



Agenda

- **Introduction**
- **Recent Accomplishments**
- **2004 – 2005 GIS Workplan**
 - GIS Executive Team
 - 2004 – 2005 Projects and Status
- **Special Projects**
- **GIS Demonstration**
- **Conclusion and Discussion**



GIS at the City of Dallas

Introduction

- Infrastructure Management/GIS is a division of Public Works and Transportation
- GIS serves all City departments, Mayor and Council, and the Citizens of Dallas



What does the Division of Infrastructure Management/GIS do?

- APPLICATION DEVELOPMENT AND SUPPORT
- SYSTEM PLANNING
- TRAINING AND SUPPORT
- SPATIAL ANALYSIS
- PROJECT MANAGEMENT
- GIS DATA DEVELOPMENT, MAINTENANCE, STORAGE, DELIVERY AND ADMINISTRATION
- GIS HARDWARE AND SOFTWARE ADMINISTRATION
- CUSTOM GIS ANALYSIS AND MAPS



What GIS technology is currently available for use at the City of Dallas

- Approximately 115 data/map layers (See Attachment A)
 - Over 20 data layers added this year include building footprints and a routable street file
- Internet and Intranet GIS applications for the public, employees and officials
- The capability of spatially analyzing hundreds of different problems related to the City of Dallas
- Data support for applications (CRMS-311, CAD, Capital Project Mgmt system, Land Information System, etc.)
- GIS Training
- GIS Technical assistance
- GIS Support - maps and data



Some Recent Accomplishments

- Internet Crime Map
- 311 intranet Application
- Enhancements to Street file data. Necessary for new Computer Aided Dispatch system.
- Homeland security
 - Maps on the fly – Incident management mapping
- Application Development
 - Crime Incident Proximity Analysis
 - Transportation Petition notification application
- CRMS – data loader
- GIS Hardware upgrades
 - Added servers to support CRMS and data distribution



Internet Crime Mapping Application

- Integrated Dallas Police Department crime data with Internet Mapping Application.
- Allows the public to spatially query crime by category and location.
- Over 596,000 Internet maps generated by users including the public since release, 4/4/05.

Address: <http://maps.dallascityhall.com/index.asp?ExtentLeft=2486261.31732678&ExtentRight=2494951.11511797&ExtentTop=...>

DALLASCityhall.com City Information | Elected Officials | City Employment | Contact the

Specify date/time: From: Month Day Hour To: Month Day Hour

DALLASCityhall.com City Information | Elected Officials | City Employment | Contact the

home online services life in dallas business in dallas visiting dallas new

Interactive Maps

Map Options

Click or drag a rectangle on the map to:
 Recenter Zoom In Zoom Out Query A Crime

Crimes Information
Click here for a crime statistics overview and disclaimer --

Police Beats Police Report Areas

Select a year:
 2003 2004 2005

Aggravated Assault Business Burglary Residential Burglary

Murder Theft Robbery - Business Robbery - Individual BMV Related Auto Theft All Crimes

Update Map Clear Map

Crime Site Report

Service Number	Category	
0501379P	THEFT	
Event Date	Event Time	
8/22/2005	01:30 PM	
Beat	Watch	Rep
452	2	418

Definition
THEFT | OTHER THEFTS | OTHERS | ...

Click here to view the Beat, Reporting Demographic reports for this ...

Start Over

Done Internet

general profile | social profile | economic profile | housing profile

If you require additional information regarding crime statistics or how the information is derived, please call 214-671-3060 or email us at crimeinfo@dpd.dallascityhall.com



311 Call Center Intranet Application

- Allows call takers to easily determine a multitude of City services with a single address.
- Retrieve map if needed.
- Can be used by any staff member with an Internet connection.

