Homicide Reduction in Richmond, Virginia

A strategic/tactical intelligence based approach for reducing homicides

Focus years 2005 through 2008

Presented by Lt. Brian E. Russell

Richmond Police Department

O-I-C Homicide Unit

Homicide Reduction in Richmond, Virginia

Population: 200,123

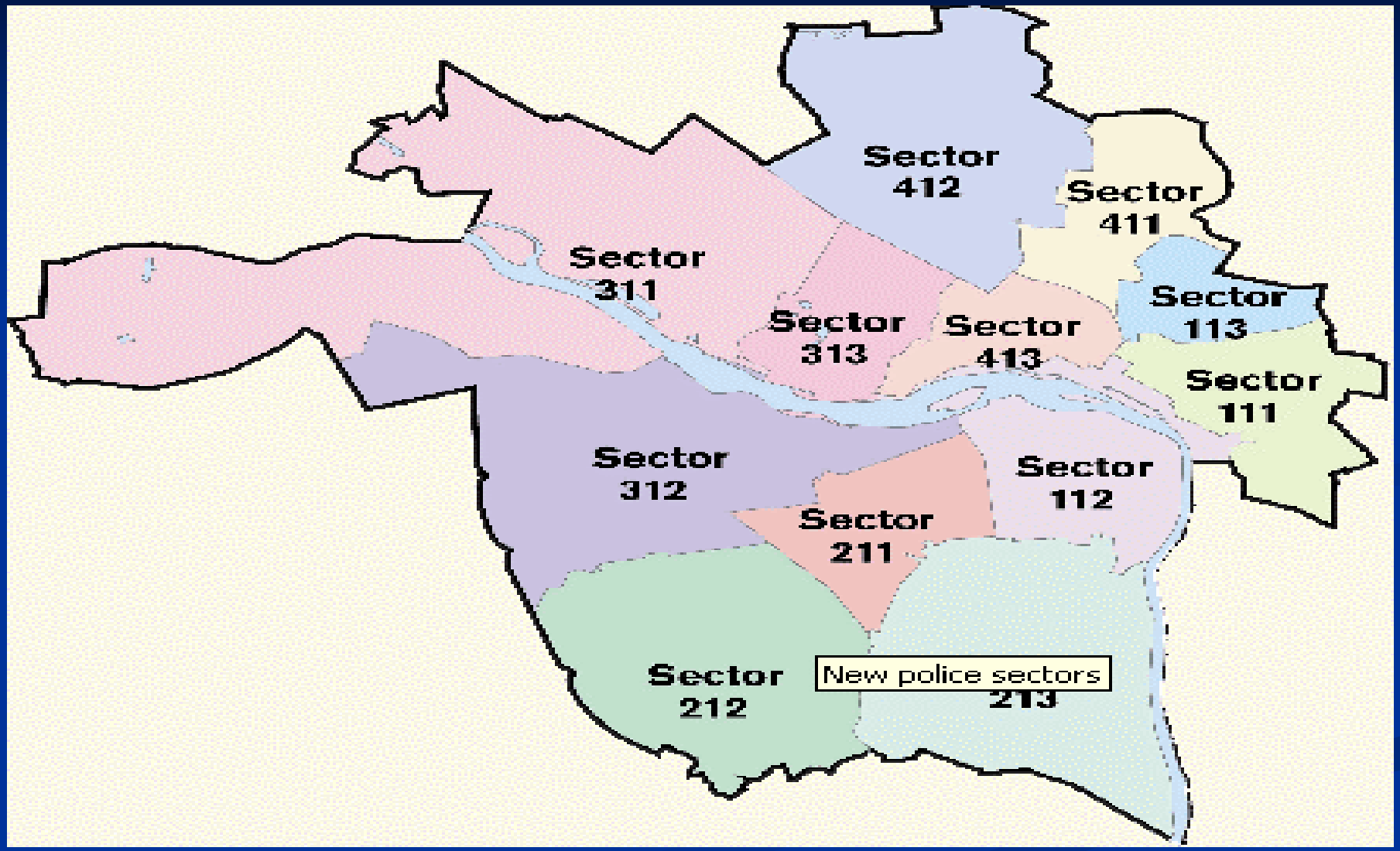
Size: 62.5 square miles

Metropolitan Area: 1.2 million

State Capital of Virginia

Home to nine Fortune 500 Companies

Homicide Reduction in Richmond, Virginia



Homicide Reduction in Richmond, Virginia

Homicides 2005-2008

	2005	2006		2007		2008		Total
Homicide Totals	86	81	-9%	55	-32%	32	-42%	-28%
Cleared %	80%	81%		89%		90%	Average	85%
Conviction %	94%	90%		88%		92%	Average	91%

Homicide Reduction in Richmond, Virginia

Richmond, Virginia, Police Department Helps Lower Crime Rates with Crime Prediction Software

Dec 22, 2008, By *Chandler Harris*

The Department of Pre-Crime is an intriguing concept used in the 2002 science fiction film Minority Report, and it's inching toward reality for the Richmond (Va.) Police Department (RPD). Instead of the film's fictitious "precogs" who float in a pool of water while foreseeing crimes, the police department uses crime analysis and prediction.

