American Association of Private Lenders

The Washington Region: Overview of Economic, Housing Sales & Demographic Trends

Jeannette Chapman
Deputy Director and Senior Research Associate
Stephen S. Fuller Institute
Schar School of Policy and Government
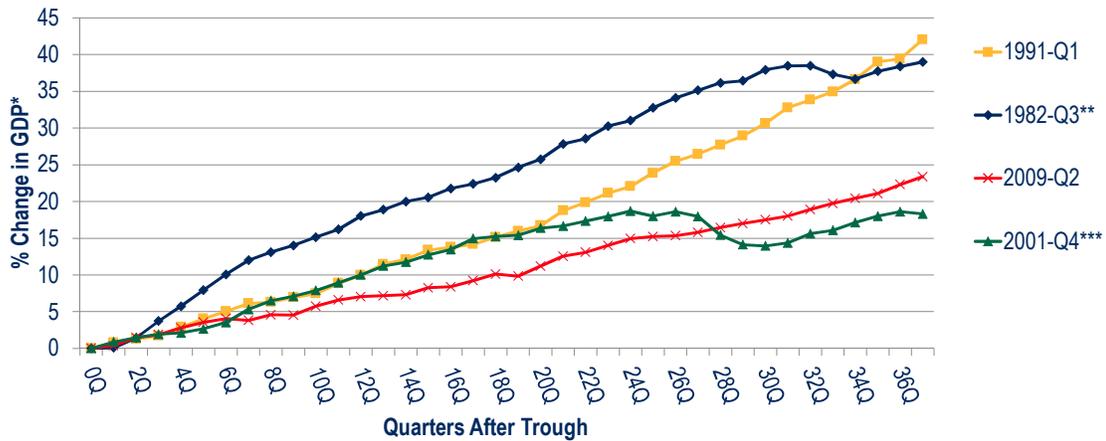George Mason University

February 22, 2019

National Economic Trends Impacting the Housing Market

Recession Recovery Patterns of GDP
Past Four Recessions

*in 1992 or 2009 Chained Dollars; ** Quarters 32+ include the 1991 Recession; *** Quarters 25+ include the 2009 Recession
Sources: Bureau of Economic Analysis, The Stephen S. Fuller Institute at the Schar School, GMU
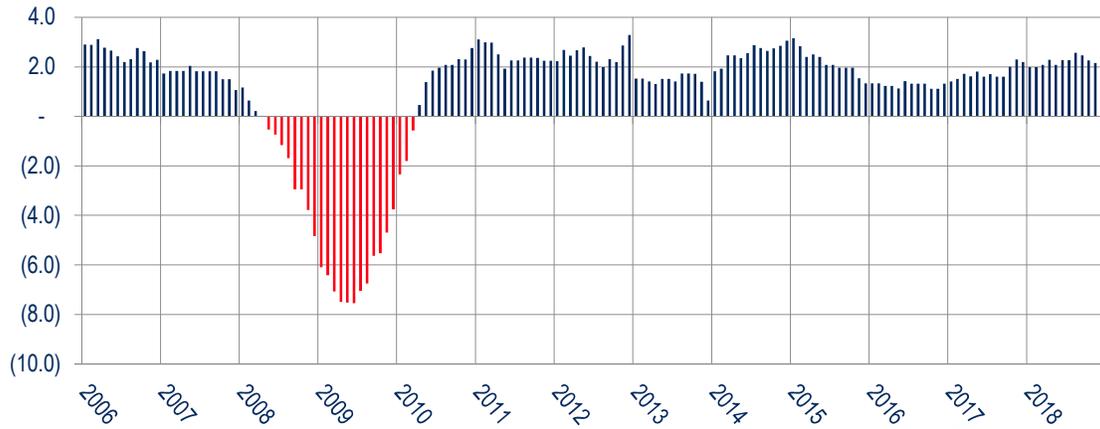
U.S. Leading Index
Month-Over-Year Percent Change
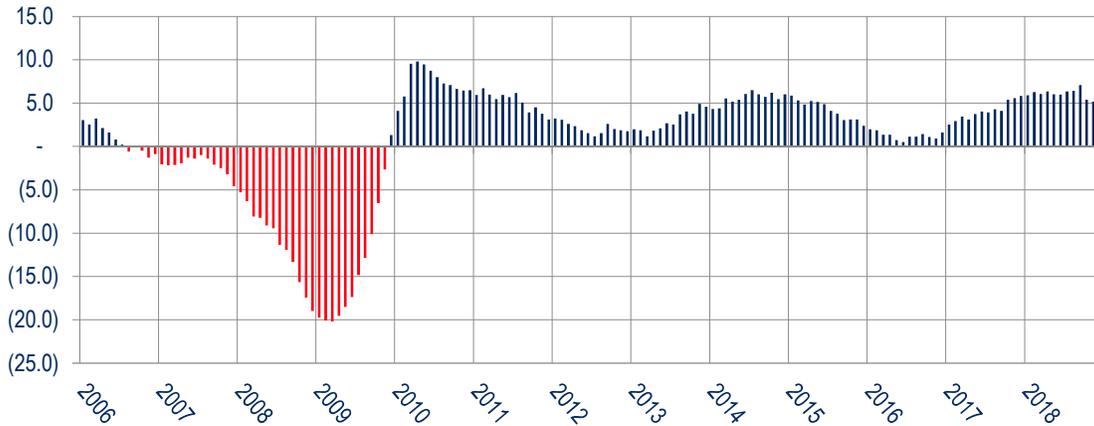
Sources: The Conference Board, The Stephen S. Fuller Institute at the Schar School, GMU
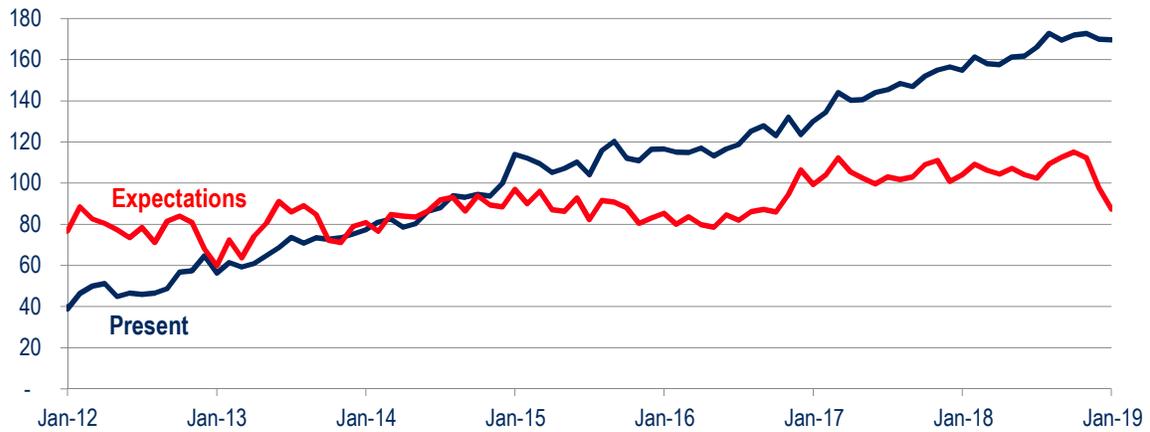
U.S. Coincident Index
Month-Over-Year Percent Change

Sources: The Conference Board, The Stephen S. Fuller Institute at the Schar School, GMU

U.S. Consumer Confidence
January 2012 – January 2019

Sources: The Conference Board, The Stephen S. Fuller Institute at the Schar School, GMU

U.S. Interest Rates
Average Annual, 2001 - 2022

Sources: IHS Markit (January 2019), The Stephen S. Fuller Institute at the Schar School, GMU

U.S. New and Existing Home Sales

Sources: U.S. Census (New), National Association of Realtors (Existing), The Stephen S. Fuller Institute at the Schar School, GMU

U.S. GDP
2007 – 2018 – 2022
(Annual % Change)

Sources: U.S. Bureau of Economic Analysis, IHS Markit (January 2019), The Stephen S. Fuller Institute at the Schar School, GMU
Forecast as of January 2019

The STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

Washington Region:

Dependence on the Federal Government

The STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

U.S. GDP and Washington MSA GRP
2002 – 2017 (Annual % Change)
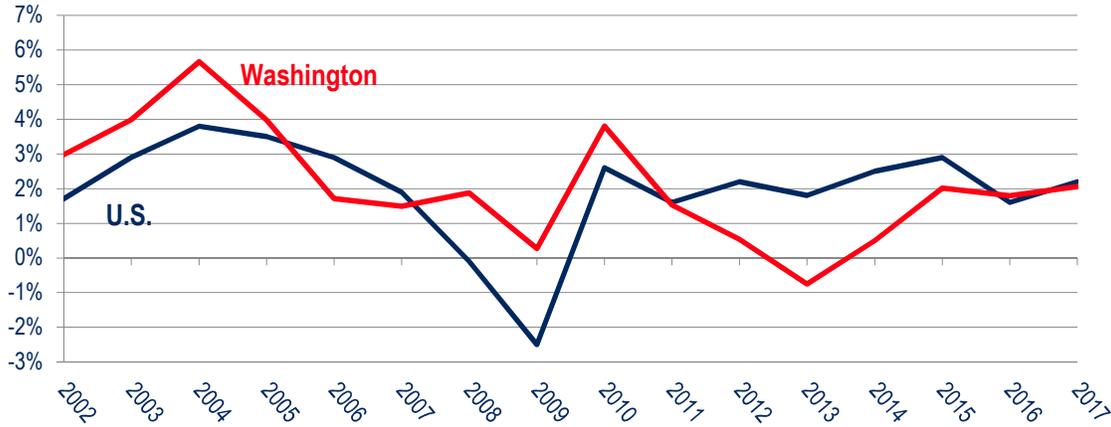
Sources: U.S. Bureau of Economic Analysis; The Stephen S. Fuller Institute at the Schar School, GMU

Average Annual GRP Change in the Largest Metros
2010-2017 (inflation-adjusted)

