

# Milwaukee Police Department Crime Data Audit – Initial Report

Chief Edward A. Flynn

June 21, 2012



# Crime Reduction

- 2008: MPD began to focus on crime reduction with an approach that is community-based, problem-oriented and data-driven
- Deployments are based on timely information
- Focus is on results
  - Officers in the right places, engaged in the right activities
  - Officers on beats and bicycles
- Milwaukee's homicides dropped from a twenty year average of 126 to a four year average of 81
- During the same 4 year period auto theft declined 42%

# Measuring Crime

- There is no single accepted measure for crime in a community
  - National Crime Victimization Survey
  - Self Reported Surveys
  - Uniform Crime Reports
  - Incident Based Reporting
  - Statutory Violations
- All of these are proxy measures for progress in the community

# Data Management System

- MPD's Crime Data System is comprised of four integrated subsystems that join together to share and exchange information
  - Computer Aided Dispatch (CAD)
  - Automated Reporting System (ARS)
  - Corrections Management System (CMS)
  - Records Management System (RMS)
- February 7, 2005, MPD began reporting crime statistics in the National Incident Based Reporting System (NIBRS)
  - From the reported NIBRS data, the DOJ extracts summary data and that data becomes the UCR crime numbers for Milwaukee
  - NIBRS crimes are filtered out by the DOJ based on rules of hierarchy and therefore are not included in summary (UCR) reporting

# Data Management & Tiburon

- 2005: MPD went “Live” with Tiburon and encountered significant problems with its implementation, resulting in an initial delay in WIBRS reporting for year 2005 – 2006
- 2007: Common Council requested an Audit of MPD’s Crime Data System to determine functionality and establish whether the State crime reporting requirements were being met
- 2007: City Comptroller’s Office conducted an audit and concluded that MPD had difficulty with some important system functions that were not yet operational
- 2008: Chief Flynn requested assistance from private sector during a meeting with the Greater Milwaukee Committee
- September 2011: Chief Flynn directed formation of Steering Committee to assess current system and consider replacement
- May 2012: Request For Information (RFI) was developed to determine best course of action concerning new data management system

# FBI Audit

- March 2010: First ever FBI Quality Assurance Review (QAR) was requested by Chief Flynn
- January 2012: FBI confirmed the request for audit
- May 8-9, 2012: FBI conducted MPD audit
- August/September 2012: FBI to report on QAR results

# Targeted Audit

- NOT a random sample of incidents; purpose was to identify incidents that had the greatest likelihood of containing coding mistakes resulting in misclassification of aggravated assaults
- May 23, 2012 – MPD began a review of over 34,000 assault type reports
- Auditors examined reports between 2006-2012
- Office of Management, Analysis & Planning (OMAP) had oversight of audit
- Team focused on misclassification related to Wis. State Statutes, IBRS codes and other key fields of data
- Audit team included approximately 25 members from various locations and ranks within the Department

# Targeted Audit - Procedure

- NIBRS crime categories reviewed
  - Simple Battery (13B)
  - Disorderly Conduct (90C)
  - Family Offenses, Non-violent Crime (90F)
  - All Other Offenses (90Z)
- Incidents were electronically filtered to identify those in need of further review
- A systematic procedure was established for assessing each record to ensure consistency among the auditors
- The auditors assessed the IBRS codes, State Statutes, and other key fields
- A centralized audit database was created to track any corrections

# Targeted Audit Results

- 1) Aggravated assaults decreased over the past 6 years
- 2) Classification errors were made in both directions (over-reporting and under-reporting)
- 3) Classification errors in the reporting of aggravated assault have decreased over the past 6 years

# Official UCR Crime Totals

## FBI Uniform Crime Reporting

Year	Murder and nonnegligent manslaughter	Forcible rape	Robbery	Aggravated assault	Burglary	Larceny -Theft	Motor vehicle theft	Arson	Violent Crime Total	Property Crime Total	Total Crime
2006	103	220	3,606	3,873	5,654	24,427	8,239	320	7,802	38,320	46,442
2007	105	236	3,536	4,186	6,220	24,408	7,754	349	8,063	38,382	46,794
2008	71	204	3,242	3,879	6,354	23,821	6,540	319	7,396	36,715	44,430
2009	72	205	3,179	3,215	6,581	23,485	4,875	359	6,671	34,941	41,971
2010	95	196	2,943	3,102	6,206	21,243	4,330	249	6,336	31,779	38,364
2011	85	196	3,175	2,736	6,626	19,294	4,534	257	6,192	30,454	36,903
<b>Total</b>	<b>531</b>	<b>1,257</b>	<b>19,681</b>	<b>20,991</b>	<b>37,641</b>	<b>136,678</b>	<b>36,272</b>	<b>1,853</b>	<b>42,460</b>	<b>210,591</b>	<b>254,904</b>
<b>2006-2011 %Change</b>	<b>-17%</b>	<b>-11%</b>	<b>-12%</b>	<b>-29%</b>	<b>17%</b>	<b>-21%</b>	<b>-45%</b>	<b>-20%</b>	<b>-21%</b>	<b>-21%</b>	<b>-21%</b>

Sources: 2006 Data retrieved on June 19, 2012 from the Federal Bureau of Investigation Uniform Crime Report:

<http://www.ucrdatatool.gov/>; 2007-2011 data retrieved on January 13, 2012 from the MPD Annual Report and official FBI UCR data.

