

Fleetware Internship

Matt Johnson

Fleetware Background

- Contract Software development
- Employs a team of 2-5 employees
- Currently contracted through the University of Pennsylvania's Business School in the design of a restful API for the recently released USAFacts website

USAFacts

- Commissioned as a philanthropic project by Steve Ballmer, former Microsoft CEO
- The main goal was to give the American people an unbiased look at how the government is performing



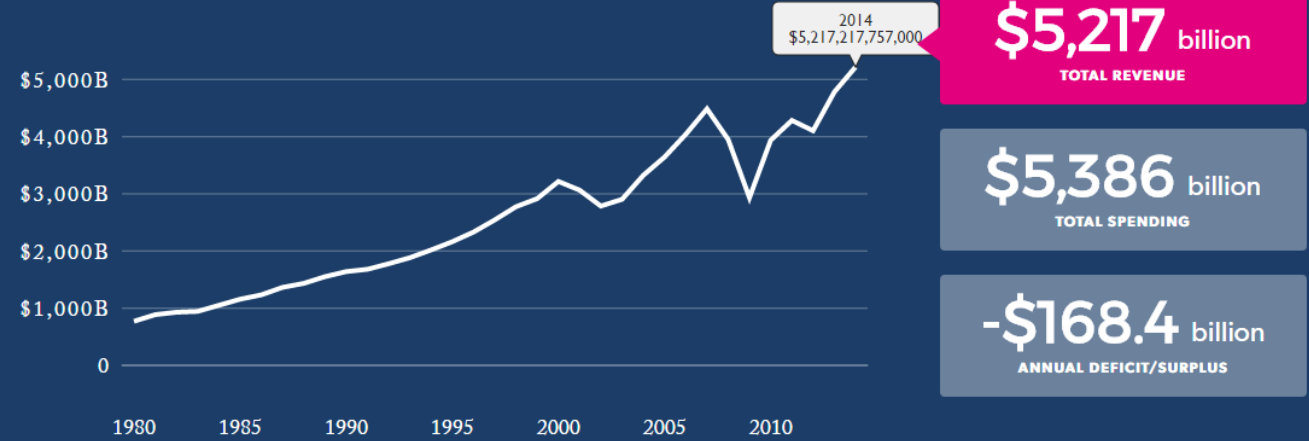
USAFacts

Government Finances

Find the financial details of how much money government makes, owes, as well as spending details on employees and services.

| Revenue (\$ billions) | Federal | State & Local | Combined |
|---|----------------|----------------|----------------|
| Tax Revenue | 2,912.6 | 1,498.6 | 4,411.2 |
| + Individual Income Taxes | 1,394.6 | 341.1 | 1,735.7 |
| + Payroll Taxes | 1,040.8 | n/a | 1,040.8 |
| Corporate Income Taxes | 320.7 | 54.6 | 375.3 |
| + Sales and Excise Taxes | n/a | 517.4 | 610.7 |
| Property Taxes | n/a | 466.4 | 466.4 |
| Estate and Gift Taxes | 19.3 | 5.0 | 24.3 |
| Severance Taxes | n/a | 17.9 | 17.9 |
| Customs Duties | 33.9 | n/a | 33.9 |
| Licenses | n/a | 68.0 | 68.0 |
| Other Taxes | 9.9 | 28.2 | 38.2 |
| Excise Taxes | 93.4 | n/a | n/a |
| Non-Tax Revenue | 134.9 | 1,270.0 | 806.0 |
| + Sales of Government Resources | 8.7 | 19.7 | 28.4 |
| Federal Reserve Earnings | 99.9 | n/a | 99.9 |
| Earnings (Losses) on Investments | n/a | 539.0 | 539.0 |
| Other Non-Tax Revenues | 26.3 | 112.4 | 138.7 |
| Intergovernmental Revenue from Federal Government (Net) | n/a | 598.8 | n/a |
| Total Revenue | 3,047.5 | 2,768.6 | 5,217.2 |

2014 Total Revenue



- Sample graph and breakdown of revenue for 2014

USAFacts

DEMOGRAPHICS

Net divorce rate (Currently divorced as % o...