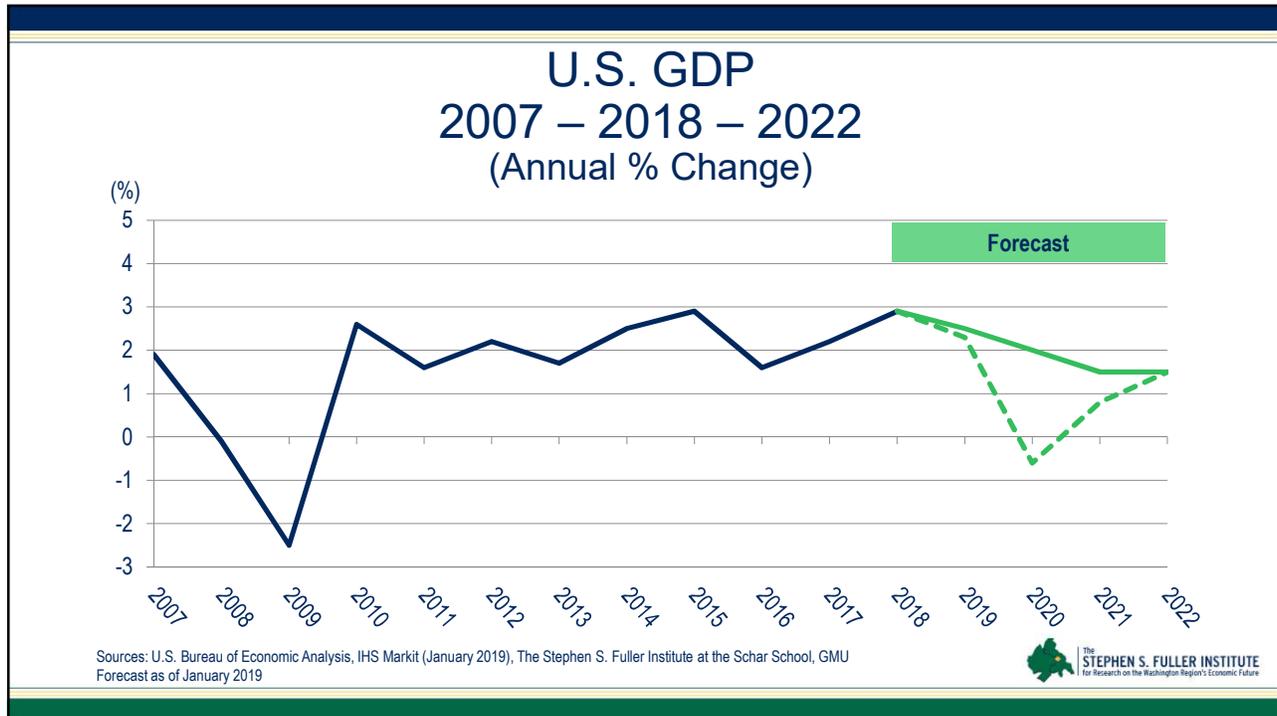Sources: U.S. Bureau of Economic Analysis, The Stephen S. Fuller Institute at the Schar School, GMU

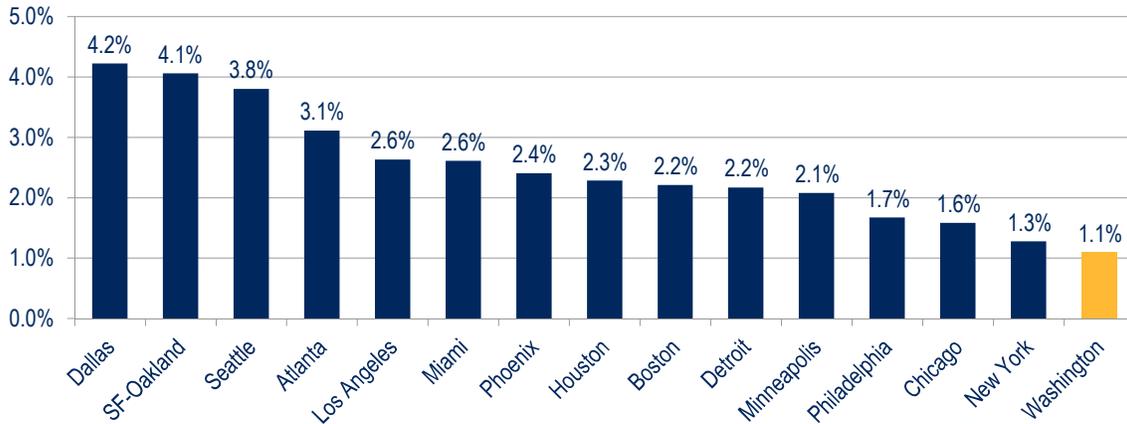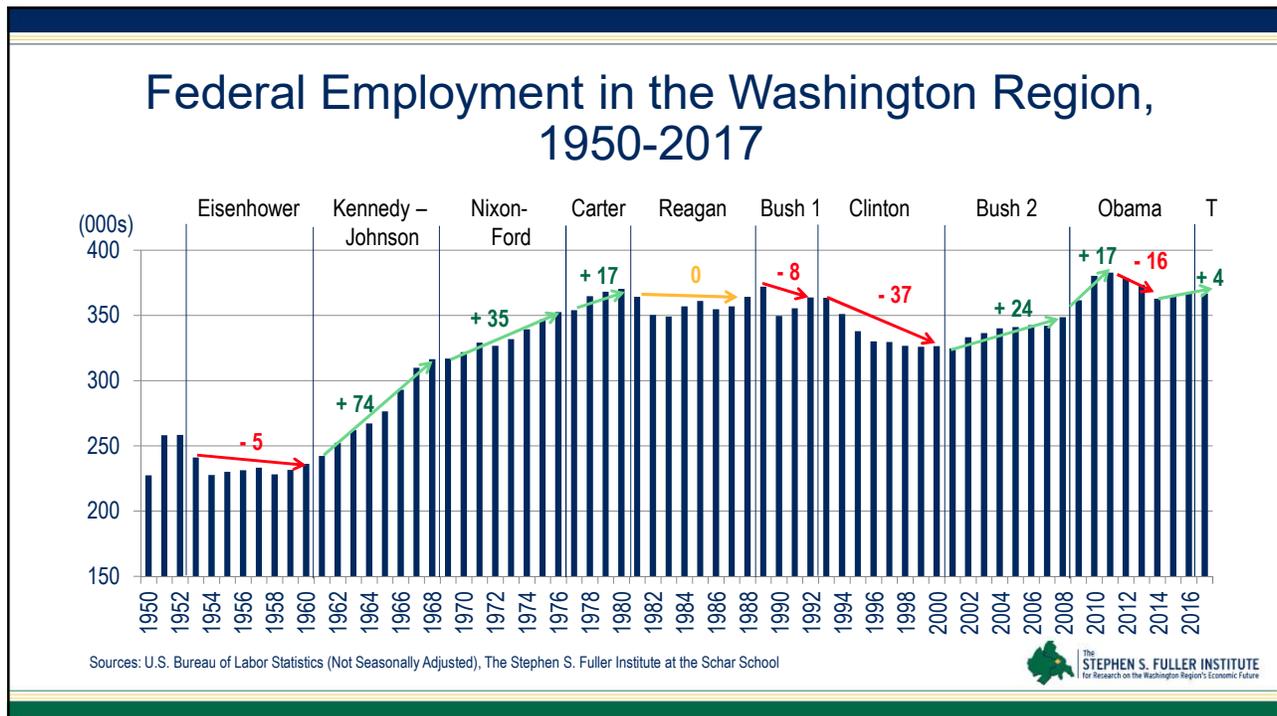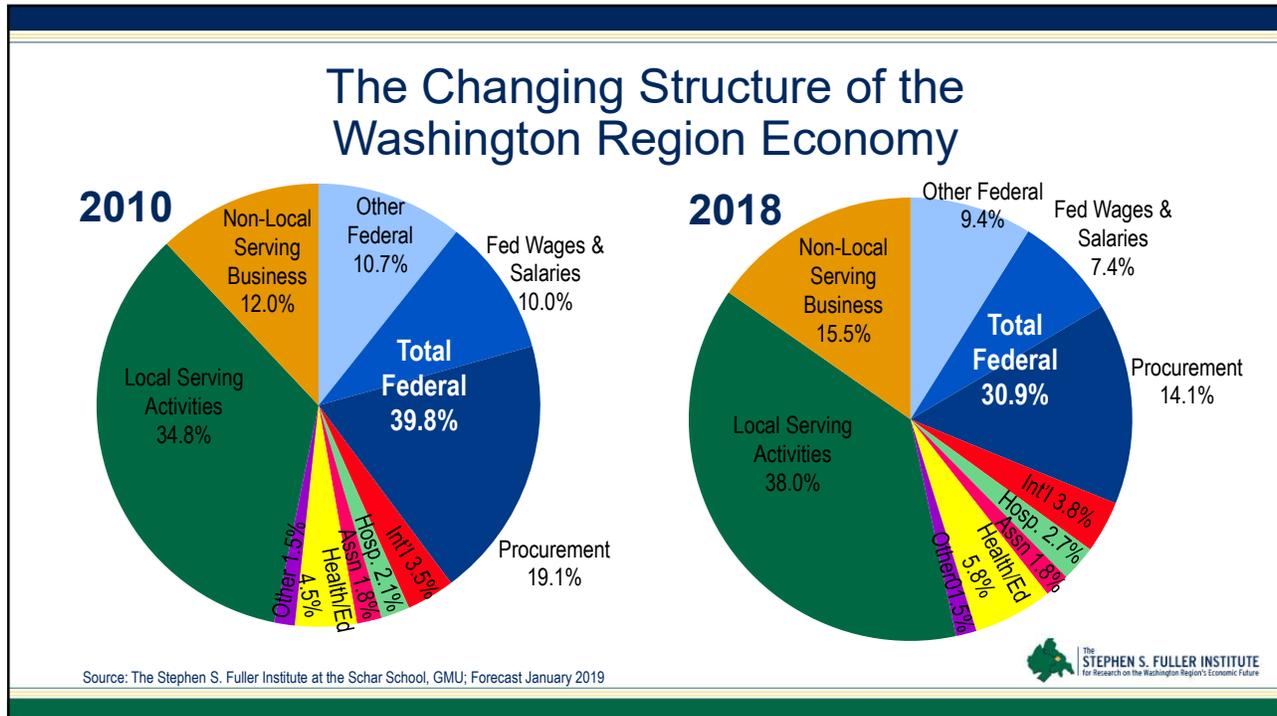# The Changing Structure of the Washington Region Economy

2010

- Other Federal 10.7%
- Fed Wages & Salaries 10.0%
- Total Federal 39.8%
- Procurement 19.1%
- Int'l 3.5%
- Hosp. 2.1%
- Assn 1.8%
- Health/Ed 4.5%
- Other 1.5%
- Local Serving Activities 34.8%
- Non-Local Serving Business 12.0%

