

Deliverable 3

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Base Project

1. Where did business assistance go during the pandemic? What were the demographic profiles of the communities where the businesses were located?

We analyzed the business assistance data during the pandemic.

We firstly analyzed the populations of different jobs in Boston. We could find that the job type "Noninstitutionalized population" has the highest population and then is "College/University student". The job type "Other institutional facilities" has the lowest population.

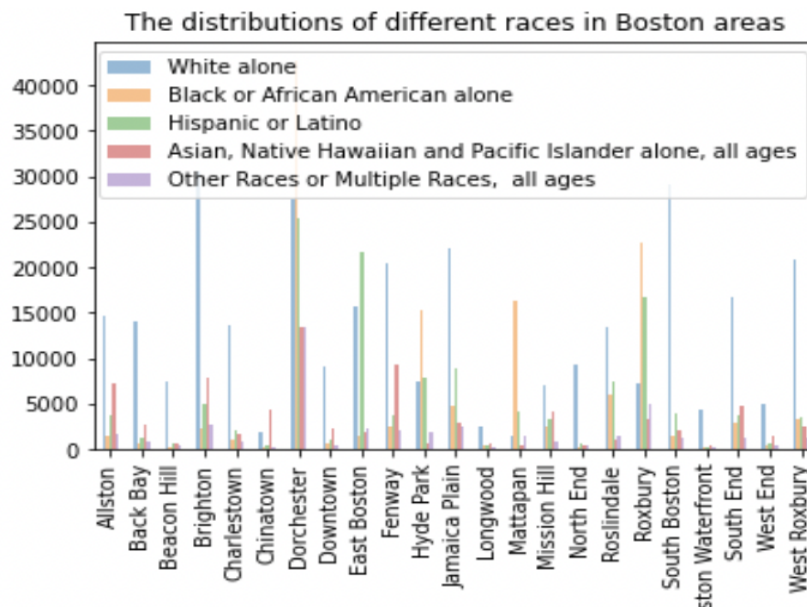


Fig 1

Then, we analyzed the distribution of different races in Boston areas, and visualized the distribution in a bar chart. From the result, we found that the population of "White alone" is the largest in the Boston area, while "Asian, Native Hawaiian and Pacific Islander alone, all ages" has the lowest population. Since the gap between the population of "White alone" and other races is large, especially the race of "Asian, Native Hawaiian and Pacific Islander alone, all ages", there might be a risk of the distribution of relief funds between different races. From our analysis, we found out that Mattapan has the highest black population - 68.29% followed by Hyde Park - 49.96%, Roxbury - 41.52%, and Dorchester - 34.95%. For the LatinX population, we find that East Boston has the

highest percentage - 50.38% followed by Roxbury - 30.47% and Roslindale - 25.09%.(Fig 1)

