

Prince William County GIS Services



Presented by

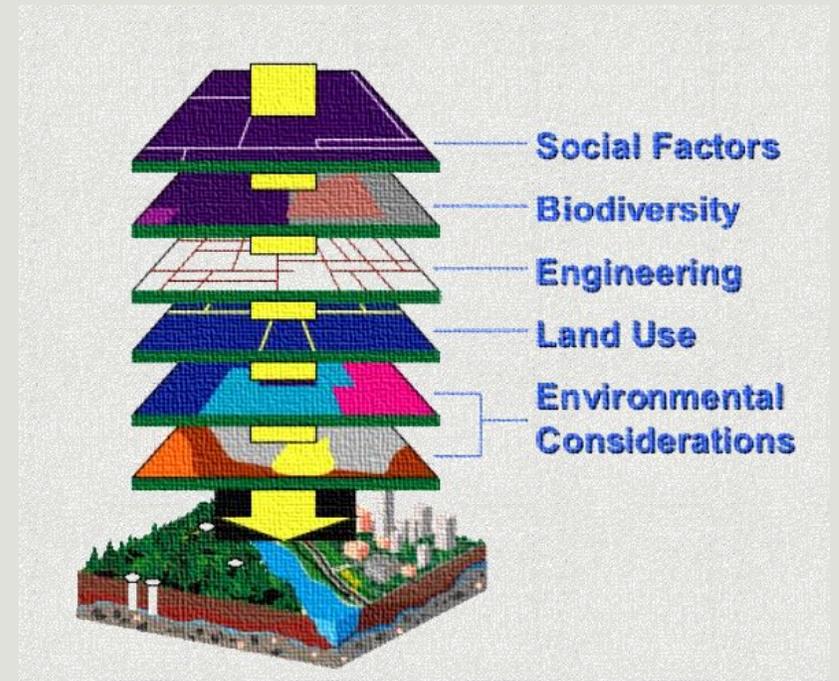
Angela Mills, GISP, GIS Division Chief
Brian Engelmann, Ph.D., Demographer

About Prince William County GIS

- Who we are
 - Division within the Department of Information Technology
 - What is our mission in PWC
 - Provide access to location based information
 - Counter based services
 - Support every agency in Prince William County and most of their associated services.
- How we are structured
 - Structured into 4 teams – each play an important part.
 - Data Services – data stewards
 - Technical Services – developers
 - Addressing/Customer Services – public facing services
 - Demographics

What is GIS?

- Technology
 - Gather, manage, and analyze location data
 - Data that represents features on the earth
 - Visualize, question, analyze and understand the data.
- Benefits to Local Government
 - Transparency
 - Improves organizational communication
 - Better decision-making skills



Parcel/Tax Mapping

Addressing

Permit Tracking

Demographics

Land-Use Planning

Streets System

Emergency Management

Crime Analysis

Infrastructure Mgmt

Assessments

Environmental

Zoning

Public Safety

Parks and Recreation

GIS Utilization in Prince William County



GIS Services for Communities to Use

Customer Service Counter

- Addressing Services
 - Enforcement of addresses and street names
 - Addressing assignments, validation, verification
- Thematic Maps
 - Pre-designed maps generated on the fly – fees associated
- Historical aerial imagery
 - Now available online
 - 1966 and 1984 are still only available in office.

GIS Services for Communities to Use

Customer Online Services

- GIS Data Portal – Open access to GIS data
- Map Gallery – Access to a wide variety of interactive mapping applications
- Webpages – Wealth of information about our services
- Demographic Information –Single portal into human population statistics for PWC

Easy Accessibility

- GIS Data Portal
www.pwcgov.org/gisdata
- GIS Map Gallery
www.pwcgov.org/mapgallery
- Addressing and Customer Service
www.pwcgov.org/addressing
- Demographic Information
www.pwcgov.org/demographics
- Email – pwcmaps@pwcgov.org
- URL – www.pwcgov.org/gis



Data Portal



Map Gallery



Addressing



Demographics

DEMOGRAPHIC MAPPER



Layers Enter Address or GPIN to search...