2018

- Other Federal 9.4%
- Fed Wages & Salaries 7.4%
- Total Federal 30.9%
- Procurement 14.1%
- Int'l 3.8%
- Hosp. 2.7%
- Assn 1.8%
- Health/Ed 5.8%
- Other 1.5%
- Local Serving Activities 38.0%
- Non-Local Serving Business 15.5%

Source: The Stephen S. Fuller Institute at the Schar School, GMU; Forecast January 2019

The STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

Federal Employment in the Washington Region, 1950-2017

Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School

The STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

Federal Procurement in the Washington Region, 1980-2018

($s Billions)

TOTAL = $1,479.1 Billion

\ < 80-90 = $96.5B > | < 91-00 = $207.9B > | < 01–10 = $565.5B > |

82.6   69.6   82.5   82.4
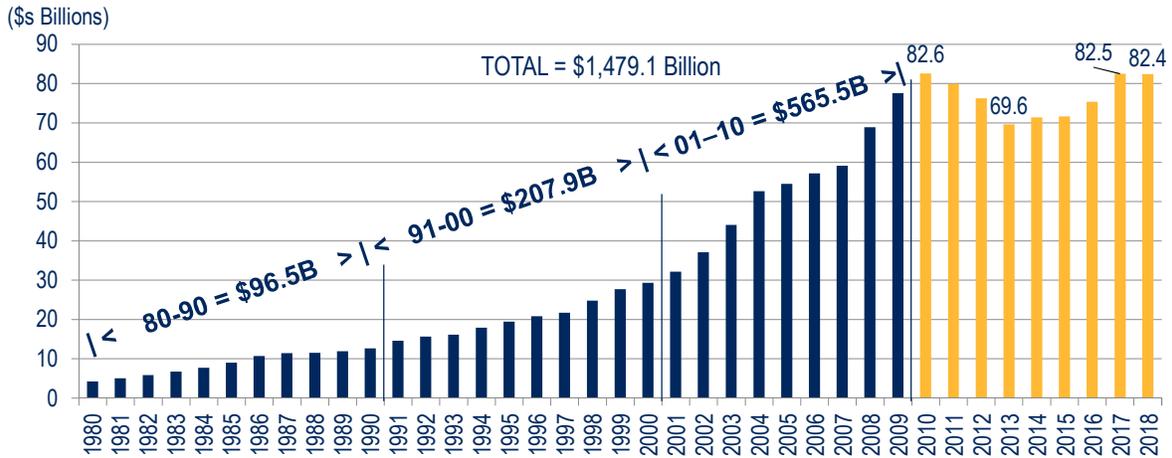
Source: US Census, Consolidated Federal Funds Report and USAspending.gov, The Stephen S. Fuller Institute at the Schar School, GMU

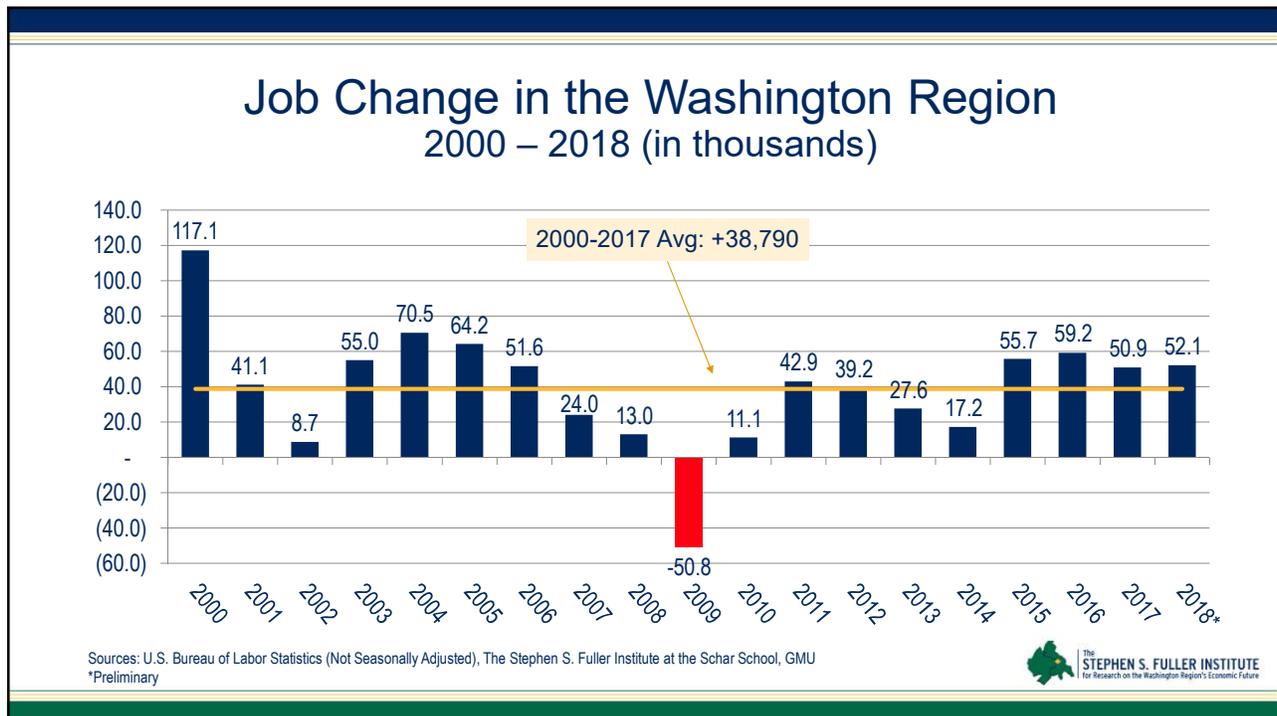**STEPHEN S. FULLER INSTITUTE**
for Research on the Washington Region's Economic Future

Average Wage in the Washington Region
(000s of 2017 $s)

64.7, 66.1, 66.2, 67.1, 68.8, 69.5, 70.4, 71.6, 71.2, 73.0, 74.1, 73.2, 72.8, 71.7, 72.1, 74.0, 74.0, 74.6
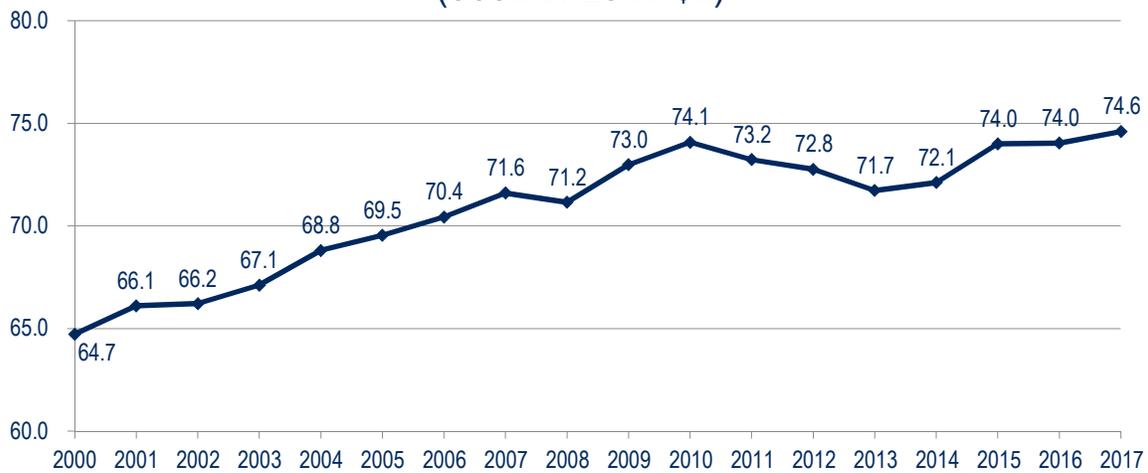
Sources: Bureau of Labor Statistics; The Stephen S. Fuller Institute

STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

Washington Region:

Recent Economic Trends & Forecast

Job Change in the Washington Region
2000 – 2018 (in thousands)

2000-2017 Avg: +38,790

117.1
41.1
8.7
55.0
70.5
64.2
51.6
24.0
13.0
-50.8
11.1
42.9
39.2
27.6
17.2
55.7
59.2
50.9
52.1

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018*

Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU
*Preliminary

Job Change in the Washington Region
2000 – 2018 (in thousands)

■ Private, Office-Using   ■ All Other

2007-2014: +15,650 Office-Using

25.7 · 13.8 · 12.7 · 16.4 · 17.4 · 19.2 · 20.1

03-06 Avg · 07-09 Avg · 2010 · 2011 · 2012 · 2013 · 2014 · 2015 · 2016 · 2017 · 2018*

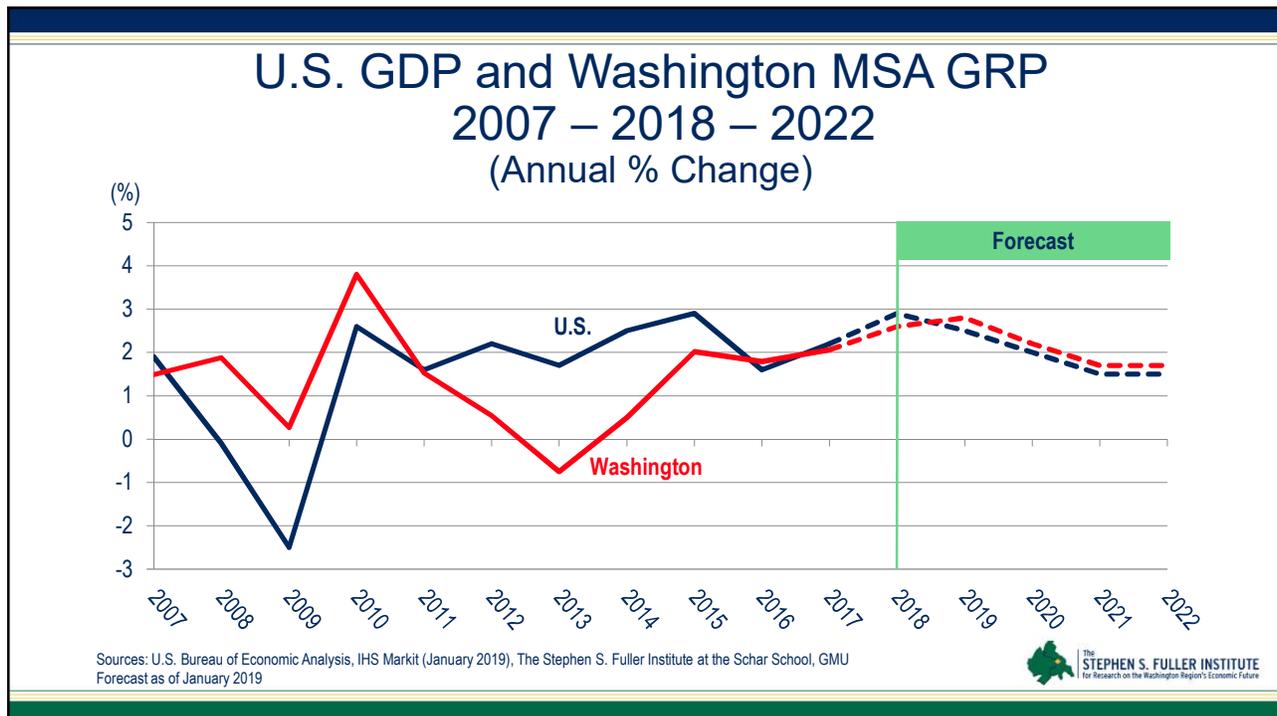Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU
*Preliminary

