

# DEMOGRAPHIC TRENDS & THE PA ECONOMY

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PA State Association of Boroughs



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# Good Morning & Today's Presentation

## **The big picture: state demographic trends.**

- Historical trends. Projections through 2025.
- Disclaimer: trends may not translate to all local units.

## **Aging's impact on the state economy.**

- Economic growth. Job Creation. Spending patterns.
- Service sector jobs. Slower growth. Housing pressures.

## **Transition to local unit trends.**

- Earned income tax and property tax.
- Focus on wage growth.

# The Independent Fiscal Office

## **Established in 2011. Non-partisan analysis.**

- Modeled after the Congressional Budget Office.
- Separate from Executive and Legislative branches.

## **Various mandatory duties.**

- General Fund revenue estimates.
- Coordinate pension analysis. Analyze wage contracts.
- Develop Performance-Based Budget plans for agencies.

## **Things the office does not do:**

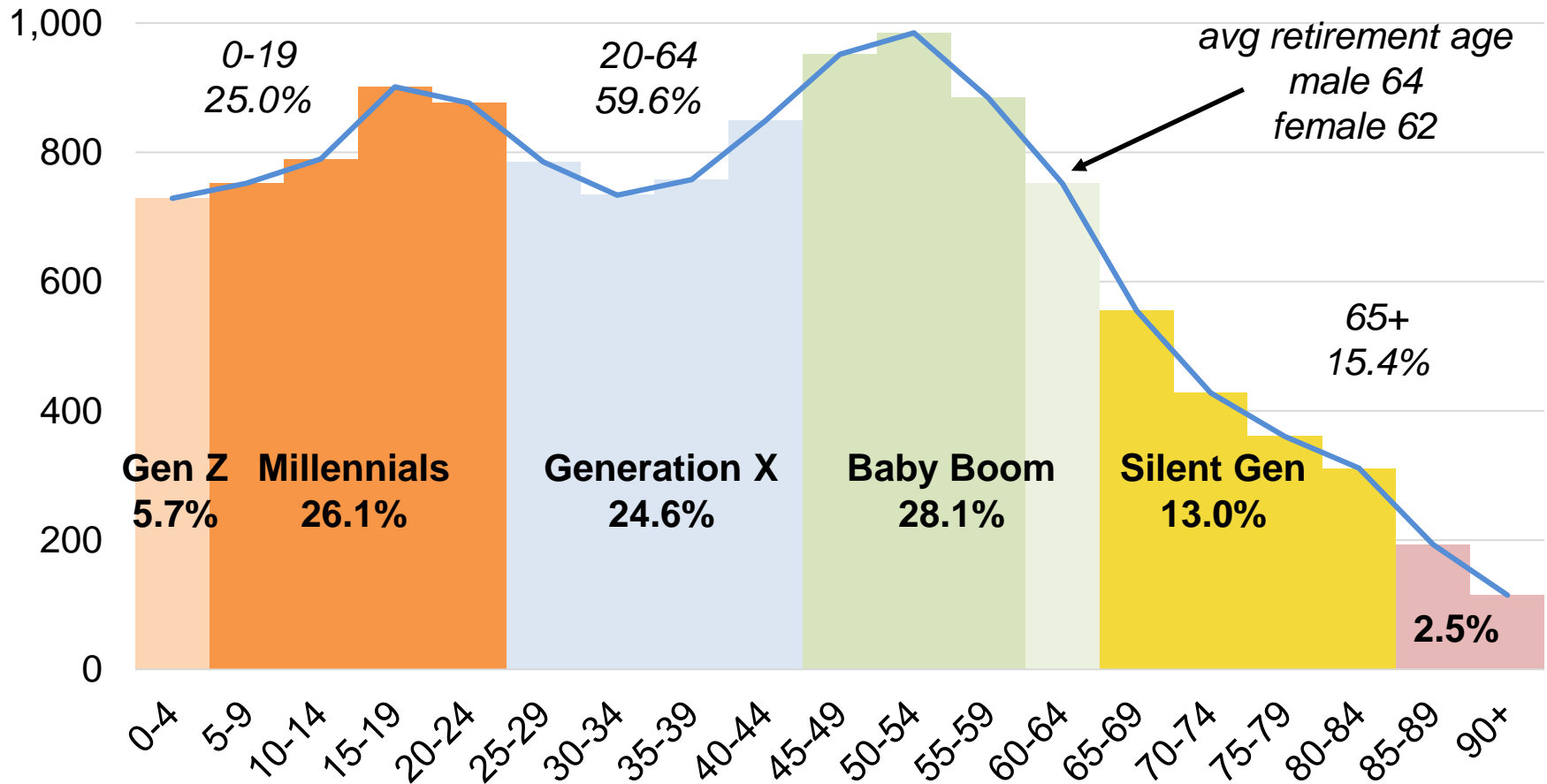
- Make policy or budget recommendations.
- Produce separate budgets (an executive duty).
- Produce fiscal notes (a legislative duty).

