




District of Columbia HSIP Safety Targets



November 2, 2018
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Presentation Outline

A decorative graphic consisting of two parallel horizontal lines made of small dots, extending from the right edge of the slide towards the center.

- Target Setting Process
 - Target Estimates
 - 5-year Fatality Trends
 - District Transportation Challenges/External Factor
 - DC Efforts
- 
- A decorative graphic at the bottom of the slide consisting of a thick red wave shape above a thinner blue wave shape.

Target Setting Process



STEP
1

Key Stakeholders Coordination:

- Safety (HSIP) and Highway Safety Office (NHTSA)
- Metropolitan Washington Council Of Government (MWCOCG)
- Vision Zero Staff
- Metropolitan Police Department (MPD)

STEP
2

Gather Necessary Data:

- Number of fatalities [[Fatality Analysis Reporting System, FARS](#)]
- Number of serious injuries [[MPD](#)]
- Vehicle miles travelled (VMT) [[MWCOCG](#)]

STEP
3

Conduct Trend Analysis:

- Annual trend with projections
- 5 year rolling average with projections
- Assess various trend lines (linear, polynomial, etc.)
- Checked goodness of fit with R-square

STEP
4

External Factor Considerations:

- Increasing exposure risk increase by at least 10 to 15 percent per year as a result of population growth, tourist activities, VMT, non-motorized trips, etc.
- Level of education and enforcement activities

STEP
5

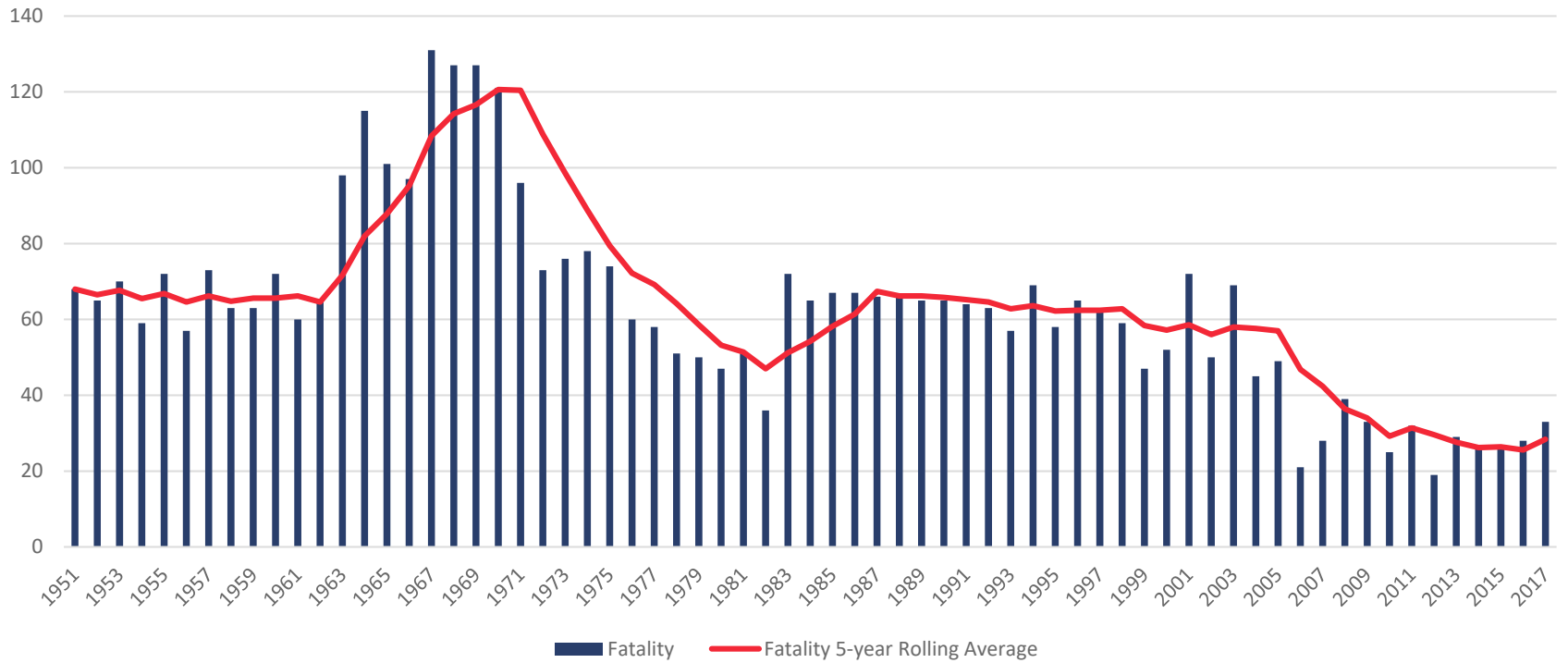
Adjust & Finalize Targets:

- Increase or decrease targets as determined by external factors and level of planned engineering

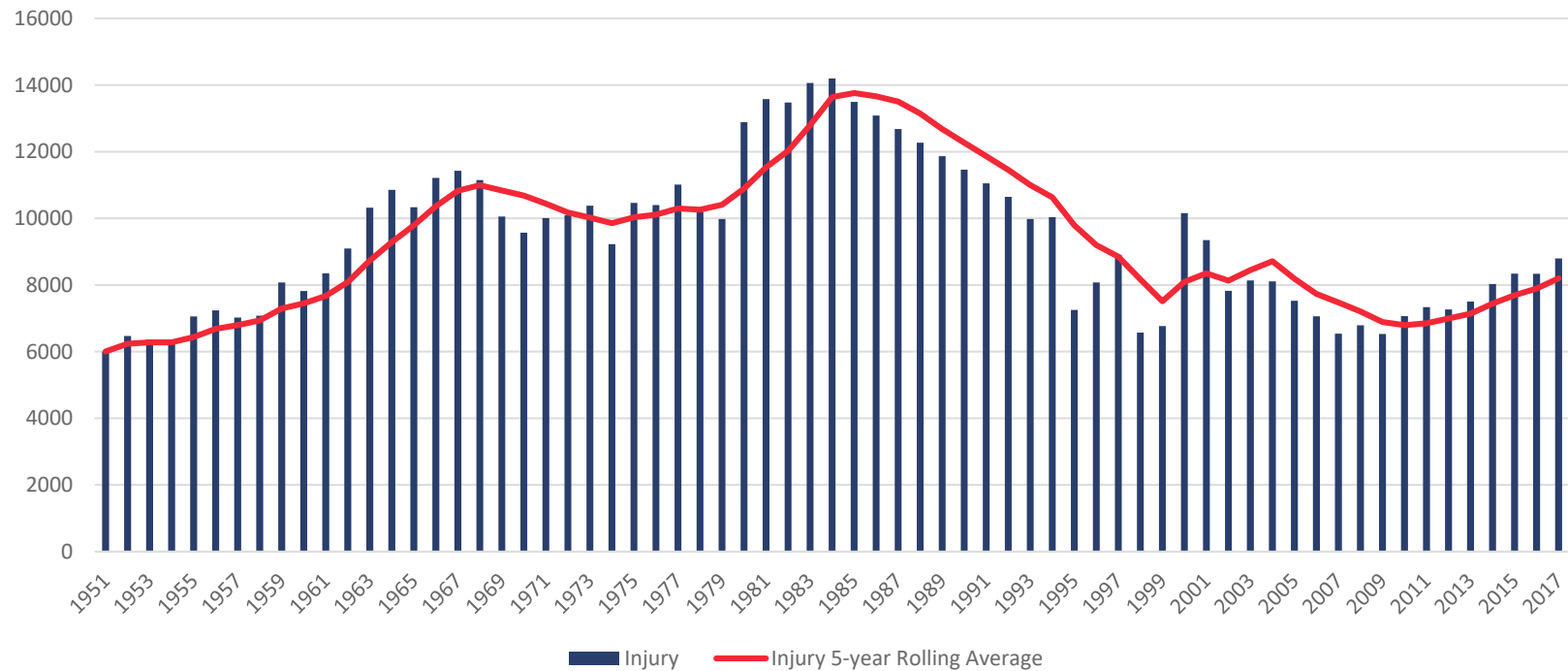
Source of Data

- Number of fatalities [**Fatality Analysis Reporting System, FARS**] ;
- Number of serious injuries [**Metropolitan Police Dept., MPD**] ;
- Fatality rate per hundred million vehicle miles traveled (HMVMT) [**FARS, MWCOCG**] ;
- Serious injury rate per HMVMT [**MPD, MWCOCG**]; and
- Number of non-motorized fatalities and non-motorized serious injuries [**MPD, FARS, MWCOCG**].

