

# Oregon Population Forecast Program

## Regional Forecast Meeting – February 28, 2018

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

# Oregon Population Forecast Program Project Team

**Nick Chun,**  
*Population Forecast Program Manager*

**Kevin Rancik,**  
*GIS and Research Analyst*

**Deborah Loftus,**  
*Administrative Assistant*

**Rhey Haggerty,**  
*Graduate Research Assistant*

**Joshua Ollinger,**  
*Graduate Research Assistant*

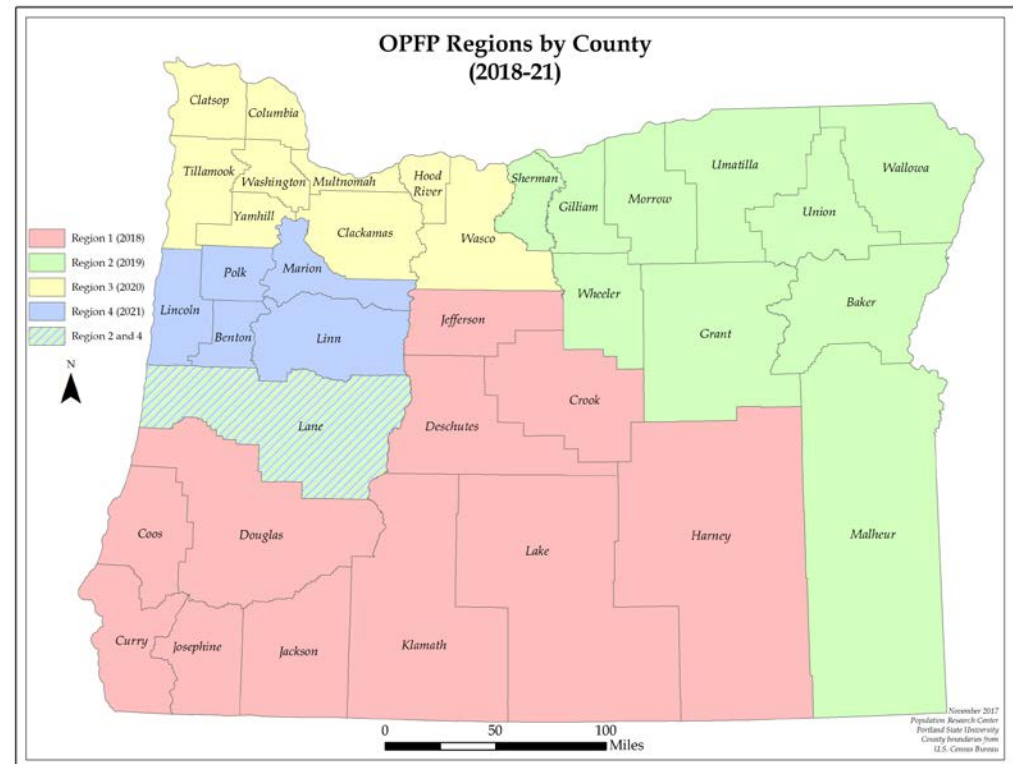
**Charles Rynerson,**  
*Research Consultant*

# 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

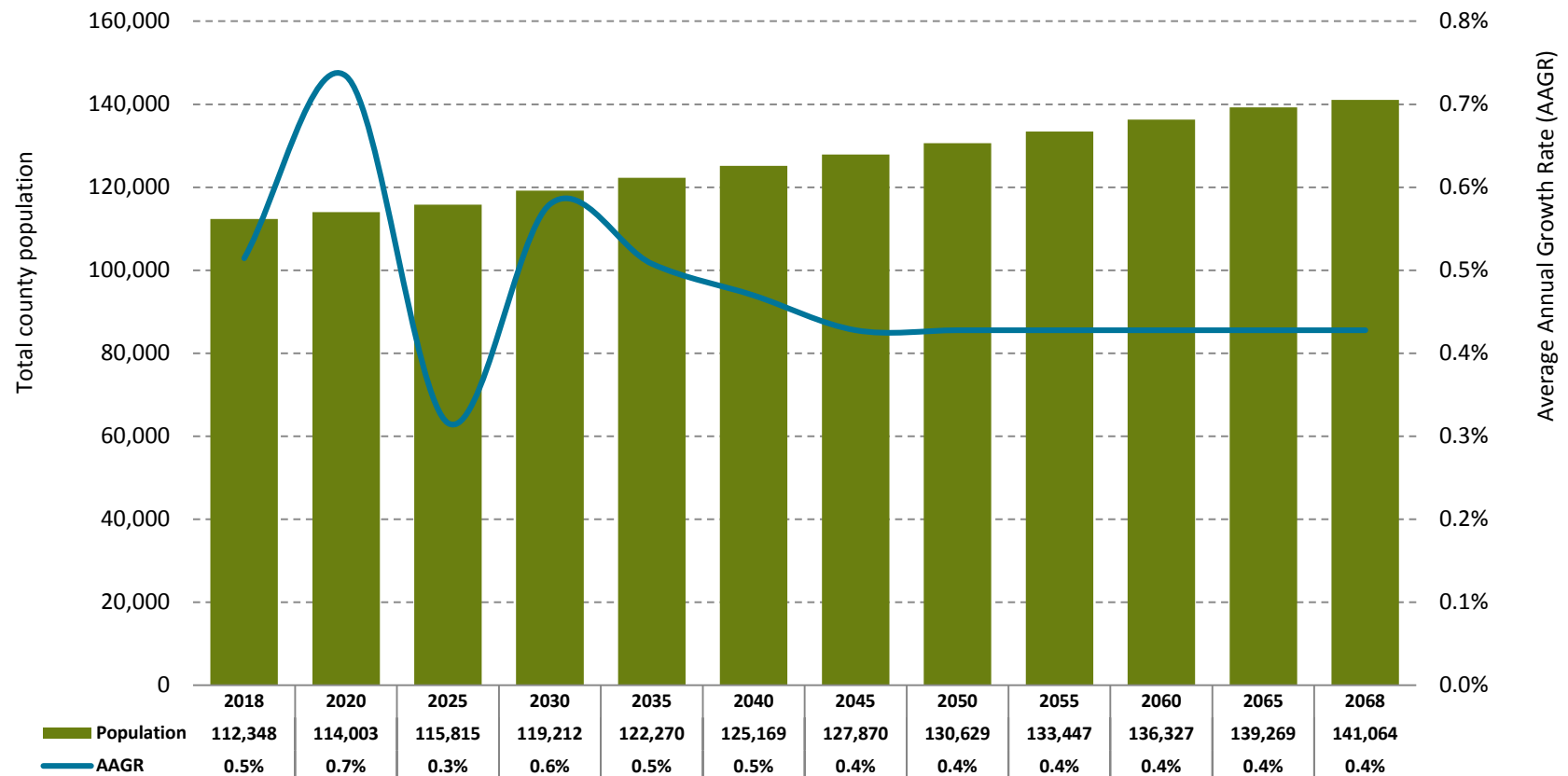
- Modified Methodology (50 Year Period)
- Forecast Methods (2018-43)
  - Cohort-Component and Housing Unit Model
- Modified Method (2043-68):
  - County: AAGR of the last 5 year period (2040-45) is extrapolated out for the remaining 25 years.
  - Sub-areas: Trend the sub-area share of the County for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



## Assumptions for Douglas 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.
  - b) Total fertility rates decline throughout the forecast period.
  - c) As a result, we expect the County and its sub-areas will continue to experience a growing natural decrease.
3. Population growth is expected to slow over time as natural decrease magnifies and net in-migration tapers.

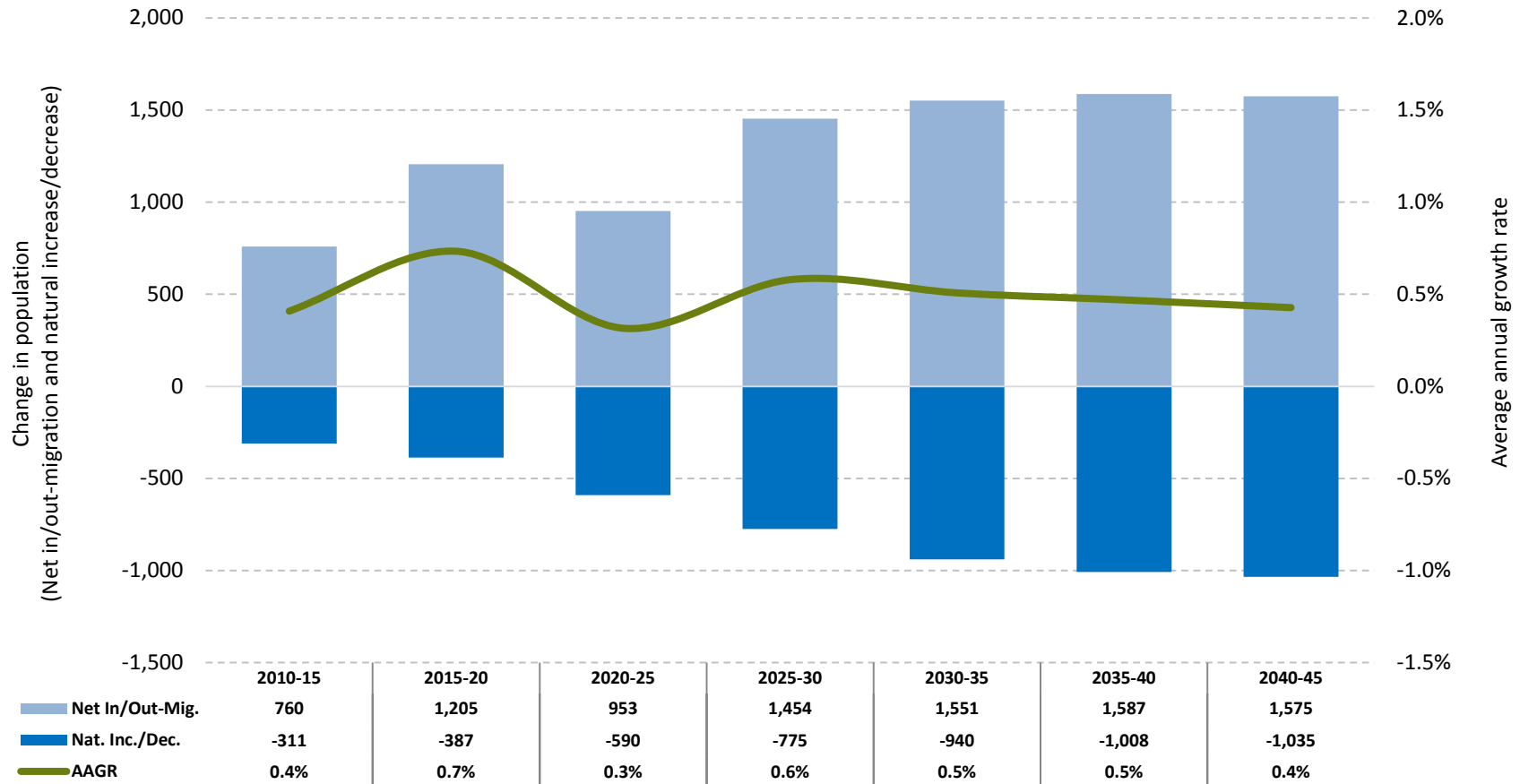
**Douglas County—Total Population by Five-year Intervals (2018-2068)**