The concept is based on the idea that criminal behavior often follows identifiable patterns that can be used to predict criminal acts. By collecting yesterday's crime statistics and external factors - weather, time, day, moon phase, etc. - officers can estimate when and where tomorrow's crimes will occur using intelligence capabilities.

Beginning in 2006, a new system was launched in a phased implementation that provides predictive crime analysis, data mining, reporting and GIS capabilities to the RPD. Officers receive the most current information available, including predictions of crime hot spots they can access before a shift. Data from the records-management system is integrated and analyzed continuously.

Homicide Reduction in Richmond, Virginia

Richmond, Virginia, Police Department Helps Lower Crime Rates with Crime Prediction Software

The RPD's innovative enterprise platform produced dramatic results. By moving from a "reactive crisis management structure" to a "proactive problem deference model," the department lowered the city's ranking from fifth most dangerous U.S. city in 2004 to 15th most dangerous city in 2005, and a 21 percent reduction in major crimes from 2005 to 2006.

"We're replicating the intuitive nature of the seasoned veteran cops - the guys who have been on the force for 25 years and know certain sections of the city really well and operate almost out of complete intuition - who know more than a crime map might show them."

In 2005, the police department was data-rich and information-poor: A wealth of historical data was gleaned from its mature 911 system, the computer-aided dispatch system and the records management system, which were all used to track crime and ensure quality of service. But like many organizations, the police lacked a solution on how the data could be used.

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The RPD's first task was to identify data that would be used to create predictive crime reports - factors that wouldn't change drastically over short periods of time. This created a model that automatically improves itself and avoids the manual refreshing of variables. The chosen data included: time, day, holidays, weather, moon phases, city events, paydays and crime records. All the analyzed data was at least five years old to ensure the integrity of the predictions.

Since there weren't packaged solutions that provided what the RPD required, the department developed a custom solution with several different technologies. The police data was integrated with Information Builders' WebFocus software, which included capabilities for analytics and reporting. The platform uses WebFocus as the primary user interface that displays criminal activity every four hours, which enables each new shift of officers to make adjustments for how they patrol. This information is available to officers at police stations and in squad cars; real-time alerts are sent by e-mail and text messages when extra officers are needed for deployment.

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The GIS capabilities let officers view specific types of crimes for a particular area and perform crime mapping and analysis functions. Officers can view maps of crime hot spots by location or crime type, such as car theft; they can also see specific incidents within a ZIP code, neighborhood, city district or other user-defined area. Data for weather, events, time, case history, associated suspects and aerial photos can also be integrated. The result is a sophisticated data model of criminal activity with a user-defined set of elements that predict criminal behavior. The system was integrated with Richmond.com, which feeds it contextual information about local activities, such as sporting events and the city's weather data collection system.

From 2006 to 2007, the platform saw reduced incident rates of murder (32 percent lower), rape (20 percent), robbery (3 percent), aggravated assault (18 percent), burglary (18 percent) and auto theft (13 percent). A New Year's initiative used the platform to deploy officers in targeted areas, which resulted in a 49 percent reduction in random gunfire and a 246 percent increase in weapons seized - and only one-third as many officers were deployed compared to previous years, resulting in a $15,000 savings of overtime pay.

Homicide Reduction in Richmond, Virginia

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Analyses of criminal behavior also determined what crimes should receive higher priority. Now instead of looking at their static data, [officers] pull BI reports every two weeks and see where crimes are taking place. We wanted to be more predictive and have the officers there before a crime is committed; that's what makes this unique.

While other metropolitan areas use similar BI tools for crime analysis, the RPD is unique because it found its own solution with a limited budget.

Homicide Reduction in Richmond, Virginia

Criminal Violence Reduction Plan (CVRP)

Mission

The CVRP, chaired by Richmond Police Department, Chief Bryan Norwood consists of local, state, and federal law enforcement and criminal justice stakeholders that coordinate efforts to reduce violence and improve the quality of life in Richmond.

The goal is to disrupt the systemic violence associated with individuals and loosely confederated individuals that are involved in the use and/or distribution of illegal drugs and/or other inherently violent illegal enterprises through enforcement, prevention and education.

