



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF MANAGEMENT AND BUDGET
May 12, 2010

Delaware Major Crimes
2005 Thru 1st Quarter 2010

This report provides a summary of changing monthly major reported crime between calendar year 2005 and the first quarter of 2010. 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 Identification's 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 criminal justice operations and costs.

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



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What have the Most Recent Crime Trends Been?

Between 2005 and 2008, major reported crimes 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 reported crimes in 2009 actually decreased by 2.4 percent (Table 1). Burglary was the only major crime that increased in 2009. The first indication in 2010 shows that the decrease in crime we experienced in 2009 may be reversing. So far in 2010, compared to the same period in 2009, major reported crimes have remained steady at 3,012 (Table 2). While overall this appears promising, important offsetting trends are developing. It is notable that in the first quarter of 2010 sex, robbery and assaultive crimes increased by double digits, and that homicide more than doubled. These significant increases are offset by the double digit decrease in drug crimes, making it appear as though crime has not increased. Drug crimes, which started to decrease in 2007, have continued their decrease into 2010.

Table 1: Reported Major Crimes Decreased in 2009

	2009	2008	Count Change	Percent Change
Homicide	42	57	-15	-26.3%
Sex	630	693	-63	-9.1%
Robbery	1,692	1,849	-157	-8.5%
Assault	1,338	1,479	-141	-9.5%
Burglary	7,153	6,884	269	3.9%
Drugs	2,249	2,469	-220	-8.9%
Total	13,104	13,431	-327	-2.4%

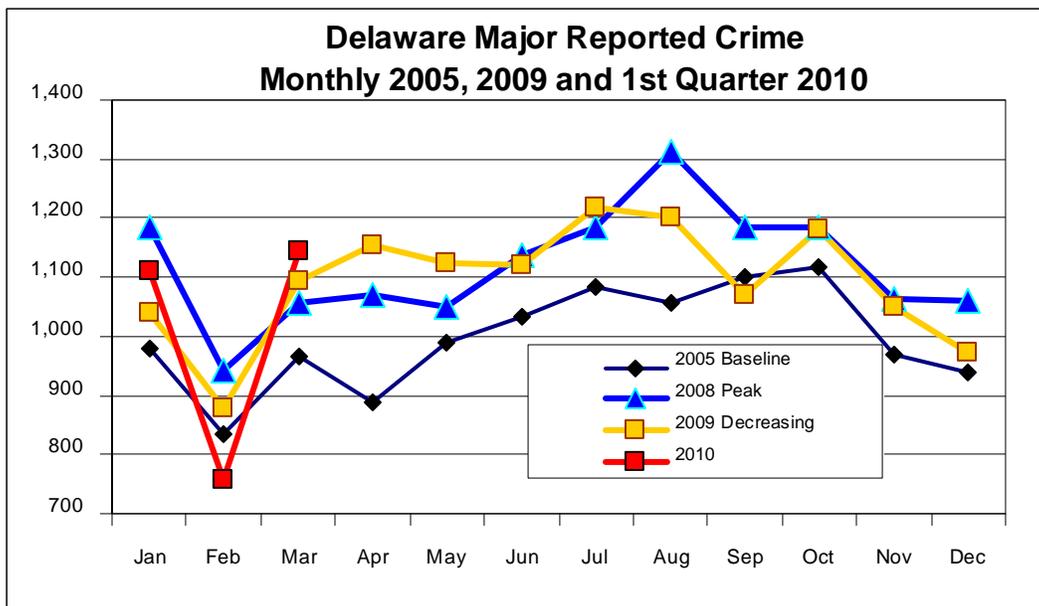
Table 2: 1st Quarter 2010 Major Crime Increases

	2010 1st Qtr	2009 1st Qtr	Count Change	Percent Change
Homicide	15	7	8	114.3%
Sex	172	148	24	16.2%
Robbery	427	343	84	24.5%
Assault	321	279	42	15.1%
Burglary	1,520	1,556	-36	-2.3%
Drugs	557	678	-121	-17.8%
Total	3,012	3,011	1	0.0%

Chart 1, below, provides a multi-year backdrop for the first quarter 2010 crime pattern. 2005 monthly reported crime counts serve as the baseline for subsequent years. 2008 shows the monthly crime for the year with highest number of reported crimes, and 2009 shows the most recent year where we experienced a small decrease in reported crime.

