District of Columbia Government
Emergency Management Agency

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Multi – Year Floodplain Management Strategic Plan

2005 – 2009

"Planning, Prevention, Protection and Partnership"



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DISTRICT OF COLUMBIA
MULTI-YEAR FLOODPLAIN MANAGEMENT
STRATEGIC PLAN

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DISTRICT OF COLUMBIA
MULTI-YEAR FLOODPLAIN MANAGEMENT
STRATEGIC PLAN

PURPOSE

The Federal Emergency Management Agency (FEMA) Community Assistance Program – State Support Services Element (CAP-SSSE) provides the mechanism for ensuring that the District of Columbia and other National Flood Insurance Program (NFIP) communities achieve flood loss reduction goals. CAP-SSSE provides technical assistance to NFIP communities; evaluates community performance in implementing NFIP floodplain management activities; and develops community-based floodplain management expertise.

The Multi-Year Floodplain Management Program Strategic Plan (FMSP) describes the needs and measurable priorities for increasing the effectiveness of the existing floodplain management program, beginning FY 2004-2009. Formation of this plan represents the commitment of the District Government to assume a larger role toward achieving increased floodplain management compliance; and conveys the vision for the District of Columbia Emergency Management Agency (EMA); the Department of Health (DOH), and public and private stakeholders to achieve "state-level" NFIP performance.

BACKGROUND

The District of Columbia Floodplain Management Program supports the hazard mitigation strategy, as described in the approved District Multi-Hazard Mitigation Plan. The FMSP governs implementation of the following actions:

- Flood assessments and risk analyses
- Flood Plan development and maintenance
- Effective grant management and program administration
- Pre-disaster flood mitigation, floodplain and stormwater management
- Delivery of quality floodplain management services
- Strategies and permanent post-disaster construction to abate repetitive loss
- Detailed engineering analyses and development of digital flood insurance rate maps
- Community hazard awareness and education
- Preventive measures supporting sustained protection against future flood disasters

In addition, the FMSP embraces the efforts addressed in related plans including the Flood Mitigation Assistance Plan and the Multi-Hazard Flood Map Modernization Business Case.

The ultimate floodplain management goal is to significantly reduce personal and economic flood loss through effective implementation of NFIP and active participation in the Community Rating System (CRS). Meeting these objectives will result in sustained protection, fewer property losses and economic benefits in the form of lower flood insurance premiums.

I. State Authorities for Floodplain Management

The following laws and regulations govern the District of Columbia Floodplain Management Program:

1. DCMR Title 20, Chapter 31, Flood Hazard Rules

2. D.C. Law 2-23 (The District of Columbia Soil Erosion and Sedimentation Control Act of 1977)

3. D.C. Law 1-64 (District of Columbia Applications Insurance Implementation Act of 1976); D.C. Code 5-301; Mayor's Order 84-193, dated November 2, 1984

4. D.C. Law 8-36 (The District of Columbia Environmental Policy Act of 1989)

5. D.C. Law 6-216 (Construction Codes Approval and Amendments Act of 1986)

6. Clean Water Act, 33 U.S.C. 1251 et. seq.

7. D.C. Law 5-188 (The District of Columbia Water Pollution Control Act of 1984, and subsequent amendments)

8. DCMR 21 Chapter 5 (D.C. Soil Erosion and Sediment Control and Stormwater Management Regulations)

During FY 2003 EMA secured Pre-Disaster Mitigation Planning Grant funds to support a project to analyze, review and revise the DCMR 20, Chapter 31 (D.C. Flood Hazard Regulation) legislation. FEMA Region 3 conducted a detailed review of the Flood Hazard Regulation. The FEMA Region 3 Liaison to the District of Columbia completed a preliminary review, provided recommendations to assure compliance with the National Flood Insurance Program and facilitate the transformation of the District into a CRS community. FEMA's recommendations will be incorporated into the final regulation. The project is scheduled for completion in December 2005.

II. The 5-Year Vision for Floodplain Management in the District of Columbia

A. Current Efforts

Agency Responsibilities

The DOH, Watershed Protection Division, Sediment and Storm Water Technical Services Branch develops and implements storm water management, erosion and sediment control and floodplain management programs. The major functions of the Branch are:

1. Review construction and grading plans for storm water management, erosion and sediment control, and floodplain management;

2. Coordinate the permit review process with the Department of Consumer and Regulatory Affairs (DCRA);

3. Review environmental impact screening forms (EISFs) and environmental impact studies;

4. Review geotechnical reports;

5. Develop and upgrade storm water management, erosion and sediment control, and floodplain management regulations, and guidance manuals;

6. Provide information on soil types and characteristics;

7. Provide information on flood zones and availability of flood insurance in support of NFIP;

8. Provide technical assistance on storm water management, erosion and sediment control and floodplain management issues.

EMA coordinates the response to emergencies, disasters and catastrophic events. EMA has primary responsibility for saving lives and protecting property against hazards of all types. EMA administers an aggressive hazard mitigation program that helps District citizens and businesses reduce disaster losses. EMA supports NFIP through the following actions:

1. Develop and maintain flood mitigation and related community-based emergency plans;

2. Inventory floodprone areas and other hazard data;

3. Facilitate partnership with District agencies and FEMA regarding flood mitigation issues;

4. Collaborate with public and private stakeholders concerning all-hazard risk analysis, mitigation and critical infrastructure protection;

5. Promote the NFIP, flood insurance protection and flood mitigation through community outreach and education;

6. Conduct community activities to promote all-hazard awareness, prevention and protection;

7. Identify grant funding opportunities supporting hazard mitigation planning, technical assistance and structural project development;

8. Identify prospective mitigation project opportunities, secure grant funds and facilitate project development;

9. Promote measures to significantly minimize or permanently protect against future damage.

10. Support professional development of District personnel responsible for emergency response and recovery.

Emergency Management Accreditation

Beginning October 2002, EMA convened meetings with District Government agencies to assemble documentation in support of the National Emergency Management Association Emergency Management Accreditation Program (EMAP). The EMAP Standard is a rigorous national standard for local, tribal and state emergency management programs. EMAP is designed as a tool for continuous improvement as part of a voluntary accreditation process. As of June 2003, the District Hazard Mitigation Plan is fully compliant with all EMAP standards, as required under the National Fire Protection Association 1600 Standard on Disaster/Emergency Management and Business Continuity Programs. This activity provided an opportunity for EMA to compile data on a government-wide basis to more comprehensively address all-hazard mitigation concerns and provided an opportunity to promote hazard mitigation concepts to each District Government agency.

Interagency Partnerships

The partnership between EMA and DOH enhances the ability for the District Government to target and fund flood mitigation projects; identify map modernization needs; assist citizens with obtaining flood zone determinations; promote the flood insurance program; and encourage proactive flood mitigation measures through community education.

DOH collaborates with regional organizations including the U.S. Environmental Protection Agency Chesapeake Bay Program, the Interstate Commission on the Potomac River Basin (ICPRB), the Metropolitan Washington Council of Governments (MWCOG) to address shared environmental concerns. These organizations include public and private partners from Maryland, Virginia and the District of Columbia.

EMA partners with the D.C. Local Emergency Planning Council, Inc. (LEPC) to address environmental issues; monitor and inform the public about the use of hazardous chemicals; coordinate emergency management training; and address environmental concerns associated with the development of proposed hazard mitigation projects. The membership is composed of representatives from the emergency management community, higher education institutions; environmental interest organizations; business leaders, chemical trade and professional associations; the media, utility companies; District and Federal government agencies. EMA collaborates with other regional organizations including the MWCOG, the National Capital Region HAZUS-MH Usergroup,

and the Anacostia River Business Coalition. EMA has established alliances through public-private partnerships, leveraging an estimated $725,000 in "soft" or in-kind contributions.

The D.C. Water and Sewer Authority - Drainage Committee (WASA-COMM) was established in 1955 as a working group to review and investigate citizen drainage complaints. The Committee includes representatives from the DOH, EMA WASA, the D.C. Department of Transportation (DDOT), DCRA and the Department of Public Works (DPW). Committee meetings are convened on a monthly basis. Also, the members conduct field investigations, as necessary, to remedy flood control issues. The multi-disciplinary approach enables the Committee to propose a holistic course of action to address complex, controversial or costly issues associated with the flood and drainage problems.

The alliance with the Committee has proven to be extremely beneficial for all parties. The Committee identifies problem areas for potential flood mitigation project development. Typical flood control projects include culvert and pipe enlargements, catch basin and inlet enhancements. The interaction promotes increased efficiency and cost-effectiveness concerning the integration and completion of multiple construction projects, including those involving aspects of hazard mitigation. EMA routinely provides updates on FEMA programs, including hazard mitigation and map modernization planning requirements and grant funding opportunities. This informational exchange enables the Committee to fund "unmet needs". Conversely, this interface enables EMA to fulfill its mandate by involving public and private stakeholders in the hazard mitigation planning process, as required by Section 322 of the Disaster Mitigation Act; and the flood mitigation planning processes supporting the FMA and NFIP.

The Office of the Chief Technology Officer (OCTO) has proven extremely helpful in facilitating access to various datasets and technology supporting the all-hazard mitigation-planning component. In addition, they provide technical assistance and personnel to support future map development, including collaborations with alternative mapping sources.

Low Impact Development

Traditionally, the District of Columbia emphasizes the use of conventional best management practices that control both the quantity and quality of storm water runoff. Quantity control helps to mitigate flooding while quality control helps to improve runoff water quality. However, the Chesapeake 2000 Agreement, the 2001 Chesapeake Executive Council Directive 01-1 on storm water management, and the Municipal Separate Storm Sewer System (MS-4) Permit requirements under the Clean Water Act, required DOH to aggressively encourage developers to incorporate, where feasible, the use of low impact development (LID) measures in their site development. In combined sewer systems, LID can help reduce the speed and volume of runoff through infiltration to vegetated areas and temporary storage, thereby reducing

overflows. The District intends to encourage the use of LID technologies in its floodplain management program as one of the tools for flood hazard mitigation and to assist the District's Long Term Control Plan for Combined Sewer Overflows (CSOs).

Stormwater Management

The District of Columbia Storm Water Management Program was developed in response to the 1983 Chesapeake Bay and the 1984 Anacostia Restoration Strategy Agreements, to which the District is a signatory. The main focus of the program is to ensure through a regulatory mechanism that developers use Best Management Practices (BMPs) (either structural or non-structural) to control both the quantity and quality of storm water runoff from new development or retrofit projects. In order to more effectively accomplish the goal of the program, DOH developed a *Storm Water Management Guidebook* to provide design engineers, architects, developers and urban planners the necessary information to meet the regulatory requirements.

The storm water program requires any person developing land in the District of Columbia to comply with a set of minimum criteria including: (a) submitting management measures necessary to maintain the post-development peak discharges for a 24-hour, 2-and 15-year frequency storm event at a level that is equal to or less than the respective, 24-hour, 2-and 15-year pre-development peak discharge rate through storm water management practices that control the volume, timing and rate of flows; b) Ensuring that where a development is planned in which the storm water runoff will increase the downstream discharge into an area designated as a flood hazard watershed, as delineated on the National Flood Insurance Flood Hazard Boundary Maps (FHBM), the developer complete an analysis of the downstream peak discharge for the one hundred (100) year frequency storm event, and install the appropriate controls to avoid exceeding this peak discharge; and (c) ensuring that all storm water management plans, conform to the District of Columbia flood management, erosion and sediment control plans.

Erosion and Sediment Control

Title 21, Chapter 5 of the District of Columbia Municipal Regulations (DCMR) contains both the soil erosion and sediment control and the storm water management regulations that are used to implement D.C. Laws 2-23 and 5-188. The erosion and sediment control regulatory program focuses on the prevention and control of sediment deposition and accumulation in city sewers and pollution of the Potomac River and its tributaries by requiring developers to submit erosion and sediment control plans to the Department of Health for review and approval before a building permit can be issued for land disturbing activities. The DOH Erosion and Sediment Control Program complements both the Storm Water and Floodplain Management Programs.

Education and Outreach

DOH promotes outreach related to floodplain management by hosting technical workshops for design engineers, architects, planners and land developers on innovative approaches to storm water management and floodplain management in ultra-urban areas. Also through the building permit process, DOH provides developers with information regarding compliance with flood hazard regulations.

EMA and DOH promote NFIP by conducting and/or participating in community events. During these events the agencies distribute FEMA and state-developed literature; conduct orientations, exhibits, workshops and seminars to provide detailed information concerning protective measures that significantly reduce or eliminate the impact of future hazards on lives and property; promote NFIP/flood insurance; and provide details on FEMA hazard mitigation programs. During FY 2003 EMA conducted and/or participated in 23 community events, including orientations, seminars and exhibits. The most notable event is the NBC Channel 4, Health and Fitness Expo. This event attracts an average of 6,500+ participants. EMA has been a participant in this single event since 1997! During the FY 2004, first quarter, EMA conducted six community activities to promote all-hazard mitigation; and eight activities involving outreach to stakeholders. Refer to Appendix A for the detailed Inventory of Hazard Mitigation Planning Meetings and Community Events.

