

# Firefighters Fatalities in the U.S (2000-2015)

Amferny Arias S.

IST 421 Data Visualization

## Introduction

Firefighting is one of the most dangerous professions in the United States. Nonetheless, people is not aware of the circumstances that put their life's in danger.

All the inforamtion conatined is to inform about the firefighters daily dangers, the riskiest places ,duties and the reasons behind it. This can be interesting of government officials,and firefighter departments since knowing this facts will help to understrand how to prevent the deaths.

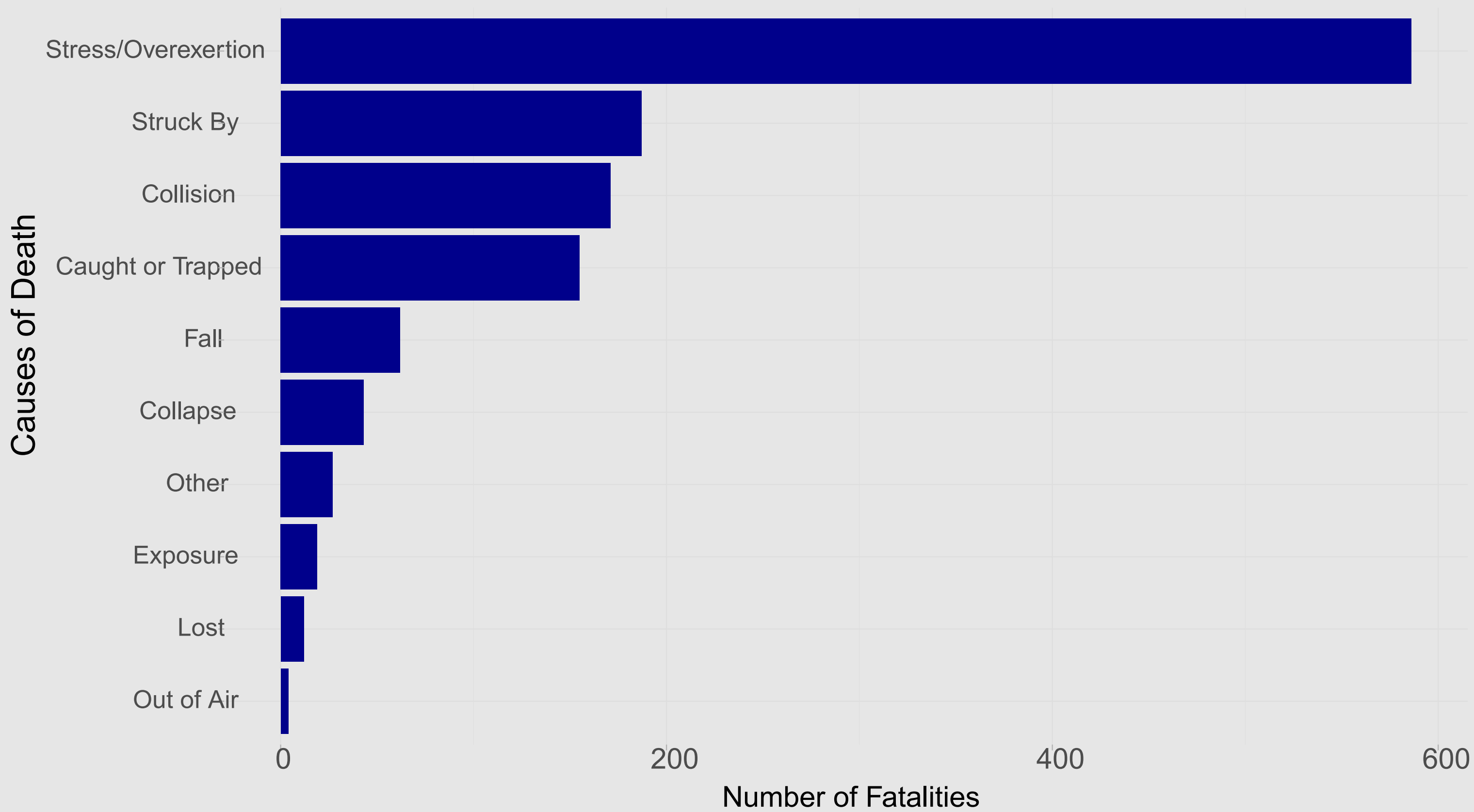
## Data Description

The dataset includes all on duties, properties, causes of fatalities that occurred in the U.S between 2000-2015, excluding the date of Sept.11, 2011, to make the data more normalize since this event was a huge affectation in firefigthers deaths'. It contains 2005 rows and 13 observations