Legend Results

Demographics Select options below to render Census Data

Overlays

Advanced

Demographic Year / Aggregation Level:
2016 ACS Census Block Groups

Filter Data Field list relevant to:
All Estimates

Data Field for Classification Values:
Percentage of Commuters - Public Transportation

Classification method: Natural Breaks

Number of Classes: 5

Color Scheme: teal-lightgreen-bright

2016 ACS Census Block Groups-All Demographics

Estimated Percentage of Commuters - Public Transportation

- > 12.7 to 23
- > 8.1 to 12.7
- > 4.8 to 8.1
- > 1.87 to 4.8
- 0 to 1.87



Demographics

❖ Baseline Demographics

Attribute	Value	
Total Population:	456,105	
Housing Units:	152,274	
1 Unit, Detached:	83,540	54.86%
1 Unit, Attached:	37,716	24.77%
Multi-unit:	31,018	20.37%
Households:	146,067	

COMPLETE COMMUNITY



...and add to the wonderful recreational community of new homes. CONVENIENT Bank within 3 blocks—2 blocks to Elmer new Garfield High School—Rapid Transit ALL CITY CONVENIENCES! Clubs, pools! Also Available Are 4-Bed and Ram

DIRECTIONS:
From 14th St. Bridge and Shirley Highway (Route 280) to Woodbridge, right on Route 123 approximately 1/2 mile to Manassas Village stop, left to model homes. Or U. S. No. 1 to Woodbridge and continue as above.

**Open Daily & Sunday
9 A.M. 'til Dark**

Sales by

**WOODBRIDGE, VA.
GYpsy 4-1822**



SPACIOUS MODELS
\$5,650 to \$26,800
FHA FROM \$525 DOWN

Dem



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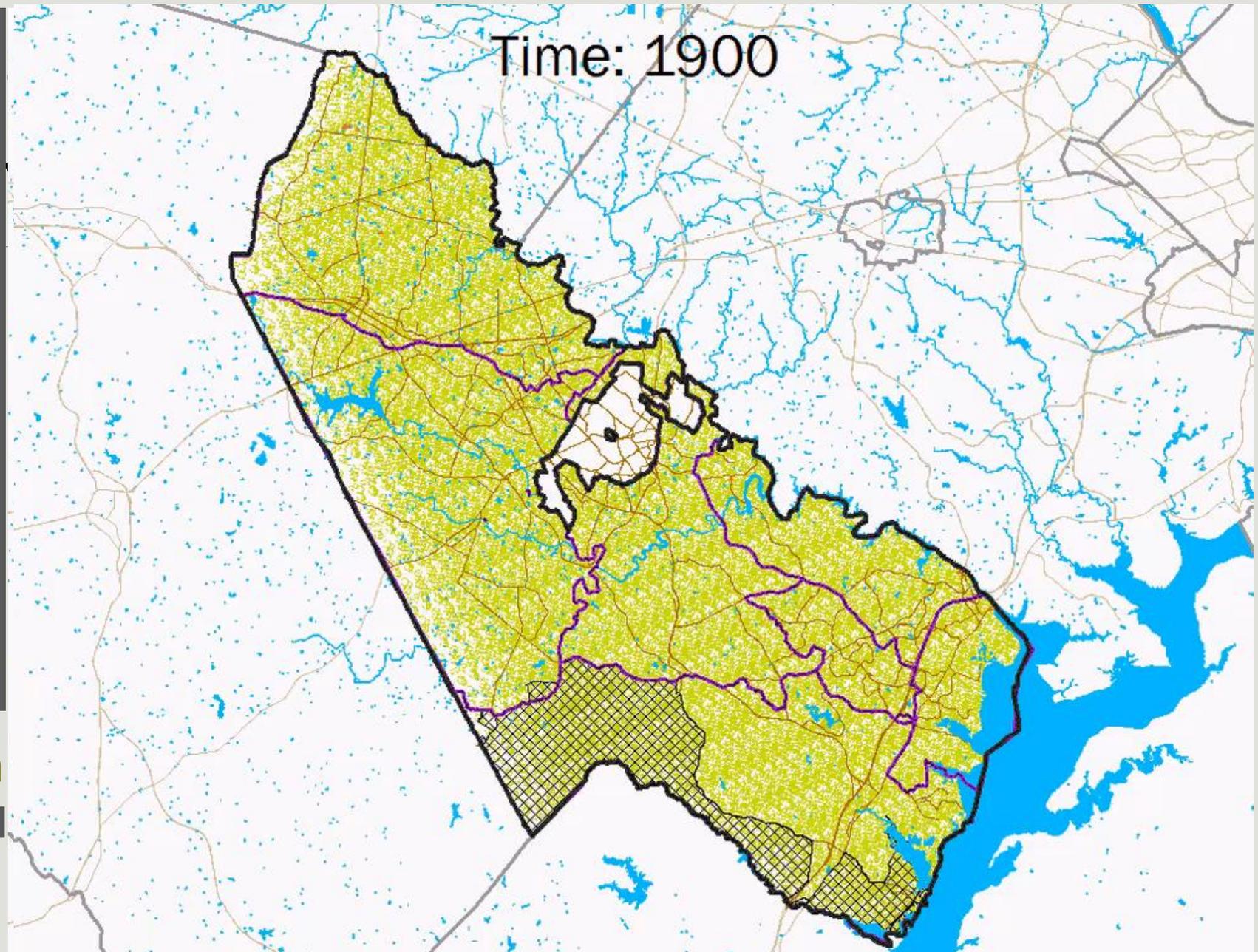
Single-Family
Detached

