1. QUALIFICATIONS OF THE FIRM AND KEY PERSONNEL

Kensington Consulting LLC

Kensington Consulting LLC is a significant contributor to Federal, State and local agencies in the field of emergency preparedness. Our expertise in the field is led by **Elisa M. Nichols, President and Chief Executive Officer**, whose experience in the fields of safety, security, emergency preparedness and protective action spans the nation and abroad. She will fulfill the roles of Principal in Charge of the Project and Project Manager, as well as lend her expertise in exercise preparation and facilitation, after action report preparation, emergency response and exercise program development, training and security and threat vulnerability assessment.

Ms. Nichols is nationally recognized in her field for excellence and precision in her work and dedication to serving clients. Ms. Nichols earned a B.A. in English, a B.S. in Psychology and an M.A. in English Language and Literature from the University of Maryland at College Park.

From 1981 to 1984 she worked at the University of Maryland's Facilities Safety and Security Department, where she became a supervisor and eventually assisted the director of the Safety and Security Department in administration of the department.

In 1985 she began employment with the University of Maryland's Shuttle-UM Transportation System. During her ten years with Shuttle-UM, she held positions as driver, dispatcher, operations supervisor and assistant to the Fleet Maintenance Manager, and also began her doctoral studies in English Language and Literature at The Catholic University of America. Throughout her career at the Shuttle system, she handled or responded to most of the system's major emergencies, including hurricane operations, accidents, on-board and facilities security incidents, and passenger incidents and injuries.

In 1995, she went to work on an innovative start-up operation to institute local bus service and rail feeder services using state-of-the-art ITS technology in Prince William County, Virginia for the Potomac and Rappahannock Transportation Commission. Her expertise there helped the local system to develop emergency plans and preparedness and she handled the OmniLink system's emergencies in the dispatch room. Ms. Nichols then became the Transportation Administrator for the Arc of Montgomery County. As general manager of the system, she instituted the emergency response preparedness program for the Transportation Department and developed and implemented its emergency drill program. All employees of the department participated in monthly tabletop, full scale and interagency exercises.

In 1997, she joined the American Public Transit Association's Safety and Security Management program where she co-directed the Safety and Security audit program for bus, heavy and light rail, and commuter rail for most of the major systems in North America as well as international systems. She evaluated/audited over 50 emergency preparedness and exercise programs worldwide, attended numerous exercises and provided expertise and recommendations for improvements to those exercise and preparedness programs.

She has traveled extensively all over the world to visit public agencies and assist in Emergency Preparedness, Safety and Security. In 2001, she and Mr. Tucci of K&J were part of a team representing the U.S. Department of Transportation that made a visit to Singapore to provide expertise in Safety and Security to the Singapore MRT. She has also visited transit systems in London, Tokyo and Sydney and Santiago, Chile.

Her ability to develop and function in an exceptionally productive manner in strategic alliances with other contractors has led to impressive successes in providing emergency preparedness and exercise programs to a number of clients nationwide. She has worked with all of the proposed team members on multiple projects for a wide range of clients in providing emergency preparedness services. Project descriptions included in this proposal demonstrate the successful teaming strategies she brings to this project.

Ms. Nichols joined BMI-SG in 1998, and was made a principal of the firm in 2000. SG joined with BMI in 2003 to form BMI-SG, where she was a principal until its merger with VHB. Ms. Nichols Chartered Kensington Consulting LLC in November of 2004, and the company has continued to provide quality service to clients since that time.

Current and past clients include:

- The Baltimore Metropolitan Council, where she is providing Tabletop Exercises in support of the development of the BMC's Regional Protective Action Plan (with Louis Berger group)
- The Virginia Railway Express, where she provides all system safety and security services for the agency. She recently developed, planned coordinated and facilitated the VRE's 2004 Emergency Exercises for 2004, "Joint Emergency Training" with tabletop held on October 14, 2004 and the field exercise on October 23, 2004. She also developed VRE's emergency exercise program, policies and procedures. Most recently, she assisted in the development of VRE's 2005 exercise with the Prince William County SWAT team, and the upcoming 2006 drill to be held with Fairfax County fire and recue and other Metropolitan Washington responders.

- Hillsborough County, FL's transit provider, HARTLine, where she has recently conduted a full audit of the emergency response programs (with K&J Consulting).
- Safety and Security Certification of the Euclid Corridor Transportation Project in Cleveland, Ohio. A prominent element of the project is emergency preparedness and response program training and implementation. In coordination with Cleveland's Fire, Police and Emergency Management agencies, as well as Health, Medical and other city services, emergency response plans and drills are being prepared are being the entire 13-mile length of the Corridor; and all potential responders will be trained in the plan (with K&J, Fortress/VHB personnel).
- Metropolitan Atlanta Safety and Security Certification of MARTA's new Armour Drive Rail Maintenance Facility. A key component of the Certification was the development and assurance of appropriate emergency response and preparedness programs for the facility (with K&J, Fortress/VHB personnel).
- FTA-compliant Safety and Emergency Preparedness Plan for the Metropolitan Atlanta Rapid transit Authority (with K&J).

Other past clients have included:

- New Orleans Regional Transit Authority, where she developed, planned, coordinated and facilitated NORTA's June 2004 Emergency Preparedness Exercise. (with K&J, Fortress/VHB personnel)
- The Metropolitan Washington Council of Governments' (MWCOG) Regional Emergency Coordination Plan, where she developed, planned, coordinated and facilitated tabletop exercises in support of the development of the RECP (with Louis Berger Group)
- St. Louis, MO's Bi-State Development Agency, where she developed, planned, coordinated and facilitated its Annual Emergency Exercise in January of 2004 (with K&J)
- MTA-Maryland Customer Information Department's Management methodologies, including Emergency Preparedness and Response policies and procedures.
- MTA-Maryland Safety Department Emergency Exercise program policies and procedures. She has participated in and evaluated more than 5 exercises for MTA-Maryland for all modes of transportation.
- Served as evaluator for the Washington Metropolitan Area Transit Authority's Blue Line Drill in October 2004.
- Southern California Regional Rail Authority, where she audited the safety, security and emergency preparedness plans and programs. She provided recommendations and corrective actions to the SCRRA that have since been developed and implemented at the agency. Those plans were crucial during the aftermath of the agency's fatal collision of one of its MetroLink Trains with a freight train April of 2002.

Ms. Nichols has a strong background in her work with the MTA-Maryland and the MWCOG in the Emergency Management Plans of the State of Maryland and the District of Columbia. Her familiarity with these plans will be brought to the development of the COG's exercises, including lessons learned in the areas of communications, coordination, interagency and interjurisdictional cooperation, resource deployment, effective management tools and techniques and public information strategies.

Ms Nichols also understands that one of the most under-rehearsed scenarios in the nation is that of cyberterrorism. Some of our most critical infrastructure, upon which people and emergency management depends, is vulnerable to cyberterrorism. Among these systems are dams, emergency management networks, traffic signal/lane controls, public transit computer operating systems, water management systems, etc. She is working on developing scenarios for her current project for the Baltimore Metropolitan Council that involves cyberterrorism scenarios. She has also participated in cyber-security training and discussion groups. She has also audited IT system security at may of the nations' largest transit systems, where trains operate on SCADA systems, one of the most vulnerable electronic systems. Vulnerabilities of SCADA systems can lead to catastrophic emergencies in many communities across the U.S.

Currently Ms. Nichols is a member of the Transportation Research Board's Critical Infrastructure Protection Committee and of the APTA Rail Committee and the Committee on Public Safety. She has spoken at TRB meetings on Security and Preparedness. She is also a member of the National Safety Council, the System Safety Society, and is certified in OSHA and Crime Prevention Through Environmental Design (CPTED). She is an active participant on COG's Passenger Rail Safety Subcommittee.

Kensington Consulting LLC is also in the final approval stages of its United States Small Business Administration 8(a) Certification as a Disadvantaged Business Enterprise. Final approval is expected by May of 2006.

<u>K&J Safety and Security Consulting</u>

K & J Safety and Security Consulting is a small consulting business specializing in safety and security, environmental compliance and industrial hygiene with offices in Cantonment, FL. K & J is a small business specializing in transit safety and security. K & J focuses on providing emergency management, safety and security services throughout the United States. K & J provides safety, security and emergency management training, threat and vulnerability analysis (TVA), OSHA compliance audits, safety and security certification, and emergency preparedness, system safety and security audits.

K&J also provides environmental services. The engineers at K & J focus on delivering the best in Remedial Design, Water and Wastewater Resource

Management, RCRA Compliance and CERCLA consulting as well as traditional services such as site assessments and facility compliance audits. These services have been delivered to a wide range of clients covering both the United States and Canada.

K & J's client base is centered on servicing state and federal government as well as general industry. Currently, K & J has contracts with the Federal Transit Administration (FTA), United States Department of Transportation (USDOT), Federal Bureau of Investigation (FBI), and the National Aeronautical Space Administration (NASA). K & J also has contracts with the University of South Florida (CUTR), the California Transit Insurance Pool (CalTIP), several State Departments of Transportation (DOTs), as well as several large transportation providers throughout the United States.

K&J has successfully prepared, coordinated and facilitated a number of emergency preparedness exercises for agencies across the nation. K&J's clients include:

- New Orleans RTA (with BMI-SG)
- Bi-State Development Agency, St. Louis, MO. (with BMI-SG)
- HARTLine, Tampa, Florida (with BMI-SG)
- New York City Transit Authority
- Atlanta Hartsfield Airport Authority
- Dallas Area Rapid Transit, Texas
- Federal Bureau of Investigation (FBI)

James Tucci, President will serve as security, emergency exercise, chemical and biological incident, environmental issues and training specialist. Mr. Tucci has more than 20 years of experience in military and civilian security concerns, transit safety and security and environmental compliance.

James Tucci is an Environmental Engineer/Chemist operating his own consulting business in Pensacola, Florida. His expertise is concentrated in the areas of environmental regulatory compliance, OSHA compliance, transit system safety/security compliance audits and investigations, environmental investigation and restoration project management.

Mr. Tucci began his professional career as a Research Technician with the United States Army. While assigned to Walter Reed Army Medical Center, Mr. Tucci worked in the Infectious/Zoonotic Disease division investigating a variety of diseases such as AIDS, Ebola, Lasa Fever, Leprosy and Hanta Virus.

Upon separating from active military service, Mr. Tucci accepted the position of Quality Assurance/Quality Control officer for Environmental Protection Systems (EPS) in Pensacola. There he was responsible for the accuracy and legal defendability of analytical chemistry data generated by laboratories as well as

conducting routine audits of laboratory operations to insure compliance to state and federal guidelines.

Mr. Tucci accepted a staff research position with the Centers for Disease Control (CDC) in Atlanta Georgia. While at CDC, Mr. Tucci worked in a Biological Safety Level (BSL) IV Infectious Disease Containment/Research Facility studying AIDS, Ebola and Hepatitis.

Mr. Tucci left the CDC to accept the position of Operations Manager for the Pensacola office of LAW Engineering and Environmental Services, the country's third largest Environmental Engineering firm. His duties included the oversight of the company's environmental analytical chemistry division, senior project manager for state and/or federally negotiated consent orders regulated under RCRA, CERCLA, CWA, SDWA and NPDES. Mr. Tucci was later promoted to the position of Office Manager and Chief Scientist where his duties and responsibilities included marketing, sales, training, P&L management, and oversight of new facilities construction. Mr. Tucci directly managed 17 transportation/transit industry contracts providing consulting/training services in the areas of Industrial safety, OSHA compliance, work place violence, alternate fuels accident investigation, fatigue awareness, environmental compliance as well as system safety and system security audits.

Mr. Tucci graduated Cum Laude from LaSalle University with a Bachelor of Science Degree in Environmental Engineering/Environmental Management, as well as a Masters Degree in Analytical Chemistry. Mr. Tucci is an Adjunct Instructor at the Pensacola Junior College (PJC) and the University of West Florida (UWF). He has served in the U. S. Army Reserves as an Intelligence Analyst and has authored/co-authored two books on environmental management. He currently teaches for the Transportation Safety Institute, and as an Associate Instructor in several college and university programs.

Currently, Mr. Tucci is serving as a committee member for the National Academy of Sciences (NAS). The focus of the committee is to develop nationally acceptable occupancy standards for publicly occupied spaces post a weapon of mass destruction incident.

Francis O'Hare has been a K&J Associate since his retirement as a Deputy Inspector with the New York City Police Department and served as the Operations Commander for Transit Manhattan Borough Command. As the Operations Commander he developed plans and deployment strategies for personnel and equipment for all special events. His last assignment was to prepare contingency plans; crisis and consequence management plans for NYC for the Mayor's Office of Emergency Management in the wake of the terrorist events of September 11, 2001. He will provide law enforcement, security and CBN expertise to the project.

Inspector O'Hare began his career as a police officer in 1965 and rose through the ranks to Deputy Inspector. Serving as Commanding Officer of various police commands, he directed, supervised and deployed all personnel assigned to conditions affecting the safety and security of the public. As the Operations Commander, he coordinated and established emergency procedures, i.e., terrorism, hurricane preparedness, Y2K, etc., and has established emergency procedures for rail and bus operations during a chemical incident.

He also received a Bachelor of Science Degree in Behavioral Science from New York Institute of Technology, NY, graduating Summa Cum Laude, and joined the National Honor Society and Psychology Honor Society.

Other contributions:

- Associate instructor for Transportation Safety Institute, OKC, OK
- Associate instructor for Federal Law Enforcement Training Center, Glynco, GA
- Consultant for Argonne National Labs on chemical and biological response
- Consultant for National Transportation Institute on security training
- State certified instructor for SCOPE on intervention training, etc.,
- State certified instructor/trainer under the N. Y. S. Security Guard Act
- Facilitator for Volpe on Emergency Preparedness and Security Regional Forums “Connecting Communities”
- Panelist for the Transportation Research Board, National Academy of Sciences
- Trainer for the American Health Foundation, Level I and Level II
- Panelist for APTA, FEMA, DOT, DOJ, and FTA
- Representative at international antiterrorism conferences in England, Italy and Japan.
- Served on the National Transportation Safety Board
- From 1993 to the present provided training and consultation services to various regional transit agencies; Amtrak, Minneapolis/St. Paul, NJT, Metro North, MTA Bridge and Tunnel, MTA – NYC Transit, etc.
- Prior to the Olympics in Salt Lake City he surveyed, reviewed, wrote procedures and trained UTA personnel for emergency response for Weapons of Mass Destruction.

He has participated in many special projects for NYPD, the Mayor's Office of Emergency Management and the National Emergency Training Center, National Fire Academy.

K&J Associate **Thomas E. Jones** has worked with the Washington Metropolitan Area Transit Authority (WMATA) in Washington, DC since 1983. His responsibilities include all fire protection/life safety equipment maintenance throughout the entire transit authority. Systems include critical fire and life safety

equipment such as fire alarms, fire sprinkler and standpipe systems, emergency exit shafts, fire extinguishers, and Emergency Tunnel Evacuation Carts. He is certified by the Transportation Safety Institute as a Transit System Safety and Security Practitioner and certified from the World Safety Organization as a Safety and Security Director.

In his role as safety and emergency management consultant, he prepares and trains transportation and government agencies in emergency management, including operations planning and policy review, threat analysis, development and evaluation of table top and full scale exercises; evaluates the interaction with the public, local and state government agencies; the transit agencies and prepares after action reports.

Tom is currently an Associate Staff Instructor with the Transportation Safety Institute. Tom teaches Effectively Managing Transit Emergencies Courses for the Transportation Safety Institute and has assisted with the development and delivery of courses for the Transportation Safety Institute. Tom has also assisted the Federal Transit Administration as a facilitator at the Federal Transit Administration Communities Emergency Preparedness and Security Forums.

Tom has been a volunteer fire chief at the Glen Echo (MD) Volunteer Fire Department since March 2000. Tom came to the Glen Echo Fire Department after serving 23 years at the Kensington Volunteer Fire Department in Kensington, Maryland. He rose through the volunteer ranks from firefighter to Fire Chief during his tenure as a member of KVFD.

Tom has been recognized with several awards and citations.

- Awards from Montgomery County Fire and Rescue and Cabin John Park Volunteer Fire Department
- The prestigious National Association of Search and Rescue Higgins & Langley Award for saving over 200 residents during Hurricane Isabel in July 2003
- 2001 WMATA General Manager's Award, Safety and Emergency Response, for rescuing a person from the track bed with an oncoming train arriving in the subway station
- Unit Citations from the Senate of Maryland and Maryland House of Delegates following the February 1996 MARC/Amtrak train collision in Silver Spring, Maryland.

Additionally, he has numerous commendations and awards for life saving efforts on emergency incidents; an award for performing CPR on a Metrorail incident; and an award for EMS assistance on a United Air Lines flight over the Pacific Ocean.

Louis Berger Group

The Louis Berger Group (Berger) is an internationally recognized infrastructure engineering, environmental science, and economic development consulting firm. Berger's primary focus is to meet the needs of the communities we serve. LBG works with clients over time to help them address current and upcoming issues. Services are comprehensive and include full project and program delivery. LBG's staff covers a wide range of disciplines, from architects, engineers and scientists, economists and management consultants, to sociologists and historians.

LBG staff members bring experience with the Washington, DC Office of Emergency Management plan and the Missouri State Emergency Plan. Vital information on effective coordination, communications, resource deployment and personnel development are just a few of the areas in which LBG/s expertise will assist the Kensington team in providing expertise in this project.

LBG's experience in the emergency management and preparedness field includes:

Washington, D.C. Emergency Transportation, Evacuation and Sheltering-in-Place Components of the Regional Emergency Coordination Plan: The Louis Berger Group, Inc, with BMI-SG, developed the second phase of emergency transportation planning for MWCOG to include all hazards planning, terrorism and WMD programs. (Berger also developed the first phase.) The process significantly expanded on the first phase to include functions related to transportation's ability to respond to emergencies, such as cross-functional and public communications, public warning, public education, and coordination with schools, as well as advancing all transportation aspects. The work was performed in conjunction with a joint technical working group including transportation and emergency management representatives from the jurisdictions comprising MWCOG, as well as key federal and state local stakeholders, including representatives of the Office of Personnel Management, General Services Administration, the Federal Emergency Management Administration and the Office of Homeland Security. The products included maps, initial plans for transportation coordination, three completed workshops on particular situations and material for nine additional workshops, models of network responses to surge demands and linkage losses for various situations, research on human behavior in emergencies, assessments of public warning systems, school coordination, and pet/ animal shelter coordination, initial plans for public messages, information, reentry and recovery, and completed a revised regional EAS plan.

Washington Area Emergency Evacuation Plan Annex: In an exceptionally short time frame- four weeks from notice to proceed until delivery of full draft document- The Louis Berger Group, with BMI-SG and other team members,

developed the complete Evacuation Transportation Coordination Annex for Metropolitan Washington. The final draft was delivered in week five, six days ahead of the published schedule. The process included full involvement of the transportation committee in developing scenarios and strategies, and involvement of federal, state, and local stakeholders, from local emergency management, security, and transit personnel to representatives of the Department of Defense, Office of Personnel Management, General Services Administration, and the Federal Emergency Management Administration. The product included maps for regional evacuation routes, example scenarios, a framework for describing incidents, a structured questionnaire, and a comprehensive set of demand, highway and transit strategies to deal with major incidents. In addition to strategies dealing with maximizing the flow out of the area in response to an emergency (signals, lanes, transit, etc.) the document identified situations where shelter in place is most appropriate for many people, and where strongly encouraging shelter in place for certain populations (through coordinated demand and supply strategies) will ensure that transportation capacity exists for those who truly need to leave. The study also identified future efforts that are needed to test and refine the strategies, through further scenario developments and coordination efforts. The document quality, process and timeliness were given highest marks by the client and the participating agencies and jurisdictions.

Emergency Operations Plans: Missouri State Emergency Management Agency, State Emergency Management Agency: The Louis Berger Group, Inc was retained by the Missouri State Emergency Management Agency to update Local Emergency Operations Plans for 149 cities and counties throughout the state, including rural areas, small cities, and major metropolitan regions. The work requires significant interaction with local officials in updating sections of these All-Hazards Plans that already exist, and in preparing new annexes on Terrorist Incident Response dealing with incidents involving weapons of mass destruction, chemical and biological agents. Berger developed an efficient work plan to accomplish a full review of each local governmental jurisdiction's Local Emergency Operation Plan (LEOP). The work plan process utilized the "all hazards" approach to emergency management with special emphasis on planning for a terrorist Weapons of Mass Destruction (WMD) event. This challenging contract required close interaction with local emergency management directors and elected officials as well as Missouri State Emergency Management Agency Area Coordinators. Berger fielded a team of professionals with a broad background including emergency management, transportation, planning, engineering, fire and law enforcement, and governmental professionals. This Berger team formed relationships with all the supporting departments and agencies that would participate in the activation of the local plan. As a result of these relationships Berger was successful in gathering a vast amount of data that were developed into the new LEOP's. The revision of a jurisdiction's plan for a community, such as Kansas City, Missouri became a complex process. Many involved details had to be explored and resolved. The

plan had to address the interaction of the bi-state relationships of Missouri and Kansas, in addition to the multiple mutual aid agreements. The planning process for this Greater Kansas City area involved the interactions with 5 counties on the Missouri side and detailed plans for 10 of the principle cities within the Missouri boundaries. A comprehensive plan with a minimum of 14 annexes supported by appendices and standing operation guidelines (SOG's) were delivered.

Key personnel assigned to the project are Deborah Matherly and Jim Morris.

Debbie Matherly will provide expertise in written program development. Ms. Matherly has over 24 years of experience with a broad technical, management and facilitation background in major aspects of transportation planning, metropolitan planning, emergency planning and interfacing emergency planning with transportation planning.

- She is currently Project Manager for the Baltimore Metropolitan Council Regional Protective Action Plan, which includes four major table-top exercises as the key to developing the concept of operations, and identifying gaps in current plans. The Baltimore Metropolitan Council includes five counties, the City of Baltimore, and the City of Annapolis. Planning efforts integrate emergency management, transportation, public information, public health, public safety, and other functions.

- She recently developed the team and served as Project Manager for first creating and then updating the Metropolitan Washington Council of Governments Emergency Transportation and Evacuation elements of the Regional Emergency Coordination Plan. This effort required extensive cross-functional and multi-jurisdictional cooperation and coordination, including emergency managers, law enforcement, military organizations, and federal organizations such as OPM, GSA, DHS (including FEMA), and others. Each agency and jurisdiction is typically operating under its own agenda, framework and focus. The Project Team made extensive use of tabletop workshops and discussions to facilitate a broader view, identify common ground, and help agencies self-identify areas of weakness and identify their "fit" in the broader picture; this proved a key tool to facilitate openness and dialog, and develop a realistic regional planning framework.

LBG Senior Manager **James Morris** served in NOAA's Officer Corp for 22 years where he retired as a Commander. During his tenure he worked for more than 10 years in the area of emergency response. Assigned to NOAA's Hazardous Materials Response Division, Mr. Morris worked closely with the U.S. Coast Guard (USCG), the Environmental Protection Agency and coastal states in planning for, and responding to, oil spills and releases of hazardous materials. Mr. Morris was been involved in numerous emergency exercises, including the first ever Spill of National Significance (SONS) exercises that were held in Philadelphia (as a participant; 1997), Anchorage (design team member; 1998)

and New Orleans (evaluation team, 2002). He has attended various Incident Command System (ICS) training classes and has served as the Planning Section Chief, Situation Unit Leader and Technical Specialist during drills and responses.

Mr. Morris was also a member of a multi-agency task force in the development of an National Interagency Incident Management System-based (NIIMS) Field Operations Guide (FOG) that is currently being used by the U.S. Coast Guard for All-Hazards emergency management. The FOG is also being used by many coastal states and agencies for their emergency management as well. For this effort, Mr. Morris received the USCG Commendation Award. He is a skillful manager and possesses excellent communication skills.

Mr. Morris will provide expertise in the area of written program development, exercise development, environmental hazards and NIMS.

LBG also has a wealth of staff in different areas of emergency management. The Kensington team will call upon these persons as need arises during the project, based on their areas of expertise. Some of these staff members will provide evaluation when appropriate.

Additional LBG personnel available to the project include:

Stephanie Mattes
Training and Workshops Manager, Washington, DC

KEY QUALIFICATIONS:

Ms. Mattes has extensive international experience in the design and implementation of workshops and conferences. She serves as the project manager for a major Louis Berger contract with the U.S. Trade Development Agency to provide a series of conferences, workshops, study tours, and orientation visits for foreign delegations interested in policy training and trade and investment opportunities. She also serves as the deputy director for a 5-year contract with the Department of Justice – OPDAT to provide training programs, study tours, workshops and roundtables for foreign delegations interested in judicial system upgrades. In this capacity, she has managed more than 50 study tours, training sessions, conferences and orientation visits for approximately up to 150 individuals per each event. As project manager, she is responsible for the preparation of conference facilities, selection of U.S. participating firms, and scheduling and facilitating all aspects of study tours and logistic arrangements. She has facilitated conferences and tours for high-level foreign government ministers and U.S. Ambassadors, as well as environmental officials from Venezuela, public transportation officials from Japan, Greece, Kazakhstan, Colombia and India, port and airport officials from Argentina and South Africa, and power generation and construction officials from Azerbaijan and Venezuela, among others.

