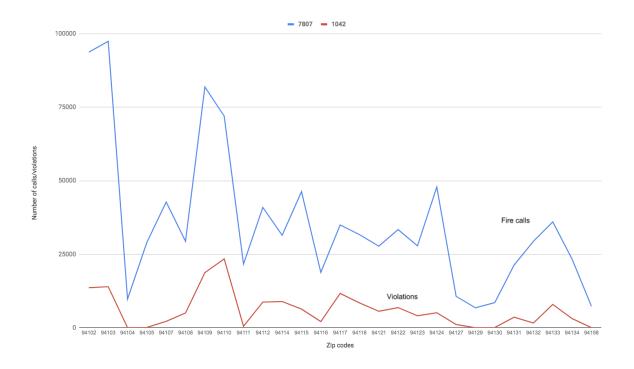
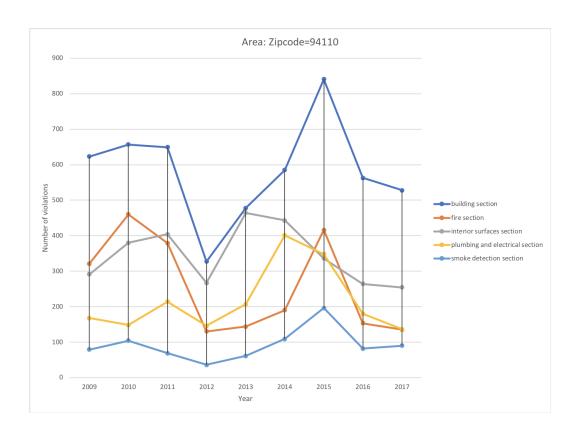
Results

1. From analytics 1, we came to a conclusion that fire incidents reported are directly proportional to violations reported by SF inspection department. Such similar conclusion was observed in reference paper[1] and [4]. An insight could be that fake calls were made to the Fire department by those areas. Another could be that some violations in these areas went undetected.



2. From analytics 2, we found out that violations related to building section are more in number than the other types over the past 10 years. So building violations constitute about a major part of the total violations in any area. In the following graph, it can be observed that a minima is reached in the year 2012 and there is an occurrence of maxima around 2014 - 2016. Moreover, since the graphs of fire section and smoke detection section nov_categories attain maximas and minimas together, we can say that they are all related to each other. A violation of one can suggest a possibility that a violation of another also exists.



3. From Analytics 3, we can observe that number of fake calls reported over the years is almost consistent over last 10 years. Moreover, we can observe in graph 2 that number of fake calls is directly proportional to total incidents reported. As most of the fake calls are made due to faulty smoke detection equipments, fire equipments or alarm system, this analytic substantiates our findings obtained from 1st analytics.