While the first quarter 2009 and 2010 overall reported crime counts are nearly equal, the monthly patterns are quite different. The shifts in reported crime in the first quarter of 2010 are dramatic. February reported crime, probably due to record adverse weather, was the lowest in the data series. But then March was the highest. Even with the notable increases in violent crime in the first quarter of 2010, overall reported crime for 2010 is still below the record set in 2008. In 2008 there were 3,184 reported major crimes and in 2010 there were 3,012.

Chart 1

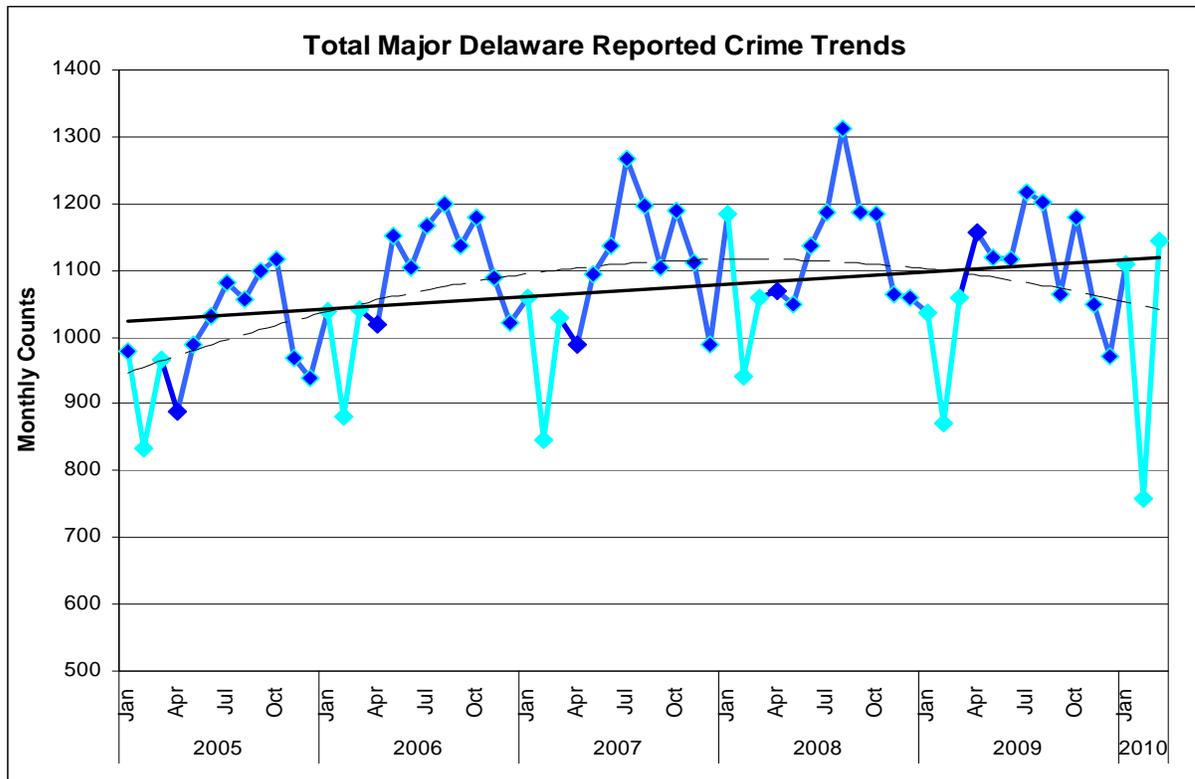


What is the Long-term Crime Trend?

Chart 2 below shows the monthly major reported crime counts in Delaware since January of 2005. The solid straight line (linear trend) shows an approximate 10 percent increase in major crime between January 2005 and first quarter of 2010. Interestingly, however, the “polynomial fit,” which is a method of curve fitting that is more sensitive to changes over time, indicates the major crimes in Delaware have started to decrease beginning in 2008. Which representation is more accurate? At this point it is not possible to really know, as the trend results at this time are mixed. The long term linear trend indicates a continued growth in major crimes, while the polynomial fit indicates that crime may still be decreasing slightly. However as pointed out above, simple dependence on the overall major reported crime pattern may conceal important underlying shifts for specific types of crime. For instance, currently the increases for violent crime are being offset by the decreases for drug crimes.

