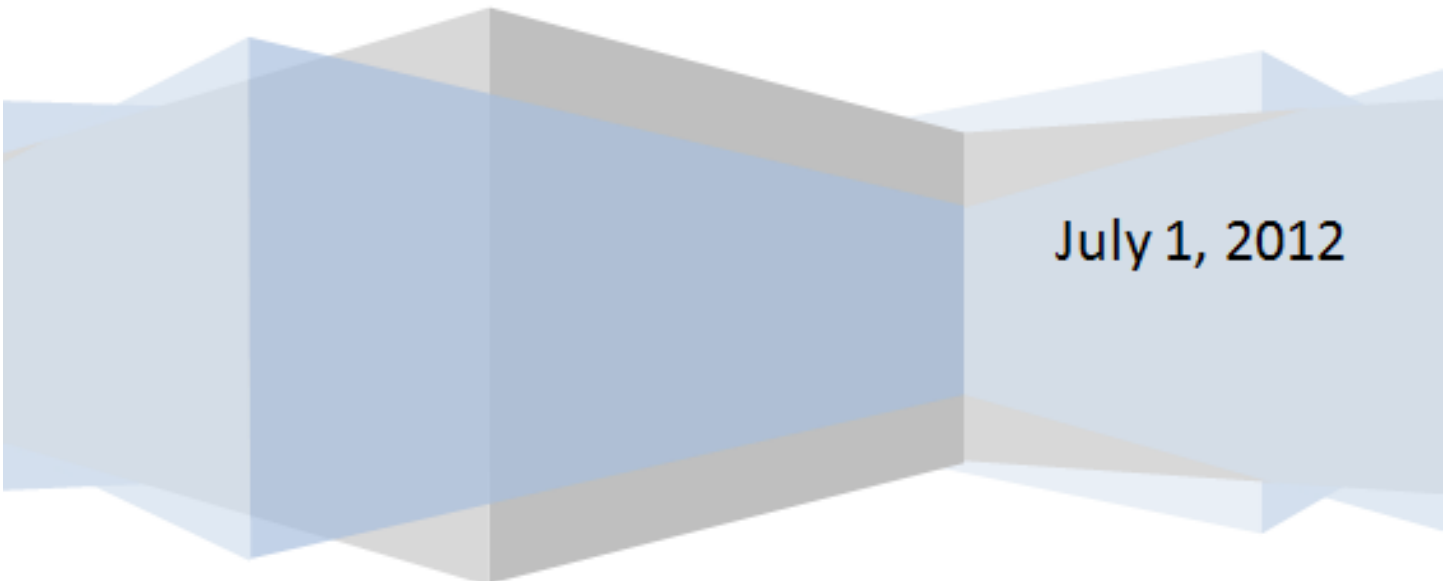


Milwaukee Fire and Police Commission

Analysis of 2011 Milwaukee Police Department Vehicle Pursuits

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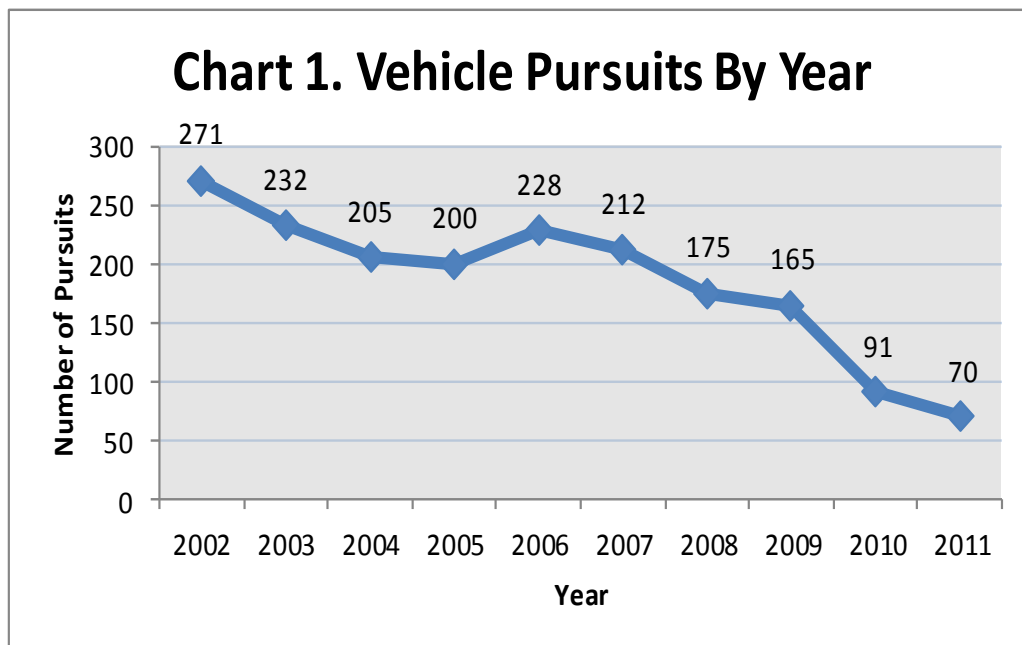


