GOVERNMENT OF THE
DISTRICT OF COLUMBIA

APPLICANT PROFILE

FY 2005 Homeland Security Grant Program: Urban Areas Security Initiative	
PROJECT TITLE:	Development of Regional Capabilities to Improve Transportation System Management and Operational Support in Response to Terrorism Emergencies.
EMERGENCY SUPPORT FUNCTION:	**R-ESF-1-A**
PROJECT PERIOD:	**7/1/05 – 6/30/07**
PROJECT SYNOPSIS:	Creation of a formal Regional Transportation Coordination Program in the Washington metropolitan area to ensure preparedness for, response to, and recovery from terrorist incidents and other regional disasters and events.
IMPLEMENTING JURISDICTION:	**Maryland (multiple jurisdictions), Virginia (multiple jurisdictions), and the District of Columbia**

AGENCY:	University of Maryland Center for Advanced Transportation Technology (CATT)
ADDRESS:	6305 Ivy Lane, Suite 300
	Greenbelt, MD 20770

AUTHORIZATION OFFICIAL	
NAME:	Antoinette Lawson, Associate Director
TITLE:	Office of Research Administration
ADDRESS:	3112D Lee Bldg. College Park MD 20742
TEL:	301-405-6275
FAX:	301-314-9569
EMAIL:	tlawson@umd.edu

PROJECT DIRECTOR		**FINANCIAL OFFICER**
NAME:	Philip J. Tarnoff	**NAME:** Helena Moynahan, Manager
TITLE:	Director, CATT/T2 Center	**TITLE:** Contract Accounting
ADDRESS:	Bldg. 806 Ste 3103 College Park MD 20742	**ADDRESS:** 4101 Chesapeake Bldg.
TEL:	301-403-4619	**TEL:** 301-405-2615
FAX:	301-403-4591	**FAX:** 301-314-9889
EMAIL:	tarnoff@eng.umd.edu	**EMAIL:** moynaha@accmail.umd.edu

Signature of Authorized Official [signature on original and copies] **Date** [3-1-04]

This page intentionally left blank.

Table of Contents

This page intentionally left blank.

I. Proposal Summary

Terrorist incidents will have significant impacts on the region's transportation system and the ability of public safety agencies to use this system as they lead emergency response and recovery efforts. Severe congestion or outright roadway or transit closures will impede efficient emergency response. Emergency personnel responding to incident scenes or evacuating members of the public away from danger need real-time transportation system status information, both for locations in the immediate vicinity of the incident and well beyond the incident site.

Currently, sources of such real-time information are dispersed across various jurisdictions and modes of transportation and information availability, as well as update procedures are not consistent across the region. If a terrorist incident were to occur today, effective transportation response would be hampered by:

- Procedures which are overly dependent upon transportation response personnel already busy with dealing with transportation system impacts in the immediate vicinity of the terrorism incident.
- Shortfalls in the availability and accuracy of real-time transportation information during the incident, especially in the critical beginning stages of the incident.
- The absence of an entity with the responsibility for tracking the ripple effects of a terrorist incident on the region's transportation system, no current consistent source of transportation information, and no consistent mechanism for regional transportation communication and coordination.

The following is a proposal to establish a single entity, provisionally called "CapCom", that will facilitate operational coordination and collaboration among transportation agencies and implement a permanent "Center" that will improve the management and sharing of incident-related transportation systems condition and impact information. The goals of CapCom are to:

- Provide better real-time transportation information to emergency managers, the public safety community, and decision-makers in support of their roles in responding to a terrorist incident.
- Help improve the availability and accuracy of real-time transportation information in support of entities that will provide information to the public in such situations, such as emergency managers, transportation agencies, and the media.
- Facilitate coordination among regional transportation decision-makers while an incident is in progress.
- Enable transportation information sharing that will help manage transportation system ripple effects in the wake of a terrorist incident.
- Support post-incident evaluation of response activities and to provide needed support for exercises and training.

The University of Maryland, in coordination with the Transportation Planning Board (TPB) of the Metropolitan Washington Council of Governments (MWCOG) is pleased to submit this proposal for the planning, prototyping and support of CapCom. This proposal

is submitted in response to Request for applications (RFA) #05 HSGP-UASI issued by the District of Columbia Office of the Deputy Mayor for Public Safety and Justice, on January 7, 2005.

II. Project Goals, Objectives and Implementation Steps

CapCom represents a cooperative effort of the Washington region's transportation agencies with the support of the Greater Washington Board of Trade. The unanimous support of this effort is tangible evidence of both the need for CapCom and a guarantee of its success. CapCom is a targeted activity whose scope is specifically devoted to responsibility for overseeing the planning and communications functions associated with transportation operations in connection with the region's response to major incidents, such as, but not limited to, terrorist incidents. CapCom's information sharing functions include communications among agencies as well as with the media and general public to ensure that there is a uniform understanding of the state of the transportation system during such incidents. The content of this proposal have been unanimously approved by the TPB, which is made up of all agencies in the National Capital Region as defined on Page 4 of the RFA.

The region's support of the CapCom effort results from an evaluation of the transportation sector performance during previous incidents, an evaluation of the standard operating procedures of the region's transportation agencies, and a review of progress made in completing the "Regional Emergency Evacuation Transportation Coordination Annex for transportation (R-ESF #1) worksheets. As a result of this review, it was concluded that little planning progress had been made and coordination during incidents was inconsistent. This conclusion highlighted the importance of establishing an organization like "CapCom" that can focus specifically on planning for, responding to, and recovering from the transportation system consequences of regional incidents.

In addition to its regional orientation, the concepts presented in this proposal are directly correlated with the evaluation criteria listed on page 6 of the RFA. Table 1 defines the manner in which these criteria have been addressed.

As requested by the proposal, the remainder of this section is devoted to the description of goals, objectives and implementation steps presented in outline form as requested by the RFA. This information represents the culmination of an extensive planning effort that has been undertaken for CapCom, and to the TPB for their concurrence.

1. **Goal 1 – Establish and operate a regional organization (CapCom) including a governance structure and project staff with the responsibility to facilitate the planning, response and recovery from regional incidents. (Note: Portions of this goal have already been met)**
   1.1. Objective 1 – Define overall governance structure (Completed)
      1.1.1. Implementation step 1 – Identify preferred structure and submit to TPB and CapWIN Executive Leadership Group for approval (Completed)

Table 1. Comparison of Proposal with Review (Evaluation) Criteria

Evaluation Criteria	Proposed Approach
Need for services	Need identified by the Greater Washington Board of Trade (BOT) & from RESF-1 plans, and review of existing SOPs
How needs meet NCR/UAHSS goals & objectives	Goal 1. Preparedness planning – a primary CapCom activity Goal 2. Training – CapCom responsible for coordinating transportation training and providing courses as needed in the area of response to major incidents Goal 3. Transportation sector functional area exercises will be a CapCom Phase II activity Goal 4. Equipment – Access to regional databases including transportation status
How needs meet national initiatives	Potentially useful for responding to HSPD-8 National Preparedness Working with CapWIN toward provision of interoperable voice communications Supports Catastrophic Incident Planning by facilitating movement of responders Citizen participation and communication, fundamental element of CapCom plan
Detailed description of the project	Provided in Section III.
How services meet identified needs	Connection between needs and goals and objectives provided in this section
Are goals measurable and specific	All goals accompanied by quantitative performance measures.
Are goals and objectives clear	Goals and objectives fully defined, connected with needs and measurable.
Organization structure ensures project success	Organization structure built on foundation of successful CapWIN governance structure. Well defined and thoroughly reviewed.
Clearly defined roles & jobs	All roles defined based on past experience with CapWIN organization, knowledge of comparable organizations, and familiarity with operations center management
Accounting safeguards	Use the safeguards and structure of the University of Maryland

Evaluation Criteria	Proposed Approach
Current audit	Audit for FY04 completed. Previous audits available at: http://www.usmd.edu/Leadership/USMOffice/AdminFinance/
Accurate & defined budget	All direct and indirect costs fully defined and described
Evaluation strategy	Evaluation program traceable from goals and objectives to final test plan.

1.2. Objective 2 – Acquire and house staff required to support CapCom operation
   1.2.1. Implementation step 2 – Develop and implement CapCom staffing plan including preparation of job descriptions, and announcing availability of position. (Preliminary position descriptions have been created – please see Appendix A.)
   1.2.2. Implementation step 3 – Employ applicants as needed to fill positions, provide training as appropriate for each position.

1.3. Objective 3 – Initiate operation of a center staffed by trained individuals capable of identifying the presence of a regional incident, and providing the management, coordination, communication, information dissemination and other support required during the incident.
   1.3.1. Implementation step 1 – Prepare a facility to house the staff, and provide needed equipment (consoles, displays, communications, etc.) for communication with appropriate agencies and the media.
   1.3.2. Implementation step 2 – Evaluate staff performance during training exercise conducted under Implementation step described in paragraph 2.3.2, and provide remedial training and supplementary resources as required.

2. Goal 2 – Develop plans and procedures required for transportation response to regional incidents

2.1. Objective 1 – Complete the R-ESF #1 Coordination Worksheets of Appendix III of the Regional Emergency Coordination Plan
   2.1.1. Implementation step 1 – Working with the CapCom steering committee, identify a comprehensive set of evacuation scenarios
   2.1.2. Implementation step 2 – Complete worksheets for each scenario and submit to committee for review
   2.1.3. Implementation step 3 – Derive a general set of CapCom and local agency operating procedures from the completed worksheets.

2.2. Objective 2 – Align procedures of Level A (DDOT, MDOT, VDOT and WMATA) and other selected agencies with the procedures derived during fulfillment of Objective 1.
   2.2.1. Implementation step 1 – Review and supplement information in existing agency standard operating procedures as required for alignment.
   2.2.2. Implementation step 2 – Prepare contact lists and other communications procedures for use by CapCom and agency staffs during regional incidents.

2.3. Objective 3 – Deliver training and conduct exercises to prepare staff for support of regional incidents, and to evaluate staff performance.
   2.3.1. Implementation step 4 – Develop training program to familiarize agency staffs with procedures to be used during major incidents.
   2.3.2. Implementation step 3 – Conduct at least two exercises to validate procedures and contact lists

3. **Goal 3 – Plan and implement the needed resources to support agency coordination as well as the dissemination of transportation system status and condition information to the media and the general public.** Note: CapCom will not be responsible for disseminating incident-related information, and will not advise the public on the actions to be taken during an incident.

3.1. Objective 1 – Develop needed real-time inputs to permit CapCom operators to receive automated information of transportation status from diverse sources such as traffic operations centers, CapWIN incident information, and information provided by media traffic sources (such as WTOP radio).

3.1.1. Implementation step 1 – Access and consolidate information sources via remote access or remote workstations from each of the various sources to be used by CapCom operators, as needed.

3.1.2. Implementation step 2 – Develop automated interfaces between sources and RITIS.

3.2. Objective 2 – Develop a regional integrated transportation information system (RITIS) to combine information received from diverse sources into a unified, accessible system.

3.2.1. Implementation step 1 – Develop RITIS prototype to validate the concept, and provide the opportunity to review the user interface and general RITIS operability (Underway)

3.2.2. Implementation step 2 – Based on the results of the prototype evaluation, review alternative RITIS architectures, and based on this review, procure a production version of the system.

3.2.3. Implementation step 3 – Interface RITIS with other systems including a GIS system such as EMMA or other GIS applications consistent with the Open GIS Consortium (OGC) Web Map Services (WMS) standard. In addition, these interfaces will permit queries of transportation system status by first responder and emergency managers.

3.2.4. Implementation step 4 – Provide media access to RITIS.

The milestones, outcome/benefits, deliverables and measures for evaluation, and the relationship of the goals to the NCR Urban Security Strategy and Eight Commitments to Action are presented in Tables 2 and 3, respectively.

Table 2. Goal Outputs, Outcomes and Evaluation

Goal	Outputs (Milestones & Deliverables)	Outcomes & Benefits	Measures for Evaluation
1. Establish a regional organization	Approved organization Staff hired and trained	CapCom operation Coordination with CapWIN & first responders	Staff size Training completed
2. Plans & procedures for transportation response to regional incidents	R-ESF#1 worksheets SOPs for identified agencies (see text) CapCom SOP Completed facility Exercises	Establishment of operational facility for coordination of transportation response. Improved information dissemination to the media and the public Single point of contact for regional transportation information	Completed R-ESF#1 worksheets SOPs prepared Operational facility Satisfactory completion and evaluation of two exercises
3. Resources to support CapCom operation	RITIS (see text) Interfaces with GIS, the media and the public	Automated interfaces for enhanced dissemination of transportation information	Completion of RITIS prototype Production version of RITIS Full integration

Table 3. Relationship to NCR Strategy and Commitments

Project Goal	NCR Urban Security Strategy Goals	NCR's "Eight Commitments to Action"
1. Establish a regional organization	Required to enable goals 2 and 3.	
2. Plans & procedures for transportation response to regional incidents	1 Preparedness Planning 2 Coordinated Training 3 Exercises	3 Decision-making coordination 6 Media relations 8 Training & exercises
3. Resources to support CapCom operation	4 Equipment to support preparedness	6 Media relations

The CapCom development is scheduled for two sequential phases, with a total project duration of 24 months. The duration of Phase I is 12 months, and the duration of Phase II is 12 months. The relationship between the project phases and the completion of the goals and objectives is shown in Table 4.

Table 4. Time Durations

Goal	Objective	Duration
1. Establish a regional organization	1.1 Governance	Complete
	1.2 Staffing & training	4-6 mos.
	1.3 Operation & exercises	12 mos.
2. Plans & procedures for transportation response to regional incidents	2.1 R-ESF#1 Worksheets	6 mos.
	2.2 Procedures	4 mos.
	2.3 Training & exercises	12 mos.
3. Resources to support CapCom operation	3.1 Real-time inputs	18 mos.
	3.2 RITIS	18 mos.

III. Project Description

The Transportation Planning Board (TPB) formally expressed its support for such a regional program on November 17, 2004, passing a resolution "to endorse actions to improve regional transportation communications and coordination during incidents." Under the leadership of the TPB, a work program for this new entity, provisionally called "CapCom," has been developed to coordinate and collaborate among transportation agencies and to develop a new Regional Transportation Operations Coordination Center to enhance the management and sharing of incident-related transportation systems condition and impact information. The CapCom work program was officially endorsed by the TPB on January 19, 2005, with the support of the Greater Washington Board of Trade.

In accordance with this work program, CapCom will take advantage of the institutional foundation developed under the Capital Wireless Integrated Network (CapWIN) Program. By leveraging the investment already made in the CapWIN Program's current governance structure, and staff, CapCom can be implemented more quickly and efficiently while avoiding duplication with other ongoing activities. Equally important is that the existing governance structure represents a partnership between public safety and transportation agencies that is unique within the United States. The ability to capitalize on this structure will enable the Washington region to circumvent many of the problems that have been faced by other metropolitan areas attempting to develop similar capability.

Implementation of CapCom will occur in two phases:

Phase I. Planning and Prototyping

The first phase includes formal planning and regional coordination activities required to prepare for initial production operations. Specific activities include, but are not limited to, the following:

Planning

- Establish ongoing operations planning coordination structure with regional participants
- Review and begin updating existing SOPs for applicability to regional incidents
- Review and begin updating existing training for regional incidents
- Review and begin updating existing phone and pager lists
- Review and begin updating regional signal timing plans for emergency evacuation
- Review and coordinate identification of critical transportation infrastructure with regional impacts
- Review and begin identifying regional incident data sharing needs (use available documents) such as:
    - Available agency resources
    - Transportation condition information
    - "Exception" data
    - Construction activities
    - Databases being used in statewide geographic information systems
    - Databases of critical infrastructure in the region
- Coordinate preparation and review of regional incident after action reports (with emphasis on regional transportation coordination)
- Prepare and begin implementing Operations Outreach Awareness Plan
- Develop detailed regional incident concept of operations
- Develop regional incident response performance measures of effectiveness for transportation

Prototyping

- Implement a 2-shift CapCom coordination center with the following responsibilities (note that full center implementation will be completed at the end of Phase I):
    - Monitor – recognize need for regional coordination
    - Initiate and coordinate (RICCS-type) communications
    - Ensure that regional SOPs are followed
    - "One-stop-shop" for providing status of transportation system during regional incident (hotline for senior managers and key members of media)
    - Resource availability
    - Operate and maintain regional transportation-specific databases and systems (e.g. RITIS, 511)
    - Provide common access point for regional transportation (e.g. RITIS) information and public safety information while levering existing systems and applications (e.g. CapWIN, EMMA).
    - Establish access to sources of information related to transportation status through real-time linkages with existing systems and execution of agreements with private sector organizations currently collecting similar data. (Note: real-time connection has already been established with CHART, and initial agreements has already been reached with WTOP for provision of such data).
    - Provide "help-desk" support for agreed upon regional applications (initially CapWIN and RITIS).
- Implement RITIS Prototype by end of Phase I
- Identify and deploy existing regional incident applications:

- Center-to-Center: CHART (transportation specific); EMMA/WebEOC, etc. (emergency management specific)
- Center-to-Field: CapWIN

Phase II. Production Operations

Phase II includes the development of enhanced CapCom system capabilities as well as improved regional planning and procedural coordination. Specific activities include, but are not limited to the following:

- Start-up of a 24/7 CapCom coordination center with Phase I responsibilities
- Continue to operate and maintain a 24/7 CapCom coordination center with Phase I responsibilities. Modify responsibilities as necessary based on formal evaluation of center role in incident response coordination for transportation
- Implement "Full Scale"[1] RITIS by end of Phase II
- Initiate phased integration effort based on Phase I integration planning. Pilot integration of system using Center-to-Center (C2C) standards, where available.
- Continue phased application integration effort based on plan developed with activities, milestones, standards, and funding for integration of state and local transportation system applications.
- Continue ongoing facilitated planning coordination meetings
- Complete update of existing SOPs for applicability to regional incidents. Establish timeline & procedure for future updates.
- Complete update of training for regional incidents and begin coordinated training program. Establish method for providing most up-to-date training.
- Complete update of and maintain up-to-date phone and pager lists. Establish timeline & procedure for future updates.
- Complete update of and maintain regional signal timing plans for emergency evacuation. Establish timeline & procedure for future updates.
- Establish specific regional SOPs for incidents involving critical transportation infrastructure.
- Establish regional incident data sharing coordination mechanisms and continue to identify, refine, and implement required incident sharing data.
- Coordinate preparation and review of regional incident after action reports (with emphasis on regional transportation coordination)
- Conduct at least two exercises to be used for evaluation of the SOPs, as well as to evaluate the state of readiness of the transportation sector to provide needed coordination during a regional incident.
- Continue ongoing implementation of Operations Outreach Awareness Plan.
- Revise detailed regional incident concept of operations as necessary based on lessons learned.
- Provide report of regional incident response performance. Establish timeline & procedure for future reports.
- Develop a long-term funding plan to support ongoing CapCom planning, operations, and systems integration activities.

[1] "Full Scale" to be defined during CONOPS and requirements development

All CapWIN development is designed to be compliant with new XML transactions that utilize a multitude of standards, such as GJXDM, IEEE 1512, and OASIS' Common Alerting Protocol (CAP). This capability will be enabled through CapWIN's dedicated XML translation server.

Applicability to National Initiatives

The implementation of CapCom is consistent with several National initiatives identified in the Request for Applications. The matrix below describes the specific benefit that CapCom will address for each applicable initiative.

Table 5. CapCom Applicability to National Initiatives

National Initiative	CapCom Benefit
National Incident Management System (NIMS)	CapCom's incident management capabilities will be designed in accordance with current NIMS command policies and procedures. This integration will: • Ensure that information documented in the CapCom system will be consistent with NIMS incident management requirements • Support incident management operationally in the field by providing electronic access to NIMS-required data to all CapCom participants • Facilitate NIMS post-incident reporting requirements through the use of standardized reports.
HSPD-8 National Preparedness	CapCom's regional governance structure and participation by multiple state and federal entities across the Metropolitan Washington provides a unique opportunity to incorporate new National Preparedness Goals. Specifically, CapCom can: • Facilitate testing of new National Preparedness Scenarios, once finalized. • Electronically enable discreet processes as required "steps" in CapCom's user interface and incident management functions. This can include the proposed Target Capabilities list and associated metrics.
HSPD-8 Implementation/Preventing and Preparing for Terrorist Attacks involving Improvised Explosive Devices (IED)	As an extension of CapCom's ability to support National Preparedness Goals, CapCom can also support IED planning and preparedness goals by: • Helping to develop and conduct scenarios and regional exercises related to IED incidents, focusing specifically on evacuation planning and execution, road closures, detours, and regional coordination. CapCom can aid in the development and implementation of regional-scale exercises for the entire Metropolitan Washington Region.
Achieving Tactical Interoperable Communications	Since CapCom will be built upon the existing capabilities of the CapWIN system infrastructure, CapCom will be

National Initiative	CapCom Benefit
	instantly able to provide tactical interoperable data communication across MD, VA and D.C., transportation, law enforcement, and fire/EMS agencies. CapWIN currently has over 450 users from 23 public safety agencies at both mobile and fixed station locations. CapWIN is currently the only secure, multi-state, interoperable communication system connecting first responders across all public safety disciplines in the field and at emergency operation centers (EOCs). Specific actions will include, but not be limited to: • Establish CapCom connections to all NCR jurisdiction transportation entities through public and commercial networks, including wireless field access through public and commercial networks • Incorporate new ODP tactical interoperable communications guidance into CapCom operational policies and procedures
National Response Plan	As noted in above, CapCom will be able to support multiple national initiatives involving the adoption of new standard processes and protocols. This will be accomplished by: • Incorporating NRP policies/procedural information as document resources available via the CapCom systems • Integrating newly defined incident reporting protocols within CapCom applications, including notifications to Joint Terrorism Task Forces and the Homeland Security Operations Center
Catastrophic Incident Planning	CapCom will be able to support the NRP's Catastrophic Incident Response Annex (CIRA) by: • Supporting regional exercises by utilizing CapCom's infrastructure to help coordinate regional exercises across Federal and state/local agencies • Using CapWIN's currently interoperable connectivity to wireless and fixed station users, CapCom will be able to quickly serve as a lead coordinating entity in support of CIRA/NRP goals and objectives for incident planning and response.
Public Awareness and Citizen Participation	CapCom will support the goals and objectives of Citizen Participation and Public Awareness through the creation of CapCom's Regional Integrated Transportation Information System (RITIS). RITIS will be linked to key media outlets and therefore able to inform the general public of key exercises and events via media outlets. These efforts will: • Increase general public awareness of regional exercises related to emergency preparedness and their

National Initiative	CapCom Benefit
	role/responsibilities in such situations • Solicit citizen participation in preparedness activities and planning

CapCom will also be able to support several objectives listed on page 8 of the RFA, as described below.

Develop/enhance interoperable communication systems
CapCom represents a focused enhancement to the existing CapWIN network which already provides interoperable data communications across 23 agencies in the NCR and beyond. CapCom will be able to leverage this capability and expand connectivity across transportation and public safety agencies at operations centers and wirelessly in the field.

Establish/enhance a terrorism/early warning system, center, or task force
CapCom will also benefit from planned enhancements to the CapWIN system which will include the incorporation of automated notifications to first responders at emergency operations centers and in the field. This capability will include "push-pull" technology that will automatically receive myriad types of alerts, e.g., DMIS, and then automatically send electronic notifications to CapCom/CapWIN users. In this way, CapCom will be able to enhance "early warning" initiatives across transportation and public safety agencies in the NCR.

Establish/enhance citizen emergency preparedness awareness campaigns and public-private emergency preparedness programs
As noted in the National Initiative matrix above, CapCom will be able to support citizen and public-private preparedness programs by providing a media link to the general public concerning regional exercises and incident planning.

Establish/enhance emergency operations centers
CapCom's vision is to become an operational resource available to all Emergency Operations Centers (EOCs) across the NCR. Participation in CapCom, which includes access to the CapWIN system, necessarily provides an instant communication channel to all EOCs and CapCom/CapWIN users in the field and at fixed locations. This will provide unprecedented communication and coordination capabilities among EOCs that is not currently available.

Establish/enhance regional response teams
CapCom' communications infrastructure can be used by regional response teams during incidents and in support of planning activities and exercises. CapCom users will also have instant access to all CapWIN users, including law enforcement and fire/EMS officials in the field and at fixed stations. This capability can greatly enhance regional response teams comprising of multiple jurisdictions and disciplines.

Establish/enhance sustainable homeland security exercise, training, and planning programs
As noted above, CapCom/CapWIN's communication infrastructure will be able to support NCR incident planning and training exercises. Since CapCom is built upon the CapWIN network (a federally funded initiative) all Federal agencies can access and use the CapCom infrastructure. This means that CapCom resources will be available nationally in support of homeland security initiatives.

Manage, update and/or implement the State Homeland Security Strategy
In supporting NCR/National incident planning, response, training, citizen awareness and participation, and notifications to transportation and public safety entities as well as local and national media, CapCom can become a critical communication link and resource to State Homeland Security strategies and plans. CapWIN has already been included in the Commonwealth of Virginia and State of Maryland's formal Interoperability Plans.

Evaluation Strategy
CapCom's implementation will be formally evaluated against the measures identified in Section II of this proposal. This evaluation will be performed by a third party and include quantitative assessments of each measure, wherever possible. As indicated in the first section, the evaluation measures identified for management of the CapCom project include:

Data describing these measures will be collected as an integral part of the Phase 1 and 2 activities. The third party evaluator will prepare the data collection formats and work with system operators and managers to ensure that a continuous evaluation is made. Separate sets of evaluation results will be prepared for phases 1 and 2, to provide the ability to analyze improvements in operations that may have been identified during the prototyping activities of Phase 1.

- Staff size
- Percent of staff trained
- Number of completed R-ESF#1A Worksheets
- Percent of agencies in the region whose SOPs have been reviewed for regional operations, and modified to reflect regional response requirements
- Satisfactory completion and evaluation of two exercises
- Completion of the RITIS prototype
- Completion of a production version of RITIS
- Integration of regional systems.

Admittedly, the measures identified for evaluation are "output" measures rather than "outcome" measures, and the latter are generally preferred. Outcomes describing the CapCom effectiveness will be developed as part of the evaluation of exercises conducted for coordinated transportation system response.

IV. Organization, Experience, and Qualifications of Applicant

The applicant is the University of Maryland, Center for Advanced Transportation Technologies (UMD-CATT).

Overview:

The Center for Advanced Transportation Technology (CATT) is an integral component of the research group within the Department of Civil and Environmental Engineering of the University of Maryland. The Center, which is one of the largest research centers on the College Park Campus, has a long and distinguished history within the University. Through its association with the College of Engineering, the CATT can draw on its own resources as well as the significant capabilities of the College faculty and facilities. The Center has full access to the many resources of the many disciplines that exist throughout the College and the University.

