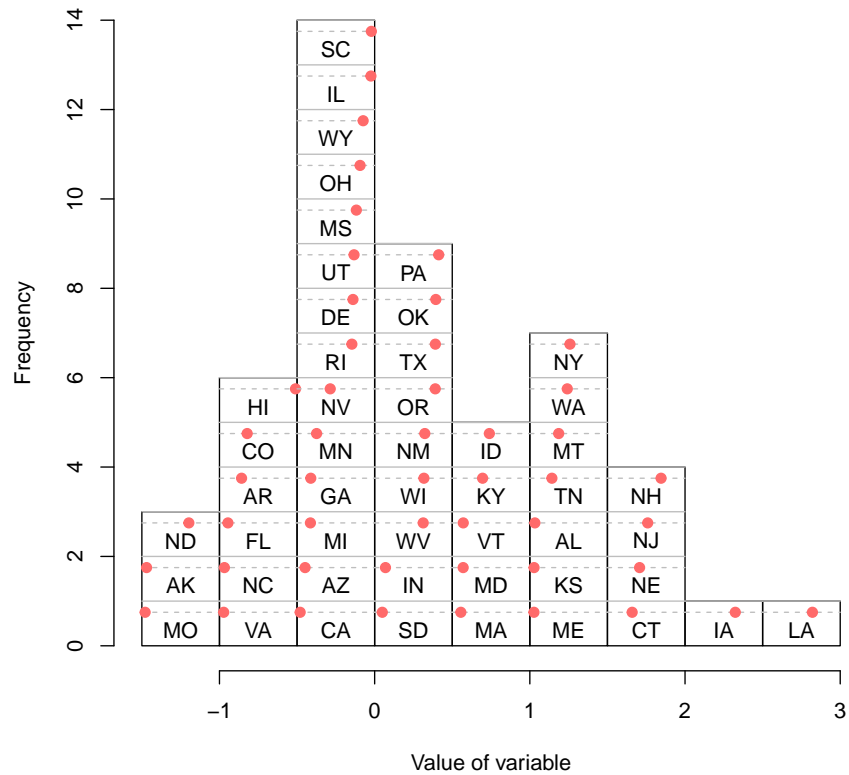


Example of Special Histogram



```
library(readr)
files=list.files("Driving/Worst Drivers By State 2015/");files

## [1] "animation.gif"
## [2] "Careless Driving-Table 1.csv"
## [3] "Copy of Final Scoring-Table 1.csv"
## [4] "DrivingData.gif"
## [5] "Drunk Driving-Table 1.csv"
## [6] "Failure to Obey-Table 1.csv"
## [7] "Fatalities per 100M Miles-Table 1.csv"
## [8] "Final Scoring-Table 1.csv"
## [9] "Rplot.jpeg"
## [10] "Speeding-Table 1.csv"

setwd("Driving/Worst Drivers By State 2015/")
```

```

data=read.csv("Fatalities per 100M Miles-Table 1.csv")
data=data.frame(State=data$State)

files=c("Careless Driving-Table 1.csv","Fatalities per 100M Miles-Table 1.csv")
# "Careless Driving-Table 1.csv"           "Copy of Final Scoring-Table 1.csv"
# "Drunk Driving-Table 1.csv"             "Failure to Obey-Table 1.csv"
# "Fatalities per 100M Miles-Table 1.csv" "Final Scoring-Table 1.csv"
# "Speeding-Table 1.csv"

for(i in files){
temp=read.csv(i)
data=merge(data,temp, by = "State")
}

data$MillionMilesTraveled=100/data$Fatalities.Rate.per.100.Million.Vehicle.Miles.Traveled
data$MillionMilesTraveled

## [1] 76.33588 95.23810 71.42857 69.44444 109.89011 98.03922 112.35955
## [8] 94.33962 175.43860 80.00000 92.59259 99.00990 74.62687 106.38298
## [15] 100.00000 100.00000 86.20690 73.52941 68.02721 97.08738 121.95122
## [22] 172.41379 100.00000 147.05882 63.29114 91.74312 52.63158 91.74312
## [29] 94.33962 95.23810 136.98630 80.64516 108.69565 81.30081 68.02721
## [36] 113.63636 70.92199 107.52688 81.96721 119.04762 63.69427 67.56757
## [43] 71.42857 72.46377 123.45679 103.09278 108.69565 131.57895 57.80347
## [50] 109.89011 107.52688

data

##           State Pedestrians.Killed Pedacyclists.Killed
## 1      Alabama                59                    6
## 2       Alaska                 6                     1
## 3      Arizona               151                    31
## 4    Arkansas                45                     4
## 5    California             701                   141
## 6     Colorado                50                     12
## 7   Connecticut              36                      3
## 8     Delaware                25                      1
## 9 District of Columbia         9                      1
## 10    Florida               501                   133
## 11    Georgia               176                     28
## 12    Hawaii                 23                      2
## 13    Idaho                  14                      3

