



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF MANAGEMENT AND BUDGET
September 10, 2009

Delaware Major Crimes
2005 Thru the First Half of 2009

This report provides a summary of changing monthly major reported crime between calendar year 2005 and June 2009. The purpose of this report is to provide a timely means of tracking recent crime trends. While this analysis is helpful, it should not be viewed as the state's official crime report. The official data is based on the State Bureau of Identifications National Incident Based Reporting System (NIBRS), which is much more comprehensive, but not as timely. This report focuses on the major crimes listed in the table below because they represent the greatest risk to public safety and because they are the most likely to result in pre-trial detention and subsequent sentences to jail or prison – and therefore they are most likely to have a significant impact on costs and operations.

Types of Reported Crimes Included in the Report

Homicide: Title 11 Sections 631 thru 636, excluding unintentional vehicular homicide

Felony Sex Crimes: Title 11 Sections 768 thru 776 and 778 that consists of Rape 1st thru 4th, Unlawful Sexual Contact 1st and 2nd, and Sexual Extortion and Continuous Sexual Abuse of a Child

Robbery Title 11 Sections 831, 832, 835 and 836 that consists of Robbery 1st and 2nd, Carjacking 1st and 2nd

Felony Assault: Title 11 Sections 612 and 613 that consists of Assault 1st and 2nd and Attempted Murder.

Burglary: Title 11 Sections 824 thru 826 that consists of Burglary 1st thru 3rd

Drug Dealing: Title 16 Sections 4751, 4752 and 4753A that consists of Possession with the Intent to Deliver (PWITD) and Drug Trafficking



BUDGET DEVELOPMENT, PLANNING AND ADMINISTRATION
STATISTICAL ANALYSIS CENTER
410 FEDERAL STREET • SUITE 6 • DOVER, DE 19901
PHONE: (302) 739-4626 • FAX (302) 739-4630 • sac.omb.delaware.gov

DELSAC DC 10-02-08 090906

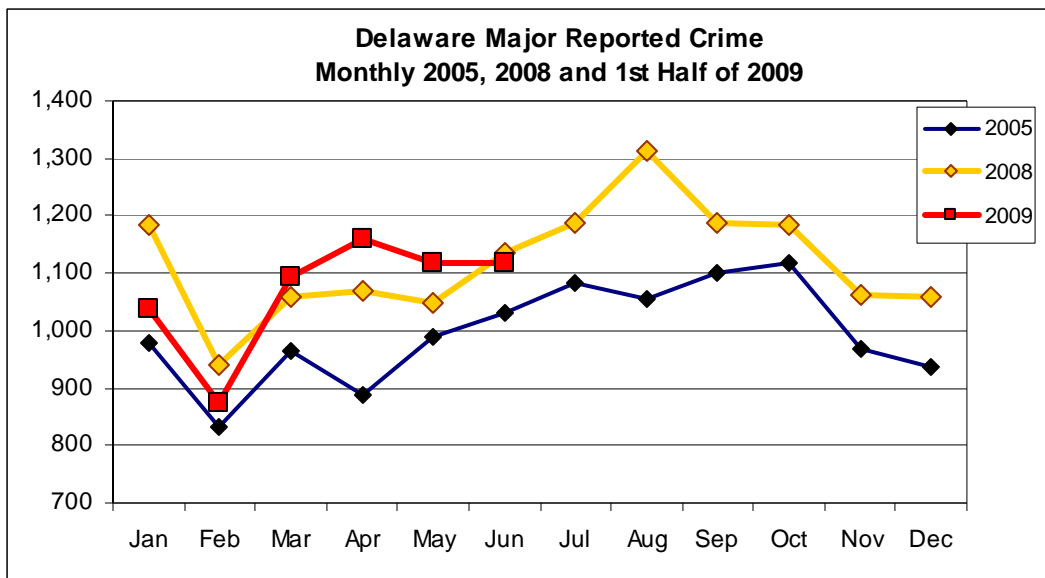
What have the Most Recent Crime Trends Been?