Resources:

CATT offers significant resources related to the acquisition, design, simulation and evaluation of transportation systems. Significant training resources are also available that range from the availability of classrooms and staff for targeted short courses, to the development and hosting of sophisticated internet-based training and education. Through its association with the Technology Transfer Center, the staff includes a total of more than 30 professional and graduate student researchers, as well as a simulation laboratory and other extensive facilities. The funding of the two centers exceeded $8 million in 2004.

CATT Mission:

The mission of CATT is to foster the development and application of innovative approaches to existing and emerging transportation needs through research, education, and deployment assistance.

Who is CATT?

The Center for Advanced Transportation Technology at the University of Maryland, College Park was created in order to respond to the significant changes brought about by increasing use of advanced technologies in the transportation field. The CATT is supported by a permanent staff of Intelligent Transportation Systems (ITS) professionals and affiliated faculty of the Department of Civil Engineering. All offer extensive knowledge and experience in the areas of ITS technology, traffic engineering and control, systems analysis, and operations research.

What CATT does:

The CATT provides a bridge between the ITS community, the information technology community and other disciplines essential to the successful application of ITS.

The Center for Advanced Transportation Technology has a strong and stellar history of qualifications, experience, expertise and capability when managing projects dealing with regional transportation issues. The following are samples of highly successful CATT initiatives:

Maryland SHA CHART II Support: CATT personnel are actively involved in the development of the new traffic management system being developed by the Maryland State Highway Administration. Support includes the definition of a new system acquisition strategy, participation in the definition of the system architecture and participation in the review of software development activities http://www.chart.state.md.us/

CATT Laboratory: The CATT Lab's research and other activities provides a bridge between the intelligent transportation systems (ITS) community, the information technology community, and other disciplines essential to the successful application of ITS. Though more complete list of research activities can be found at the lab's web site, the CATT Lab specializes in transportation data archiving, on-line data retrieval tools, traveler information systems, real-time simulation and forecasting, video detection technologies for traffic and security applications, and geographic information systems (GIS).

Consortium for Intelligent Transportation Education (CITE): The CATT is managing a new university consortium whose objective is the development of distance learning courseware for ITS. All distance-learning courses are delivered over the Internet. Courses span the entire range of ITS technologies from traffic flow through advanced telecommunications concepts. Courses are currently available on the web at http://www.citeconsortium.org/home.html

Capital Wireless Integrated Network (CapWIN): The CapWIN project is intended to provide the technological integration of law enforcement, fire, emergency services and transportation personnel through the use of wireless data networks for communications among field personnel and dispatch centers. The project provides a suite of applications, including incident management, messaging, and access to multiple first responder databases, e.g., law enforcement, HAZMAT, etc. The results of the CapWIN project are anticipated to be more effective incident management, increased personnel productivity and improved inter-agency coordination. Additional information can be found at http://www.capwin.org/

ITS Textbook: The CATT completed the development of an ITS textbook that is intended to serve as a primer for the ITS community. The textbook covers the entire range of ITS applications including traveler information systems, transportation

management, public transit and many other applications. The Institute of Transportation Engineers and the Federal Highway Administration sponsored the work.

Corridor Modeling and Analysis: CHART II ITS support includes the development of a modeling and analysis tool for managing traffic throughout the state of Maryland. The project includes simulation, real-time data acquisition and research into advanced traffic management techniques.

Cellular Applications for Traffic Surveillance: The technology of geo-locating cellular telephones has advanced significantly in the past few years. This project takes advantage of the new location technology by passively tracking cellular telephone users for the purpose of estimating vehicle speeds and travel times throughout the roadway network. The technology offers the prospect of wide area surveillance of traffic flow without the expense of installing vehicle detectors throughout the roadway network.

User Interfaces for ITS: In cooperation with the Human-Computer Interaction Laboratory (HCIL) the CATT is investigating the effectiveness of a variety of computer displays for ITS applications. These include an analysis of the effectiveness of alternative displays of traffic speeds and congestion on highway maps and various techniques for the display of database information related to incidents.

Statewide ITS Architecture: The CATT is supporting the Maryland State Highway Administration in the development of a statewide ITS architecture that will permit seamlessly integrated operation of all agencies involved in transportation management. A statewide ITS capability will permit the sharing of incident information, video, and archived database information among all public agencies of the state.

Occupancy Requirements

No specific license or certification is required to perform the proposed services as reflected in this proposal. This proposal includes a description and floor plan of the proposed CapCom operational center facility to be co-located with the CapWIN Program, another high profile regional communication and information sharing system designed for public safety first responders. The plan calls for CapCom to share the existing CapWIN facility by leasing an additional 2,960 square feet of commercial space immediately adjacent to CapWIN in the Capital Office Park, located at 6305 Ivy Lane, Suite 300, Greenbelt, Maryland 20770. The proposed space includes 1,106 square feet of open area for the Operations Center, one (1) small conference room and five (5) adjacent offices. (See proposed floor plan in Appendix G). Being in close proximity to and physically integrated into the existing CapWIN facility, CapCom will immediately benefit from on-site technical and administrative support.

The proposed CapCom facility is currently vacant and subject to immediate lease and occupancy. A simple modification to CapWIN's existing lease will allow the necessary renovations to start. It is estimated that occupancy could occur within ninety (90) days, once the required renovations and build out to CapCom specifications are completed. A copy of CapWIN's Certificate of Occupancy, issued February 27, 2003 by the Prince George's County Department of Environmental Resources – Permits and Review Division is also included in the Appendices.

Non-profit status

The University of Maryland, as an institution of higher education, is by definition a public or other non-profit institution as defined in US. Code Title 20 (see Appendix C for specific site and associated documentation).

Further, the University of Maryland is a state institution and a wholly owned agency or instrumentality of the State of Maryland. Federal income tax laws do not apply to it and contributions to it are deductible under the provisions of section 170 (c) (1) of the Internal Revenue Code. Thus, the University of Maryland derives its tax exempt status from Internal Revenue Code Sections 170 (c) and 115. Official correspondence to this effect is included in the Appendices.

V. Staffing Plan

Proposed staffing pattern:

CATT proposes to utilize support information technology and administrative services of existing employees from within the CapWIN Program and hire additional personnel with specialized transportation skills, knowledge and abilities to accomplish the goals and objectives as previously established for the development of CapCom.

Due to the ultimate 24x7x365 requirements of the proposed CapCom Operations Center, a phased-in approach will be used to hire and deploy staff as the program develops. The two phases required to fully implement the CapCom vision consist of:

1. **Phase I – Preparation and Prototyping**

    a. Administrative Staffing and planning (within 4 months from start)

    b. Two shift "trial" operation (within 7-9 months from start)

2. **Phase II – Operational**

    a. Three shifts in full operation (within 12 months from start)

Utilizing existing CapWIN staff and services, the project can be expedited and implemented quickly.

The following table reflects existing CapWIN professional staff; proposed CapCom personnel; and the estimated amount of work time to be commitment to the proposed CapCom Program. Note that only a portion of the % time of the existing personnel listed in the table will be funded through this grant. Details are included in the Budget and Budget Narrative. These in-kind services will expedite making CapCom operational.

Table 6. Proposed Personnel and Percentage of Work Time

CATT / CapWIN **Existing Personnel**	**%** **Time**	**CapCom** **New Hires**	**%** **Time**
CATT Director	25	Transportation Manager	100
CATT Lab Director	25	Asst. Transportation Manager Operations	100
CATT Program Manager/UMD-CapWIN Liaison	50	Asst. Transportation Manager Systems	100
CapWIN Program Director	50	Administrative Assistant	100
CapWIN Deputy Program Director	50	Operations Shift Lead (3)	100
CapWIN Director of Technical Operations	30	Operators (12)	100
CapWIN Senior Systems Architect	15		

CATT / CapWIN Existing Personnel	% Time	CapCom New Hires	% Time
CapWIN Network Operations Manager	50		
CapWIN Technical Operations Manager	25		
CapWIN Systems Administrator	20		
CapWIN Director of Field Operations	15		
CapWIN Field Services Coordinator	15		
CapWIN Training & Multi-media Manager	15		
CapWIN Client Relations & Marketing Manager	15		
CapWIN Program Coordinator	15		

New employees hired to fulfill requirements for the CapCom program will be employed as Faculty Research Assistants (FRA) through the University of Maryland. An FRA is defined as:

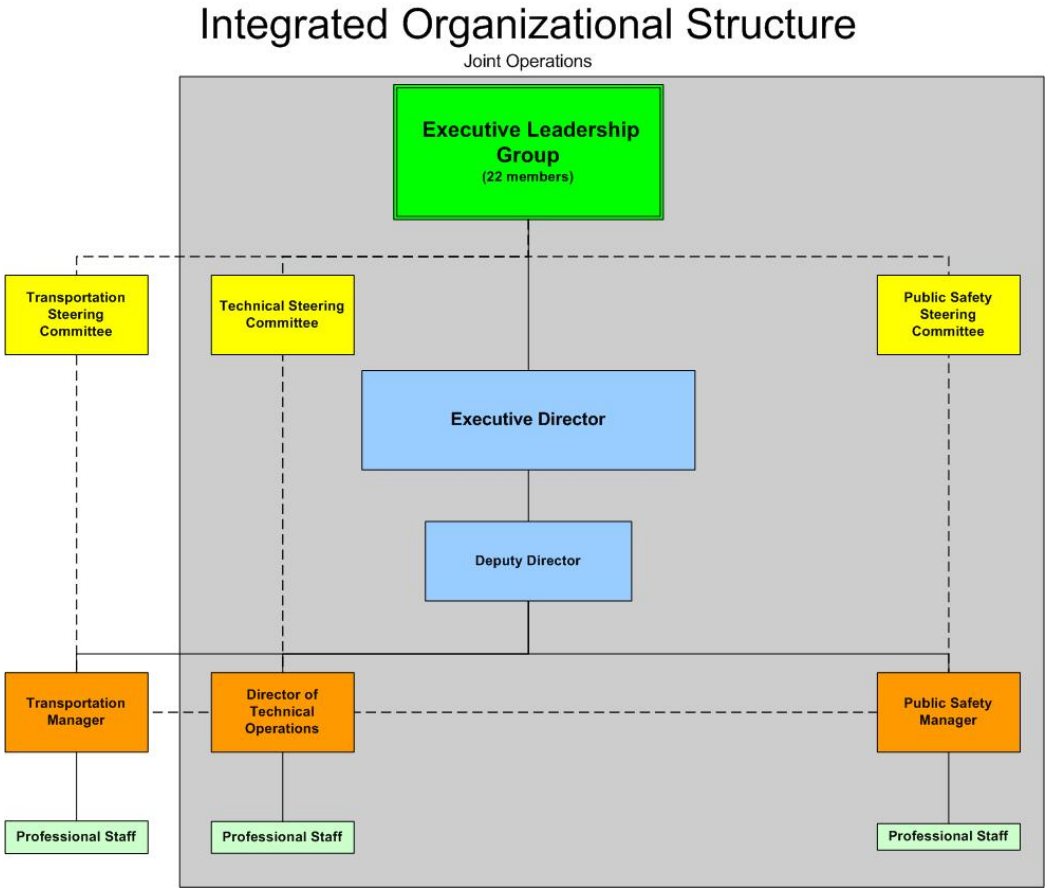
- "The appointee should be capable of assisting in research under the direction of the head of a research project and should have ability and training adequate to the carrying out of the particular techniques required, the assembling of data, and the use and care of any specialized apparatus. A baccalaureate degree shall be the minimum requirement."

The only exception to this applies to the proposed CapCom Administrative Assistant. This position will be a non-exempt UMD employee subject to a different hiring process than an FRA.

Relationship to existing resources:

The CapWIN Program has been recognized by regional transportation authorities as currently having the fundamental governance structure, staff and other elements required for implementing a regional transportation coordination program like CapCom. CapWIN has the existing capacity to provide the basis for developing and rapidly implementing CapCom while avoiding duplication with other ongoing activities.

The proposed organization shown in the figure below has been approved by the Management and Operations ITS (MOITS) committee under the Transportation Planning Board, as well as the CapWIN executive leadership group. This structure permits senior transportation sector, and public safety sector managers to oversee the operation of both CapCom and CapWIN. In this manner, the coordination of the two activities is assured, efficient use is made of scarce management time, and representation by all parties responsible for response to terrorist incidents is assured. Similarly, steering committees staffed by public sector individuals with operational experience are established to provide detailed guidance in their respective areas. This organization conserves staff time, and leverages the existing CapWIN organization. This relationship is reflected in the following organizational chart:



The structure below reflects the fully staffed operation in place at the end of Phase I. Phase I includes startup of a prototype 2-shift operation within 7-9 months of notification of award. The table following the CapCom organizational structure provides a summary of duties by position. For detailed position descriptions, please see Appendix A.

CapCom internal organization:

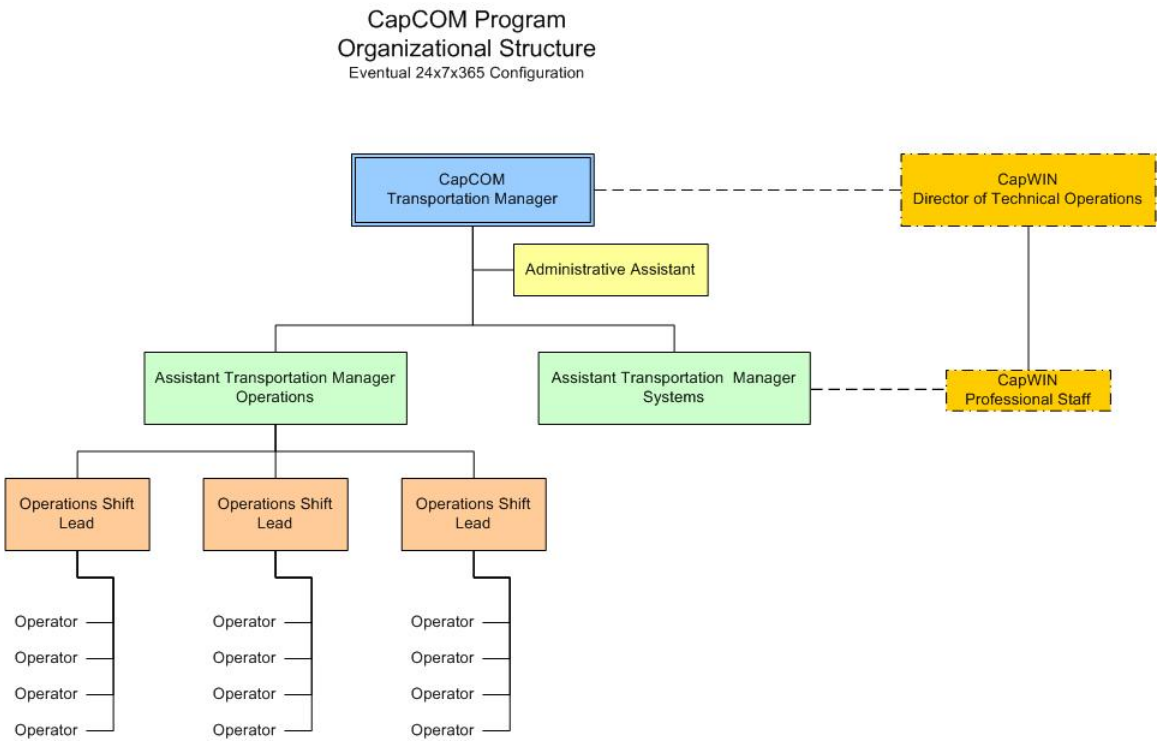


Table 7. Proposed Positions and Functions

Proposed Position	General Functions & Responsibilities*
CapCom Transportation Manager	Provides overall administrative direction of CapCom.
CapCom Assistant Transportation Manager - Operations	Manages all activities of the CapCom Operations Center for delivery of 24x7x365 service.
CapCom Assistant Transportation Manager - Systems	Manages all IT and technical interfaces of regional transportation systems and applications related to CapCom.
CapCom Administrative Assistant	Administrative support for CapCom personnel.
CapCom Operations Shift Lead (3 positions)	Provides supervisory duties and responsibilities for one of three (3) Operator Teams. Also functions as a Lead Operator and works rotating shifts with the team.

Proposed Position	General Functions & Responsibilities*
CapCom Operator (12 positions)	Provides basic Operator duties and responsibilities as required. Works rotating shifts to ensure 24x7x365 delivery of service.

* Complete duties and responsibilities are detailed in each position's job description included in the Appendices.

Records Management:

Employee personnel records shall be kept and accurately maintained by the Administrative Services Division of the University of Maryland. UMD has extensive and detailed policy for handling all human resource issues that will be associated with the CapCom Program. Policy on records management issues is clearly stated in the UMD Policy (please see Appendix F).

VI. Project Budget and Budget Justification

The total project cost for full CapCom implementation is $4,889,094. This funding is essential to carry out all the project goals, objectives, and implementation steps as outlined in Section II of this proposal as well as all the activities included with Section III, Project Description. This funding is critical to significantly improve the capability of regional transportation agencies to coordinate regional planning and operational response capabilities in their efforts to better assist the public safety community in times of crisis.

Key to this budget is the emphasis placed on existing resources and investment made in physical infrastructure and personnel resources. Leveraging this investment will allow CapCom to be stood up in a matter of months as opposed to years and reduces the overall capital cost of implementation.

This UASI grant is critical to make CapCom an operational system that can serve homeland security needs well within the timeframe of the three year FY05 UASI grant funding period. Operational costs are critical for CapCom start-up and are limited to the duration of this proposals period of performance. On-going operational costs of CapCom will be met through a variety of sources to include, but not limited to: TPB member contributions and regular transportation Federal-aid funding.

The budget narrative that follows is broken down by phase and provides a detailed justification for all costs included in this proposal.

A. Personnel (Phases I & II)

The following new positions are required to staff the CapCom Program. It is assumed that all new positions will be filled starting 3 months from notice to proceed. Position descriptions for each position are included in Appendix A. A CapCom organizational chart

is included in Section 5. (Note that this organizational chart shows all positions through Phase II).

- **Transportation Manager**: Provides overall day-to-day management and direction for CapCom.
- **Assistant Transportation Manager – Operations**: Manages incident pre-planning activities as well as all CapCom Center operations activities.
- **Assistant Transportation Manager – Systems**: Manages all transportation system integration activities and IT support related to CapCom. Works closely with, and receives support from, CapWIN Program technical staff.
- **Administrative Assistant**: Provide administrative program support for CapCom personnel.
- **Transportation Operations Shift Lead (2 positions (Phase I))**: Provides supervisory duties and responsibilities for one of two Transportation Operator Technician teams covering 2 shifts. Also functions as a Lead Operator and works rotating shifts with the team.
- **Transportation Operator Technician (8 positions (Phase I))**: Provides monitoring, information entry, communication, and coordination duties.

The following are existing positions within the UMD Center for Advanced Transportation Technology Center (UMD-CATT) and the CapWIN Program within UMD-CATT. Existing CapWIN personnel is shown in Section 5. Because these personnel are already hired and available to help support CapCom, the entire CapCom operation can be stood up in months as opposed to years. In many instances, the % time that would be charged to the UASI grant is less than the % time that will be spent by these individuals in supporting CapCom. This is because existing funds from other sources that are directly related to this initiative are being used to leverage the UASI grant funds. The numbers in parenthesis denote the percent time that will be spent on CapCom followed by the percentage time charged to the UASI grant.

- **Director, CATT**: Provides overall strategic direction for CapCom. (25% | 5%)
- **Director, CATT Laboratory**: Provides technical integration and transportation database access support. (25% | 5%)
- **Program Manager, CATT**: Provides start-up project management for CapCom as well as ongoing transportation management domain expertise to CapCom and CapWIN Programs. (50% | 25%)
- **Director, CapWIN Program**: Provides management and strategic direction for both CapCom and CapWIN and coordinates the multi-discipline staff to support the direction and needs of the Executive Leadership Group and its Committees. (50% | 0%)
- **Deputy Director, CapWIN Program**: Provides overall personnel, budget, and office management for CapCom and CapWIN and provides direct support for implementing CapCom Center. (50% | 20%)
- **Director of Technical Operations, CapWIN Program**: Provides overall technical management in support of CapCom and CapWIN. (30% | 15%)
- **Senior Systems Architect, CapWIN Program**: Provides software development and technical integration support for CapCom and CapWIN. (15% | 5%)

- **Network Operations Manager, CapWIN Program**: Provides office LAN and CapCom / CapWIN landline and wireless telecommunications support. [Note: This is an existing unfilled position within the CapWIN Program. When filled, this position will support both CapWIN and CapCom IT infrastructure. (50% | 50%)
- **Technical Operations Manager, CapWIN Program**: Provides project management of software development as well as IT infrastructure initiatives in support of CapCom and CapWIN. (25% | 15%)
- **System Administrator, CapWIN Program**: Provides office LAN and CapCom / CapWIN landline wireless telecommunications support (reports to Network Operations Manager- a position that is currently vacant). (20% | 15%)
- **Director of Field Operations, CapWIN Program**: Provides field operations management support such as interagency agreement execution and incident preplanning coordination between transportation and public safety. (15% | 5%)
- **Field Services Coordinator, CapWIN Program**: Provides coordination support services directly with field personnel to ensure transportation and public safety coordination. (15% | 5%)
- **Training and Multi-media Manager, CapWIN Program**: Provides training on use of computer software for field responders and system administrators. (15% | 5%)
- **Client Relations & Marketing Manager, CapWIN Program**: Works with incident response agencies to bring on new users and to market CapCom operations capabilities and benefits. (15% | 5%)
- **Program Coordinator, CapWIN Program**: Provides lead administrative support to all CapCom and CapWIN personnel. (15% | 10%)

All of these positions are included in Phase II. Phase II includes the addition of a Transportation Operations Shift Lead position and four Transportation Operations Technicians. This is required to add a third shift for 24/7 operations in Phase II. There are some increases in the percent time of existing technical personnel that are charged to this grant as they will play an increased role in getting traffic management centers integrated with CapCom. Some percentages charged to the grant also decrease.

B. Fringe Benefits (Phases I & II)

The RFA indicates that "fringe should not exceed 20%". It is assumed that the 20% limit is a guideline not a mandatory requirement. The University of Maryland's fringe benefits are based on actual fringe costs for each person. For budgeting purposes, we are using the average rate for the employees working on this project, which is 28% and is calculated as follows:

Category	Rate
Employers FICA	7.65%
Retirement	7.25%
Tuition Remission	0.06%
Health Benefits	12.98%
Unemployment Insurance	0.06%
Total	**28.00%**

As the University of Maryland is a State institution, employees of the University must abide by the State fringe structure. We will be happy to discuss this matter with you in additional detail, and explore ways in which the policies of the District of Columbia and the University of Maryland can be reconciled. Should you have any questions regarding this fringe rate, please contact Ms. Wendy Montgomery in the University's Office of Research Administration and Advancement at (301) 405-6279.

C. Travel (Phases I & II)

All travel will be in accordance with University of Maryland travel policies.

Local Coordination Meetings:

- Provides travel funds for CapCom staff to attend Transportation Steering Committee Meetings, Technical Committee meetings, Public Safety Steering Committee meetings, MWCOG meetings, Executive Leadership Group meetings, etc.

ITS America Meeting:

- Provides travel funds for two CapCom staff members to attend two ITS America conferences (one in each Phase). Attendees will be presented with the latest developments of the Intelligent Transportation Systems technology and share experiences and lessons learned with other attendees on interoperability issues, progress and status of the CapCom initiative.

National / Regional Homeland Security Conference:

- Provides travel funds to attend two key regional or National Homeland Security meetings / Conferences (one in each Phase) to learn more about the latest

developments in public safety homeland security terrorist response efforts and how transportation can facilitate those efforts. Experiences and lessons learned will be shared with other attendees on the progress and status of CapCom and how transportation can play an active role in facilitating terrorist incident planning, response, and recovery. Alternatively, funds could be used for one CapCom staff member to attend the annual IACP/LEIM conference to learn about the latest developments in law enforcement / public safety related technology that would have potential benefit transportation and law enforcement technology integration.

D. Equipment (Phases I and II)

- **Existing Network Room Expansion**: This does NOT involve physical expansion of the existing network room housing CapWIN computer equipment. It does include the addition of racks, LAN hardware such as servers, routers, etc. to support the CapCom Center and offices. To the maximum extent possible, spare capacity of existing IT infrastructure built for CapWIN will be leveraged to support CapCom. It also includes funding to increase the capacity of the telecommunications infrastructure (network room "communication closet" to handle additional circuits for connecting to regional transportation management centers).

- **CapCom Ops Center & Offices**: CapCom requires an operational base to provide for an operations Center and offices. CapCom will leverage the existing facility space being leased to support CapWIN. This will allow sharing of space that will support both CapCom and CapWIN such as the existing network room, training facility, kitchen, file and storage areas, a main copy room. Additional physical space will be required to accommodate the CapCom Center and offices. This proposal requests funds to establish this Center and related office if the current commercial facility (a floor plan of showing the addition of 3,000 square feet of additional space is included in Appendix G). The CapCom Center space will require furnishings to support an operations center similar to a traffic operations center. The offices will house support staff and will require furnishings. A small conference room with furnishings is included for internal staff meetings as well as for meetings with transportation and public safety agency personnel.

- **CapCom Facility IT Equipment**: Because CapCom will involve implementation of an operational center that will be connected to transportation management centers, it will require the necessary internal IT equipment to conduct daily operations. Essential items include hardware; software; a fax machine and a small copier. Major copying jobs can be performed using existing equipment. In addition, other related support equipment such as video projectors, scanners, digital whiteboards, and digital cameras will NOT be required as these already exist and will be shared by the CapWIN Program. Also included in this section are funds for CapCom Integration. This includes funding for additional,

hardware, software, and integration that will be required to connect to existing regional transportation management centers starting with:

- Maryland Statewide Operations Center;
- Northern Virginia Smart Traffic Center;
- DC Integrated Transportation Management Center;
- WMATA Operations Center

- Phase II includes additional CapCom integration funding to connect additional local centers such as the Montgomery County TMC, Prince George's County TMC, as well as for software application integration.

E. Supplies (Phases I & II)

- As a professional operational entity, CapCom will require office supplies and materials necessary to conduct day-to-day business and operational activities. The establishment of a Center and support offices will have to be appropriately equipped and supplied in order to become fully operational. Office supplies will be purchased via existing vendor contracts established through the University of Maryland. Training manuals and reference materials will be developed and produced to support CapCom operational requirements.

- The Phase I equivalent number of supplies and funding for those supplies is included in Phase II.

F. Consultants/Contracts (Phase I & II)

- This funding is required to support T-1 circuits to connect to existing traffic management centers and includes the addition of Nextel phones for CapCom center personnel which will be added to an existing contract. The phones will be an important communications tool to facilitate communications with transportation managers and field personnel as may be required.

