



# GIS Excellence Awards

## November, 15<sup>th</sup> 2006



The GIS Excellence Awards were created in order to celebrate and recognize those County employees and agencies which are using GIS technology. This year, 29 projects were submitted for one of the twelve awards given annually.

Use of GIS technologies in the County has led to the work that you see posted in the hallways, on display by the exhibitors, and honored at the GIS Excellence Awards.

The award competition is divided into four categories:

- Cartographic Use of GIS
- Use of GIS by an Individual
- Use of GIS by a Group or Team
- Use of GIS by an Agency

The awards were determined by a judging panel which included representatives from the Department of Management and Budget, George Mason University Department of Geography, and the Environmental Systems Research Institute (ESRI).

# Cartographic Use of GIS

## Awardees

### Transportation Plan

**Chad Cerar**

*Department of Transportation*

The Transportation Plan (Transplan) is an element of the Fairfax County Comprehensive Plan and serves as a guide for long-range transportation development in the County. The Transportation Plan Map is used by many County employees, developers, and residents in planning and decision making. This map shows existing and proposed transportation infrastructure.

### Land Cover

**Buddy Rose**

*Park Authority*

The project's main purpose is to develop an inventory of the basic types of land cover to assist planning, resource management, and park operations. This map depicts the location of all County parks and their land cover classifications.

### Lake Mercer-1

**Forooz Nemati**

*Department of Public Works & Environmental Services-Storm Water Maintenance*

This map depicts the inundation areas for a potential breach of the Lake Mercer dam. Several insets show the details of floodplains and affected areas for the potential flood.

# Use of GIS by an Individual Awardees

## Route 28 Bank Robberies

**Cammie King**

*Police Department*

This GIS project was done to aid analysis of bank robbery spatial patterns and plan for most likely potential targets. The GIS focused limited resources towards the successful apprehension of a suspect in December, 2005.

## Pedestrian Crashes and Fatalities

**Mimi Murray**

*Department of Transportation*

This map of all pedestrian accidents and fatalities in the County serves as a planning tool for the identification of new areas for potential pedestrian improvement projects, new potential sign locations, and it allows the comparison current pedestrian signal locations with the accident locations around the County. The GIS data in the map is used by other agencies for their own planning and analysis purposes.

## Public Facilities Planning Determination

**Marsha Collins**

*Department of Planning & Zoning*

This project was developed for the graphical description of antenna placement in public rights of way. There were two scales to provide an overview of all placements and detailed view of each antenna location.

## Use of GIS by a Group or Team Awardees

### Senior Assistance Program

**Mike Demon**

*Department of Transportation*

**Jeanna Muhoro, Dennis Paddeu**

*Department of Transportation, Transit Services*

This project was requested by and presented to the Transportation Task Force to assist with the evaluation of current and future specialty transit needs. Four programs are displayed. The data was extracted from the membership databases and geocoded to provide accurate point data. The data was then summarized by census tract in order to display relationships between total elder population and registered users of the Senior Assistance Programs.

### Fort Willard Historic Site

**Pat Rosend, Andy Galusha**

*Department of Housing and Community Development*

This map shows the location and surroundings of the Fort Willard Historic site. GIS was used for the collection and arrangement of base data as well as the integration of this data with historical information.

### Arlington Blvd / US 50 Corridor Proposed Pedestrian Improvements

**Maria Turner, Chris Wells**

*Department of Transportation,*

For this project, GIS was utilized to store and portray information related to the proposed project improvements, in combination with the previously developed GIS information such as bus stop locations from the *Bus Stop Inventory and Safety Study*, and separate pedestrian improvement activity already underway at critical intersections. This GIS project effort provides an all-inclusive overview of all non-motorized information relevant from previous GIS information and of future needs.

# Use of GIS by an Agency Awardees

## **Department of Transportation**

The Department of Transportation has continued to integrate GIS into their business processes. From using analysis and graphics produced by GIS for amending the Comprehensive Plan, to evaluating pedestrian safety, this organization continues to leverage the investment made in GIS to support its missions.

## **Park Authority**

The Park Authority uses GIS for both its planning processes and cultural resources research. The Authority's varied submissions—including historic aerial photographic analysis, historical site descriptions, park land cover inventory, and park service locations—show the heavy incorporation of GIS technologies within the Park Authority's activities.

