

Oregon Population Forecast Program

Regional Forecast Meeting – February 28, 2018

Preliminary Coordinated Forecasts for
Josephine County, its Urban Growth Boundaries
(UGBs), and the Area Outside UGBs

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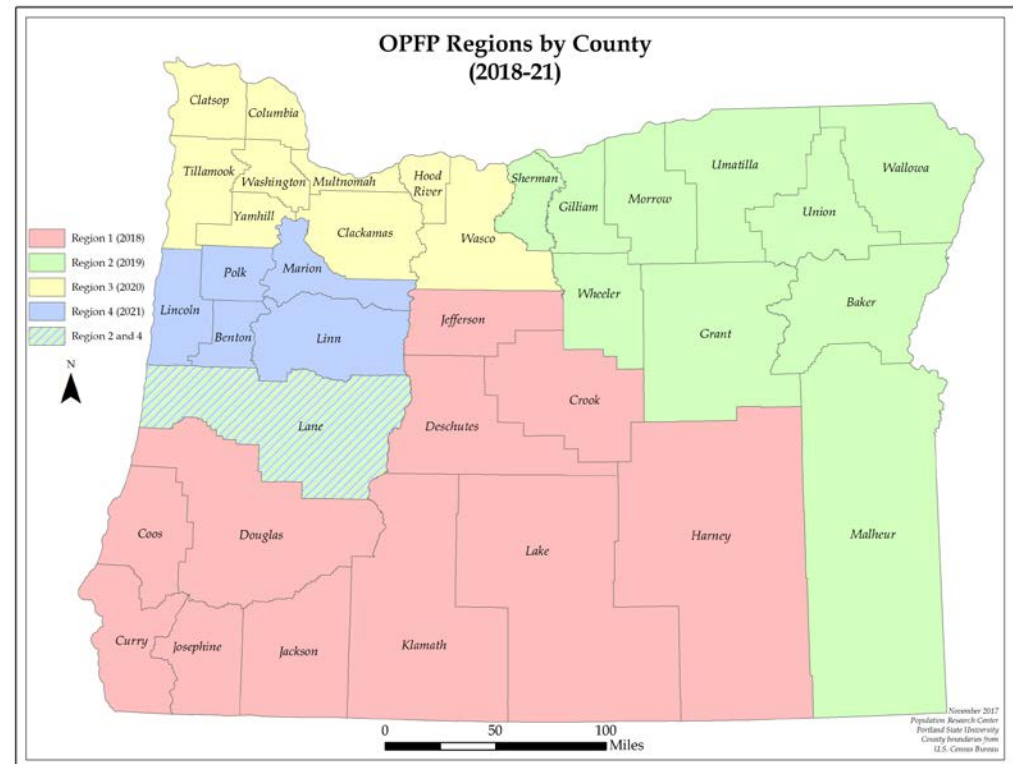
Charles Rynerson,
Research Consultant

Agenda

- Present and discuss preliminary forecast results
 - Proposed Forecasts by March 31st, 2018; To be posted on Oregon Population Forecast Program (OPFP) website:
<http://www.pdx.edu/prc/opfp>
- Explain our assumptions for future change
- Obtain your feedback

2018-2021 Update

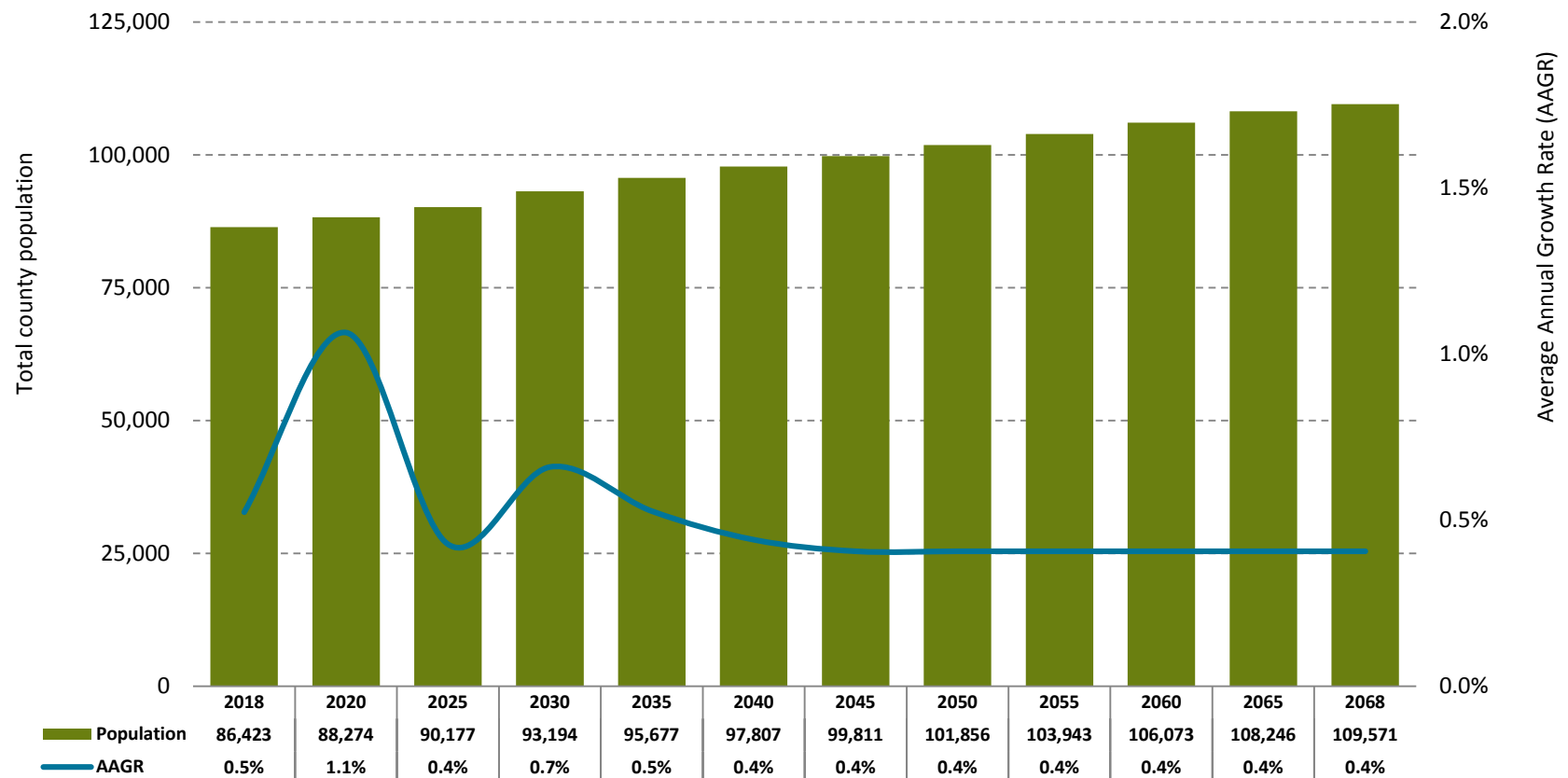
- Modified Methodology (50 Year Period)
- Forecast Methods (2018-43)
 - Cohort-Component and Housing Unit Model
- Modified Method (2043-68):
 - County: AAGR of the last 5 year period (2040-45) is extrapolated out for the remaining 25 years.
 - Sub-areas: Trend the sub-area share of the County for the remaining 25 years.



Assumptions for Josephine County and Larger Sub-Area Forecasts

1. As the economy strengthens and Oregon's population ages, we assume net in-migration and housing construction to increase into the 2010-20 decade.
 - a) Despite the recent influx of net in-migration over the last few years, we expect growth to regress during early 2020's as the economy contracts.
 - b) Net in-migration will occur over the entire forecast horizon.
2. We incorporate state and local trends into our assumptions for fertility and mortality.
 - a) As a result of aging Baby Boomers, deaths increase and peak in the 2040's, with total deaths tapering through 2050.
 - b) Total fertility rates remain stable throughout the forecast period.
 - c) As a result, we expect the County will experience a growing natural decrease.
3. Population growth is expected to slow over time as natural decrease magnifies and net in-migration tapers.