G. Other Costs (Phases I & II)

- CapCom requires an operational base to provide for an operations Center and offices. CapCom will leverage the existing facility space being leased to support CapWIN. This will allow sharing of space that will support both CapCom and CapWIN such as the existing network room, training facility, kitchen, file and storage areas, a main copy room. Additional physical space will be required to accommodate the CapCom Center and offices. This proposal requests funds to establish this Center and related office within the current commercial facility (a floor plan of showing the addition of 3,000 square feet of additional space is included in Appendix G). This proposed space will be added to the existing CapWIN lease which means it can be executed very quickly allowing the Center to become operational in the proposed aggressive timeframe. Included in the

lease are space reconfiguration costs and expansion expenses broken down as follows:

▪ CapCom Floor Space Reconfiguration:	$48,000
▪ Existing Kastle Security System Extension:	$2,500
▪ Pulling wires to expand LAN:	$5,000
▪ Installing dedicated circuits to existing generator:	$5,000
▪ Electrical overage charges:	$12,000
▪ Upgrade existing UPS:	$50,000
▪ Capital Office Park Maintenance "Pass Through":	$1,000
▪ 2 year lease for 3,000 sq. ft.:	$146,084
Total:	$269,584

Note again, that existing infrastructure installed to support CapWIN will be leveraged. That includes the existing generator which has the capacity to support CapCom center operations in the event of a power failure. However, the existing CapWIN uninterruptible power supply (UPS) will have to be upgraded to support the CapCom center. The existing security system will also be used. Electrical costs for basic office power supply is included in the lease; however, overages due to the network room are not included. The electrical overages for the addition of the CapCom center are estimated at $500/month.

- Registration Fees to attend the ITS America Annual Meeting and Homeland Security Conference are also included. These are the only fees included in Phase II.

H. Indirect Costs (Phases I and II)

- A copy of the approved ***Colleges and Universities Rate Agreement*** has been included within this proposal as required (see Appendix E). As is indicated in the worksheet, certain amounts have been identified as exempt from indirect costs in the Equipment, and Other sections of this Budget Detail Worksheet. The line items that are exempt from overhead are denoted in these sections.

Detailed budget tables can be found below.

Phase I & II Budget Summary

Budget Category		Amount
A. Personnel (Phase 2)	$	1,041,127.88
B. Fringe Benefits (Phase 2)	$	291,515.81
C. Travel (Phase 2)	$	4,889.00
D. Equipment (Phase 2)	$	903,000.00
E. Supplies (Phase 2)	$	5,450.00
F. Consultants/Contracts (Phase 2)	$	27,300.00
G. Other (Phase 2)	$	900.00
Total Phase 2 Direct Costs	**$**	**2,274,182.68**
H. Indirect Costs (Phase 2)	$	625,400.24
TOTAL PHASE 2 PROJECT COSTS	**$**	**2,899,582.92**
TOTAL PHASE 1 PROJECT COSTS	**$**	**1,989,511.21**
TOTAL PROJECT COSTS (PHASE 1 & 2)	**$**	**4,889,094.12**

Phase I. Spreadsheets

A. Personnel (Phase 1) - 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	Annual Salary	% Time	Salary Cost
Transportation Manager, CapCom Program*	$ 100,000	100%	$ 75,000.00
Asst. Transportation Manager - Operations, CapCom Program*	$ 90,000	100%	$ 67,500.00
Asst. Transportation Manager - Systems, CapCom Program*	$ 80,000	100%	$ 60,000.00
Administrative Assistant, CapCom Program*	$ 30,000	100%	$ 22,500.00
Transportation Operations Shift Lead (2), CapCom Program**	$ 76,000	100%	$ 31,666.67
Transportation Operator Technician (8), CapCom Program**	$ 280,000	100%	$ 116,666.67
CATT Director	$ 165,000	5%	$ 8,250.00
CATT Lab Director	$ 81,000	5%	$ 4,050.00
CATT Program Manager	$ 102,000	25%	$ 25,500.00
Director, CapWIN Program	$ -	20%	$ -
Deputy Director, CapWIN Program	$ 90,400	20%	$ 18,080.00
Director of Technical Operations, CapWIN Program	$ 89,850	15%	$ 13,477.50
Senior Systems Architect, CapWIN Program	$ 86,450	5%	$ 4,322.50
Network Operations Manager, CapWIN Program	$ 83,000	50%	$ 41,500.00
Technical Operations Manager, CapWIN Program	$ 87,450	15%	$ 13,117.50
System Administrator, CapWIN Program	$ 66,000	15%	$ 9,900.00
Director of Field Operations, CapWIN Program	$ 88,800	5%	$ 4,440.00
Field Services Coordinator, CapWIN Program	$ 68,800	5%	$ 3,440.00

A. Personnel (Phase 1) - 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	Annual Salary	% Time	Salary Cost
Training & Multi-media Manager, CapWIN Program	$ 75,400	5%	$ 3,770.00
Client Relations & Marketing Manager, CapWIN Program	$ 80,000	5%	$ 4,000.00
Program Coordinator, CapWIN Program	$ 42,300	10%	$ 4,230.00
		Phase 1 Total	**$ 531,410.83**

***** These positions would be filled starting 3 months following NTP

** These positions would be filled starting 7 months following NTP

B. Fringe Benefits (Phase 1) - 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	Salary Cost	Fringe Rate	Fringe Cost
Transportation Manager, CapCom Program	$ 75,000.00	28%	$ 21,000.00
Asst. Transportation Manager - Operations, CapCom Program	$ 67,500.00	28%	$ 18,900.00
Asst. Transportation Manager - Systems, CapCom Program	$ 60,000.00	28%	$ 16,800.00
Administrative Assistant, CapCom Program	$ 22,500.00	28%	$ 6,300.00
Transportation Operations Shift Lead (3), CapCom Program	$ 31,666.67	28%	$ 8,866.67
Transportation Operator Technician (7), CapCom Program	$ 116,666.67	28%	$ 32,666.67
CATT Director	$ 8,250.00	28%	$ 2,310.00
CATT Lab Director	$ 4,050.00	28%	$ 1,134.00
CATT Program Manager	$ 25,500.00	28%	$ 7,140.00
Director, CapWIN Program	$ -	28%	$ -
Deputy Director, CapWIN Program	$ 18,080.00	28%	$ 5,062.40
Director of Technical Operations, CapWIN Program	$ 13,477.50	28%	$ 3,773.70
Senior Systems Architect, CapWIN Program	$ 4,322.50	28%	$ 1,210.30
Network Operations Manager, CapWIN Program	$ 41,500.00	28%	$ 11,620.00
Technical Operations Manager, CapWIN Program	$ 13,117.50	28%	$ 3,672.90
System Administrator, CapWIN Program	$ 9,900.00	28%	$ 2,772.00
Director of Field Operations, CapWIN Program	$ 4,440.00	28%	$ 1,243.20
Field Services Coordinator, CapWIN Program	$ 3,440.00	28%	$ 963.20
Training & Mulit-media Manager, CapWIN Program	$ 3,770.00	28%	$ 1,055.60

B. Fringe Benefits (Phase 1) - 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	Salary Cost	Fringe Rate	Fringe Cost
Client Relations & Marketing Manager, CapWIN Program	$ 4,000.00	28%	$ 1,120.00
Program Coordinator, CapWIN Program	$ 4,230.00	28%	$ 1,184.40
		Phase 1 Total	**$ 148,795.03**

C. Travel (Phase 1) - 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	Computation	Cost
Local Coordination Meetings	Metro Washington	Metro Fares	3 meetings per mo * 3 people * $7 roundtrip * 12 mo's	$ 756
		Parking	1 meeting per mo * 2 people * $12 * 12 mo's	$ 288
		Mileage	1 meeting per mo * 2 people * 35 miles * 12 mo's * $0.36	$ 300
ITS America Annual Meeting	TBD	Airfare	2 people * $500	$ 1,000
		Lodging	2 people * $125 * 3 nights	$ 750
		Subsistence	2 people * $50 per day * 4 days	$ 400
		Car Rental	$40 per day * 4 days	$ 160
IACP / LEIM Meeting or National Security Related Conference	TBD	Airfare	1 person * $500	$ 500
		Lodging	1 person *$125 * 3 nights	$ 375
		Subsistence	1 person * $50 per day * 4 days	$ 200
		Car Rental	$40 per day * 4 days	$ 160
			Phase 1 Total	**$ 4,889.00**

D. Equipment (Phase 1) - 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
Existing Network Room Expansion		
- Expansion related alterations* (e.g., Racks, LAN HW components such as routers, hubs, switches, bridges, servers, etc.)	LS	$ 35,000
- Telecommunication infrastructure upgrade*	LS	$ 20,000
CapCom Ops Center & Offices		
- Ops Center Consoles	4 @ $8,000	$ 32,000
- Office Furniture & Small Conf Room	6 offices & 1 small conf room	$ 20,000
CapCom Facility IT Equipment		
- Ops Center Hardware*	Computers & Displays	$ 50,000
- Office Computer Work Stations*	6 @ $2500	$ 15,000
- EvDO wireless network cards	3 @ $300	$ 900
- Existing CISCO IP Phone Sys Expansion	10 @ $750	$ 7,500
- Fax Machine	1 @ $300	$ 300
- Small Copier	1 @ $400	$ 400

D. Equipment (Phase 1) - 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
CapCom Integration	LS for Existing TMC Hardware/Software Integration	$	475,000
	Phase 1 Total	**$**	**656,100.00**
	****Total Exempt from Overhead***	**$**	**120,000.00**

E. Supplies (Phase 1) - 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
Office supplies: Binders, calculators, calendars, cards, clips, clamps, clocks, copy paper, diskettes, data storage media, envelopes, file folders, label makers, note pads, paper, pens, pencils, punches, rubber bands, rulers, scissors, staples and removers, surge protectors, tags, tape dispensers, tap, etc.	LS	$ 2,500.00
Printer Supplies (standard toner)	4 @ $125	$ 500.00
Pinter Supplies (color toner)	4 @ $300	$ 1,200.00
Postage	USPS, FedEx, UPS rates	$ 750.00
Training & Reference Manuals	5 @ $100	$ 500.00
	Phase 1 Total	**$ 5,450.00**

F. Consultants/Contracts (Phase 1) - 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 Consultant	Service Provided	Computation	Cost
		subtotal	**$ -**

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
		subtotal	**$ -**

F. Consultants/Contracts (Phase 1) - 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 Consultant	Service Provided	Computation	Cost

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
CapCom Telecommunications Services (leased T-1 circuits)	$	24,000
CapCom Nextel Service Contract (5 phones @ $55/phone /yr)	$	3,300
Phase 1 subtotal	**$**	**27,300.00**

G. Other Costs (Phase 1) - 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
CapCom Facility Commercial Lease (add on to existing CapWIN Facility Lease)**	2 year (24 month) lease and facility prep for commercial space of 3000 sq. ft. @ $23.87/sq. ft. for year 1 and a 4% increase in year 2. Prep includes work to reconfigure existing floor plan to accommodate CapCom center, and expand existing CapWIN security, LAN, and telephone system to accommodate CapCom facility space.	$ 269,584
Registration Fees - ITS America	2 @ $300	$ 600
Registration Fees - IACP/LEIM	1 @ $300	$ 300
	Total	**$ 270,484.00**
	****Total Exempt from Overhead***	**$ 269,584.00**

**Lease Cost is for Phase 1 and 2

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
Total Direct Cost Exemptions		
D. Equipment		$ 120,000
G. Other		$ 269,584.00
	Subtotal Items Exempt from OH	$ 389,584.00
	Phase 1 Total Direct Cost	$ 1,644,428.87
Phase 1 Total Modified Direct Cost (TDC - Subtotal of Exempt Items)		$ 1,254,844.87
Phase 1 Total Indirect Cost (27.5% of MTDC)		**$ 345,082.34**

Phase II. Spreadsheets

A. Personnel (Phase 2) - 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	Annual Salary	% Time	Salary Cost
Transportation Manager, CapCom Program	$ 100,000	100%	$ 105,000.00
Asst. Transportation Manager - Operations, CapCom Program	$ 90,000	100%	$ 94,500.00
Asst. Transportation Manager - Systems, CapCom Program	$ 80,000	100%	$ 84,000.00
Administrative Assistant, CapCom Program	$ 30,000	100%	$ 31,500.00
Transportation Operations Shift Lead (3), CapCom Program*	$ 116,280	100%	$ 116,280.00
Transportation Operator Technician (12), CapCom Program**	$ 428,400	100%	$ 428,400.00
CATT Director	$ 173,250	5%	$ 8,662.50
CATT Lab Director	$ 85,050	10%	$ 8,505.00
CATT Program Manager	$ 107,100	10%	$ 10,710.00
Director, CapWIN Program	$ -	35%	$ -
Deputy Director, CapWIN Program	$ 94,920	10%	$ 9,492.00
Director of Technical Operations, CapWIN Program	$ 94,343	25%	$ 23,585.63
Senior Systems Architect, CapWIN Program	$ 90,773	25%	$ 22,693.13
Network Operations Manager, CapWIN Program	$ 87,150	50%	$ 43,575.00
Technical Operations Manager, CapWIN Program	$ 91,823	25%	$ 22,955.63
System Administrator, CapWIN Program	$ 69,300	15%	$ 10,395.00
Director of Field Operations, CapWIN Program	$ 93,240	5%	$ 4,662.00
Field Services Coordinator, CapWIN Program	$ 72,240	5%	$ 3,612.00
Training & Multi-media Manager, CapWIN Program	$ 79,170	5%	$ 3,958.50

A. Personnel (Phase 2) - 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	Annual Salary	% Time	Salary Cost
Client Relations & Marketing Manager, CapWIN Program	$ 84,000	5%	$ 4,200.00
Program Coordinator, CapWIN Program	$ 44,415	10%	$ 4,441.50
		Phase 2 Total	**$ 1,041,127.88**

***** 1 additional shift lead in Phase 2 (includes 3% salary increase for Phase 1 shift leads)

** 4 additional Transportation Operator Technicians added in Phase 2 (includes 3% salary increase for Phase 1 technicians)

B. Fringe Benefits (Phase 2) - 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	Salary Cost	Fringe Rate	Fringe Cost
Transportation Manager, CapCom Program	$ 105,000.00	28%	$ 29,400.00
Asst. Transportation Manager - Operations, CapCom Program	$ 94,500.00	28%	$ 26,460.00
Asst. Transportation Manager - Systems, CapCom Program	$ 84,000.00	28%	$ 23,520.00
Administrative Assistant, CapCom Program	$ 31,500.00	28%	$ 8,820.00
Transportation Operations Shift Lead (3), CapCom Program	$ 116,280.00	28%	$ 32,558.40
Transportation Operator Technician (7), CapCom Program	$ 428,400.00	28%	$ 119,952.00
CATT Director	$ 8,662.50	28%	$ 2,425.50
CATT Lab Director	$ 8,505.00	28%	$ 2,381.40
CATT Program Manager	$ 10,710.00	28%	$ 2,998.80
Director, CapWIN Program	$ -	28%	$ -
Deputy Director, CapWIN Program	$ 9,492.00	28%	$ 2,657.76
Director of Technical Operations, CapWIN Program	$ 23,585.63	28%	$ 6,603.98
Senior Systems Architect, CapWIN Program	$ 22,693.13	28%	$ 6,354.08
Network Operations Manager, CapWIN Program	$ 43,575.00	28%	$ 12,201.00
Technical Operations Manager, CapWIN Program	$ 22,955.63	28%	$ 6,427.58
System Administrator, CapWIN Program	$ 10,395.00	28%	$ 2,910.60
Director of Field Operations, CapWIN Program	$ 4,662.00	28%	$ 1,305.36
Field Services Coordinator, CapWIN Program	$ 3,612.00	28%	$ 1,011.36
Training & Mulit-media Manager, CapWIN Program	$ 3,958.50	28%	$ 1,108.38

B. Fringe Benefits (Phase 2) - 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	Salary Cost	Fringe Rate	Fringe Cost
Client Relations & Marketing Manager, CapWIN Program	$ 4,200.00	28%	$ 1,176.00
Program Coordinator, CapWIN Program	$ 4,441.50	28%	$ 1,243.62
		Phase 2 Total	**$ 291,515.81**

C. Travel (Phase 2) - 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	Computation	Cost
Local Coordination Meetings	Metro Washington	Metro Fares	3 meetings per mo * 3 people * $7 roundtrip * 12 mo's	$ 756
		Parking	1 meeting per mo * 2 people * $12 * 12 mo's	$ 288
		Mileage	1 meeting per mo * 2 people * 35 miles * 12 mo's * $0.36	$ 300
ITS America Annual Meeting	TBD	Airfare	2 people * $500	$ 1,000
		Lodging	2 people * $125 * 3 nights	$ 750
		Subsistence	2 people * $50 per day * 4 days	$ 400
		Car Rental	$40 per day * 4 days	$ 160
IACP / LEIM Meeting or National Security Related Conference	TBD	Airfare	1 person * $500	$ 500
		Lodging	1 person *$125 * 3 nights	$ 375
		Subsistence	1 person * $50 per day * 4 days	$ 200
		Car Rental	$40 per day * 4 days	$ 160
			Phase 2 Total	**$ 4,889.00**

D. Equipment (Phase 2) - 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
CapCom Integration	LS for Existing TMC Hardware/Software Integration	$	903,000
	Phase 2 Total	**$**	**903,000.00**

E. Supplies (Phase 2) - 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
Office supplies: Binders, calculators, calendars, cards, clips, clamps, clocks, copy paper, diskettes, data storage media, envelopes, file folders, label makers, note pads, paper, pens, pencils, punches, rubber bands, rulers, scissors, staples and removers, surge protectors, tags, tape dispensers, tap, etc.	LS	$	2,500.00
Printer Supplies (standard toner)	4 @ $125	$	500.00
Pinter Supplies (color toner)	4 @ $300	$	1,200.00
Postage	USPS, FedEx, UPS rates	$	750.00
Training & Reference Manuals	5 @ $100	$	500.00
	Phase 2 Total	**$**	**5,450.00**

F. Consultants/Contracts (Phase 2) - 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 Consultant	Service Provided	Computation	Cost
		subtotal	**$ -**

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
		subtotal	**$ -**

F. Consultants/Contracts (Phase 2) - 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 Consultant	Service Provided	Computation	Cost

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
CapCom Telecommunications Services (leased T-1 circuits)	$	24,000
CapCom Nextel Service Contract (5 phones @ $55/phone /yr)	$	3,300
Phase 2 subtotal	**$**	**27,300.00**

G. Other Costs (Phase 2) - 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
Registration Fees - ITS America	2 @ $300	$ 600
Registration Fees - IACP/LEIM	1 @ $300	$ 300
	Phase 2 Total	**$ 900.00**

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
Total Direct Cost Exemptions		
D. Equipment		$ -
G. Other		$ -
	Subtotal Items Exempt from OH	$ -
	Phase 2 Total Direct Cost	$ 2,274,182.68
Phase 2 Total Modified Direct Cost (TDC - Subtotal of Exempt Items)		$ 2,274,182.68
Phase 2 Total Indirect Cost (27.5% of MTDC)		**$ 625,400.24**

VII. Certifications and Assurances

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

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.

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)

_____

_____

_____

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:

   _____
   _____
   _____

2. Application Number and/or Project Name: _____

3. Grantee IRS/Vendor Number: _____

_____

4. Typed Name and Title of Authorized Representative

[signature on original & copies]_____ _____

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), 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.

14. 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.

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

16. 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 on original and copies]	
Signature	**Date**

This page intentionally left blank.

Appendix A: Job Descriptions

Employee: TBD
Job Title: CapCom Transportation Manager
Reports To: CapWIN Deputy Program Director
Department: CapCom
Prepared By: fbd
Revision Date: 2/18/2005

Summary: Plans, directs, and coordinates all activities of the CapCom Program to ensure that the overall mission of the Program is accomplished within the prescribed time frame and funding parameters following duties personally or through subordinate supervisors. The Program mission is to facilitate the planning and communications functions associated with transportation operations in connection with the region's response to major incidents including the enhancement of the transportation community's ability to support public safety in preventing, responding to, and recovering from acts of terrorism.

Essential Duties and Responsibilities include the following. Other duties may be assigned.

1. Provides overall leadership and direction for the successful implementation and sustainability of the CapCom Program mission.

2. Ensures that the CapCom mission, goals, and objectives are consistent with, and in support of, the National Capital Region Urban Area Homeland Security Strategy.

3. Oversees the implementation and operation of the CapCom Program organization including a CapCom Regional Transportation Coordination Center that will be used to support the Regional Emergency Evacuation Transportation Coordination (RESF-1) Annex of the Regional Emergency Coordination Plan (RECP).

4. Facilitates support of RESF-1 coordination with other RESF's in the RECP.

5. Provides support to the Transportation Steering Committee (TSC) and to the Executive Leadership Group (ELG) in carrying out TSC and ELG directed activities.

6. Ensures that support to the TSC and ELG is carried out in coordination with the Public Safety Steering Committee and Technical Steering Committee as well as the Public Safety and Technical staff supporting those committees.

7. Represents the CapCom Program at meetings; conferences; and other public forums.

8. Reviews program proposals and/or plans to determine time frame, funding limitations, procedures for accomplishing Program, staffing requirements, and allotment of available resources to various phases of CapCom.

9. Establishes work plans and staffing levels for each phase of CapCom, and arranges for the appropriate assignment of program personnel to ensure successful implementation.

10. Confers with program staff to outline work plans and to assign duties, responsibilities, and scope of authority.

11. Directs and coordinates activities of CapCom personnel to ensure the program progresses on schedule and within prescribed budget.

12. Reviews status reports prepared by CapCom personnel and modifies schedules or plans as required.

13. Prepares CapCom Program reports for the Executive Leadership Group, Transportation Steering Committee, CapCom sponsors, clients, or other interested parties.

14. Confers with program personnel to provide technical advice and to resolve problems.

15. Coordinates program activities with activities of government regulatory or other governmental agencies.

16. Participates in professional organizations and on a variety of boards, commissions, and committees as the primary representative of the CapCom Program.

Qualifications:
To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Education/Experience:
Bachelor's degree (BS) in a technical field, preferably related to transportation; four to ten years experience and/or training in the area of transportation management and operations; or equivalent combination of education and experience. Experience with application of Intelligent Transportation Systems (ITS) as it supports transportation operations and management as well as public safety operations required.

Language Ability:
Ability to read, analyze, and interpret common scientific and technical journals, financial reports, and legal documents. Ability to communicate effectively with public safety, emergency management, and other incident management personnel. Ability to respond to common inquiries or complaints from customers, regulatory agencies, or members of the business community. Ability to write speeches and articles for publication that conform to prescribed style and format. Ability to prepare presentations and present to a wide variety of audiences within the transportation and public safety community.

Math Ability:
Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

Reasoning Ability:
Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

Computer Skills:
To perform this job successfully, an individual should have knowledge of Word Processing software; Spreadsheet software; Internet skills, Program Management software and Database software. Basic knowledge of landline and wireless communications principles and technologies.

Certificates and Licenses:
PE, PTOE beneficial, but not required.

Supervisory Responsibilities:
Directs two functional managers who supervise between 15-20 employees in the CapCom Program. Is responsible for the overall direction, coordination, and evaluation of these units. Also directly supervises one non-supervisory administrative assistant. Carries out supervisory responsibilities in accordance with the organization's policies and applicable laws. Responsibilities include interviewing, hiring, and training employees; planning, assigning, and directing work; appraising performance; rewarding and disciplining employees; addressing complaints and resolving problems.

Work Environment:
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The noise level in the work environment is usually moderate.

Physical Demands:
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to walk. The employee is occasionally required to stand and sit.

Competency:
To perform the job successfully, an individual should demonstrate the following competencies:

Analytical - Synthesizes complex or diverse information; Collects and researches data; Uses intuition and experience to complement data; Designs work flows and procedures.

Problem Solving - Identifies and resolves problems in a timely manner; Gathers and analyzes information skillfully; Develops alternative solutions; Works well in group problem solving situations; Uses reason even when dealing with emotional topics.

Program Management - Develops Program plans; Coordinates Programs; Communicates changes and progress; Completes Programs on time and budget.

Customer Service - Manages difficult or emotional customer situations; Responds promptly to customer needs; Solicits customer feedback to improve service; Responds to requests for service and assistance; Meets commitments.

Interpersonal - Focuses on solving conflict, not blaming; Maintains confidentiality; Listens to others without interrupting; Keeps emotions under control; Remains open to others' ideas and tries new things.

Oral Communication - Speaks clearly and persuasively in positive or negative situations; Listens and gets clarification; Responds well to questions; Demonstrates group presentation skills; Participates in meetings.

Team Work - Balances team and individual responsibilities; Exhibits objectivity and openness to others' views; Gives and welcomes feedback; Contributes to building a positive team spirit; Puts success of team above own interests; Able to build morale and group commitments to goals and objectives; Supports everyone's efforts to succeed; Recognizes accomplishments of other team members.

Written Communication – Able to convey concepts and information effectively using written communication skills. Able to read and interpret written information.

Change Management - Develops workable implementation plans; Communicates changes effectively; Builds commitment and overcomes resistance; Prepares and supports those affected by change; Monitors transition and evaluates results.

Delegation - Delegates work assignments; Matches the responsibility to the person; Gives authority to work independently; Sets expectations and monitors delegated activities; Provides recognition for results.

Leadership - Exhibits confidence in self and others; Inspires and motivates others to perform well; Effectively influences actions and opinions of others; Inspires respect and trust; Accepts feedback from others; Provides vision and inspiration to peers and subordinates; Gives appropriate recognition to others; Displays passion and optimism; Mobilizes others to fulfill the vision.

Managing People - Includes staff in planning, decision-making, facilitating and process improvement; Takes responsibility for subordinates' activities; Makes self available to staff; Provides regular performance feedback; Develops subordinates' skills and encourages growth; Solicits and applies customer feedback (internal and external); Fosters quality focus in others; Improves processes, products and services; Continually works to improve supervisory skills.

Visionary Leadership - Displays passion and optimism; Inspires respect and trust; Mobilizes others to fulfill the vision; Provides vision and inspiration to peers and subordinates.

Cost Consciousness - Works within approved budget; Conserves organizational resources.

Diversity - Demonstrates knowledge of EEO policy; Shows respect and sensitivity for cultural differences; Educates others on the value of diversity; Promotes a harassment-free environment; Builds a diverse workforce.

Ethics - Works with integrity and ethically; Upholds organizational values.

Organizational Support - Follows policies and procedures; Supports organization's goals and values; Supports affirmative action and respects diversity.

Strategic Thinking - Develops strategies to achieve organizational goals; Understands organization's strengths & weaknesses; Identifies external threats and opportunities; Adapts strategy to changing conditions.

Adaptability - Adapts to changes in the work environment; Changes approach or method to best fit the situation; Able to deal with frequent change, delays, or unexpected events.

Attendance/Punctuality - Is consistently at work and on time; Ensures work responsibilities are covered when absent; Arrives at meetings and appointments on time.

Dependability - Commits to long hours of work when necessary to reach goals.

Initiative - Seeks increased responsibilities; Looks for and takes advantage of opportunities.