Shannon Burns
Contracts Administrator/ Website Specialist, Washington, DC

Education

M.S., Computer Systems Management, University of Maryland University College, 2007
B.S., Computer Engineering, Embry-Riddle Aeronautical University, 2003

Qualifications

Database Development. Project Manager in the development of a timesheet database used to track the time and budget spent on projects. Overseeing the entire design and implementation process which includes client time estimating, evaluation of utilities infrastructure requirements, and facilitating public involvement meetings. USACE, Baltimore District

Website Development. Designed and maintained intranet websites showing the progress of the Architect of the Capitol Master Planning project. Architect of the Capitol.
Maintained internet website and secure access for the Baltimore Metropolitan Council Protective Action Plan website. Baltimore Metropolitan Council.

Professional Affiliations

Department of Defense Secret Clearance

Andrew Burke
GIS Specialist, Washington, DC

Education

B.S., Double Major: Geography/GIS and Environmental Science & Policy, 2005

Qualifications

Mr. Burke is a GIS Analyst with Louis Berger Group, Inc. as a GIS Analyst, Mr. Burke has experience with map creation, spatial analysis, and project development. He has worked with a broad range of data which has included wetland data and flood data.

Laura C. Dickinson
Biologist, Washington, DC

Education

B.S., Biology, Mary Washington College, 2004

Qualifications

Ms. Dickinson is a biologist specializing in water quality and habitat assessments of aquatic environments. Her experiences include water quality analysis,

macroinvertebrate sampling and identification, endangered species habitat monitoring and wetland management plan development.

Gregory Dorn, AICP
Senior Planner and GIS Specialist, Washington, DC

Education

M.S., Geography (and Regional Planning), Indiana University of Pennsylvania, 1998
B.S., Environmental Science, Allegheny College, 1996

Qualifications

As a senior planner and geographic information systems (GIS) specialist, Mr. Dorn's responsibilities include various tasks related to master planning, mapping, graphics, and document production. Mr. Dorn's experience includes Department of Defense (DOD) facilities and environmental planning, as well as traditional community planning. Areas of specialized focus include campus planning, cost estimates and economic analysis, land use analysis, phasing plans, facility site selection, natural and cultural resources, supporting infrastructure, programming requirements, zoning, code interpretation and development, parks and recreation, and client/community liaison.

Carlos Espindola
Transportation Planner and Transportation Engineer, Washington, DC

Education

Masters in Transportation Engineering, University of Illinois at Urbana-Champaign, Illinois, USA, May 1998.
Bachelors in Civil Engineer with honors, National Autonomous University of Mexico, Mexico, June 1996.

Qualifications

Eight years of experience in highway related projects. First, performing research on human factors as they relate to highway-rail grade crossings. Then as a transportation engineer involved in the development and use of state-of-the-art traffic forecasting multimodal models. Projects involved multimodal, corridor level studies in urban settings. More recently, involved in the traffic and revenue forecasting for toll roads, both in the US and abroad, for clients which include construction companies, private and development banks.

Tim Gaul
Biologist and GIS Specialist, Washington, DC

Education:

M.S., Biology, Creighton University

B.S., Environmental and Forest Biology, SUNY College of Environmental Science and Forestry at Syracuse University

Qualifications

Mr. Gaul is an environmental scientist with an interdisciplinary background in forest ecology, aquatic biology, and GIS sciences. He specializes in landscape level environmental assessment and modeling, natural resource inventory, hydrologic analyses, and GIS analysis in support environmental planning and compliance efforts. He has experience conducting a range of environmental studies for federal agencies including: watershed analyses, environmental assessments (EAs), environmental impact statements (EISs), ecological risk assessments, natural resource inventories, and road and transportation analyses. He is trained in a variety of field techniques including wetland delineation, small mammal sampling, and vegetation and forest type characterization. Throughout his training and experience, Mr. Gaul has incorporated the use of computer technology in the form of GIS, statistical software packages, environmental modeling, and graphic arts applications to produce advanced analyses and high quality presentations.

Joel Gorder, AICP
Planner/Environmental Scientist, Washington, DC

Education

M.U.R.P. Concentrating in Environmental Planning
B.S. Biology/Limnology

Professional Experience

Mr. Gorder has 10 years of successful experience in environmental analysis, environmental protection, and environmental resource planning. His positions include environmental analyst and project manager, field biologist, regulatory fisheries, environmental educator and community organize, and Peace Corps volunteer specializing in natural resource management. He has participated in a variety of field surveying techniques including wetland delineation, fish and macroinvertebrate sampling, and habitat type identification. Mr. Gorder has experience with the National Environmental Protection Act, the Endangered Species Act, National Historic Preservation Act, and is familiar with wetlands provisions of the Clean Water Act.

Lori B. Gutman, AICP
Senior Planner, Washington, DC

Education

M.C.P., University of Maryland, Land Use, Environmental, and Economic Development Planning, 2001
B.S., Natural Resources and Environmental Policy, University of Michigan, 1999

Registrations and Affiliations

American Institute of Certified Planners
American Planning Association-National Capital Area Chapter: Secretary 2001-2004

Professional Experience

Ms. Gutman has more than six years of experience as a Planner specializing in environmental issues, air quality analysis, and land use planning. Ms. Gutman is experienced in field work and has combined both her planning and natural resource knowledge to facilitate the National Environmental Policy Act (NEPA) process for various Federal and local government agencies.

Jill S. Cavanaugh
Architect and Planner, Washington, DC

Education

MS Architecture & Urban Design, Columbia University 2002
B. Architecture, University of Kansas 1999

Qualifications

Fox Architects, St. Louis, MO: May 1999- August 2000
Beyer Blinder Belle Architects & Planners LLP, Washington D.C.: July 2002-December 2005
Louis Berger Group, Inc., Washington, D.C.: January 2005- present

Brian L. Lee
Environmental Engineer, Washington, DC

Education

B.S., Civil Engineering, University of Virginia, 2004

Qualifications

Mr. Lee is a civil engineer specializing in water resources and environmental engineering. His areas of expertise include water quality analysis, surface water and groundwater hydrology, water and wastewater treatment, and watershed management plans.

Christian Lillo
CADD and GIS Specialist, Washington, DC

Education

Electronic Technician, 1989
Theological and Social Studies, 1992

Qualifications

Mr. Lillo has over 9 years experience in analysis of existing conditions, coordination, and production of construction documents. He has provided technical support on projects to customers, staff, performed and reviewed load calculations for power and lighting systems. Mr. Lillo has been responsible for CAD drafting, reviews and delivery of complete drawings on fast track projects that successfully completed. He has provided technical assistance and training to new employee in the use of company standards and use of AutoCAD. He has also developed and assisted in the creation of company standards (CAD).

Fehmidakhatun A. Mesania, Ph.D., PE
Environmental Engineer, Washington, DC

Education

Ph.D., Environmental Engineering, Case Western Reserve University, 1999
M.S., Civil and Environmental Engineering, West Virginia University, 1995
B.S., Civil Engineering, Universidade Federal de Minas Gerais, Brazil, 1992
B.S., Data Processing, FUMEC, Brazil, 1990

Qualifications

Dr. Mesania is a licensed Professional Engineer with experience in the areas of watershed and water quality modeling, development of Total Maximum Daily Loads (TMDLs), groundwater modeling, remediation and water quality assessment. Dr. Mesania has experience implementing several water quality /groundwater models, including BASINS, HSPF, NPSM, QUAL2E, EFDC, MINEQL, WARMF, MODFLOW, BIO1D, BIOPLUME, HEC-RAS and ArcView.

Robert M. Oakes
Biologist, Washington, DC

Education

M.S., Biology, Kansas State University, 2003
B.S., Biology, Emory University, 2001

Qualifications

Mr. Oakes is a biologist specializing in water resources planning and management programs supporting federal, state and local government agencies. His experience includes watershed planning, benthic impairment analysis, endangered species modeling, water quality modeling, and TMDL development. Technical skills include biological assessments, ecological and water quality modeling techniques, ArcView and ArcGIS software, and statistical analyses.

Dana Otto, AICP
Senior Environmental Scientist, Florida

Education

M.S., Environmental Planning, Florida State University, 1997

B.S., Biology, Florida State University, 1993

Qualifications

Ms. Otto has thirteen years professional experience. She has more than twelve years of professional experience and extensive experience in project management, development planning, and public outreach. She is knowledgeable of federal regulatory requirements under NEPA, NPS DO-12, the Clean Water Act, and the Endangered Species Act, in addition to state and local regulatory and permitting requirements. She has been trained in NPS DO-12 guidelines. Her involvement on a variety of projects has afforded her experience in coordinating and negotiating with federal, state, and local regulatory agencies. She is knowledgeable of federal regulatory requirements under NEPA, the Clean Water Act, and the Endangered Species Act, in addition to state and local regulatory and permitting requirements.

Fortress, Inc.

A subsidiary of VHB/Vanasse Hangen Brustlin, Inc., Fortress Inc. is a management consulting firm specializing in the design, development, implementation and evaluation of emergency preparedness programs. Fortress' professionals and associates have extensive experience addressing all phases of emergency preparedness program development and management.

Fortress provides emergency preparedness services for a variety of transportation and industrial environments and has been successful in resolving complex emergency planning issues in a consistent and practical manner. The basis of that success is in understanding the needs of our clients and using a systematic process to develop and implement both immediate and long-term emergency preparedness program solutions. Our services include vulnerability assessments for security, natural and technological threats/hazards, design and development of emergency management plans, procedures, training and drills and exercise programs.

Headquartered in Watertown, Massachusetts, VHB/Vanasse Hangen Brustlin, Inc. is a 700-person engineering, planning, and applied sciences firm that provides integrated transportation, land development, and environmental services to public, private and institutional clients. VHB has 13 office locations throughout the eastern United States in Watertown, Boston, and Springfield Massachusetts; Bedford, New Hampshire; Middletown, Connecticut; Providence, Rhode Island; Edison, New Jersey; Newport News, Richmond, Virginia Beach, and Williamsburg, Virginia; and Orlando, and Palmetto, Florida.

Fortress has very broad exercise program development experience, deep knowledge in exercise program methodology and has successfully coordinated, conducted and evaluated multi-jurisdictional exercises at the federal, state and local level.

Fortress has been intimately involved in the design, development, and evaluation of highly structured, discussion and operations based exercise programs since 1987. Our experience includes designing and developing exercise programs at the federal, state and local levels that adhere and comply with the requirements of programs such as the FEMA Radiological Emergency Preparedness Program for commercial nuclear power plants, the FEMA Chemical Stockpile Emergency Preparedness Program for US Army chemical stockpile sites and the Department of Energy's OA-30 requirements for DOE sites. In addition, we have also designed and developed exercise programs for underground and below grade construction sites, highway tunnels and various transportation agencies.

In addition, Fortress has been very successful at analyzing exercise program guidance such as those contained within HSEEP Volumes I, II III and IV and establishing standardized policies and program administration procedures that result in much more consistent exercise program design, development, conduct and evaluation. This programmatic approach results in a higher level of confidence in both exercise participants and evaluators, that exercise performance can be assessed and evaluated in a fair, unbiased and productive manner. This result produces exercises that are well attended and highly regarded.

Fortress is very experienced at hosting and facilitating exercise coordination meetings for the many and varied stakeholders involved in the exercise process. In addition, Fortress is very familiar with the importance of developing exercise teams that have been recruited and trained to support implementation of the HSEEP at the state, region and local levels. Effectively managed meetings and properly recruited and trained team members are critical in assuring buy-in from the numerous entities that will ultimately support the success of the VDEM HSEEP. Fortress is extremely proficient in the development and utilization of a uniform approach to exercise design, development, conduct and evaluation and using defined exercise evaluation and improvement processes to effectively analyze and compile exercise results into standardized after action reports.

Fortress' broad exercise program development experience, coupled with the deep exercise evaluation methodology, allows Fortress to present a very unique set of qualifications for the development of Virginia's Department of Emergency Management Homeland Security Exercise and Evaluation Program.

Mr. **Albert Samano III**, President of Fortress Security, will provide his expertise to the project in the areas of Emergency Preparedness and Management and training. Mr. Samano is known nationally as one of the premier experts of emergency preparedness and security plans. His company, Fortress Inc. was recently acquired by VHB and has since bolstered VHB's security capabilities. With VHB, Mr. Samano will continue to provide leading consulting services in this critical arena. BMI-SG and VHB have formed a number of critical alliances in

past transportation projects, and continue to work together on a number of projects.

Mr. Samano has served as project manager on various projects involving the comprehensive review, assessment and subsequent design and development of Emergency Management Programs. Program reviews and assessments have included emergency management plans, traffic management plans for bridge and tunnel closures and emergency response procedures for Operations Control Centers. Mr. Samano has also designed, developed and implemented improvements to emergency management programs including expansion of hazard identification and risk assessment programs, restructuring of emergency management plans and developing emergency response procedures for Executive staff, Division Directors and State Police. In addition, he has designed, developed and implemented emergency response training programs including course training materials, lesson plans, conducting the training and providing train-the-trainer sessions for in house staff; and designed, developed and coordinated drill and exercise programs that test the actions identified in the emergency management plans and procedures and validate the emergency response training program elements.

Mr. Samano has experience in emergency management in the states of Texas, Massachusetts and Ohio, including the critical areas of effective coordination and communication, emergency response policies and procedures and effectively implementing the National Incident Management System and effective Incident Command.

Kim Lieberman, Senior Planner for Fortress/VHB will provide support services for all aspects of the project. She has performed major roles first in BMI-SG's projects under the direction of Ms. Nichols with the New Orleans RTA emergency exercise, Cleveland and Atlanta Safety and Security Certifications, Virginia Railway Express exercises, and preparedness work with the Baltimore Metropolitan Council; and as a subcontractor to kensington Consulting on various emergency preparedness projects.

Ms. Lieberman has 8 years of experience with BMI-SG/VHB, as well as operations experience at Fairfax County's Connector bus service, where she was responsible for daily operations of the system and emergency preparedness and response.

A summary of her experience with Ms. Nichols includes:

- Currently assisting Kensington Consulting as a subcontractor in providing support for emergency preparedness tabletops for Baltimore Regional Protective Action Plan, including Baltimore City, County, and all surrounding jurisdictions.

- Provided project staff support for FTA-compliant Safety Certification Project for GCRTA's Euclid Corridor Transportation Program.
- Assisted with the preparation, coordination and evaluation of the 2004 emergency preparedness tabletop exercise, rail car equipment familiarization field training and field exercise drill for the Virginia Railway Express and Prince William County and Cities of Manassas and Manassas Park Police, Fire and EMS and Office of Emergency Preparedness, Virginia State Police, Federal Railroad Administration, Department of Homeland Security, Department of Energy and FBI. Scenario involved a plane crash into a passenger train and subsequent improvised explosive radiologically contaminated device.
- Rail Maintenance Technical and Safety Procedures: Interviewed supervisors and mechanics, reviewed current maintenance manuals, and developed maintenance standard operating procedure manuals for Greater Cleveland Regional Transit Authority's light and heavy rail cars. Crucial elements of the maintenance program review and development portion of this project included emergency procedures.
- Reviewed contract documents and developed certifiable elements as part of the FTA-compliant Safety Certification for Metropolitan Atlanta Rapid Transit Authority's new rail facility.
- Assisted with the preparation, coordination and evaluation of an emergency preparedness tabletop and drill for the New Orleans Regional Transit Authority and New Orleans Police, Fire and EMS, Office of Emergency Preparedness and FBI.
- Assisted with developing training materials for a hazard identification and assessment class and also a general overview of safety certification class for the Virginia Railway Express (VRE); project staff for BMI-SG's ongoing safety and security consulting for VRE. Developed checklist for Charlotte Area Transit System's Fare Collection Practices Audit.
- OSHA certification August, 2004.
- Transportation Safety Institute Certified Safety and Security Specialist Effective March 2005 (Courses: Effectively Managing Transit Emergencies, Rail Accident Investigation, Rail System Safety, and Transit Security).
- Participated in the American Public Transportation Association's 2004 ITS Emergency Response Workshop

Resume for all Key Personnel can be found in Attachment C.

<u>Evaluators and other Support Personnel</u>

MWCOG has requested up to 50 evaluators for some of the proposed exercises. Kensington Consulting and the other Kensington team members have access to a wide range of personnel who can provide expert evaluation during these exercises. These evaluators are professional firefighters, emergency management personnel, military personnel and private contractors. These personnel have provided evaluation for Kensington Consulting, K&J, Berger and

Fortress/VHB in the past. This section lists just some of these personnel as an example of the quality of evaluation the Kensington team can provide:

Mr. Conrad Santana
Mr. Santana**,** President of CES Consulting of Apollo Beach, FL, is an internationally recognized consummate transit professional with over 20 years of experience in Management/Operations of Transit, System Safety, Safety Auditing, Emergency Preparedness, Rail Training and Field Engineering.

Mr. Mark Hartmerr
Mr. Hartmerr has participated in several full scale and table top exercises for the U.S. Navy in his position as Chief of Tactical Operations and Training, Naval Airstation Pensacola. Mr. Hartmerr has developed and evaluated training exercises for U.S. Naval Fleet Operations for the past eleven years.

Mr. John Bollan
Mr. Bollan has of 14 years of experience with FEMA and ODP in developing full-scale training exercises for general industry. Mr. Bollan has participated in FEMA operations involving several major natural disasters like hurricanes Andrew, Katrina and Ivan as well as flooding in the Mississippi Delta.

Ms. Janean Thompson:
Ms. Thompson worked for the U.S. Forrest Service as a regional compliance inspector. In her roll as a regional compliance inspector, Ms. Thompson has been directly involved in leading or evaluating over 17 fire training exercises.

Mr. Wendell Roundtree:
Mr. Roundtree is an Environmental Engineer with over 30 years of solid waste and storm water experience. Mr. Roundtree has worked closely with the cities of Corpus Christi, Galveston and Pensacola to develop “Worst-case Scenarios” for environmental disasters impacting their respective cities.

John Baggs:
Mr. Baggs is a Civil Engineer with 22 years of flood control experience with the U.S. Army Corps of Engineers. Mr. Baggs has worked with designated “Flood Plan” cities to develop, implement and evaluate emergency scenarios involving flood control and citywide evacuation.

Alex Brown:
Mr. Brown has worked in transportation services for Trailways and Greyhound bus for over 28 years. Mr. Brown has evaluated numerous field and tabletop exercises evaluating his transportation company’s ability to respond to and mitigate staged catastrophic events.

Ms. Wendy Scott:
Ms. Scott has worked in transportation services for Laidlaw and McDonald Services for over 21 years. Ms. Scott has completed the NIMS ICS training and has participated in evaluating several agency sponsored tabletop exercises in her position as regional manager for emergency services.

Mr. Randy Hecht:
Mr. Hecht work for 13 years in the Atlanta FEMA office before transferring to the CDCP. While at the CDCP, Mr. Hecht was responsible for developing training scenarios for trucking companies regulated by the Federal Motor Coach Safety Administration (FMCSA). These scenarios were specifically developed to emphasize events involving hazardous materials.

Mr. Paul Liston:
Mr. Liston has over 11 years of experience managing emergencies for the Bay Area Regional Transit Authority as a rail operations manager. Mr. Liston has managed BART rail operations through several system and regional emergencies.

Mr. Robert Sullivan:
Mr. Sullivan has 25 years of transit rail and bus experience several years of which were spent in emergency management. Mr. Sullivan has designed and evaluated several agency specific emergency drills and full scale exercises.

Mr. Len Diamond
Mr. Diamond has over 30 years of experience in the field, including his positions as New Jersey Transit's Director of Emergency Management and Director of the Federal Transit Administration's Office of Security. He also has experience teaching "Effectively Managing Transit Emergencies" and other courses for the Transportation Safety Institute, and his experience with security and safety course development for the National Transit Institute.

Mr. Paul Krause
Mr. Krause is a Maritime Engineer and volunteer firefighter. He has provided expertise in shipboard emergency systems to the Navy for over 15 years.

Mr. Roy Satterwhite
Mr. Satterwhite has over 35 years of experience in safety and emergency management with the CSXT railroad. Currently he provides emergency management, safety and security services as a private contractor.

2. TECHNICAL APPROACH

Introduction

Emergency preparedness plans and programs are designed to minimizing a continuum of risks to which people, structures and systems may be exposed. This continuum includes risks including:

- *Natural Disasters*
- *Criminal Acts and Terrorism*
- *Chemical and Environmental Hazards*
- *Biological Hazards*
- *Nuclear, Laser and Radiation Hazards*
- *Cyber Vulnerabilities and Terrorism*

It is imperative that public agencies in the U.S. continue to effectively prepare themselves and their citizens to manage critical situations in which life, health and property may be compromised.

Mandates from the U.S. Government requiring implementation of Emergency Preparedness and Response Programs include:

> ***Homeland Security*** *Department Secretary Tom Ridge set deadlines for federal, state and local government officials to participate in the National Incident Management System (NIMS), a system for coordinating responses to terrorist attacks or other crises. Fiscal 2005 will be a start-up year, and in fiscal 2006, improvements will be made. After fiscal 2007, officials of state and local governments will not receive federal emergency preparedness grants until they can fully participate in NIMS.*
>
> *In fiscal 2005, state and local government officials must, at a minimum, begin:*
> - *Incorporating NIMS into training programs and exercises.*
> - *Ensuring that federal preparedness grants support NIMS at state and local levels.*
> - *Incorporating NIMS into emergency operations plans.*
> - *Promoting intrastate mutual aid agreements.*
> - *Coordinating and providing technical assistance to local entities for NIMS.*
> - *Institutionalizing the use of the Incident Command System.*
>
> ***Homeland Security Presidential Directive/HSPD-8*** *mandating all-hazards preparedness, December 17, 2003 for preparedness for domestic terrorist attacks, major disasters, and other emergencies.*

It will be important to ensure that these requirements are part of the exercise and evaluation program.

Precise emergency preparedness encompasses a wide range of safety and security activities: protective action planning and implementation, threat and vulnerability assessment, training and reinforcement, effective communication and cooperation, contingency planning and implementation, effective distribution of resources and personnel and effective management of all aspects of operations.

The history of response to critical incidents shows that there is a direct link between planning and exercising response plans and the quality of the response itself to an actual critical event. Through the process of pre-event planning and exercising, participating agencies can ensure the broadest access of use and resources, as well as minimal duplication of effort. An appropriate emergency planning and exercise program requires communities to examine the risks they face, from such incidents as technological emergencies involving radiological or hazardous materials releases or major aircraft crashes, and natural disasters such as floods, tornadoes, earthquakes, and hurricanes.

After completing these hazards analysis studies, each community is expected to prepare response plans for the expected hazards. Response plans identify authority levels and responsibilities, determine resource needs and access, and identify mutual-aid protocols. Incorporating responses to potential intentional acts must also be accomplished in these plans. Once the plan is written, it must be exercised and reviewed annually to ensure that no critical changes have occurred during the year that require update. Communities and organizations change over time, as do their resources, structure and personnel. Businesses change, and transportation and highway systems change as well. An effective response plan must be routinely updated to ensure it contains current information.

Exercises. The follow-up to plan development is to test the plan by conducting multi-disciplinary exercises based on a community's assessed risks. Those communities that have conducted pre-incident exercises based on well-developed community response plans and have actually faced critical incidents have discovered that pre-incident planning and exercising substantially improved their personnel's performance. Exercises work out relationships and problems before an incident occurs.

An effective emergency management and exercise program has four aspects:

- Protection
- Preparedness
- Mitigation
- Response and Recovery

The Department of Homeland Security has provided guidance for agencies to develop effective emergency management programs. The Homeland Security

Exercise and Evaluation Program provides a model for development, implementation, evaluation and follow-up for exercises.

NIMS is the national standardized approach to incident management and response developed by the Department of Homeland Security and released in March 2004. It establishes a uniform set of processes and procedures that emergency responders at all levels of government will use to conduct response operations.

These processes are:

- Organizational structures, processes and procedures
- Planning, training and exercising
- Personnel qualification
- Equipment acquisition and certification
- Interoperable communications processes, procedures and systems
- Information management systems with a commonly accepted architecture
- Supporting technologies, including communications systems, information systems, data systems, etc. and
- Publication management

In June of 2004, the Department of Homeland Security established the National Incident Management System Integration Center (NIC). The NIC will support direct participation and regular consultation with other federal departments and state, local, and tribal incident management entities, as well as private organizations for incident response.

Scope

The following comprise the scope of the project as we understand it:

The contractor is to provide support for a comprehensive exercise and corrective action program for the National Capital Region (NCR).

These emergency exercises includes tabletop, functional and full field exercises, with after-action reports and improvement plans. The purpose of these exercises is to establish a clear mutual understanding of the expectations for future operations in order to promote a cohesive and well-coordinated response to disastrous events in the NCR.

During these exercises, participants should build on essential skills and the understanding of roles, responsibilities and interests that have been developed in intra-jurisdictional plans and previous exercises. The desired outcome of these exercises is to reinforce the NCR's strategy for responding to an emergency event. Key objectives for the exercise include:

- Review decision making processes and coordination within and between jurisdictions;
- Review command and operating processes and procedures;
- Understand jurisdictional roles and responsibilities under the National Response Plan and the region plans;
- Evaluate coordination and communications processes;
- Build partnerships between regional agencies and with federal partners; and
- Understand the laws and authorities guiding the inter-jurisdictional response.