http://gis.cod/stinfo.asp - Microsoft Internet Explorer

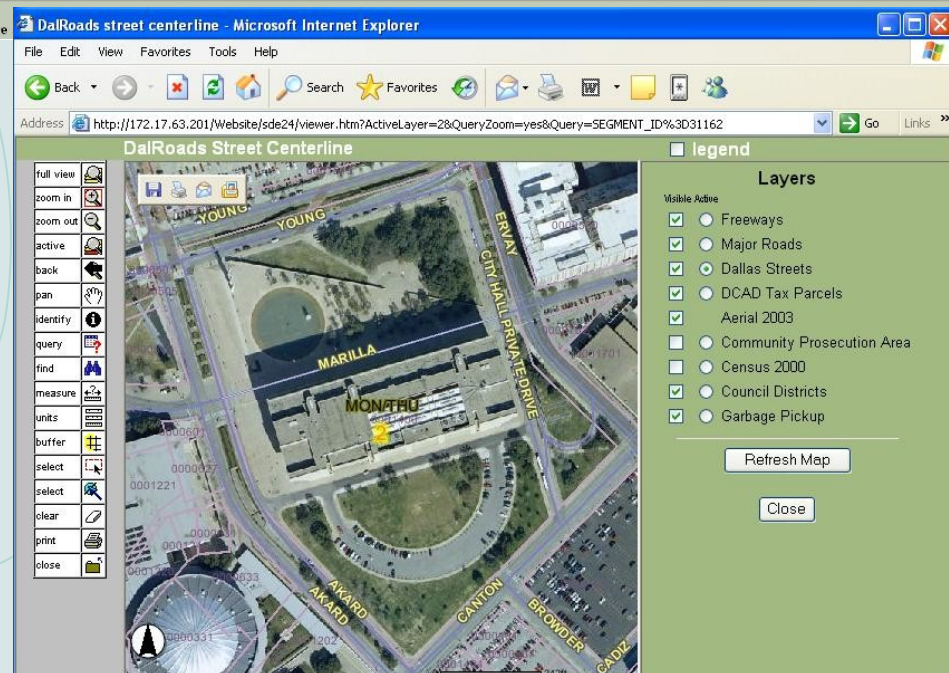
File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Print Mail News RSS Feeds

Address http://gis.cod/stinfo.asp

Close Location Information Street = .MARILLA.ST. Number = 1500
For data errors - call 670-0876 or 670-4513

