

DEMOCRATIZING OPEN DATA

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Fairfax County, Virginia



PURPOSE

POVERTY in Fairfax County and the Cities of Fairfax and Falls Church, VA

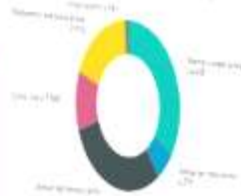
71,932 persons lived below poverty in 2015

A poverty rate of 6.1%

Persons Who Live Below Poverty by Age and Race/Ethnicity



Using weightings of years lived in housing



Employment Status: Persons Age 20 to 64 Years



9% of persons, age 18 and older who speak a language other than English at home, live in poverty



13.3% of persons, age 18 and older who have a disability, live in poverty



11.2% of adults, age 25 and older who have not passed education beyond high school, live in poverty



9.4% of foreign born residents live in poverty

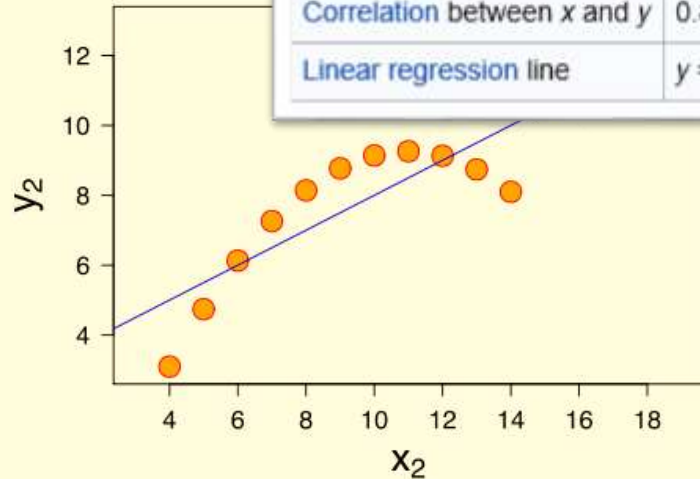
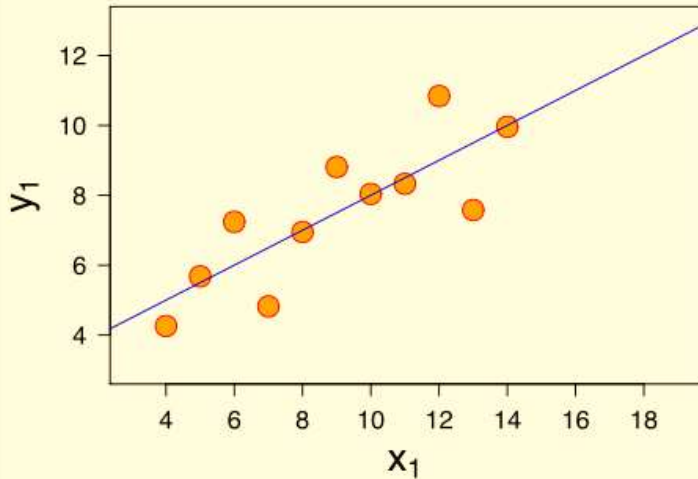


Source: U.S. Census Bureau, American Community Survey (ACS) 2013
Prepared by Area Public Data Systems, Georgetown and Arlington
Public Health Department of Epidemiology and Community Health

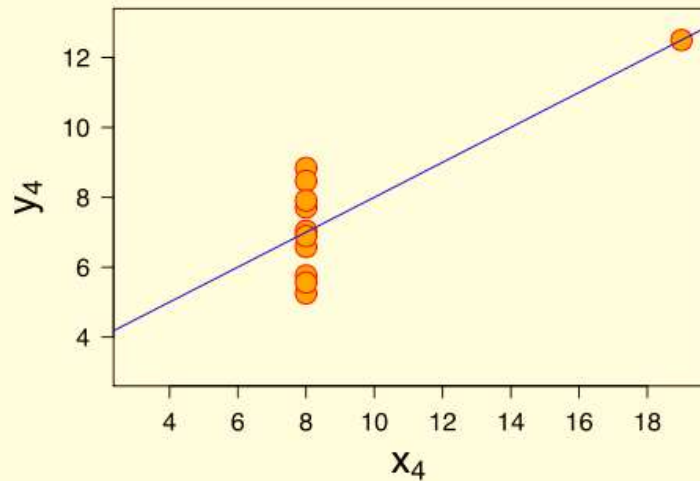
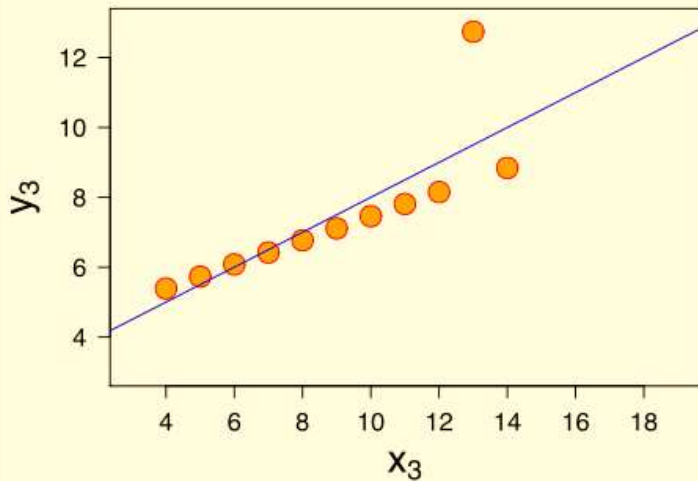
To make data accessible through the use of interactive data visualizations.

