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## Aspects of Nebraska's Migration Including Brain Drain and Workforce Impacts

David J. Drozd

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# Aspects of Nebraska's Migration Including Brain Drain and Workforce Impacts



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Nebraska Department of Economic Development

*February 27, 2020 – Lincoln, NE*



@UNOmahacpar  
#NebraskaByTheNumbers



@unocpar



# The Importance of Data Collection

- Information comes from resident's responses
  - Ongoing American Community Survey (ACS)
  - Decennial Census



The 2020 Census is less than **1** month away. See [cpar.unomaha.edu/2020census](http://cpar.unomaha.edu/2020census)

Last call regarding Census jobs (apply NOW!): see [2020census.gov/jobs](http://2020census.gov/jobs)

Initial letters sent around March 15, 2020 | Respond by internet, paper, call-in

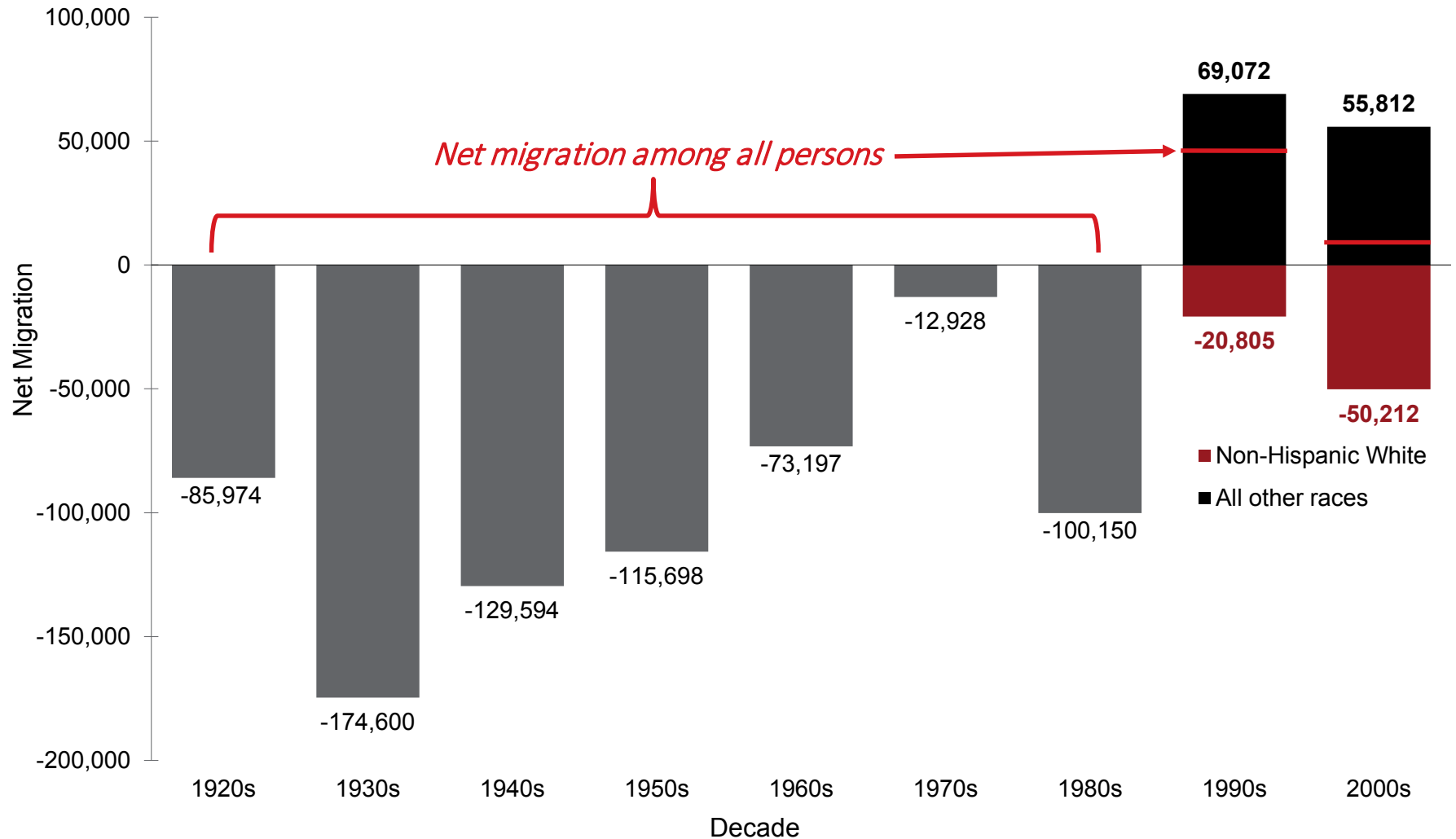
**Do what you can to promote filling out the census (and ongoing ACS)**