# PA Demographic Snapshot

Age	# Residents (000s)			Change (000s)		Total Growth	
	2010	2017	2025	2010-2017	2017-2025	2010-2017	2017-2025
0 to 19	3,172	3,009	2,890	-163	-119	-5.1%	-4.0%
20 to 64	7,576	7,517	7,237	-59	-280	-0.8%	-3.7%
65 to 74	983	1,279	1,545	297	266	30.2%	20.8%
75 to 84	672	665	886	-7	221	-1.0%	33.3%
85+	<u>308</u>	<u>335</u>	<u>347</u>	<u>27</u>	<u>12</u>	<u>8.8%</u>	<u>3.6%</u>
<b>Total</b>	<b>12,711</b>	<b>12,806</b>	<b>12,906</b>	<b>94</b>	<b>100</b>	<b>0.7%</b>	<b>0.8%</b>

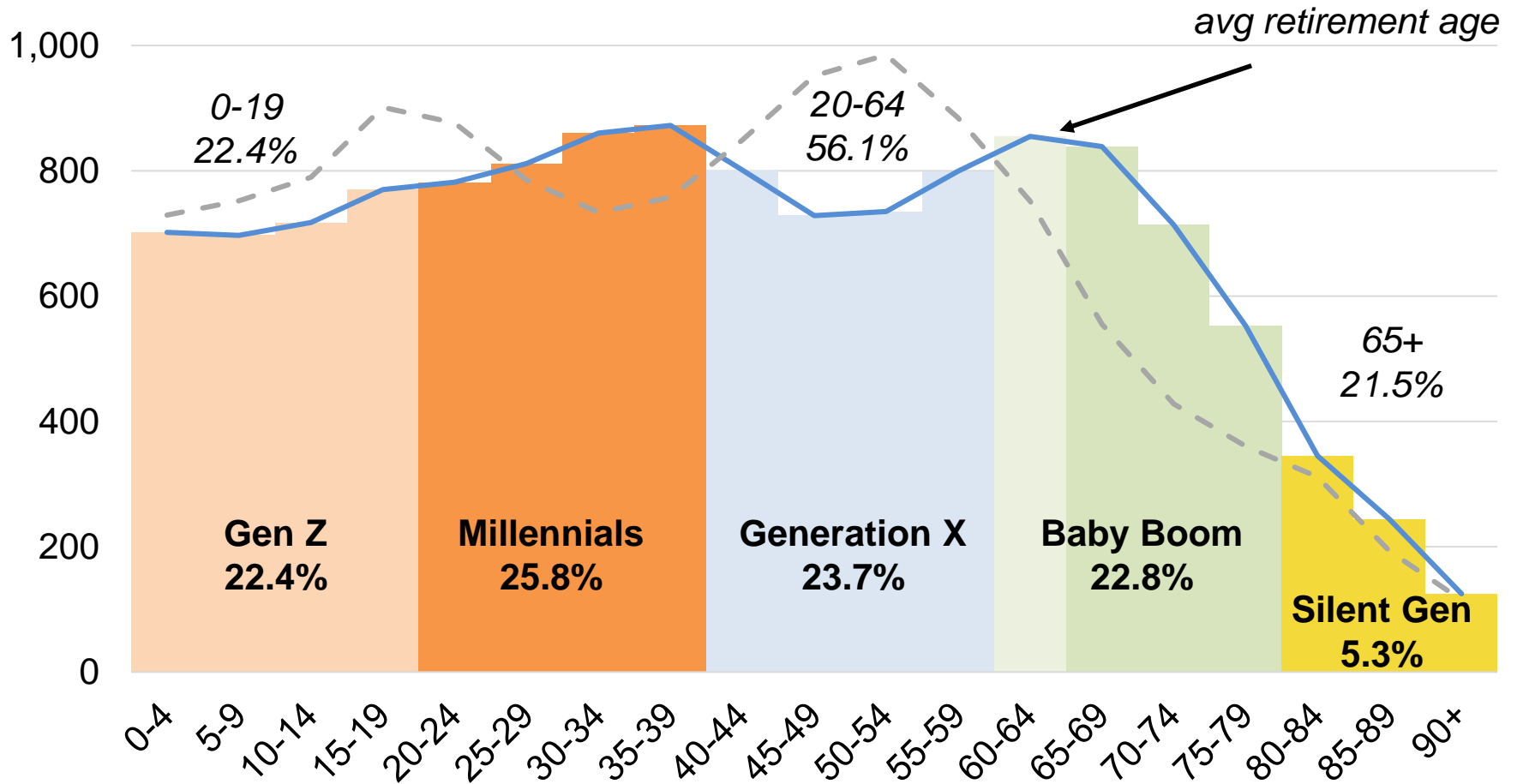
Source: Data for 2010 (final) and 2017 (estimate) from U.S. Census Bureau. 2025 is a projection by the IFO.