```

## 14	Illinois	125	30
## 15	Indiana	77	14
## 16	Iowa	20	3
## 17	Kansas	25	6
## 18	Kentucky	55	3
## 19	Louisiana	97	14
## 20	Maine	11	4
## 21	Maryland	108	6
## 22	Massachusetts	68	6
## 23	Michigan	148	27
## 24	Minnesota	32	6
## 25	Mississippi	53	6
## 26	Missouri	73	4
## 27	Montana	24	1
## 28	Nebraska	12	0
## 29	Nevada	65	7
## 30	New Hampshire	12	4
## 31	New Jersey	129	14
## 32	New Mexico	49	4
## 33	New York	335	40
## 34	North Carolina	173	22
## 35	North Dakota	1	1
## 36	Ohio	85	19
## 37	Oklahoma	58	13
## 38	Oregon	48	3
## 39	Pennsylvania	147	11
## 40	Rhode Island	14	3
## 41	South Carolina	100	15
## 42	South Dakota	9	0
## 43	Tennessee	80	8
## 44	Texas	480	48
## 45	Utah	28	6
## 46	Vermont	5	0
## 47	Virginia	75	8
## 48	Washington	49	11
## 49	West Virginia	28	0
## 50	Wisconsin	37	10
## 51	Wyoming	4	0
##	Population..Thousands.	Pedestrian.Fatality.Rate.per.100.000.	Population
## 1	4834		1.22
## 2	735		0.82
## 3	6627		2.00
## 4	2959		1.52
## 5	38333		1.83
## 6	5268		0.95

## 7	3596	1.00
## 8	926	2.70
## 9	646	1.39
## 10	19553	3.00
## 11	9992	1.76
## 12	1404	1.64
## 13	1612	0.87
## 14	12882	1.00
## 15	6571	1.17
## 16	3090	0.65
## 17	2894	1.00
## 18	4395	1.00
## 19	4625	2.10
## 20	1328	0.83
## 21	5929	1.82
## 22	6693	1.02
## 23	9896	1.50
## 24	5420	0.59
## 25	2991	2.00
## 26	6044	1.21
## 27	1015	2.36
## 28	1869	0.64
## 29	2790	2.33
## 30	1323	1.00
## 31	8899	1.45
## 32	2085	2.35
## 33	19651	2.00
## 34	9848	1.76
## 35	723	0.14
## 36	11571	1.00
## 37	3851	1.51
## 38	3930	1.00
## 39	12774	1.15
## 40	1052	1.33
## 41	4775	2.09
## 42	845	1.07
## 43	6496	1.23
## 44	26448	2.00
## 45	2901	1.00
## 46	627	0.80
## 47	8260	0.91
## 48	6971	1.00
## 49	1854	1.51
## 50	5743	0.64
## 51	583	0.69

##	Pedacyclist.Fatality.Rate.per.100.000.Population
## 1	0.12
## 2	0.14
## 3	0.47
## 4	0.14
## 5	0.37
## 6	0.23
## 7	0.08
## 8	0.11
## 9	0.15
## 10	0.68
## 11	0.28
## 12	0.14
## 13	0.19
## 14	0.23
## 15	0.21
## 16	0.10
## 17	0.21
## 18	0.07
## 19	0.30
## 20	0.30
## 21	0.10
## 22	0.09
## 23	0.27
## 24	0.11
## 25	0.20
## 26	0.07
## 27	0.10
## 28	0.00
## 29	0.25
## 30	0.30
## 31	0.16
## 32	0.19
## 33	0.20
## 34	0.22
## 35	0.14
## 36	0.16
## 37	0.34
## 38	0.08
## 39	0.09
## 40	0.29
## 41	0.31
## 42	0.00
## 43	0.12
## 44	0.18

