

# SEXUAL OFFENCES GREATER LONDON

## 2013 - 2014 - 2015

Introduction

Location

Westminster 018A

City of London 001F

Westminster 013E

Westminster 018C

Westminster  
018B

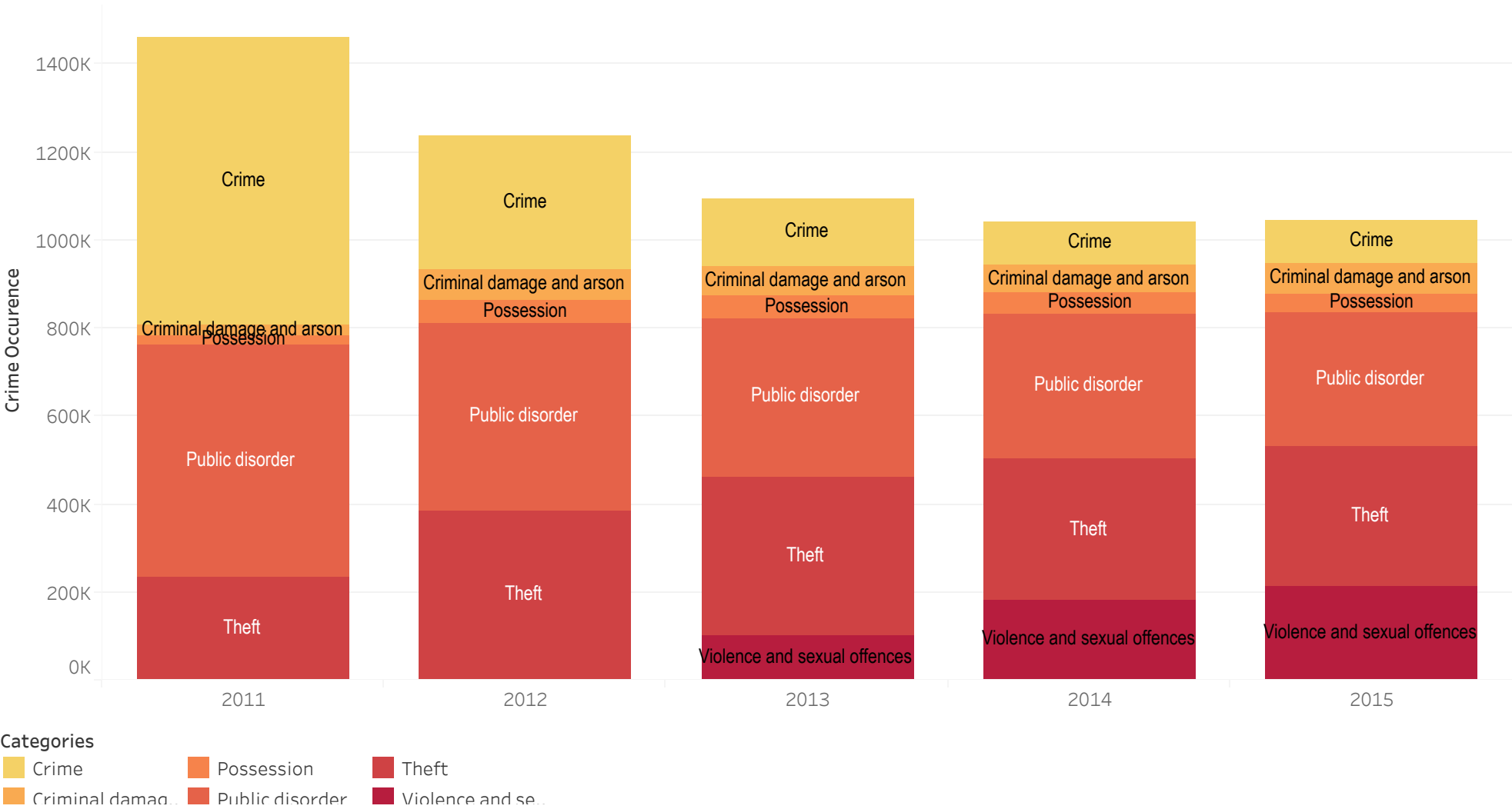
## SEXUAL OFFENCES IN POLICE DATASET

For my analysis, I have decided to focus only on violence and sexual offences.  
Nowadays, sexual offences are still an embarrassing subject and very few are actually reported to the police.  
I think it is important to know what correlations can be drawn from these complains. They would help the police acting efficiently on these specific assaults.

As shown on the graph below, no violence and sexual offences were reported in 2011 and 2012 (were they reported in a different category at the time ?). Hence, this analysis focusses on 2013,2014 and 2015 only.

The first result to highlight is the increase of sexual offences between 2013 and 2015, doubling from 100,000 to more than 200,000.

CRIMES OCCURENCE PER CATEGORY AND PER YEAR



# SEXUAL OFFENCES GREATER LONDON

## 2013 - 2014 - 2015

Introduction	Location	Westminster 018A	City of London 001F	Westminster 013E	Westminster 018C	Westminster 018B
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### IDENTIFY MOST DANGEROUS LSOA CODES FOR SEXUAL OFFENCES

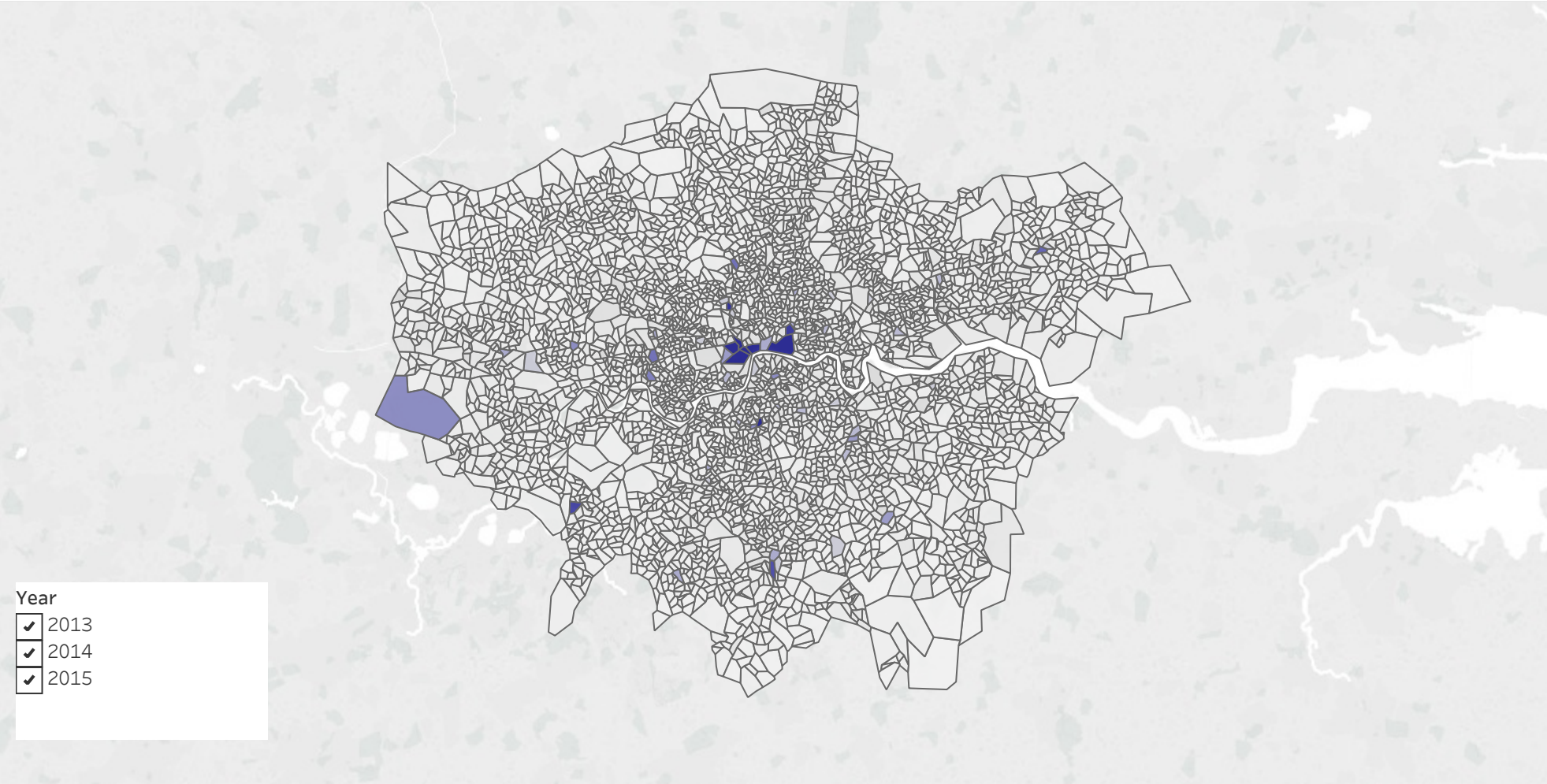
To analyse population profile, areas have been restricted to a limited number, by the following procedure:

