GOVERNMENT OF THE
DISTRICT OF COLUMBIA

APPLICANT PROFILE

FY 2005 Homeland Security Grant Program: Urban Areas Security Initiative	
PROJECT TITLE:	**Washington Metropolitan Area Transit Authority Metrorail Radio Communications Upgrade for NCR First Responders**
EMERGENCY SUPPORT FUNCTION:	**RESF, 4 (RSF-4E)**
PROJECT PERIOD:	**July 1, 2005 - December 31, 2006**
PROJECT SYNOPSIS:	**This project is a multi-year project to provide reliable, trunked system access for emergency responders in all below grade portions of the Metrorail system for those jurisdictions that currently do not have access. In additon, redundancy for interconnectivitiy to the DC trunked system and remote monitoring for all DBAs would be provided incrementally under this project to maximize the reliability, safety, and availability of the system for all first reponders through adequate and standard communication access.**
IMPLEMENTING JURISDICTION:	**N/A: to be implemented by the Washington Metropolitan Area Transit Authority (WMATA) on behalf of the region.**

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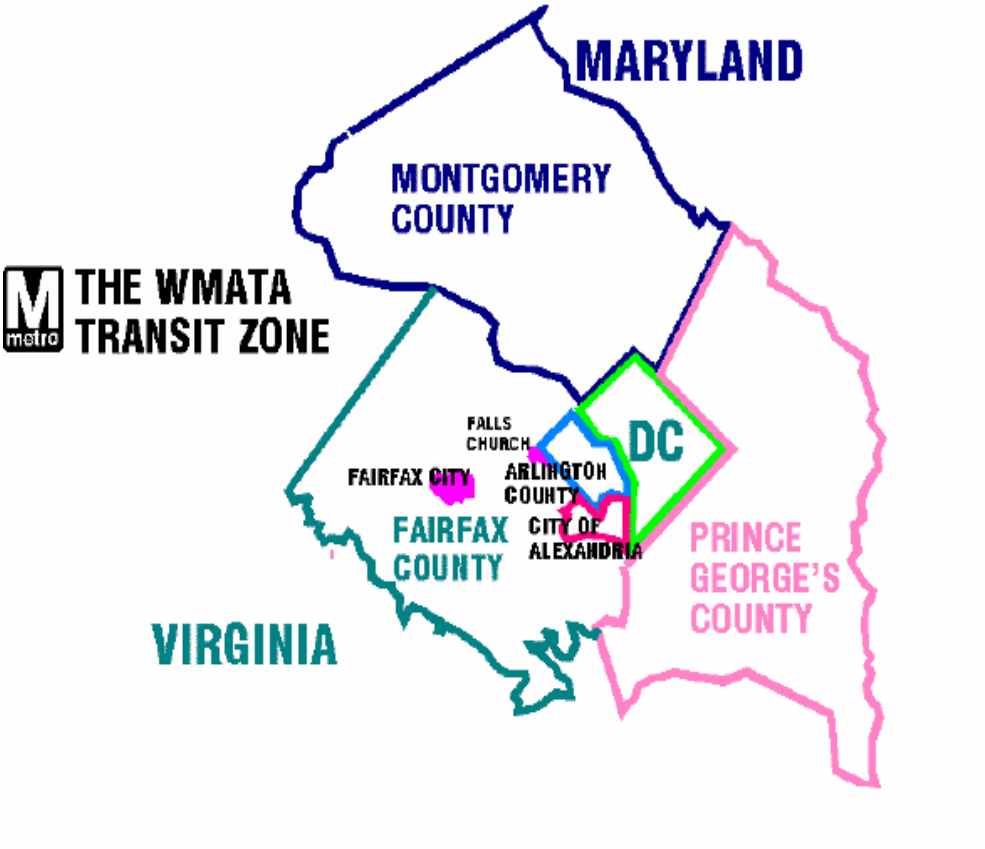
Signature of Authorized Official **Date**

Radio Communications Upgrade for NCR First Responders

FY 2005 Homeland Security Grant Program
Urban Areas Security Initiative



Radio Communications Upgrade for NCR First Responders
Submitted by WMATA
600 Fifth Street, NW
Washington, DC 20001

March 1, 2005

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Radio Communications Upgrade
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Regional Interoperable Communications System

Proposal Summary

Communication capacity and reliability are critical to the successful management and mitigation of emergency incidents in the Metrorail tunnel system. Metrorail, the second largest rail transit system in the United States, is 106 miles in length, includes 86 rail stations and carries over 600,000 passengers each day. Metrorail is a critical regional transportation link and a major response challenge for first responders. There are numerous examples of emergency incidents in our recent past which have occurred in Metrorail system's 52 miles of below grade infrastructure such as the Foggy Bottom tunnel fire in April 2000, Woodley Park train crash in November 2004 and Belmont traction power substation cable fire in November 2004.

Communications for first responders operating on 800 MHz radio systems in the below grade portions of the Metrorail system is provided by the Public Safety System (PSS), which is a complex distributed antenna system consisting of over 500 bi-directional amplifiers (BDAs) and over a 100 miles of Radiax™ coaxial cable installed throughout the below grade portions of the system.

There are **two** different critical needs that must be addressed to maximize the capacity and reliability of the Metrorail PSS to meet the needs of first responders.

The **first** concern is that only two of the four jurisdictions in the region, having first responder responsibility for subway portions of the Metrorail system and operating 800 MHz trunked radio systems, have access to their trunked systems when operating below grade; Washington, DC and Montgomery County, MD have access. Arlington County and the City of Alexandria in Virginia do not have access to their trunked system infrastructure; this means that when an incident occurs in those areas without trunked system access, users are required to operate on a very limited number of conventional channels, severely constraining communication capacity. In addition to limiting capacity, operating on conventional channels prevents the use of the advanced signaling features available on trunked infrastructure, such as emergency alerts that notify dispatchers that a user is in trouble and push-to-talk identifiers that provide automatic identification of users when transmitting. These features provide critical user safety benefits, particularly in the complex, high risk, below grade Metrorail environment.