Innovation - Generates suggestions for improving work; Presents ideas and information in a manner that gets others' attention.

Judgment - Displays willingness to make decisions; Exhibits sound and accurate judgment; Includes appropriate people in decision-making process.

Motivation - Demonstrates persistence and overcomes obstacles; Takes calculated risks to accomplish goals.

Planning/Organizing - Prioritizes and plans work activities; Develops realistic action plans.

Professionalism - Approaches others in a tactful manner; Treats others with respect and

consideration regardless of their status or position; Follows through on commitments.

Quality - Applies feedback to improve performance.

Employee: TBD
Job Title: Assistant Transportation Manager - Operations
Reports To: CapCom Transportation Manager
Department: CapCom - Operations
Prepared By: fbd
Revision Date: 2/18/2005

Summary: Manages all activities associated with the CapCom Operations Center. Assists the Transportation Manager with planning, directing, and coordinating activities of CapCom. Ensures that CapCom operational goals supports the CapCom mission to facilitate the planning and communications functions associated with transportation operations in connection with the region's response to major incidents including the enhancement of the transportation community's ability to support public safety in preventing, responding to, and recovering for acts of terrorism. Performs the following duties personally or through subordinate supervisors.

Essential Duties and Responsibilities include the following. Other duties may be assigned.

1. Consults with management and reviews proposals to determine operational program goals, time frame, funding limitations, procedures for accomplishing goals and objectives, staffing requirements, and allotment of resources.

2. Establishes and maintains an ongoing transportation operations coordination structure in support of the Transportation Steering Committee. Uses this operations coordination structure to:

    a. Review and update existing transportation SOPs for applicability to major regional incidents including terrorist incidents.
    b. Review and update existing transportation training for regional incidents.
    c. Identifies terrorism related response training applicable to regional transportation response personnel.
    d. Reviews and coordinates identification of critical transportation infrastructure with regional impacts
    e. Facilitates development of a detailed regional incident concept of operations.
    f. Facilitates development of regional incident response performance measures of effectiveness for transportation.
    g. Reviews and coordinates identification of regional incident data sharing needs that will improve transportation response to major incidents and facilitate public safety response to those incidents.

3. Develops Operational plans specifying goals, strategy, staffing, scheduling, identification of risks, contingency plans, and allocation of available resources.

4. Facilitates the conceptual definition of the operational scope of the Operations Center and transforms operational concepts into effective operations practices.

5. Identifies and schedules Operational deliverables, milestones, and required tasks.

6. Coordinates recruitment or assignment of Operational personnel.

7. Coordinates recruitment or assignment of Operational personnel including assignment of duties, responsibilities, and scope of authority.

8. Directs and coordinates activities of Operational personnel to ensure project progresses on schedule and within budget.

9. Establishes standard operating procedures for the Operations Center that is consistent with, and supporting of, regional transportation agency standard operating procedures.

10. Reviews status reports prepared by Operational personnel and modifies schedules and plans as required.

11. Prepares Operational status reports and keeps management, clients, and others informed of Operational status and related issues.

12. Confers with Operational personnel to provide technical advice and resolve problems.

13. Coordinates and responds to requests for changes from original specifications.

14. Develops business processes that ensure developed application meets all project requirements.

15. Develops and maintains Operational documentation.

16. Develops quality assurance test plans and directs quality assurance testing.

17. Coordinates CapCom Operational activities with marketing, engineering, customer support, and client staff to ensure goals and requirements are met.

Qualifications:
To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Education/Experience:
Bachelor's degree from four-year college or university in a field preferably related to transportation; three to seven years related experience and/or training in the area of transportation management and operations including management of a transportation management center; direct relevant experience may be substituted for education. Experience with implementing/overseeing traffic incident management programs at the state or local level

required including coordinating with public safety agencies and personnel. Direct experience with coordinating field-level transportation response during incidents considered extremely beneficial, but not necessarily required.

Language Ability:
Ability to read, analyze, and interpret common industry trade journals, financial reports, and legal documents. Ability to communicate effectively with public safety and emergency management personnel. Ability to respond to common inquiries or complaints from customers, regulatory agencies, or members of the public.

Math Ability:
Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of algebra. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

Reasoning Ability:
Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

Computer Skills:
To perform this job successfully, an individual should have knowledge of Word Processing software; Spreadsheet software; Internet skills; Project Management software; and Personnel Resource Scheduling Software Database software. Basic knowledge of landline and wireless communications principles and technologies.

Certificates and Licenses:
None required

Supervisory Responsibilities:
Directly supervises three employees in CapCom Operations who in turn manage 10-15 Transportation Operation Technicians. Carries out supervisory responsibilities in accordance with the organization's policies and applicable laws. Responsibilities include interviewing, recommending qualified candidates for employment, and training employees; planning, assigning, and directing work; appraising performance; rewarding and disciplining employees; addressing complaints and resolving problems.

Work Environment:
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The work environment is normal office conditions. The noise level in the work environment is usually quiet to moderate.

Physical Demands:
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to talk and hear. The employee is frequently required to sit. The employee is occasionally required to stand.

Competency:

To perform the job successfully, an individual should demonstrate the following competencies :

Analytical - Synthesizes complex or diverse information; Collects and researches data; Uses intuition and experience to complement data; Designs work flows and procedures.

Design - Generates creative solutions; Translates concepts and information into images; Uses feedback to modify designs; Applies design principles; Demonstrates attention to detail.

Problem Solving - Identifies and resolves problems in a timely manner; Gathers and analyzes information skillfully; Develops alternative solutions; Works well in group problem solving situations; Uses reason even when dealing with emotional topics.

Project Management - Develops project plans; Coordinates projects; Communicates changes and progress; Completes projects on time and budget; Manages project team activities.

Technical Skills - Assesses own strengths and weaknesses; Pursues training and development opportunities; Strives to continuously build knowledge and skills; Shares expertise with others.

Customer Service - Manages difficult or emotional customer situations; Responds promptly to customer needs; Solicits customer feedback to improve service ; Responds to requests for service and assistance; Meets commitments.

Interpersonal - Focuses on solving conflict, not blaming; Maintains confidentiality; Listens to others without interrupting; Keeps emotions under control; Remains open to others' ideas and tries new things.

Oral Communication - Speaks clearly and persuasively in positive or negative situations; Listens and gets clarification; Responds well to questions; Demonstrates group presentation skills; Participates in meetings.

Team Work - Balances team and individual responsibilities; Exhibits objectivity and openness to others' views; Gives and welcomes feedback; Contributes to building a positive team spirit; Puts success of team above own interests; Able to build morale and group commitments to goals and objectives; Supports everyone's efforts to succeed; Recognizes accomplishments of other team

members.

Written Communication - Writes clearly and informatively; Edits work for spelling and grammar; Varies writing style to meet needs; Presents numerical data effectively; Able to read and interpret written information.

Change Management - Develops workable implementation plans; Communicates changes effectively; Builds commitment and overcomes resistance; Prepares and supports those affected by change; Monitors transition and evaluates results.

Delegation - Delegates work assignments; Matches the responsibility to the person; Gives authority to work independently; Sets expectations and monitors delegated activities; Provides recognition for results.

Leadership - Exhibits confidence in self and others; Inspires and motivates others to perform well; Effectively influences actions and opinions of others; Inspires respect and trust; Accepts feedback from others; Provides vision and inspiration to peers and subordinates; Gives appropriate recognition to others; Displays passion and optimism; Mobilizes others to fulfill the vision.

Managing People - Includes staff in planning, decision-making, facilitating and process improvement; Takes responsibility for subordinates' activities; Makes self available to staff; Provides regular performance feedback; Develops subordinates' skills and encourages growth; Solicits and applies customer feedback (internal and external); Fosters quality focus in others; Improves processes, products and services; Continually works to improve supervisory skills.

Quality Management - Looks for ways to improve and promote quality; Demonstrates accuracy and thoroughness.

Visionary Leadership - Displays passion and optimism; Inspires respect and trust; Mobilizes others to fulfill the vision; Provides vision and inspiration to peers and subordinates.

Business Acumen - Understands business implications of decisions; Displays orientation to profitability; Demonstrates knowledge of market and competition; Aligns work with strategic goals.

Cost Consciousness - Works within approved budget; Develops and implements cost saving measures; Contributes to profits and revenue ; Conserves organizational resources.

Diversity - Demonstrates knowledge of EEO policy; Shows respect and sensitivity for cultural differences; Educates others on the value of diversity; Promotes a harassment-free environment; Builds a diverse workforce.

Ethics - Treats people with respect; Keeps commitments; Inspires the trust of others; Works with integrity and ethically; Upholds organizational values.

Organizational Support - Follows policies and procedures; Completes administrative tasks correctly and on time; Supports organization's goals and values; Benefits organization through outside activities; Supports affirmative action and respects diversity.

Strategic Thinking - Develops strategies to achieve organizational goals; Understands organization's strengths & weaknesses; Analyzes market and competition; Identifies external threats and opportunities; Adapts strategy to changing conditions.

Adaptability - Adapts to changes in the work environment; Manages competing demands; Changes approach or method to best fit the situation; Able to deal with frequent change, delays, or unexpected events.

Attendance/Punctuality - Is consistently at work and on time; Ensures work responsibilities are covered when absent; Arrives at meetings and appointments on time.

Dependability - Follows instructions, responds to management direction; Takes responsibility for own actions; Keeps commitments; Commits to long hours of work when necessary to reach goals; Completes tasks on time or notifies appropriate person with an alternate plan.

Initiative - Volunteers readily; Undertakes self-development activities; Seeks increased responsibilities; Takes independent actions and calculated risks; Looks for and takes advantage of opportunities; Asks for and offers help when needed.

Innovation - Displays original thinking and creativity; Meets challenges with resourcefulness; Generates suggestions for improving work; Develops innovative approaches and ideas; Presents ideas and information in a manner that gets others' attention.

Judgment - Displays willingness to make decisions; Exhibits sound and accurate judgment; Supports and explains reasoning for decisions; Includes appropriate people in decision-making process; Makes timely decisions.

Motivation - Sets and achieves challenging goals; Demonstrates persistence and overcomes obstacles; Measures self against standard of excellence; Takes calculated risks to accomplish goals.

Planning/Organizing - Prioritizes and plans work activities; Uses time efficiently; Plans for additional resources; Sets goals and objectives; Organizes or schedules other people and their tasks; Develops realistic action plans.

Professionalism - Approaches others in a tactful manner; Reacts well under pressure; Treats others with respect and consideration regardless of their status or position; Accepts responsibility for own actions; Follows through on commitments.

Quality - Demonstrates accuracy and thoroughness; Looks for ways to improve and promote quality; Applies feedback to improve performance; Monitors own work to ensure quality.

Quantity - Meets productivity standards; Completes work in timely manner; Strives to increase productivity; Works quickly.

Safety and Security - Observes safety and security procedures; Determines appropriate action beyond guidelines; Reports potentially unsafe conditions; Uses equipment and materials properly.

Employee: TBD
Job Title: Assistant Transportation Manager - Systems
Reports To: CapCom Transportation Manager
Department: CapCom - Systems
Prepared By: fbd
Revision Date: 2/18/2005

Summary: Manages all activities associated with CapCom Systems and facilitating Regional Transportation Systems integration. Assists the Transportation Manager with planning, directing, and coordinating activities of CapCom, as they apply to transportation systems interfaces. Ensures that CapCom system interface goals are consistent with the CapCom mission to facilitate the planning and communications functions associated with transportation operations in connection with the region's response to major incidents including the enhancement of the transportation community's ability to support public safety in preventing, responding to, and recovering for acts of terrorism are accomplished within the prescribed time frame and funding parameters. Performs the following duties personally or through subordinate supervisors, when available.

Essential Duties and Responsibilities include the following. Other duties may be assigned.

1. Consults with management and reviews proposals to determine CapCom System goals, time frame, funding limitations, procedures for accomplishing goals and objectives, staffing requirements, and allotment of resources.

2. Establishes and maintains an ongoing transportation systems coordination structure in support of the Transportation Steering Committee and Technical Steering Committee. Uses this systems coordination structure to:

    a. Implement a system that supports RICCs-type communications specifically for transportation operations coordination
    b. Maintain regional transportation-specific databases that provide information to responders and the public
    c. Identify and deploy existing regional incident information sharing applications
    d. Develop a plan for systems and application integration based on identified operational needs and standards and specifically those standards such as XML that are being used to support homeland security information technology needs.

3. Develops CapCom System plans specifying goals, strategy, staffing, scheduling, identification of risks, contingency plans, and allocation of available resources.

4. Formulates and defines technical scope and objectives of the Systems interfaces.

5. Identifies and schedules System deliverables, milestones, and required tasks.

6. Coordinates closely with CapWIN technical staff in recruitment or assignment of personnel to work with specific System interfaces.

7. Coordinates activities of Systems personnel to ensure project progresses on schedule and within budget.

8. Establishes standards and procedures for CapCom Systems reporting and documentation.

9. Reviews status reports prepared by Systems personnel and modifies schedules and plans as required.

10. Prepares CapCom System status reports and keeps management, clients, and others informed of System status and related issues.

11. Confers with Systems personnel to provide technical advice and resolve problems.

12. Coordinates and responds to requests for changes from original specifications.

13. Develops business processes that ensure developed application meets all project requirements.

14. Develops and maintains CapCom Systems documentation.

15. Develops quality assurance test plans and directs quality assurance testing.

16. Coordinates CapCom Systems activities with marketing, engineering, customer support, and client staff to ensure goals and requirements are met.

Qualifications:

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Education/Experience:

Bachelor's degree (B. S.) in a technical area from four-year college or university; one to two years related experience and/or training; or equivalent combination of education and experience. Must have experience with XML, HTML, HTTP, IPX/SPX, POP, SMTP, SNMP, and TCP/IP and firewall/VPN products. Experience with Transportation Management System software development or administration desired.

Language Ability:

Ability to read, analyze, and interpret common scientific and technical journals, financial reports, and legal documents. Ability to respond to common inquiries or complaints from customers, regulatory agencies, or members of the business community.

Math Ability:
Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

Reasoning Ability:
Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

Computer Skills:
To perform this job successfully, an individual should have knowledge of Word Processing software; Spreadsheet software; Software Programming Languages (e.g., C, C++, C#, CVS, Parallax PIC Assembly, Python, REXX, SQL, TCL, and Visual Basic); Internet software; Project Management software; Database software (e.g. Microsoft SQL Server, Microsoft Access, IBM DB/2, Paradox, Gupta SQL Server and Berkley DB); and Operating System Software (e.g., Windows, NetWare, Linux).

Certificates and Licenses:
MSCE desired

Supervisory Responsibilities:
Works with CapWIN technical staff to design, develop, implement and maintain CapCom Systems, as required. Indirectly supervises internal IT staff assigned to a specific project or contracted IT staff.

Work Environment:
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The work environment is normal office conditions. The noise level in the work environment is usually quiet to moderate.

Physical Demands:
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to talk and hear. The employee is frequently required to sit. The employee is occasionally required to stand.

Competency:

To perform the job successfully, an individual should demonstrate the following competencies:

Analytical - Synthesizes complex or diverse information; Collects and researches data; Uses intuition and experience to complement data; Designs work flows and procedures.

Design - Generates creative solutions; Translates concepts and information into images; Uses feedback to modify designs; Applies design principles; Demonstrates attention to detail.

Problem Solving - Identifies and resolves problems in a timely manner; Gathers and analyzes information skillfully; Develops alternative solutions; Works well in group problem solving situations; Uses reason even when dealing with emotional topics.

Project Management - Develops project plans; Coordinates projects; Communicates changes and progress; Completes projects on time and budget; Manages project team activities.

Technical Skills - Assesses own strengths and weaknesses; Pursues training and development opportunities; Strives to continuously build knowledge and skills; Shares expertise with others.

Customer Service - Manages difficult or emotional customer situations; Responds promptly to customer needs; Solicits customer feedback to improve service ; Responds to requests for service and assistance; Meets commitments.

Interpersonal - Focuses on solving conflict, not blaming; Maintains confidentiality; Listens to others without interrupting; Keeps emotions under control; Remains open to others' ideas and tries new things.

Oral Communication - Speaks clearly and persuasively in positive or negative situations; Listens and gets clarification; Responds well to questions; Demonstrates group presentation skills; Participates in meetings.

Team Work - Balances team and individual responsibilities; Exhibits objectivity and openness to others' views; Gives and welcomes feedback; Contributes to building a positive team spirit; Puts success of team above own interests; Able to build morale and group commitments to goals and objectives; Supports everyone's efforts to succeed; Recognizes accomplishments of other team members.

Written Communication - Writes clearly and informatively; Presents numerical data effectively; Able to read and interpret written information.

Change Management - Develops workable implementation plans; Communicates changes effectively; Builds commitment and overcomes resistance; Prepares and supports those affected by change; Monitors transition and evaluates results.

Delegation - Delegates work assignments; Matches the responsibility to the person; Gives

authority to work independently; Sets expectations and monitors delegated activities; Provides recognition for results.

Leadership - Exhibits confidence in self and others; Inspires and motivates others to perform well; Effectively influences actions and opinions of others; Inspires respect and trust; Accepts feedback from others; Provides vision and inspiration to peers and subordinates; Gives appropriate recognition to others; Displays passion and optimism; Mobilizes others to fulfill the vision.

Managing People - Includes staff in planning, decision-making, facilitating and process improvement; Takes responsibility for subordinates' activities; Makes self available to staff; Provides regular performance feedback; Develops subordinates' skills and encourages growth; Solicits and applies customer feedback (internal and external); Fosters quality focus in others; Improves processes, products and services; Continually works to improve supervisory skills.

Quality Management - Looks for ways to improve and promote quality; Demonstrates accuracy and thoroughness.

Visionary Leadership - Displays passion and optimism; Inspires respect and trust; Mobilizes others to fulfill the vision; Provides vision and inspiration to peers and subordinates.

Business Acumen - Understands business implications of decisions; Displays orientation to profitability; Demonstrates knowledge of market and competition; Aligns work with strategic goals.

Cost Consciousness - Works within approved budget; Develops and implements cost saving measures; Contributes to profits and revenue ; Conserves organizational resources.

Diversity - Demonstrates knowledge of EEO policy; Shows respect and sensitivity for cultural differences; Educates others on the value of diversity; Promotes a harassment-free environment; Builds a diverse workforce.

Ethics - Treats people with respect; Keeps commitments; Inspires the trust of others; Works with integrity and ethically; Upholds organizational values.

Organizational Support - Follows policies and procedures; Completes administrative tasks correctly and on time; Supports organization's goals and values; Benefits organization through outside activities; Supports affirmative action and respects diversity.

Strategic Thinking - Develops strategies to achieve organizational goals; Understands organization's strengths & weaknesses; Analyzes market and competition; Identifies external threats and opportunities; Adapts strategy to changing conditions.

Adaptability - Adapts to changes in the work environment; Manages competing demands; Changes approach or method to best fit the situation; Able to deal with frequent change, delays, or unexpected events.

Attendance/Punctuality - Is consistently at work and on time; Ensures work responsibilities are covered when absent; Arrives at meetings and appointments on time.

Dependability - Follows instructions, responds to management direction; Takes responsibility for own actions; Keeps commitments; Commits to long hours of work when necessary to reach goals; Completes tasks on time or notifies appropriate person with an alternate plan.

Initiative - Volunteers readily; Undertakes self-development activities; Seeks increased responsibilities; Takes independent actions and calculated risks; Looks for and takes advantage of opportunities; Asks for and offers help when needed.

Innovation - Displays original thinking and creativity; Meets challenges with resourcefulness; Generates suggestions for improving work; Develops innovative approaches and ideas; Presents ideas and information in a manner that gets others' attention.

Judgment - Displays willingness to make decisions; Exhibits sound and accurate judgment; Supports and explains reasoning for decisions; Includes appropriate people in decision-making process; Makes timely decisions.

Motivation - Sets and achieves challenging goals; Demonstrates persistence and overcomes obstacles; Measures self against standard of excellence; Takes calculated risks to accomplish goals.

Planning/Organizing - Prioritizes and plans work activities; Uses time efficiently; Plans for additional resources; Sets goals and objectives; Organizes or schedules other people and their tasks; Develops realistic action plans.

Professionalism - Approaches others in a tactful manner; Reacts well under pressure; Treats others with respect and consideration regardless of their status or position; Accepts responsibility for own actions; Follows through on commitments.

Quality - Demonstrates accuracy and thoroughness; Looks for ways to improve and promote quality; Applies feedback to improve performance; Monitors own work to ensure quality.

Quantity - Meets productivity standards; Completes work in timely manner; Strives to increase productivity; Works quickly.

Safety and Security - Observes safety and security procedures; Determines appropriate action beyond guidelines; Reports potentially unsafe conditions ; Uses equipment and materials properly.

Employee: TBD
Job Title: Operations Shift Lead – Team One
Reports To: CapCom Assistant Transportation Manager - Operations
Department: CapCom Center Operations
Prepared By: fbd
Revision Date: 2/18/2005

Summary: Serves as Lead Transportation Operator on assigned shift. Supervises and coordinates activities of a specific team of Transportation Operator Technicians in the CapCom Operations Center by performing the following duties.

Essential Duties and Responsibilities include the following. Other duties may be assigned.

1. Assigns staff and schedules work to facilitate coordination activities and production.

2. Distributes work assignments and monitors daily logs of CapCom Operations Center Team One.

3. Interprets company policies to workers and enforces safety regulations.

4. Directs training or trains workers to operate information systems, monitoring and peripheral equipment.

5. Confers with other transportation agency representatives to ensure complete coordination of activities and processes of CapCom.

6. Directs operation of CapCom information systems to execute programs, and observes operations to detect error or failure in progress of programs or activities.

7. Reads monitors and displays to interpret data and ensure accurate and timely information is disseminated to the appropriate transportation and public safety agencies.

8. Revises input data and programs to continue effective and efficient operations.

9. Notifies transportation and public safety agency personnel when conditions warrant.

10. Revises information release to pertinent parties when traffic conditions cause delays for the regional transportation system.

11. Prepares or reviews traffic conditions and down time records and reports.

12. Recommends changes in CapCom Operations Center processes, routines, and quality control standards to improve operational efficiency.

13. Consults with the Assistant Transportation Manager for Operations about problems such as equipment performance, information output quality, and work schedules.

14. Coordinates flow of work between shifts to ensure continuity of operations.

15. Issues written and oral instructions for team members.

16. Maintains harmony among workers and resolves grievances.

17. Adjusts errors and complaints.

Qualifications:
To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Education/Experience:
High School Diploma required with a Associates Degree from an accredited College desired; one to two years related experience in a transportation operations center and/or training; or equivalent combination of education and experience.

Language Ability:
Ability to read, analyze, and interpret technical and operational procedures. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

Math Ability:
Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Ability to compute rate, ratio, and percent and to draw and interpret bar graphs.

Reasoning Ability:
Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

Computer Skills:
To perform this job successfully, an individual should have knowledge of Word Processing software; Internet, and Windows based operating systems. Ability to use Transportation Management Control software (Freeway or Arterial) desired.

Certificates and Licenses:
None required.

Supervisory Responsibilities:
Directly supervises four employees on Operator Team One. Carries out supervisory

responsibilities in accordance with the organization's policies and applicable laws. Responsibilities include interviewing, recommending employees for hire and training employees; planning, assigning, and directing work; appraising performance; rewarding and disciplining employees; addressing complaints and resolving problems.

Work Environment:
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The noise level in the work environment is usually quiet to moderate conditions.

Physical Demands:
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to sit. The employee is occasionally required to stand.

Competency:
To perform the job successfully, an individual should demonstrate the following competencies :

Analytical - Uses intuition and experience to complement data; Designs work flows and procedures.

Design - Generates creative solutions.

Problem Solving - Identifies and resolves problems in a timely manner; Gathers and analyzes information skillfully; Works well in group problem solving situations.

Project Management - Coordinates projects; Communicates changes and progress; Manages project team activities.

Technical Skills - Assesses own strengths and weaknesses; Strives to continuously build knowledge and skills; Shares expertise with others.

Customer Service - Responds promptly to customer needs; Solicits customer feedback to improve service; Responds to requests for service and assistance.

Interpersonal - Maintains confidentiality.

Oral Communication - Speaks clearly and persuasively in positive or negative situations; Listens and gets clarification; Responds well to questions.

Team Work - Balances team and individual responsibilities; Exhibits objectivity and openness to others' views; Contributes to building a positive team spirit; Puts success of team above own interests; Recognizes accomplishments of other team members.

Written Communication - Writes clearly and informatively; Edits work for spelling and grammar.

Change Management - Communicates changes effectively; Builds commitment and overcomes resistance; Prepares and supports those affected by change.

Delegation - Delegates work assignments; Matches the responsibility to the person; Sets expectations and monitors delegated activities.

Leadership - Exhibits confidence in self and others; Inspires and motivates others to perform well; Effectively influences actions and opinions of others; Provides vision and inspiration to peers and subordinates; Gives appropriate recognition to others; Mobilizes others to fulfill the vision.

Managing People - Takes responsibility for subordinates' activities; Makes self available to staff; Provides regular performance feedback; Develops subordinates' skills and encourages growth; Improves processes, products and services.

Quality Management - Looks for ways to improve and promote quality.

Visionary Leadership - Provides vision and inspiration to peers and subordinates.

Business Acumen - Aligns work with strategic goals.

Cost Consciousness - Conserves organizational resources.

Diversity - Demonstrates knowledge of EEO policy; Builds a diverse workforce.

Ethics - Treats people with respect; Upholds organizational values.

Organizational Support - Follows policies and procedures; Completes administrative tasks correctly and on time; Supports organization's goals and values.

Strategic Thinking - Develops strategies to achieve organizational goals.

Adaptability - Manages competing demands; Able to deal with frequent change, delays, or unexpected events.

Attendance/Punctuality - Is consistently at work and on time.

Dependability - Follows instructions, responds to management direction; Takes responsibility for own actions; Commits to long hours of work when necessary to reach goals.

Initiative - Volunteers readily; Asks for and offers help when needed.

Innovation - Meets challenges with resourcefulness; Generates suggestions for improving work.

Judgment - Displays willingness to make decisions; Exhibits sound and accurate judgment; Makes timely decisions.

Motivation - Sets and achieves challenging goals; Demonstrates persistence and overcomes obstacles.

Planning/Organizing - Prioritizes and plans work activities; Uses time efficiently; Organizes or schedules other people and their tasks; Develops realistic action plans.

Professionalism - Reacts well under pressure; Treats others with respect and consideration regardless of their status or position; Accepts responsibility for own actions.

Quality - Demonstrates accuracy and thoroughness; Looks for ways to improve and promote quality; Monitors own work to ensure quality.

Quantity - Meets productivity standards; Completes work in timely manner.

Safety and Security - Observes safety and security procedures; Uses equipment and materials properly.

Employee: TBD
Job Title: CapCom Transportation Operator Technician
Reports To: Operations Shift Lead
Department: CapCom
Prepared By: fbd
Revision Date: 2/18/2005

Summary: Receives, monitors, relays and coordinates regional transportation related information and routinely coordinates the dissemination of traffic related information to interested transportation and public safety agencies including; police, fire, rescue, and other emergency services by performing the following duties.