# Crime Reports Based On State Statutes

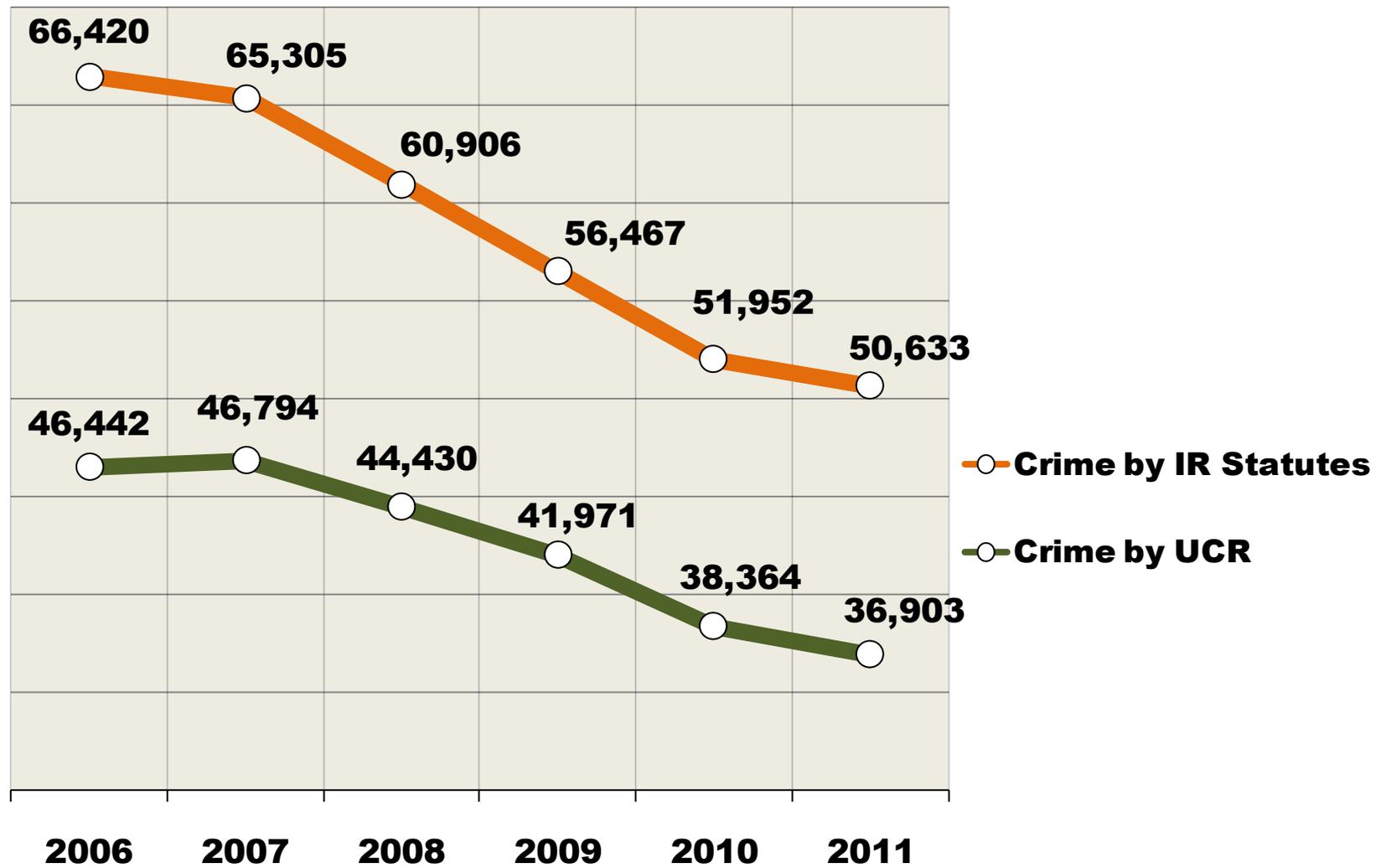
(Major Crime Categories)

## Incident Reports by Wisconsin Criminal Code Chapter

Year	940-LIFE & BODY	941-HEALTH & SECURITY	943-PROPERTY	948- AGAINST CHILDREN	Total
2006	7,954	3,543	53,217	1,706	66,420
2007	8,813	3,481	51,333	1,678	65,305
2008	8,388	3,377	47,777	1,364	60,906
2009	7,367	3,180	44,730	1,190	56,467
2010	7,256	2,874	40,642	1,180	51,952
2011	7,097	2,997	39,317	1,222	50,633
<b>Total</b>	<b>46,875</b>	<b>19,452</b>	<b>277,016</b>	<b>8,340</b>	<b>351,683</b>
<b>2006-2011 % Change</b>	<b>-11%</b>	<b>-15%</b>	<b>-26%</b>	<b>-28%</b>	<b>-24%</b>