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ANALYSIS OF 2011 VEHICLE PURSUITS

The purpose of this study is to review all vehicle pursuits conducted by the Milwaukee Police Department (MPD) between January 1, 2011 and December 31, 2011. Analyses conducted provide measurements as to the frequency and circumstances surrounding vehicle pursuits conducted by MPD. Data presented in the report were obtained from the MPD AIM (Administrative Investigations Management) system and analyzed using SPSS.

Between January 1, 2011 and December 31, 2011, officers of MPD initiated a total of 70 vehicle pursuits, which represents the fewest number of pursuits in the past ten years¹ (see Chart 1). The greatest number of vehicle pursuits occurred in 2002², with 271 vehicle pursuits. Between 2002 and 2011, vehicle pursuits decreased by 201 incidents, a 74.2% decrease. Vehicle pursuits decreased by 21 (23.1%) between 2010 and 2011. Overall, vehicle pursuits conducted by MPD have steadily declined since 2002, except for an increase between 2005 and 2006.



1. MPD's Standard Operating Procedure (SOP) for Vehicle Pursuits was amended on March 26, 2010. The SOP revision required an officer to know or have probable cause that a violent felony has occurred or is about to occur in order to begin or continue a vehicle pursuit.

2. 2002 is the first year that vehicle pursuit data is available electronically.

In 2011, the highest number of vehicle pursuits occurred in March (9 pursuits, 12.9%), July (8 pursuits, 11.4%), and January (8 pursuits, 11.4%), while the fewest number of pursuits occurred in both September and December (3 pursuits, 4.3%) (see Table 1). As seen in Table 1, there was variation in the frequency of incidents across months but no discernible seasonal pattern.

Table 1. Vehicle Pursuits by Month

Month	Number of Pursuits	Percentage
January	8	11.4%
February	6	8.6%
March	9	12.9%
April	5	7.1%
May	6	8.6%
June	7	10.0%
July	8	11.4%
August	6	8.6%
September	3	4.3%
October	5	7.1%
November	4	5.7%
December	3	4.3%
Total	70	100.0%

