

EXECUTIVE DEPARTMENT

OFFICE OF MANAGEMENT AND BUDGET

November 29, 2010

Delaware Major Crimes 2005 Thru 3rd Quarter 2010

This report provides a summary of changing monthly major reported crime between calendar year 2005 and the third 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 1^{st} and 2^{nd} , Carjacking 1^{st} and 2^{nd}

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 \cdot SUITE 6 \cdot DOVER, DE 19901 PHONE: (302) 739-4626 \cdot FAX (302) 739-4630 \cdot sas.omb.delaware.gov

DELSAC DC 100208 101107

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 indication in the third quarter of 2010 is that the decrease in crime we experienced in 2009 is reversing. So far in 2010, compared to the same period in 2009, major reported crimes have increased about 1 percent (Table 2). Overall this does not appear too threatening; however important trends may be developing. It is notable that by the third quarter of 2010 homicide, robbery and assaultive crimes are showing significant increases of 8.8, 9.3 and 6.9 percent. These significant increases are offset by the double digit decrease in drug crimes of -10.5 percent. Drug crimes, which started to decrease in 2007, have continued their steady decrease in 2010. Burglary while showing series high peaks in August and September overall are increasing at a slower rate than in 2009.

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%

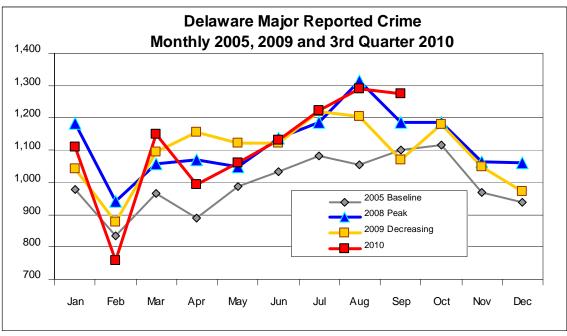
Table 2: 3rd Quarter 2010: Crimes Against Persons Increase and Drugs and Burglary Decrease

	2010 3rd Qtr	2009 3rd Qtr	Count Change	Percent Change
Homicide	37	34	3	8.8%
Sex	496	485	11	2.3%
Robbery	1,360	1,244	116	9.3%
Assault	1,120	1,048	72	6.9%
Burglary	5,421	5,354	67	1.3%
Drugs	1,557	1,739	-182	-10.5%
Total	9,991	9,904	87	0.9%

Chart 1, below, provides a multi-year backdrop for the third 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 full year of statistics where we experienced a small decrease in reported crime.

Overall reported crime in the first nine months of 2010 is higher in six out of nine months compared to the same period in 2009, for a total of 87 more crimes. If the offsetting decrease in drug crimes is discounted, major crime would be shown to have increased by 269 so far in 2010. With the active summer, which was disproportionately experienced in Wilmington, the decrease in major crime we experienced in 2009 has ended. If the 2010 regional trends continue for the remainder of the year, Wilmington's serious crime count will have increased by 18 percent. For the same period, in the remainder of New Castle County and in Sussex County major crime is projected to only increase by one to two percent, and so far in Kent County, there is a decrease in crime. It is noteworthy that the September 2010 count is the highest September in this data series. This may be an indication that we will not see the strong seasonal decrease we normally experience in the late fall. However, there is no mistaking that the reason that major crimes are not increasing even more rapidly is the continued reduction in the number of reported drug selling cases, which are linked directly to law enforcement investigations





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 12 percent increase in major crime between January 2005 and third 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 and this trend projects a more stable crime pattern than indicated by the linear trend. 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 a more stable future. However, as pointed out above, simple dependence on the overall major reported crime trends may conceal important underlying shifts for specific types of crime. Currently the decrease in drug crimes is being offset by significant increases for violent crime, particularly robbery, assault and homicide.

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 (light blue). An aberration occurred in 2008, when the decrease was not as large as previous years, which ended up being a precursor of a record year for reported crime. 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, and 2007. The sharp downturn in crime in the first quarter of 2010 was probably related to particularly inclement weather in the winter of 2010.