DOH promotes NFIP by providing two personnel to staff the "DCRA Permit Service Center" on a daily basis. During periods of low activity, personnel service approximately 18 clients daily. During peak periods, they service approximately 35 customers each day. This operation involves collaboration between DCRA and DOH to assist business developers, and other permit applicants seeking general information regarding permits, application materials and technical assistance. DOH has a specific responsibility for ensuring that permit applications, construction plans and environmental forms and other documents that are submitted to acquire a permit, meet the regulatory requirements for sediment and erosion control, floodplain and stormwater management. DOH interacts with customers to review an average of 2,000 construction plans each year. In the DOH-Watershed Protection Division, engineers service approximately 10-15 clients each day to assure compliance with sediment and erosion control, floodplain and stormwater management.

B. Program Strengths

1. Partnerships: The District demonstrates strong capability for establishing intra- and interagency liaisons through partnerships with the private and Federal sectors. However, there is a need for the District to consider developing project collaborations with counterparts in Prince George's and Montgomery Counties in Maryland and contiguous jurisdictions in Northern Virginia concerning the development of multi-state mapping products. Also, the District should consider strengthening the partnership with the

U.S. Army-Baltimore District Corps of Engineers, Natural Resource Conservation Service and U.S. Geological Survey to improve mapping precision.

2. Data Management: The District Hazard Mitigation Program and has secured and/or developed data layers applicable to flood mitigation. The layers include the following:

   a. National Flood Insurance Policy data 2004
   b. National Flood Insurance Policy data 2002
   c. WASA Pump Stations
   d. Best Available Data, August 2001 Flood
   e. WASA Drainage Committee Data
   f. WASA Catchbasin/High-Risk Flood Areas
   g. Mayor's Call Center (Hanson System) Flood Data
   h. Neighborhood Flood Frequency Data

   The Office of the Chief Technology Officer has contacted U.S. Geological Survey (USGS) to obtain higher resolution Digital Elevation Modeling Sets (DEMS) to support the watershed modeling effort. OCTO requested 2.5 and 5 meter DEMs at USGS standards to support hydrological modeling for DOH and EMA. Unfortunately, OCTO has not been able to fund the project. In addition, OCTO is attempting to coordinate with NGA to discuss the possibility of the military providing high quality LIDAR to support emergency response in the National Capital Region and meeting the hydrological modeling needs.

3. Community Hazard Awareness and Education

   The DOH and EMA implement an aggressive community-based hazard awareness and community education program. As evidenced by the detailed Inventory of Planning Meetings and Community Events. Refer to Appendix A. On September 8-10, 2004, EMA utilized CAP-SSSE funds for the American Society of Civil Engineers to conduct the Hydrologic Engineering Center's-Riverine Analysis System (HEC-RAS) Course for 16 engineers from DOH, WASA and the DDOT. This action improves the ability for engineers to analyze plans for projects along District waterways and increases the professional capability available for future development of flood mitigation projects.

4. Enforcement of Floodplain: DOH is more aggressively enforcing flood hazard regulations with respect to proposed development in the floodplain. These actions assure that commercial development in the floodplains is scrutinized for compliance with NFIP and local regulations to reduce flood risks. In addition, these efforts are supported by markedly increased coordination with FEMA, WASA, DDOT and EMA. In 2003, the District of Columbia adopted the International Building Code, which supports stringent land development, zoning and floodplain ordinances.

C. Program Weaknesses

1. Automation of essential services: DOH capability for completing flood zone determinations will require information management expertise to automate the Floodplain Coordinator's existing business routines; including program management and project monitoring, flood zone determinations; tracking and reporting applications for program activities; establishing a floodplain management web portal to effectively promote flood hazard awareness and disseminate flood map information.

2. Data Management: EMA unsuccessfully attempted to secure datasets from FEMA during the August 2001 flood and Hurricane Isabel. This assistance is necessary, as the data would significantly to the inventory of best available flood data. This information used for plan development, GIS map development and delineation of high-risk flood areas, coordination of preparedness and recovery actions and coordinated community outreach.

3. Administrative Staff Support : At a minimum, DOH will require one full time environmental engineer devoted solely to floodplain management. If available, additional staff support should include: (1-2) GIS/Information Management Specialists, (1) Administrative Assistant for data collection and entry; and (1) Staff Assistant to provide administrative support, field and document phone inquiries.

4. Financial and Resource Opportunities: DOH and EMA do not anticipate marked reduction in FEMA funding. The Mitigation Officer and Floodplain Manager will endeavor to identify non-FEMA funds to sustain the District Floodplain Management Program. In addition, OCTO coordinates with other liaisons to secure funds and technological resources for hydrologic mapping, including higher resolution maps.

5. Professional staff development: DOH and EMA sponsor professional development courses. However, additional expertise is required in the following areas: Advanced HEC-RAS Modeling, Benefit Cost-Analysis, Advanced Floodplain Management Concepts, Design of Flood Protection Systems, GIS Mapping, HAZUS-MH for Floods, Storm water Management Model Course and a CRS Course for Program Managers. Additionally, increased numbers of personnel require accreditation Certified Floodplain Managers or Certified Emergency Managers.

6. Increased partnership with outlying jurisdictions: The District intends to increase the partnership with Region 3 Floodplain Managers to exchange information and remain abreast of current technologies and trends in floodplain management. There is a need for increased participation in the Association for State Floodplain Managers and similar professional organizations. In addition, the District needs promote the creation of inter-

jurisdictional mapping projects and information/technology exchange with contiguous counties in Maryland and Virginia.

III. Strategy to Improve Floodplain Management

The District of Columbia intends to improve the existing floodplain management program by achieving the following short-term objectives:

- Establish and maintain a premier data collection and delivery system
- Achieve effective program management
- Build and maintain mutually beneficial partnerships
- Expand and better inform the user community

Long-term, the District Floodplain Management will secure the necessary technology and technical training to improve service delivery supporting implementation of the National Flood Insurance Program, actively participate as viable Cooperating Technical Partners and receive accreditation as a participate in the Community Rating System (CRS)

Refer to Appendix B – Fundable Floodplain Management Activities for the detailed schedule of project activities, partnerships, milestones and performance measures, estimated manpower and projected expenses. Close coordination will be required for District officials to discuss acceptable standards for the completion of Community Assistance Visits and Community Assistance Contacts, efforts to promote NFIP compliance, in the absence of a historical NFIP violations records.

IV. Needs Assessment and Gap Analyses

As a territory of the United States, District of Columbia has the inherent character of a city, county and state. This unique attribute compels the District Government to develop partnerships vertically, among operational (first responders), coordination, and policy groups and horizontally through multiple departments. Additionally, this distinctive character facilitates interaction with various Federal and State government organizations and multiple jurisdictions in the National Capital Region (NCR). Within this highly charged and complex context, working with a staff of eight engineers, the District Floodplain Coordinator is responsible for the following:

- Program administration and project management
- Plan review and permit activities
- Ordinance maintenance
- All map modernization activities
- Environmental issues, including preservation, historic, environmental health and justice
- Flood zone determinations
- Erosion and sediment control
- Interagency partnerships, e.g., with EMA, the WASA Drainage Committee

- Emergency readiness and recovery
- Flood mitigation and planning

Given the constraints of District personnel and resources, a comprehensive and detailed user needs assessment for Floodplain Management Program and flood mitigation planning effort has not been conducted to support a user assessment and gaps analysis. The District proposes to complete a detailed assessment of floodplain management and planning user needs and requirements within the first six (6) months of plan implementation. After completion of the User Needs Assessment, the District will have the necessary data to analyze gaps in meeting the objectives of the Multi-Year Floodplain Management Strategic Plan against the funding levels through FY 2009. In addition, the Multi-Hazard Map Modernization Business Plan is pending FEMA approval. Upon completion of the Multi-Hazard Implementation Plan (MHIP) the District will use the approved Multi-Year Floodplain Management Strategic Plan and the MHIP to project ordinance assistance requirements; develop an approach for the new map distribution to all District communities; and identify gaps in personnel, budgetary, data and information requirements.

The Floodplain Coordinator's highest ranking priorities for completing the comprehensive user needs assessment for the floodplain planning and mapping include, establishing an interactive web portal, including web applications to support mapping/hazard identification, flood zone determination, dFIRMs production, and impermeability analyses.

Floodplain Management Users Needs

In 1995 a consortium of District of Columbia agencies formed to implement a central, comprehensive, enterprise-wide GIS. The objective of the consortium is the development of current, accurate digital maps, and databases that are linked through a geographic component, as well as applications to view and query data. The Office of the Chief Technology Officer (OCTO) is responsible for implementing and managing D.C. GIS. OCTO's tasks include map conversion and database and application development, agency coordination, hardware and software implementation and training, as well as updating procedures for the central GIS.

The D.C. Office of the Chief Technology Officer (OCTO) provides the District of Columbia with extensive information resources on the Internet and in the D.C. Enterprise GIS available across the Web. OCTO's services include dataset search capabilities, FGDC compliant GIS metadata, the D.C. Atlas, the D.C. Guide, orthophotography and imagery, planimetric data, real property and street centerline data services. The D.C. Atlas is a web-based tool to display maps and find information and links to other resources. The Emergency Information Center serves as the central source for accurate emergency information. The D.C. Guide assists citizens in learning more about the District through mapping, routing, and providing links to other resources and maps. Metadata on the OCTO GIS website is compliant with the Federal Geographic Data Committee's (FGD.C.) *Content Standard for Digital Geospatial Metadata (CSDGM)* and the Environmental

Systems Research Institute (ESRI) profile of the CSDGM. All of the GIS data and metadata are available to the DOH. Appendix C summarizes the GIS data available for floodplain management and planning. The District of Columbia Enterprise GIS provides FEMA with a wealth of data to support any and all of FEMA's programs.

Nevertheless, working together on Map Modernization FEMA and the District of Columbia have identified critical gaps in the data availability to support the Map Mod Program. Specifically, the Digital Elevation Models (DEMs) in the D.C. Enterprise GIS are inadequate to support Map Modernization. The District of Columbia has 1m, 5m, and 10m contours that were created from the DEM, however, the contours represent derivative products that are not derived from planimetric DEM files, but rather from sample grids and contour vertices, and consequently, do not map the topography of DC accurately enough to generate a usable DEM or to generate 1 meter or 5 meter contours required to improve the District's dFIRMs.

Preliminary Assessment of Major Gaps

A preliminary assessment of major gaps in strategic floodplain planning in meeting the strategic plan objectives can be synthesized around gaps in knowledge and gaps in resources available to support floodplain management with information technology. The knowledge gap between data/technology providers and floodplain management end users is an important issue to address. A significant gap exists between existing GIS, technology products and their deployment, and floodplain management needs for refined information and applications to address the specific problems of the WPD daily workflow. There is a need for better dissemination of information on available data products and tools, as well as training on how to use them. Overarching the technical issues and challenges, the budget gap must be addressed in order to apply existing capabilities to interagency and regional needs.

V. Map Modernization Activities

The District of Columbia Map Modernization Business Case Plan supports the development of a data collection and delivery mechanism that provides accessibility to reliable flood and multi-hazard data. The map modernization process encourages data sharing and improved coordination among floodplain management stakeholders. Also, the Business Case defines measures the District will employ to foster public and stakeholder awareness of flood data sources; and promote an understanding of data analysis to reduce the vulnerability to natural and man made hazards.

It is recommended that the District of Columbia be considered for a planned restudy to ascertain whether changes in land development would require changes to the existing flood hazard ordinance.

DOH and EMA will conduct the following activities to ensure the residents of the District of Columbia adopt the new digital FIRMs:

1. Provide details of the map modernization efforts on District Government website along with press releases, radio and television public service announcements.

2. Complete mass mailings would be sent to the District's Advisory Neighborhood Commissioners by January 30, 2005 to solicit comments from the public. Public hearings would be held in April 2005 to evaluate and address comments on preliminary DFIRMS, and in July 2005 to finalize prototypes. It is anticipated that the DFIRMS should be ready for distribution to the public in October 2005.

The territory of the District of Columbia is considered as a single community 110001. Therefore the outreach strategy would target the entire jurisdiction.

The existing floodplain management program intends to support the map modernization process by implementing the program utilizing interagency partnerships, EMA, DOH and OCTO personnel resources, and contractual support.

Information Management and Interagency Partnerships

The District will utilize existing interagency alliances to support the acquisition of datasets, maps and technologies. Independent of this grant, EMA has secured information from public and private stakeholders. EMA and DOH will aggressively pursue similar opportunities to develop new data and interoperable technologies.

1. Personnel Resources

The following personnel will be utilized to support flood mitigation, floodplain management and map modernization activities.

