

# An Analysis of PERM Labor Certification and Labor Condition Applications from the United States Department of Labor

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## **Abstract**

Foreign born workers make up 17% of the United States workforce. In 2014, nearly one million foreign nationals became lawful permanent residents in the United States. Of those one million, 140,000 came through visas which are allocated to employment based residency. Where are these workers, and what do the demographics look like? How does each company's compensation measure up? Here, we use statistical analysis and business analytics to examine visa application data from the U.S. Department of Labor from 2008 to 2016. By making this publicly available information more accessible and interactive, we empower students who are entering the workforce, as well as US citizens and permanent residents, allowing them to competitively position themselves in the job market by making more informed decisions.

```

visas <- readRDS('H1BVisas.rds')

hist(visas[which(visas$normalized_wage < 250000),]$normalized_wage, breaks=500)

findmode <- function(x, na.rm = TRUE) {
  if(na.rm){
    x = x[!is.na(x)]
  }

  ux <- unique(x)
  return(ux[which.max(tabulate(match(x, ux)))]])
}

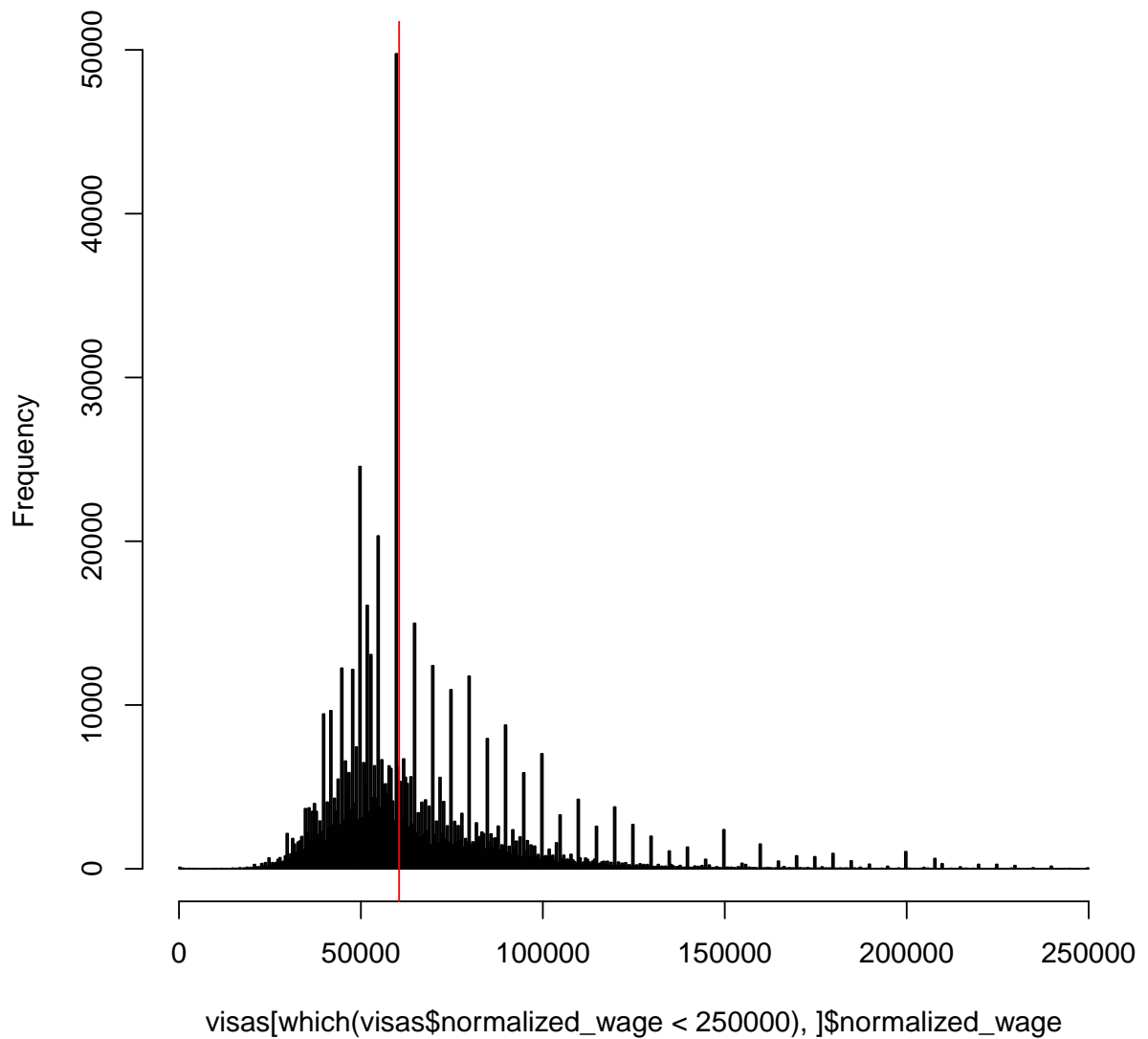
wage.mode <- findmode(visas$normalized_wage)
wage.mode

## [1] 60000

abline(v=wage.mode + 500, col="red")

