**SPD Data Analysis**

**CAD Analysis**

Not all officers in the HR file are in the CAD. The CAD is missing about 4,027 observations.

Table

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So, when I aggregate to estimate the unique count of officers per event\_month, I end up with about 4,027 missing observations

Here is the **termination per year** when I merged CAD and HR files. This is based on unique serial number per month.

Table

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Chart, histogram

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Now, let us trace each officer in the CAD file, what years they appear, and when they were terminated. The screenshot is below, but the excel sheet is attached here as cad\_officer\_year.xlsx. t\_year2015 is what year they were terminated (provided by HR file), n12015 etc is what year they appear in the CAD file.

Graphical user interface, application, table

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The CAD has 2,197 unique badge numbers.

**HR File Analysis**

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This shows the officer’s serial number, t\_2008 etc show when they were terminated, while the numbers in the cell show when they were hired. And it has 6,224 officers. So, the CAD is missing 4,027 officer numbers. The excel sheet is attached as officer\_roster.xls.

**Officer Count from CAD**

**Chart, line chart

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**From the HR data**

By 2007, we had 1627 officers hired since 1962. No termination was recorded until 2008. See what I manually computed:

Table

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The excel sheet, manual\_hr\_roster is attached here.

**Chart, line chart

Description automatically generated**