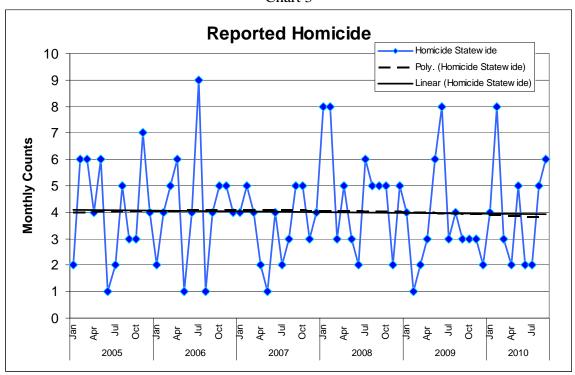
Total Major Delaware Reported Crime Trends (3rd Quarter 2010) 1400 1300 1200 1100 Monthly Counts 1000 900 800 700 600 500 ö ö ₹ \exists \exists \exists \exists \exists 2005 2006 2007 2008 2009 2010

Chart 2

Crime Trends by Type of Crime

Chart 3 shows the reported homicides between 2005 and the third 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. So far the first nine months of 2010 are at a pace of 3 more than in the same period in 2009: 37 versus 34.

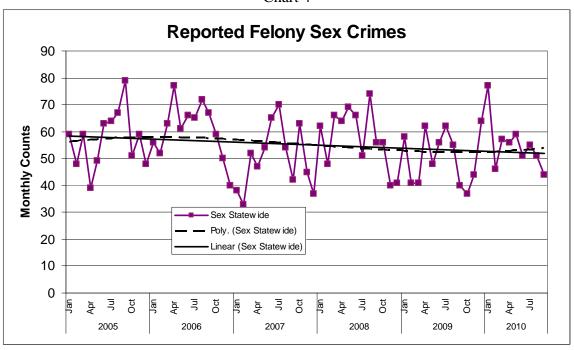




Percent	Statewide Reported Homicide													
Change	Annual	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan	
	49	4	7	3	3	5	2	1	6	4	6	6	2	2005
2.0%	50	4	5	5	4	1	9	4	1	6	5	4	2	2006
-16.0%	42	4	3	5	5	3	2	4	1	2	4	5	4	2007
35.7%	57	5	2	5	5	5	6	2	3	5	3	8	8	2008
-26.3%	42	2	3	3	3	4	4	8	5	3	2	1	4	2009
					6	5	2	2	5	2	3	8	4	2010

Chart 4 shows the reported felony sex crime trend between 2005 and third quarter of 2010. The felony sex crime linear trend line and the polynomial curve indicate a gradual, decrease in felony sex crimes. The monthly number of felony sex crimes has decreased from about 60 per month to about 55 per month by second quarter of 2010. 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.

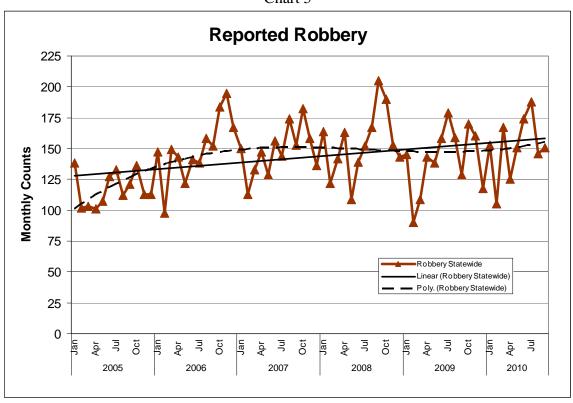
Chart 4



					Statev	vide Re	eporte	d Felon	ıy Sex					
														Percent
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Change
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	6.30%
2007	38	33	52	47	54	65	70	54	42	63	45	37	600	-17.60%
2008	62	48	66	64	69	66	51	74	56	56	40	41	693	15.50%
2009	58	43	47	63	49	60	63	57	45	37	44	64	630	-9.10%
2010	77	46	57	56	59	51	55	51	44					

The polynomial fit for robbery and 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 to stabilization near 150 robberies. On the other hand, the linear trend still shows a slowly increasing trend. At the nine month mark in 2009 there were 1,244 robberies and in 2010 the number of robberies in the same period had increased to 1,360. The increase in robberies in 2010 is large enough that both the linear and polynomial trends are now both projecting a continued slow increase.