Homicide Reduction in Richmond, Virginia

Traditional State Investigation/Prosecution

TRIAL

Investigation/Prosecution with CVRP

Homicide

Guilty Plea/Prison Sentence

Homicide Reduction in Richmond, Virginia

Key Components of Success

Crime Analysis/Intelligence and Information Sharing

Focus

De-conflict

Evaluation and Adaptability

Accountability

Homicide Reduction in Richmond, Virginia

Key Components of Success

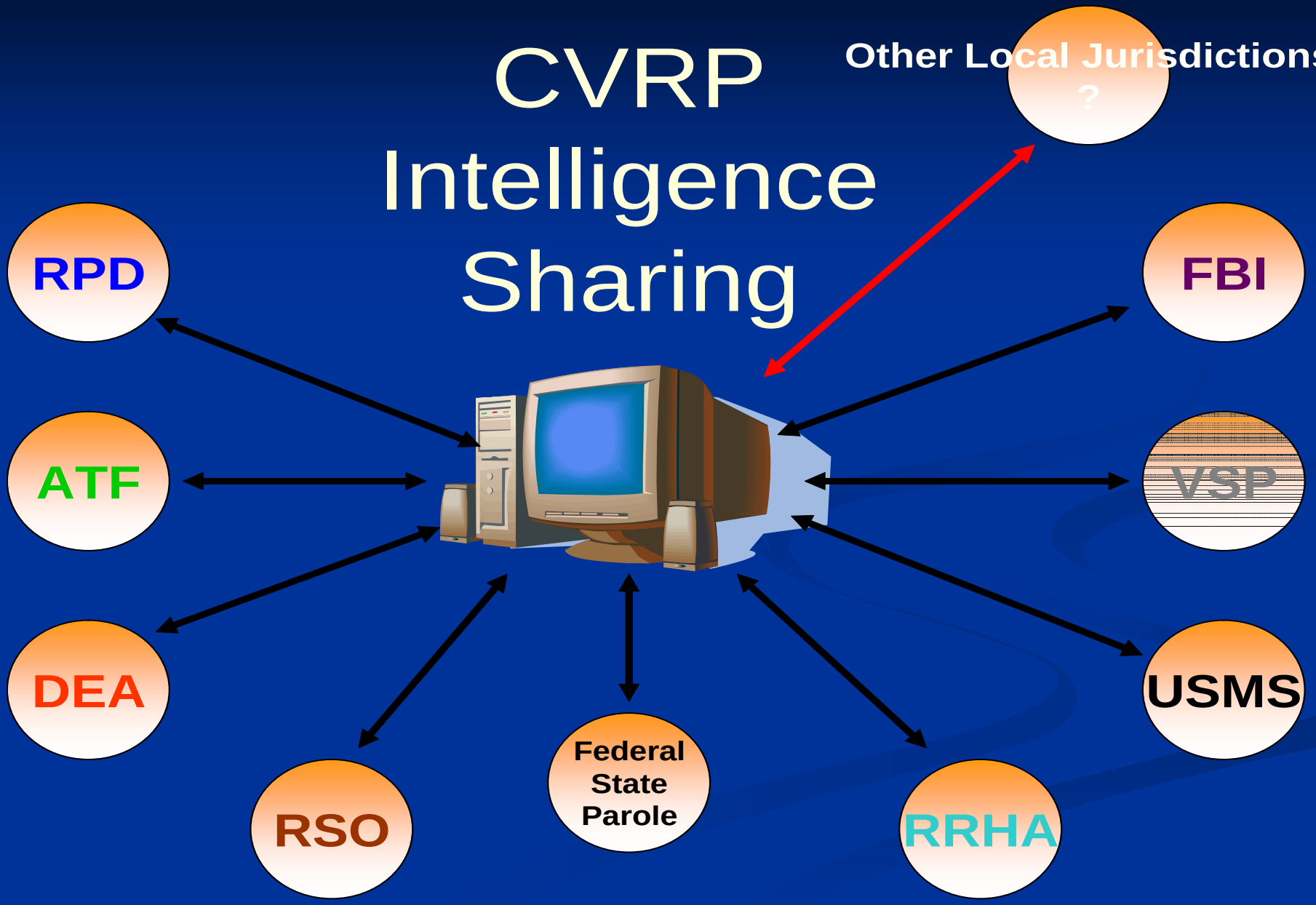
Crime Analysis/Intelligence and Information Sharing

Utilizes crime analysis and intelligence to deploy the available resources throughout the city with focused individual missions tailored to each agencies own mission, and resources.