Average Job Change in 2018, Largest Metros
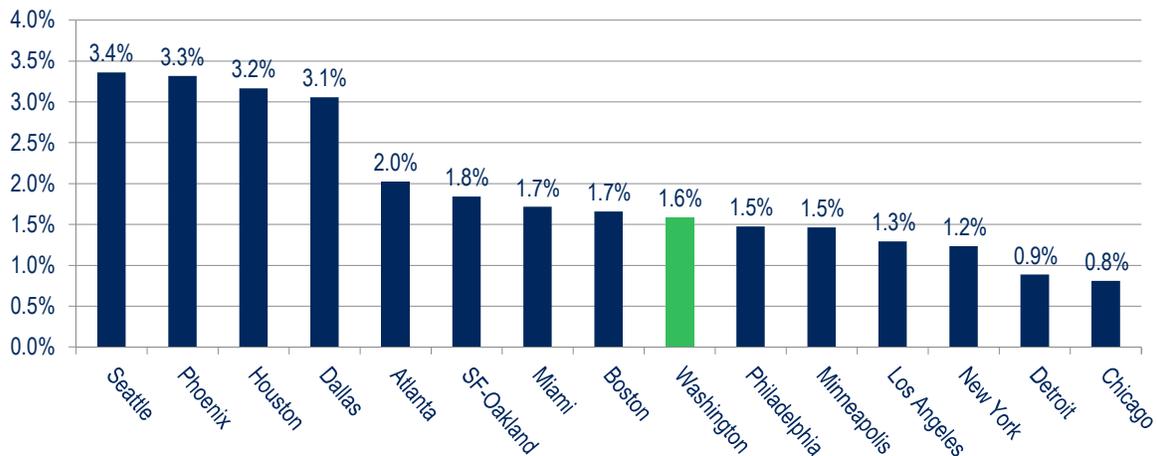
3.4% · 3.3% · 3.2% · 3.1% · 2.0% · 1.8% · 1.7% · 1.7% · 1.6% · 1.5% · 1.5% · 1.3% · 1.2% · 0.9% · 0.8%

Seattle · Phoenix · Houston · Dallas · Atlanta · SF-Oakland · Miami · Boston · Washington · Philadelphia · Minneapolis · Los Angeles · New York · Detroit · Chicago

Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU
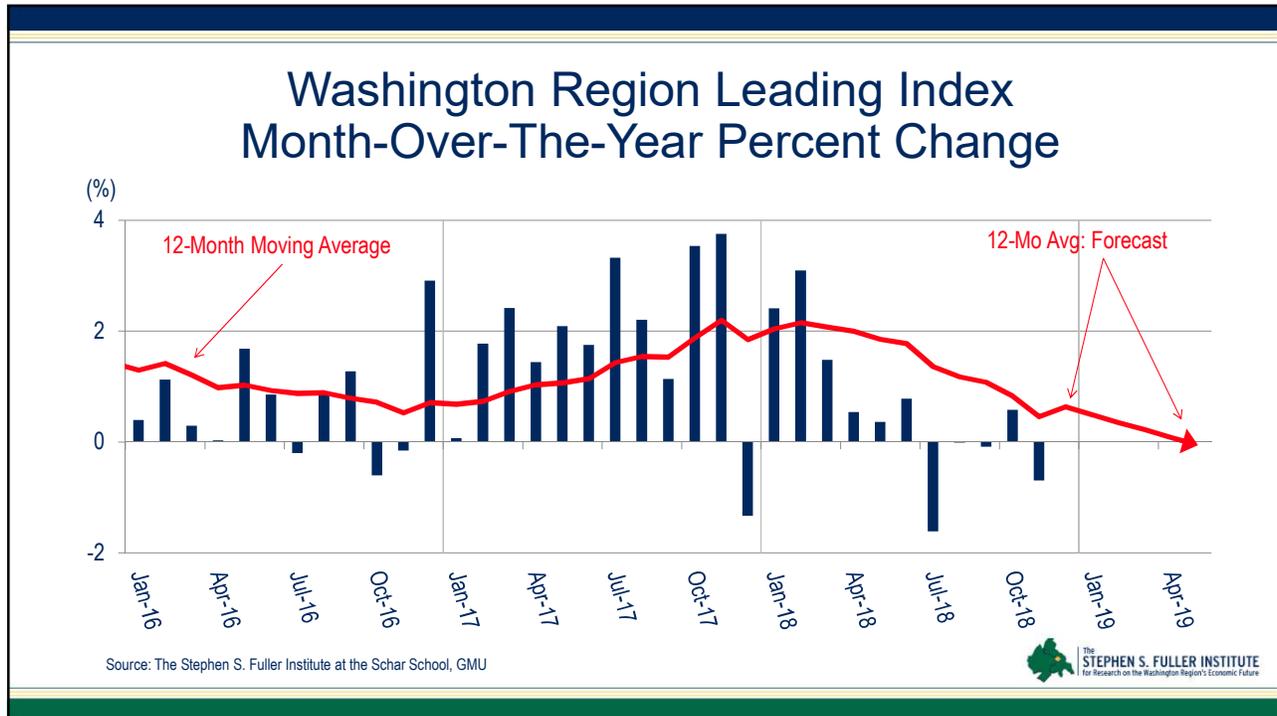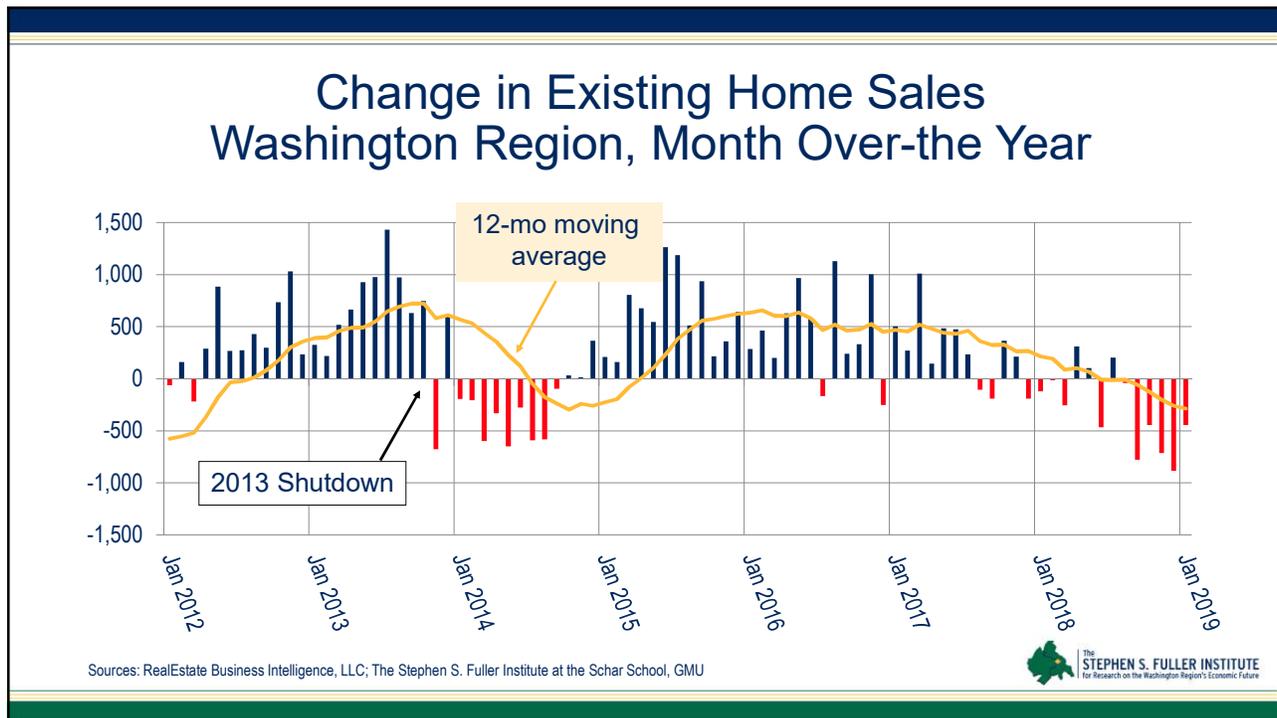NOTE: Preliminary

Washington Region Leading Index
Month-Over-The-Year Percent Change

Source: The Stephen S. Fuller Institute at the Schar School, GMU

U.S. GDP and Washington MSA GRP
2007 – 2018 – 2022
(Annual % Change)

Sources: U.S. Bureau of Economic Analysis, IHS Markit (January 2019), The Stephen S. Fuller Institute at the Schar School, GMU
Forecast as of January 2019

Washington Region: Home Sales Trends

Change in Existing Home Sales
Washington Region, Month Over-the Year

12-mo moving average

2013 Shutdown

Sources: RealEstate Business Intelligence, LLC; The Stephen S. Fuller Institute at the Schar School, GMU

Change in Average Days-On-Market
Washington Region, Month Over-the Year
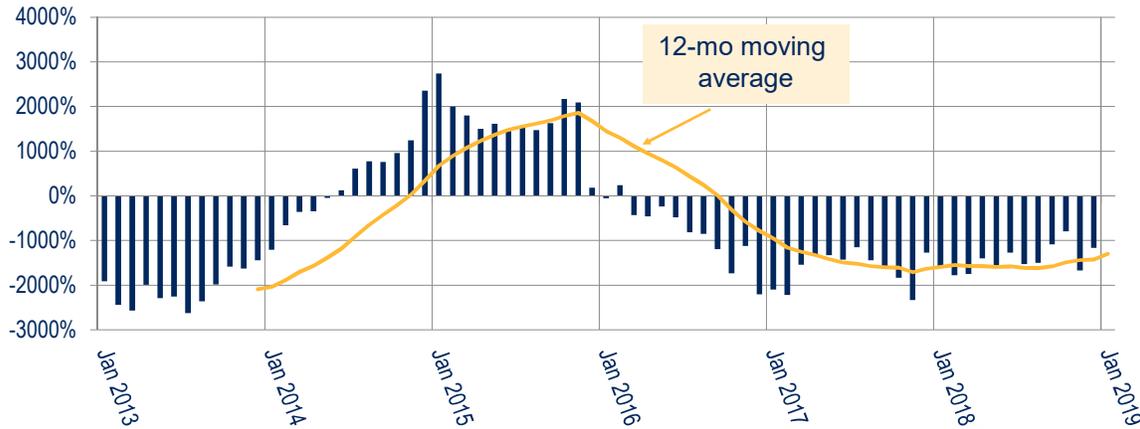
12-mo moving average