Mobile Home
Park

Single-Family
Attached

Multi Family-
Attached

Other green area
= rural & wooded

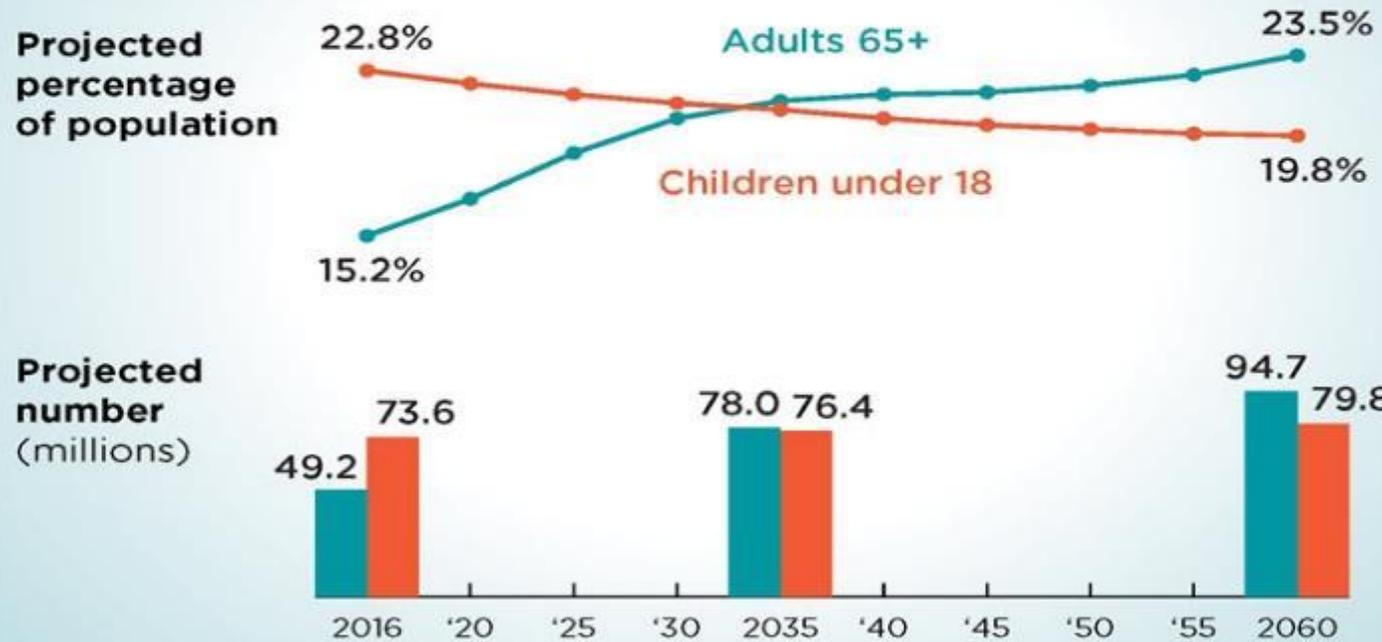




An Aging Nation

Projected Number of Children and Older Adults

For the First Time in U.S. History Older Adults Are Projected to Outnumber Children by 2035