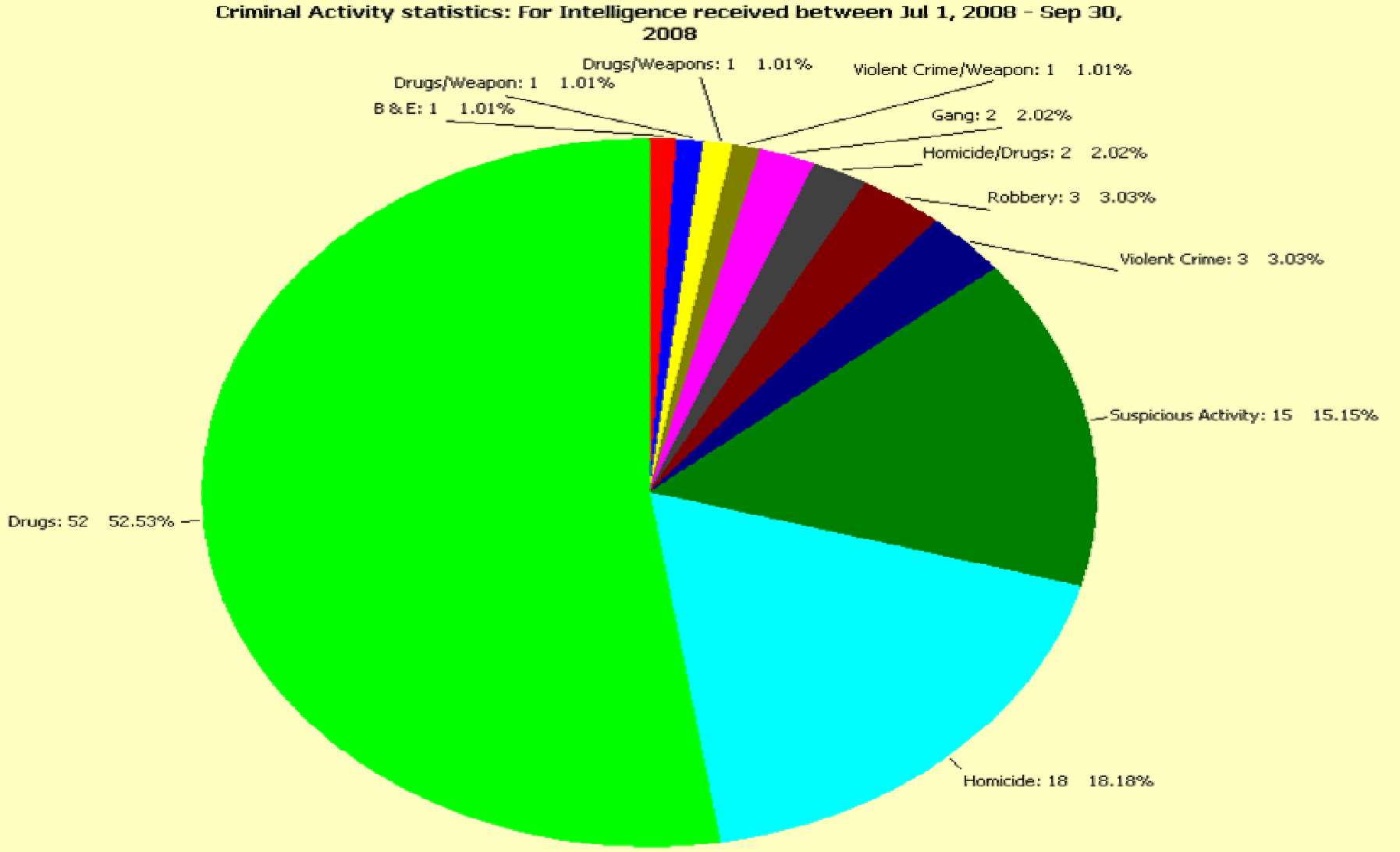
Integrated intelligence database

Training and protocols on available data from proprietary databases.

Homicide Reduction in Richmond, Virginia



Intelligence received by crime



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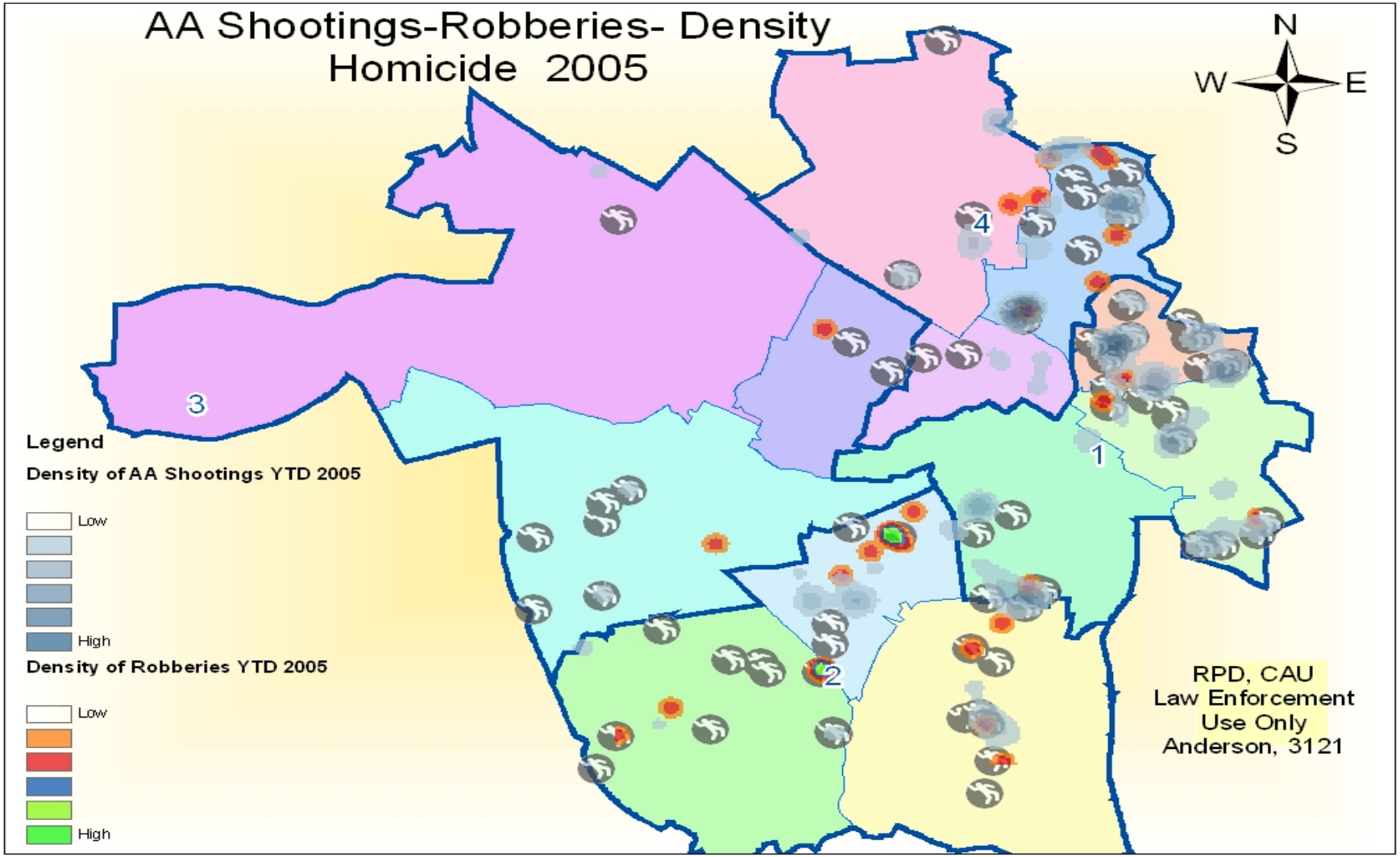