Another important finding seen in Chart 2 is that there is a strong seasonal decrease in the first quarter of most years for reported major crimes. An aberration occurred in 2008, when the decrease was not as large as previous years. This means the decrease in crime in 2009 is partially related to the higher than expected first quarter crime in 2008. The downturn in first quarter major crime in 2009, which created a lot of attention, is not exceptional when it is compared to 2005, 2006, 2007 or 2010 (light blue).

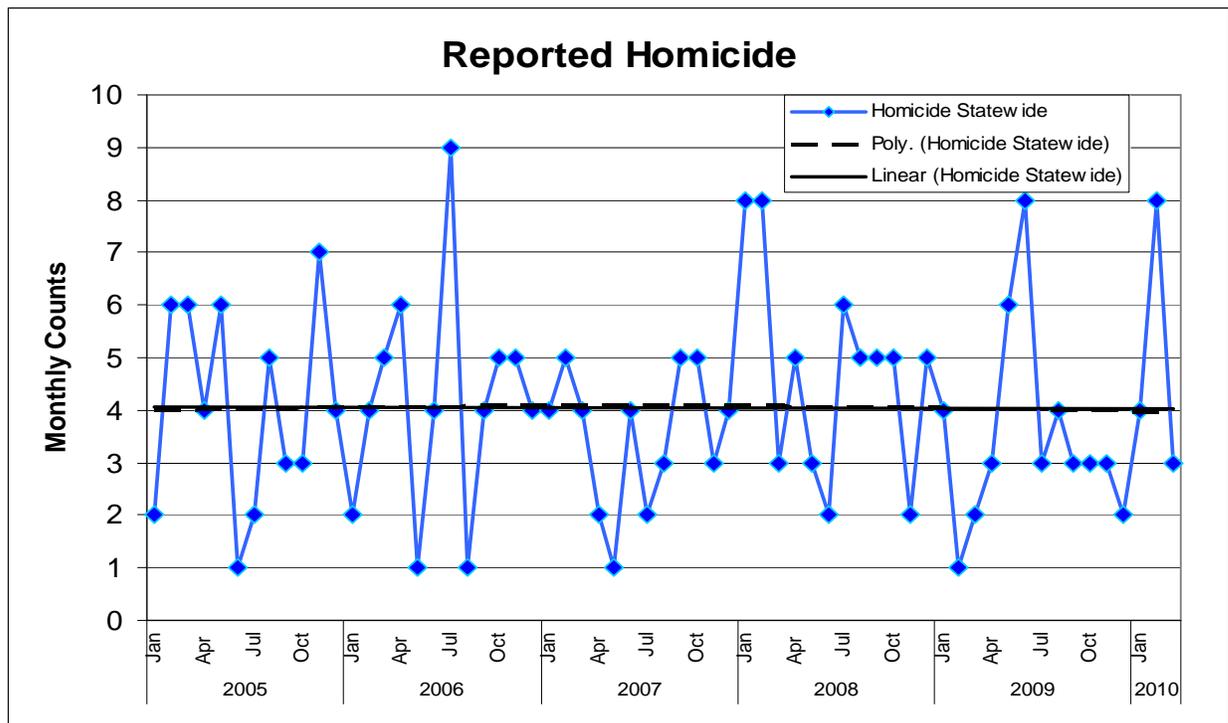
Chart 2



Crime Trends by Type of Crime

Chart 3 shows the reported homicides between 2005 and the first quarter of 2010. On average, the linear trend shows that there are 4 reported homicides per month in Delaware. Although homicide counts decreased in 2009, the homicide linear trend line and the polynomial curve, which nearly duplicates the linear trend, denotes a stable long term pattern indicating that homicides may continue to follow the historical pattern.