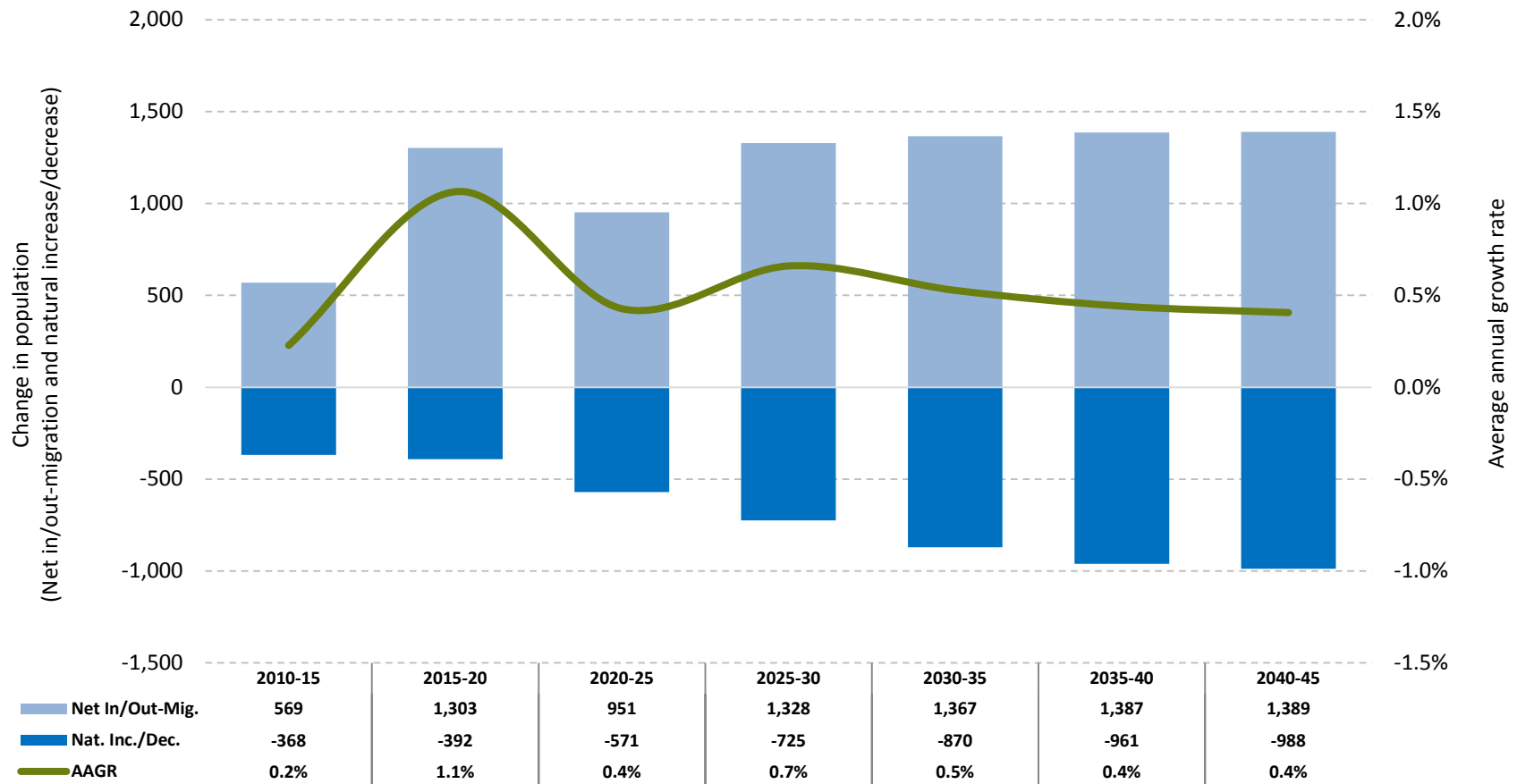
Josephine County—Total Population by Five-year Intervals (2018-2068)



Source: Forecast by Population Research Center (PRC).

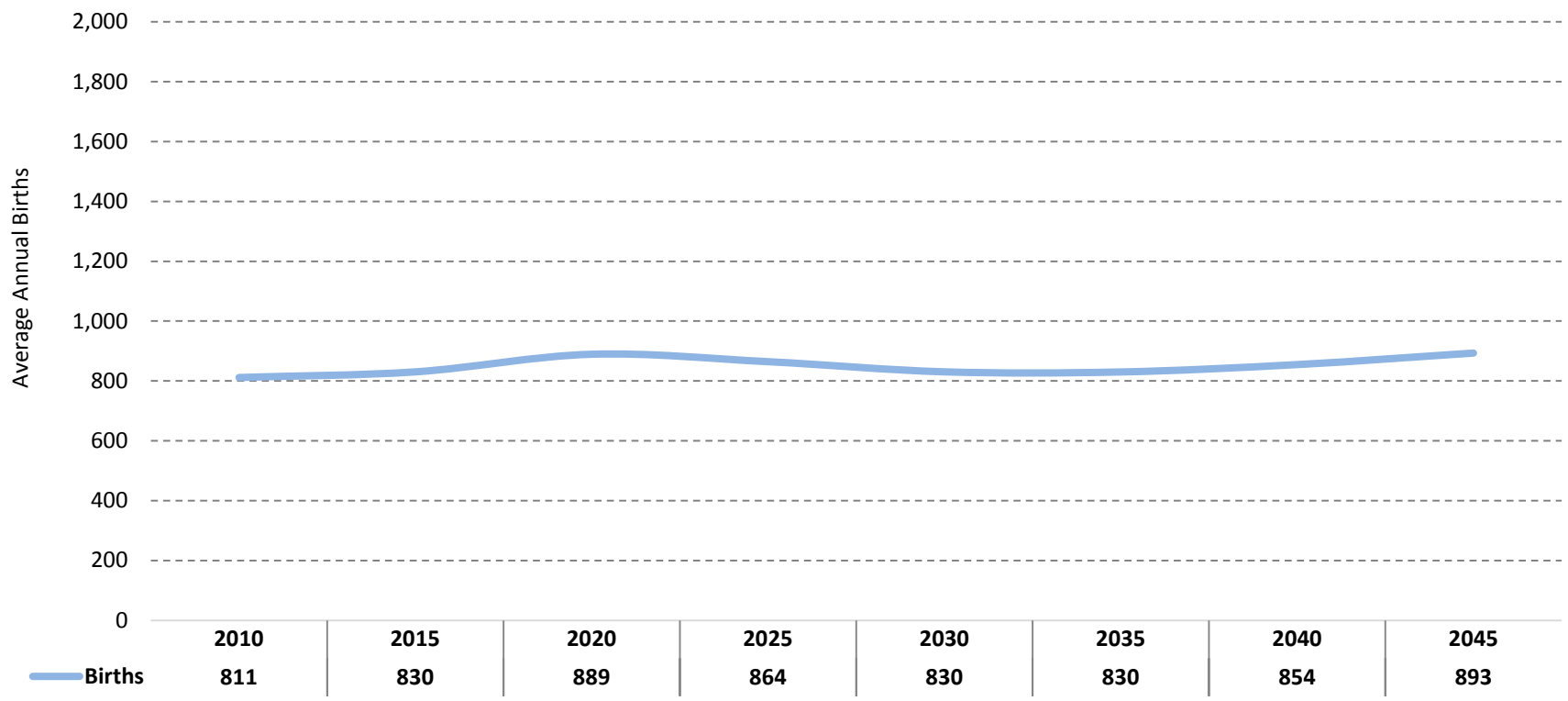
Preliminary Forecast Results

Josephine County—Components of Population Change by Five-year Intervals (2015-2045)



Source: Forecast by Population Research Center (PRC)

Josephine County—Average Annual Births



Sources: Oregon Health Authority, Center for Health Statistics. Calculations and Forecast by Population Research Center (PRC).
Note: The years signify the end of the period for which average annual numbers were calculated. The average annual numbers for "2010" were calculated for the 2000-2010 period, with the remaining years calculated for their preceding five-year periods.

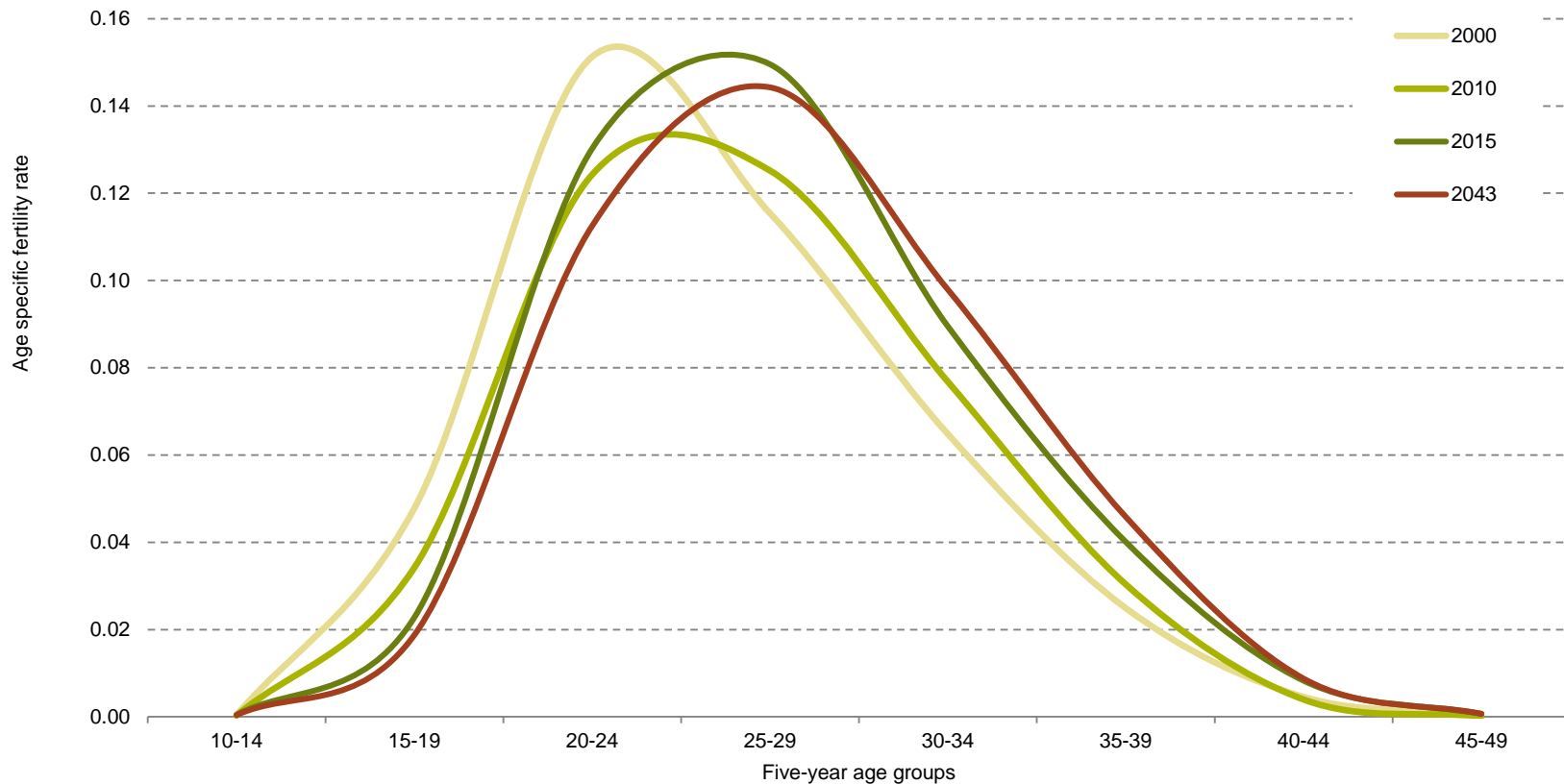
Total Fertility Rate (TFR)