Between 2005 and 2008, major crimes reported have increased 12.4 percent from 11,945 to 13,431. With the current economic downturn, conventional wisdom indicates that crime could be on the increase. So it is with some interest that the early returns in the half of 2009 are being discussed. In the first quarter of 2009 versus the first quarter of 2008, reported major crimes have decreased 5.8 percent. However, as Table 1 below shows, by mid-year 2009 that overall decrease has all but vanished. So far in 2009, homicide, robbery and assault, the crimes most related to illegal use of firearms, are still lower than the activity in 2008. Drugs are still 6 percent lower than last year-to-date, but the 7.6 percent increase in burglary, which is the highest volume major crime offset lower violent and drug crime counts. Chart 1 show that the overall reported crime pattern in March, April and May 2009 exceeded the 2008 counts. The slow start for major crimes in January and February has been offset by the record numbers in March and April.

Table 1: Reported Major Crime is Down in Early 2009

	2009 1st Half	2008 1st Half	Percent Change
Homicide	24	29	-17.2%
Sex	315	375	-16.0%
Robbery	781	839	-6.9%
Assault	671	744	-9.8%
Burglary	3,372	3,133	7.6%
Drugs	1,239	1,318	-6.0%
Total	6,402	6,438	-0.6%

Chart 1

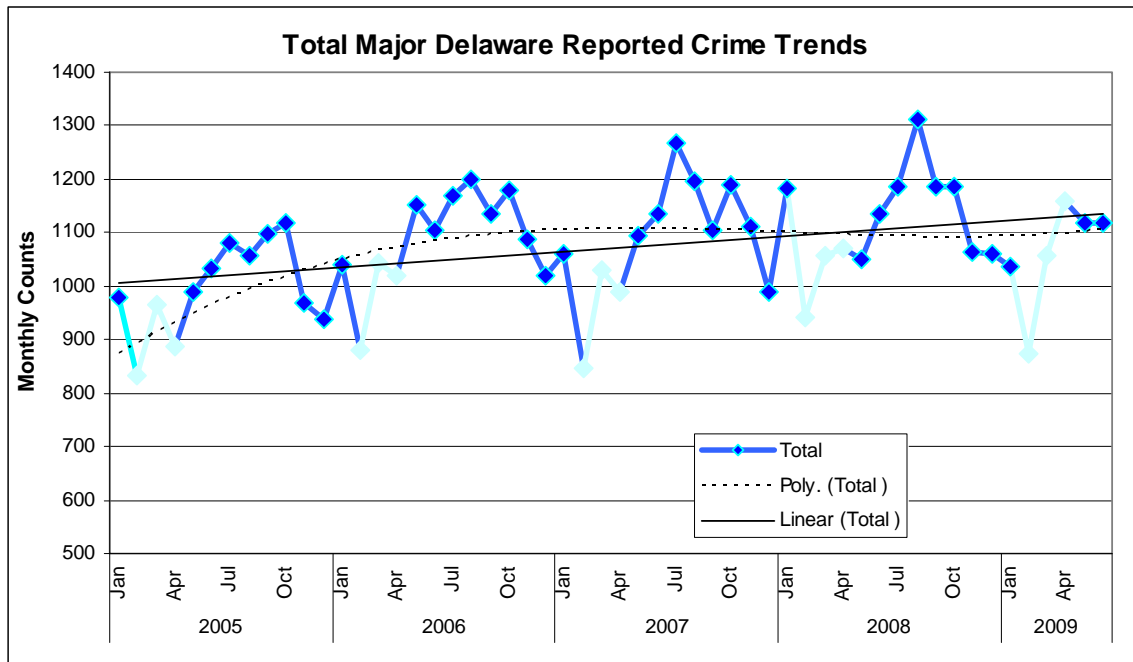


What is the Long-term Crime Trend?

Chart 2 below shows the monthly reported major crimes in Delaware since January of 2005. The solid straight line (linear trend) shows an approximate 11 percent increase in major crime between January 2005 and June of 2009. The linear trend indicates that between 2005 and the first half of 2009 reported major crime has been increasing. Interestingly, however, the “polynomial fit,” which is a method of curve fitting that is more sensitive to changes over time, indicates the major crime in Delaware is at best stable. Which representation is more accurate? At this point it is not possible to really know. The long term linear trend indicates a continued growth in major crimes, while the shorter term polynomial fit indicates a stable future.