## Questions

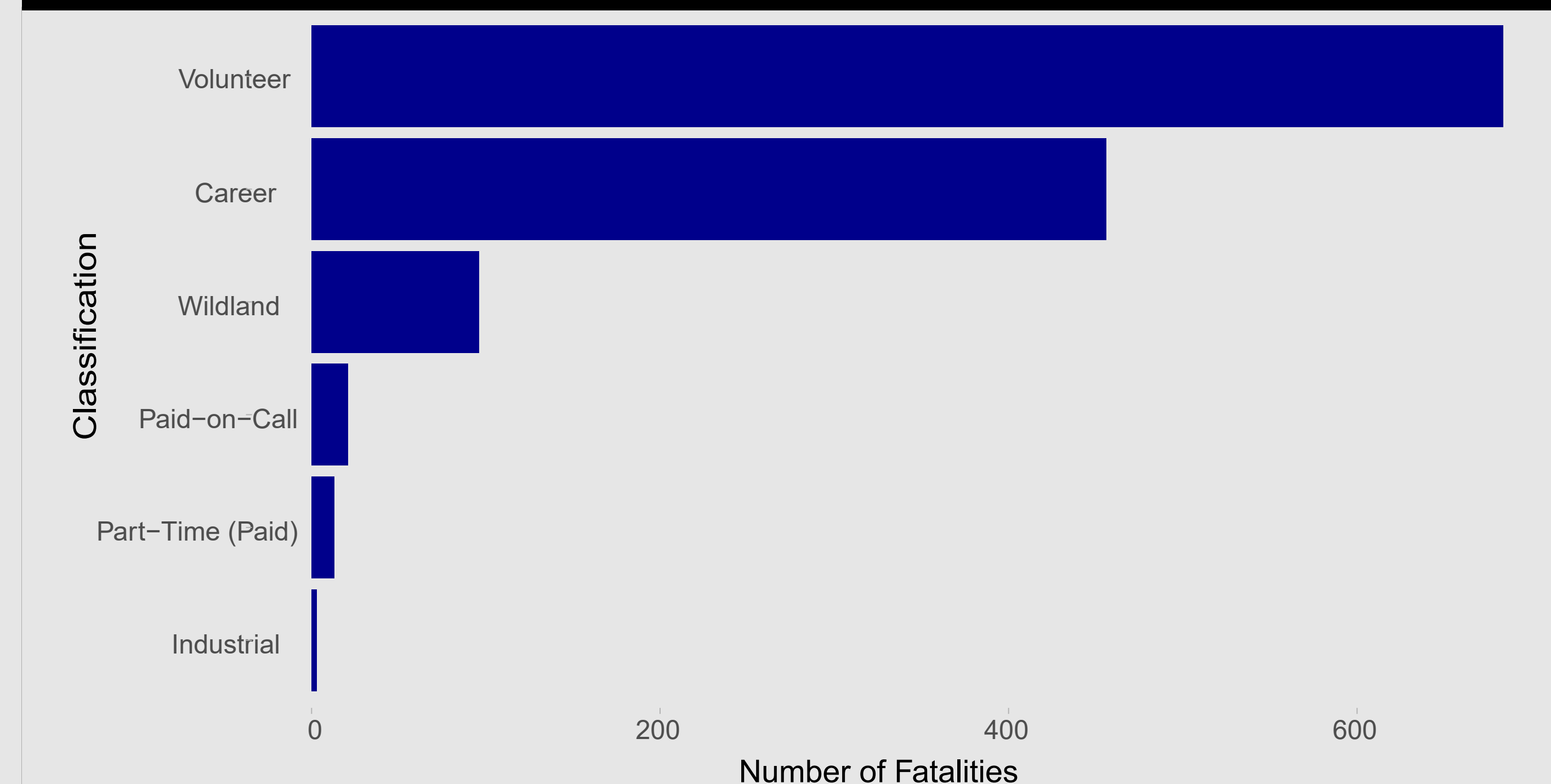
- 1.What are the principals types of deaths?
- 2.Which firefighters are at more risk and when?
- 3.Why these firefighters have the most risk?