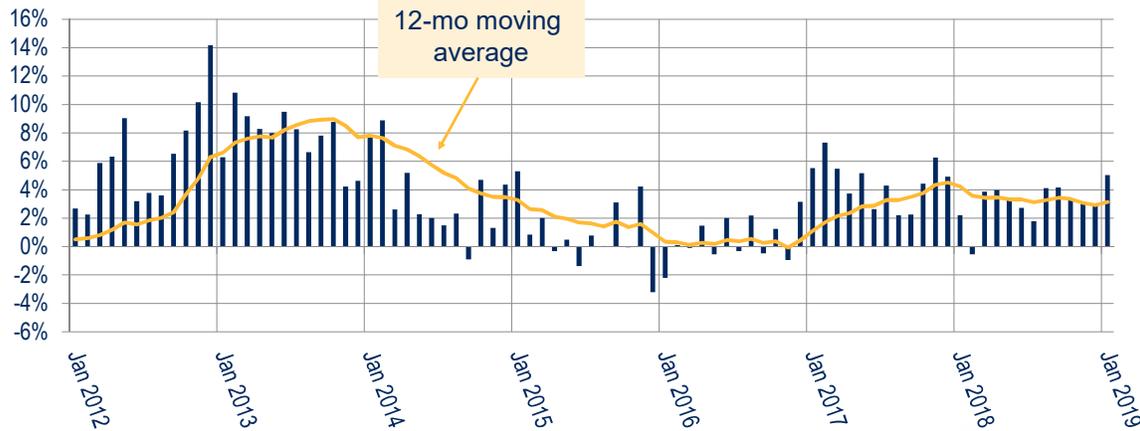Sources: RealEstate Business Intelligence, LLC; The Stephen S. Fuller Institute at the Schar School, GMU

Months of Supply
Washington Region, January of Each Year

4-6 Mo: Typical Healthy Range

Sources: RealEstate Business Intelligence, LLC; The Stephen S. Fuller Institute at the Schar School, GMU

Change in Average Sales Price
Washington Region, Month Over-the Year

Sources: RealEstate Business Intelligence, LLC; The Stephen S. Fuller Institute at the Schar School, GMU
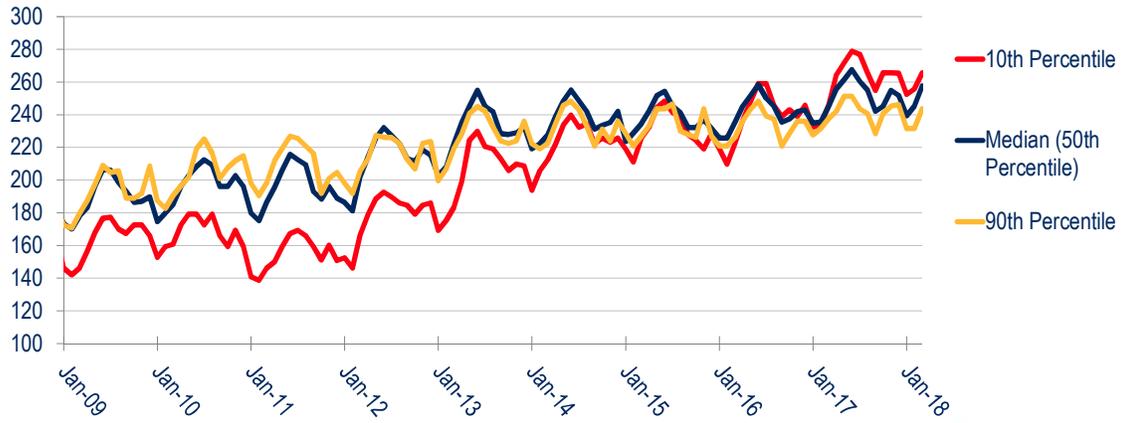

Change in Average Sales Price
Washington Region, Annual

Sources: RealEstate Business Intelligence, LLC; The Stephen S. Fuller Institute at the Schar School, GMU
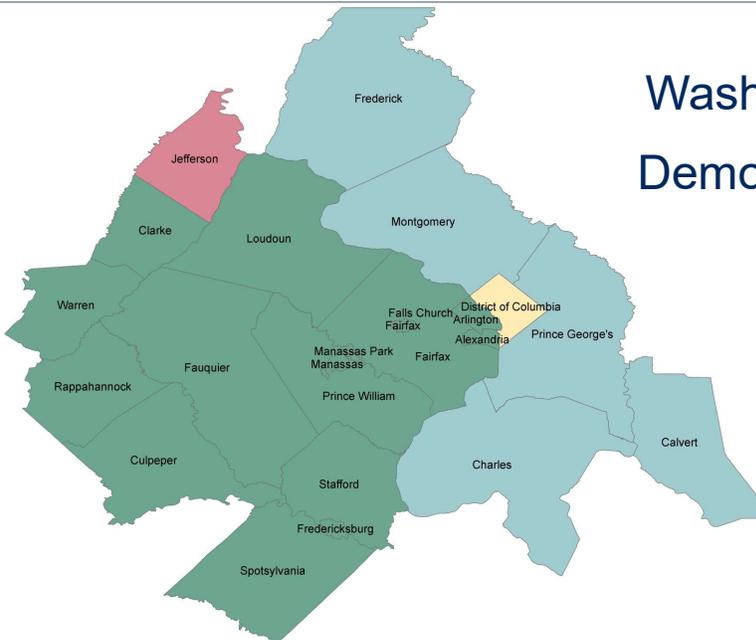
Home Sales Price Growth By Percentile
Washington Region, 1997 – March 2018
100 = January 1997

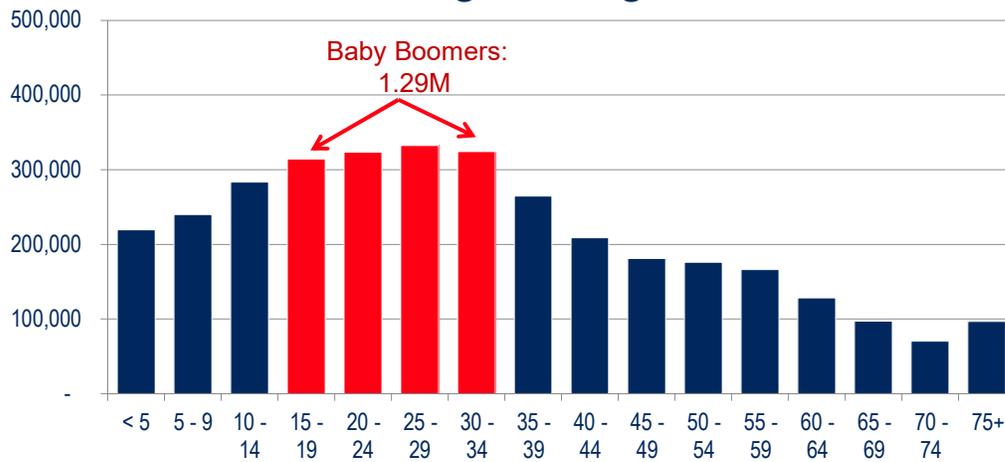Sources: MRIS; The Stephen S. Fuller Institute at the Schar School, GMU

The STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

Washington Region:
Demographic Trends

The STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

15

An Aging Population

STEPHEN S. FULLER INSTITUTE
The
for Research on the Washington Region's Economic Future

