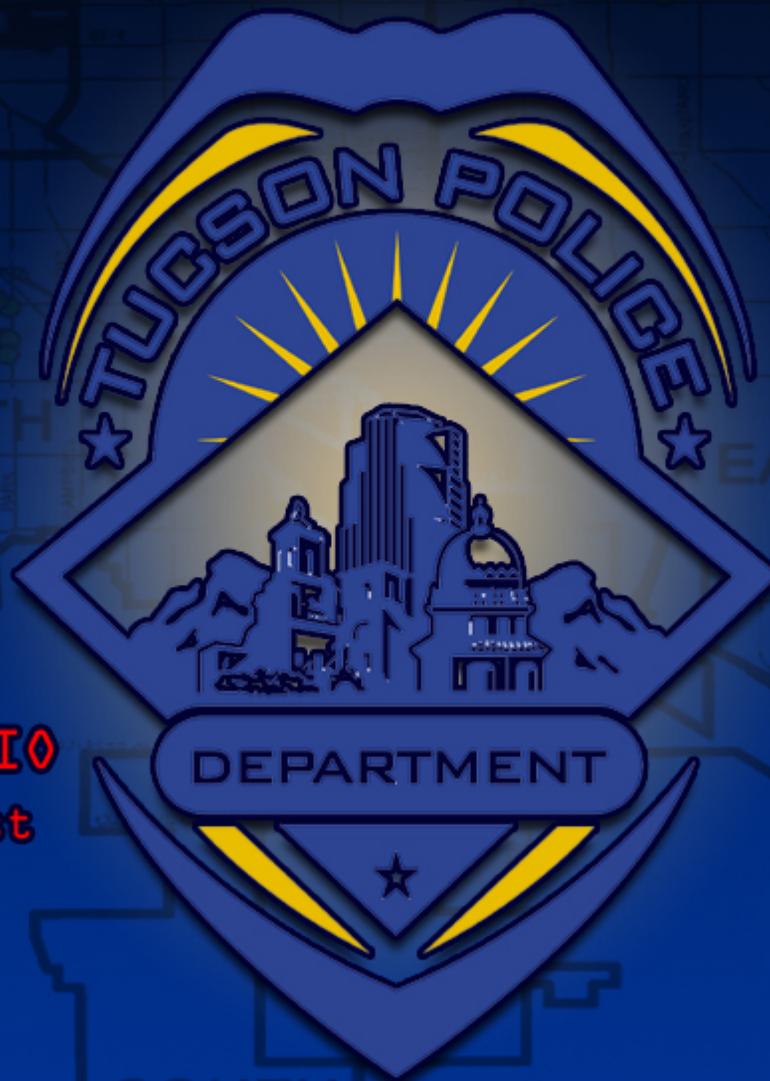


CRIME MAPPING



LAURA VITTORIO
Crime Analyst

TOPICS TO BE COVERED

- Brief Background
- Types of Crime Analysis and Mapping
- What I Do
- Crime Mapping Tools
- Update on the NIJ 10th Annual Crime Mapping Conference
- Future Applications



BACKGROUND

- History: Crime mapping dates back to early 1800s
- Environmental Criminology
- Primary theories utilized in understanding crime in a spatial context:
 - Routine Activities Theory
 - Rational Choice Theory
 - Crime Pattern Theory
- Geographic Profiling



BACKGROUND

- Hot Spot Types
- Concentration of Crime (80/20 Rule)
- Policing Paradigms
 - Community Policing
 - Problem-Oriented Policing
 - CompStat
 - Intelligence-Led Policing



TYPES OF CRIME ANALYSIS

- Tactical
- Strategic
- Administrative
- Other Types of Law Enforcement Analysis



WHAT I DO

- Targeted Operational Planning (CompStat)
- Strategic Analysis
- Mainly Citywide



MAPS

- Purpose
 - Strategic
- Types
 - Point
 - Choropleth
 - Kernel Density
 - Aerial



TUCSON POLICE DEPARTMENT OPERATIONS DIVISION SOUTH (ODS) UCRs 0301-0308, 0401-0404, 0501-0503, & 0701 September 6, 2009 through September 12, 2009