1. The 10 most dangerous LSOA for violence and sexual assaults have been identified by year (by computing the number of assaults per head)
2. If an area was in the top 10 for two or three years, it was then selected for our sample

Once our sample was built, age and gender analysis were run on population data to try to identify trends between these 9 areas. This analysis by area is presented in the next slides.

- The 9 selected areas in our sample are:
- Westminster 018A, 018B, 018C, 013E, 013B
  - City of London 001F
  - Hackney 027G
  - Croydon 027B (for 2013 and 2014)
  - Camden 021A (for 2014 and 2015)

LSOA : SEXUAL OFFENCES PER HEAD AND PER YEAR



# SEXUAL OFFENCES GREATER LONDON

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Introduction	Location	Westminster 018A	City of London 001F	Westminster 013E	Westminster 018C	Westminster 018B
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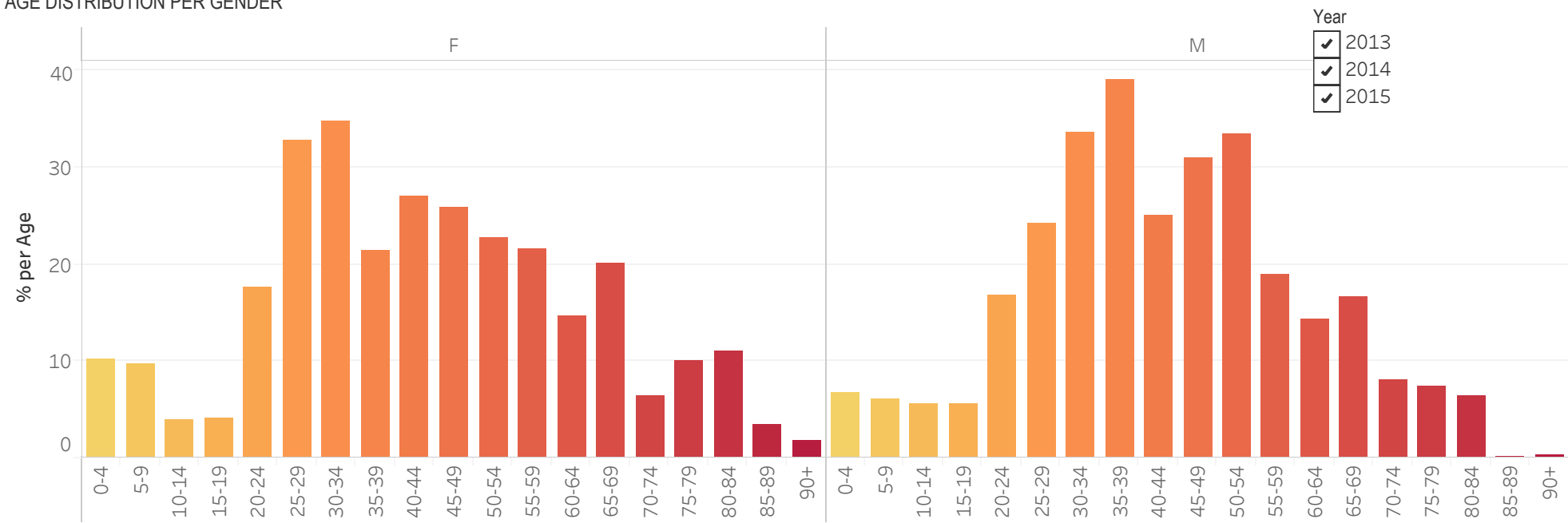
### WESTMINSTER 018A

With a shocking average of **0.473** crime per head over the three years, Westminster 018A is the most dangerous area in our sample. Between 2013 and 2015, the number of crime per head has jumped from 0.29 to 0.56.

The average population for the period of interest is **1,745**.

Westminster 018A is a rich area with a mean salary of **£78,450**.

AGE DISTRIBUTION PER GENDER



GENDER DISTRIBUTION



The suprisingly high number of males between 30 and 40 years old is the first result to notice. It does represent ~ 25% of the male population over the 3 years for only 18% of the female population.

In Wesminster 018A , there is a relative young male population compared with the female distribution.

The pie chart on the right shows unbalanced gender population, with ~ 58% of males over the 3 years.

# SEXUAL OFFENCES GREATER LONDON

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Introduction	Location	Westminster 018A	City of London 001F	Westminster 013E	Westminster 018C	Westminster 018B
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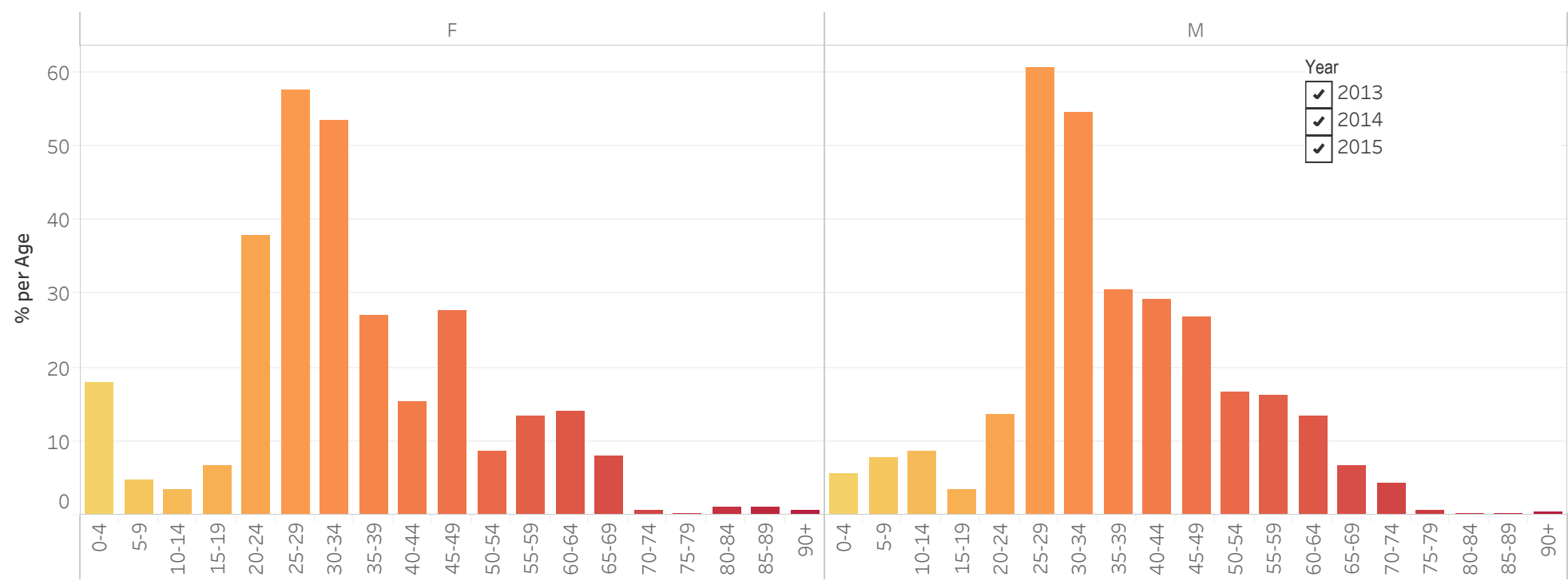
### CITY OF LONDON 001F