District Government Floodplain Management Resources			
Position	% Time Available	Agency	Programs
Hazard Mitigation Officer	Full-Time (100%)	EMA	CAPSSSE, FMA, HMGP, MMMS, PDM-P, PDM-C
GIS Engineer	Full Time (50%)	EMA	FMA, HMGP, MMMS, PDM-P
NFIP Coordinator	Full Time (60%)	DOH	CAPSSSE, FMA, HMGP, MMMS, PDM-P
Environmental Engineers	(3) Full Time (30%)	DOH	CAPSSSE, MMMS
Environmental Engineers	(2) Full Time (100%)	DOH	CAPSSSE, MMMS
Senior GIS Analyst & Public Safety Sector Liaison	Full Time as necessary	OCTO	MMMS
Contract Services	Hire as necessary	All	CAPSSSE, FMA, HMGP, MMMS, PDM-P, PDM-C

*CAPSSSE – Community Assistance Program State Support Services Element
FMA – Flood Mitigation Assistance Program
HMGP – Hazard Mitigation Grant Program
MMMS – Map Modernization Management
PDM-P – Pre-Disaster Mitigation Planning Grant
PDM-C – Pre-Disaster Mitigation Competitive Grant

2. Activities Promoting Map Adoption

The District Government will utilize various methods to assure involvement in the map development and adoption process. OCTO, EMA and DOH are exploring the acquisition of "cutting-edge" technologies to create a web portal for citizens, businesses, commercial developers, permit and regulatory agencies in the District and Federal sectors. Accessibility to accurate information assures public awareness of Special Flood Hazard Areas, other floodprone locations and NFIP. In addition, discussion of the map modernization process will be integrated into the existing community presentations and exhibits.

VI. System for Evaluating Program Performance

The systematic evaluation of the District Floodplain Management Program will be required to measure losses, establish acceptable levels of performance, track

progress, adjust policies and implement program changes. The evaluation process will involve a combination of the following methods:

A. CIS and Performance-Based Evaluation

The FEMA Community Information System will serve as the central vehicle for documenting program operation and performance. FEMA Region 3, Headquarters personnel, authorized consultants and District officials having responsibility for floodplain management and/or flood mitigation will access the system to remain abreast of programmatic progress. It is anticipated that District officials will populate the system on weekly or at a minimum, monthly basis, providing updates concerning digital map development, professional development and community education, plan maintenance and other program information.

B. Enlist Community and Stakeholder Involvement

DOH and EMA will conduct outreach activities, in the form of meetings, surveys, mass mailings and other measures to disseminate program information and enlist community involvement. These activities will be reported in CIS and progress reports, as appropriate.

C. Progress Reports and Workplans

The development of an annual or bi-annual workplan will aid organizing priorities and realistically planning the subordinate tasks required to successfully meet each milestone. Progress reports will be prepared on a quarterly basis to identify accomplishments, impediments or delays encountered toward achieving the desired performance outcome. In addition, these documents can be used to identify staff shortages, specify needs for supplemental technical support, propose budget adjustments or other operational concerns; and they will reflect the involvement of all sectors in program goals.

D. Site visits and Meetings

FEMA personnel or District officials are likely to conduct meetings and site visits in an ongoing effort to effectively evaluate program performance. These activities will be coordinated through the District Floodplain Manager and/or the District Hazard Mitigation Officer.

It should be noted that measures involving population behavioral changes may require the use of surveys or alternative data collection methods; and accurate evaluation may require multiple years to establish the baseline and track significant progress.

Appendix A

The D.C. Emergency Management Agency has conducted or participated in meetings to promote and familiarize the public and private sectors with the hazard mitigation planning effort, as required under Section 322, Disaster Mitigation Act of 2000 and the National Flood Insurance Act of 1968.

Inventory of Planning Meetings and Community Events						
Date	**Meeting**	**Plans**	**Community Education Event**	**Programs**	**Hazard Identification and Awareness**	**Projects**
6/29/2004	NBC 4 – Safe and Secure Campaign	No	Yes	Yes	Yes	Yes
6/25-30/2004	Homeland Security Information Technology and Evaluation Grant Application Development	Yes	No	Yes	Yes	Yes
6/24/2004	Health and Safety Exhibit Department of Labor - Bureau of Labor Statistics, #2 Massachusetts Ave., NE	Yes	Yes	Yes	Yes	Yes
6/23/2004	DHS Information Technology and Evaluation Program Grant	Yes	No	Yes	Yes	Yes
6/22/2004	EMA Staff Meeting	No	No	Yes	No	Yes
6/21/2004	EMA Core Team	No	No	Yes	Yes	Yes
6/21/2004	Map Modernization Meeting (Mitigation and NFIP Coordinators)	Yes	No	Yes	Yes	Yes
6/18/2004	HAZUS-MH Seminar ARC 2025 E Street, NW	Yes	Yes	Yes	Yes	Yes
6/17/2004	Ward 5-Neighborhood Service Coordinators	No	Yes	Yes	Yes	Yes
6/16/2004	KACIA and the Office of Property Management (Razavi Application Developers)	Yes	No	Yes	Yes	Yes
6/16/2004	Office of Property Management (Edward Hampton)	Yes	No	Yes	Yes	Yes
6/15/2004	EMA Staff Meeting	No	No	Yes	No	Yes
6/14/2004	Emergency Shelter Project (Dr. Michael Chipley)	Yes	No	Yes	Yes	Yes
6/12/2004	North Michigan Park Civic Association 13th and Emerson Street, NW	No	Yes	Yes	Yes	Yes
6/15/2004	EMA Executive Staff	No	No	Yes	Yes	Yes
6/10/2004	Ward 5-Neighborhood Service Coordinators	Yes	Yes	Yes	Yes	Yes
6/8/2004	Map Modernization and Floodplain Management (Mitigation and NFIP Coordinators)	Yes	No	Yes	Yes	Yes
6/7/2004	EMA Staff Meeting – Preparations for Ronald Reagan Funeral	No	No	No	Yes	No
6/7/2004	WASA – Blue Plains Health and Safety Exhibit, 5000 Overlook Drive, SW	No	Yes	Yes	Yes	Yes
6/3/2004	WASA Drainage Committee	No	No	Yes	Yes	Yes
6/1/2004	EMA Executive Staff	No	No	Yes	Yes	Yes
5/27/2004	Ward 5-Neighborhood Service Coordinators	Yes	Yes	Yes	Yes	Yes
5/27/2004	322 Planning Meeting	Yes	No	Yes	No	Yes

Inventory of Planning Meetings and Community Events						
Date	**Meeting**	**Plans**	**Community Education Event**	**Programs**	**Hazard Identification and Awareness**	**Projects**
5/27/2004	EMA/FEMA/WASA Site Inspection 1325 Projects (Mt. Olivet Rd & Rhode Island Avenue)	No	No	Yes	No	Yes
5/26/2004	EMA/FEMA/DOH Map Modernization	Yes	No	Yes	Yes	Yes
5/26/2004	EMA CORE (Hotspot Initiative)	No	No	Yes	Yes	Yes
5/25/2004	EMA Executive Staff	No	No	Yes	Yes	Yes
5/25/2004	Map Modernization and KACIA (Razzavi Application Developers)	Yes	No	Yes	Yes	Yes
5/21/2004	Plans and Training Division	Yes	No	Yes	No	Yes
5/21/2004	Dun and Bradstreet	Yes	No	Yes	Yes	Yes
5/20/2004	Ward 5-Neighborhood Service Coordinators	Yes	Yes	Yes	Yes	Yes
5/18/2004	Monthly Program Performance (EMA Director)	Yes	No	Yes	Yes	Yes
5/17/2004	Plans and Training Division	No	No	Yes	No	Yes
5/12/2004	Map Modernization (FEMA Reg. 3)	No	No	Yes	Yes	Yes
5/11/2004	EMA/FEMA/WASA/NPS Teleconference – Lingan Road	No	No	Yes	No	Yes
5/11/2004	EMA Executive Staff	Yes	No	Yes	No	Yes
5/7/2004	Hazardous Materials Endorsements Teleconference	No	No	Yes	Yes	No
5/6/2004	HAZUS-MH Integration with the KACIA Project (Dr. Michael Chipley)	Yes	No	Yes	Yes	Yes
5/6/2004	WASA Drainage Committee	No	No	Yes	Yes	Yes
5/5/2004	EMA/FEMA/DOH Southeast Federal Center Development	Yes	No	Yes	No	Yes
5/4/2004	EMA/FEMA/DOH Georgetown Boathouse Developers	Yes	No	Yes	No	Yes
5/3/2003	EMA/FEMA 322 Plan Review	Yes	No	Yes	No	Yes
4/30/2004	Plans and Training Division	Yes	No	Yes	No	Yes
4/26/2004	Hotspot Initiative - Program Managers	Yes	Yes	Yes	No	Yes
4/23/2004	Anacostia Business Coalition	No	Yes	Yes	Yes	Yes
4/22/2004	FEMA/District Site Visit	No	Yes	Yes	No	Yes
4/20/2004	Mid-Year Performance Review	Yes	No	Yes	Yes	Yes
4/20/3004	EMA Staff Meeting	No	No	Yes	No	Yes
2/20/2004	Gov't Printing Office-17th Annual Public Safety and Health Exhibit	No	Yes	Yes	Yes	Yes
4/5/2004	Neighborhood Service Coordinators	Yes	Yes	Yes	Yes	Yes
4/2/2004	Teleconference: 1389 Projects	No	No	Yes	No	Yes
3/29-31/2004	Emergency Management Workshop With Historic Black Colleges and Universities (HBCUs), University of Maryland Eastern Shore	Yes	Yes	Yes	Yes	Yes
3/31/2004	Public Safety GIS and Emergency Data Sub-Committee Meeting 441 4th Street, NW	No	No	Yes	Yes	Yes
3/23/2004	Lead Water Quality Workgroup	No	No	No	Yes	No
3/22/2004	EMA Executive Staff Meeting	No	No	Yes	Yes	Yes

Inventory of Planning Meetings and Community Events						
Date	**Meeting**	**Plans**	**Community Education Event**	**Programs**	**Hazard Identification and Awareness**	**Projects**
3/16/2004	Lead Water Quality Workgroup	No	No	Yes	Yes	Yes
3/9/2004	Lead Water Quality Workgroup	No	No	Yes	Yes	No
3/4/2004	TRIDENT	No	No	Yes	Yes	Yes
3/4/2004	WASA Drainage Committee	Yes	No	Yes	Yes	Yes
3/3/2004	Lead Water Quality Workgroup	Yes	No	Yes	Yes	Yes
3/2/2004	WASA Community Meeting 4901 V Street, NW	No	Yes	Yes	Yes	Yes
2/27/2004	Lead Water Quality Workgroup	No	No	Yes	Yes	Yes
2/26/2004	WASA Community Meeting	No	Yes	No	Yes	No
2/26/2004	ITSPATIAL LLC – Technology Integration	Yes	No	Yes	Yes	Yes
2/25/2004	Lead Water Quality Workgroup	No	No	Yes	Yes	No
2/24/2004	EMA Executive Staff	Yes	No	Yes	Yes	Yes
2/23/2004	Traffic Signal Meeting	Yes	No	Yes	Yes	Yes
2/23/2004	WASA Community Meeting 3660 Alabama Avenue, SE	No	Yes	Yes	Yes	Yes
2/23/2004	EMA Director/WASA General Managers Lead Abatement	No	No	Yes	Yes	Yes
2/18/2004	WASA Community Meeting 115 Atlantic Street, SE	No	Yes	Yes	Yes	Yes
2/13/2004	322 Plan Development	Yes	No	Yes	Yes	Yes
2/10/2004	322 Plan Development	Yes	No	Yes	Yes	Yes
1/27/2004	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes
1/22/2004	Emergency Preparedness Council	Yes	No	Yes	Yes	Yes
1/17-18/2004	NBC Channel 4 Health & Fitness Expo	No	Yes	Yes	Yes	Yes
12/23/2003	Performance Based Management (Agency Benchmark)	Yes	Yes	Yes	Yes	Yes
12/18/2003	HMTAP-Traffic Signal Study	Yes	No	Yes	Yes	Yes
12/17/2003	Community Relations-Office on Aging	Yes	Yes	Yes	Yes	Yes
12/16/2003	EMA Executive Staff	Yes	No	Yes	Yes	Yes
12/10/2003	NBC Channel 4 Health and Fitness Expo (Preliminary Exhibitor Meeting)	No	Yes	Yes	Yes	No
12/10/2003	Map Modernization Business Case Plan Development	Yes	No	Yes	Yes	Yes
12/9/2003	322 Plan Development	Yes	No	Yes	Yes	Yes
12/9/2003	EMA Executive Staff	Yes	No	Yes	Yes	Yes
12/6/2003	Office of the Peoples Counsel Exhibit	No	Yes	Yes	Yes	No
12/4/2003	Community Preparedness-State and Local Emergency Operation Planning	Yes	Yes	Yes	Yes	No
12/4/2003	WASA Drainage Committee	Yes	No	Yes	Yes	Yes
12/4/2003	EMA Environmental Review	No	No	Yes	No	Yes
12/2/2003	EMA Executive Staff	Yes	No	Yes	No	Yes
11/25/2003	EMA Executive Staff	Yes	No	Yes	Yes	Yes
11/25/2003	EMA Program Audit	Yes	No	Yes	Yes	Yes
11/24/2003	EMA/FEMA 322 Plan Development	Yes	No	Yes	Yes	Yes