These exercises shall include:

- one senior leaders' seminar/tabletop,
- one field exercise,
- one command center functional exercise, and
- three large workshop/tabletop exercises.

In support of the corrective action and improvement plans program, the contractor will provide support to develop after action reports for four events during the period of performance which can include a mix of both special events and local responses. These after action reports are in addition to the exercise after action reports, which must be completed for each of the above-mentioned exercises.

Specific tasks within the scope are:

The contractor shall conduct initial interviews with NCR personnel or other individuals who may be participating in the workshops (e.g., The Department of Homeland Security (DHS), the Federal Bureau of Investigation (FBI), etc.). A list of these personnel will be provided by the COG Project Manager. Based on this research and data collected from the interviews and previous meetings, the contractor will coordinate with the COG Project Manager and the NCR in order to develop materials associated with the workshop.

The contractor will provide the COG Project Manager bi-weekly progress updates and reports from the contract award through the duration of the contract. The primary purpose of these reports will be to track progress on the management of the exercise project.

Tasks that the contractor will perform and will include in its project plan are associated with the exercise development, hotwash, after action report and deliverable development utilizing NCR scenarios. Activities include but are not limited to:

- Host a kickoff meeting with NCR personnel to clarify objectives and desired outcomes, and scope the scenario for the event (All exercises)

- Work with the NCR to establish a core planning group that includes representatives from the NCR Regional Emergency Support Function (RESF) committees: (each activity will have a separate planning group, but it is anticipated that overlap will occur for some events. When/if applicable meetings will be designed to support multiple events);

- Interview individuals, as selected by the planning group, to gather information that will be used to further clarify, confirm and/or refine requirements, parameters, objectives and issues surrounding the event, and to optimize the utility of the scenario (All exercises);

- Coordinate with the core planning group and, if necessary and to the extent possible, representatives of other participating organizations in the exercises (Virginia, Maryland and DHS) to identify points of contact for gathering key reference documents, graphics, and write-ups that will be used in developing event materials (All exercises);

- Support on-site registration for each tabletop and full-field exercise;

- Secure Exercise locations to conduct each of the 4 identified tabletop exercises including audio-visual equipment and support.

- Produce an on-line registration web site (A single website should be developed with links to each individual exercise for persons to register);

- Develop exercise materials, including the situation reports, master scenario event list and scenario briefings (All exercises);

- Provide Evaluators for each exercise. For each full field exercise, the contractor shall supply 20 evaluators at a minimum. For each functional exercise, the contractor shall provide 2 evaluators for each or the up to 25 emergency operations centers participating.

- The contractor will provide support staff to support a simulation cell for the functional exercise

- Develop an after action report following the exercise and hotwash and place the After Action Report (AAR) on the Internet for comment and review. All AARs must conform to Homeland Security Exercise and Evaluation Program (HSEEP) requirements (All exercises and 4-events to be identified by the COG Project Manager later);

- Work with the NCR to develop an exercise agenda (All exercises)

- Provide expert consultant to facilitate the exercises (All exercises)

- Provide computer/consultant support to run presentations. (All exercises)

- Provide food and non-alcoholic beverages, in quantities sufficient for the participants, for each exercise so long as it is longer than 5 hours.

- Provide note-takers to capture issues for the AAR (All exercises and events)

Work Plan

Our approach is one of teamwork. We have assembled a team with principals and staff of phenomenal experience in the field of emergency management. Our strength lies in the diversity of our team, with experience acquired from all phases of emergency planning, response and management from all over the world. All of the firms have worked together on numerous projects in the past as well as currently, and have formed deep and lasting working relationships that have benefited their clients.

In addition, every team member firm has experience in transportation aspects of emergency management, one of the most crucial elements of affording protection and facilitating response. This experience will be invaluable in developing adequate exercises and emergency management evaluation expertise.
All DHS/ODP-funded exercises must be threat-based, and, as MWCOG desires, we will assist in preparing sufficient threat-based discussion-based and full field exercises in a variety of formats as appropriate so that each of the participating jurisdictions will have effective participation in exercises to varying degrees according to the schedule desired by MWCOG. Approved scenarios may include chemical, biological (including pandemic flu), radiological, nuclear, explosive, agricultural, or cyberterrorism-related events. Non-threat-based exercise can also be developed if MWCOG desires in any of the tabletop exercise or the field exercise.

It is our plan to provide all services as laid out in the scope above in accordance with MWCOG's wishes.

Using the HSEEP Volume II as our guide, we will provide adequate evaluators per MWCOG's instructions. For each exercise, per the advisement of MWCOG, we will provide:

- An exercise Facilitator
- The number of evaluators needed for each exercise, depending on type and nature
- A lead evaluator
- Correct deployment of evaluators

- Train evaluators in the evaluation plan for each exercise
- Provide evaluators with the proper information and materials to evaluate the exercise effectively
- Conduct a final briefing right before each exercise

Many of our team members have experience in the development and delivery of training programs. Our recruitment process will involve ensuring that potential evaluators are interested and enthusiastic, understand their role as an evaluator, and are well-trained in the HSEEP evaluation methods as prescribed in Volume II.

In order to provide the most insightful summary of findings and recommendations for the After Action Reporst, it will be essential that our team collect accurate data before, during and after the exercises, properly analyze that data and report it in a coherent and useful fashion. Our evaluators and support staff are trained and experienced in the collection of data for AARs.

Each AAR will contain the prescribed parts:

- Executive Summary
- Exercise Overview
- Exercise Goals and Objectives
- Analysis of Mission Outcomes
- Analysis of Capacity to Perform Critical Tasks
- Conclusion

Management Plan

Our approach to a project management plan is to develop and coordinate the plan with the client, and to maintain that plan as a living document that will grow and change as the project progresses. The Kensington team has experienced much success with our clients over the years through this approach. We have found that attempting to enforce an outdated or ill-fitting project plan results in frustration and disappointment for everyone involved.

That being said, an effective project plan is essential to the successful execution of a project. We are committed to providing such a plan and maintaining it in coordination with MWCOG. IT is our plan to us MS Project per the request of COG to develop and manage time and resources for MWCOG effectively. Currently, in our work with the Euclid Corridor transportation project and other clients, we use MS Project to manage the client's project.

Each exercise will be managed according to the following steps in keeping with the HSEEP guidelines:

1. Identify and designate the team's Exercise Coordinator for the exercise design, development, conduct and evaluation effort. Various Kensington team members have more experience in certain areas, and will lead exercises in their specific areas as applicable. However, all key personnel will be involved in planning and executing all exercises.
2. Meet with MWCOG personnel that will be involved in the design, coordination, conduct and evaluation of the exercise.
3. With COG representatives, determine the exact dates and times for the exercise.
4. Once the exercise dates and timeframes have been established, determine the exercise scope and exercise objectives to be accomplished. Note: Exercise objectives f will be based on the seventy-one (71) tasks/actions associated with the following seven (7) HSEEP outcomes:

A. Criminal Prevention and Deterrence
B. Emergency Assessment
C. Emergency Management
D. Incident Site Hazard mitigation
E. Protection
F. Victim Care
G. Criminal Investigation and Apprehension

Exercise objectives may vary slightly from exercise to exercise based on exercise scope, involved agencies and extents of play.

5. Using the exercise scope and exercise objectives, develop the individual exercise project schedule to clearly identify the milestones and deliverables for the preparation, conduct and completion of the exercise.
6. Utilizing the exercise scope and exercise objectives, finalize in conjunction with COG personnel an exercise scenario that effectively integrates hazards/threats to the emergency response and support organizations in that particular area/jurisdiction or regionally if the scenario clals for it.
7. Develop the specific exercise emergency response facility and action site objectives.
8. Using the objectives, determine the appropriate extents of play to be demonstrated for each tabletop or field location.
9. Develop the exercise narrative summary and overall timeline for the entire exercise.
10. Using the general timeline for the exercise, develop the timeline table to guide the development of controller messages.
11. Develop the required controller messages and incorporate message execution into facility and action site timelines.
12. Develop mini-scenarios (traffic impediment, lack of equipment, etc.) to facilitate exercise contingency play.

13. Using the exercise scenario, timeline and objectives, determine the number of controllers needed to conduct/facilitate the exercise.
14. Determine the Exercise Controller organization needed to facilitate the exercise, develop an Exercise Controller organization chart and recruit personnel to serve as exercise Controllers.
15. Using the exercise scenario, timeline and facility/action site objectives, and in conjunction with COG personnel, determine the number of exercise evaluators necessary to evaluate the critical tasks at the associated facilities and action sites.
16. Determine the Exercise Evaluator organization needed to evaluate the exercise, develop an Exercise Evaluator organization chart and recruit personnel to serve as exercise Evaluators.

Preparing for the Conduct of the Exercise

1. Once the exercise scenario, timelines, facilities, action sites, numbers of players, controllers and evaluators have been developed and/or defined, determine the administrative and logistical requirements for supporting the exercise (acquire space, contract for meals, provide supplies for controller and evaluator handbooks, IDs, radios, cell phones, vehicles, etc.).
2. Arrange and schedule exercise Player briefing(s) as appropriate.
3. Arrange and schedule exercise Evaluator training session(s) as appropriate.
4. Arrange and schedule exercise Facility and Field Controller training session(s) as appropriate.
5. Arrange and schedule remote site Controller training session(s) as appropriate.
6. Arrange for the provision of space, meals, binders, tabs and IDs to support the exercise participants.
7. Reserve/coordinate use of communications equipment for exercise Evaluators and Controllers such as pagers, radios, or cell phones.
8. Prepare exercise Player packages with general exercise information.
9. Develop and conduct Player Briefing.
10. Prepare and distribute exercise Evaluator packages with specific exercise information, Evaluator organization chart, exercise evaluation guides and facility/action site timelines.
11. Develop and conduct Evaluator training.
12. Prepare and distribute exercise Controller packages with specific exercise information, Controller organization chart, controller messages and execution timelines.
13. Develop and conduct Controller training.
14. Prepare and distribute remote site Controller packages with specific exercise information, remote site Controller organization chart, controller messages and execution timelines.
15. Develop and conduct remote site Controller training.
16. Determine the number and names of personnel that will be observing the EM Region exercise.

Conducting and Evaluating Exercises

1. Assemble exercise Controllers and Evaluators immediately prior to commencing exercise.
2. Conduct communications test to verify communications link to Controllers and Evaluators.
3. Stage exercise Controllers and Evaluators at all exercise facilities and actions sites.
4. Conduct the exercise, by issuing Controller messages in accordance with the exercise timeline and observing and collecting data on critical tasks using the HSEEP Exercise Evaluation Guides.
5. Terminate exercise when all exercise objectives at facilities and action sites have been evaluated.

Developing the After Action report for the Exercise

1. Immediately following the exercise conclusion, assemble exercise Controllers and Evaluators and perform a hot wash regarding exercise observations.
2. Develop a Draft After Action Report (with the Improvement Plan) and review with Exercise Design Team.
3. Perform Exercise Debrief for officials from agencies who participated in the exercise and discuss the observations and findings and solicit their observations and comments.
4. Incorporate observations and comments from the Exercise Debrief into the After Action Report (with Improvement Plan).
5. Finalize and distribute After Action Report with Improvement Plan and track implementation of improvements.

Developing the After Action report for the EM Exercise

1. Immediately following the exercise conclusion, assemble exercise Controllers and Evaluators and perform a hot wash regarding exercise observations.
2. Develop a Draft After Action Report (with the Improvement Plan) and review with Exercise Design Team.
3. Perform Exercise Debrief for officials from agencies who participated in the exercise and discuss the observations and findings and solicit their observations and comments.
4. Incorporate observations and comments from the Exercise Debrief into the After Action Report (with Improvement Plan).
5. Finalize and distribute After Action Report with Improvement Plan and track implementation of improvements.

We will also provide up to four After Action Reports for regional events as specified in the RFP. Once an event has been identified, and working with COG representatives, we will attend regional and local debriefings and contact local representatives to gather effective information to complete an AAR for MWCOG.

Schedule

It is our intention to honor the schedule as provided by MWCOG. All exercises will be held and AARs completed by March 31, 2007.

3. COST PROPOSALS

The cost proposal is found as Attachment A.

4. REFERENCES

Virginia Railway Express
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MWCOG
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(Fortress/VHB)

Attachment A: Price Proposal

Attachment B—Certification

Attachment C—Resumes of Key Personnel

ATTACHMENT A - COST AND PRICE ANALYSIS

NAME OF FIRM: Kensington Consulting LLC

ADDRESS OF OFFEROR: 10308 Drumm Avenue, Kensington, MD 20895

SEE FOLLOWING PAGES FOR ALL DETAILS

TYPED NAME: **Elisa Nichols** **SIGNATURE:**

TITLE: President **DATE:** 3-21-06

COG RFP #14-06
Cost Estimates

		Labor hours												
		Kensington Consulting		LBG				K&J			FortressVHB			
		Principal	Support	Principal	Engineer	Planner	Support	Principal	Engineer	Support	Principal	Engineer	Planner	Support
		$175.00	$75.00	$175.00	$95.00	$95.00	$75.00	$175.00	$95.00	$95.00	$175.00	$95.00	$95.00	$75.00
Task 1-Senior Leaders Exercise														
Exercise		160	80	96	120	120	80	96	80	24	80	24	80	24
AAR		80	40	40			20	8			8		40	
Hours Totals		240	120	136	120	120	100	104	80	24	88	24	120	24
		$42,000.00	$9,000.00	$23,800.00	$11,400.00	$11,400.00	$7,500.00	$18,200.00	$7,600.00	$2,280.00	$15,400.00	$2,280.00	$11,400.00	$1,800.00
Evaluators	Stipend: $1000/day	50												
		$50,000.00												
Facilities Cost (includes room, food, audic		$35,000.00												
Other direct costs (phone, fax, postage, p		$3,500.00												
Travel costs (all firms)		$8,000.00												

		Average hourly cost
		$164,060.00
		$50,000.00
		$35,000.00
		$3,500.00
		$8,000.00
Total estimated cost of exercise		$260,560.00

COG RFP #14-06
Cost Estimates

Labor hours

	Kensington Consulting		**LBG**				**K&J**			**FortressVHB**				
	Principal	Support	Principal	Engineer	Planner	Support	Principal	Engineer	Support	Principal	Engineer	Planner	Support	
	$175.00	$75.00	$175.00	$95.00	$95.00	$75.00	$175.00	$95.00	$95.00	$175.00	$95.00	$95.00	$75.00	Average hour
Task 2-Tabletop Exercise 125 participants														
Exercise	80	80	80	80	80	80	80	80	24	40	24	80	24	
AAR	80	40	40			20	8			8		40		
Hours Totals	160	120	120	80	80	100	88	80	24	48	24	120	24	
	$28,000.00	$9,000.00	$21,000.00	$7,600.00	$7,600.00	$7,500.00	$15,400.00	$7,600.00	$2,280.00	$8,400.00	$2,280.00	$11,400.00	$1,800.00	$129,860.00
Evaluators Stipend: $1000/day	25													
	$25,000.00													$25,000.00
Facilities Cost (includes room, food, audio	$27,000.00													$27,000.00
Other direct costs (phone, fax, postage, pri	$3,500.00													$3,500.00
Travel costs (all firms)	$6,000.00													$6,000.00
											Total estimated cost of each exercise			$191,360.00
											Total estimated cot for (2) exercises			$382,720.00

COG RFP #14-06
Cost Estimates

	Labor hours													
	Kensington Consulting		**LBG**				**K&J**			**FortressVHB**				
	Principal	Support	Principal	Engineer	Planner	Support	Principal	Engineer	Support	Principal	Engineer	Planner	Support	
	$175.00	$75.00	$175.00	$95.00	$95.00	$75.00	$175.00	$95.00	$95.00	$175.00	$95.00	$95.00	$75.00	Average hourly cost
Task 3-Tabletop Exercise 225 participants														
Exercise	120	80	120	80	120	80	80	80	24	40	24	80	24	
AAR	80	40	40			20	8			8		40		
Hours Totals	200	120	160	80	120	100	88	80	24	48	24	120	24	
	$35,000.00	$9,000.00	$28,000.00	$7,600.00	$11,400.00	$7,500.00	$15,400.00	$7,600.00	$2,280.00	$8,400.00	$2,280.00	$11,400.00	$1,800.00	$147,660.00
Evaluators Stipend: $1000/day	50													
	$50,000.00													$50,000.00
Facilities Cost (includes room, food, audic	$35,000.00													$35,000.00
Other direct costs (phone, fax, postage, p	$3,500.00													$3,500.00
Travel costs (all firms)	$8,000.00													$8,000.00
											Total estimated cost of exercise			$244,160.00

COG RFP #14-06
Cost Estimates

		Labor hours												
		Kensington Consulting		LBG				K&J			FortressVHB				
		Principal	Support	Principal	Engineer	Planner	Support	Principal	Engineer	Support	Principal	Engineer	Planner	Support	
		$175.00	$75.00	$175.00	$95.00	$95.00	$75.00	$175.00	$95.00	$95.00	$175.00	$95.00	$95.00	$75.00	Average hourly cost
Task 4-CPX-EOC Functional 25 EOCs															
Exercise		160	80	120	120	160	80	160	160	24	80	80	120	80	
AAR		80	40	40			20	8			8		40		
Hours Totals		240	120	160	120	160	100	168	160	24	88	80	160	80	
		$42,000.00	$9,000.00	$28,000.00	$11,400.00	$15,200.00	$7,500.00	$29,400.00	$15,200.00	$2,280.00	$15,400.00	$7,600.00	$15,200.00	$6,000.00	$204,180.00
Evaluators	Stipend: $1000/day	50													
		$50,000.00													$50,000.00
Facilities Cost (includes room, food, audic		$0.00													$0.00
Other direct costs (phone, fax, postage, p		$3,500.00													$3,500.00
Travel costs (all firms)		$8,000.00													$8,000.00
												Total estimated cost of exercise			$265,680.00

COG RFP #14-06
Cost Estimates

Labor hours

	Kensington Consulting		**LBG**				**K&J**			**FortressVHB**				
	Principal	Support	Principal	Engineer	Planner	Support	Principal	Engineer	Support	Principal	Engineer	Planner	Support	
	$175.00	$75.00	$175.00	$95.00	$95.00	$75.00	$175.00	$95.00	$95.00	$175.00	$95.00	$95.00	$75.00	Average hourly cost
Task 5-Full Field Exercise														
Exercise	160	160	120	120	160	160	160	160	24	80	80	120	160	
AAR	80	40	40			20	8			8		40		
Hours Totals	240	200	160	120	160	180	168	160	24	88	80	160	160	
	$42,000.00	$15,000.00	$28,000.00	$11,400.00	$15,200.00	$13,500.00	$29,400.00	$15,200.00	$2,280.00	$15,400.00	$7,600.00	$15,200.00	$12,000.00	$222,180.00
Evaluators Stipend: $1000/day	50													
	$50,000.00													$50,000.00
Food	$17,500.00													$17,500.00
Other direct costs (phone, fax, postage, p	$3,500.00													$3,500.00
Travel costs (all firms)	$8,000.00													$8,000.00
											Total estimated cost of exercise			$301,180.00

COG RFP #14-06
Cost Estimates

	Labor hours													
	Kensington Consulting		**LBG**				**K&J**			**FortressVHB**				
	Principal	Support	Principal	Engineer	Planner	Support	Principal	Engineer	Support	Principal	Engineer	Planner	Support	
	$175.00	$75.00	$175.00	$95.00	$95.00	$75.00	$175.00	$95.00	$95.00	$175.00	$95.00	$95.00	$75.00	Average hourly cost
Task 6-Event After Action Reports														
AAR	80	40	80			20	80			8		24		
Hours Totals	80	40	80	0	0	20	80	0	0	8	0	24	0	
	$14,000.00	$3,000.00	$14,000.00	$0.00	$0.00	$1,500.00	$14,000.00	$0.00	$0.00	$1,400.00	$0.00	$2,280.00	$0.00	$50,180.00
														$0.00
														$0.00
Other direct costs (phone, fax, postage, p	$1,000.00													$1,000.00
Travel (all Firms)	$4,000.00													$4,000.00
													Total estimated cost per report	$55,180.00
													Total estimated cost of (4) reports	$220,720.00

ATTACHMENT B

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

The prospective vendor certifies to the best of its knowledge and belief that it and its principals:

- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any department or agency of the District of Columbia, State of Maryland or the Commonwealth of Virginia or any of the 19 jurisdictions comprising the membership of the Metropolitan Washington Council of Governments (COG);
- Have not within a three year period preceding this date been convicted of or had a civil judgment rendered against them for commission of fraud or 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;
- Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated above of this certification; and
- Have not within a three-year period preceding this date had one or more public transactions (Federal, State or local) terminated for cause or default.

Vendor understands that a false statement on this certification may be grounds for rejection of any submitted proposal or quotation or termination of any award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to $10,000 or imprisonment for up to 5 years, or both if federal funds are being used to support the procurement.

Kensington Consulting LLC

Typed Name of Vendor

Elisa Nichols, President

Typed Name & Title of Authorized Representative

Signature of Authorized Representative Date

JAMES M.G. TUCCI

Associate, Kensington Consulting LLC
3257 Elcano Lane
Cantonment, FL 32533
(850) 968-0901 Fax 0902

PROFESSIONAL EXPERIENCE

Consulting *July 1997 to Present*

- Develop/Review emergency prepardness plans for transit systems throughout the United States to include MTA Baltimore, Chicago Transit Authority and Bay Area Rapid Transit in Oakland.
- Develop emergency prepardness tabletop drills and field exercises for over twenty transit properties throughout the United States and Canada.
- Program manager responsible for the implementation and management of the Hartsfield International Airport, Security Evasion and Intervention Program (SEIP).
- Provided technical oversight for the remediation of Nitro Aromatics (DNT) and Nitroamines (TNT) via biocomposting.
- Conducted CNG/LNG facility safety, compliance and security inspections on over 17 properties through out the United States.
- Provided construction drawing review and pre-construction safety and security analysis of Alternative fuel and conventional fuel fueling facilities on numerous transit properties as well as NASA's Huntsville Alabama, mission center.
- Provided technical and educational consulting services in the area of environmental management, industrial safety, HAZMAT, and OSHA compliance and facility security to 13 industrial facilities located through out the United States.
- OSHA Star Site program auditor responsible for the auditing of industrial and manufacturing facilities through out the South Eastern United States.
- Performed over 66 industrial, commercial and transit facility Threat and Vulnerability Assessments (TVA) through out the United States.

- Technical assistant to the Federal Bureau of Investigation (FBI) in the development of the transit tubular assault plan for train and bus as well as transit counter-terrorism.
- Provided technical review of Transit System Security Program Plans (SSPP's) for new rail property startups. These properties include Salt Lake City (UTA), San Juan (Tren Urbano) as well as Baltimore (MTA) and Detroit (DDOT and DTC People Mover).
- Performed safety certification for the Howard Street track fixation upgrade for MTA Baltimore.
- Performed safety certification of the Howard and Lombard Street intersection post the CSX fire for MTA Baltimore.
- Provided internal system safety auditing and training for MTA Baltimore's Metro Rail and Central Light Rail operations.
- Audited rail operating procedures for Bi-State Development Agency's Metrolink Rail Operations.
- Sub-contractor to S.G. Associates to support of the Virginia Rail Express (VRE) with commuter rail security services.
- Performed track structure failure investigation for MTA Baltimore's Central Light Rail (CLR) operation at Penn Station and for the State of Maryland at the Howard Street tunnel.
- Sub-contractor to the department of system safety of Parsons Transportation in support of the 4.4 billion dollar East Side Access project.

LAW Engineering and Environmental Services, Inc. *July 1995 to July 1997*
Pensacola, FL.

OFFICE MANAGER

- Managed a staff of over 80 chemists, engineers, geologists, and technicians.
- Provided technical and managerial oversight to a project management staff that handled a caseload of 75 to 130 projects per week.
- Provided environmental regulatory compliance, OSHA compliance auditing, pre and post construction analysis and security inspections of conventional and alternative fuel fueling facilities and maintenance shops.
- Developed safety work plans, standard operating procedures and quality assurance plans for new construction, renovation and deconstruction of Alternative fuel fueling and maintenance facilities.

- Project engineer/chemist for the remediation/closure of the AGRICO superfund site the nations number 8 ranked NPL site.

LAW Engineering and Environmental Services, Inc. *July 1989 to July 1995*
Pensacola, FL.

OPERATIONS MANAGER

- Provided senior technical supervision for all aspects of an ISO 9000 accredited non-destructive/destructive testing, process chemistry laboratory.
- Insured all analytical procedures were compliant with those methods approved by the USEPA, NIOSH, ATSM and Standard Methods (SM).
- Provided system safety training and instruction for all NASA new engineering staff at the Huntsville Alabama space complex.
- Acting chief research scientist for all in-house research projects conducted in the area of human fatigue.
- Developed Standard Operating Procedures for Alternative fuel maintenance facilities.
- Conduct internal audits on transit properties for compliance to the transit system's System Safety Program Plan (SSPP) and APTA guidelines.

Environmental Protection Systems *October 1987 to July 1989*
Pensacola, FL.