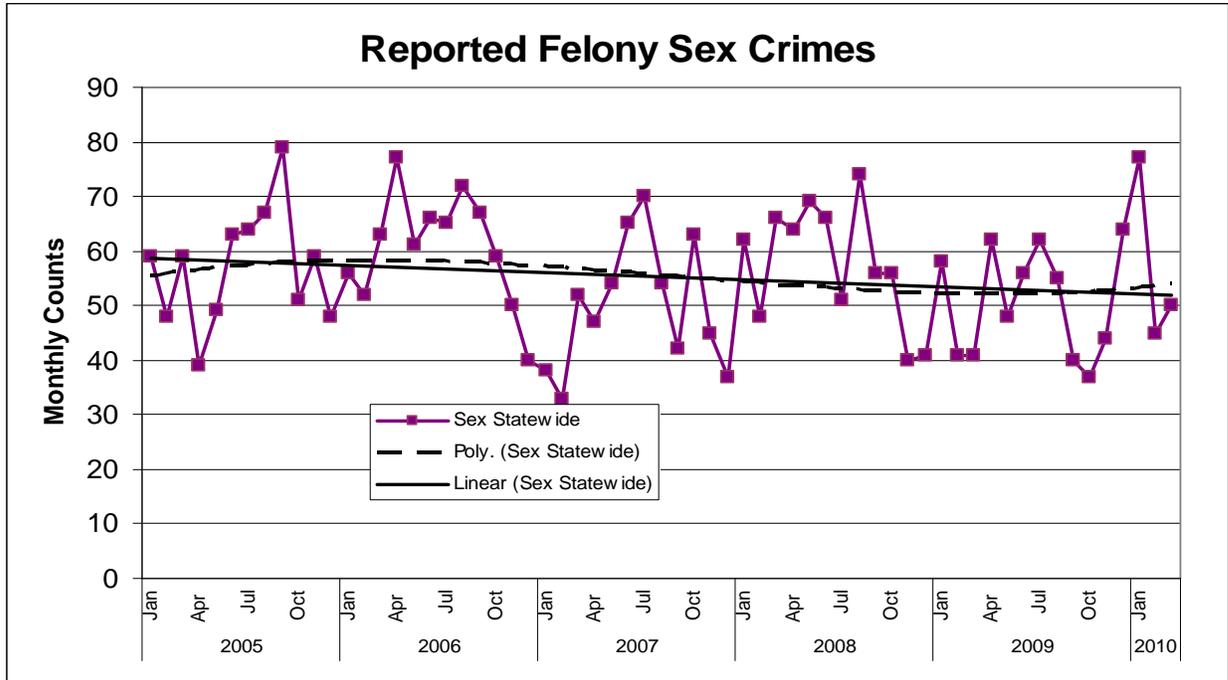
Chart 3



	Statewide Reported Homicide												Annual	Percent Change
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
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	5	8	4	4	3	3	3	2	42	-26.3%
2010	4	8	3											

Chart 4 shows the reported felony sex crime trend between 2005 and first quarter of 2010. The felony sex crime linear trend line and the polynomial curve 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 2009. The spike in felony sex crimes in January 2010 of 77, while significant, has not altered the projection of a slowly decreasing trend for this crime.