Population by Age Group
Washington Region, 1980

Baby Boomers:
1.29M

< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75+

Sources: U.S. Census Bureau (1980 Census); The Stephen S. Fuller Institute at the Schar School, GMU
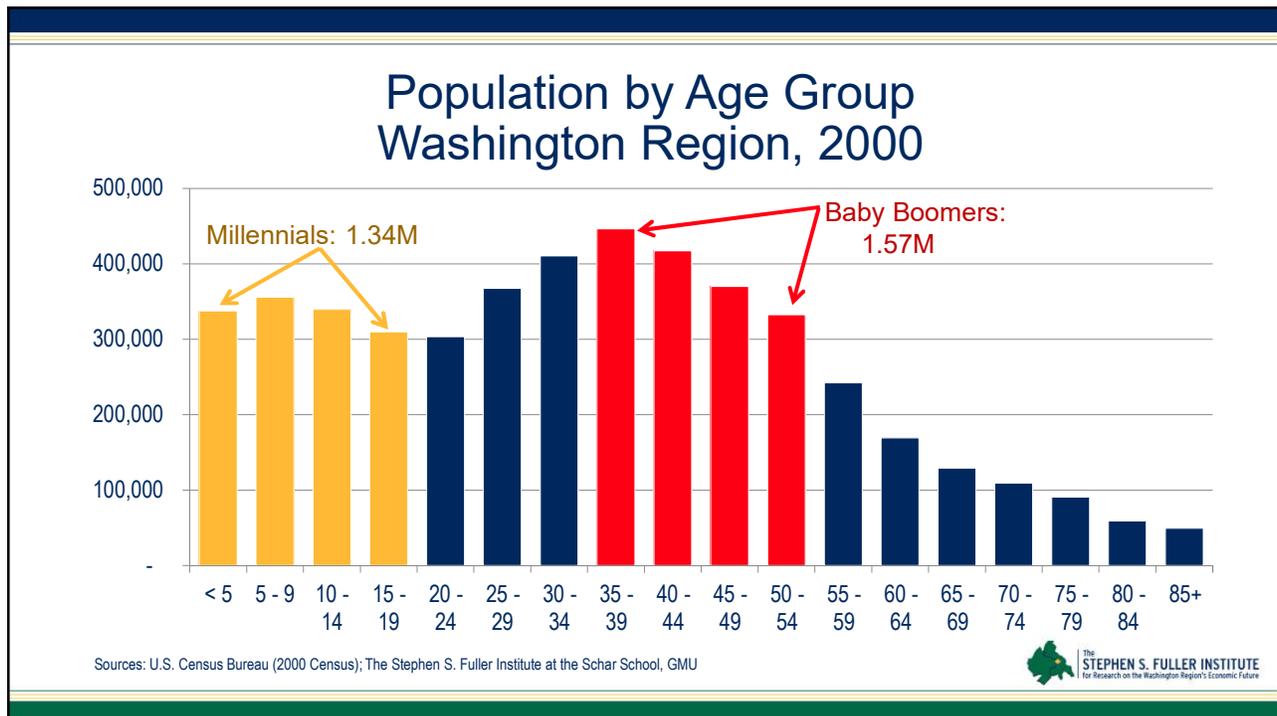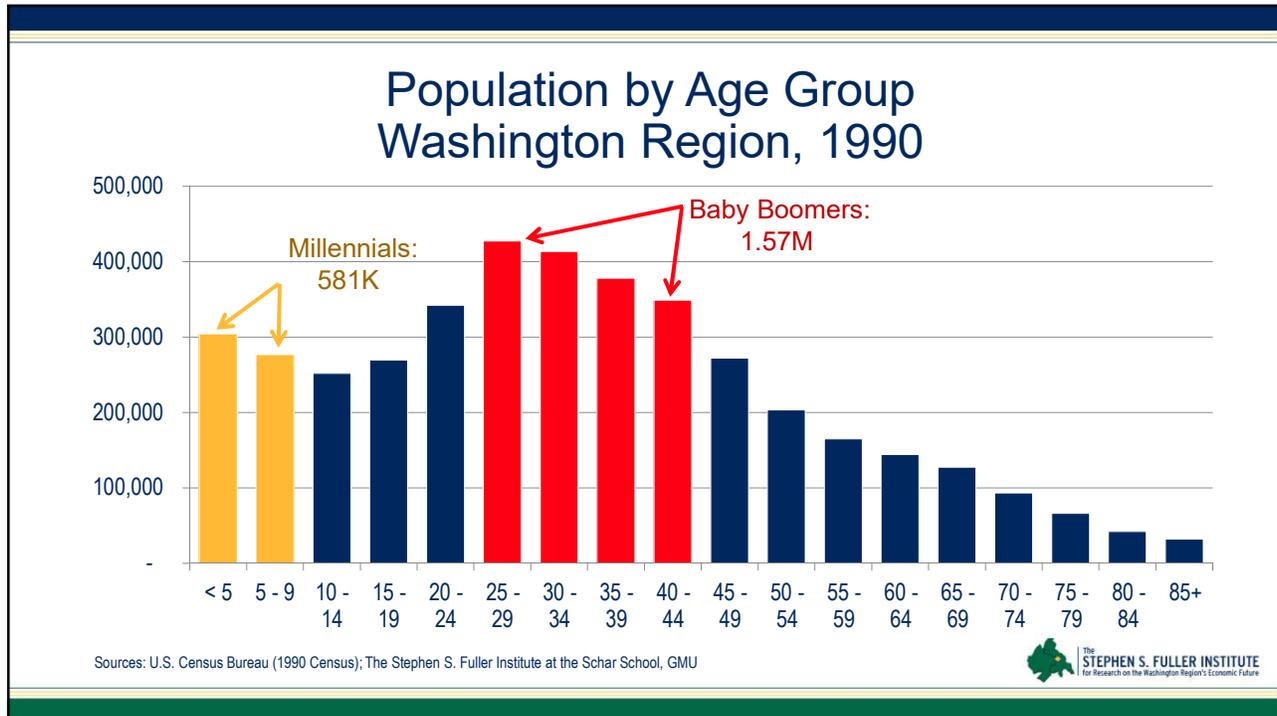
STEPHEN S. FULLER INSTITUTE
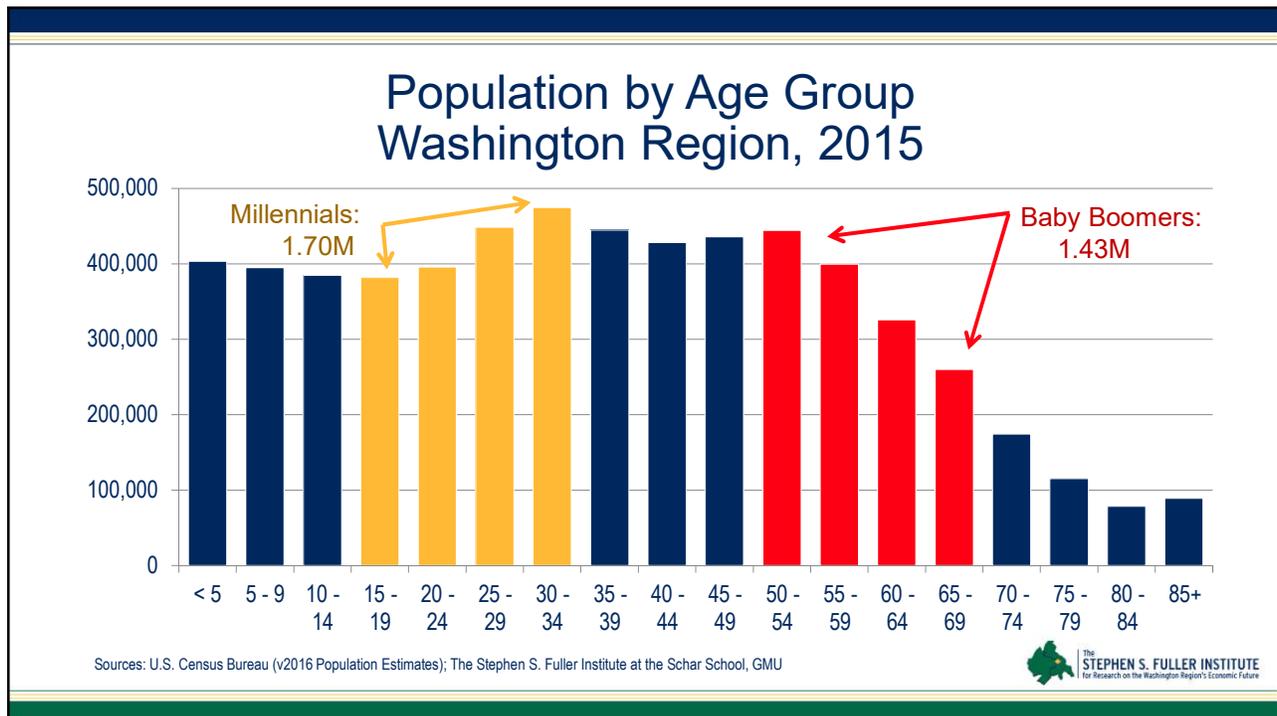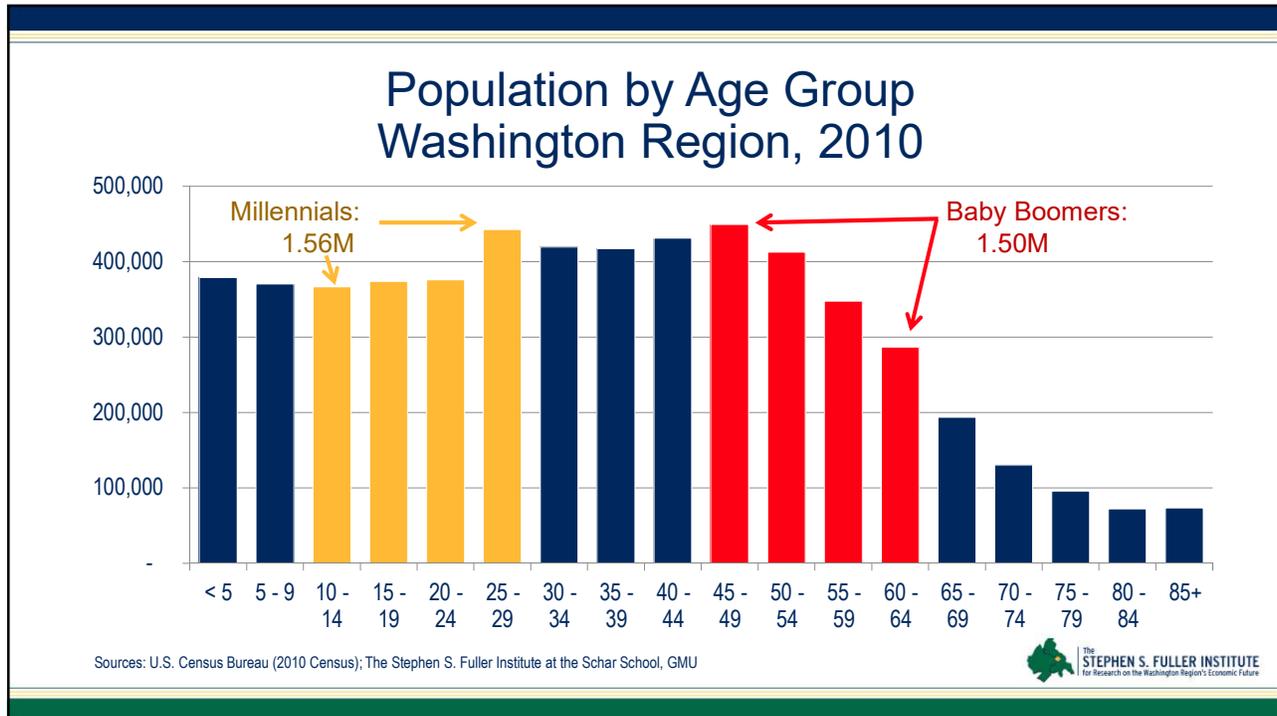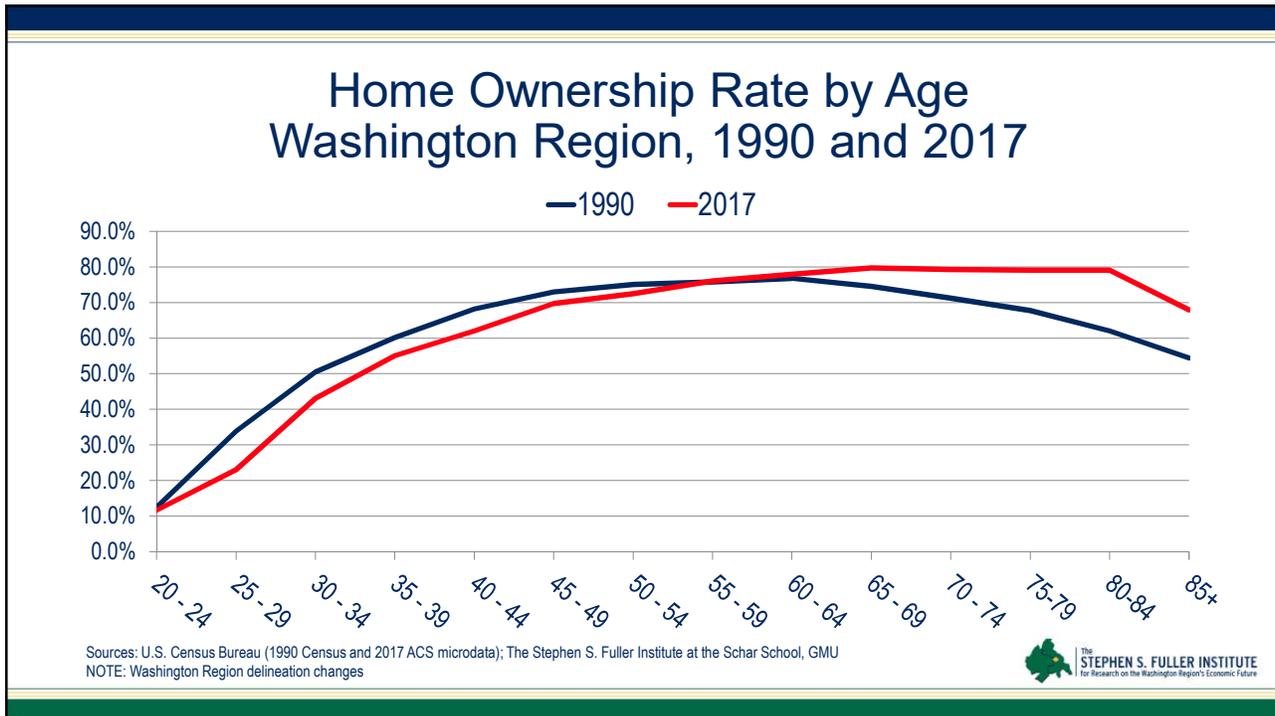The
for Research on the Washington Region's Economic Future

