ATTACHMENT A

Statement of Work (SOW)
District of Columbia
Office of the Chief Technology Officer
OCTO GIS

NATIONAL CAPITAL REGION GEOSPATIAL DATA EXCHANGE

Introduction

Regional GIS Managers have identified a need to produce, maintain and share a set of Common Operating Data to build an Intelligence Operating Picture fusible with individual jurisdiction Common Operating Picture applications. Partners in the Commonwealth of Virginia have taken the first step in fulfilling this goal by building a CAD to CAD sharing application between jurisdictions in Northern Virginia. Frederick, Montgomery and Prince George's counties in Maryland have developed an interoperable data exchange (INDEX) solution. This project will build upon these successes by expanding this sharing architecture to the rest of the NCR partners. A seamless set of situational data are necessary to allow the region to respond to large scale threats to the livelihood of the residents thereof.

The project is funded by the United States Department of Homeland Security (DHS) via an Urban Area Security Initiative (UASI) grant to the National Capital Region (NCR).

This solution will augment the NCR DEH by building capacity for partners to securely share dynamic web services and data. It will also create an indexing service and methodology for the sharing of geospatial data. States, local jurisdictions, and other NCR partners will be able to submit metadata on their geospatial data and services and share and consume data via the service. The service will include foundational data as well as topic-specific data. The data maintained by custodians in their native format will be made available to others in a standardized format to support all leading geospatial platforms. The service will include tools for search and discovery of data and will notify users of new and updated data

Members of County, City, State and Regional governments across the NCR have worked together to draft the attached scope of work for a Geospatial Data Exchange project. The three main goals for the project are to:

1. move towards live web services as a means to discover and consume geospatial data;

2. collaborate across jurisdictions and disciplines to share geospatial information;

3. provide access to viewer-independent geospatial information for the NCR.

The aim of the project is to provide the many geospatial-enabled applications across the region with a one-stop-shop for complete and current geospatial data that are accessible to NCR members.

The group recognized that multiple applications throughout the NCR need to consume GIS data. The project has taken into account the following:

- GIS managers cannot have maps that stop at their borders - the GIS data needs to be complete and understandable throughout the NCR.

- Individual user communities will have distinct needs and requirements on how they want to view the GIS data (aka the viewer). This project will ensure the data is complete and accurate regardless of the viewer chosen by the end user community – provided that the viewer technology is consistent with the interoperability standards adopted by the NCR.

- Considerable work is underway in Maryland through the PSIC grant program. This project will collaborate and build upon the work being performed in Maryland.

- This project should utilize Open Geospatial Consortium standards for interoperability. The project should all adhere to data security standards that have been adopted through the Data Exchange Hub. This project will adhere to the adopted regional standards on data exchange and leverage previous investments in the NCR Net fiber infrastructure.

- Multiple GIS applications could ultimately consume the GIS data and GIS data services created by this project. This includes, but is not limited to VIPER in Virginia, GoogleDC in the District, EMMA in Maryland and ISAVE through DHS/FEMA. This project will follow interoperability standards so that future data exchanges to additional outside entities could be created if desired.

The project manager from both the contractor and the GIS Committee will report regularly to a steering committee, made up of full time government representatives from NCR state and local agencies, and as requested to the CIO Committee and GIS Committee. Contractors will not be permitted to participate on the steering committee or otherwise in any decision-making activity in the oversight of the project. The following government representatives will act as the steering committee for the project.

PROJECT STEERING COMMITTEE

Tom Conry	GIS Manager - Fairfax County, VA
Barney Krucoff	GIS Manager – District of Columbia
Marc Weinshenker	GIS Manager – City of Rockville, MD
Apollo Teng	GIS Manager – Montgomery County, MD
Jack Markey	Emergency Management Director - Frederick County, MD
Gail Bohan	Director of Information Technology – City of Fairfax, VA

Kenny Miller Geographic Information Officer – State of Maryland

Chris McIntosh Interoperable Communications Coordinator - Virginia Governor's Office

The COG CIO's Subcommittee for GIS:

Robert Horne	Committee Chair / Project Manager	202-465-6735
Tom Conry	GIS Manager - Fairfax County, VA	703-324-3909
Barney Krucoff	GIS Manager – District of Columbia	202-727-9307
Marc Weinshenker	GIS Manager – City of Rockville, MD	240-314-8170
Apollo Teng	GIS Manager – Montgomery County, MD	240-777-2883
Patrick Callahan	GIS Manager – Prince George's County, MD	301-883-5343
Marshall Stevenson	GIS Manager – Frederick County, MD	301-631-2310
Steven Chozick	GIS Division Chief – Alexandria, VA	703-746-3822
Mary Beth Fletcher	GIS Manager – Arlington County, VA	703-228-3649
Larry Stipek	GIS Manager – Loudoun County, VA	703-777-0552
Kathy Prescott	GIS Manager – Prince William County, VA	703-792-6847
Shafi Khan	GIS Analyst – Falls Church, VA	703-248-5040
Margaret Montgomery	GIS Coordinator - Manassas VA	703-257-8216
Maurice Rioux	GIS Manager – City of Fairfax	703-246-6331
Martha Kile	Principal GIS Analyst – Metropolitan Washington Council of Governments	202-962-3294
Jack Markey	Emergency Management Director - Frederick County, MD	301-600-6790
Gail Bohan	Director of Information Technology – City of Fairfax, VA	703-385-7896
Kenny Miller	Geographic Information Officer – State of Maryland	410-260-4044
Chris McIntosh	Interoperable Communications Coordinator - Virginia Governor's Office	804-363-5794
Dale Spangenberg	IIT Director/CIO – Frederick County, MD	301-600-1010

Contractor Security Requirements

Due to the sensitive nature of the data being shared, ALL non-governmental persons interacting with this system, from concept through end of lifecycle, must pass a criminal background investigation through DC MPD and submit the results of the background investigation to the project manager prior to beginning work. All costs for this process will be absorbed by the contractor and shall not be passed along to the client. Failure to pass the background investigation will result in the immediate removal of the person from the project and could result

in the removal of the contractor from the project. Additionally, ALL non-governmental persons will be required to sign a Non Disclosure Agreement. Failure to comply with these requirements will result in legal action against the contractor.

Tasks and Deliverables

Task 1 Stakeholder Coordination

A goal of the "Regional Strategic Planning for Interoperability and Information Sharing" plan (attached as an appendix hereto) for Northern Virginia (NoVA) is to secure "Buy in and Partnership" from the NCR Partners. Building on this goal, this project seeks to unify the spatial data sharing goals of all of the regional GIS Partners.
The contractor will hold three meetings with each of the following primary stakeholders and at least one meeting with each of the secondary stakeholders. The first meeting will be at project inception, the second after the system design has been completed, and the third upon delivery of the final system.

Primary Stakeholders

- Project steering committee – biweekly conference calls
- COG GIS Committee
- MDPSIC project team
    - Frederick County
    - Montgomery County
    - Prince George's County
- Northern Virginia CAD to CAD Regional Data Exchange Hub (DEH) project team
    - Fairfax County
    - Arlington County
    - NoVA Public Safety Situational Awareness Focus Group
    - ***Others***
- Metropolitan Chief Information Officers' Committee (MetroCIOs)
- COG Emergency Manager's Committee
- State Level Partners (MD, DC, VA)
    - State GIS Coordinators
    - State Emergency Management Coordinators
- The Metropolitan Area Transportation Operations Coordination (MATOC) Program
- Up to three other COG committees to be determined

Secondary Stakeholders

- DHS HFLD For The Regions project team
- DHS UCIDS project team
- DHS Virtual USA project team
- ArcGIS.com ESRI representatives

- WebEOC Regional Project
- COG CISO's Committee
- NOVA Situational Awareness Project
- USGS Liaisons VA/MD/DC

Task 1 Deliverables

1.1 Stakeholder coordination meeting notes round one. The round one meeting notes should include detailed descriptions of existing systems, hardware, data, and plans. The notes should also include the aspirations/requirements of stakeholders regarding data exchange.