Legend

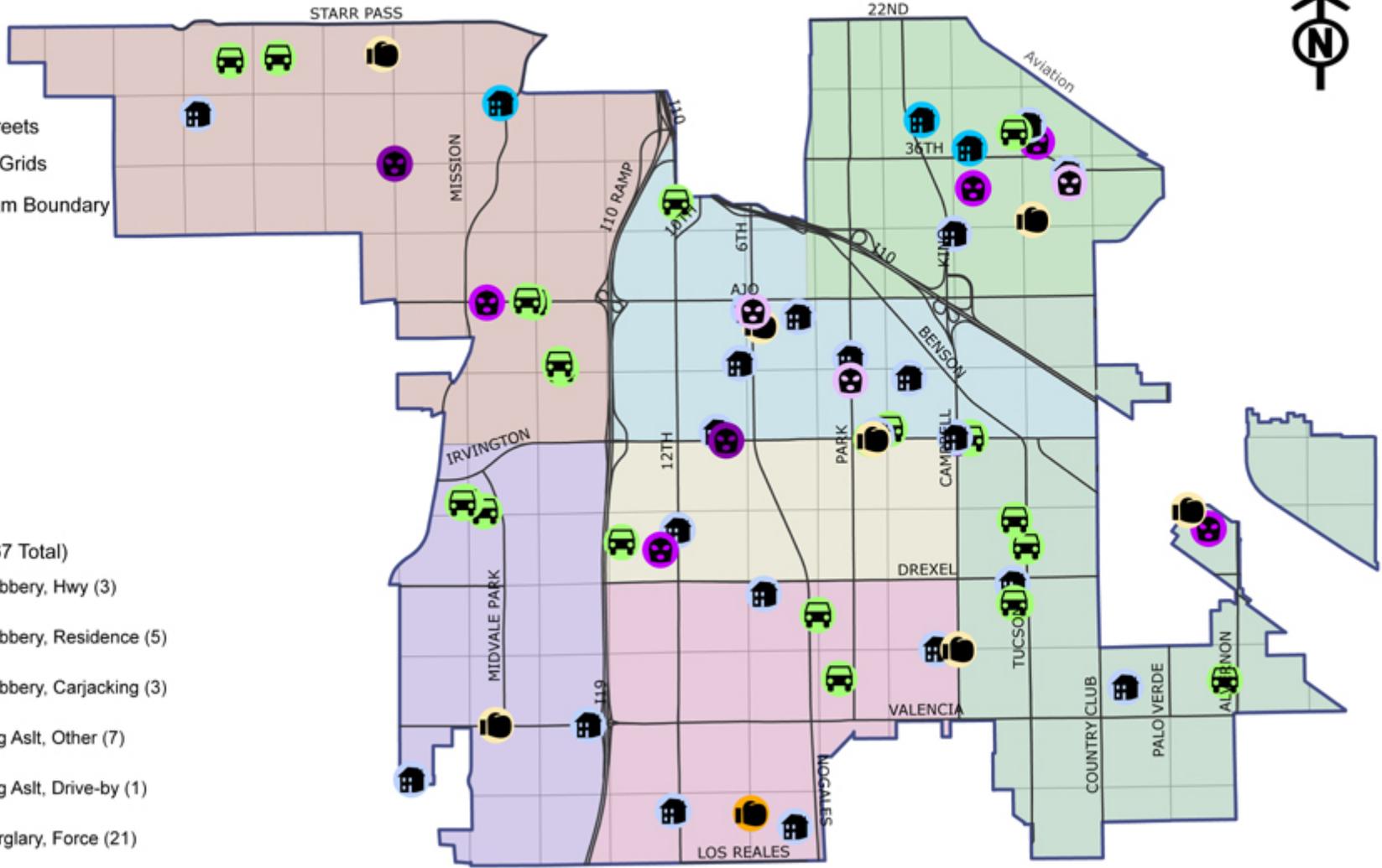
- Major Streets
- TRS 1/4 Grids
- ODS Team Boundary

ODS Sectors

- 1
- 2
- 3
- 4
- 5
- 6
- 7

Incident Count (67 Total)

- 0301 - Robbery, Hwy (3)
- 0305 - Robbery, Residence (5)
- 0308 - Robbery, Carjacking (3)
- 0403 - Agg Aslt, Other (7)
- 0404 - Agg Aslt, Drive-by (1)
- 0501 - Burglary, Force (21)
- 0502 - Burglary, No Force (3)
- 0701 - Motor Vehicle Thft, Stolen (24)