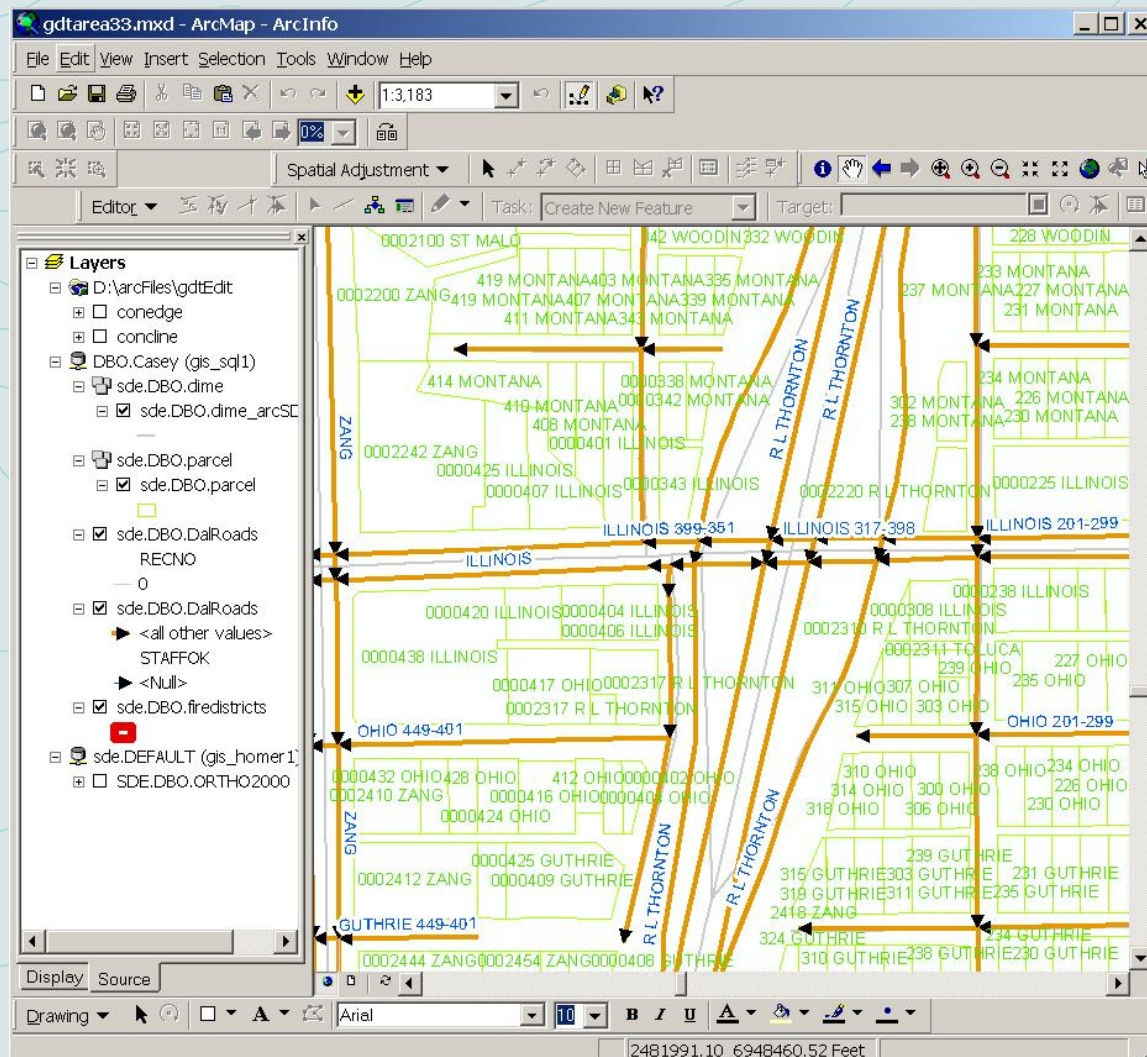
Address	Council District	Census Tract	Mapsc0	City Service	Garbage Days	Brush Week	Recycling Day	Sanitation Dist	Code	Street Mant	Fire Dist	Police Beat	County	ZipCode	BldgIns
1400 - 1698 R. MARILLA ST	2	003201	45-Q	1	MON/THU	3	Thursday	5	4	5	1	135	Dallas	75201	28





Improved Street Address Range File

- Developed an improved street address range file. File is an inventory of actual numeric street block ranges.
- Some of the uses include: Emergency response, customer response (CRMS), crime analysis. This file is necessary for the implementation of the new Computer Aided Dispatch system.