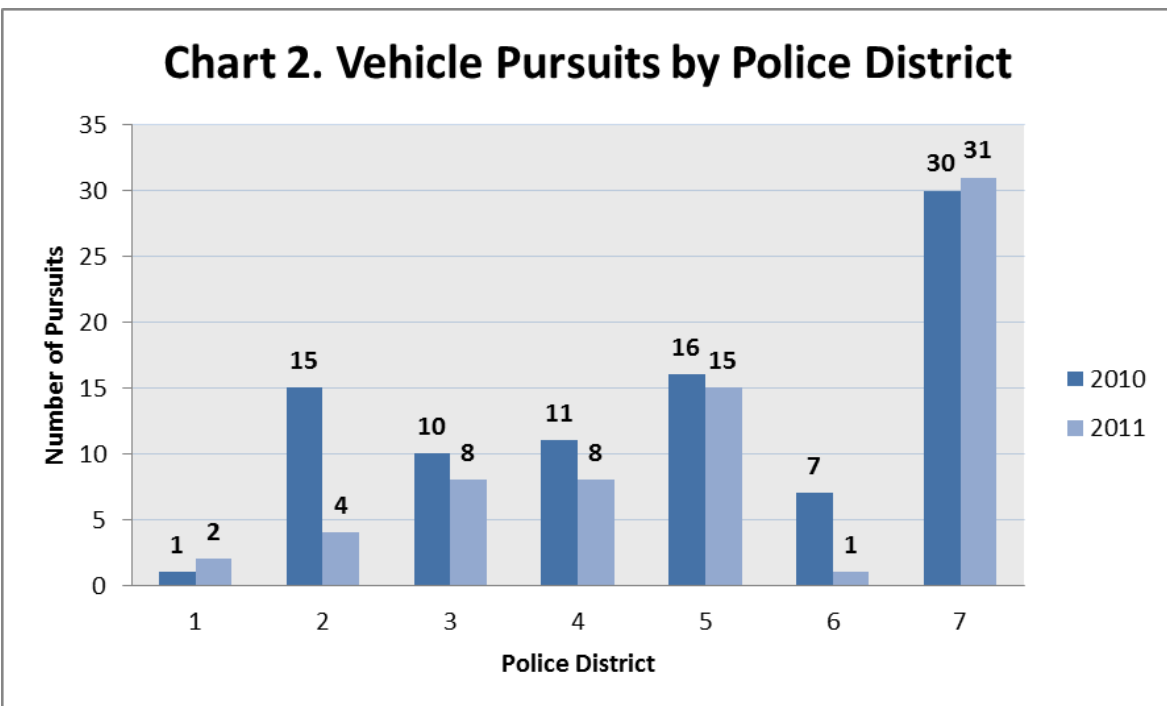
In 2011, the highest number of vehicle pursuits began between the hours of 11:00 pm and midnight (9 pursuits, 12.9 %), 1:00am-2:00am (8 pursuits, 11.4%), and 3am to 4am (7 pursuits, 10.0%), while the fewest (1 pursuit, 1.4%) occurred during five of the time intervals (see Table 2).

As seen in Chart 2, the greatest number of vehicle pursuits originated in Police District 7 (31 pursuits, 44.3%), while the fewest number of pursuits originated in Police District 6³(1 pursuit, 1.4%). The majority of vehicle pursuits originated in Police Districts 7 and 5 (46 pursuits, 65.7%).

3. Note: 1 missing case

Table 2. Vehicle Pursuits by Time

Time	Frequency	Percent
00:00-00:59	6	8.6%
01:00-01:59	8	11.4%
02:00-02:59	2	2.9%
03:00-03:59	7	10.0%
04:00-04:59	2	2.9%
08:00-08:59	2	2.9%
09:00-09:59	2	2.9%
10:00-10:59	2	2.9%
11:00-11:59	1	1.4%
12:00-12:59	1	1.4%
13:00-13:59	1	1.4%
14:00-14:59	3	4.3%
15:00-15:59	1	1.4%
16:00-16:59	1	1.4%
17:00-17:59	6	8.6%
18:00-18:59	4	5.7%
19:00-19:59	2	2.9%
20:00-20:59	3	4.3%
21:00-21:59	4	5.7%
22:00-22:59	3	4.3%
23:00-23:59	9	12.9%
Total	70	100.0%



The greatest percentage of vehicle pursuits originated in Aldermanic District 7, with 13 pursuits (19.4%), and Aldermanic Districts 1 and 6, with 11 pursuits⁴ (16.4%) (see Table 3). Aldermanic Districts 11 and 3, with no pursuits, had the lowest totals.