## 45		0.21
## 46		0.00
## 47		0.10
## 48		0.16
## 49		0.00
## 50		0.17
## 51		0.00
##	Total..Pedestrians...Pedacyclist.	Rank.x X.x
## 1	1.34	26 NA
## 2	0.96	42 NA
## 3	2.75	3 NA
## 4	1.66	19 NA
## 5	2.20	9 NA
## 6	1.18	33 NA
## 7	1.08	37 NA
## 8	2.81	2 NA
## 9	1.54	22 NA
## 10	3.24	1 NA
## 11	2.04	10 NA
## 12	1.78	17 NA
## 13	1.06	40 NA
## 14	1.20	32 NA
## 15	1.38	24 NA
## 16	0.75	47 NA
## 17	1.07	38 NA
## 18	1.32	27 NA
## 19	2.40	7 NA
## 20	1.13	35 NA
## 21	1.92	14 NA
## 22	1.11	36 NA
## 23	1.77	18 NA
## 24	0.70	48 NA
## 25	1.97	13 NA
## 26	1.28	29 NA
## 27	2.46	6 NA
## 28	0.64	50 NA
## 29	2.58	4 NA
## 30	1.21	31 NA
## 31	1.61	21 NA
## 32	2.54	5 NA
## 33	1.90	15 NA
## 34	1.98	12 NA
## 35	0.28	51 NA
## 36	0.89	43 NA
## 37	1.85	16 NA

## 38	1.30	28	NA
## 39	1.24	30	NA
## 40	1.62	20	NA
## 41	2.40	7	NA
## 42	1.07	38	NA
## 43	1.35	25	NA
## 44	1.99	11	NA
## 45	1.18	33	NA
## 46	0.80	46	NA
## 47	1.01	41	NA
## 48	0.86	44	NA
## 49	1.51	23	NA
## 50	0.81	45	NA
## 51	0.69	49	NA
##			Sources.
## 1	http://www-fars.nhtsa.dot.gov/States/StatesPedestrians.aspx		
## 2	http://www-fars.nhtsa.dot.gov/People/PeoplePedalcyclists.aspx		
## 3			
## 4			
## 5			
## 6			
## 7			
## 8			
## 9			
## 10			
## 11			
## 12			
## 13			
## 14			
## 15			
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## 28			
## 29			
## 30			


```

## 31
## 32
## 33
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## 41
## 42
## 43
## 44
## 45
## 46
## 47
## 48
## 49
## 50
## 51
## Fatalities.Rate.per.100.Million.Vehicle.Miles.Traveled Rank.y X.y
## 1 1.31 15 NA
## 2 1.05 26 NA
## 3 1.40 10 NA
## 4 1.44 8 NA
## 5 0.91 40 NA
## 6 1.02 29 NA
## 7 0.89 42 NA
## 8 1.06 24 NA
## 9 0.57 51 NA
## 10 1.25 16 NA
## 11 1.08 23 NA
## 12 1.01 30 NA
## 13 1.34 14 NA
## 14 0.94 35 NA
## 15 1.00 31 NA
## 16 1.00 31 NA
## 17 1.16 20 NA
## 18 1.36 13 NA
## 19 1.47 6 NA
## 20 1.03 28 NA
## 21 0.82 45 NA
## 22 0.58 50 NA
## 23 1.00 31 NA

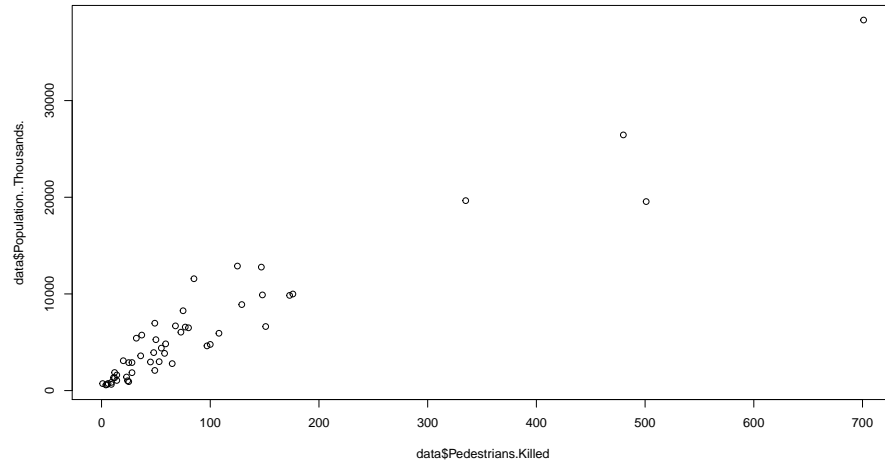
```