# 2010 PA Population Distribution



Note: Vertical axis is thousands of residents. Percentages are share of state population.  
Source: U.S. Census Bureau.

# 2025 PA Population Distribution



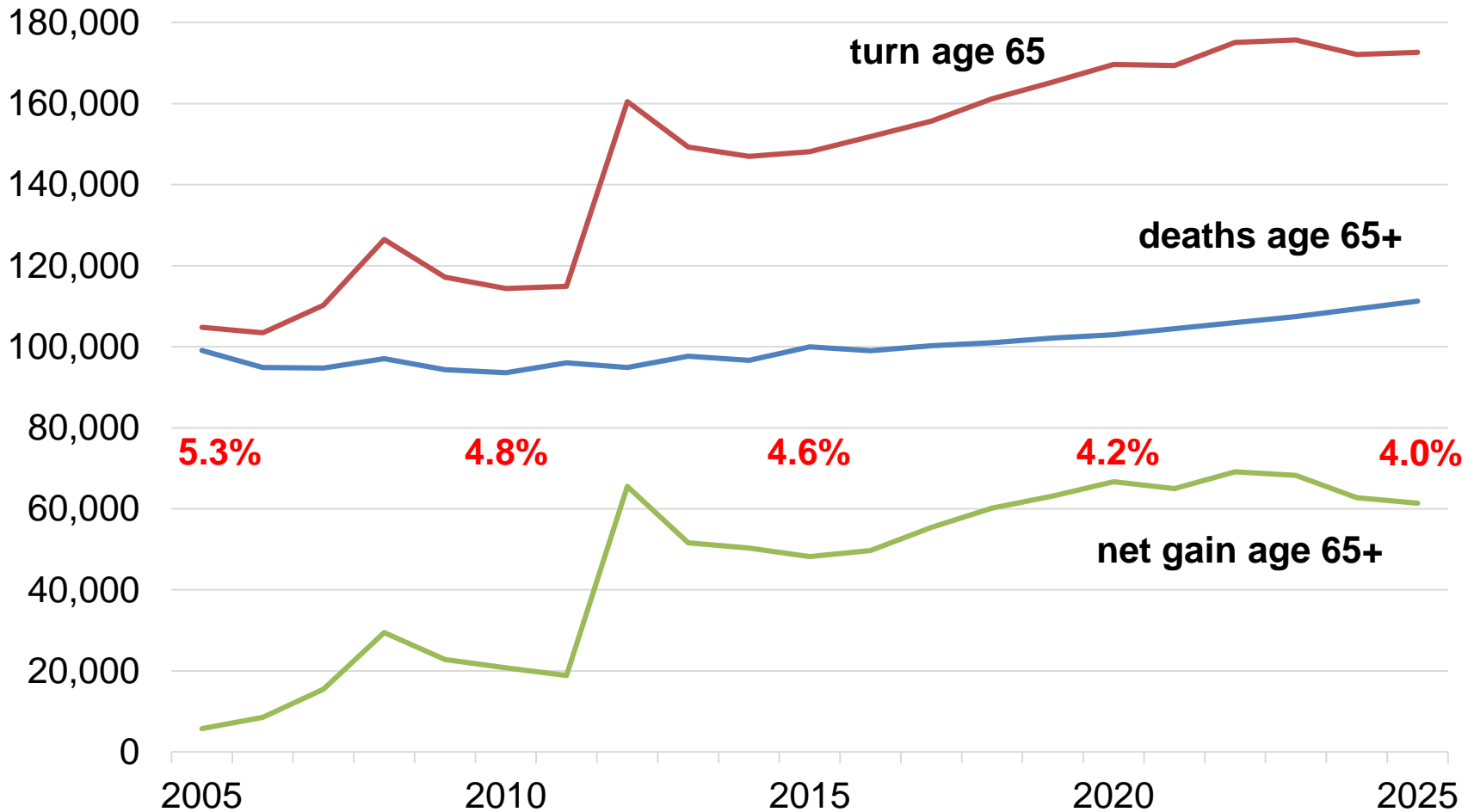
Note: Vertical axis in thousands of residents. Percentages are share of state population.  
 Source: All projections by the IFO.