	2000	2010	2015	2043
Josephine County	2.05	1.98	2.21	2.15
Oregon	1.98	1.81	1.72	--

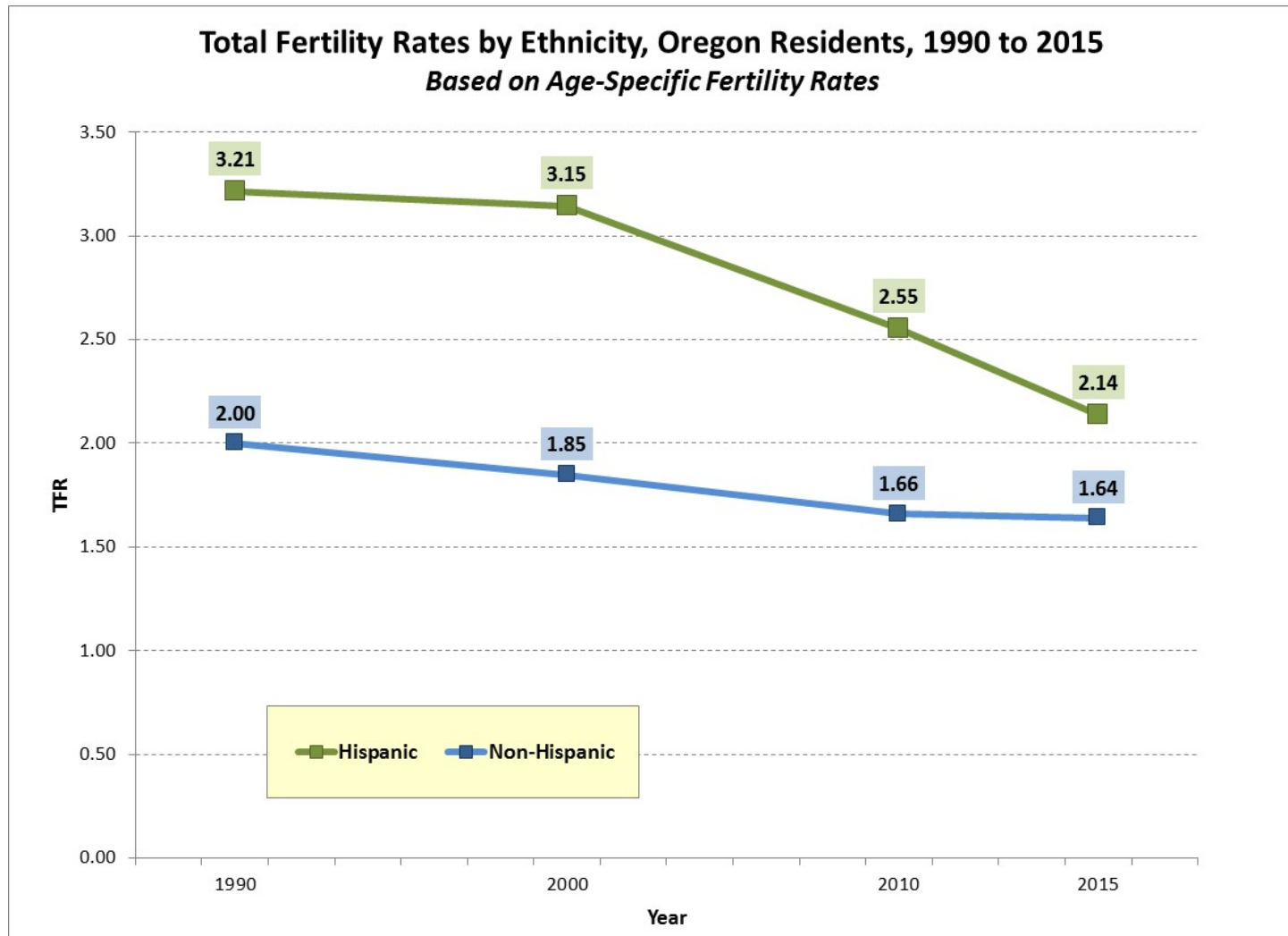
Sources: U.S. Census Bureau, 2000 and 2010 Censuses. PRC Estimates. Oregon Health Authority, Center for Health Statistics. Calculations and Forecast by Population Research Center (PRC).

Note: 2000, 2010 and 2015 are annual TFRs, whereas the TFR for 2043 is for the preceding five-year forecast period. In other words the TFR for 2043 is calculated for the 2040 to 2045 forecast period.

Josephine County—Age Specific Fertility Rate (2000, 2010, 2015 and 2043)



Sources: U.S. Census Bureau, 2000 and 2010 Censuses. PRC Estimates. Oregon Health Authority, Center for Health Statistics. Calculations and Forecast by Population Research Center (PRC).

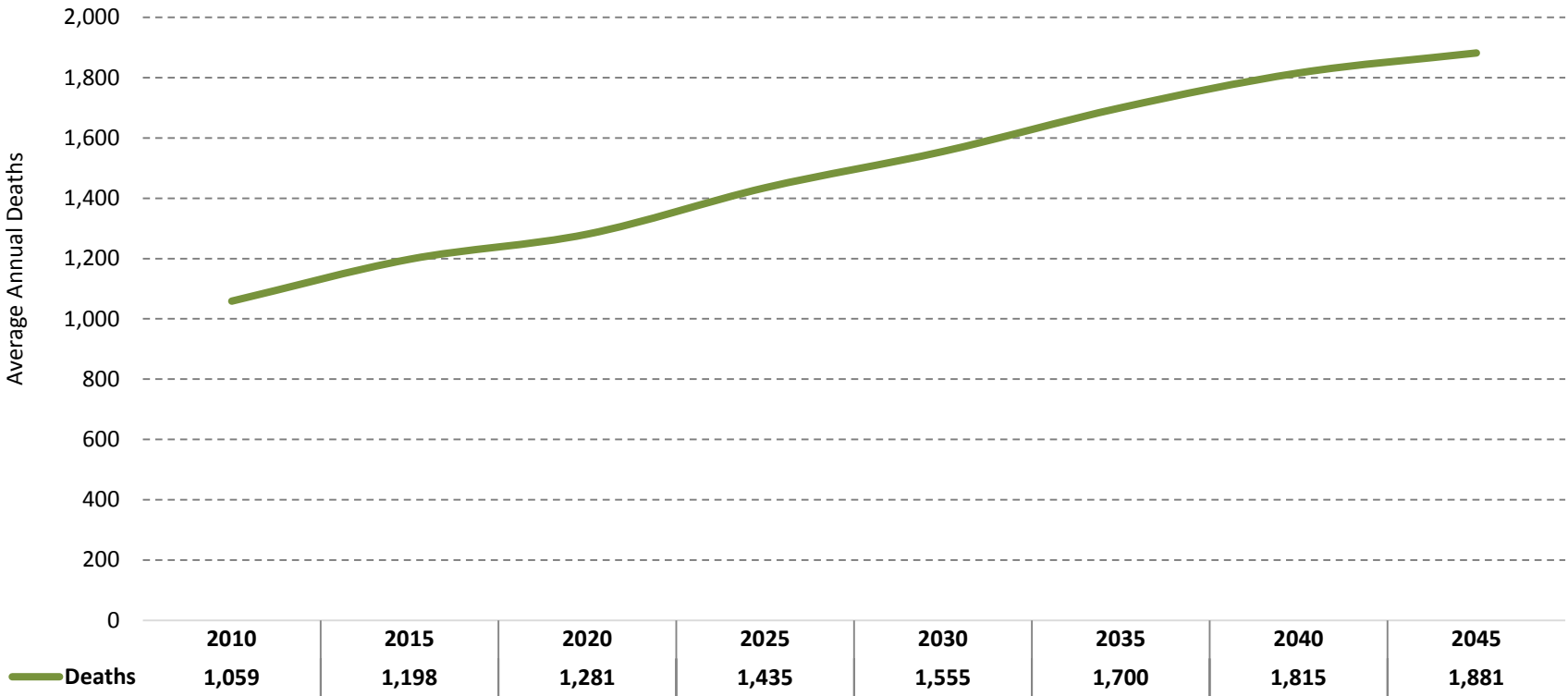


Sources: PEPASR6H-Geography-OregonYear-July 1, 2015 and July 1, 2010

Hispanic Origin-Hispanic: Annual Estimates of the Resident Population by Sex, Age, Race, and Hispanic Origin for the United States and States: April 1, 2010 to July 1, 2015