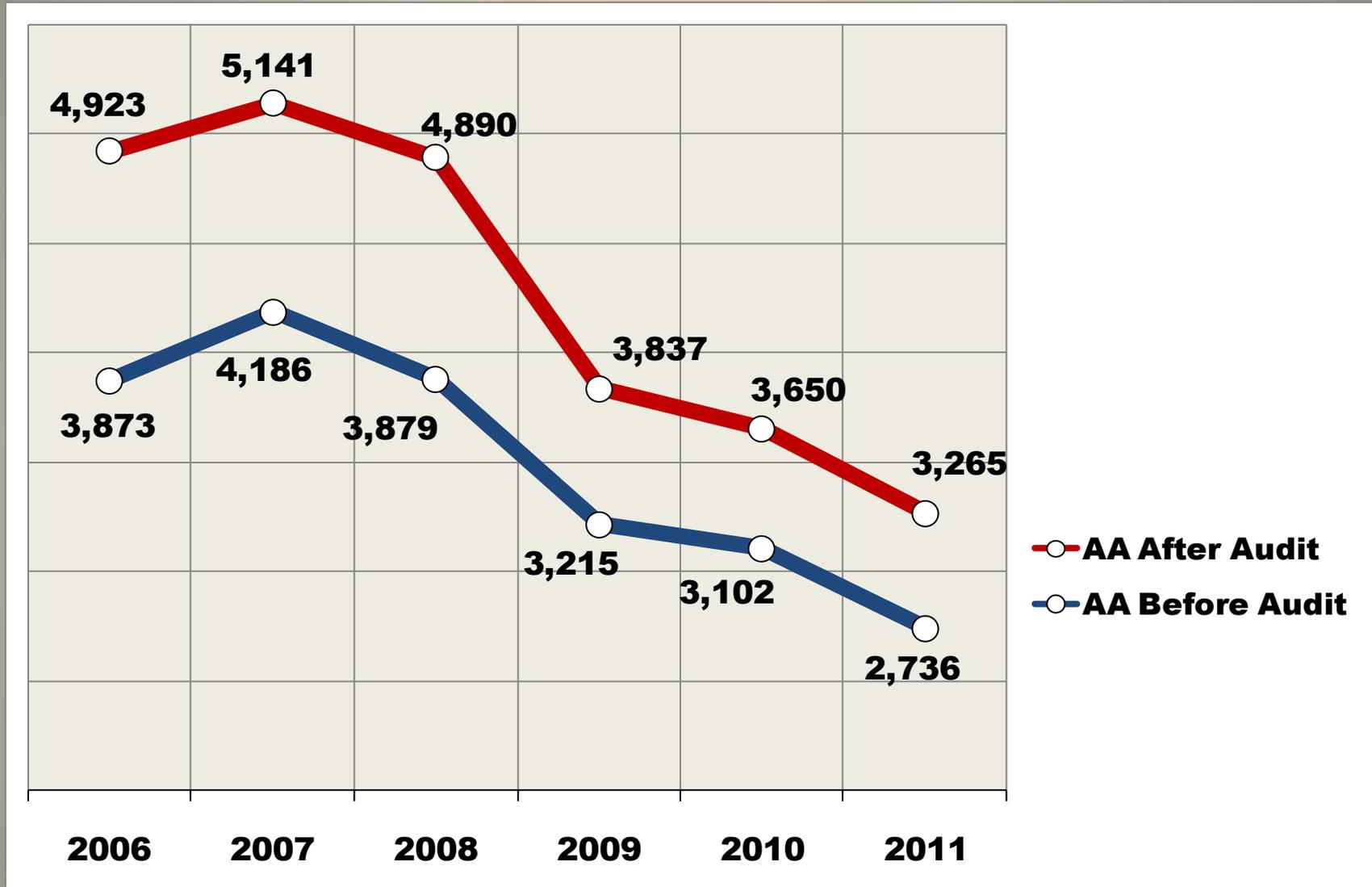
Source: Data retrieved on June 16, 2012 from the Milwaukee Police Department Automated Reporting System (ARS).