The necessity of using conventional channels also requires users to utilize unique communication procedures for subway responses that differ from those used in day-to-day operations. The unique nature of these procedures, their infrequent use, the limited communications capacity, and the overall complexity of any below grade Metrorail response all conspire to make these responses much more hazardous and inefficient than they otherwise need to be for first responders and the public. Communication capacity is of particular concern given the probability

that if there is a terrorist attack on the system that multiple points might be attacked simultaneously straining communications even in the best of circumstances.

There is **also** concern about the resilience of the manner in which the District of Columbia's trunked infrastructure is tied into the PSS currently. The signal from DC's trunked infrastructure is tied into the PSS via a fiber optic connection that has no redundancy and is routed through the Metrorail tunnel system. A break in this connection, whether inadvertent or intentional, disconnects the trunked infrastructure from the PSS which would create a communication outage throughout all the below grade portions of the Metrorail system in DC. Therefore, the first critical need is to provide Arlington County and the City of Alexandria an interface for their trunked 800 MHz radio systems to the PSS and to enhance the resiliency of DC's trunked 800 MHz radio systems.

The **second** critical need is the replacement of the majority of the existing aging 800 MHz BDAs and the provision of remote monitoring for all the BDAs. Two-thirds of the BDAs currently in the system are nearing the end of their useful life (approximately 15 years) and, in addition, cannot be economically equipped for remote status monitoring. The absence of remote monitoring capability means that the only way failures are identified is through regular system testing, or when communication failures are experienced during incidents. Given the age of the majority of the BDAs (in excess of 13 years in many cases), frequent failures result in coverage outages until the outages are identified and BDA(s) are repaired. Concurrent with the replacement of the older BDAs, all BDAs in the system need to be connected to the existing Metrorail radio system monitoring infrastructure so that their status can be monitored remotely, providing real-time notification of outages so that they can be addressed in a timely manner.

The **first priority** is providing reliable trunked system access in all below grade portions of the Metrorail system for those jurisdictions that currently do not have trunked system access, Arlington County and the City of Alexandria (see note). Additionally, redundancy needs to be provided for interconnection to DC's trunked system to improve its resiliency. In the case of Arlington County and the City of Alexandria, this requires providing the appropriate hardware at suitable locations throughout the below grade system to reliably interconnect the PSS to their respective trunked radio system infrastructures. For DC's system, a redundant connections need to be established between the PSS and the trunked system infrastructure.

The **second priority** is to replace the aging BDAs to eliminate a frequent point of failure and to provide remote monitoring capability for all BDAs in the system. Once the aging BDAs that are failing frequently have been replaced, the reliability of the system infrastructure will improve dramatically through immediate response to equipment failures. Remote status monitoring will ensure that system managers will always be aware of system status and provide a means of proactive, rather than reactive, management of the system infrastructure. This will maximize the availability and reliability of the system for first responders. Unanticipated outages greatly increase the risk to the public and first responders during responses.

Providing reliable trunked system access for jurisdictions utilizing trunked infrastructure will maximize user safety and the overall efficiency of first responder subway responses by providing adequate communication capacity, allowing for the use of standard communication procedures, and by providing continued access to advanced signaling features, such as emergency alerts and push-to-talk identifiers, that the trunked infrastructure offers.

The **overall cost** of the regional interoperable communications system program is estimated to be approximately $10,000,000. However, due to the limited access to the Metrorail system for this type of implementation activity (requires non-revenue service hours), funding can only be expended at a rate of $2M to $4M per year, spread over as many as four years. The first year (FY05) of the program requires the most funding, approximately $4M. This provides resources to interconnect the Arlington County and City of Alexandria (see note) systems to the PSS and to design redundancy for the Washington, DC infrastructure, approximately $1.5M to $2M. The balance of the first year funding, approximately $2M to $2.5M, will be used to begin the replacement of, and provision of remote status monitoring for, the BDAs. The balance of the overall funding (FY06 & later) will be used at a rate of approximately $2M to $3M over two to three years to complete the replacement and remote monitoring of all the BDAs, plus the implementation of the redundancy for the Washington, DC infrastructure. The rate at which the funds can be expended is dependent upon the amount of work that can be completed in the Metrorail right-of-way during non-revenue hours in a given fiscal year as constrained by access to the system.

NOTE: The City of Alexandria effort is part of the overall MetroRail below grade regional interoperable communications system program, but will be the subject of a separate grant application and is provided here for information and coordination purposes.

Project Goals, Objectives and Implementation Steps

1. Goal - provide reliable trunked system access for first responders to the PSS in all belowgrade portions of the Metrorail system for those jurisdictions that currently do not have trunked system access.

1.1 Objective 1 - procure and implement the appropriate equipment at suitable locations throughout the below grade system to reliably interconnect the PSS to the Arlington County's 800 MHz trunked radio system infrastructures.

1.1.1 Implementation step 1 - advertise, evaluate and award communications contract

1.1.2 Implementation step 2 - work jointly with contractor to develop the interface design

1.1.3 Implementation step 3 - contractor will implement and test the design

1.2 Objective 2 - design a redundant interconnection to DC's trunked system to improve the resilience of the system

1.2.1 Implementation step 1 - advertise, evaluate and award communications contract

1.2.2 Implementation step 2 - work jointly with contractor to evaluate and select a second donor site

1.2.3 Implementation step 3 - contractor will prepare a design to interface the second donor site to the PSS.

1.2.4 Implementation step 4 - implementation will be the subject of a future (FY06 or later) grant application

1.3 Objective 3 - procure and implement the appropriate equipment at suitable locations throughout the below grade system to reliably interconnect the PSS to the City of Alexandria 800 MHz trunked radio system infrastructures.

