Fairfax County GIS Excellence Awards Ceremony

GIS Day 2007
Wednesday, November 14th

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AGENDA

1. **Opening Introduction** – Tom Conry

2. **Featured Speakers**

    i. **Mr. Gerry Connolly**, Chairman,
        Board of Supervisors, County of Fairfax,
        Virginia

    ii. **Ms. Wanda Gibson**, Chief Technology
        Officer, Department of Information
        Technology, County Of Fairfax, Virginia

3. **Presentation of Awards** – Tom Conry, Wanda
    Gibson

4. **Closing**

GIS Excellence Awards
November 14th, 2007

The 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 here at the GIS Excellence Awards.

As part of the GIS Day celebrations, the GIS Excellence Awards are given annually for outstanding uses of GIS technology by Fairfax County employees and agencies. The GIS Excellence Awards were created in order to celebrate and recognize those County employees and agencies which are effectively and creatively using GIS technology. This year, 48 submissions were received for the seven categories of recognition.

The award categories have changed from previous years. The awards now have two categories recognizing individual and/or team accomplishments and 5 categories recognizing agency accomplishments. The following page lists the new categories and their descriptions.

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).

2007 GIS Excellence Award Categories

Individual/Team Categories
FIRST, SECOND, AND THIRD PLACE AWARDS FOR EACH CATEGORY

Best GIS Cartographic Product/Presentation
This award is intended to showcase the power of GIS tools in creating accurate, instructive, and visually-pleasing maps. Criteria used to evaluate the entries include:
- clarity of purpose and intent
- success in clearly explaining spatial concepts
- visual balance and appeal
- inclusion of necessary map elements and conventions

Best Use of GIS for Analysis
This award is intended to showcase the power of GIS tools in undertaking sophisticated spatial analyses that aid County operations and answer significant questions. Criteria used to evaluate the entries include:
- complexity of analysis
- ingenuity of GIS methods for answering analytical questions
- project benefits to a team or department
- effective demonstration of the information and insight gained (e.g., Diagrams, maps, presentations, reports, text)

Agency Categories
ONE AWARD PER CATEGORY

Best Use of GIS on the Web
- Presented to the agency with the best use of GIS interactivity, maps, and/or data on the internet or County intranet

Best Use of GIS for Public Outreach
- Presented to the agency with the best use of GIS to serve the public in such items as map documents, customer service operations, press relations, and public events

Most Significant Data Contributor
- Presented to the agency that has created or refined the most significant spatial data for the County

Best GIS Integration or Application Development
- Presented to the agency that has integrated GIS into their operations to the greatest degree and/or has created a significant GIS software application

Most Significant Progress
- Presented to the agency that has demonstrated the most progress in their use of GIS over the past year

Best GIS Cartographic Product/Presentation
Individual/Team Awardees

Third Place
Analysis of Drug Activity and Commercial Areas
Daphne Sawyer
Fairfax County Police Department
Utilizing a variation of crime pattern theory, this map shows an analysis of drug offenders committing offenses and the locations at which they are being committed. The illustration shows specific areas within each patrol district station of highest activity. This information can help to assist supervisors in the proactive enforcement of narcotics violations and patrol resource allocation.

Second Place
Planning Determination 2232-MD06-10 (Dulles Metrorail Extension)
Marsha Collins
Department of Planning and Zoning
For this presentation, the GIS System was used to map out the Dulles Metro Rail Extension Comprehensive Plan amendment. A presentation piece was created that shows the geographically long extent of this proposal in a detailed nine map series including a large air photo based supplement that helps readers understand and visualize the complex Plan Amendment.

First Place
Injury and Fatal Crashes Involving One or More Teenage Drivers
Emily Yance-Hauser
Fairfax County Police Department
The Young Driver Crash Map is a visual reminder of the consequences of inexperienced teen driving. It displays the County's public high schools as well as graduated data points representing two years' of injury and fatal crashes in which at least one driver was between 15 and 20 years old. This map has been used numerous times for public outreach and continues to impress youths and their parents when receiving their first licenses.

Best Use of GIS for Analysis
Individual/Team Awardees

Third Place
Calls for Service by Patrol Area
Glenn Duncan
Fairfax County Police Department
This project depicts percentage of change, by patrol area, between 2006 Call for Service totals and projected totals to the end of 2007. This map may be utilized for the identification of those patrol areas that have elevated levels of raw calls for service, and those that show an elevated increase compared to the previous year. It may assist district station commanders and strategic planners in their resource allocation strategies and patrol plans.