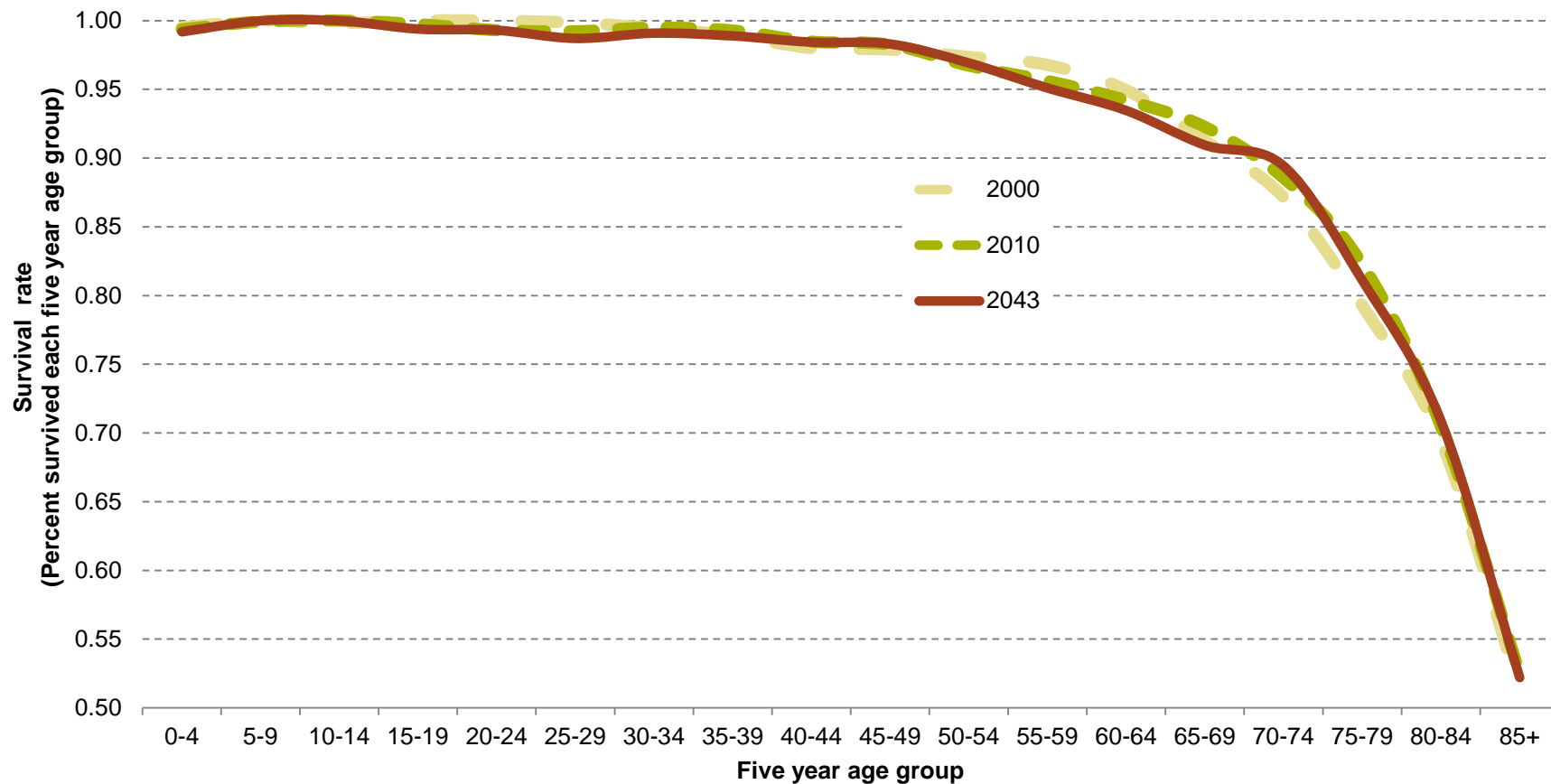
Population Research Center (PRC): 2015 Population Estimates

Josephine County—Average Annual Deaths



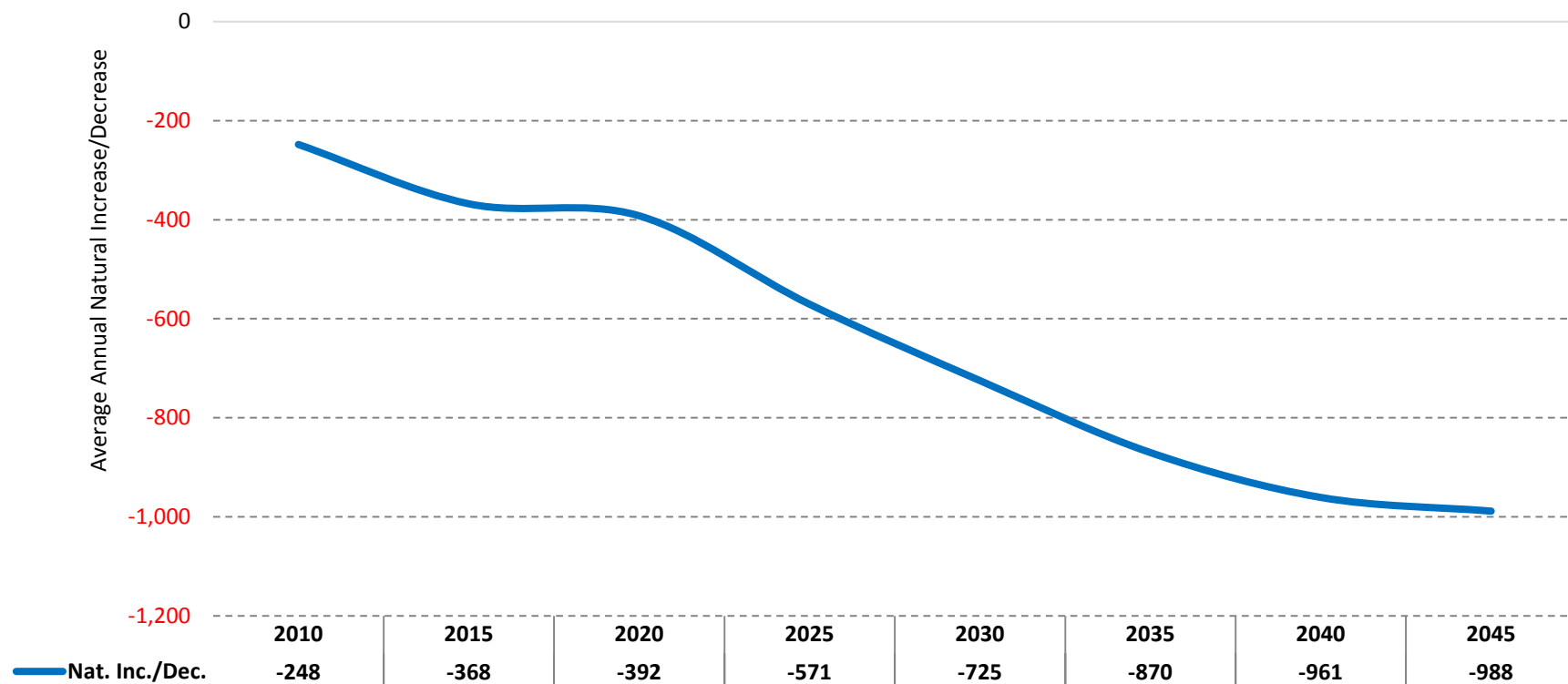
Sources: Oregon Health Authority, Center for Health Statistics. Calculations and Forecast by Population Research Center (PRC).
Note: The years signify the end of the period for which average annual numbers were calculated. The average annual numbers for "2010" were calculated for the 2000-2010 period, with the remaining years calculated for their preceding five-year periods.

Josephine County – Age Specific Survival Rates



Sources: U.S. Census Bureau, 2000 and 2010 Censuses; Forecast by Population Research Center (PRC).

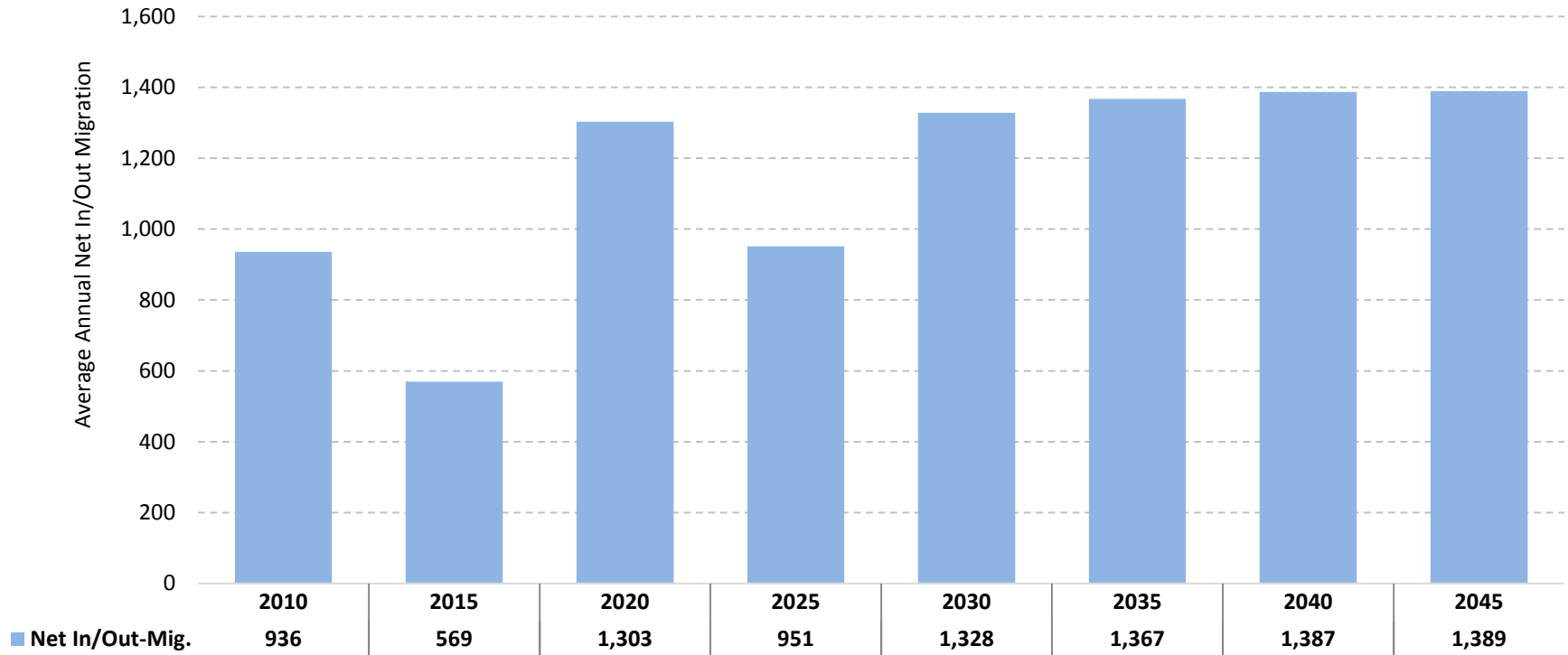
Josephine County—Average Annual Natural Increase/Decrease