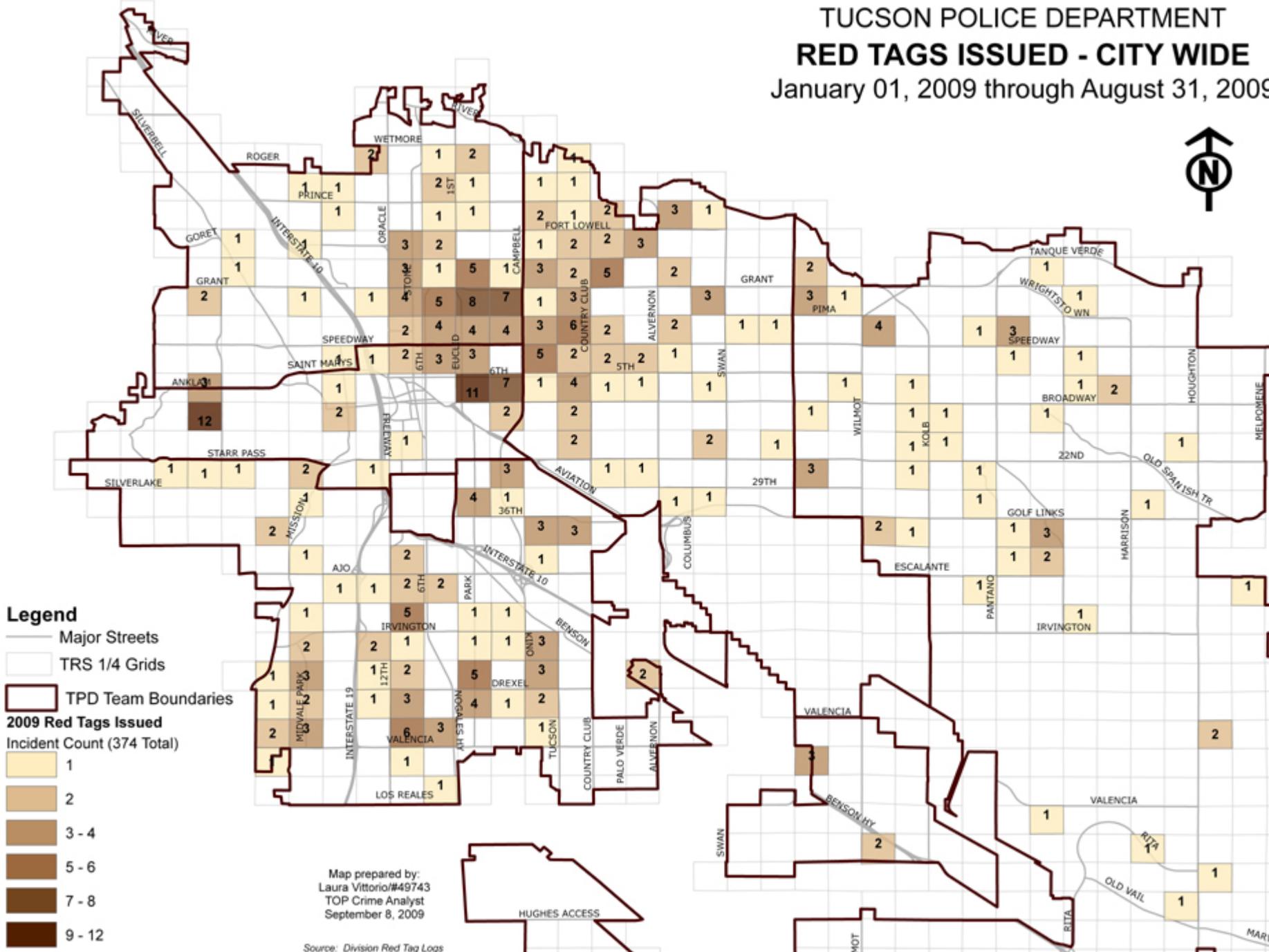


Source: city_inci.shp file dated 09/14/09. Data reflects RMS data on date file run, therefore numbers may change in future maps/reports.
Note: Addresses of all incidents reported as occurring at all hospitals, stations, and the Pima County Jail have been removed.

