The Parole Hearing Data and Ask a Prisoner are attempts to work on the data provided by Department of Corrections and Community Supervision. The following analysis has been done with a dataset having the following attributes:

1. NYSID
2. DIN
3. Inmate Name
4. Parole Interview Type
5. Date of Interview
6. Interview Decision
7. Sex of the inmate
8. Race/Ethnicity of Inmate

As the DIN is divided into 3 parts, the first two characters being the year they got admitted into the facility, an extraction of it was done, appending appropriate 20(if no. < 16) or 19(else) character to it to give a field of year they got imprisoned. Also their birth date year was extracted, to yield a field of age. Another field added from the interview date was the number of years they have stayed in the prison. Note that many times, one inmate would have more than one interviews (sometimes- it is denied once or paroled later or any other combination but my aim was to see, later, any age trend in the type of decision imparted)

First Analysis:

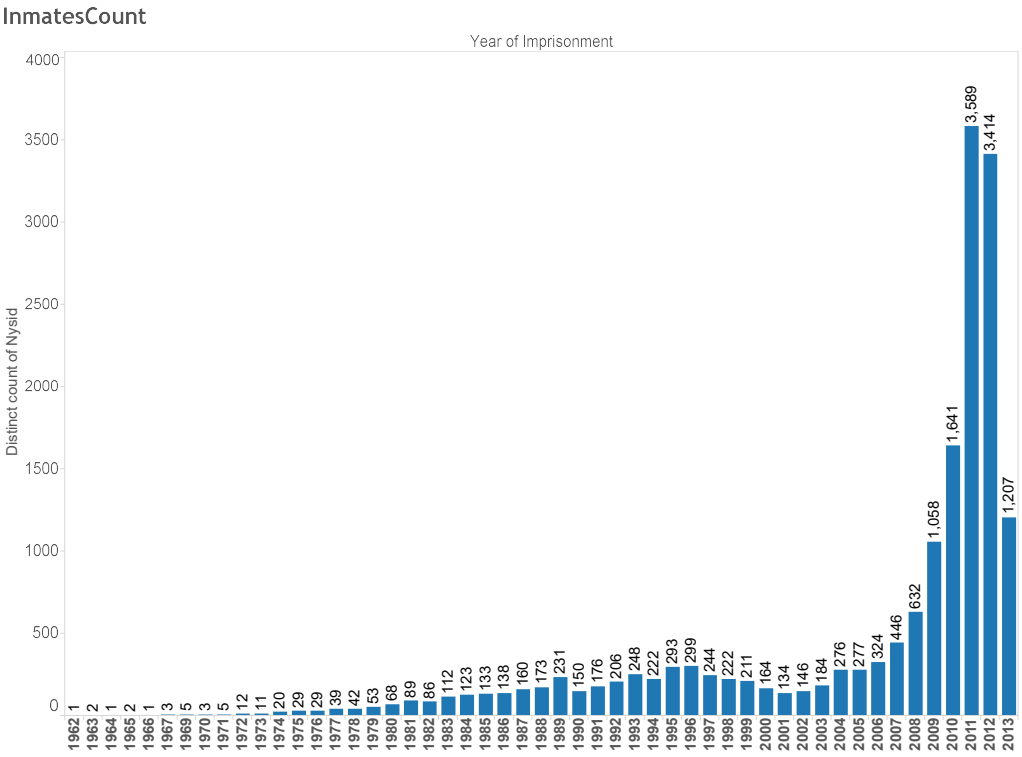
I wanted to see, what is the count of inmates admitted into the facility each year.

I could see that there has been an increase in the years 2009 and a decrease in 2013.

Assessing it by Race and Ethnicity we see that Black population forms a major part of the inmate population. Followed by White/Hispanic. (The Asian/American Indian/Other groups did not form a major part of the population, during the analysis hence have not been included as these did not set the trend. Similarly, with female section of the population which formed a straight line for each year, meaning that only the men inmates responded to or were instrumental for the trend in the parole dataset.)

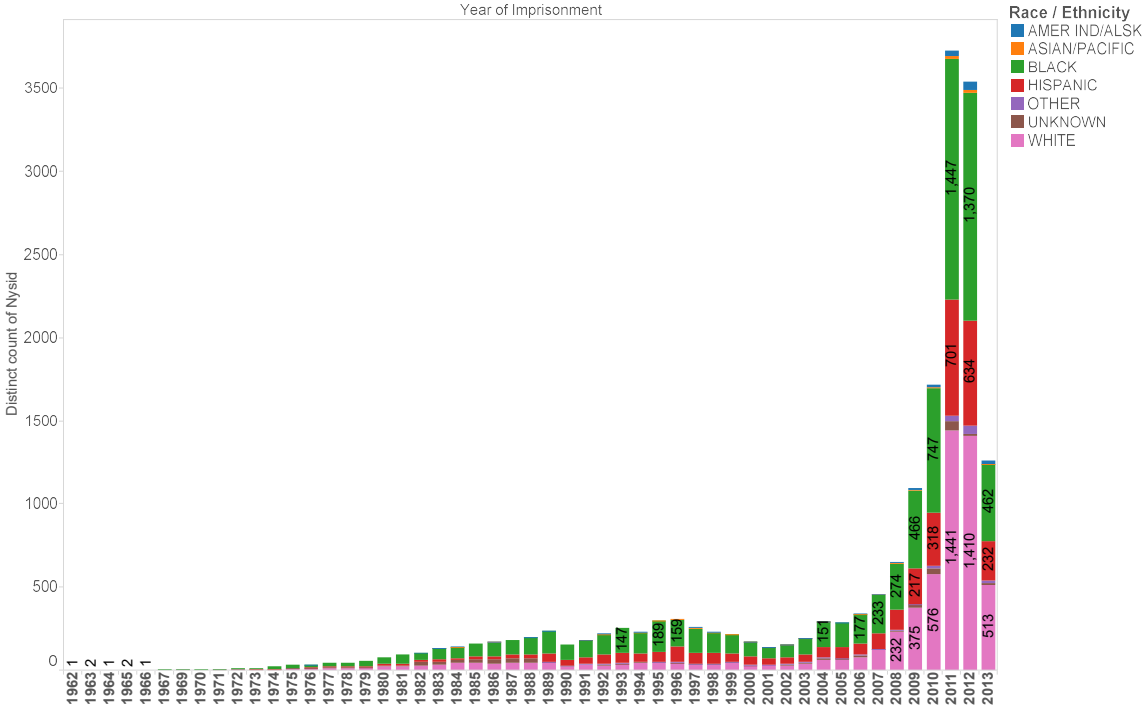
As the Black population is the most, we can think that there should be higher interview rate and decision of them, and if not then there is a bias existing between them. This we can see later segregating data into race and ethnicity.

For now a percentage of Black, White and Hispanic Population has been taken. Percentage always serves as a better measure as its relative.

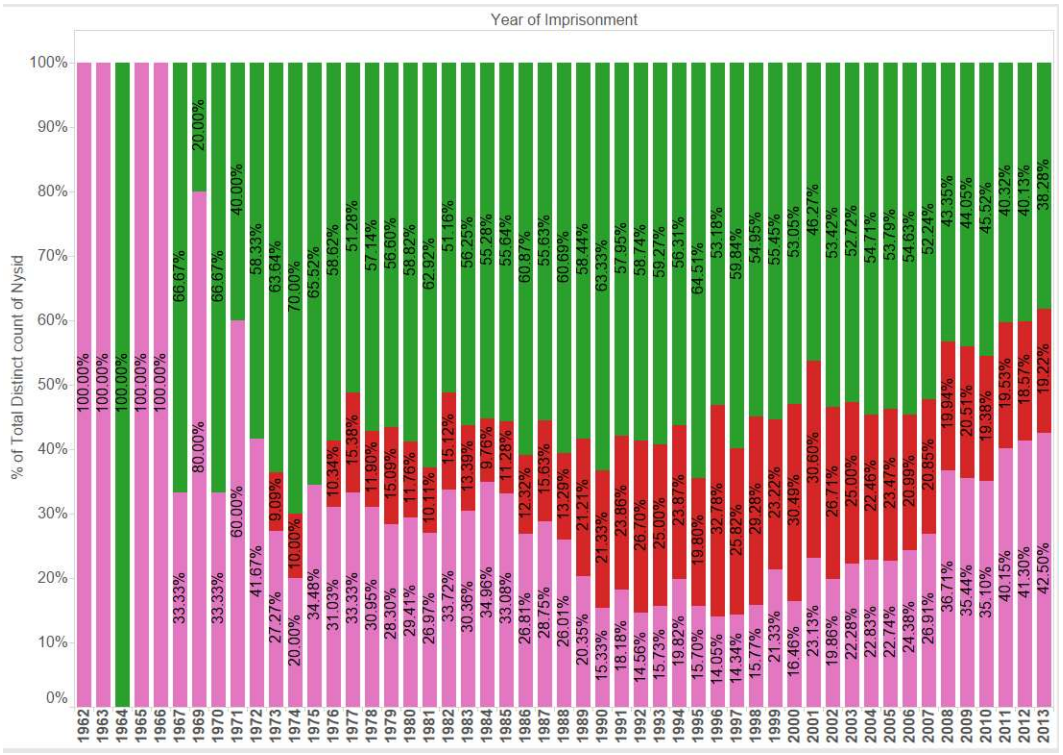


Distinct count of Nysid for each Year of Imprisonment. The data is filtered on Race / Ethnicity, which keeps BLACK, HISPANIC and WHITE. Percents are based on each column of the table.