15% 2015

Households

124,587,000 2015

Population

321,418,820 2015

Currently married

133,564,000 2015

Family Households

81,716,000 2015

Rate of Young Adults Living at Home

15% 2015

Average Household Size

2.54 2015

Young Adults Living at Home

6,509,000 2015

Average Family Size

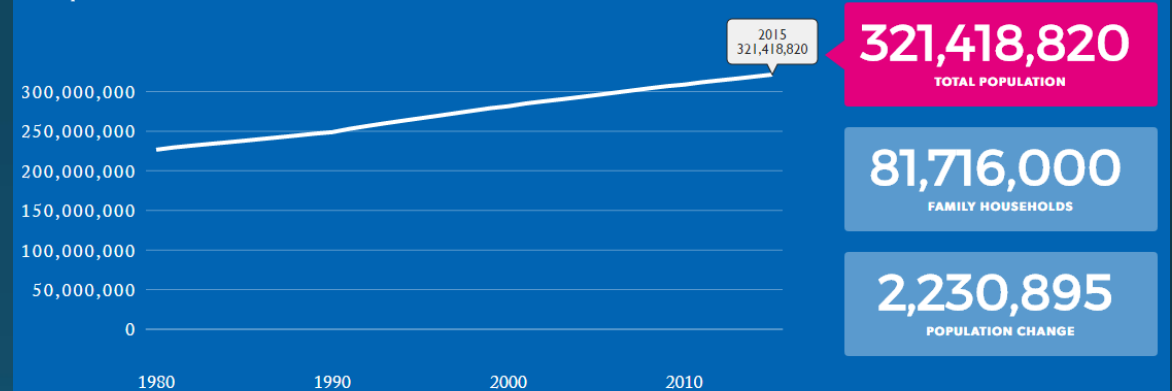
2.54 2015

U.S. Population

America is a diverse nation made up of people from a wide variety of racial, ethnic and educational backgrounds. Explore these differences below.

2015

Total Population



- Sample statistic of U.S. Population for 2015 and its various demographics

USAFacts

VETERAN'S AFFAIRS

VA expenditures

\$161,229,000,000 2014



Median income

\$36,927 2014



Veteran population

21,894,000 2014



Veteran Patients

5,829,000 2014



In poverty

7% 2014



Labor force participation

75% 2014



Unemployment

6% 2014



With any disability

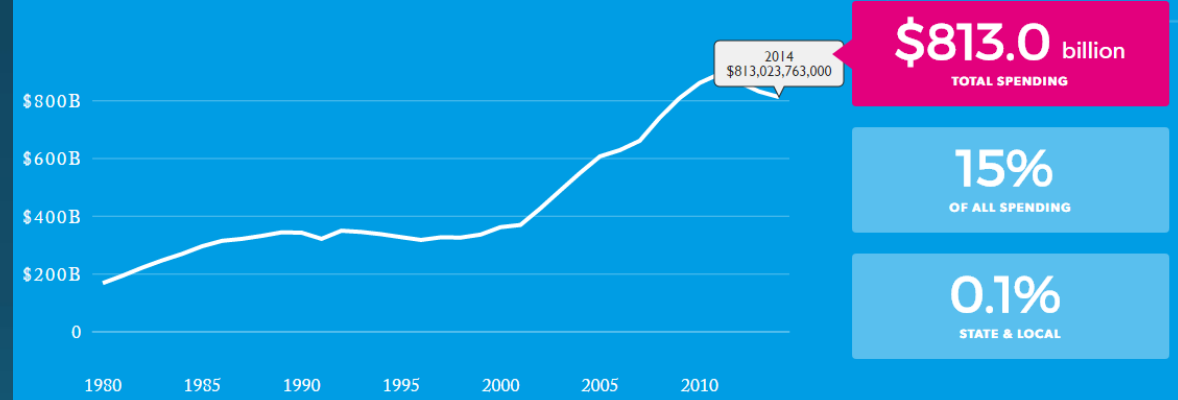
29% 2014



Provide for the Common Defense

Government prevents international conflict where possible and engages in war where necessary, manages relationships with other nations, and keeps the borders secure.