Essential Duties and Responsibilities include the following. Other duties may be assigned.

1. Receives, monitors cameras and screens incoming all traffic related information at the CapCom Operations Center and coordinates the dissemination of critical information as needed.

2. Analyses potential transportation related problems, determines location and seriousness of traffic related events and responds in a timely and appropriate manner.

3. Enters vital information into the appropriate information sharing systems and distributes as needed.

4. Monitors two-way radio and/or other communications equipment to recognize potential regional transportation related problems and provide the necessary notification functions to appropriate agencies.

5. Provides transportation related information to caller inquiries.

6. Coordinates transportation agency requests, relaying instructions to closest and most suitable units available.

7. Relays all critical transportation information between regional centers.

8. Coordinates the transmission and receipt of traffic messages between regional divisions of DOT and other public safety agencies as needed.

9. Monitors highway sensor systems, remote cameras, and other systems used to detect potential transportation problems.

10. Serves as transportation liaison during times of emergencies and coordinates responses from the CapCom Operations Center.

11. Enters, updates, and retrieves traffic related information from a variety of computer and information systems.

12. Answers or forwards non-emergency requests for assistance to the appropriate agency.

13. Tests communications and monitoring equipment and backup systems to ensure serviceability.

Qualifications:
To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Education/Experience:
High School Diploma required with one or more years of College education desired; or one to two years related experience in a transportation operations center and/or training; or equivalent combination of education and experience.

Language Ability:
Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of customers or employees of organization.

Math Ability:
Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Ability to compute rate, ratio, and percent and to draw and interpret bar graphs.

Reasoning Ability:
Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

Computer Skills:
To perform this job successfully, an individual should have knowledge of Word Processing software; Internet; and Windows Operating Systems.

Certificates and Licenses:
None Required

Supervisory Responsibilities:
This job has no supervisory responsibilities.

Work Environment:
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The noise level in the work environment is usually quiet to moderate.

Physical Demands:
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this Job, the employee is regularly required to sit. The employee is occasionally required to stand and walk.

Competency:
To perform the job successfully, an individual should demonstrate the following competencies:

Analytical - Synthesizes complex or diverse information.

Problem Solving - Identifies and resolves problems in a timely manner; Gathers and analyzes information skillfully; Works well in group problem solving situations.

Technical Skills - Assesses own strengths and weaknesses; Pursues training and development opportunities; Strives to continuously build knowledge and skills.

Customer Service - Responds promptly to customer needs; Solicits customer feedback to improve service; Responds to requests for service and assistance.

Interpersonal - Focuses on solving conflict, not blaming.

Oral Communication - Speaks clearly and persuasively in positive or negative situations; listens and gets clarification; responds well to questions.

Team Work - Balances team and individual responsibilities; Contributes to building a positive team spirit.

Written Communication - Writes clearly and informatively.

Quality Management - Looks for ways to improve and promote quality; Demonstrates accuracy and thoroughness.

Ethics - Treats people with respect; Works with integrity and ethically; Upholds organizational values.

Organizational Support - Follows policies and procedures.

Adaptability - Adapts to changes in the work environment; Able to deal with frequent change, delays, or unexpected events.

Attendance/Punctuality - Is consistently at work and on time; Ensures work responsibilities are covered when absent.

Dependability - Follows instructions, responds to management direction; Takes responsibility for own actions; Commits to long hours of work when necessary to reach goals.

Initiative - Volunteers readily; Seeks increased responsibilities.

Innovation - Displays original thinking and creativity.

Judgment - Exhibits sound and accurate judgment; Makes timely decisions.

Motivation - Demonstrates persistence and overcomes obstacles.

Planning/Organizing - Uses time efficiently; Sets goals and objectives.

Professionalism - Reacts well under pressure; Accepts responsibility for own actions.

Quality - Demonstrates accuracy and thoroughness; Looks for ways to improve and promote quality; Monitors own work to ensure quality.

Quantity - Completes work in timely manner.

Safety and Security - Observes safety and security procedures; Uses equipment and materials properly.

Employee: TBD
Job Title: Administrative Assistant
Reports To: CapCom Transportation Manager
Department: CapCom
Prepared By: fbd
Revision Date: 2/18/2005

Summary: Works closely with CapCom staff to schedule appointments, provide information to callers, meet and greet visitors to the CapCom Operations Center, and otherwise relieves staff of clerical work and minor administrative and business detail by performing the following duties.

Essential Duties and Responsibilities include the following. Other duties may be assigned.

1. Works closely with the CapWIN Program Coordinator to coordinate the administration of office duties and responsibilities.

2. Reads and routes incoming mail. Locates and attaches appropriate file to correspondence to be answered by employer.

3. Composes and prepares routine correspondence.

4. Organizes and maintains file system, and files correspondence and other records.

5. Answers and screens incoming telephone calls and arranges conference calls.

6. Coordinates CapCom staff schedules and makes appointments as requested.

7. Greets scheduled visitors and conducts them to appropriate meeting area or contact person.

8. Arranges and coordinates travel schedules and reservations.

9. Conducts research, and compiles and types statistical reports.

10. Coordinates and arranges meetings, prepares agendas, reserves and prepares facilities, and records and transcribes minutes of meetings.

11. Attends meetings and provides CapCom resources as needed.

12. Makes copies of correspondence or other printed materials.

13. Prepares outgoing mail and correspondence, including e-mail and faxes.

14. Orders and maintains supplies, and arranges for equipment maintenance.

Competency:

To perform the job successfully, an individual should demonstrate the following competencies :

Analytical - Collects and researches data.

Design - Generates creative solutions; Demonstrates attention to detail.

Problem Solving - Identifies and resolves problems in a timely manner; Works well in group problem solving situations.

Project Management - Communicates changes and progress; Completes projects on time and budget.

Technical Skills - Assesses own strengths and weaknesses; Pursues training and development opportunities; Strives to continuously build knowledge and skills; Shares expertise with others.

Customer Service - Responds promptly to customer needs; Meets commitments.

Interpersonal - Maintains confidentiality; Remains open to others' ideas and tries new things.

Oral Communication - Speaks clearly and persuasively in positive or negative situations; Listens and gets clarification; Responds well to questions; Participates in meetings.

Team Work - Balances team and individual responsibilities; Gives and welcomes feedback; Contributes to building a positive team spirit; Puts success of team above own interests; Supports everyone's efforts to succeed; Recognizes accomplishments of other team members.

Written Communication - Writes clearly and informatively; Edits work for spelling and grammar; Varies writing style to meet needs; Presents numerical data effectively; Able to read and interpret written information.

Quality Management - Looks for ways to improve and promote quality; Demonstrates accuracy and thoroughness.

Business Acumen - Aligns work with strategic goals.

Cost Consciousness - Works within approved budget.

Diversity - Demonstrates knowledge of EEO policy; Shows respect and sensitivity for cultural differences.

Ethics - Treats people with respect; Keeps commitments; Inspires the trust of others; Works with integrity and ethically; Upholds organizational values.

Organizational Support - Follows policies and procedures; Completes administrative tasks

correctly and on time; Supports organization's goals and values; Supports affirmative action and respects diversity.

Strategic Thinking - Understands organization's strengths & weaknesses; Adapts strategy to changing conditions.

Adaptability - Adapts to changes in the work environment; Changes approach or method to best fit the situation; Able to deal with frequent change, delays, or unexpected events.

Attendance/Punctuality - Is consistently at work and on time; Ensures work responsibilities are covered when absent; Arrives at meetings and appointments on time.

Dependability - Follows instructions, responds to management direction; Takes responsibility for own actions; Keeps commitments.

Initiative - Volunteers readily; Seeks increased responsibilities; Asks for and offers help when needed.

Innovation - Generates suggestions for improving work.

Judgment - Exhibits sound and accurate judgment.

Motivation - Sets and achieves challenging goals.

Planning/Organizing - Prioritizes and plans work activities; Uses time efficiently; Sets goals and objectives.

Professionalism - Approaches others in a tactful manner; Reacts well under pressure; Accepts responsibility for own actions; Follows through on commitments.

Quality - Demonstrates accuracy and thoroughness; Looks for ways to improve and promote quality; Monitors own work to ensure quality.

Quantity - Completes work in timely manner.

Safety and Security - Reports potentially unsafe conditions ; Uses equipment and materials properly.

Qualifications:
To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Education/Experience:
High school diploma or general education degree (GED); or one to three months related

experience and/or training; or equivalent combination of education and experience.

Language Ability:
Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of customers or employees of organization.

Math Ability:
Ability to calculate figures and amounts such as discounts, interest, commissions, proportions, percentages, area, circumference, and volume. Ability to apply concepts of basic algebra and geometry.

Reasoning Ability:
Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

Computer Skills:
To perform this job successfully, an individual should have knowledge of MS Office Suite applications, i.e., Word Processing software, Excel Spreadsheet software, Access Database software; PowerPoint Presentation software and MS Outlook; Internet software; Order processing systems; and Contact Management systems.

Certificates and Licenses:
Must pass 40 wpm typing test prior to posting of job vacancy at the University of Maryland.

Supervisory Responsibilities:
This job has no supervisory responsibilities.

Work Environment:
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually quiet.

Physical Demands:
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee must occasionally lift and/or move up to 25 pounds.

Staff Resumes

- **Philip J. Tarnoff**
- **Thomas H. Jacobs**
- **Michael L. Pack**
- **George S. Ake**
- **Fred B. Davis**
- **Bruce A. Barney**
- **William L. Henry**
- **Roddy Moscoso**
- **Joseph A. Kemp**
- **Catherine A. Miller**
- **David Fontaine**
- **John A. Binks**
- **Stephen E. Peterson**
- **Theresa A. Mullen**

PHILIP J. TARNOFF

Director, CATT/T2 Center

Education

Graduate Studies in Transport Planning, University of Maryland, 1975
Graduate Studies in Mathematics, Johns Hopkins University, 1963-1965
M.S., Electrical Engineering, New York University, 1963
B.S., Electrical Engineering, Carnegie Institute of Technology, 1962

Employment History

1997 - Present	Director of the University of Maryland Transportation Studies Center and the Maryland T2 Center
1984 - 1997	President and founder of PB Farradyne Inc., a subsidiary of Parsons Brinckerhoff
1975 - 1984	Deputy Vice President of PRC Engineering, a division of the Planning Research Corporation
1970 - 1975	Research Engineer, US Department of Transportation, Federal Highway Administration
1966 - 1970	Vice President, Kelly Scientific Corp.
1963 - 1966	Engineer, Johns Hopkins Applied Physics Laboratory

Intelligent Transportation Systems Qualifications

Since it's beginning, Mr. Tarnoff has served in a leadership role related to the development of the Intelligent Transportation Systems Industry. He participated in the formation and activities of Mobility 2000 that, in turn lead to the creation of ITS/America. Mr. Tarnoff was the president and founder of Farradyne Systems, Inc. (subsequently renamed PB Farradyne) which has become one of the larges ITS consulting and systems integration firms in the U.S. He participated in the development of both the Strategic and Tactical plans for ITS America. Mr. Tarnoff is currently active in ITS America's Coordinating Council, the Strategic Planning Subcommittee, and the ITS Future's Group. He also serves on the editorial board of the ITS magazines. As ITS technical director of Parsons Brinckerhoff, Mr. Tarnoff's responsibilities include serving as a visible force in national technical organizations, maintaining expertise in the state-of-the-art, participating in QA/QC and peer review, providing guidance to the Technology Transfer Committees, and compiling and distributing information about the discipline.

Project Experience

The following projects are a sample of technical activities in which Mr. Tarnoff has participated.

- Standards activities: Mr. Tarnoff served as principal-in-charge on a project to develop case studies for the implementation of NTCIP standards at three locations throughout the United States. He has been actively involved with standards development activities since their inception beginning with the NEMA activities associated with NTCIP. He is also chairman of the Maryland ITS Working Group, which is responsible for developing statewide ITS capabilities through the definition, design and implementation of an interoperable network of ITS systems throughout the state.

- Maryland State Highway Administration CHART II Project: Is actively involved in the development of the CHART II statewide advanced traffic management system (ATMS). This system is initially being developed for freeway traffic management with the capability for future expansion to include signalized arterials as well as coordination with other transportation modes in the State of Maryland. Responsibilities include oversight of the definition of requirements and the system design and implementation.
- AASHTO Software Procurement Study and Course Presentation: Participated in the evaluation of alternative techniques for the procurement and implementation of complex software systems for ITS.
- Baltimore/Washington Corridor Study: Leading a planning study being performed for the Maryland State Highway Administration, in which the Baltimore Washington corridor is being analyzed to identify ITS applications that offer the potential for relieving traffic congestion in this heavily traveled corridor.
- Real-Time Traffic Adaptive Control System (RT-TRACS): Project manager for the development of a new traffic adaptive control system that will automatically update signal timing in real-time, in response to changing traffic conditions. This research project. funded by the Federal Highway Administration, is intended to set a new standard in the United States, and throughout the world for responsive signal control, that is capable of operating under both congested and non-congested roadway conditions. In addition, the system will offer the capability to recognize the need for new signal phasing and roadway operations. This project includes the development of the control strategies, implementation and testing under both simulated and real-world conditions.
- TRANSCOM ETTM System: Project manager for the design and development of the TRANSMIT system, which is being implemented to demonstrate the feasibility of using Electronic Toll and Traffic Management (ETTM) equipment for traffic surveillance and incident detection. This system is being implemented on approximately 90 miles of freeways and surface streets in New York and New Jersey. The project involves the development of traffic monitoring and incident detection algorithms based on the use of the vehicle probe data produced by ETTM equipped vehicles.
- Management Information Systems Transportation (MIST®) System: principal-in-charge for the development of this traffic control software. In this role, he was responsible for the analysis of city traffic control requirements and the development of a functional definition for the system. He was also responsible for monitoring the software development, test and installation.
- Computerized Traffic Control System, Washington, DC: Project manager for the development of this system. His responsibilities included management of the software development, development of communications testing plans, development of the controller testing procedures and changeover plans. He was also responsible for participating in communications testing and analyzing results.
- Caltrans Southern Districts Communications Study: Project manager whose responsibilities on this study included the comparison of interdistrict communications alternatives, and the development of standards to enhance the ability of the districts to exchange data with each other.
- Pathfinder Project: Principal-in-charge for this project for the Federal Highway Administration. This project includes the development of the first US version of an in-vehicle navigation and motorist information system.

- Wide Area Video Detection System (Autoscope), Minnesota: Participated in the application of this system to the automated identification of incidents. This work is being performed for the State of Minnesota, as a subcontractor to the University of Minnesota.
- Optimized Policies for Adaptive Control (OPAC), Federal Highway Administration: Project manager for the development and demonstration of an on-line optimization algorithm for the control of individual intersections.
- Office of Motor Carriers: Principal-in-charge of this project, which included a feasibility analysis and functional definition of the Commercial Driver Licensing System (CDLIS). This project included the development of a nationwide communications network for interchange of driver license information among State Departments of Motor Vehicles.
- National Highway Transportation Administration's Field Accident Investigation Teams: Analyzed the data processing and data communications requirements of these teams which operate from more than 100 locations throughout the United States, using an extensive data entry and data communications network.
- Communications Standards Development: Principal-in-charge of a federal project to develop these standards for the computer controlled traffic signal industry. This project includes the requirement for a detailed analysis of existing communications equipment and the development of a standard that will have a minimal impact on the communications industry, while simplifying design procedures and encouraging multiple-source solicitations by local government agencies.

Professional Affiliations

Institute of Electrical and Electronics Engineers; ITS America member of the Coordinating Council, and Futures Group; Chairman of the Board of the Virginia Polytechnic Institute, Transportation Research Center of Excellence; Past Chairman Transportation Research Board Communications Committee; Institute of Transportation Engineers.

Publications

Tarnoff, P., "Invariants Under Lossless Reciprocal Embedding," Technical Note 400-17, New York University, New York, New York.

Tarnoff, P., "Computer Control of Urban Traffic," paper presented at the IEEE Fifth Annual Computer Society Conference, September 1971.

Tarnoff, P., "Microcomputer Applications in Traffic Operations," Transportation Research News, Vol. 94, May/June, 1981.

Pugh, J and Tarnoff, P., "Multitenant Telecommunications Systems," Urban Land, April, 1984.

Tarnoff, P., "The Road to Automated Highways", presented for the Institute of Electrical and Electronics Engineers at the 1990 IEEE Annual Media Briefing Program

Tarnoff, P., "Management Information Concepts for Signal Systems", presented at the Annual Meeting of the Transportation Research Board, January 1993

Tarnoff, P., "Advanced Traffic Control - A Look at the 90's", presented at the Engineering Foundation Conference, Palm Coast, FL, 1993.

Gartner, N. and Tarnoff, P., "Real Time Traffic Adaptive Control Strategy (RT-TRACS)", Presented at the Annual Meeting of the Transportation Research Board, January, 1994.

Tarnoff, P., "ATMS Deployment - The developer's Perspective", Presented to the International Workshop on Advanced Traffic Management systems, 1994, St. Petersburg, FL

Kennedy, J. and Tarnoff, P., "IVHS and ITS Opportunities for the Cellular Industry", Presented to Bell Atlantic Mobile Systems, 1994

Tarnoff, P., "Vehicle Detection - A Reality Check", Presented at the Annual Meeting of the Transportation Research Board, January, 1995.

Tarnoff, P., "Privacy and the TRANSMIT Project", Presented at the Annual ITS America Meeting, Houston, TX, April, 1996.

Tarnoff, P., "Issues Associated with the Systems Integration", presented to the symposium on Integrated Transportation Management Systems, Boston, MA, June, 1996.

Keynote speaker at the 1996 Urban ITS Conference attended by high-ranking officials of major cities throughout the world.

THOMAS JACOBS

UNIVERSITY OF MARYLAND,
CENTER FOR ADVANCED TRANSPORTATION TECHNOLOGY

EDUCATION

M.S., CIVIL ENGINEERING (TRANSPORTATION), UNIVERSITY OF MARYLAND, 2000

B.S., CIVIL ENGINEERING, UNIVERSITY OF SOUTH CAROLINA, 1989

RATIONALE FOR SELECTION

Mr. Jacobs' involvement with the Capital Wireless Integrated Network (CapWIN) project and Maryland State Highway Administration's CHART program has provided extensive project specific experience in overseeing and developing programs with significant operations oriented requirements.

TECHNICAL EXPERIENCE

Mr. Jacobs has been a program manager at the University of Maryland Center for Advanced Transportation Technology for over four years. He has been involved in managing a number of complex ITS and Public Safety Technology related projects. These projects include:

Capital Wireless Integrated Network (CapWIN). During the initial planning and institutional development work, Mr. Jacobs was the Project Manager with responsibility for the overall management of the Capital Wireless Integrated Network (CapWIN) project. The purpose of CapWIN is to plan and implement an integrated wireless network in the Washington, DC region that serves the mobile communication needs of transportation and public safety agencies during incident response. Mr. Jacobs has been intimately involved in the planning, design, and integration the CapWIN system as well as its operations since production deployment in June of 2004.

CATT Lab. Mr. Jacobs was lead project manager in planning and deploying the Center for Advanced Transportation Technology Laboratory. He conducted the initial feasibility study that was used to guide implementation of the Lab. Mr. Jacobs hired all Lab personnel and oversaw the work of multiple graduate students doing research work on supporting real-time transportation center operations using real-time simulation software. He hired the current Lab Director and oversaw what has become a nationally recognized transportation lab facility.

CHART System Operational Support. During his career with FHWA and in his current position, Mr. Jacobs has been involved with providing support of Maryland State Highway Administration's CHART program. He worked directly with operations personnel in providing the necessary federal oversight to help stand up the CHART Statewide Operations Center including many key operational software support functions such as the Emergency Operations Reporting System, Road Weather Information System, and TMC system control software. Mr. Jacobs currently manages a CHART sponsored program to facilitate coordination and cooperation amongst TMC operators and public safety dispatch personnel.

I-95 Coalition. The I-95 Corridor Coalition is a partnership of major public and private transportation agencies, toll authorities, and industry associations, serving the I-95 corridor of the

United States from Maine to North Carolina. Mr. Jacobs participates on the Highway Operations Group (Potomac Division) that is involved in coordination transportation planning and operations throughout the I-95 Corridor. He also serves on the Information Services Network Steering Committee which is looking to tie transportation operations centers up and down the east coast together to support corridor-wide transportation operations activities.

OTHER EXPERIENCE

The following projects are a sample of relevant ITS activities Mr. Jacobs was involved with during 9+ years with the Federal Highway Administration.

- **Federal Highway Administration, Maryland Division**: Mr. Jacobs, while employed as a Transportation Management Engineer, managed the delivery of a Federal-aid program in support of State and local implementation of Intelligent Transportation System (ITS) projects consistent with the National ITS Architecture. He conducted independent federal reviews and approvals of all phases of State and local ITS projects, including planning; plan, specification & estimate development; software development; system integration; field construction; and maintenance and operations. He implemented FHWA programs, policies, and procedures as related to ITS deployment and operations and was a FHWA project manager for Baltimore ITS Early Deployment study and Montgomery County's integrated traffic/transit project.
- **Federal Highway Administration, Region 3**: As an Urban Transportation Management Engineer, Mr. Jacobs developed a workshop of ITS Functional Requirements and Technologies that later became a National Highway Institute (NHI) training course. He did a rotational assignment to the Montgomery County Transportation Management Center where he spent time as a TMC operator. He assisted FHWA's Washington office in writing the National ITS Strategic Plan's chapter on ITS Deployment and authored the system integration section of the Federal-aid Policy Guide for Implementation Plans. Mr. Jacobs led a team that developed FHWA Intelligent Vehicle Highway System Planning Process and co-authored FHWA's IVHS Planning Process, v1.00 document. He also co-authored Region 3 ITS Strategic Plan and Region 3 Signing Review final report.
- **Federal Highway Administration Highway Engineer Training Program**: As a Highway Engineer Trainee, Mr. Jacobs gained valuable knowledge from the Kentucky Transportation Center on the ADVANTAGE I-75 commercial vehicle operations project. He developed a project newsletter, gathered information on technology involved, prepared presentations on the project, and created and maintained a project log.

MICHAEL L. PACK
CATT Lab Director

Systems Engineer
Faculty Research Assistant
Center for Advanced Transportation Technology

Highlights of Experience

Michael L. Pack has extensive experience in the areas of Intelligent Transportation Systems, data acquisition systems, database management systems, process control, and video image processing. He serves as director of the Center for Advanced Transportation Technology's Advanced Transportation Laboratory. His experience includes planning and design of intelligent transportation systems (ITS) data collection devices and methods; development of probe vehicle technologies; travel time estimation tools; transportation database management and data extraction tools, and video traffic detection methodologies. A sample of the types of projects Mr. Pack has worked on is given below.

CATT Laboratory Director, The University of Maryland, College Park. Mr. Pack currently serves as the director of the applied ITS research laboratory at the University of Maryland's Center for Advanced Transportation Technology. He works with students and faculty to bring in cutting edge, applied ITS research projects, funding, and researchers. He is also actively involved in the network design and integration of the lab with other ITS facilities and research institutions.

'Smart Travel Van' Mobile Traffic Data Collection Vehicle, Smart Travel Laboratory, Charlottesville, VA. Developed for the Virginia Transportation Research Council (VTRC) and the University of Virginia by Mr. Pack, the Smart Travel Van is a state-of-the-art mobile traffic data collection system. It is a non-intrusive data collection device - it does not require placing or installing any equipment in travel lanes. The van allows the VTRC and Smart Travel Laboratory to collect highly detailed traffic data at any location - heavily traveled freeways, busy signalized intersections, work zones, or remote rural locations. In addition to its current configuration, the Smart Travel Van will serve as a platform for research and evaluation of new sensor technologies. The Smart Travel Van was designed and integrated entirely by Michael Pack.

Automatic Camera Repositioning Techniques for Video Traffic Detection, Charlottesville, VA. The purpose of this project was to address the camera positioning and calibration challenge in order to develop a means to integrate CCTV systems and machine vision vehicle detection systems. This research conducted by Mr. Pack, culminated in the development of a prototype positioning and calibration system based, itself, on machine vision principles. In-field prototypes are currently being tested and developed for ITS in Northern Virginia and Maryland.

Information Technology Applications in Transportation Management Course Development and Instruction, Charlottesville, VA. Mr. Pack developed the database management systems curriculum for The Maryland and Virginia Transportation T^2 Centers' short course on Information Technology Application in Transportation Management. This course, which has been taught for the past three years, continues to give transportation professionals hands-on, instructional training on the core information technologies that support transportation management including software engineering, traffic simulation models, and geographic information systems/database management systems. Mr. Pack also helps with the instruction at these courses.

Environmental Transportation Database Development, Center for Transportation Analysis, Oak Ridge National Lab, Oak Ridge, TN. While at the Oak Ridge National Laboratory, Mr. Pack developed a working database for researchers at the Center for Transportation Analysis that combined vehicle environmental databases with the National Personal Transportation Survey database. This database is actively used by researchers for acquiring statistical data about world transportation trends and their environmental impacts.

Publications

- Pack, Michael L., Brian L. Smith, and William T. Scherer (2003). An Automated Camera Repositioning Technique for Integrating Video Image Vehicle Detection Systems with Freeway CCTV Systems. Transportation Research Board. 2003
- Smith, Brian L., and Michael L. Pack (2003). Camera Positioning and Calibration Techniques for Integrating Traffic Surveillance Video Systems with Machine-Vision Vehicle Detection Devices. Final Contract Report. Virginia Transportation Research Council.
- Smith, Brian L., Michael L. Pack, David J. Lovell, and M. William Sermons (2001). Transportation management applications of anonymous mobile call sampling. IN: Proceedings of the 11th Annual Meeting of ITS America, Miami, FL.
- Keynote speaker at the 2002 Tennessee State Mu Alpha Theta Mathematics Competition in Nashville, TN.