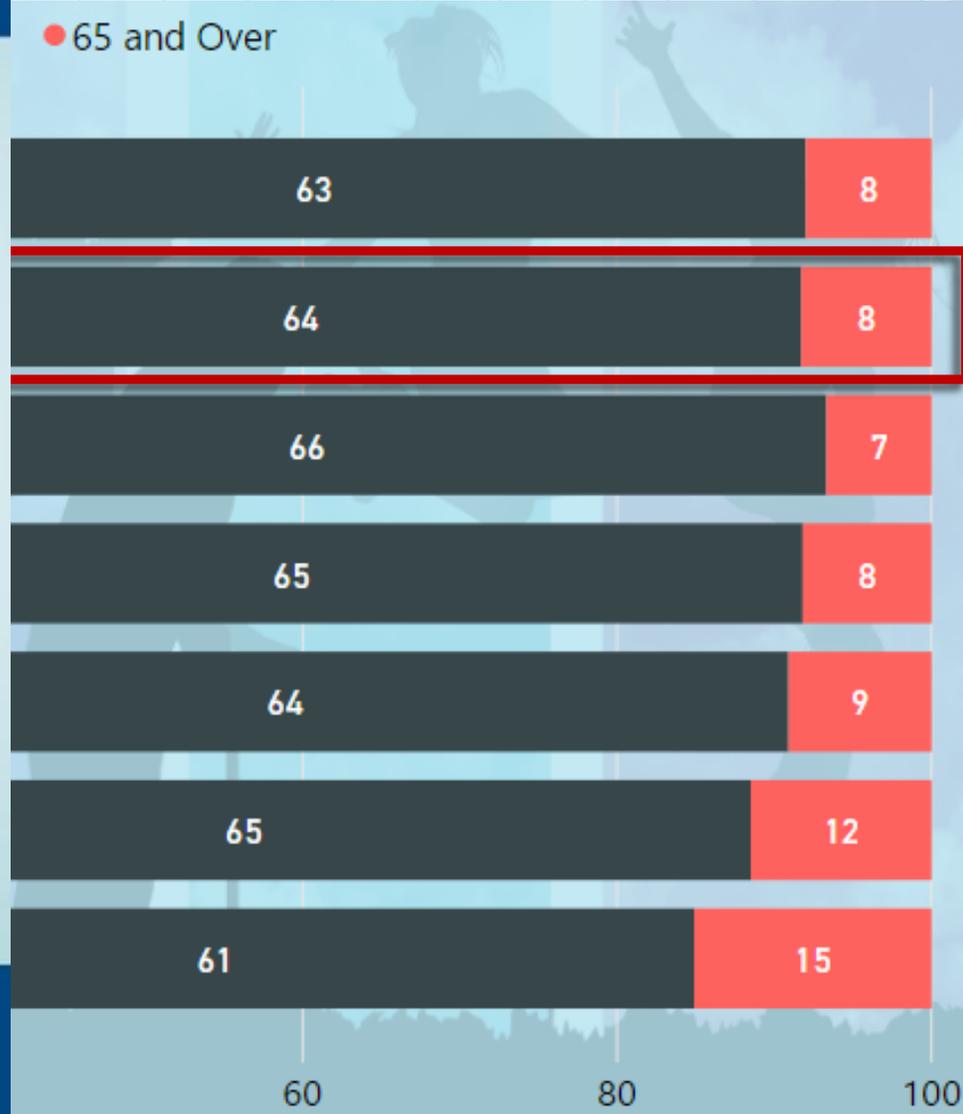


Note: 2016 data are estimates not projections.



U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
[census.gov](https://www.census.gov)

Source: National Population Projections, 2017
www.census.gov/programs-surveys/popproj.html