# Comparison of Crime: State Statutes and UCR



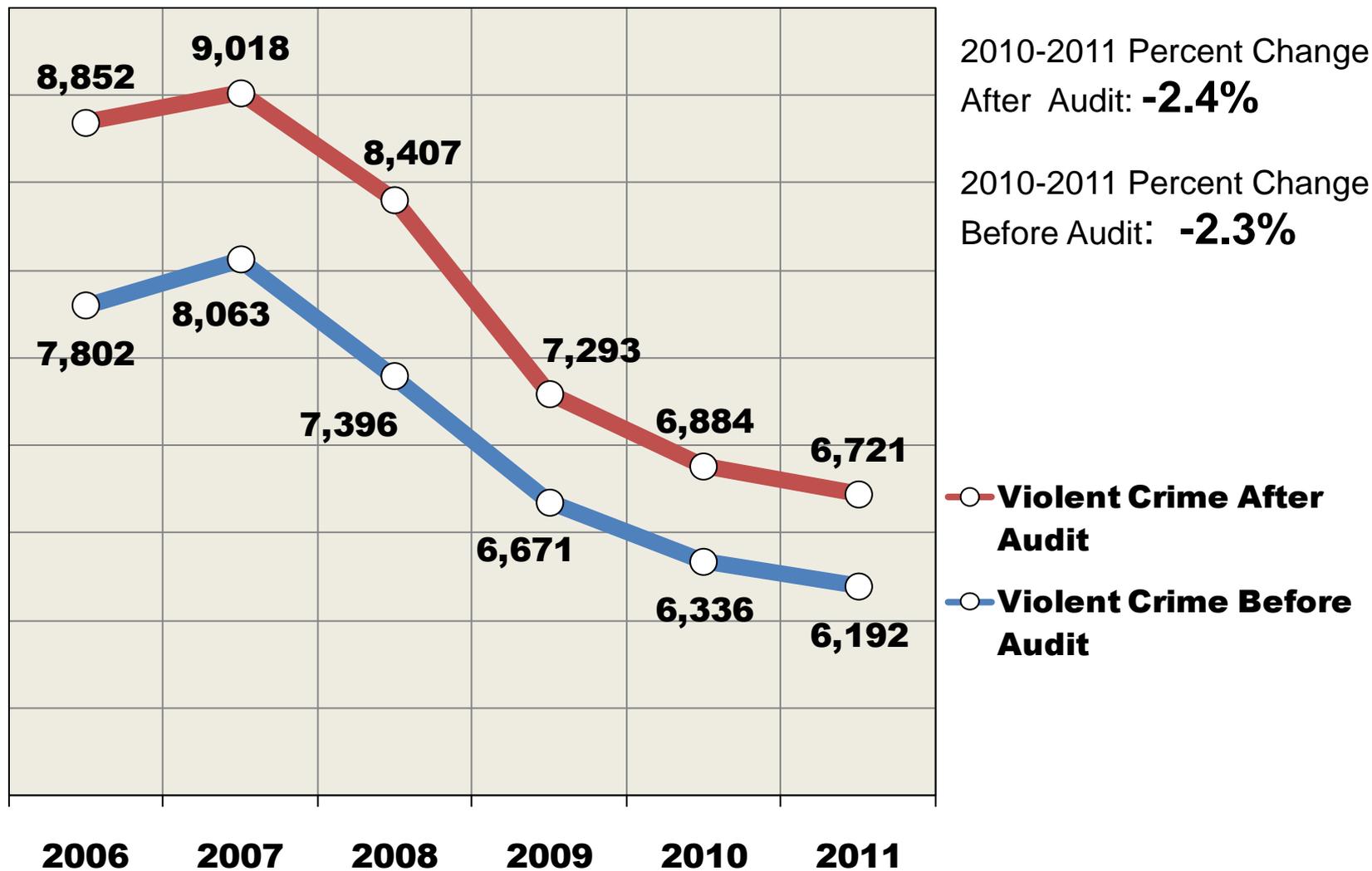
Sources: Crime by incident report (IR) statutes includes chapters 940 (Life & Body), 941 (Health & Security), 943 (Property) and 948, (Crimes Against Children) and retrieved from the Milwaukee Police Department Automated Reporting System (ARS); Crime by UCR retrieved from the Federal Bureau of Investigation Uniform Crime Report.