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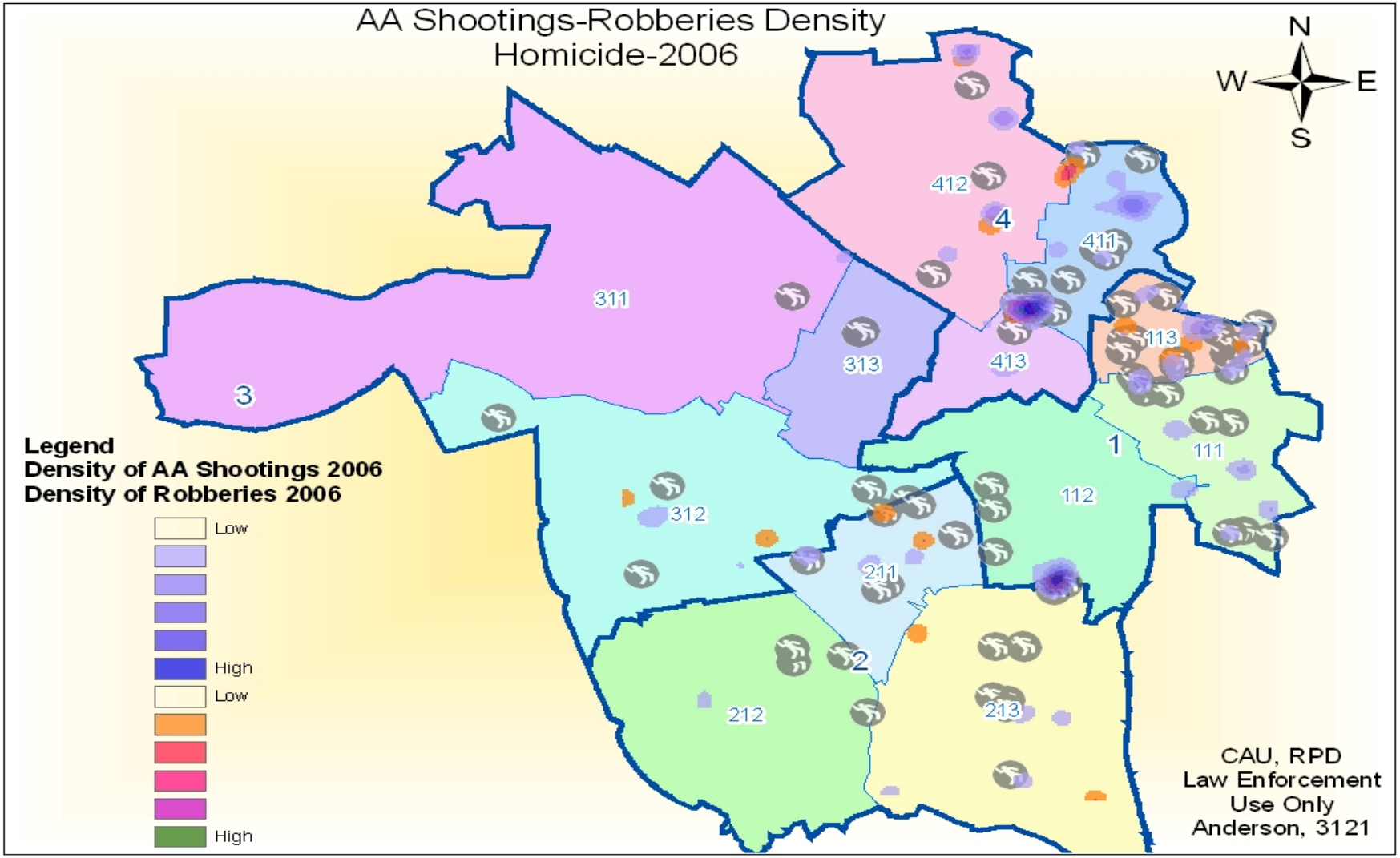

