

**Matt Mathan, Bureau Chief**  
**Bureau of GIS**  
**Division of IT**  
**Department of Economic**  
**Development**

# County Aerials Photographs

- Color Aerials Taken in 1999
- Scale 1"=50' (1/2' X1/2' Pixel) 3 Towns
- Scale 1"= 100' (1' x 1' Pixels) 18 Towns
- New Flight for three towns (2004, April)
- Six Basic Vector Layers

## GIS Service by Departments & Towns

- ❖ Megan's Law
  - ❖ Drug Free Zone
  - ❖ Homicide & Investigation
  - ❖ Security Planning
  - ❖ Prosecutor
  - ❖ Sheriff's Office
  - ❖ Office of Emergency Management
  - ❖ Board of Election
  - ❖ Board of Taxation
  - ❖ Community Development
  - ❖ Economic Development
  - ❖ County Police
  - ❖ Union County Engineering
  - ❖ Parks & Recreation
  - ❖ Runnels Hospital
  - ❖ Data Processing
- Linden
  - Plainfield
  - Fanwood
  - Garwood
  - Hillside
  - Berkley Heights
  - New Providence
  - Westfield
  - Rahway
  - Springfield
  - Elizabeth
  - Mountainside
  - Clark
  - Kenilworth
  - Elizabeth
  - Scotch Plains

# Union County Street Map

1. We have the copyright
2. Save lots of money
3. 25,000 copies printed
4. 97% accuracy
5. Most updated street information  
(2003)

## Union County Street Map

1. We won three awards from New Jersey State competition
2. 1<sup>st</sup> Place for Best Overall Map
3. 1<sup>st</sup> Place for Best Cartographic Design
4. 2<sup>nd</sup> Place for 'Newbie of the Year'.
5. It is Automatically qualified to enter the International conference in CA

# GIS and Pictometry

# Pictometry and GIS

1. 3-D Views (4 Sides) for every Buildings in the County also available (Prosecutor's Office & County Police)
2. GIS will Coordinate Training and Support all Pictometry Users.

## Drug Free Zone – Prosecutor's Office

1. Data available on an intranet website
2. Quick determination without having to search through tax books
3. Maps in the court room
4. 100% conviction when GIS Maps used
5. Save labor, paper trail, and time
6. Appreciation from judges and lawyers



# **Our Best and Award Winning Project**

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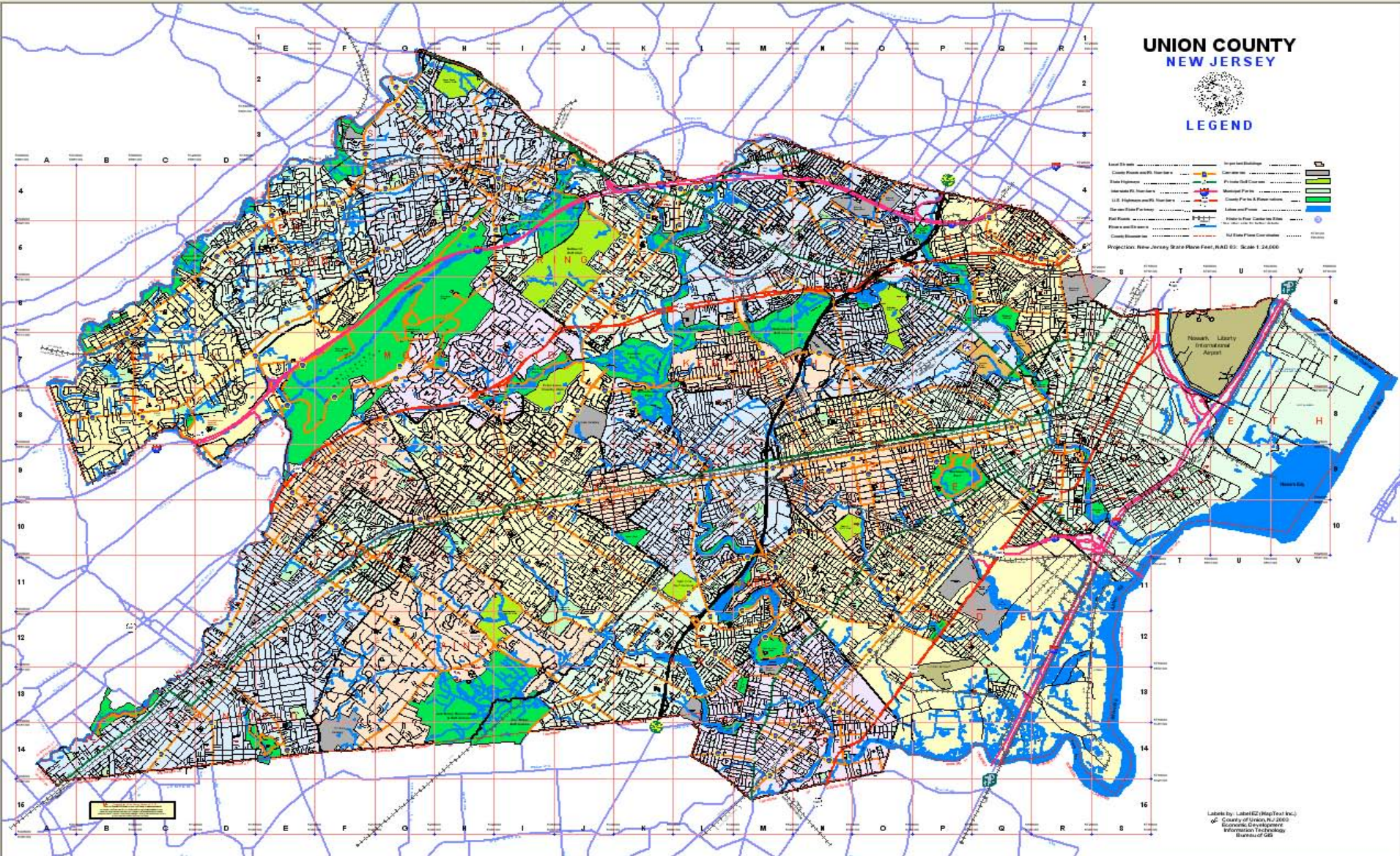
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# Union County Street Map