QUALITY ASSURANCE MANAGER

- Developed employee health and safety plans, chemical hygiene plans and multi-state approved environmental quality assurance plans for transit properties.
- Produced and implemented standard operating procedures for the implementation of internal auditing of transit safety departments.
- Performed failure modes analysis for NASA on the implementation of Alternative Fueled Support Vehicles (AFSV) for the NASA Huntsville complex.
- Generated project specific safety work plans for the Charles Street freight terminal for Amtrak's Gold Coast Corridor.
- Reviewed construction drawings on fueling facility renovations for compliance to NFPA and best industry standards.

United States Army *October 1979 to October 1987*
Walter Reed Army Medical Center
Washington, D.C.
MEDICAL RESEARCH SUPERVISOR, INFECTIOUS DISEASE DEPARTMENT

June 1987 to Present
United States Army
361st Civil Affairs Brigade
Pensacola, FL
INTELLIGENCE ANALYST, COUNTER TERRORISM

EDUCATION

LaSalle University

BACHELORS OF SCIENCE, (CUM LAUDE) ENVIRONMENTAL ENGINEERING/MANAGEMENT WITH A MINOR IN CHEMISTRY

MASTERS OF SCIENCE, ANALYTICAL CHEMISTRY (CUM LAUDE)

TEACHING CREDENTIALS

US Department of Transportation, Transportation Safety Institute

SENIOR ASSOCIATE INSTRUCTOR:

ALTERNATIVE FUELS FACILITY INVESTIGATIONS

ALTERNATIVE FUELS SAFETY

TRANSIT INDUSTRIAL SAFETY

TRANSIT SYSTEM SAFETY

RAIL SYSTEM SAFETY

BUS SYSTEM SAFETY

TRANSIT SYSTEM SECURITY

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

EFFECTIVELY MANAGING TRANSIT EMERGENCIES

RAIL HIJACKING

FATIGUE

RAIL INCIDENT INVESTIGATION

Federal Transit Administration
INSTRUCTOR:

EMERGENCY PREPAREDNESS AND SECURITY

Pensacola Junior College, Department of Natural Resources
ADJUNCT INSTRUCTOR:

ANALYTICAL CHEMISTRY

University of West Florida, Department of Chemistry
ADJUNCT INSTRUCTOR:

SOIL ANALYSIS

PUBLICATIONS

Co-author, Handbook for Environmental Laboratory Technicians, Lewis Publishing, 1996

Co-author, Environmental Laboratory Operations, Lewis Publishing, 1997

AFFILIATIONS

Regional Director of the Society of Florida Environmental Chemists
National and Local Member of the American Chemical Society
Member of the Society of American Military Engineers
Regional Member of the Air and Waste Management Association (AWMA)
Member of the American Waste Water Association (AWWA)
Diplomat, Pensacola Chamber of Commerce
Member of the Pensacola Junior College Environmental Steering Committee
Member of the Florida Rural Water Association (FRWA)
Member of the Society of Alternative Fuel Engineers
Diplomat, Alternative Fuels Research Institute

CERTIFICATIONS / REGISTRATIONS

Certified Emergency Medical Technician (EMT)
Certified Federal Emergency Disaster Responder (FEMA)
Certified Hazardous Waste Operations (HAZWOPER)
Certified Hazardous Waste Operations Site Supervisor
Certified OSHA 501 instructor
Certified Transit Safety and Security Practioneer (TSI-TSSP)
Certified Safety and Security Director (WSO - CSSD)
Registered Professional Engineer (P.E.)

Deborah W. Matherly, AICP

Senior Associate and Transportation Planner, Washington, DC

Years with Firm: 5
Year with Other Firms: 24

Education

M.B.A., Hood College, Frederick, MD, 2001
B.S., Public Administration, Northern Kentucky University, Highland Heights, KY, 1979

Professional Overview

Ms. Matherly has over 24 years of experience with a broad technical and management background in major facets of transportation analysis. Her emergency evaluation and research planning experience ranges from transit operations analysis to highway emergency transportation planning, human behavior in emergency situations to regional coordination and communications, coordination of pandemic planning to mass sheltering coordination.

Registrations/Certifications

Emergency Evacuation Transportation Subcommittee, Transportation Research Board (TRB)
Freight Data Committee, TRB
Subcommittee on Performance Measurement for Sustainable Transportation, TRB
American Planning Association
American Institute of Certified Planners Certificate Number 018097
WTS

Qualifications

Regional Protective Action Plan, Baltimore Metropolitan Council. Ms. Matherly is Project Manager for the BMC Regional Protective Action Plan, which includes major table-top exercises as the key to developing the concept of coordination and identifying gaps in current plans. The Baltimore Metropolitan Council includes five counties, the City of Baltimore, and the City of Annapolis. Planning efforts integrate emergency management, transportation, public information, public health, public safety, and other functions. In-depth interviews with transportation managers identify the linkages, commonalities, and differences between responding to everyday, unplanned minor incidents; planning for a major planned event (such as a Ravens football game or major festival); and planning for a major unplanned event (such as a disaster). Each has lessons and parallels for the others. The Plan includes coordination concepts for command and management, communications, public information, evacuation, mass shelter, and pandemic planning. It is scheduled to be completed by May, 2006.

Phase 2- Emergency Transportation, Evacuation, and Shelter-in-Place Components of the Regional Emergency Coordination Plan (RECP) for the Metropolitan Washington Council of Governments (MWCOG). Ms. Matherly was the Berger Project Manager to develop the second phase of emergency planning for MWCOG to include all hazards planning, terrorism and WMD programs. The process significantly expanded on the first phase to include the development of initial plans for the protective actions such as shelter-in-place as well as transportation actions, involved in emergency planning and operations. The products included research on analysis tools and behavioral elements of emergency responses, initial plans for protective actions and transportation coordination, pet and animal shelters plans, an assessment of public warning systems, development of initial public messages and information, initial reentry and

recovery strategic plans, and "tabletop" exercises to identify and probe transportation communications plans and actions across the region. The project was completed December 31, 2003.

Phase 1- Washington Area Emergency Evacuation Plan Annex for the Metropolitan Washington Council of Governments (MWCOG) In an exceptionally short time frame- four weeks from notice to proceed until delivery of full draft document, Ms. Matherly directed the project team that developed the complete Evacuation Transportation Coordination Annex for Metropolitan Washington. The product included maps for regional evacuation routes, example scenarios, a framework for describing incidents, a structured questionnaire, and a comprehensive set of demand, highway and transit strategies to deal with major incidents. In addition to strategies dealing with maximizing the flow out of the area in response to an emergency (signals, lanes, transit, etc.) the document identified situations where shelter in place is most appropriate for many people, and where strongly encouraging shelter in place for certain populations (through coordinated demand and supply strategies) will ensure that transportation capacity exists for those who truly need to leave.

"Introduction to Metropolitan Transportation Planning" - for the National Transit Institute (NTI). While with COMSIS, conducted research, gathered materials, developed presentations and workbooks, and coordinated arrangements for the pilot and first course. The course continues to be offered by the NTI.

ELISA M. NICHOLS
PRESIDENT, KENSINGTON CONSULTING LLC

EDUCATION

BA, English, University of Maryland, 1984
BS, Psychology, University of Maryland, 1984
MA, English Language and Literature, University of Maryland, 1989

CURRENT CERTIFICATIONS /AFFILIATIONS

Certified Instructor for **National Safety Council's** 6- and 8-hour Defensive Driving Courses: Trainer for the National Safety Council's six and eight hour courses in driver safety.

Associate Instructor, **Transportation Safety Institute** (TSI), Oklahoma City, OK: Currently certified to instruct for TSI, The educational division of the Federal Transit Administration, based at the campus of the FAA's Mike Mulroney Training Center in Oklahoma City, OK, TSI provides training programs in Safety and Security for domestic and International transit systems. Responsibilities include course/curriculum development and instruction in system safety courses for ground transportation including:

- Transit System Safety
- Rail System Safety
- Bus System Safety
- Effectively Managing Transit Emergencies
- Rail Accident investigation
- Industrial Safety
- Transit System Security

Certified instructor for the **National Transit Institute**'s Health and Safety Training Program. NTI is a federally sponsored program based at Rutgers University, New Brunswick, NJ. Other duties include course development and critique, including classes in Chemical, Biological and Nuclear Incidents in Transit. Courses include:

- Transit System Safety and Security
- Industrial Safety
- Workplace Violence/Conflict Resolution/Security
- Hazard Identification, Analysis and Mitigation

CDL Class B License with Passenger and Air Brake Endorsements, DOT-certified

OSHA-certified (10 hours)

Certified Quality Auditor, **American Society for Quality,** certified in 1999

Member, **System Safety Society**

Member, **Transportation Research Board's Committee on Critical Infrastructure Protection**

Member, **Metropolitan Washington Council of Government's Passenger Rail Safety Subcommittee**

Member, **APTA Bus & Rail Safety Committees, Committee on Public Safety**

Member, **National Safety Council**

PREVIOUS POSITIONS

SG Associates, Inc. & BMI-SG: 1998 – 2005, Principal, Owner and Vice President
American Public Transit Association: 1997-1998, System Safety Program Coordinator
Arc Of Montgomery County, MD: 1996-1997, Transportation Administrator
Potomac and Rappahannock Transportation Commission: 1995-1996, OmniLink Bus System Dispatcher
Charles County Community College, Instructor, English Department, 1989 - 1995
University of Maryland Shuttle-UM Transit System: 1985-1995, various positions
University of Maryland Facilities Safety and Security 1981-1984, various positions

CURRENT EXPERIENCE

Ms. Nichols has a wide variety of transit experience, with emphasis on safety, security operations and maintenance. She has provided technical assistance on safety issues and processes to the Federal Railroad Administration, the Federal Transit Administration and the Inspector General's office of the US Department of Transportation. She has conducted in-depth safety, security and management audits/technical system overviews for over 35 bus, commuter rail, subway and light rail systems in North America, and provided technical assistance to many other transit systems on maintenance, operations, equipment specification, ADA compliance and safety and security issues, transit emergency preparedness plans and implementation, transit security plans and implementation, and operator safety programs. She has traveled extensively, and has reviewed transit systems as far as Singapore.

In 2005, upon the sale of the firm she co-directed, Ms. Nichols started her own consulting firm to continue her work in safety and security, and transit operations, planning and maintenance.

System Safety & Security Planning and Implementation projects include working with the MTA-Maryland's transit system (Baltimore, MD), which includes commuter rail (MARC), Metro subway, Central Light Rail, transit and commuter bus and paratransit systems. She has also provided similar services for the Southern California Regional Rail Authority (SCRRA, Los Angeles, CA), and the Regional Transit District in Denver.

She also plans and executes emergency and crisis response drills and tabletop exercises for her clients, including the 2003 Common Corridor Drill for the Washington, DC area emergency responders with the Virginia Railway Express. She has planned, developed and implemented emergency preparedness exercises for transit systems nationwide, including the rail systems in St. Louis, MO (MetroLink), New Orleans, LA (NORTA) and Washington, DC (VRE) and provided evaluation and review of emergency exercises for MTA-Maryland's transit system, the Washington Metropolitan Area Transit Authority's Metro subway system. She has also provided review and development of emergency and crisis plans for a number of clients, including the Metropolitan Washington Council of Governments Regional Emergency Coordination Plan; municipal plans for Cleveland, OH and St. Louis, MO; and transit emergency and crisis plans for Long Island Rail Road, Chicago Transit Authority, Tri-Met (Portland, OR), WMATA (Washington, DC), MARTA (Atlanta, GA), BART (Bay Area, CA) and GO Transit Commuter Rail System (Toronto, CA), among many others.

In addition, Ms. Nichols has performed system reviews, performance assessments, procedural reviews, internal/system safety and security auditing, safety and security certification. safety/security program development and implementation with the Metropolitan Atlanta Rapid Transit Authority (MARTA) in development and implementation of the Authority's Internal Safety Audit Program; triennial safety review and auditing for the Hartline (Tampa, FL) historic TECO streetcar line. Other services she has provided include System Safety programs and documentation for Herzog Transit Services Inc. (Tri-Rail Commuter Rail, Miami, FL); Quality Assurance for Arlington County, Virginia's paratransit transportation services (STAR service) and fare collection practices review for CATS (Charlotte, NC) and Cognisa Security of Atlanta, GA, for whom she prepared operational manuals, emergency preparedness plans and other documentation. She has assisted the GCRTA (Cleveland, OH) in developing Standard Operating Procedures for its maintenance department and is currently working there providing FTA-compliant safety and security certification for the GCRTA's Euclid Corridor busway.

Other current clients include the Baltimore Metropolitan Council, for whom she is providing assistance in

preparing the Regional Protective Action Plan; the Virginia Railway Express commuter railroad, for whom she provides System Safety and Security Services; and the Metropolitan Atlanta Regional Transit Authority, for whom she is providing the development of a Security and Emergency Preparedness Plan

PREVIOUS EXPERIENCE

Consulting. Principal, Owner and Vice President at SG Associates, Inc., which merged with BMI in 2003 to form BMI-SG, where Ms. Nichols retained her Principal, Owner and Vice President responsibilities. Provided consulting services in transportation safety, security, emergency preparedness, operations, maintenance and planning to transit systems and federal, state and local governmental agencies across the nation. Directed a staff of up to 30 and provided mentoring and professional development support to employees working on the firms' transit-oriented contracts.

System Safety. Responsible for coordination of APTA's safety management programs in heavy rail (subway), light rail, commuter railroad and bus for all North American transit system safety program members. Reviewed and revised system safety program plans for transit systems, coordinated system safety seminars, and provided training in system safety and related topics, including safety certification, hazard identification and analysis, and configuration management. Wrote, edited and revised system safety publications, including Manuals for the Development of System Safety Program Plans for all modes and all correspondence regarding the system safety management programs.

Developed and implemented system safety and security audits, including senior management practices; loss prevention and risk management; accident/incident investigation and prevention programs; OSHA compliance; collection of safety data and failure trend analysis; hazard analysis and resolution; safety awards and incentives programs; safety of maintenance, planning and operational practices systemwide; physical audits/inspections of transit properties, rail lines, bus and rail terminals and stations; busways/HOV practices; fatigue awareness and other fit-for duty programs, including drug and alcohol program compliance and Employee Assistance Programs; contracts and contract operations; construction projects; system security plans and their implementation; safety meetings and other awareness programs and committees; alternative fuels vehicles and fueling and maintenance facilities; maintenance, operational and safety training; purchasing and warehousing operations, including safety-critical, safety-sensitive and hazardous materials purchasing and handling; safe driving programs; emergency plans and liaisons with outside emergency response agencies; emergency drills; internal audit process; and configuration management and document control SOP's and safety certification programs. Prepared audit reports outlining findings, recommendations and corrective action plans.

Served as Staff Advisor to APTA committees, including the Bus Safety Committee, the Operator Personal Safety Committee and the Access Committee. Conducted APTA's Bus Safety Awards program. Prepared and delivered presentations on System Safety at Conferences and Seminars.

Prepared testimony for National Transportation Safety Board hearings. Prepared response and commentary on behalf of APTA members regarding FTA/FRA Notices of Proposed Rulemaking. Assisted transit systems with implementation of compliance programs for regulatory actions. Provided a clearinghouse and referrals to members for the industry's best safety practices and regulatory compliance for all modes.

Transportation Administration. General Manager of Arc MC's Transportation System for the Vocational Division, about 320 passenger trips daily for developmentally delayed adults on small buses and vans. Responsible for planning and implementing all routes, budgeting, purchasing, evaluating special needs of passengers, accommodating those needs and ensuring all ADA compliance; also responsible for hiring, training and evaluating all transportation department personnel and ensuring systemwide safety through operational training of all licensed vocational staff and liaison with quality assurance officer.

Directed maintenance and safety programs for all Vocational and Transportation vehicles; directed refinement and continued supervision of preventive maintenance programs on both fleets, including small buses, passenger vans and heavy-duty utility trucks; ensured safety of all vehicles and ensured all required safety equipment was purchased, installed and functional; ensured safety and efficiency of on-site vehicle maintenance facility; evaluated condition of vehicles and determined need for outside work to be contracted; provided liaison with outside vendors for contracted work. Tracked and improved vehicle maintenance program and system safety/training programs wherever necessary. Developed specs for,

purchased and evaluated new vehicles and equipment; assisted in writing applications for FTA Section 16 (now FTA 5310) MTA-Maryland grant vehicles.

Established emergency policy for transportation department, including vehicle failure, natural disaster evacuation plans, on-board medical emergencies and behavioral crises. Responsible for departmental spending and payroll. Handled customer concerns and compliments and coordinated all special events, including two off-site program holiday celebration events per year.

Provided liaison with Maryland Motor Vehicle Administration for all vehicle requirements and legal issues. Responded to accidents, handled coordination with families, group homes and vocational program for accidents and other incidents (as reportable to the Developmental Disabilities Administration) within the transportation system; conducted internal investigations and prepared written reports and communications and coordinated follow-up for accidents and incidents.

Acted as Chairperson of Accident Review Board; as such, scheduled and conducted Accident Review Board for any agency vehicular accidents, investigated and determined preventability of accidents, evaluated liability and risk management issues and acted as liaison with insurance carrier to develop safety and accident-reduction programs for all agency staff.

Established training and re-training programs as needed for safety and prevention of accidents for all Transportation, Residential and Vocational staff. Assisted in coordinating alternate transportation for eligible passengers/employees of vocational program or passengers for whom it was desirable.

Dispatcher, OmniLink Services. Responsible for daily coordination, scheduling and operations of fixed-route system with ADA compliant route-deviation.

Day-to-day operation of busy control center and customer service office, including supervision of route-deviation scheduling and emergency management of the control center.

Developed manifests for routes, assisted in training and evaluating drivers on routes and passenger assistance in liaison with contractor's supervisory staff, trained customer service representatives, assisted in planning routes, bus stops and printed materials for all local bus services, coordinated special events, performed on-time studies, route observations and other field work including customer satisfaction surveys and interviews, compiled, tabulated, evaluated and reported data for route-deviation services, assisted in maintenance evaluation inspections, responded to accidents, and handled customers' complaints and compliments in writing, person and by phone. Developed proficiency in use of Windows 95 and NT and Unix systems for real-time GPS Intelligent Transportation System using AVL and mobile data terminals.

Assistant to Fleet Maintenance Manager. Responsible for assisting Shuttle-UM's Fleet Maintenance Manager in all aspects of running day-to-day and long-range maintenance functions, including parts purchasing and stocking, vendor liaison, developing and recording specs for new equipment and vehicle purchases, equipment testing, facilities and equipment maintenance, new facility construction, supervision and training of maintenance assistants and maintenance support staff, maintaining vehicle operational and maintenance records, tracking maintenance and evaluating safety and efficacy of maintenance programs, budgeting, correspondence, record keeping and planning, coordination of and participation in special events. Coordinated and implemented safety certification program for acceptance of equipment. Coordinated and implemented configuration management program. Instituted electronic data storage and retrieval for parts inventory on computer.

Evening Operations Supervisor. Directed, planned, scheduled and coordinated Shuttle-UM's evening security operations, including 6 fixed routes and one demand-response route.

Hired and trained new drivers; assisted in orientation of new drivers and performed road supervision duties. Directly supervised, counseled and disciplined 25 drivers. Participated in evaluation process for drivers and dispatchers. Responded, investigated and followed up on accidents. Attended management meetings and participated in planning and coordination functions for other transit operations within the system. Participated in on-call pool for daily operations and emergencies.

Maintenance Assistant. Inspected, maintained and repaired paratransit and transit buses, and equipment and facilities under the direction of Shuttle-UM's Fleet Maintenance Manager.

Dispatcher, Shuttle-UM. Shift supervisor when on duty; coordinated routes, handled emergencies, accidents and reroutes, scheduled demand-response riders, paid shifts, handled communications, coordinated maintenance requests and all other duties as necessary to ensure that routes were completed.

Driver. Operated paratransit and 27', 30' and 40' transit buses on Shuttle-UM's fixed and demand-response routes.

Safety and Security Department Administration, University of Maryland. Assisted Safety and Security Program Manager in day-to-day administration of Safety and Security programs for Residential halls and Facilities. Coordinated safety- and security-critical repairs and replacements with Facilities Maintenance, developed schedules for safety and security teams, monitored vehicle usage and maintenance for Program fleet, and provided configuration management and document control support for the Program. Developed and administered Security awareness programs for residents.

Safety and Security Supervisor. Directed safety and security teams in the field, operated vehicles, and investigated and reported on safety and security incidents.

Safety and Security Personnel. Under the direction of team Supervisor, provided foot patrol services, residence safety and security inspection of buildings, and responded to safety and security emergencies on campus residential facilities. Performed firewatches, assisted in evacuations and provided support to emergency responders at incidents. Coordinated efforts with campus police and fire departments. Closed residences at breaks and holidays and performed lockouts and lock changes as necessary.

OTHER AFFILIATIONS

Member, American Society for Quality
Member, Women's Transportation Seminar
Member, Community Transportation Association of America
Member, National Safety Council

SELECTED PRESENTATIONS AND PAPERS

1999 APTA Bus Conference, Cleveland, OH, "Internal System Safety Auditing"

1999 – 2003 Presenter, Reliability Engineering Graduate Program, University of Maryland at College Park, MD, various topics, including Human Factors in Transportation Safety, Accident Prevention and Crime Prevention Through Environmental Design.

2001 APTA Training Seminar for Federal Railroad Administration, Washington, DC, "System Safety and Security Auditing"

2002 Community Transportation Association of America Annual Meeting, Wenatchee, WA, "Transit Safety and Security"

2003 Metropolitan Washington Council of Governments Heavy Rail Passenger Safety Subcommittee, various topics, including Emergency Response in New York and Cleveland during the Northeast Blackout of 2003

2005 Annual Meeting of the Transportation Research Board, Presenter, "Bus System Security"

2005-2006, Guest Lecturer, Northern Virginia Community College Homeland Security Program

JAMES R. MORRIS, CDR/NOAA (ret.)
Senior Environmental Manager

Education/Experience:	B.S. Environmental Biology, State University of New York at Cortland 22-Year Career with the National Oceanic and Atmospheric Admin. 2 Years with this Firm
Specialized Skills:	Advanced Working Diver 40-Hour HAZWOPER Certified

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Project Experience

- ***Chief Scientific Support Coordinator, NOAA, Hazardous Materials Response Division.*** Immediate supervisor of twelve Scientific Support Coordinators (SSC) who represented NOAA in support of Federal On-Scene Coordinators in responding to, and planning for, oil spills and releases of hazardous materials. Responsible for ensuring that all personnel retained a high state of readiness and proficiency to effect positive results during emergency responses. Was responsible for implementing the ICS for the NOAA Scientific Support Team. Was also responsible for planning, coordinating, and participating in numerous emergency management drills. Major emergency responses during this tenure were the groundings of M/V NEW CARISSA near Coos Bay, Oregon; T/V WESTCHESTER in the Mississippi River; T/V JESSICA in the Galapagos Islands. Also represented the Department of Commerce on Regional Response Teams in five federal regions (IV, VI, X, Caribbean and Alaska), which were responsible for coordinating responses and support during major emergencies, including Federally declared disasters.

- ***Scientific Support Coordinator, 11th Coast Guard District/EPA Region IX, NOAA, Hazardous Materials Response Division.*** Provided direct support to Incident Commanders of the USCG and EPA during emergency responses to oil spills and releases of hazardous materials. Provided the primary conduit for NOAA scientific products to the response effort. Products provided included trajectory modeling, fate and effects of pollutants, identification of resources at risk, chemical and biological analyses, and oceanographic and climatological forecasting. Was tasked with the duties of Planning Section Chief, Situation Unit Leader and Technical Specialist on numerous drills and emergency responses. Was also responsible for liaison between Federal On-Scene Coordinators and the various scientific representatives from other Federal agencies, state and local governments, academia, private industry and public interest groups. Major responses during my tenure included Bouchard Barge #155, Tampa Bay, Florida; Santa Clara River Spill, Northridge, California.

- ***Spill Prevention, Control and Countermeasure Plans (SPCC) / NOAA's National Weather Service (NWS).*** As the Senior Environmental Manager I provided project oversight of the writing and development of new SPCC Plans for NOAA's Weather Forecast Offices in the Southern Region. SPCC Plans are required of the NWS owing to their emergency generator systems and associated Above-Ground diesel storage tanks. The project required the building of plans from the ground up as the old plans were outdated and not compliant with the current

regulations promulgated by the EPA (40 CFR § 112) in July 2002. The project entailed site visits to various locations throughout NWS's Southern Region, meeting with NOAA personnel, and becoming familiar with each site's fuel systems, refueling operations, required maintenance and inspection schedules, and emergency procedures in the event of an oil spill. Additionally, the project required familiarity with state and local rules and regulations to insure that the plans met all of those requirements as well. Berger was also responsible for identifying any shortcomings and for recommending physical engineering and procedural changes.

- ***U.S. Coast Guard Integrated Deepwater System.*** Senior Environmental Manager for comprehensive contract providing Pollution Prevention Planning (P2) and Environmental Compliance documentation for the USCG and major contractors (Northrop Grumman Ship Systems, Lockheed Martin, Bollinger Shipyards, EADS/CASA, Bell). The project is a 20-year $17B recapitalization of the USCG fleet of ships and aircraft. The project includes in-depth coordination and on-site support to shipyards and other major vendors to identify, evaluate, and integrate P2 planning and systems into new ship and aircraft design, construction, and operations. Work included coordination with vessel and aircraft design engineers to develop systems specifications, reviewing vendor submissions and identifying environmental gains in the newer platforms. Conducted numerous vessel and facility tours to evaluate current equipment and practices employed by the USCG as a means of determining the net environmental benefits of the newer assets. Also conducted a thorough analysis of waste streams aboard USCG High Endurance Cutters and applied that analysis to the design of the newest cutter to go into production (the Maritime Security Cutter) for such systems as the handling of shipboard trash, sewage, graywater, medical waste, sludge oil and hazardous wastes.