Sources: Oregon Health Authority, Center for Health Statistics. Calculations and Forecast by Population Research Center (PRC).

Note: The years signify the end of the period for which average annual numbers were calculated. The average annual numbers for "2010" were calculated for the 2000-2010 period, with the remaining years calculated for their preceding five-year periods.

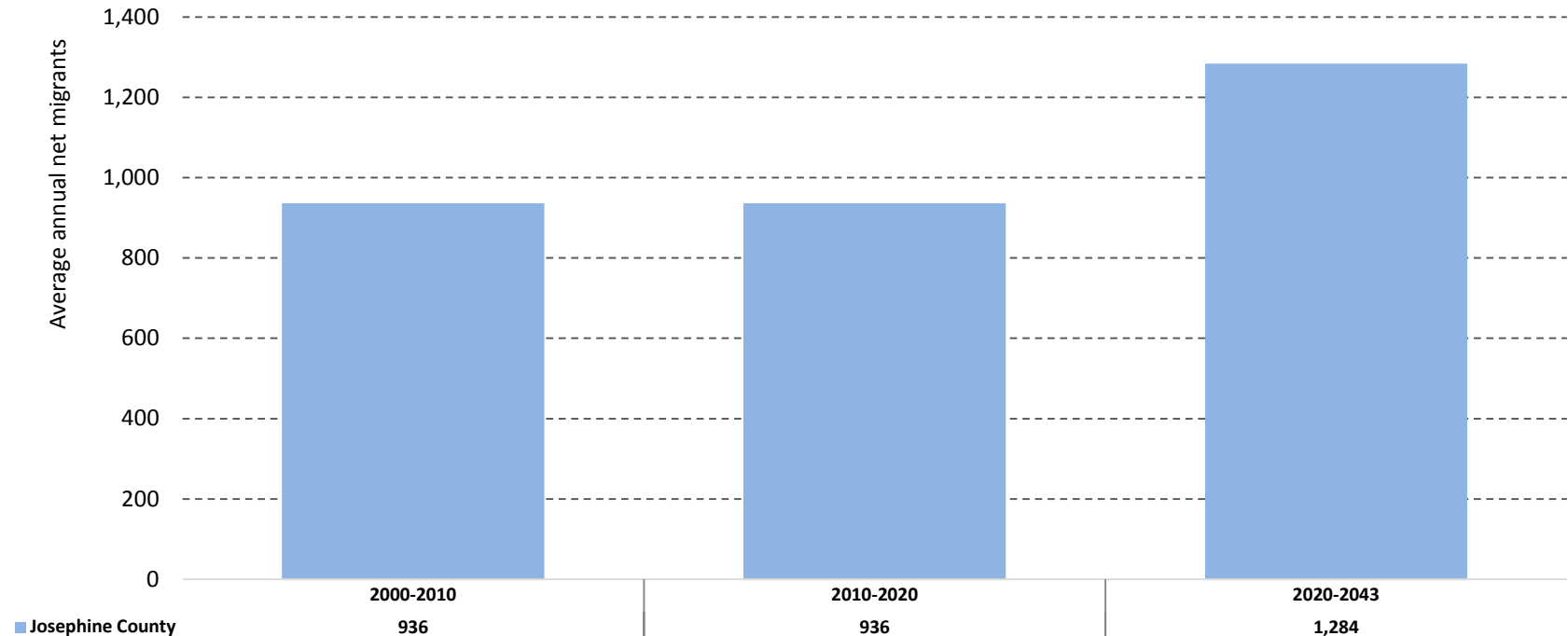
Josephine County—Average Annual Net In/Out-Migration



Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculations and Forecast by Population Research Center (PRC).

Note: The years signify the end of the period for which average annual numbers were calculated. The average annual numbers for "2010" were calculated for the 2000-2010 period, with the remaining years calculated for their preceding five-year periods.

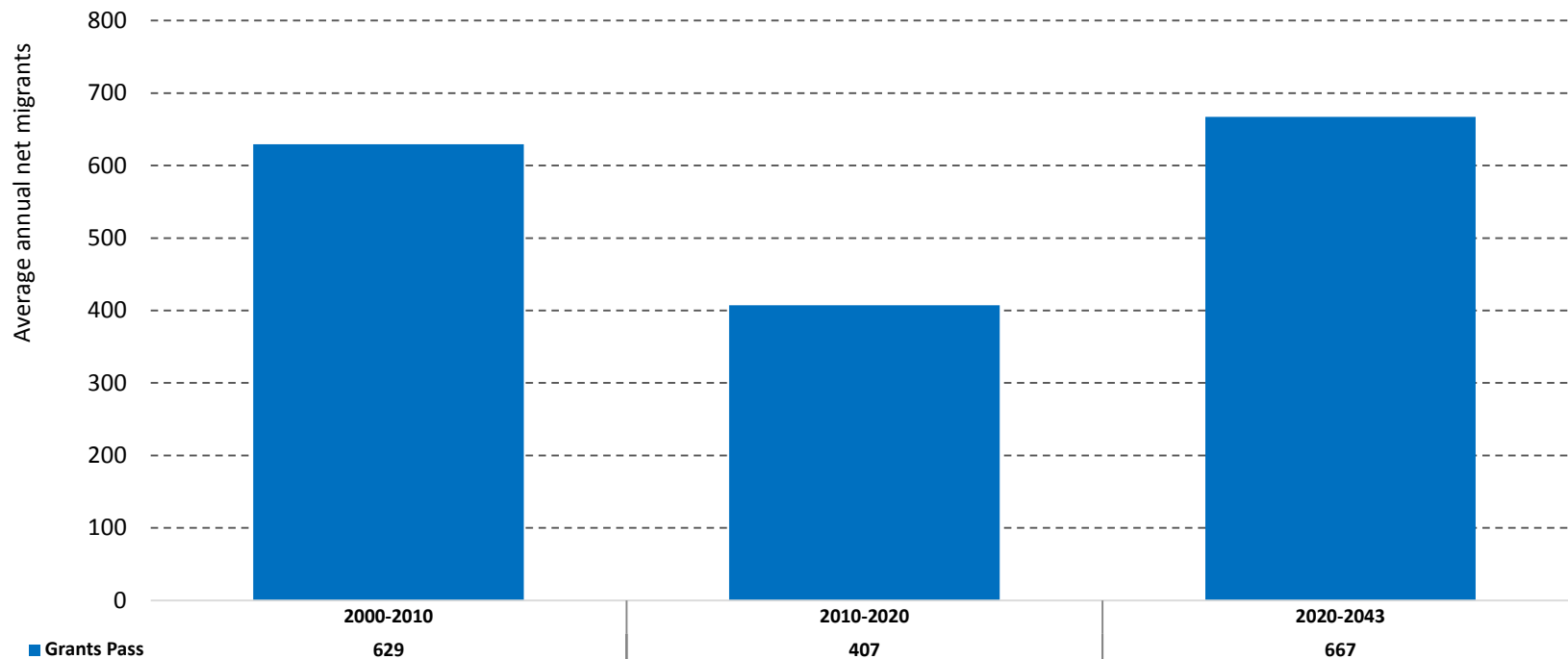
Josephine County—Average Annual Net In/Out-Migration



Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculations and Forecast by Population Research Center (PRC).

Note: The average annual numbers were calculated for the 10 year periods (2000-2010 and 2010-2020) and the 23 year period (2020-2043).