**\*\* Decennial Census and survey response data show the trends \*\***



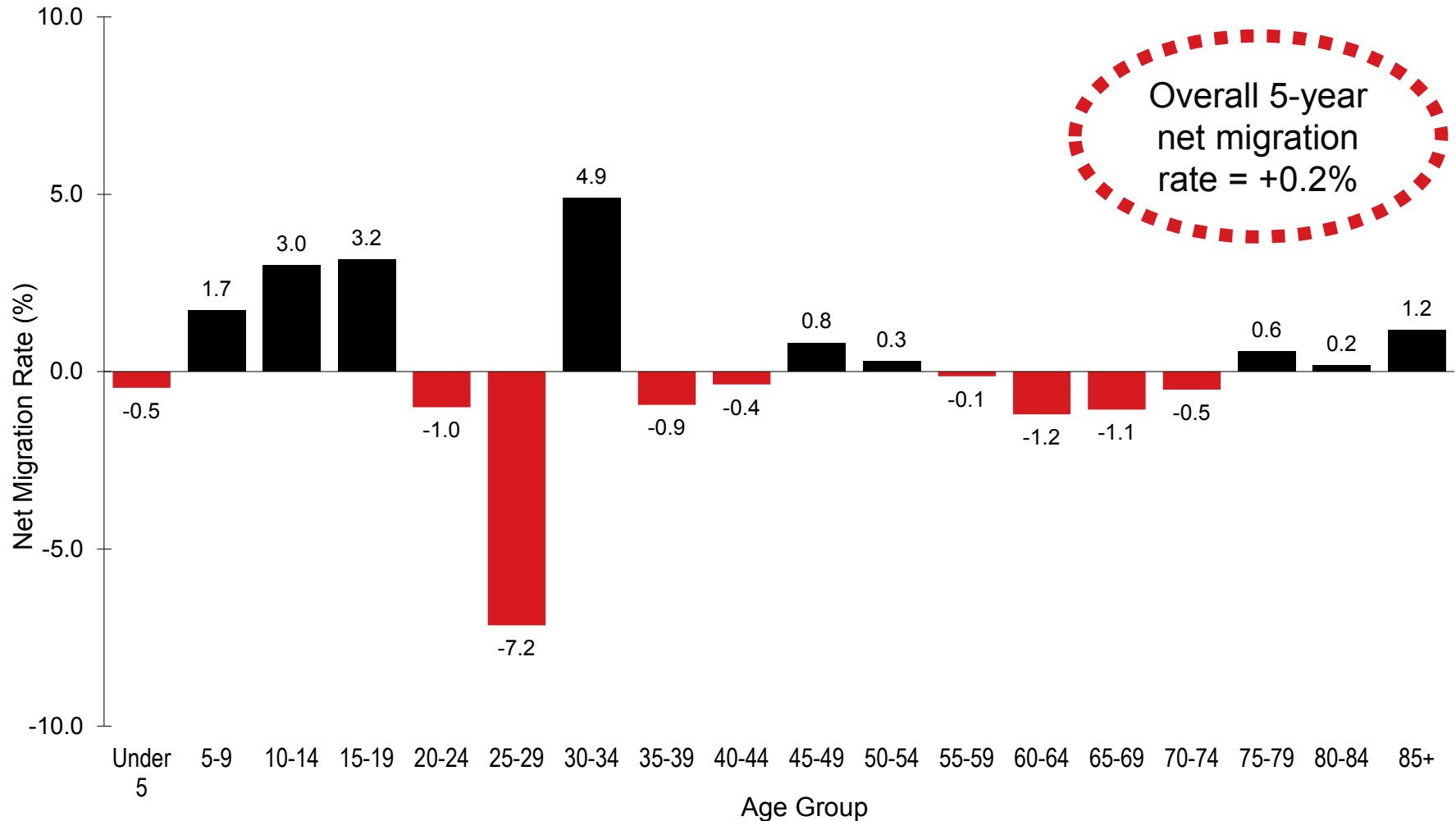
# Net migration has trended upward and now is positive given rising diversity