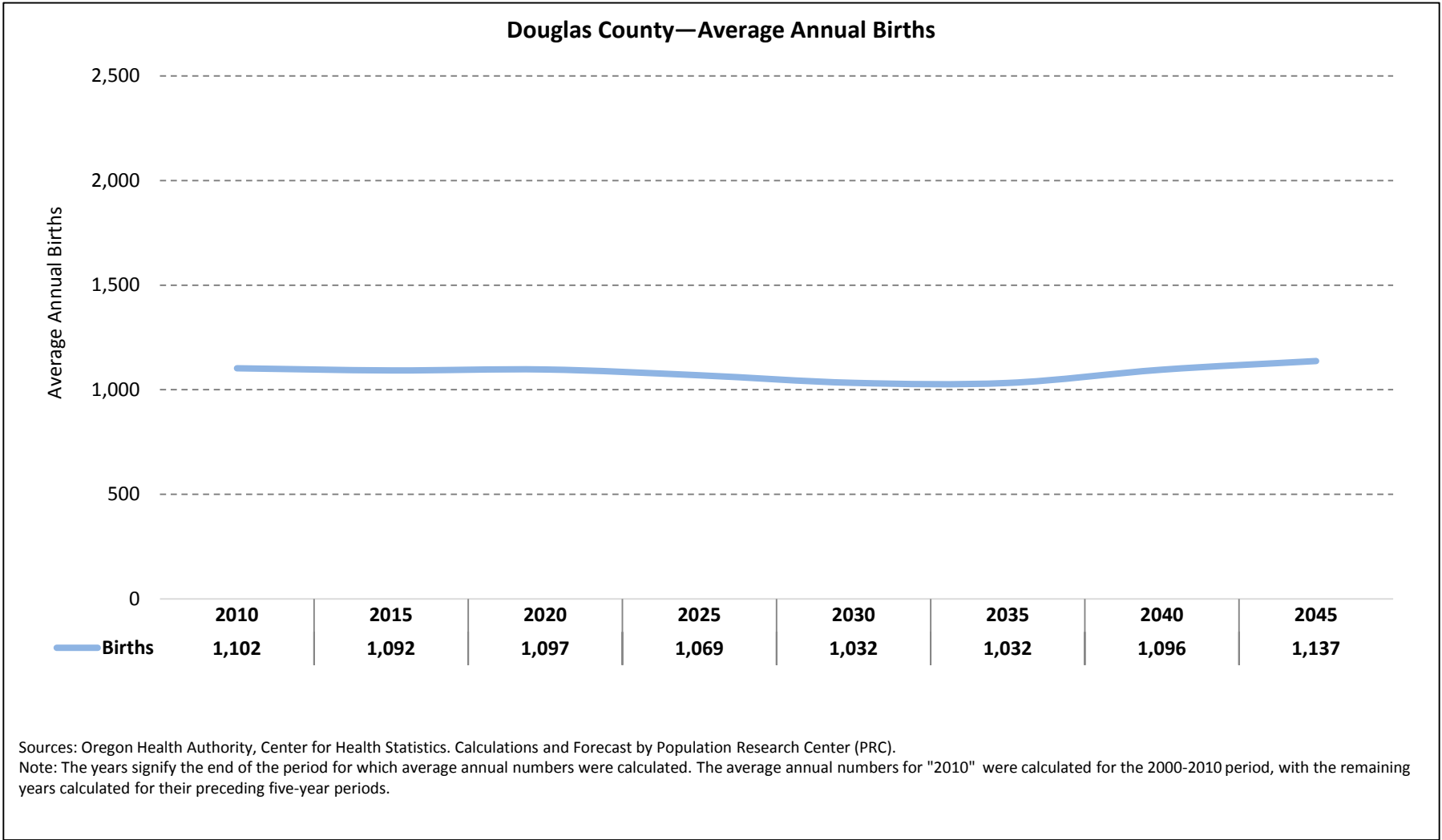
Source: Forecast by Population Research Center (PRC).

# Preliminary Forecast Results

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



Source: Forecast by Population Research Center (PRC)





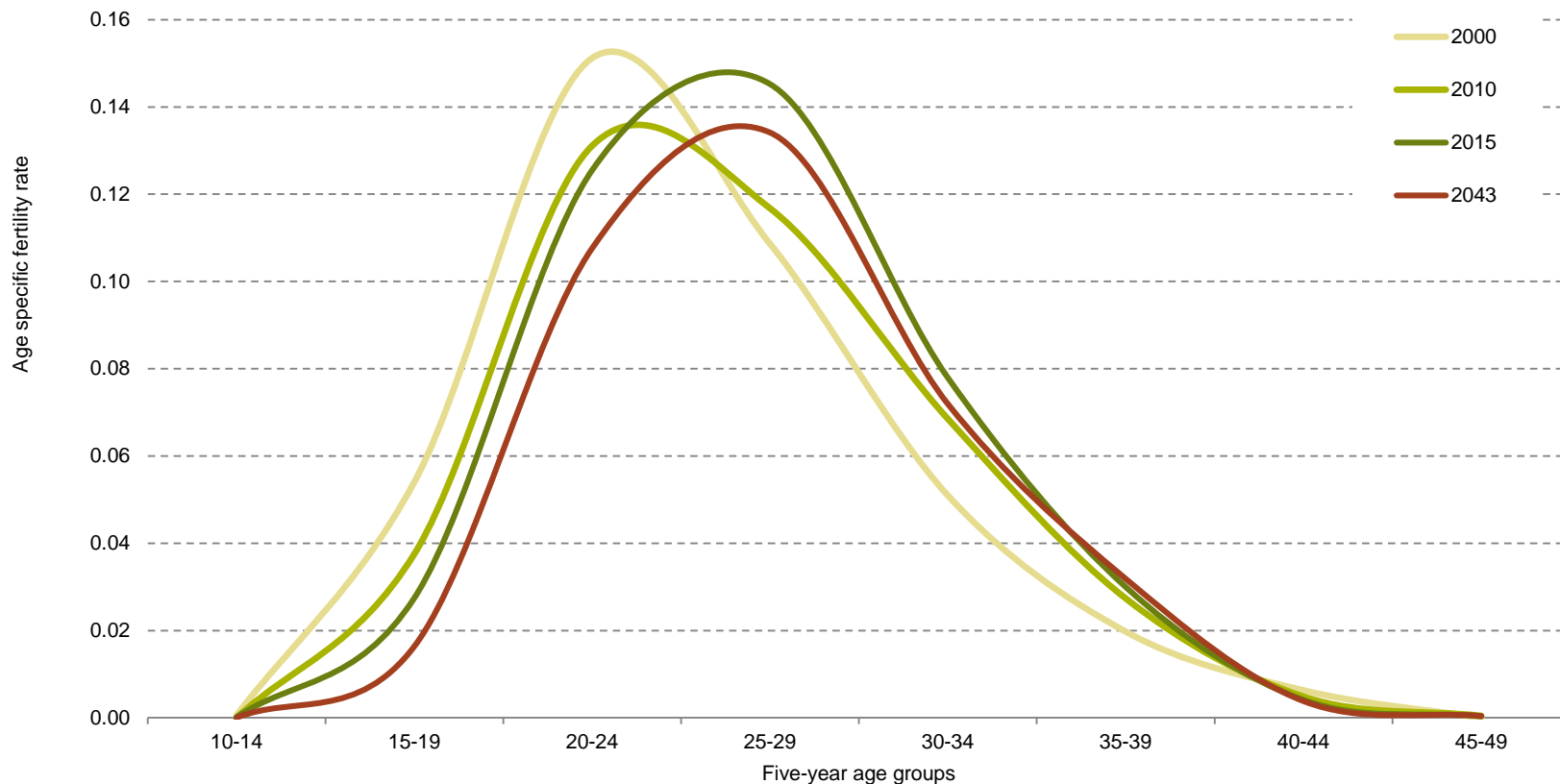
## Total Fertility Rate (TFR)

	2000	2010	2015	2043
<b>Douglas County</b>	1.96	1.93	2.05	1.83
<b>Oregon</b>	1.98	1.81	1.72	--

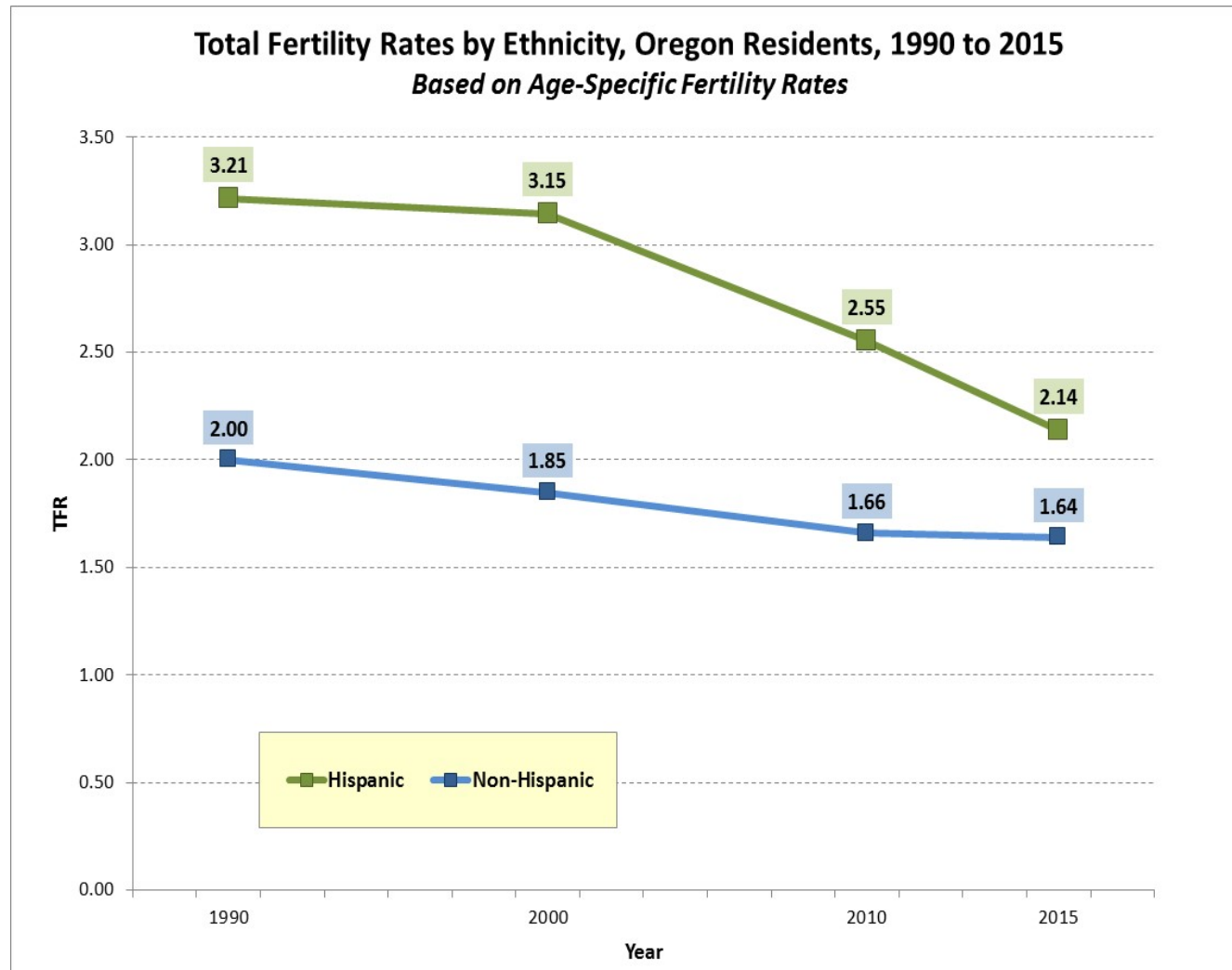
*Sources: U.S. Census Bureau, 2000 and 2010 Censuses. PRC Estimates. Oregon Health Authority, Center for Health Statistics. Calculations and Forecast by Population Research Center (PRC).*

*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.*

Douglas 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).