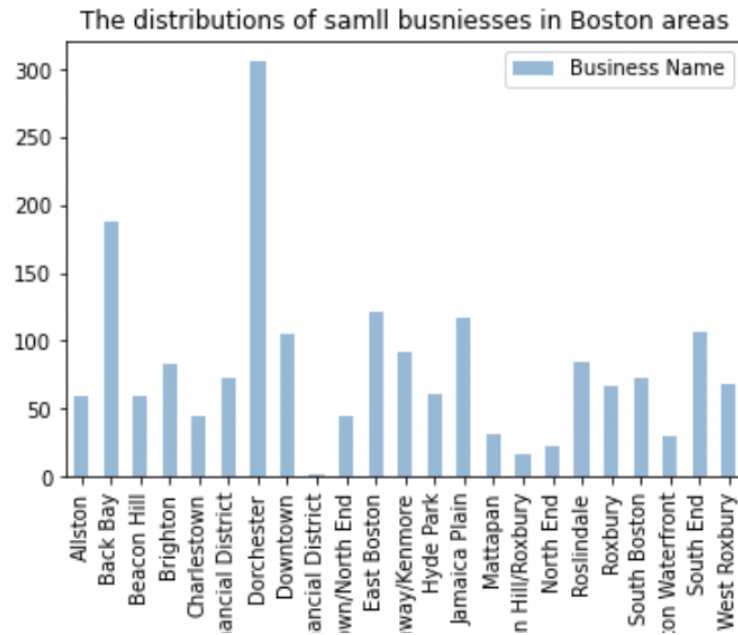


Fig 2

We also analyzed the distributions of small businesses in Boston areas, and visualized it in a bar chart. The result showed that Dorchester has the most small businesses, and then is Back Bay, while Downtown/ Financial District has the least number of businesses. (Fig 2)

2. Where did the city's rental assistance go during the pandemic? What were the demographic profiles of the recipients of these funds?

We analyzed the rental assistance data during the pandemic.