## Major Causes of firefigthers deaths

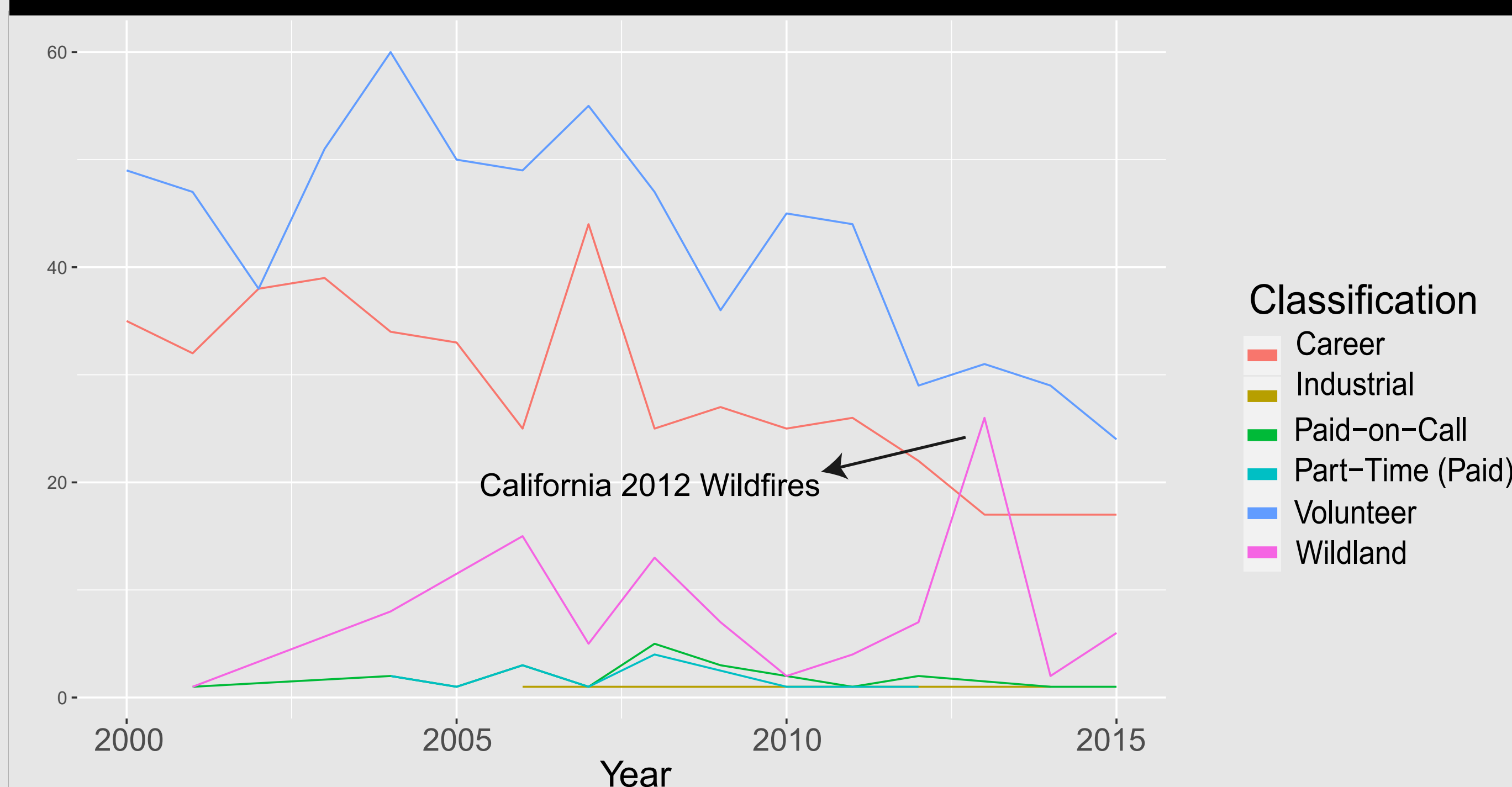


sources:<https://www.kaggle.com/datasets/fema/firefighter-fatalities>  
<https://apps.usfa.fema.gov> RPackages: tidyverse, maps, lubridate, palette,ggmap