# Aggravated Assaults: pre and post audit



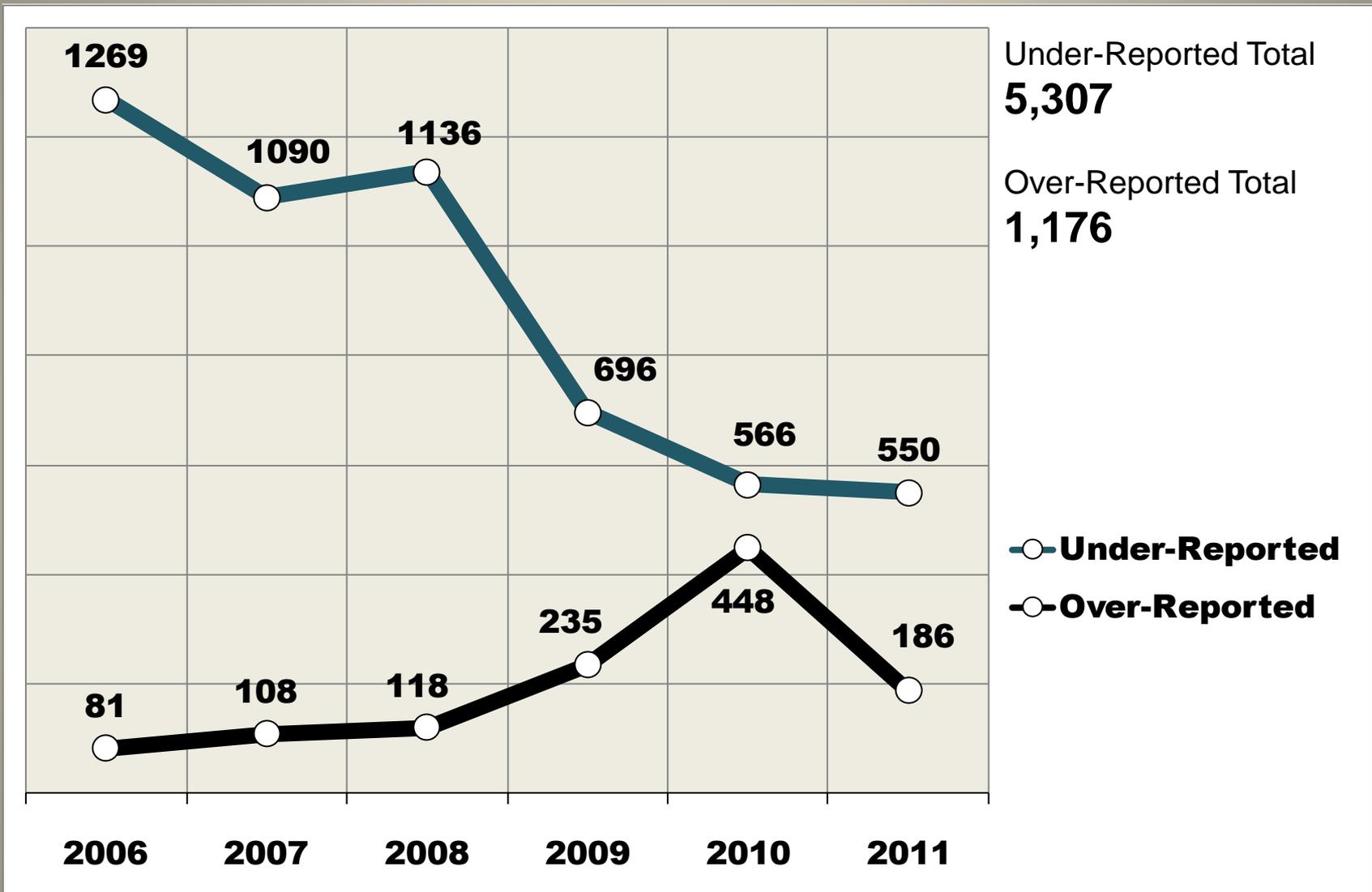
Sources: Aggravated Assaults (AA) Before Audit numbers retrieved from FBI Uniform Crime Report ; Aggravated Assaults (AA) After Audit calculated by adding the number of adjusted aggravated assault incidents during the audit to UCR aggravated assaults for each year.