Lon,Lat(d.m.s) -74:21:03.273, 40:40:54.968



## UNION COUNTY NEW JERSEY



### LEGEND

- Local Roads
- County Road with 4 Lanes
- County Road with 2 Lanes
- U.S. Highway with 4 Lanes
- U.S. Highway with 2 Lanes
- State Route
- Interstate
- Canal
- Private Rail Corridor
- Managed Parks
- County Park with 4 Lanes
- County Park with 2 Lanes
- Local road
- Utility Pole Corridor
- Water
- Not State Plane Corridor

Projection: New Jersey State Plane Feet, NAD 83, Scale: 1:24,860

Labels by: LabelEZ (MapTool Inc.)  
County of Essex, NJ 2000  
Economic Development  
Information Technology  
Bureau of GIS

Click to zoom or press and drag.

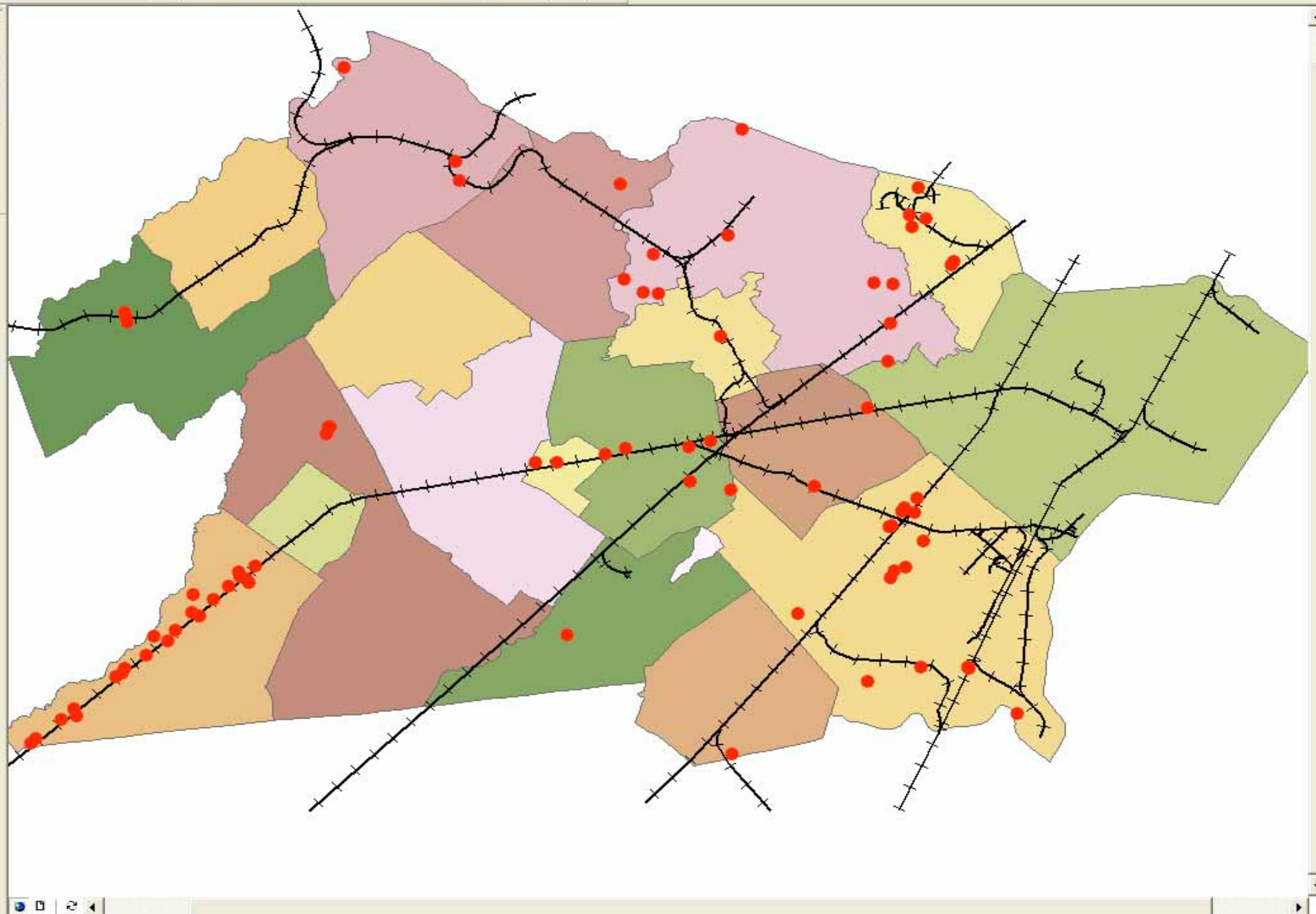
ESC

1:84,782

# GIS LAYERS

Layers

- UC\_ORTHO.SDEADM
  - RGB Composite
    - Red: Band\_1
    - Green: Band\_2
    - Blue: Band\_3
  - uc\_vector.SDEADMII
  - uc\_vector.SDEADMII
- municipal
  - <all other values
  - MUN
    - Berkeley Heights
    - Clark
    - Cranford
    - Elizabeth
    - Fanwood
    - Garwood
    - Hillside
    - Kenilworth
    - Linden
    - Mountainside
    - New Providence
    - Plainfield
    - Rahway
    - Roselle
    - Roselle Park
    - Scotch Plains
    - Springfield
    - Summit
    - Union
    - Westfield
    - Winfield



