

# Visualizing data

Data Studio • The Lede Program • Columbia University  
Hilary Fung • Monday, July 15, 2019

## RANK IN 1790.

1790.

1800.

1810.

1820.

1830.

1840.

1850.

## RANK IN 1850.

Virginia.....1.  
 Massachusetts.....2.  
 Pennsylvania.....3.  
 North Carolina.....4.  
 New-York.....5.  
 Maryland.....6.  
 South Carolina.....7.  
 Connecticut.....8.  
 New-Jersey.....9.  
 New-Hampshire.....10.  
 Vermont.....11.  
 Georgia.....12.  
 Kentucky.....13.  
 Rhode Island.....14.  
 Delaware.....15.  
 Tennessee.....16.

17. Ohio  
 18. Dist. Col.  
 19. Miss.  
 20. Ind.

Lou.

Ala.

Mis.

Ill.

Mich.

Ark.

Flo.

Iowa.

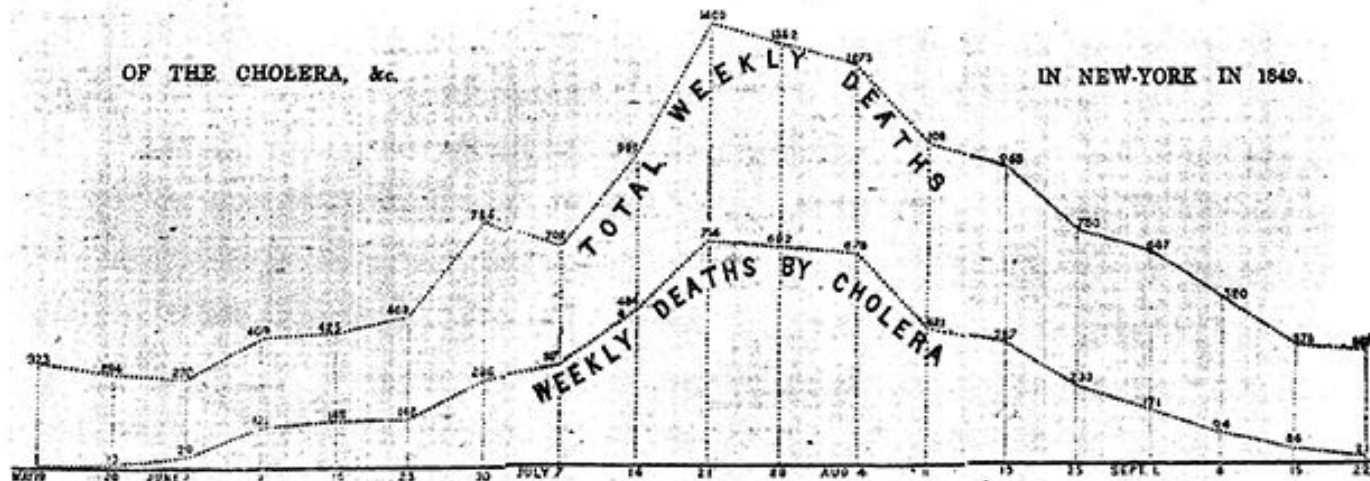
Wis.

1. New-York.  
 2. Pennsylvania.  
 3. Ohio.  
 4. Virginia.  
 5. Tennessee.  
 6. Massachusetts.  
 7. Indiana.  
 8. Kentucky.  
 9. Georgia.  
 10. North Carolina.  
 11. Illinois.  
 12. Alabama.  
 13. Missouri.  
 14. South Carolina.  
 15. Mississippi.  
 16. Maine.  
 17. Maryland.  
 18. Louisiana.  
 19. New-Jersey.  
 20. Michigan.  
 21. Connecticut.  
 22. New-Hampshire.  
 23. Vermont.  
 24. Wisconsin.  
 25. Texas.  
 26. Arkansas.  
 27. Iowa.  
 28. Rhode Island.  
 29. California.  
 30. Delaware.  
 31. Florida.  
 32. New-Mexico Terr.  
 33. District Columbia.  
 34. Oregon Terr.  
 35. Utah.  
 36. Minnesota.

# DIAGRAM SHOWING THE RISE, PROGRESS AND DECLINE

OF THE CHOLERA, &c.

IN NEW-YORK IN 1849.



DRAWN AND ENGRAVED EXPRESSLY FOR THE NEW-YORK TRIBUNE.

The above Diagram, or Graphic Table, (for which we are indebted to Professor GILLESPIE of Union College,) represents to the eye, in a very striking manner, the rise, progress, and decline of the Cholera, and other diseases in our City, during the last four months.

Each half-inch along the bottom line represents a week. The dates are placed under each. At the end of each half-inch, or week, are upright dotted lines, whose various lengths indicate the number of deaths by Cholera, and other causes, during that week; each inch on these upright lines corresponding to 500 deaths. The numbers are placed at the top of each. The zig-zag lines, which join the ends of these lines, show, by their upward or downward slopes, whether the deaths during those weeks have increased or decreased, rapidly or slowly.

Some curious circumstances are apparent, on an inspection of this figure. We see that during the first two weeks of the Cholera, while it was increasing, as shown by

the line sloping upward, the total deaths were decreasing, as shown by the line sloping downward. This was probably caused by the great care in diet, &c. then practiced, on the first alarm. In the week ending July 7, while the Cholera line goes up the "Total deaths" line unaccountably goes down. Thence both lines go on ascending, and the corresponding number of deaths increasing, till in the week ending July 21, they reach their culminating point. Thence there is a constant and quite regular descent, excepting a sudden fall, from Aug. 4 to 11. This may have arisen from the diminution of population, consequent upon the custom of many persons to leave the city at the beginning of that month. The descent keeps on, till it brings up to our present normal condition.

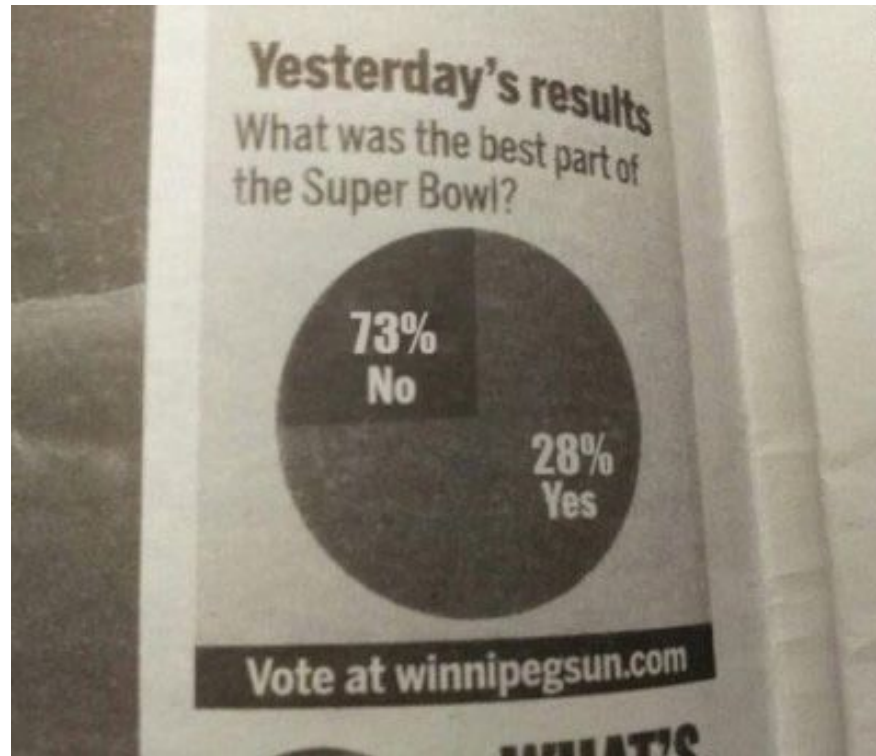
If the average temperature, moisture, electrical state, &c. during these weeks were represented in the same manner, and added to this diagram, their comparison would show at a glance whether there has been any connection between them.