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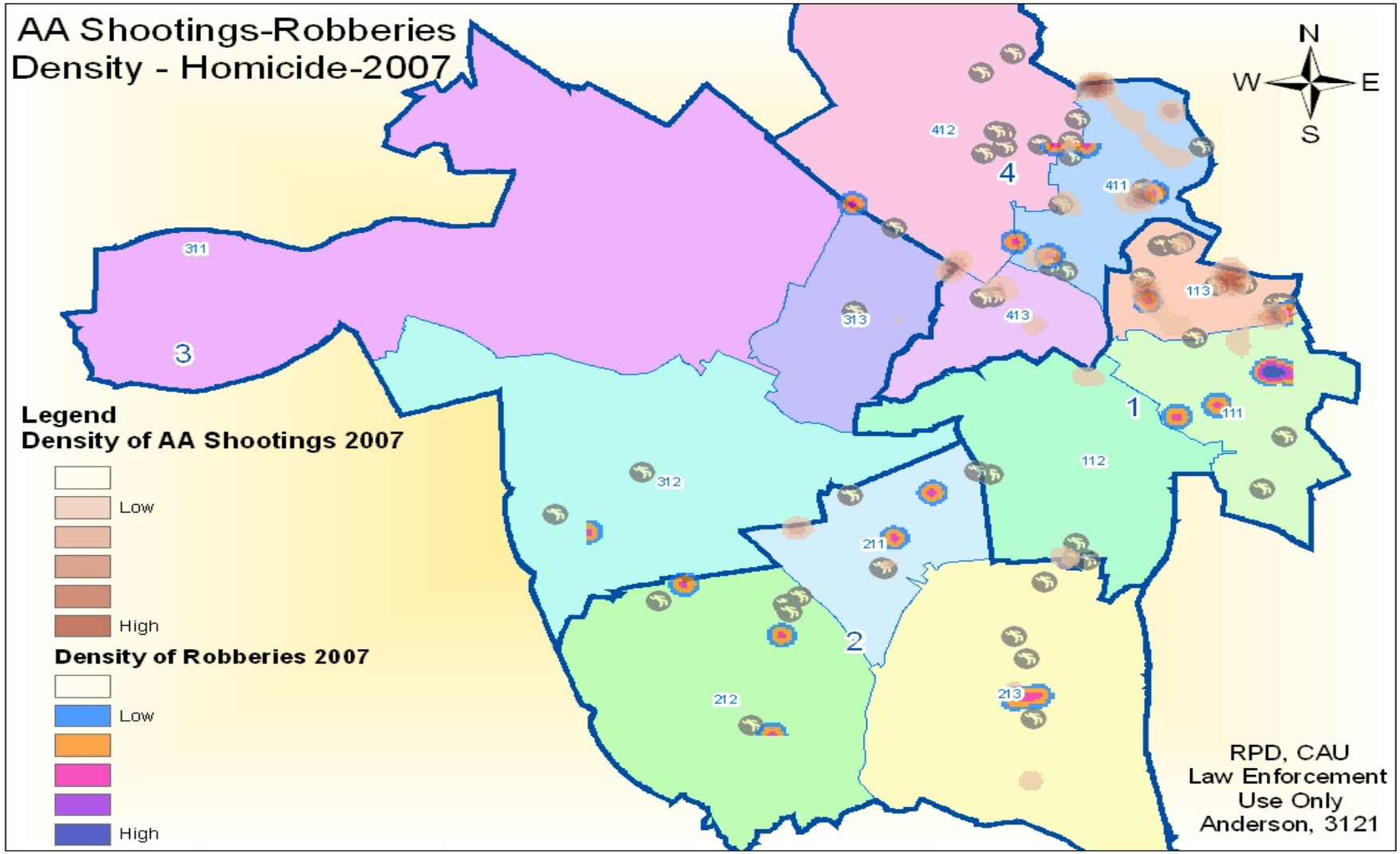