1.2 Summary of findings round one coordination meetings.

1.3 Stakeholder coordination meeting notes round two. The round two meeting notes should include stakeholders reaction to the system design and data inventory

1.4 Summary of findings round two coordination meeting.

Task 2 Data Inventory

The consultant shall:

- Survey local, state, regional, and federal agencies to identify available live data feeds and data stores. This will include:
  - Identifying data that the various viewers in the region are consuming
  - Agencies outside of the COG GIS Subcommittee membership
  - Native formats and coordinates
  - Security requirements for each dataset
- Identify existing services of value to emergency operations
- Briefly review and include in the inventory HSIP Gold NAVTEQ data recently made available to the NCR by DHS.
- Add a list of existing services consumed by jurisdictions
- Identify datasets that should be hosted centrally versus consumable services provided by local jurisdictions
- Determine where data gaps exist in both availability and sustainability (currency of data), and formulate a plan to augment and maintain data in these areas
  - Needs for individual assistance to jurisdictions should be identified and outlined
  - The goal of this item is to provide jurisdictions with the necessary information to secure funding (through local, grant or COG funding streams) to procure this data in the future
  - NAVTEQ data as base to fill in regional holes in data availability and simple basemap.

Task 2 Deliverables

2.1 Final data inventory report outline

2.2 Draft data inventory report

2.3 Final data inventory report

2.4 Standalone executive summary document with geospatial data development and maintenance recommendations for individual jurisdictions and the NCR as a whole.

Task 3 System Design

The consultant shall:

- Detail the functionality/requirements for the data exchange.
- Determine what security is needed and work with the CIOs to plan the implementation of the security procedures
    - Utilize Active Directory/LDAP for regional compatibility
    - Allow role-based security
    - Security plan should be consistent across platforms and not require the user to login multiple times
    - Leverage regional security infrastructure to the extent that it is ready
- Identify points of data publication within participating jurisdictions
    - Data standardization tools will have to be developed to ensure fluency and continuity of data
    - CAD to CAD project in Virginia
    - Data Exchange project in Maryland
    - Viper, Virtual USA, ArcGIS.com, DC Google Earth, Maryland PSIC portal, UCIDS
    - Data currently not being published could be housed in PG County on MD infrastructure
    - Identify Federal partners sharing data feeds of their data
        - USGS
        - NOAA
        - USDOT
        - DHS

- Review existing systems:
    - HIRA servers and software to handle the load anticipated from the service
    - Maryland PSIC hardware as a hub for anything not fed as a live data source from the jurisdiction
    - Define what servers in what jurisdictions will best fill the needs of the group as a whole
    - Review existing CAD to CAD systems and design an schema for common data exchange services that could be consumed by other systems (CAD, COP, Spatial Database, other)
- Identify the hardware and software requirements for the data exchange.
    - The reuse of existing hardware and software, for example from the MD Data Exchange project and the Northern Virginia CAD to CAD should explicitly be studied and discussed. Reuse/expansion of existing systems is encouraged to the extent practical.
    - The hardware and software requirement shall include detailed specifications and budget estimates for any additional hardware or software required for implementation. The District of Columbia is holding $150,000 for the potential purchase of hardware and software for the geospatial data exchange hub. The District will be responsible for procuring all hardware and software.

- Identify or develop an indexing system for discovery of shared services and hosted data
- Make recommendations on how much data is housed centrally (mirrored) and how much is delivered straight from the source

- Develop test plan
    - Test initial post of each dataset
    - Test periodically the availability of published data
    - Provide testing of available bandwidth and suggest changes to allocation during emergency events

- Draft Inter-jurisdictional Service Level Agreement (SLA) between all jurisdictions to ensure availability including funding for maintenance and assurance that the system will be 99% available

Task 3 Deliverables:

3.1 Draft system requirements
3.2 Final system requirements
3.3 Draft security plan
3.4 Final security plan
3.5 Draft system design
3.6 Final system design
3.7 Draft test plan
3.8 Final test plan
3.9 Draft Inter-jurisdictional Service Level Agreement
3.10 Draft Final Inter-jurisdictional Service Level Agreement

Task 4. System Implementation and Testing

The consultant shall:

- Implement security for the system that is consistent with current CIO defined security capabilities and that will also safeguard the data
    - The security structure may change over time as identity management tools become available
    - Credentials are passed from the index service login to the jurisdictional hub to allow/deny access to each individual dataset
    - Build a functional database of users classified by groups for distributing data access

- Develop procedures for allowing jurisdictions to publish web services for their data
    - Create a "Publish" button in and form in ArcGIS versions 9.3.1 and 10.1.
        - As jurisdictions develop and update event specific data during an emergency event, each jurisdiction must have the ability to "publish" this dataset to the region with minimal interruption to the workflow in the emergency environment.
        - The regional partners will be notified of NEW or UPDATED data sets available through the service.