```

Histogram of visas[which(visas\$normalized\_wage < 250000), ]\$normalized\_w

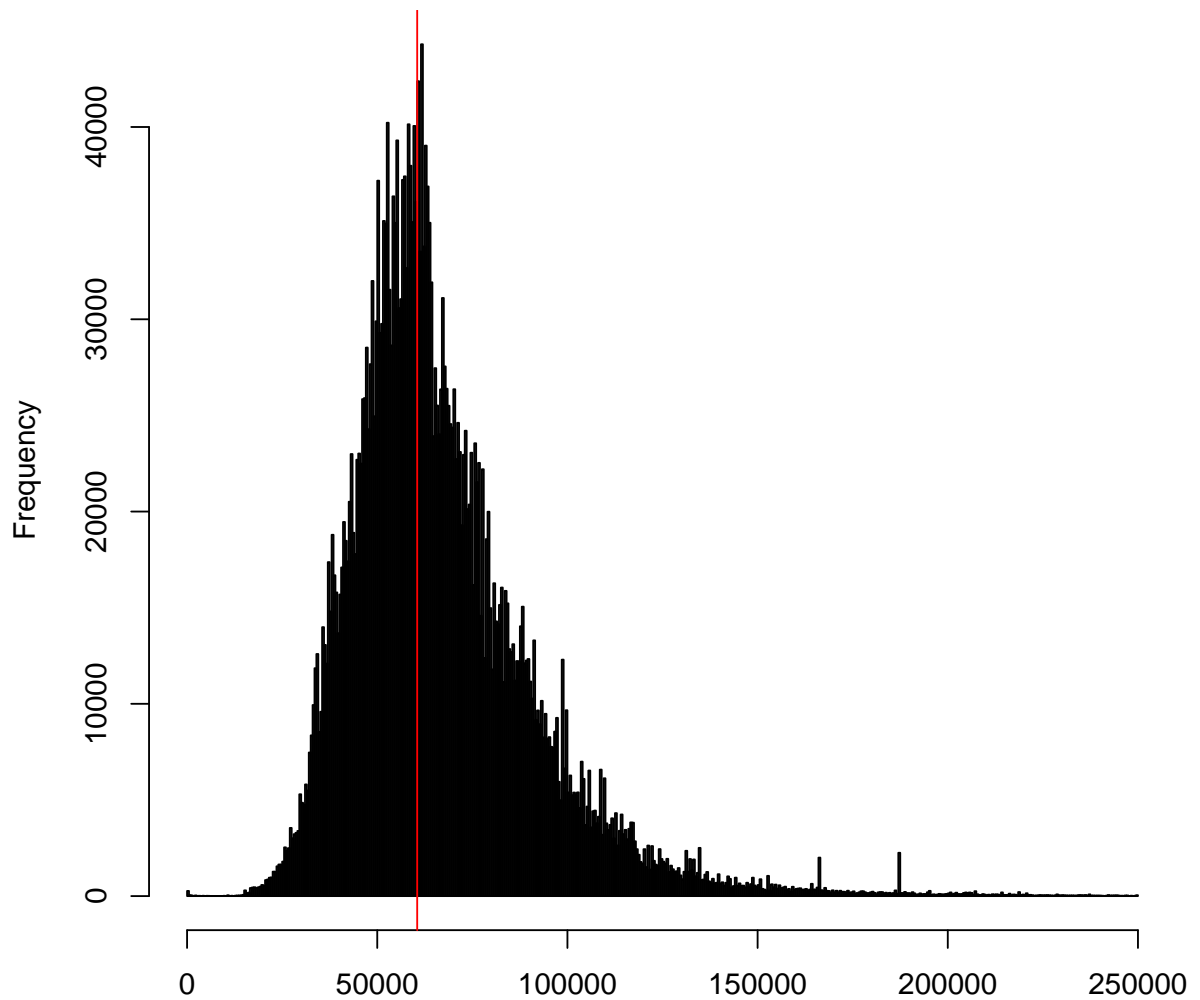


```
hist(visas[which(visas$normalized_prevaling_wage < 250000),]$normalized_prevaling_wage, breaks=500)
pw.mode <- findmode(visas$normalized_prevaling_wage)
pw.mode

## [1] 52790

abline(v=wage.mode + 500, col="red")
```

of visas[which(visas\$normalized\_prevaling\_wage < 250000), ]\$normalized\_prevaling\_wage



visas[which(visas\$normalized\_prevaling\_wage < 250000), ]\$normalized\_prevaling\_wage