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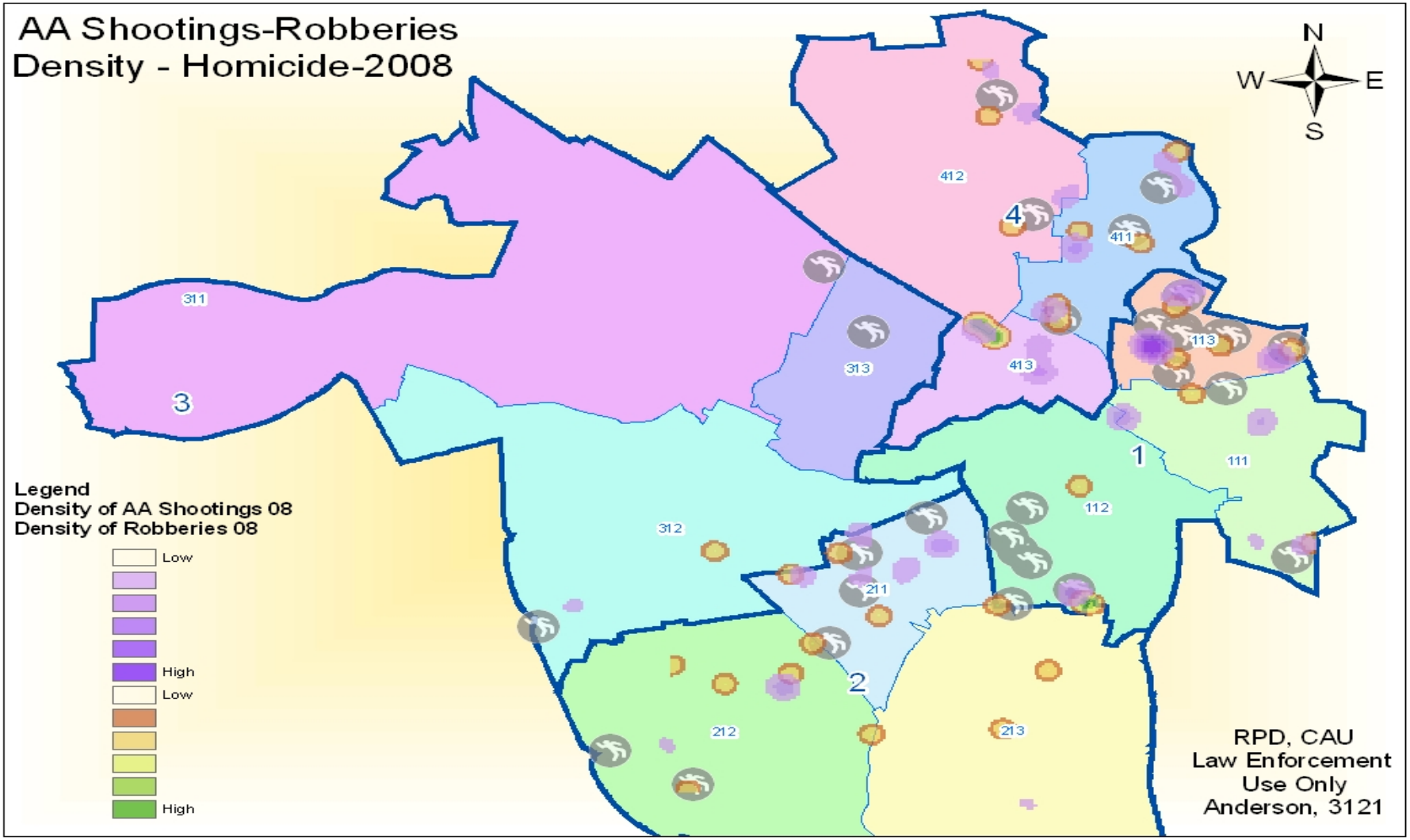

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Key Components of Success

Focus

Member agencies hold one another accountable for staying on course and resisting the urge to divert resources away from reducing violent crime (i.e. narcotics trafficking without a nexus to violence)

Homicide Reduction in Richmond, Virginia

Key Components of Success

De-conflict

De-conflict not only in the sense of operational concerns but duplication of resources, tactics and effort.

Recognizing the strengths of each division and outside agencies and appropriately applying their resources.

Avoid multiple entities deploying the same tactics

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Key Components of Success

Evaluation and Adaptability

Regular evaluation of everything mentioned above and remain fluid and flexible enough to adapt to the environment and changing resources

Deployment of resources has moved and/or changed every year since 2005.