Education

Graduate Studies in Civil Engineering, 2003, University of Maryland, College Park, MD.
Master of Science, 2002, Systems Engineering, University of Virginia, Charlottesville, VA
Bachelor of Science, 2000, Integrated Science and Technology: Instrumentation & Measurement and Information Knowledge Management, James Madison University, Harrisonburg, VA

Professional Activities

Intelligent Transportation Society of MD
Annual Meeting Chairman (2003), Outreach Committee (2004)
Transportation Research Board Member
IEEE Computer Society, James Madison University Founding Member
Chairman (1999-2000), Member (1998-1999)

GEORGE S. AKE

6305 IVY LANE GREENBELT, MARYLAND 20770Experience- University of Maryland

EXPERIENCE

COORDINATOR, CAPITAL WIRELESS INTEGRATED NETWORK 1999- PRESENT
Responsible for: Overall coordination of a project to implement an integrated voice and mobile data network for Transportation and Public safety in the Washington D.C. Region

Experience-North Carolina Highway Patrol
Major, Director of Research and Planning 1993-1999
Responsible for: Accreditation; Information Management Unit; Medical Services; Promotional System; Research and Planning Section

Director of Specialized and In-service Training 1985-1993
Responsible for: *Career Development, In-service training and Specialized Training*

District Commander (Wilmington) 1981-1985
Responsible for: *field operations in two counties*

Trooper and First Line Supervisor 1966-1981
Worked in Field Operations and staff positions

EDUCATION

NORTH CAROLINA STATE UNIVERSITY, RALEIGH, NORTH CAROLINA
MASTER'S OF PUBLIC ADMINISTRATION, *MAY 1996*

GUILFORD COLLEGE, GREENSBORO, NORTH CAROLINA
B.A.S., ADMINISTRATION OF JUSTICE, *1980*

SENIOR MANAGEMENT INSTITUTE FOR POLICE, BOSTON, MASS., *JUNE 1995*

SOUTHERN POLICE INSTITUTE, LOUISVILLE, KENTUCKY
ADMINISTRATIVE OFFICERS COURSE, *1981*

STEDMAN HIGH SCHOOL, *1963*

PROFESSIONAL AND CIVIC ORGANIZATIONS

- Southern Police Alumni Association
- North Carolina Southern Police Alumni Association
- Honorary member Virginia Southern Police Alumni Association
- Past National Secretary, Southern Police Alumni Association

- Past President, North Carolina Southern Police Alumni Association
- N.C. State Administrative Officer's Management Program Advisory Board
- Information Management Committee, Governor's Crime Commission
- UNC School of Medicine Law Enforcement Advisory Board
- Past member, National Institute of Justice Technology Advisory Board
- IACP-Police Traffic Services in the 21st Century Subcommittee
- IACP- Communications and Technology Committee
- National Institute of Justice -National Task Force on Interoperability (2002)
- Project SAFECOM Advisory Committee

AWARDS

- Dean's Scholar, University of Louisville, 1981
- Distinguished MPA Alumnus Award, N.C. State University, 1998

PROJECTS

- ***National Task Force on Interoperability*** ***2002***
  Developed recommendations for public safety agencies to assess their communications needs and encourage sharing of information. These recommendations focused on enabling public safety agencies to communicate with each other. A published guide is available for the agencies.

- ***IACP Police Traffic Services Study Group*** 1999-2000
  Developed recommendations for police executives to improve and enhance traffic law enforcement in the next century. The recommendations included management and administrative changes, technology, and community involvement. The published guide will be available for law enforcement agencies throughout the United ***States.***

- ***Criminal Justice Information Network*** ***1997-1999***
  Represented CJIN Governing Board making presentations on the concepts of a shared network. Presentations have been made to members of the North Carolina General Assembly, U.S. Congress, International Chiefs of Police, and other professional organizations. Worked with the "CJIN" board to identify new technologies for all Criminal Justice information systems. Routinely meet with local law enforcement officers, court, and correction officials to discuss strategies for cooperation and sharing of resources.

  - ***Operation Helping Hand*** ***1996-1999***
    Developed a regional policing program to address high crime areas in North Carolina. This program (Operation Helping Hand) is a partnership between State law enforcement agencies and Local Police to address high crime areas. A federal grant provides for overtime salaries for enforcement officers and resources for the community.

  - ***Highway Patrol Promotional and Hiring processes*** ***1994-1999***
    Developed and validated new promotional and hiring systems for the North Carolina Highway Patrol. These systems are a national model for other agencies.

- ***National Hiring and Promotional Summit 1994-1995***
  Developed a national summit for Highway Patrol and State Police Organizations. This summit is now an annual event hosted by State Police organizations to exchange methods and ideas to improve promotional and hiring systems.

- ***Highway Patrol Medical Services 1992-1999***
  Developed a partnership with the University of North Carolina Medical School to provide medical services for several state law enforcement agencies. This program has reduced medical costs and provided excellent care for approximately 2000 officers. This program includes stress debriefing, routine physical exams and proactive medical strategies to prevent illness. The Medical School has established an advisory board of experts, which develop new and innovative medical programs for law enforcement officers.

- ***Administrative Officers Management Program (NCSU) 1988-present***
  Worked with North Carolina State University and North Carolina Law Enforcement Leaders to start an Administrative Officer Management Program in North Carolina. This program has graduated five hundred and twenty-three officers form fifty-four North Carolina police agencies and one hundred and fifty-three officers from other states and countries. The program is designed to expose officers to management methods and new trends in law enforcement. This program has an advisory board made up of law enforcement leaders throughout the state.

FRED B. DAVIS

Deputy Program Director
Capital Wireless Integrated Network (CapWIN)
6305 Ivy Lane, Suite 300
Greenbelt, MD 20770
301-614-3702

CURRENTLY

Faculty Research Assistant, University of Maryland - Center for Advanced Transportation Technology (CATT), College Park, MD.
07/01/2001 - Present

Deputy Program Director, CapWIN Program – University of Maryland. The Capital Wireless Integrated Network (CapWIN) Program is a partnership between the States of Maryland, Virginia and the District of Columbia with a shared goal of developing an integrated transportation and criminal justice wireless information network. This unique program integrates transportation and public safety data and voice communications systems in two states and the District of Columbia and will be the first multi-state transportation and public safety integrated wireless network in the United States.

Position Summary: As Deputy Program Director, I assist the CapWIN Program Director in the development, administration, coordination, and implementation of applicable policies, procedures, programs, and activities of the CapWIN Program by performing the following duties personally or through subordinate managers and supervisors.

Essential Duties and Responsibilities include the following. Other duties may be assigned.

- Develop and implement organizational goals, objectives, policies, and procedures for the program as assigned.
- Assist in developing the organizational budget and provide administrative guidance for the control of budget expenditures.
- Represent the CapWIN Program at meetings, conferences, and other public functions.
- Direct the preparation of a variety of records, reports, and correspondence relating to office activities.
- Review and evaluate reports submitted by subordinate personnel.
- Evaluate and modify, as required, programs, activities, policies, procedures, rules, orders, and regulations to ensure compliance with the CapWIN's mission, goals, and objectives.
- Design, coordinate, and implement organizational and end user's mobilization efforts to achieve CapWIN's mission, goals, and objectives.
- Design and implement technical and administrative methods of successfully supporting the CapWIN Program and services provided to all end users of the communications network.
- Identify and resolve difficult user agency and internal human relations problems.
- Coordinate and direct CapWIN's fiscal, equipment, and human resources activities and services.
- Act as spokesperson for the CapWIN Program to the media as needed.
- Assume command of the CapWIN Program in the absence of the Program Director.

- Participate in professional organizations and on a variety of boards, commissions, and committees.

POST LAW ENFORCEMENT CAREER

Eastern Regional Manager, Public Safety Management, Ltd., Clearwater, FL.
07/01/2000 – 03/16/2001

Marketing and sales of advanced Windows NT Computer Assisted Dispatch Systems, Records Management Systems and Intelligent Mobile applications for law enforcement and other public safety agencies.

Participation in public safety industry trade shows, on-site application software demonstrations, teleprospecting, and development of prospect interest.

PROFESSIONAL LAW ENFORCEMENT PROFILE

Twenty-seven year career law enforcement officer with the North Carolina State Highway Patrol.

Retired at the rank of Captain; serving as Director of the Information Management Unit. (12-31-1998)

Project Manager - North Carolina Criminal Justice Information Network – Mobile Data Network (CJIN-MDN). Directed successful State Highway Patrol implementation of a multi-phased statewide mobile data network providing wireless data communication access for all law enforcement and public safety agencies in North Carolina.

Thorough understanding of law enforcement policies, procedures and operational processes.

Highly motivated with a strong work ethic.

PROFESSIONAL SKILLS

Strong leadership skills with a successful history of influencing and directing the task-related activities of group members.

Demonstrated ability to function as a “Change Agent” in order to integrate advanced information technology into a statewide law enforcement agency.

Advanced administrative abilities that combine strong written and verbal communication skills.

Knowledgeable in state legislative processes, governmental affairs, organizational structure and personnel management.

Experienced in research and strategic planning methodology.

Accomplished in developing, preparing, monitoring and evaluating Federal grants.

Skilled in comprehensive information technology project management; including, the development of needs assessment, preparation and execution of Request for Proposals (RFP), vendor contract negotiations and selection processes, budget preparation and analysis, system implementation and evaluation.

Analytical team member with a proven record of successfully coordinating multi-agency activities.

Proficient with various personal computer platforms, information system hardware components, and software applications.

CAREER ASSIGNMENTS

UNIT COMMANDER – North Carolina State Highway Patrol. As Director of the Information Management Unit, I managed a statewide, multi-platform information system utilized for the delivery of critical administrative and operational law enforcement data. A staff of highly trained and dedicated information technology professionals supported the information system under my supervision. I administered the daily operation of the Information Management Unit, and as the Officer-In-Charge, I accepted full responsibility for performance levels of uniformed officers and civilian staff members assigned to the Unit. I provided executive direction, long range planning, system deployment, and statewide implementation of mobile data services and advanced computer technology in support of the State Highway Patrol and the North Carolina Criminal Justice Information Network.

Information Management Unit – Headquarters Staff - Raleigh, NC

Director, February 1994 - December 1998 (Retired 12/31/98)

Promoted to Captain, October 1995

Research & Planning Unit – Headquarters Staff – Raleigh, NC

Planning Officer, March 1988-February 1994

Promoted to Lieutenant, April 1993

Promoted to First Sergeant, March 1989

Field Operations –

Winston Salem, NC – Line Sergeant, October 1985-March 1988

Roanoke Rapids, NC – Line Sergeant, December 1984-October 1985

Greenville, NC – State Trooper, December 1971-December 1984

EDUCATION

Northwestern University – Traffic Institute
Evanston, IL – Police Administration Training Program (PATP) September 1987-June 1988
Central Piedmont Community College
Charlotte, NC – September 1966-May 1967
East Mecklenburg High School
Charlotte, NC – September 1963-June 1966

MILITARY SERVICE

United States Coast Guard, May 1967-May 1971
Gunner's Mate 2nd Class (E-5) – Honorable Discharge
USCG Air Base – Elizabeth City, NC, June 1969-May 1971
Viet Nam Service – Subic Bay, Philippines, May 1968-May 1969
USCG Cutter Samuel D. Ingham – Norfolk, VA., July 1967-May 1968

AWARDS

North Carolina Department of Crime Control and Public Safety
Distinguished Service Award, December 1998

BRUCE A. BARNEY, J.D.

803 Salisbury Way
Stevensville, MD 21666
Home: 410-604-0714
Work: 301-489-1707

Education:

University of Maryland School of Law — Juris Doctorate, 1996

University of Oregon — Bachelor of Arts, 1993
Major: Classics (Latin, Greek and Ancient History)
Honors: Phi Beta Kappa

Professional Experience:

May 2001 – Present **University of Maryland – CapWIN**
Technical Director

Oversee technical aspects of CapWIN project including RFP requirements, technical negotiations with vendors, implementation planning and execution and technical outreach. Provide overall technical management services for development, implementation, maintenance and expansion of CapWIN system. Oversee and manage technical staff. Provide guidance and support to CapWIN Executive Committee.

May 2000 – April 2001 **Maryland Department of Public Safety**
Chief Network Officer

Provided upper management services to the Information Technology and Communications Division of one of the largest state agencies in Maryland. Played a critical role in the delivery of essential PC and mainframe services providing voice, data, and video services, 24 hours a day, 365 days a year, to criminal justice entities including state court systems, Federal Bureau of Investigations, Maryland State Police, and local law enforcement agencies.

Responsible for staff of over thirty (30) State employees in the areas of Wide Area Networking, Local Area Networking, PC support, and Telecommunications. Developed and oversaw 4.5 million dollar budget in fiscal year 2001 for purpose of expanding the Department's network infrastructure and related services throughout the State of Maryland.

Directed the design, development, implementation, maintenance, and ongoing operation of Department of Public Safety and Correctional Services' statewide wide area network (WAN), local area networks (LAN), office automation systems, departmental telecommunications systems, and nondepartmental customer communications services.

May 1999 - May 2000 **University of Maryland HIDTA Research Program**
Project Manager

Provided project management for a project involving locating and administering custom Visitor Tracking System for Maryland's Division of Corrections. The system was designed to use a dual biometric (fingerprint and facial recognition) to track visitors to the Maryland Division of Corrections (DOC) institutions. The pilot program involved two DOC locations, wide area networking between institutions, fiber optic and LAN wiring within institutions, Oracle database support, system administration and training. Conducted needs analysis and located appropriate vendor. Negotiated contract vehicle and managed customization and implementation. Implemented working prototype in two institutions and all associated infrastructure within three (3) months. The prototype system is still in use today and prevents a minimum of five (5) unauthorized and potentially dangerous visits per month that were previously undetected.

March 1999 - May 1999 **University of Maryland HIDTA Research Program**
Systems Administrator

Acted as systems administrator for the implementation of client/server case management and drug lab reporting software for the Maryland Division of Parole and Probation (P&P). Responsible for implementing LAN and WAN infrastructure for 20+ P&P locations. Responsible for implementing integrated drug lab software at three lab locations for automated reporting. Responsible for network, PC and automated drug lab support for all locations. Managed installation, upgrade and user support functions for entire install-base. Maintained 150 seat Windows NT network at central location.

May 1998 - March 1999 **Network Business Solutions, Inc.**
Consultant

Acted as Director of Business Development as well as technical consultant and PC technician for several Maryland-based businesses and law firms. Delivered several new clients and developed all proposals during my tenure. Installed several small networks and performed day-to-day administration and desktop support.

August 1997 - May 1998 **McNamee, Hosea, Jernigan & Kim, P.A.**
Associate Attorney

Primary practice involved commercial litigation including some technology Patent and Trademark matters. Developed Year 2000 problem opinion letter for major financial institution regarding potential impact and required planning and implementation steps required by government agencies.

June 1995 - August 1997 **DeCaro, Doran Associate**
Attorney, Law Clerk

Primary practice involved insurance defense litigation. Prepared web site for firm and assisted with day-to-day computer related issues.

Seminars and Publications:

- Seminar - Internet Search Engines, A Practical Guide, 1999 (Maryland Bar Association Technology Seminar)
- Article - E-mail Security for Attorneys, 1999 (Small Practice Journal)
- Seminar - Maryland Legal Updates for the Insurance Professional, 1997 (Annual DeCaro, Doran Legal Seminar for Insurance Professionals)

Community Activities:
1997, 1998 and 1999 - Attorney Coach for Suitland High School Mock Trial Team (State Champions 1997)

Professional Memberships:
Maryland State Bar Association (inactive)
Federal Bar for the District of Maryland (inactive)

Security Clearances:
DEA Security Clearance

WILLIAM L. HENRY

12623 West Oak Drive
Mt. Airy, Maryland 21771
(301) 614-3719 (W) (301) 831-9716 (H)
bhenry@capwin.org

EDUCATION

Columbia Union College	Bachelor of Arts, 1993, Business Administration
Montgomery College	Associate of Arts, 1992, Fire Science

PROFESSIONAL EXPERIENCE:

December 2003 – Present University of Maryland/CATT – CapWIN Project
Director of Field Operations

Develops and executes comprehensive outreach plans and programs, both short and long range, to ensure the success of CapWIN organizational objectives. Plans and oversees CapWIN publicity and promotional activities including print, online, electronic media, and direct mail. Evaluates and recommends CapWIN field application development programs for law enforcement, fire/EMS and transportation agencies. Determines agencies and suppliers of record, and negotiates contract terms and memorandums of agreement for major CapWIN field services. Serves as liaison with outside agencies on ongoing CapWIN promotional campaigns. Oversees development of CapWIN program and training materials. Develops and recommends CapWIN deployment scheduling to produce the most effective and efficient roll out of field services. Directs the activities of the CapWIN Field Services Coordinator, Training/Multi-media Manager and Client Relations and Marketing Manager. Oversees and evaluates training activities and adjusts field operational strategy to meet changing needs, conditions and special training requirements. Monitors CapWIN User Group activities. Oversees development and maintenance of CapWIN user database. Establishes and maintains relationships with industry influencers and key community and strategic partners. Conducts surveys on current and new technology products and application concepts, and provides feedback for future CapWIN development or enhancement to services provided. Guides preparation of activity reports and presents to CapWIN executive management. Establishes and maintains a consistent professional CapWIN image throughout all contact with user agencies, user groups, service providers and external industry events.

July 2002 – December 2003 University of Maryland/CATT – CapWIN Project
Fire and EMS Coordinator

Provided full-time support to the CapWIN project representing Fire/EMS interests. Served as lead coordinator for CapWIN Fire/EMS agencies. Coordinated project involvement of all Fire/EMS members of CapWIN from field users to upper management. Provided Fire/EMS expertise and insight to the CapWIN project team. Provided direction and represent Fire/EMS interests in all dealings with the CapWIN systems integrator and all CapWIN committees. Conducted CapWIN project briefings and presentations to various government agencies and

associations throughout the region and across the country. Developed memorandums of agreement (MOA) for various aspects of the project. Coordinated with University of Maryland attorneys on development of the MOAs. Served as liaison to and oversee the grant given to the International Association of Fire Chiefs.

October 2001 – April 2002 Montgomery County, Maryland Fire and Rescue Service
Temporary Position - Employment Background Investigator

Conducted interviews with current and past employers, co-workers, family members, neighbors, school representatives, and personal references of firefighter/rescuer applicants. Reviewed any driving and criminal record histories, military discharge paperwork and financial reports. Documented all information received and prepared a final report for each applicant investigated.

March 1972 – July 2000 Montgomery County, Maryland Fire and Rescue Service

Executive and senior levels of responsibility encompassed a balance of administrative, managerial and operational leadership, including substantive areas of labor relations, policy formulation and review, equal employment opportunity, human resources, budget, legislative oversight at federal, state and local levels, fire/rescue emergency operations, fire code enforcement, and fire/explosives investigation.

11/98 to 7/00	Executive Assistant Fire Chief	Career Fire Chief's Office
3/97 to 11/98	Section Chief (District Fire Chief)	Human Resources/Labor
1/94 to 3/97	Shift Commander (District Fire Chief)	Bureau of Operations
3/92 to 1/94	Section Chief (Captain)	Fire Code Enforcement
3/92 to 8/92	Section Chief (Captain)	Fire Code Enforcement And Fire Investigations
1/89 to 8/92	Section Chief (Captain)	Fire Investigations
11/82 to 1/89	Fire Investigator (Lieutenant)	Fire Investigations
11/79 to 11/82	Fire Inspector (Sergeant)	Fire Code Enforcement
3/72 to 11/79	Firefighter/Technician	Kensington Fire Department

June 1968 – March 1972 Lafayette Radio Electronics, (no longer in business)

In less than 4 years progressed from stock room clerk to store manager. Duties included: supervision of retail/mail order electronics and stereo store; hired/fired employees; ordered inventory; sales of merchandise; payroll; bank deposits; assembled stereo components; maintained stock room; unloaded deliveries; shipped merchandise; inventoried stock.

Professional Schools, Courses, Seminars, etc.

Executive Fire Officer Program Graduate, National Fire Academy, 2000

Certificate, Equal Employment Opportunities Studies, New York State School of Industrial and Labor Relations, Cornell University, 1997
Negotiating Labor Agreements, Program on Negotiations, Harvard Univ., Tufts Univ. and M. I. T., 1997
Montgomery County Police Entry Level Training, Montgomery County Police Training Academy, 1986
Polygraph Examiner Training, Maryland Institute of Criminal Justice, 1984

MEMBERSHIPS

National Society of Executive Fire Officers
The National Fire Academy Alumni Association
International Association of Fire Chiefs
Intelligent Transportation Society of America
International Association of Bomb Technicians and Investigators, Life Member

COMMITTEES

Global Justice Information Sharing Initiative, Infrastructure/Standards Working Group (GISWG)

HONORS, AWARDS, and COMMENDATIONS

Dean's List, Columbia Union College, Spring 1992, 1993

Montgomery County Fire and Rescue Service Extraordinary Performance Award, 1993, 1989

Montgomery County Fire and Rescue Service Unit Citation – Fire Investigations, 1991, 1989

Captain James E; Daly Award for Excellence, Montgomery County Police Recruit School, 1986

Scholastic Achievement, Fire Investigator's Basic Criminal Investigation Course, 1980

Montgomery County Fire and Rescue Service Richard D. Thompson Award, Emergency Care, 1977

Fireman of the Year, City of Hyattsville, MD, 1969

RODDY MOSCOSO

Professional Profile

Roddy Moscoso has 15 years of experience providing consulting services to senior public sector executives. Mr. Moscoso has extensive experience in managing and supporting all aspects of IT development and integration efforts, including requirements identification and documentation, change management, human resources skill assessments and training, business process engineering/reengineering, system deployment, and communications. Mr. Moscoso routinely works directly with senior managers in support of critical decision-making and issue identification and resolution.

Employment History

Capital Wireless Integrated Network (CapWIN), University of Maryland, College Park, MD, July 2005 - Present

International Business Machines, Inc. (IBM), Bethesda, MD, May 1999-June 2005

McManis Associates, Inc., Washington, DC, July 1994- May 1999

National Performance Review Task Force, Office of the Vice President, Washington, DC, April 1993-July 1994

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Washington, DC, June 1989-April 1993

Professional Experience

New System Deployment Planning and Oversight, Capital Wireless Integration Network (CapWIN), Served as Client Relations and Marketing Manager for the CapWIN program. Engage new agency participants across public safety and transportation disciplines. Responsible for marketing activities include press and political communications. Work directly with senior agency representatives to identify critical success factors and issues affecting operational integration of CapWIN. Serve as a liaison between the technical development team and the project leadership team. Provide direct support to system testing, and the development of training materials. Prepare and delivered briefings to participating agencies, the project Executive Board, key stakeholders, and the media.

Large Systems Development and Integration, US Office of Personnel Management (OPM), Deputy Project Manager for a 35 member planning and development team supporting the modernization of the Federal retirement system (RSM). Responsible for solution planning, technical and non-technical requirements identification, and formal documentation development. Responsibilities included staff management, cost monitoring, revenue forecasting and project management reviews (PMR). Responsible for day-to-day client interaction including the negotiation of contracts and task order modifications. Managed and supported the development of formal proposals in response to official statements of work (SOWs) associated with the initiative. Coordinated with other supporting organizations, including contractors and related

government programs, (e-gov initiatives). Supported development of RSM Business Case and Capital Asset Plan (OMB Exhibit 300) for Fiscal Years 2003 and 2004.

Business Transformation and System Development, Department of Commerce, Census Bureau, Worked with staff in the Director's office to implement an enterprise-wide process improvement initiative that included the development of a web-based management and tracking system. Supported a Bureau-wide team with the development of revised policies and procedures using Business Process Reengineering methodologies. Designed and developed a web-based tracking tool to support revised policies and procedures. Developed internal communication documentation to facilitate employee understanding of the operational changes taking place.

Work Activity Tracking System Design and Development, Department of Commerce, Census Bureau, Worked with the Census Bureau's Demographic Directorate to develop and implement a comprehensive information management system designed to capture and maintain information on activities performed by Directorate personnel. Developed customized applications using COTS software to identify trends related to personnel activities in order to better prioritize work and personnel.

Business Process Reengineering, Federal Aviation Administration, Air Traffic Services, Participated in the implementation of the Airway Facilities Concept of Operations which centralized maintenance operations and introduced new supporting technology. Conducted business process reengineering and created standard operating procedures, developed a new measurement and evaluation system, developed a transition plan for moving operational functions and personnel, and developed communication materials which articulated the rationale and benefits of the new concept.

Workforce Staffing Assessment, Federal Aviation Administration, Air Traffic Services, Supported the development and implementation of a workforce planning methodology to facilitate the modernization of the National Airspace System (NAS). Developed staffing and skill profile baselines of the current FAA workforce, projected staffing levels and skill profiles required to support NAS modernization, identified the major issues standing between the current and projected future states, and developed recommendations to mitigate the identified issues.

Training Assessment Planning, Federal Aviation Administration, Airway Facilities Training Division, Worked with the Airways Facilities division responsible for identifying training requirements for the 10,000 person workforce. Developed a process and methodology for projecting 5-year training requirements and costs, baselined (mapped) current training requirement identification processes, and developed new processes designed to improve the division's ability to identify and manage training needs over time.

Knowledge Management, National Institute of Standards and Technology (NIST), Supported the development of an electronic database designed to capture "best practices" on NIST Administration activities. The database was created to improve NIST operations through information sharing and performance standards development.

Management Planning, Department of Commerce, Census Bureau, Worked with the Director's Office to develop a business planning methodology designed to improve leadership's understanding of key Bureau activities as well to improve overall Bureau strategic planning. Developed a business planning process and reporting structure as well as an electronic database to store individual business plans and make them accessible to all Bureau staff.

Knowledge Management, Federal Aviation Administration, Team Technology Center, Worked on the design and development of a comprehensive database on the subject of Business Process Reengineering (BPR). Researched and collected materials for database population, worked closely with FAA officials and computer software programmers on database structure, subject matter content, and graphical user interface (GUI) design, and coordinated the information collection efforts of other sub-contractors.

Business Transformation, Federal Communications Commission (FCC), Provided strategic planning and team building assistance to the FCC's Wireless Telecommunications Bureau. Facilitated the merging of two separate Bureaus into one organization with a single vision to accomplish their mission.

Workload Study, Federal Aviation Administration, Airway Facilities, Worked with the FAA's Airway Facilities Organization to prepare a baseline of current workload at FAA Maintenance Management Centers (MCC) in order to facilitate future consolidation across the country.

Business Process Reengineering, National Institutes of Health (NIH), Division of Engineering Services, Worked with senior officials at NIH's Division of Engineering Services (DES) to improve and reengineer core business processes in order to streamline their organization and improve performance and customer service. Supported the deployment of individual process action teams (PATs), and developed and analyzed assessment instruments, such as customer surveys.

Education and Certifications

M.S. Public Administration, Virginia Polytechnic and State University, 1993
B.S. Economics, George Mason University, 1989

Languages

Spanish

Publications

Jasper, Herbert and Roddy Moscoso, "Making Strategic Planning and Performance Measurement Work," National Academy of Public Administration, January 1997.

Moscoso, Roddy, "It's Getting the Word Out, Stupid: The Continuing Need to Communicate Effectively the Message of Reinventing Government Throughout the Federal Workforce," *The Public Manager,* Fall 1994.

JOSEPH A. KEMP

2 Woodmoor Drive
Silver Spring, MD 20901
(C) 301-502-1281 (H) 301-593-4499
jkemp101@verizon.net

Summary:
Seeking a challenging technical position that will allow me to draw on my wide range of skills to bring projects to success. Over 10 years hands-on experience in the information technology field.