**Pies and bars**





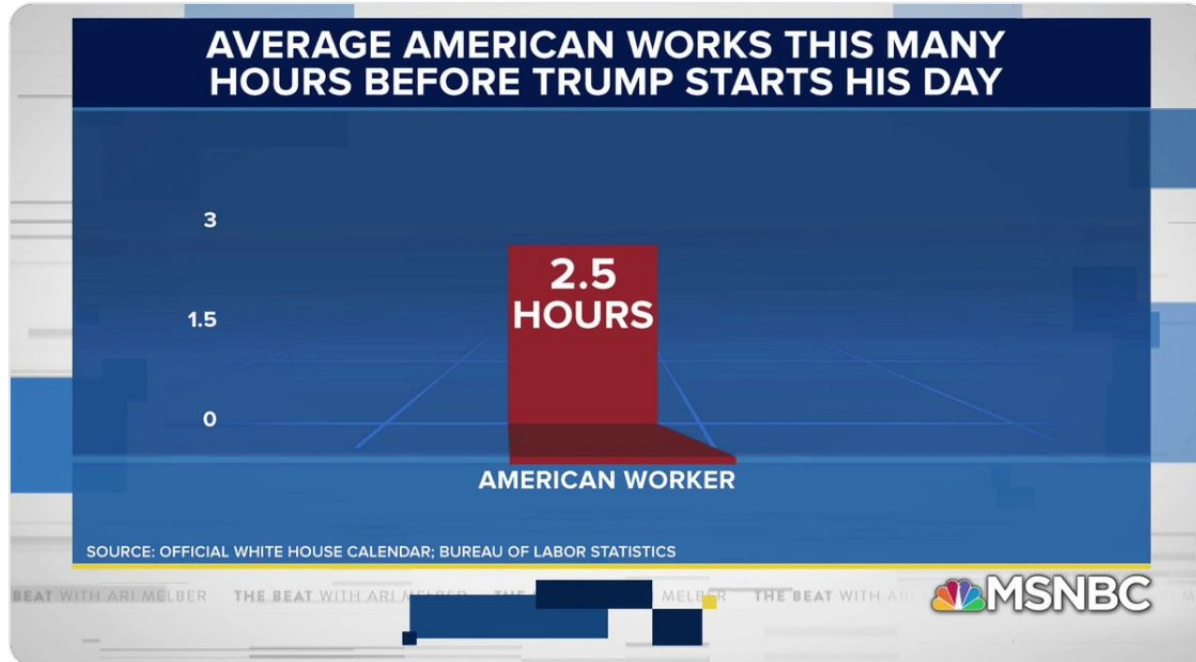
**TheBeat w/Ari Melber** ✓

@TheBeatWithAri

Follow



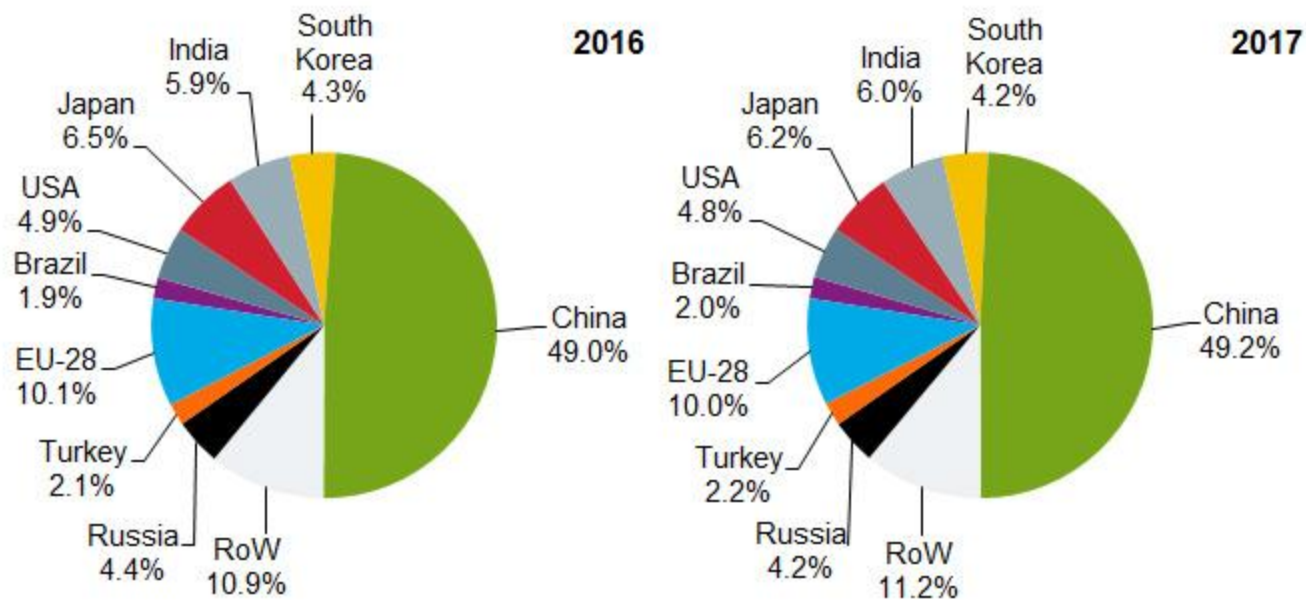
"Most Americans work longer hours than this low-energy President" - @AriMelber



6:41 PM - 21 Jan 2019



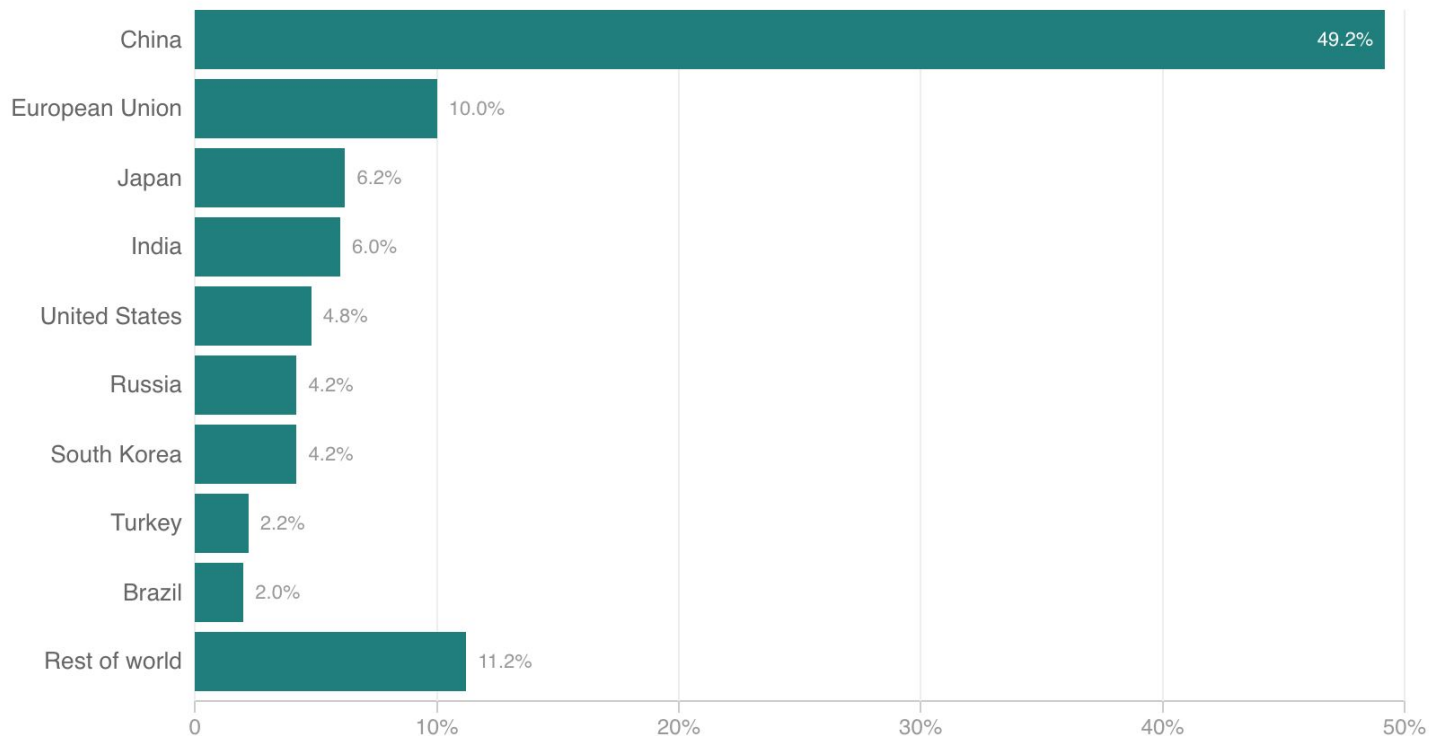
Share of world crude steel production 2016 & 2017