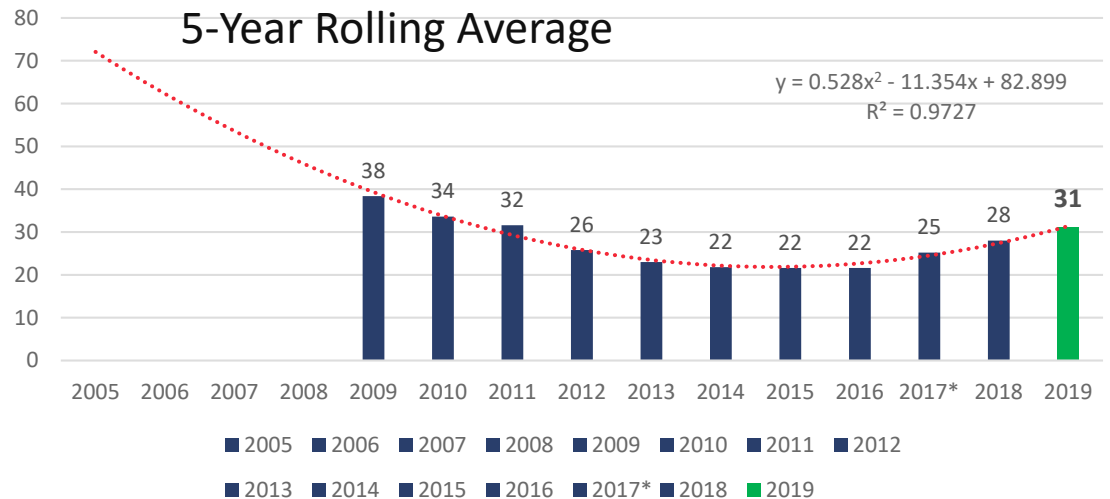
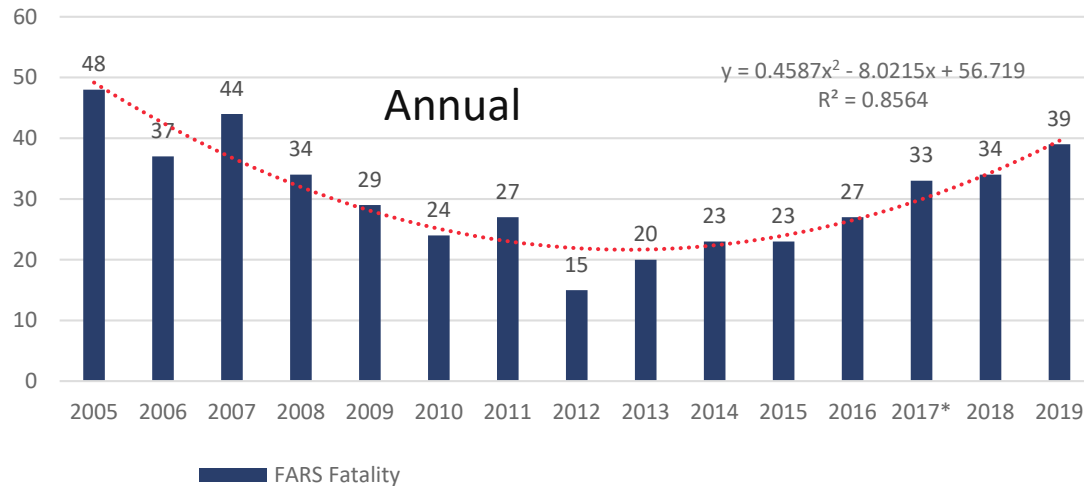
Fatalities