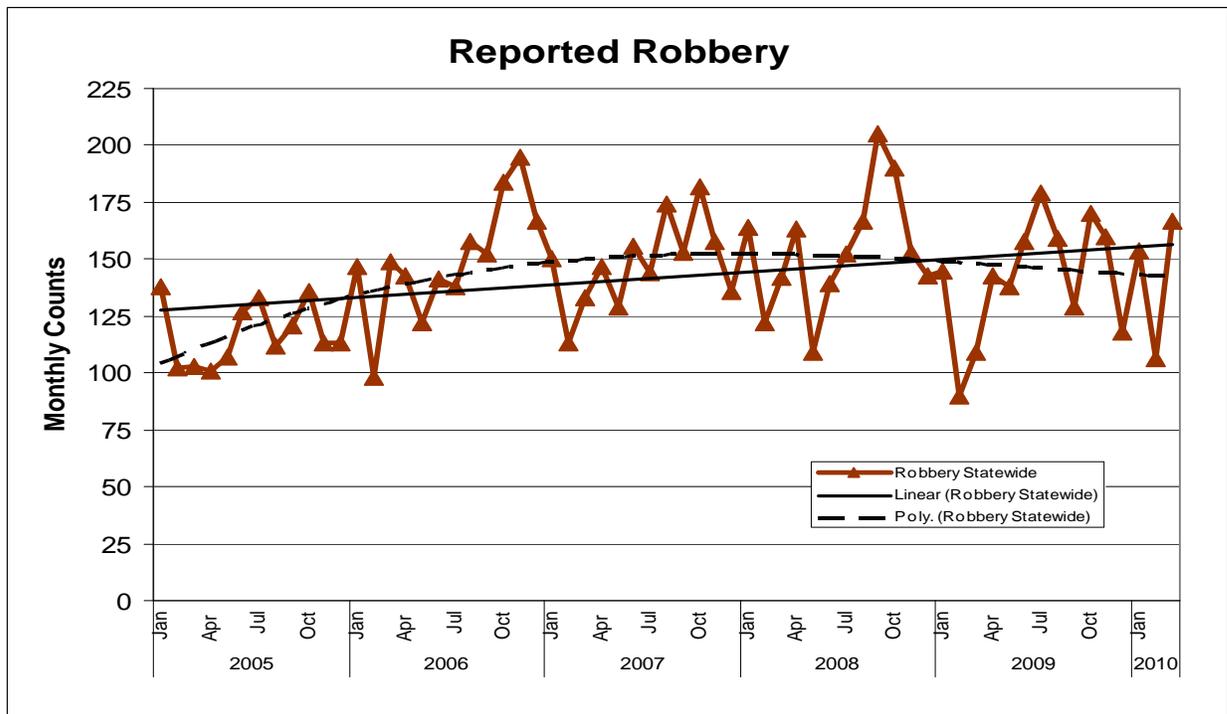
Chart 4



Statewide Reported Felony Sex Crimes													Annual	Percent Change
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
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	43	47	63	49	60	63	57	45	37	44	64	630	-9.1%
2010	77	45	50											

The polynomial fit for robbery and to a lesser degree the linear trend in Chart 5 shows that we experienced an increase in robbery between 2005 and 2008. Per the polynomial fit, the average number of monthly robberies increased from about 100 per month in 2005 to just over 150 per month in 2007 and 2008. Then in 2009 we have experienced a small decrease in robberies, which caused the polynomial fit to project an expected decline in robberies. However, the linear trend still shows a steadily increasing trend. At this point while the projections are still mixed, the polynomial fit is now, because of the 25 percent increase in the first quarter of 2010, more closely aligned to the linear trend. These recent changes may be signaling a diminished hoped for possibility for a decreased number of robberies.