Source: worldsteel

# China Produces Almost Half Of The World's Steel

Share of world crude steel production, 2017

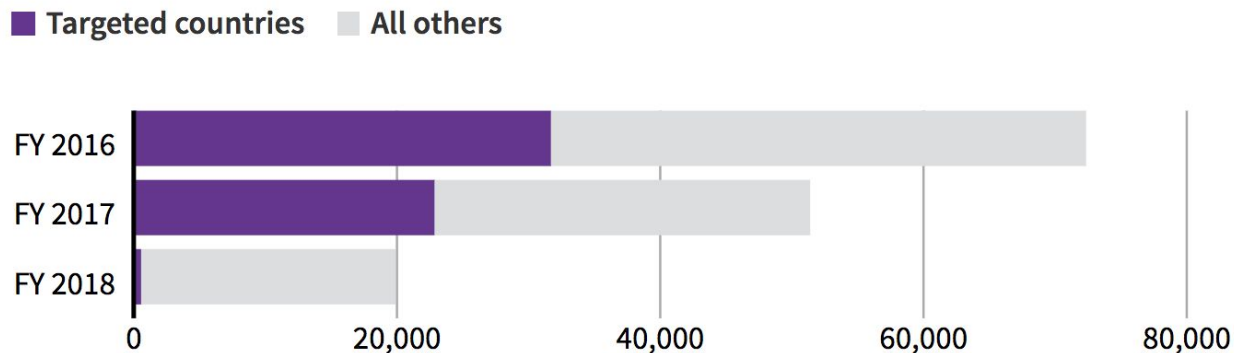


Source: [World Steel Association](#)

Credit: Hilary Fung/NPR

## Some nationalities hit harder than others

Though overall refugee admissions are lower than previous years, the Trump administration's policies have hit refugees from 11 countries particularly hard: **Egypt, Iran, Iraq, Libya, Mali, North Korea, Somalia, South Sudan, Sudan, Syria and Yemen**. Current and former officials say the background checks these refugees go through are taking longer and turning up more red flags than they did before. The admission numbers show they now have almost no chance of getting to the United States.



# Drug Abuse by County Type

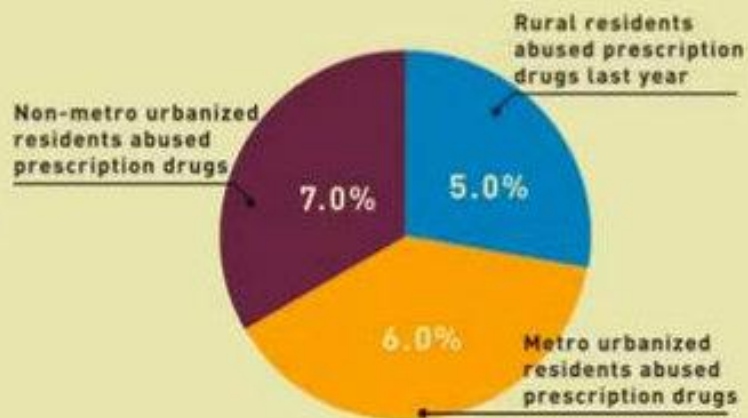
## Illicit Drug Use:

Illicit drug abuse is greatest in metropolitan areas.  
In 2011, illicit drugs used by people ages 12+ was:



## Prescription Drug Use:

Prescription drug abuse is greater in urbanized areas:



# Reading Skills



Grade 8 students at or above the specified reading achievement level:



Private School  
Students



Public School  
Students



**Basic**



**Proficient**



**Advanced**



# WELFARE VS. FULL TIME JOBS



SOURCE: CENSUS BUREAU, 2011

RED SOX BEAT ST. LOUIS CARDINALS 4-2 TO EVEN WORLD SERIES AT T

mediamatters.org

Fox News via [mediamatters.org](http://mediamatters.org)