InmatesCount



Distinct count of Nysid for each Year of Imprisonment. Color shows details about Race / Ethnicity. Percents are based on each column of the table.

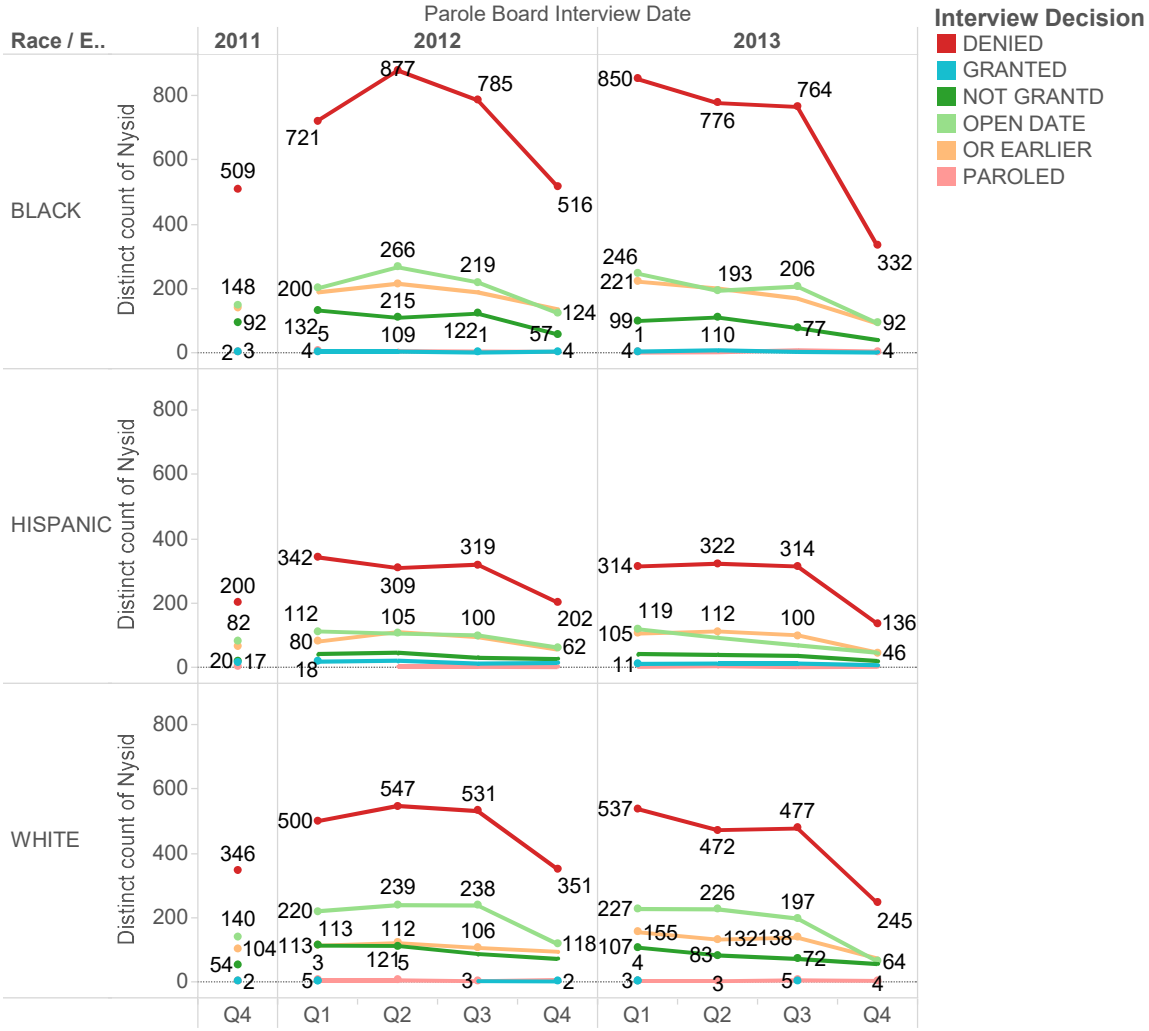


With the **Second analysis** I wanted to check if one group of population was more prone to denial or grant. But with this we can see that

1. Less interviews are scheduled at the end of the year (as the interview trend decreases for all types of interview decision while it peaks in either of the first two quarters)
2. The top most common decision are 1.Denied, 2. Open Date, 3.Or earlier 4. Not granted. And these interviews in each ethnicity follow a similar pattern for the quarters. For eg. In 2012 and 2013 for black population, the trend of Denied interview decision is followed by a similar pattern of Type 2 and 3 more or less.(more for type 2 though). And so for Hispanic and White.
3. This implies that there is a ratio measure maintained in these interview decisions, with the highest being the denied decision. Or
4. The Paroled and granted decision fall flat every year, in every category showing that indeed it is very less.

A closer look would be to look at each facility closely so that we can make judgement, if this is some overall effect or is there a weighted factor of denial or grant associated with each facility type.