1.3.1 Implementation step - NOTE: The City of Alexandria effort is part of the overall program, but will be the subject of a separate (FY05) grant application and is provided here for information and coordination purposes.

2. Goal - improve the availability and reliability of the PSS for first responders in all below grade portions of the Metrorail system.

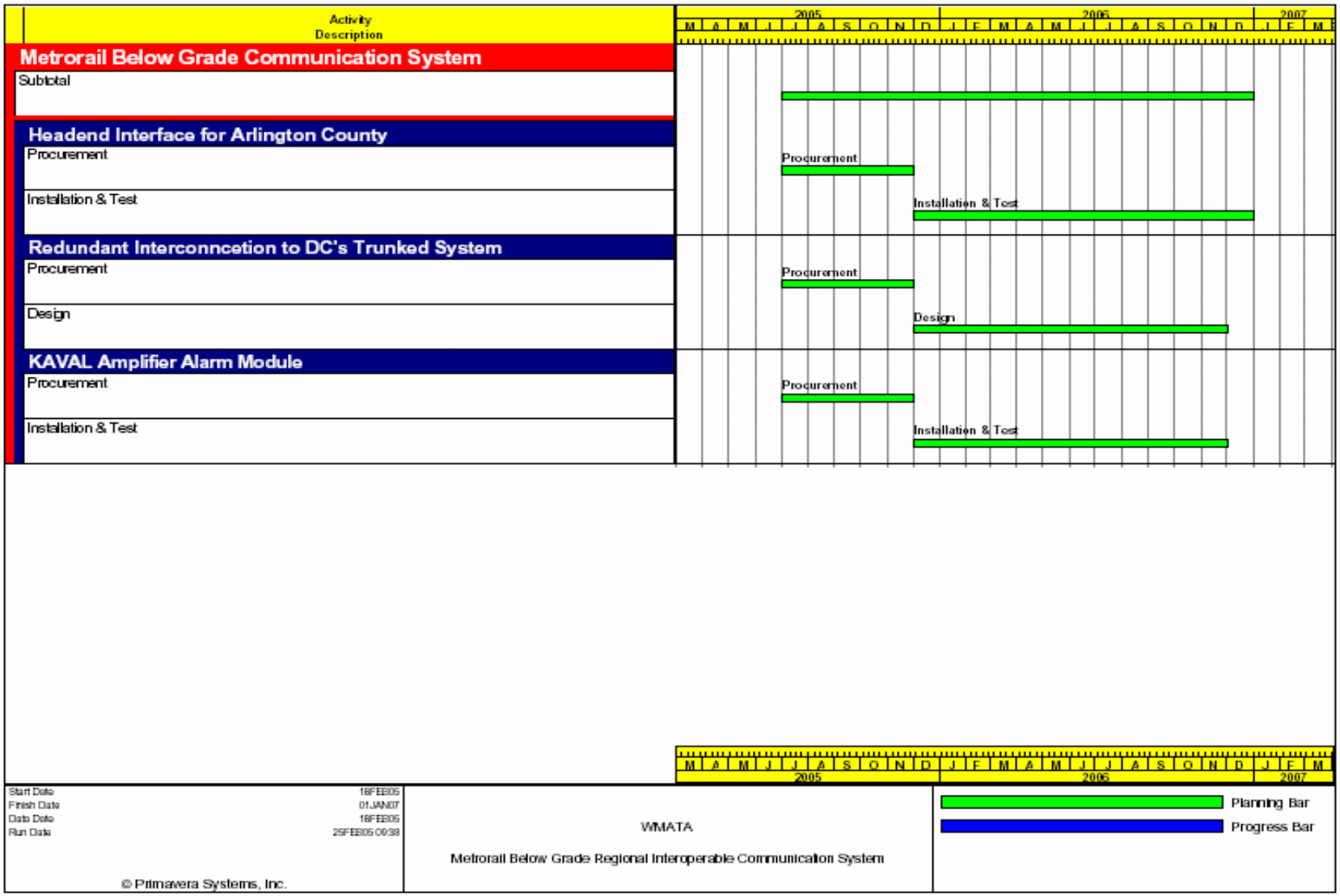
2.1 Objective 1 - procure and implement additional alarm modules and remote monitoring of the existing Kaval BDAs presently without this function. This effort will be limited to BDAs manufactured by Kaval since the alarm function can be added by simply adding an alarm module.

2.1.1 Implementation step 1 - advertise, evaluate and award communication contract.
2.1.2 Implementation step 2 - contractor will implement alarm modules
2.1.3 Implementation step 3 - contractor will integrate and test the alarms with the existing Metrorail remote monitoring system.

2.2 Objective 2 - procure and implement BDAs to replace the Allen Telecom BDAs that can not be equipped with remote monitoring by adding an alarm module. In order to add an alarm function to BDAs manufactured by Allen Telecom, the entire BDA must be replaced with a BDA manufactured by Kaval. The Allen Telecom BDAs are no longer manufactured.

2.2.1 Implementation step - NOTE: This effort is part of the overall program, but will be the subject of a separate future (FY06 or later) grant application and is provided here for information and coordination purposes.

Radio Communications Upgrade for NCR First Responders



Project Description

The MetroRail Below Grade Regional Interoperable Communications System directly supports the National Initiative of Achieving Tactical Interoperable Communications. The project is a direct result of the lessons the region recently experienced in the aftermath of the multiple emergency incidents in the 52 miles of below grade portions of the Metrorail system. The emergency incidents include the Foggy Bottom tunnel fire in April 2000, the Woodley Park train crash in November 2004 and Belmont traction power substation cable fire in November 2004.