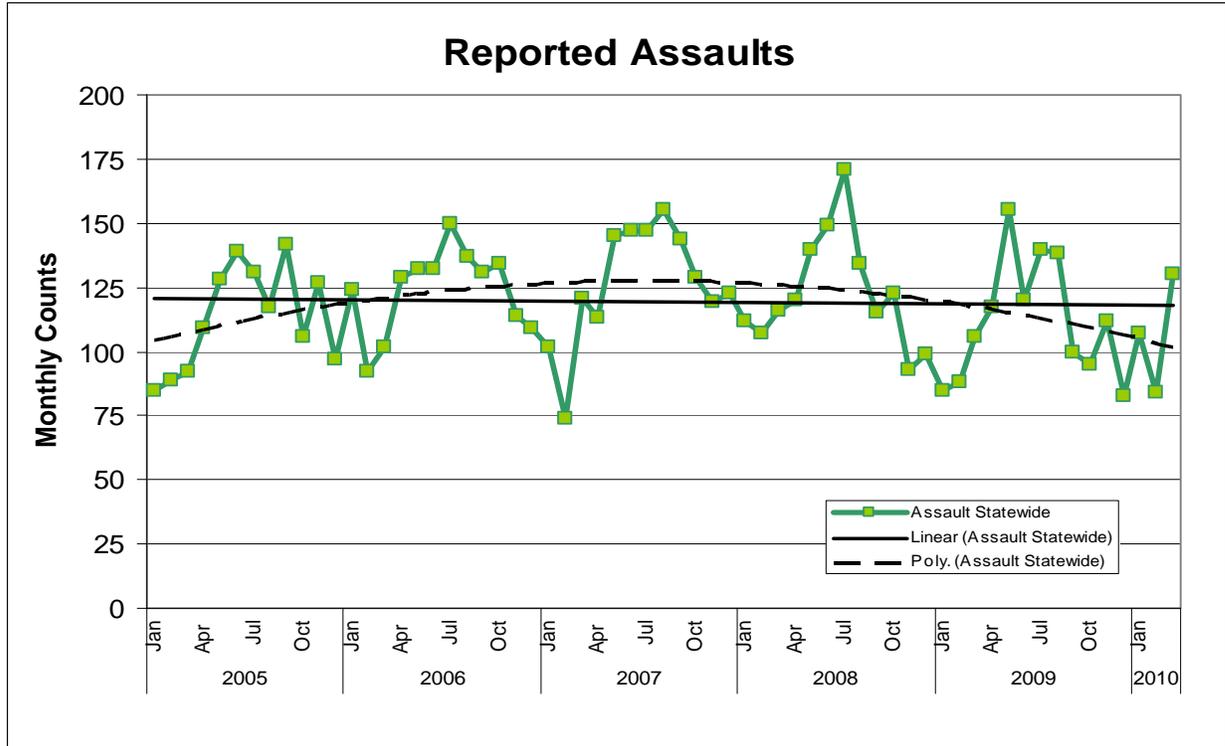
Chart 5



	Statewide Reported Robbery												Percent Change	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
2005	138	102	103	101	107	127	133	112	121	136	113	113	1,406	
2006	147	98	149	143	122	141	138	158	152	184	195	167	1,794	27.6%
2007	150	113	133	147	129	156	144	174	153	182	158	136	1,775	-1.1%
2008	164	122	142	163	109	139	152	167	205	190	153	143	1,849	4.2%
2009	145	89	109	143	138	157	178	158	127	170	160	118	1,692	-8.5%
2010	154	106	167											

Although assaults in the first quarter of 2010 show a 15 percent increase compared to the same period last year, these counts do not, yet, indicate a change in the trend. Both the long term linear and polynomial trends still indicate a small and gradual decrease in assaults. This decrease is reflected in the year-to-year count summaries where assaults in 2008 showed a decrease of 2.6 percent and in 2009 of 9.5 percent.