**BROWN FIELDS/RAIL LINES**

# ROAD CENTER LINES

1:105,774

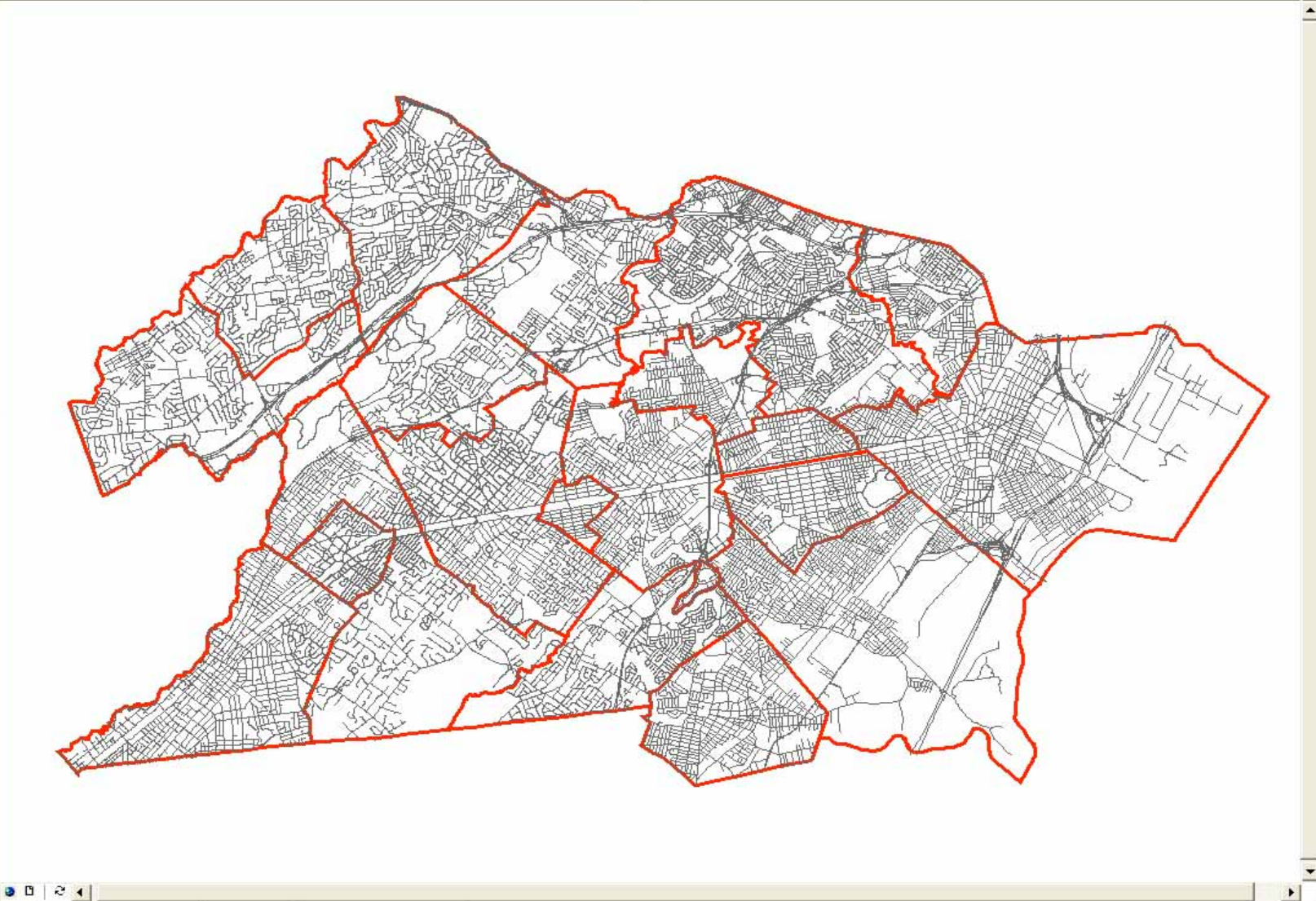
100%

Editor Create New Feature Target:

**Layers**

- uc\_vector.St
- municipal

Display Source



# UC GIS LAYERS

Load Objects...