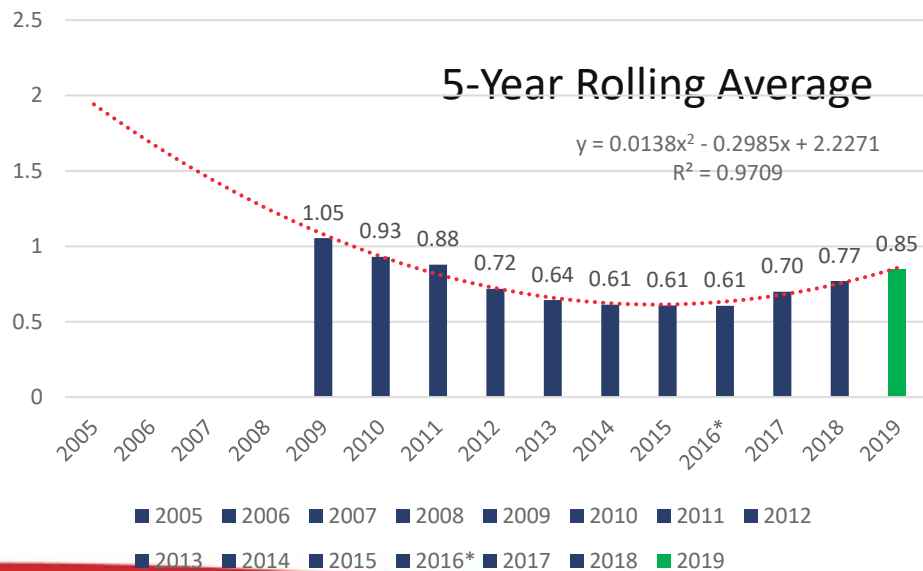
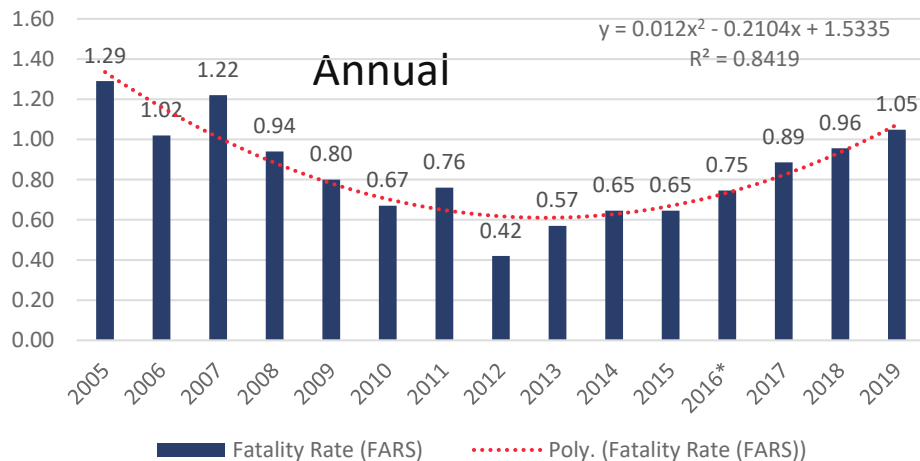
Injuries (not Serious Injuries)



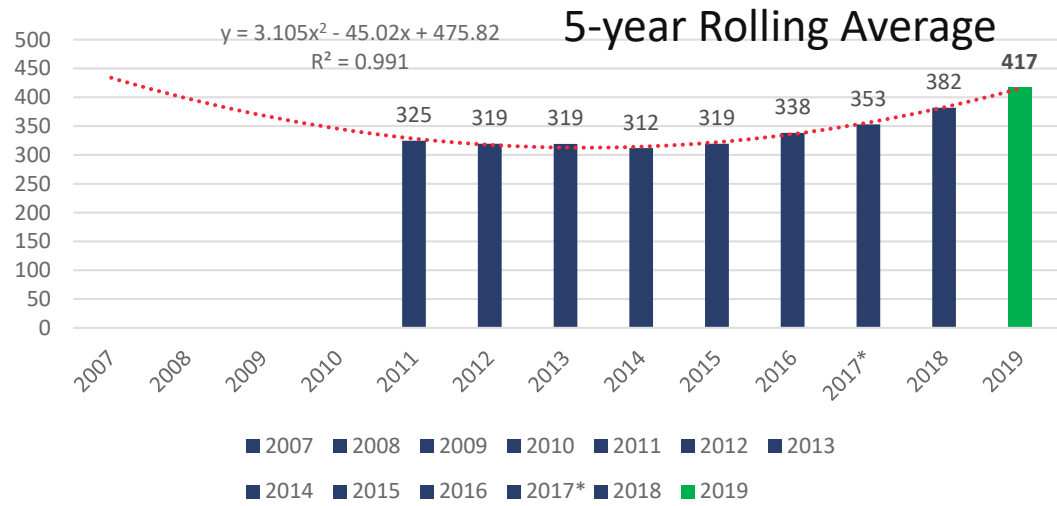
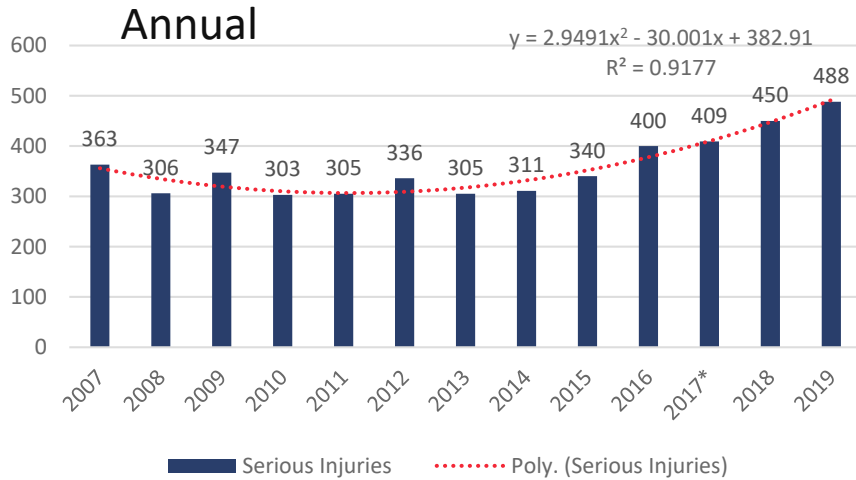
Fatality (FARS)