WHY DATA VISUALIZATION?

Property	Value
Mean of x	9
Sample variance of x	11
Mean of y	7.50
Sample variance of y	4.125
Correlation between x and y	0.816
Linear regression line	$y = 3.00 + 0.500x$



Anscombe's Quartet



WHY BOTHER WITH INTERACTIVE?

Only 10% to 15% of people looking at the New York Times interactive graphics click on buttons and interact.

– Gregor Aisch, NYT



DATA & TOOLS USED

- Data:
 - American Community Survey
 - Local data
- Software tools:
 - SAS
 - Microsoft Power BI Desktop



STRUCTURING DATA

id2	Geography	HD01_VD01	HD02_VD01	HD01_VD02	HD02_VD02	HD01_VD03	HD02_VD03	HD01_VD04	HD02_VD04
5105990464	Braddock dis	123158	1975	60605	1356	4105	377	35	45
5105993391	Dranesville c	123704	1294	61416	1090	4209	434	45	45
5105993943	Hunter Mill c	126172	1605	61714	1086	4554	483	42	42
5105994207	Lee district, f	124227	2220	60721	1600	4217	551	45	45
5105994543	Mason distri								

EO.id	Id
GEO.id2	Id2
GEO.display-l	Geography
HD01_VD01	Estimate; Total:
HD02_VD01	Margin of Error; Total:
HD01_VD02	Estimate; Male:
HD02_VD02	Margin of Error; Male:
HD01_VD03	Estimate; Male: - Under 5 years
	Margin of Error; Male: - Under 5 years
	Estimate; Male: - 5 to 9 years
	Margin of Error; Male: - 5 to 9 years
	Estimate; Male: - 10 to 14 years
	Margin of Error; Male: - 10 to 14 years
	Estimate; Male: - 15 to 17 years
	Margin of Error; Male: - 15 to 17 years
	Estimate; Male: - 18 and 19 years
	Margin of Error; Male: - 18 and 19 years
	Estimate; Male: - 20 years
	Margin of Error; Male: - 20 years
	Estimate; Male: - 21 years
	Margin of Error; Male: - 21 years
	Estimate; Male: - 22 to 24 years
	Margin of Error; Male: - 22 to 24 years
	Estimate; Male: - 25 to 29 years
	Margin of Error; Male: - 25 to 29 years
	Estimate; Male: - 30 to 34 years
	Margin of Error; Male: - 30 to 34 years
	Estimate; Male: - 35 to 39 years
	Margin of Error; Male: - 35 to 39 years
	Estimate; Male: - 40 to 44 years
	Margin of Error; Male: - 40 to 44 years