# Violent Crime: Pre and Post Audit



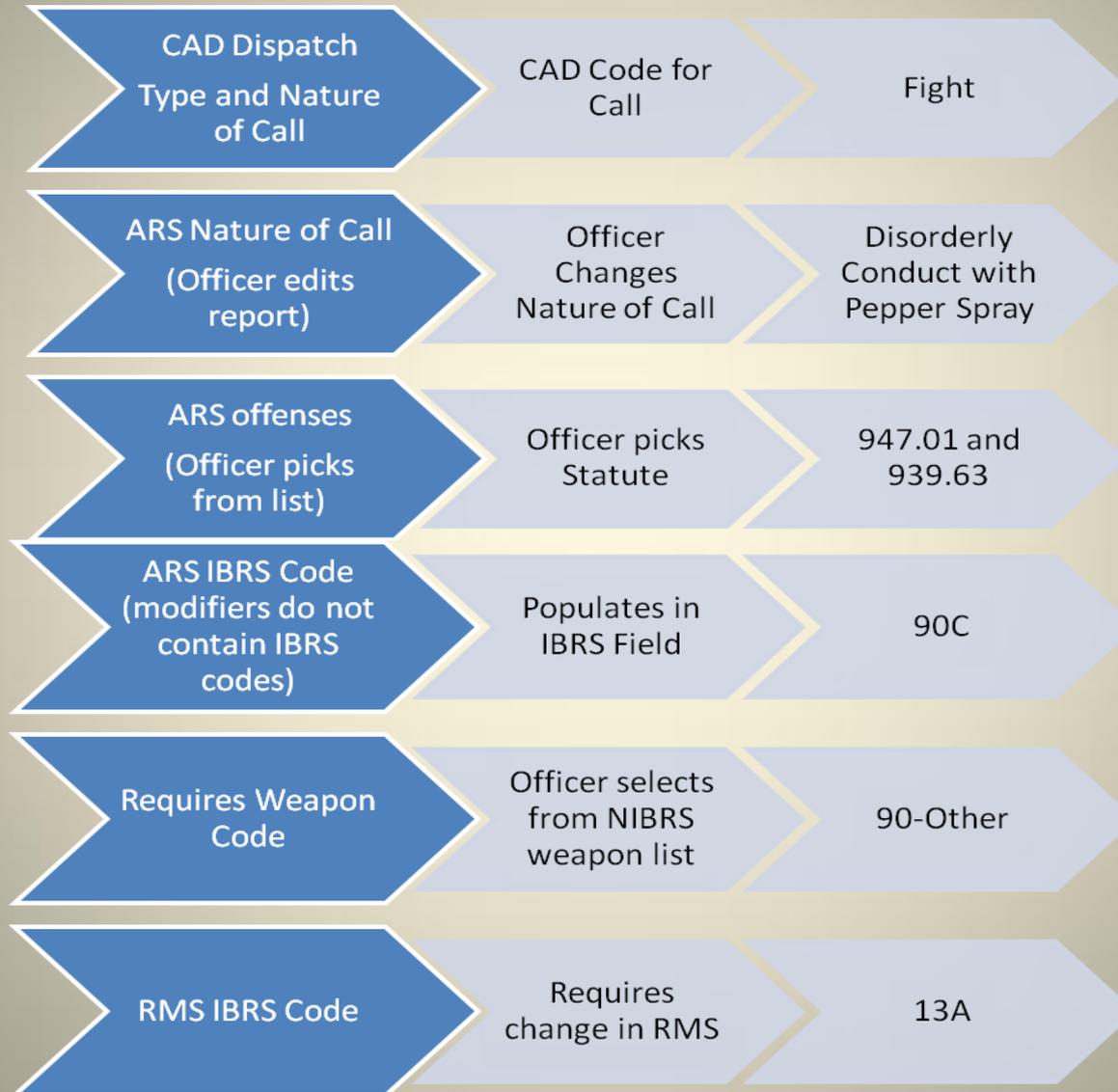
Sources: Violent Crime Before Audit data retrieved from the FBI Uniform Crime Report; Violent Crime After Audit data calculated by adding the number of adjusted aggravated assault incidents found during the audit to total UCR violent crime for each year.