THE AVENUE

The U.S. will become “minority white” in 2045, Census projects

Youthful minorities are the engine of future growth

William H. Frey · Wednesday, March 14, 2018

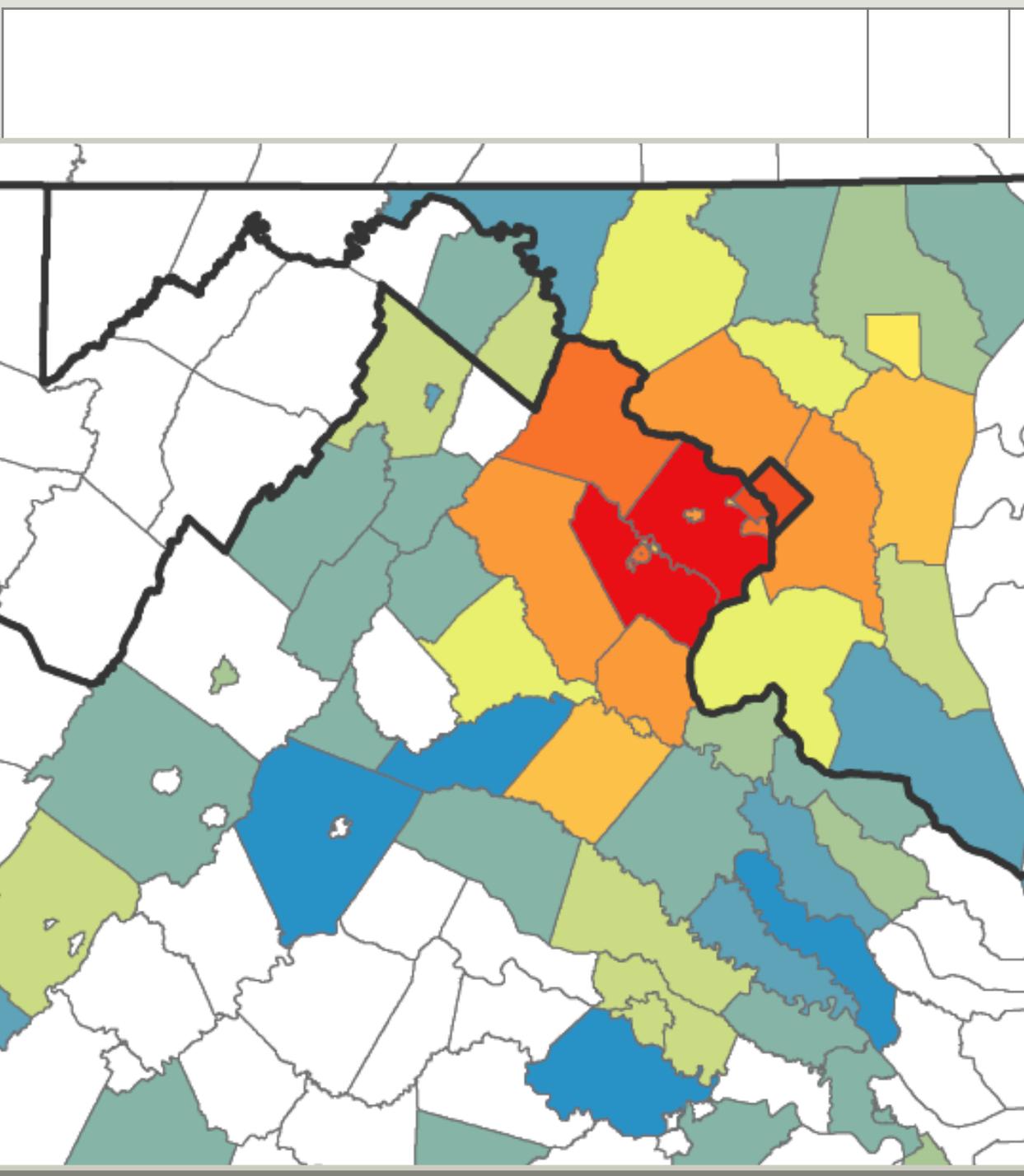
THE AVENUE

Prince William County	99,223	35.3%	206,346	51.3%	241,593	54.5%
Stafford County	18,419	19.9%	41,527	32.2%	49,259	35.3%
	661,921	34.4%	1,045,708	43.9%	1,195,497	46.4%

U.S. Census 1980; 1990; 2000; 2010; U.S. Census American Community Survey (ACS) 2012-2016 5-Year Estimates. Minnesota Population Center. National Historical Geographic Information System: University of Minnesota.

Demographics

 Households	2000	2010	2011-2015
Households (universe):	94,570	130,785	136,794
Average household size:	2.94	3.05	3.17
Families (universe):	76.91%	76.92%	77.41%
Average family size:	3.32	3.44	3.60
Married-couple family:	79.68%	77.57%	77.78%
Female householder, no husband present, with own children under 18:	9.81%	9.29%	8.55%
Male householder, no wife present, with own children under 18:	2.55%	3.31%	3.84%



	STATE	COUNTY	WORKERS	Margin of Error (+/-)
1	Virginia	Prince William County	76,431	1,680
2	Virginia	Fairfax County	58,742	1,651
3	District of Columbia	District of Columbia	22,033	1,121