During the response to the above emergency incidents, it quickly became apparent to the incident managers that it was not only critical for first responders to reliability communicate on the surface, but it was just as important to reliability to communicate below grade also. As a direct result of this experience, the MetroRail Below Grade Regional Interoperable Communications System project was developed recognizing that having reliable regional interoperable communications with maximum capacity would be critical in the event of future major incidents in the below grade portion of Metrorail.

Communications for first responders operating on 800 MHz radio systems in the below grade portions of the Metrorail system is provided by the Public Safety System (PSS), which is a complex distributed antenna system consisting of 516 bi-directional amplifiers (BDAs) and over 104 miles of Radiax™ coaxial cable installed throughout the below grade portions of the system.

The FY05 critical goals of this project are to: 1) provide reliable trunked system access for first responders to the PSS in all below grade portions of the Metrorail system for those jurisdictions that currently do not have trunked system access and 2) improve the availability and reliability of the PSS for first responders in all below grade portions of the Metrorail system.

The first FY05 critical goal will be achieved by providing reliable trunked radio access in the below grade portions of the Metrorail system for Arlington County. The District of Columbia and Montgomery County both have access to their 800 MHz trunked radio system while responding to emergency incidents in the below grade portion of Metrorail. However, both Arlington County and the City of Alexandria do not have access to their 800 MHz trunked radio system while responding to emergency incidents in the below grade portion of the Metrorail system.

Arlington County currently operates and maintains a 3-channel, 6-site conventional 800 MHz radio system within the Metrorail tunnel system. There are transmitters at the following Metrorail stations: Crystal City, Virginia Square, Court House, Rosslyn, Foggy Bottom and Pentagon. Currently, the first responders must leave their home radio system, change channels and be patched for this system to work. By providing reliable trunked system access, it will

maximize user safety and the overall efficiency of first responder below grade responses by providing seamless communications functionality, allowing for the use of standard communication procedures, and by providing continued access to advanced signaling features, such as emergency alerts and push-to-talk identification. Working with a contractor, the appropriate equipment will be implemented, integrated and tested at a suitable locations throughout the below grade system to reliably interconnect the PSS to Arlington County's 800 MHz trunked radio system infrastructure.

The City of Alexandria currently operates and maintains a conventional 800 MHz radio system within the Metrorail tunnel system. There is a transmitter at the Braddock Road Metrorail station. NOTE that this project, in coordination with a separate grant application by the City of Alexandria, plans to establish reliable trunked system access to the PSS throughout the below grade system by interconnecting the PSS to the City of Alexandria's 800 MHz trunked radio system infrastructure.

Additionally, the first critical goal will also improve the reliability of the below grade 800 MHz trunked radio system access by designing a redundant interconnection to the DC's 800 MHz trunked radio systems above ground. Currently, the only interconnection to DC's 800 MHz above ground trunked radio system utilizes the antenna site on the DC government's building at 441 4th Street NW in Washington, DC and is interconnected via fiber optic cable to the PSS in the Gallery Place Metrorail station. Should this sole interconnection fail, the entire Washington, DC 800 MHz trunked radio system below ground would go silent. Working with a contractor, a second donor antenna site will be evaluated and selected, an interface to the PSS designed and then implemented, integrated and tested.

The second FY05 critical goal (improve the availability and reliability of the PSS for first responders in all below grade portions of the Metrorail system) will be achieved by alarming and remote monitoring the BDAs in the below grade portion of the Metrorail system. Two manufacturers of BDAs are currently installed in the below grade portion of the Metrorail system.

The Kaval BDAs can be relatively easily alarmed by adding an alarm module. Of the five hundred sixteen BDAs, one hundred and seventy-two were manufactured by Kaval. Due to the limited funding available in FY05, a fraction of the Kaval BDAs will be alarmed and remotely monitored by integrating them into the existing Metrorail remote monitoring system. Working with a contractor, the Kaval BDAs will have alarm modules added, integrated and tested with the Metrorail remote monitoring system.

The Allen Telecom Microfill BDAs can not be alarmed economically. Of the 516 BDAs, 344 were manufactured by Allen Telecom. Due to the limited funding available in FY05, none of the Allen Telecom BDAs will be replaced at this time. Instead, this action will be a subject of a future (FY06 or later) grant application to replace them with Kaval BDAs and provide alarming and remote monitoring.

In summary, the critical goals of this project are to:

1) Provide reliable trunked system access for first responders to the PSS in all below grade portions of the Metrorail system for those jurisdictions that currently do not have trunked system access
2) Improve the availability and reliability of the PSS for first responders in all below grade portions of the Metrorail system.

In FY05, the goals are to be achieved by:

1) Providing reliable trunked radio access in the below grade portions of the Metrorail system for Arlington County
2) Providing reliable trunked radio access in the below grade portions of the Metrorail system for the City of Alexandria (subject of a separate grant application, here for reference and coordination purposes)
3) Designing a redundant interconnection to DC's 800 MHz trunked radio systems above ground
4) Alarming and remote monitoring a limited quantity of the Kaval BDAs in the below grade portion of the Metrorail system

In the future (FY06 or later), the goals are to be achieved by:

1) Implementing a redundant interconnection to DC's 800 MHz trunked radio systems above ground
2) Alarming and remote monitoring the balance of the Kaval BDAs in the below grade portion of the Metrorail system
3) Replacing the Allen Telecom BDAs in the below grade portion of the Metrorail system with Kaval BDAs which will be alarmed and remotely monitored

Organization, Experience, and Qualifications

The Washington Metropolitan Area Transit Authority (WMATA) has worked with regional transportation partners on the development of a regional transportation partner emergency communication network plan. Also, WMATA has invested in a major upgrade and installation of an 800 MHz radio system throughout the 106 mile metro rail and regional bus systems. WMATA's experience with systems and communication technologies makes the organization well qualified to design and successfully implement this regional communications project.