Second Place
Analysis of Drug Activity and Commercial Areas
Daphne Sawyer
Fairfax County Police Department
Utilizing a variation of crime pattern theory, this map shows an analysis of drug offenders committing offenses and the locations at which they are being committed. The illustration shows specific areas within each patrol district station area of highest activity. This information can help to assist supervisors in the proactive enforcement of narcotics violations and patrol resource allocation.

First Place
Geographic Distribution of GMU Employees & Available Public Transportation Sites
Tim Demorest ; Walter Daniel; Glenn Hiner
Department of Transportation
Fairfax County Department of Transportation Employer Services Program in conjunction with the FCDOT Geographic Information System Team has developed Employer Density plots to assist large Employers in Fairfax County with the implementation of alternate commute or Transportation Demand Management strategies. These maps provide "at a glance" assessment of potential commute alternatives such as: Ride sharing – Car and Vanpool, Shuttles – Origin, Destination and frequency, teleworking, Transit - Bus and Rail, Park and Ride and HOV Lanes.

Best Use of GIS on the Web
Agency Winner

Police Incident Viewer
Fairfax County Police Department
Rolland Watenpaugh, Angelique Abbott

This past year the police department has launched the Police Incident Viewer. This internet based tool allows citizens to view police calls for service in their neighborhood by proximity to an entered address. With this new application any citizen can visualize the spatial distribution of police calls by type of reported incident.

Best Use of GIS for Public Outreach
Agency Winner

Centreville Park & Ride Usage
Take the Easy Way to Work
Bike Crashes 2003-2006
Pedestrian Fatalities & Crashes 2003-2006
Department of Transportation
Shari Crane, Beth Francis, Tim Demorest, Mike Demmon, Christy Wegener, Jim Carrell, Chip Galloway, Nohemy Miranda, Charlie Strunk, Chris Wells

This award is presented to the Department of Transportation for their extraordinary use of GIS in public outreach for various purposes. Examples from four projects were submitted to show how DOT has continued to use GIS in its outreach efforts this year. GIS was important in gathering and then presenting information about pedestrian awareness and commuting options at public meetings, in publications and on the web. These projects helped get the message out to citizens on a variety of issues through public meetings, publications, and the web.

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Most Significant Data Contributor
Agency Winner

Stormwater Asset Inventory
Department of Public Works- Maintenance and Stormwater Management Division
Keith Appler

The MSMD is engaged in an easement mapping project to identify existing easements related to stormwater management. Currently, the project is over 40% complete covering the southern half of the county. MSMD has already mapped over 17,000 easement polygons and the associated land survey line work. The easement mapping project has aided in the spatial correction of existing stormwater data and become an important tool in merging elements of the Fairfax County Hydrography Dataset (streams and junctions) with stormwater infrastructure (pipes and structures) to build a geometric network of the county's entire stormwater drainage system.

Best GIS Integration or Application Development
Agency Winner

Integrated Parcel Life Cycle System
Department of Systems Management for Human Services
Fatima Khaja, Vickie Baitinger, Anne Cahill, Chris Gao, Jaya Kori, Keisha Dotson, Aimee Garcia, Stephanie Walters

With the new GIS based Integrated Parcel Life Cycle System, DSMHS can bring together disparate county databases to perform the annual housing forecasting reports. The system can also map authorized new housing locations that are in the "pipeline". This application has streamlined a very complex task and provided new capabilities that enhance this important service and monitoring area.

Most Significant Progress
Agency Winner

Survey Control Monument Database
Department of Public Works and Environmental Services, Capital Facilities, Land Survey Branch
Sue Sheviak; Guy Murdoch; Vickie McEntire

This year the Land Survey Branch made a concerted effort to migrate all control monument information to the county GIS warehouse. As part of this effort a GIS database was designed to capture and catalog existing monumentation information. Over 400 individual monuments were then reviewed and placed in the database. An additional 600 monuments remain to be digitized, but when complete, the data layer will efficiently provide all county monument data in a spatial format that is accessible on the internet.