- ***Maritime Administration / James River Ready Reserve Fleet.*** Conducted an Environmental Assessment for MARAD's Ready Reserve Fleet moored in the James River in Virginia. In charge of assessing the environmental issues related to towing obsolete vessels from the U.S. to Teeside, U.K. for recycling. Conducted inspections to assess vessels' condition and level of environmental threat. Worked closely with MARAD personnel to ascertain their standard operating procedures for handling hazardous wastes and readying vessels for towing. Also, interfaced with personnel from the U.S. Coast Guard to determine all of the safety requirements necessary to conduct such operations. Was responsible for determining navigational routes, pilotage protocol and vessel traffic for the Port of Hampton Roads and Norfolk Naval Shipyard.

Awards:

USCG Special Achievement Award - April 2000
NOAA Unit Citation - January 1999
NOAA Special Achievement Award - August 1996
NOAA Special Achievement Award - January 1996
USCG Meritorious Team Award - June 1996
USCG Commendation - December 1995
USCG Meritorious Team Award - December 1994
NOAA Special Achievement Award - January 1993
NOAA Unit Citation - May 1992
NOAA Special Achievement Award - February 1988
NOAA Unit Citation - May 1984

Publications : *Santa Clara River Spill Resulting from the Northridge Earthquake 1994.* Presented at the 1996 International Oil Spill Conference.

Development of Multi-Hazard Contingency Plans and Tools for the National Marine Sanctuary System. Presented at the 2003 International Oil Spill Conference.

Security Clearance: SECRET

KIMBERLY A. LIEBERMAN
Senior Safety and Security Specialist

EDUCATION

BA, Villanova University, Geography, Magna Cum Laude
MA, University of Virginia, Urban Planning, In Progress

EMPLOYMENT HISTORY

Senior Safety and Security Specialist , BMI-SG, Vienna, VA — 1/2004 to Present

- Contract Administrator/Transportation Planner, Bus Operations, Fairfax County Department of Transportation, FAIRFAX CONNECTOR, Fairfax, VA — 1/2002 to 1/2004
- Transportation Analyst, SG Associates, Inc. (now BMI-SG), Annandale, VA — 6/1997 to 1/2002
- Transportation Planner Apprentice, Potomac and Rappahannock Transportation Commission, Woodbridge, VA — 8/1996 to 6/1997 (Fixed Route, Flex Route and Demand Response Bus Service and Commuter Rail Service)
- Intern, Subdivision and Land Development Division, Delaware County Planning Department, Media, PA — 1995 to 1996 University Credit Program
- Intern, Zoning and Planning Offices, Fairfax City Government, Fairfax City, VA — Summer of 1995

EXPERIENCE

Senior Safety and Security Specialist, Fortress/VHB ., Vienna, VA — 1/2004 to Present (formerly BMI-SG)

Transportation Safety and Security:

- Currently conducting emergency preparedness tabletops for Baltimore Regional Protective Action Plan, including Baltimore City, County, and all surrounding jurisdictions.
- Currently project staff for the FTA-compliant Safety Certification Project for GCRTA's Euclid Corridor Transportation Program.
- Assisted with the preparation, coordination and evaluation of an emergency preparedness tabletop exercise, rail car equipment familiarization field training and field exercise drill for the Virginia Railway Express and Prince William County and Cities of Manassas and Manassas Park Police, Fire and EMS andOffice of Emergency Preparedness, Virginia State Police, Federal Railroad Administration, Department of Homeland Security, Department of Energy and FBI. Scenario involved a plane crash into a passenger train and subsequent improvised explosive radiologically contaminated device.
- Rail Maintenance Technical And Safety Procedures: Interviewed supervisors and mechanics, reviewed current maintenance manuals, and developed maintenance standard operating

procedure manuals for Greater Cleveland Regional Transit Authority's light and heavy rail cars.

- Reviewed contract documents and developed certifiable elements as part of the FTA-compliant Safety Certification for Metropolitan Atlanta Rapid Transit Authority's new rail facility.
- Assisted with the preparation, coordination and evaluation of an emergency preparedness tabletop and drill for the New Orleans Regional Transit Authority and New Orleans Police, Fire and EMS, Office of Emergency Preparedness and FBI.
- Assisted with developing training materials for a hazard identification and assessment class and also a general overview of safety certification class for the Virginia Railway Express (VRE); project staff for BMI-SG's ongoing safety and security consulting for VRE. Developed checklist for Charlotte Area Transit System's Fare Collection Practices Audit.
- OSHA certification August, 2004.
- Transportation Safety Institute Certified Safety and Security Specialist Effective March, 2005 (Courses: Effectively Managing Transit Emergencies, Rail Accident Investigation, Rail System Safety, and Transit Security).
- Participated in the American Public Transportation Association's 2004 ITS Emergency Response Workshop

Transit Planning:

- Developed and reported on ridership projections and operating/capital costs for shuttle service from neo-traditional neighborhood to rail station in Spotsylvania County, VA.
- Designed on-board bus survey, instructions, data collection spreadsheet and report format for a traffic delay analysis in Charlottesville, VA, including training of surveyors.
- Participates in the APTA Bus and Paratransit Conference (annually) and Virginia Transit Association's 2004 Annual Conference.
- Currently analyzing numerous transit corridor New Starts Criteria Submissions and preparing their land use assessments/ratings for the FTA.
- Developed capital costs for bus service expansion in Maryland.

Contract Administrator/Transportation Planner, Fairfax County Department of Transportation, FAIRFAX CONNECTOR, Fairfax, VA — 1/2002 to 1/2004

Contract Administration/Project Management:

- Administered numerous contracts, including 2 contracts for daily fixed route bus operations involving approximately 165 buses and 300 employees; 1 customer information and fare media sales contract for 4 transit stores and 10 employees; and several bus fleet maintenance inspection contracts.
- Prepared contract amendments and contract renewals.
- Served as co-chair for $100 million fixed route bus service contract selection advisory committee, including assisting with the development of request for proposals; attending pre-bid conference; reviewing letters and questions by potential offerors in conjunction with County Purchasing Department; reviewing request for proposals; participating in and documenting selection advisory committee meetings; developing ratings criteria for proposals and interview questions; and serving on the negotiations team.

- Served on transition team, comprised of incumbent bus contractor, new bus contractor, and County staff, including attending transition meetings; functioning as daily contact; disseminating information to new bus contractor; and organizing and attending final bus inspections.
- Organized and supervised multiple bus maintenance inspections conducted by a 3rd party inspector, including determining how many and which vehicles will be inspected; coordinating inspections and inspection criteria with 3rd party inspector; attending bus inspections; analyzing final inspection reports and coordinating meetings with bus contractor management to discuss inspection results and bus contractor action plans.
- Completed "Purchasing/Contract Development and Management: How to Avoid the Legal Pitfalls" course, taught by the American Management Association.
- Requested and coordinated meeting with County Purchasing Department and FAIRFAX CONNECTOR staff to discuss ethics and procedures for County staff when reviewing proposals, writing contracts and interacting with contractors.
- Prepared request for proposals for transit stores contract.

Daily Operations Transportation Management:

- Served as daily contact, 24-7, for two bus contractors (approximately 165 buses and approximately 300 employees) and the transit stores contractor (4 transit stores and 10 employees).
- Lead policies, practices and procedures meetings with contractors and officially implemented the changes (bus idling, code red reporting, emergency responses etc.). Monitored daily operations reports of two bus contractors.
- Reviewed bus accident reports, discussed potential service impacts with contractors, and disseminated any service interruptions and/or modifications to the public via the website, telephone information center, and transit stores.
- Designed and monitored a service interruption form for bus contractors to send to the County customer service representative, transit stores and telephone information center.
- Participated in monthly service delivery meetings with all contractors, including leading the operational issues portion of the agenda and reviewing, analyzing and summarizing the previous month's customer comments.
- Developed, maintained and frequently disseminated databases containing all contact information for numerous county and state agencies, regional transit agencies, contractors, and FAIRFAX CONNECTOR staff.
- Attended monthly contractor management meetings and quarterly contractor corporate meetings. Prepared correspondence to Fairfax County Board of Supervisors and County constituents regarding bus service delivery comments and inquiries.
- Reviewed resumes, selected applicants for interviews, developed interview questions and lead and participated on interview panels for County positions.
- Organized and participated in conference calls with County staff and Contractors to determine service levels during inclement weather and other emergencies.
- Participated in regional transit operators' conference calls and regional emergency management agencies' conference calls to coordinate service levels during inclement weather (snow and Hurricane Isabel) and other emergencies.

Transportation Safety and Security:

- Developed and continuously updated Safety and Security Plan for FAIRFAX CONNECTOR, including transit system description; security response measures; management of the System Safety and Security Plan; threat and vulnerability identification, assessment & resolution; numerous appendices pertaining to appropriate driver responses in various emergency situations and to facilities security; and an Emergency Response Plan comprised of an explanation of the FAIRFAX CONNECTOR and contractors staffing structure; emergency response team description; identification of response levels and service reduction levels; radio communications procedures; identification of standby locations; bus idling and extreme cold procedures; small pox inoculation plan; WMATA rail station closure contingency plan; snow brochure; potential flood routes; and emergency contact information and procedures via telephone, conference call, Roam Secure, regional conference call, and regional direct connect phone tree.
- Identified and coordinated with a 3rd party bus maintenance inspector regarding severe brake, tire and steering safety concerns which resulted in a full fleet audit and subsequent follow-up audits.
- Represented Fairfax Connector at Council of Governments' regional emergency preparedness meetings, WMATA's regional transit operators' meetings, Virginia Department of Transportation's Smart Traffic Center emergency planning meetings and Fairfax County's emergency management committee meetings. Attended Federal Transit Administration Volpe Center's Connecting Communities: Emergency Preparedness and Security Forum; WMATA's regional emergency response drill; and Fairfax County's emergency management drill and dirty bomb exercise at the West Ox Fire House. Planned and attended committee meetings regarding Fairfax Connector's participation in the statewide bio-terrorism exercise.
- Organized logistics and coordinated attendance with local transit agencies for the Transportation Safety Institute's 4-day course entitled "Effectively Managing Transit Emergencies".

Operational Planning:

- Participated in Trapeze scheduling software training. Modified bus routes and policies on bus service snow brochure. Supervised GIS Analyst/Apprentice who maintains FAIRFAX CONNECTOR bus routes and provides maps as needed.
- Prepared passenger notices for buses, shelters, website, transit stores and telephone information center regarding service modifications such as reroutes, reduced service levels, bus stop construction, or transit store closures.

Transportation Analyst, SG Associates, Inc., Annandale, VA — 6/1997 to 1/2002

Transit Planning:

- Prepared Transit Development Plan for Southeast Area Transit, a sixteen route system based in Norwich, CT, including documenting goals and objectives, participating in public meetings, analyzing financial data and ridership, and developing recommendations for service enhancements (Project Manager).
- Prepared Demographic Projections and Existing/Planned Transit Services Reports for Northern Virginia's Route 1 Bus Study, including documenting current and estimating future ridership by bus stop, using GIS to map current/projected employment and housing, making field inspections for on-time performance and bus stop inventory, using GIS to map the

number of buses operating along various roadway segments during different time periods, planning new routes/transit centers, modifying existing routes, and attending public meetings

- Assessed public transportation service levels for elderly, disabled, and low-income population groups in Kent County, DE and in the 9 cities and counties surrounding Richmond, VA.
- Prepared reports regarding survey and market research findings as part of a comprehensive operational assessment of OmniRide commuter bus services in Prince William County, VA.
- Conducted fieldwork and analyses related to determining appropriate locations for bus stops in Rockland County, NY, a transit center in downtown Newark, DE, and a bus garage in Wilmington, DE.
- Edited and prepared several technical reports addressing the evaluation of an ITS enhanced flex-route service in a suburban environment. Evaluated Fare Collection software for the FTA. Analyzed numerous transit corridors' New Starts Criteria Submissions and prepared their land use assessments/ratings for the FTA (annually).
- Modeled and prepared transit demand estimates for Rockingham County, VA. Analyzed transit need surveys/demographics in order to conduct a transit feasibility study, including service types, route schedules, service span, days of operation, financial plan, budget and capital program, for Martinsville, VA (Project Manager).
- Prepared report on transit center location guidelines for Montgomery County, Maryland. Revised travel demand forecasts for Wilmington, DE by interviewing and researching all major generators and local developers.
- Conducted park and ride demand analysis for Rockland County, NY, including determining the current markets for park-ride, both at specific lots and by residential area; assessing the projected growth in peak period travel from each residential area to each of the destination markets for which there is significant park-ride activity; computing the projected growth in park-ride demand at each lot resulting from market growth; and adjusting for the expected effect of the opening of the Secaucus Transfer on choice of mode by Rockland County commuters.

Service Monitoring:

- Developed service monitoring program for Arlington County, VA's paratransit service, including designing and implementing field inspections and test calls, performing an audit of the contractors' invoices against the records of rides, developing a system for monitoring the performance of the call-taking staff, and designing an ongoing monitoring program for the County to implement for the contractors.
- Generated database reports concerning on-time performance for Rockland County, NY and Southeast Connecticut. Monitored and evaluated ITS operational demonstration tests for Lynx's suburban circulator in Orlando, FL.

Demographic Analysis:

- Conducted G1S based census tract, block group or traffic analysis zone level demographic analyses to assess transit demand in Kent County/New Castle County, DE, Cecil County, MD, Westchester County/Rockland County, NY, and the City of Richmond/New Kent County/Charles City County/Chesterfield County (Henrico County/Hanover County/Goochland County/Powhatan County/City of Colonial Heights/City of Petersburg/Tidewater region/Martinsville, VA.

- Geocoded addresses of paratransit clients in Tidewater, VA, as part of a review of TRT's Maxi-Ride demand-response area services to evaluate the appropriate Maxi-Ride fare policy. Assessed opportunities to integrate ADA and TRT's general public demand response operations.
- Geocoded addresses of registered vehicles using HOV lanes and commuter parking lots for Northern Virginia study, origin and destination addresses of Rockland County, NY commuters by park and ride lot.
- Prepared numerous reports based on GIS demographic analyses. Created GIS maps that graphically represent existing, proposed, and/or modified routes for numerous transit agencies throughout the country.

Market Research:

- Assembled data and prepared report for FTA Fare Collection Oversight Study. Reviewed transportation improvement programs and identified projects and programs with relevance to proposed ITS deployment strategy for Lower Hudson Valley, NY.
- Obtained and assembled data on passenger transportation services available in the I-95/1-395 corridor for the Potomac River High Speed Ferry Feasibility Study.
- Assisted in data collection, analysis, and report preparation for the Highway Occupancy Vehicle Restriction study in Northern Virginia.
- Conducted field surveys, including capacity and utilization studies, survey form distribution, and customer interviews for over 60 park- ride sites throughout Delaware. Constructed databases and tabulated survey results from Delaware park-ride study.
- Prepared numerous demographic and database reports concerning Delaware park-ride survey findings.
- Collected Section 15 and additional data from transportation agencies in order to prepare peer review reports for Rockland County, NY and Westchester County, NY.
- Collected data for a vehicle handbook for Maryland Transit Administration.
- Interviewed downtown circulator systems and prepared peer report for a proposed trolley system study in Wilmington, DE.

Transportation Planner Apprentice, Potomac and Rappahannock Transportation Commission, Woodbridge, VA — 8/1996 to 6/1997 (Fixed Route, Flex Route and Demand Response Bus Service and Commuter Rail Service)

- Planned, organized volunteers for, managed, and reported on the annual ridership survey for Virginia Railway Express Budget Analysis. Manipulated EXCEL-based ridership and cost model for analytical purposes.
- Created graphical presentations of data.
- Dealt with the public and with companies regarding complaints and requests for information.
- Completed surveys, including data gathering for the University of London and APTA, on all aspects of PRTC operations.
- Designed customer comment process for fixed route and demand response services.
- Assisted in writing PRTC contracts for fuel and financial management services.
- Developed drug and alcohol policy for fixed route and demand response services.
- Presented drug and alcohol program training to PRTC employees.

- Attended monthly technical transportation meetings at the Metropolitan Washington Council of Governments.
- Made on-site visits to monitor progress of waste water recycling system project at PRTC bus garage and insured compliance with contract provisions, including environmental requirements.
- Made on-site visits at the Multipurpose Transit Center construction project to monitor compliance with contract provisions and zoning regulations.
- Collected data for Comprehensive Operations Analysis Service Plan. Researched and eliminated a one year backlog of unbilled fees for charter trips, including preparation of invoices.
- Performed research on population statistics.
- Wrote public notices concerning bus or train schedule changes and public hearing topics.
- Created spreadsheets for operations data.
- Training included: Trapeze scheduling software; Arc View Geographic Information Systems course.

Intern, Subdivision and Land Development Division, Delaware County Planning Department, Media, PA — 1995 to 1996 University Credit Program

- Screened site plan applications and actual plans for completeness and compliance with zoning laws and regulations. Identified requirements for highway occupancy permits and special analysis related to flood plains or wetlands.
- Entered application and plan data into an automated reference system (Fox Pro). Formally notified applicants of Planning Commission meetings.
- Provided the public with various types of information.
- Assisted in land development reviews to formulate staff recommendations to the Planning Commission.

Intern, Zoning and Planning Offices, Fairfax City Government, Fairfax City, VA — Summer of 1995

- Compiled project data and prepared correspondence concerning bond release for construction projects, necessary changes to, proposed projects, various plans' compliance with the zoning ordinance and clarifications of city requirements for a homeowners' association.
- Assisted with field inspections.
- Reviewed site plans.
- Attended City Council meetings regarding proposed construction.
- Assisted in updating the Comprehensive Plan by doing research on demographics.
- Prepared a map book for ready reference by Planning Office personnel.
- Created a Lotus spreadsheet to better track outstanding bond amounts.

CERTIFICATIONS

OSHA 10-hour
Transportation Safety Institute Certified Safety and Security Specialist (March 2005)

MEMBERSHIPS AND HONORS

Metropolitan Washington Council of Governments Passenger Rail Safety Subcommittee
Member of the American Public Transportation Association's Bus Safety Committee
Member of the Women's Transportation Seminar (WTS)
Member of Phi Kappa Phi Honor Society (Top 10% of class)
Recipient of The Alexander von Humboldt Award for top Geography student at Villanova University, class of 1996

ADDITIONAL SKILLS

Software – Excel, Word, Word Perfect, Quattro Pro, Visual D-base, Crystal Reports, Fox Pro, GIS, PowerPoint, Presentations, Outlook
Excellent writing and communications skills
Excellent professional relationship with colleagues, clients and contractors

Francis M. O'Hare
Phone – (631) 334-5426
E-Mail: fohare411@aol.com

Francis O'Hare, recently retired as a Deputy Inspector for the New York City Police Department, where he served as the Operations Commander for Transit Manhattan Borough Command; in this position, he developed plans and deployment strategies for personnel and equipment for all special events, from parades to dignitary protection. Mr. O'Hare also served as the Commanding Officer of the NYPD Downtown Center, coordinating police activities with the Downtown Alliance, a civilian security force, in lower Manhattan.

Mr. O'Hare began his career as a police officer in 1965. As a Commanding Officer of various police commands, he directed, supervised and deployed all personnel assigned to conditions affecting safety and security. In addition, he met with community boards, school boards, block associations, church groups, civic associations, etc. in regards to their concerns for the community. As the Operations Commander, he coordinated and established emergency procedures for terrorism, WMD, hurricane preparedness, Y2K, etc., and has established emergency procedures for and during a chemical or biological incident.

Mr. O'Hare received a Bachelor's Degree in Behavioral Science from New York Institute of Technology, NY, and graduated Summa Cum Laude. He was a member of the National Honor Society and Psychology Honor Society. At Florida State University, he had graduate studies in motivation and communication. He has received certification in various aspects of training, management and supervision. Additionally, he is currently a:

- Consultant to the Federal Transit Administration (FTA), DOT, DC
- Consultant to the Argonne National Laboratory, DOE, University of Chicago, IL
- Consultant/instructor for the National Transportation Institute, Rutgers University, NJ
- Consultant/instructor for Volpe National Transportation Systems Center, Cambridge, MA
- Consultant/instructor for SCOPE (Suffolk County for the Promotion of Education), NY
- Associate instructor for the Federal Law Enforcement Training Center, Glynco, GA
- Associate instructor for the Transportation Safety Institute, Oklahoma City, OK
- Certified instructor for School Violence Prevention and Intervention Training, NY
- Certified instructor under the NYS Security Guard Act, NY
- Panelist for the Transportation Research Board, National Academy of Sciences, DC
- Trainer for the American Health Foundation, Level I and Level II

Mr. O'Hare has served as a panelist at various conferences, i.e., FEMA, DOT, DOJ, FTA, NTI, and has been the NYPD representative at international anti-terrorism conferences in England, Italy, and Japan. From 1993 to the present, he has provided training and consultation services to various regional transit agencies, and has served on the National Transportation Safety Board.

Mr. O'Hare has participated in many special projects for NYPD, the NYC Mayor's Office of Emergency Management and the National Emergency Training Center, National Fire Academy.

Mr. O'Hare is committed to providing his colleagues with his experience, training and expertise in policing operations, so that they can respond with greater efficiency to natural and man-made disasters.

Mr. O'Hare has coauthored training manuals for the:

- Federal Transit Administration (FTA) on "Crime Prevention Through Environmental Design", 2001
- Department of Energy (DOE) on "Guidelines for Managing Suspected Chemical and Biological Agent Incidents in Rail Tunnel Systems", 2002
- National Transportation Institute (NTI) on "System Security Awareness for Transit Employees and System Security Awareness for Transit Supervisors", 2002

Mr. Samano is founder and president of Fortress Incorporated. His firm's legacy stretches back to 1986, and has operated out of Austin, Texas and the Boston area. He is well known as one of the premier experts on the design, development, and evaluation of emergency preparedness and security plans.

Mr. Samano has served as project manager on various projects involving the comprehensive review, assessment and subsequent design and development of Emergency Management Programs. Program reviews and assessments have included emergency management plans, traffic management plans for bridge and tunnel closures and emergency response procedures for Operations Control Centers. Mr. Samano has also designed, developed and implemented improvements to emergency management programs including expansion of hazard identification and risk assessment programs, restructuring of emergency management plans and developing emergency response procedures for Executive staff, Division Directors and State Police. Mr. Samano has designed, developed and implemented training programs including course training materials, lesson plans, conducting the training and providing train-the-trainer sessions for in house staff. In addition, Mr. Samano has designed, developed and coordinated drill and exercise programs that test the actions identified in the emergency management plans and procedures and validate the emergency response training program elements.

Mr. Samano's experience with VHB includes:

Capital Metropolitan Transportation Authority Austin, TX
Designed, developed and conducted an Emergency Response drill to evaluate the Emergency Response Team's actions, assess the operability of the Departmental Operation Center and evaluate the overall adequacy of the Comprehensive Emergency Management Program. The Emergency Response drill included an integrated event timeline, mini scenarios and ten specific drill messages designed to test the operational knowledge and integrated response actions of the Emergency Response Team. In addition, a Drill report was developed which provided the specific findings for each area that was assessed and the recommendations for program improvement.

Mr. Samano's prior experience includes:

Massachusetts Turnpike Authority Boston, MA
Performed a comprehensive review and assessment of the Massachusetts Turnpike Authority's emergency management program. Program review and assessment included the Mass. Turnpike's emergency management plan, Metropolitan Highway System's emergency response plan, traffic management plans for tunnel closures,- and emergency response procedures for the Operations Control Center. Developed and implemented improvements to the emergency management program including expansion and consolidation of the hazard identification and risk assessment program, restructuring the emergency management plan and its annexes and developing standard operating procedures for the emergency response actions assigned to Executive staff, Division Directors and State Police. Designed, developed and conducted the Notification & Communications drill that was utilized to prepare the MTA for the 2004 Democratic National Convention.

Massachusetts Highway Department (Central Artery /Tunnel Project) Boston, MA
Staffed and managed a team of 5 emergency preparedness procedure and training specialists in the design and development of the Project's Emergency Response plan, policies, procedures and training. Designed and developed the policies and procedures for the Interim Operations Center (IOC), Public Information Center (PIC) and Emergency Support Center (ESC), including

equipment inventory and floor plans. Conducted emergency operations training and evaluated the overall efficacy of the emergency response program through operational readiness drills and exercises. Designed, developed and implemented the emergency response system integration tests which resulted in the certification of operations for the Ted Williams Tunnel. In addition, served as the IOC and Emergency Operations Manager.

Department of Energy (Rocky Flats Plant) Golden, CO
Staffed and managed a team of 3 safety professionals in the design and development of a Loss Control audit and evaluation program for the site safety programs. Reviewed and assessed procedures, training content and delivery, and developed monthly reports identifying accidents, near misses and trends. Evaluated emergency response scenarios and performance of emergency responders during drill and exercise performance.