Table 3. Vehicle Pursuits by Aldermanic District

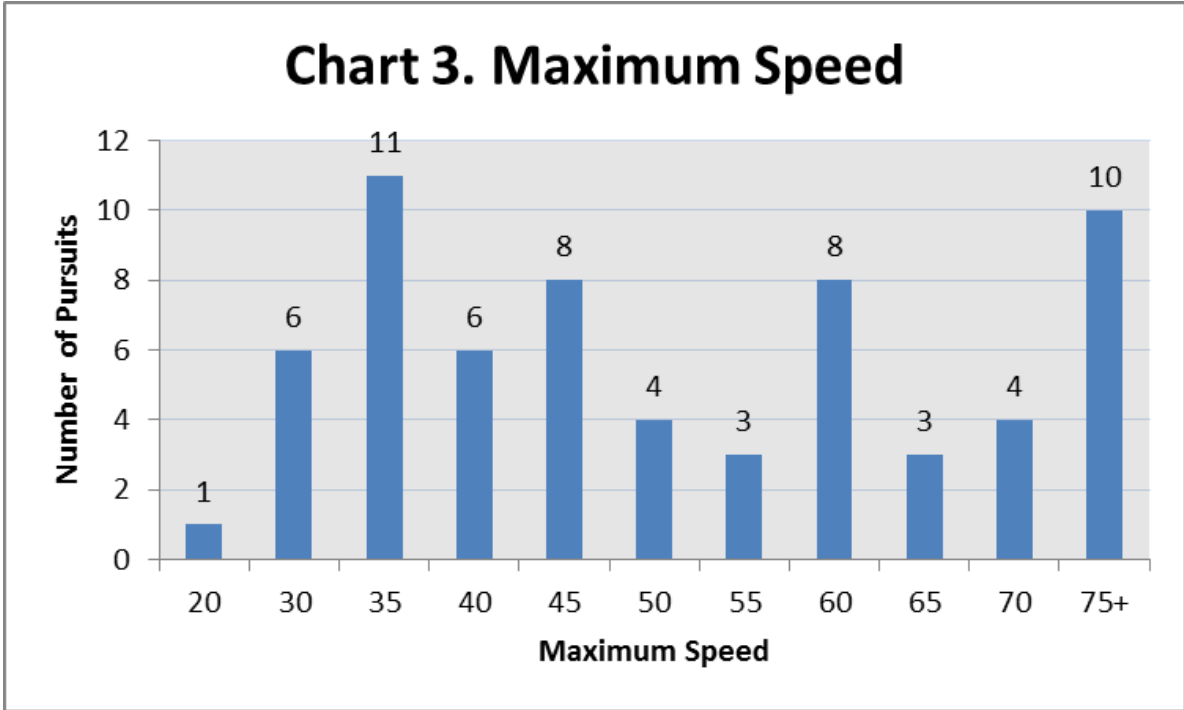
Aldermanic District	Number of Pursuits	Percentage
1	11	16.4%
2	6	9.0%
3	0	0.0%
4	7	10.4%
5	1	1.5%
6	11	16.4%
7	13	19.4%
8	1	1.5%
9	5	7.5%
10	3	4.5%
11	0	0.0%
12	2	3.0%
13	1	1.5%
14	1	1.5%
15	5	7.5%
Total	67	100.0%

Maximum speed reached during the pursuit ranged from 20 miles per hour to over 75⁵ miles per hour⁶ (see Chart 3). The most common maximum speeds were 35 miles per hour (11 pursuits, 17.2%) and over 75 miles per hour (10 pursuits, 15.6%). The average maximum speed reached was 52 miles per hour, with a median of 47.5 miles per hour.