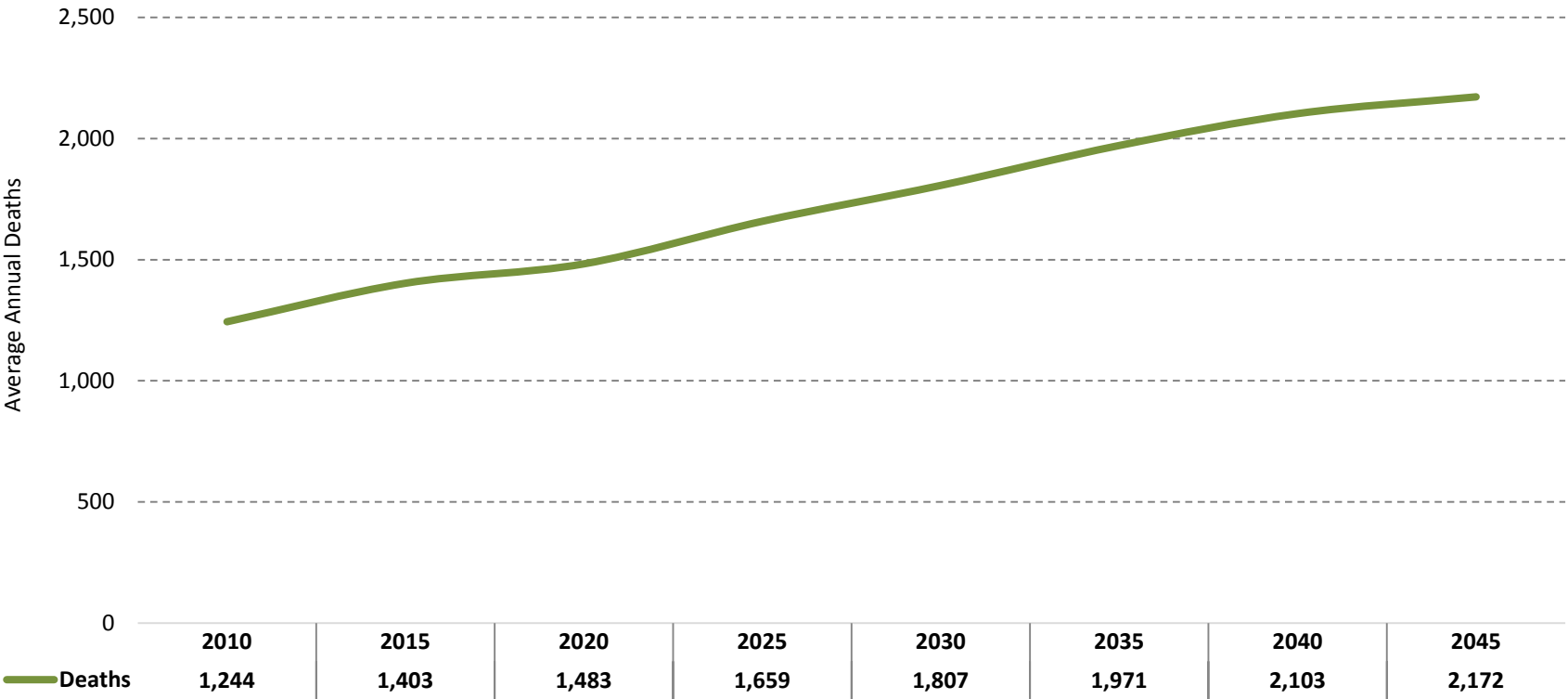


Sources: PEPASR6H-Geography-OregonYear-July 1, 2015 and July 1, 2010

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

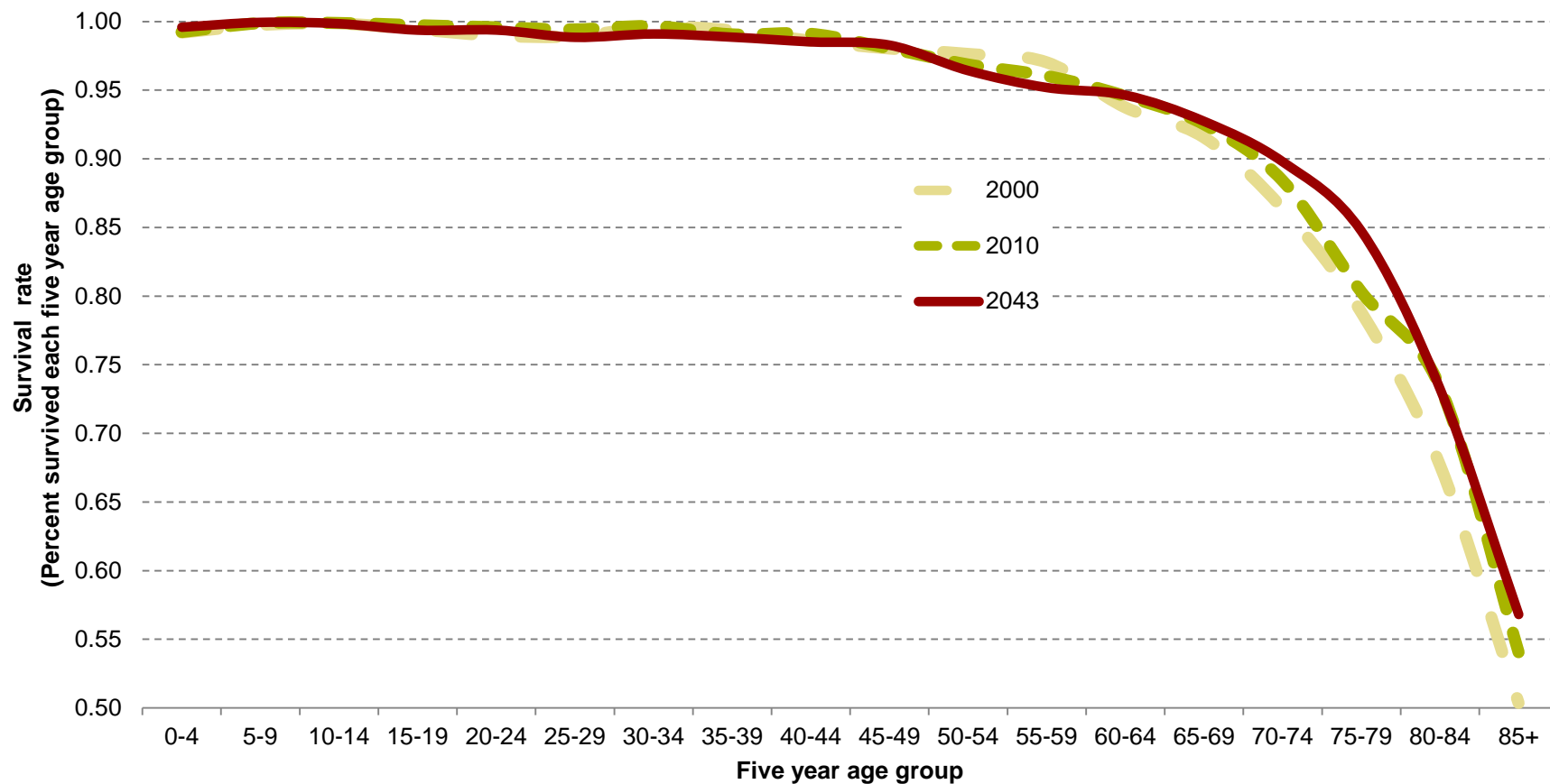
Population Research Center (PRC): 2015 Population Estimates

Douglas County—Average Annual Deaths



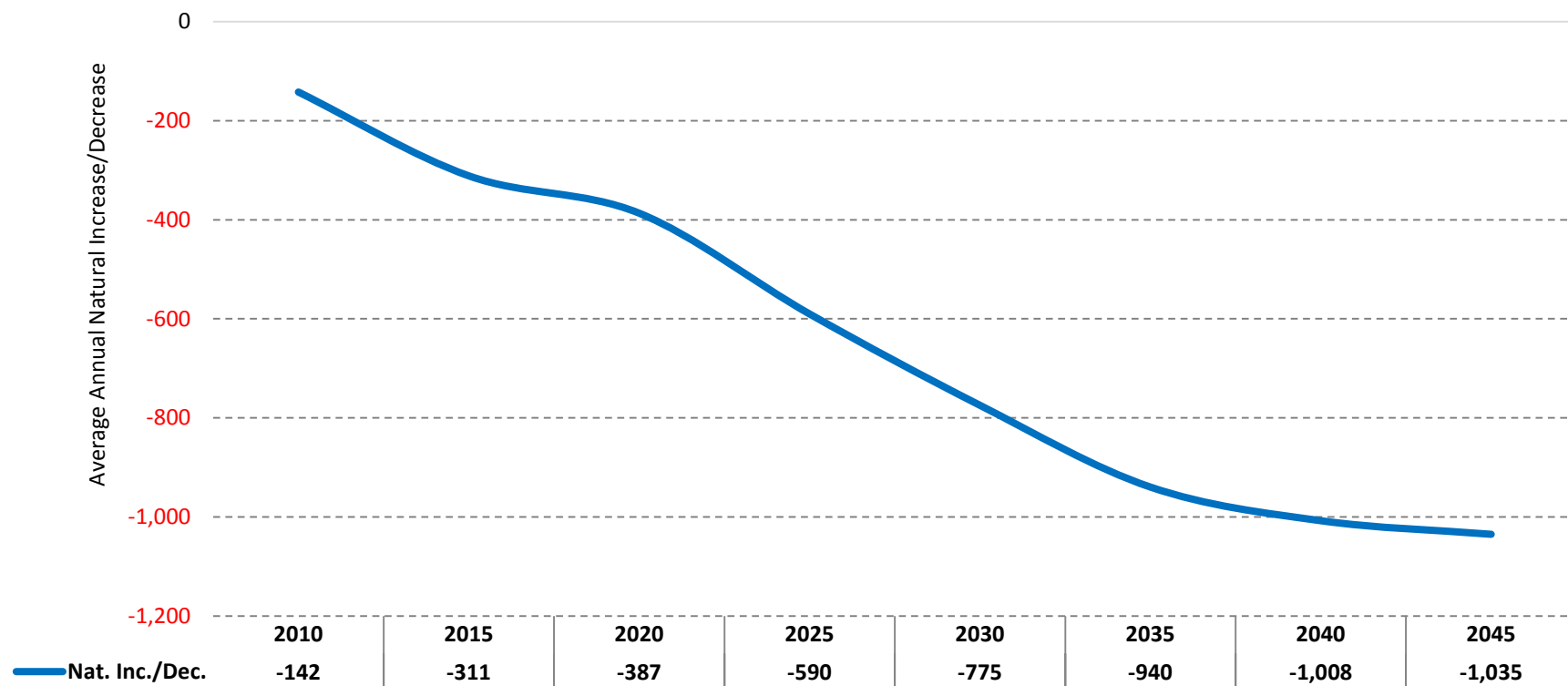
Sources: Oregon Health Authority, Center for Health Statistics. Calculations and Forecast by Population Research Center (PRC).  
Note: The years signify the end of the period for which average annual numbers were calculated. The average annual numbers for "2010" were calculated for the 2000-2010 period,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

Douglas County – Age Specific Survival Rates



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

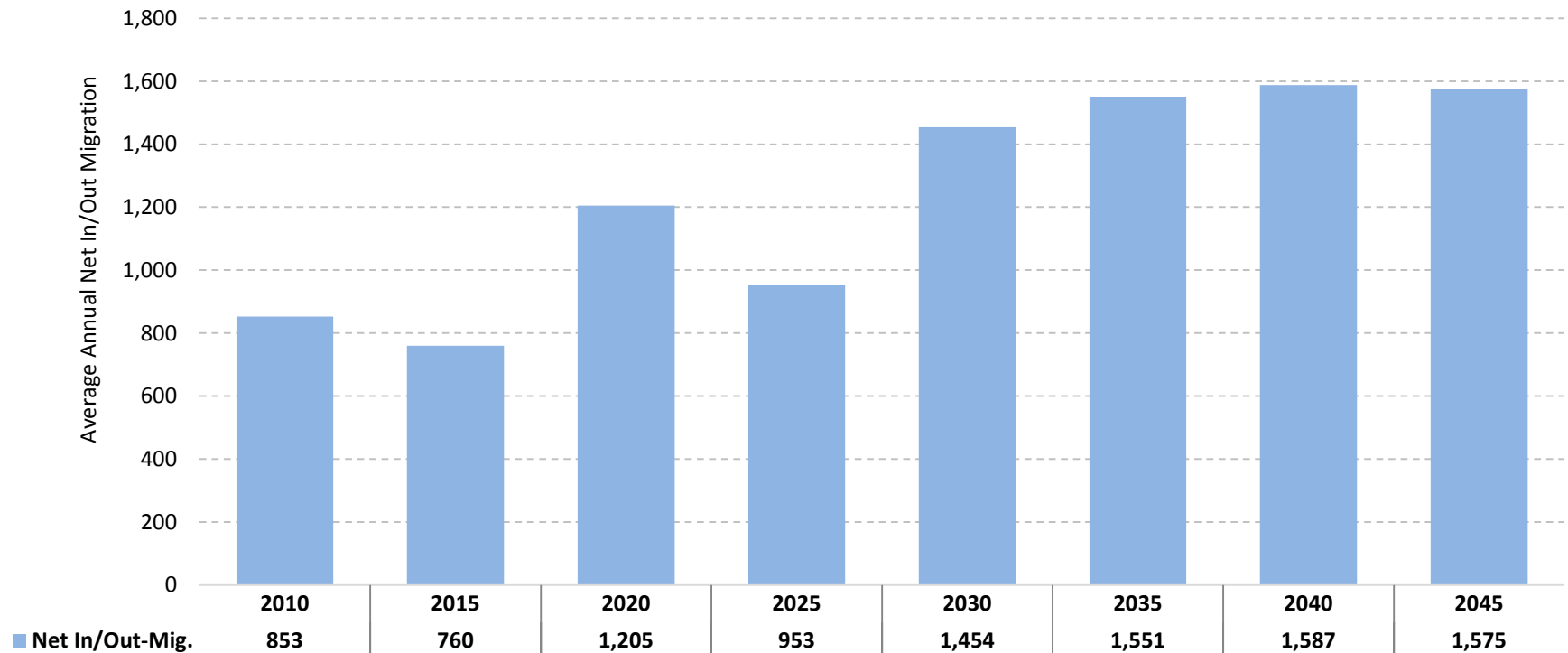
**Douglas County—Average Annual Natural Increase/Decrease**



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.