Boston Edison (Pilgrim Nuclear Power Station) Plymouth, MA
Designed, developed and successfully implemented a full scale federally evaluated exercise program. The evaluated exercise involved 750 emergency response personnel performing at 62 evaluated demonstration sites over a two-day period. Program elements included developing objectives, exercise scenarios, scenario control messages, integrated facility timelines and controller/evaluator packages. Designed, developed and presented the comprehensive exercise evaluation report to regulatory agencies.

Department of Energy (Rocky Flats Plant) Golden, CO
Staffed and managed a team of 7 radiological emergency preparedness procedure and training specialists in the development of the site emergency operations policies, procedures and training. Developed the Emergency Operations Center procedures and conducted emergency response training and drills. Served as the Emergency Preparedness Manager during large-scale incidents and emergencies.

Boston Edison (Pilgrim Nuclear Power Station) Plymouth, MA
Spearheaded the development of an emergency preparedness program in a highly contested environment to allow the Pilgrim Nuclear Power Station to resume nuclear operations. Developed, staffed and managed an organization of 27 emergency preparedness procedure and training specialists in the design and development of:

- Nine community emergency response plans
- Twelve emergency response facilities
- Four hundred state and town emergency response procedures
- One hundred and twenty training modules for the training of 6,000 offsite emergency responders

Presented Emergency Response program elements to regulatory agencies, elected officials and citizens' committees. Negotiated with state & local agencies on the design and content of their Emergency Response programs. Served as the Emergency Preparedness Liaison in the State EOC during large-scale incidents and emergencies.

Toledo Edison (Davis-Besse Nuclear Power Station) Oak Harbor, OH
Designed and developed the Toledo Emergency Operations Center (EOC) procedures. Developed field emergency response procedures, conducted emergency response training to state and local emergency response personnel and conducted emergency response drills to evaluate procedure and training effectiveness.

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Education	B.S. (magna cum laude) – Excelsior College	2000
Registration	International Association of Emergency Managers (IAEM)	

Thomas E. Jones

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Chevy Chase, Maryland 20815
H) 301-654-4501, W) 301-618-1168

WORK EXPERIENCE

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

December 1983 - Present; Supervisor, Fire Protection Maintenance

Duties:

Responsible for planning, coordinating and investigating matters related to fire prevention, fire protection and life safety within the Plant Maintenance Department. Schedule and conduct fire prevention inspections of all rail stations, bus garages and administrative buildings throughout the Transit Authority for compliance with the NFPA and BOCA codes. Schedule, perform inspections, tests and repairs of the critical fire and life safety equipment throughout the Transit Authority including fire alarms, fire sprinkler and standpipe systems, emergency exit shafts, fire extinguishers, and Emergency Tunnel Evacuation Carts. Trouble shoot problems, order materials, perform repairs, and initiate repair requests for corrective action of the critical fire and life safety equipment throughout the Transit Authority. Created the computer database and entered all the necessary information in the MARS computer network system for the preventive maintenance schedule, for the testing and preventive maintenance of all fire protection equipment in Plant Maintenance. Use Internet browsers, WordPerfect, Microsoft Office, Windows, DOS, Powerpoint, Personal Digital Assistant (PDA), and other mainframe applications to maintain accurate records of tests, impairments and inspections of fire life safety equipment related to fire and life safety, including confined space entries. Prepare weekly, monthly, and quarterly written and oral reports to reflect the duties carried out by the Fire Equipment Technicians. Manage personnel and equipment to fulfill necessary OSHA requirements and procedures in performing confined space entries. Orchestrated the entire KNOX BOX and key installation program to allow fire department access into the Metrorail stations. This operation was in cooperation with the Metropolitan Council of Governments Metro Liaison Committee and the six local fire and rescue departments. This project is still on going. Assist the METRO Safety Office by conducting instruction in Metrorail train and tunnel familiarization, for the local fire departments and other departments within the Transit Authority. Assist the METRO Transit Police by authoring a chapter in emergency tunnel information on each update of their operations procedure manual. Performed the duties of the Maintenance Operation Center Dispatcher. Initiates repair requests and the dispatching of the appropriate maintenance personnel for corrective action. Assisted in conducting the execution of full-scale emergency simulation drills within the Transit Authority. Consult with other departments within the Transit Authority and provide them with technical fire safety understanding, support, and assistance when requested.

WORK EXPERIENCE - Continued

MONTGOMERY COUNTY DEPARTMENT of FIRE/RESCUE SERVICES
February 1989 - Present; Rail Safety Officer

Duties:
Assist in writing response guidelines for the firefighting and rescue activities in event of a commercial railroad or Metrorail emergency. Coordinate and develop policies and methods to resolve emergency situations during a commercial railroad or Metrorail emergencies, including WMD/HazMat incidents, derailments, fires and EMS emergencies. Respond to commercial railroad and Metrorail emergencies and assist with fire/rescue incident management operations.

CABIN JOHN PARK VOLUNTEER FIRE DEPARTMENT
October 2005 – Present; Deputy Chief – Training Division

Duties:
Develop, implement, coordinate and supervise department-wide training and safety activities; plan, develop and assign training assignments to Company Officers; conduct multi-company and mutual aid drills; monitor scheduled training activities and identify need for improvement; provide scheduled supervisory and management training programs for management staff; act as Department liaison to other fire training agencies and associations; assist in coordinating Fire Department activities with other departments; conduct critiques of fires and fire suppression strategies employed; Assumes Safety Officer role and responsibilities on emergency incidents; assist the Fire Chief for special administrative assignments; serve as the County Operation Duty Chief. Direct and supervise forces in the control of emergency incidents; make technical decisions as to the best methods for managing the incident; ascertain the need for and type of additional equipment necessary to counteract the emergency; and coordinate fire suppression resources at mutual aid responses.

GLEN ECHO FIRE DEPARTMENT
March 2000 – December 2005 Fire; Chief of Department

Duties:
Coordinates and directs the deployment and utilization of personnel and equipment at major fires; assures that standard operating guidelines are followed by all personnel; assist in the planning and budgeting to ensure proper staff, professional development, and equipment resource requirements are met; makes recommendations concerning new technology and procedures; attends conferences and meetings on emergency service fire related topics; makes assignments and supervises subordinate officers..Assures that all department officers and firefighters are skilled in fire prevention, suppression, rescue techniques and hazardous materials; identifies training priorities. Operate emergency vehicles. Prepare and administer fire department annual budget. Oversee the supervision of the Public Affairs Office, the Internal Affairs Office, the EEO/AA Coordinator's Office and the Apparatus Maintenance Division. Provide strategic command during emergency incidents, including scene management, directing personnel and determining equipment needs. Supervise, evaluate and discipline all fire department members in accordance with the fire department regulations and in conformance with state and local laws. Implement and enforce fire department rules, regulations, policies and procedures to meet current and future needs of the department. Provide fire and rescue related information to the media. Represent the fire department to other local fire departments, governmental agencies and the general public.

WORK EXPERIENCE - Continued

U.S. DEPARTMENT of TRANSPORTATION / TRANSPORTATION SAFETY INSTITUTE

January 2003 – Present; Associate Instructor Staff

Duties:
Assist with the development and delivery of transit related courses to all levels of managers and supervisors responsible for developing and implementing an emergency response plan to transit representatives and community emergency support services such as law enforcement, fire protection, FEMA and emergency medical responders; and state safety oversight agencies. The participants learn how to develop and implement transit emergency management plans and response programs.

K & J CONSULTING SERVICES, INC

January 2003 – Present; Transportation Safety and Emergency Management Consultant

Duties:
Prepares transportation and government agencies in emergency management operations planning and policy review, threat and vulnerability analysis; prepares and evaluates table top and full scale field exercises; evaluates the interaction with the public, local and state government agencies and the transit agencies; and prepares after action reports.

KENSINGTON VOLUNTEER FIRE DEPARTMENT, INC

March 1977 – March 2000; Fire Chief of Department

Duties:
Achieved the ranks of Firefighter, Sergeant, Lieutenant, Captain, Assistant Chief, Deputy Chief and Fire Chief for the fire department. Responsible for providing fire, rescue, medical, and EMS operations for the citizens of Montgomery County, Maryland. Plan, coordinate and direct the operations of the fire department of approximately 100 personnel and 4 fire stations. Oversee the Public Affairs Office, the Internal Affairs Office, the EEO/AA Coordinator's Office and the Apparatus Maintenance Division. Responsible for all activities involving preventing and extinguishing fires, motor vehicle collisions, technical rescues, handling hazardous situations and materials, saving lives and property and providing emergency medical service. Provide strategic command during emergency incidents including scene management, controlling personnel and determining equipment needs. Supervise, evaluate and discipline all fire department members in accordance with the fire department regulations and in conformance with state and local laws. Provide fire rescue related information to the media. Represent the fire department to other local fire departments, government agencies and the general public. Participate in the investigation of fire scenes to determine cause, origin and circumstances of the fire. Conduct fire prevention inspection surveys of single-family homes, apartments and commercial buildings. Issue orders and citations to acquire compliance with the NFPA Life Safety Code. Prepare and submit monthly reports to the fire department's Board of Directors.

MARYLAND FIRE EQUIPMENT CORPORATION

August 1979 - December 1983; Fire Extinguisher Mechanic

Duties:
Recharge, repair, and test all types of fire extinguishers. Service, install, and test restaurant fire suppression systems.

EDUCATION

EINSTEIN SENIOR HIGH SCHOOL

Graduated June 1978

MONTGOMERY COLLEGE

Fire Prevention and Inspections
Fundamentals of Fire Suppression
Fire Suppression and Detection Systems
Introduction to DOS

NATIONAL FIRE ACADEMY / NATIONAL EMERGENCY TRAINING CENTER

Volunteer Fire Service Management
Safe Management of Hazardous Material Incidents
Material Incident Analysis the Pesticide Challenge
Introduction to the Incident Command System - IS100
Exercise Design – IS139
ICS for Single Resources and Initial Action Incidents -IS200
Hazardous Materials Incident Analysis
Recognition and Identification of Hazardous Materials
Initial Company Tactical Operations
Orientation to Community Disaster Exercises – 120
National Incident Management System – IS 700
National Response Plan – IS 800

UNIVERSITY of MARYLAND FIRE and RESCUE INSTITUTE

Tunnel Firefighting and Emergency Operations
Emergency Services Confined Space Entry and Rescue
Fire Inspector Short Course
Traffic Safety Incident Management

MONTGOMERY COUNTY FIRE/RESCUE TRAINING ACADEMY

Fire Fighter III
Emergency Medical Technician
Cardiopulmonary Resuscitation
Truck Company Operations
Pumps and Hydraulics
Swiftwater Rescue Technician III
Arson I
Instructor II
Officership I
Hazardous Materials
Incident Command
Practical Rescue
Emergency Vehicle Operators Course
Metrorail Instructor Training Program
Accident Investigators Course
Chemical/Biological Terrorism Course

U.S DEPARTMENT of TRANSPORTATION / TRANSPORTATION SAFETY INSTITUTE

Certified Transit System Safety and Security Practitioner

Industrial Safety
Effectively Managing Transit Emergencies
Transit System Security
Transit Rail System Safety
Transit Rail Accident Investigation
Instructor Excellence Course

Energetic Materials Research and Testing Center (EMRTC) of the New Mexico Institute of Mining and Technology

Incident Response to Terrorist Bombings

ACHIEVEMENTS and AWARDS

U.S. Department of Transportation / Transportation Safety Institute

Certified Transit System Safety and Security Practitioner

World Safety Organization, Inc

Certified Transit Safety and Security Director – Rail Transportation Certification

- 2005 recognized several times with awards and citations for a14 day Emergency Service deployment to the City of New Orleans Fire Department, New Orleans, Louisiana the after Hurricane Katrina
- 2005 National Association for Search and Rescue - Higgins and Langley Memorial Award for Incident Response involving a technical swiftwater in Montgomery County, Maryland
- 2005 Awarded Life Membership status from the Glen Echo Fire Department
- 2004 National Association for Search and Rescue - Higgins and Langley Memorial Award for Outstanding Achievement in swift water rescues in Baltimore, Maryland during Hurricane Isabel
- 2004 Unit Citation from Montgomery County Fire and Rescue for making over 200 water rescues during Hurricane Isabel
- 2002 Award for 25 years active service in the Kensington Volunteer Fire Department
- 2001 WMATA General Manager's Award for Safety and Emergency Response for rescuing a woman from the track bed with a on-coming train arriving in subway station
- 1997 Special Appreciation from the Montgomery County First Aid Unit for support provided during the 1997 Presidential Inauguration
- 1996 Unit Citation from the Senate of Maryland for heroic efforts following the February 16, 1996 MARC/ Amtrak train collision in Silver Spring, Maryland
- 1996 Unit Citation from the Maryland House of Delegates for selfless devotion following the February 16, 1996 MARC/Amtrak train collision in Silver Spring, Maryland
- 1994 WMATA Performance Excellence Award
- 1994 Letter of Appreciation for WMATA's KNOX BOX project, from the District of Columbia Fire Chief Otis Latin
- 1990 Certificate of Appreciation for outstanding contribution to the opening of the Forest Glen and Wheaton Metrorail stations
- 1989 Award for life saving efforts on a house fire
- 1987 Awarded Life Membership status from the Kensington Volunteer Fire Department
- 1986 Award for participating in the fire prevention open house
- 1986 Award for performing CPR on a Metrorail incident
- 1985 Award for EMS assistance on United Air Lines Flight 196

Professional Affiliations

Member of National Fire Protection Association (NFPA)
Member of the North America Fire Marshals of the NFPA
Member of the Rail Transportation Systems Section of the NFPA
Member of International Association of Fire Chiefs / Eastern Division
Member of the World Safety Organization

BALTIMORE METROPOLITAN COUNCIL

REGIONAL PROTECTIVE ACTION PLAN

LIBERTY DAM EMERGENCY WORKSHOP SCENARIO

OCTOBER 26, 2004

AFTER ACTION REPORT

Report Date: December 8, 2004

FOR OFFICIAL USE ONLY

CONTROLLED DOCUMENT

EXECUTIVE SUMMARY:

This first workshop scenario, designed to support the concept of operations aspect of the development of a regional protective action plan for the Baltimore Metropolitan Region, postulates a sudden major breach of the Liberty Reservoir Dam. This particular scenario and location were chosen because the impacts are clearly regional, involving multiple counties and cities in the immediate impact area, and necessitating support from the rest of the region, the state, and possibly beyond. There will be significant communications, power, and transportation impacts, plus requirements for sheltering, possibly across county borders. There will also be long-term challenges to consider. Finally, it will require cooperation and coordination across several functions and through several levels of government, as well as across jurisdictions.

Agencies from all member jurisdictions were present, and covered emergency management and response areas, transportation, public works and emergency services.

The prime successes of this workshop were increased recognition of the need for communication among the many agencies and that all jurisdictions need to share all documentation. Key findings for improvement included the development of better communications protocols among agencies, the further development of emergency plans within jurisdictions and the need for standard operating procedures (SOPs) to support the implementation of plans.

EXECUTIVE SUMMARY:

This workshop is designed to assist the Baltimore Metropolitan Council in facilitating the development and refinement of a Regional Protective Action Plan for the Baltimore Metropolitan Region.

In addition, the workshops will help the region's emergency response, public services and public safety agencies test, improve and refine regional emergency preparedness plans, emergency management and coordination between agencies, jurisdictions and other key players.

This workshop postulated a breach of the Liberty Dam and was conducted on October 26, 2004 at 9:00 AM. The workshop was held at the MDOT facility located at 7201 Corporate Center Drive in Hanover, MD.

Participants included members of law enforcement, medical agencies, public works, transportation, environmental, hazardous materials and emergency management agencies from all Metropolitan Council: Baltimore City, Baltimore County, Harford County, Carroll County, Anne Arundel County, the City of Annapolis and Howard County. State Agencies were the Maryland Emergency Management Agency (MEMA), the MD Department of Agriculture, the MD Department of Transportation, The MD Aviation Authority, the MD Deparmtent of Disabilities, the Maryland Transit Administration, and the MD State Highway Administration. Also participating were the American Red Cross and the Federal Highway Administration.

Members of the Evaluation team completed directed questionnaires evaluating aspects of the exercise, including law enforcement action, public works and transportation response and emergency management response. Participants also evaluated the exercise upon its conclusion.

RISK ASSESSMENT:

Recent events in the nation, including the September 11th attacks on the World Trade Center, the Pentagon and other targets; and subsequent heightened awareness of other terrorist attacks elsewhere in the world have highlighted the safety and security risks facing the United States, particularly large cities. In consideration of Baltimore's size and proximity to Washington D.C., there exists risk of intentional harm to the Baltimore region's residents, employees, and travelers through the area. Furthermore, accidents and natural disasters, such as Tropical Storm Isabel, continue to pose a threat to people, infrastructure and economic centers in the Baltimore region and throughout the United States.

Depending upon the timing and location of an intentional attack, accident or natural disaster, the Baltimore region's response will be combined with that of local fire, emergency, law enforcement and medical personnel; state and federal emergency personnel; and possibly military, hazmat and law enforcement investigation response. Access to the incident and to the proper equipment,

notification and communications procedures and coordination among all responders will be crucial to an effective rescue and recovery effort.

EXERCISE GOALS AND OBJECTIVES:

The following objectives were established for the Liberty Dam Breach Workshop:

1. Examine Regional Coordination and Communication within agencies, across jurisdictions, and through various levels of government.

- Emergency Response agencies and personnel.
- Law Enforcement agencies and personnel.
- Transportation agencies and personnel
- Identify (and if feasible involve) other pertinent agencies: Department of Human Resources (shelters), Department of Health and Mental Hygiene, Department of Public Works, Medical Examiner's Office, etc.
- Discover gaps in communication and coordination

2. Improve understanding of data and information needs and requirements as well as techniques of summarizing, displaying, and communicating the data and information among the participants and with decision makers

3. Rehearse "generic" regional emergency response and protective action coordination

4. Examine specific situations/incidents that may occur in the region
    - Examine effective response and protective actions
    - Measure adequacy, effectiveness and efficiency of Protective Actions
    - Identify outstanding unresolved issues relating to Protective Actions and Emergency Response

5. Identify the potential impact of current protective action and response strategies (e.g., advising citizen evacuation across county boundaries) and foster discussion of weaknesses or gaps in current plans, and develop possible alternatives to those strategies if required

6. Provide input to RPAP development, particularly the Concept of Operations

PARTICIPATING AGENCIES:

The following groups were invited to participate in the Liberty Dam Breach Workshop:

Local	Emergency Management Fire / EMS Health Police Public Information Officers Public Works Transportation
State	Emergency Management Emergency Medical Services Environment Health and Mental Hygiene Medical Examiner

	Transit Transportation
National / Other	American Red Cross Army Corps of Engineers Baltimore Metropolitan Council Federal Highway Administration US Coast Guard

Appendix A contains the detailed list of workshop participants and evaluators. Overall, 68 persons attended the workshop on October 26, 2004.

SCENARIO:

Part 1: Initial Situation

October 26, 2004

Late-season Hurricane Paula has stalled in the mid-Atlantic region, with heavy rains. The rainfall is concentrated in the northern Maryland and Southern Pennsylvania regions.

Although downgraded to a tropical storm overnight, heavy rainfall over a 24-hour period beginning in the early morning hours of October 25, 2004 has produced between 12 and 15 inches of rain over the Baltimore region, and winds are still gusting to 35 mph. Flash flooding has been reported in some areas.

Part 2: Dam Breach

2:00 AM—A fishing boat is launched from a ramp area on the Liberty Reservoir. The boat is piloted toward the dam area. The Reservoir normally holds about 48 billion gallons of water.

When it reaches the lip of the dam near the center, about 1000 lbs of C-4 plastic explosive in the hold of the boat is detonated. The dam is weakened at the lip, and the pressure of the water behind it finally breaches the dam. The breach has a cascading effect; and as more and more water pours through, further damage is done to the dam.

Water rushes through the dam, flooding the North Branch of the Patapsco and then into the main branch of the Patapsco and into the bay at the Harbor, inundating communities along the way that are already saturated from the storm:

- Anne Arundel - Hanover, Dorsey, Linthicum, Brooklyn Park
- Howard - Ellicott City, Elkridge
- Baltimore City - Patapsco Valley, Halethorpe, Baltimore Highlands, Cherry Hill, Fairfield

Parts of downtown Baltimore City are under water, including parts of the Inner Harbor.

Part 3: Recovery and Further Protective Actions

As a result of widespread destructive flooding, there are regional power failures, and many roads are impassable. Major roads that are out west and south of the city include I-95, I-295, US 1, US 40 and I-70. Critical facilities in each jurisdiction are affected. Drinking water for thousands is now unavailable, and wastewater treatment is intermittent, if available at all, due to flooding and power outages.

Thousands of people are dead, injured, trapped in their flooded homes and cars. Many others are also in their homes without phones, power, water, or access to these things because roads are out and cell towers are not working well or at all.

Low bridges have been swamped, and higher bridges, especially those near the dam, have suffered scour. Road surfaces and subsurfaces are damaged, trees are down and debris covers many roadways.

Environmental hazards have been released into the communities, including petroleum products, waste, debris, remains, chemicals of various kinds from households and businesses, etc.

ANALYSIS:

Each workshop workgroup, including law enforcement, transportation, EMS/health, emergency management, and public information/department of public works/engineering, had 1 to 2 formal evaluators from the Louis Berger Consultant team. The evaluator, as well as participant, comments and recommendations pertaining to the specific objectives of this exercise are as follows:

Objective 1: Examine Regional Coordination and Communication within agencies, across jurisdictions, and through various levels of government.

- Emergency Response agencies and personnel.
- Law Enforcement agencies and personnel.
- Transportation agencies and personnel
- Identify (and if feasible involve) other pertinent agencies: Department of Human Resources (shelters), Department of Health and Mental Hygiene, Department of Public Works, Medical Examiner's Office, etc.
- Discover gaps in communication and coordination

Findings and Observations:

Overall

- The exercise provided an opportunity for good recognition of State Mutual Aid agreements.

Transportation

- Not having a contingency plan for communications failure was raised as a concern.
- Group members questioned whether they would be contacted about locations of emergency shelters.

Pubic Information Office (PIO)/Dept. of Public Works (DPW)/Engineering

- It appears that jurisdictions share external resources, e.g. structural engineers, who would be receiving calls and directions from several groups – how to prioritize requests is not currently part of procedures.

Law Enforcement

- Baltimore County, Baltimore City, Anne Arundel County and Howard County emergency responders can talk on their radios to each other; however, the Transportation Authority Police currently cannot talk to other agencies. (There is a State-wide system coming soon).

Emergency Management

- Different jurisdictions have different procedures for implementing Incident Command functions as regards NIMS as applied by MEMA.

Maryland Department of Agriculture

- Communication/notification issues regarding agricultural concerns need to be included in the Regional Protective Action Plan.

Recommendations:

Overall

- All participating agencies/jurisdictions should be familiar with regional communications contingency plans. Internal communication contingency plans should also exist within individual agencies.
- Communications plans must be kept current and should be tested in workshops.

Transportation

- Ensure that the RPAP includes notification channels for transportation support

PIO/DPW/Engineering

- For agencies that share external resources, a coordination plan that includes prioritization, communications and administration should be developed and distributed among jurisdictions.

Law Enforcement

- A regional or statewide communication system is needed, and once it is in place it should be tested through scenarios and exercises

Emergency Management

- Familiarization training should be conducted for each jurisdiction's Incident Command Center, including coordination with NIMS as applied by MEMA

Maryland Department of Agriculture

- The Regional Protective Action Plan should include a procedure to activate MDA emergency operating group.
- The Regional Protective Action Plan should include a procedure to notify and utilize services of Maryland Cooperative Extension Service, Maryland Veterinary Medical Association, the Humane Society of the United States, Maryland Department of the Environment, Dept. of Health and Mental Hygiene, Maryland Emergency Management Agency, County EOCs, Veterinary Medical Assistance Teams, and Days End Farm.

Objective 2: Improve understanding of data and information needs and requirements as well as techniques of summarizing, displaying, and communicating the data and information among the participants and with decision makers

Findings and Observations:

EMS/Health

- Clarification is needed regarding where to get information that is readily available, e.g. how quickly water would flood an area (Who is responsible for getting that information? Does everyone know where the information can be obtained?).
- Clarification is needed regarding who maintains information on hospital capacity limits and who decides to re-route patients to other hospitals.
- There is no hard and fast protocol as to whether hospitals are coordinated by MOU or may participate in EOC if only one hospital is in affected area. Clarification is needed regarding this relationship.

Emergency Management

- Reunification software is needed to assist in the reunification of families.
- Need a system solution to interconnect databases pertaining to shelter information that is available.

Recommendations:

Overall

- Familiarization training with existing contingency plans should be conducted.

*EMS/*Health

- Familiarization training including protective actions connected with hospital data sources, contact persons and EOC procedures should be conducted for EMS and other health related professionals.
- FRED, the database for hospital resources, available through the Maryland Institute for Emergency Medical Services Systems (MIEMSS), can provide this data and it can be linked through EMMA (Emergency Management Mapping Application, currently available to each jurisdiction through MEMA).

Emergency Management

- Reunification software should be developed to use in shelter or evacuation situations.
- EMMA can serve as a system solution to interconnect shelter databases also.