Fatality Rate per 100M VMT

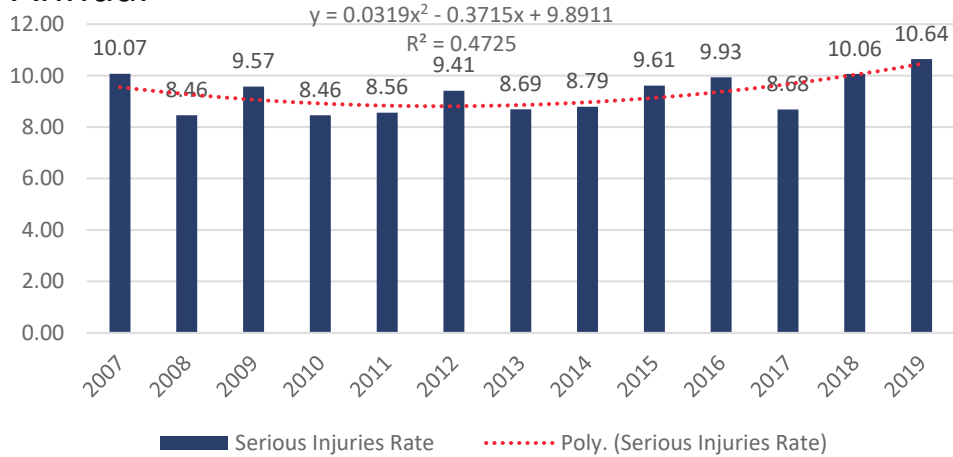


Serious Injury

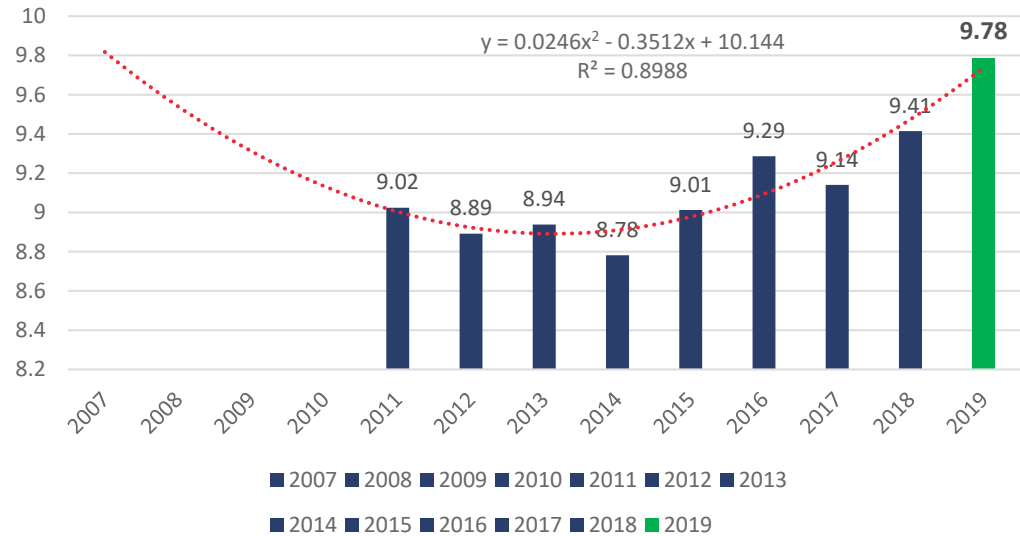


