



GIS Excellence Awards

November, 16th 2005



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

This graphic allows FCPS staff to visualize future development within these two school clusters and plan for increased school attendance as a result of residential growth.

Centreville Historic Overlay District Graphics

Harry Rado

Department of Planning and Zoning

Graphics depict historic properties and structures within Centreville. These maps are being used to support development preservation measures within the study area.

Cross County Trail Map

Buddy Rose

Fairfax County Park Authority

This map graphically depicts where the Fairfax County Cross County Trail location will be. This trail is a linkage of new and existing trails, and when it is completed citizens will be able to traverse this trail to walk or bike from one edge of the county to the other without having to travel on a single road.

Use of GIS by an Individual Awardees

GIS Reimbursement Application

Bo Baik

Department of Public Works and Environmental Services

This application has aided how Fairfax County evaluates development impacts on the existing sanitary sewer network. Using an automated GIS driven reimbursement calculation has resulted in a cost savings of 95% over the previously used manual calculation.

Distribution of Stormwater Facility Drainage Areas

Keith Appler

Department of Public Works and Environmental Services

Through analyzing watershed development and stormwater facilities, DPWES is able to identify areas of critical imbalance. This analysis allows for DPWES to direct resources to those watersheds with inadequate detention capacity.

Hanson Work Order Field Map

Ned Langdon

Department of Public Works and Environmental Services

As a result of integrating Hanson and GIS, these maps and graphics are easily created by field personnel; allowing personnel to locate and repair damaged structures maintained by DPWES.

Use of GIS by a Group or Team Awardees

State of Roadway Lighting and Traffic Accidents in Fairfax County

Emily Yance-Houser - *Fairfax County Police Department*

Riad Saraiji, Felix Bermejo - *Department of Public Works and Environmental Management*

This project evaluates the current state of street lighting in Fairfax County. Through modeling of streets adequately lit by street lights, DPWES will be able to proactively prioritize those areas which need additional lighting without having to rely solely on costly field evaluations. In addition, FCPD is better able to make lighting recommendations for hazardous intersections, with the goal of reducing night-time vehicle accidents caused by poor lighting conditions.

Annandale Little River Turnpike Study Area for Various ROW Requirements

Myah Evers-Schwartz, Robert Fields, Matthew Marchione, William Majercisk - *Department of Housing and Community Development*

Leonard Wolfenstein, Caijun Luo, Tony Foisy - *Department of Transportation*

This project illustrated how existing Comprehensive Plan language relates to future widening of the Route 236 right of way in the Annandale revitalization area. The project allowed for staff to evaluate the impact of plan language on property owners and alleviated the need for a costly consultant study.

Northern Virginia Soil and Water Conservation Improvements

Garland Robertson, Joanna Cornell, Asad Rouhi, Willie Woode, - *Northern Virginia Soil and Water Conservation District*,

This extraordinarily labor intensive project, when completed, will increase the accuracy of data on soil and subsurface information within Fairfax County. As part of the project, improvements to how soil information is being delivered to citizens are being made.

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.

Fairfax County Health Department

Locating drinking water sources within Fairfax County is necessary for many reasons. The Health Department through capturing field locations of wells through GPS, as well as as-built plan information, has allowed them to automate and create analyses that were unable to be done prior to data capture. Health and security evaluations of private drinking water facilities can now be undertaken.

Fairfax County Police Department

The overall submissions to the Excellence Awards this year by the Police Department demonstrate the breadth and depth of GIS usage within as well as the clear support of GIS by the agency. They submitted a large number of projects ranging from integrating GIS into Countywide crime trends, to predicting individual crime suspect ranges.

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