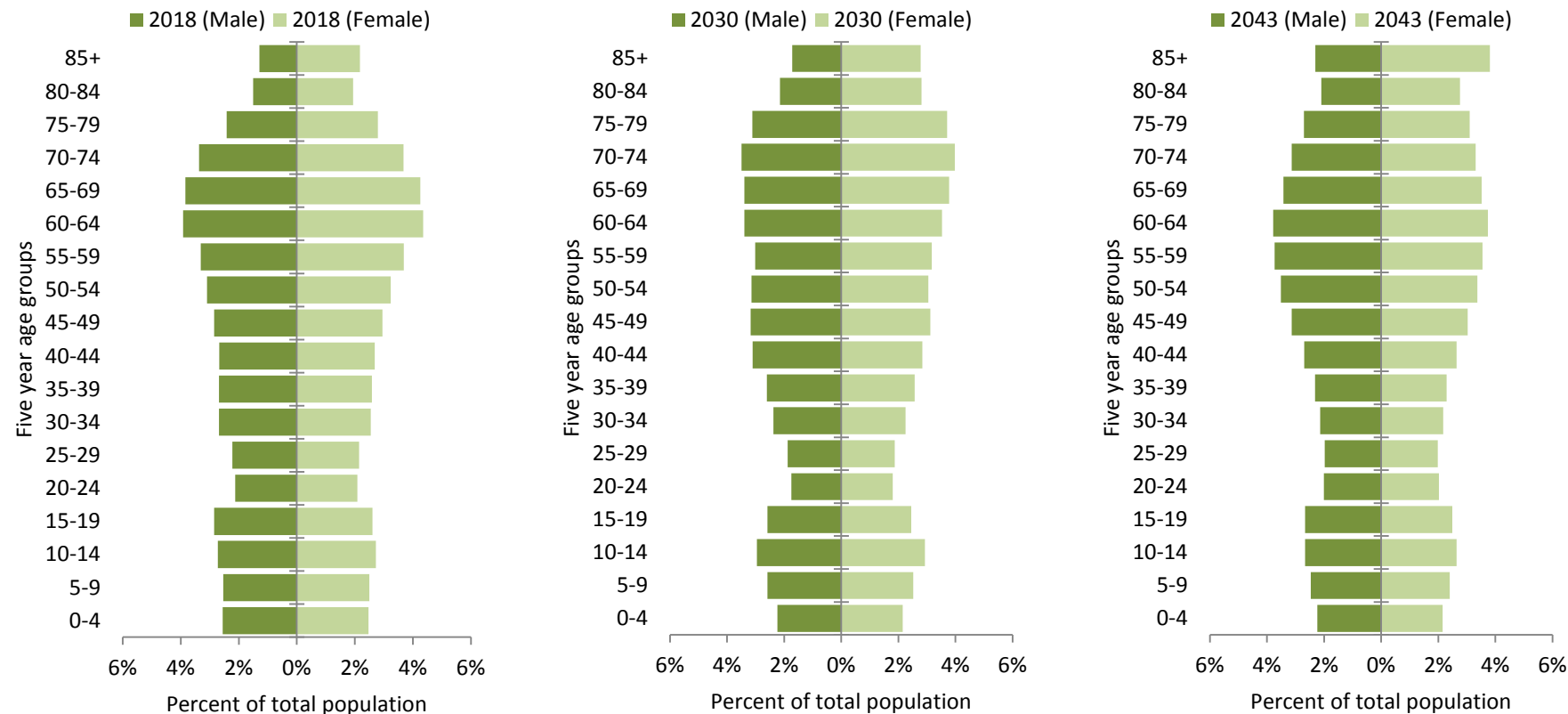
Josephine County's Larger Sub-Areas—Average Annual Net In/Out-Migration



Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculations and Forecast by Population Research Center (PRC).

Note: The average annual numbers were calculated for the 10 year periods (2000-2010 and 2010-2020) and the 23 year period (2020-2043).

Josephine County—Age Structure of the Population



Source: Forecast by Population Research Center (PRC)

Historical and Forecast Populations for Josephine County and its Sub-Areas

	Historical			Forecast					
	2000	2010	AAGR (2000-2010)	2018	2043	2068	AAGR (2010-2018)	AAGR (2018-2043)	AAGR (2043-2068)
Josephine County	75,896	82,775	0.9%	86,423	99,004	109,571	0.5%	0.5%	0.2%
Cave Junction	1,780	2,199	2.1%	2,234	2,486	2,729	0.2%	0.4%	0.4%
Grants Pass	32,908	38,512	1.6%	40,684	52,724	65,808	0.7%	1.0%	0.9%
Outside UGBs	41,038	42,002	0.2%	43,505	43,794	41,034	0.4%	0.0%	-0.3%

Sources: U.S. Census Bureau, 2000 and 2010 Censuses; Forecast by Population Research Center (PRC).

Note: For simplicity each UGB is referred to by its primary city's name.

County and Larger Sub-Areas—Population and Average Annual Growth Rate (AAGR) (2018, 2043 and 2068)

	2018	2043	2068	AAGR (2018-2043)	AAGR (2043-2068)	Share of County 2018	Share of County 2043	Share of County 2068
<i>Josephine County</i>	86,423	99,004	109,571	0.5%	0.4%	--	--	--
Grants Pass	40,684	52,724	65,808	1.0%	0.9%	47.1%	53.3%	60.1%
Outside UGBs	43,505	43,794	41,034	0.0%	-0.3%	50.3%	44.2%	37.4%

Source: Forecast by Population Research Center (PRC)

Note: For simplicity each UGB is referred to by its primary city's name.

Assumptions for Smaller Sub-Area Forecasts

1. For UGBs experiencing population growth, we assume a higher growth rate in the near-term, with growth stabilizing over the remainder of the forecast period.
2. If planned housing units were reported in the surveys, then we account for them being constructed over the next 5-10 years.
3. For county sub-areas where population growth has been flat or declined, and there is no planned housing construction, we tend to temper losses over the forecast period.

County and Smaller Sub-Areas—Population and AAGR (2018, 2043 and 2068)

	2018	2043	2068	AAGR (2018-2043)	AAGR (2043-2068)
<i>Josephine County</i>	86,423	99,004	109,571	0.5%	0.4%
Cave Junction	2,234	2,486	2,729	0.4%	0.4%
Outside UGBs	43,505	43,794	41,034	0.0%	-0.3%

Share of County 2018	Share of County 2043	Share of County 2068
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2.6%	2.5%	2.5%
50.3%	44.2%	37.4%

Source: Forecast by Population Research Center (PRC)

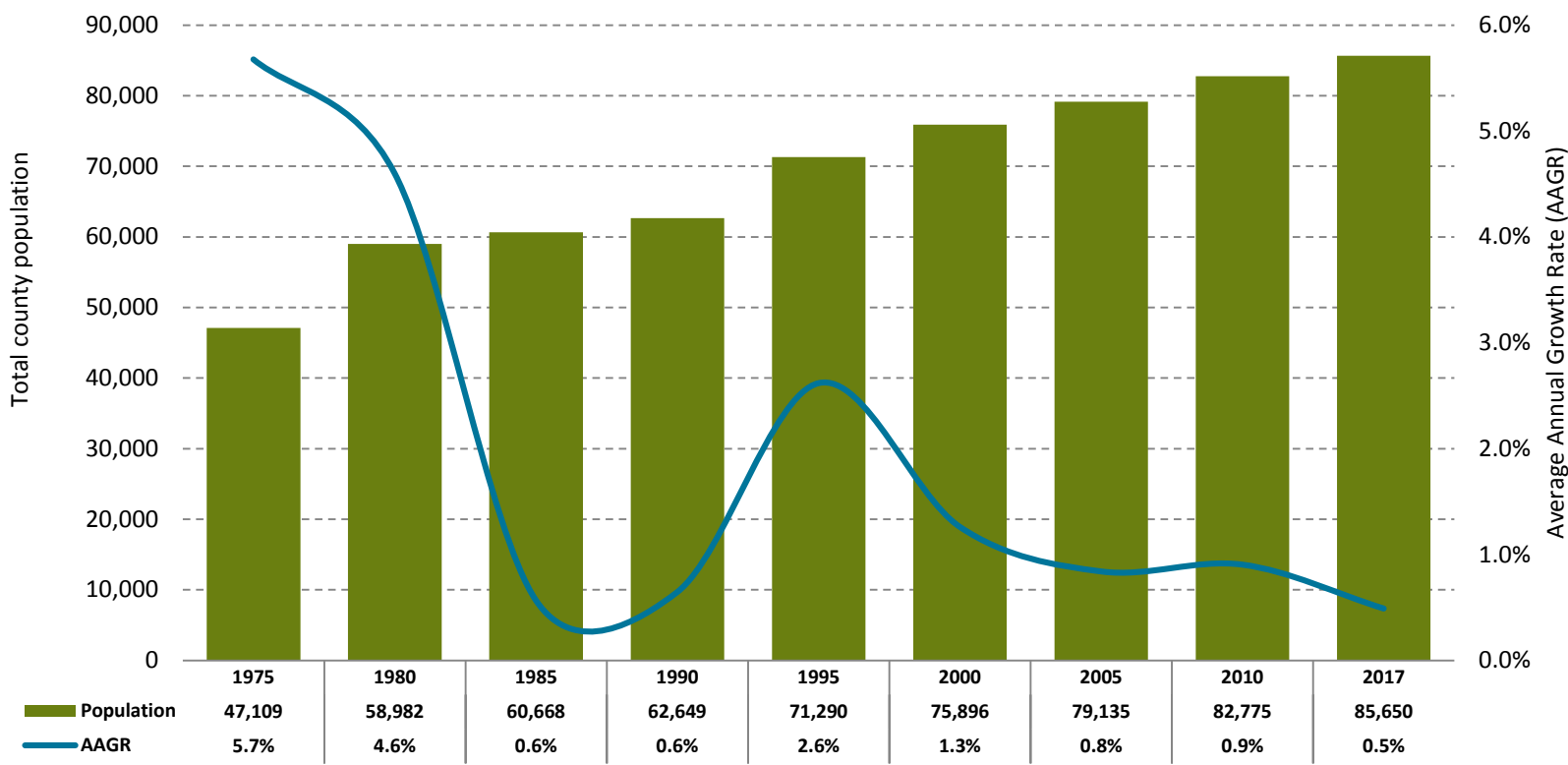
Note: For simplicity each UGB is referred to by its primary city's name.