A key component of the installation of any work within the metrorail right of way is safety procedures during installation. WMATA personnel are uniquely qualified to provide this force account service. WMATA's staff has extensive knowledge and expertise in various technology installations as they have performed similar configurations in WMATA's existing facilities and right of way. Therefore, WMATA force account installation activities by in-house forces will be utilized to ensure system integrity and safety.

WMATA has extensive experience in the receipt and management of federal funding. Therefore, appropriate procurement, accounting and auditing processes and systems already exist within the organization to ensure efficient and appropriate utilization of federal grants.

WMAA has the operational experience, technological knowledge, financial structure, professional qualifications and project delivery background to successfully implement this project.

Staffing Plan

- Proposed Staffing Patterns

This project implemented using a variety of communications personnel already on staff that has experience installing CRCS equipments and cables throughout the Metrorail system. The Authority has on staff numerous Communications expertise from Project Managers, Field Engineer - Communication, Communications Inspector and Communications technicians. These personnel have installed CRCS equipments, cables and antennae throughout the system

•Personnel Record:
Time reported will be maintained using WMATA's existing payroll system. Discrete job numbers will be created to capture all costs associated with this project. Included will be accurate time reporting by individual on an hourly basis. The payroll system will provide accountability of all project hours expended and the corresponding benefits are posted under different general ledger within the job number. All pertinent personnel records (name, employee number, address, and social security numbers) are maintained in the payroll system. No additional staff will be hired to support this project.

•Qualification:
As stated in the first bullet, WMATA's communications staff have up to 30 years of experience in engineering, installation and maintaining CRCS equipment, cables and antennae.

GOVERNMENT OF THE DISTRICT OF COLUMBIA

OFFICE OF THE DEPUTY MAYOR FOR PUBLIC SAFETY AND JUSTICE

Certifications Regarding Lobbying; Debarment, Suspension and Other Responsibility Matters; and Drug-Free Workplace Requirements

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Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 28 CFR Part 69, "New Restrictions on Lobbying" and 28 CFR Part 67, "Government-wide Debarment and Suspension (Non-procurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact.

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1. LOBBYING

As required by Section 1352, Title 31 of the U.S. Code. and implemented at 28 CFR Part 69, for persons entering into a grant or cooperative agreement over $100,000, as defined at 28 CFR Part 69, The applicant certifies that:

(a) No Federal 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 making of any Federal grant, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement;

(b) 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 grant or cooperative agreement, the undersigned shall complete and submit Standard Form - lll, "Disclosure of Lobbying Activities," in accordance with its instructions;

(c) The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers including sub grants, contracts under grants and cooperative agreements, and subcontracts) and that all sub-recipients shall certify and disclose accordingly.

2. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS (DIRECT RECIPIENT)

As required by Executive Order 12549, Debarment and Suspension, and implemented at 28 CFR Part 67, for prospective participants in primary covered transactions, as defined at 28 CFR Part 67, Section 67.510—

A. The applicant certifies that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal court, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c.) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause or default; and

B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

3. DRUG-FREE WORKPLACE (GRANTEES OTHER THAN INDIVIDUALS)

As required by the Drug Free Workplace Act of 1988, and implemented at 28 CFR Part 67, Subpart F. for grantees, as defined at 28 CFR Part 67 Sections 67.615 and 67.620—

A. The applicant certifies that it will or will continue to provide a drug-free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in The applicant's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing an on-going drug-free awareness program to inform employees about—

(1) The dangers of drug abuse in the workplace;
(2) The applicant's policy of maintaining a drug-free workplace;

(3) Any available drug counseling, rehabilitation, and employee assistance programs; and

(4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will—

(1) Abide by the terms of the statement; and

(2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;

(e) Notifying the agency, in writing, within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title to: Office of Grants Management and Development, 717 14th St., NW, Suite 1200, Washington, DC 20005. Notice shall include the identification number(s) of each affected grant;

(f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted—

(1) Taking appropriate personnel action against such an employee, up to and incising termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or

(2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;

(3) Making a good faith effort to continue to maintain a drug free workplace through implementation of paragraphs (a), (1), (c), (d), and (e). and (f)

B. The applicant may insert in the space provided below the sites for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city. county, state, zip code)

__Washington, DC region _____

_____

USAI Grant Application

Radio Communications Upgrade
Metrorail Below Grade
Regional Interoperable Communications System

As the duly authorized representative of the applications, I hereby certify that the applicant will comply with the above certifications.

1. Grantee Name and Address:

__Washington Metropolitan Area Transit Authority_____
____600 Fifth Street, NW_____
____Washington, DC 20001_____

2. Application Number and/or Project Name: _WMATA Radio Communications Upgrade for NCR First Responders_____

3. Grantee IRS/Vendor Number: __52-0847040_____

Harold Bartlett Chief of Staff
Typed Name and Title of Authorized Representative

5. Signature

6. Date

GOVERNMENT OF THE DISTRICT OF COLUMBIA

OFFICE OF THE DEPUTY MAYOR FOR PUBLIC SAFETY AND JUSTICE

STANDARD ASSURANCES

The applicant hereby assures and certifies compliance with all Federal statutes, regulations, policies, guidelines and requirements, including OMB Circulars No. A-21, A-110, A-122, A-128, A-87; E.O. 12372 and Uniform Administrative Requirements for Grants and Cooperative Agreements - 28 CFR, Part 66, Common Rule, that govern the application, acceptance and use of Federal funds for this federally-assisted project.