Homicide Reduction in Richmond, Virginia

Key Components of Success

Accountability

Arguably the most significant reason for the success in Richmond

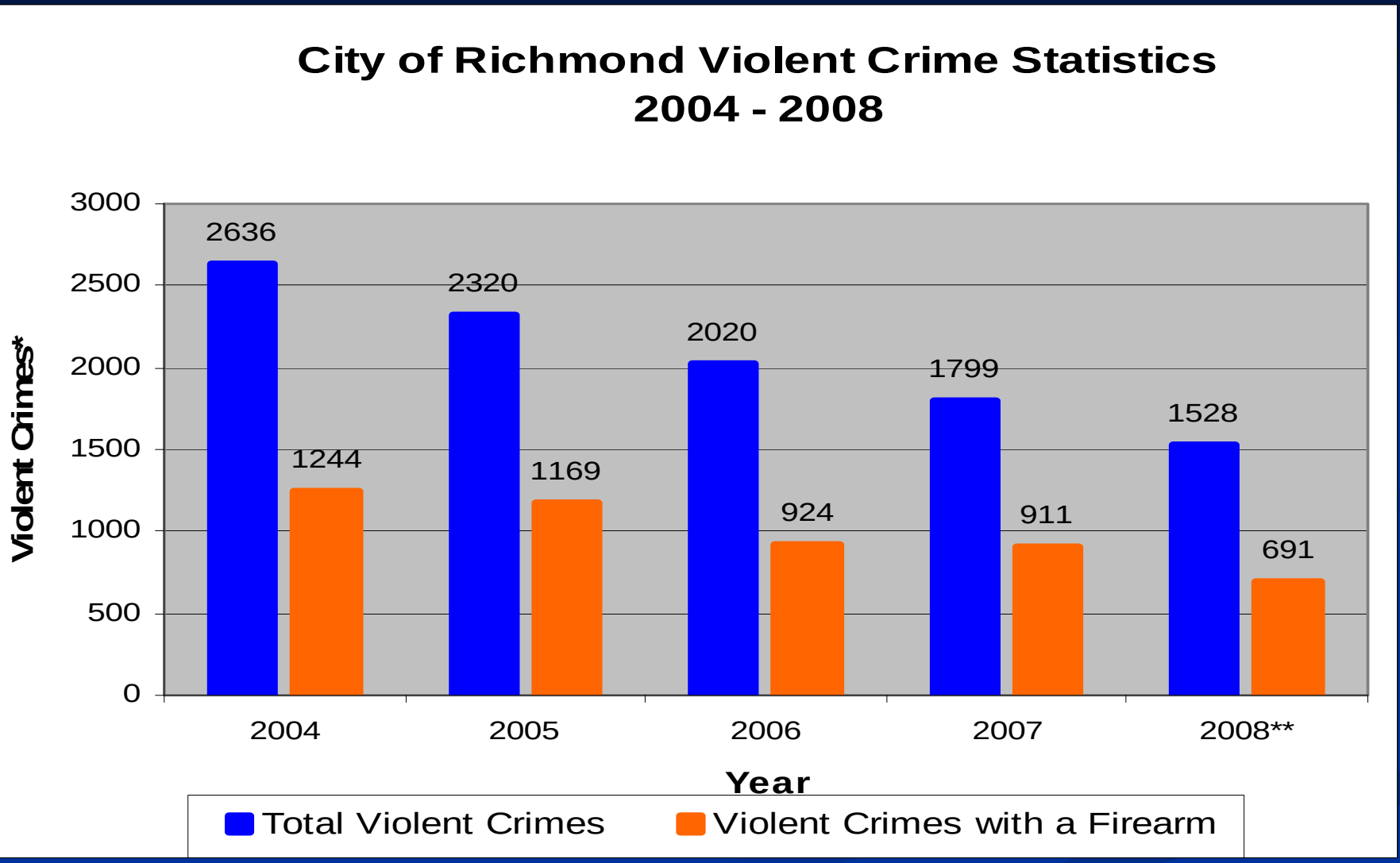
Ego checked at door

Everyone allows themselves to be questioned and held accountable

It must permeate the CVRP and each agency.

Not always pretty but effective

Homicide Reduction in Richmond, Virginia



Homicide Reduction in Richmond, Virginia

Overtime Expenditures

	2006	2007	2008
RPD	$62,574.69	$34,201.19	$22,434.28

Homicide Reduction in Richmond, Virginia

Richmond Times Dispatch- November 25, 2008

Richmond drops to 49 in crime list- November 25, 2008

Richmond is dropping further down the list of most dangerous cities.

Based on 2007 data, it now ranks as the nation's 49th most-dangerous city, an improvement from its 29th ranking in 2006, according to annual rankings released yesterday by Washington-based CQ Press.

The newest ranking is a significant improvement from 2005, when the city was ranked fifth most-dangerous by Morgan Quitno Press, a research firm purchased last year by CQ Press, a publishing company.

Reacting to the latest ranking, Richmond Police Chief Bryan T. Norwood praised his officers and attributed the improved ranking to collaboration with city prosecutors and a sector approach to law enforcement.

He also credited a fugitive and firearms initiative, an anti-gang program and efforts to reduce truancy. Norwood, who was sworn in as chief on Nov. 3, said in a statement that Richmond no longer is on track to have the "dubious distinction of one of the 'most dangerous' cities."

Based on 2007 FBI crime statistics, CQ Press ranked 385 cities with populations of 75,000 or more based on crimes per 100,000 people.

The survey ranks cities based on six crime categories: murder, rape, robbery, aggravated assault, burglary and motor vehicle theft.

The ranking of some cities, Richmond among them, is skewed by the fact that surrounding counties aren't included in their boundaries.

According to 2008 Richmond statistics, the number of homicides is down 33 percent compared to the same period in 2007, rapes are down 11 percent, commercial robberies down 48 percent, individual robberies down 16 percent, and aggravated assaults down 8 percent.

Homicide Reduction in Richmond, Virginia

Richmond Times-Dispatch- January 4, 2009

Homicides in region plummet

Richmond's dramatic drop in homicides last year fueled a notable decline in killings throughout central Virginia, which fell below 100 for the first time in years.

The 21 localities that make up the greater metropolitan region collectively recorded 82 homicides in 2008, or 20 percent fewer than the 103 slayings in 2007, according to an analysis of homicide data by the Richmond Times-Dispatch.

Although Richmond accounted for 44 percent of the region's killings, the city's low homicide count compared with previous years was largely responsible for the drop in the region.

Excluding four cases considered justifiable homicide or manslaughter, Richmond officially recorded 32 killings in 2008, or 23 fewer than the year before. That made 2008 the city's least-deadly year since the early 1970s.

Richmond police and prosecutors attribute the historically low number to stronger relationships among local, state and federal law-enforcement agencies, aggressive targeting of violent offenders and cooperation from residents who are fed up with violence.

John D. Reitzel, an assistant professor of criminal-justice studies at Virginia Commonwealth University, said Richmond's turnaround is nothing short of remarkable.

"This is amazing, considering only about 12 years ago they had about 121 homicides and have been averaging over 80 for the past decade," said Reitzel, who examined the data collected by The Times-Dispatch. In 1994, Richmond led the nation in per-capita homicides with 160 killings.

Reitzel noted another remarkable achievement -- 66 of the region's 82 homicides have been solved, for a clearance rate of 80 percent. By comparison, the national average was 61.2 percent in 2007, according to the FBI.