



CRASH CALLS FOR SERVICE IN 2017

FEBRUARY 8, 2018

CITY OF CAMBRIDGE POLICE DEPARTMENT CRIME ANALYSIS UNIT

CRIMEANALYSIS@CAMBRIDGEPOLICE.ORG | (617) 349-3390

SUMMARY

The Crime Analysis Unit at the Cambridge Police Department has conducted analysis of the crash-related calls for service (Crash CFS) in 2017 in the context of recent years and long-term trends in crashes. Of particular interest is the number of Crash CFS requiring transport to the hospital by Emergency Medical Services (EMS Transport), which is used as a metric to indicate crash-related injuries. This analysis resulted in the following conclusions:

- **The Police Department received and responded to 2,666 Crash CFS in 2017, the lowest number recorded in nearly 20 years.** The number of Crash CFS in 2017 falls below expectations, even accounting for a linear decline in Crash CFS from 2000 to 2016.
- **The total number of Crash CFS resulting in an EMS Transport fell to 276 in 2017, the lowest number in 14 years of quality records.** The number of EMS Transports fell 17% versus 2016, and 13% versus 2015.

As the first full calendar year after the City's implementation of Vision Zero, understanding changes in crash trends in 2017 is particularly important. Notably, one of the first major actions taken under the Vision Zero initiative – the reduction of the speed limit to 25 miles per hour city-wide – was implemented in December 2016. While it is unlikely that a reduction in number of crashes and crash-related injuries can be attributed to a singular cause, the long-term decline in number of Crash CFS accelerated in 2017 following this action. In the coming months, the Crime Analysis Unit will work to identify potential causes of the accelerated decline in crashes with more certainty.

LONG TERM TRENDS

CRASH CALLS FOR SERVICE

The Police Department responded to 2,666 calls for service (CFS) relating to traffic crashes in 2017: **the lowest number of Crash CFS in nearly two decades**. Total Crash CFS fell 3% compared to 2,749 in 2016, and 13% compared to 3,068 in 2015.

In Figure 1, the monthly average Crash CFS per day is adjusted for seasonal variability. This accounts for the expected seasonal changes in Crash CFS each year, leaving only the long-term trends in Crash CFS (shown in black). The linear trend (shown in blue) demonstrates the rate of the long-term decline in Crash CFS from 2000 to 2016. Even accounting for inter-annual variability in Crash CFS, the number of Crash CFS in 2017 (shown in red) fell well below expectations based on this linear trend.