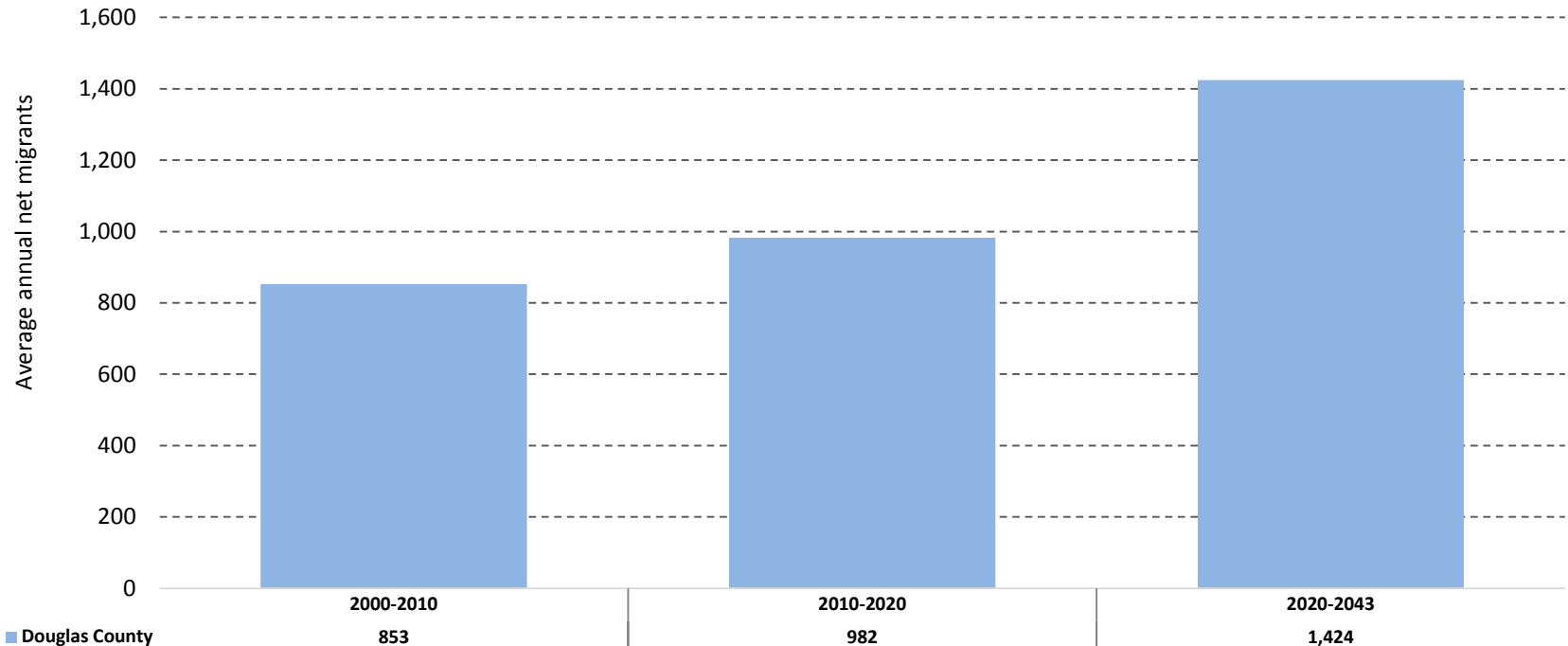
**Douglas County—Average Annual Net In/Out-Migration**



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.

**Douglas County—Average Annual Net In/Out-Migration**

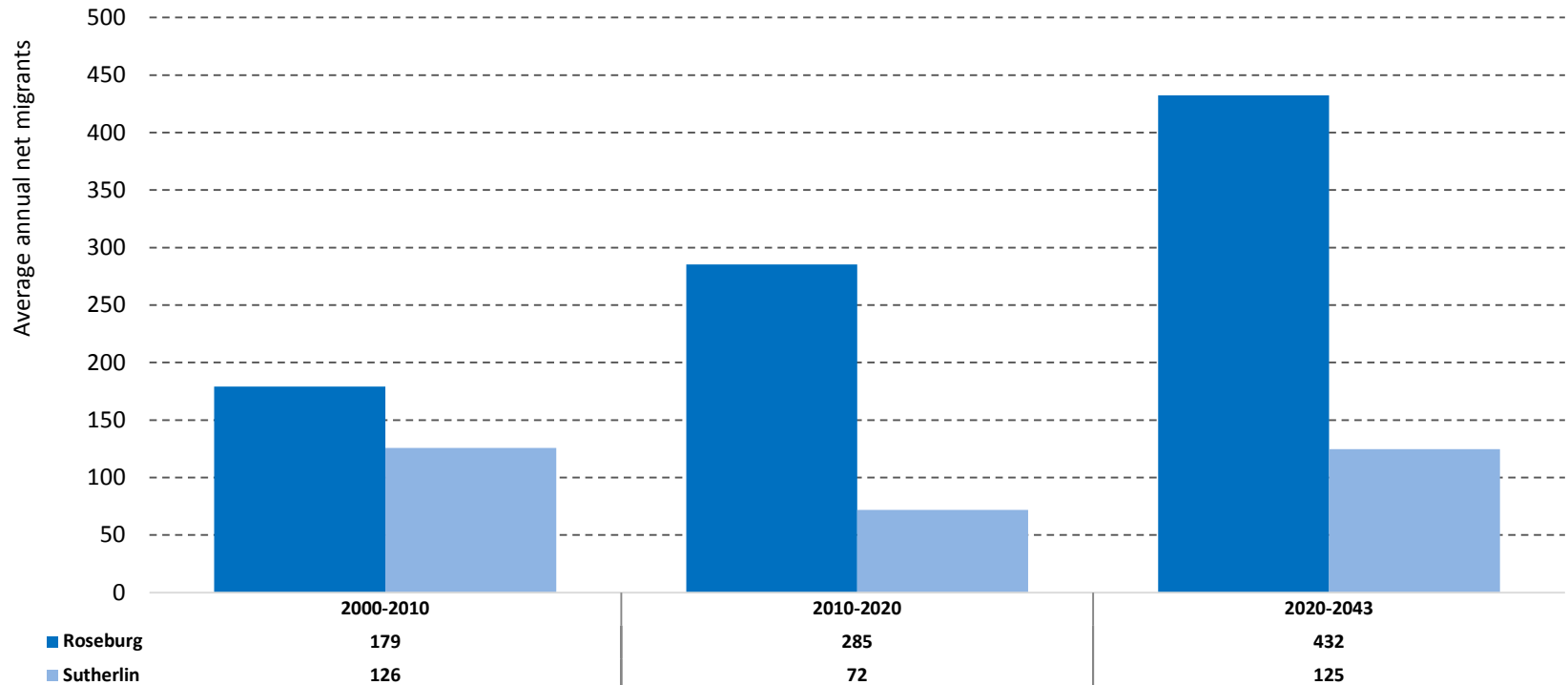


Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculations and Forecast by Population Research Center (PRC).

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



**Douglas 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).

## Douglas County—Age Structure of the Population



Source: Forecast by Population Research Center (PRC)

**Historical and Forecast Populations for Douglas County and its Sub-Areas**

	Historical			Forecast					
	2000	2010	AAGR (2000-2010)	2018	2043	2068	AAGR (2010-2018)	AAGR (2018-2043)	AAGR (2043-2068)
<i>Douglas County</i>	100,579	107,690	0.7%	112,348	126,782	141,064	0.5%	0.5%	0.2%
Canyonville	1,498	2,007	3.0%	2,037	2,523	3,150	0.2%	0.9%	0.9%
Drain	1,204	1,352	1.2%	1,361	1,487	1,619	0.1%	0.4%	0.3%
Elkton	169	195	1.4%	218	269	324	1.3%	0.9%	0.7%
Glendale	946	979	0.3%	987	1,045	1,081	0.1%	0.2%	0.1%
Myrtle Creek	6,998	7,478	0.7%	7,791	9,642	11,576	0.5%	0.9%	0.7%
Oakland	1,117	1,097	-0.2%	1,128	1,271	1,413	0.3%	0.5%	0.4%
Reedsport	4,437	4,244	-0.4%	4,207	4,226	4,190	-0.1%	0.0%	0.0%
Riddle	1,030	1,182	1.4%	1,193	1,267	1,333	0.1%	0.2%	0.2%
Roseburg	26,599	28,344	0.6%	30,092	37,147	45,575	0.7%	0.8%	0.8%
Sutherlin	7,003	8,138	1.5%	8,465	10,390	12,697	0.5%	0.8%	0.8%
Winston	4,907	5,571	1.3%	5,721	8,015	10,496	0.3%	1.4%	1.1%
Yoncalla	1,082	1,085	0.0%	1,108	1,193	1,272	0.3%	0.3%	0.3%
Outside UGBs	43,409	45,995	0.6%	48,040	48,306	46,336	0.5%	0.0%	-0.2%

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>Douglas County</i>	112,348	126,782	141,064	0.5%	0.4%	--	--	--
Roseburg	30,092	37,147	45,575	0.8%	0.8%	26.8%	29.3%	32.3%
Sutherlin	8,465	10,390	12,697	0.8%	0.8%	7.5%	8.2%	9.0%
Outside UGBs	48,040	48,306	46,336	0.0%	-0.2%	42.8%	38.1%	32.8%

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.

# Preliminary Forecast Results

## County and Smaller Sub-Areas—Population and 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>Douglas County</i>	<i>112,348</i>	<i>126,782</i>	<i>141,064</i>	<i>0.5%</i>	<i>0.4%</i>	--	--	--
Canyonville	2,037	2,523	3,150	0.9%	0.9%	1.8%	2.0%	2.2%
Drain	1,361	1,487	1,619	0.4%	0.3%	1.2%	1.2%	1.1%
Elkton	218	269	324	0.9%	0.7%	0.2%	0.2%	0.2%
Glendale	987	1,045	1,081	0.2%	0.1%	0.9%	0.8%	0.8%
Myrtle Creek	7,791	9,642	11,576	0.9%	0.7%	6.9%	7.6%	8.2%
Oakland	1,128	1,271	1,413	0.5%	0.4%	1.0%	1.0%	1.0%
Reedsport	4,207	4,226	4,190	0.0%	0.0%	3.7%	3.3%	3.0%
Riddle	1,193	1,267	1,333	0.2%	0.2%	1.1%	1.0%	0.9%
Winston	5,721	8,015	10,496	1.4%	1.1%	5.1%	6.3%	7.4%
Yoncalla	1,108	1,193	1,272	0.3%	0.3%	1.0%	0.9%	0.9%
Outside UGBs	48,040	48,306	46,336	0.0%	-0.2%	42.8%	38.1%	32.8%

Source: Forecast by Population Research Center (PRC)