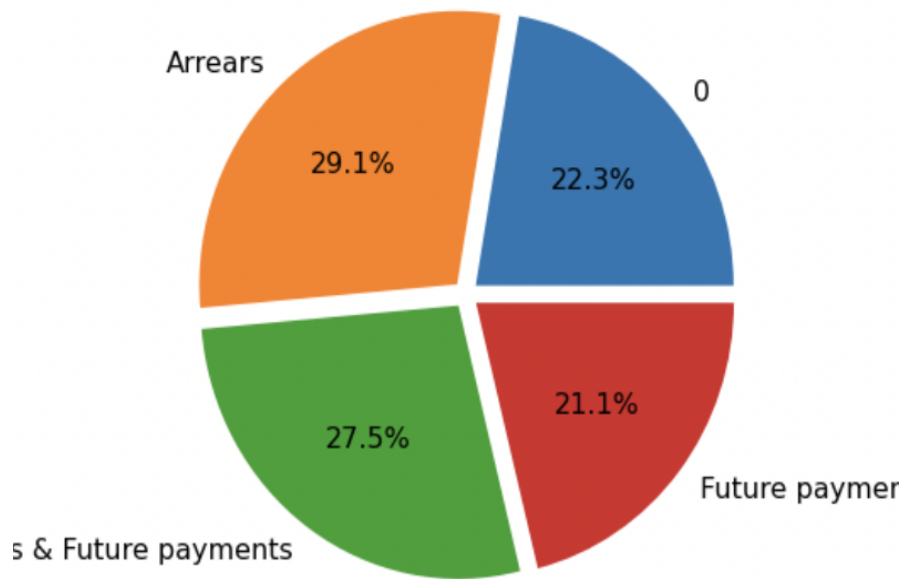


Fig 3

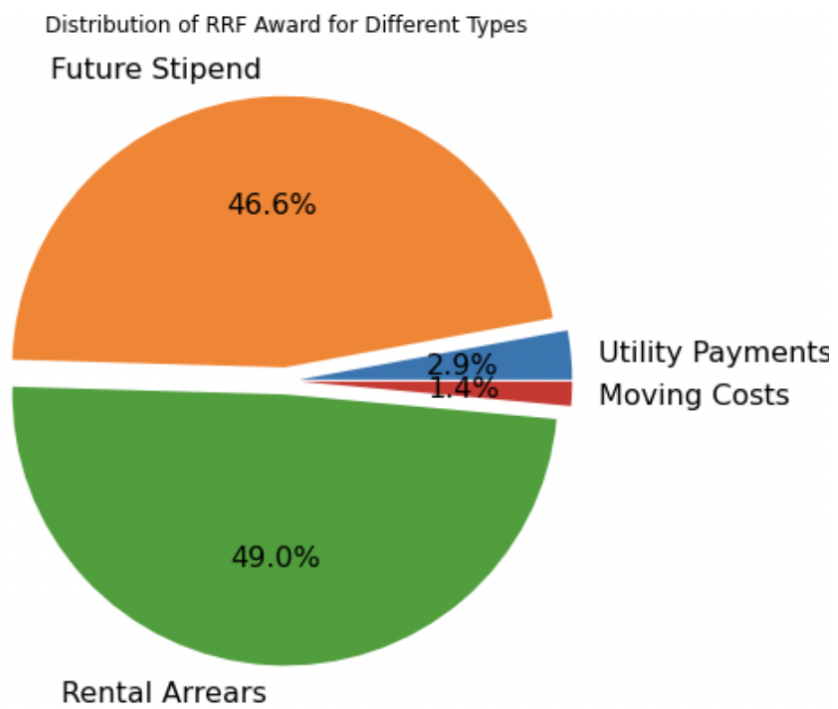


Fig 4

We firstly analyzed the distribution of RRF award amounts for different RRF types, and visualized the distribution in a bar chart. We found that, from Oct20 to Mar21, the funds to ‘Arrears’ are highest, and then are ‘Arrears & Future payments’ and ‘Future payments’. The difference between their distribution is not that big. (Fig 3) From April21 to Sept21, the award to ‘Rental Arrears’ and ‘Future Stipend’ are highest, while the award to ‘Utility Payments’ and ‘Moving Costs’ is lowest. (Fig 4)

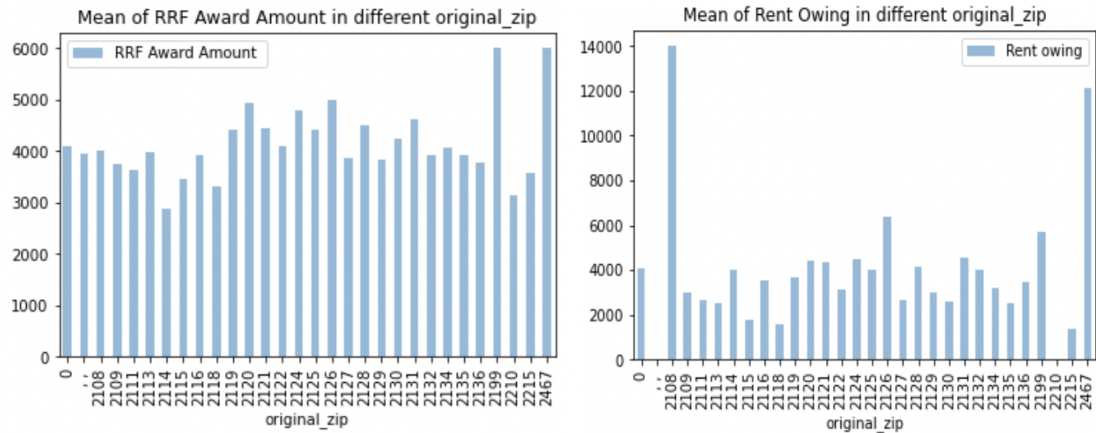
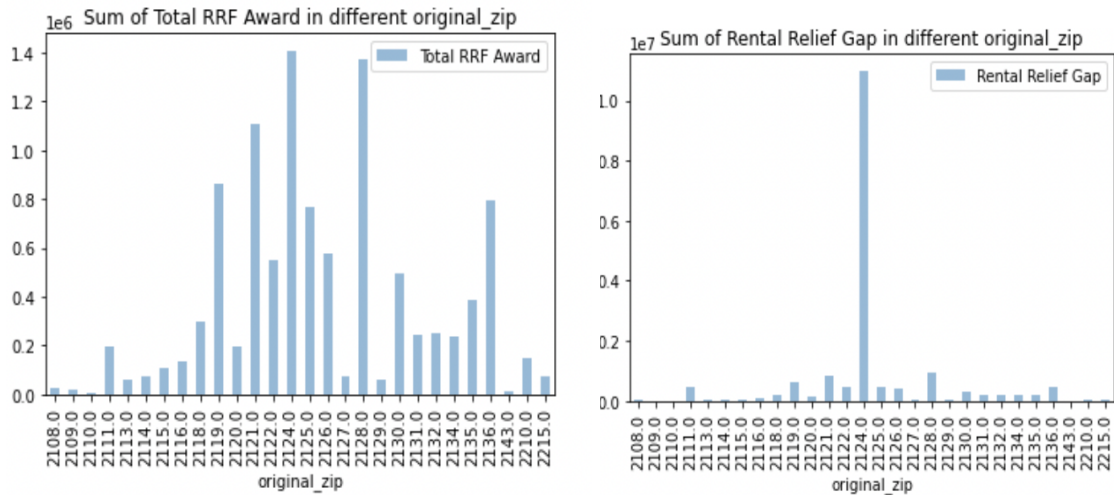