## Deaths by Classification



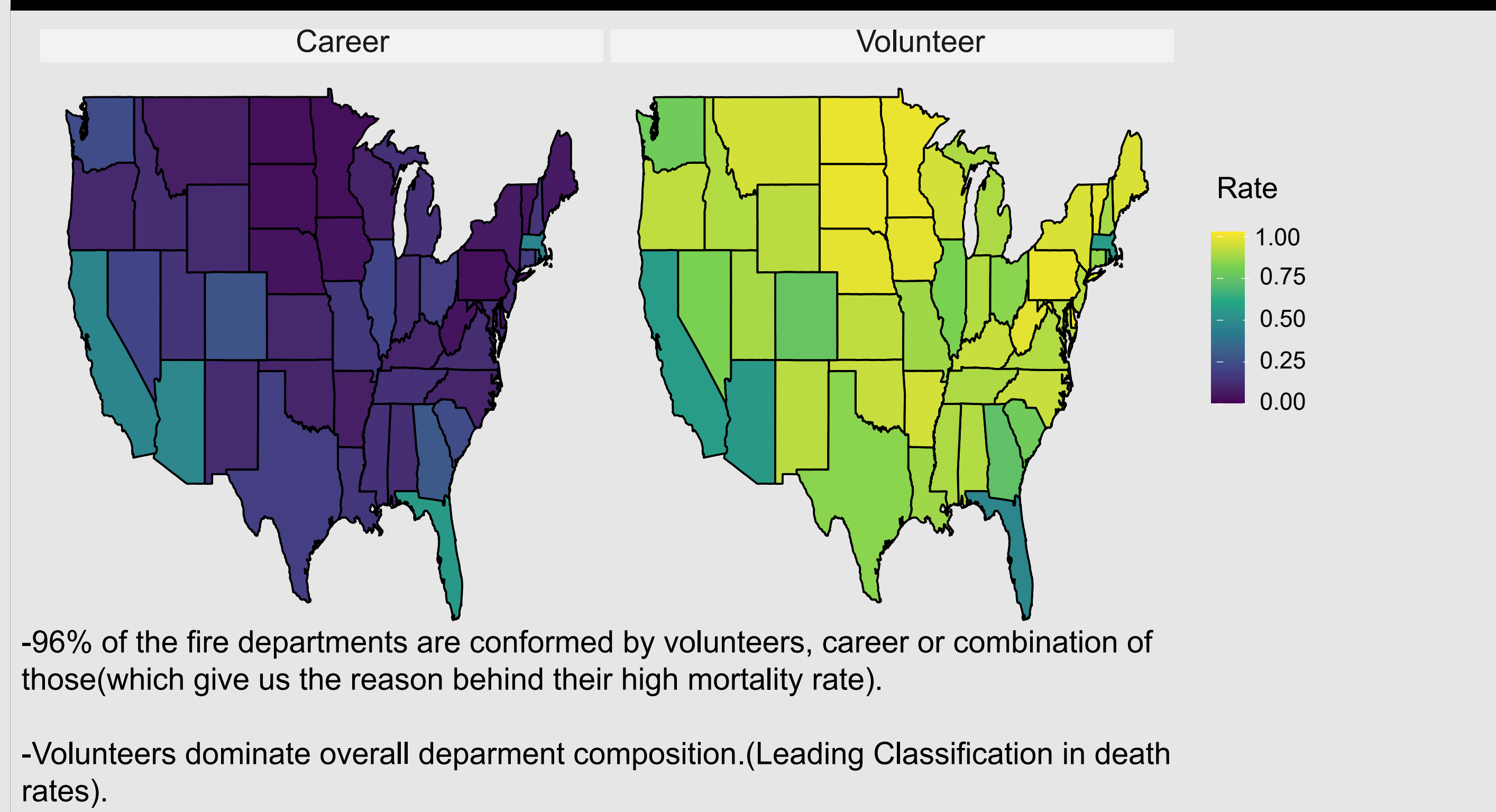
## Mortality Rate by Classification