2014
Total Spending

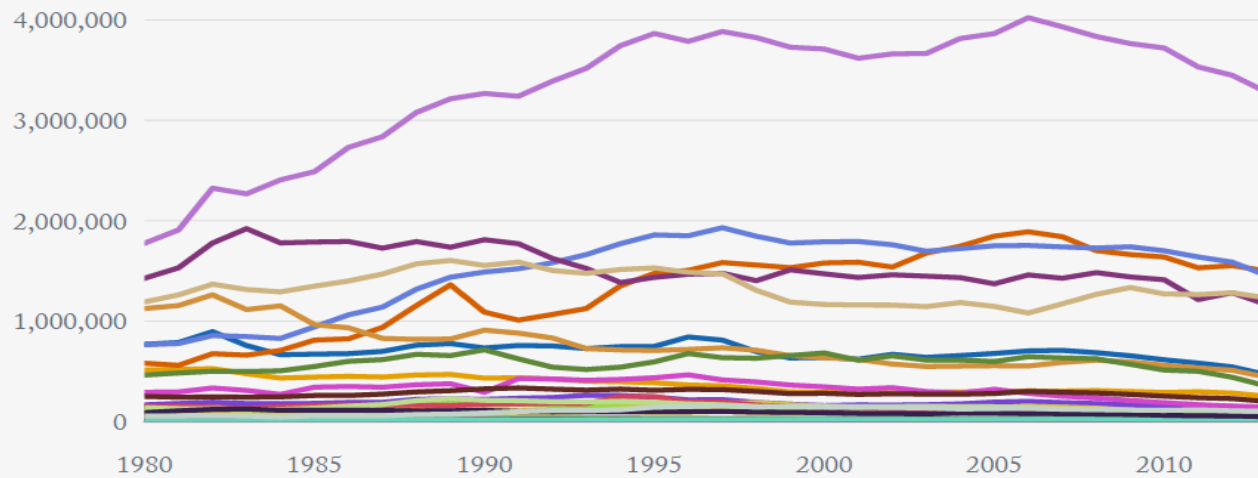


- Sample statistic of Veteran's affairs and general defense spending for 2014-2015

Responsibilities

| | Total Arrests | | | | | | | | | | |
|----|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 1980 | 1990 | 2000 | 2005 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| 2 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | All Offenses | 10,458,260 | 14,217,170 | 13,985,979 | 14,097,950 | 13,122,113 | 12,410,323 | 12,198,491 | 11,303,198 | 11,207,143 | 10,798,477 |
| 5 | Drug Abuse Violations -Total | 580,900 | 1,089,500 | 1,579,566 | 1,846,351 | 1,638,846 | 1,531,251 | 1,552,432 | 1,501,043 | 1,561,231 | 1,488,707 |
| 6 | Sale-Manufacturing-Total | 129,725 | 347,915 | 327,157 | 343,698 | 302,312 | 281,173 | 277,802 | na | na | na |
| 7 | Possession-SubTotal | 451,175 | 741,585 | 1,252,409 | 1,502,653 | 1,336,532 | 1,250,078 | 1,274,630 | na | na | na |
| 8 | Driving Under the Influence | 1,426,700 | 1,810,800 | 1,471,289 | 1,371,919 | 1,412,223 | 1,215,077 | 1,282,957 | 1,166,824 | 1,117,852 | 1,089,171 |
| 9 | Larceny-Theft | 1,191,900 | 1,554,800 | 1,166,362 | 1,146,696 | 1,271,410 | 1,264,986 | 1,282,352 | 1,231,580 | 1,238,190 | 1,160,390 |
| 10 | Assault | 766,070 | 1,489,430 | 1,790,586 | 1,750,689 | 1,700,937 | 1,639,429 | 1,587,838 | 1,456,601 | 1,465,943 | 1,457,173 |
| 11 | Aggravated Assault | 277,470 | 475,330 | 478,417 | 449,297 | 408,488 | 397,707 | 388,362 | 358,860 | 372,685 | 376,154 |
| 12 | Other Assaults | 488,600 | 1,014,100 | 1,312,169 | 1,301,392 | 1,292,449 | 1,241,722 | 1,199,476 | 1,097,741 | 1,093,258 | 1,081,019 |
| 13 | Disorderly Conduct | 769,700 | 733,000 | 638,740 | 678,231 | 615,172 | 582,158 | 543,995 | 467,993 | 436,014 | 386,078 |
| 14 | Drunkenness | 1,125,800 | 910,100 | 637,554 | 556,167 | 560,718 | 534,218 | 511,271 | 443,527 | 414,854 | 405,880 |
| 15 | Liquor Laws | 463,500 | 714,700 | 683,124 | 597,838 | 512,790 | 500,648 | 441,532 | 354,872 | 321,125 | 266,250 |
| 16 | Burglary | 513,300 | 432,600 | 289,844 | 298,835 | 289,769 | 296,707 | 283,582 | 252,629 | 237,974 | 216,010 |
| 17 | Vandalism | 250,500 | 326,000 | 281,305 | 279,562 | 252,753 | 237,638 | 228,463 | 201,168 | 198,400 | 191,015 |
| 18 | Fraud | 291,500 | 291,600 | 345,732 | 321,521 | 187,887 | 168,217 | 153,535 | 143,528 | 141,293 | 133,138 |
| 19 | Weapons; Carrying, Possessing, etc. | 166,700 | 221,200 | 159,181 | 193,469 | 159,020 | 153,519 | 149,286 | 137,779 | 140,713 | 145,358 |
| 20 | Offenses Against the Family and Children | 55,400 | 85,800 | 147,663 | 129,128 | 111,062 | 116,723 | 107,018 | 101,247 | 102,336 | 94,837 |
| 21 | Robbery | 146,270 | 167,990 | 106,130 | 114,616 | 112,300 | 106,674 | 103,661 | 94,406 | 94,403 | 95,572 |
| 23 | Stolen Property; Buying, Receiving, Possessing | 123,200 | 165,200 | 118,641 | 133,856 | 94,802 | 93,234 | 97,670 | 92,691 | 88,946 | 88,576 |
| 24 | Curfew and Loitering Law Violations | 70,700 | 80,800 | 154,711 | 140,835 | 94,797 | 76,942 | 70,190 | 56,371 | 53,654 | 44,802 |
| 25 | Motor Vehicle Theft | 138,300 | 211,300 | 148,225 | 147,459 | 71,487 | 66,414 | 68,845 | 64,566 | 68,422 | 77,979 |
| 26 | Sex Offense (except forcible rape and prostitution) | 67,400 | 107,600 | 93,399 | 91,625 | 72,628 | 69,225 | 68,355 | 57,925 | 55,456 | 51,388 |
| 27 | Forgery and Counterfeiting | 78,200 | 94,800 | 108,654 | 118,455 | 78,101 | 70,211 | 67,046 | 60,969 | 56,783 | 55,333 |
| 28 | Prostitution and Commercialized Vice | 88,900 | 111,400 | 87,620 | 84,891 | 62,668 | 57,345 | 56,575 | 48,620 | 47,598 | 41,877 |
| 29 | Vagrancy | 30,700 | 38,500 | 32,542 | 33,227 | 32,033 | 29,203 | 27,003 | 25,755 | 27,380 | 25,151 |
| 30 | Forcible Rape | 31,380 | 39,160 | 27,469 | 25,528 | 20,088 | 19,491 | 18,098 | 16,863 | 21,007 | 22,863 |
| 31 | Embezzlement | 8,500 | 15,300 | 18,952 | 18,970 | 16,616 | 16,190 | 16,023 | 15,730 | 16,227 | 15,909 |
| 32 | Arson | 19,800 | 19,100 | 16,530 | 16,337 | 11,296 | 11,776 | 11,433 | 10,509 | 9,394 | 8,834 |
| 33 | Murder and Non-Negligent Manslaughter | 20,040 | 22,990 | 13,227 | 14,062 | 11,201 | 10,832 | 11,075 | 10,231 | 10,571 | 11,092 |
| 34 | Gambling | 87,000 | 19,300 | 10,842 | 11,180 | 9,941 | 8,596 | 7,868 | 6,024 | 5,637 | 4,825 |
| 35 | Suspicion | 17,200 | 22,200 | 5,682 | 3,764 | 1,166 | 1,424 | 1,532 | 1,096 | 1,310 | 1,389 |
| 36 | Runaways | 153,200 | 174,200 | 141,975 | 108,954 | - | - | - | - | - | - |
| 37 | All Other Offenses (except traffic) | 1,775,500 | 3,267,800 | 3,710,434 | 3,863,785 | 3,720,402 | 3,532,195 | 3,448,856 | 3,282,651 | 3,274,430 | 3,218,880 |
| 38 | Violent Crime Index | 475,160 | 705,470 | 625,243 | 603,503 | 552,077 | 534,704 | 521,196 | 480,360 | 498,666 | 505,681 |
| 39 | Property Crime Index | 1,863,300 | 2,217,800 | 1,620,961 | 1,609,327 | 1,643,962 | 1,639,883 | 1,646,212 | 1,559,284 | 1,553,980 | 1,463,213 |