# WELFARE VS. FULL TIME JOBS



SOURCE: CENSUS BUREAU, 2011

RED SOX BEAT ST. LOUIS CARDINALS 4-2 TO EVEN WORLD SERIES AT

mediamatters.org

100 million

80

60

40

20

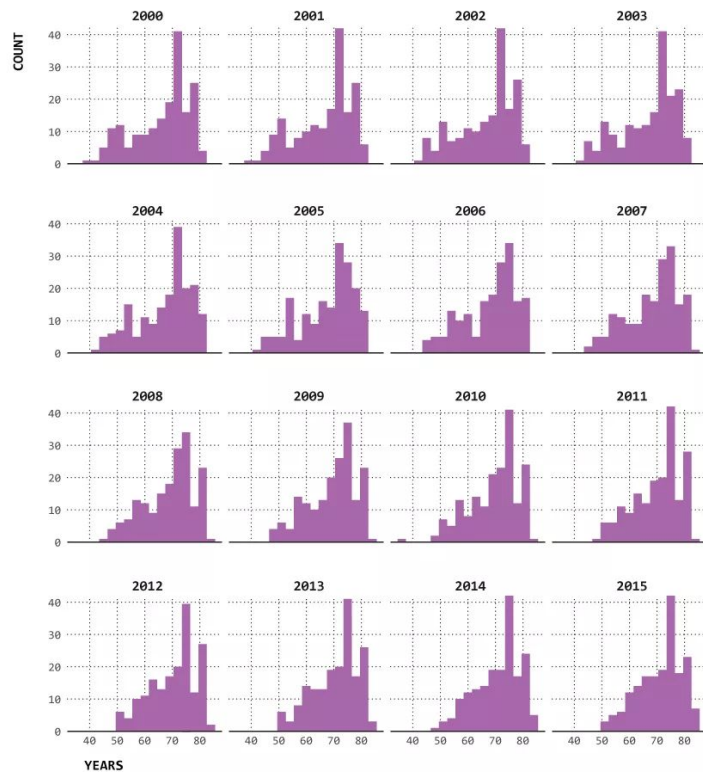
0

People on welfare

People with full-time jobs



**LIFE EXPECTANCY AT BIRTH**  
**DISTRIBUTION OF COUNTRIES, 2000-2015**



**Histogram**

# **Line charts and area charts**

# US GDP

\$16 trillion

12

8

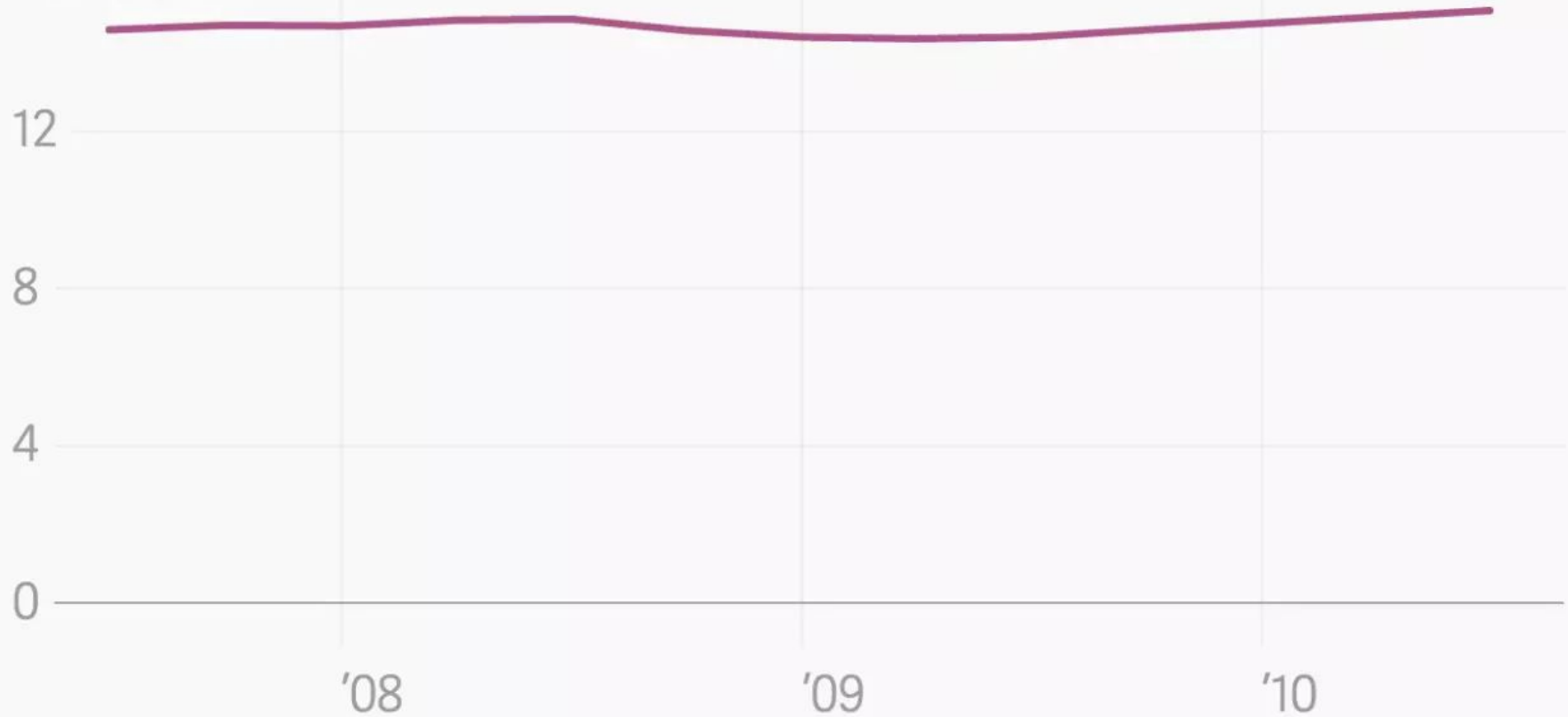
4

0

'08

'09

'10



# US GDP

\$15.00 trillion

14.75

14.50

14.25

14.00

'08

'09

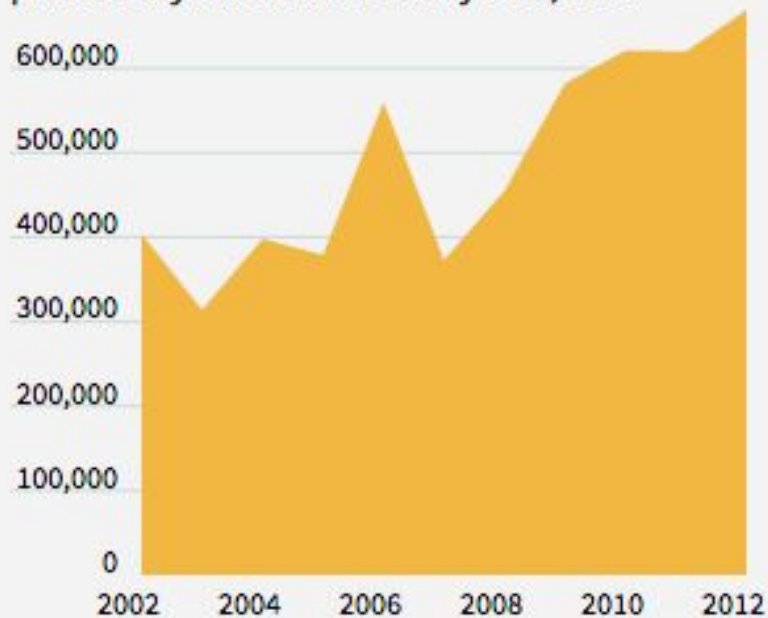
'10





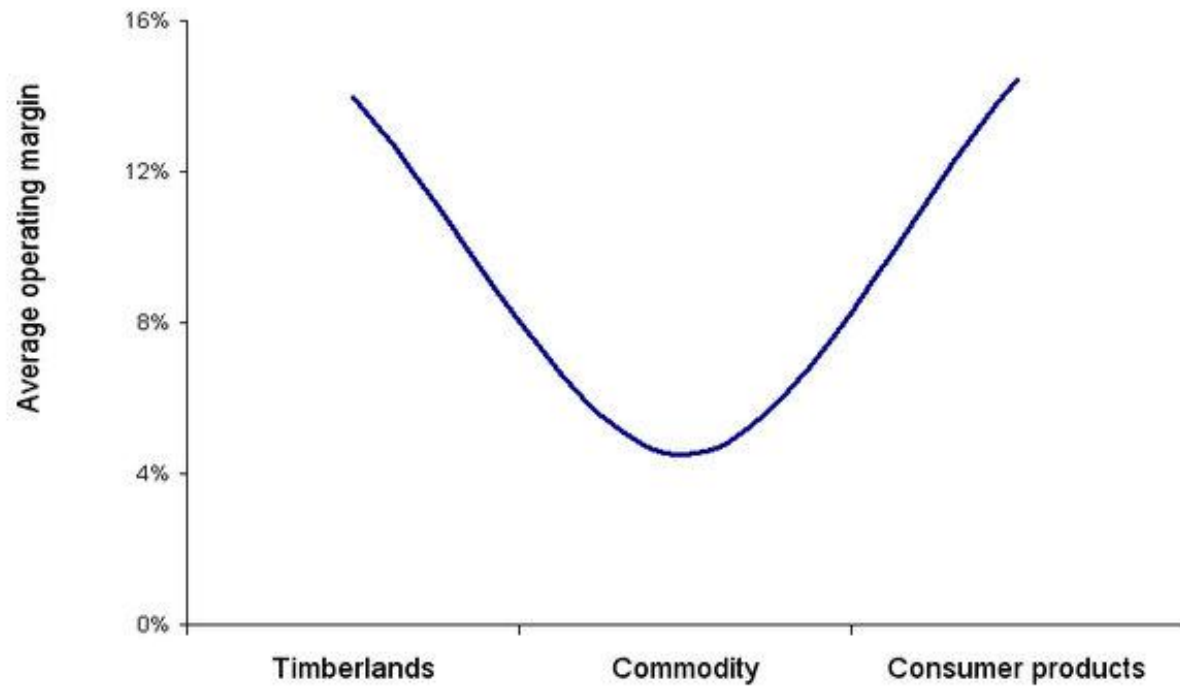
## U.S. HEROIN USE BY YEAR

Between 2002 and 2012, the number of people who reported using heroin within the previous year increased by 265,000.