Skills:

Management
Departmental and project budgeting, performance based evaluation, and team development

Hardware
PC based, RISC servers/workstations, PIC microcontrollers, basic solid state electronics, CISCO LAN/WAN equipment, and RS-232 interfaces

Operating Systems
Windows, NetWare, Linux (inc. MPI & PVM parallel processing clusters), FreeBSD, Octagon Real-time DOS, OS/2, Solaris and CISCO IOS

Protocols/Markup Languages
HTML, HTTP, IPX/SPX, POP, SMTP, SNMP, TCP/IP, and XML

Programming Languages/Tools
C, C++, C#, CVS, Parallax PIC Assembly, Python, REXX, SQL, TCL, and Visual Basic

Databases
Microsoft SQL Server, Microsoft Access, IBM DB/2, Paradox, Gupta SQL Server and Berkley DB

Security
Checkpoint firewall/VPN products, Cylink Ethernet Encryption Devices, SonicWALL, Snort Intrusion Detection System (IDS) w/Snarf & Barnyard, Nessus Vulnerability Tester, NIST SP 800 Series Specifications, V-One VPN products, and Clearswift MimeSweeper products (SMTP & HTTP scanners)

Education and Certifications:

BS Mechanical Engineering, University of Maryland College Park, 1994
MS Computer Systems Management, University of Maryland University College, 2002

Microsoft Certified Systems Engineer (MCSE), 1997

Experience:

7/96 – Present Washington/Baltimore High Intensity Drug Trafficking Area (W/B HIDTA) – Network Operations Center (NOC) Program Manager – University of Maryland

- Lead team to design, implement and maintain IT infrastructure including LAN, WAN, office automation, and specialized law enforcement applications. Highlights include:
  - Designed extranet utilizing Checkpoint VPN technologies connected to various state and local agencies
  - Secure WAN utilizing CISCO IPSec enabled routers replacing Cylink Ethernet encryption devices.
  - Development of Case Explorer case management and deconfliction software
    - Used by law enforcement agencies throughout Washington/Baltimore region to share criminal intelligence
  - Development of HIDTA Automated Tracking System (HATS) to management treatment and drug testing operations.
    - Interfaced to SYVA and Olympus Chemistry Analyzers
    - Used by Criminal Justice agencies and Treatment providers in 17 counties surrounding the Washington metropolitan region
  - Developed data management techniques to facilitate access to various law enforcement intelligence databases
- Manage technical projects involving mult-agency/mult-jurisdictional participants
  - Include 28 CFR 23 regulations into project and design planning phases to ensure compliance with federal criminal intelligence laws
- Develop policies and procedures to control operation of critical law enforcement systems
- Participate on committees that shape global criminal intelligence sharing techniques for the nationwide HIDTA program
- Manage software development projects for law enforcement and treatment/criminal justice applications used throughout the Washington/Baltimore region utilizing Microsoft development platforms (Visual Basic 6 & .Net)
- Develop security focused designs to combat threats to law enforcement systems
  - Utilized Python scripts to track network threats (Defacement group) on a Brazilian IRC network
  - Developed monitoring techniques for intrusion detections, bandwidth utilization, and CPU utilization

1/96 - 7/96 SIGNAL Corporation – Network Engineer (US Patent and Trademark Office)

- Worked in Information Technology Lab to test and implement new technologies
- Researched various strategies implementing Windows NT and NetWare network operating systems

- Implemented mission critical collaboration system built upon NetFRAME high availability server
- Exposed to ATM products from CISCO, Fore and XYLAN
- Utilized Network General Sniffers on FDDI and Ethernet networks to diagnose application performance issues
    - Identified faults in SPX protocol driver in NetFRAME FDDI network card

9/92 - 1/96 Office of Academic Computing Services (OACS), University of Maryland – Network Administrator

- Administered 1500 node NetWare (3.11 & 4.10 w/NDS) network
- Involved in all aspects of system management including server maintenance, server upgrades, workstation repair, and workstation deployment
- Designed, coded and implemented many network modules including Pay for Print system, IP address assignment/management (pre-DHCP) and network print servers
- Programmed in C, C++ and Visual Basic on DOS, Windows, OS/2 and Linux platforms
- Installed Gupta SQL Server and IBM DB/2 servers to support OACS database requirements
- Designed and implemented vending kiosk interfaced to SQL server to maintain account transactions
- Prepared research datasets for SAS statistical analysis on IBM mainframe utilizing Waterloo C compiler

5/90 - 5/92 Triangle True Value, Wheaton, MD. – Technician

- Developed parts inventory system in Paradox 4.0
- Utilized new inventory system to maximize cost savings associated with annual parts inventory purchases
- Maintained Lantastic network to support inventory system and general office automation functions

5/89 - 8/89 RT Frank Electric Co. Inc. – Electrician Helper

- Supported master electrician in installation and maintenance of electrical control systems
- Installed power wiring, control wiring, data cabling and security signal wiring in commercial environments

Awards and Nominations:

Maryland State Police Superintendent's Salute - Support of the Montgomery County Sniper Task Force

State of Maryland Department of Parole and Probation Director's Team Spirit Award

2002 National HIDTA Outstanding Administrator Nominee

Clearance:

United States Department of Agriculture - Top Secret
Law Enforcement Sensitive

CATHERINE A. MILLER

12408 Bunche Road
Fairfax, VA 22030
703-222-7698
703-222-7699 (fax) - 703-407-9402 (cell)

Professional Experience

Jan 1999 – HTE, Inc. Lake Mary, FL

Project Manager – Public Safety and Justice

Is the focal point for both the client and HTE for the entire implementation of applications for the company's most sensitive public safety implementations.

Has directed the implementation of Computer Aided Dispatch systems (CAD), Police, Fire, EMS, Jail, and Courts Records Management systems and Police and Fire Mobile systems for many agencies across the United States including Alexandria, VA, Berkeley, CA, and New York Department of Transportation and State Police. These implementations require conducting kick-off meetings, needs analysis, conference calls, creating and maintaining project plans, creating scope of work documents, ordering hardware and software, coordinating training and installations, resolving and tracking issues, and developing status reports for clients.

Arbitrate project conflicts and renegotiate statements of work including contract modifications, if necessary, to ensure win-win success throughout the immediate project life cycle while maintaining long-term customer satisfaction.

Develops and maintains project plans and delivery, installation, and training schedules for all HTE Public Safety and Justice development efforts working with all levels of staff within the company and with third party vendors.

Leads efforts to improve the standards and practices of project management by striving for uniformity and clarity in reporting and in coordinating efforts with other departments and teams. Provides leadership for how to better manage projects and to ensure that the necessary personnel are involved in making decisions for the project.

Assists in Request for Proposal (RFP) responses, contract negotiations, accounting processes, and business planning.

Assists other project managers with complex implementations and serves as an internal consultant on all aspects of implementations, particularly in client/server technology and mobile systems.

1996 – 1999 CAM Computer Services Springfield, VA

Owner

Owned a professional services business providing systems analysis, design, programming, management, data and statistical analysis, and graphics and presentation design.

Clients included Marriott Corporation, Tetra Tech EM (formerly PRC Environmental Management), Institute for Law and Justice, Justice Research and Statistics Association, Hallcrest Systems, and other businesses in the DC Metropolitan Area.

1994 – 1996 Alexandria Office of Sheriff Alexandria, VA
Director, Automation and Technical Services

- Managed all automated systems, prioritized needs and recommended changes to current systems in order to provide the Office with systems that are capable of revision to accommodate changing needs, and are indispensable to supporting daily decision making and long-range planning efforts. Lead the effort to automate manual functions within the department to give deputies quicker access to information, and enable new capabilities such as automated fingerprinting and digital mug shot transmission to assist in the identification of prisoners enabling the Sheriff to use the data produced by the systems in the best way possible to help mange the jail.
- Designed and implemented a training strategy for the Office including a new MIR training course still used today to train Deputies and Police Officers in how to handle and use automated equipment.

1987– 1994 Institute for Law and Justice, Inc. Alexandria, VA
Programmer/Analyst

- Evaluated various criminal justice and fire-related information systems. Provided recommendations for changes. Developed and programmed intricate information systems for criminal justice and fire-related projects. Designed, maintained and analyzed complex databases for major criminal justice research and training projects.
- Managed, planned, and coordinated the implementation of all computer systems. Implemented ILJ's Novell Network. Served as the LAN administrator. Provided technical hardware and software assistance to all system users.
- Researched the application of microcomputers in law enforcement. Identified police departments, jails, and courts that successfully used microcomputers for crime analysis, narcotics, and other criminal investigations.
- Assisted in research on narcotics enforcement programs, investigation of computer crimes, integrated operations and department consolidations, use of dogs in drug investigations, and use of mapping systems in criminal justice.

Education

1987 B.S. Mathematics (with emphasis on Computer Science)
Mary Washington College, Fredericksburg, VA

1988 – 2002 Post Graduate courses in Criminal Justice, Computer Technology, Business Management, Project Management, and Business and Technical Writing

Certification

1994 – 1999 Criminal Justice Instructor – Commonwealth of Virginia

Past Management Experience

- Served on a team of professionals that conducted a technology needs assessment of the District of Columbia Criminal Justice Agencies for the Justice Research and Statistics Association. Led the technology needs assessment for the DC Jail, DC Probation and

Parole, DC Superior Court and assisted in the assessment of the DC Police Department. Recommendations were presented and accepted which lead to the creation of the Criminal Justice Coordinating Council (CJCC) District of Columbia (DC) and the development of the data sharing application known at JUSTIS – The Justice Information System for the District of Columbia.

- For Marriott Corporation, assisted in the evaluation of project plans and approaches to project planning for a $34 million dollar automation reengineering program. Maintained and administered project plans, provided performance analysis and measurement, tracked risks and issues for the project, and facilitated resolution of those risk/issues using project management software in a LAN environment.
- Planned and procured a new fiber optic network for the Alexandria Public Safety Center. Coordinated efforts with other city agencies including the Alexandria Police Department, the Alexandria District Court, and the Alexandria Information Technology Services Department. Managed several hardware and software vendors involved in the project. Supported procurement of the fiber optic network and other computer equipment needed to transition the Sheriff's Office and other city criminal justice agencies from the City mainframe to a client/server environment.
- Led the planning and recommendation of many changes to the City of Alexandria Comprehensive Justice Information System. One of the recommendations included the procurement of automated fingerprint and mug shot modules linking the Alexandria Sheriff's Office, Alexandria Magistrate's Office, Alexandria Police Department, Northern Virginia Regional Identification System (NVARIS), Virginia Crime Information Network (VCIN), National Crime Information Center (NCIC), National Law Enforcement Telecommunication System (NLETS), and Alexandria City INET.
- Represented the Sheriff's Office warrant squad in the planning and procurement of the Tactical Computer Systems at the Alexandria Police Department. Assisted in all aspects of the procurement, planning, testing, and implementation of cellular digital packet data (CDPD) systems. The systems use laptop computers to provide officers and deputies access to critical criminal history and wanted information from the Virginia Criminal Information Network, federal wanted files, and the Virginia Division of Motor Vehicles.
- Led a team to design and program an automated management information system for forensic crime laboratories for the Bureau of Justice Assistance. Led the design and programming of this microcomputer system used in either a standalone or network environment. Functions of the system include evidence intake, evidence tracking, analysis results, personnel assignments, case backlogs, and many others. The system also produces numerous output reports on the volume of laboratory cases and the dispositions.

System Analysis and Technology Experience

- Co-authored the *Fire Data Analysis Handbook* that was designed solely for fire service personnel to use as a tool to analyze fire data to make better and more informed decisions in fire departments. The handbook includes examples and problems that were developed from fire data collected from departments all over the nation. The handbook includes sections that cover ways to present fire data, basic statistics, analysis of tables, correlation and regression, and queuing analysis.
- Assisted in the research on violence by and against juveniles in Washington, D.C. Activities under this project included development of a detailed description of the juvenile justice system, analysis of three years of data from the juvenile court in the

District, analysis of over 200 interviews of juveniles from high crime areas, and an analysis of available youth-serving organizations. The final report from this project will include recommendations on how to improve the District's juvenile justice system.

- Assisted in the development of the Criminal Justice System Simulation Interactive Model (CJSSIM) for the Bureau of Justice Assistance. Tested the model to identify system errors and made recommendations for system improvements. This model is used to analyze the flow, cost, and average times for processing offenders through the criminal justice system.
- Major contributor in the evaluation of the Arson Information Management System (AIMS) that was distributed to fire departments by the United States Fire Administration. AIMS includes modules for case management, association management, system files management, and data backup management.
- Designed and programmed an Arson Reporting System (ARS) for the National Fire Information Council. ARS is a querying system designed to help local and state governments in arson investigations. Investigators can record information on persons associated with an arson incident, insurance companies, and arrests.
- Designed and programmed a management information system to track conference participants and manage multiple conferences simultaneously for the Professional Conference Series, sponsored by the National Institute of Justice. This system also holds invitations, travel, hotel, and reimbursement information.

Training

- Previously certified as a Criminal Justice Instructor for the Commonwealth of Virginia. Created a training strategy for the Alexandria Sheriff's Office. Designed and implemented a new MIR training course to train deputies and police officers in how to handle and use automated equipment and software.
- Designed and implemented a training strategy for the Arson Reporting System (ARS) for the National Fire Information Council. This strategy addressed hands-on microcomputer training for arson investigators and administrative staff.
- For the United States Fire Administration, assisted in training fire personnel on how to analyze and report fire data through courses offered at the National Fire Academy.
- Under the direction of the Bureau of Justice Assistance, assisted in the design and implementation of on-site training for the National Forensic Laboratory Information System operational sites.

Publications

McEwen, J. T., and Catherine A. Miller, *Fire Data Analysis Handbook.* Federal Emergency Management Agency, United States Fire Administration, 1993.

McEwen, J. T., Catherine A. Miller, *et al. CJSSIM: Criminal Justice System Simulation Model User Manual*. Alexandria, VA: Institute for Law and Justice, May 1992.

Miller, C.A., J. Thomas McEwen. *The Arson Reporting System User's Guide*. Federal Emergency Management Agency, United States Fire Administration, 1992.

Miller, C.A., J. Thomas McEwen, *et al. National Forensic Laboratory Information System (NFLIS) User Manua*l. Office of Justice Programs, U.S. Department of Justice, 1990.

Miller, C.A., J. Thomas McEwen, *et al. National Forensic Laboratory Information System (NFLIS) Administrator Manua*l. Office of Justice Programs, U.S. Department of Justice, 1990.

Research and Analysis Contributions for Publications

McEwen, J.T., and Faye S. Taxman "High-Tech Computer Mapping and Low-Tech Community Policing", *The Journal of Urban Technology*, 1995. 2(1): 85-103.

Miller, Neal "An Empirical Study of Forum Choices in Removal Cases Under Diversity and Federal Question Jurisdiction", *The American University Law Revie*w, 1992. 41(2): 371-452.

McEwen, J.T. "Use of Microcomputers in Criminal Justice Agencies," prepared for the National Institute of Justice, U.S. Department of Justice, May 1990.

McEwen, J.T., and Hugh Nugent. "A Prosecutor's National Assessment of Needs," prepared for the National Institute of Justice, in *American Justice: Research of the National Institute of Justice*, Larry T. Siegel, editor. New York: West Publishing Company, 1990.

McEwen, J.T., *et al*. "Dedicated Computer Crime Units," *Issues and Practices*, prepared for the National Institute of Justice, U.S. Department of Justice, 1989.

DAVE FONTAINE

240-375-5191(cell)
dave@davefontaine.com
1250 4th St SW W404
Washington, DC 20024

BRIEF SUMMARY OF QUALIFICATIONS AND EXPERIENCE

Intelligent, responsible, thirsting for knowledge, hard working, motivated, independent, yet a team player. Lifetime computer experience, 10 years internet experience, Network Administration, UNIX systems installation, configuration, and administration, Windows Networking, experience in HTML authoring, web development, and graphic design.

EDUCATION:

Bachelor of Arts - University of Maryland (Theatre)
Bachelor of Science - Computer Science (Incomplete)
Dean's List for Academic Achievement

IBM AIX System Administrator 5L Certified

Costpoint System Supervisor I and II Certified

TECHNOLOGY EXPERIENCE:

Operating Systems: MacOS, MacOS X, Windows 3.1/95/98/2000/XP, WindowsNT/2000 Server, UNIX (AIX, Solaris, LINUX, IRIX), DOS

Hardware: Experience with Server hardware (including IBM pSeries, and RS/6000 series, Dell PowerEdge 4000 series, 6000 series, Toshiba Magnia 3000 series, Numerous Wintel configs), Cisco Networking and Telephony (including routers, PIX firewalls, IP telephony, etc.), RAID installation and configuration, Backup HW installation and configuration, Macintosh, Intel-based PC's, Silicon Graphics Hardware, and associated peripherals (modems, ZIP drives, printers, scanners, uninterruptible power supplies, etc.). Construction and assembly of Intel-based PC's, installation of peripherals (e.g. Disk Drives, CDRom and diskette, Tape Backup Devices, etc.), RAM, etc.

Networking: Installation and configuration of LAN/WAN, including fabrication of cable, configuration and maintenance of Cisco Routers/Switches, hubs, cabling, etc. Configuring network printers for Win-based networks, configuration of Wintel based (3.1/95/98/NT/200/xp), MacOS (Classic, OS X, X.1), and, UNIX-based (Solaris, Linux, IRIX) machines, for network access – both software and hardware (NIC card and wireless installation)

Languages: HTML, C, C++, JS

EMPLOYMENT EXPERIENCE:

Capital Area Wireless Integrated Networks (CapWIN), University of Maryland, College Park, MD:

UNIX Systems Administrator (August 2002 to Present)

Network/Systems Administrator for a partnership between the States of Maryland and Virginia and the District of Columbia to develop an integrated Law Enforcement, Fire/EMS, Transportation, and Criminal Justice information wireless network. Responsible for the administration of the CapWIN application UNIX (AIX, Linux) systems – configuration changes, maintenance, upgrades, data security, etc. IBM Hardware. Tivoli Storage Manager configuration and administration. Configuration and maintenance of Network hardware (Data Lines, Cisco Routers/Switches, etc.). My tasks, focused on the installation, configuration, and administration of the CapWIN internal LAN, include the following: Microsoft Exchange 2000 Services, Mail Relay and Outlook Web Services, Web Services, Cisco Switches and Firewalls, Active Directory Services, File and Print Services, Jabber Messaging, and Mailing Listserve services (Majordomo). I also provide network and systems troubleshooting and support to the CapWIN staff and users.

Technology, Automation, And Management (TeAM), Inc., Greenbelt, MD:

Primary Unix Systems Administrator, Network Administrator, Web Designer/Technician, TPOCS Software Support, Office and Client Technical Support (June 2000 to May 2002)

Unix Systems Administrator for a network of Defense Department servers running a client/server application that provides acquisition management support to the Composite Health Care System II – a multi-billion dollar, tri-service (CHCS, TPOCS, ADS) program to provide a computer-based patient record and increased functionality at over 500 military health care facilities around the world. I performed the following tasks: Internal Network configuration and maintenance, Creating fully deployable servers beginning at Hardware assembly and configuration, RAID configuration, Backup hardware and software configuration, and continuing with administrative tasks such as patch installations, backup maintenance, and systems planning, etc. Participated in DOD security Certification and Accreditation (C&A) for the TPOCS application. I was responsible for installation of Sun Solaris Operating system, then a Full Distribution installation of the Oracle 7.x Database, and the installation of the TPOCS application. I was also responsible for configuring network services for deployment to sites, and the Installation of the client software on Windows and WindowsNT based machines, and the network configuration for those. I also provided Tier 3 user support to clients for system, application, and network issues. Finally, I was responsible for the inter-office LAN and WAN support.

Prowebsite Hosting Corp., Millersville, MD

Web Technician/Designer, Technical Support, Junior Network Administration (May

1998 – March 2000)

Participated in general upkeep of 30+ system network of IRIX/Apache-based web servers. Provided network and systems administration support, in addition to Customer Technical Support, and web and graphics design. Lastly, I was called upon to program Common Gateway Interface applications (CGIs) generally written in either C or C++ for inter- and intra-office functionality.

REFERENCES:

Kurt Bolland SRA International, Inc. Solutions Architect
Phone Number: 703-502-1218
Email Address: kurt_bolland@sra.com

Cliff Britton TeAM, Inc. Chief Operating Officer
Phone Number: 301-220-0010
Email Address: cbritton@teamconsult.com

ADDITIONAL INFORMATION:

- Eagle Scout with Bronze Palm
- Additional References Available Upon Request

JOHN A. BINKS
Capital Wireless Integrated Network
6305 Ivy Lane, Suite 300
Greenbelt, MD 20770

CAREER OBJECTIVE

To obtain a management position where my skills in Information Technology, Law Enforcement and Technical Training will enhance organizational profitability and success.

SUMMARY OF QUALIFICATIONS

More than 20 years diversified experience in technology, specializing in Public Sector mobile/wireless products and applications. Familiar with a wide range of hardware and software environments. Proven effectiveness developing and delivering training, a polished presenter and facilitator.

SELECTED ACCOMPLISHMENTS

- Conducted Administrative, Technical, and End User training to professionals at over 30 Law Enforcement Agencies for HTE Inc. nationwide.
- Developed and implemented new training curriculum for mobile data products at HTE Inc.
- Worked on the development of the new line of HTE Inc. wireless Field Reporting and MDB application suites.
- Owner of several small business including computer and Internet-based Corporations.
- Technology Contributor for USAToday as well as high-technology columns in other publications.
- As a sworn Detective/Deputy Sheriff, developed and instructed Sex Crimes Investigations curriculum to multiple Law Enforcement Agencies throughout Florida.
- Assigned to the Training Division of the Orange County Sheriff's Office and assisted with development of Annual Training programs for 1300 Deputies.

PROFESSIONAL WORK EXPERIENCE

Mobile/Wireless Products Technical Trainer – HTE Inc. 2002 - Present
Technology Contributor – USA Today 2002 - Present
Owner/Website Developer – Geek Workx Inc. 1998 - Present
Adjunct Faculty – University of Central Florida (Computer Education) 2001 - 2002
Adjunct Faculty – Florida Metropolitan University (Computer Education) 1999 - 2000
Detective/Webmaster - Orange County Sheriff's Office 1994 - 2001

EDUCATION/CERTIFICATIONS

AA - Business Administration, Brevard Community College
Network+ Certified, CompTIA

i-Net+ Certified, CompTIA
Master CIW Certified, Certified Internet Webmaster
MOUS Certified, Microsoft
Systems Builder Certified, Microsoft
Certified Instructor, State of Florida

TECHNICAL PROFICIENCIES

- Wireless connectivity infrastructures including CDPD, CDMA, TDMA and Electrocom.
- Mobile/wireless laptop computer interoperability, mid-frame systems including IBM AS/400, and PC based IBM eServers.
- HTML, XML, DHTML, Java Script, CGI, and other web development programs and languages.
- Apache Unix system, OS/400, and Windows NT/2000/XP.
- Client/Server/Enterprise 10/100/1000 Base-T and CAT-5 Networks, IIS (Internet Information Server), PDA/WAP protocols as well as Dedicated Internetworking Servers including Dell, Sun Microsystems, Cobalt Raq4, and HP.
- 3Com hubs and routers and peripherals such as scanners, network printers, NIC cards and other media devices.
- Microsoft Office Developer 2002/XP, IE 6.0, SQL Server 7.0 and countless desktop software applications.

PROFESSIONAL AFFILIATIONS

The Association of Internet Professionals (AIP), Orlando Chapter
The Internet Corporation for Assigned Names and Numbers (ICANN)
The International Webmasters Association (IWA)
The Internet Society (ISOC)
The Internet Engineering Task Force (IETF)

STEPHEN E. PETERSON

21211 Lake Spray Terrace • Germantown, MD 20876 • (301) 916-5741
stevepeterson1@comcast.net

Experience

Firewall Operations Team Lead (Apr 2001 to present) - EDS Corporation contracting to the National Association of Securities Dealers, Rockville, MD

- Developed EDS/NASD firewall strategic plan
- Established project plan for implementing and tracking the firewall strategic plan
- Established NASD Firewall Change Control, Disaster Recovery & Asset Management Procedures
- Manages Firewall Support Team (3 firewall administrators)
- Facilitates the weekly Firewall Change Control Board meeting
- Attends weekly senior management operations meetings with the customer
- Responds to internal audits on behalf of the firewall team
- Represents the firewall team at enterprise-level emergency conference calls
- Assists with troubleshooting efforts associated with outages, 24x7
- Provides post-mortem reports relating to infrastructure outages to the customer
- Presents firewall briefings to various audiences throughout the account.
- Writes non-conformance reports to projects when processes are not followed.

Configuration Management Administrator (Sep 2000 to April 2001) - EDS Corporation contracting to the National Association of Securities Dealers, Rockville, MD

- Led the weekly Enterprise Change Control Board meeting ensuring it operated in an efficient, effective, and responsive manner. The purpose of the ECCB meeting was to determine the impact of changes on applications, hardware, and infrastructure software. This forum ensured that changes did not impact the integrity of systems within the environment.
- Supported all aspects of configuration management to ensure all application development and changes followed the defined processes.

Graphics Specialist/Program Analyst (April 1997 to Sep 2000) - CALIBRE Systems, Inc., Falls Church, VA

- Designed briefings for monthly DoD CIO Executive Board Meetings
- Designed briefings for monthlyY2K Deputy Secretary of Defense Steering Committee Meetings
- Performed multiple quick response tasks within demanding timeframes for last minute briefing changes
- Implemented PDF technology into everyday communication (email, web-based, network storage)
- Designed fully-functional website for Worldwide DoD CIO Conference
- Created and updated DoD's Y2K Monthly Status Boards displayed throughout the Pentagon
- Created cost-effective, time-saving methods to electronically archive and distribute material
- Designed presentations for senior level officials under tight deadlines
- Electronically archived internal and external correspondence, briefings, and presentations onto CD-ROMs
- Prepared read-ahead materials and assisted in development of briefings to NATO, the United Kingdom, Australian, Canadian, New Zealand, Netherlands, and Russian Y2K Delegations

- Developed and designed graphics for technical reports and briefings in support of projects, annual reports, proposal preparation, and internal corporate activities

Typesetter (Jul 1996 to Apr 1997) - PIP Printing, Washington, D.C.
- Responsible for office's typesetting department
- Prepared camera-ready art with color separations for commercial printers and specialized vendors
- Designed business cards, letterheads, and envelopes for customers
- Downloaded customer files into compatible format recognized by page layout software
- Prepared proofs for customer's review and made alterations in a timely manner
- Maintained the subscriber database for world-wide journal

Program Support Assistant (Jul 1989 - Apr 1997), US Dept of Agriculture, Beltsville, MD
- Assisted with development of library database
- Received visitors and handled phone calls for the department
- Assisted in interpreting government travel regulations
- Reorganized library shelves, files, and journals making them easily accessible to staff members.
- Scheduled meetings for supervisor and staff members

Education
- University of Maryland University College, Bachelor's of Science, Computer Studies, 2001
- University of Maryland University College, Certificate in Computer Science, 2001
- Montgomery College, Associate of Arts, General Studies, 1996

Special Training/Certificates
How to Unlock Your Vast Untapped Potential for Leadership and Life (online), 2003; Creating PDFs with Adobe Acrobat (online), 2003; Firewall Basics (online), 2003; How to Give a Great Presentation (online), 2003; Guide to Practical Desktop Publishing (online), 2003; Certification in Configuration Management, 2001; Introduction to UNIX, 2001; Introduction to MS Project, 2001; Exceptional Customer Service, 2000; Professional Sequence Certificate, Desktop Publisher: Adobe PageMaker, EEI Communications, 1999; Introduction to FrontPage 98, 1999; Adobe Acrobat, 1998; Introduction to PhotoShop, 1998; Production Techniques and Technology, 1998; Introduction to PowerPoint, 1997; Time Management, 1997; Speaking With Confidence, 1997; Business Grammar and Usage for Professionals, 1995; Montgomery College, Certificate, Computer Graphics: Art and Animation, 1995

Awards
- President’s Council on Year 2000 Conversion, Commemorative Medal and Ribbon, Jul 2000.
- Secretary of Defense, Certificate of Appreciation, Support to DoD Y2K Efforts, Jul 2000.
- Chairman, Joint Chiefs of Staff (JCS), Certificate of Appreciation, Support to JCS Year 2000 Work, Apr 2000.
- Dept. of Army, Certificate and Commemorative Medallion, Support to Army Y2K Efforts, Jun 2000.
- Special Achievement, CALIBRE Systems, Inc., 2000, 1999, and 1998.
- Special Achievement, PIP Printing, 1996.