Not far behind Westminster 018A, the average of sexual offences in City of London 001F is equal to **0.406** for the period of interest. Similarly to Westminster 018A, , the number of offence per head has almost doubled between 2013 and 2015, jumping from 0.27 to 0.51.

The average population for the period of interest is **1,090**.

City of London 001F is the richest area of our sample with a mean salary of **£99,220**.

AGE DISTRIBUTION PER GENDER



GENDER DISTRIBUTION



The age distribution for males and females present some dissimilarities, specifically in the older ages (over 40 years old). By averaging per year, we notice that 38.5% of the males are over 40 years old, for only 30% of women. In LSOA City of London 001F, the population has older males compared to females.

The pie chart on the right shows unbalanced gender population, with ~ 63% of males over the 3 years.

# SEXUAL OFFENCES GREATER LONDON

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Location	Westminster 018A	City of London 001F	Westminster 013E	Westminster 018C	Westminster 018B	Westminster 013B
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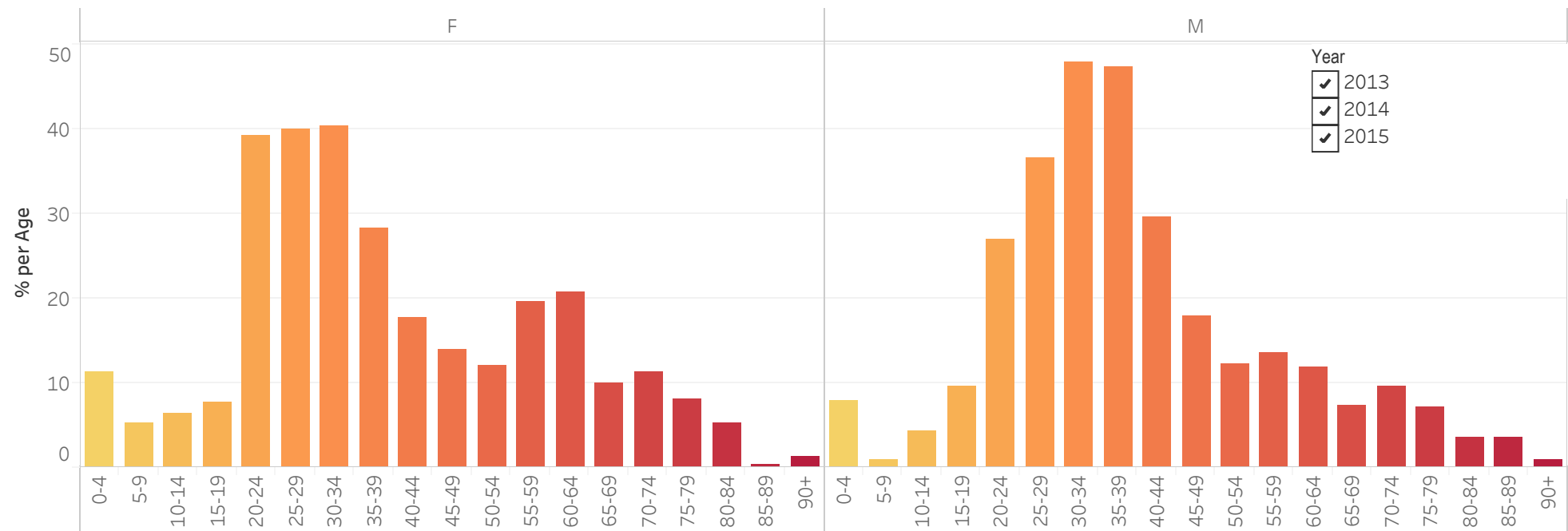
### WESTMINSTER 013E

In third position comes Westminster 013E, with an average over the period of interest of **0.337** sexual offences per head. Once again , the number of offence per head has almost doubled between 2013 and 2015, jumping from 0.23 to 0.41.

The average population for the period of interest is **1280**.

Westminster 013E is a rich area with a mean salary of **£89,000**.

AGE DISTRIBUTION PER GENDER



GENDER DISTRIBUTION



The age distribution is relatively similar between both genders. By analysing the older population, 21% of the female population is between 40 and 60 years old, for 25% of the male population. In LSOA Westminster 013E, the population is roughly well distributed by age.

The pie chart on the right shows unbalanced gender population, with ~ 60.5% of males over the 3 years.