Source: Substance Abuse and Mental Health Services Administration

Average operating margin by sector in the Canadian forest industry (1999-2012)



# QUALITATIVE



Tagalongs



Do-si-dos



Samoas



Savannah  
Smiles



S'mores



Thin Mints



Toffe-tastic



Trefoils

# QUANTITATIVE



# UNEMPLOYMENT RATE

## UNDER PRESIDENT OBAMA

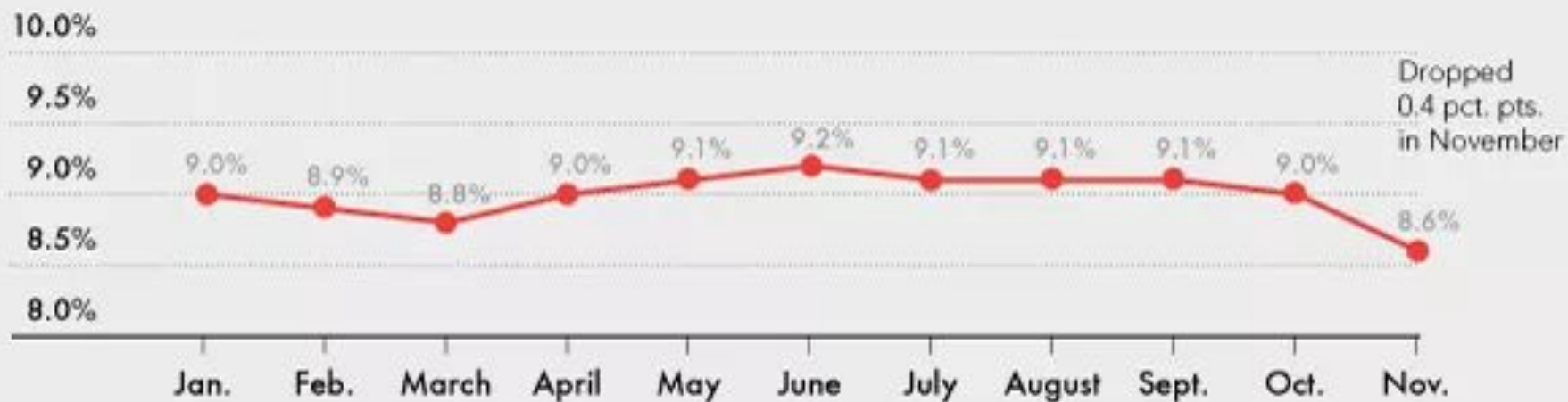


**2011**

**SOURCE: BUREAU OF LABOR STATISTICS**

AR WAR AND A TROOP WITHDRAWAL AT THE EI NAS FUT 2,292.50

## Unemployment Rate in 2011

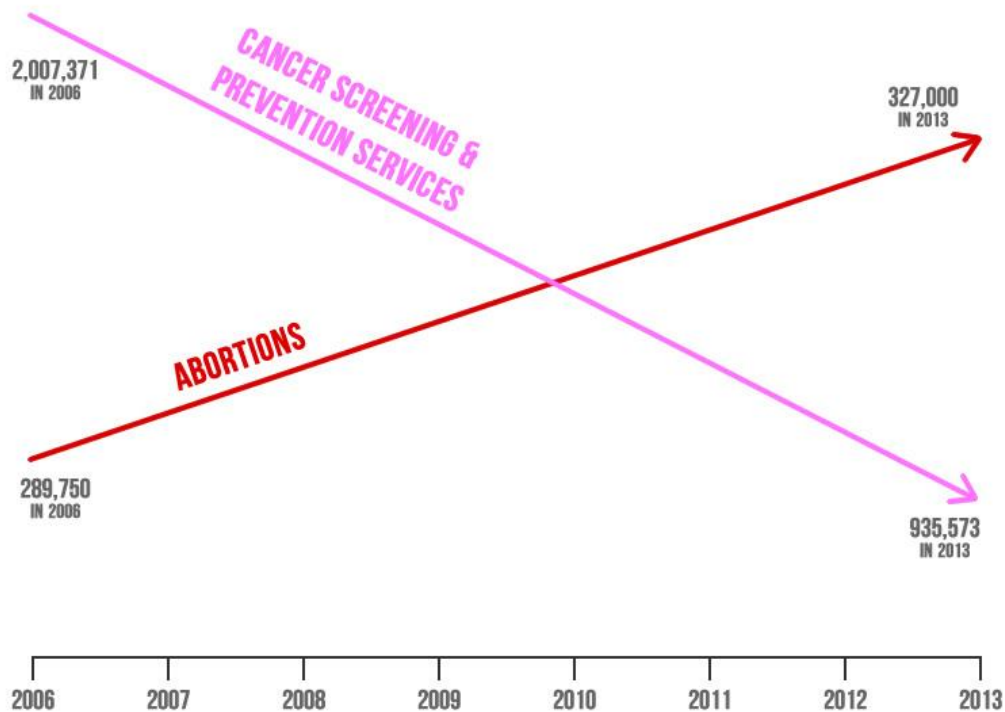


Source: Bureau of Labor Statistics



## PLANNED PARENTHOOD FEDERATION OF AMERICA: ABORTIONS UP — LIFE-SAVING PROCEDURES DOWN

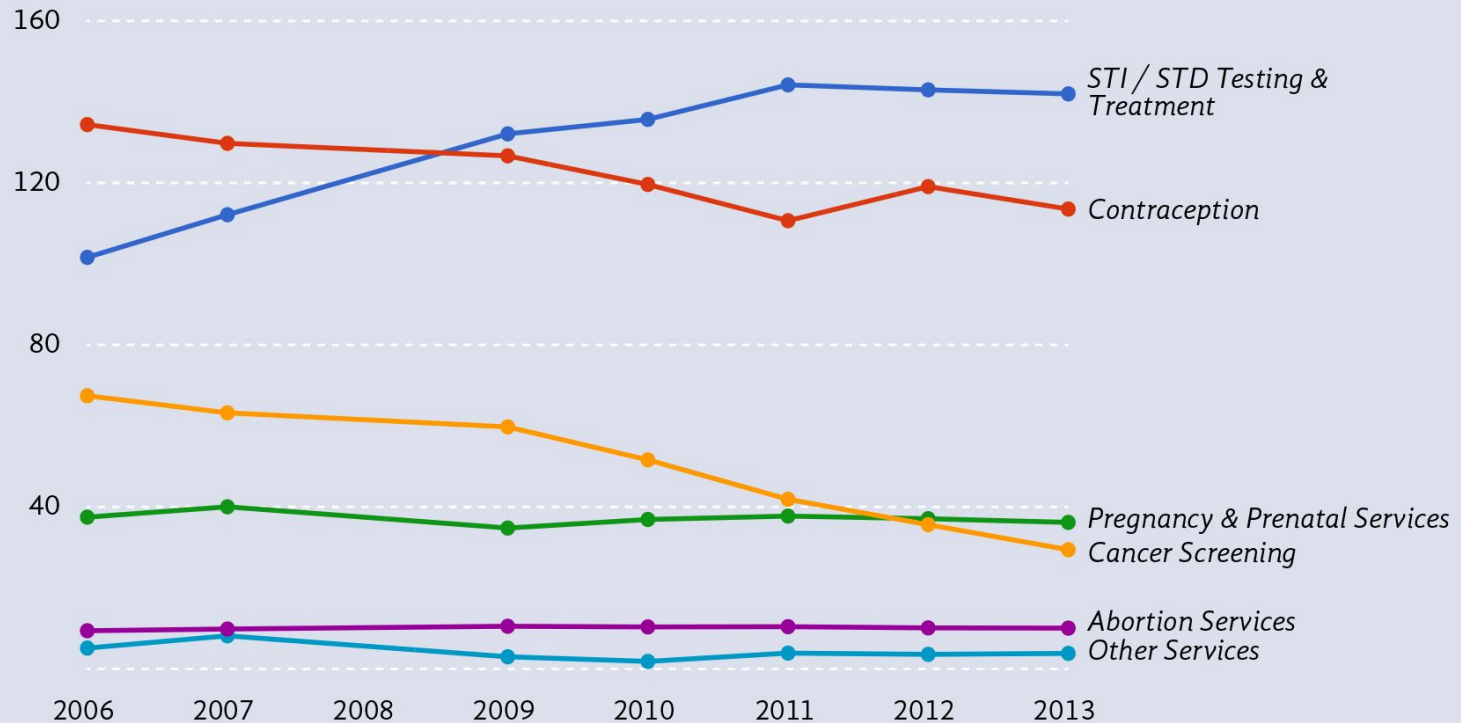