# Misclassification Found During Targeted Audit



Source: Data retrieved from the Milwaukee Police Department Audit Database on June 19, 2012. Further audit of police reports may change the number of incidents under-reported and over-reported.

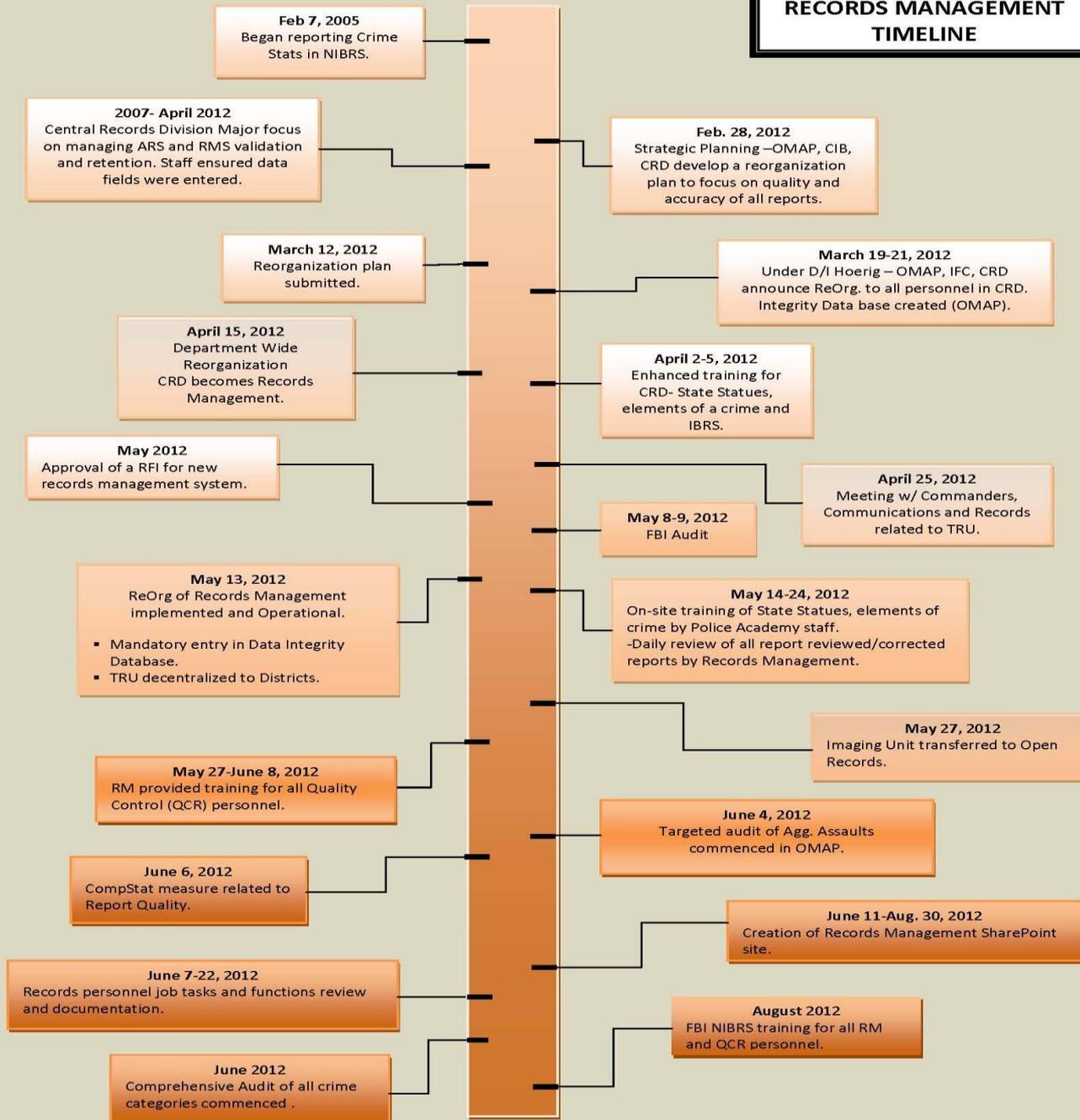
# Case Study – Disorderly Conduct



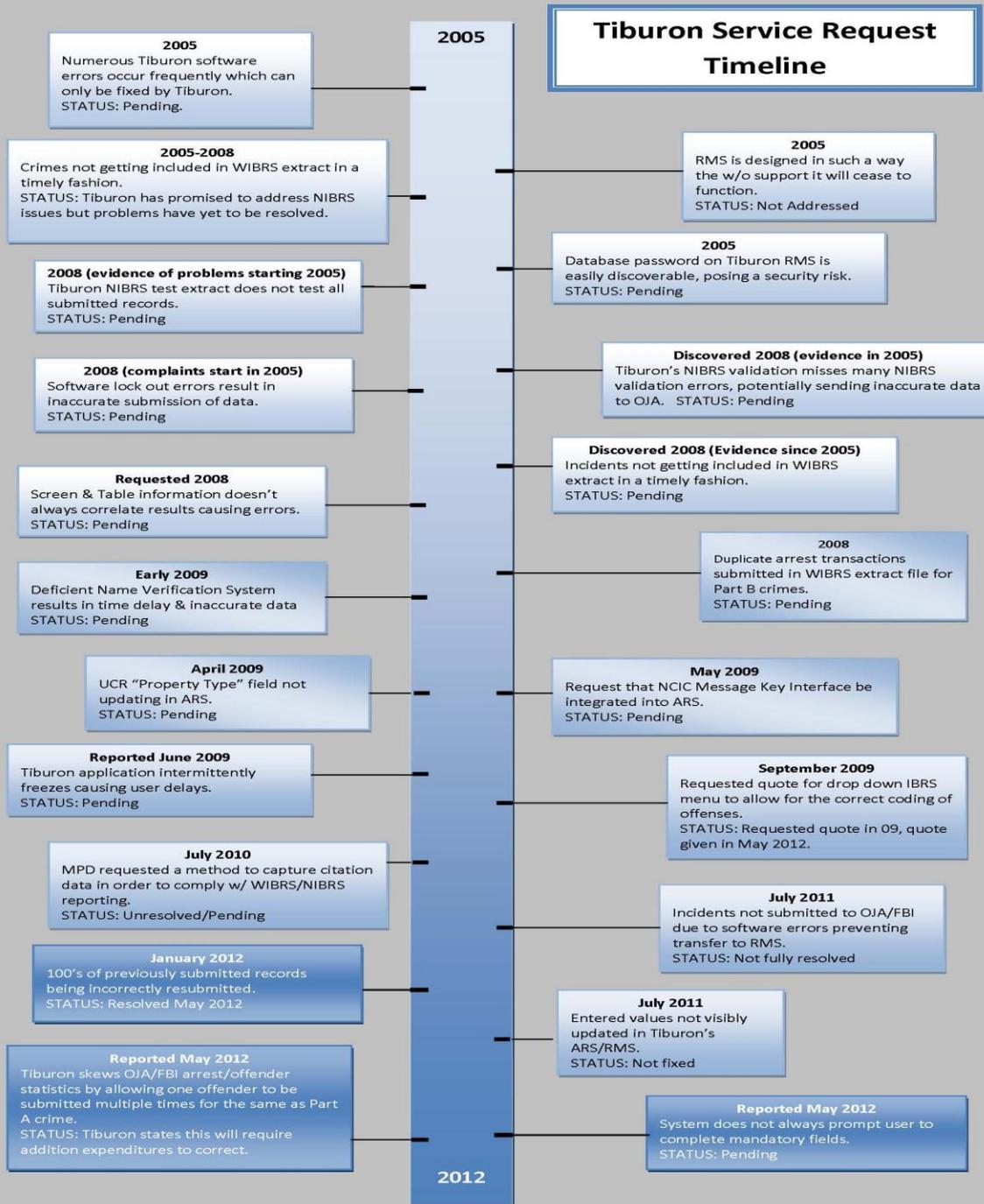
# Records Management Reorganization: May 2012