Inventory of Planning Meetings and Community Events						
Date	**Meeting**	**Plans**	**Community Education Event**	**Programs**	**Hazard Identification and Awareness**	**Projects**
11/24/2003	EMA Plans and Training Division	Yes	No	Yes	Yes	Yes
11/24/2003	Public Information-EMA Newsletter	Yes	No	Yes	Yes	Yes
11/21/2003	Debris Management	Yes	No	Yes	No	No
11/21/2003	Map Modernization-Business Case Plan	Yes	No	Yes	Yes	No
11/20/2003	Fall Energy Expo & Consumer Choice Workshop	No	Yes	Yes	Yes	Yes
11/18/2003	EMA Executive Staff	No	No	Yes	Yes	Yes
11/14/2003	EMA Plans and Training Division	Yes	No	Yes	Yes	Yes
11/10/2003	EMA Executive Staff	Yes	No	Yes	No	Yes
11/6/2003	Joint Utility Day Exhibit	Yes	Yes	Yes	Yes	Yes
11/5/2003	Debris Management	Yes	No	Yes	No	No
11/5/2003	Adjusters International Disaster Recovery Services	Yes	No	Yes	Yes	Yes
11/5/2003	Disaster Recovery and Mitigation	Yes	No	Yes	Yes	Yes
11/4/2003	Plans and Training Division	Yes	No	Yes	No	Yes
11/3/2004	NBC-4 Health & Fitness Expo	No	No	Yes	Yes	No
11/3/2003	EMA Executive Staff	Yes	No	Yes	No	Yes
10/31/2003	Map Modernization-Business Case Development	Yes	No	Yes	Yes	Yes
10/29/2003	HMTAP-Repetitive Loss Properties	No	No	Yes	Yes	Yes
10/28/2003	EMA Executive Staff	Yes	No	Yes	No	Yes
10/27/2003	Disaster Field Office	No	No	Yes	No	Yes
10/27/2003	EMA Plans and Training Division	Yes	No	Yes	No	Yes
10/24/2003	Water Resources and Mitigation Needs	Yes	No	Yes	Yes	Yes
10/24/2003	Map Modernization-Business Case Development	Yes	No	Yes	Yes	Yes
10/23/2003	Remedial Assessment Management Program	Yes	No	Yes	No	Yes
10/23/2003	Federal/District Hazard Mitigation Briefing	Yes	Yes	Yes	Yes	Yes
10/22/2003	Disaster Field Office	No	No	Yes	No	Yes
10/21/2003	Community Education and Outreach	Yes	No	Yes	Yes	Yes
10/21/2003	HMTAP-Repetitive Loss Properties	Yes	No	Yes	Yes	Yes
10/21/2003	Disaster Field Office	No	No	Yes	No	Yes
10/20/2003	Disaster Field Office	No	No	Yes	No	Yes
10/18/2003	HMTAP-Traffic Signals	No	No	Yes	Yes	Yes
10/16/2003	Grant and Budget Administration - Chief Financial Officer	Yes	No	Yes	No	Yes
10/15-31/2003	Fiscal Year 2003 Agency Performance Measure Audit	Yes	No	Yes	Yes	Yes
10/15/2003	HMTAP-Traffic Study	Yes	No	Yes	Yes	Yes
10/11/2003	Community Education-Burns Street	No	Yes	Yes	Yes	Yes
10/9/2003	Grant and Budget Administration - Chief Financial Officer	Yes	No	Yes	No	Yes
10/8/2003	Disaster Field Office	No	No	Yes	No	Yes
10/6/2003	Project Development (DPW)	Yes	No	Yes	Yes	Yes

Inventory of Planning Meetings and Community Events						
Date	**Meeting**	**Plans**	**Community Education Event**	**Programs**	**Hazard Identification and Awareness**	**Projects**
10/6/2003	Disaster Field Office	No	No	Yes	No	Yes
10/3/2003	HMTAP-Traffic Study	Yes	No	No	Yes	No
10/3/2003	Disaster Field Office	No	No	Yes	No	Yes
10/2/2003	WASA Drainage Committee	Yes	No	Yes	Yes	Yes
10/2/2003	Disaster Field Office Lee Stubbs – FEMA Headquarters	Yes	No	Yes	Yes	Yes
10/2/2003	EMA Plans and Training	Yes	No	Yes	Yes	Yes
12/4/2003	EMA Environmental Review	No	No	Yes	No	Yes
11/25/2003	EMA Executive Staff	Yes	No	Yes	Yes	Yes
11/25/2003	EMA Program Audit	Yes	No	Yes	Yes	Yes
11/24/2003	EMA/FEMA 322 Plan Development	Yes	No	Yes	Yes	Yes
11/24/2003	EMA Plans and Training Division	Yes	No	Yes	Yes	Yes
11/24/2003	Public Information-EMA Newsletter	Yes	No	Yes	Yes	Yes
11/21/2003	Map Modernization	Yes	No	Yes	Yes	No
11/10/2003	EMA Executive Staff	Yes	No	Yes	No	Yes
11/6/2003	Joint Utility Day	Yes	Yes	Yes	Yes	Yes
11/5/2003	Debris Management	Yes	No	Yes	No	No
11/5/2003	Disaster Recovery and Mitigation	Yes	No	Yes	Yes	Yes
11/3/2003	EMA Executive Staff	Yes	No	Yes	No	Yes
10/31/2003	Map Modernization	Yes	No	Yes	Yes	Yes
10/29/2003	HMTAP-Repetitive Loss Properties	No	No	Yes	Yes	Yes
10/28/2003	EMA Executive Staff	Yes	No	Yes	No	Yes
10/27/2003	Disaster Field Office	No	No	Yes	No	Yes
10/27/2003	EMA Plans and Training Division	Yes	No	Yes	No	Yes
10/24/2003	Map Modernization	Yes	No	Yes	Yes	Yes
10/23/2003	Remedial Action Management Program	Yes	No	Yes	No	Yes
10/23/2003	Federal/District Hazard Mitigation Briefing	Yes	Yes	Yes	Yes	Yes
10/21/2003	Community Education and Outreach	Yes	No	Yes	Yes	Yes
10/21/2003	HMTAP-Repetitive Loss Properties	Yes	No	Yes	Yes	Yes
10/20/2003	Disaster Field Office	No	No	Yes	No	Yes
10/15/2003	HMTAP-Traffic Study	Yes	No	Yes	Yes	Yes
10/8/2003	Disaster Field Office	No	No	Yes	No	Yes
10/6/2003	Project Development (DPW)	Yes	No	Yes	Yes	Yes
10/6/2003	Disaster Field Office	No	No	Yes	No	Yes
10/3/2003	HMTAP-Traffic Study	Yes	No	No	Yes	No
10/3/2003	Disaster Field Office	No	No	Yes	No	Yes
10/2/2003	WASA Drainage Committee	Yes	No	Yes	Yes	Yes
10/2/2003	Lee Stubbs – FEMA Headquarters	Yes	No	Yes	Yes	Yes
10/2/2003	Plans and Training	Yes	No	Yes	Yes	Yes
9/30/2003	EMA Executive Staff	Yes	No	Yes	Yes	Yes
9/30/2003	Map Modernization	Yes	No	Yes	Yes	Yes
9/30/2003	EMA Executive Staff	Yes	No	Yes	Yes	Yes
9/20/2003	EMA/FEMA Mitigation	Yes	No	Yes	No	Yes
9/162003	EMA Hurricane Preparedness	Yes	No	Yes	Yes	Yes
9/162003	Emergency Liaison Officers	Yes	No	Yes	Yes	Yes

Inventory of Planning Meetings and Community Events						
Date	**Meeting**	**Plans**	**Community Education Event**	**Programs**	**Hazard Identification and Awareness**	**Projects**
9/15/2003	EMA Hurricane Preparedness	Yes	No	Yes	Yes	Yes
9/15/2003	Emergency Liaison Officers	Yes	No	Yes	Yes	Yes
9/11/2003	EMA/FEMA 322 Plan Development	Yes	No	Yes	Yes	Yes
9/4/2003	D.C. Water and Sewer Authority Drainage Committee	Yes	No	Yes	Yes	Yes
9/2/2003	EMA Executive Staff	Yes	No	Yes	No	Yes
8/29/2003	EMA/FEMA 322 Plan Development	Yes	No	Yes	No	Yes
8/7/2003	D.C. Water and Sewer Authority Drainage Committee	Yes	No	Yes	Yes	Yes
8/7/2003	Mitigation Update with EMA Director	Yes	No	Yes	Yes	Yes
7/26/2003	EMA Training, Exercise, Mitigation and Planning	Yes	No	Yes	No	Yes
7/25/2003	EMA Plans and Training	Yes	No	Yes	No	Yes
7/23/2003	EMA/FEMA 322 Plan Development	Yes	No	Yes	No	Yes
7/10/2003	D.C. Water and Sewer Authority Drainage Committee	Yes	No	Yes	Yes	Yes
7/8/2003	EMA Executive Staff	Yes	No	Yes	No	Yes
7/8/ 2003	Emergency Management Accreditation Program Meeting	Yes	No	Yes	Yes	Yes
7/2/2003	PDM-C Competitive Grant Teleconference	Yes	No	Yes	Yes	Yes
7/1-2/2003	EMA/FEMA 322 Plan Development	Yes	No	Yes	No	Yes
7/3/2003	EMA Executive Staff	Yes	No	Yes	No	Yes
7/27/2003	Emergency Management Accreditation Program	Yes	No	Yes	Yes	Yes
6/27/ 2003	Community Assistance Program-State Support Services Element Planning	Yes	No	Yes	Yes	Yes
6/24/2003	Emergency Preparedness Summit for Apartment and Office Building Owners and Managers	Yes	Yes	Yes	Yes	Yes
6/23/2003	Emergency Management Accreditation Program	Yes	No	Yes	Yes	Yes
6/17/2003	EMA Training, Exercise, Mitigation and Planning	Yes	No	Yes	No	Yes
6/17/2003	Conference Committee Meeting – Emergency Preparedness Summit for Apartment and Office Building Owners and Managers	Yes	No	Yes	Yes	Yes
6/15/2003	Emergency Management Accreditation Program	Yes	No	Yes	Yes	Yes
6/6/2003	EMA/FEMA 322 Plan Development	Yes	No	Yes	Yes	Yes
6/5/2003	EMA/FEMA Region 3 Planning Meeting	Yes	No	Yes	Yes	Yes
6/5/2003	Conference Committee Meeting – Emergency Preparedness Summit for Apartment and Office Building Owners	Yes	No	Yes	Yes	Yes
6/2/2003	Mitigation Update for EMA Director	Yes	No	Yes	No	Yes
5/29/2003	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes

Inventory of Planning Meetings and Community Events						
Date	**Meeting**	**Plans**	**Community Education Event**	**Programs**	**Hazard Identification and Awareness**	**Projects**
5/29/2003	Emergency Management Accreditation Program	Yes	No	Yes	Yes	Yes
5/29/2003	EMA Mitigation with George Washington University	Yes	No	Yes	Yes	Yes
5/23/2003	EMA/DOH Floodplain Management with Prince George's County NFIP Coord.	Yes	No	Yes	Yes	Yes
5/22/2003	EMA Director - Grants Management	Yes	No	Yes	No	Yes
5/22/2003	EMA/FEMA 322 Plan Development	Yes	No	Yes	No	Yes
5/22/2003	George Washington University-Hazard Mitigation	Yes	No	Yes	Yes	Yes
5/21/2003	Conference Committee Meeting – Emergency Preparedness Summit for Apartment and Office Building Owners	Yes	No	Yes	Yes	Yes
5/21/2003	Urban Threat Initiative	Yes	No	Yes	Yes	Yes
5/20/2003	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes
5/15/2003	EMA Meeting with the Apartment and Office Building Association	Yes	Yes	Yes	Yes	Yes
5/13/2003	EMA Executive Staff Meeting	Yes	No	Yes	No	No
5/3/2003	Department of Public Works, 5th Annual-Equipment Roadeo	Yes	Yes	Yes	Yes	Yes
5/1/2003	D.C. Water and Sewer Authority Drainage Committee	Yes	No	Yes	Yes	Yes
4/30/2003	U.S. Department of Homeland Security, Urban Area Security Initiative	Yes	No	Yes	Yes	Yes
4/29/2003	EMA Executive Staff	Yes	No	Yes	No	Yes
4/28/2003	Mayor's Forum on Persons with Disabilities	Yes	Yes	Yes	Yes	Yes
4/22/2003	Emergency Planning Meeting – Clusters 1, 2 and 3	Yes	Yes	Yes	Yes	Yes
4/24/2003	Office of the People's Counsel	No	Yes	Yes	Yes	Yes
4/16/2003	Emergency Planning Meeting – Clusters 28, 36, 37 and 39	Yes	Yes	Yes	Yes	Yes
4/15/2003	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes
4/15/2003	EMA Advanced Warning System Meeting Whelen Engineering Company	Yes	No	Yes	Yes	Yes
4/7-11/2003	FEMA Region 3 – Hazard Mitigation Officer/National Flood Insurance Program Coordinator Meeting and Mitigation Planning Seminar	Yes	No	Yes	Yes	Yes
4/3/2003	Emergency Planning Meeting - Clusters 26 and 27	Yes	Yes	Yes	Yes	Yes
4/1/2003	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes
3/31/2003	Emergency Planning Meeting – Clusters 11, 12, 13, 14 and 15	Yes	Yes	Yes	Yes	Yes
3/27/2003	Emergency Planning Meeting – Clusters 4 and 5 (Ward 1)	Yes	Yes	Yes	Yes	Yes