---



SOURCE: AMERICANS UNITED FOR LIFE

# Services Provided by Planned Parenthood

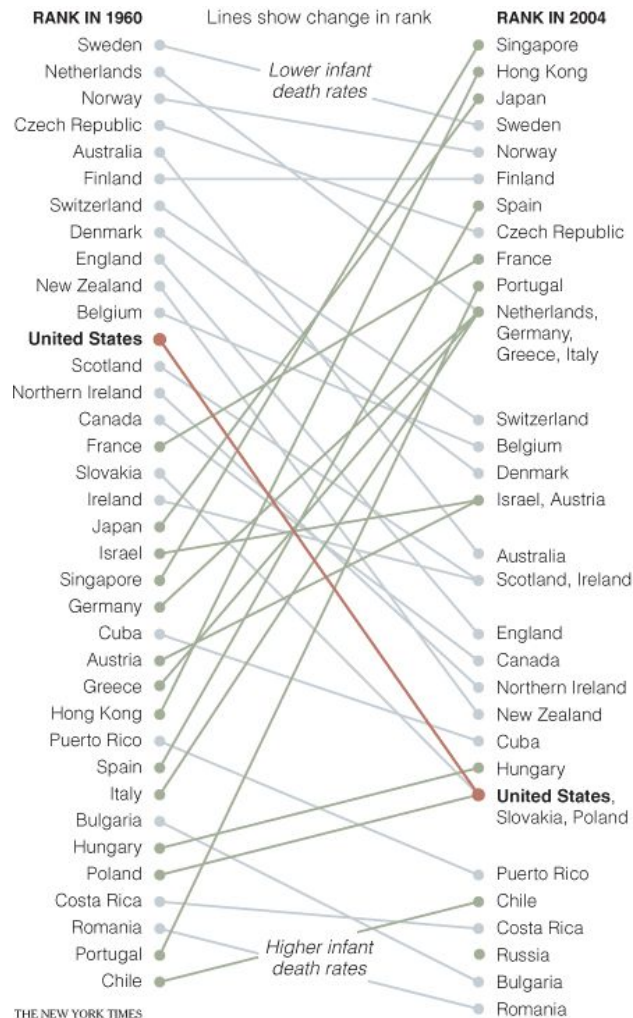
per 10,000 people in the population



SOURCE: Planned Parenthood Annual Reports

Current Receipts of Government as a  
Percentage of Gross Domestic  
Product, 1970 and 1979





# Infrastructure

PROPOSED 2018 BUDGET: \$114.4B

Reagan

Bush

Clinton

Bush

Obama

The government increased oil production in response to the energy crisis.

Housing and Urban Development

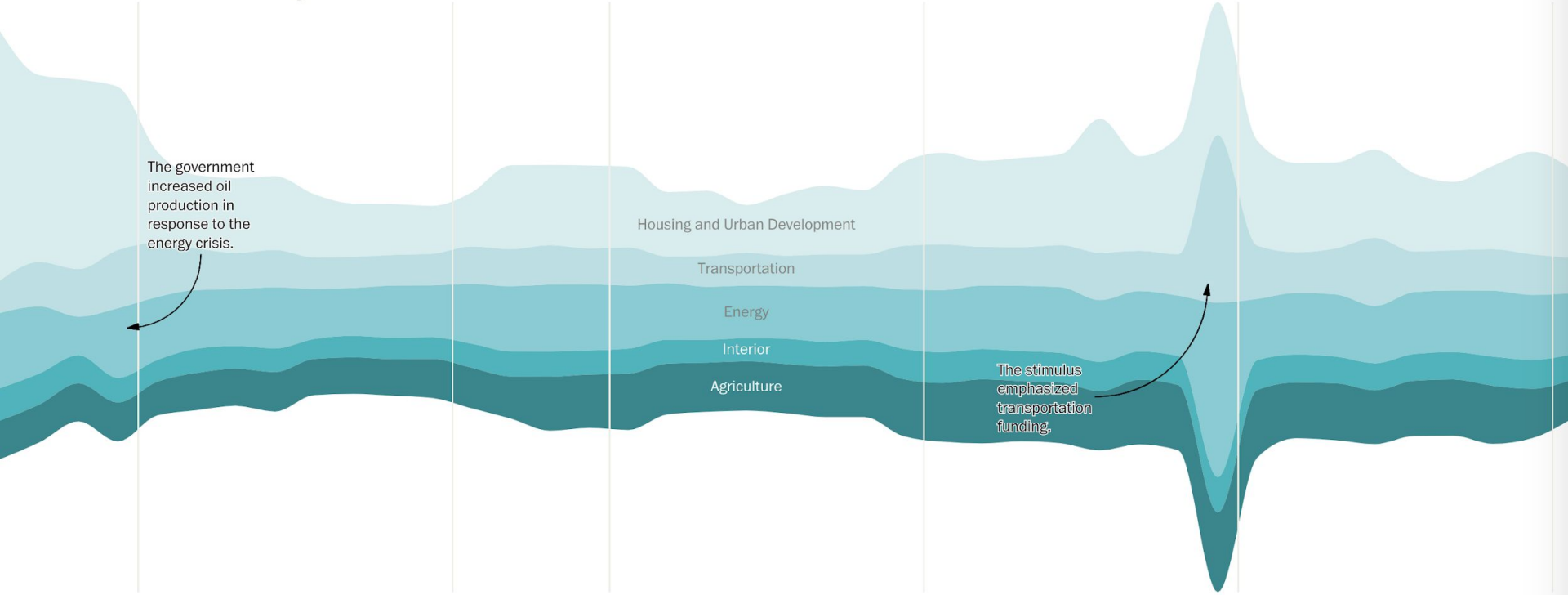
Transportation

Energy

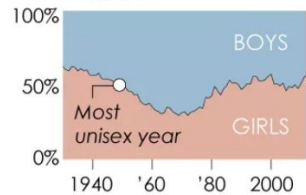
Interior

Agriculture

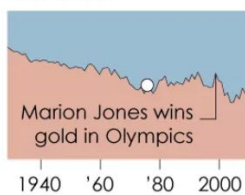
The stimulus emphasized transportation funding.