Another important finding seen in Chart 2, is that there is a strong seasonal down turn in reported major crime in the first quarter of most years. The aberration was in 2008. In the first quarter 2008 the seasonal decrease in reported major crime was not as extensive as in other years. This means the 2009 versus 2008 decrease in major crimes is in part an aberration too. The down turn in first quarter major crime in 2009 is not that exceptional when it is compared to 2007, 2006 or 2005 (light blue).

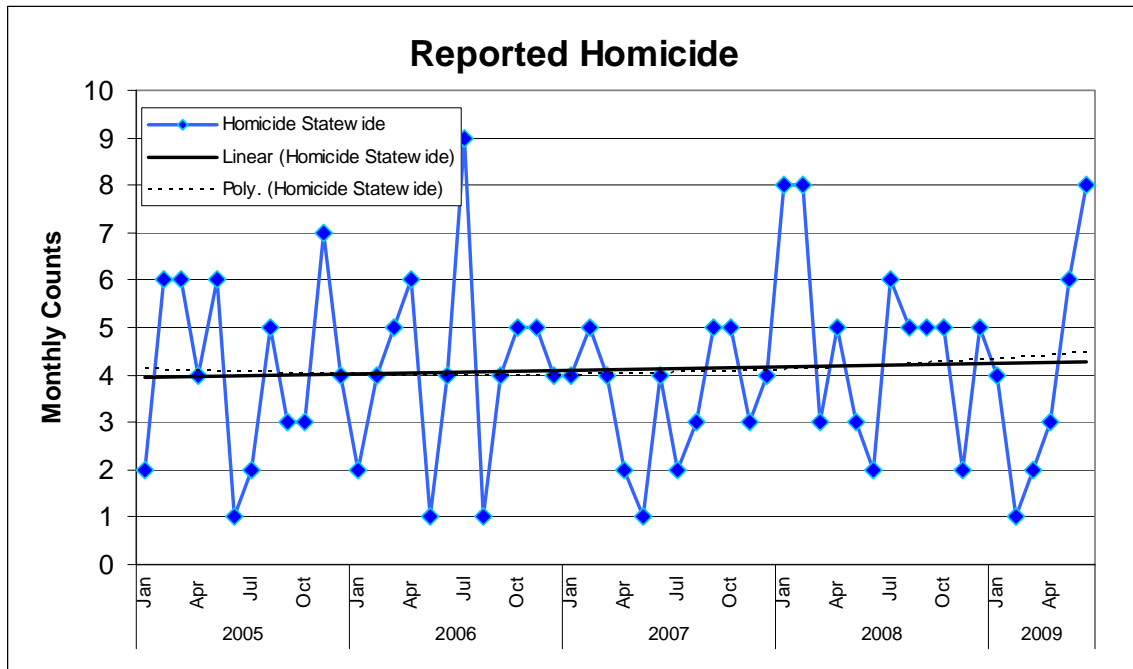
Chart 2



Crime Trends by Type of Crime

Chart 3 shows the reported homicide crime trend between 2005 and the first half of 2009. On average, the linear trend shows that there are 4 reported homicides per month in Delaware. The homicide linear trend line and the polynomial curve (3rd order) indicate a very small increase in homicides.