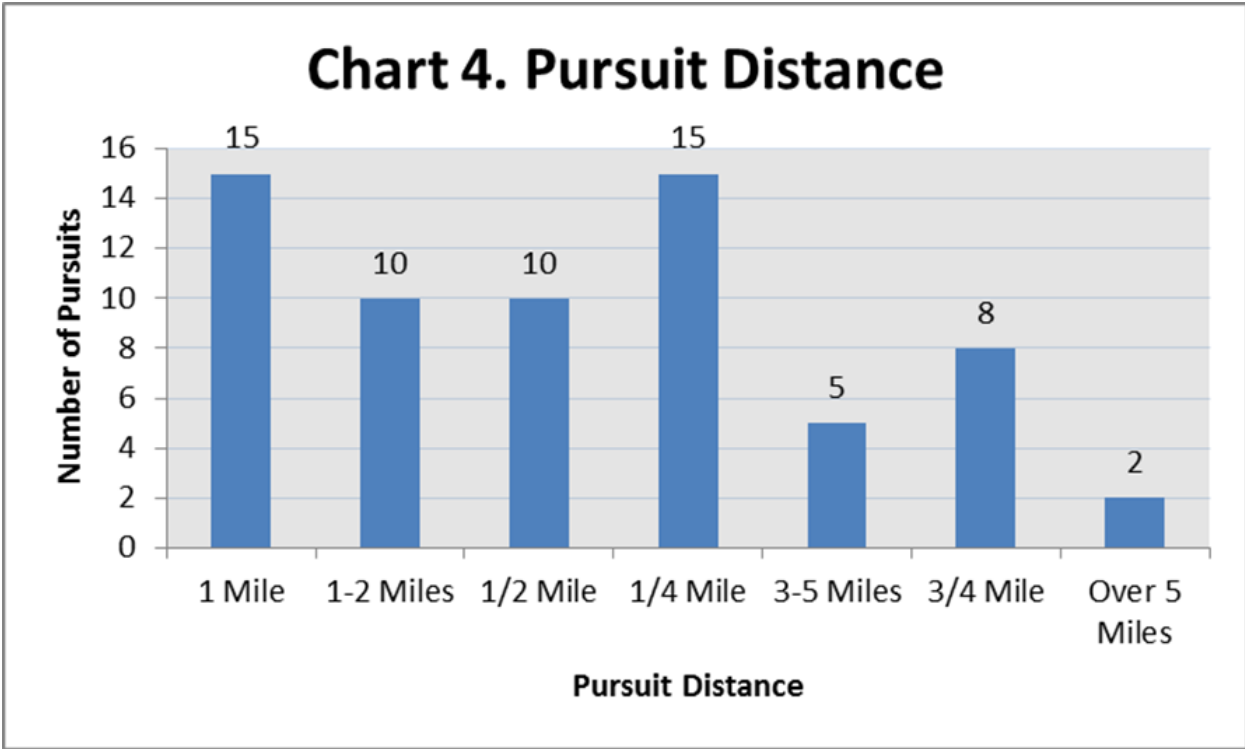
4. Note: 3 missing cases

5. For Pursuits where the maximum speed reached was listed as 75 miles per hour or greater, the data was recoded to 80 miles per hour for statistical purposes.

6. Note: 6 missing cases



Pursuit distance ranged from one-quarter of a mile to 5 miles or greater⁷ (see Chart 4). The most common distances were 1 mile (15 pursuits, 23.1%) and one-quarter of a mile (15 pursuits, 23.1%).



7. Note: 5 missing cases

Marked squads were utilized in 60 pursuits⁸ (86.9%). Nine pursuits (13.1%) utilized other vehicles (e.g., unmarked squads, wagon, motorcycle, etc.).

The outcome for pursuits included: the suspect stopped (21 pursuits, 30.0%), the pursuit was terminated because of a crash (13 pursuits, 18.6%), the pursuit was terminated by law enforcement (31 pursuits, 44.3%), the suspect escaped (4 pursuits, 5.7%), and vehicle failure/other (1 pursuits, 1.4%). Stop sticks were deployed in one pursuit. Twenty-two of the pursuits terminated by law enforcement were halted because the pursuit did not meet the criteria under the March 26, 2010 SOP revision.

The length of time for a pursuit ranged from less than 60 seconds to 35 minutes⁹. Twenty-one pursuits (32.8%) lasted one minute, 15 pursuits (23.4%) lasted two minutes, and 7 pursuits (10.9%) lasted 60 seconds or less. The mean amount of time a pursuit lasted was three minutes, with a median of 2 minutes and a mode of 1 minute.

In 2011, 20 pursuits (28.6%) involved an accident. One of these accidents was fatal, resulting in the death of one third-party bystander¹⁰ and one accident resulted in one third-party bystander sustaining minor injuries. The majority of accidents involved property damage or personal injury. Fifteen pursuits listed an estimate for the amount of property damage. The cost of property damage ranged from \$100 to \$30,000.

As the overall number of pursuits has decreased, the number of pursuits that involved an accident¹¹ has also declined, from almost 50% in 2007 to 29% in 2011¹² (see Chart 5). In 2007¹³, 100 vehicle pursuits (48.1%) resulted in an accident, while 108 pursuits (51.9%) did not. In 2011, 20 pursuits (28.6%) resulted in accident, while 50 pursuits (71.4%) did not.