Objective 3: Rehearse “generic” regional emergency response and protective action coordination

Findings and Observations:

Overall

- Protective actions could not be fully discussed due in part to a lack of proper agency representation.
- Questions were raised regarding the location of the Incident Command Center(s).

Recommendations:

Overall

- Future workshops of this level should be attended by policy makers/management, all appropriate agencies and planning departments.
- Establishing Incident Command Posts, especially if there are multiple ICs, should be discussed and planned for among jurisdictions and agencies.

Objective 4: Examine specific situations/incidents that may occur in the region

- Examine effective response and protective actions
- Measure adequacy, effectiveness and efficiency of protective actions

- Identify outstanding unresolved issues relating to protective actions and emergency response

Findings and Observations:

Transportation

- Agencies with available equipment (i.e., sandbagging machines) and how the equipment might be shared among jurisdictions were issues needing further exploration.
- MTA does not have a backup or contingency facility for their main bus garage, where the bus communications & dispatch are housed.
- This group raised the question of whether protective actions could be made to protect roadway improvements and facilities in order to minimize damage to transportation arteries.

Law Enforcement

- Concerns arose as to whether jurisdictions were aware that they could request the assistance of the 400-person Maryland Transportation Authority Police force.

Emergency Management

- The Red Cross indicated that numerous shelter identification/location and personnel management needs must be addressed.
- Regarding shelter operations, the issue was raised of what it means when a jurisdiction opens a shelter, e.g. what should people bring, what items/services would be available, etc. (Harford County, for example, informs residents what to bring).
- Some issues surrounding shelter operations included:
    - shelter management
    - first aid/health care
    - security
    - registration/people tracking
    - transferring evacuees if shelters become too crowded
- Jurisdictions should work together to identify host shelters to accommodate neighboring jurisdictions. Currently, this exists for Cecil, Harford, and Baltimore Counties, even though there is no formal agreement for sheltering between jurisdictions. The state and local jurisdictions have discussed the use of Regional Transition Centers in concept only. Currently, there is no plan in the region for Regional Transition/Reception Centers.

- Issues surrounding hosting evacuees from neighboring jurisdictions include:
    - How long to keep people
    - Liability and risk management issues
    - Transportation back to home jurisdiction(s).

Recommendations:

Transportation

- Emergency response resources needed by the transportation agencies should be identified, documented, including location, owner and applications. Again, EMMA can be used to link all local databases.
- MTA should develop a contingency operating plan if their main bus garage is out of service. An alternative operating and storage location should be identified. This is particularly important if MTA is identified as a major support group for transitioning people to and from shelters.
- Protective actions for roadway improvements and facilities should be examined.

Overall/Law Enforcement

- Available resources for all agencies should be documented in the Regional Protective Action Plan and through MOUs and MOAs.

- The Red Cross indicated that shelter management personnel needed to be trained for all proposed shelters; facilities other than schools need to be identified as shelters; the region needs to come to a common understanding of special needs shelters; and special needs sheltering needs to be addressed (including pets and livestock).
- Operating plans for sheltering should include items such as what residents are allowed to bring to the shelter and what services are available to residents at the shelter.
- Jurisdictions need to identify host shelters available to accommodate neighboring jurisdictions. A program plan for Regional Transition/Reception Centers should be developed, including locations, liability, transportation etc.
- Local jurisdictions need to agree on common terminologies: Shelter-in-Place; Reception Centers; Transition Areas; Host Sheltering – typically non-traditional centers, e.g. churches, community centers, etc. (Note: All jurisdictions may not be amenable to this concept); Special Needs Shelters; and Shelter Personnel: managers, security, healthcare, etc.
- The region needs to develop a plan to recruit, train and manage shelter volunteers.

Objective 5: Identify the potential impact of current protective action and response strategies (e.g., advising citizen evacuation across county boundaries) and foster discussion of weaknesses or gaps in current plans, and develop possible alternatives to those strategies if required (this will definitely need more findings and recommendations).

Findings and Observations:

PIO/DPW/Engineering

- Where to put debris was an issue.
- Regarding debris cleaning and temporary repairs, seemed to be an issue about whose responsibility it would be (utility, state road, local jurisdiction road).
- Communicating with the public needs to be unified and this was recognized by participants throughout the workshop.

Recommendations:

PIO/DPW/Engineering

- Develop a debris plan, including location sites and management.
- Develop a unified public information communications plan as part of the RPAP

Objective 6: Provide input to RPAP development, particularly the Concept of Operations

Observations:

Overall

- Regional protective actions are not coordinated or fully developed.

Maryland Department of Agriculture

- Procedures regarding agricultural concerns need to be included in the Regional Protective Action Plan.

Recommendations:

Overall

- A common operating protocol is needed for the region that would result in a complete picture following an emergency.
- It is recommended that regional communications be tested in workshops and drills.
- It is recommended that jurisdictional and agency coordination be strengthened through written SOPs, MOUs, MOAs, etc.
- Familiarization training of Federal resources and requirements is needed, and integration into the RPAP is recommended.

- Sheltering plans across all jurisdictions are recommended.
- It is recommended that transportation concerns are integrated into all regional protective actions
- Unified public information dissemination is vital to the success of the RPAP.

Maryland Department of Agriculture

- Develop pre-event protective action information bulletins for farmers and animal owners.
- Develop procedures for treating sick and injured animals.
- Develop procedures for animal rescues. (water rescue, mountain rescue)
- Develop resource, equipment, and volunteer list and offer training programs.
- Develop procedures with MDE for handling of farm pesticide spills.
- Develop procedures for dead animal disposal.
- Develop procedures for zoonotic disease control.
- Develop procedures for mosquito control and eradication.
- Develop procedures for emergency crop harvest.

PARTICIPANT EVALUATION OF WORKSHOP:

All participant evaluations that were returned are attached as Appendix B.

Appendix C displays a detailed tabulation of all workshop evaluation survey responses, including the specific survey questions. In summary, respondents were asked to rate 20 questions on a scale from 1 (low) to 5 (high). Therefore, the highest score possible per survey form was 100. The mean (62 out 100) and the median (61 out of 100) were calculated for all 41 survey respondents.

Weighted averages were also calculated per question with the range of 1 to 5. The lowest score, 2.5, pertained to the amount of time participants had for the workshop and the highest score, 3.9, pertained to the workshop staff being professional and organized. The majority of weighted averages fell between 3.0 and 3.5. Appendix C includes the weighted average for each specific survey question.

FINAL CONCLUSION:

It is extremely important that the Baltimore region continue to plan, conduct and participate in emergency workshops and drills to keep its level of readiness high and its programs, plans and procedures effective. The region has committed itself to developing and refining a Regional Protective Action Plan. Participation in the Liberty Dam Breach workshop has allowed the region's stakeholders to review their readiness, note needed improvements, and recommit to protective action planning.

FINAL RECOMMENDATIONS:

- The Baltimore region will review and update all of its emergency programs, plans and procedures. Specific recommendations, resulting from the workshop and detailed in this report, are vital to the RPAP.
- The Baltimore region will continue to plan and participate in emergency workshops and drills. The next workshop, scheduled for January, 2005, will not focus on a specific scenario, but rather serve as an interactive forum for emergency planners, focusing on protective actions.

Charlotte Area Transit System

TABLETOP DRILL
2005
AFTER ACTION REPORT

March 29, 2005

FOR OFFICIAL USE ONLY

CATS TABLETOP EXERCISE 2005

AFTER ACTION REPORT

EXECUTIVE SUMMARY

The Charlotte Area Transit System (CATS) provides transit services to the City of Charlotte and the surrounding areas. In March of 2005, CATS initiated an exercise to test its own response to an emergency as well as its coordination with area emergency responders and managers. This report summarizes the exercise and resulting findings and recommendations.

The Charlotte-Mecklenburg Police Department, which has a dedicated transit unit for policing the transit system, has recently opened a state of the art emergency operations center at its downtown headquarters. The exercise was designed to familiarize participants with the new center, and to reinforce and enhance current arrangements between agencies and jurisdictions for emergency management and response.

Participants in the drill included agencies from the City of Charlotte and from Mecklenburg County. These agencies represented emergency management and response areas, transportation, public works and emergency services.

The prime successes of this workshop were increased recognition of the need for communication among the participating agencies and that current documentation needs to be more fully developed for full preparedness in all scenarios. Key findings for improvement included the development of better communications protocols among agencies, the further development of emergency plans within jurisdictions and the need for standard operating procedures (SOPs) to support the implementation of plans.

The exercise enabled CATS to test its current plans for effectiveness, and to ensure its agreements with local responders are successful. These agreements were validated, and areas where preparedness needs improvement were identified. Significant areas for improvement were the expansion of existing plans to cover more possible adverse events, communications improvements and ensuring resources to implement plans already in place.

EXERCISE OVERVIEW:

CATS understands its responsibility to initiate and implement regular emergency preparedness drills in order to:

- Evaluate CATS emergency management plans and procedures,
- Observe and improve the expertise and knowledge of emergency responders in specifically handling transportation emergencies,
- Allow emergency responders to test and critique their own procedures and personnel in responding to emergencies on the CATS system,
- Improve communications and coordination among all potential responders to CATS emergencies,
- Allow CATS to test emergency interactions with its contractors,

Hosting of and participation in the CATS Tabletop Exercise 2005 allows CATS to meet the above objectives and identify opportunities for enhancement and improvement of its current emergency plans and procedures as well as its relationships with its contractors and area emergency responders.

The CATS Tabletop Exercise 2005 was initiated and developed as a group effort involving CATS, the City of Charlotte, Mecklenburg County, emergency managers and emergency responders. It was held March 29, 2005 in the Charlotte-Mecklenburg Police Department's Headquarters in the Emergency Operations Center.

CATS invited the following groups to participate in the tabletop exercise:

1. City of Charlotte & Mecklenberg County Offices of Emergency Preparedness
2. Charlotte Fire Department/Hazmat
3. Medic
4. Charlotte Mecklenberg Police Department
5. Charlotte Area Transit System (CATS)
6. Risk Management
7. Public Information & Media
8. State Safety Oversight (NCDOT)
9. Private Industry Partners

Persons in attendance at the tabletop are listed as part of Appendix A.

Tabletop Facilitators and Participants

EXERCISE GOALS AND OBJECTIVES:

CATS objectives in this exercise included:

- Assessment of the interactions between CATS, fire and rescue, other emergency responders,
- Evaluation of CATS preparations for emergencies, including conventional terrorist incidents,
- Determination of future needs for CATS emergency management and contingency plans and procedures, and,
- Testing of CATS customer information, media and public information control plans and protocols.

Simulated result of an explosion on the trolley overpass

SCENARIO

The tabletop scenario was as follows:

Background Information

- Several pieces of intelligence have been circulated recently among Charlotte area emergency responders:
    - FBI advisories have been circulated regarding terrorist cell activity in the Triangle, NC area or in other urbanized areas of NC.
    - Several days ago, a large quantity of beta-emitting carbon-14 and tritium was identified as missing and is presumed stolen from a UNCC physics laboratory.

System Status

- Tuesday, March 29, 2005. The Charlotte Area is quiet after the Easter holiday. Public schools are not in session for spring break, and people are taking advantage of the day to travel downtown to shop and sightsee.
- Normal CATS operations are in effect.

Trolley Event:

8:15 AM. A CATS trolley bound for the 9th Street station is approaching the Charlotte Transportation Center. Ten to twelve buses are under the canopy of the Transportation Center loading and unloading passengers.

As the trolley is on the overpass supporting the tracks leading into the area of the Transportation Center, a backpack filled with powerful explosives aboard the trolley detonates. Nearly simultaneously, another very powerful explosive device detonates in a wire trash container inside the area under the canopy of the Transportation Center.

Substantial damage occurs to the Transportation Center and the vehicles in it, and many people in the center are killed and injured. General panic ensues in the Transportation Center area, and passersby attempt to assist victims. Traffic is stopped on the roadway, and citizens are also attempting to help those trapped in cars under the collapsed overpass.

4th Street Overpass at Transportation Center

Location of Blast Can

Further Developments

Responders begin to arrive on the scene and media reports begin to surface.

A large chunk of the bridge-overpass over the street has fallen onto several cars, and two people are trapped inside two different vehicles. The Transportation Center structure has major damage and there are injured people inside it.

There are four day care centers in the vicinity of the Transportation Center; the YMCA day care center is immediately adjacent to it.

Media Response

Media reports are becoming more speculative.

People call the CATS customer service number regarding the emerging situation. The website is getting record hits and its capacity to handle public inquiries is strained. About 20,000 hits are recorded in the first 15 minutes after the initial events.

Additional television and print media personnel arrive on the scene. Jane Doe of Local Eyewitness News calls the CATS Communications Center to find out if CATS Operations are affected.

Handling the Media

The PowerPoint Presentation of the tabletop exercise and other documentation of the event is found in Appendix A.

RISK ASSESSMENT

Recent events in the United States and worldwide, including the September 11th attacks on the World Trade Center and the Pentagon; the March 11th train bombings in Madrid, Spain; and subsequent heightened awareness of other terrorist attacks elsewhere in the world have highlighted the safety and security risks that transportation systems face in everyday operations. The Department of Homeland Security has issued a directive requiring rail transit systems to take additional security measures to ensure the safety and preparedness of their systems. In preparation for the implementation of light rail in Charlotte, preparedness for an attack is a necessity. In addition, CATS' current status as the major transportation link in Charlotte carries risk of intentional harm to its passengers, employees and equipment.

Depending upon the timing and location of such an attack, the CATS response will be combined with that of local fire, emergency, law enforcement and medical personnel, as well as possible military, hazmat and law enforcement investigation

response. Access to the site and to CATS equipment; effective notification and communications procedures; and coordination among all responders will be crucial to an effective rescue, recovery and restoration effort.

In addition, Charlotte has periodic hurricanes, heavy rains and flooding, ice storms and other natural disasters that may directly affect safety on the CATS system. Fires, bus/motor vehicle accidents, light rail derailments, hazardous materials releases and other types of unforeseen emergencies on the CATS system also require immediate and appropriate response.

The same resources and efforts are called upon in a non-security-related emergency situation, and CATS and emergency management and response should be equally prepared for foreseen events as well as those that are unforeseen.

TABLETOP LOCATION

The Charlotte-Mecklenburg Police Department provided the resources and accommodations for the exercise at its downtown headquarters.

DIRECTION

Direction and control of the exercise was accomplished by Exercise Controller Mr. James Tucci of K&J Consulting Services. CATS coordination was provided by CATS Director of Safety and Security Mr. James Dougherty.

Facilitators were K&J Associates Francis O'Hare, Thomas E. Jones and Elisa Nichols of Kensington Consulting.

DEBRIEFING

Evaluation forms for participants were provided to assist the consultant team in debriefing and reporting for the exercise.

A blank evaluation form is included as Appendix B.

ANALYSIS:

The exercise had the following objectives:

- Assessment of the interactions between CATS, fire and rescue, other emergency responders,
- Evaluation of CATS preparations for emergencies, including conventional terrorist incidents,
- Determination of future needs for CATS emergency management and contingency plans and procedures, and,

- Testing of CATS customer information, media and public information control plans and protocols.

This analysis provides findings and recommendations related to each objective

Findings and Recommendations

Objective 1: Assessment of the interactions between CATS, fire and rescue, and other emergency responders

Findings:

1. Although CATS has a protocol to provide personnel at Incident Command and at the Emergency Operations Center, there is no formal written procedure in place identifying the representatives by title (and successors, in that person's absence).
2. CATS does not yet have in place a plan to implement the Department of Homeland Security's National Incident Management System, which has been adopted by all the Charlotte area responders.
3. CATS does have use of radios that include police and emergency frequencies. However, CATS employees are not familiar with their use.

Recommendations:

- F1: CATS should develop written Standard Operating to ensure that there is a CATS representative of appropriate authority and responsibility on scene and reporting to incident command and the emergency operations center for needed information and action. CATS needs to have SOPs cover multiple shifts, use positions and titles for these responsibilities, and have backup personnel for the response protocol.
- F2: CATS should develop a plan to implement the Department of Homeland Security's National Incident Management System, which has been adopted by all the Charlotte area responders.
- F3: ICS familiarization should be provided to all designated staff, and at least annually CATS should provide a drill and recertification in the ICS for employees. Joint ICS training should be held with responders on a regular basis to increase coordination and cooperation and to ensure common language during emergencies, and to ensure CATS' familiarity with communication devices for direct interaction with responders.

Tabletop Exercise in progress

Objective 2**:** Evaluation of specific CATS preparations for emergencies, including conventional terrorist incidents.

Findings:

1. CATS does not currently have in place security procedures for operator inspection of in-service vehicles.
2. CATS does not have a qualified employee whose responsibility is to provide emergency management services for the agency. Many of the above recommendations would be greatly facilitated by the institution of such a position, as well as the constant monitoring , update and training needed to keep an agency of CATS' size at its highest level of safety and security.
3. Training for all CATS employees in the Incident Command system is in place, but employees are not regularly recertified and drilled in its implementation.
4. CATS does not have a formal procedure for tracking costs in an unforeseen event.
5. CATS uses the term "Command Center" to describe its field station for administration, media, etc. in the event of an emergency. This could be a terminology problem with field command for emergency responders and lead to confusion during an incident.

Recommendations:

- F1: CATS should develop full written procedures for handling security incidents aboard revenue vehicles, including operator searches for suspicious packages.

- F2: CATS should provide a qualified employee whose responsibility is to provide emergency management services for the agency, including the OSHA requirement for emergency response and management. Many of the above recommendations would be greatly facilitated by the institution of such a position, as well as the constant monitoring , update and training needed to keep an agency of CATS' size at its highest level of safety and security.
- F3: Training in WMD (Weapons of Mass Destruction) and other special security procedures is needed for all employees, security personnel and responders at CATS, including management and contractors.
- F3: Training in emergency response should be recurring, and all new operators must be trained and tested in emergency response before operating a revenue vehicle.
- F4: CATS should develop an emergency/unforeseen event tracking process so that it can recoup financial losses.
- F5: CATS should learn and implement NIMS (See above) so that common terminology is used among all agencies in the field.
- F5: Consideration should be given for CATS to have a mobile command vehicle for emergencies to facilitate field direction.

Objective 3: Determination of future needs for CATS emergency management plans and procedures

Findings:

1. CATS has not had a full-scale field exercise for an event of this type in some time. In order to remain at a full state of readiness, regular tabletops, interactive tabletop exercise and full-scale field exercises should be regularly planned and implemented.
2. CATS does not have a formal written debriefing program after incidents, to include employees, supervisors and management.
3. CATS does not have a formal written alternative site plan for operations should its primary sites be out of commission due to an unforeseen event.

Recommendations:

- F1: CATS should develop a full written emergency exercise program, including all levels from tabletop to full-scale field exercise, and implement the plan as soon as possible. Again, a CATS emergency management position is recommended to ensure that this program, as well as all emergency management programs, is fully developed and maintained.
- F2: CATS should develop and implement a formal critical incident debriefing program.
- F3: CATS should develop a written contingency plan to include alternate operational sites for its primary locations should they be affected by emergency events.

Objective 4: Testing of CATS customer information, media and public information control plans and protocols.

Findings:

1. Media response was well-planned and coordinated. However, the media response would benefit from CATS having a mobile command vehicle to facilitate CATS information traveling between the field and other locations, especially if primary CATS locations are affected by an emergency.

Recommendation:

- F1: Consideration should be given for CATS to have a mobile command vehicle for emergencies to facilitate field direction.

FINAL CONCLUSION:

It is imperative that CATS make improvements and enhancements to its current emergency plans, training and procedures in order to be at a high level of preparedness in the event of emergencies of any kind. CATS should also continue to plan, conduct and participate in emergency drills and tabletops to keep its level of readiness high and its programs, plans and procedures effective. CATS has committed itself to maintaining an organization in which safety and security are a top priority. Development and implementation of the CATS Tabletop Exercise 2005 has allowed CATS to review its readiness, note needed improvements, and recommit itself to constant vigilance in safety and security.

FINAL RECOMMENDATIONS:

- CATS should review and update all of its existing emergency programs, plans, training and procedures; and should develop procedures for the areas where no formal procedures exist. This process should involve including all procedures recommended here, and further development of existing plans to include more foreseeable scenarios, more foreseeable contingencies and a disaster recovery plan to address all foreseeable emergencies and contingencies.
- CATS should develop an effective Unified Incident Command Structure in coordination with its emergency response partners in all jurisdictions and train all of its employees in the management of emergencies and how to effectively use the UICS in accordance with NIMS.

- CATS should continue to plan and participate in emergency drills to continuously improve its response and its responders' abilities to effectively deal with emergencies.
- CATS should actively seek to train with emergency response personnel frequently, including law enforcement personnel, in emergency response.

New Orleans Regional Transit Authority

NORTA

EMERGENCY DRILL 2004 AFTER ACTION REPORT

FOR OFFICIAL USE ONLY

June 11, 2004

NORTA DRILL 2004
TABLETOP AND FULL SCALE EXERCISE
AFTER ACTION REPORT
New Orleans Regional Transit Authority

EXERCISE SUMMARY

New Orleans is a major port city in Louisiana. It is a tourist center and an important commercial center. Its preparedness for an emergency is key to economic viability and public safety in the area.

The New Orleans Regional Transit Authority recognizes that the threat of intentional harm is very real for public transportation systems. Public transit is, by its nature, open and accessible. Attacks on public transit create fear and cause economic harm, both significant objectives of terrorists.

Terrorists weapon of choice in public transit attacks are improvised explosive devices (IEDs). These weapons are easy to make from simple ingredients and are also easy to transport in non-descript cases such as backpacks and briefcases, making the IED an ideal portable device for carrying aboard transit vehicles and detonating, either in a suicide attack or remotely.

In order to be prepared for dealing with the aftermath of such an attack, NORTA has taken the initiative to plan a tabletop exercise followed by a full scale field exercise simulating such an attack.

NORTA included an attack on both its bus and streetcar operations for the tabletop exercise. The field exercise was limited to the streetcar scenario due to NORTA and Department of Transportation considerations.

The exercise enabled NORTA to test its current plans for effectiveness, and to ensure its agreements with local responders are successful. These agreements were validated, and areas where preparedness need improvement were identified. Significant areas for improvement were the expansion of existing plans to cover more possible adverse events, communications improvements and ensuring resources to implement plans already in place.

EXERCISE OVERVIEW

NORTA has developed a System Safety Program Plan (SSPP) in accordance with the regulations of the Federal Transit Administration and LaDOT, the State Safety Oversight agency for NORTA. The SSPP provides for annual emergency drills and tabletop exercises for NORTA to prepare the system to effectively

manage incidents. In 2004, NORTA initiated an exercise in two parts: a tabletop drill to involve both its bus and streetcar operations and New Orleans emergency responders.

The tabletop exercise was held June 10th. 2004, and the field exercise was held on June 11th, 2004. Exercise participants represented multiple agencies. These agencies were:

1. New Orleans Office of Emergency Preparedness
2. New Orleans Fire Department/Hazmat
3. NOPD/Transit Police
4. New Orleans Emergency Medical Services
5. NORTA Transportation Management
6. NORTA Rail/Bus Departments
7. NORTA Facility/ROW Maintenance
8. NORTA Rail Maintenance
9. NORTA Media/Public Information
10. NORTA Bus Maintenance
11. NORTA Safety Department

The tabletop scenario posited a first scenario of a non-intentional accident involving a freight train carrying hazardous materials and a transit bus. The second scenario posited that an IED is activated aboard a streetcar as it returns to the streetcar barn on Canal Street.

The evaluation team used guided questions to evaluate transit system response, emergency management, public information, law enforcement, medical and fire and rescue response to the incidents.

GOALS AND OBJECTIVES:

NORTA understands its responsibility to initiate and implement regular emergency preparedness drills in order to:

- Evaluate NORTA's emergency management plans and NORTA procedures,
- Observe and improve the expertise and knowledge of emergency responders in specifically handling transportation emergencies,
- Allow emergency responders to test and critique their own procedures and personnel in responding to emergencies,
- Improve communications and coordination among all potential responders to NORTA emergencies,
- Allow NORTA to test emergency interactions with its contractors,
- Comply with Federal and State requirements.

Participation in the NORTA Drill 2004 allowed NORTA to meet the above objectives and identify opportunities for enhancement and improvement of its current emergency plans and procedures.

SCOPE:

The NORTA Drill 2004 was devised as a group effort involving NORTA and City of New Orleans OEP and emergency responders.

On June 10, 2004 a tabletop simulation of the two scenarios was held in the Training Room of the East New Orleans Transit Building in New Orleans, LA.

NORTA invited the following groups to participate in the tabletop exercise:

12. New Orleans Office of Emergency Preparedness
13. New Orleans Fire Department/Hazmat
14. NOPD/Transit Police
15. New Orleans Emergency Medical Services
16. NORTA Transportation Management
17. NORTA Rail/Bus Departments
18. NORTA Facility/ROW Maintenance
19. NORTA Rail Maintenance
20. NORTA Media/Public Information
21. NORTA Bus Maintenance
22. NORTA Safety

Persons in attendance at the tabletop are listed as part of Appendix A.

Tabletop Facilitator and Participants

The tabletop scenario was as follows:

System Status

- Thursday, June 10, 2004. NORTA has recently made changes to comply with the Department of Homeland Security rail directive effective May 23, 2004.
- Operators have been trained to be alert and report any suspicious activity to the control center.
- Normal operations are in effect.