    - Create a "Remove" button in ArcGIS and on the Portal to stop sharing the dataset when it is no longer applicable.
- Develop links to existing web services that can be consumed
    - Links will be indexed in the system
    - Data stewards will be contacted by the contractor and advised of the consumption of their products be the system
- NCRNet is primary delivery backbone
- Contractor will have to coordinate with NCRNet to ensure coverage
- Preliminary guide to what is available through the exchange
- Conduct comprehensive testing of the system
    - Consistent operation of data redundancy
    - The ability to publish datasets by every jurisdiction

Task 4 Deliverables:

4.1 Hardware Installed
4.2 Software Installed
4.3 Development 50% of capability
4.4 Draft1 data exchange
4.5 Testing Report Round 1
4.6 Draft 3 data exchange
4.7 Testing Report Round 2
4.8 Final system delivery
4.9 Draft desktop publication button and form ArcGIS 9.3.1 and 10.1
4.10 Final desktop publication button and form ArcGIS 9.3.1 and 10.1

Task 5. Training

Contractor will create and proctor the following training sessions and deliver training materials. Contractor will provide technical support and installation support for any soft solutions necessary to carry out all of the training classes.

Task 5 Deliverables:

5.1 Draft curriculum and training materials
5.2 Final curriculum and training materials
5.3 Five hands-on training classes for up to 12 GIS specialists each
    - Government will provide training facility and equipment
    - Contractor will provide training materials
        - User documentation
        - Curriculum
        - Instructor
5.4 Two lecture / demo training classes for up to 15 executive users each
5.5 One train the trainer session for up to 15 users

Selection Scoring and Proposal Guidelines

This is closed competition for firms on the DCAM-2010-D-0053 contract. Proposals are limited to 25, 8.5"x11" pages including executive summary and attachments. The most qualified firm will be selected in accordance with the following criteria:

40pts Project understanding and approach: In narrative form please describe your understanding of and approach to the project. Please discuss deliverables and timelines

20pts Resumes and roles. Proposers shall provide a collection of resumes that clearly demonstrate a collection of individuals that possess the professional credentials, experience and technical ability to administer / manage their contracts. Please include a project organization chart. (Maximum five, 8.5x11 pages)

20pts Projects: Proposers shall provide a portfolio of projects that in combination represent the proposer's strength and ability to address data exchange and homeland security geospatial projects.(Maximum five, 8.5x11 pages)

20pts Schedule: A detailed and realistic schedule that completes the project prior to September 1, 2011. It is assumed that some tasks will run in parallel. The schedule should call out each deliverable and the dependencies between them.

The most qualified firm will be asked for a cost quotation. Cost: The most qualified respondents shall use price sheet included in this scope of work. Respondents should also provide a detailed cost justification that includes labor categories, hours, rates, and expenses for each deliverable. Initial questions should be delivered to the Contracting Officer within one week of the issuance of this RFTOP.

Pricing and Payment schedule:

A lump sum payment shall be for accepted deliverables. The cost proposal should follow the format below:

Tasks and Deliverables	Cost
Task 1 Stakeholder coordination	
1.1 Stakeholder coordination meeting notes round one.	$ -
1.2 Summary of findings round one coordination meetings.	$ -
1.3 Stakeholder coordination meeting notes round two,	$ -
1.4 Summary of findings round two coordination meeting.	$ -
1.5 Stakeholder coordination meeting notes round three	$ -
Subtotal	**$ -**
Task 2 Data Inventory	
2.1 Final data inventory report outline	$ -
2.2 Draft data inventory report	$ -
2.3 Final data inventory report	$ -
2.4 Standalone data inventory executive summary document	$ -
Subtotal	**$ -**
Task 3 System Design	
3.1 Draft system requirements	$ -
3.2 Final system requirements	$ -
3.3 Draft security plan	$ -
3.4 Final security plan	$ -
3.5 Draft system design	$ -
3.6 Final system design	$ -
3.7 Draft test plan	$ -
3.8 Final test plan	$ -
3.9 Draft Inter-jurisdictional Service Level Agreement	$ -
3.10 Draft Final Inter-jurisdictional Service Level Agreement	$ -
Subtotal	**$ -**
Task 4 System Implementation and Testing	
4.1 Hardware Installed	$ -
4.2 Software Installed	$ -
4.3 Development 50% of capability	$ -
4.4 Draft1 data exchange	$ -
4.5 Testing Report Round 1	$ -
4.6 Draft 2 data exchange	$ -
4.7 Testing Report Round 2	$ -
4.8 Final system delivery	$ -
4.9 Draft desktop publication button and form ArcGIS 9.3.1 and 10.1	$ -
4.10 Final desktop publication button and form ArcGIS 9.3.1 and 10.1	$ -
Subtotal	**$ -**
Task 5 Training	
5.1 Draft curriculum and training materials	$ -
5.2 Final curriculum and training materials	$ -
5.3 Five hands on training classes for up to 12 GIS specialists each	$ -
5.4 Two lecture / demo training classes for up to 15 executive users each	$ -
5.5 One train the trainer session for up to 15 users	$ -
Subtotal	**$ -**
Total	**$ -**