TUCSON POLICE DEPARTMENT

RED TAGS ISSUED - CITY WIDE

January 01, 2009 through August 31, 2009



TUCSON POLICE DEPARTMENT RED TAGS ISSUED - CITY WIDE

January 01, 2009 through August 31, 2009



Legend

- Major Streets
- TRS 1/4 Grids
- TPD Team Boundaries

Per Address Count

Total Red Tags Issued: 374

- 1
- 2
- 3
- 4
- 5
- 9

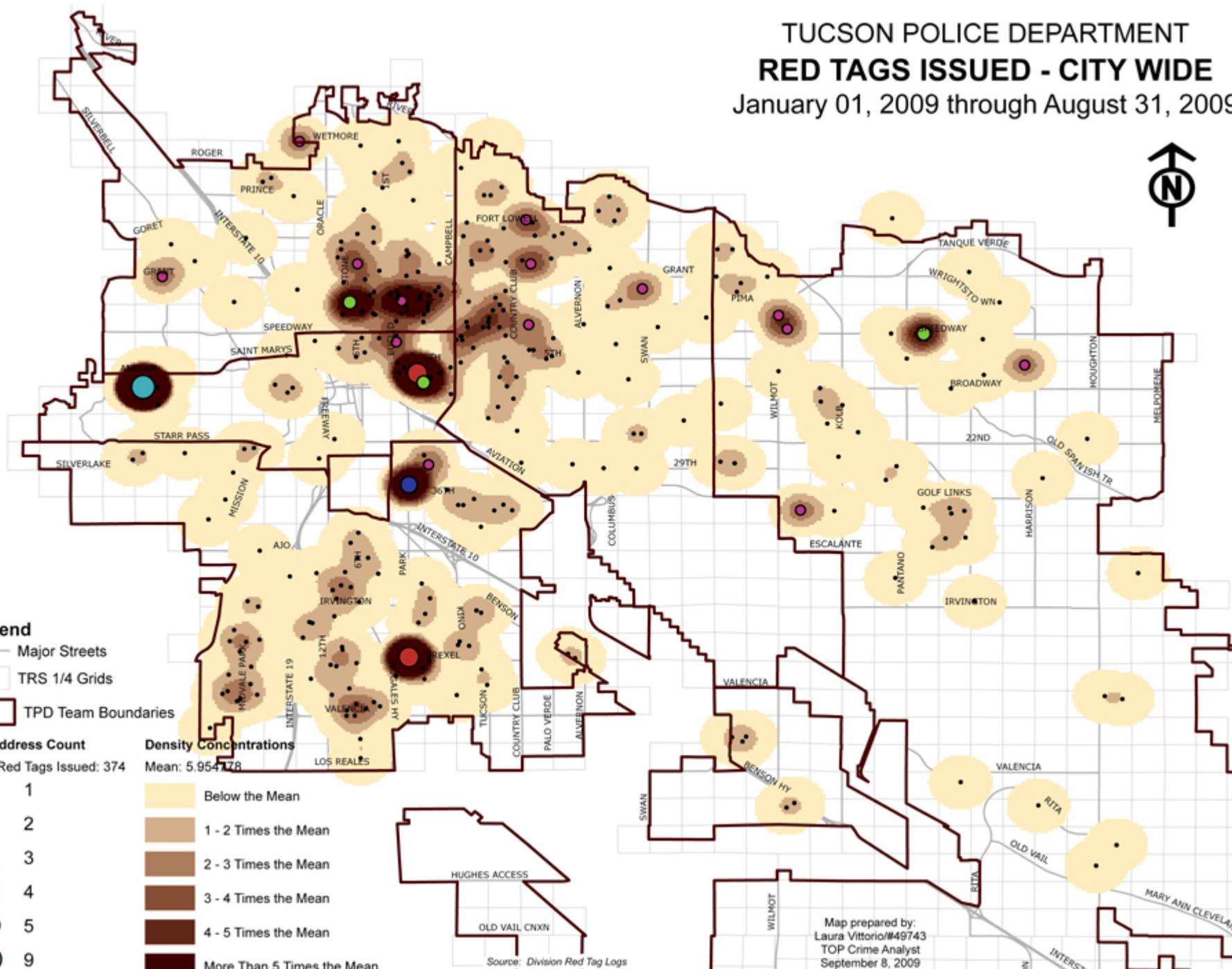
Density Concentrations

Mean: 5.954778

- Below the Mean
- 1 - 2 Times the Mean
- 2 - 3 Times the Mean
- 3 - 4 Times the Mean
- 4 - 5 Times the Mean
- More Than 5 Times the Mean