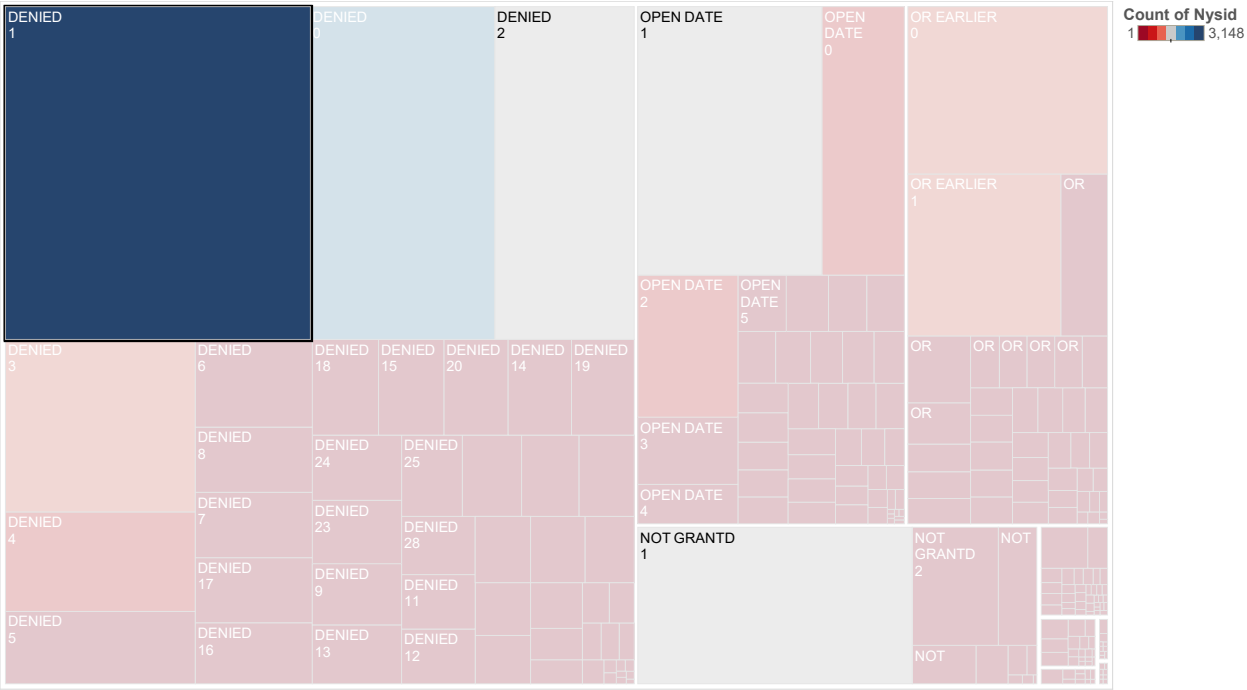
Race/Ethnicity



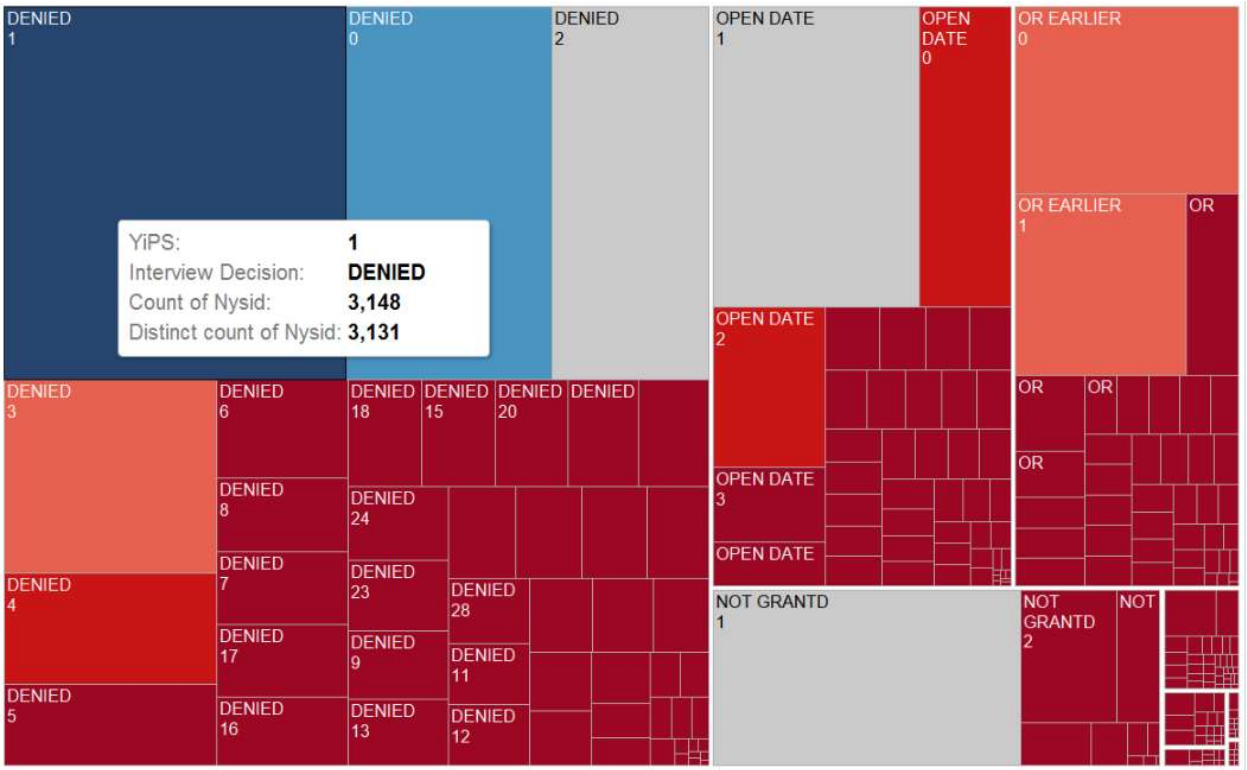
The trend of distinct count of Nysid for Parole Board Interview Date Quarter broken down by Parole Board Interview Date Year vs. Race / Ethnicity. Color shows details about Interview Decision. The view is filtered on Race / Ethnicity, Parole Board Interview Date Year and Interview Decision. The Race / Ethnicity filter keeps BLACK, HISPANIC and WHITE. The Parole Board Interview Date Year filter keeps 2011, 2012 and 2013. The Interview Decision filter excludes RCND&HOLD;, RCND&RELSE; and RE-

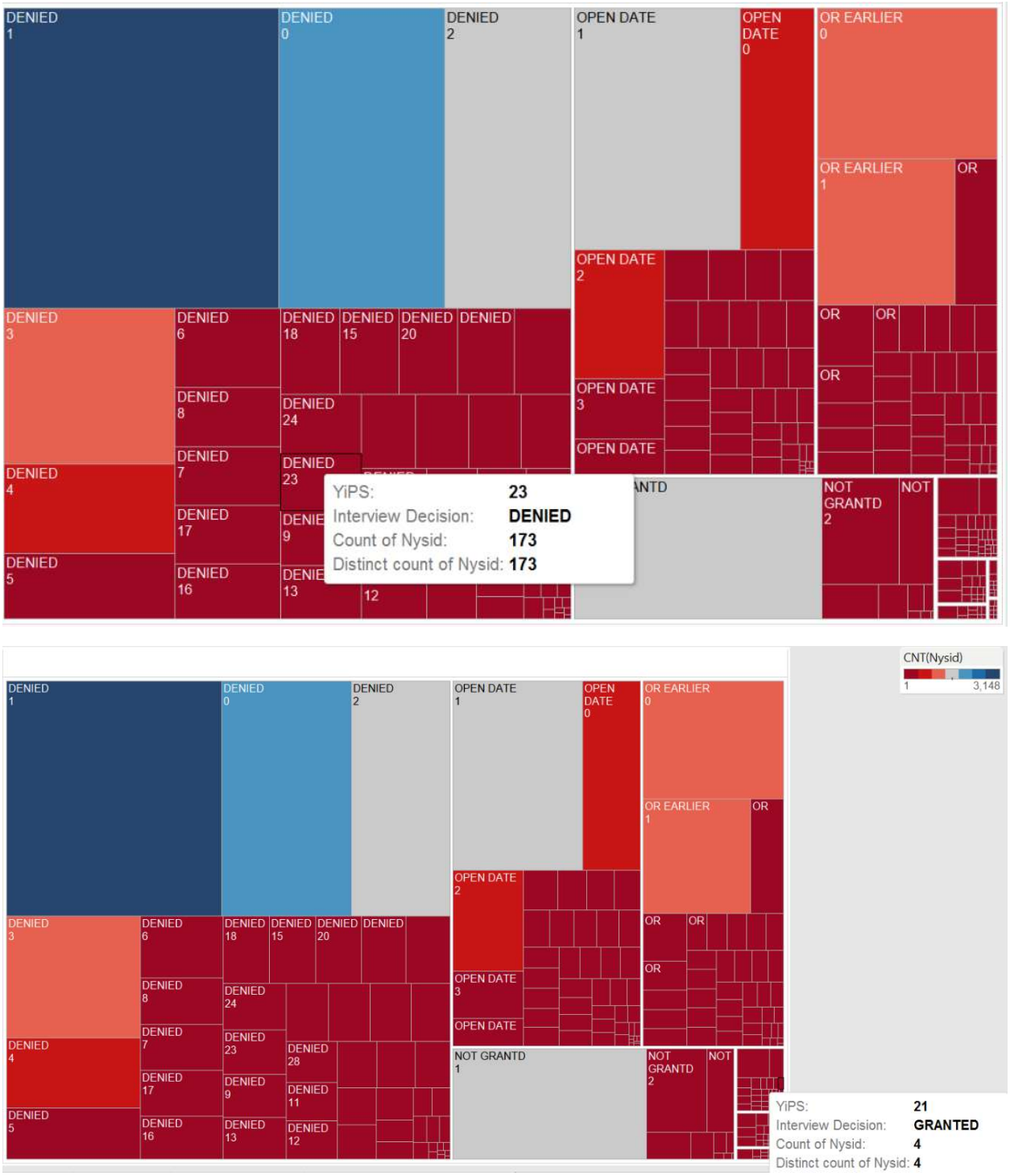
The **Third analysis** would be to draw a fair picture. We also take into account the number of years the person has stayed in the prison(actually we still need the type of crime committed, absent in the dataset currently). And we see that denied verdict is given the most for inmates with 1 year of being in the prison. It also includes high count for people with 8-25 years in prison. A more advanced analysis could be done on the data if the crime committed is also included.