Population by Age Group
Washington Region, 1990

Population by Age Group
Washington Region, 2000

Population by Age Group
Washington Region, 2010

Population by Age Group
Washington Region, 2015

Population Distribution by Age
Washington Region, 1980 and 2017

— 1980 — 2017

Sources: U.S. Census Bureau (1980 Census and v2017 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU

Home Ownership Rate by Age
Washington Region, 1990 and 2017

— 1990 — 2017

Sources: U.S. Census Bureau (1990 Census and 2017 ACS microdata); The Stephen S. Fuller Institute at the Schar School, GMU
NOTE: Washington Region delineation changes

% of Owners Living In Home Since 1989 or Earlier
- 0% - 14.9%
- 15% - 24.9%
- 25% - 34.9%
- 35% - 100%
- Washington Region
- County

Source: U.S. Census Bureau (2012-2016 ACS); The Stephen S. Fuller Institute at the Schar School, GMU

The STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

Slowing Population Growth

The STEPHEN S. FULLER INSTITUTE
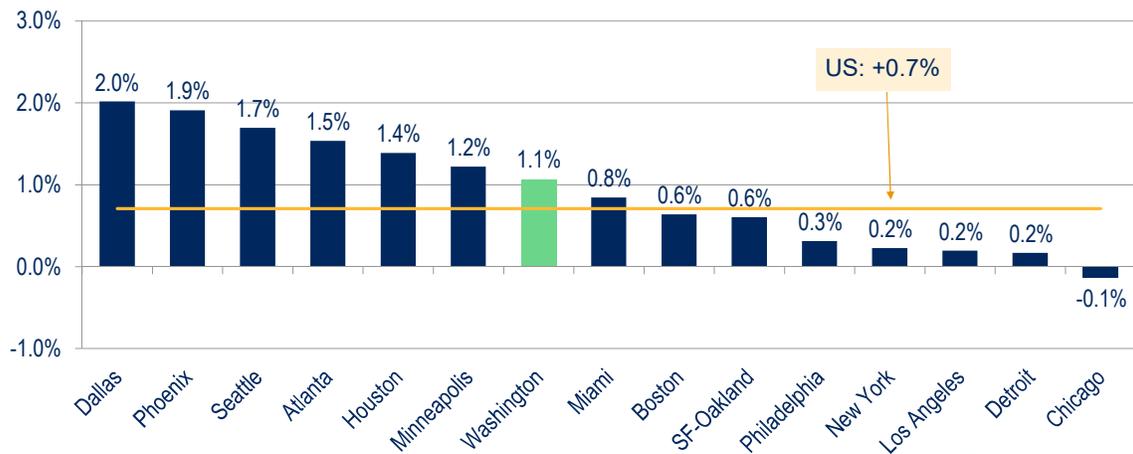for Research on the Washington Region's Economic Future

Population Growth in the
Washington Region, 2001 to 2017

Sources: U.S. Census Bureau (Intercensal & v2017 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU
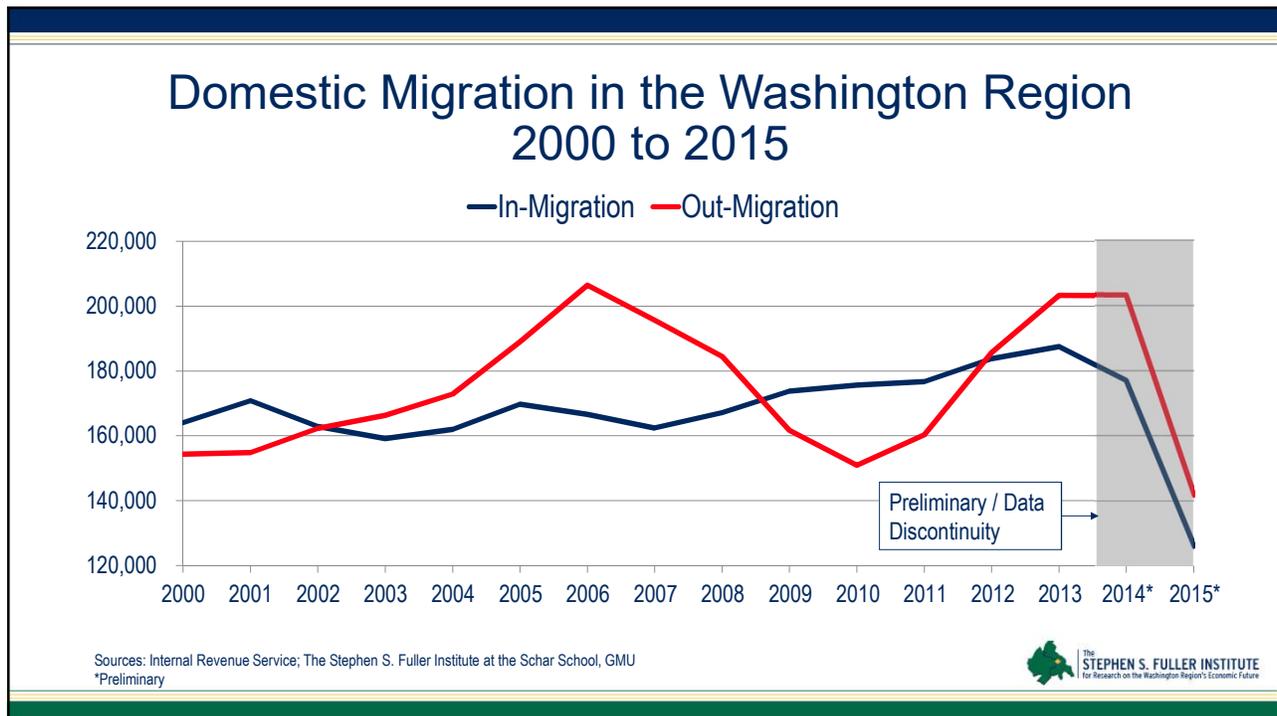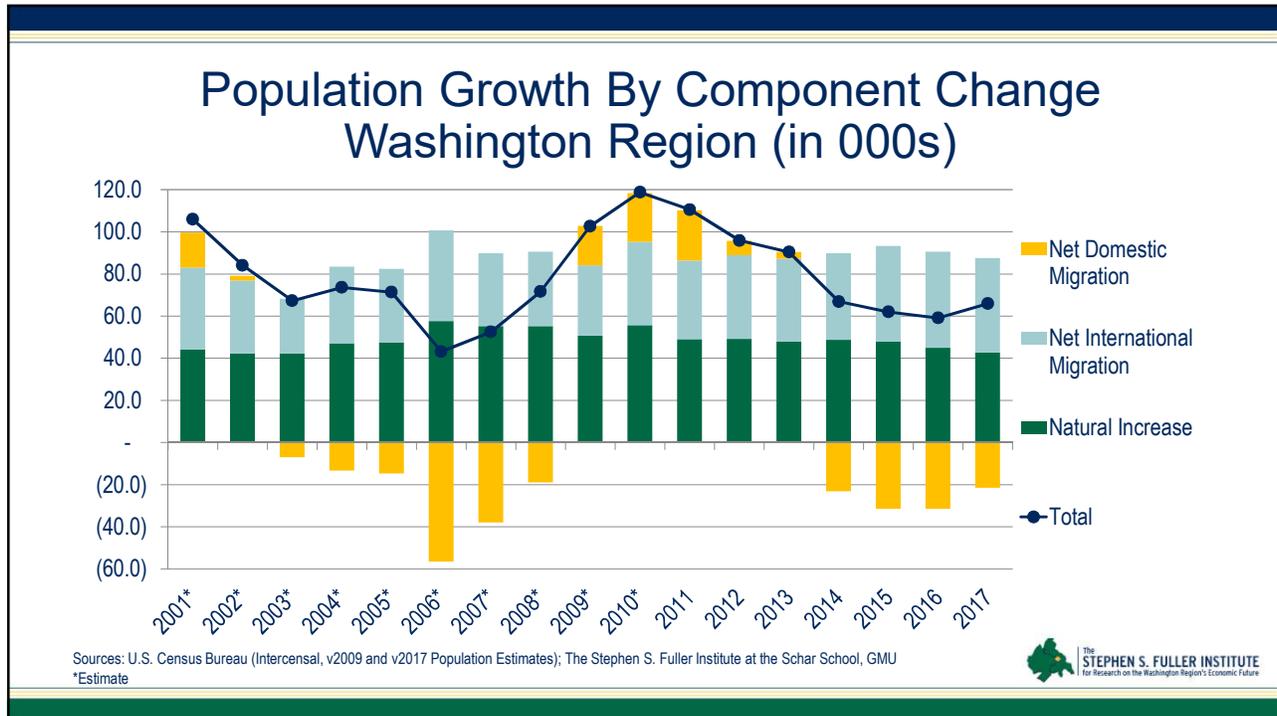