# SEXUAL OFFENCES GREATER LONDON

## 2013 - 2014 - 2015

Westminster 018A	City of London 001F	Westminster 013E	Westminster 018C	Westminster 018B	Westminster 013B	Camden 021A
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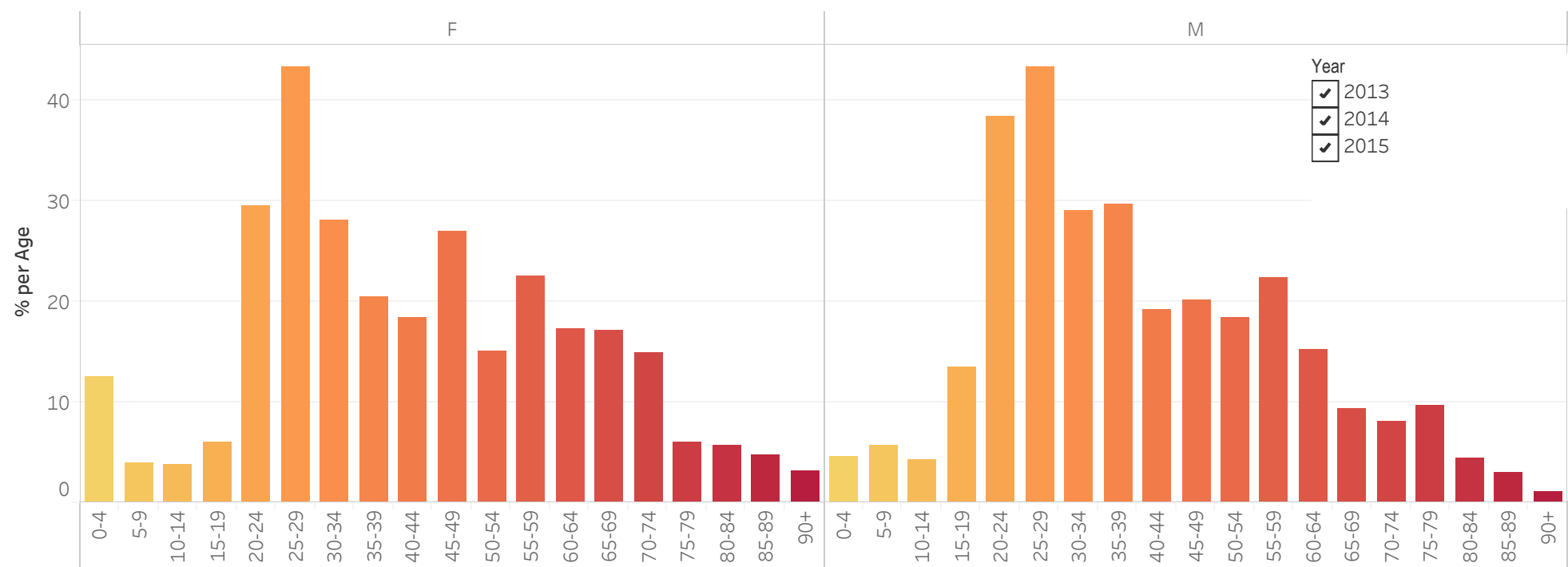
### WESTMINSTER 018C

With an average of **0.204** sexual offences per head, Westminster 018C is our fourth more dangerous area. For this area, the number of offence per head has worryingly more than doubled between 2013 and 2015, jumping from 0.12 to 0.27.

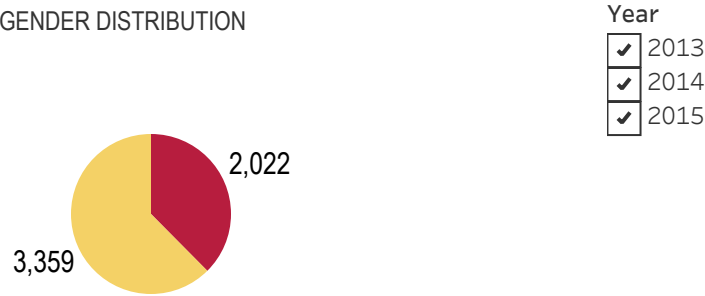
The average population for the period of interest is **1794**.

Westminster 018C is a rich area with a mean salary of **£94,910**.

AGE DISTRIBUTION PER GENDER



GENDER DISTRIBUTION



The suprisingly high number of females between 25 and 29 years old is the first result to highlight, as encountered in Hackey 027G. However, it does represent 14% of the female population, similar to male population of this age. Considering a larger age bracket, 35.64% of the female population is between 15 and 35 years old, for 41% of the male population. In LSOA Westminster 018C, the population is well distributed by age.

The pie chart on the right shows unbalanced gender population, with ~ 62% of males over the 3 years.

# SEXUAL OFFENCES GREATER LONDON

## 2013 - 2014 - 2015

City of London 001F	Westminster 013E	Westminster 018C	Westminster 018B	Westminster 013B	Camden 021A	Hackney 027G
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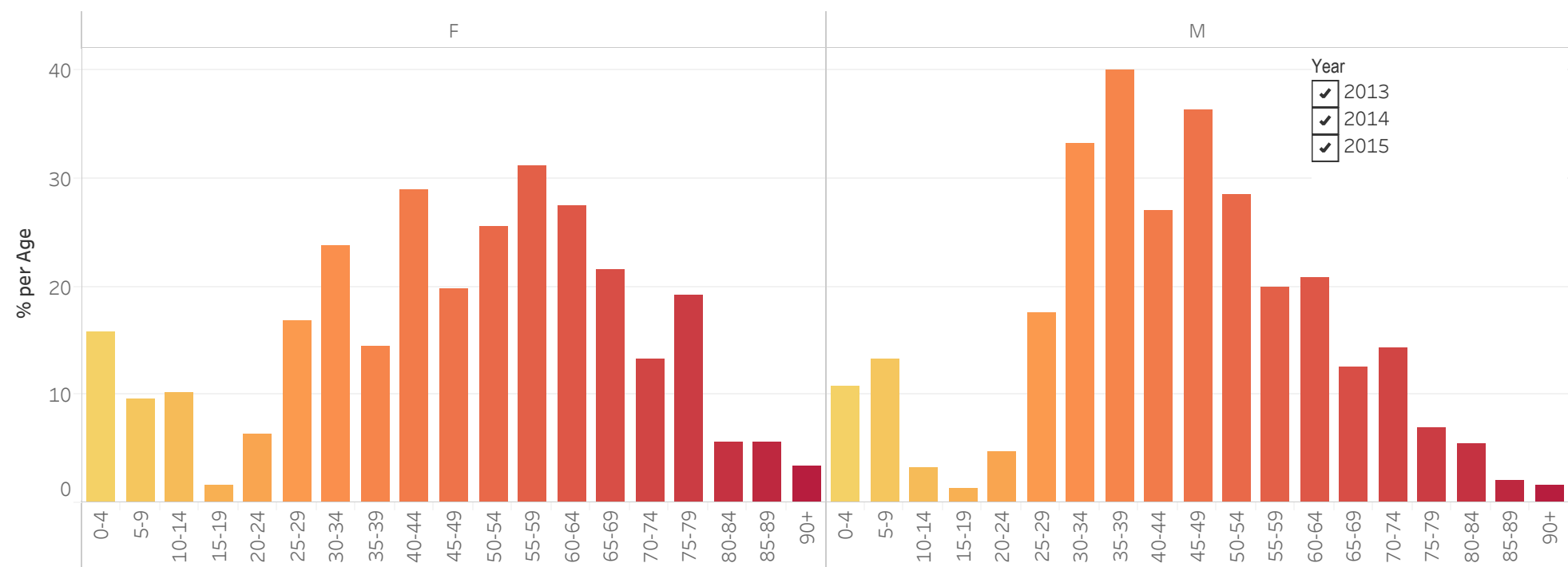
### WESTMINSTER 018B

Fourth area belonging to the Westminster borough comes Westminster 018B, with an average of **0.182** sexual offences per head. Between 2013 and 2015, this area shows the most surprising and shocking increase of offences, jumping from 0.10 to 0.25 assault per head.

The average population for the period of interest is **1327**.

Westminster 018B is a rich area with a mean salary of **£80,620**.

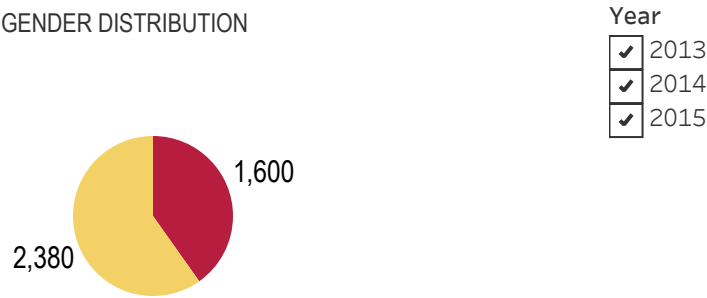
AGE DISTRIBUTION PER GENDER



GENDER DISTRIBUTION

The age distribution for the female looks relatively even, with a relatively old population. The male age distribution looks rather different, with 30% of them being between 25 and 35 years old (for ~15.6% of the female population). This result is quite different from the previous areas. Westminster 018B has an older female population.