517118.36 643143.79 Feet

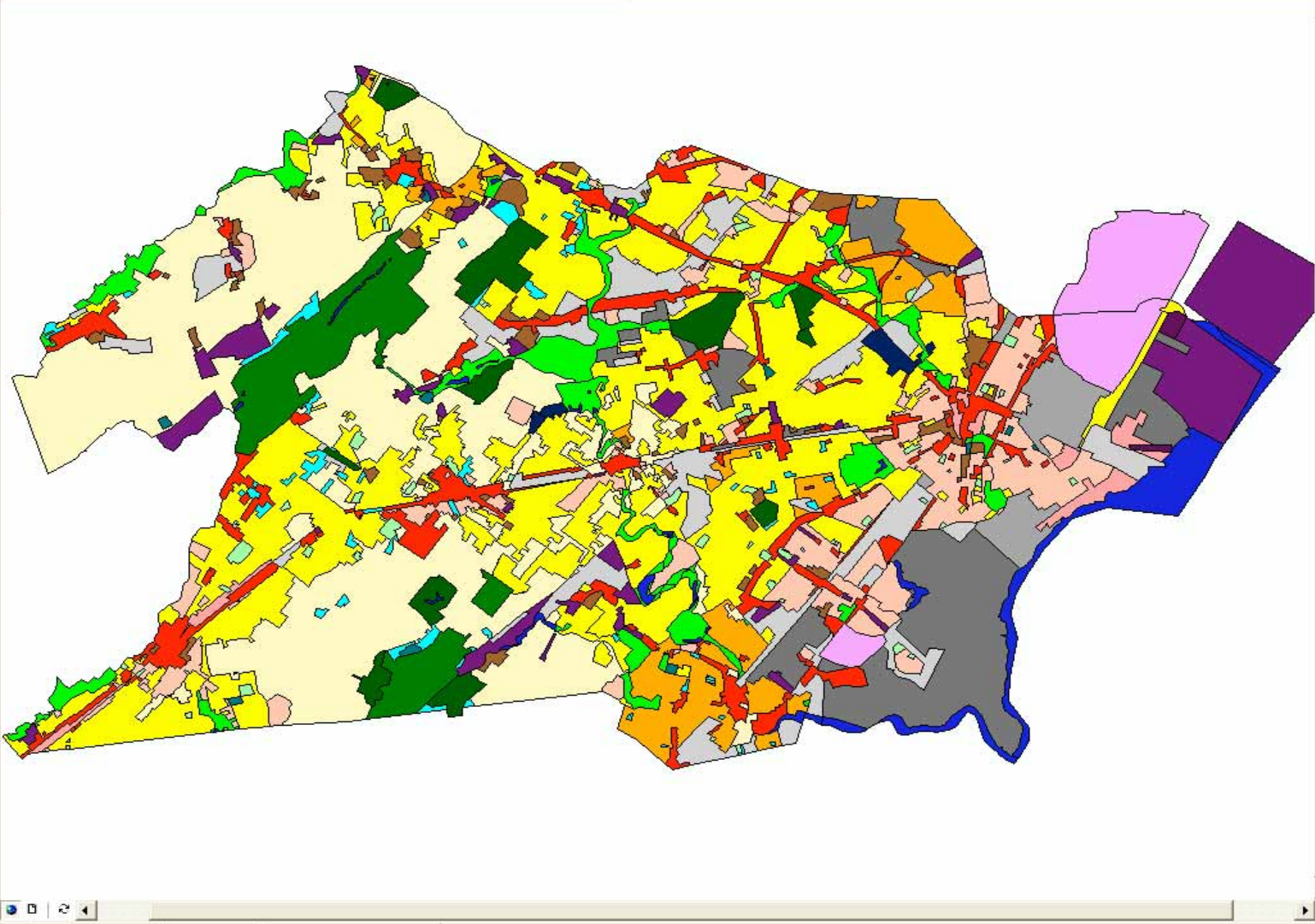
# UNION COUNTY LAND USE MAP

Editor Task: Create New Feature Target:

**Layers**

- landuse2
  - LANDUSE
    - Unclassified
    - Residential-10,000
    - Residential-5,001
    - 5,000 S.F. or less
    - Two to Four Fami
    - Multi-Family
    - Office
    - Neighborhood\_Ge
    - Special Developm
    - Light Industrial
    - Medium Industria
    - Heavy Industrial
    - County Park
    - Municipal Park
    - Reservation
    - Cemetery
    - Hospital
    - Water Feature
    - Golf Course/Cour
    - Airport
    - College
    - Port Elizabeth/Ne
    - Terminal
    - Public

Display Source



Topology: Load Objects...

Drawing Arial 10 B I U



# COUNTY LAND USE MAP

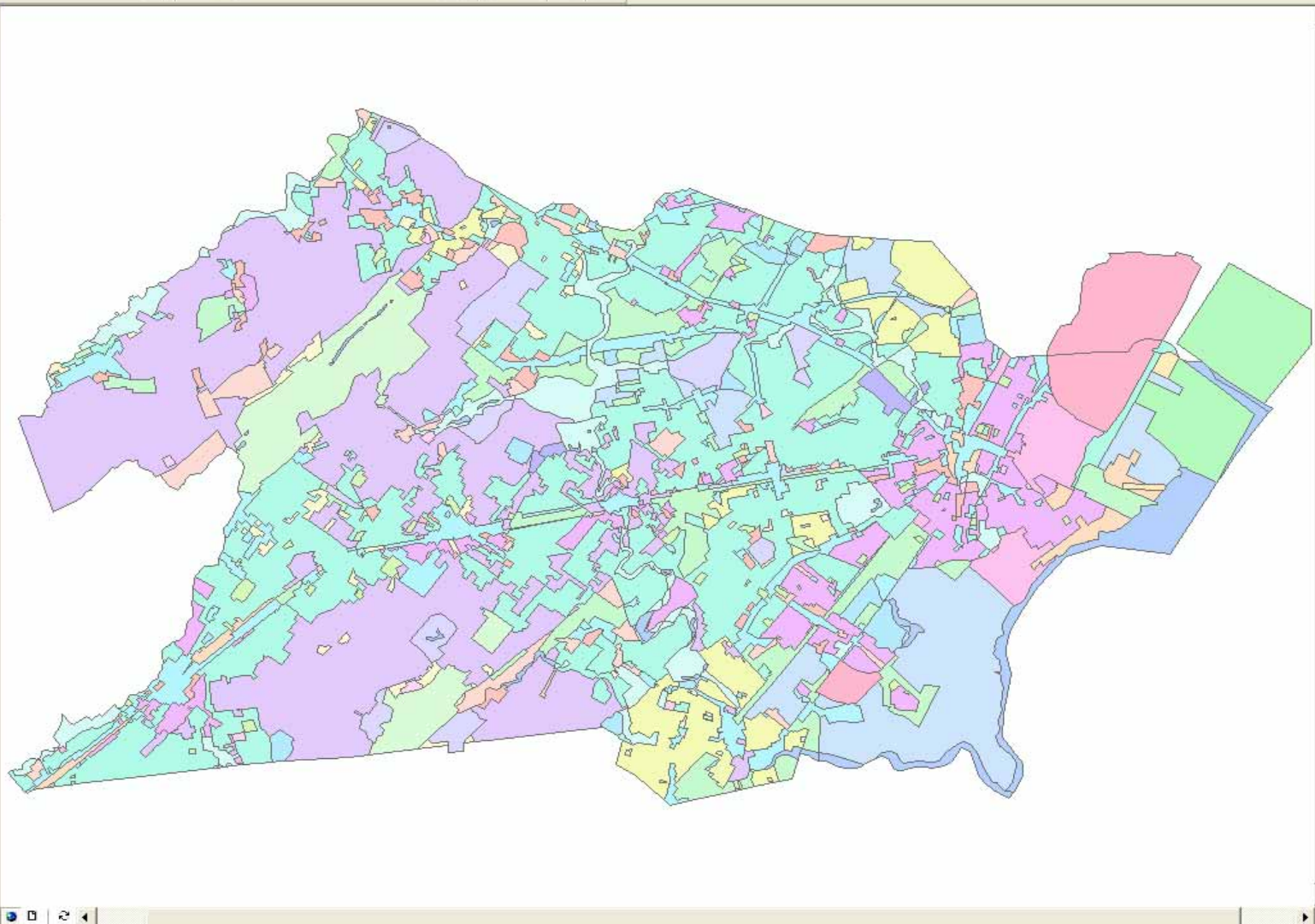
Editor Task: Create New Feature Target:

Layer: uc\_vector.SDEADMIN.landuse\_1

**Layers**

- uc\_vector.SDEADMIN.landuse\_1
- <all other values>
- DESCRIPTION
- 5,000 S.F. or less
- Airport
- Cemetery
- College
- County Park
- Golf Course/Country
- Heavy Industrial
- Hospital
- Light Industrial
- Medium Industrial
- Multi-Family
- Municipal Park
- Neighborhood General
- Office
- Port Elizabeth/Newar
- Public
- Reservation
- Residential-10,000 S
- Residential-5,001 S.
- Special Development
- Terminal
- Two to Four Family
- Water Feature

Display Source



Topology: Load Objects...

Drawing Arial 10 B I U

# GIS and Megan's Law

# How to keep the data updated

- Changes are made to the Server
- Direct Access
- Editing Capabilities
- One software license
- Megan's Law staff maintain the data

# Data security

- Behind multiple firewalls
- Multiple password protection
- Access is limited to GIS and Network Administrators
- Confidentiality Agreement

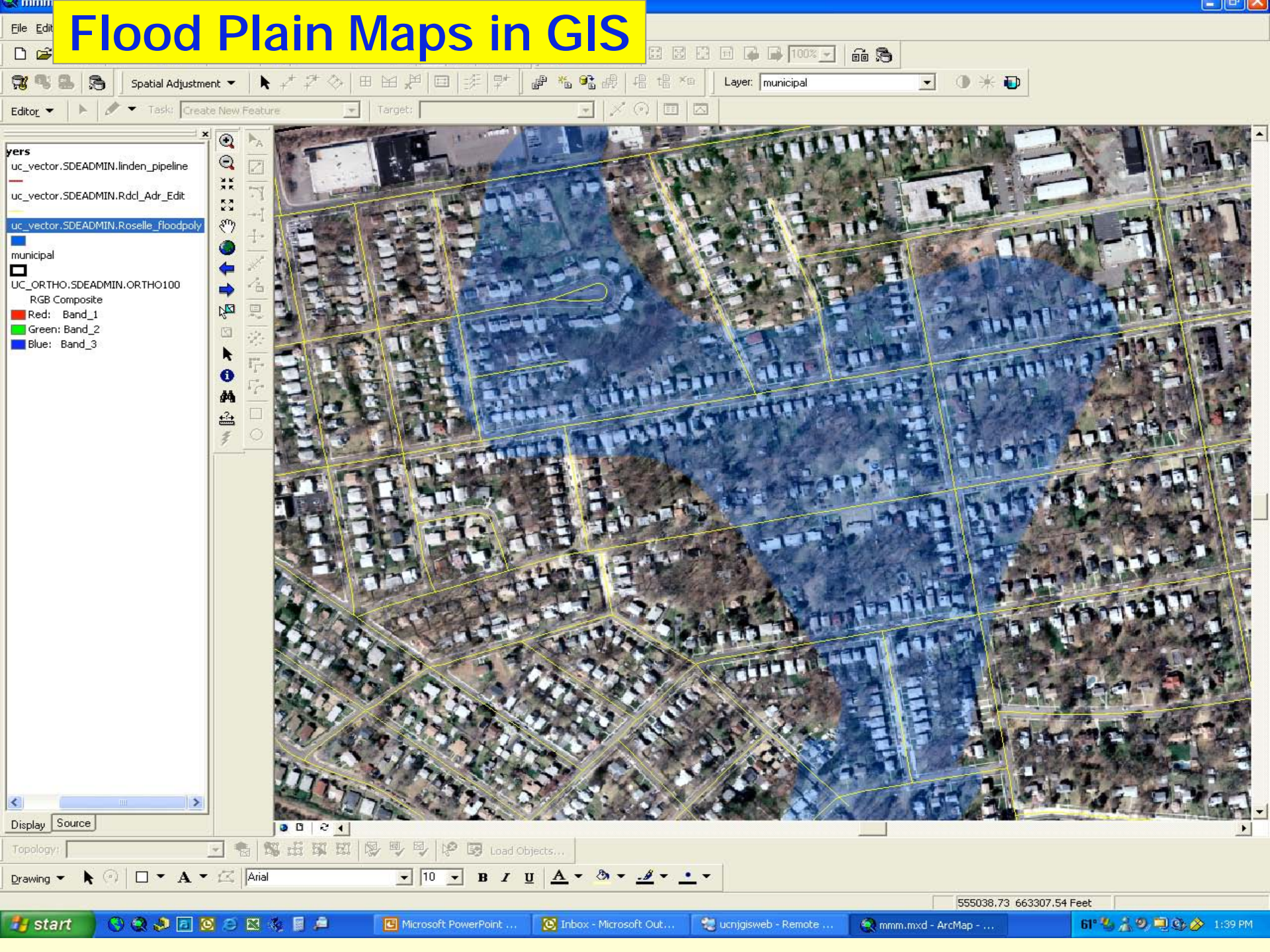
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# GIS and Flood Plain Maps