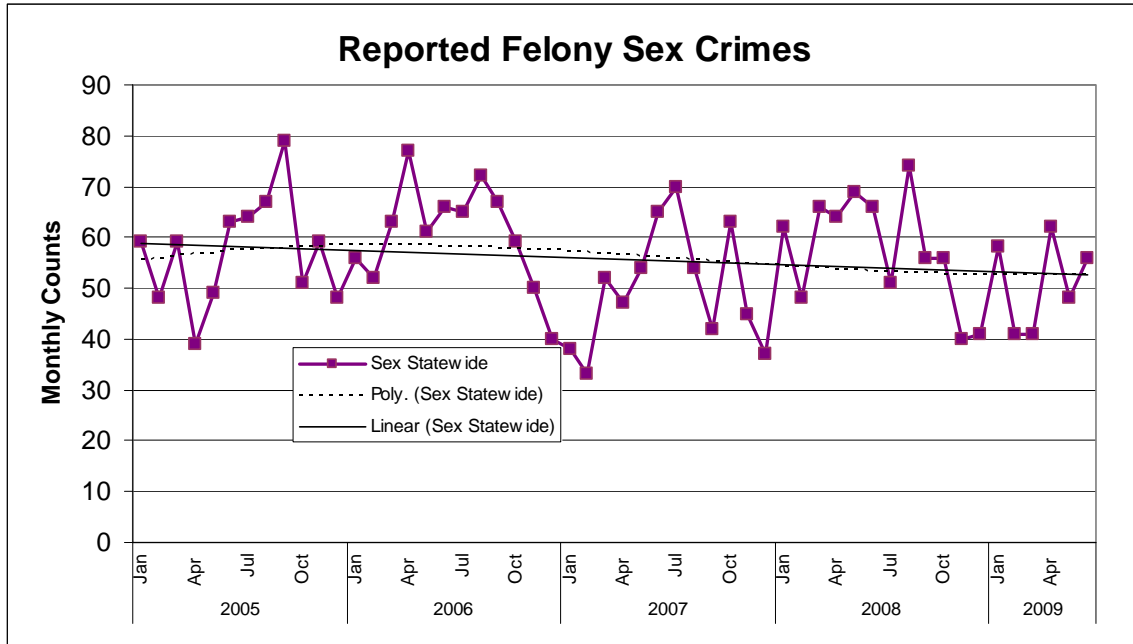
Chart 3



	Statewide Reported Homicide												Percent Change	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
2005	2	6	6	4	6	1	2	5	3	3	7	4	49	
2006	2	4	5	6	1	4	9	1	4	5	5	4	50	2.0%
2007	4	5	4	2	1	4	2	3	5	5	3	4	42	-16.0%
2008	8	8	3	5	3	2	6	5	5	5	2	5	57	35.7%
2009	4	1	2	3	6	8								

Chart 4 shows the reported felony sex crime trend between 2005 and the first half of 2009. The felony sex crime linear trend line and the polynomial curve (3rd order) indicate a gradual, but small decrease in felony sex crimes. The monthly number of felony sex crimes has decreased from about 60 per month to about 50 per month by mid-2009.

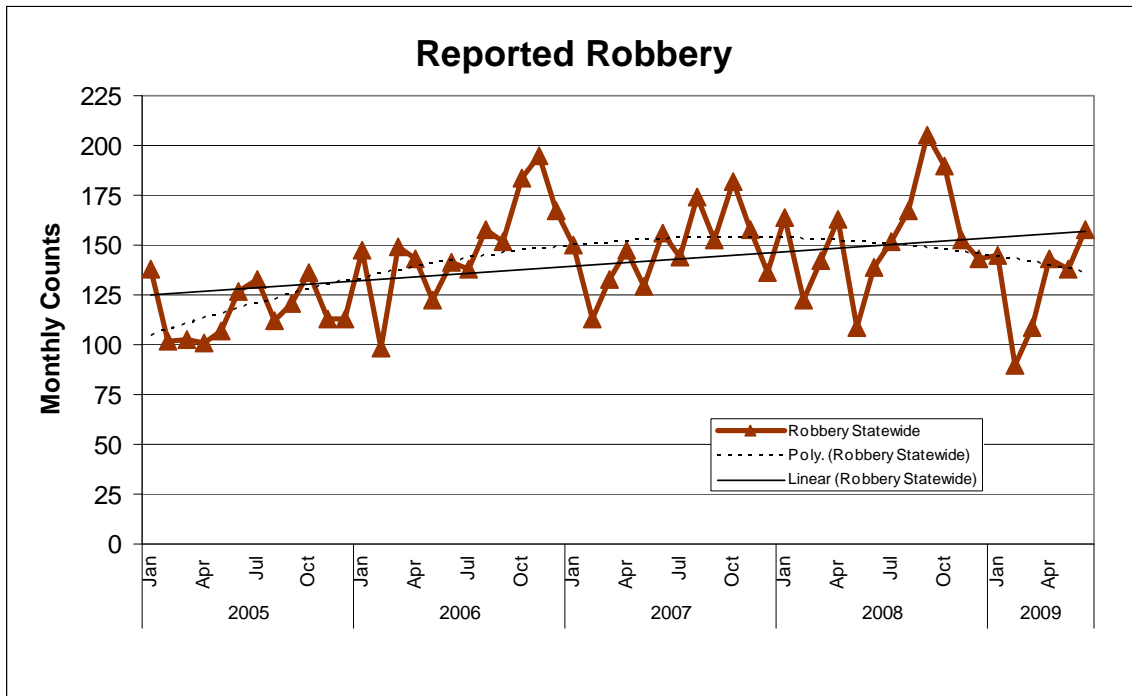
Chart 4



	Statewide Reported Felony Sex Crimes												Percent Change	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
2005	59	48	59	39	49	63	64	67	79	51	59	48	685	
2006	56	52	63	77	61	66	65	72	67	59	50	40	728	6.3%
2007	38	33	52	47	54	65	70	54	42	63	45	37	600	-17.6%
2008	62	48	66	64	69	66	51	74	56	56	40	41	693	15.5%
2009	58	41	41	62	48	56								