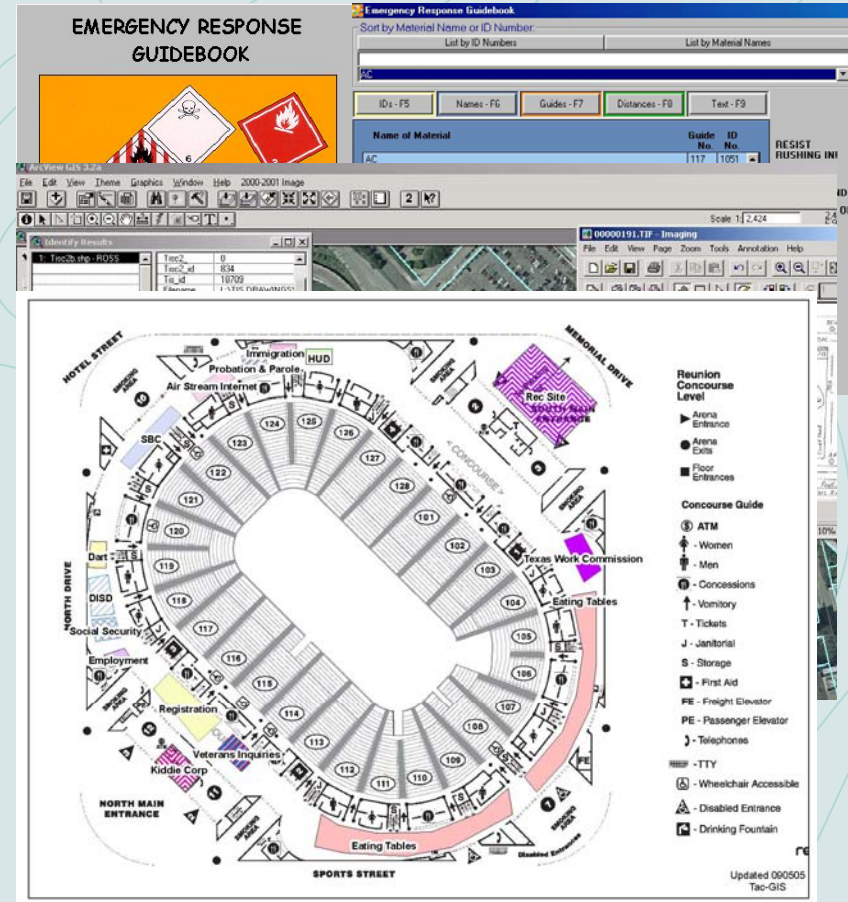




Homeland Security



- Developed Emergency Response Guidebook.
- Assisted EOC
 - Siren coverage areas
 - Multi-Hazard Mitigation Plan
- Completed the clean up efforts on the electronic format for 1,045 Tactical Information Survey's (TIS's).
- Started work on site specific properties including Dallas City Hall and Love Field Airport.
- Active in developing maps for Hurricane Katrina evacuee facilities
- Started organizing and automating data for Apartment Complexes, Shopping centers and Mobil home parks:
 - Data gathering and automation
 - Establishing contacts with management organizations
 - Started inventory of properties





2007 Bond Project Mapping

- In the process of digitizing the Needs Inventory data. This data will be used to assist in determining 2007 Bond projects.
- Integrate data with applications that can be used by staff and citizens. Will implement public website displaying sites.

Dallas Bond Information

2001 Aerial Photos
 2003 City Council Districts

2003 Bond
These 2003 maps are for planning purposes only. The amounts identified for each project are estimated amounts. The city may reallocate the amounts among the various projects listed, modify the various listed projects, or substitute other projects of a similar nature, in accordance with the respective Bond proposition. Propositions 8 and 13 are not shown because they are not geographic specific.

2003 Bonds

Show: **All Propositions**

Query a 2003 Bond Project

1995 Bond

Query a 1995 Bond Project

1998 Bond

Query a 1998 Bond Project

[Return to Main Layer List](#)

Bond Information
There are a total of 1 bond projects around the current point on the map.
[Click here to see the list](#)

Start Over
City of Dallas Mosquito Control Information web site
City of Dallas Mosquito Control Latest Information and updates

Name:	Program:	Category:	Description:	Proposition:	Council District Served:	Estimate:
Illinois (W) - Hampton to thru 2800 Block	Specified Street Projects	Street Resurfacing	2400-2800	10	01	\$240,000.00



GIS Workplan



- Workplan project determination process:
 - Surveys distributed to all City of Dallas departments requesting GIS projects for the upcoming fiscal year.
 - A list of the recommended projects is compiled also included is an estimate of the time and resources it will take to complete each project.
 - GIS Executive Committee then votes on the projects GIS will complete that fiscal year considering how much time is available for workplan projects.
 - Infrastructure Management dedicates time to the following areas:
 - Maintaining and administering the present system
 - Special projects (all projects that are not considered workplan projects. Any request for maps, data etc.)
 - Workplan Projects
 - Office Administration
 - 2004-2005 Workplan allowed for approximately 6600 worker hours