Also, the Application assures and certifies that:

1. It possesses legal authority to apply for the grant; that a resolution, motion or similar action has been duly adopted or passed as an official act of The applicant's governing body, authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of The applicant to act in connection with the application and to provide such additional information as may be required.

2. It will comply with requirements of the provisions of the Uniform Relocation Assistance and Real Property Acquisitions Act of 1970 P.L. 91-646 which provides for fair and equitable treatment of persons displaced as a result of Federal and federally-assisted programs.

3. It will comply with provisions of Federal law which limit certain political activities of employees of a State or local unit of government whose principal employment is in connection with an activity financed in whole or in part by Federal grants. (5 USC 1501, et. seq.).

4. It will comply with the minimum wage and maximum hour's provisions of the Federal Fair Labor Standards Act if applicable.

5. It will establish safeguards to prohibit employees from using their positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties.

6. It will give the sponsoring agency of the Comptroller General, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the grant.

7. It will comply with all requirements imposed by the Federal-sponsoring agency concerning special requirements of Law, program requirements, and other administrative requirements.

8. It will insure that the facilities under its ownership, lease or supervision which shall be utilized in the accomplishment of the project are not listed on the Environmental Protection Agency's (EPA), list of Violating Facilities and that it will notify the Federal grantor agency of the receipt of any communication from the Director of the EPA Office of Federal Activities indicating that a facility to be used in the project is under consideration for listing by the EPA.

9. It will comply with the flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973, Public Law 93-234-, 87 Stat. 975, approved December 31, 1976. Section 102(a) requires, on and after March 2, 1975, the purchase of flood insurance in communities where such insurance is available as a condition for the receipt of any Federal financial assistance for construction or acquisition purposes for use in any area that has been identified by the Secretary of the Department of Housing and Urban Development as an area having special flood hazards. The phrase "Federal Financial Assistance" includes any form of loan, grant, guaranty, insurance payment, rebate, subsidy, disaster assistance loan or grant, or any other form of direct or indirect Federal assistance.

10. It will assist the Federal grantor agency in its compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (16 USC 470), Executive Order 11593, and the Archeological and Historical Preservation Act of 1966 (16 USC 569a-1 et. seq.) By (a) consulting with the State Historic Preservation Officer on the conduct of investigations, as necessary, to identify properties listed in or eligible for inclusion in the National Register of Historic Places that are subject to adverse effects (see 36 CFR Part 800.8) by the activity, and notifying the Federal grantor agency of the existence of any such properties, and by (b) complying with all requirements established by the Federal grantor agency to avoid or mitigate adverse effects upon such properties.

11. It will comply, and assure the compliance of all its sub grantees and contractors, with the applicable provisions of Title I of the Omnibus Crime Control and Safe Streets Act of 1968, as amended, the Juvenile Justice and Delinquency Prevention Act, or the Victims of Crime Act, as appropriate; the provisions of the current edition of the Office of Justice Programs Financial and Administrative Guide for Grants; and all other applicable Federal laws, orders, circulars, or regulations.

12. It will comply with the provisions of 28 CFR applicable to grants and cooperative agreements including Part 18. Administrative Review Procedure; Part 20, Criminal Justice Information Systems; Part 22, Confidentiality of Identifiable Research and Statistical Information; Part 23, Criminal Intelligence Systems Operating Policies; Part 30, Intergovernmental Review of Department of Justice Programs and Activities; Part 42, Nondiscrimination/Equal Employment Opportunity Policies and Procedures; Part 61, Procedures for Implementing the National Environmental Policy Act; Part 63, Flood Plain Management and Wetland Protection Procedures; and Federal laws or regulations applicable to Federal Assistance Programs.

13. It will comply, and all its contractors will comply, with the non-discrimination requirements of the Omnibus Crime Control and Safe Streets Act of 1968, as amended, 42 USC 3789(d),

14. or Victims of Crime Act (as appropriate); Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973, as amended; Subtitle A, Title II of the Americans with Disabilities Act (ADA) (1990); Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975; Department of Justice Non-Discrimination Regulations, 28 CFR Part 42, Subparts C, D, E and G; and Department of Justice regulations on disability discrimination, 28 CFR Part 35 and Part 39.

15. In the event a Federal or State court or Federal or State administrative agency makes a finding of discrimination after a due process hearing on the grounds of race, color, religion, national origin, sex, or disability against a recipient of funds, the recipient will forward a copy of the finding to the Office for Civil Rights, Office of Justice Programs.

16. It will provide an Equal Employment Opportunity Program if required to maintain one, where the application is for $500,000 or more.

17. It will comply with the provisions of the Coastal Barrier Resources Act (P.L 97-348), dated October 19, 1982, (16 USC 3501 et. seq.) which prohibits the expenditure of most new Federal funds within the units of the Coastal Barrier Resources System.

_____ _____

Print Name Print Title

_____ _____

Signature Date

Code No.: 1148

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

JOB DESCRIPTION

POSITION: Project Manager (Communications), TA-26 DATE:

DEPT/OFFICE: TSDV/SYSP REVIEWED:

REPORTS TO: Director of Systems (SYSP) TSDV:

POSITION SUMMARY:

This position manages one or more assigned projects in communications, telecommunications and fare collection. Responsibilities include overseeing, managing, and coordinating the development of assigned projects from conceptualization to final acceptance, including planning, design, systems engineering, procurement, contract close-out, engineering analysis, testing and acceptance. The position (1) coordinates the needs of various offices; (2) resolves conflicts that impact on project schedule and costs; (3) makes decisions and recommendations that are recognized as authoritative with a far-reaching impact on the overall development and completion of the assigned projects; (4) initiates and maintains extensive contacts with key personnel and officials of other organizations within and outside the Authority; and (5) negotiates critical and controversial issues with other top level engineers and offices of other organizations, companies and representatives of state, local, and Federal governments.