The polynomial fit (2nd order) for robbery in Chart 5 shows that we experienced an increase in robbery between 2005 and 2007, but since then we have experienced a decrease. Per the polynomial fit, the average number of monthly robberies increased from about 100 in 2005 to just over 150 in the summer of 2007. Since then there has been a small decrease back to about 140 per month. However, the linear trend however shows a steadily increasing trend. At this point the projections are mixed, however the low number of reported robbery counts in first quarter 2009 may be a positive future indicator.

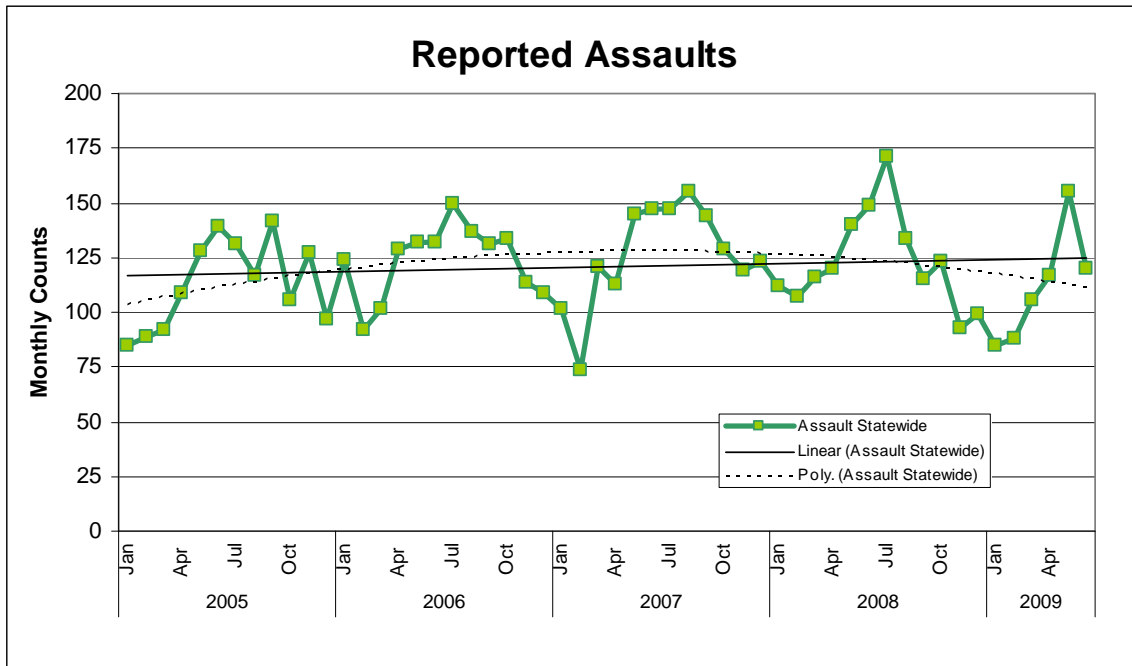
Chart 5



Statewide Reported Robbery												Annual	Percent Change
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
138	102	103	101	107	127	133	112	121	136	113	113	1,406	
147	98	149	143	122	141	138	158	152	184	195	167	1,794	27.6%
150	113	133	147	129	156	144	174	153	182	158	136	1,775	-1.1%
164	122	142	163	109	139	152	167	205	190	153	143	1,849	4.2%
145	90	109	143	138	158								

Reported assaults, like reported robbery, present a slightly mixed picture. The linear trend shown in Chart 6 shows a very slow increase since 2005, while the polynomial fit (2nd Order) shows an increase from about 100 reported assaults in 2005 to as high as 130 per month in 2007 with a decreasing trend since then. By the end of 2009, we may have experienced a decrease to as low as 115 per month.