ATTACHMENT B

DEPARTMENT OF SMALL AND LOCAL BUSINESS DEVELOPMENT
CONTRACT COMPLIANCE DIVISION

SUBCONTRACT SUMMARY FORM

This SUMMARY form is to be completed by the PRIME contractor

BID NO.	CCB NUMBER:	____ of ____ pages
* NOTE: The standard for minority subcontracting is 25% of the TOTAL contract dollar amount to be subcontracted.	AMOUNT OF PRIME CONTRACT: $____ AMOUNT OF ALL SUBCONTRACTS: $____ equals ____% OF THE PRIME CONTRACT.	
NAME OF PRIME CONTRACTOR: TELEPHONE NO.	ADDRESS:	
PROJECT NAME: ADDRESS: WARD NO.:____	PROJECT DESCRIPTIONS:	

SECTION II — LIST ALL SUBCONTRACTORS THAT WILL BE UTILIZED ON THE ABOVE PROJECT

1. NAME OF SUBCONTRACTOR 2. ADDRESS 3. CONTACT PERSON 4. MBOC CERT. NO. — 5. PHONE NO.	1. IS THIS A *MINORITY SUB? ____ YES ____ NO 2. TRADE OR BUSINESS PRODUCT THAT SUB WILL PROVIDE.	1. $ AMOUNT OF SUBCONTRACT equals(=) 2. ____% (percent) OF TOTAL PRIME CONTRACT.
1. 2. 3. 4. 5.	1. MINORITY SUBCONTRACTOR ____ YES ____ NO 2.	1. $____ equals(=) 2. ____%
1. 2. 3. 4. 5.	1. MINORITY SUBCONTRACTOR ____ YES ____ NO 2.	1. $____ equals(=) 2. ____%
1. 2. 3. 4. 5.	1. MINORITY SUBCONTRACTOR ____ YES ____ NO 2.	1. $____ equals(=) 2. ____%
1. 2. 3. 4. 5.	1. MINORITY SUBCONTRACTOR ____ YES ____ NO 2.	1. $____ equals(=) 2. ____%
1. 2. 3. 4. 5.	1. MINORITY SUBCONTRACTOR ____ YES ____ NO 2.	1. $____ equals(=) 2. ____%
1. 2. 3. 4. 5.	1. MINORITY SUBCONTRACTOR ____ YES ____ NO 2.	1. $____ equals(=) 2. ____%
1. 2. 3. 4. 5.	1. MINORITY SUBCONTRACTOR ____ YES ____ NO 2.	1. $____ equals(=) 2. ____%
1. 2. 3. 4. 5.	1. MINORITY SUBCONTRACTOR ____ YES ____ NO 2.	1. $____ equals(=) 2. ____%
1. 2. 3. 4. 5.	1. MINORITY SUBCONTRACTOR ____ YES ____ NO 2.	1. $____ equals(=) 2. ____%
1. 2. 3. 4. 5.	1. MINORITY SUBCONTRACTOR ____ YES ____ NO 2.	1. $____ equals(=) 2. ____%
1. 2. 3. 4. 5.	1. MINORITY SUBCONTRACTOR ____ YES ____ NO 2.	1. $____ equals(=) 2. ____%

TOTAL DOLLAR AMOUNT SUBCONTRACTED TO *MINORITY BUSINESS ENTERPRISES. $____

PERCENT OF PRIME CONTRACT. ____%