YearsInPrison



Interview Decision and YiPS. Color shows count of Nysid. Size shows distinct count of Nysid. The marks are labeled by Interview Decision and YiPS. The view is filtered on Interview Decision, which excludes * and **********.





The treemap shows – the interview decision, and the number in each block is the number of years the inmates have spent in the prison. I have included labels of distinct NYSIDs and usual count also. As in the individual analysis of NYSID(each

person), and their interview type and date, I had seen that sometimes one individual can have initial type as the interview but the decision varies (or earlier/denied).

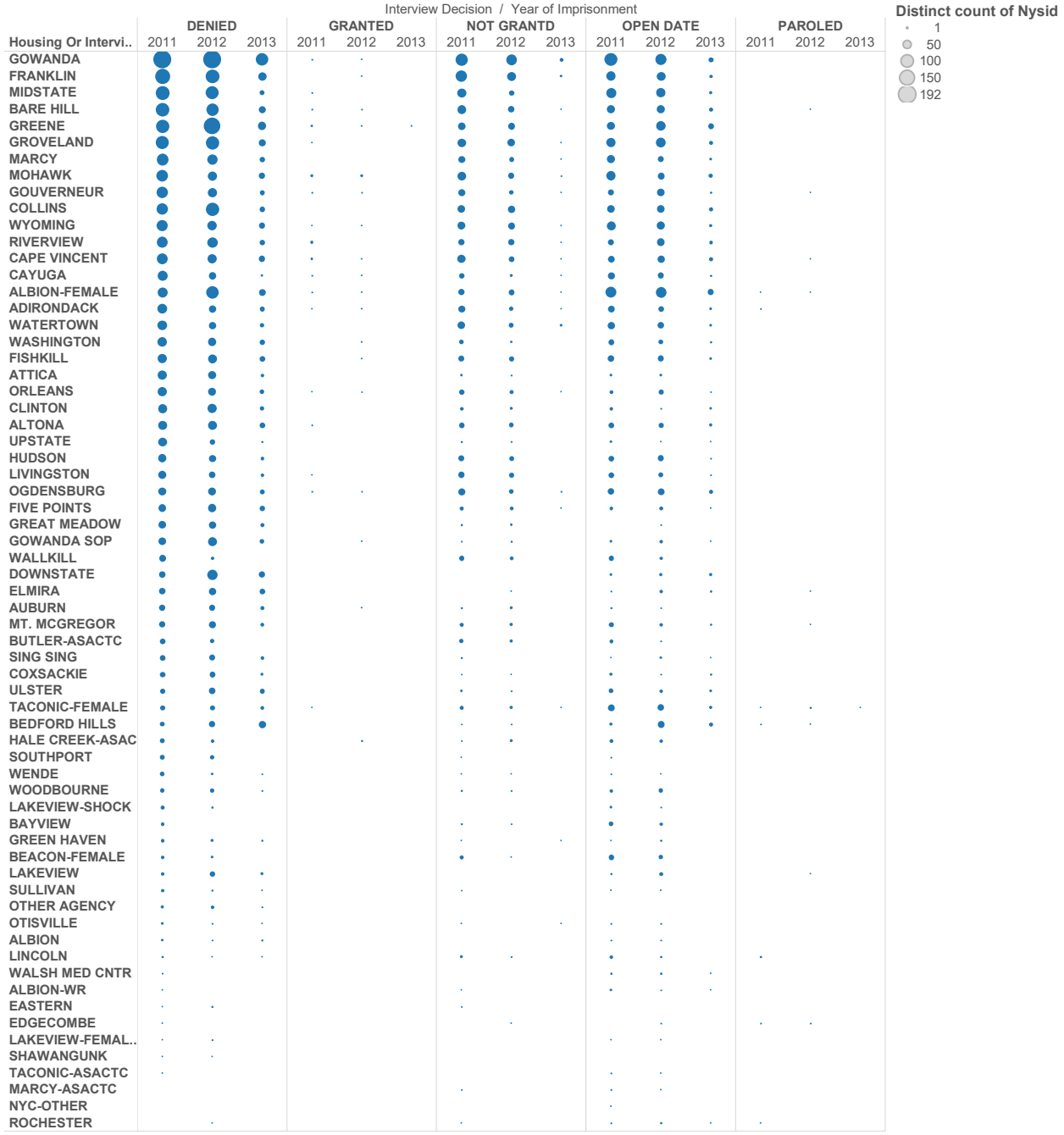
Here the Denied decision type occupies the largest area in the Treemap, but it also shows that 1 year of imprisonment inmate applying for parole gets the most denial. We can make a guess that maybe these cases are the ones with “Initial” interview type. We can see if this is wrong or write later.

Also, this shows the sorry state of condition, with inmates with 23 years of being in prison, have been denied parole. And there are few cases with more YiPs (years in prison).

The **Fourth analysis** is considering the facility in consideration. If one facility gives more denied verdict than another. Though this is dependent on the crime that has been committed, we are just going to take for now the parole applicants as a gauge to see the verdict relatively (as a percentage)

You can see that Gowanda always denies more, but it also has the highest number of inmates. It’s percentage is also the highest. But this has been done only for the year 2011. Here another better way to do is taking percentage of the inmates as taking a percentage (a relative quantity is always better as the number of interviews conducted at each facility would be different). Even with that Gowanda seemed to be the highest ones. But this analysis didn’t give much insight as it spread out all its decision equally. Like in analysis 2, where a ratio between different interview decisions was observed.

FacilityDecision

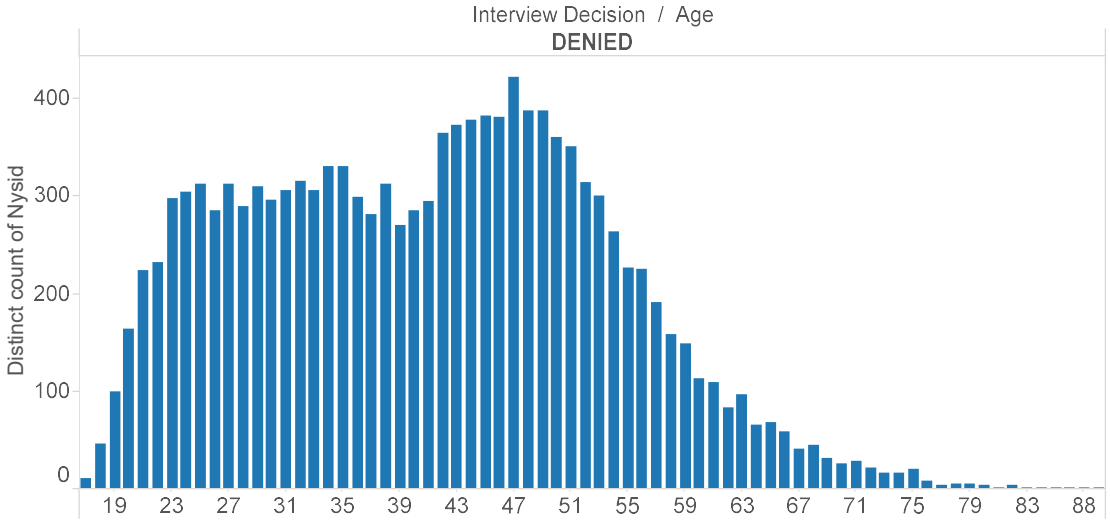


Distinct count of Nysid (size) broken down by Interview Decision and Year of Imprisonment vs. Housing Or Interview Facility. The view is filtered on Interview Decision and Year of Imprisonment. The Interview Decision filter keeps DENIED, GRANTED, NOT GRANTD, OPEN DATE and PAROLED. The Year of Imprisonment filter keeps 2011, 2012 and 2013. Percents are based on each column of each pane of the table.