Local Input and Additional Information

- Questions?
- Discussion time

Additional Historical Trends: Josephine County

Josephine County—Total Population by Five-year Intervals (1975-2017)



Sources: U.S. Census Bureau, 1980, 1990, 2000, and 2010 Censuses; Population Research Center (PRC), July 1st Annual Estimates 1975, 1985, 1995, 2005 and 2017.

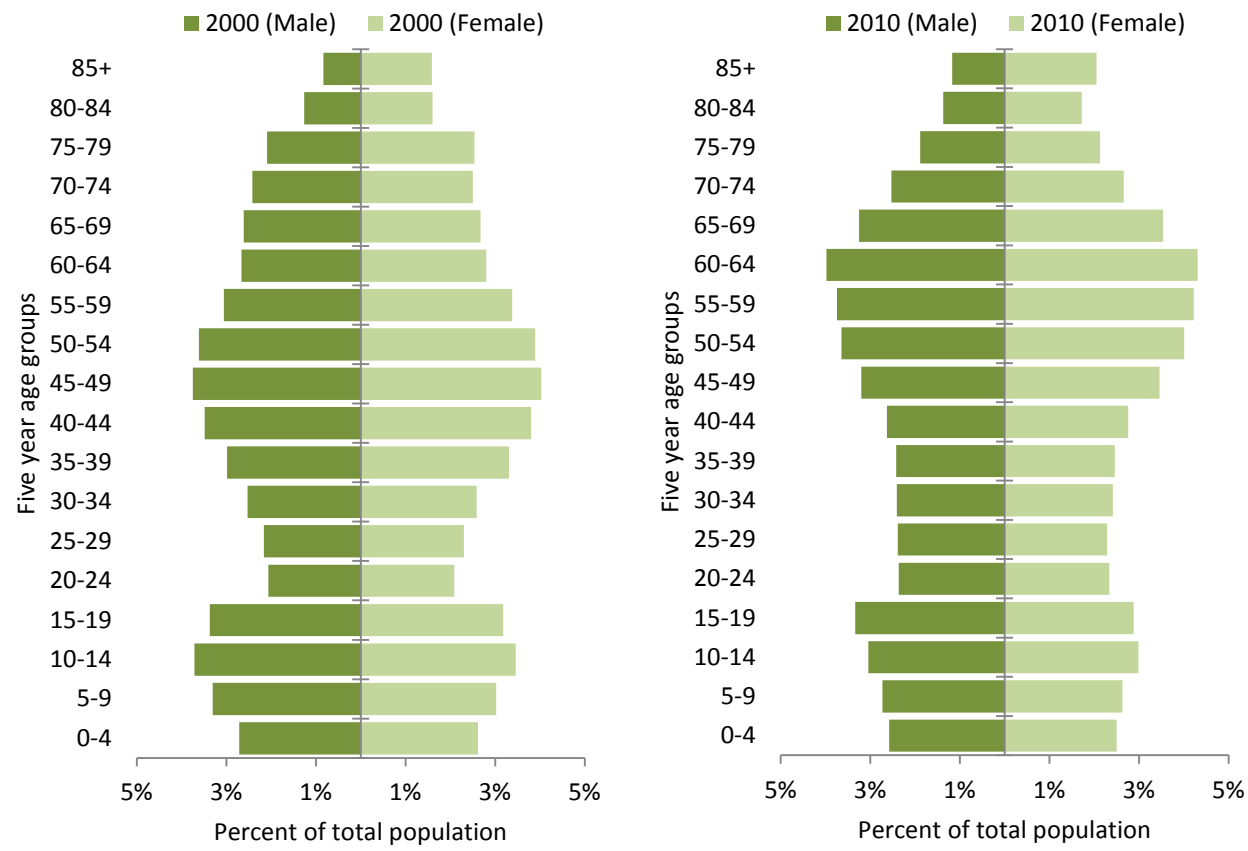
County and Sub-Areas—Population and Average Annual Growth Rate (AAGR) (2000-2010)

	2000	2010	AAGR (2000-2010)	Share of County 2000	Share of County 2010	Change (2000-2010)
<i>Josephine County</i>	75,896	82,775	0.9%	99.8%	99.9%	0.1%
Cave Junction	1,780	2,199	2.1%	2.3%	2.7%	0.3%
Grants Pass	32,908	38,512	1.6%	43.4%	46.5%	3.2%
Outside UGBs	41,038	42,002	0.2%	54.1%	50.7%	-3.3%

Sources: U.S. Census Bureau, 2000 and 2010 Censuses.

Note: For simplicity each UGB is referred to by its primary city's name.

Josephine County—Age Structure of the Population (2000 and 2010)

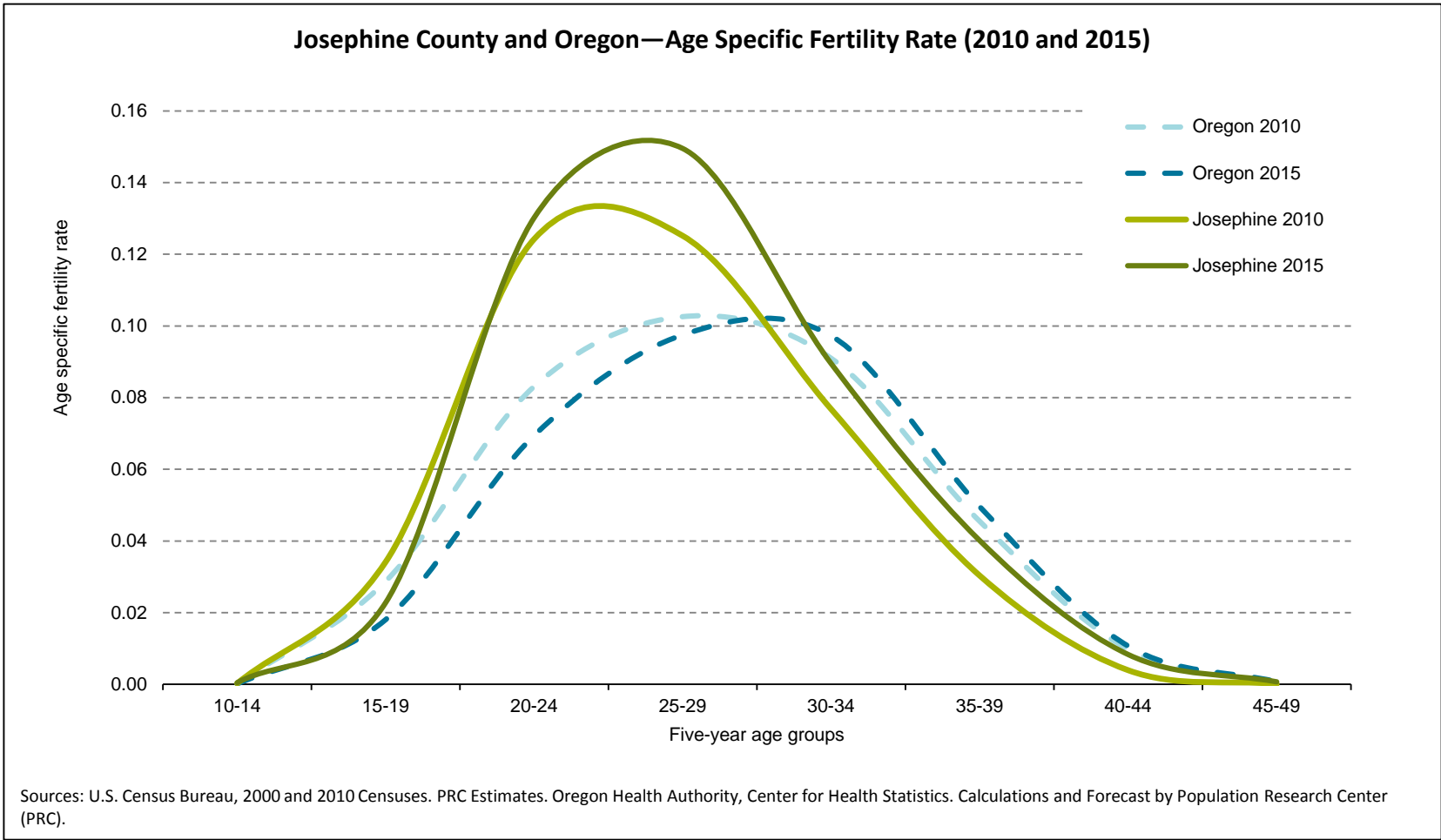


Sources: U.S. Census Bureau, 2000 and 2010 Censuses

Josephine County—Hispanic or Latino and Race (2000 and 2010)