Responsibilities



Select Lines

- By Offense
- By Assault Type
- By Drug Abuse Violation

Questions or feedback about the data?

Toggle All Off

- Gambling
- Vagrancy
- Burglary
- Sex Offense (except forcible rape and prostitution)
- Disorderly Conduct
- Murder and Non-Negligent Manslaughter
- Drug Abuse Violations -Total
- Forgery and Counterfeiting
- Robbery
- Weapons; Carrying, Possessing, etc.
- Stolen Property; Buying, Receiving, Possessing
- Fraud
- Forcible Rape
- Suspicion
- Curfew and Loitering Law Violations
- Assault
- Drunkenness
- All Other Offenses (except traffic)
- Liquor Laws
- Arson
- Embezzlement
- Runaways
- Motor Vehicle Theft
- Driving Under the Influence
- Larceny-Theft
- Prostitution and Commercialized Vice
- Offenses Against the Family and Children
- Vandalism

Challenges

- New Languages (C#)
- Coming in late to an already well established project
- Working independently



Classroom Experience

- Compiler construction
 - Weekly deadlines
 - Large piece of established code
 - Learning to modify large sections of the pre-existing code to suit my needs



General Experience

- Learning to take greater care in the code I hand in
- The practical use of object-oriented programming
- A different style of programming for the use on the backend of web development
- Confidence going into the work place

Questions ?