Source: Division Red Tag Logs

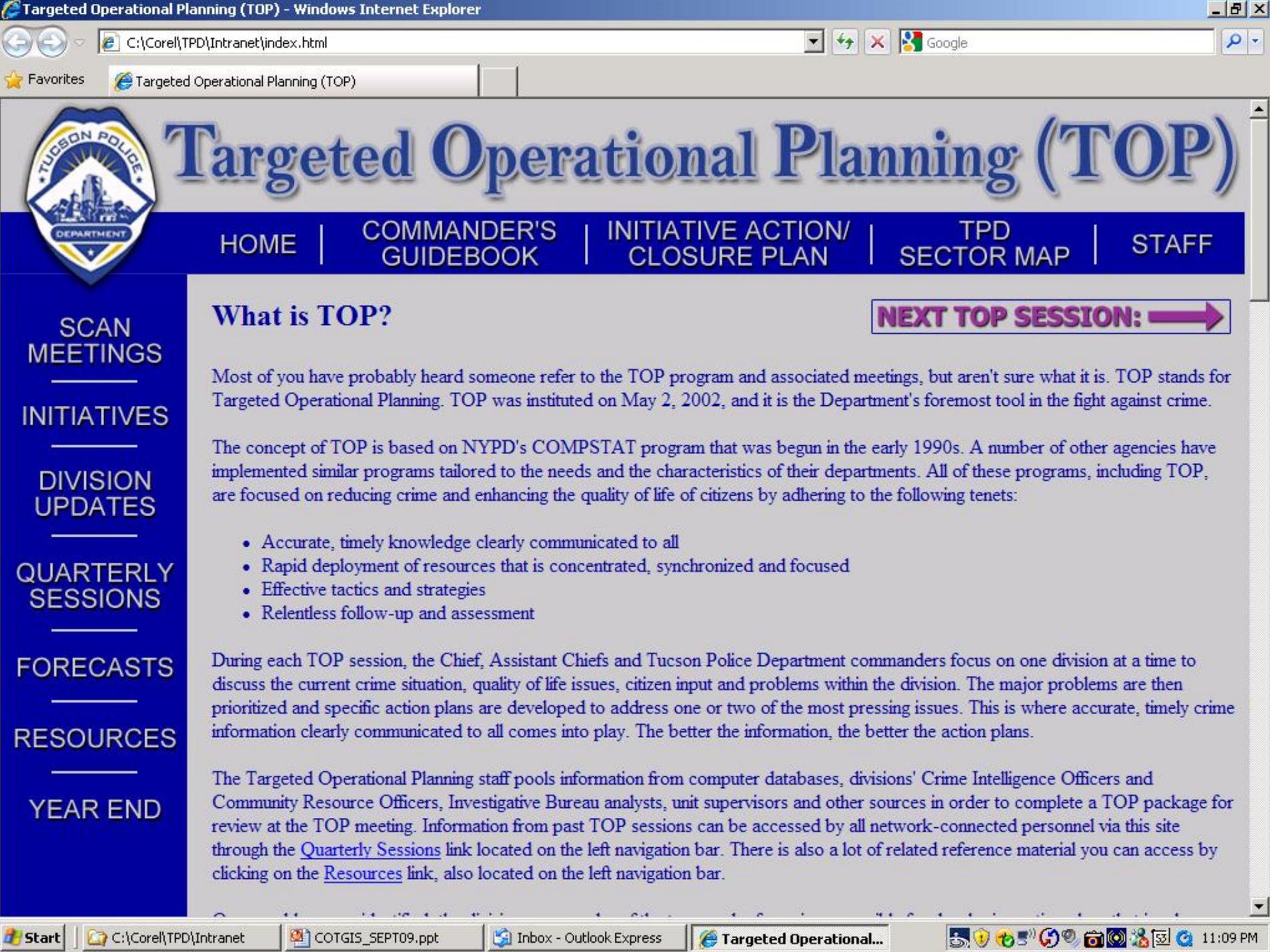
Map prepared by:
Laura Vittorio/#49743
TOP Crime Analyst
September 8, 2009



INTRANET

- Sharing of
 - Maps and other documents
 - Forms
 - Information
 - Resources





Targeted Operational Planning (TOP)



HOME | COMMANDER'S GUIDEBOOK | INITIATIVE ACTION/ CLOSURE PLAN | TPD SECTOR MAP | STAFF

SCAN MEETINGS
INITIATIVES
DIVISION UPDATES
QUARTERLY SESSIONS
FORECASTS
RESOURCES
YEAR END

What is TOP?