The **Fifth Analysis** is on Age Distribution:

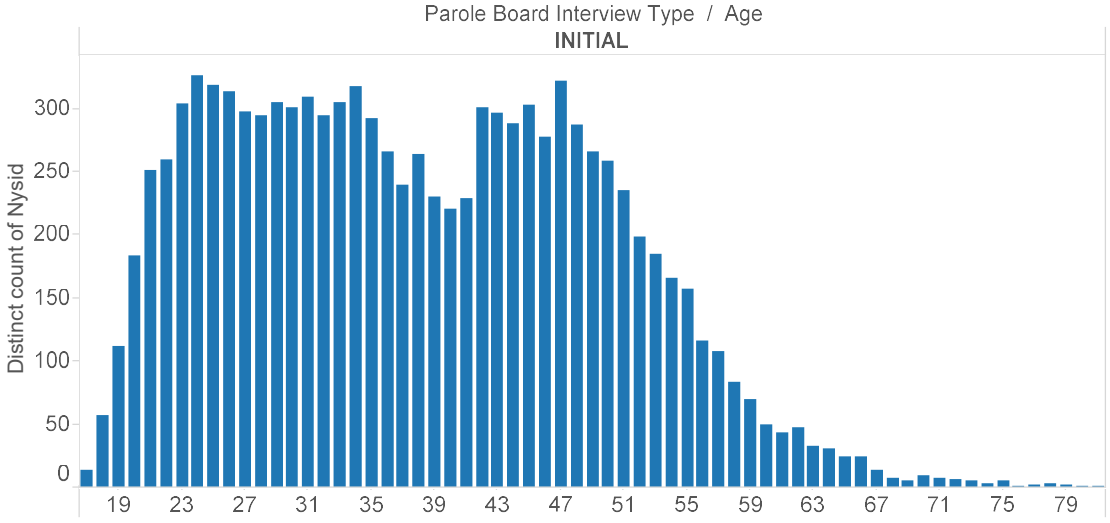
I wanted to see if a particular age group has more denial occurrences than others. For this , side by side we have to consider for what interview type they go (initial, merit time)

Age-InterviewDecision



Distinct count of Nysid for each Age broken down by Interview Decision. The data is filtered on Parole Board Interview Type, which excludes RESCISSION. The view is filtered on Interview Decision and Age. The Interview Decision filter keeps DENIED. The Age filter excludes Null.

Age-InterviewType

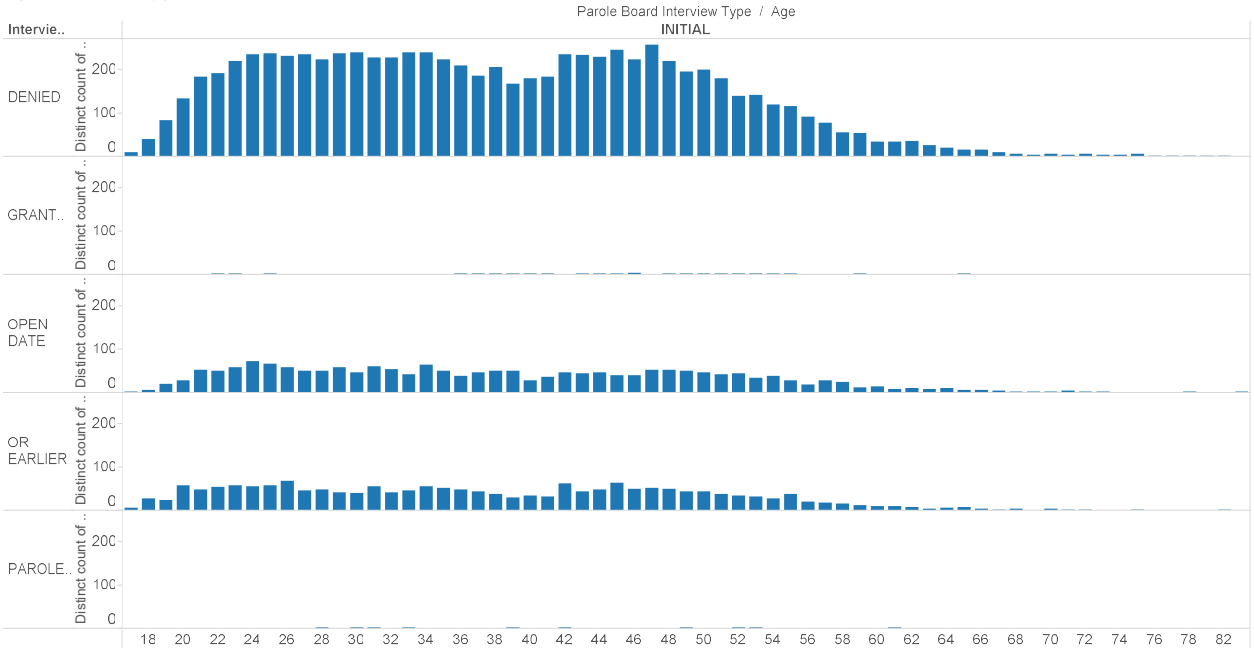


Distinct count of Nysid for each Age broken down by Parole Board Interview Type. The view is filtered on Parole Board Interview Type and Age. The Parole Board Interview Type filter keeps INITIAL. The Age filter excludes Null.

The distribution of these two seem similar, meaning that initial cases occur the most and are spread correspondingly between the two. But to make a distribution, it is better to take into account the decision types (all of them together). This would mean, that given a distribution of initial type, what likely distribution will the interview decision follow. Hence you see that initial parole interview type is met with denied decision most of the time.

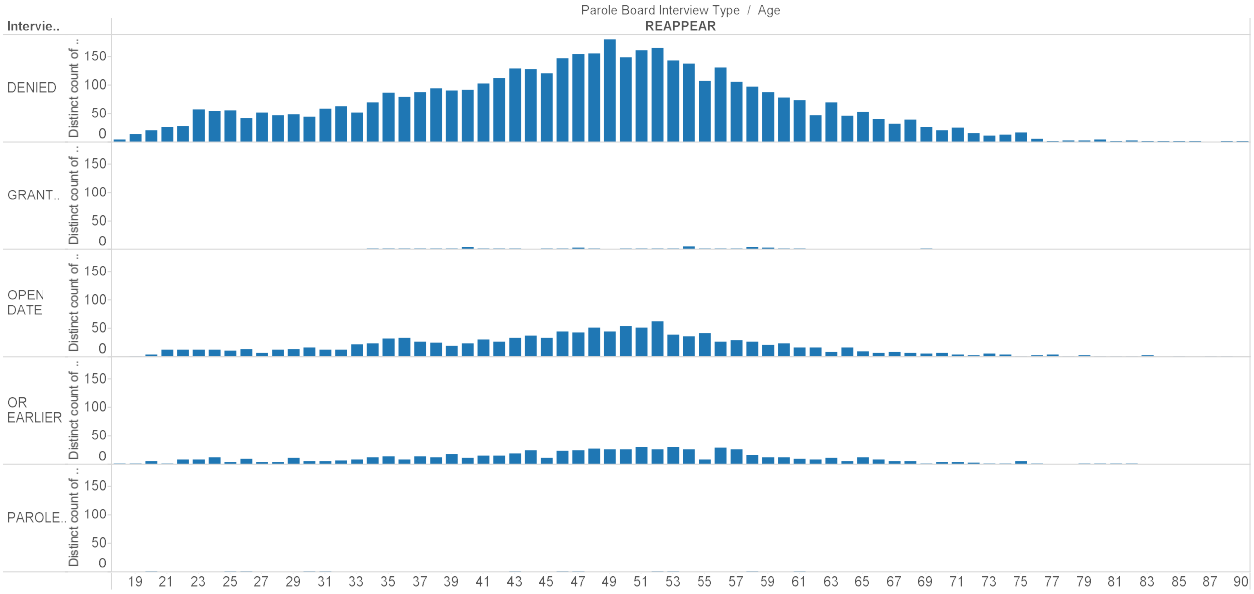
The above was just a preliminary insight into distributions, we can have a more better analysis if we interlink age, interview type and decision and see what happens more for what age group and interview type.