EO.id	Id	Geography	Sex	Age_Sort	Age_Group	Persons	MOE	Year
5105990464	Braddock district,	Females	1	80 yrs & older	2250	327	2015	
5105995191	Braddock district,	Females	2	75 to 79 yrs	1359	222	2015	
5105995847	Braddock district,	Females	3	70 to 74 yrs				
5105995999	Braddock district,	Females	4	65 to 69 yrs				
	Braddock district,	Females	5	60 to 64 yrs				
	Braddock district,	Females	6	55 to 59 yrs				
	Braddock district,	Females	7	50 to 54 yrs				
	Braddock district,	Females	8	45 to 49 yrs				
	Braddock district,	Females	9	40 to 44 yrs				
	Braddock district,	Females	10	35 to 39 yrs				
	Braddock district,	Females	11	30 to 34 yrs	3953	388	2015	
	Braddock district,	Females	12	25 to 29 yrs	3760	443	2015	
	Braddock district,	Females	13	20 to 24 yrs	4838	575	2015	
	Braddock district,	Females	14	15 to 19 yrs	5254	419	2015	
	Braddock district,	Females	15	10 to 14 yrs	3583	395	2015	
	Braddock district,	Females	16	5 to 9 yrs	3415	355	2015	
	Braddock district,	Females	17	Under 5 yrs	3380	407	2015	
5105993391	Dranesville distric	Females	1	80 yrs & older	2372	306	2015	
5105993391	Dranesville distric	Females	2	75 to 79 yrs	1164	160	2015	
5105993391	Dranesville distric	Females	3	70 to 74 yrs	1939	209	2015	
5105993391	Dranesville distric	Females	4	65 to 69 yrs	3100	328	2015	
5105993391	Dranesville distric	Females	5	60 to 64 yrs	3929	362	2015	
5105993391	Dranesville distric	Females	6	55 to 59 yrs	4536	265	2015	
5105993391	Dranesville distric	Females	7	50 to 54 yrs	5027	348	2015	
5105993391	Dranesville distric	Females	8	45 to 49 yrs	5188	405	2015	

Field labels and codes formatted and translated to English

New fields created

SAMPLE DATA HEALTH INSURANCE

Persons without Health Insurance by Age and Race/Ethnicity

Use the filters below to explore the data. Click on filters to use. Clear all filters to view area-wide

persons lacked health insurance in 2015

Race/Ethnicity

- White
- Black
- Asian/PI
- Hispanic
- Other

Area

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5
- Area 6
- Area 7
- Area 8
- Area 9

Citizenship

- Native born
- Naturalized
- Not a citizen

Sample Observations

12335



Hispanic Other



50.6%

of persons without health insurance are not U.S. citizens.



Facts for Working Age Adults Age 20 to 64 Years

\$18,023

is the median individual income of working age adults, who lack health insurance.

10.2% of working age adults with a disability lack health insurance.

Lack of Health Insurance by Employment Status Working Age Adults

71.3%

of working age adults without health insurance are employed.



Lack of Health Insurance by Educational Attainment Working Age Adults





Fairfax County Overview: Housing Char



Rental Complex Housing



\$60,448

annual income needed to
the average market rate
bedroom apartment unit

Unit Type	Units	Market Rate Unit
One bedroom	26,556	23,000
Two bedroom	30,994	25,500
Other unit typ...	16,541	13,500
Total	74,091	62,200

Rental complex units that are not market rate units include affordable housing



Fairfax County, VA Overview: Economic Characteristi



Instructions: When all of the supervisor district boxes are unchecked, countywide information is displayed. Check the box in front of a supervisor district to display information for that district.

- BRADDOCK
- DANFORTHVILLE
- HUNTER HILL
- LEE
- MASON
- MOUNT VERNON
- PINEWOOD
- SPRINGFIELD
- SULLY

Educational Attainment by Sex (Persons Age 25 Years and Older)



- Less than High School
- High School Graduate
- Some College
- Bachelor's Degree
- Advanced Degree



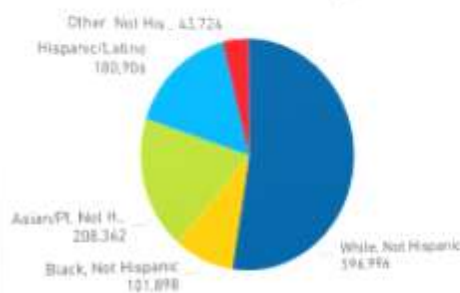
Fairfax County, VA Overview: Demographic Characteristics



Instructions: When all of the supervisor district boxes are unchecked, countywide information is displayed. Check the box in front of a supervisor district to display information for that district.

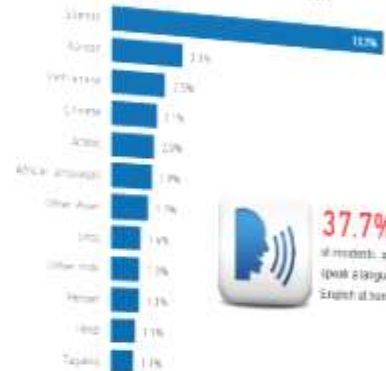
- BRADDOCK
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- SULLY

Persons by Race/Ethnicity



Estimate/Forecast	2016	2020	2025	2030
Households	402,362	413,305	434,506	458,200
Housing Units	413,746	428,350	453,134	478,000
Population	1,131,886	1,156,857	1,204,146	1,256,900

Most Frequently Spoken Languages Other Than English Percent of Persons 5 Years and Older



37.7%

of residents, age 5 and over, speak a language other than English at home.