The pie chart on the right shows unbalanced gender population, with ~ 60% of males over the 3 years.



# SEXUAL OFFENCES GREATER LONDON

## 2013 - 2014 - 2015

Westminster 013E	Westminster 018C	Westminster 018B	Westminster 013B	Camden 021A	Hackney 027G	Croydon 027B
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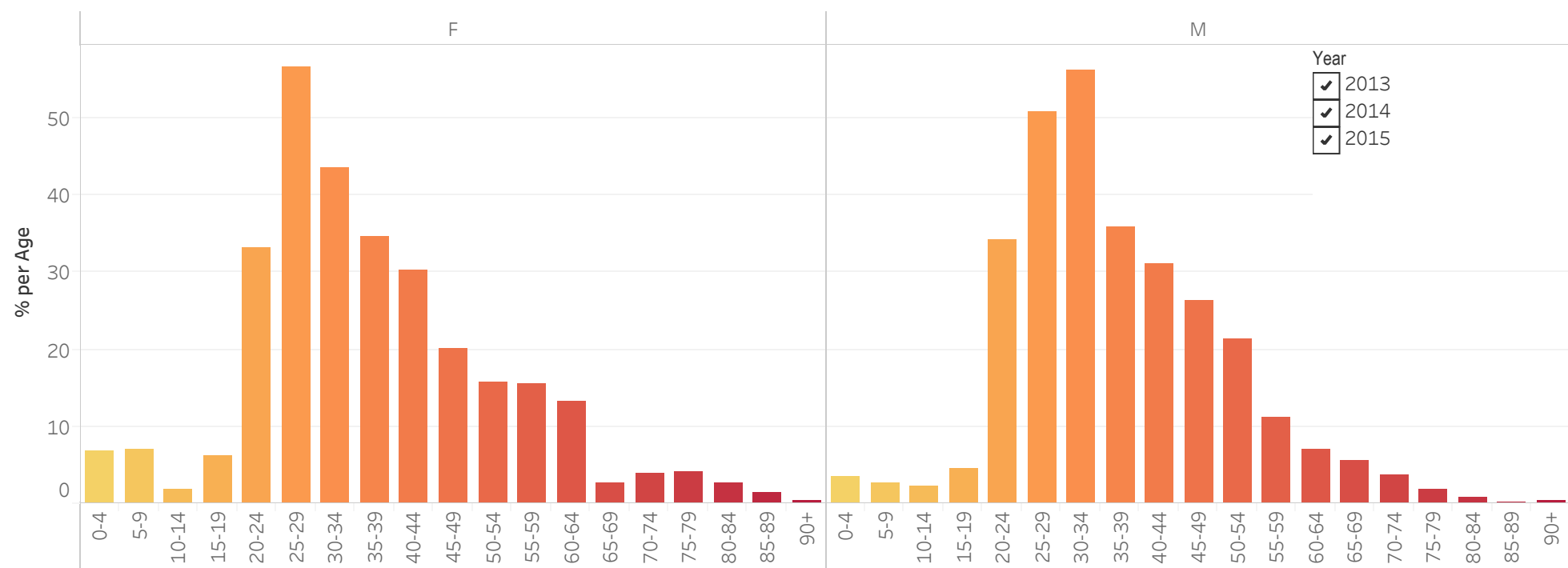
### WESTMINSTER 013B

Westminster 013B is the final area from the Westminster borough in our sample. It has recorded an average of **0.181** sexual offences per head between 2013 and 2015. For this area, the number of offence per head has increased from 0.13 to 0.23.

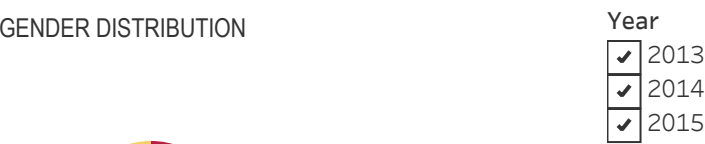
The average population for the period of interest is **2,473**.

Westminster 013B is a rich area with a mean salary of **£80,260**.

AGE DISTRIBUTION PER GENDER



GENDER DISTRIBUTION



The age distribution profile for both gender looks relatively similar.

The pie chart on the right shows unbalanced gender population, with ~ 62% of males over the 3 years.



# SEXUAL OFFENCES GREATER LONDON

## 2013 - 2014 - 2015

Westminster 018C	Westminster 018B	Westminster 013B	Camden 021A	Hackney 027G	Croydon 027B	Age Distribution for all area
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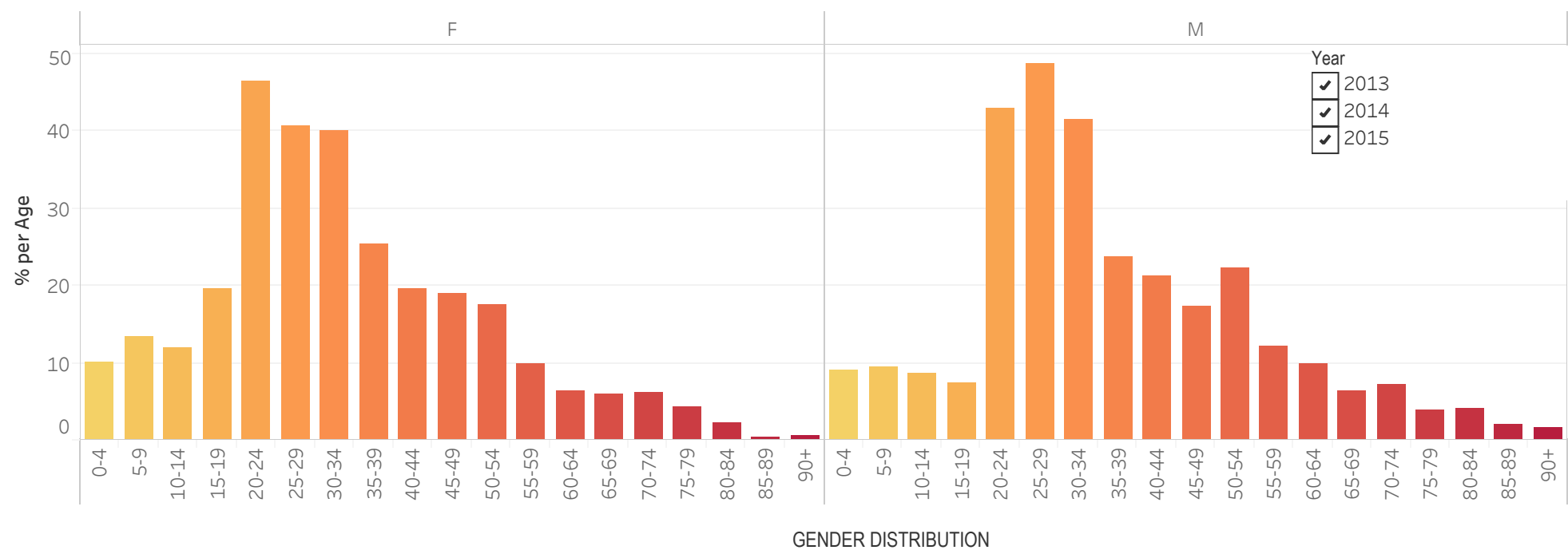
### CAMDEN 021A

In the bottom 3 comes Camden 021A with an average of **0.157** sexual offences per head.  
As highlighted on the map, Camden 021A has become more dangerous in 2014 and 2015, with the number of offence per head almost tripling from 0.8 to 0.22.