Age-InterviewType



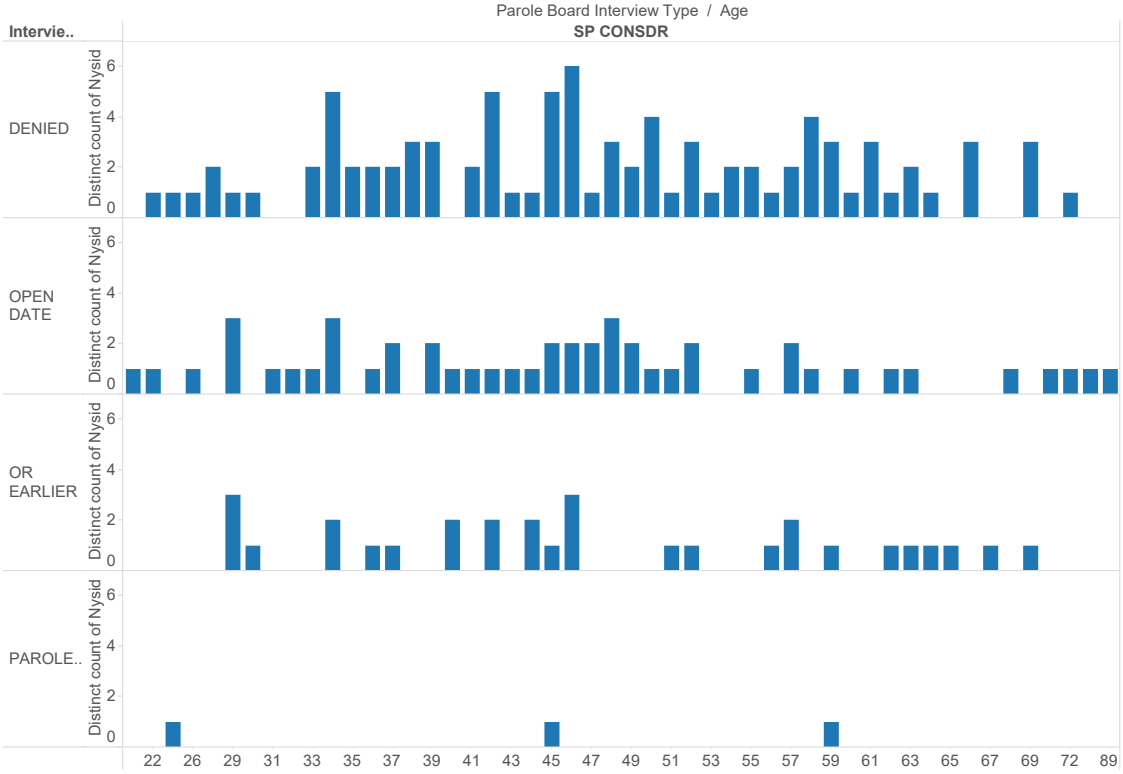
Distinct count of Nysid for each Age broken down by Parole Board Interview Type vs. Interview Decision. The view is filtered on Parole Board Interview Type and Age. The Parole Board Interview Type filter keeps INITIAL. The Age filter excludes Null.

Age-InterviewType



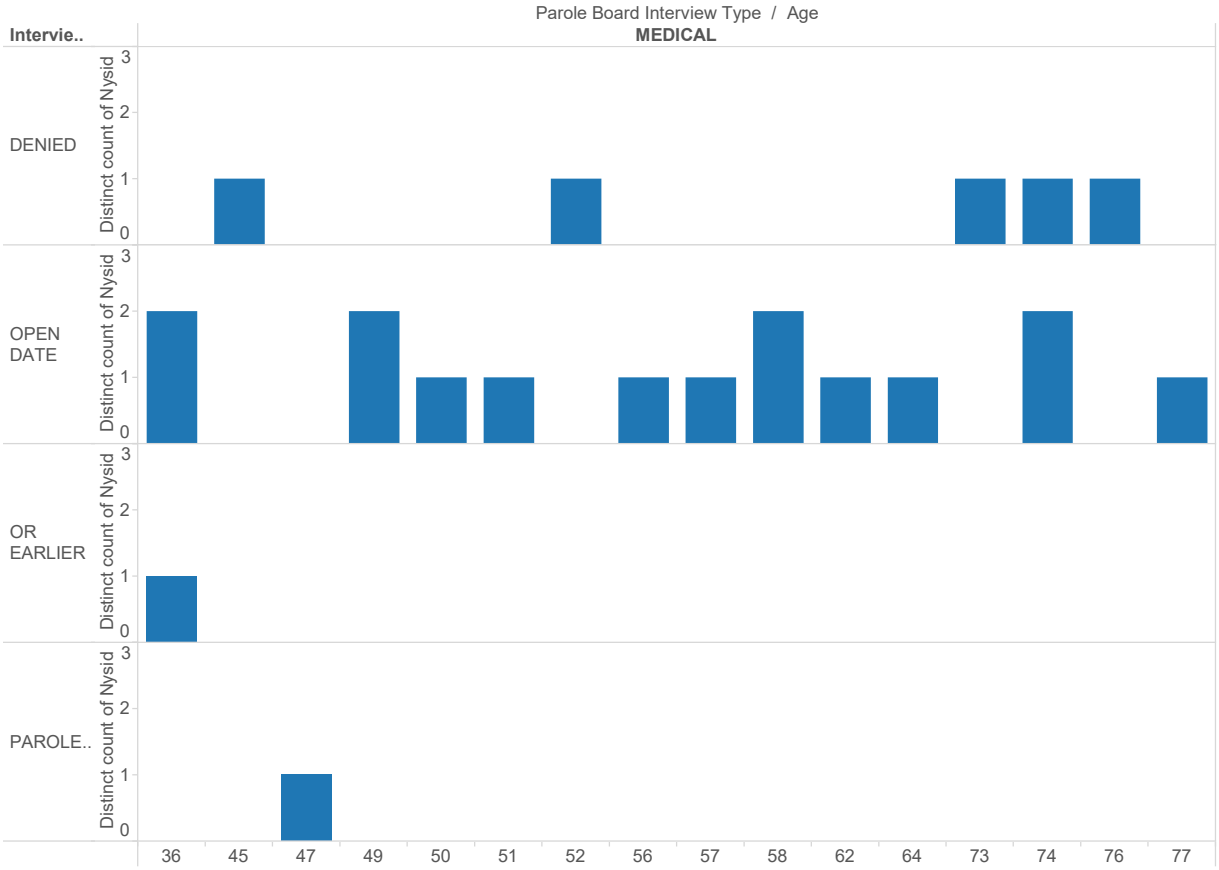
Distinct count of Nysid for each Age broken down by Parole Board Interview Type vs. Interview Decision. The view is filtered on Parole Board Interview Type and Age. The Parole Board Interview Type filter keeps REAPPEAR. The Age filter excludes Null.

Age-InterviewType



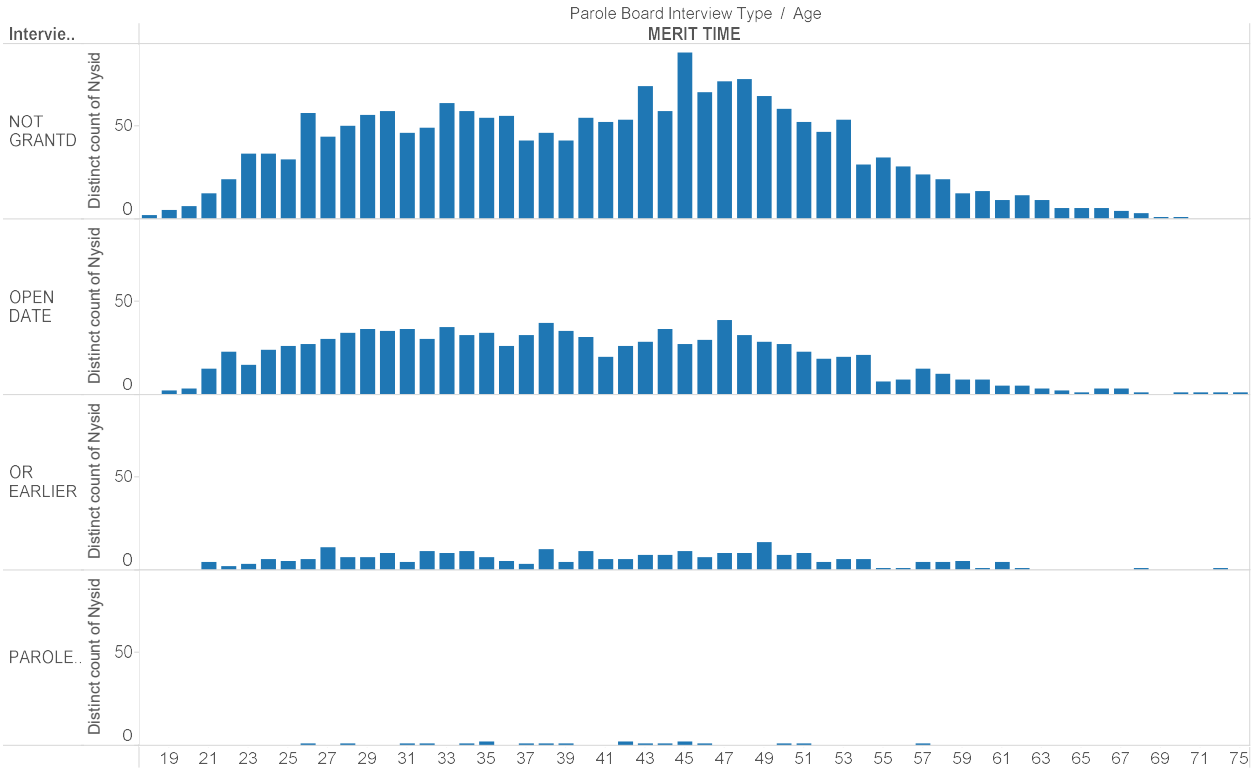
Distinct count of Nysid for each Age broken down by Parole Board Interview Type vs. Interview Decision. The view is filtered on Parole Board Interview Type and Age. The Parole Board Interview Type filter keeps SP CONSDR. The Age filter excludes Null.