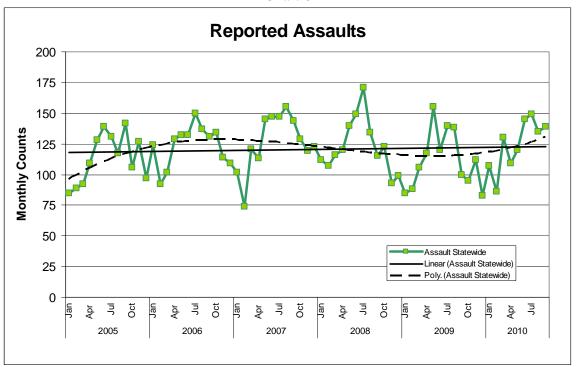
Chart 5



Statewide Reported Robbery													Percent	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Change
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	153	105	167	125	151	174	188	146	151					

Assaults by the end of the third quarter (September) 2010 show a 6.8 percent increase compared to the same period last year: 1,120 versus 1,048. While the long term linear still indicate a small and gradual increase for assaults, the polynomial trend shows the possibility for a future acceleration of the assault rate of crime. This trend indicates that the decreases experienced in the number of reported assaults in 2008 (- 2.6 percent) and in 2009 of (-9.5 percent) have likely reversed.

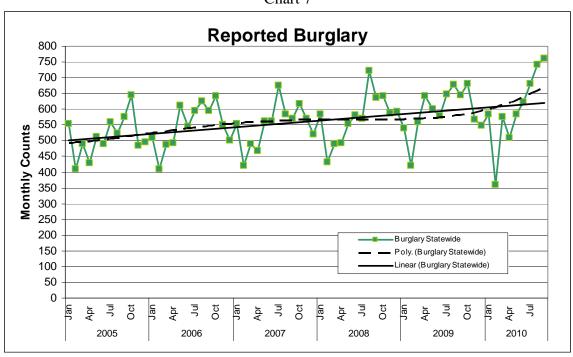
Chart 6



Statewide Reported Assault													Percent	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Change
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	86	130	109	120	145	149	135	139					

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 2009 we experienced almost 600 per month. However, for the first six months of 2010 compared to 2009, reported burglaries have decreased 4.1 percent. About half of this decrease, however, is attributed to February 2010 when we experienced exceptionally inclement weather including multiple days of closed highways and for this data series a historically low numbers of reported robbery. Statistically, this situation has proven to be a one-time event as by the end of the third quarter (September) 2010, the number of reported burglaries pattern has reversed and now exceeds 2009 rate: 2009; 5,354 versus 2010; 5,421. So, instead of the 4.1 percent decrease in burglaries we experienced in the first half of 2010, we are now experiencing a 1.3 percent increase. The increase in burglaries in the third quarter was significant enough that the polynomial trend reversed direction, flipping from a decrease in prior reports to an accelerated increase in this update. The current trend for burglary is now up.

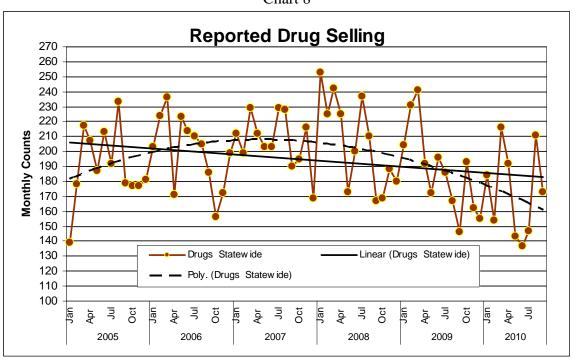




Statewide Reported Burglary													Percent	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Change
2005	555	410	489	428	511	489	560	522	575	644	485	495	6,163	
2006	508	411	487	494	613	546	596	626	596	642	552	502	6,573	6.7%
2007	553	421	491	469	561	561	675	583	571	616	571	521	6,593	0.3%
2008	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	585	360	577	509	583	623	682	741	761					

While still at a high level, after a decade of increasing, the reported drug selling crimes has reversed and now there is a notable decrease for these cases. The linear trend is now negative, when in earlier reports it still showed a small increasing trend. Reported drug selling began to show indications of a decline in 2008, even though there where still some exceptionally high spikes in some months. By the end of 2008 there was a .6 percent decrease and then in 2009 there was a very significant 8.9 percent decrease. So far in the first nine months of 2010 there have been even further decreases in reported drug selling. At the nine month mark in 2008 there were 1,932 reported drug sells. In the first nine months of 2009 there were 1,739 and in the first nine months of 2010 there were 1,557. The 2010 pace is about 20 percent off the 2008 nine month count, almost 42 fewer reported crimes per month.