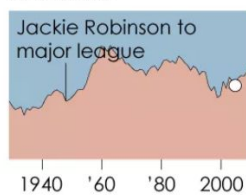
1. Jessie



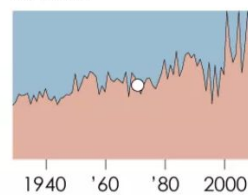
2. Marion



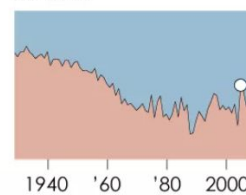
3. Jackie



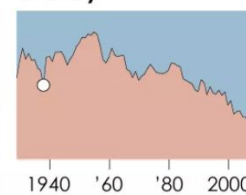
4. Alva



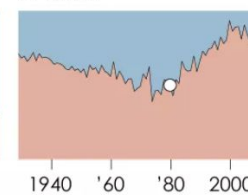
5. Ollie



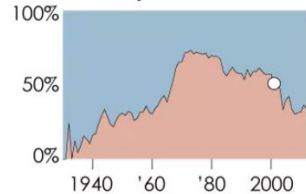
6. Jody



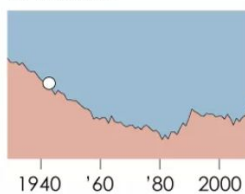
7. Cleo



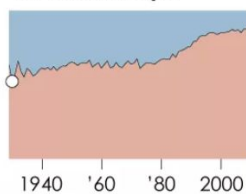
8. Kerry



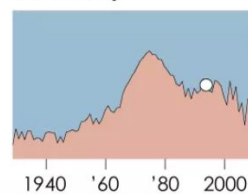
9. Frankie



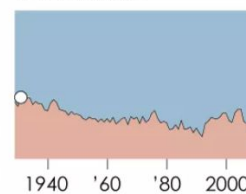
10. Guadalupe



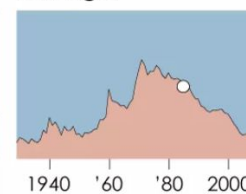
11. Carey



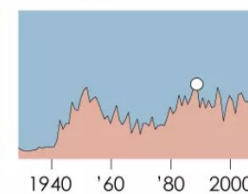
12. Tommie



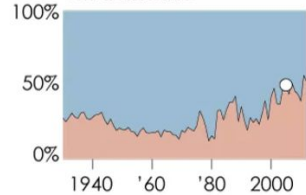
13. Angel



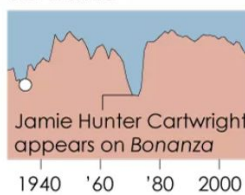
14. Hollis



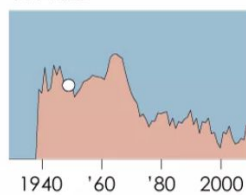
15. Sammie



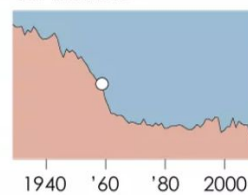
16. Jamie



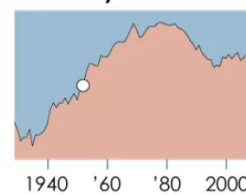
17. Kris



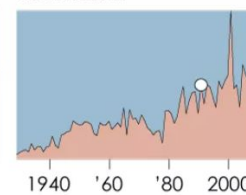
18. Robbie



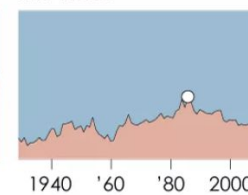
19. Tracy



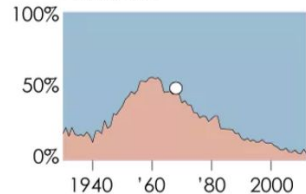
20. Merrill



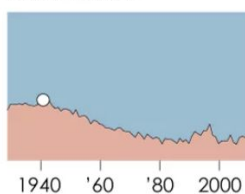
21. Noel