Fig 5



and zip 2114 and 2210 have the lowest funds, while zip 2108 and 2467 have the highest rent owing, and zip 2210 has the lowest rent owing. (Fig 5) From the data April21 to Sept21, we could see that zip 2124 and 2128 have the highest funds, and zip 2110 and 2143 have the lowest funds, while zip 2124 has the extremely highest amount of rental relief gap. (Fig 6)

We also analyzed the difference between RRF amount and the owing amount in different zips. We found that zip 2124 has an extremely big difference compared to the differences in other zips.

3. Where are the city's economic development licenses? Which communities are benefitting? Which communities are being left out?

We analyzed the city's economic development licenses in the Food, Alcohol, Cannabis field.

For Food (Fig 7) and Alcohol Licenses (Fig 8), Boston has the highest amount of licenses while Chestnut Hill and Southend have the lowest amounts of licenses. (Fig 9) For Cannabis Licenses, Dorchester has the highest number of licenses while Mission Hill and Westend have the lowest.

(Fig 10) The distribution for general licenses are similar to food and liquor licenses, meaning the food and alcohol industries have a higher impact on the overall economy development.

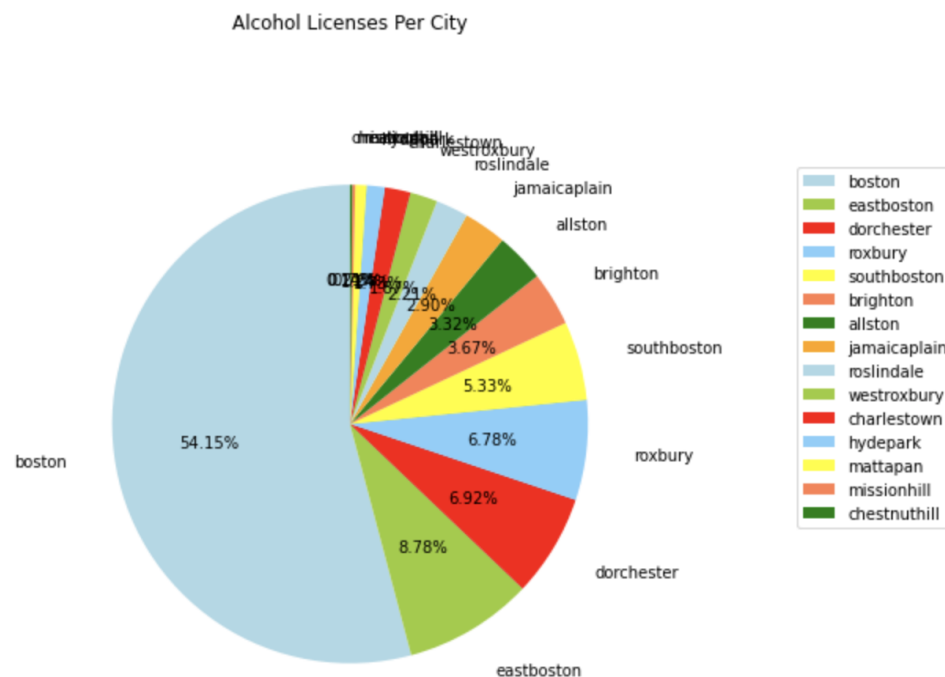


Fig 7

Food Licenses Per City

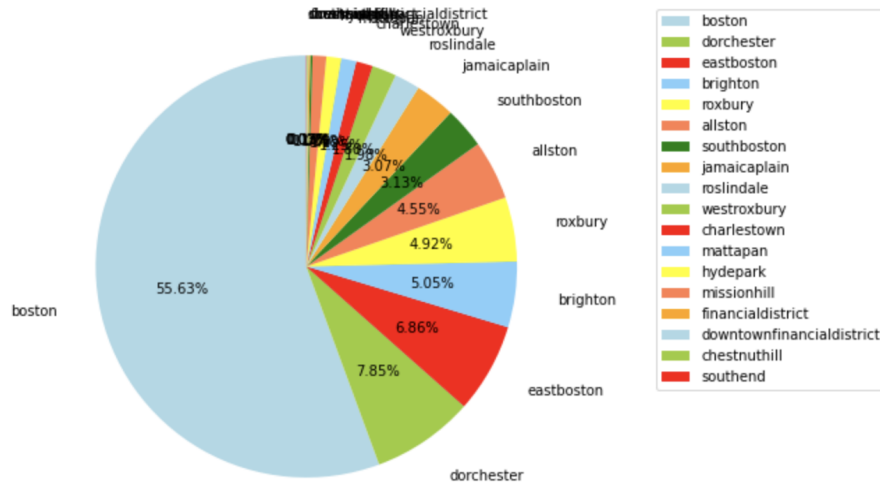


Fig 8

Cannabis Licenses Per City

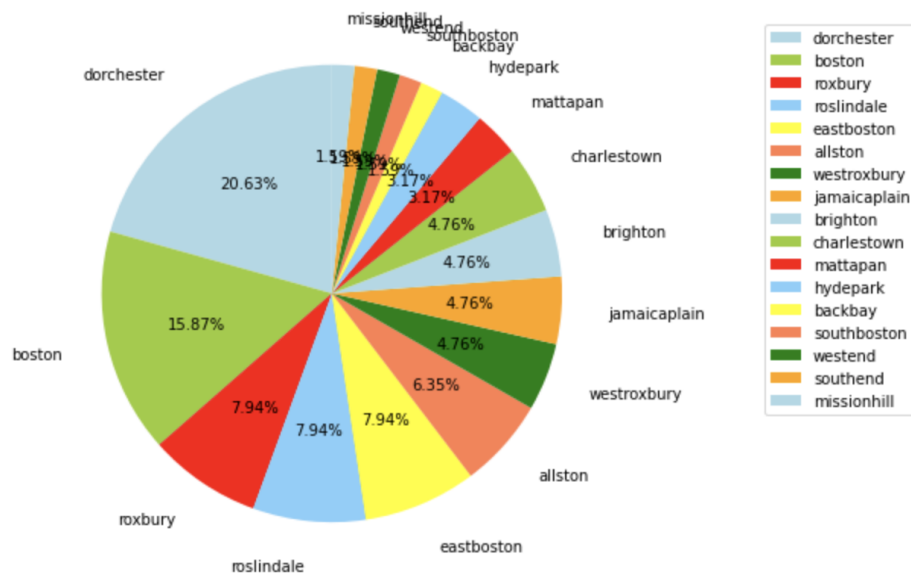


Fig 9

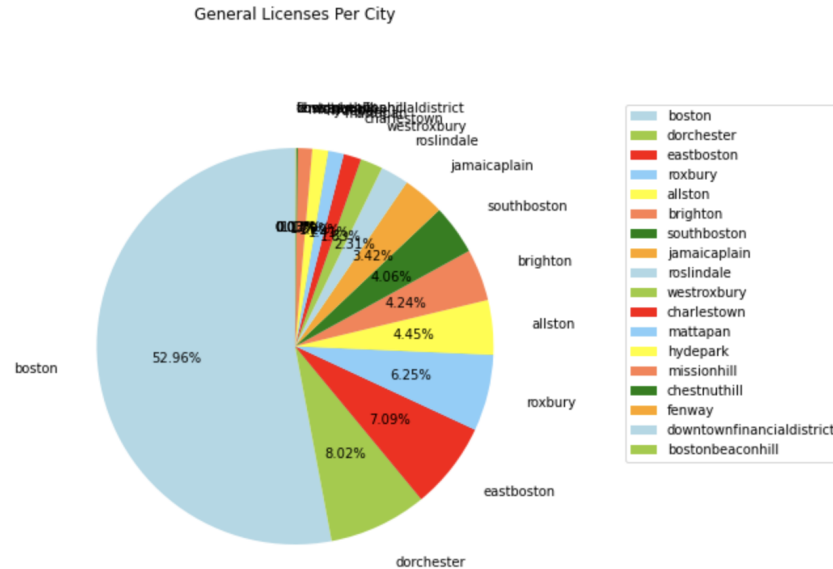


Fig 10

Boston, Dorchester and East Boston benefitting the most, while Chestnut Hill, Mission Hill and Hyde Park are being left out. This may due to population distribution, since most of the licenses are concentrated in Boston downtown.

311 Extension Project

We analyzed the data of the RRF request.

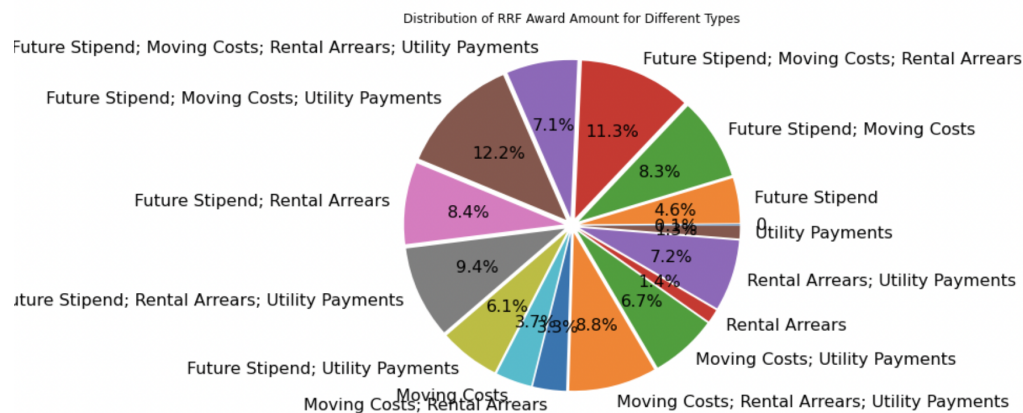


Fig 11

- We firstly analyzed the distribution of RRF award amounts for different types. From the graph above, we could find that 'Future Stipend; Rental Arrears; Utility

Payments' has the highest funds and then is 'Future Stipend; Rental Arrears', whose number of funds is really close to the highest funds. The 'Rental Arrears' and 'Utility Payments' have the lowest funds, which are 1.3% and 1.4% respectively. (Fig 11)