Complete Listing of GIS Excellence Award Submissions

GIS Cartographic Product/Presentation

Six Dam Sites – Forooz Nemati, DPWES/MSMD
Dam Areas – Forooz Nemati, DPWES/MSMD
Young Driver Crash Map – Emily Yance-Houser, FCPD/CAU/OSB
The Route 28 Tax District – Marsha E. Collins, DPZ
Planning Determination 2232-MD06-10 (Dulles Metrorail Extension) – Marsha E. Collins, DPZ
UOSA – TRANSCO Easements – Buddy Rose, Cindy McNeal and Scott Sizer, FCPA
Indecent Exposure / Assault Cases – Kara White, FCPD/Major Crimes
Storm Water Template – Forooz Nemati, DPWES/SWM
Public Safety – Streetlights – Alex P. Cheng, DPWES/PDD
Geocode Hazardous/Explosive Material Sites – Diane Jenkins, HCD
Traffic Calming Project Inventory – Chip Galloway, Doug Hanson, Steve Knudsen, FCDOT/Capital Projects
Affordable Rental Housing – Krystal Workman, HCD
Project Pizza Box – Camie King, FCPD/CAU/Sully
Fairfax County Park Trails – Buddy Rose, FCPA
Analysis of Drug Activity & Commercial Areas – Daphne Sawyer, FCPD/Organized Crime
 & Narcotics

Use of GIS for Analysis

Regional GC Burglary Series – Beverly Wheatley, FCPD/CAU
Geographic Distribution of GMU Employees & Available Public Transportation Sites –
 Tim Demorest, Daniel Walter, Glenn Hiner, FCDOT
Continued Analysis of Early Historical Aerial Photography of Fairfax County, Virginia – John
 Rutherford, FCPA/Resource Management
UOSA – TRANSCO Easements – Buddy Rose, Cindy McNeal and Scott Sizer, FCPA
Tyson's Corner Private and Public Open Space – Buddy Rose, Andi Dorlester, and Jon Gailard, FCPA/Planning & Development
2005-2006 Density Change – Karin Lanigan, FCPD/CAU/Reston
Delineating Watersheds – Forooz Nemati, DPWES/SWM

Street Lighting - Vehicle/Pedestrian Accidents – Alex Cheng (DPWES), Felix Bermejo
  (DPWES), Riad Saraiji (UAE University), Scott Sizer (FCPA), Emily Yance-Houser
  (FCPD)
VA State Code 18.2-255.2 (Drug-Free Zone Analysis) – Jessica Beaty,
FCPD/CAU/Mason
Repeat Incident Locations of Nuisance-Type Crimes – Simone Englehardt-Greer,
  FCPD/CAU/Franconia
Transportation Forecast Model – Chip Galloway and Arpita Chatterjee,
FCDOT/Planning
West Springfield Vehicle Tampering – Angelique J. Abbott, FCPD/CAU/West
Springfield
Analysis of Drug Activity & Commercial Areas – Daphne Sawyer, FCPD/Organized
Crime
  & Narcotics
Mob Assaults & Robberies – Amisha Amin, FCPD/CAU/Mount Vernon
Site Selection Analysis for Relocating Herndon Station 4 – Eric Fisher, Edie Beitzel and
  Ralph Dulaney, FCF&R/Business Services Bureau
Calls for Service by Patrol Area – Glenn Duncan, FCPD/CAU

Use of GIS on the Web

Lake Fairfax On-line Maps – Park Authority/Planning & Development
Interactive Facility Map – Fire & Rescue
Crime Incident Reporter (My Neighborhood) – Police Department/Crime Analysis Unit

Use of GIS for Public Outreach

Planning Determination 2232-MD06-10 (Dulles Metrorail Extension) – Planning &
Zoning
Fort Willard – Park Authority
Fairfax Villa – Park Authority
UOSA – TRANSCO Easements – Park Authority
Take the Easy Way to Work – Department of Transportation
Centreville Park & Ride Usage – Department of Transportation/Transit Services
Division
Bike Crashes 2003-2006 – Department of Transportation/Capital Projects
Pedestrian Fatalities & Crashes 2003-2006 – Department of Transportation/Capital
Projects
Project Pizza Box – Police Department/Crime Analysis Unit/Sully

Significant Data Contributor
Park Trails Dataset – Park Authority/Planning & Development
Stormwater Asset Inventory – DPWES/Maintenance & Stormwater Management

GIS Integration or Application Development
Fort Willard – Park Authority
Community Parking Districts – Department of Transportation/Operations Section
Location, Location, Location – Department of Transportation
Human Services Resource Guide – Department of Systems Management for Human Services
Integrated Parcel Lifecycle System (IPLS) – Department of Systems Management for Human
  Services

Significant Progress
Control Monument Dataset – DPWES/Capital Facilities/Land Surveys
Fort Willard – Park Authority
Affordable Rental Housing – Department of Housing and Community Development
Environmental Improvement Program – DPWES/Urban Forest Management Division