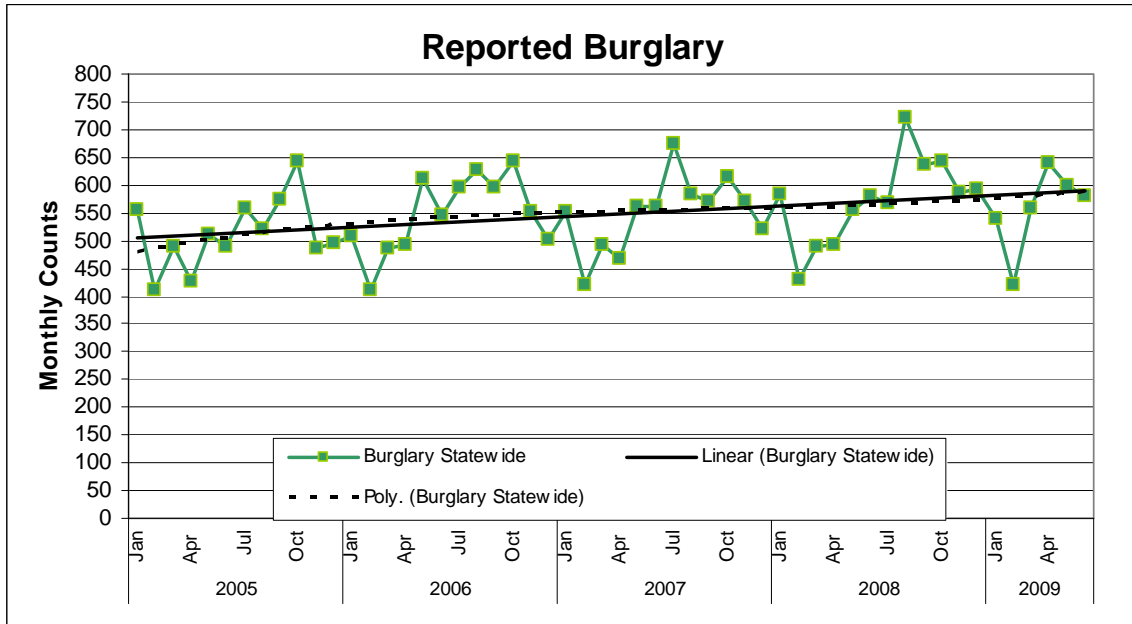
Chart 6



Statewide Reported Assault												Annual	Percent Change
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
85	89	92	109	128	139	131	117	142	106	127	97	1,362	
124	92	102	129	132	132	150	137	131	134	114	109	1,486	9.1%
102	74	121	113	145	147	147	155	144	129	119	123	1,519	2.2%
112	107	116	120	140	149	171	134	115	123	93	99	1,479	-2.6%
85	88	106	117	155	120								

Both the linear and the polynomial fits (3rd order) in Chart 7 show that we have been experiencing and will most likely continue to experience an increase in the number of reported burglaries. In 2005 we experienced, on average, about 500 burglaries per month and by the end of 2009 we could be experiencing nearly 560 per month.