Infrastructure Management/GIS 2004 – 2005 Workplan

● GIS Executive Team Member Departments

- Public Works and Transportation
- Development Services
- Park and Recreation
- Sanitation Services
- Street Services
- Fire
- Police
- Code Compliance
- Dallas Water Utilities
- CIS



2004-2005 GIS Executive Committee Approved Project (04-05 Workplan)

- Map all Cultural Centers, Museums, and Music Halls & Points of Interest, and all public art locals. GIS will geocode OCA's data and create a GIS geodatabase. Completed.
- Assist Dallas Water Utilities and Dallas Fire with verification of All Fire Hydrants. GIS will oversee matching Hydrants to their respective DFR PLUG dataset. GIS division portion completed.
- Environmental Health Services: Restaurant Inspection Score Mapping per Site. GIS will geocode and publish food inspection scores on the World Wide Web. GIS portion completed except for final publishing phase.
- PW&T Engineering:
 - Compile Needs Inventory database and digital location. GIS, in conjunction with PW&T engineering, will map the Needs Inventory projects. Two year project – Currently digitizing projects
 - Construct and distribute Traffic Engineering Petition Notification Application. Beta version released and being used by Transportation. Final testing should be complete within weeks.
- PW&T Infrastructure GIS:
 - Purchase, set-up, and maintain ArcSDE Enterprise Server for CRMS, CapPro, LMS and CAD. Completed.
 - Continue Homeland Security GIS Projects with DPD And DFR. Long term project in progress.
 - Cut Permit GIS Application (ESRI Authored). Pending contact approval.



Infrastructure Management/GIS

2005 – 2006 Workplan

- GIS Executive Team Meeting September, 2005
 - Reviewed 2004 – 2005 GIS Workplan
 - Discussed proposed 2005 – 2006 projects
 - Prioritized proposed 2005 – 2006 projects
 - Set 2005 – 2006 Workplan



2004 – 2005 Special Projects

- Infrastructure Management completed an estimated 200 special projects in the 2004-2005 fiscal year. Some of the groups we did projects for include:

- Aviation
- City Attorney
- City Auditor
- City Manager
- CIS
- Code Compliance
- Convention and Event Services
- Council Office
- Department of Development Services
- Economic Development
- Environmental & Health Services
- Equipment and Building Services
- Fire
- Housing
- Housing Compliance
- Human Resources
- Intergovernmental Services
- Library
- Mayor's Office
- Numerous non-profits
- Office of Emergency Preparedness
- Office of Strategic Customer Service
- Parks & Recreation
- Police
- Public Works & Transportation
- Sanitation Services
- Street Services



Special Projects – Internet and Intranet Development

Internet and Intranet Development

City of Dallas Internet Interactive Map

- Over 4,915,720 maps generated by the public and COD employees since 7/18/02
- Improved the look and added new features
- Added new layers
- Added new Interactive crime map site

City of Dallas Intranet

- Added New Interactive maps for production
- Added query tools

Location Information: Use Street Address or Intersection

Street Address Format: [Number] StreetName [StreetType]
 Intersection Format: StreetName [StreetType] {AND|&|@} CrossStreet [StreetType]

1500 Marilla

exact starts with includes

Street Address Input format: [Number] [Prefix] StreetName [StreetType] (do not input Suffix)
 Example: 1500 MARILLA ST

Different ways of entering Street Addresses:
 Enter Number and StreetName - 5100 OAK TREE
 Leave off Number - OAK TREE
 Enter part of StreetName - OAK
 Include StreetType - OAK TREE CIR

Intersection: StreetName [StreetType] {AND|&|@} StreetName [StreetType]
 Example: MAIN AND AKARD

Different ways of entering Street Intersections:
 MAIN AND AKARD

Address	Council District	Census Tract	Mapsc0	City Service	Garbage Days	Brush Week	Recycling Day	Sanitation Dist	Code	Street Maint	Fire Dist	Police Beat	County	ZipCode	EldgIns
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A few more 2004-2005 GIS Projects