Serious Injury Rate

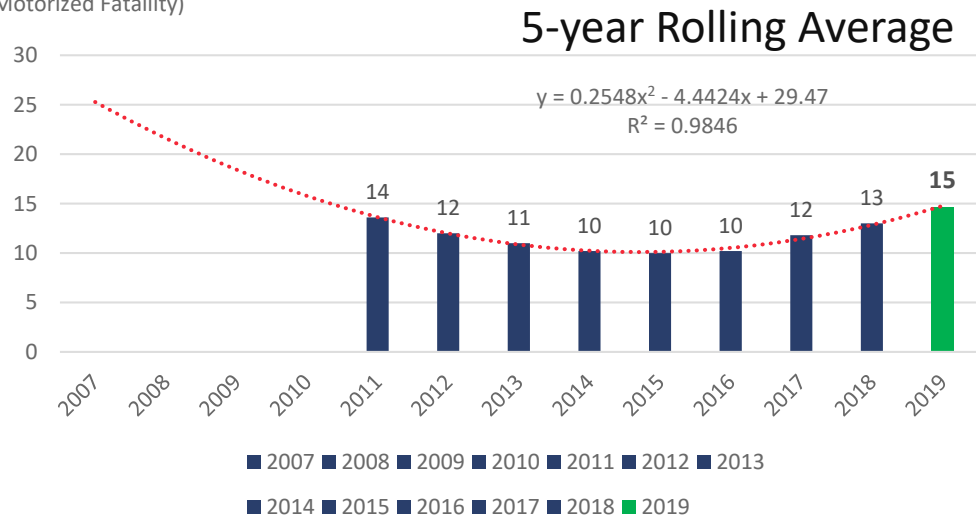
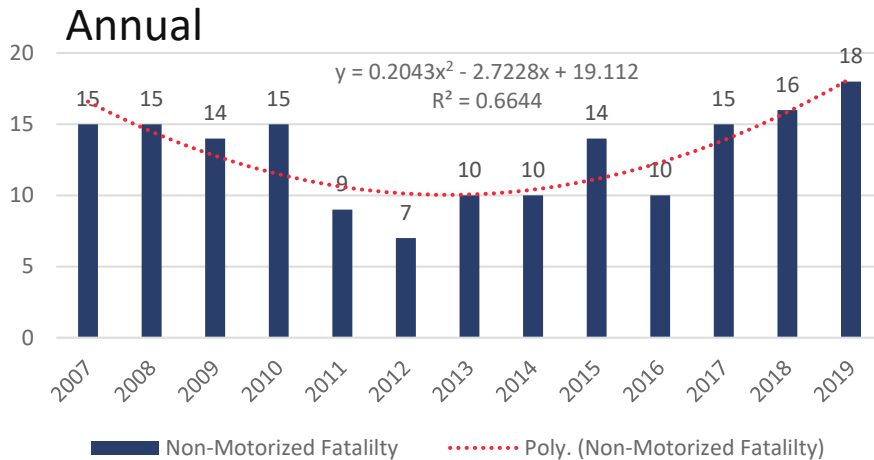
Annual