Inventory of Planning Meetings and Community Events						
Date	**Meeting**	**Plans**	**Community Education Event**	**Programs**	**Hazard Identification and Awareness**	**Projects**
3/25/2003	Emergency Planning Meeting (Ward 4), Clusters 16, 17, 18 and 19	Yes	Yes	Yes	Yes	Yes
3/20/2003	Local Emergency Planning Council	Yes	Yes	Yes	Yes	Yes
3/19/2003	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes
3/19/2003	Emergency Planning Meeting – Cluster 6	Yes	Yes	Yes	Yes	Yes
3/14/2003	EMA/FEMA 322 Plan Development	Yes	No	Yes	No	Yes
3/12/2003	Advanced Warning System Meeting (EMA and WASA)	Yes	No	Yes	Yes	Yes
3/12/2003	Ward 5 Community Meeting	Yes	Yes	Yes	Yes	Yes
3/10/2003	Emergency Planning Meeting – River Terrace	Yes	Yes	Yes	Yes	Yes
3/7/2003	Plans and Training Division Meeting	Yes	No	Yes	No	Yes
3/6/2003	EMA/FEMA 322 Plan Development	Yes	No	Yes	No	Yes
3/6/2003	D.C. Water and Sewer Authority Drainage Committee	Yes	No	Yes	Yes	Yes
2/24/2003	Logan Circle and Shaw Community Planning Meeting	Yes	Yes	Yes	Yes	Yes
2/13/2003	EMA/FEMA 322 Plan Development Meeting	Yes	No	Yes	Yes	Yes
2/12/2003	Emergency Planning Meeting-Clusters 22,23,24 and 25	Yes	Yes	Yes	Yes	Yes
2/11/2003	Chevy Chase, Barnaby Woods and Hawthorne – Cluster 10 Meeting	Yes	Yes	Yes	Yes	Yes
2/11/2003	D.C. Water and Sewer Authority Drainage Committee	Yes	No	Yes	Yes	Yes
1/31/2003	Hazard Identification and Environmental Study Meeting (EMA)	Yes	Yes	Yes	Yes	Yes
1/24/2003	EMA/FEMA 322 Plan Development Meeting	Yes	No	Yes	Yes	Yes
1/23/2003	Environmental Review Meeting (EMA, DOH and FEMA)	Yes	No	Yes	Yes	Yes
1/23/2003	Local Emergency Planning Council	Yes	Yes	Yes	Yes	Yes
1/212003	NEMA Mitigation Committee Teleconference	Yes	No	Yes	No	Yes
1/18-19/ 2003	NBC Channel 4 Health and Fitness Expo	Yes	Yes	Yes	Yes	Yes
1/16/2003	EMA Executive Staff Meeting (Mitigation Program and Plan Updates)	No	No	Yes	No	Yes
12/17/2002	EMA Meeting with the Department of Health (D.C. Floodplain Manager)	Yes	No	Yes	Yes	Yes
12/9/2002	EMA Meeting with the D.C. Department of Transportation	Yes	No	Yes	Yes	Yes
12/3/2002	ANC 4A - Community Preparedness	Yes	Yes	Yes	Yes	Yes
12/2/2002	Strategic Meeting for Conducting the Community Emergency Preparedness and Planning	Yes	No	Yes	Yes	Yes
11/21/2002	Local Emergency Planning Council	Yes	Yes	Yes	Yes	Yes

Inventory of Planning Meetings and Community Events						
Date	**Meeting**	**Plans**	**Community Education Event**	**Programs**	**Hazard Identification and Awareness**	**Projects**
11/7/2002	WASA - Drainage Committee	Yes	No	Yes	Yes	Yes
10/28-30/ 2002	Emergency Management Accreditation Program	Yes	No	Yes	Yes	Yes
10/24/2002	Emergency Management Accreditation Program	Yes	No	Yes	Yes	Yes
10/24/2002	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes
10/21/2002	Emergency Management Accreditation Program	Yes	No	Yes	Yes	Yes
10/21/2002	Local Emergency Planning Council	Yes	Yes	Yes	Yes	Yes
10/10-11/ 2002	Emergency Management Accreditation Program	Yes	No	Yes	Yes	Yes
10/10/2002	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes
10/10/2002	Mount Carmel Baptist Church	Yes	Yes	Yes	Yes	Yes
10/7/2002	EMA Training, Exercise, Mitigation and Planning Division	Yes	No	Yes	Yes	Yes
10/3/2002	WASA - Drainage Committee	Yes	No	Yes	Yes	Yes
9/25/2002	Community Flood Mitigation	Yes	No	Yes	Yes	Yes
9/13/2002	WASA - Drainage Committee	Yes	No	Yes	Yes	Yes
9/12/2002	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes
9/5/2002	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes
9/3/2002	WASA - Drainage Committee	Yes	No	Yes	Yes	Yes
8/29/2002	Performance Based Budget	Yes	No	Yes	No	Yes
8/28/2002	EMA Training, Exercise, Mitigation and Planning Division	Yes	No	Yes	No	Yes
8/25/2002	Performance Based Budget	Yes	No	Yes	No	Yes
8/25/2002	Community Plan Development Meeting (KROLL)	Yes	No	Yes	Yes	Yes
8/22-23/ 2002	Performance Based Budget	Yes	No	Yes	Yes	Yes
8/16/2002	EMA Meeting with the D.C. Department of Transportation	Yes	No	Yes	Yes	Yes
8/14/2002	Performance Based Budget	Yes	No	Yes	No	Yes
8/12/2002	Ward 5 Community Day	Yes	Yes	Yes	Yes	Yes
8/7/2002	EMA Training, Exercise, Mitigation and Planning Division	Yes	No	Yes	Yes	Yes
7/2/2002	EMA Training, Exercise, Mitigation and Planning Division (Mitigation Program, Project and Plan Updates)	Yes	No	Yes	Yes	Yes
6/27/2002	EMA Mitigation Project Meeting with DOH-Floodplain Manager and WASA	Yes	No	Yes	Yes	Yes
6/13/2002	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes
4/19/2002	EMA Executive Staff Meeting	Yes	No	Yes	No	Yes
3/28/2002	Local Emergency Planning Council	Yes	Yes	Yes	Yes	Yes
3/12-13, 2002	EMA Mitigation Project Development	Yes	No	Yes	Yes	Yes
2/20/2002	Hazard Analysis Advisory Committee Meeting	Yes	Yes	Yes	Yes	Yes

Inventory of Planning Meetings and Community Events						
Date	**Meeting**	**Plans**	**Community Education Event**	**Programs**	**Hazard Identification and Awareness**	**Projects**
2/20/2002	Washington Consortium of Universities and Colleges	Yes	Yes	Yes	Yes	Yes
2/12/2002	EMA Training, Exercise, Mitigation and Planning Division	Yes	No	Yes	No	Yes
2/4/2002	Water and Sewer Authority Meeting	Yes	No	Yes	Yes	Yes
1/17/2002	Local Emergency Planning Council	Yes	Yes	Yes	Yes	Yes
1/17/2002	GIS Meeting with the D.C. Office of Technology	Yes	No	Yes	Yes	Yes
1/16/2002	322 Plan Development Meeting with the Marasco Newton Group	Yes	No	Yes	Yes	Yes
1/7/2002	GIS Meeting with the D.C. Office of Technology	Yes	No	Yes	Yes	Yes
1/3/2002	GIS Meeting with the D.C. Office of Technology	Yes	No	Yes	Yes	Yes
12/18/2001	Local Emergency Planning Council	Yes	Yes	Yes	Yes	Yes
12/13/2001	Mitigation Update Director	Yes	No	Yes	Yes	Yes
11/1-2/2001	Mitigation Project Development	Yes	No	Yes	Yes	Yes
10/24/2001	Washington Consortium of College and Universities	Yes	Yes	Yes	Yes	Yes
10/13/2001	Mitigation Meeting with the EMA Training Officer	Yes	No	Yes	Yes	Yes
4/5/2001	Local Emergency Planning Council	Yes	Yes	Yes	Yes	Yes
6/7/2001	Local Emergency Planning Council	Yes	Yes	Yes	Yes	Yes

Appendix B

FUNDABLE FLOODPLAIN MANAGEMENT ACTIVITIES

ACTIVITIES	POTENTIAL PARTNERS	PERFORMANCE PERIOD	MILESTONES AND PERFORMANCE MEASURES	ESTIMATED MANPOWER PERCENTAGE	ESTIMATED COSTS (If Applicable)
1. Develop the Multi-Year Floodplain Management Workplan	FEMA, DOH, EMA, OCTO, WASA, WASA-COMM, DDOT, OP, COE, NRCS, USGS	February 9-September 30, 2004	Devise the framework for establishing a premier performance-based "state-level" floodplain management program in the District of Columbia and prepare an approvable plan. • Collaborate with stakeholder agencies to build consensus • Develop the Floodplain Management Program Strategy • Develop Program Performance Measures • Develop and submit the Workplan • Coordinate with FEMA for final approval	• NFIP Coordinator (50%) • Hazard Mitigation Officer (50%) • GIS Engineer (50%) • Information Management Specialist (50%)	$30,000
2. Ordinance Assistance	FEMA, DOH, EMA, WASA, WASA-COMM, DCRA, CORP, COE	October 1-December 31, 2005	Document the process required for maintaining the model ordinance that meets of exceeds NFIP requirements. • Collaborate with FEMA for the an initial review • Collaborate with stakeholder agencies • Develop template and incorporate recommendations • Review by General Counsel • Public review and comment • Review and comment by elected officials • Revisions per public comment • Final review and adoption • Public outreach	• NFIP Coordinator (50%) • Hazard Mitigation Officer (50%) • Contractual Services (100%) • General Counsel (25%) • Agency Representatives (10%) • Environmental Engineers (50%)	$50,000
3. Community Assistance Visits or Community Assistance Contacts	FEMA, DOH, EMA	October 1-December 30, 2004 October 2005-2006	Devise protocol for the District to meet FEMA requirements for conducting Community Assistance Visits or Community Assistance Contacts. • Collaborate with FEMA for the an initial review • Document protocol for conducting CAVs and CACs in the District. Evaluate NFIP community compliance and establish baseline data • Consult with FEMA for recommendations to improve community compliance with NFIP • Complete scope development and solicitation process for consultant services • Collaborate with consultant to prepare project workplan • Provide information, documentation and other resources to the consultant to aid in the evaluation process • Document findings in progress reports	• NFIP Coordinator (50%) • Hazard Mitigation (50%) • Agency Representatives (10%) • Environmental Engineers (50%)	$60,000 (1 FTE)

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FUNDABLE FLOODPLAIN MANAGEMENT ACTIVITIES

ACTIVITIES	POTENTIAL PARTNERS	PERFORMANCE PERIOD	MILESTONES AND PERFORMANCE MEASURES	ESTIMATED MANPOWER PERCENTAGE	ESTIMATED COSTS (If Applicable)
4. Community Information System Data Entry	FEMA, DOH, EMA, OCTO	2004-2009 (Quarterly Updates)	Quantify floodplain management activities. • Complete needs assessment to identify services requiring automation • Identify appropriate technology and data to automate services • Develop and implement automated systems/mechanisms for quantifying floodplain management activities (i.e., calls, targeted outreach, floodzone determination) • Deploy systems and train personnel • Develop and implement maintenance plan • Document progress for planning or mitigating repetitive loss properties, including FMA plan updates, project development, etc. • Enter community data into CIS	• NFIP Coordinator (50%) • Environmental Engineers (50%) • OCTO Personnel (TBD)	$300,000 $60,000 (1 FTE)
5. State Model Ordinance Research	FEMA, DOH, EMA, WASA, WASA-COMM, DCRA, CORP, COE	October 1-December 31, 2004	Document the process required for maintaining the model ordinance that meets of exceeds NFIP requirements. • Collaborate with FEMA, the Association of State Floodplain Managers and other stakeholder agencies • Monitor and implement best practices • Consult with General Counsel	• DOH General Counsel (25%) • NFIP Coordinator (50%) • Hazard Mitigation Officer (10%) • Agency Representatives (10%) • Environmental Engineers (40%)	$20,000 $60,000 (1 FTE)
6. Workshops and Training	FEMA, DOH, EMA, OCTO, COE, ASCE, ASFPM, IBHS	2004-2009 (Quarterly Updates)	Increase the delivery of floodplain management training for the private sector and District officials. • Assess training needs and develop strategy for professional development • Identify alternative funding sources for training delivery • Promote participation in specialized training provided by the Emergency Management Institute • Track professional training delivery and career development, including progress toward develop personnel as Certified Floodplain Managers • Document improvements in personnel and program performance • Conduct a minimum of 1 course each year	• DOH General Counsel (25%) • NFIP Coordinator (50%) • Hazard Mitigation Officer (10%) • Agency Representatives (10%) • Environmental Engineers (40%)	$30,000 $60,000 (1 FTE)
7. General Technical Assistance	FEMA, DOH, EMA, OCTO, WASA	2004-2009 (Quarterly Updates)	Provide technical assistance and document efforts in CIS, to assure NFIP compliance. • Document CACs and CAVs in CIS • Document alternative outreach efforts • Progressively increase the CRS status and document program improvements	• NFIP Coordinator (50%) • Hazard Mitigation Officer (10%) • Environmental Engineers (40%)	$60,000 (1 FTE)