The position requires a high degree of creativity, foresight and mature judgment in planning, organizing, coordinating and solving unprecedented engineering and construction problems. The position determines project needs and requirements, develops procedures and guides all engineering and construction activities to meet project deadlines. Responsibilities include leading and directing diverse staff, and selection of personnel.

DUTIES:

Prepares and recommends for approval project schedules, estimates and budgets that are complete, realistic, and fully meet project goals; and adheres strictly to approved project schedules and budgets.

Secures commitments from affected Authority departments related to contract documents, budget, and schedule. Arranges for project management coordination and controls, consistent with both project and operational needs.

Supervises subordinate staff to include recommending applicant selection, disciplinary actions, resolution of grievances, assigning duties, directing work, conducting

performance evaluations, approving leave requests and timesheets, and ensuring appropriate subordinate training is provided.

Assigns detailed work tasks to be completed by staff members.

Oversees coordination to establish schedule priorities, access requirements and allocation of work areas for each contract. Minimizes fiscal impacts by exercising maximum control and assuring that work is performed in a safe manner to meet scheduled completion dates.

Conducts project status meetings with staff. Records meeting results and transmits summaries to the AGM, Office Director, Contracting Officer, and other Department and Office Directors for appropriate action.

Conducts project status briefings for Authority Officers; the General Manager; WMATA Board Members; Federal, state, and local government offices; and local civic organizations as required.

Reviews and comments on Project Scope to ensure that program needs, schedule and costs are adhered to; coordination occurs between various departments and aspects of the project; and project elements are cost effective.

Coordinates all major events on the project by assisting various offices to solve mutually dependent items, calling conferences when necessary and chairing meetings.

Assists supporting offices in obtaining major approvals and agreements from city, state and D.C. jurisdictions, including Federal agencies, to assure project schedules and goals are met.

Conducts research and prepares recommendations for complex project management, engineering and construction problems.

KNOWLEDGE, SKILLS, AND ABILITIES:

Thorough knowledge of the principles, practices and techniques of project management, to coordinate, review and provide expert technical management for assigned projects.

Thorough knowledge of the use of project controls including critical path method scheduling and budgetary control systems.

Extensive knowledge of general communications and telecommunications engineering including: integrated radio, automatic vehicle location system, two-way radio systems with leaky line coaxial antennas in tunnels and large computer controlled bus fleet and police dispatch facilities, carrier transmission systems, closed circuit television video

surveillance, computer data interfaces, and miscellaneous associated systems technology in order to (1) design complex communications systems and telecommunications networks; (2) translate operational requirements into system, circuit and equipment hardware specifications; and (3) establish special development engineering programs to meet unusual or unique Authority system requirements.

Extensive knowledge of Automatic Fare Collection methodologies, types of fare card media and associated interfaces and equipment.

Extensive knowledge of Federal Transit Administration requirements and project management oversight.

Knowledge and skills sufficient to apply new developments to the solution of complex engineering, technical and project management problems.

Ability to supervise, train and evaluate engineers and support staff in compliance with applicable Authority personnel and labor relations policies, procedures, regulations and agreements.

Ability to independently organize and carry out assignments with minimum direction and ability to function as a leader of highly professional personnel.

Ability to develop and comprehend various types and levels of technical, contractual and legal documentation.

Ability to communicate effectively and to establish and maintain effective working relationships.
Ability to handle confidential materials and information in a professional manner.

MINIMUM QUALIFICATIONS AND EXPERIENCE:

Graduation from an accredited college or university with a Bachelor's Degree in Electrical, Electronics, or Telecommunications Engineering or a related field. A minimum of eight (8) years of demonstrated successful experience in overall technical project management within a large engineering project. Thorough knowledge or demonstrated ability to rapidly obtain knowledge of the engineering requirements, program policies and procedures that govern the Authority.

Or, an equivalent combination of post high school education in electrical, electronics, or telecommunications engineering or a related field, and more than ten (10) years of demonstrated successful experience in overall technical project management within a large engineering project. Thorough knowledge or demonstrated ability to rapidly obtain knowledge of the engineering requirements, program policies and procedures that govern the Authority.

MEDICAL GROUP:

Ability to complete satisfactorily the medical examination for this job. The employee must be able to perform the essential functions of this job either with or without reasonable accommodation(s).

FLSA: EXEMPT

A. Personnel - List each position by title and name of employee, if available. Show the annual salary rate and the percentage of time to be devoted to the project. Compensation paid for employees engaged in grant activities must be consistent with that paid for similar work within the applicant organization.

Name/Position	Computation	Cost
Project Manager, Communications	25% of first calendar yr, 44% of second calendar year @ $100,000 per year	$ 69,000.00
Contract Administrator (procurement)	10% of first year @ $75,000 per year	$ 7,500.00
	Total	**$ 76,500.00**

B. Fringe Benefits - Fringe benefits should be based on actual known costs or an established formula. Fringe benefits are for the personnel listed in budget category (A) and only for the percentage of time devoted to the project. Fringe benefits on overtime hours are limited to FICA, Workman's Compensation, and Unemployment Compensation.

Name/Position	Computation	Cost
Project Manager, Communications	20%	$ 13,800.00
Contract Administrator	20%	$ 1,500.00
	Total	**$ 15,300.00**

C. Travel - Itemize travel expenses of project personnel by purpose (e.g., staff to training, field interviews, advisory group meeting, etc.). Show the basis of computation (e.g., six people to 3-day training at $X airfare, $X lodging, $X subsistence). In training projects, travel and meals for trainees should be listed separately. Show the number of trainees and unit costs involved. Identify the location of travel, if known. Indicate source of Travel Policies applied, Applicant or Federal Travel Regulations.