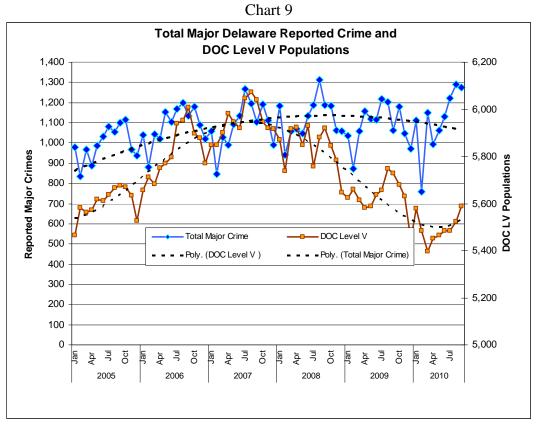


Statewide Reported Drugs													Percent	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Change
2005	139	178	217	207	187	213	192	233	179	177	177	181	2,280	
2006	203	224	236	171	223	214	210	205	186	156	172	199	2,399	5.2%
2007	212	199	229	212	203	203	229	228	190	195	216	169	2,485	3.6%
2008	253	225	242	225	173	200	237	210	167	169	188	180	2,469	-0.6%
2009	205	231	242	191	173	196	186	167	148	193	162	155	2,249	-8.9%
2010	184	154	216	192	143	137	147	211	173					

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 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 Level IV offenders housed at a Level V facility awaiting space at Level IV.

Chart 9 provides a comparison showing the 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 has the DOC Level V population. While the direction of change makes some sense the degree of change is not always easily explained. The DOC Level V population varies to a much greater degree than the reported crime because there are intervening criminal justice actions that may have as much independent influence on the DOC Level V population as a reduction in crime. Between 2008 and early 2010 the decline in the DOC populations exceeded the decline in reported crimes. However, as crime has started increasing in 2010 so has the DOC populations.



Delaware: Regional Crime Patterns

New Castle County (without Wilmington) is the largest region in Delaware and is the areas with the most reported major crime in the state. Until 2010, Kent and Sussex Counties were the areas with largest increases in crime. In fact in 2008, Sussex County for the first time exceeded the crime counts in the City of Wilmington. However, in 2010 the increase in major crimes in Wilmington reverses a three year decline and is the major contributor for the statewide increase in crime in 2010.

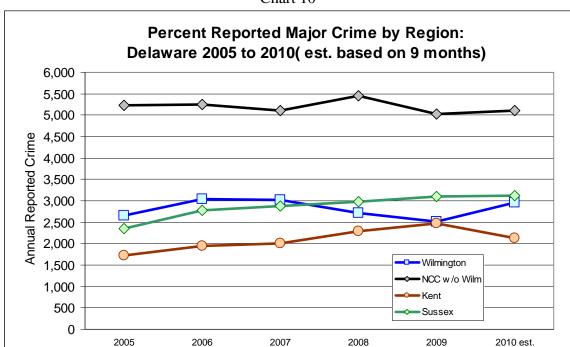


Chart 10

		Reported N	∕lajor Delaw	are Crime	by Region	
Region	2005	2006	2007	2008	2009	2010 est.
Statewide	11,945	13,030	13,014	13,431	13,104	13,321
Wilmington	2,646	3,040	3,023	2,721	2,510	2,961
NCC w/o Wilm.	5,224	5,250	5,104	5,455	5,022	5,116
Kent	1,716	1,956	2,006	2,283	2,465	2,119
Sussex	2,359	2,784	2,881	2,972	3,107	3,125

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 identifies 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.