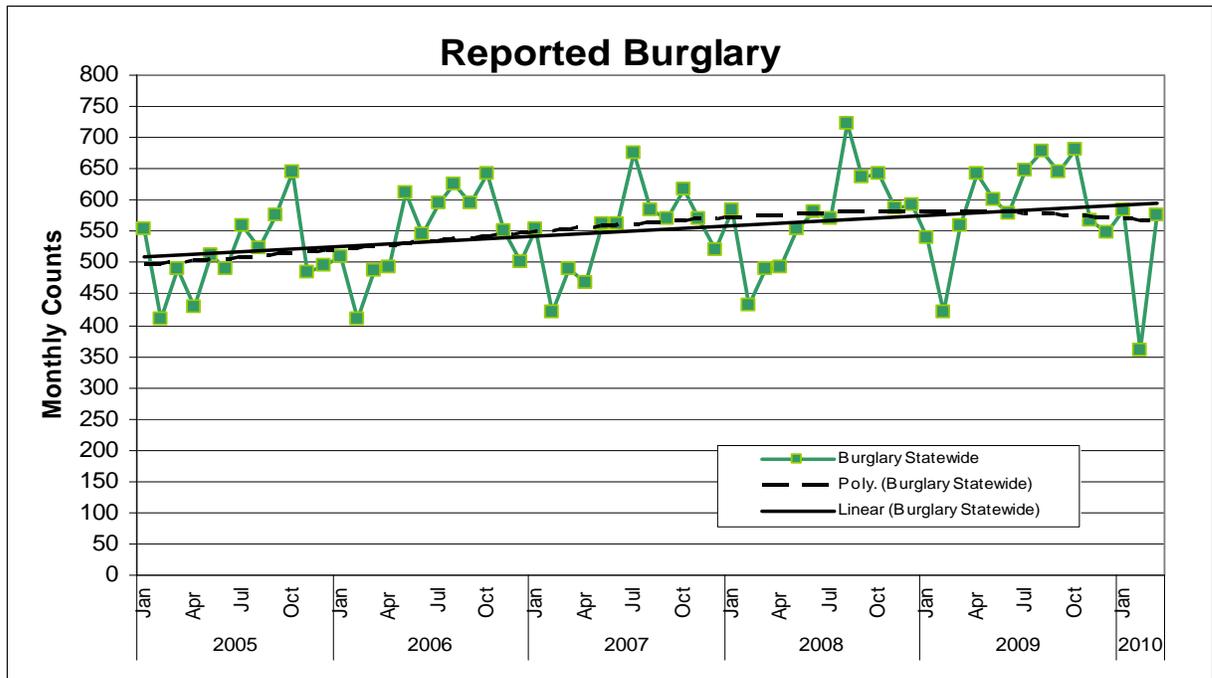
Chart 6



	Statewide Reported Assault												Percent Change	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
2005	85	89	92	109	128	139	131	117	142	106	127	97	1,362	
2006	124	92	102	129	132	132	150	137	131	134	114	109	1,486	9.1%
2007	102	74	121	113	145	147	147	155	144	129	119	123	1,519	2.2%
2008	112	107	116	120	140	149	171	134	115	123	93	99	1,479	-2.6%
2009	86	88	105	117	155	121	138	138	100	95	112	83	1,338	-9.5%
2010	107	84	130											

The linear trend in Chart 7 shows 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. The two percent decrease in reported burglaries in the first quarter of 2010 was limited primarily to the month of February when we experienced exceptionally inclement weather including multiple days of closed highways. Statistically, these limitations that damped burglary behavior somewhat were probably a one time event.