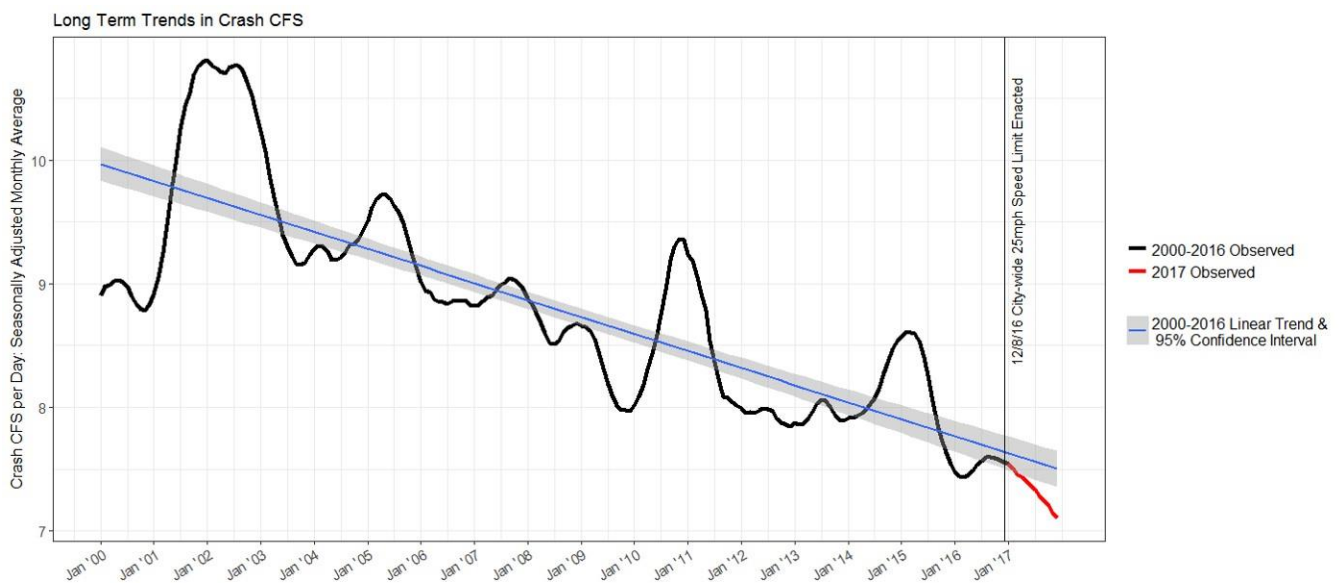


Figure 1. Seasonally Adjusted Monthly Average Crash CFS per Day. The number of Crash CFS in 2017 is the lowest in nearly 20 years of modern records, and falls below expectations based on the 2000-2016 linear trend.

CRASH CFS WITH EMS TRANSPORT REQUIRED

Of the 2,666 Crash CFS in 2017, 276 resulted in an involved party requiring transport to the hospital by Emergency Medical Services (EMS Transport): **the lowest number of EMS Transports reported since consistent reporting began in 2005**. EMS Transports in 2017 decreased 17% compared to 2016, and 13% compared to 2015.

The annual total Crash CFS and the annual total crash-related EMS Transports for the past three years are shown in Figure 2. In 2017, 10.4% of Crash CFS required EMS transport to the hospital, compared to 12.1% in 2016 and an average of 11.1% during the 5-year period from 2012 to 2016. This demonstrates a downward trend in the absolute number of EMS Transports, as well as the proportion of Crash CFS requiring EMS transport to the hospital.

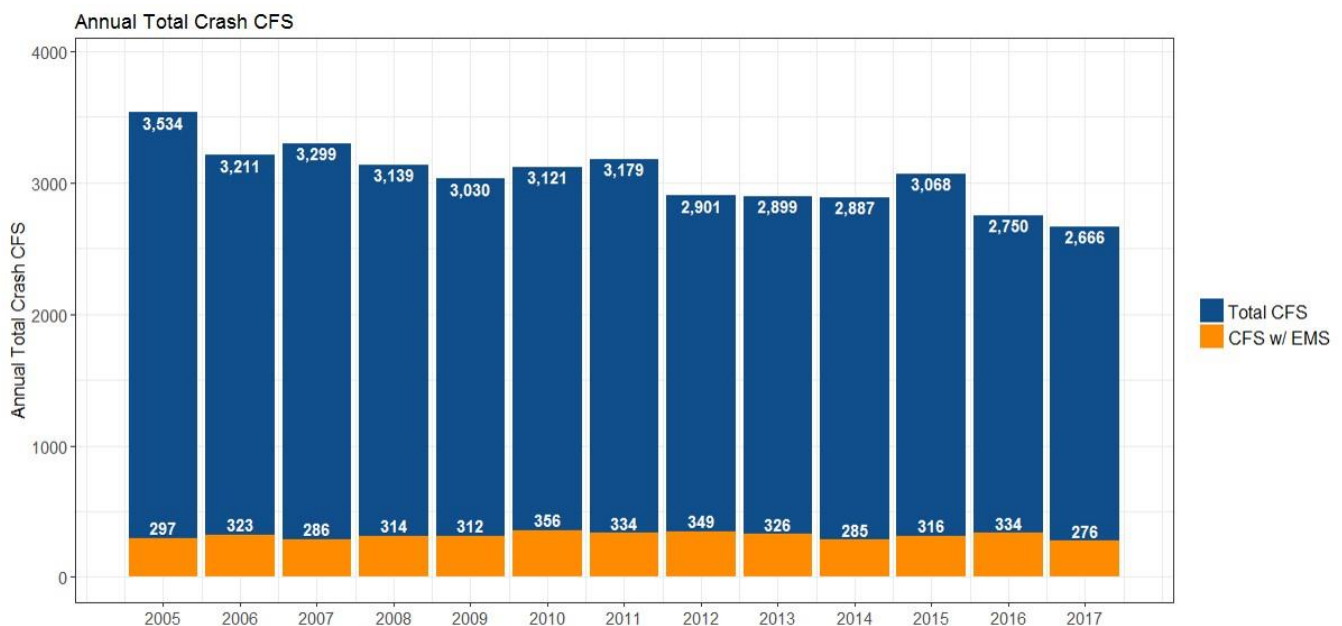


Figure 2. Annual Total Crash CFS and Crash CFS requiring EMS Transport to the Hospital. (Note: While Crash CFS have been consistently recorded for at least 20 years, EMS Transports have been tracked consistently beginning with changes to the EMS dispatch system beginning in 2005).