Age-InterviewType



Distinct count of Nysid for each Age broken down by Parole Board Interview Type vs. Interview Decision. The view is filtered on Parole Board Interview Type and Age. The Parole Board Interview Type filter keeps MEDICAL. The Age filter excludes Null.

Age-InterviewType



Distinct count of Nysid for each Age broken down by Parole Board Interview Type vs. Interview Decision. The view is filtered on Parole Board Interview Type and Age. The Parole Board Interview Type filter keeps MERIT TIME. The Age filter excludes Null.

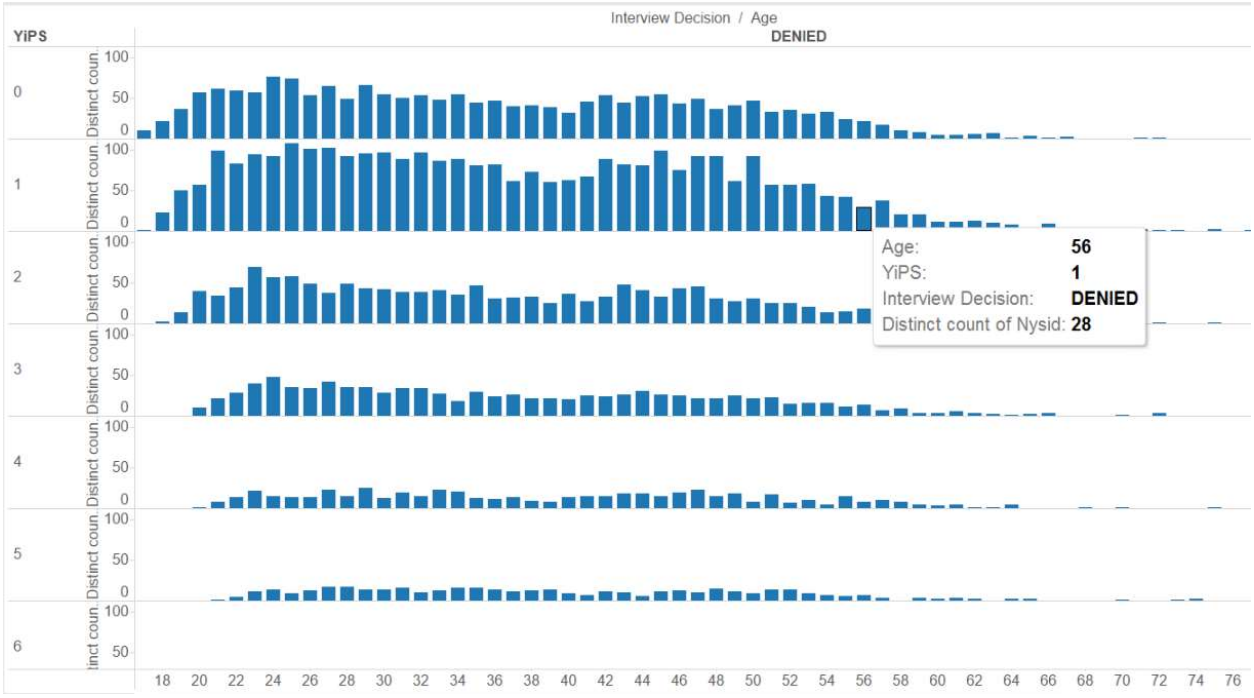
You can see that in Special Consideration and Medical cases- not a single grant case appeared, but a straight date parole is given or more times, an open date is given. This is not exactly age specific or a pttern with age can't be seen as was expected.

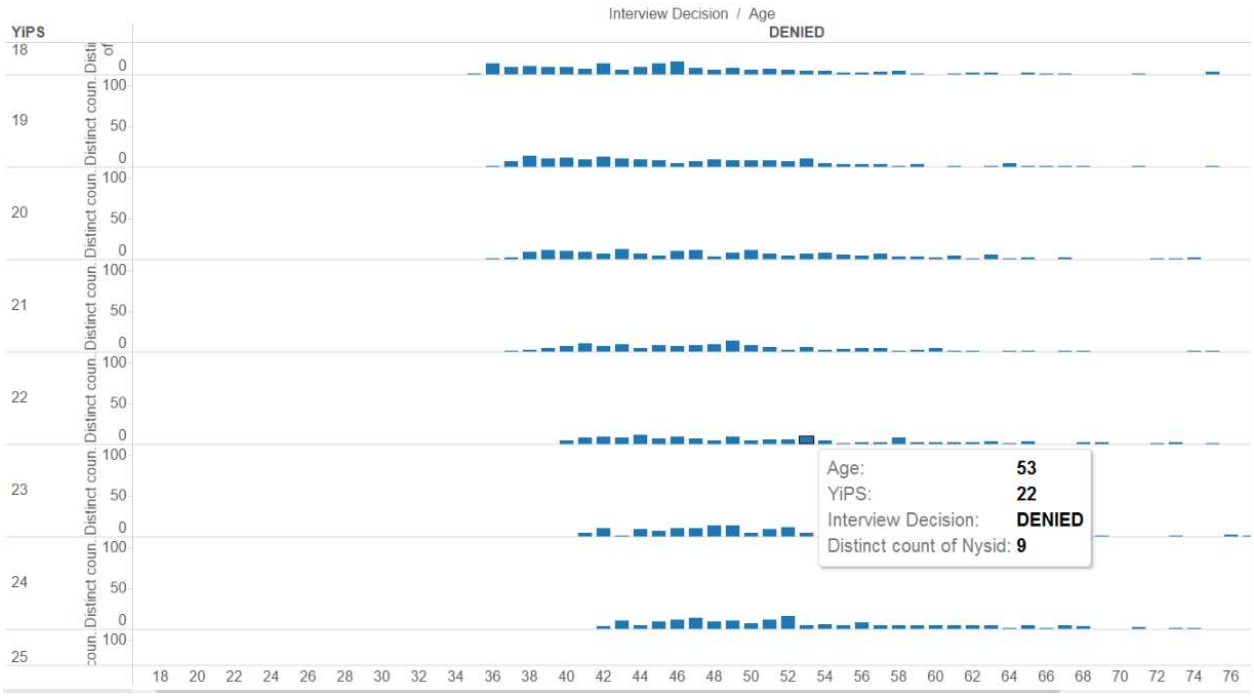
Also the merit time follows the distribution of "Initial" interview type, and the parole has been not granted most of the times. The parole cases are extremely miniscule as can be seen.

But what can be seen is that the most cases of initial/ reappear interviews occur in the 40-50 age group. And they are usually denied , meaning that it takes more time to arrange parole for them.

There are many other considerations also, we can also take all these factors of age, years in prison and then observe interview patterns. On doing that we observed that denial and more so grants follow a sporadic trend, with no real

reason found. Denial occurs more in the early years of imprisonment and more in the age group of 40-50.