NEXT TOP SESSION:

Most of you have probably heard someone refer to the TOP program and associated meetings, but aren't sure what it is. TOP stands for Targeted Operational Planning. TOP was instituted on May 2, 2002, and it is the Department's foremost tool in the fight against crime.

The concept of TOP is based on NYPD's COMPSTAT program that was begun in the early 1990s. A number of other agencies have implemented similar programs tailored to the needs and the characteristics of their departments. All of these programs, including TOP, are focused on reducing crime and enhancing the quality of life of citizens by adhering to the following tenets:

- Accurate, timely knowledge clearly communicated to all
- Rapid deployment of resources that is concentrated, synchronized and focused
- Effective tactics and strategies
- Relentless follow-up and assessment

During each TOP session, the Chief, Assistant Chiefs and Tucson Police Department commanders focus on one division at a time to discuss the current crime situation, quality of life issues, citizen input and problems within the division. The major problems are then prioritized and specific action plans are developed to address one or two of the most pressing issues. This is where accurate, timely crime information clearly communicated to all comes into play. The better the information, the better the action plans.

The Targeted Operational Planning staff pools information from computer databases, divisions' Crime Intelligence Officers and Community Resource Officers, Investigative Bureau analysts, unit supervisors and other sources in order to complete a TOP package for review at the TOP meeting. Information from past TOP sessions can be accessed by all network-connected personnel via this site through the [Quarterly Sessions](#) link located on the left navigation bar. There is also a lot of related reference material you can access by clicking on the [Resources](#) link, also located on the left navigation bar.

CRIME MAPPING TOOLS

- ESRI ArcView, & Various ArcScripts
- CrimeStat III
- Hawth's Tools
- ET GeoWizards
- XTools Pro
- Other



CONFERENCE UPDATE

- General
- Sessions I Took
- Sessions I Wanted To Take
- Where Things Are Going



SESSIONS I TOOK

- 2-Day Advanced ArcGIS for Crime & Intelligence Analysis
- Opening Plenary
- Dangerous Streets – Street Clustering of Crime Points
- Applying Key Spatial Theories for Understanding Maps & Preventing Crime
- Spatial Analysis I



SESSIONS I TOOK

- Spatial Analysis II
- Plenary Panel
- Policing III
- Keynote Address
- Crime and Place V
- Geographic Data Systems
- COMPSTAT/Community Policing
- Identifying Near-Repeat Crime Patterns



SESSIONS I WANTED TO TAKE

- Introduction to CrimeStat III
- Using GIS to Analyze Urban/Public Safety Issues
- Accessing & Using Census Data for Crime Analysis
- Basics of Cartography
- Location Quotients in the Micro-Spatial Analysis of Violent Crime



SESSIONS I WANTED TO TAKE

- Criminal Violence
- Spatial Analysis III
- Theory to Practice
- Data Analysis Methods for Data-Driven Approaches to Crime & Traffic Safety (DDACTS)
- GIS for Problem-Oriented Policing
- Hawth's Tools for Crime Mapping
- Thematic Mapping Principles for Crime Data



WHERE THINGS ARE GOING

- Actionable Information
- Intelligence-Led Policing
- Context
- Data-Driven Approaches to Crime & Traffic Safety (DDACTS)
- Applying the CDC's Epidemiological Model
- Mapping in the Virtual World
- Other

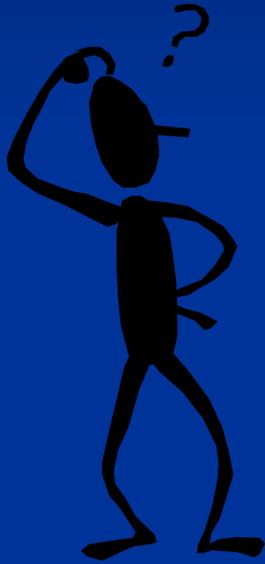


FUTURE APPLICATIONS

- Become more proficient with crime mapping software/tools
- Learn scripting language
- Utilize Model Builder more
- Add more context to maps
- Map crime in other ways
- Incorporate animation



CLOSING



Q

and

A