# Vital Statistics for PA Females

	2007	2016	Change
Median Marriage Age	26.6	28.9	+2.3
Share Married			
Age 30-39	60.1%	53.1%	-7.0%
Age 40-49	62.9%	60.2%	-2.7%
Age 50-59	63.3%	59.8%	-3.5%
Average Age Mother	27.8	28.9	+1.1
Average Fertility Rate	60.9	58.5	-2.4
Avg. Life Expectancy 65+	18.8	19.2	+0.4

Notes: The average age of mother is for all births. The average fertility rate is per 1,000 females ages 15 to 44.  
Sources: PA Department of Health, Centers for Disease Control and Prevention, and American Community Survey. Some computations by IFO.

# Age 65+: Large Influx and Longevity



Note: figures in red are decedent rates for age 65+ population.

Sources: PA Department of Health, U.S. Census Bureau. Projections after 2017 by IFO.



# Future Challenges for State Budget

	2000	2010	2020	2030
Working Age / Age 65+	3.88	3.86	3.02	2.36
% Adult Population 65+	20.5%	20.6%	24.9%	29.8%
Approximate Share of State Taxes Paid by Age 65+ (2017)				
Personal Income	15%	to	18%	
Sales and Use	20%	to	26%	
Property	30%	to	35%	
<p>Notes: Sales tax figures include amounts passed through from business. Property tax figures represent all property taxes. Working age is age 20 to 64. Adult population is age 20 or older.            Source: IFO computations based on state and federal tax data.</p>				

# Components of PA Population Change

	1990 to 2000	2000 to 2010	2010 to 2020
<b>Starting Population (000s)</b>	<b>11,916</b>	<b>12,284</b>	<b>12,711</b>
Average Annual Levels (000s)			
Number Births	154	145	140
Number Deaths	-126	-128	-129
Net Domestic Migration	0	-4	-25
Net Int'l Migration	9	18	29
Residual	0	12	0
<b>Ending Population (000s)</b>	<b>12,284</b>	<b>12,711</b>	<b>12,852</b>
Avg. Annual Growth Rate	0.30%	0.34%	0.11%

Source: Data through 2017 from U.S. Census Bureau. Data after 2017 are projections by IFO. Migration data for 1990 to 2000 are based on a residual computation and trends for early 2000s.