26.4%

of residents are children and youth under age 20 years.



49.5%

of residents are male.



11.1%

of residents are seniors age 65 years and older.



50.5%

of residents are female.

Source: Fairfax and US Census Department

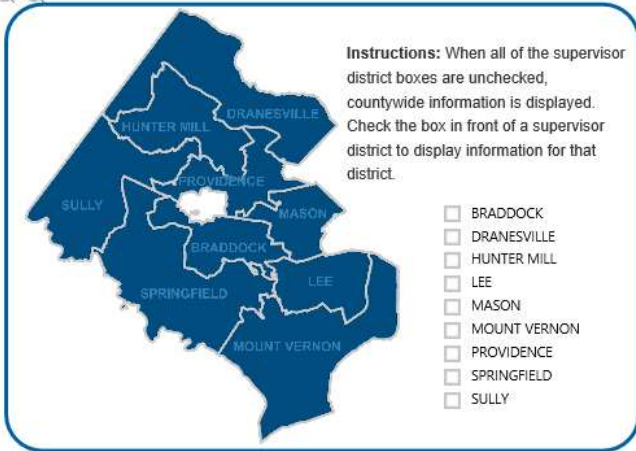


Fairfax County, VA

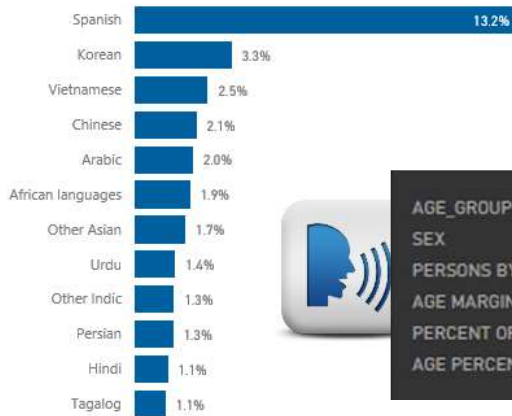
Overview:

Demographic Characteristics

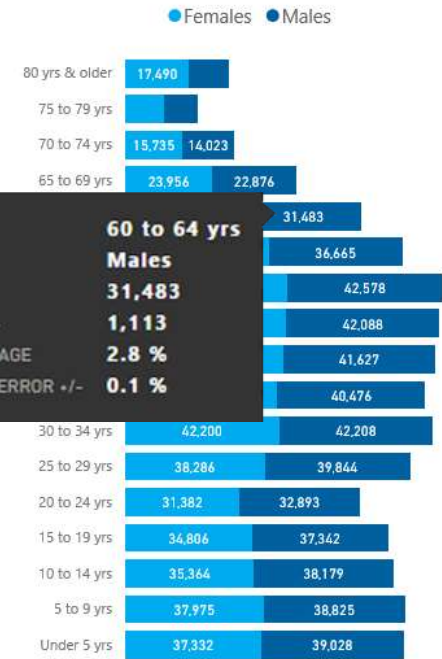
Estimate/Foreca...	2016	2020	2025	2030	2035	2040	2045
Households	402,362	413,305	434,506	458,290	480,994	502,902	525,094
Housing Units	413,746	428,350	453,134	478,035	501,636	524,354	547,360
Population	1,131,886	1,156,852	1,204,146	1,256,916	1,307,183	1,355,736	1,405,107



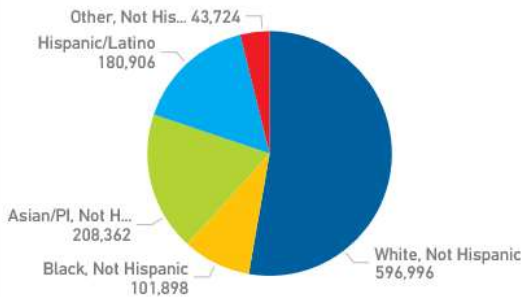
Most Frequently Spoken Languages Other Than English
Percent of Persons 5 Years and Older



Persons by Age and Sex



Persons by Race/Ethnicity



26.4%

49.5%

Demographic Characteristics

Economic Characteristics

Housing Characteristics

Source: Fairfax County Economic, Demographic and Statistical Research, 2016 data and US Census Bureau, 2015 five-year American Community Survey data. Prepared by: Anne Pickford Cahill, Economic, Demographic and Statistical Research.