Clearance
- Secret (NAC) – Expired September 15, 2000

THERESA MULLEN

1915 5th Street - Owings, Maryland 20736
Phone 301-855-4190(home) – 301-614-3710(office)
email tmullen20736@yahoo.com

Long term goals: To expand my career in Administrator staff works.

PRESENT EMPLOYMENT

1987 - Present University of Maryland – promoted throughout 16 years of service:
*Capital Wireless Integrate Network (CapWIN), - Program Coordinator
*Civil Engineering, - Executive Administrative Assistant I
*Facilities Management – Special Events Coordinator

PRESENT: ***Program Coordinator-Capital Wireless Integrated Network (CapWIN)***

a. Administrative leadership support to the CapWIN project – Currently $25 million federal and state funded

- Administrator for all CapWIN monetary contractual accounts.
- General Ledger reconciliation of all accounts. This includes reporting to the Department of Civil & Environmental Engineering all monetary commitments and expenditures to date.
- Track all charges for purchases and payroll/benefits on a monthly basis.
- Assist managers in the development and design of all monetary forecasting.
- Assistant with the writing of all proposals.
- Point of contact for the financial audits
- Point of contact for the inventory audits of equipment purchase.
- Creator for detailed financial record keeping using Quick Books© *non-profit edition.*
- Creation of detailed inventory control records using Bar Code© tracking software and equipment.
- Travel coordinator for all in-state, out-state and foreign travels.
- Approval for up to $25,000.00 monthly purchases
- Write all Procurement orders for CapWIN through the University of Maryland.
- Administrative support for full-time university & IBM staff.

SKILLS:

Communications: Administrator point of contact between University of Maryland, National Institute of Justice, State Highway Administration, Washington Counsel of Government (COG) and all Washington Metropolitan affiliates of the CapWIN Project. Correspond with on and off campus affiliates through various forms of communications: ***internet***, ***facsimile***, ***telephone***, ***intranet***, ***postal***. UMUC Writing classes including COMM492 Grants/Proposal Writing, CAPP

310 Desktop publishing, COMM 393 Technical Writing, COMM 4914 Technical Editing, COMM 394 Business Writing.

Analytical/Problem Solving: Administrative process of Contract or Grants Proposals for the University of Maryland at College Park. Excellent skills in keeping all parties involved in the CapWIN Project and their daily activities. Reconciliation of all financial reports this includes – General Ledgers & shadow system. Assisted with the accreditation of the ***Department of Civil and Environmental Engineering***. ***Facilities Management-General Services***, *Special Events Coordinator*, 1992 through 1998. This involved writing work orders, giving estimates on jobs or events, daily problem solving and decision making. Point of contact for all project billing discrepancies for internal and external customers. Assisted with the development of the FM's first database system to process work orders. Coordination of all moves and special events on campus along with all facility management departments involved in those moves and events.

Team Work: Train and supervise staff employees. Team leader for several on-line classroom settings in college level classes through the Communications Department. Coordinate workshops for the 19th annual "*Professional Concepts Exchange*" conference sponsored by the President Commission on Women's Issues. Set up registration database for 400 participates in the conference.

Leadership: Supervision of all clerical personnel. Process staff guidelines for all administrative responsibilities. Administer the Performance Review and Development (PRD) process for full – time staff members, this process includes; setting expectations, midway feedback and final review all are required by the university. Set expectations and guidelines for all part-time clerical personnel.

Computer Skills: Proficient in all Microsoft® family products, familiar with Word Perfect® products. Advanced HTML language knowledge. Continually gaining knowledge in all Adobe® products. Proficient in all applications having to do with QuickBooks® non-profit edition this includes and is not limited to: running reports, reconciling all general ledger reports and forecasting future budgets. Excellent knowledge to all support office equipment; printers, copiers, facsimile machines and scanners.

Employment History

UNIVERSITY OF MARYLAND
COLLEGE PARK, MARYLAND

Present – 1987

- **2002 – 2004 Capital Wireless Integrated Network CapWIN**
  - 2003 – Present: Program Coordinator/Supervisor II
  - 2002 – 2003: Program Coordinator I
- **1999 – 2002 Department of Civil & Environmental Engineering**
  - 2001 – 2002: Executive Administrative Assistant
  - 1999 – 2001: Administrative Assistant II
- **1987 – 1998 Department of Physical Plant, Building & General Services**
  - 1992 – 1998: Special Events Coordinator
  - 1989 – 1992: Secretary I/II

- 1987 – 1989: Office Clerk I

Education:

2000 - Present University of Maryland, University College

Communications Management

b. Communications: undergraduate courses - presently enrolled 53 credits complete

c. Computer-Based Systems: Advanced classes for internet technology

- Award "Workplace Communications" – May 2004

Professional References:

Fred Davis, Deputy Program Directory – Current Supervisor
University of Maryland
Capital Wireless Integrate Network Project (CapWIN)
301-614-3702

Nancy Lapanne, Director of Administration – Previous Supervisor
University of Maryland
Department of Civil & Environmental Engineering
301-405-1876

Jeanette Prevots, Project Manager – Coworker
University of Maryland
Center for Advanced Transportation Technology (CATT)
301-403-4525

Appendix C: Certification of Non-Profit Status

UNITED STATES CODE - TITLE 20 > CHAPTER 28 > SUBCHAPTER I > Part A > § 1001

§ 1001. General definition of institution of higher education
Release date: 2004-08-06

(a) Institution of higher education

For purposes of this chapter, other than subchapter IV, the term "institution of higher education" means an educational institution in any State that—

(1) admits as regular students only persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such a certificate;

(2) is legally authorized within such State to provide a program of education beyond secondary education;

(3) provides an educational program for which the institution awards a bachelor's degree or provides not less than a 2-year program that is acceptable for full credit toward such a degree;

(4) is a public or other nonprofit institution; and

(5) is accredited by a nationally recognized accrediting agency or association, or if not so accredited, is an institution that has been granted pre-accreditation status by such an agency or association that has been recognized by the Secretary for the granting of pre-accreditation status, and the Secretary has determined that there is satisfactory assurance that the institution will meet the accreditation standards of such an agency or association within a reasonable time.

UNIVERSITY OF MARYLAND SYSTEM

OFFICE OF GENERAL ADMINISTRATION

3300 Metzerott Road
Adelphi, Maryland 20783

(301) 853-3625
FAX: (301) 853-4761

Financial Affairs
(301) 853-3638

Tax Identification No. used by the
University of Maryland System: 52-6002033

September 10, 1992

Internal Revenue Service
EP/EO Division
Systems Unit, Room 708
P.O. Box 13163
Baltimore, MD 21203

Attn: BAR 9007

To whom it may concern (BAR 9007):

This letter is in response to H. J. Hightower's inquiry dated August 12, 1992 regarding the exemption of the University of Maryland System from Federal income tax. It is my understanding that the University of Maryland System, being an agency of the State of Maryland, derives its tax exempt status from Internal Revenue Code sections 170(c) and 115.

Enclosed is a copy of Sections 10 through 13 of the Education article of the Annotated Code of Maryland which codifies the Higher Education Reorganization Act of 1988 establishing the University of Maryland System. The Editor's note explains that the University of Maryland System was established through the July 1, 1988 merger of the University of Maryland and the aggregate of schools governed by the Board of Trustees of State Universities and Colleges.

Also enclosed is a copy of a letter which reflects that the former University of Maryland, as an institution of the State of Maryland, was exempt from Federal income tax under provision 170(c)(1) of the Internal Revenue Code. Since the letter is somewhat tattered with age and handling, the main body is reproduced for your convenience as follows:

This is in regard to your exemption application, Form 1023, claiming exemption from federal income tax.

The University of Maryland is a State Institution and a wholly owned agency or instrumentality of the State of Maryland. Federal income tax laws do not apply to it and contributions to it are deductible under the provisions of section 170(c)(1) of the Internal Revenue Code.

Accordingly, no further action is necessary with respect to your application.

I hope that this information satisfies your request. Please feel free to contact Mr. David M. Forman, Manager - Endowment Funds and Taxes, of my staff by phone at 301-853-3643, 8 A.M. to 5 P.M., Monday through Friday.

Sincerely,

Donna H. Cunningham
Associate Vice Chancellor
for Financial Affairs

Enclosures (3)

cc (w/o Ann. Code enclosure):
Ms. Lynette Andresen
Mr. Donald L. Myers
Mr. David M. Forman

Internal Revenue Service
Washington, DC 20224

Date OCT 17 1972 | In reply refer to T:PS:T:HP

Mr. Robert A. Beach, Jr.
University of Maryland
Office of Endowment & Gifts
College Park, Maryland 20742

Dear Mr. Beach:

This is in response to your September 28 letter concerning the tax exempt status of the above-named University.

Our records disclose that on November 11, 1942, the Regents of the University of Maryland, Baltimore, Maryland, was recognized as being entitled to exemption from Federal income tax as an agency of the State government and that contributions to it were deductible for Federal income tax purposes.

The name of the University appears on page 626 of our latest (revised to December 31, 1970) "Cumulative List" of organizations described in section 170(c) of the 1954 Code (organizations contributions to which are deductible).

We hope that this letter will be helpful for your purposes.

Sincerely yours,

Robert J. Brown

Chief,
Technical Services Branch

Appendix D: Certificate of Occupancy

PRINCE GEORGE'S COUNTY

Department of Environmental Resources
Permits and Review Division

CERTIFICATE OF OCCUPANCY

EFFECTIVE DATE: **February 27, 2003** CASE NUMBER : 38070-2002-00

CASE_COMMENTS

PERMISSION IS HEREBY GRANTED TO OCCUPY :

6305 IVY LN #300 GREENBELT, MD 20770

OWNERSHIP :
USE GROUP :
CONST. TYPE :
TAX MAP : 026
ZONE : /CO/

PARKING SPACES : 365
SPECIAL EXCEPTION :
LOT :
BLOCK :
PARCEL :

USE (MNCPPC ZONING) :
OFFICE,NO SALES OR STORAGE

LIMITATIONS (UP TO) :
general interior

PROPERTY OWNER	OCCUPANT
11TH SPRINGHILL LAKE ASSOC, LLLP 4061 POWDER MILL RD #103 CALVERTON , MD 20705	CAPWIN 6305 IVY LN #300 GREENBELT , MD 20770 TRADE NAME :

CERTIFICATE IS TO BE CONSPICUOUSLY DISPLAYED AND NOT REMOVED FROM THE PREMISE FOR WHICH IT WAS ISSUED. IT IS NOT TRANSFERABLE.

RECEIVED
MAR 4 2003
BY:

P.E.

BUILDING CODE OFFICIAL

MAR 10 REC'D

This page intentionally left blank.

Appendix E: University of MD Rate Agreement

ORIGINAL

COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN #: 15-20710851

DATE: October 29, 2001

INSTITUTION:
University of Maryland - College Park
1132 Main Administration Building
College Park MD 20742-5035

FILING REF.: The preceding Agreement was dated June 23, 1998

The rates approved in this agreement are for use on grants, contracts and other agreements with the Federal Government, subject to the conditions in Section III.

SECTION I: FACILITIES AND ADMINISTRATIVE COST RATES*

RATE TYPES: FIXED FINAL PROV.(PROVISIONAL) PRED.(PREDETERMINED)

TYPE	EFFECTIVE PERIOD FROM	TO	RATE(%)	LOCATIONS	APPLICABLE TO
FINAL	07/01/99	06/30/01	48.0	On-Campus	Organized Research
FINAL	07/01/99	06/30/01	26.0	Off-Campus	Organized Research
PRED.	07/01/01	06/30/03	48.0	On-Campus	Organized Research
PRED.	07/01/01	06/30/04	26.0	Off-Campus 1	Organized Research
PRED.	07/01/01	06/30/04	27.5	Off-Campus 2	Organized Research
PRED.	07/01/03	06/30/04	48.5	On-Campus	Organized Research
FINAL	07/01/99	06/30/01	48.0	On-Campus	Instruction
FINAL	07/01/99	06/30/01	26.0	Off-Campus	Instruction
PRED.	07/01/01	06/30/03	48.0	On-Campus	Instruction
PRED.	07/01/03	06/30/04	48.5	On-Campus	Instruction
PRED.	07/01/01	06/30/04	26.0	Off-Campus 1	Instruction
FINAL	07/01/99	06/30/01	40.0	On-Campus	Other Spons Act
PRED.	07/01/01	06/30/02	40.0	On-Campus	Other Spons Act
PRED.	07/01/02	06/30/04	37.0	On-Campus	Other Spons Act
FINAL	07/01/99	06/30/01	26.0	Off-Campus	Other Spons Act
PRED.	07/01/01	06/30/04	26.0	Off-Campus 1	Other Spons Act
PROV.	07/01/04	UNTIL AMENDED	Use same rates and conditions as those cited for fiscal year ending June 30, 2004.		

1. Off-Campus, Remote - Activities performed outside commuting area of College Park, Maryland.

2. Off-Campus, Adjacent - Activities performed within commuting area of College Park, Maryland.

BASE: Total direct costs consisting of salaries and wages, fringe benefits, materials and supplies, services, travel and subaward up to the first $25,000 of each subaward. These base costs do not include capital expenditures (building, individual items of equipment, alterations and renovations), hospitalization and other fees associated with patient care whether the services are obtained from owned, related or third party hospital or other medical facility; rental/maintenance of off-site facilities, student tuition remission and support costs (e.g. student aid, dependency allowances, scholarships, fellowships).

(1) U20445

INSTITUTION:
University of Maryland - College Park

AGREEMENT DATE: October 29, 2001

SECTION II: SPECIAL REMARKS

TREATMENT OF FRINGE BENEFITS:
Fringe benefits are specifically identified to each employee and are charged individually as direct costs. The directly claimed fringe benefits are listed below.

TREATMENT OF PAID ABSENCES:
Vacation, holiday, sick leave pay and other paid absences are included in salaries and wages and are claimed on grants, contracts and other agreements as part of the normal cost for salaries and wages. Separate claims for the costs of these paid absences are not made.

OFF-CAMPUS DEFINITION: For all activities performed in facilities not owned by the institution and to which rent is directly allocated to the projects(s), the off-campus rate will apply. Projects partially performed off-site are apportioned between their on-site/off-site components when projects activity is conducted off-site for at least three consecutive months or more.

Fringe Benefits Include: FICA, Retirement, Tuition Remission, Vision Care, TIAA/CREF, Unemployment Insurance and Health Insurance.

Tuition benefits for family members other than employees are unallowable for fiscal years beginning after June 30, 1999.

Equipment means an article of nonexpendible tangible personal property having a useful life of more than one year and an acquisition cost of $5,000 or more per unit.

RESEARCH base includes University expenditures related to grants and contracts conducted at the following facilities: Agricultural Experiment Station, Cooperative Extension Service, University Research Corporation International. The RESEARCH base also includes grants and contracts conducted by the following Centers of the University of Maryland Biotechnology Institute (UMBI): Center for Advanced Research in Biotechnology (CARB), Center for Marine Biotechnology (COMB), and Center for Agricultural Biotechnology (CAB).

The expenditures related to activities conducted by Medical Biotechnology Center (MBC) and Institute of Human Virology (IHV) of UMBI are included in the Rate Agreement of University of Maryland at Baltimore.

INSTITUTION:
University of Maryland - College Park

AGREEMENT DATE: October 29, 2001

SECTION III: GENERAL

A. LIMITATIONS:
The rates in this Agreement are subject to any statutory or administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the organization were included in its facilities and administrative cost pools as finally accepted: such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) The same costs that have been treated as facilities and administrative costs are not claimed as direct costs; (3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the organization which was used to establish the rates is not later found to be materially incomplete or inaccurate by the Federal Government. In such situations the rate(s) would be subject to renegotiation at the discretion of the Federal Government.

B. ACCOUNTING CHANGES:
This Agreement is based on the accounting system purported by the organization to be in effect during the Agreement period. Changes to the method of accounting for costs which affect the amount of reimbursement resulting from the use of this Agreement require prior approval of the authorized representative of the cognizant agency. Such changes include, but are not limited to, changes in the charging of a particular type of cost from facilities and administrative to direct. Failure to obtain approval may result in cost disallowances.

C. FIXED RATES:
If a fixed rate is in this Agreement, it is based on an estimate of the costs for the period covered by the rate. When the actual costs for this period are determined, an adjustment will be made to a rate of a future year(s) to compensate for the difference between the costs used to establish the fixed rate and actual costs.

D. USE BY OTHER FEDERAL AGENCIES:
The rates in this Agreement were approved in accordance with the authority in Office of Management and Budget Circular A-21 Circular, and should be applied to grants, contracts and other agreements covered by this Circular, subject to any limitations in A above. The organization may provide copies of the Agreement to other Federal Agencies to give them early notification of the Agreement.

E. OTHER:
If any Federal contract, grant or other agreement is reimbursing facilities and administrative costs by a means other than the approved rate(s) in this Agreement, the organization should (1) credit such costs to the affected programs, and (2) apply the approved rate(s) to the appropriate base to identify the proper amount of facilities and administrative costs allocable to these programs.

BY THE INSTITUTION:	BY THE COGNIZANT AGENCY ON BEHALF OF THE FEDERAL GOVERNMENT:
University of Maryland - College Park	DEPARTMENT OF HEALTH AND HUMAN SERVICES
(INSTITUTION)	(AGENCY)
(SIGNATURE)	(SIGNATURE)
Dr. C. D. Mote, Jr.	Charles J. Seed
(NAME)	(NAME)
President	DIRECTOR, DIVISION OF COST ALLOCATION
(TITLE)	(TITLE)
November 16, 2001	October 29, 2001
(DATE)	(DATE) 0445

HHS REPRESENTATIVE: Chitra Verma
Telephone: (202) 401-2808

(3)

ORIGINAL

COMPONENTS OF PUBLISHED INDIRECT COST RATE

INSTITUTION: **UNIVERSITY OF MARYLAND @ COLLEGE PARK**

PERIOD COVERED BY RATE : 07/01/99 - 06/30/04

TYPE OF RATE: ORGANIZED RESEARCH

	On-Campus			Off Campus-	Off Campus-
RATE COMPONENTS:	FY 00, 01	FY 02, 03	FY 04	Remote	Adjacent
Building-Depr/Use Allow	2.0	2.0	2.0		
Equipment - Depr/Use Allow	3.0	2.8	2.8		
Interest	1.0	1.4	1.4		
Operations & Maintenance	14.2	14.3	14.8		
Library	1.8	1.5	1.5		1.5
Admin Component	26.0	26.0	26.0	26.0	26.0
TOTAL	48.0	48.0	48.5	26.0	27.5

CONCURRENCE:

University of Maryland - College Park
(Organization)

(Signature)

Dr. C.D. Mote, Jr.
(Name)

President
(Title)

November 16, 2001
(Date)

COMPONENTS OF PUBLISHED INDIRECT COST RATE

ORIGINAL

INSTITUTION: **UNIVERSITY OF MARYLAND @ COLLEGE PARK**

PERIOD COVERED BY RATE : 07/01/99 - 06/30/04

TYPE OF RATE: INSTRUCTION/OTHER SPONSORED ACTIVITIES

	INSTRUCTION				OTHER SPONS ACT		
	On-Campus			Off	On-Campus		Off
RATE COMPONENTS:	FY 00, 01	FY 02, 03	FY 04	Campus	FY 00,01, 02	FY 03, 04	Campus
Building-Depr/Use Allow	2.0	2.0	2.0		1.5	1.0	
Equipment - Depr/Use Allow	3.0	2.8	2.8		1.5	1.0	
Interest	1.0	1.4	1.4		0.3	0.3	
Operations & Maintenance	14.2	14.3	14.8		8.3	7.2	
Library	1.8	1.5	1.5		2.4	1.5	
Admin Component	26.0	26.0	26.0	26.0	26.0	26.0	26.0
TOTAL	48.0	48.0	48.5	26.0	40.0	37.0	26.0

CONCURRENCE:

University of Maryland College Park
(Organization)

(Signature)

Dr. C. D. Mote, Jr.
(Name)

President
(Title)

November 16, 2001
(Date)

This page intentionally left blank.

Appendix F: University of MD Records Management Policy

153.0 VI-6.10 - POLICY ON RECORDS MANAGEMENT

(Issued by the Chancellor, January 6, 1992)

1. The President of each institution shall establish a Records Management Program and shall develop and maintain a Records Management Plan consistent with the requirements of State Government Article, Title 10, Sections 10-632 through 10-633.

2. The Vice President for Administration at each institution will be responsible for records management at that institution, unless the Chancellor is notified otherwise.

3. Each President shall prepare and shall submit to the Chancellor for approval a Records Retention and Disposal Schedule(s), which will be in compliance with standards set by the Chancellor. The Schedule must be updated every ten years and may be amended as necessary.

4. Each President will provide for the periodic transfer of records to the University Archives, State Archives, or State Records Center, as appropriate, or may otherwise dispose of records in accordance with the approved Records Retention and Disposal Schedule(s). The Chancellor may require periodic Records Retention and Disposal reports in the format and according to the schedule provided by him.

   Responsibility for keeping and maintaining personnel and human resource records and forms management for the University of Maryland is a requirement of the Department of Business Services – Personnel and Human Resources Records.

   A detailed description of personnel records and related retention schedules for each of those items is included in the following table:

Item #	Description	Retention
1	rsonnel Folders rsonnel Files - folders prepared at the commencement of ıployment, which may include any of the following ms: application, appointment letter, correspondence ating to appointment (i.e. reference checks), personnel yroll form, personnel position action request, personnel cruitment screening report, personnel transaction form, irement form, transcripts, change of address forms, arance file, charges for removal, commendations, ntracts, correspondence, counseling sessions, ciplinary actions, efficiency ratings, EOE statistical orts, grievance actions, health insurance benefits forms,	Office of Record to retain for three (3) years after termination of employment, then destroy.

Item #	Description	Retention
	ve forms, orientation program material, position tory, probation documentation, promotions, classifications, résumés, suggestion file, summer ployment material, suspension actions, training cumentation, letter of resignation, retirement cumentation, transfer material, and/or dismissal cumentation.	
2	udy Number rsonnel ID number assigned to associate staff and rmanent (non-exempt and exempt) employee job scriptions.	University Human Resources to retain permanently (paper or microfilm). Departments to retain for three years after position associated with study number is abolished, then destroy.
3	tus Card File lex card file that includes the following information: me, date of birth, hire date, Social Security Number, e, retirement information, salary, insurance information, rital status, and county.	Office of Record to retain for five (5) years, then destroy.
4	story Card on being selected for employment within a Department her as a new hire, transfer, reinstatement, or temporary ployee, a personal history card is prepared. is card contains the following data: Name, Address, cial Security Number, Telephone Number, Race, Sex, rth date, Increment Date, EOD (Entry on Duty) Date, assification, Effective Date of Classification, nployment Status, Salary, and Position Identification mber for Employee Each reclassification, promotion, motion, change in salary, extended probation, title ange, and change of address or telephone number is ly noted on the card. e last entry on the History Card would be one of the llowing: Resignation Retirement Transfer Dismissal Expiration e card would then be filed inside the personnel folder	Office of Record to retain for three (3) years after termination of employment, then destroy.

Item #	Description	Retention
	d filed in the inactive personnel file.	
5	orker's Compensation First Report of Injury ate of Maryland form that includes the following formation: Employer's Name and State Mailing Address; surance Policy; Employee's Name, Address, Social curity Number, and Occupation; Occurrence - Place of cident, Date of Injury/Illness; Physician's Name and ldress; and Hospital's Name and Address.	Departments to retain until employee leaves the department. Worker's Compensation unit in the Health Center (Office of Record) to retain for 30 years.
6	arch Committee Files arch Committee materials for faculty, administrators, d exempt staff. Consists of advertisements, final commendation of the committee, meeting minutes ntaining final recommendation data, voting results, top ndidate résumés (top 5 or 2 only - depending on size of arch), and all information on appointed candidate.	Office of Record (generally main office of the department seeking the candidate) to retain listed material for 10 years, then destroy. Retain other search committee materials for 1 year, then destroy.
7	Staff and Student Employee Timekeeping cords - records for individual employees, approved by supervisor, that show hours/duty days worked and ve taken for Student, Contingent Category I, ntingent Category II, and Regular employees.	Retain for three (3) years and until audit requirements are met, then destroy. The Payroll and Human Resources (PHR) System is the system of record for time entry. Offices of Record for time entry are University Human Resources and Payroll Services. For timesheets prior to PHR implementation, Office of Record is the department.
	Faculty Time Reports - monthly reports owing days worked and leave taken by faculty embers.	Retain individual monthly reports for five (5) years, then destroy. Retain summary records of monthly time reports until the faculty member leaves employment, then destroy.
	Employee Leave Balances - leave balances for culty members and Contingent Category II and Regular ployees.	Retain final leave balance for 3 years after termination of employment, then destroy. During the time

Item #	Description	Retention
		the employee is active, retain ongoing leave balance for 3 years and until audit requirements are met, then destroy. The Payroll and Human Resources (PHR) System is the system of record for time entry. Offices of Record for leave balances are University Human Resources and Payroll Services.
8	nployment Applications)plications for employment by people who were not ed.	Retain application for 3 years, then destroy.
9	rformance Review and Development Files aluations of exempt and non-exempt staff members, ich indicate employee performance factors, rformance ratings by the employee's supervisor, and nployee development plans.	Retain for three (3) years after termination of employment, then destroy.

Appendix G: Proposed CapCom Floor Plan