# Flood Plain Maps in GIS



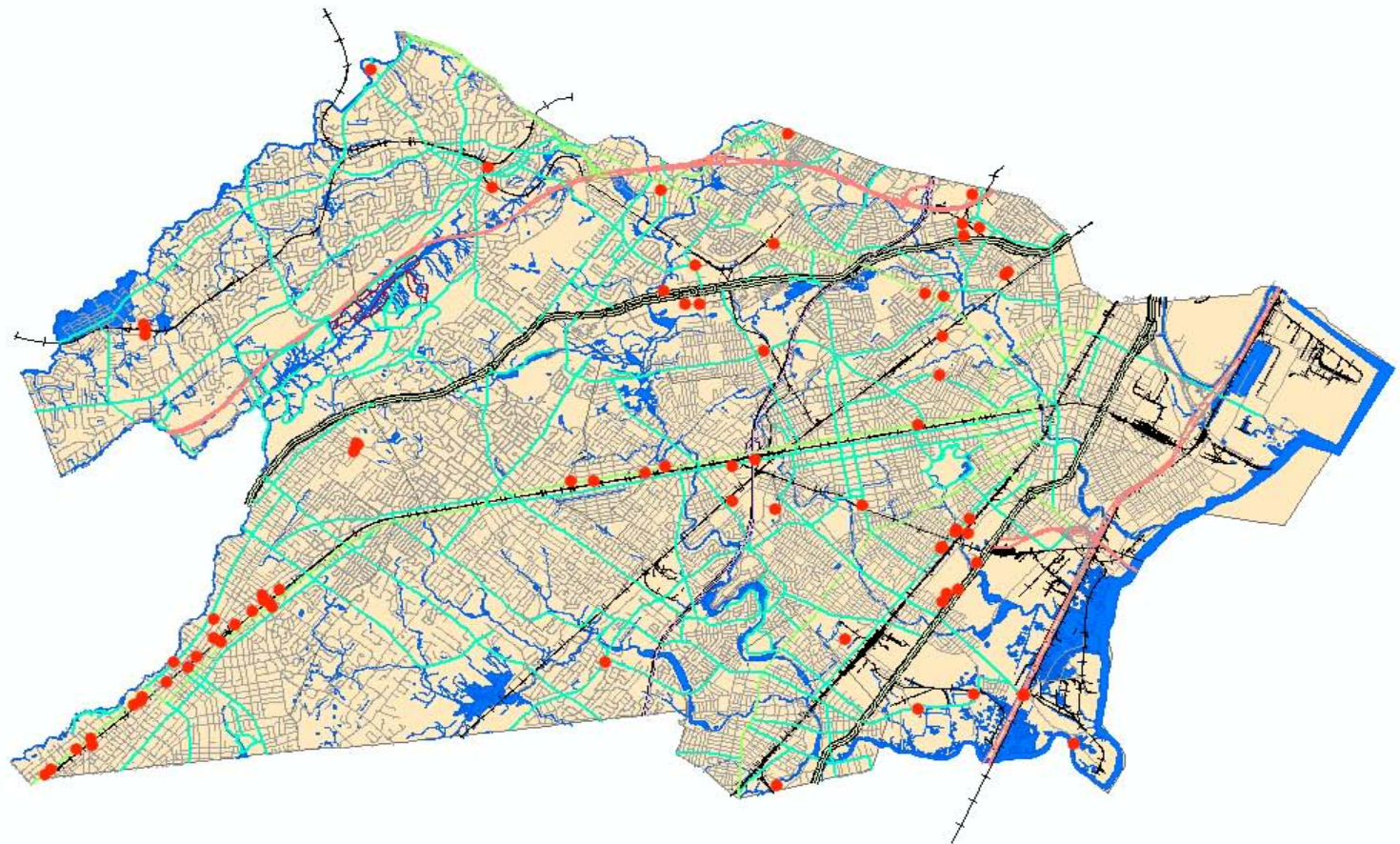


# GIS and Brownfields

**Layers**

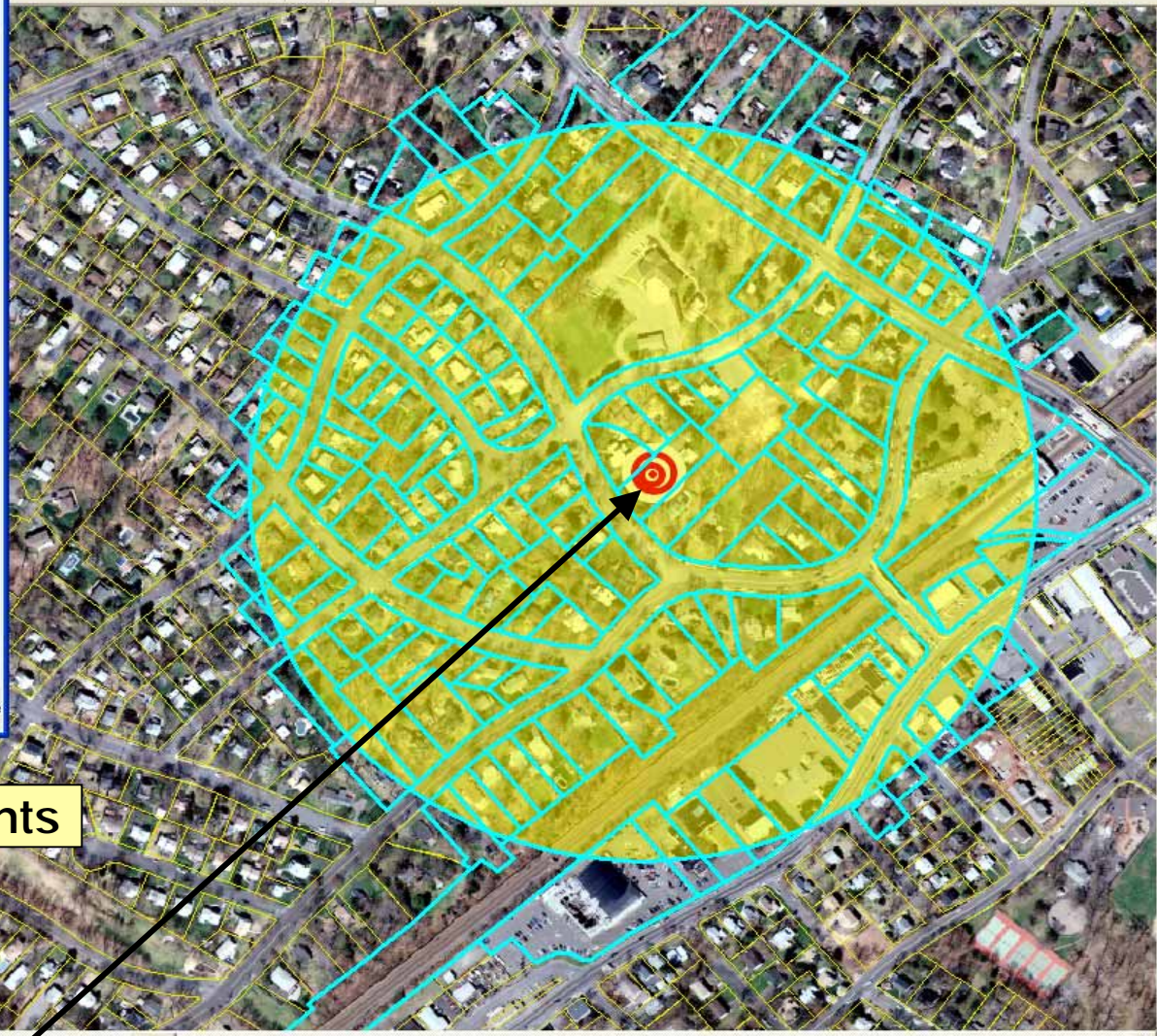
- sde.DEFAULT (gis)
- uc\_vector.SD
  - uc\_vector
  - uc\_vector.SD
    - uc\_vector
    - <all ot TYPE
    - <Null:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
  - uc\_vector
  - uc\_vector
- uc\_vector.SD
  - uc\_vector
  - uc\_vector
- uc\_vector.SD
  - municipal

# UNION COUNTY BROWN FIELDS



# GIS Buffer Process

LOCATION	OWNERNAME
124 WATSON RD	BRENNAN, ROBERT M & BARBARAaaa
130 WATSON RD	THE BOROUGH OF FANWOOD
180 NORTH AVE	MASTROCOLO, FAMILY, LP
196 NORTH AVE	DE QUINTAL, LINDA
SOUTH AVE	BOROUGH OF FANWOOD
233 SOUTH AVENUE	NEW JERSEY TRANSIT CORP
217 SOUTH AVENUE	URSO, JOHN
NORTH AVE	BOROUGH OF FANWOOD
209 SOUTH AVENUE	TWELVE SPRINGS, INC
204 SOUTH AVENUE	FIRST SAVINGS BANK, S L A
200 SOUTH AVENUE	YARUSI, LEON & PAULA