Purpose of Travel	Location	Item	omputatio	Cost
			Total	**$ -**

D. Equipment - List non-expendable items that are to be purchased. Non-expendable equipment is tangible property having a useful life of more than two years. (Note: Organization's own capitalization policy and threshold amount for classification of equipment may be used). Expendable items should be included either in the "Supplies" category or in the "Other" category. Applicants should analyze the cost benefits of purchasing versus leasing equipment, especially high cost items and those subject to rapid technical advances. Rented or leased equipment costs should be listed in the "Contractual" category. Explain how the equipment is necessary for the success of the project. Attach a narrative describing the procurement method to be used.

Item	Computation	Cost
	Total	**$** **-**

E. Supplies - List items by type (office supplies, postage, training materials, copying paper, and other expendable items such as books, hand held tape recorders) and show the basis for computation. (Note: Organization's own capitalization policy and threshold amount for classification of supplies may be used). Generally, supplies include any materials that are expendable or consumed during the course of the project.

Item	Computation	Cost
	Total	**$** **-**

F. Consultants/Contracts - Indicate whether applicant's formal, written Procurement Policy or the Federal Acquisition Regulations are followed.

Consultant Fees: For each consultant enter the name, if known, service to be provided, hourly or daily fee (8-hour day), and estimated time on the project. Consultant fees in excess of $450 per day require additional justification and prior approval from ODP.

Name of Consultan	Service Provided	Computation	Cost
Unknown at this time	Design a redundant interconnection to the Washington, DC trunked system to improve the resilience of the system	$200 per hour based on existing contract which is out for re-bid (1500 hours).	$ 300,000.00
		subtotal	**$ 300,000.00**

Consultant Expenses: List all expenses to be paid from the grant to the individual consultant in addition to their fees (i.e., travel, meals, lodging, etc.)

Item	Location	Computation	Cost
Will be negotiated after a Consultant is selected		NTE	$ 10,000.00
		subtotal	**$ 10,000.00**

Contracts: Provide a description of the product or services to be procured by contract and an estimate of the cost. Applicants are encouraged to promote free and open competition in awarding contracts. A separate justification must be provided for sole source contracts in excess of $100,000.

Item	Cost
Design, procure and implement the appropriate equipment at suitable locations thoughout the below grade system to reliably interconnect the PSS to the Arlington's 800mhz trunked radio system infrastructures.	$ 2,200,000.00
Procure and install alarm modules on some of the Kaval amplifier (estimate approximately 100 of the 172 Kaval amplifiers)	$ 573,259.20

In-house Force Account during installation - 3 operations personnel to ensure that the Contractor does not damage WMATA's assets during construction for 12 months @ $100,000 per person at Overtime rate and including fringe benefits of 32%	$	300,000.00
In-house Force Account - 1 Construction Inspector for 12 months @ $100,000 including fringe benefits of 32% (required during design and installation-field personnel)	$	100,000.00
subtotal	**$**	**3,173,259.20**

G. Other Costs - List items (e.g., rent, reproduction, telephone, janitorial or security services, and investigative or confidential funds) by major type and the basis of the computation. For example, provide the square footage and the cost per square foot for rent, and provide a monthly rental cost and how many months to rent.

Description	Computation	Cost
	Total	**$** **-**

H. Indirect Costs - Indirect costs are allowed only if the applicant has a Federally approved indirect cost rate. A copy of the rate approval, (a fully executed, negotiated agreement), must be attached. If the applicant does not have an approved rate, one can be requested by contacting the applicant's cognizant Federal agency, which will review all documentation and approve a rate for the applicant organization, or if the applicant's accounting system permits, costs may be allocated in the direct costs categories.

Description	Computation	Cost
FTA approved Authority's Project Administration Costs	2.64%	$ 96,940.80
	Total	**$** **96,940.80**

Budget Category		Amount
A. Personnel	$	76,500.00
B. Fringe Benefits	$	15,300.00
C. Travel	$	-
D. Equipment	$	-
E. Supplies	$	-
F. Consultants/Contracts	$	3,483,259.20
G. Other	$	-
Total Direct Costs	**$**	**3,575,059.20**
H. Indirect Costs	$	96,940.80
TOTAL PROJECT COSTS	**$**	**3,672,000.00**

U.S. Department
of Transportation
**Federal Transit
Administration**

Washington, DC
Metropolitan Office

1990 K Street, NW
Suite 510
Washington, DC 20006-1178
(202) 219-3562/3565
(202) 219-3545 (fax)

January 2, 2004

Mr. Richard A. White
General Manager/Chief Executive Officer
Washington Metropolitan Area Transit Authority
600 Fifth Street, NW
Washington, DC 20001-2693

Re: FTA Cost Allocation Plan Review
Final Report

Dear Mr. White:

Enclosed is a copy of the final report resulting from FTA's review of WMATA's FY2004 Cost Allocation Plan (CAP). Deva & Associates, P.C. conducted this review for FTA during the fall of 2003. Thanks to your staff for their cooperation and assistance to our consultants.

As a result of the CAP review, FTA hereby accepts your Plan and the cost allocation rate of 2.64 percent of direct costs for the period July 1, 2003 through June 30, 2004.

As required by OMB Circular A-87 and FTA's regulations in Circular 5010.1C, Chapter III, WMATA must update this Plan on an annual basis. Please also be reminded that if WMATA's proposed cost allocation rate exceeds that approved for the previous year(s) by more than ten percent, then WMATA must submit the updated Plan to FTA for review and acceptance.

Please call me at (202) 219-3562 if you have any questions.

Sincerely,

Brian A. Glenn, PE
Director

Enclosure

cc with enclosure: Peter Benjamin, WMATA, 2 copies
Rick Harcum, WMATA, 1 copy
James C. Stewart, WMATA, 1 copy