# PA Net Domestic Migration - 2016

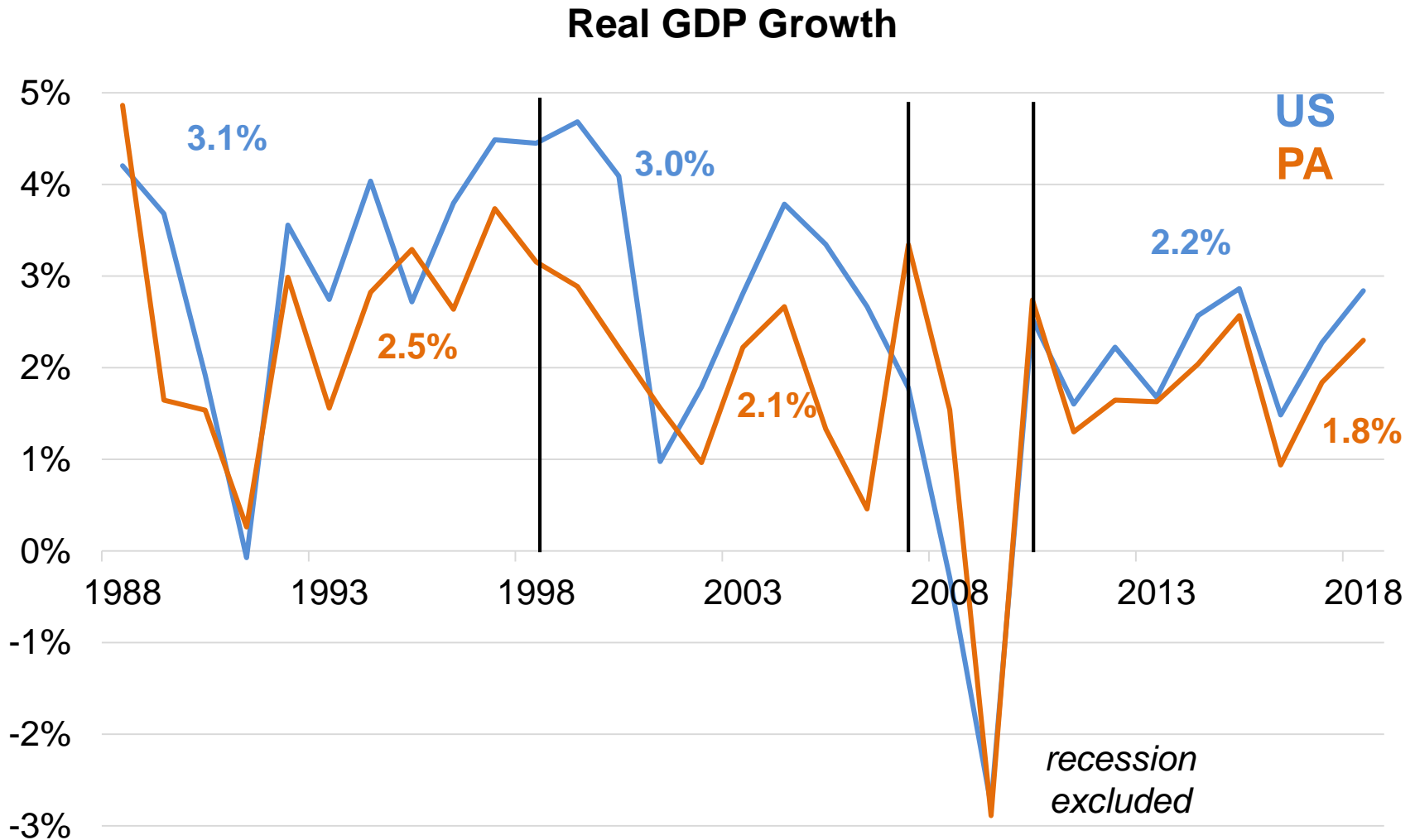
Age Group	Inflow to PA	Outflow from PA	Net Migration
0-19	79,747	55,951	23,796
20-24	30,737	47,369	-16,632
25-39	86,885	83,518	3,367
40-49	19,863	24,308	-4,445
50-59	16,867	21,681	-4,814
60-69	13,453	18,448	-4,995
70+	<u>11,428</u>	<u>13,245</u>	<u>-1,817</u>
<b>Total</b>	<b>258,980</b>	<b>264,520</b>	<b>-5,540</b>
Destination/Origin	Inflow to PA	Outflow from PA	Net Migration
New Jersey	41,602	25,298	16,304
New York	42,480	24,941	17,539
Maryland	20,737	15,409	5,328
Florida	14,158	32,582	-18,424
All Other	140,003	166,290	-26,287

Source: 2016 American Community Survey, U.S. Census Bureau.

# Transition to Economic Impact

- Economic impacts of demographics are hard to isolate, but fundamental.
- Trends only apparent over long time horizons.
- Significant variation amongst local units, but underlying challenges are similar.