*Nebraska net migration by decade with 1990s & 2000s breakout by race/ethnicity*

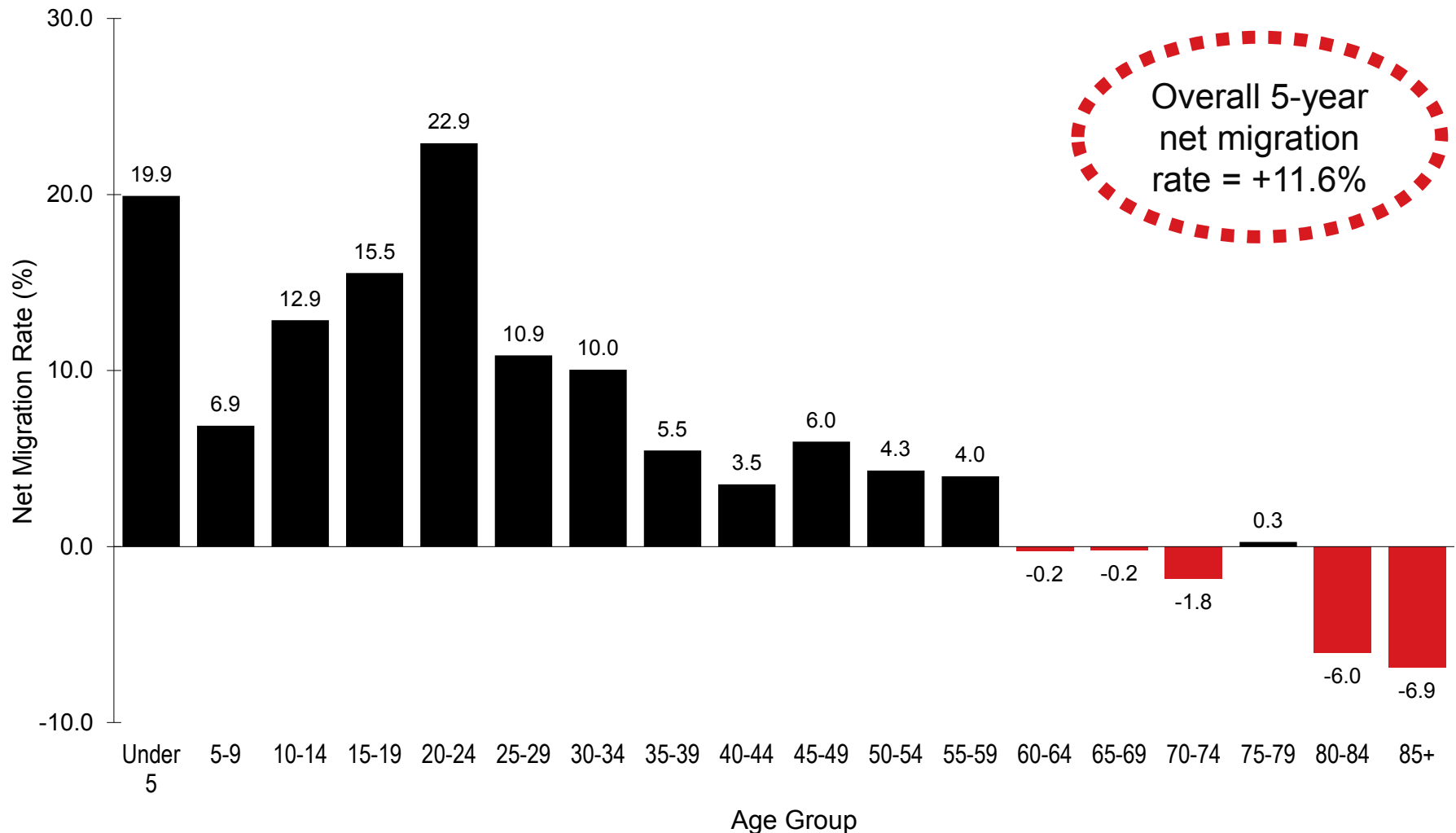


# Nebraska's outmigration mostly occurs among those in their 20s and at/near retirement ages

*Nebraska 5-year net migration rates by age for 2000-2010 using two 5-year periods*