FUNDABLE FLOODPLAIN MANAGEMENT ACTIVITIES

ACTIVITIES	POTENTIAL PARTNERS	PERFORMANCE PERIOD	MILESTONES AND PERFORMANCE MEASURES	ESTIMATED MANPOWER PERCENTAGE	ESTIMATED COSTS (If Applicable)
8. Mapping Assistance ▪ Digital Base Map Inventory	FEMA, DOH, EMA, OCTO, WASA, WASA-COMM, DDOT, OP, COE, NRCS, USGS	October 1, 2004-September 30, 2004 (Quarterly Updates)	Provide a catalog of existing and new data sources, to include datasets and map resources meeting FEMA specifications ▪ Facilitate FEMA access to the District of Columbia Enterprise GIS. ▪ Utilize existing District Government resources, including administrative/grant management, technical, regulatory, information management and mapping resources to fulfill this requirement. ▪ Tracks, reports costs, performance schedules and measures using a workplan or project management tool to track progress.	▪ NFIP Coordinator (50%) ▪ Environmental Engineers 10%) ▪ OCTO Personnel (TBD) ▪ Hazard Mitigation Officer (10%) ▪ Agency Representatives (10%) ▪ Administrative Support (20%)	$100,000 $60,000 (1 FTE) $20,000 (1 PTE)
▪ Digital Base Map Data Sharing	FEMA, DOH, EMA, OCTO, OP, WASA, WASA-COMM, DDOT, ITspatial, DCRA, USGS	October 1, 2004-April 30, 2006 (Quarterly Updates)	Provides a base map that complies with FEMA minimum accuracy requirements for use in producing a DFIRM. ▪ Collaborate with FEMA to support distribution of map products by FEMA to the public in hardcopy and electronic formats. ▪ Collaborate with District stakeholders to evaluate the usability of the maps as they are developed in phases, building toward the production of a final map product.	▪ NFIP Coordinator (50%) ▪ Environmental Engineers (10%) ▪ OCTO Personnel (TBD) ▪ Hazard Mitigation Officer (10%) ▪ Agency Representatives (10%)	$0
▪ DFIRM Maintenance	FEMA, DOH, EMA, OCTO	2004-2009	Collaborate with stakeholders to develop a long-term, periodic maintenance plan for the DFIRMs. ▪ Devise a detailed community-based assessment of mapping needs for every mapped political boundary ▪ Prepare a written maintenance agreement, as appropriate to assure compliance with Federal data retention/maintenance requirements.	▪ NFIP Coordinator (50%) ▪ Environmental Engineers (10%) ▪ OCTO Personnel (TBD) ▪ Hazard Mitigation Officer (20%) ▪ Agency Representatives (10%)	$50,000 $60,000 (1 FTE)
▪ Hydrologic and Hydraulic Review	FEMA, DOH, EMA, WASA, WASA-COMM, DDOT, USGS	2005-2009	Complete Hydrologic and Hydraulic Studies ▪ Prepare data updates ▪ Complete map revisions as appropriate ▪ Develop documentation for flood hazard guidelines and specifications.	▪ NFIP Coordinator (50%) ▪ Environmental Engineers (20%) ▪ OCTO Personnel (TBD) ▪ Hazard Mitigation Officer (10%) ▪ Agency Representatives (10%)	$150,000 $60,000 (1 FTE)

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FUNDABLE FLOODPLAIN MANAGEMENT ACTIVITIES

ACTIVITIES	POTENTIAL PARTNERS	PERFORMANCE PERIOD	MILESTONES AND PERFORMANCE MEASURES	ESTIMATED MANPOWER PERCENTAGE	ESTIMATED COSTS (If Applicable)
▪ Assessment of Community Mapping Needs	FEMA, DOH, EMA, OCTO, OP, WASA, WASA-COMM, DDOT, USGS	2004-2009	Perform detailed community-based assessments of mapping needs for every mapped political boundary (including flood data updates and map maintenance). ▪ Enters updates in MNUSS ▪ Track, reports costs, develop work schedule and monitor performance to track progress	▪ NFIP Coordinator (50%) ▪ Environmental Engineers (10%) ▪ OCTO Personnel (TBD) ▪ Hazard Mitigation Officer (10%) ▪ Agency Representatives (10%) ▪ Administrative Support (20%)	$130,000 $20,000 (1 PTE) $60,000 (1 FTE)
▪ Needs Update Support System	FEMA, DOH, EMA, OCTO	2005-2009	Secure technical support for MNUSS database. ▪ Delivers an agreement listing technical standards and specifications for flood mapping purposes. ▪ Conduct user training on MNUSS application ▪ Track, reports costs, develop work schedule and monitor performance to track progress	▪ NFIP Coordinator (50%) ▪ Environmental Engineers (10%) ▪ OCTO Personnel (50%) ▪ Hazard Mitigation Officer (10%) ▪ Agency Representatives (10%)	TBD
▪ Technical Standards Agreement	FEMA, DOH, EMA, OCTO, OP, WASA, USGS	2005-2009	Adopt technical standards or processes for NFIP flood mapping purposes. ▪ Develop and establish database management standards for preliminary and effective dFIRMs data.for distribution to the public in an electronic format. ▪ Track, reports costs, develop work schedule and monitor performance to track progress.	▪ NFIP Coordinator (50%) ▪ Environmental Engineers (10%) ▪ OCTO Personnel (TBD) ▪ Hazard Mitigation Officer (10%) ▪ Agency Representatives (10%)	$10,000

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FUNDABLE FLOODPLAIN MANAGEMENT ACTIVITIES

ACTIVITIES	POTENTIAL PARTNERS	PERFORMANCE PERIOD	MILESTONES AND PERFORMANCE MEASURES	ESTIMATED MANPOWER PERCENTAGE	ESTIMATED COSTS (If Applicable)
▪ Information Technology Systems Outreach	FEMA, DOH, EMA, OCTO, OP, WASA, WASA-COMM, DDOT, ITspatial, USGS	2004-2009	Develop and maintain an Information Technology System to archive, organize, distribute and otherwise manage effective digital FIRMS, preliminary DFIRMS, and/or underlying backup data (eg., digital FIRM database, engineering models, etc). ▪ Use existing District Government resources including technical, regulatory, information management and mapping resources to fulfill this requirement. ▪ Develop a website and post DFIRMs and Multi-hazard Maps and Data for target audiences to include: the general public, technical audiences, and other stakeholder groups. ▪ Coordinate with key stakeholders to promote floodplain management and map modernization information.	▪ NFIP Coordinator (50%) ▪ Environmental Engineers (10%) ▪ OCTO Personnel (TBD) ▪ Hazard Mitigation Officer (10%) ▪ IT Engineer (40%) ▪ GIS Engineer (40%) ▪ Agency Representatives (10%)	$150,000
9. Coordination with other "State" Programs for NFIP Compliance	FEMA, DOH, EMA, OCTO, OP, WASA, WASA-COMM, MD, VA	2004-2009 (Quarterly Updates)	Conduct and document the number of workshops, meetings, technical assistance visits, project reviews and other collaborations with state agencies • Document collaborative efforts that improve floodplain management performance • Identify measures for improved interactions/program performance in the out-year plan and CIS	• NFIP Coordinator (50%) • Hazard Mitigation Officer (20%) • Environmental Engineers (40%)	$60,000 (1 FTE)
10. Post disaster Assistance	FEMA, DOH, EMA, OCTO, WASA, WASA-COMM,	2004-2009	Document post-disaster efforts to improve program performance • Report increases in the number of CAVs and CACs • Document outcomes in CIS	• NFIP Coordinator (50%) • Hazard Mitigation Officer (10%) • Environmental Engineers (40%) • GIS Engineer (30%) • Administrative Support (20%)	$60,000 (1 FTE) $20,000 (1 PTE)

Appendix C. The District of Columbia Enterprise GIS Basemap Layers to Support the Multi-Year Floodplain Management Strategic Plan (FMSP)

1. Office of the Chief of Technology Officer (OCTO) GIS Infrastructure Arc Spatial Database Engine (ArcSDE) Geographic Information Systems (GIS) Database Layers/Tables

In the *GIS infrastructure* program, a regional consortium, including the Chief of Technology Officer (OCTO), the regional Council of Governments and the federal government, is developing a coordinated GIS system to support mission-critical mapping for numerous District and federal agencies, including the EMA, MPD, DPW, DCRA, FEMS, DHS, Office of Planning, and Office of Zoning. OCTO has centralized agency software license acquisition and developed a centralized network-based GIS infrastructure. The GIS infrastructure consists of data, hardware, software, network connectivity and personnel that work together to assemble, store, manipulate and display geographically referenced information.

At its core is the DC Atlas, a set of more than 50-layered digital maps, linked to a database that displays a wide variety of geographical details. The detailed layers in the Atlas include: voting precincts; business improvement districts; DC ward boundaries; hospitals and medical clinics; parks; fire stations; police stations; police districts; libraries; census tracts; historical districts; zip codes; Metro stations; public schools; charter schools; real property squares; building structure lines; power stations; overhead traffic signs; utility poles; bodies of water; street center lines; wooded areas; wheelchair ramps; guardrails and barriers.

The Atlas is now available to District agencies through the DC WAN and will be available in summer 2002 to the public through the Internet. Together, the DC Atlas and other GIS map products will permit OCTO and agencies to develop virtually countless applications to speed and improve services for residents, businesses, and visitors. Potential map applications will help agencies route emergency services, examine crime trends, conduct citywide planning, study the incidence of disease outbreaks, direct citizens to the closest public health facility, route road repairs and trash pickups, and maintain streets, bridges, traffic control systems, and trees. The GIS infrastructure program is expected to yield a significant return on the District of Columbia's investment through inter-agency cost sharing and faster, more effective services citywide. As of late 2001, the program has already saved $1.2 million through the consolidation of software licenses alone.

DCEMA warehouses a copy of all the OCTO GIS data and related tables, and the DCEMA Mitigation Program actively uses the data described in the following table to support Section 322 Hazard Mitigation Planning, Flood Mitigation Planning, target opportunities to develop mitigation projects, monitor and evaluate of ongoing projects, Critical Infrastructure Protection, Vulnerability Analysis, and Loss Estimation.

All DC GIS data is stored and exported in Maryland State Plane coordinates NAD 83 meters. The content of the following metadata is in the process of validation and is subject to change.

Appendix C. The District of Columbia Enterprise GIS Basemap Layers to Support the Multi-Year Floodplain Management Strategic Plan (FMSP)

Figure C- 1. OCTO Geospatial Data Used by the DCEMA

Layer	Theme	Description
SDE.CensusTracts	Government jurisdictions, Census tracts, Tracts, Census	Census Tracts. This dataset contains line and polygon features, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. 2000 census tracts are identical to 1990 census tracts, except in instances where multiple tracts were merged to form one new tract. Census tracts were identified from maps provided by the U.S. Census Bureau and the D.C. Office of Planning. The tract polygons were created by selecting street arcs from the WGIS planimetric street centerlines, and, where necessary, heads-up digitized from the 1995 orthophotographs.
SDE.CharterSchools	Government jurisdictions, Census tracts, Tracts, Census	Charter Schools. This feature class contains points and building footprint polygons for charter schools, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. School locations were identified from public records and heads-up digitized from the 1995 orthophotographs.
SDE.FireStations	Fire stations, Government facilities, Fire Department, Fire and Emergency Services Department, Emergency Services Department, Ambulance, Fire Apparatus, Fire Equipment, Emergency Services Equipment	DC Fire and Emergency Medical Services Department (FEMS) stations. This feature class contains point and polygon features, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. Fire stations were identified from D.C. Fire and EMS Department records and heads-up digitized from 1995 orthophotographs.
SDE.HistoricPreservation	Government jurisdictions, Boundary, Historic districts, Historic preservation	Historic districts, sites, and landmarks. This feature dataset contains locations and descriptive attributes of historic districts, historic sites, and landmarks in the District of Columbia, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. The features were identified from public records (including published maps and National Register nomination forms) and heads-up digitized using a combination of the 1995 orthophotographs and planimetric roads features.

Appendix C. The District of Columbia Enterprise GIS Basemap Layers to Support the Multi-Year Floodplain Management Strategic Plan (FMSP)

Layer	Theme	Description
SDE.HistoricTracts	Government jurisdictions, Census tracts, Tracts, Census	Census Year 1930-1980 Census Tracts. The dataset contains polygons representing CY 1930-1980 census tracts, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. The Census bureau retains similar tract geography from census to census, resulting in data that is topologically related. Census tracts were identified from maps provided by the U.S. Census Bureau and the D.C. Office of Planning. The tract polygons were created by selecting street arcs from the WGIS planimetric street centerlines. Supplementary Information See individual metadata files for source citations.
SDE.Hospitals	Hospitals, Health facilities	Hospitals. This dataset contains points and building footprint polygons for hospitals, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. Hospital locations were identified from public records and heads-up digitized from the 1995 orthophotographs.
SDE.Metro	Metro, WMATA, Washington Metropolitan Area Transit Authority, Subway, Mass transit, Rail transit	Metro Lines. The dataset contains locations and attributes of Metro lines, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) by participating D.C. government agencies. Lines were taken from legacy data from WMATA and fit to orthophotography and extracted planimetric data.
SDE.Planimetrics	Geographic Information System, Planimetrics	Contract NCPC 93-02. This document describes the planimetric map production for the 350 tiles located in Washington DC and the surrounding states of MD and VA.
SDE.PoliceAreas	Government jurisdictions, Metropolitan Police Department, Regional Operations Commands, ROC	Metropolitan Police Department (MPD) jurisdictions. This dataset contains polygons for all three levels of police jurisdiction: Police Service Area (PSA), Police District, and Regional Operations Command (ROC). It was created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. Police jurisdictions were created by selecting street arcs from the WGIS planimetric street centerlines and, where necessary, heads-up digitized from the 1995 orthophotographs.
SDE.PoliceStations	Police Stations, Government facilities, Metropolitan Police Department	Police Stations. This dataset contains points and building footprint polygons for police stations, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. Station locations were identified from public records and heads-up digitized from the 1995 orthophotographs.