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

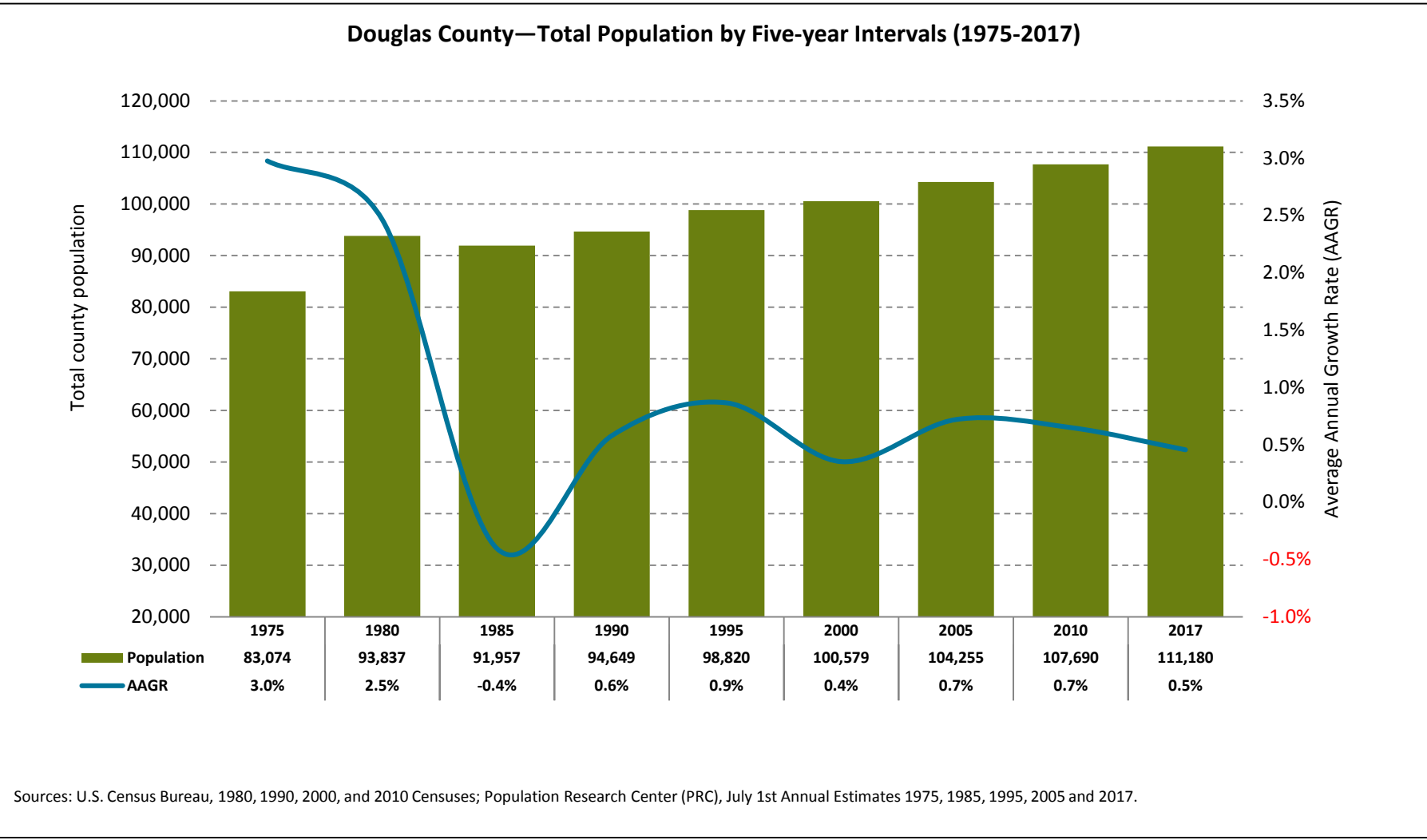
# Local Input and Additional Information

- Questions?
- Discussion time





## Additional Historical Trends: Douglas County



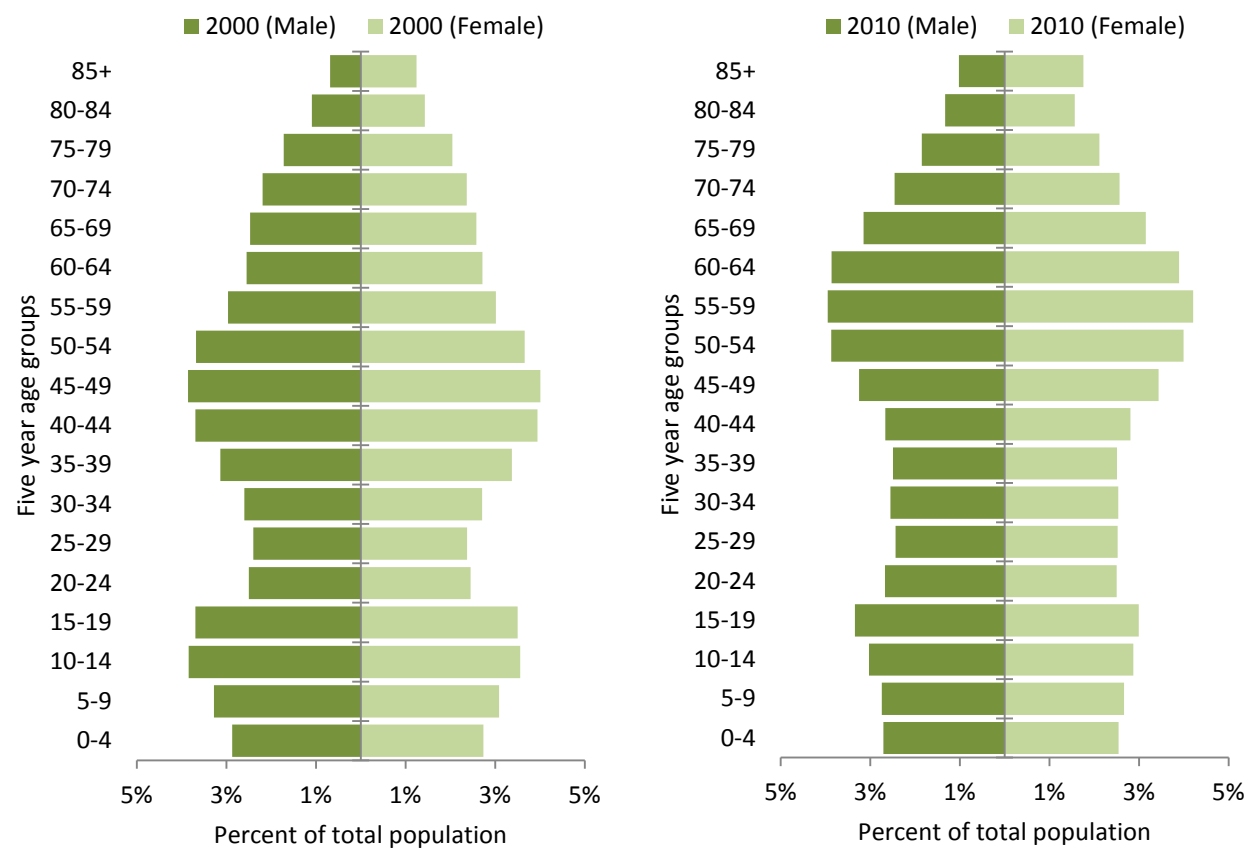
## County and Sub-Areas—Population and Average Annual Growth Rate (AAGR) (2000-2010)

	2000	2010	AAGR (2000-2010)	Share of County 2000	Share of County 2010	Change (2000-2010)
<i>Douglas County</i>	100,579	107,690	0.7%	17.3%	17.2%	-0.1%
Canyonville	1,498	2,007	3.0%	1.5%	1.9%	0.4%
Drain	1,204	1,352	1.2%	1.2%	1.3%	0.1%
Elkton	169	195	1.4%	0.2%	0.2%	0.0%
Glendale	946	979	0.3%	0.9%	0.9%	0.0%
Myrtle Creek	6,998	7,478	0.7%	7.0%	6.9%	0.0%
Oakland	1,117	1,097	-0.2%	1.1%	1.0%	-0.1%
Reedsport	4,437	4,244	-0.4%	4.4%	3.9%	-0.5%
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Yoncalla	1,082	1,085	0.0%	1.1%	1.0%	-0.1%
Outside UGBs	43,409	45,995	0.6%	43.2%	42.7%	-0.4%