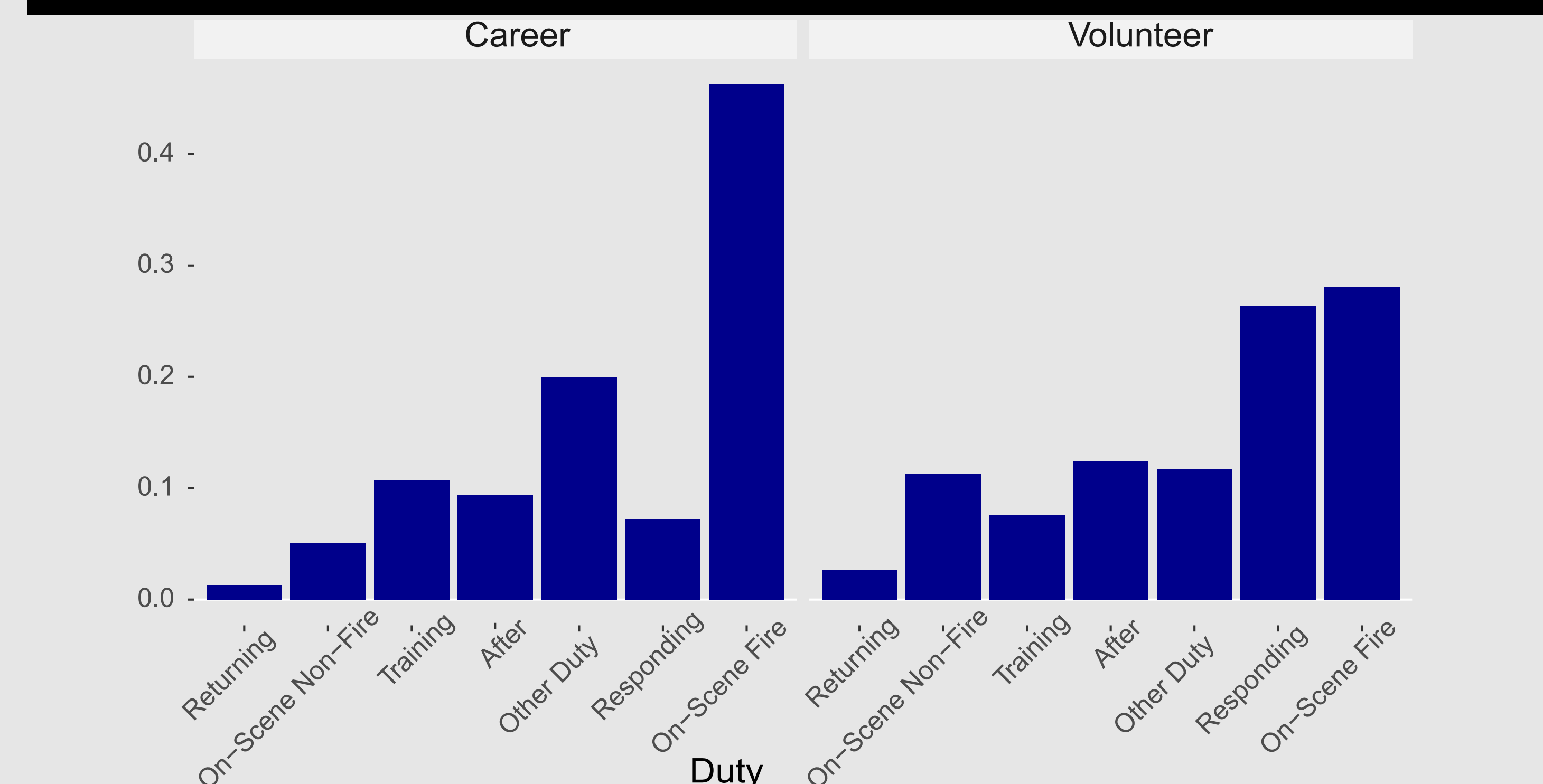
-Volunteer and Career lead by death rates over the years.