8. Note: 1 missing case

9. Note: 6 missing cases

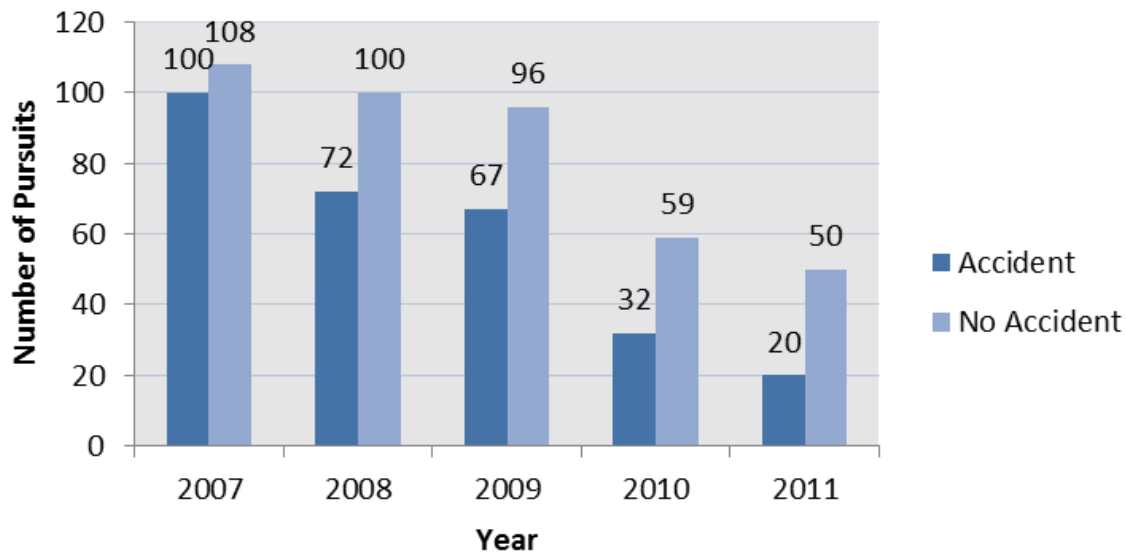
10. Third-party bystander's car was struck when suspect ran through stop sign. Bystander was transported via Milwaukee Fire Department Med Unit to the hospital where they succumbed to injuries sustained in the crash.

11. An accident is defined as involving a suspect vehicle, police vehicle, uninvolved/bystander vehicle, object, person, or structure, or any combination.

12. Note: 4 missing cases in 2007, 3 missing cases in 2008, and 2 missing cases in 2009

13. Due to the number of vehicle pursuit reports with missing data between 2002 and 2006, those years are not counted in the accident totals reported here. For example, 85 vehicle pursuit reports indicated that an accident occurred in 2002, but 186 reports gave no indication as to whether an accident occurred or not. By including the 85 reports in which an accident occurred and counting the 186 reports as missing data, the percentage of vehicle pursuits with an accident would be much higher than what is accurate. As the same time, it cannot be assumed that all 186 reports from 2002 did not have an accident. So, in order to present the most accurate data, only 2007 to 2011 is shown here.

Chart 5. Pursuit Accidents by Year



OFFICER DEMOGRAPHICS¹⁴

Of the 70 vehicle pursuits in 2011, 50 contained officer demographic information. 45 officers were involved in one vehicle pursuit and the remaining five were involved in two. Forty-eight officers (96.0%) involved in vehicle pursuits in 2011 were male, and 2 officers (4.0%) were female¹⁵. Thirty-eight officers (76.0%) were white, four officers (8.0%) were Hispanic, six officers (12.0%) were black, and one officer (2.0%) was American Indian¹⁶.

Officer age ranged from 22 years old to 56 years old, with a mean of 34 years old, a median of 35 years old, and a mode of 36 years old¹⁷. Years of service ranged from one year to 25 years, with a mean of 7.9 years, a median of 6 years, and a mode of 1 year¹⁸.

Safety equipment¹⁹ was utilized by 63 officers (90.0%), while 6 officers (8.6%) did not use safety equipment²⁰. No officers were injured during the course of a pursuit in 2011²¹ (see Chart 6).