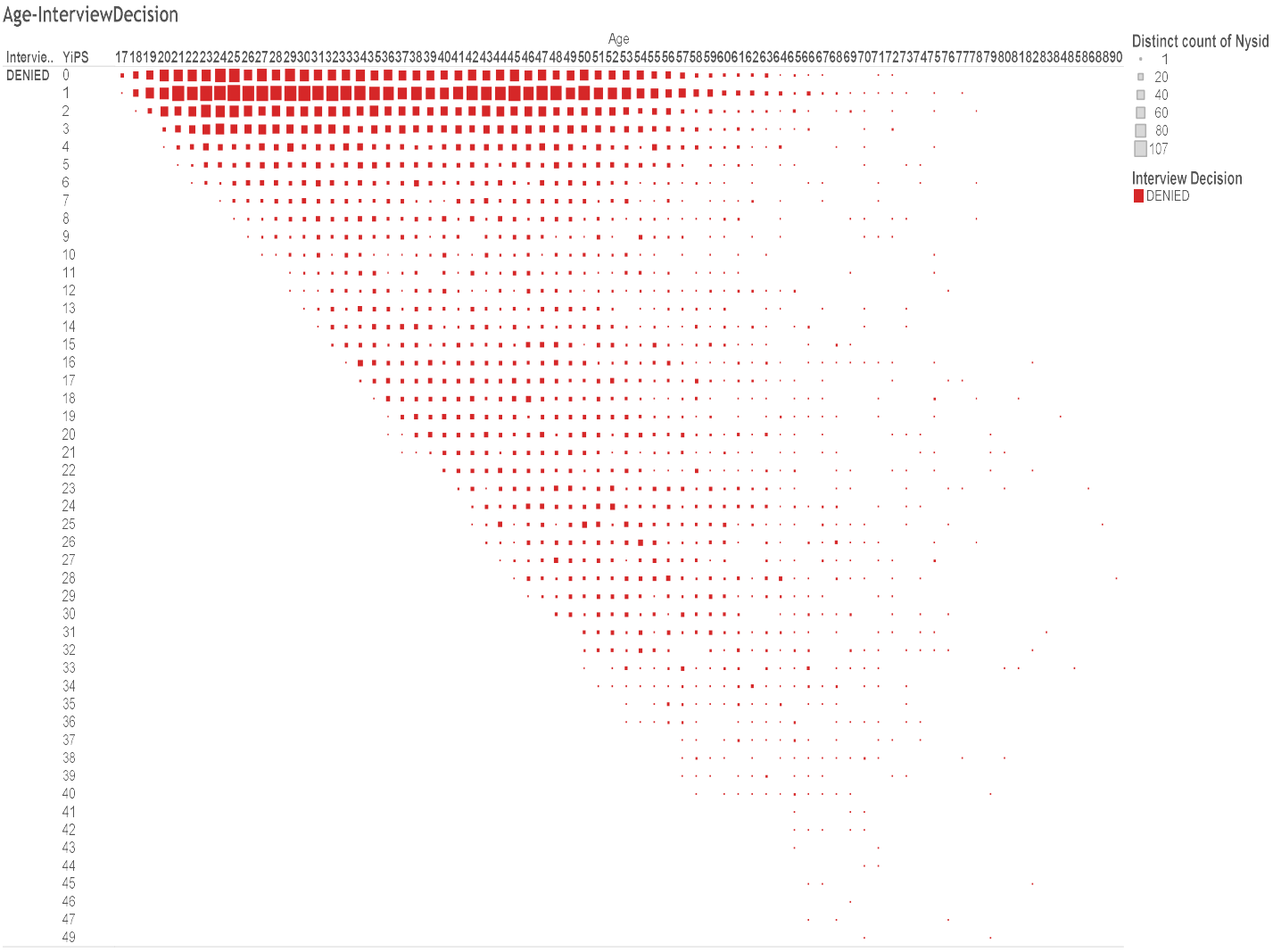


A compact way to see this would be to use a heatmap but in my opinion a distribution is always more useful for further analysis :

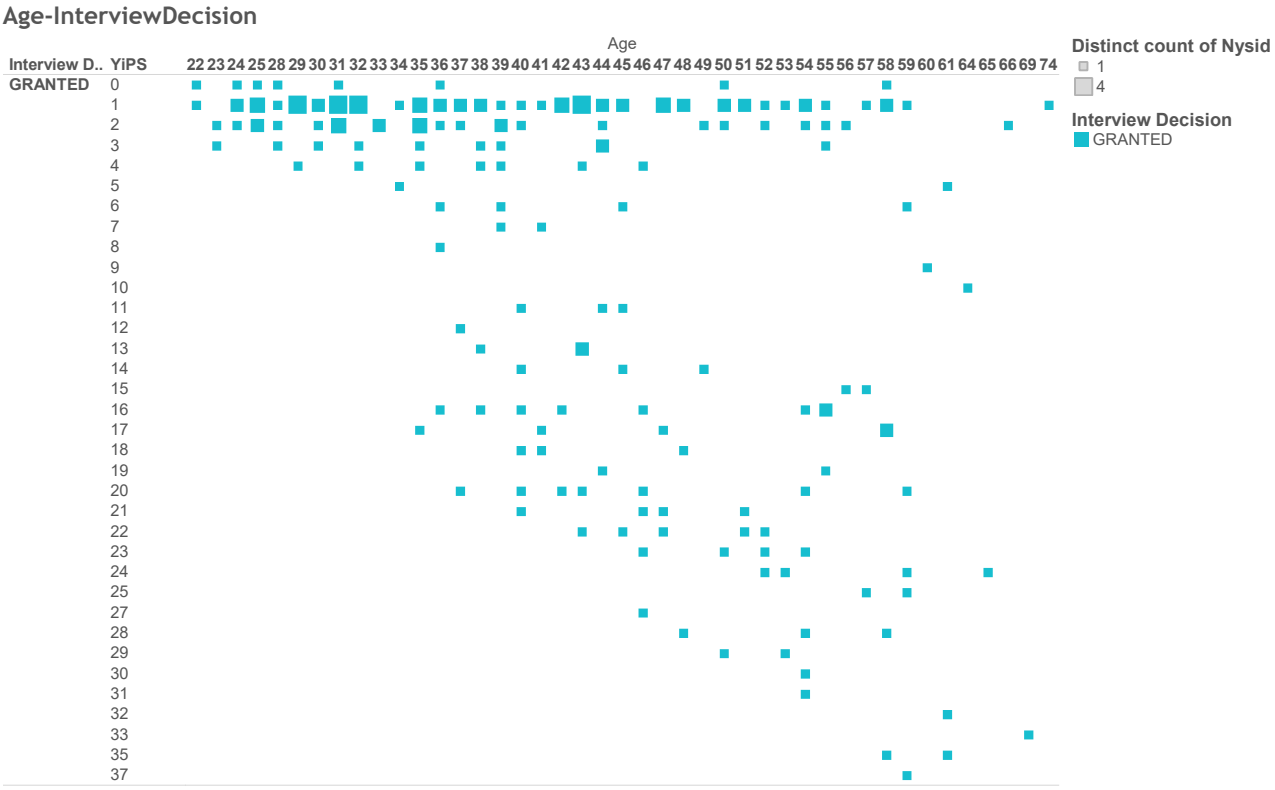
Hence you can find it here :

Denial and Grant

HeatMaps:



Interview Decision (color) and distinct count of Nysid (size) broken down by Age vs. Interview Decision and YiPS. The data is filtered on Parole Board Interview Type, which excludes RESCISSION. The view is filtered on Interview Decision and Age. The Interview Decision filter keeps DENIED. The Age filter excludes Null.



Interview Decision (color) and distinct count of Nysid (size) broken down by Age vs. Interview Decision and YiPS. The data is filtered on Parole Board Interview Type, which excludes RESCISSION. The view is filtered on Interview Decision and Age. The Interview Decision filter keeps GRANTED. The Age filter excludes Null.

The heat map shows that as age decreases and number of years increases in the prison, the chances of a denial are less, but then also, the number of aged inmates are lesser than the one in the age bracket of 30-50. And parole for them is the most difficult. This shows that a much more loss in productivity is observed for the New York state as a young population is kept in prison(this inference is made without the knowledge of crime committed), as the years pass by it is still not sure if they would get out, keeping them away from their families.

A slant clear patch is observed, as the number of years increases in the prison, the inmates age also increases, hence if they apply for a parole they move in the left part of the map.

Concluding I would like to say that there are many factors responsible for a grant, like Letter of Recommendation from the inmate officials on conduct of the inmate, the degree of crime committed, the victim also has a say, the merit programs or Shock Incarceration programs which might differentiate one inmate from another. These were absent from the current analysis; else these could have

added more in the form of a justification for a particular grant/denial. However, the conclusions still do not fail to show that a no particular reason is maintained in the decision for denial, more so for grants (which are so less) and that a proportionality where all facilities execute, all races, suffer equally from the denial instances.