# U.S. and PA Economic Growth Slows



Source: U.S. Bureau of Economic Analysis. 2018 data are estimates.

# Service Sector Jobs Dominate

Sector	Share of Total PA Payroll Jobs		
	1997	2007	2017
Manufacturing	16.1%	11.4%	9.4%
Wholesale-Retail	15.9%	15.4%	14.2%
All Government	13.3%	13.0%	11.8%
Healthcare-Social	12.8%	14.7%	17.0%
Professional-Business	10.0%	12.2%	13.5%
Leisure-Hospitality	7.8%	8.6%	9.5%
Transportation-Utility	3.8%	4.2%	4.8%
All Other	<u>20.3%</u>	<u>20.6%</u>	<u>19.8%</u>
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Note: Professional-Business includes Professional Services, Management and Administrative-Waste Management.  
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics. Excludes self-employed individuals.

# Service Sector Jobs Dominate Con't

Sector	Net PA Employment Change (000s)		
	1997 to 2007	2007 to 2010	2010 to 2017
Healthcare-Social	160	46	110
Professional-Business	166	-16	112
Leisure-Hospitality	77	1	66
Transportation-Utility	37	-7	50
All Other	96	-70	56
All Government	38	15	-69
Wholesale-Retail	28	-47	1
Manufacturing	<u>-212</u>	<u>-99</u>	<u>1</u>
<b>TOTAL</b>	<b>389</b>	<b>-178</b>	<b>326</b>

Source: U.S. Bureau of Labor Statistics, Current Employment Series. Excludes self-employed individuals.

# U.S. Seniors Working More

	Avg. Annual Growth Rate: 2005-15		
	Number Workers	Total Wages	Average Wage
<b>All U.S. Workers</b>	<b>0.7%</b>	<b>3.2%</b>	<b>2.6%</b>
Under Age 50	-0.1%	2.1%	2.2%
Age 50-59	1.4%	3.9%	2.5%
Age 60-64	3.8%	7.5%	3.6%
Age 65-69	5.2%	10.2%	4.8%
Age 70+	3.2%	8.3%	4.9%

Note: Data are for employed and self-employed workers. Reflects all employees subject to OASDI and HI taxes. Total wage and average wage growth is for group, not individuals. Some wage growth is attributable to longer average workweek.  
Source: U.S. Social Security Administration: Annual Statistical Supplement.



# 65+ Spending Patterns Shift to Housing

	Share of Spending Age 65+		
	2005-06	2015-16	Change
Housing	37.3%	41.8%	4.4%
Mortgage-Rent-Prop Tax	21.4%	25.6%	4.2%
Transportation	15.8%	14.1%	-1.8%
Healthcare	12.8%	13.2%	0.5%
All Food	13.9%	12.5%	-1.4%
All Other	6.5%	5.7%	-0.8%
Entertainment	4.5%	5.1%	0.7%
Cash Contributions	6.0%	5.1%	-0.8%
Clothing	3.3%	2.5%	-0.8%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>

Note: Treats expenditures for pensions and Social Security tax as savings.  
Source: U.S. Consumer Expenditure Survey, northeast region.

# Fewer PA Seniors Own Home Outright

Age	Share of PA Homeowners w/o Mortgage		
	2006	2016	Change
Under 35	10.5%	16.5%	6.0%
35 to 44	12.6%	15.3%	2.8%
45 to 54	24.1%	24.0%	-0.1%
55 to 59	33.8%	35.7%	1.9%
60 to 64	47.9%	46.0%	-2.0%
65 to 74	66.1%	58.5%	-7.5%
75+	88.2%	79.8%	-8.4%

Source: U.S. Census Bureau, American Community Survey.

# Transition to Local Trends

- Data are limited and available with lag.
- Significant variation amongst local units.
- Limited insights on property tax.

# Property Tax: Average Growth Rates

	Fiscal Year Ending	
	2006-11	2011-16
<b>Property Tax</b>		
Borough	4.4%	2.9%
Township	5.1%	3.0%
City	<u>3.3%</u>	<u>3.0%</u>
All Local Units	4.2%	3.0%
<b>Economics</b>		
Philadelphia House Price Index	-0.4%	2.0%
Pittsburgh House Price Index	1.6%	3.6%
Nominal State GDP	3.2%	3.3%

Sources: Dept. of Comm. and Economic Development, U.S. Bureau of Economic Analysis and Federal Housing Finance Agency.