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

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

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

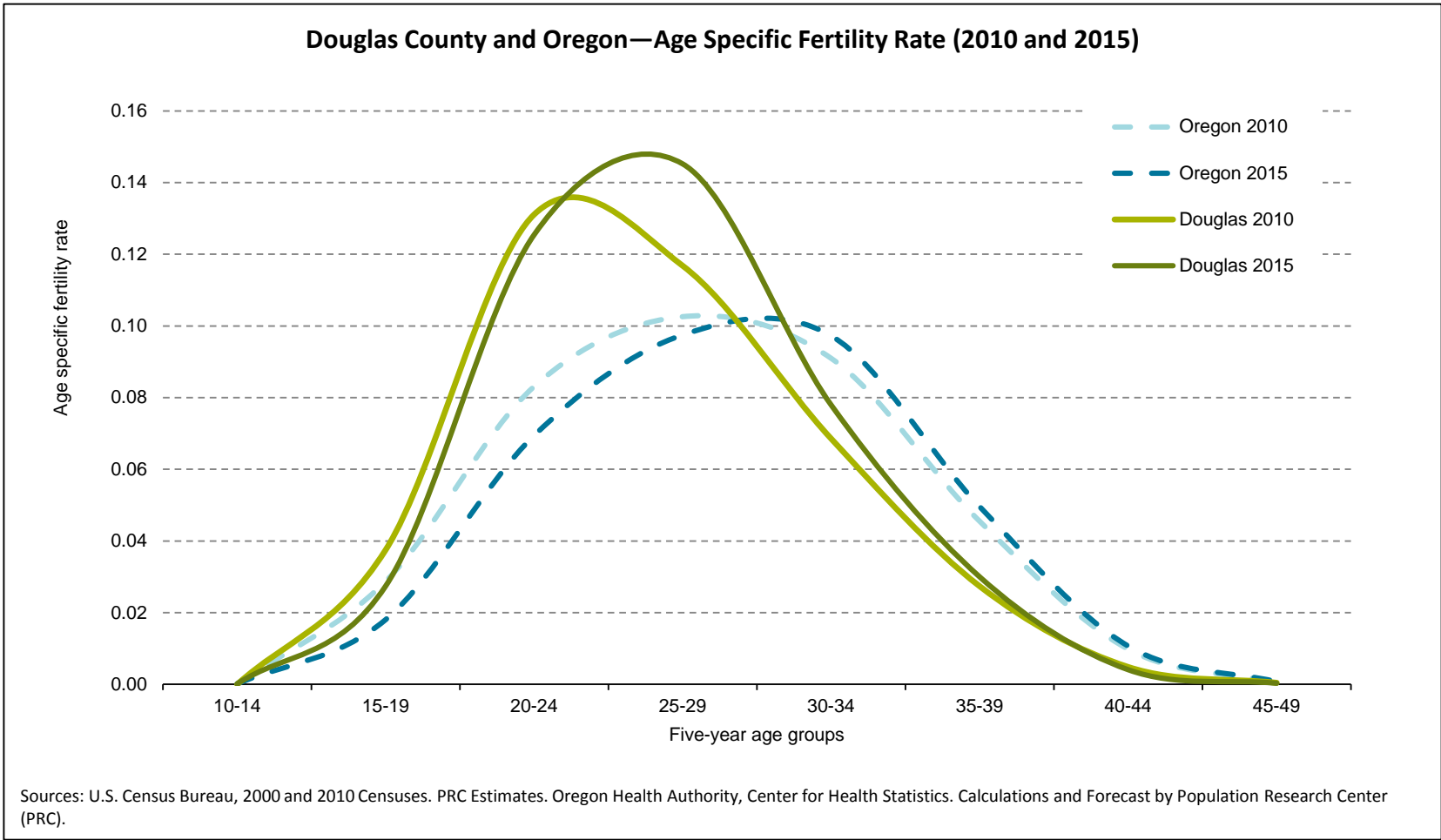


Sources: U.S. Census Bureau, 2000 and 2010 Censuses

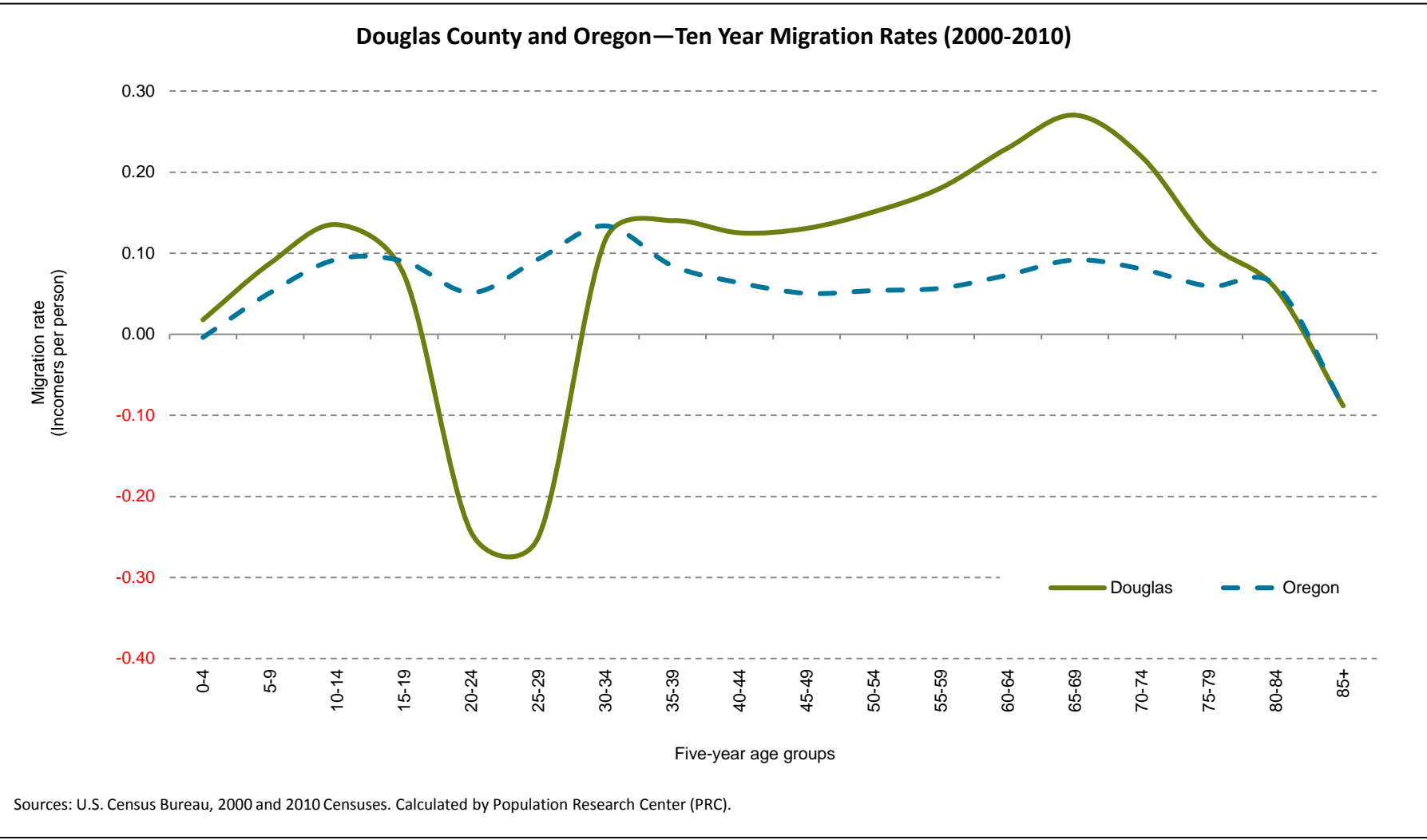
## Douglas County—Hispanic or Latino and Race (2000 and 2010)

Hispanic or Latino and Race	2000		2010		Absolute Relative	
					Change	Change
<i>Total population</i>	100,399	100.0%	107,667	100.0%	7,268	7.2%
Hispanic or Latino	3,283	3.3%	5,055	4.7%	1,772	54.0%
Not Hispanic or Latino	97,116	96.7%	102,612	95.3%	5,496	5.7%
White alone	92,302	91.9%	96,343	89.5%	4,041	4.4%
Black or African American alone	165	0.2%	279	0.3%	114	69.1%
American Indian and Alaska Native alone	1,446	1.4%	1,799	1.7%	353	24.4%
Asian alone	601	0.6%	1,008	0.9%	407	67.7%
Native Hawaiian and Other Pacific Islander alone	83	0.1%	110	0.1%	27	32.5%
Some Other Race alone	86	0.1%	154	0.1%	68	79.1%
Two or More Races	2,433	2.4%	2,919	2.7%	486	20.0%

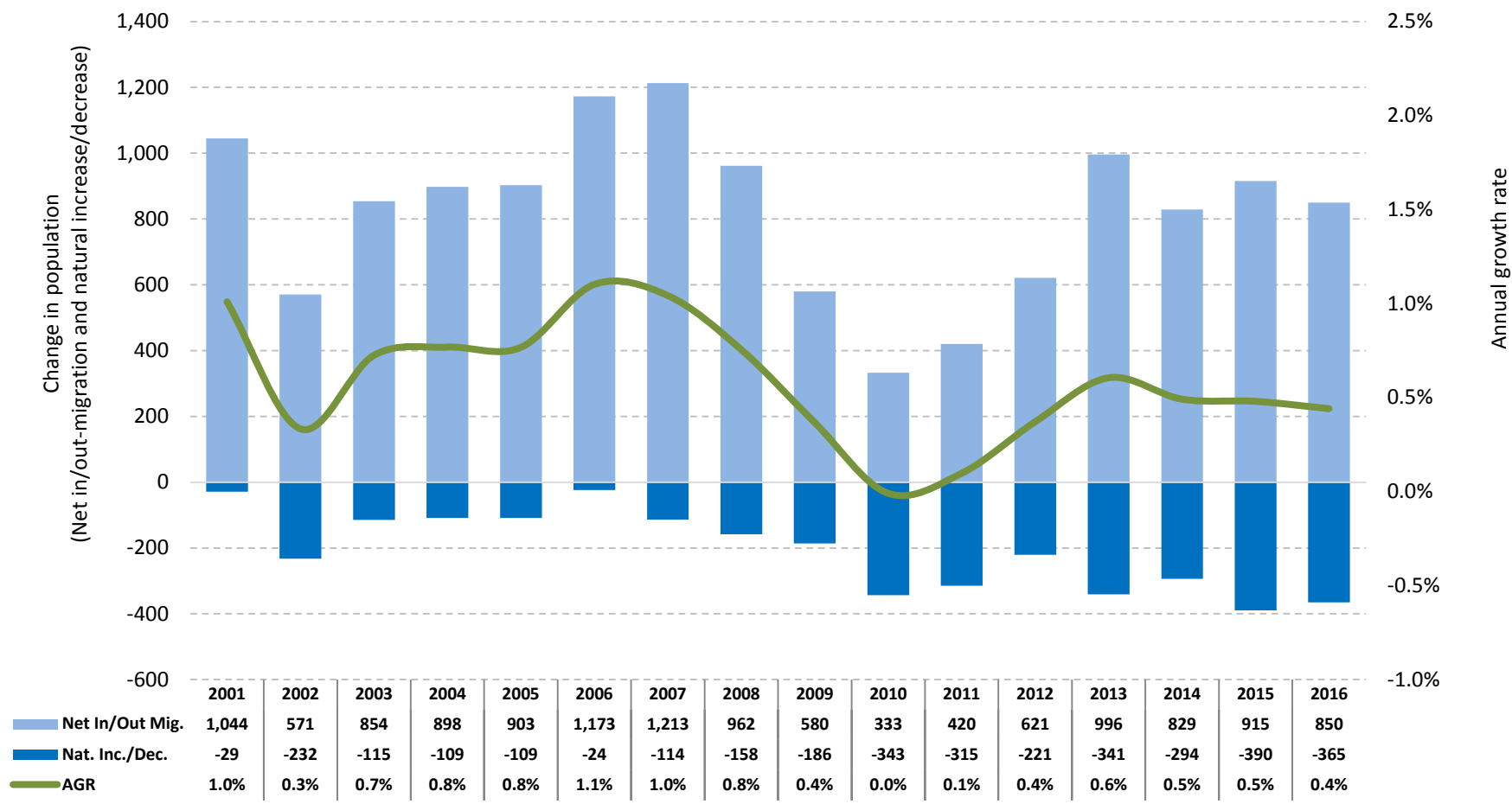
Sources: U.S. Census Bureau, 2000 and 2010 Censuses.



Total Fertility Rate (TFR)		
	2000	2010
Douglas County	1.96	1.93
Oregon	1.98	1.81



Douglas County—Components of Population Change (2001-2016)



Sources: Population Research Center, July 1st Annual Estimates 2001-2016 Oregon Health Authority, Center for Health Statistics. Calculated by Population Research Center (PRC).



## **Douglas 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>Douglas County</i>	43,284	48,915	1.2%	100.0%	100.0%	0.0%
Canyonville	670	875	2.7%	1.5%	1.8%	0.2%
Drain	529	579	0.9%	1.2%	1.2%	0.0%
Elkton	92	110	1.8%	0.2%	0.2%	0.0%
Glendale	395	438	1.0%	0.9%	0.9%	0.0%
Myrtle Creek	2,883	3,212	1.1%	6.7%	6.6%	-0.1%
Oakland	475	485	0.2%	1.1%	1.0%	-0.1%
Reedsport	2,200	2,245	0.2%	5.1%	4.6%	-0.5%
Riddle	413	490	1.7%	1.0%	1.0%	0.0%
Roseburg	11,848	13,181	1.1%	27.4%	26.9%	-0.4%
Sutherlin	3,109	3,700	1.8%	7.2%	7.6%	0.4%
Winston	2,018	2,405	1.8%	4.7%	4.9%	0.3%
Yoncalla	451	491	0.9%	1.0%	1.0%	0.0%
Outside UGBs	18,201	20,704	1.3%	42.1%	42.3%	0.3%

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

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

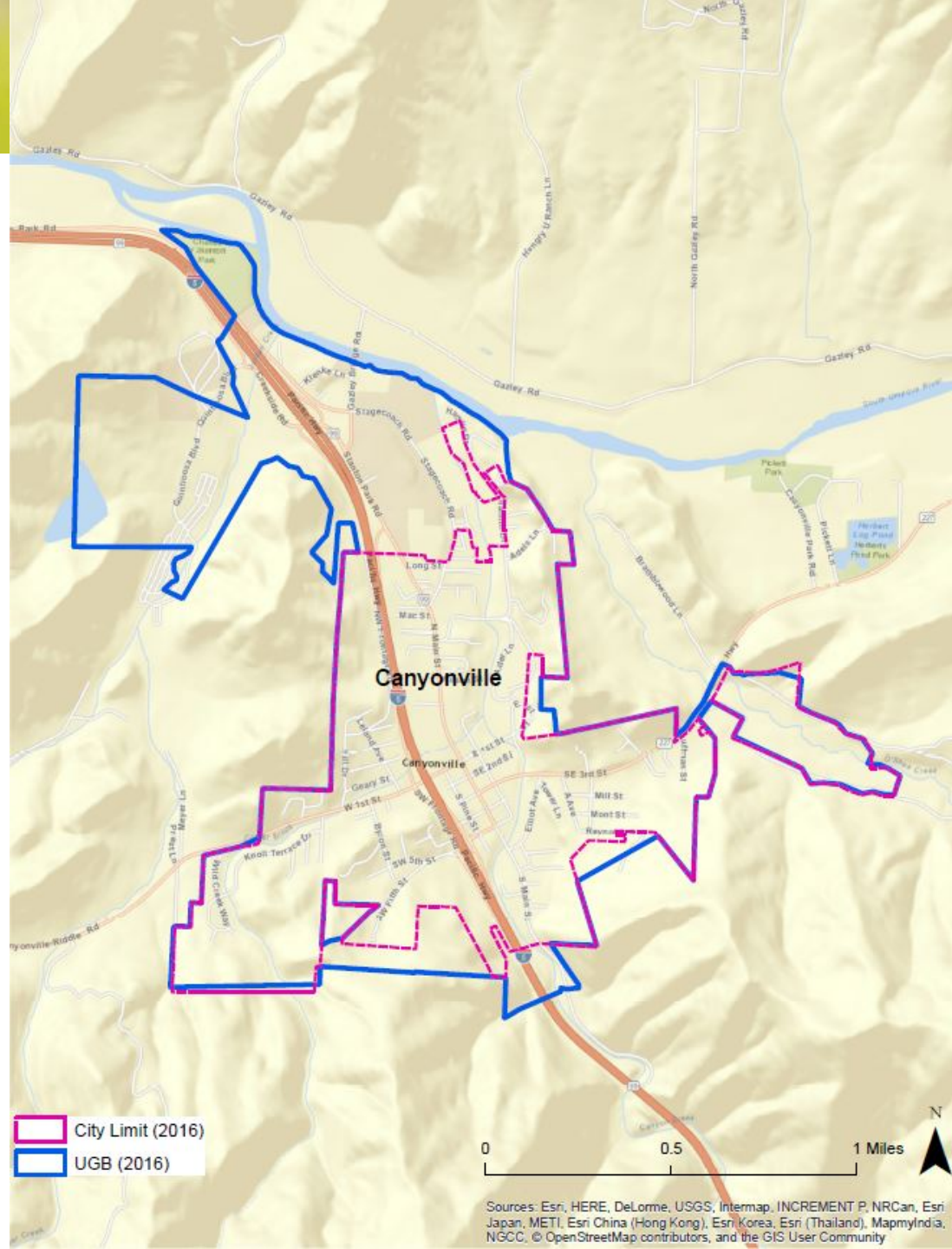
## Douglas County and Sub-Areas—Persons Per Household (PPH) and Occupancy Rate (2000 and 2010)