The average population for the period of interest is **1,593**.

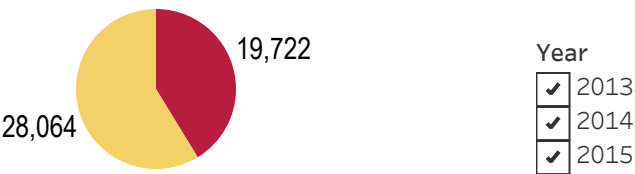
Camden 021A is a rich area with a mean salary of **£69,120** but poorer than the previous areas analysed.

AGE DISTRIBUTION PER GENDER



The age distribution for males and females looks very alike, as highlighted on the graph above.  
Indeed, for both gender, 45% of the population is between 20 and 34 years old.

The pie chart on the right shows unbalanced gender population, with ~ 59% of males over the 3 years.



# SEXUAL OFFENCES GREATER LONDON

## 2013 - 2014 - 2015

Westminster 018B	Westminster 013B	Camden 021A	Hackney 027G	Croydon 027B	Age Distribution for all area	Key Results
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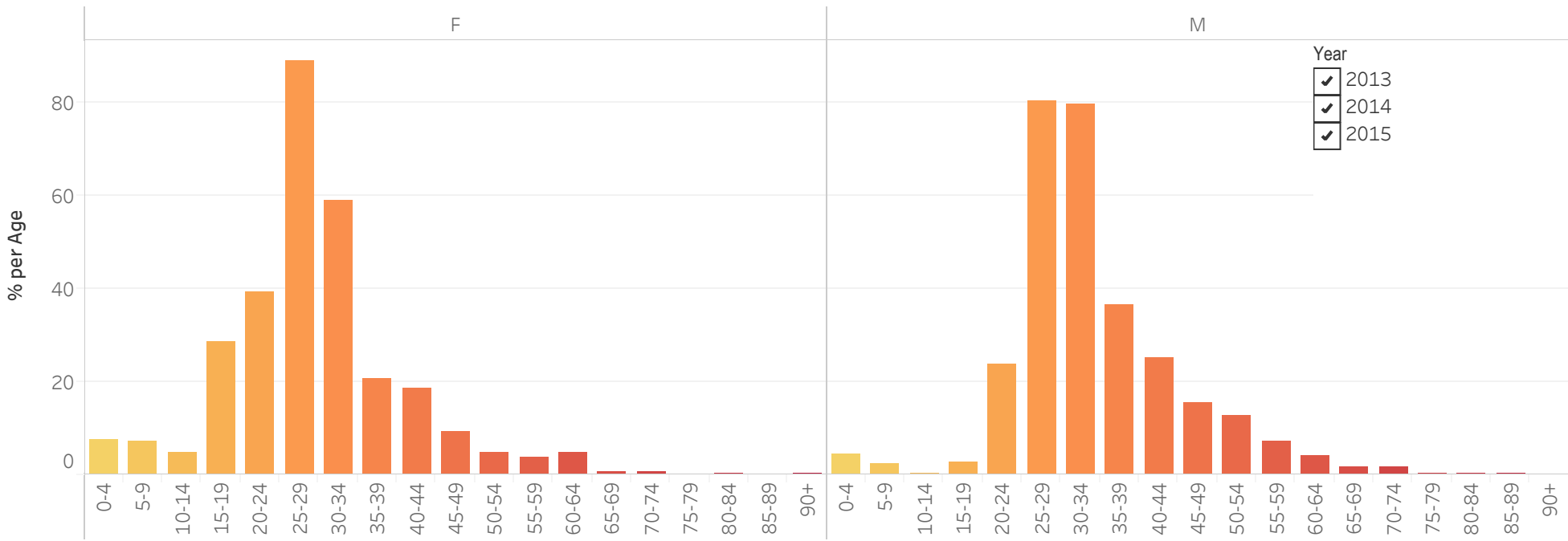
### HACKNEY 027G

With an average of **0.152** sexual offences per head, Hackney 027G is our seventh most dangerous area. For this area, the number of offence per head has worryingly more than doubled between 2013 and 2015, jumping from 0.09 to 0.20.

The average population for the period of interest is **1,790**.

Hackney 027G being further away from the centre of London, the mean salary is less important than in the rest of our sampling, with **£56,690**.

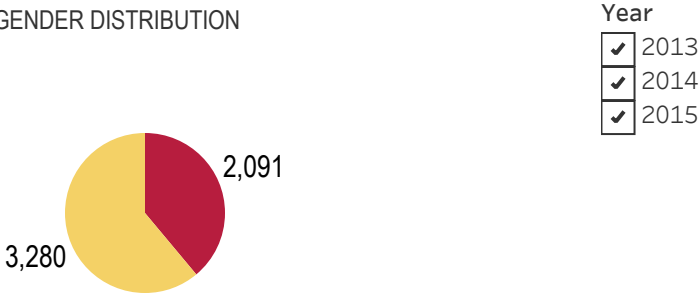
AGE DISTRIBUTION PER GENDER



GENDER DISTRIBUTION

The suprisingly high number of females between 25 and 29 years old is the first result to highlight. It does represent ~ 30% of the female population over the 3 years of interest. Considering a larger age bracket, 72% of the female population is between 15 and 35 years old, for 62% of the male population. In LSOA Hackney 027G, there is a very young female population.

The pie chart on the right shows unbalanced gender population, with ~ 61% of males over the 3 years.