# Earned Income Tax: Avg. Growth Rates

	Fiscal Year Ending	
	2006-11	2011-16
<b>Earned Income Tax</b>		
Borough	2.5%	3.7%
Township	3.6%	4.2%
City	<u>6.3%</u>	<u>4.1%</u>
All Local Units	5.1%	4.1%
<b>State Tax Return</b>		
Compensation	3.1%	3.3%
Net Profits	<u>6.0%</u>	<u>4.4%</u>
Sum of Two Income Fields	3.4%	3.5%
<b>Economics</b>		
Philadelphia CPI-U	2.0%	1.0%
Pittsburgh CPI-U	2.8%	1.7%
Nominal State GDP	3.2%	3.3%

Note: State tax return and economics use calendar year data.  
Sources: Department of Community and Economic Development, U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics.

# Population Growth: 2010-17

Avg. Annual Population Growth by County					
Age	Philly	Allegheny	Cumberland	Bradford	State
Under 20	-0.4%	-0.7%	0.5%	-1.1%	-0.8%
20 to 64	0.5%	-0.2%	0.4%	-0.9%	-0.1%
65+	<u>1.9%</u>	<u>1.4%</u>	<u>3.0%</u>	<u>1.9%</u>	<u>2.2%</u>
<b>Total</b>	<b>0.5%</b>	<b>-0.0%</b>	<b>0.8%</b>	<b>-0.4%</b>	<b>0.1%</b>

Note: Age breakdown is not available for municipalities based on single year. Only available at county level. Rates are average rates from 2010 to 2017.  
Source: U.S. Census Bureau.

# Non-Taxable Income Grows Quickly

	PA Cash Income (\$ billions)		
	2006	2018	AAGR
Wages-Salaries	\$247.9	\$347.0	2.8%
Divs-Interest-Cap Gains	\$55.9	\$74.0	2.4%
Business Income	\$47.9	\$65.9	2.7%
Pensions-IRA	\$33.2	\$64.1	5.6%
Social Security	\$24.3	\$39.4	4.1%
Income Maintenance	<u>\$15.8</u>	<u>\$24.5</u>	<u>3.7%</u>
<b>TOTAL</b>	<b>\$425.0</b>	<b>\$614.9</b>	<b>3.1%</b>
Wages Share of Total	58.3%	56.4%	

Notes: AAGR is average annual growth rate. Cash Income is all income received that could be spent or saved. Business Income includes S corporations, partnerships and sole proprietors. Income Maintenance includes unemployment compensation, SNAP, veterans' benefits and disability programs.  
Source: Computations by the IFO using various government data sources.

# 3 Factors Comprise PA Wage Growth

	Annual Growth Rate of Total PA Wages						Avg.
	2013	2014	2015	2016	2017	2018	
Number of Jobs	0.2%	0.8%	0.8%	0.9%	1.1%	1.1%	0.8%
Inflation (CPI-U)	1.2%	1.3%	0.2%	0.9%	1.6%	1.8%	1.2%
Wage Premium	<u>0.4%</u>	<u>1.7%</u>	<u>3.1%</u>	<u>-0.5%</u>	<u>1.3%</u>	<u>1.5%</u>	<u>1.2%</u>
<b>TOTAL PA WAGES</b>	<b>1.8%</b>	<b>3.9%</b>	<b>4.1%</b>	<b>1.3%</b>	<b>4.0%</b>	<b>4.3%</b>	<b>3.2%</b>

Sources: U.S. Bureau of Labor Statistics and U.S. Bureau of Economic Analysis.



# Wrapping it Up

## **PA is in middle of a retirement boom.**

- However, many seniors continue to work.
- Roughly 25% of non-disabled PA residents age 65+ are part of the labor force.
- Share will continue to increase over next decade.

## **Transition to a mature economy.**

- Implies slower economic growth – all else equal.
- Non-taxable income grows notably faster than state economy.

## **Caution: slowdown or recession likely.**

- Factors suggest higher likelihood next 2-3 years.
- Many analysts project recession for 2020.

# Thank You

Presentation to be posted on the IFO website

<http://www.ifo.state.pa.us/>

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