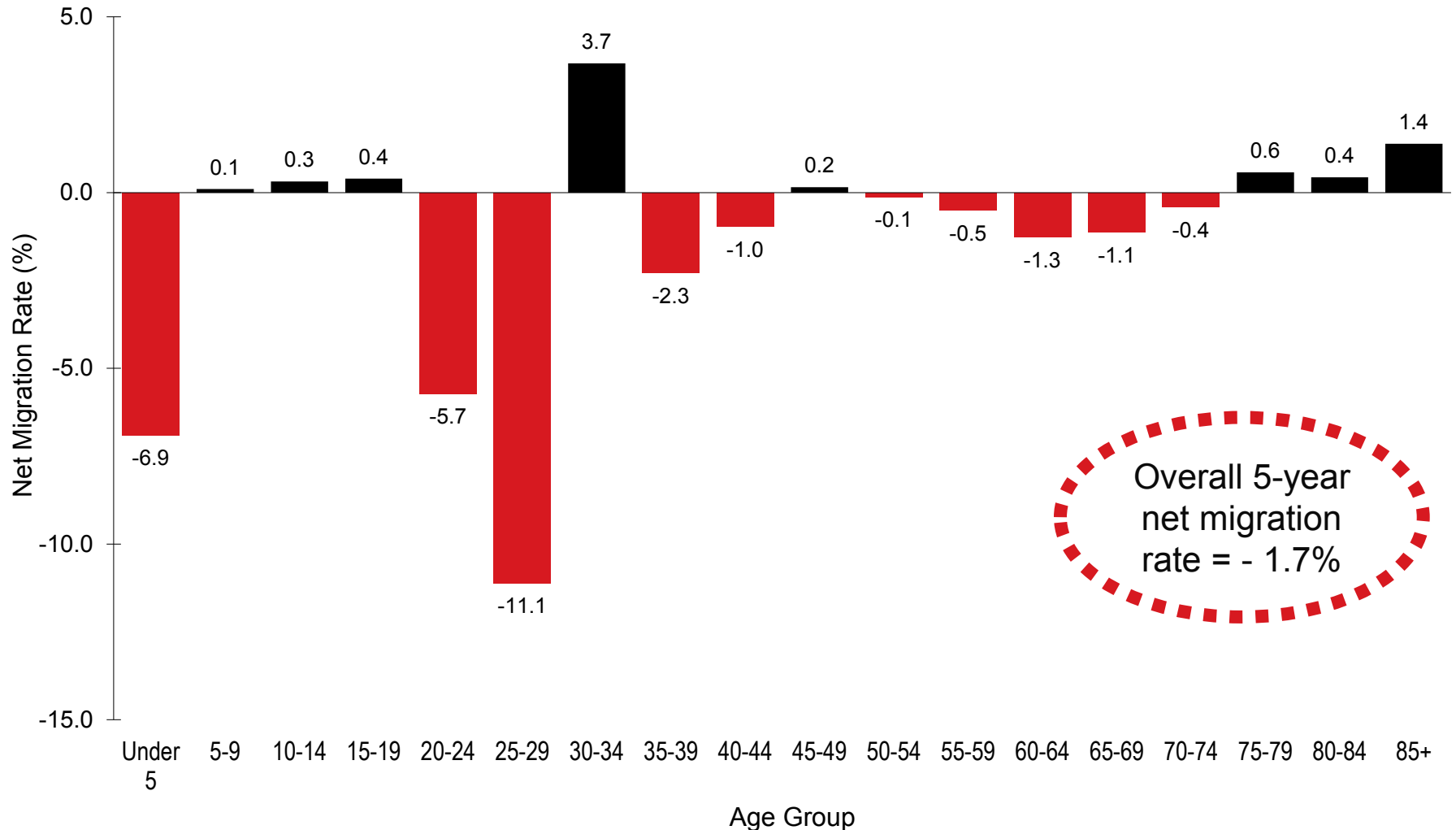


The pattern is much different for diverse populations, with high immigration for most ages  
*Nebraska 5-year net migration rates for nonwhite races by age for 2000-2010 using two 5-year periods*