5-year Rolling Average

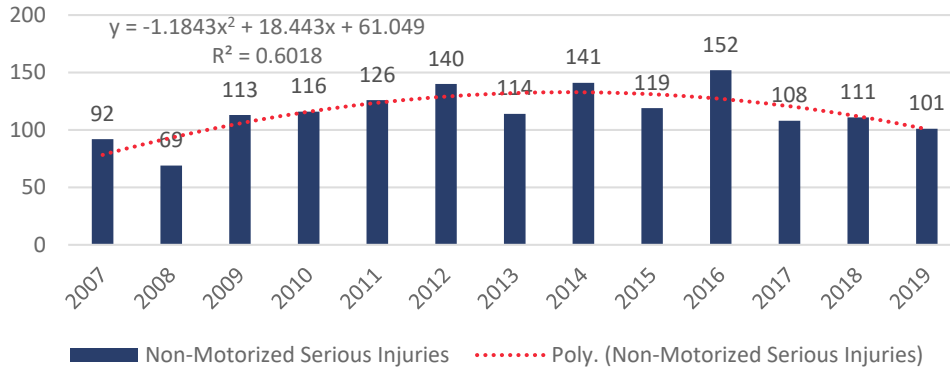


Non-Motorized Fatalities

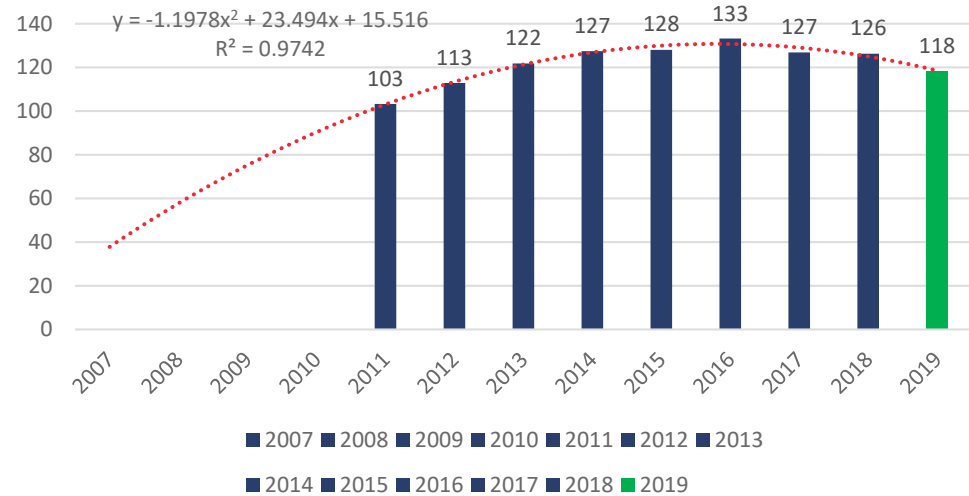


Non-Motorized Serious Injuries

Annual



5-year Rolling Average



Summary of Targets

Target	2019	2018	Change
Number of fatalities	31	26	+19%
Number of serious injuries	417	420	-0.08%
Fatality rate per hundred million vehicle miles traveled (HMVMT)	0.85	0.70	+21%
Serious injury rate per HMVMT	9.78	10.2	-5%
Number of non-motorized fatalities and non-motorized serious injuries	15, 118	12, 136	+25%, -13%

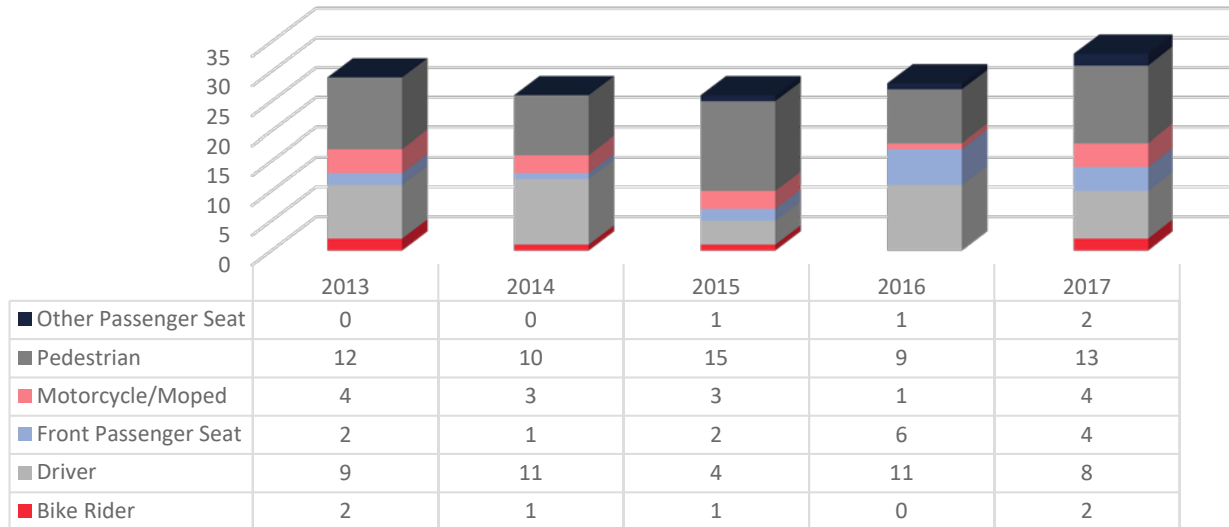
External Factors

- Targets are higher than recent year
 - District population is increasing (693,972; 15% percent increase since the 2010 U.S. Census)
 - Between July 2016 and July 2017 – 12,800 residents (1.9% increase)
 - 793,300 District Jobs in March 2018, up from 715,000 in 2005
 - Commuters who live outside of the District account for 70 percent of all DC jobs; this is also projected to increase
 - In 2017 the District welcomed a total of 21 million visitors, a 5 percent increase from 2014.
 - Top 10 cities in the US based on visits
 - Projected to increase by at least 2–3 percent per year
 - DC daytime population of well over 1.5-1.6 million people or over 2.5 times the resident population