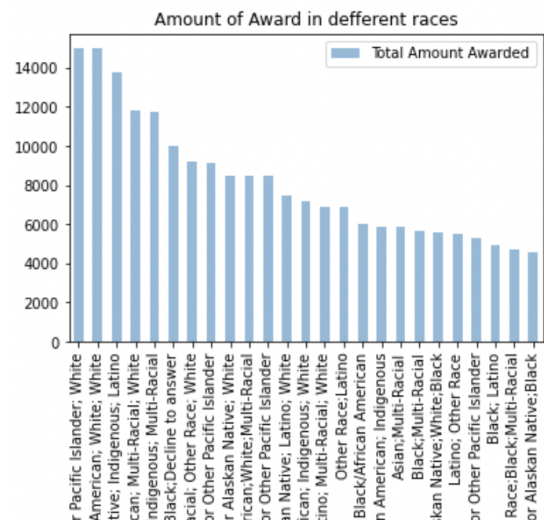


Fig 12

- Then we analyzed the distribution of the amount of awards in different races. From the graph above, we could find that the race combination of 'American Indian or Alaskan Native; Black/African American; Indigenous; Native Hawaiian or Other Pacific Islander; White' has the largest amount of awards, and then is 'Black/African American; White; White'. (Fig 12)

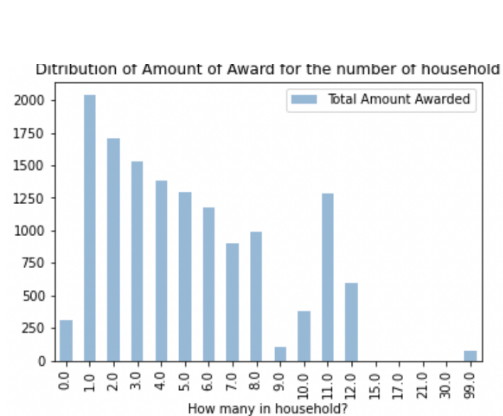


Fig 13

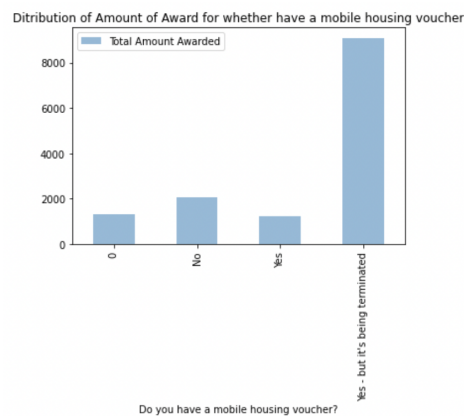


Fig 14

- We also analyzed the distribution of home ownership level. For the distribution of the amount of award for the number of households we found that the household of 1 has the highest funds and then is 2. (Fig 13) For the distribution of the amount

of award for whether to have a mobile housing voucher, we could find that the type of 'Yes but it's being terminated' has the highest funds. (Fig 14)

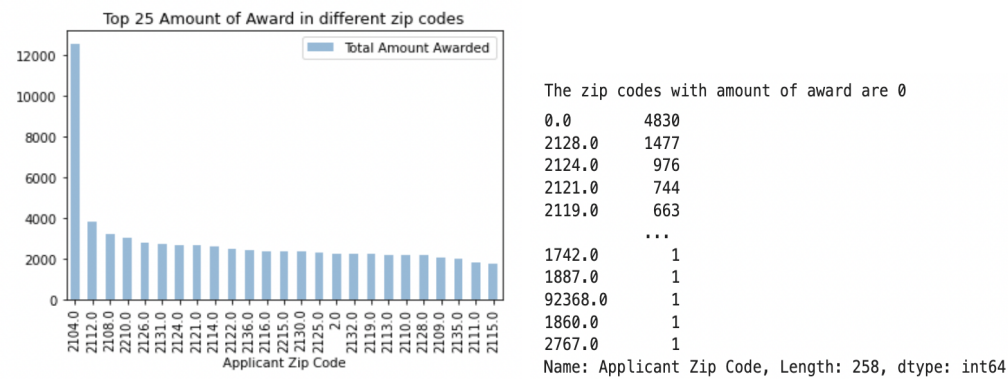


Fig 15

- The graph above is the distribution of the amount of awards in different zip codes. From the result, we could find that the zip code 2104 has the highest number of awards, While more than 250 zip codes didn't receive awards. (Fig 15)