- Tax Parcel value analysis by Council district for Council members
- COPS Grant - GIS helped to acquire and managed a \$247,000 U.S. Department of
 - The use of this grant funding made it possible to obtain enhancements to the street file in time for the CAD integration process, including the development of new Emergency Response Areas by Fire-Rescue.
- Identify areas of the City of Dallas that qualify for the new State of Texas Enterprise Zone designations.
- 2005 Aerial photo
 - Data research and acquisition process for the RFP issuance
 - Photo is 6" pixel and 1' accuracy
 - Photo received and Quality Control phase of the project is underway.
- Designed Public Works and Transportation intranet site
- City of Dallas GIS Training
 - Classroom GIS training for City of Dallas employees
 - Trained over 35 employees 2004 – 2005



GIS Demonstration





City of Dallas Geographic Information Systems (GIS) Layer List

9/16/2005

Attachment A

Building footprints
Pave surface
Sidewalk surface
Tree canopy
Animal Control Districts
Code Enforcement Districts
Dart Rail Lines
Dart Rail Stations
Dart Bus Routes
Cemeteries
Dallas City Limits
County Lines
Dallas County Zip Codes
Mapsco
Abstracts
Parcels
Certified Tax Parcel
Platted
Railroads
Railroad ownership
Air Monitoring Sites
Dallas Housing Authority Properties
Dallas senior nutrition sites
WIC clinic location
Parks
Dallas aquatic facilities
Dallas park trails
Recreation Centers
Dallas tennis centers
Boundaries of city conservation districts
Landmark districts
National Register Districts
Index grid for zoning base paper maps
Zoning
Special Use Permit
Building Inspection districts
City Landmark districts
Conservation Districts
Deed restrictions
Escarpment overlay
Moratorium overlay
Area SEC 6.1.3 Open Container area
Planned Development (PD) layer
Pedestrian overlay district
Special purpose sign district
Tree mitigation rules
Walkways in and around Downtown





City of Dallas Geographic Information Systems (GIS) Layer List

9/16/2005

"Wet" alcohol sales area
Bike routes
Fire Stations
Police Beats
Dallas Police Divisions
Dallas Police Reporting Areas
Dallas Independent School Districts
Hospitals
Libraries
Major Buildings
Shopping Centers
Traffic Cameras
Changeable Message signs in Dallas
General Vegetation cover for the City of Dallas
Dallas trail system
Traffic signals
Signal Operations Districts 1,2, 3
Trinity River 100-Year Floodplain
FEMA Flood maps
Brush Routes
Garbage Routes
Landfills
Recycling days of service
Boundaries of the Sanitation Maintenance Districts
Community Prosecution Areas
House of Representative District Boundaries
2000 Census Blocks
2000 Census Block Groups
2000 Census Tracts
1990 Census Tracts
1990 Statistical Communities
Previous Council Districts
Current Council Districts
Enterprise Communities
Enterprise Zones
Walker Target Areas
Monitoring wells in the City of Dallas
Major Lakes
Hydrology Names
Monitored Streams
Habitat quality of the streams
Citizen complaints responded to by Storm Water Management in 2002
Discharges from the storm drain system.
Storm Water system of pipes
Index grid for Storm Sewer Network Maps and Locator Maps
Points in the storm drain system - excluding discharges
Watershed
Alleys
Streets Maintenance Districts
Street conditions 03 and 04
Dallas Roads
Freeways

City of Dallas Geographic Information Systems (GIS) Layer List

9/16/2005

Highway Numbers
Highway Exit Markers
Street Cuts
Street Conditions
Streets Maintenance Districts
Major Streets
1994 street edges
Manholes
Rough Sewer Mains
Rough fitting water data
Rough lateral water lines
Rough pressurized water mains
Rough water system valves
1997 Aerial photography
2000 Aerial photography
2003 Aerial photography
2005 Aerial photography (QC phase, net yet released for use)
2000 2' contours