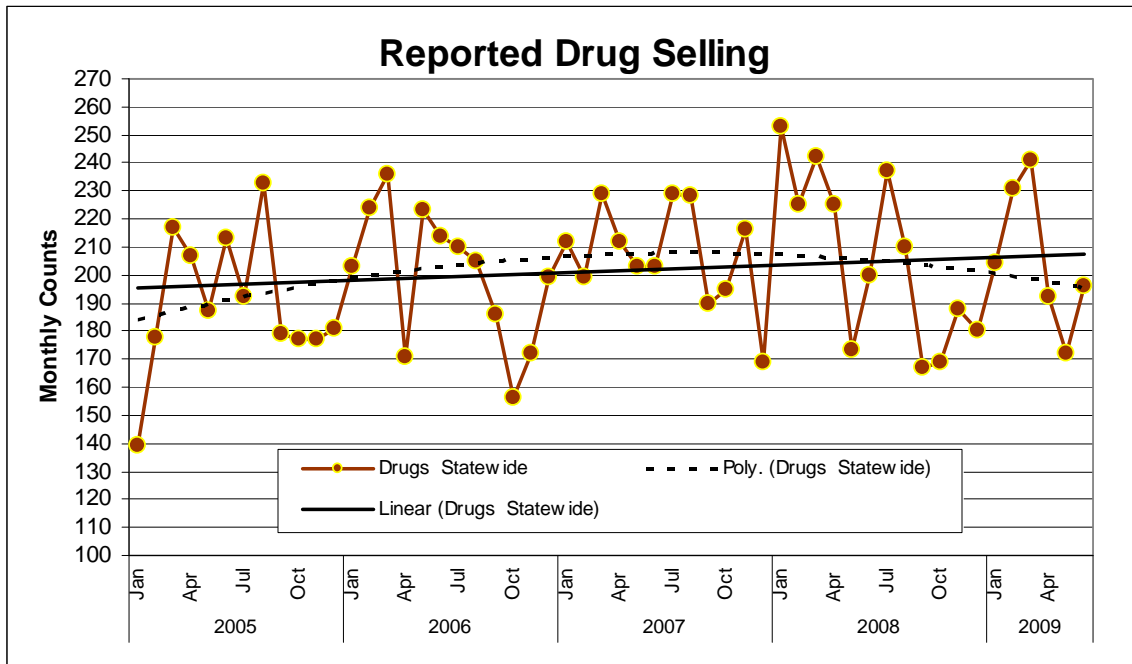
Chart 7



Statewide Reported Burglary												Annual	Percent Change
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
555	410	489	428	511	489	560	522	575	644	485	495	6,163	
508	411	487	494	613	546	596	626	596	642	552	502	6,573	6.7%
553	421	491	469	561	561	675	583	571	616	571	521	6,593	0.3%
585	431	489	493	555	580	569	723	638	642	587	592	6,884	4.4%
540	421	559	641	600	579								

The polynomial fit (2nd order) in Chart 8 indicates that there might be a small decreasing trend starting in 2008 reported drug selling. However, the linear trend indicates that a small increasing trend will continue. In 2005, we experienced on average 190 drug selling reports per month. In mid-2009, on average we are experiencing about 206 reported drug selling crimes per month.