4	Virginia	Arlington County	13,166	851
5	Virginia	Manassas city	8,535	654
6	Virginia	Alexandria city	7,419	593
7	Virginia	Loudoun County	6,696	565
8	Virginia	Fairfax city	4,888	603
9	Maryland	Prince George's County	3,135	486
10	Virginia	Stafford County	2,790	470
11	Maryland	Montgomery County	2,367	362
12	Virginia	Fauquier County	2,004	371
13	Virginia	Manassas Park city	950	285
14	Virginia	Falls Church city	802	359
15	Virginia	Spotsylvania County	644	229
16	Virginia	Fredericksburg city	581	192
17	Maryland	Anne Arundel County	508	167
18	Maryland	Baltimore city	296	181
19	Maryland	Howard County	178	102
20	Virginia	Culpeper County	161	98

Demographics

❖ Housing

	PWC	D.C. Metro	Virginia	U.S.
Occupied housing units:	95.8%	93.5%	89.5%	87.7%
Owner-occupied housing units:	71.2%	63.0%	65.8%	63.6%
Renter-occupied housing units:	28.8%	37.0%	34.2%	36.4%
Median year structure built:	1991	1979	1981	1977
Median year householder moved into unit:	2006	2006	2005	2005
Median Value:	\$345,900	\$387,400	\$248,400	\$184,700

Demographics

❖ PWC's Future

- Growing population
- Aging population
- Increasingly many younger population
- More jobs in health care/arts/entertainment/accommodation
- Rising needs for poverty line