	Persons Per Household (PPH)			Occupancy Rate		
	2000	2010	Change 2000-2010	2000	2010	Change 2000-2010
<i>Douglas County</i>	2.5	2.4	-4.3%	92.00%	91.14%	-0.9%
Canyonville	2.5	2.4	-2.7%	92.24%	91.77%	-0.5%
Drain	2.4	2.5	4.0%	90.55%	92.92%	2.4%
Elkton	2.5	2.3	-7.6%	89.13%	76.36%	-12.8%
Glendale	2.1	2.6	27.7%	87.85%	84.93%	-2.9%
Myrtle Creek	2.7	2.5	-7.8%	94.17%	92.06%	-2.1%
Oakland	2.6	2.4	-5.3%	93.26%	92.78%	-0.5%
Reedsport	2.5	2.1	-16.1%	90.82%	88.42%	-2.4%
Riddle	2.2	2.6	16.7%	93.70%	93.67%	0.0%
Roseburg	2.7	2.2	-16.1%	93.55%	92.98%	-0.6%
Sutherlin	2.3	2.4	3.3%	91.25%	90.97%	-0.3%
Winston	2.5	2.5	1.1%	92.96%	92.31%	-0.7%
Yoncalla	2.6	2.4	-8.3%	93.57%	92.67%	-0.9%
Outside UGBs	2.6	2.4	-4.3%	90.84%	90.01%	-0.8%

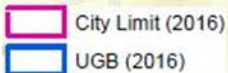
Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculated by Population Research Center (PRC)

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

# Douglas County UGBs



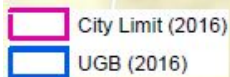
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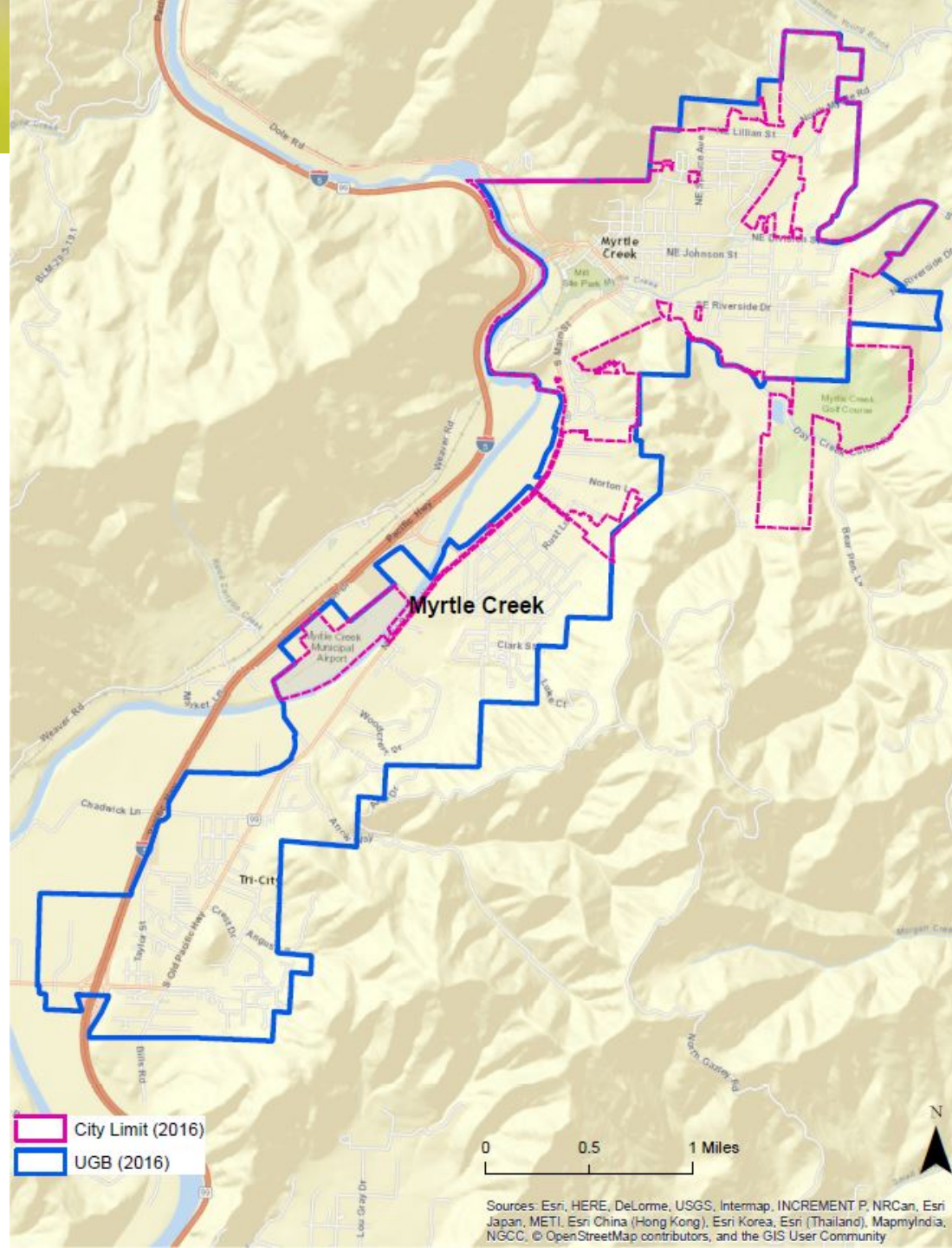