190 SOUTH AVE	PATEL, HASMUKH S-PATEL, MAHENDRA C
184 SOUTH AVENUE	GETTY OIL COMPANY
32 THIRD ST	HYDE, LYNN ANNE
168 SOUTH AVE	KEOGH, COLM & GERALDINE
300 NORTH AVE	SMYTHE, KATHLEEN O'KEEFFE
294 NORTH AVE	MEDERER, ANNE M
205 PATERSON RD	KOLTERJAHN, DONALD S & JEAN A
100 RUSSELL RD	PIERCE, NEIL & PATRICIA WALSH
209 PATERSON RD	VIRGA, THOMAS J
219 PATERSON ROAD	COUNTERMAN, ROBERT A & LORRAINE H
215 PATERSON RD	SPECK, HARVEY R & LESLIE K
131 PATERSON RD	PORTER, BRETT G & KATHLEEN M
77 WILLOUGHBY RD	MILLER, EDWARD J
70 WILLOUGHBY RD	AHLIN, HAROLD S & PATRICIA A
88 HUNTER AVE	DE PALMA, SANDRA J
81 WILLOUGHBY RD	MULLANY, THOMAS & KERRY
155 PATERSON RD	HOELTJE, HARRY & LINDA LEE
74 WILLOUGHBY RD	GUZMAN, LUIS A - TRUJILLO, EDNA
59 RUSSELL RD	HIRSCHHORN, JOEL L & CATHY A
91 WILLOUGHBY RD	KUDER, JAMES E & SUSAN NYE
80 WILLOUGHBY RD	BARANSKI, MATTHEW M TRUSTEE
63 RUSSELL RD	KELLY, MICHAEL & MARY C
159 PATERSON RD	EVERSON, JOHN M