Appendix C. The District of Columbia Enterprise GIS Basemap Layers to Support the Multi-Year Floodplain Management Strategic Plan (FMSP)

Layer	Theme	Description
SDE.Political	SMD, Single Member District, ANC, Ward	Single Member District or SMD's. Advisory Neighborhood Commissions were created pursuant to legislation approving the District of Columbia's "Home Rule" charter in 1973,. These neighborhood groups were to provide the neophyte District electorate with "grass-roots" experience in the electoral process. These groups were to be based on the latest Census Bureau records of the District's population. Each Single Member District (SMD) was to have approximately 2,000 residents, with boundaries to be developed by the new DC City Council. Candidates elected for each Single Member District sit as Advisory Neighborhood Commissioners. The first elections for these newly-formed Advisory Neighborhood Commissions (ANCs) were conducted in 1976. This data set reflects modifications to SMD boundaries approved by the Council in May, 2002, for official 2003 SMD boundaries. Supplementary Information The DC Board of Elections and Ethics (BOEE) is responsible for maintaining SMD boundaries. See the BOEE website @ http://www.dcboee.org/htmldocs/ancstruc.htm for more SMD background.
SDE.RealProperty	Owner points, Real property, Tax assessment	Property Owner Points. This dataset contains points that represent the approximate location of real property lots within the District of Columbia. Each property point is generated based on a corresponding record maintained within the Office of Tax and Revenue (OTR) Real Property Tax Administration's (RPTA) real property database. Each point contains the full attribution of database fields derived from RPTA public release extract. The initial data conversion effort was begun in 1997 as a means to provide RPTA with a digital mapping system that could be maintained to reflect ongoing changes to property lots and ownership. The initial step was to scan RPTA tax square maps from aperture cards at an effective paper resolution of 400 DPI. The resulting images were then georeferenced to DC's 0.2-meter resolution 1995 digital orthophotos. During the georeferencing process, the images were not warped; they were simply scaled and rotated to best fit the orthophotos. The DC tax assessor provided a database of active tax accounts that were placed interactively by an operator using the georeferenced square image and the orthophoto. Centroids were placed on the primary structure visible in the orthophoto within the raster property polygon. The placement was performed within ArcView 3.2 using a customized data production application. Accounts that could not be placed in the first pass were then

Appendix C. The District of Columbia Enterprise GIS Basemap Layers to Support the Multi-Year Floodplain Management Strategic Plan (FMSP)

Layer	Theme	Description
		reviewed by another operator to attempt to find their correct location. The placed points were QC'd through a spatial overlay with the square index to assure a match between the "square" field value within the property database and the actual square polygon into which the point was placed. Spot checking was then performed to confirm that the centroids fell within the correct raster lot. The centroids were delivered to OTR as a single citywide AutoCAD DWG file. Attribute features with square, suffix, and lot numbers (SSLs) were included as an AutoCAD block. Supplementary Information The process of updating the property points shape file is based on the receipt of weekly public extracts from the RPTA database. A Microsoft Access tool is used to compare existing records in the shape file against new records in the database extract. Map operators then research Assessment and Taxation (A&T) cards to determine the correct square, suffix, and lot for each new record. A visual check is made of the hard copy tax map. New centroids are then placed utilizing AutoCAD drawing tools to reference the scanned tax maps and digital orthophotos. Finally, a new ArcView shape file is created from the updated "centroids" AutoCAD drawing file. Shape file points are joined to the RPTA public extract to enable full attribution of each property centroid.
SDE.Schools	DC Public Schools, Schools, Elementary, Middle, Junior High, High School	D.C. public schools. This dataset contains points and building footprint polygons for public schools. It was created for the D.C. public schools and later added to the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO). Includes D.C. public elementary, middle, junior high, and high schools, plus some administrative buildings. Does not include private or charter schools. Created in fall of 2000. Data was reviewed by D.C. public schools in fall 2000. School locations were identified from public records and heads-up digitized from the 1995 orthophotographs.
SDE.TopoLn	Geographic Information System, Planimetrics	Elevation. Contract NCPC 93-02. This document describes the planimetric map production for the 350 tiles located in Washington DC and the surrounding states of MD and VA.
SDE.TopoLn_10m	Geographic Information System, Planimetrics	Elevation, 10 meter contours. Contract NCPC 93-02. This document describes the planimetric map production for the 350 tiles located in Washington DC and the surrounding states of MD and VA.
SDE.TopoLn_5m	Geographic Information System, Planimetrics	Elevation, 5 meter contours. Contract NCPC 93-02. This document describes the planimetric map production for the 350 tiles located in Washington DC and the surrounding states of MD and VA.

Appendix C. The District of Columbia Enterprise GIS Basemap Layers to Support the Multi-Year Floodplain Management Strategic Plan (FMSP)

Layer	Theme	Description
SDE.Zoning	Government jurisdictions, Zoning, Overlay zones, Planning, Regulation	District of Columbia Zoning. The dataset contains polygons representing District of Columbia zoning, including basic zoning, overlay zoning, and campus plans. This data was created by the District of Columbia Office of Zoning (DCOZ). The zoning was digitized from georeferenced scans of the 1986 and 1996 1":600' Zoning Atlas. Data is also published on the DCOZ website. This zoning map has not yet been adopted by the Zoning Commission and is an unofficial zoning layer. Work on the zoning layer continues. For the most up-to-date information, contact the DCOZ directly.
SDE.AOCLn	Government jurisdictions, Boundary, Architect of the Capitol	Architect of the Capitol jurisdiction boundary. The dataset contains locations and attributes of the Architect of the Capitol jurisdiction boundary, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. The boundary was identified from public records (including the Architect's http://www.aoc.gov/cc/cc_map.htm) and heads-up digitized using a combination of the 1995 orthophotographs and planimetric roads features.

Appendix C. The District of Columbia Enterprise GIS Basemap Layers to Support the Multi-Year Floodplain Management Strategic Plan (FMSP)

Layer	Theme	Description
SDE.AOCPly	Advisory Neighborhood Commissions, ANC, SMD, Ward	Temporal: 2002 Advisory Neighborhood Commissions or ANC's are collections of Single Member Districts or SMD's. There are multiple ANC's for each of the eight Wards. The initial number of ANC codes correspond to the ward. Three ANC's cross ward boundaries; 3C, 3G and 6D, the remaining do not. ANC's consider a wide range of policies and programs affecting their neighborhoods. These include traffic, parking, recreation, street improvements, liquor licenses, zoning, economic development, police protection, sanitation and trash collection, and the District's annual budget. No public policy area is excluded from the purview of the Advisory Neighborhood Commissions. The intent of the ANC legislation is to ensure input from an advisory board made up of the residents of the neighborhoods directly affected by government action. The ANCs are the body of government with the closest official ties to the people in a neighborhood. ANCs present their positions and recommendations on issues to various District government agencies, the Executive Branch, and the Council. They also present testimony to independent agencies, boards and commissions, usually under rules of procedure specific to those entities. By law, the ANCs may also present their positions to Federal agencies. Supplementary Information The DC Board of Elections and Ethics (BOEE) is responsible for maintaining SMD boundaries. Please see the BOEE website @ http://www.dcboee.org/htmldocs/ancstruc.htm for more background on ANCs. This data set was compiled by the DC Office of Planning.
SDE.BIDPly	Special jurisdictions, Business improvement districts, Special taxing area, Georgetown, Downtown, Golden Triangle	Business Improvement Districts. The dataset contains locations and attributes of the three Business Improvement Districts (BID) jurisdictions (Downtown, Golden Triangle, and Georgetown), first authorized under the Business Improvement Districts Act of 1996, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. Jurisdictions were identified from public records (websites, legacy GIS data, real property records) and heads-up digitized from the 1995 orthophotographs.

Appendix C. The District of Columbia Enterprise GIS Basemap Layers to Support the Multi-Year Floodplain Management Strategic Plan (FMSP)

Layer	Theme	Description
SDE.CEAPly	Central employment area, Planning areas	Central Employment Area. The dataset is a polygon representing the location and attributes of Central Employment Area (CEA) (the CEA is the core area of the District of Columbia where the greatest concentration of employment in the city and region is encouraged), created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. Jurisdictions were identified from public records (map and written description created by the National Capital Planning Commission) and heads-up digitized from the 1995 orthophotographs.
SDE.DCBndyPly	Government jurisdictions, Political jurisdictions, Boundary	District of Columbia boundary. The dataset is a polygon representing the District of Columbia boundary, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. The boundary was identified from public records and heads-up digitized using a combination of the 1995 orthophotographs, planimetric roads features, and the USGS digital raster graphic quad sheets, and 1999 planimetrics for the Potomac River boundary.
SDE.DCQuadPly	Government jurisdictions, Political jurisdictions, Geography, Quadrants	District of Columbia quadrants. The dataset polygons represent the locations and attributes of the four District of Columbia quadrants, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. The quadrants were identified from public records and heads-up digitized from the 1995 orthophotographs.
SDE.EntZonePly	Government jurisdictions, Census tracts, Tracts, Census, Enterprise zone, Economic incentive zones	Enterprise Zone. The dataset polygons represent locations and attributes of the DC Enterprise Zone that is a subset of the census tracts, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. This data set has polygons for both low level (10%-20% poverty level) and high-level (over 20% poverty level) zones. Census tracts were identified from public records (US Census Bureau and DC Office of Planning) and initially created selecting street arcs from the WGIS planimetric Street centerlines and, where necessary, heads-up digitized from the 1995 orthophotographs. Supplementary Information http://www.dcmarketingcenter.com/business/in_dc.asp?whatpage=in Enterprise Zone & Revenue Bond Programs

Appendix C. The District of Columbia Enterprise GIS Basemap Layers to Support the Multi-Year Floodplain Management Strategic Plan (FMSP)

Layer	Theme	Description
		DC Enterprise Zone On August 5, 1997, the President of the United States signed into law two new legislative initiatives designed to stimulate economic growth and job development in the Nation's Capital. The Balanced Budget Act of 1997 includes amendments to the District of Columbia Home Rule Charter which grant the District government broad authority to issue taxable and tax-exempt revenue bonds to finance the acquisition, construction and renovation of a wide array of capital projects owned by private enterprises and non-profit institutions. Provisions of the Taxpayer Relief Act of 1997 (TRA) complement these expanded financing powers by establishing the District of Columbia "Enterprise Zone" (EZ). Federal incentives designed to tap the investment and employment potential of the EZ include three types of wage credits, an additional expensing allowance, a zero federal capital gains tax rate on certain investments and tax-exempt bond financing. Enterprise Zone Resources: For more information about Enterprise Zone incentives, visit, the Incentives section of the DC Marketing Center's website. To determine whether a location is within the DC Enterprise Zone, contact the DC Revenue Bond Program (202) 727-6365 or (202) 727-0377 or visit The Department of Housing and Urban Development's EZ/EC locator at http://www.hud.gov/ezec/locator. For a copy of the Internal Revenue Service publication 954, Tax Incentives for Empowerment Zones and Other Distressed Communities, visit the publications section of the IRS website: http://www.irs.gov/forms_pubs/. http://dcbiz.dc.gov/info/rb.shtm DC Enterprise Zone Between January 1, 1998 and December 31, 2002, District of Columbia Enterprise Zone (DC Zone) Businesses are entitled to claim more than $1.2 billion of federal tax credits, deductions, exemptions and exclusions. These unique tax benefits are available to businesses, trade associations, non-profit institutions, and individuals that meet each of the following criteria: The sole trade or business of the corporation, limited liability company or partnership is the active conduct of a "qualified business" (this requirement applies to activities of non-profit and not-for-profit entities, but not sole proprietorships);

Appendix C. The District of Columbia Enterprise GIS Basemap Layers to Support the Multi-Year Floodplain Management Strategic Plan (FMSP)

Layer	Theme	Description
		At least 50 percent of business income is derived from the active conduct of a trade or business within the DC Zone; A substantial portion of the tangible property used in the business is within the DC Zone; A substantial portion of the intangible property is used in the active conduct of such business; A substantial portion of services performed for the business by its employees is performed in the DC Zone; and Less than five percent of the average of the aggregate unadjusted bases of the property of the business is attributable to (a) certain financial property such as debts, partnership interests, stock and annuities, or (b) collectibles not held primarily for sale to customers in the ordinary course of an active trade or business. Businesses that meet the foregoing requirements (EZ Businesses) may be eligible to obtain: Up to $15 million of tax-exempt financing of the depreciable tangible property owned by each qualified entity; An additional $20,000 expensing allowance for business machinery and equipment; Three types of employment tax credits; and Zero federal capital gains tax rate on cash investments in certain businesses located in census tracts with poverty rates 10 percent and higher. <u>Enterprise Zone Description</u> The District of Columbia Enterprise Zone consists primarily of all census tracts with 20 percent and higher poverty rates. These tracts represent more than one-third (65) of the District's 193 census tracts and cover about half of the District's developable land area. An additional 57 census tracts with poverty rates between 10 percent and 20 percent also comprise the DC Zone for purposes of the federal capital gains tax exclusion. The new DC Zone incorporates the former District "enterprise community" and is treated as an "Empowerment Zone" for purposes of most business tax incentives.
SDE.FldPlnPly	Hydrology, flood zones, insurance, FEMA, Environmentally Sensitive Areas, Hydrography, River, Streams, Water, Wetlands	The Q3 Flood Data are derived from the Flood Insurance Rate Maps (FIRMs) published by the Federal Emergency Management Agency (FEMA). Specifications for the horizontal control of Q3 Flood Data files are consistent with those required for mapping at a scale of 1:24000. Data automated from Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM). Data was interpreted from FEMA and scribed to USGS 1:12,000 quadrangles manuscripts Generalized 100- and 500- year floodplains, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies.