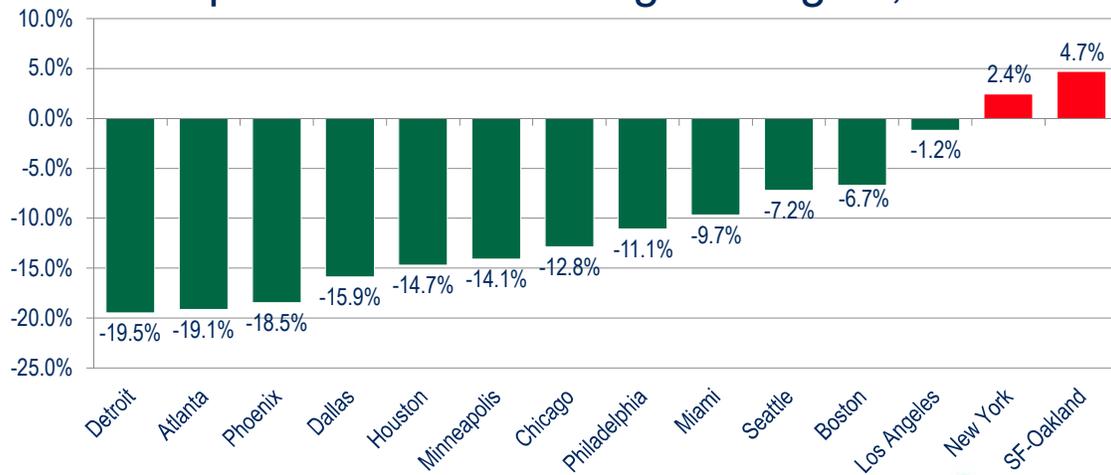Population Change in the Largest Metros
2016-2017

US: +0.7%

Sources: U.S. Census Bureau (v2017 Population Estimates), The Stephen S. Fuller Institute at the Schar School, GMU

Population Growth By Component Change
Washington Region (in 000s)

Sources: U.S. Census Bureau (Intercensal, v2009 and v2017 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU
*Estimate

Domestic Migration in the Washington Region
2000 to 2015

Sources: Internal Revenue Service; The Stephen S. Fuller Institute at the Schar School, GMU
*Preliminary

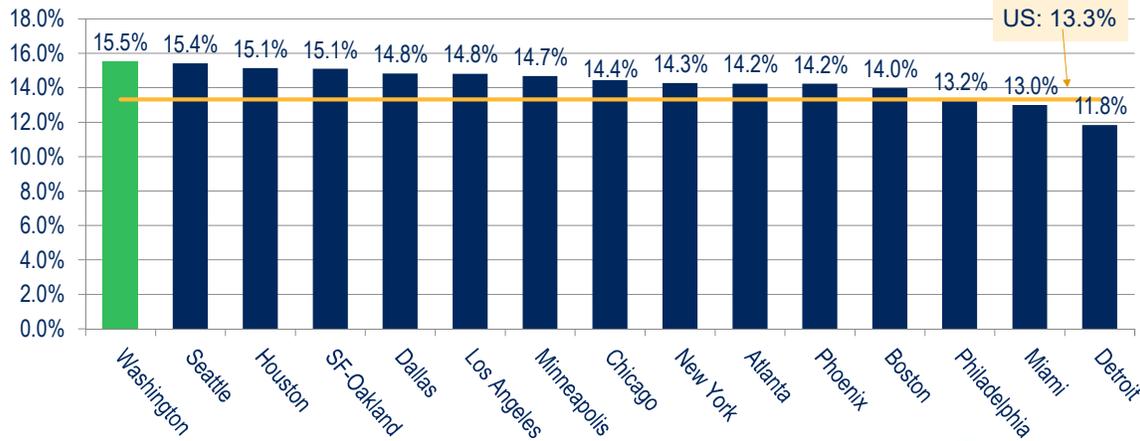# Percent Difference in Regional Price Levels, Compared to the Washington Region, 2016

City	Value
Detroit	-19.5%
Atlanta	-19.1%
Phoenix	-18.5%
Dallas	-15.9%
Houston	-14.7%
Minneapolis	-14.1%
Chicago	-12.8%
Philadelphia	-11.1%
Miami	-9.7%
Seattle	-7.2%
Boston	-6.7%
Los Angeles	-1.2%
New York	2.4%
SF-Oakland	4.7%

Sources: U.S. Bureau of Economic Analysis; The Stephen S. Fuller Institute at the Schar School, GMU

The
STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

Lagging Millennial Retention?

The
STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

Share of 25-34 Years Olds
Largest 15 Metros, 2010

Share of 25-34 Years Olds
Largest 15 Metros, 2017

Percent Change in 25-34 Years Olds
Largest 15 Metros, 2016 - 2017

US: +1.3%

Metro	Percent
Seattle	3.1%
Detroit	2.5%
Dallas	2.5%
Atlanta	2.4%
Phoenix	2.2%
Boston	1.5%
Minneapolis	1.4%
Philadelphia	1.3%
SF-Oakland	1.1%
Los Angeles	1.0%
Houston	0.7%
Miami	0.7%
New York	0.7%
Washington	0.7%
Chicago	0.0%
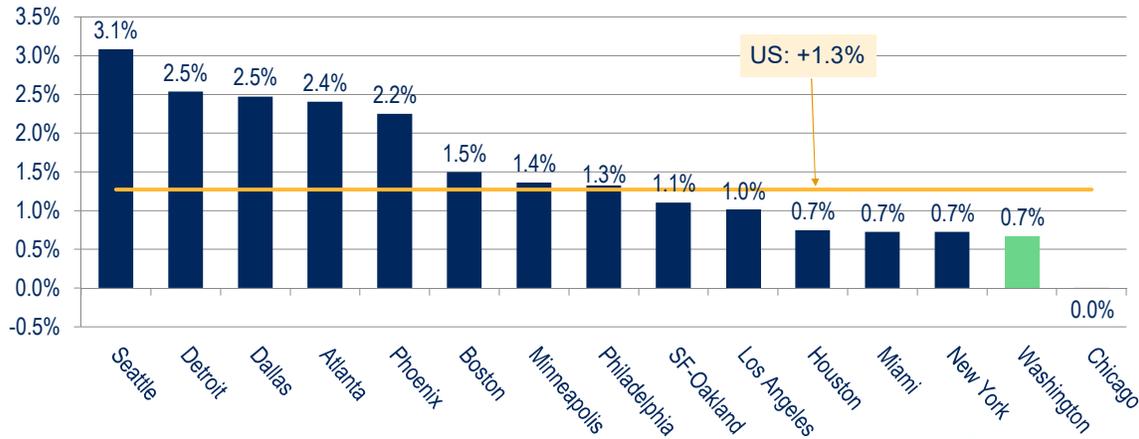
Sources: U.S. Census Bureau (Vintage 2017 &2000-2010 Intercensal Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU

The STEPHEN S. FULLER INSTITUTE
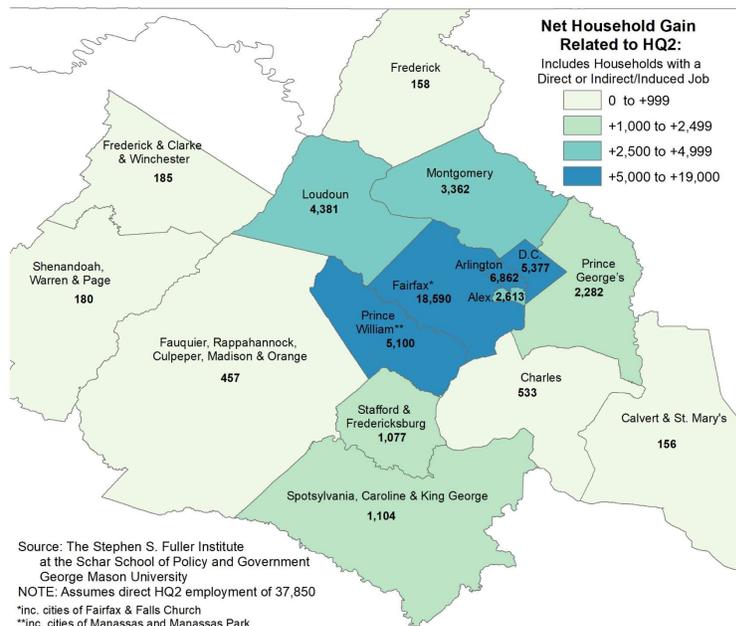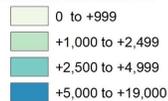for Research on the Washington Region's Economic Future

---

Amazon HQ2

The STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

Amazon-Related Owners in Select Jurisdictions
Assumes 37,850 HQ2 jobs, includes indirect & induced effects

	Build-Out	in 2017
Virginia		
Arlington County	2,071	3,030
Alexandria City	1,085	2,580
Fairfax County*	13,698	16,300
Prince William County**	4,013	8,330
Loudoun County	3,665	6,630
D.C.	2,410	8,900
Maryland		
Montgomery County	2,737	12,430
Prince George's County	1,886	10,230

Sources: RealEstate Business Intelligence, LLC; The Stephen S. Fuller Institute at the Schar School, GMU
*Includes the cities of Fairfax and Falls Church   ** Includes the cities of Manassas and Manassas Park

The STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

Amazon-Related Renters in Select Jurisdictions
Assumes 37,850 HQ2 jobs, includes indirect & induced effects

	Renters at Full Build-Out	Renters in 2016	Total % Increase from 2016
Virginia			
Arlington County	4,792	57,133	8.4%
Alexandria City	1,528	41,808	3.7%
Fairfax County*	4,893	134,425	3.6%
Prince William County**	1,087	49,891	2.2%
Loudoun County	716	25,552	2.8%
D.C.	2,968	169,875	1.7%
Maryland			
Montgomery County	625	132,098	0.5%
Prince George's County	396	121,333	0.3%

Sources: U.S. Census Bureau (2016 ACS Microdata); The Stephen S. Fuller Institute at the Schar School, GMU
*Includes the cities of Fairfax and Falls Church   ** Includes the cities of Manassas and Manassas Park

The STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

Thank You

For monthly reports on the
Washington region's economic performance go to

sfullerinstitute.gmu.edu
@FullerInstitute