-The medicine advances and training improvement have decreased the death rates .

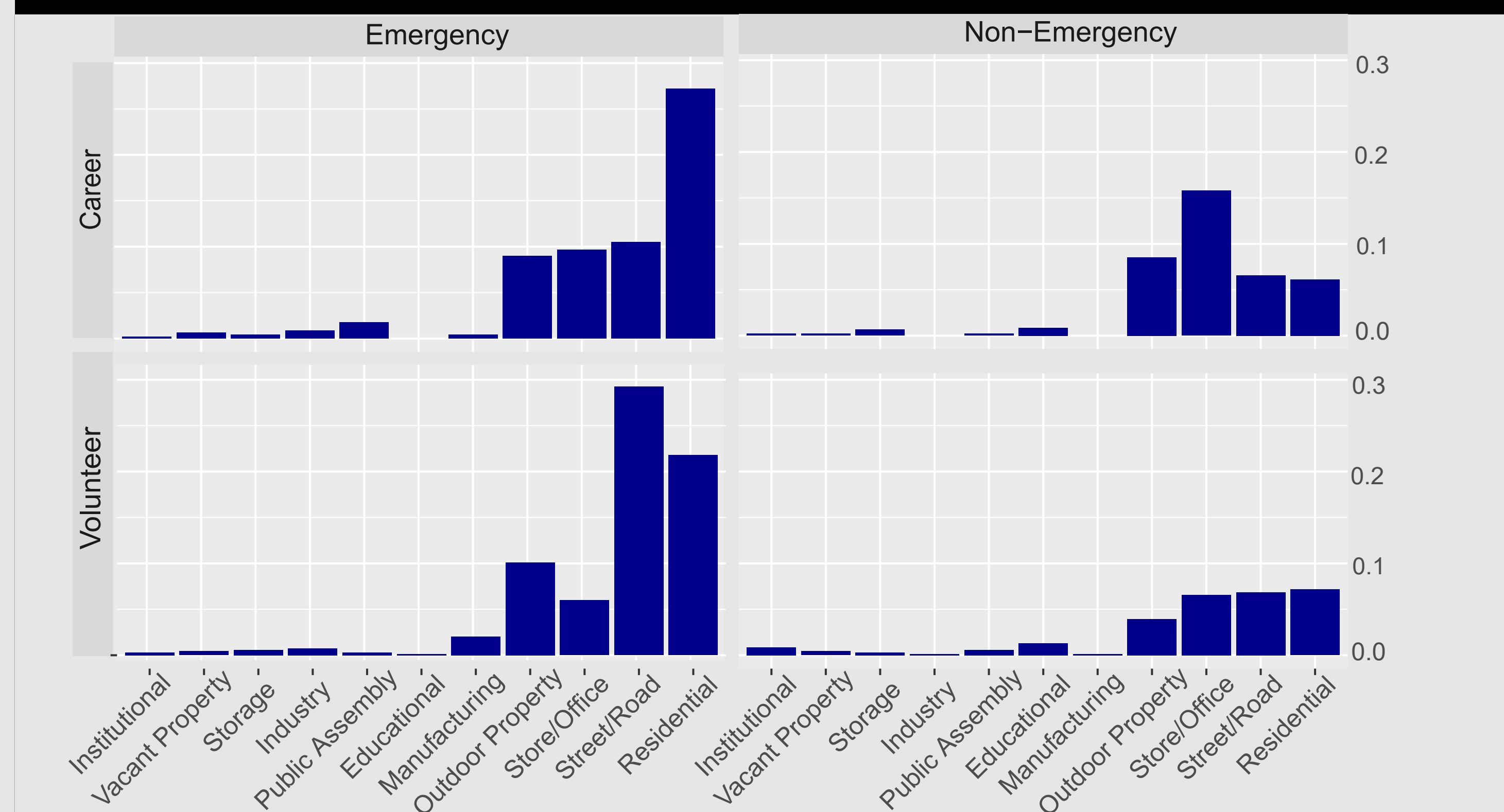
## Fire departments composition



## Which are the riskiest duties?



## Deaths by Property Type



## Is there a relationship between type of property and duty deaths?