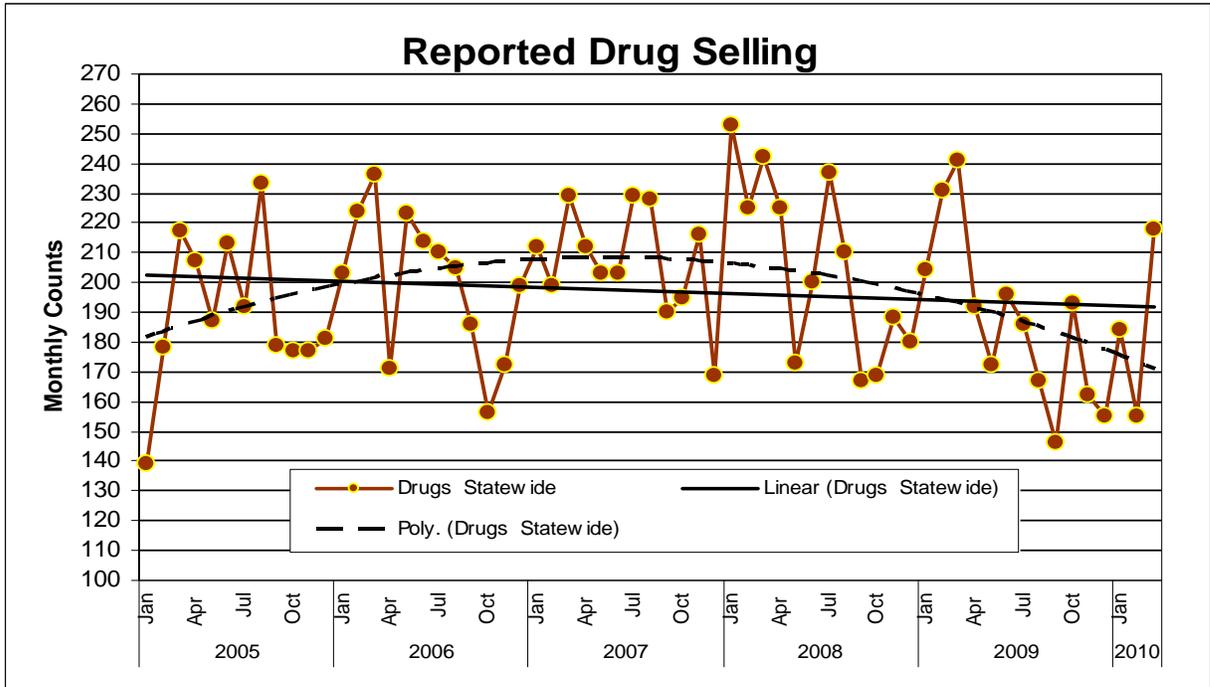
Chart 7



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Percent Change
2005	555	410	489	428	511	489	560	522	575	644	485	495	6,163	
2006	508	411	487	494	613	546	596	626	596	642	552	502	6,573	6.7%
2007	553	421	491	469	561	561	675	583	571	616	571	521	6,593	0.3%
2008	585	431	489	493	555	580	569	723	638	642	587	592	6,884	4.4%
2009	543	425	588	639	603	579	650	679	648	682	568	549	7,153	3.9%
2010	584	359	577											

Even with the spike in drug selling arrests in March of 2010, the polynomial fit in Chart 8 indicates that a decreasing trend for reported illicit drug selling started in 2007. The linear trend is now negative, when in earlier reports it still showed a small increasing trend. While still at a high level, after a decade of increasing illicit drug selling cases, the trend has appeared to reverse. In 2008 we experienced an average of 206 reported drug selling events per month and in 2009 that count has decreased to 187 per month. In the first quarter of 2010, reported drug selling crimes are down almost 18 percent compared to the same period a year ago.

Chart 8



	Statewide Reported Drug Selling												Percent Change	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
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	205	231	242	191	173	196	186	167	148	193	162	155	2,249	-8.9%
2010	184	155	218											

What percentage of Reported Major Crimes Result in Arrests?

The sharp increases in violent crimes in the first quarter of 2010 compared to those in the first quarter of 2009 causes us to think about what impact they might have on criminal justice operations. Prosecutors, defense attorneys, courts, and pre-trial detention deal with changes as they occur and rarely have enough time to place the changes that are affecting their daily schedule into perspective. When reported robberies increase 25 percent does that mean that we will experience a 25 percent increase in prosecution, court processing, pre-trial detention, and sentencing for these cases? The answer is, not immediately and not completely. Different types of crime result in different arrest efficiencies and some investigations take much longer than others. Some of the 15 first quarter 2010 homicides will take a year or more to reach disposition. On the other hand, other serious crimes may take only a few months to reach disposition. Also there are very different periods of pre-trial detention. See the DelSAC studies -- Superior Court Detention Case Status of Long Term Detainees, January 2010 and Adult Detention in Delaware: Issues and Implications, December 2002 -- for examples of the how different crimes have different impacts on criminal justice system operations.

Table 3, below, shows the relationship for each of the major crimes and eventual arrests by crime type. This table shows that there is a wide variation by crime type between the police being aware of a reported crime and an arrest being made. For instance, there were 255 reported homicides and 241 arrests since 2005. This does not mean that 94.5 percent of the homicides are solved. In some cases, a homicide results in the arrest of more than one person meaning that the arrest/crime percentage is somewhat higher than the crime clearance rate. However, the percentages are a good gauge to estimate how reported crime translates into criminal justice system activities down the road. Drugs have a high arrest efficiency rate because so many of the drug cases are police initiated investigations. On the other hand, the assault arrest efficiency rate is higher than robbery because in assault cases the victim is much more likely to know their offender than in a robbery case. Burglary, which is a very high volume crime, also has the lowest arrest efficiency resulting in a lower than expected movement of cases into the criminal justice system processes.

Table 3: Percent of Arrests versus Reported Crime
By Crime Type: 2005 through 1st Quarter 2010

	Number of Reported Crimes	Number of Arrests	Percent Arrests/ Crimes
Homicide	255	241	94.5%
Sex	3,508	1,826	52.1%
Robbery	8,943	4,271	47.8%
Assault	7,505	6,087	81.1%
Burglary	34,886	8,817	25.3%
Drugs	12,439	12,160	97.8%
Total	67,536	33,402	49.5%

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 are cases that take some time for the investigation to finalize the legal results for 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 were 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 as complex cases may take more time to investigate and to enter into the computer system.

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.