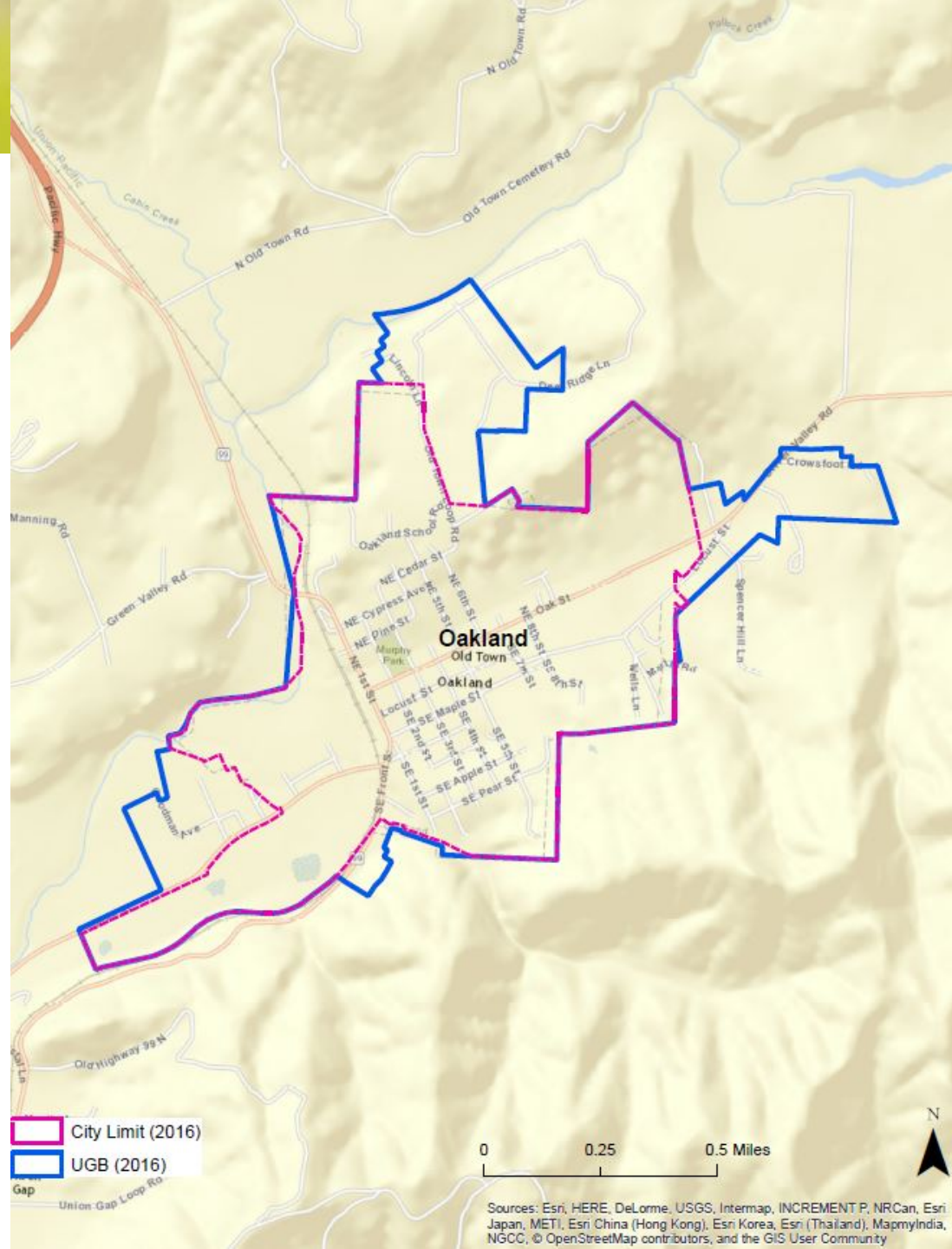


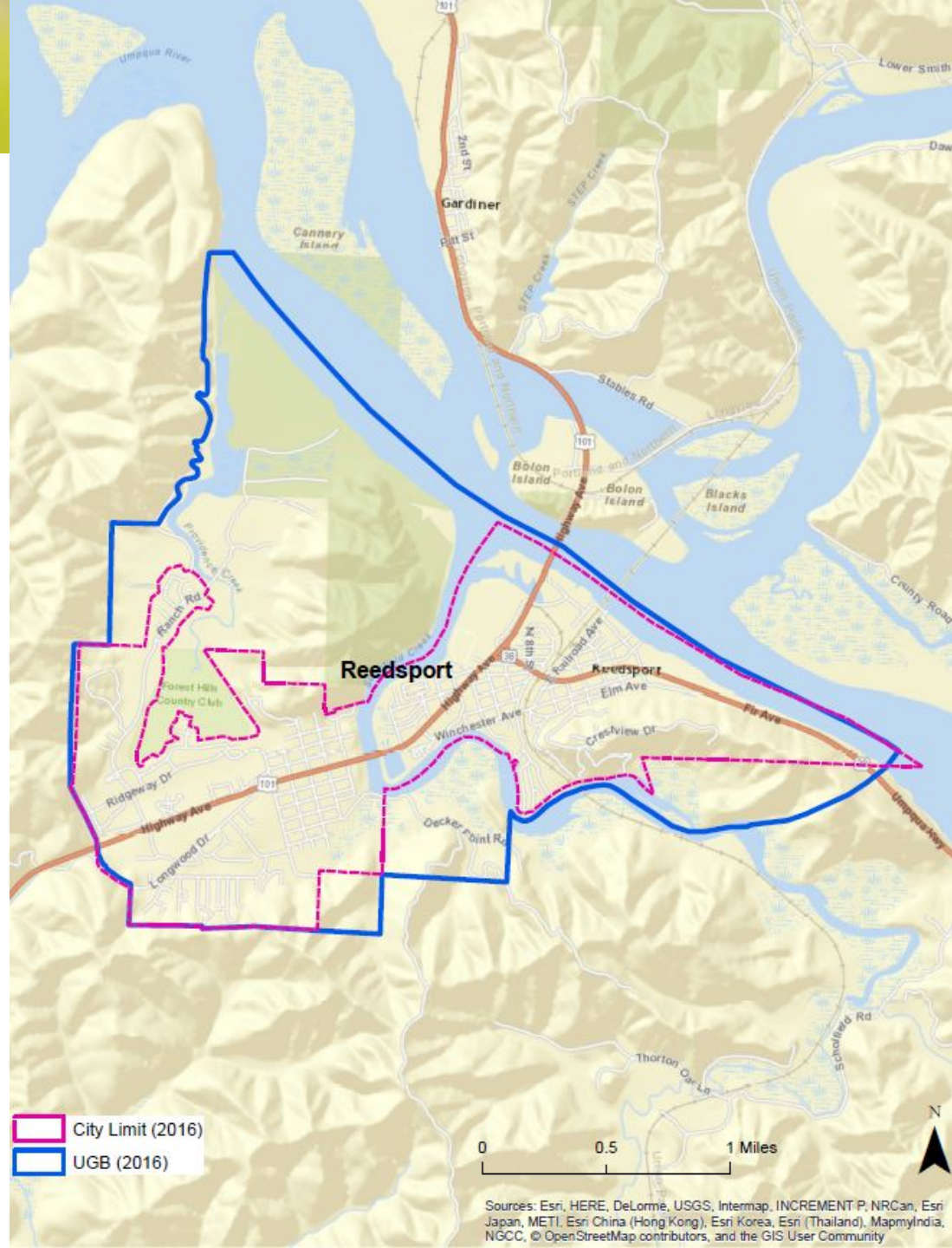
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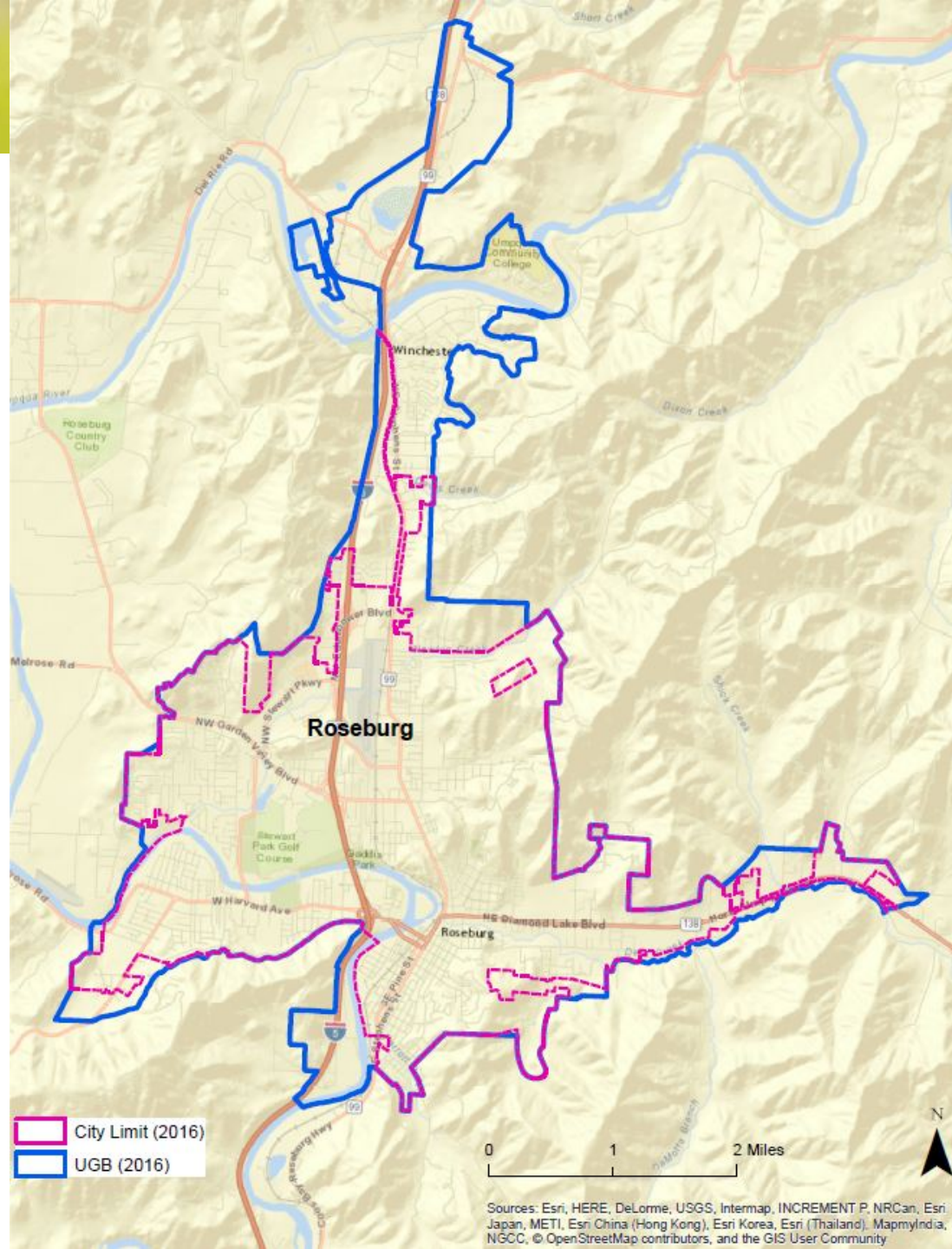






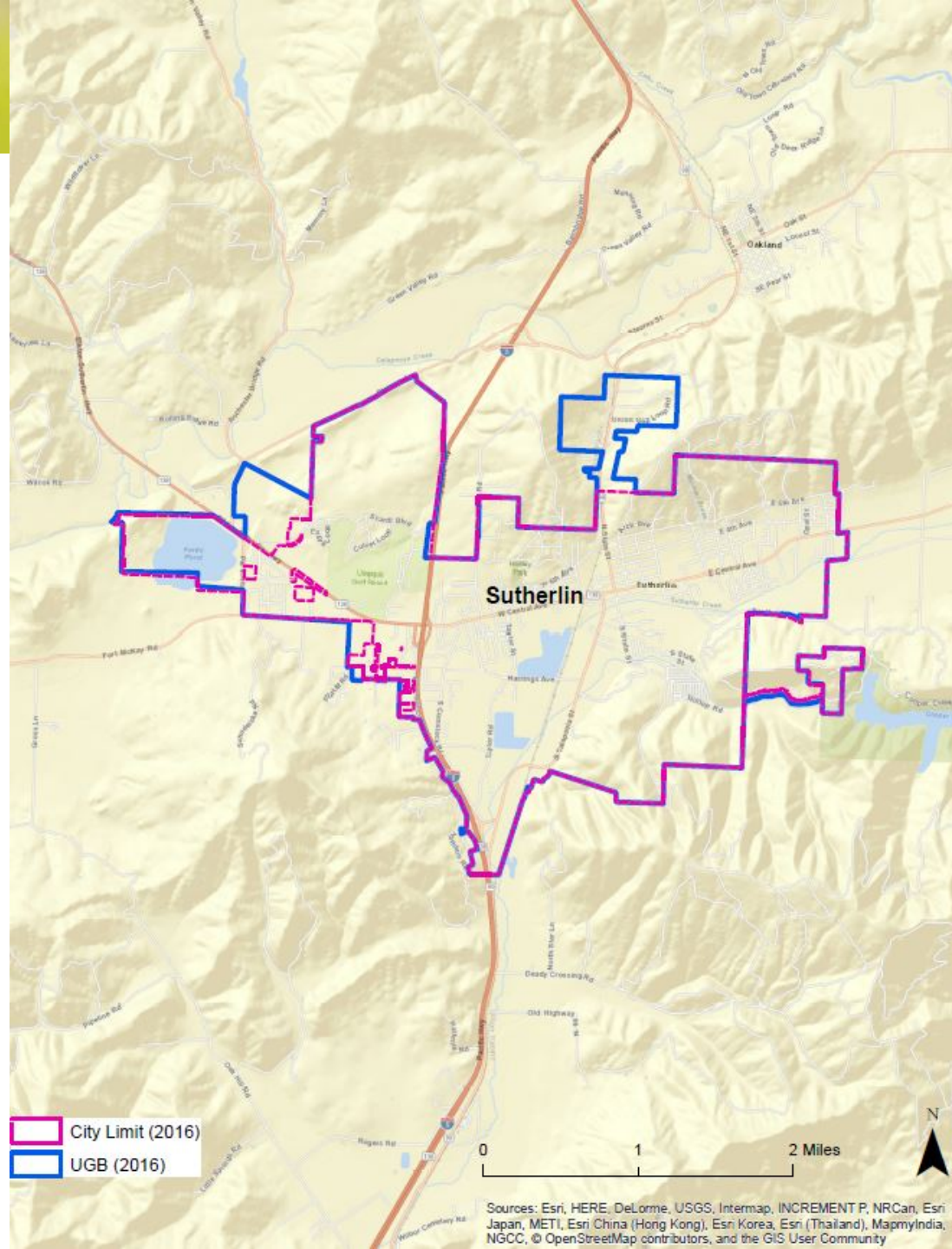


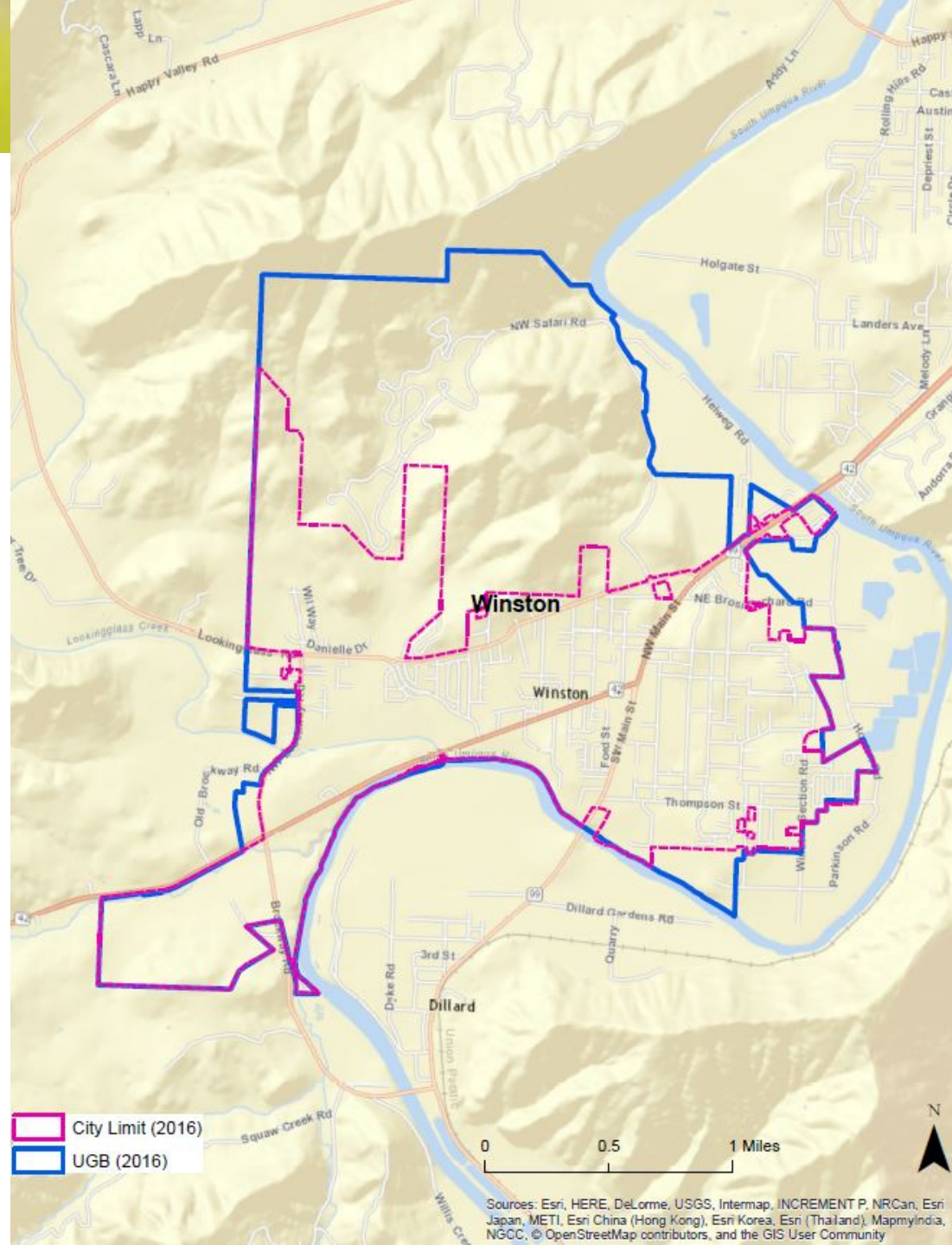




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