External Factors

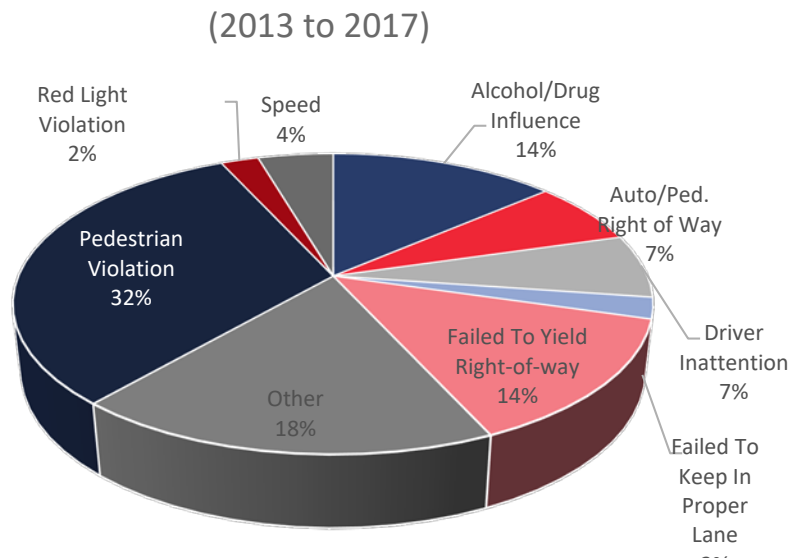
- Pedestrian and bike trips increased on average between 3 to 5 percent annually
- Bike trips make up approximately 5% of work trips
 - 3rd in the nation (Cities) by share
 - 4th by number of bike commuters
- 250k scooter trips in the first 3 months of operation
- Approximately 11.7% of residents walk to work each day

Fatalities By User



- Approximately 46% of fatalities pedestrian and bicycle riders
 - 42% are pedestrians; 4% are bicycle riders
- Approximately 41% of fatalities are drivers and front seat passengers
 - 30% are drivers; 11% are front seat passengers
- Approximately 11% of fatalities are motorcycles/mopeds

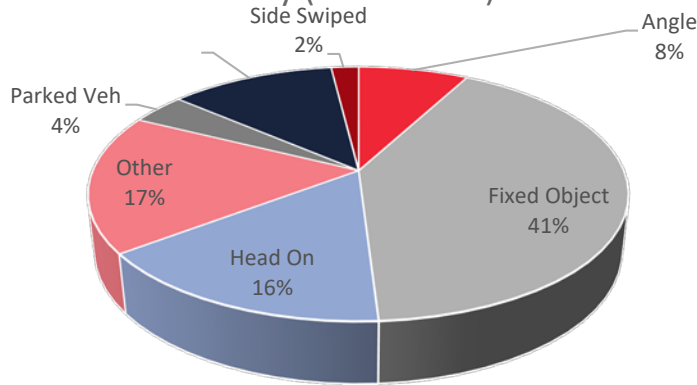
Contributing Factor for Pedestrian Fatality



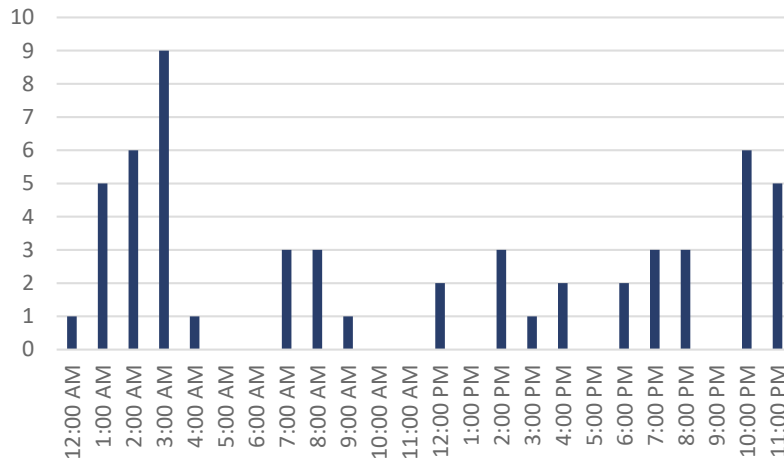
- Approximately one in three pedestrian fatalities are coded as a “pedestrian violation”
- At least one in two are associated with driver behavior

Driver/Passenger Fatality

Collision Type of Driver/Passenger Fatality (2013~2017)




- Two out of five (40%) driver/passenger fatality involves a fixed object crash



- Close to three in five (~60%) fatalities occur between 10 pm and 3 am

DC Efforts



- Pedestrian Safety Improvements
 - Two new HAWK signals in 2017, bringing our total to 17 across the city
 - Installed 19 Leading Pedestrian Intervals,
 - Modified 14 intersections that create a conflict between the dual turn lanes and pedestrian crossings
 - Closed 20 blocks of sidewalk gaps which is almost 8 miles closed in the last three years
 - Plans to Install RTOR treatments at 100 intersections
 - Bicycle Safety Improvements
 - On track to install five new miles of bike lanes this year, including new protected lanes, and upgrading existing bike lanes and intersections
- 

Questions?