Chart 8



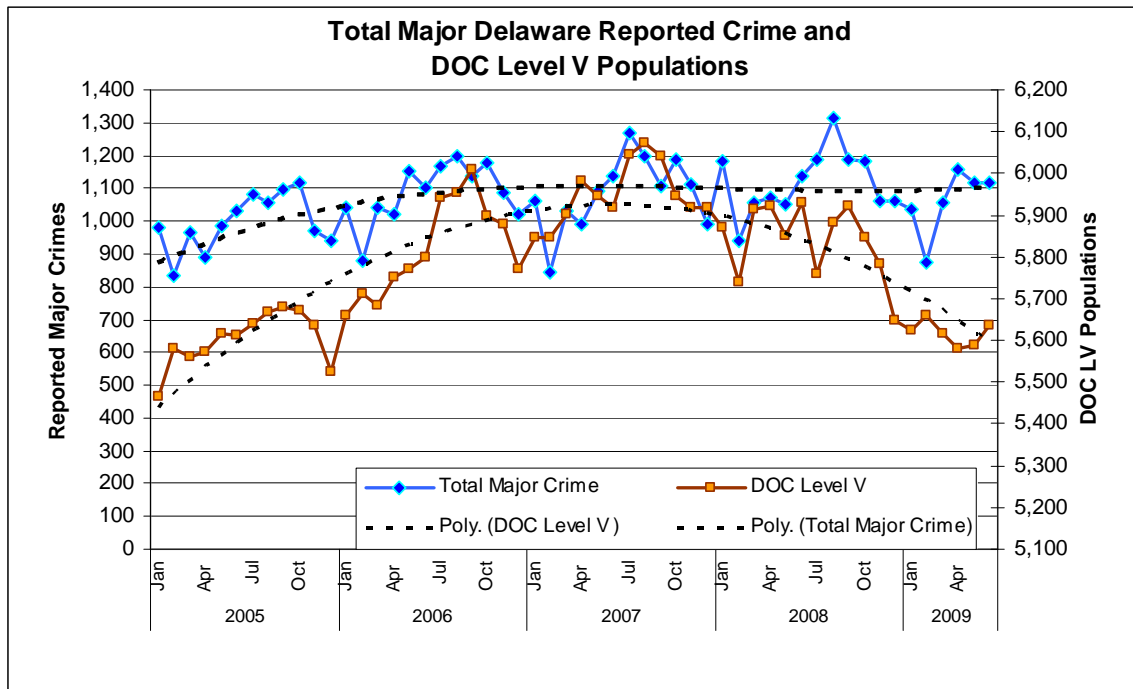
Statewide Reported Drug Selling

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Percent Change
2005	139	178	217	207	187	213	192	233	179	177	177	181	2,280	
2006	203	224	236	171	223	214	210	205	186	156	172	199	2,399	5.2%
2007	212	199	229	212	203	203	229	228	190	195	216	169	2,485	3.6%
2008	253	225	242	225	173	200	237	210	167	169	188	180	2,469	-0.6%
2009	204	231	241	192	172	196								

What is the Relationship between Reported Major Crime and Department of Correction Level V populations?

Reported major crimes included in this analysis (homicide, felony sexual assault, robbery, assault, burglary and drug selling) to some degree are one of factors affecting the size of the DOC Level V populations. The DOC Level V populations in this report include offenders housed in a DOC facility as pre-trial detainees, sentenced offenders (ranging from a short jail term to life without the possibility of release), and a Level IV offender housed at a Level V facility awaiting space at Level IV. Chart 9 provides a comparison showing the relative relationship of reported major crimes and the DOC Level V populations. In a very general sense, as expected, they are related. That is as reported crime increased the DOC Level V population increased, and as reported crime decreased so did the DOC Level V population. While the direction of change makes some sense the degree of change does not. The DOC Level V population varies to a much greater degree than the reported crime. This indicates that there are intervening actions that have as much, and maybe even more, independent influence on the DOC Level V population as changes related to reported crime. For instance, the Probation Reform Act Study (DeLSAC January 2005) showed how significantly offenders violating at Levels III and IV influence Level V and Level IV admissions rates. In addition, the HB 210 study (DeLSAC January 2008) showed how increased prosecutorial filings, increased conviction rates and longer terms for violent offenders resulted in increased DOC Level V population. In fact, this study was able to show that a significant proportion of the increased DOC population in 2006 and 2007 was related to these changes. Most recently, the DOC Level V population appears to be bottoming out follow a significant decrease in 2008.

Chart 9



Crime Measures and Caveats

With the exception of homicide, crimes are counted as single events based on one or more occurrence within a complaint number. Homicide complaint counts are increased to the number of victims in complaints with multiple victims. This is a simpler method and is markedly different from official NIBRS reporting where all crimes against persons are counted by the number of victims. Multiple crimes in a single complaint may be counted in more than one of the selected crime groups (that is, there is no hierarchical filtering of crime counts). Statutes referenced in the most recent crime supplement for each incident report identify the crimes. All groups include attempted crimes except for homicide; attempted homicide is included in the felony assault group.

A hazard related to providing timely crime reporting is that it takes time for the information to be put into the computer system and even longer in some cases to be finalized. This is most noticeable in the area of homicides that tend to get immediate detailed media coverage, but take some time for the investigation to result in entry into the computer files. For instance, in the first half of 2008, there were 29 media references to homicide of which 26 are posted on the crime computer files. Interestingly, there are four other cases that had been posted as homicides earlier, but in the most recent “police supplements” these cases had flawed information that took them off the homicide list, at least temporarily reducing the count from 26 to 22. When the dust settles it is expected that most of these cases “under review” will be listed as part of the homicide counts. To take into account the fluidity of crime information, updates to this report include updating reported crimes and arrests going back to the most recent calendar year. Therefore, while the system reflects actual crimes near real time, the most recent months of this report should be read to some degree as being preliminary. Complex cases may take more time to investigate.

This information is extracted from the Delaware Criminal Justice Information System’s (DelJISs) crime complaint files. The methodology for this report was prepared in consultation with DelJIS, the Delaware State Police’s State Bureau of Identification (SBI) and the Attorney General’s Office. It is important to know that this is unofficial crime information based on the most recent and accurate interpretation of active files that are frequently updated. The official Delaware crime data is provided annually through SBI’s National Incident Based Crime Reporting System, which includes a process that meets national standards of measurement using scores of edits, verifications and corrections.