# SEXUAL OFFENCES GREATER LONDON

## 2013 - 2014 - 2015

Westminster 013B	Camden 021A	Hackney 027G	Croydon 027B	Age Distribution for all area	Key Results	Limitations and Recommendations
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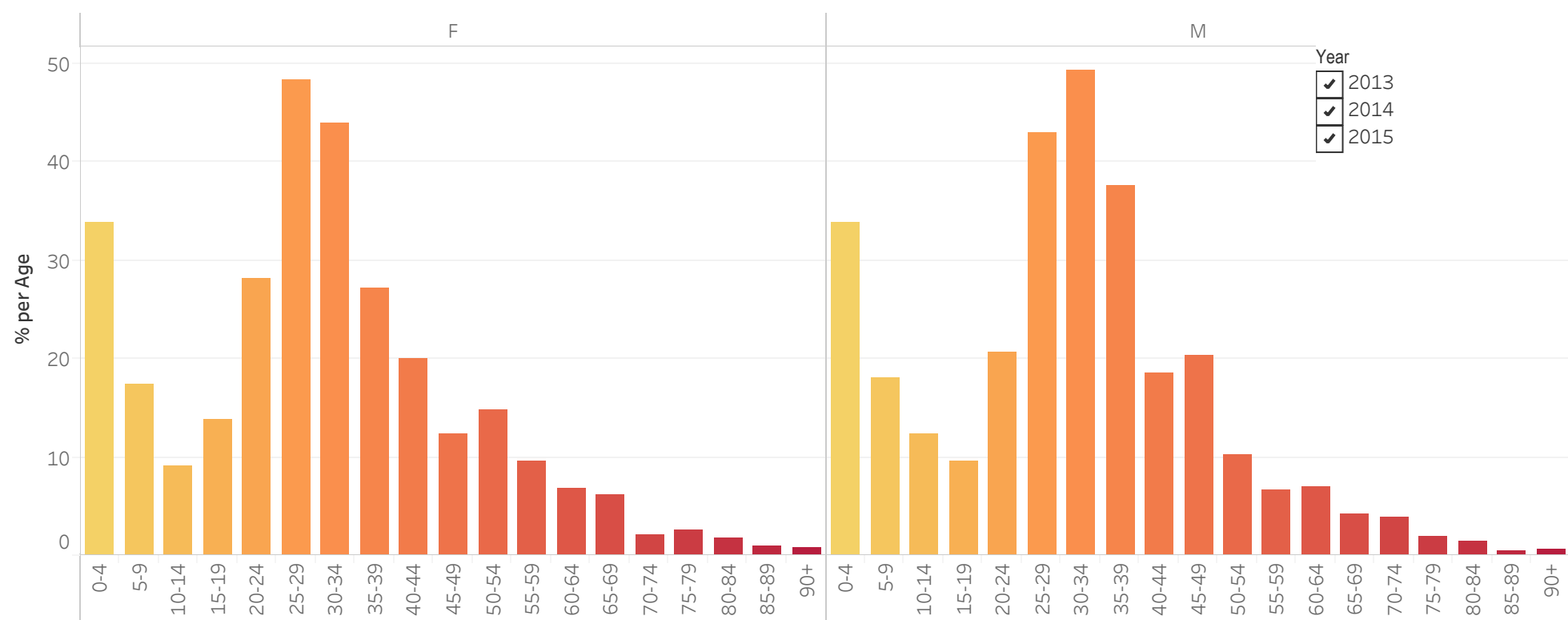
### CROYDON 027B

Finally, Croydon 027B comes last in our sampling with an average of **0.134** sexual offences per head.  
For this area, the number of offence per head has steadily increased from 0.08 to 0.16 offences per head between 2013 and 2015.

The average population for the period of interest is **2,836**.

Croydon 027B is the poorest area of our sample, with a mean salary of **£43,730**.

AGE DISTRIBUTION PER GENDER



GENDER DISTRIBUTION



The age distribution for males and females looks very alike, as highlighted on the graph above.  
Indeed, for both gender, the population is relatively young.

The gender distribution in Croydon is in the United Kingdom average, with 51% of males over the 3 years, as shown by the pie chart on the right.

# SEXUAL OFFENCES GREATER LONDON

## 2013 - 2014 - 2015

Westminster 013B	Camden 021A	Hackney 027G	Croydon 027B	Age Distribution for all area	Key Results	Limitations and Recommendations
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### AGE DISTRIBUTION FOR ALL AREAS

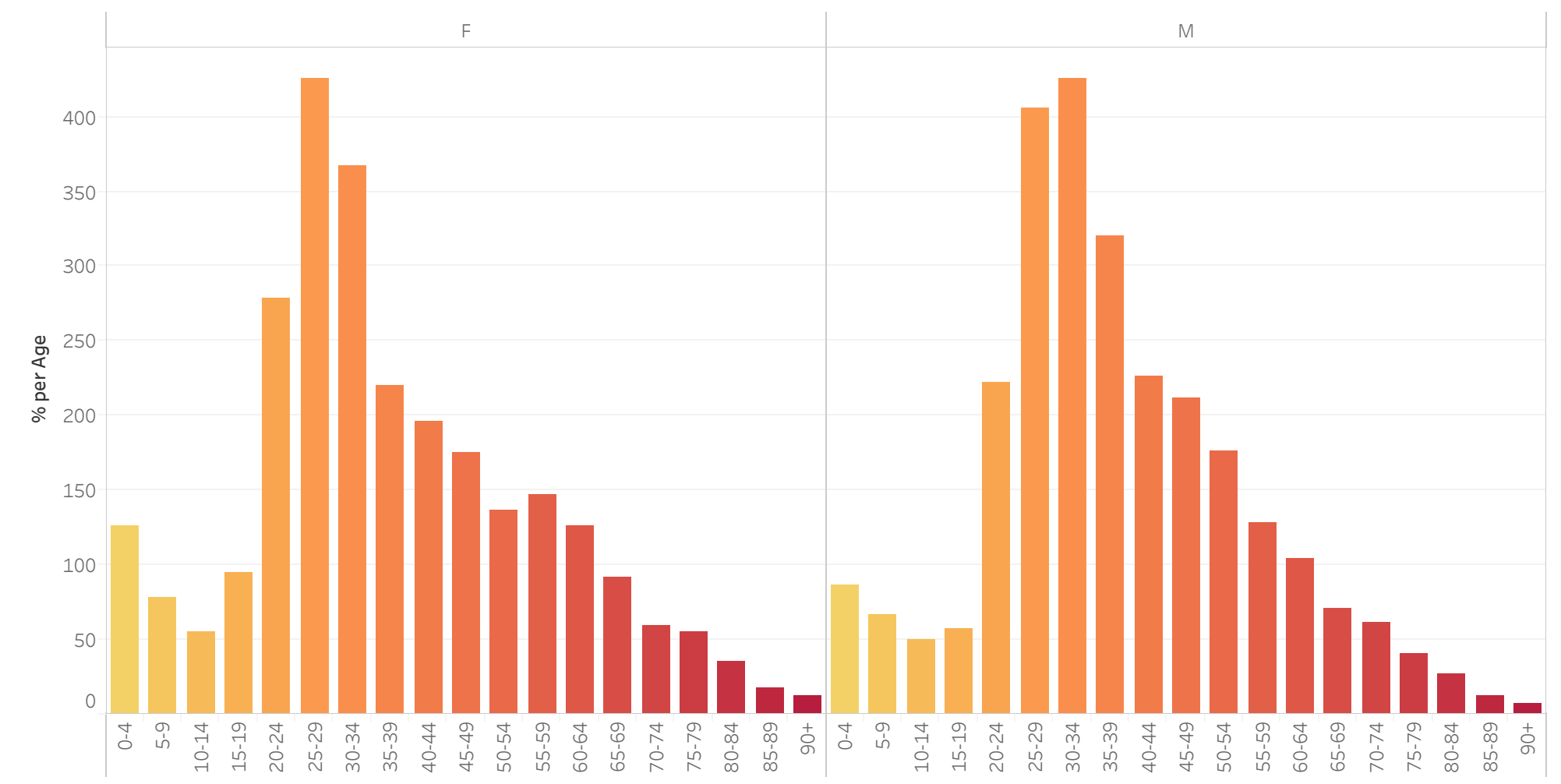
With no real trends observed for the age distribution per LSOA area, the graph below shows the age distribution per gender for all areas during the 3 years.

The main differences observed between the age profiles is the distribution of the "working" population. Indeed, there are more females aged between 20 and 24 years old (31%) than males (25%).

However, the plot shows an even bigger discrepancy for the population ages between 35 and 39 years old, with 35% of males for 25% of females.

To summarize, the working population is our selected areas has younger females and older men.