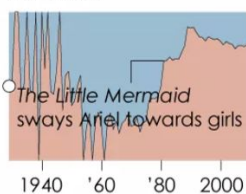
22. Rene



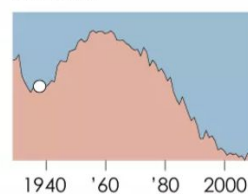
23. Johnnie



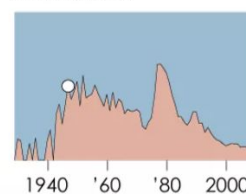
24. Ariel



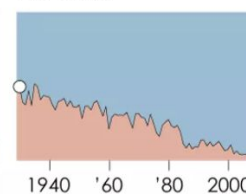
25. Jan



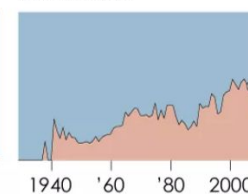
26. Devon



27. Cruz

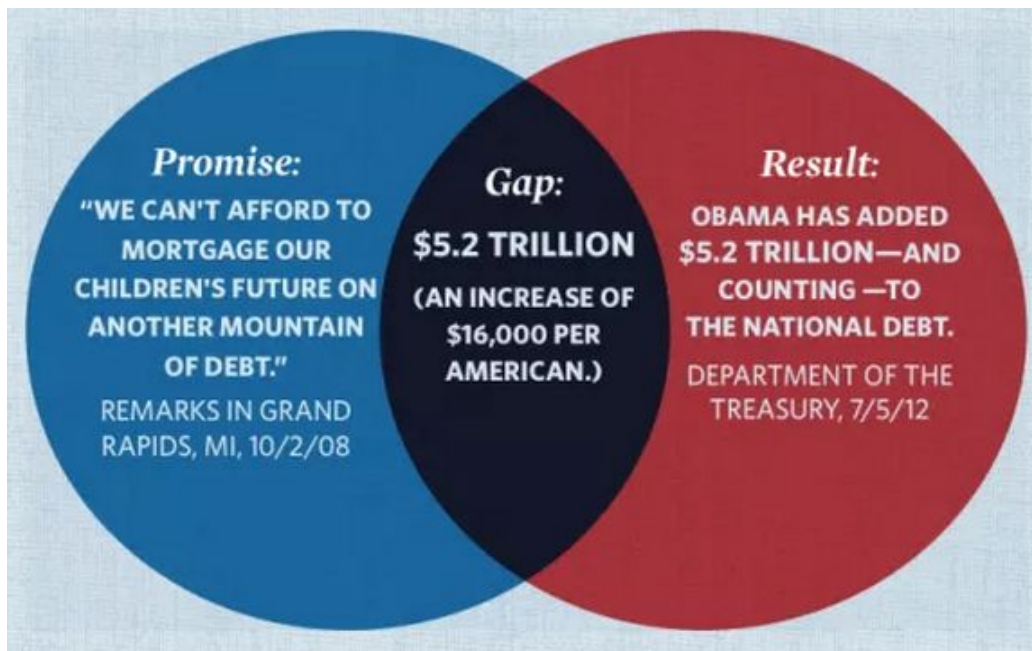


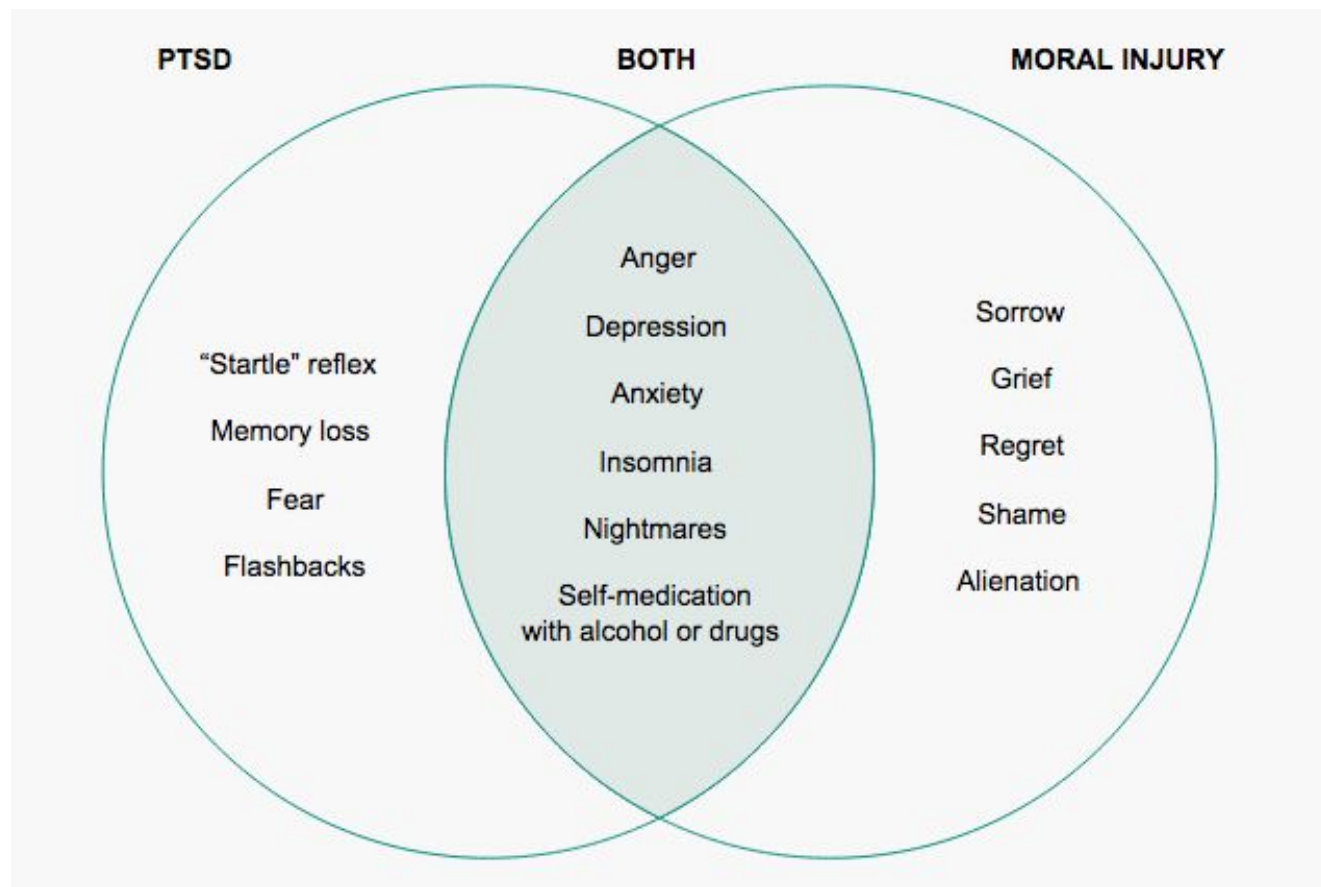
28. Michel

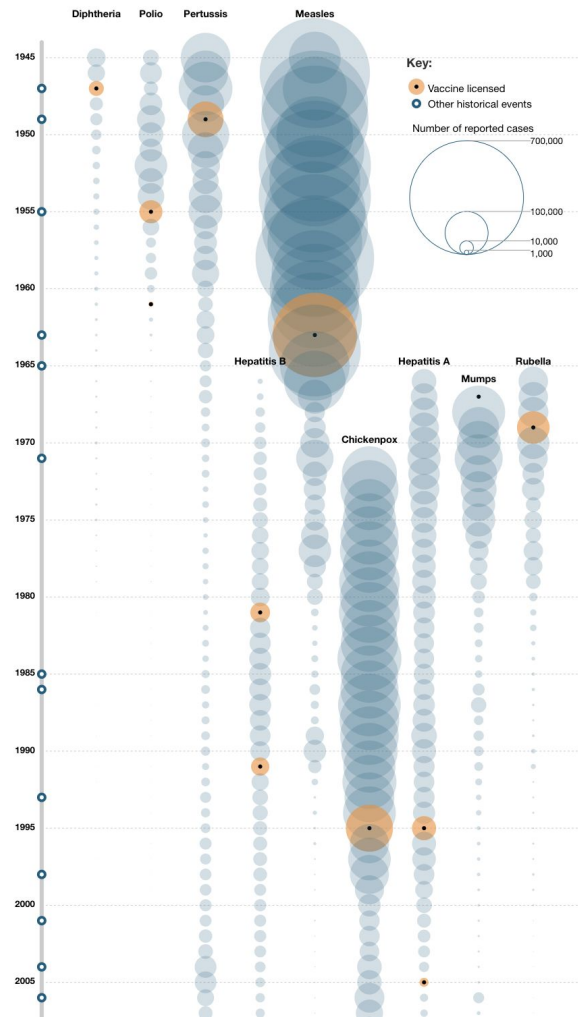




# Venn diagrams







Press [esc] to exit full screen

# ILLEGALS TRYING TO CROSS SW BORDER

**76,103**

**FEB. 2019**

**35,751**

**FEB. 2018**

U.S. CBP

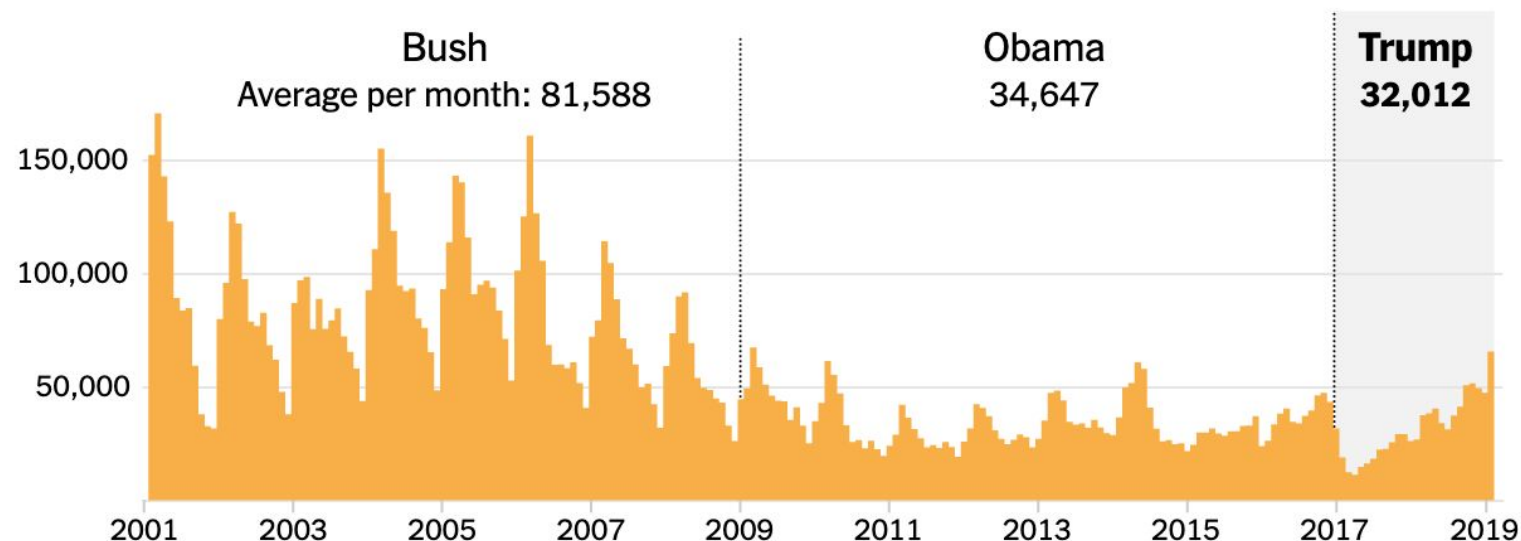


Fox News - [Family unit apprehensions at southern border up 300 percent since fiscal year 2018](#): CBP (Mar. 06, 2019)

# Illegal Border Crossings Have Spiked in Recent Months

Over the past two decades, there were large declines in apprehensions along the southwestern border with Mexico. Despite the overall trend, illegal border crossings have surged in the current fiscal year, which began in October.

## Apprehensions at the southwestern border, by month





# Chart Suggestions—A Thought-Starter