- Decentralization of the Telephone Reporting Unit and Imaging Unit
- Reassignment of RMS personnel to the Day Shift
- The creation of five subject matter expert groups to improve data quality
- Enhanced training for Records Management personnel regarding state statutes and IBRS
- The establishment of district and division quality control representatives
- The creation of a revised incident report flow chart
- The design of a data integrity database to audit errors
- The introduction of a new e-mail notification system for reporting data quality issues
- Fixed responsibility and final authority to make coding corrections

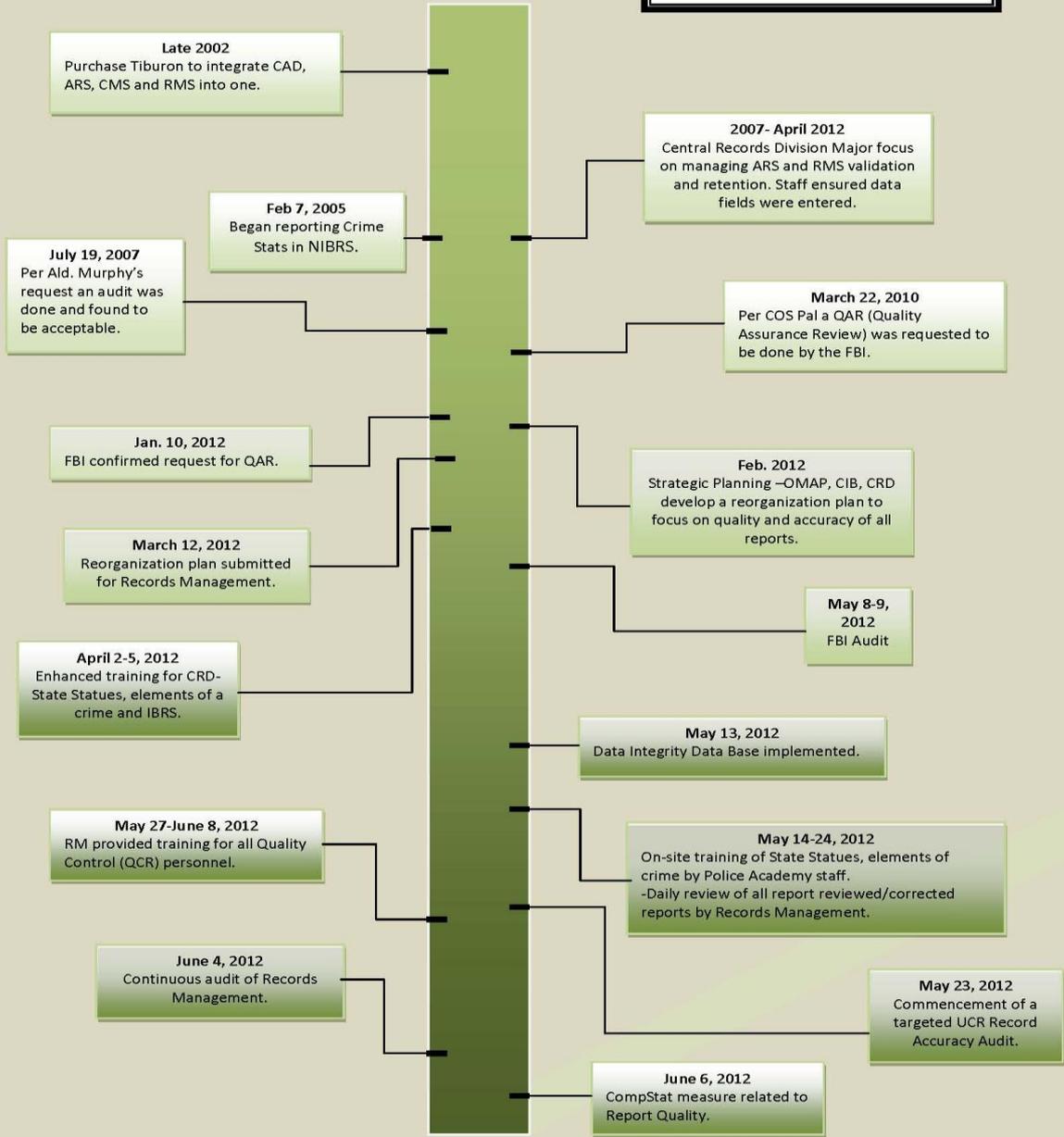
# RECORDS MANAGEMENT TIMELINE



# Tiburon Service Request Timeline



# AUDIT TIMELINE



# Conclusions

- Systems improvements are already occurring
- Targeted audit is complete and a full scientific audit is underway
- Misclassifications were due to systems' deficiencies and human errors
- Mistakes did **not** affect
  - Investigations
  - Prosecutions
  - Proactive policing strategies
- Police efforts have a substantial and positive impact on the levels of crime in Milwaukee