Name & address of residents

Unspecified Event

# Report in PDF format

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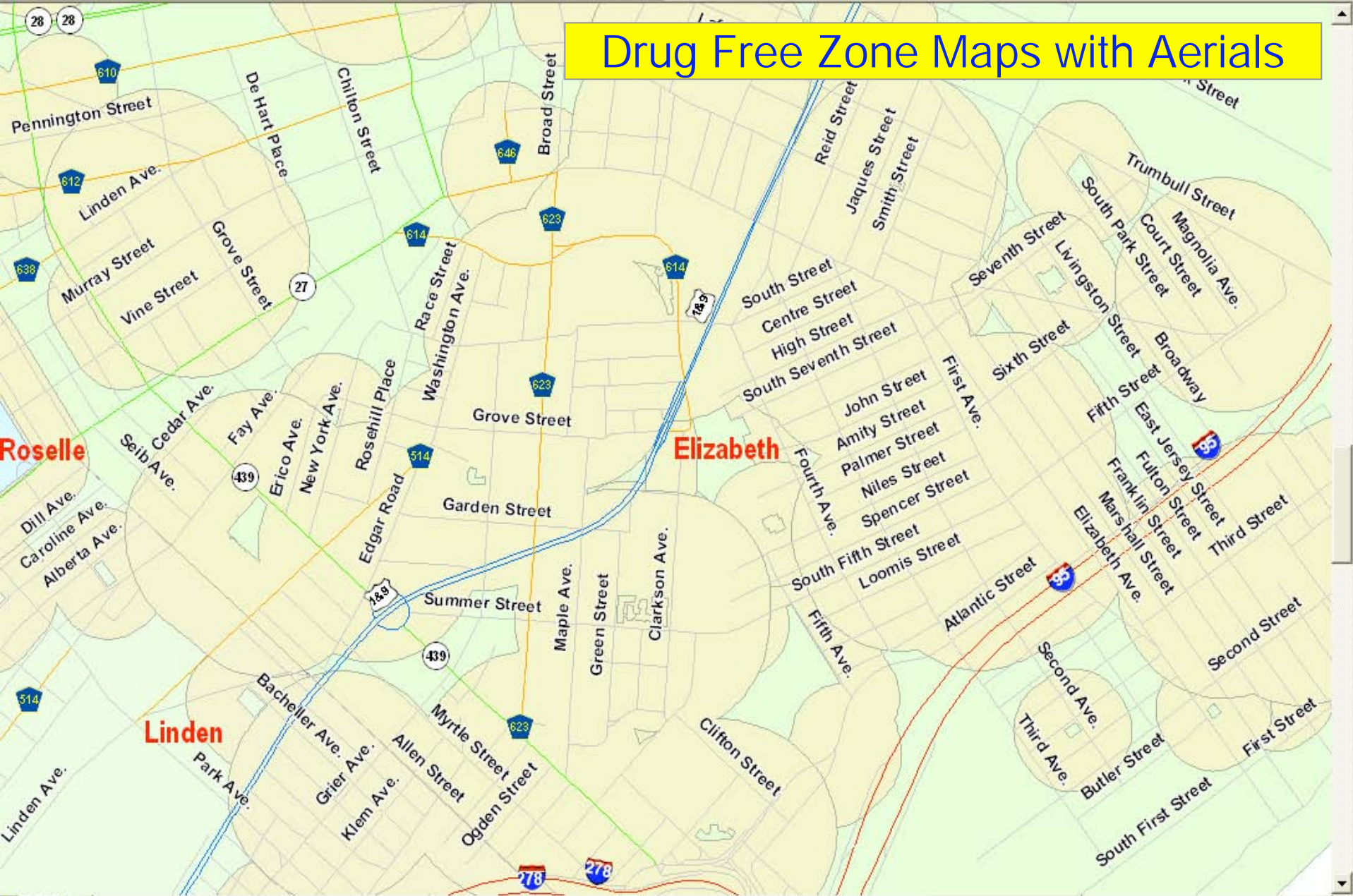
Row # : 23  
Owner : GURAL, ANTHONY F & SUCHIN  
Owneraddre :  
Ownercity : ELIZABETH  
Ownerstate : N J  
Percentown : 0  
Propertych :

Row # : 24  
Owner : CLEOPHAT, CHARLES, JAMES & TONY  
Owneraddre :  
Ownercity : ELIZABETH  
Ownerstate : NJ  
Percentown : 0  
Propertych :

Row # : 25  
Owner : CURADO, VALDEMAR J  
Owneraddre :  
Ownercity : ELIZABETH  
Ownerstate : N J  
Percentown : 0  
Propertych :

# GIS and Drug Free Zone Offences

# Drug Free Zone Maps with Aerials



Map navigation and editing toolbar. Includes icons for pan, zoom, and other map controls. A text box contains the text "Load Objects...".

# **DATA DISTRIBUTION**

# Union County GIS Website

Free access to limited data.  
Sensitive data and Aerials are in  
our secured website and the  
access is limited to Government  
employees

<http://ucgis.ucnj.org/gismaps/onpoint>



**UNION COUNTY GIS**

**Thank you!**

**QUESTIONS?**

**Matt Mathan, Bureau Chief**

**BUREAU OF GIS**

**908-527-4076**

**[Mmathan@ucnj.org](mailto:Mmathan@ucnj.org)**