## 24	0.68	49	NA
## 25	1.58	3	NA
## 26	1.09	21	NA
## 27	1.90	1	NA
## 28	1.09	21	NA
## 29	1.06	24	NA
## 30	1.05	26	NA
## 31	0.73	48	NA
## 32	1.24	17	NA
## 33	0.92	38	NA
## 34	1.23	18	NA
## 35	1.47	6	NA
## 36	0.88	43	NA
## 37	1.41	9	NA
## 38	0.93	36	NA
## 39	1.22	19	NA
## 40	0.84	44	NA
## 41	1.57	4	NA
## 42	1.48	5	NA
## 43	1.40	10	NA
## 44	1.38	12	NA
## 45	0.81	46	NA
## 46	0.97	34	NA
## 47	0.92	38	NA
## 48	0.76	47	NA
## 49	1.73	2	NA
## 50	0.91	40	NA
## 51	0.93	36	NA
##			Source.
## 1	http://www-fars.nhtsa.dot.gov/States/StatesFatalitiesFatalityRates.aspx		
## 2			
## 3			
## 4			
## 5			
## 6			
## 7			
## 8			
## 9			
## 10			
## 11			
## 12			
## 13			
## 14			
## 15			
## 16			

```
## 17
## 18
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## 39
## 40
## 41
## 42
## 43
## 44
## 45
## 46
## 47
## 48
## 49
## 50
## 51
##      MillionMilesTraveled
## 1              76.33588
## 2              95.23810
## 3              71.42857
## 4              69.44444
## 5             109.89011
## 6              98.03922
## 7             112.35955
## 8              94.33962
## 9             175.43860
```

```
## 10      80.00000
## 11      92.59259
## 12      99.00990
## 13      74.62687
## 14     106.38298
## 15     100.00000
## 16     100.00000
## 17      86.20690
## 18      73.52941
## 19      68.02721
## 20      97.08738
## 21     121.95122
## 22     172.41379
## 23     100.00000
## 24     147.05882
## 25      63.29114
## 26      91.74312
## 27      52.63158
## 28      91.74312
## 29      94.33962
## 30      95.23810
## 31     136.98630
## 32      80.64516
## 33     108.69565
## 34      81.30081
## 35      68.02721
## 36     113.63636
## 37      70.92199
## 38     107.52688
## 39      81.96721
## 40     119.04762
## 41      63.69427
## 42      67.56757
## 43      71.42857
## 44      72.46377
## 45     123.45679
## 46     103.09278
## 47     108.69565
## 48     131.57895
## 49      57.80347
## 50     109.89011
## 51     107.52688

plot(data$Pedestrians.Killed, data$Population..Thousands.)