## **Department of Public Works & Environmental Services**

For both planning and maintenance processes, the Storm Water Business Area utilizes geospatial technologies throughout their division and Fairfax County. GIS allows this group to plan for dam breaches, model rainwater runoff, and track storm water assets in the field.

# Complete Listing of GIS Excellence Award Submissions

## **Cartographic Use of GIS**

Cross County Trail Map – Buddy Rose, FCPA  
Cell Towers within Parks – Buddy Rose, FCPA  
Recent Plan Amendment Activity in School Clusters IV & V – Harry Rado, DPZ  
Centerville Historic Overlay District Maps – Harry Rado, DPZ  
Zoning Enforcement Assignment Areas – Indrani Sistla, Mike Donnelly, DPZ  
Ag District with RPA and EQC – Mary Ann Welton, DPZ  
Fairfax County Zoning Districts – Mike Liddle, DPZ

## **GIS Use by an Individual**

Hanson Work Order Field Map – Ned Langdon, DPWES-WWM  
Mason District Public Facilities - Lynne Johnson, FCPA  
Target Hot Spots for Specific Crime Types – Angelique Abbot, FCPD  
Pedestrian Task Force Maps – Mimi Murry, DOT  
Fairfax County Four-Year Transportation Program – Steve Knudsen, Beth Iannetta, Karyn Moreland, DOT  
Suspect Travel Patterns To and From Burglaries – Jessica Beaty, FCPD  
GIS Reimbursement Application – Bo Baik, DPWES – WWM  
Robbery Trends and Series – Amisha Amin, FCPD  
Predictive Analysis of Daytime Residential Burglary Series – Simone Englehardt-Greer, FCPD  
Meri-dale as-built Drawing – Charles Gerlach, DPWES-WWM  
Distribution of Stormwater Facility Drainage Areas – Keith Appler  
FCPA Mowing Area – Michelle Dawson, FCPA  
The Integration of GIS into CompStat – Melissa Carboni, FCPD  
Sully District Station Series – Camie King, FCPD  
Access Management Evaluation for the Route 7 Segment of the Dulles Rail Project – Beth Iannetta, DOT

## **GIS Use by a Group or Team**

Hanson GIS Integration – Magdalena Springer, Robert White, Robert White Jr, Calvin Hedgepeth, William White, Mickey Pettry, Charese Willis, Abraham Moazzami, Richard Harvell Tebebe Tesfa, Edith Johnson, Trina Sanders, Rita Lord, DPWES  
Annandale Little River Turnpike Study Area for Various ROW Requirements - Myah Evers-Schwartz, Robert Fields, Matthew Marchione, William Majercisk - DHCD  
Leonard Wolfenstein, Caijun Luo, Tony Foisy – DOT  
The State of Roadway Lighting and Traffic Accidents in Fairfax County – Riad Saraiji, Felix Bermejo, DPWES  
Emily Yance-Houser, FCPD  
GIS Usage Relative to Street Lighting in Fairfax County – Felix Bermejo, Ken Moreland, Greg Ambelas, Riad Saraiji, DPWES  
Northern Virginia Soil and Water Conservation Improvements - Garland Robertson, Joanna Cornell, Asad Rouhi, Willie Woode, - Northern Virginia Soil and Water Conservation District  
Fairfax County Well Mapping Project – Adrian Joye, Kevin Crisler, Ed Pippin, John Milgrim, Kevin Wastler, Kurt Aspelin, John Dickenson, Lynn Jones, Rick Kurtz, Aimee Lee, Sara Mattie, Darren Mong, Chris Pricci, Marty Shannon, Martin Thompson, FCHD  
Mapping Median Maintenance Responsibilities in CRP Districts – Drew Kolonay, Dale Glines, Steve Aitcheson, DPWES  
Selected Voting Results, Primary Election, June 2005 – Sonia Skipper, Judy Flaig, Electoral Board  
GIS: The Examination of Early Historical Aerial Photography and Its Implications – John Rutherford, Michael Rierson, Elizabeth Crowell, FCPA

## **GIS Use by an Agency**

Wastewater Management – Gilbert Osei-Kwadwo, Ned Langdon, DPWES - WWM  
Richmond Highway-Springfield Bus Tour – Vicki Serraino, Rodney Lusk, Ivy Richards - EDA  
Using GIS to Build Consensus on Proposed Land Use Changes – Mike Liddle, Meghan Vandam - DPZ