# The outmigration among Whites is concentrated among working ages and young children

*Nebraska 5-year net migration rates for non-Hispanic Whites by age for 2000-2010 using two 5-year periods*



# Understanding Nebraska's Population with a Bachelor's Degree or more education

89%

The portion of all degree holders that are non-Hispanic White

<u>Race/Ethnicity</u>	<u>Age 25+ BD+</u>	<u>Portion of Pie</u>	<u>BD+ Rate</u>
Total Population	390,606	100.0%	31.4%
White, non-Hispanic	349,279	89.4%	33.4%
Black, non-Hispanic	11,195	2.9%	22.2%
American Indian, NH	1,063	0.3%	13.8%
Asian/Pac. Islander NH	12,510	3.2%	46.7%
Other/2+ races NH	5,174	1.3%	32.0%
Hispanic/Latino	11,385	2.9%	11.7%



With the vast majority of degree holders being non-Hispanic White, it stands to reason that most of our brain drain will be among Whites

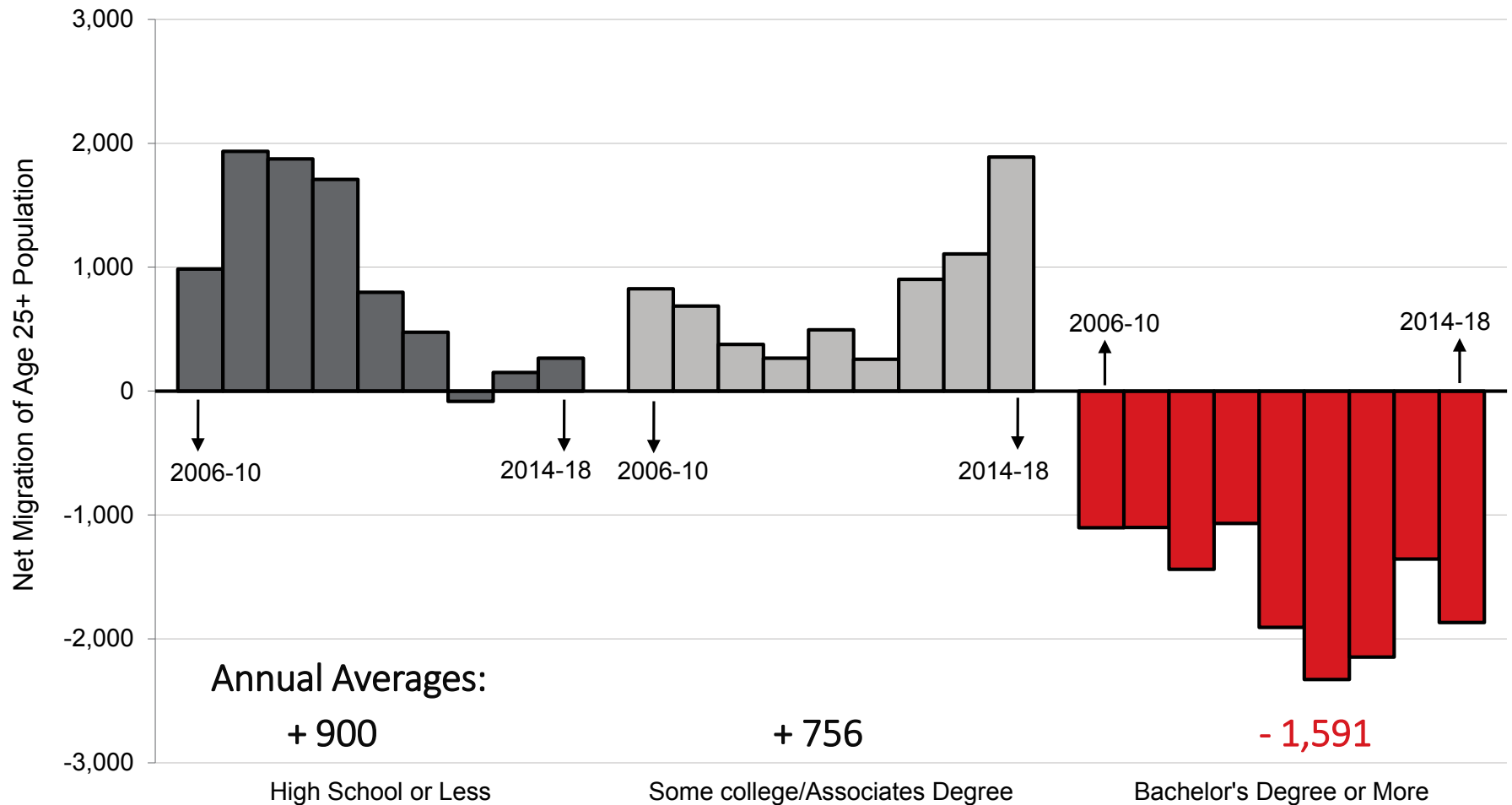
*The latest data from the American Community Survey show a small net inmigration of those with a BD+ among nonwhites (other recent timeframes have showed net outmigration)*