Scenario I: Bus Scenario

8:00 AM. A NORTA bus traveling on the St. Claude Line enters a grade crossing at Press Street and gets hung up on the tracks. The bus is carrying 25 passengers, one a quadriplegic in a wheelchair. A freight train enters the crossing before the operator has a chance to call in for assistance from dispatch and hits the bus.

Cell phone calls are received in the 911 call center from some of the passengers aboard the bus reporting the accident.

The CSX engineer calls in to Jacksonville dispatch that he has hit a bus at the appropriate location and milepost marker.

The Jacksonville dispatcher calls local emergency response to notify them of the incident and the train's freight.

The freight train is a 78 car "red ball" train carrying Methylene Chloride (1912), Anhydrous Ammonia (1005), Methyl Isocyanate (2477) and wood pulp products.

The freight train's locomotive derailed and several cars turned over at the scene. A substance begins leaking from derailed tanker cars, and bystanders assisting in rescue become ill at the scene.

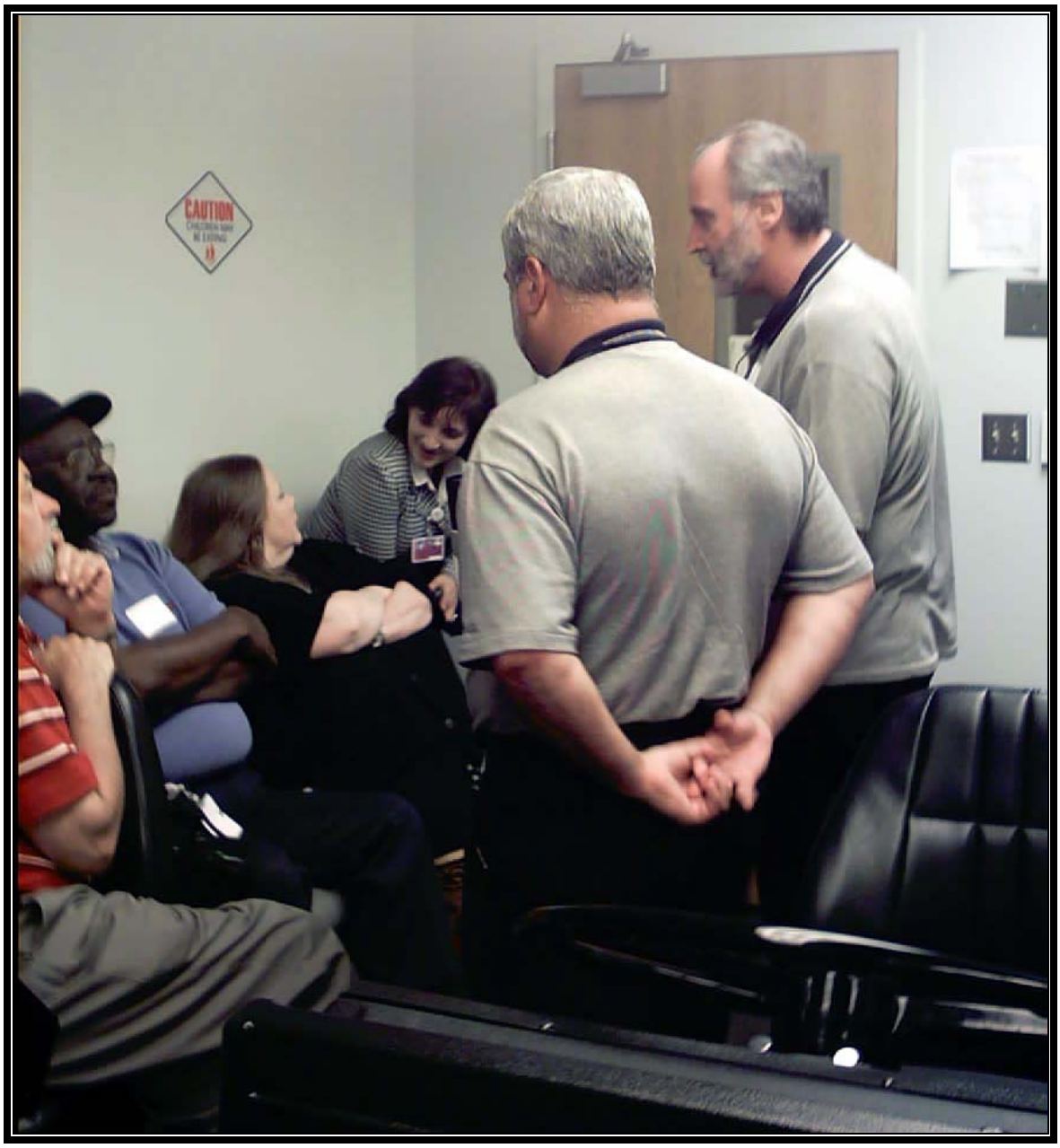
Media reports are beginning to surface on radio and television news about the freight train accident.

People call the NORTA customer service number regarding the emerging situation.

Television and print media personnel arrive on the scene. Jane Doe of Channel 5 News calls the NORTA Communications Center to find if NORTA Operations are affected.

Scenario II: Streetcar Scenario

9:00 AM. An operator completing his shift notices smoke at the back of the streetcar when he pulls up to the Storage Inspection and Service Facility (SIS), also known as the Canal Station. He goes to the source of the smoke and sees



Participants discuss the scenarios at the tabletop drill

a backpack with some sticks with wires in them and some canisters with liquid smoldering in a sand box.

Across the street from the Canal Station is a school.

As the operator is talking to the control center via radio, the backpack explodes, damaging the station as well as the car and injuring people in the station also. The operator is incapacitated and transmission to the control center stops.

A formal debriefing was held in the training room after the tabletop exercise.

The PowerPoint Presentation of the tabletop exercise and other documentation of the event is found in Appendix A.

FULL SCALE EXERCISE

The full-scale simulation was held at the Canal Station Storage Inspection and Service Facility in New Orleans. Since the full-scale simulation had to be scaled back to minimize the effect on operations, traffic and the general public, the exercise began at the 12:12 mark as presented in the scenario above.

The evaluation manual for the full-scale simulation scenario appears in Appendix B.

RISK ASSESSMENT

Recent events in the United States and worldwide, including the September 11th attacks on the World Trade Center and the Pentagon; the March 11th bombings in Madrid, Spain; and subsequent heightened awareness of other terrorist attacks elsewhere in the world have highlighted the safety and security risks that transportation systems face in everyday operations. The Department of Homeland Security has also issued a recent directive requiring rail transit systems to take additional security measures to ensure the safety and preparedness of their systems. In consideration of NORTA's status as the major transportation link in New Orleans, there exists risk of intentional harm to NORTA passengers, employees and equipment.

Depending upon the timing and location of such an attack, NORTA's response will be combined with that of local fire, emergency, law enforcement and medical personnel, as well as possible military, hazmat and law enforcement investigation response. Access to the site and to the equipment, notification and communications procedures and coordination among all responders will be crucial to an effective rescue, recovery and restoration effort.

In addition, New Orleans has periodic hurricanes, flooding and other natural disasters. Fires, vehicular accidents, derailments, hazardous materials releases and other manners of unforeseen emergencies also require immediate and appropriate response.

The same resources and efforts are called upon in a non-security-related emergency situation, and the system should be equally prepared for foreseen events as well as those that are unforeseen.

OBJECTIVES:

NORTA objectives in this exercise included:

- Assessment of the interactions between NORTA, fire and rescue, other emergency responders,
- Evaluation of specific NORTA preparations for emergencies, including conventional terrorist incidents,
- Determination of future needs for NORTA emergency management and contingency plans and procedures, and,
- Testing of NORTA customer information, media and public information control plans and protocols.

Smoke from staged drill streetcar

EQUIPMENT, CREW AND OTHER PARTICIPANTS

NORTA provided a streetcar at the Canal Station for the exercise. A NORTA operator accompanied the streetcar to the exercise location, and operated according to the scenario described in Scenario 2.

PARTICIPATING AGENCIES/SCENARIO

The NORTA Full-Scale Drill 2004 scenario presumed an improvised explosive device with possible hazmat detonated in the streetcar as it arrived at the Canal Station at the end of its daily run. The attack later understood to be a terrorist attack.

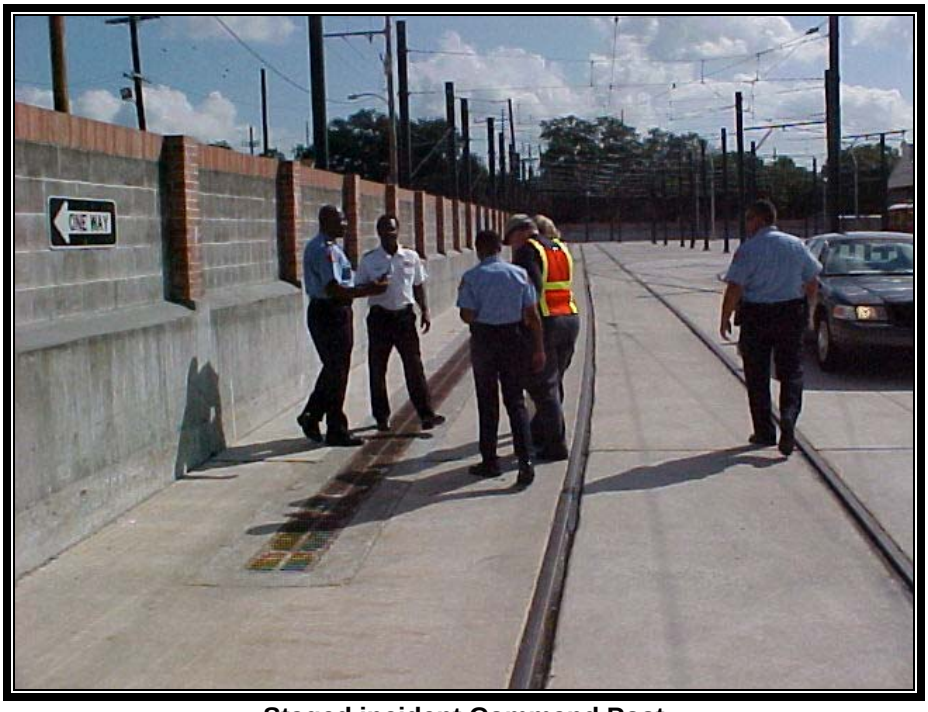
Emergency responders from NORTA, New Orleans Office of Emergency Preparedness, New Orleans Fire Department, Police Department and EMS responded for the full-scale exercise.

RESPONSE

The drill was initiated by the operator at 9:02. The Drill controller was James Tucci, and NORTA Manager of Safety James Tillie acted as the Drill Safety Officer.

Scenario of events.

Full timelines of the event are included in Appendix C.



Staged incident Command Post

FIELD DIRECTION AND CONTROL

Field safety, direction and control was accomplished by Drill Coordinator James Tillie of NORTA Safety and Drill Controller Mr. James Tucci of K&J Consulting Services as well as other NORTA Safety personnel and members of the consulting team via two- way radio. The drill safety officer was Mr. James TIllie of NORTA's Safety Department. Personnel involved in the exercise who were not responders were Observers and Evaluators. Observers were not formal drill participants, but had access to the drill site and provided informal evaluation and observation. Evaluators provided formal observation and comment on the events of the full-scale exercise.

Formal evaluators were Jim Tucci of K&J Consulting, K&J Associates Francis O'Hare, V. Ray Cole and Thomas E. Jones, Elisa Nichols and Kim Lieberman of BMI-SG, James Tillie of NORTA, Joseph Dorsey of NORTA, and Chief Tullier of NOOEP.

The Safety Briefing for participants and other information is included in Appendix B. Evaluator comments and timelines are found in Appendix C.

DEBRIEFING

A formal debriefing for the field exercise was held at the Canal Station immediately following the field exercise. All participants attended.

Observer and evaluator notes from the drill and debriefing are included in Appendix C.

ANALYSIS:

The drill had the following objectives:

- Assessment of the interactions between NORTA, fire and rescue, other emergency responders,
- Evaluation of specific NORTA preparations for emergencies, including conventional terrorist incidents,
- Determination of future needs for NORTA emergency management and contingency plans and procedures, and,
- Testing of NORTA customer information, media and public information control plans and protocols.

This analysis provides findings and recommendations related to each objective

Findings and Recommendations

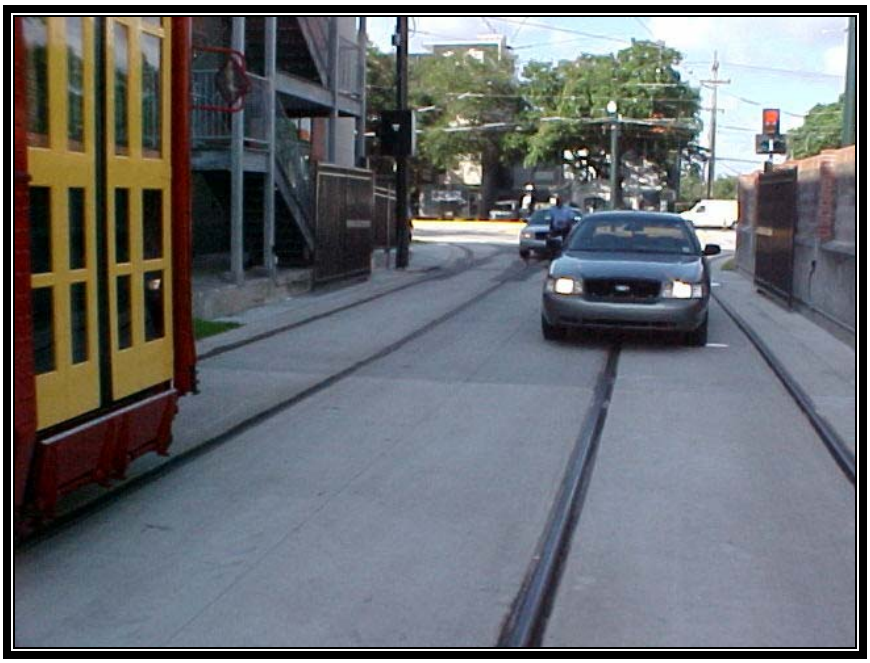
Objective 1: Assessment of the interactions between NORTA, fire and rescue, and other emergency responders

Findings:

1. No RTA representation was at the command center.
2. Not all agencies have reciprocal agreements for emergency assistance.
3. RTA is not a part of the joint radio communications network.
4. Not all NORTA employees are trained in ICS.

Recommendations:

- F1: An RTA representative should be at the incident command; SOPs need to be in place to ensure that there is an RTA representative on scene and reporting to incident command for needed information and operations. RTA needs to have SOPs cover multiple shifts use positions and titles for these responsibilities, and have a backup person for the response protocol.
- F2: MOU's and MOA's should be developed to coordinate with all regional agencies.
- F3: RTA should work with emergency responders to ensure that hardware is in place to include RTA in emergency channels.
- F3: NORTA radio frequencies should be in the EOC and in the Mobile command post vehicles.
- F4: ICS familiarization should be given to all designated staff.
- F4: Joint ICS training should be held with responders to increase coordination and cooperation and to ensure common language during emergencies.



Response vehicles too close in vicinity to event.

Objective 2**:** Evaluation of specific NORTA preparations for emergencies, including conventional terrorist incidents.

Findings:

1. No definitive incident command was established; the incident managers did not effectively record the information as they received it so that they accurately exchange information and make decisions.
2. No standardized pre-established checklists were used in the com center during the emergency; information that was in the com center was not portable as it needs to be in the event of an emergency.
3. The current Com center informal protocol does not effectively distribute the workload during emergency operations.
4. Police responders ran into the scene without first assessing the situation based on the information they received.

Recommendations:

- F1: There is a need to establish system of identification common to all agencies that identifies the incident command, the incident commander, and the incident managers.
- F1: All incident managers need to have an effective method of documenting the event as it occurs.
- F2: Emergency planning and procedures must be supported by checklists, portable documentation, and portable supporting equipment. Options for continuity include using binders, a secure website, mirrored and backed up, to ensure a seamless transfer of operations if the com center is out of service for any reason.

- F3: During an emergency, one dispatcher should be assigned to work with emergency while other dispatchers handle all routine operations.
- F4: All responders should evaluate available information before making an appropriate response to ensure responder safety and security.
- General: Training in WMD and other special security procedures is needed for all employees and responders at NORTA, including management and police.
- General: Training in emergency response should be recurring, and all new operators must be trained and tested in emergency response before operating a revenue vehicle.
- General: Consideration should be given for NORTA to have a secondary mobile command post.

Objective 3: Determination of future needs for NORTA emergency management plans and procedures

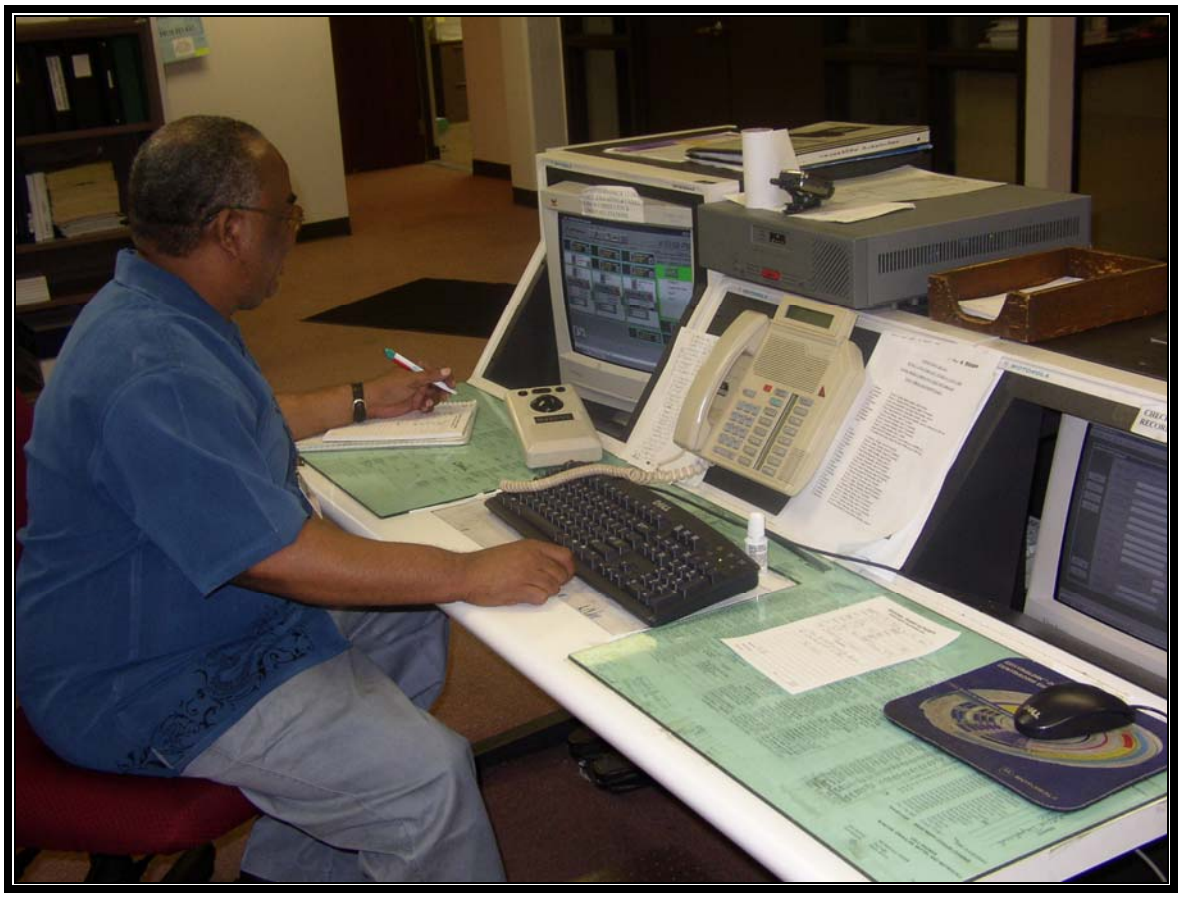
Findings:

1. The Canal Station facility did not implement any written emergency plan for the type of event that was staged, including the com center.
2. There is no labeling of levels of emergencies; in order for response agencies and other emergency responders to know the level of the event it is important to establish the nature of the event in reporting it. When information comes in from the field to establish the nature of the emergency, this information should be passed along to responders to assist the agency in meeting its critical needs.
3. There was no information available for calling other members of the community when there is a need to know information during an emergency.
4. RTA has little apparent physical equipment for emergencies. Not all RTA resources are catalogued for availability and use during an emergency
5. The drill itself was not controlled and implemented properly.
6. There are no written incident command post transfer procedures.
7. Radio calls were not prioritized during an emergency. The com center has no SOPs for clearing the airwaves and minimizing non-essential radio transmissions.
8. There was no apparent procedure for RTA to modify or discontinue service in the event of a major emergency except for a limited number and type of events.
9. There is no documented post-incident recovery plan.
10. There are no procedures for streetcar sweeps; no covert code for hostile situations in progress.
11. No video surveillance is in place on board streetcars and buses.
12. AVL is not in use on board streetcars and buses.
13. The com center has no way to record any conversations, radio, telephone, incoming or outgoing.

Recommendations:

- F1: All RTA facilities need to have an emergency plan for that specific facility that addresses all foreseeable events. It must be coordinated with all other emergency plans for the agency (COOP). The com center needs to have a separate emergency planning procedure in order to protect its safety-critical function.
- F1: A communications contingency plan should be developed for partial or total communications failure to restore full operational communications, including operators and supervisor in the field.
- F1: A procedure for identifying suspicious packages needs to be developed.
- F2: Establishing levels of emergencies in the emergency planning process is essential. SOPs must be developed to support the emergency plan, all employees trained in the plan and regular drills held to familiarize employees with its use.
- F3: A callout list for community locations is needed.
- F4: SOPs and an emergency equipment "kit" is needed to prepare for an emergency, to include stocks and locations of safety vests hard hats, badges, emergency water, first aid supplies, flashlights, batteries, portable generators, etc. The SOP should include a list of available RTA resources that can be used in an emergency; information should include location, capacities, uses, access, etc.
- F5: The RTA needs to have emergency drill procedures in place, and hold drills regularly to ensure that the drills are held and implemented properly. Also, drills and tabletops increase f2f communications and foster good relationships.
- F6: RTA, fire department, police and emergency management and EMS need command post transfer procedures in order to ensure efficient response, control and use of equipment.
- F7: The RTA should develop and implement procedures for communications protocols during emergencies
- F8: Develop full emergency and contingency plans for events other than hurricanes, flooding and Mardi Gras.
- F8: All emergency documents, plans and procedures must be regularly reviewed and updated.
- F8: Notification lists should be stored and maintained off site, including at manager's homes in case of emergencies in off hours.
- F9: A post-incident recovery plan should be developed, either separately or as part of the general emergency and contingency plan for all emergency situations.
- F10: SOPs should be instituted for operators to do streetcar sweeps at the end of each line.
- F10: A covert code for on-board emergencies should be instituted.
- F11: The team recommends that video surveillance be used on board streetcars and buses.

- F12: AVL should be used on board streetcars and buses, and an on-board panic button installed that shows location when pressed.
- F13: NORTA should install recording equipment for its com center, so that it can review and use information for accident investigations, legal issues, training and documentation. Telephone, radio and ambient conversations should be recorded for maximum benefit.



Communications Center

Objective 4: Testing of NORTA customer information, media and public information control plans and protocols.

Findings:

1. Field response for public information was not well planned.
2. Customer information does not have a disaster plan.
3. RTA does not currently have access to some resources available to it, i.e. hotline numbers, communications, etc.

Recommendation:

- F1: A field response plan is needed for public information office.

- F2: Customer service needs a crisis/disaster management plan, including for employee families.
- F3: NOOEP has resources that RTA can take advantage of; RTA should coordinate more with NOOEP to avail itself of all resources it can

FINAL CONCLUSION:

It is imperative that NORTA make improvements and enhancements to its current emergency plans, training and procedures in order to be at a high level of preparedness in the event of emergencies of any kind. NORTA should also continue to plan, conduct and participate in emergency drills and tabletops to keep its level of readiness high and its programs, plans and procedures effective. NORTA has committed itself to maintaining an organization in which safety is a top priority. Development and implementation of NORTA 2004 Tabletop and Full Scale Exercise has allowed NORTA to review its readiness, note needed improvements, and recommit itself to constant vigilance in safety and security.

FINAL RECOMMENDATIONS:

- NORTA should review and update all of its emergency programs, plans, training and procedures. This process should involve including all procedures recommended here, and further development of existing plans to include more foreseeable scenarios, more foreseeable contingencies and a disaster recovery plan to address all foreseeable emergencies and contingencies.
- NORTA should develop an effective Unified Incident Command Structure in coordination with its emergency response partners in all jurisdictions and train all of its employees in the management of emergencies and how to effectively use the UICS.
- NORTA should continue to plan and participate in emergency drills to continuously improve its response and its responders' abilities to effectively deal with emergencies.
- NORTA should actively seek to train emergency response personnel, including law enforcement personnel, in emergency response on its operational systems.
- NORTA should actively seek to improve its communications network and establish direct links with all area responders.
- NORTA should develop or improve as appropriate effective public, family and employee communications programs for use in emergencies.