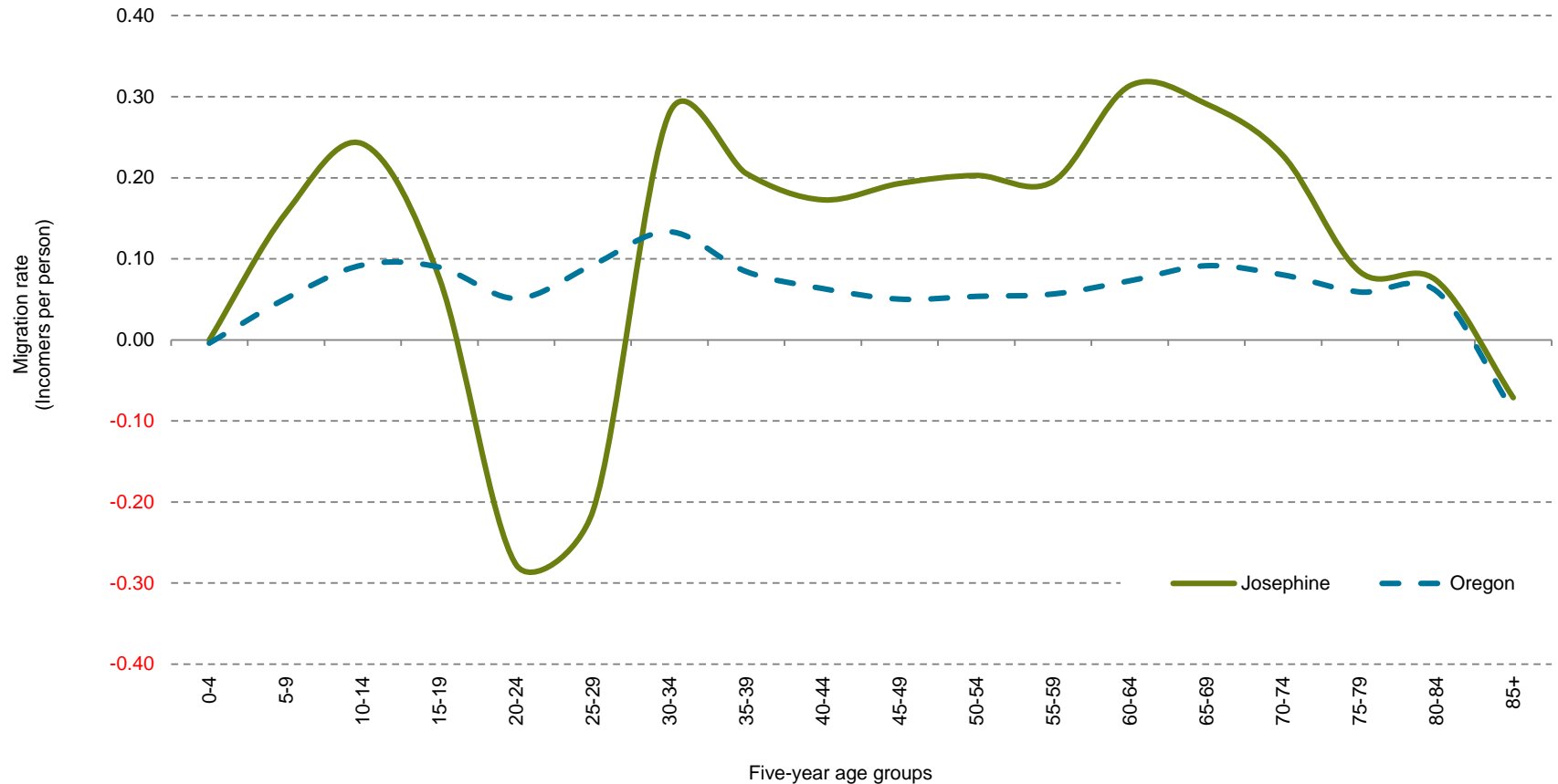
Hispanic or Latino and Race	2000		2010		Absolute Change	Relative Change
<i>Total population</i>	75,726	100.0%	82,713	100.0%	6,987	9.2%
Hispanic or Latino	3,229	4.3%	5,251	6.3%	2,022	62.6%
Not Hispanic or Latino	72,497	95.7%	77,462	93.7%	4,965	6.8%
White alone	69,233	91.4%	73,289	88.6%	4,056	5.9%
Black or African American alone	192	0.3%	295	0.4%	103	53.6%
American Indian and Alaska Native alone	844	1.1%	966	1.2%	122	14.5%
Asian alone	460	0.6%	667	0.8%	207	45.0%
Native Hawaiian and Other Pacific Islander alone	78	0.1%	117	0.1%	39	50.0%
Some Other Race alone	52	0.1%	77	0.1%	25	48.1%
Two or More Races	1,638	2.2%	2,051	2.5%	413	25.2%

Sources: U.S. Census Bureau, 2000 and 2010 Censuses.

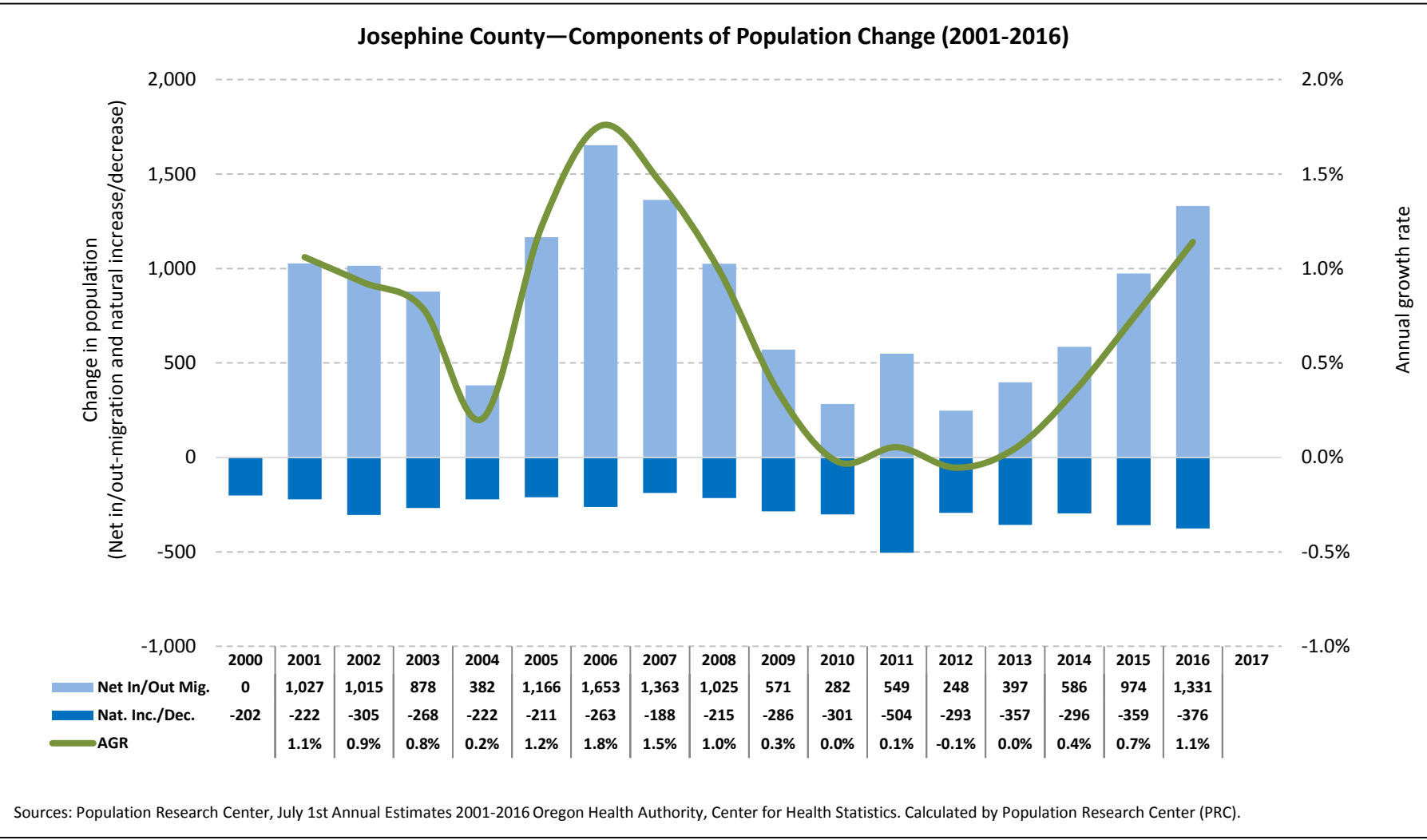


Total Fertility Rate (TFR)		
	2000	2010
Josephine County	2.05	1.98
Oregon	1.98	1.81

Josephine County and Oregon—Ten Year Migration Rates (2000-2010)



Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculated by Population Research Center (PRC).



Josephine County and Sub-Areas—Total Housing Units (2000 and 2010)

	2000	2010	AAGR (2000-2010)	Share of County 2000	Share of County 2010	Change (2000-2010)
<i>Josephine County</i>	33,239	38,001	1.3%	100.0%	100.0%	0.0%
Cave Junction	906	1,073	1.7%	2.7%	2.8%	0.1%
Grants Pass	14,276	17,522	2.1%	42.9%	46.1%	3.2%
Outside UGBs	18,057	19,406	0.7%	54.3%	51.1%	-3.3%

Sources: U.S. Census Bureau, 2000 and 2010 Censuses

Note: For simplicity each UGB is referred to by its primary city's name.

Josephine County and Sub-Areas—Persons Per Household (PPH) and Occupancy Rate (2000 and 2010)

	Persons Per Household (PPH)			Occupancy Rate		
	2000	2010	Change 2000-2010	2000	2010	Change 2000-2010
<i>Josephine County</i>	2.4	2.3	-2.9%	93.26%	91.17%	-2.1%
Cave Junction	2.4	2.3	-4.5%	83.55%	88.72%	5.2%
Grants Pass	2.3	2.3	0.2%	94.70%	91.88%	-2.8%
Outside UGBs	2.4	2.4	-0.4%	92.61%	90.67%	-1.9%

Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculated by Population Research Center (PRC)

Note: For simplicity each UGB is referred to by its primary city's name.

Josephine County UGBs