AGE DISTRIBUTION PER GENDER



# SEXUAL OFFENCES GREATER LONDON

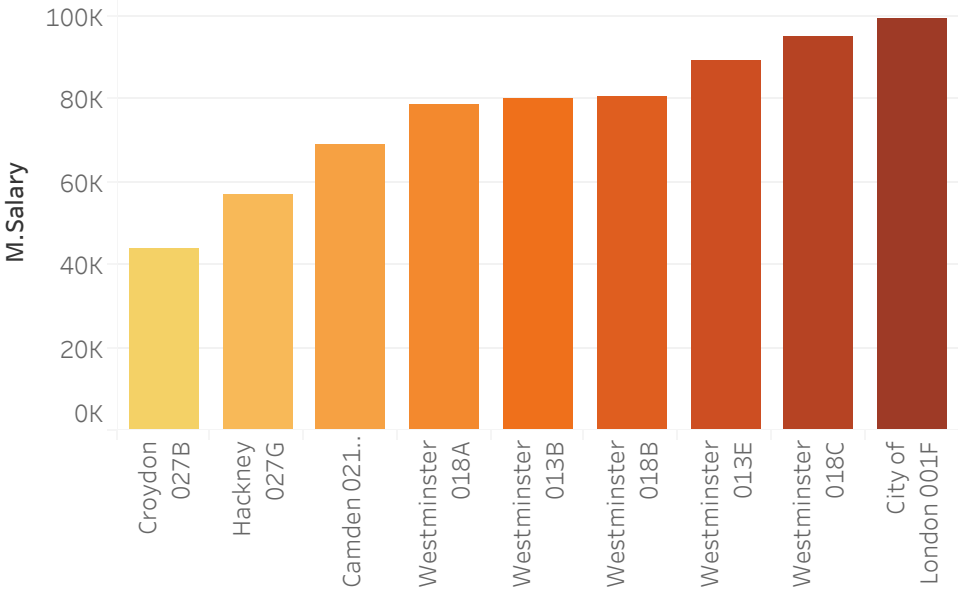
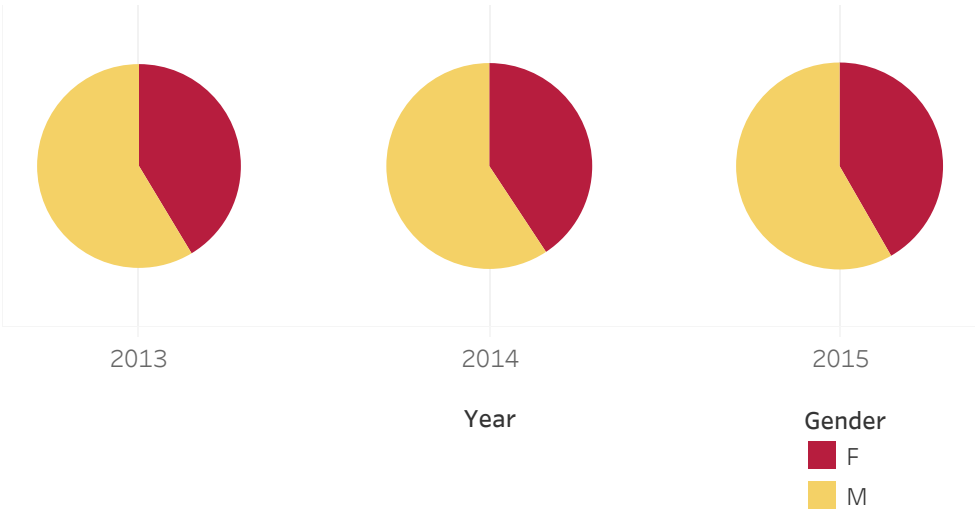
## 2013 - 2014 - 2015

Westminster 013B	Camden 021A	Hackney 027G	Croydon 027B	Age Distribution for all area	Key Results	Limitations and Recommendations
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### KEY RESULTS

1.The first important result to highlight is the gender distribution for our sample. Indeed, the United Kingdom gender division is male to female ratio of 51% / 49% respectively according to government document ([ref 3](#)), but the analysis shows that the selected areas are male-dominated.

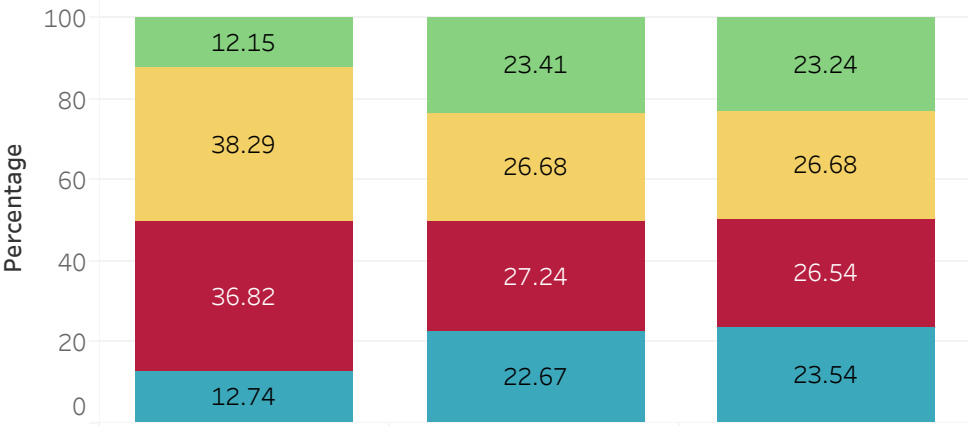
The pie charts on the right represent the gender distribution for all our areas per year, with an average ratio of 59% males for 41% females.



2.With the exeption of Croydon, the mean salary for the selected LSOA codes are over the mean salary for London (~ £48,000 in 2013, [ref 4 and 5](#)).

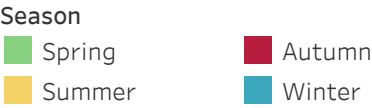
This comes as a surprise as people would probably think poorer areas are most encline to sexual assaults.

However, we need to keep into mind that most of these areas are very touristic and aggregate a lot of people in small zones.



3.Suprisingly, there is no real pattern in terms of season for the occurence of sexual assaults.

Indeed, exsept in 2013 where most assaults happened in Summer and Autumn, the assaults in 2014 and 2015 are equally spread throughout the year.



# SEXUAL OFFENCES GREATER LONDON

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Westminster 013B	Camden 021A	Hackney 027G	Croydon 027B	Age Distribution for all area	Key Results	Limitations and Recommendations
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### MODEL LIMITATIONS AND RECOMMENDATIONS

#### LIMITATIONS & BIAS

The first bias this study is victim of is the gender of the consultant. I have assumed that most of the sexual offences were perpetrated on females by males. But I am aware that males get assaulted as well and I was reminded of this reality no later than on Friday 25th of November 2016, with an article from Metro London (pictured on the right). Having no information about the gender of the assaulted person, I have hence taken the liberty to make this analysis about sexual assaults on females.



Unable to find more recent data, the mean salary is for 2013 and has been extrapolated for 2014 and 2015.

#### RECOMMENDATIONS

With most of the sexual offences being located in Westminster borough and the city of London, very touristic areas, serious investigations have to been done in order to make them safer. Looking at the mean salary of these areas, an increase of tax for funding additional police force sounds realistic.

All areas in our sample but Croydon has an unbalanced gender distribution, being all heavily male dominated. There is then an important work of information to be done, from early age but also in universities and work places. The police could partner up with education and management teams and offer workshop to promote gender equality as well as offering steps to prevent sexual assaults.

The United Kingdom could also get inspiration from other countries, with the example of the anti-sexual violence organisation, called RAINN (Rape, Abuse & Incest Nation Network), in the United States of America (ref 6). It carries out programs to prevent sexual violence, help victims and ensure that perpetrators are brought to justice.

<https://www.rainn.org/about-sexual-assault>