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Layer	Theme	Description
SDE.MDAPly	Economic incentive areas, Planning areas, Development areas, Metro development areas	Metro Development Area (Metro Station Development Opportunity Area). The dataset polygons represent locations and attributes of Metro Station Development Opportunity Areas (Metro Development Areas (MDAs) (the MDAs were established by the National Capital Revitalization Corporation (NCRC), Deputy Mayor for Planning and Economic Development, and the DC Office of Planning)), created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. Jurisdictions were identified from public records (maps and written descriptions created by the NCRC) and heads-up digitized from the 1995 orthophotographs. Supplementary Information (11) The Transit Impact Area which shall consist of any area located within 1500 feet of a Metrorail station in any of the areas set forth in paragraphs (1) through (12) of this subsection, or within 1500 feet of a Metrorail station at a designated Metrorail Station Development Opportunity Area, as defined in the District Elements of the Comprehensive Plan of the District of Columbia DISTRICT OF COLUMBIA OFFICIAL CODE 2001 EDITION DIVISION I. GOVERNMENT OF DISTRICT. TITLE 2. GOVERNMENT ADMINISTRATION. CHAPTER 12. BUSINESS AND ECONOMIC DEVELOPMENT. SUBCHAPTER X. NATIONAL CAPITAL REVITALIZATION CORPORATION. § 2-1219.20. Priority development areas
SDE Table - SDE.METROTOLN	Metro, WMATA, Washington Metropolitan Area Transit Authority, Subway, Mass transit, Rail transit	Metro Lines. The dataset contains locations and attributes of Metro lines, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) by participating D.C. government agencies. Lines were taken from legacy data from WMATA and fit to orthophotography and extracted planimetric data. They were snapped to the SIS street centerline where appropriate.
SDE.NbhActnPly	Neighborhood, Neighborhoods	This dataset was created by the DC Office of Planning and provides a simplified representation of the neighborhoods of the District of Columbia. These boundaries are used by the Office of Planning to determine appropriate locations for placement of neighborhood names on maps. They do not reflect detailed boundary information, do not necessarily include all commonly-used neighborhood designations, do not match planimetric centerlines, and do not necessarily match Neighborhood Cluster boundaries. There is no formal set of standards that describes which neighborhoods are represented or where boundaries are placed.

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Layer	Theme	Description
		These informal boundaries are not appropriate for display, calculation, or reporting. Their only appropriate use is to guide the placement of text labels for DC's neighborhoods. All DC GIS data is stored and exported in Maryland State Plane coordinates NAD 83 meters. This is an informal product used for internal mapping purposes only. It should be considered draft, will be subject to change on an irregular basis, and is not intended for publication.
SDE.NbhClusPly	Neighborhood, Neighborhoods, Cluster, Planning	This data set describes the 39 Neighborhood Clusters currently used for community planning and related purposes in the District of Columbia.
SDE.OWNERDESC - SDE Table	Real property, Definitions, Tax assessment	Table defining the fields for the attribute table of the owner points feature. It reflects the new table structure OTR adopted in 2003.
SDE.ParkPly	National Park Service, Parks	Digital version of the National Park Service Map A, indicating Park Service properties and other government-owned land.
SDE.PDAPly	Economic incentive areas, Planning areas, Development areas, Priority development areas	Priority Development Areas. The dataset polygon represents locations and attributes of Priority Development Areas (PDAs) (the PDAs were established by the National Capital Revitalization Corporation (NCRC), Deputy Mayor for Planning and Economic Development, and the DC Office of Planning), created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. Jurisdictions were identified from public records (maps and written descriptions created by the NCRC) and heads-up digitized from the 1995 orthophotographs.
SDE.PLANDECODE	Geographic Information System, Planimetrics	Attribute table for all planimetric layers. Contract NCPC 93-02. This document describes the planimetric map production for the 350 tiles located in Washington DC and the surrounding states of MD and VA.
SDE.PoolPrxPly	Swimming pools, Proximity, Recreation centers, Recreation facilities, Government facilities	Pools, subset of District of Columbia recreation facilities. The dataset contains proximity polygons (generated using proximity tools in ArcInfo Spatial Analyst) based on locations of the District of Columbia Department of Parks and Recreation recreation facilities swimming pools subset, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. The recreation facilities were identified from Department of Parks and Recreation records and heads-up digitized from the 1995 orthophotographs.

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Layer	Theme	Description
Recfacprxply	Swimming pools, Proximity, Recreation centers, Recreation facilities, Government facilities	District of Columbia recreation facilities. The dataset contains proximity polygons (generated using proximity tools in ArcInfo Spatial Analyst) based on locations of the District of Columbia Department of Parks and Recreation centers subset, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. The recreation facilities were identified from Department of Parks and Recreation records and heads-up digitized from the 1995 orthophotographs.
SDE.RecFacPt	Swimming pools, Proximity, Recreation centers, Recreation facilities, Government facilities	District of Columbia recreation facilities. The dataset contains proximity polygons (generated using proximity tools in ArcInfo Spatial Analyst) based on locations of the District of Columbia Department of Parks and Recreation recreation facilities swimming pools subset, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. The recreation facilities were identified from Department of Parks and Recreation records and heads-up digitized from the 1995 orthophotographs.
SDE.SoilPly	Soils, Soil taxonomy	Soil Survey Geographic Database (SSURGO) soils data is digital format Natural Resource Conservation Service (NRCS) county soil survey information. It essentially captures the familiar County Soil Survey (produced by NRCS, formally SCS), in GIS format. It includes a variety of information on the physical and taxonomic characteristics of mapped soil bodies, as well as an assortment of interpretive information related to soil suitability for a variety of applications. The database design is quite complex, and includes over twenty related tables in its full implementation. Users should consult formal NRCS documentation for guidelines in proper use of the data.
SDE.TnisPrxPly	Tennis courts, Proximity, Recreation centers, Recreation facilities, Government facilities	Tennis courts, subset of District of Columbia recreation facilities. The dataset contains proximity polygons (generated using proximity tools in ArcInfo Spatial Analyst) based on locations of the District of Columbia Department of Parks and Recreation recreation facilities tennis courts subset, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. The recreation facilities were identified from Department of Parks and Recreation records and heads-up digitized from the 1995 orthophotographs.
SDE.TR00CNSTR - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Construction Permits. Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C. Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.

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Layer	Theme	Description
SDE.TR00HHFLY - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Households (Family). Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR00HHFLYN - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Households (Non-family). Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR00NUMCH - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	1990-2000 Census Tract numbering changes. Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR00OWNOCC - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Percent Owner Occupancy (Housing Units). Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR00POP1 - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Population by Single Race and Hispanic Origin. Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR00POP1AD - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Adult Population (18+) by Single Race and Hispanic Origin. Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR00POP1NH - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Population (Non-Hispanic). Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.

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Layer	Theme	Description
SDE.TR00POP1Y - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Youth Population (0-17) by Single Race and Hispanic Origin. Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR00POPCH - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	1990-2000 Population Change by Single Race and Hispanic Origin. Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR00POPCHY - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Youth Population Change. Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR00POPCOM - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Population Combined. Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR00POPY - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Youth Population. Tabular data for CY 2000 census tracts. The dataset contains tabular data from the 2000 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90CONDO - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Housing Data (Condominiums Excluded). Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90CONDON - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Housing Data (Condominiums Excluded). Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90EDUC - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Educational Attainment. Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.

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Layer	Theme	Description
SDE.TR90HHFLY - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Households (Family). Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90HHFLYN - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Households (Non-Family). Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90HOVCRD - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Housing Overcrowding (Percent of Occupied Housing Units With More Than One Person Per Room). Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90HUNIT - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Housing Units (Housing Units by Number of Units in Structure). Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90MEDHH - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Median Household Income. Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90MEDVAL - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Median Housing Unit Value. Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90OWNOCC - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Percent Owner Occupancy (Housing Units). Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.

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Layer	Theme	Description
SDE.TR90PERCAPIN - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Per Capita Income. Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90POPAGE - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Population by Age. Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90POPRCE - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Population by Race & Hispanic Origin. Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90POV - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Percent of Population Below Poverty Level. Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90POVY - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Youth Population in Poverty. Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR90UNEMP - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Unemployment Rate. Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.TR99CNSTR - SDE Table	Government jurisdictions, Census tracts, Tracts, Census, Tabular data	Construction Permits. Tabular data for CY 1990 census tracts. The dataset contains tabular data from the 1990 federal decennial census, published by the U.S. Census Bureau and distributed by the D.C Office of Planning. These were prepared for the D.C. Office of the Chief Technology Officer (OCTO) for inclusion in the DC Atlas.
SDE.UniversPt - SDE Table	Higher education institutions, Universities, Higher education	Universities. This dataset contains points representing locations of universities, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies.

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Layer	Theme	Description
SDE.VotePre02Ply - SDE Table	Elections, Voting precincts, Electoral districts, Precincts, Board of Elections and Ethics, Boundaries	Voting Precincts 2002. The dataset contains polygons representing District of Columbia voting precinct boundaries. Precincts were modified based on the ward redistricting following the 2000 census, and changes for 2002. Precincts were established by the Board of Elections and Ethics and created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies.
SDE.VotePre90Ln - SDE Table	Elections, Elections, Electoral districts, Voting districts, Precincts, Board of Elections and Ethics, Boundaries, Political	Voting Precincts. The dataset contains lines representing locations of District of Columbia voting precincts, established by the Board of Elections and Ethics in 1992. These precincts were based on the wards redistricted after the 1990 census and created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies.
SDE.VotePre90Ply - SDE Table	Elections, Voting precincts, Electoral districts, Voting districts, Precincts, Board of Elections and Ethics, Boundaries, Political	1990 Voting Precincts. The dataset contains polygons representing boundaries of District of Columbia voting precincts, established in 1992 (based on the Wards redistricted due to the 1990 Census) by the Board of Elections and Ethics. This data was created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies.
SDE.WetlandPly - SDE Table	Wetlands, Hydrologic, Land cover, Surface and manmade features	National Wetlands Inventory. NWI digital data files are records of wetlands location and classification as defined by the U.S. Fish & Wildlife Service. This dataset is one of a series available in 7.5 minute by 7.5 minute blocks containing ground planimetric coordinates of wetlands point, line, and area features and wetlands attributes. When completed, the series will provide coverage for all of the contiguous United States, Hawaii, Alaska, and U.S. protectorates in the Pacific and Caribbean. The digital data as well as the hardcopy maps that were used as the source for the digital data are produced and distributed by the U.S. Fish & Wildlife Service's National Wetlands Inventory project. This dataset was reprojected as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies.
SDE.ZipCodeLn - SDE Table	ZIP codes, ZIP codes (5-digit), Postal Service, U S Postal Service	Zip Codes (5-digit). The dataset lines represent boundaries of zip codes, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. Zip Codes were identified from public records (US Postal Service) and initially created selecting street arcs from the WGIS planimetric Street centerlines and, where necessary, heads-up digitized from the 1995 orthophotographs.

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Layer	Theme	Description
SDE.ZipCodePly - SDE Table	ZIP codes, ZIP codes (5-digit), Postal Service, U S Postal Service	Zip Codes (5-digit). The dataset polygons represent location and attributes of zip codes, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. Zip Codes were identified from public records (US Postal Service) and initially created selecting street arcs from the WGIS planimetric Street centerlines and, where necessary, heads-up digitized from the 1995 orthophotographs.
SDE.ZONINGDESC - SDE Table	Zoning, Planning, Districts, Land use regulation, Residence districts, Special purpose districts, Mixed-use districts, Commercial districts, Industrial districts	Zoning. This table contains attributes of Zoning districts, created by the District of Columbia Office of Zoning (DCOZ). The zoning was digitized from georeferenced scans of the 1986 and 1996 1" to 600' Zoning Atlas. Data is also published on the DCOZ website. This zoning map has not yet been adopted by the Zoning Commission and is an unofficial zoning layer. Work on the zoning layer continues. For the most up-to-date information, contact the Office of Zoning directly.