```



```
names(data)

## [1] "State"
## [2] "Pedestrians.Killed"
## [3] "Pedacyclists.Killed"
## [4] "Population..Thousands."
## [5] "Pedestrian.Fatality.Rate.per.100.000.Population"
## [6] "Pedacyclist.Fatality.Rate.per.100.000.Population"
## [7] "Total..Pedestrians...Pedacyclist."
## [8] "Rank.x"
## [9] "X.x"
## [10] "Sources."
## [11] "Fatalities.Rate.per.100.Million.Vehicle.Miles.Traveled"
## [12] "Rank.y"
## [13] "X.y"
## [14] "Source."
## [15] "MillionMilesTraveled"

library(dplyr)

##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
##   filter, lag
## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union
```

```

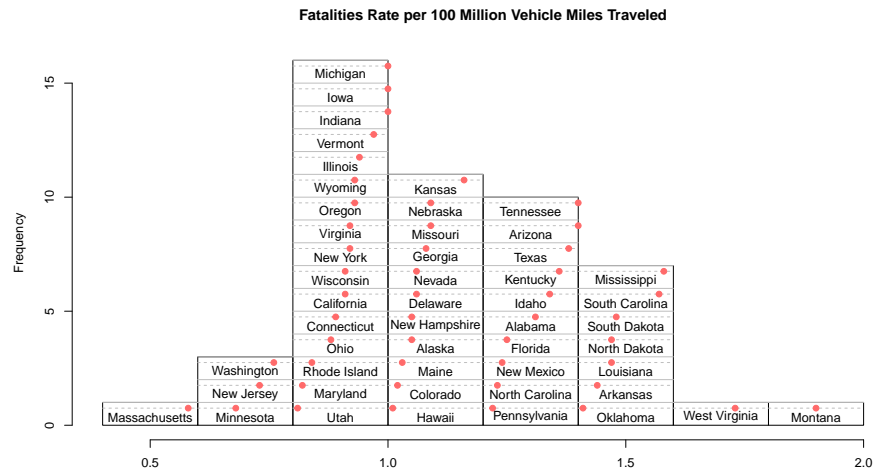
data=filter(data, State!="District of Columbia")

names(data)

## [1] "State"
## [2] "Pedestrians.Killed"
## [3] "Pedacyclists.Killed"
## [4] "Population..Thousands."
## [5] "Pedestrian.Fatality.Rate.per.100.000.Population"
## [6] "Pedacyclist.Fatality.Rate.per.100.000.Population"
## [7] "Total..Pedestrians...Pedacyclist."
## [8] "Rank.x"
## [9] "X.x"
## [10] "Sources."
## [11] "Fatalities.Rate.per.100.Million.Vehicle.Miles.Traveled"
## [12] "Rank.y"
## [13] "X.y"
## [14] "Source."
## [15] "MillionMilesTraveled"

val="Fatalities.Rate.per.100.Million.Vehicle.Miles.Traveled"
main=str_replace_all(val, "\\.", " ")
specialHist(data=data,
            val=val,
            names="State",
            main=main,
            xlab="")

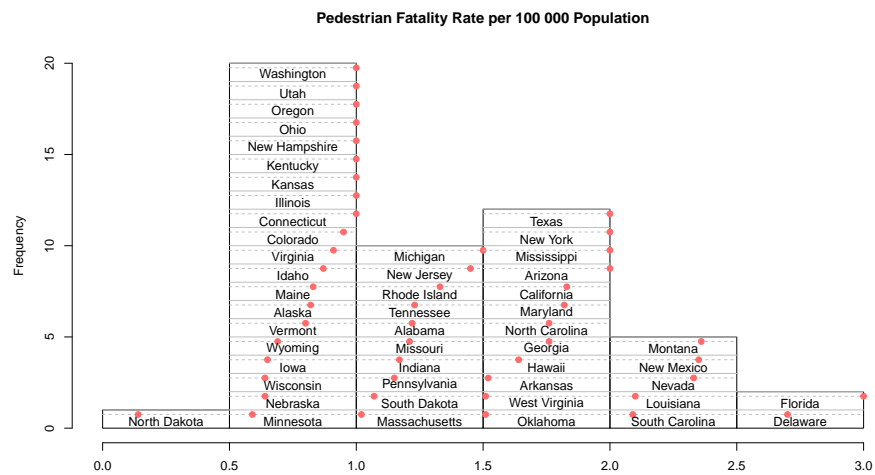
```



```

val="Pedestrian.Fatality.Rate.per.100.000.Population"
main=str_replace_all(val, "\\.", " ")
specialHist(data=data,
            val=val,
            names="State",
            main=main,
            xlab=" ")

```



```

## Executing:
## 'convert' -loop 0 -delay 150 Rplot1.png Rplot2.png Rplot3.png
## 'DrivingData.gif'
## Output at: DrivingData.gif

```