14. Officer demographic data focuses only on the driver of the first pursuit vehicle.

15. Note: 20 missing cases

16. Note: 21 missing cases

17. Note: 20 missing cases

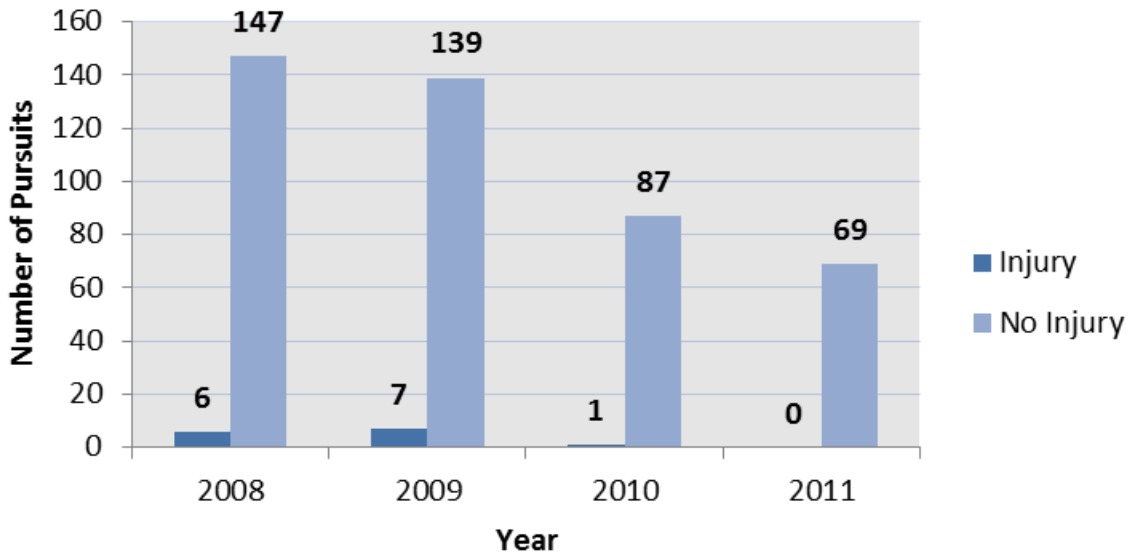
18. Note: 15 missing cases

19. Safety Equipment refers to the seat belt designed to secure the officer against harmful movement that may result from a collision or a sudden stop

20. Note: 1 missing case

21. Note: 1 missing case

Chart 6. Officer Injuries by Year



Six officers were injured in 2008, seven officers were injured in 2009, 1 officer was injured in 2010, and zero officers were injured in 2011. No MPD law enforcement personnel died as the result of a vehicle pursuit during this time period.

SUSPECT DEMOGRAPHICS²²

The majority of suspects were male (45 suspects, 91.8%), while 4 suspects (8.2%) were female²³. Forty-four suspects (89.8%) were black and 5 suspects (10.2%) were white²⁴. Suspect age ranged from 15 years old to 52 years old, with a mean of 26.8 years old, a median of 24 years old, and a mode of 22 years old²⁵.

Four suspects (5.8%) were injured, while 65 suspects (94.2%) were not²⁶. Of these four injuries, 1 was listed as minor, 1 was classified as taser related, and 2 were considered major.

Twenty-nine suspects (41.4%) fled because of a felony, 16 (22.9%) because of a traffic violation, 8 (11.4%) for warrants, 6 (8.6%) for an ordinance/misdemeanor violation, and 11 (15.7%) for other reasons. Suspects were apprehended in 45 pursuits (64.3%).

22. Suspect demographic data focuses on the driver of the pursued vehicle.

23. Note: 21 missing/unknown cases

24. Note: 21 missing cases

25. Note: 20 missing cases

26. Note: 1 missing cases

SUMMARY

A total of 70 vehicle pursuits were conducted by the Milwaukee Police Department in 2011, the lowest number recorded in the past ten years. In general, vehicle pursuits were most likely to have:

- Originated in Police District 7 or Aldermanic District 7;
- Reached an average maximum speed of 52 miles per hour;
- Covered a distance of less than 2 miles;
- Lasted an average of three minutes;
- Been terminated by law enforcement;
- Been conducted by a white, male police officer, with an average age of 34 years old and an average of 8 years of service, who utilized safety equipment; and
- Involved a black, male suspect, with an average age of 27 years old, who was fleeing because of a felony.

This report provides data on the frequency and circumstances surrounding vehicle pursuits conducted by the Milwaukee Police Department in 2011. This study can be utilized as a baseline measurement for future analyses of vehicle pursuits and to assess the implications of MPD policy, procedures, and training.