	BD+ annual net migration (all ages)	
<u>Racial group</u>	<u>2014-2018</u>	<u>Three 5-yr averages</u>
White, non-Hispanic	- 1,522	- 1,305
<b>All other races</b>	<b><u>+ 66</u></b>	<b><u>- 182</u></b>
Nebraska annual total	- 1,456	- 1,487



# Nebraska's brain drain has been consistent, versus net immigration of other education levels

*Net domestic migration of the age 25+ population by education 2006-2010 to 2014-2018*



Note: Positive values show net immigration, which is typically desired. These values depict what occurs annually, based on 5 years of surveying for accuracy.

# Nebraska's Annual Brain Drain Impact

-1,591

Average annual net migration of those age 25+ with a BD+ (last 9 five-yr ACS timeframes)

*Note: first 4 years: average of -1,178  
last 5 years: average of -1,922*

\$45,000

Median earnings of those age 20-64 with a BD+ who left NE

*Notes: 89% had earnings; those without earnings removed from median calculation.  
\$58,000 median for full-time workers*

\$72 M

Lost taxable income; would also have sales tax on spending

But those losses aren't just for one year...  
there is a future/cumulative impact from leaving NE

ACS 5-Yr Timeframe	Center Year	BD+ Net Migration	Median Earnings	Annual Loss (in millions of \$)										Totals
				2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
2006-2010	2008	-1,104	\$45,000	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	496.8
2007-2011	2009	-1,102	\$45,000		49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	446.3
2008-2012	2010	-1,438	\$45,000			64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	517.7
2009-2013	2011	-1,069	\$45,000				48.1	48.1	48.1	48.1	48.1	48.1	48.1	336.7
2010-2014	2012	-1,908	\$45,000					85.9	85.9	85.9	85.9	85.9	85.9	515.2
2011-2015	2013	-2,328	\$45,000						104.8	104.8	104.8	104.8	104.8	523.8
2012-2016	2014	-2,148	\$45,000							96.7	96.7	96.7	96.7	386.6
2013-2017	2015	-1,356	\$45,000								61.0	61.0	61.0	183.1
2014-2018	2016	-1,869	\$45,000									84.1	84.1	168.2
2015-2019*	2017	-2,000	\$45,000										90.0	90.0
10-yr average/sum		-1,632	\$45,000	49.7	99.3	164.0	212.1	297.9	402.7	499.4	560.4	644.5	734.5	3,664.4
* Estimated based upon four years of annual data														

*To find the full impact (no gray bars) over 10 years of losses (-16,320 people) we'd have to take the 2017 impacts \* 10 or = \$7.3 billion. That's \$367M of income tax using a 5% rate.*

# How does Nebraska's Brain Drain Compare

*Measure: Age 25+ BD+ net migration per 1,000 people age 25+ with a BD+ in state*

## Brain Gain States

Geography	BD+ Mover Rate	Rank
Arizona	16.42	1
Nevada	13.69	2
Washington	11.70	3
Colorado	11.37	4
Oregon	11.23	5
Florida	10.88	6
South Carolina	10.55	7
Idaho	8.93	8
North Carolina	8.55	9
Maine	7.10	10
Texas	7.02	11
New Hampshire	5.49	12
Montana	5.37	13
Delaware	4.37	14
Tennessee	3.82	15
Georgia	2.67	16
Utah	0.65	17
California	0.34	18
Arkansas	0.10	19

## Brain Drain States

Geography	BD+ Mover Rate	Rank
Louisiana	-1.85	21
Rhode Island	-1.92	22
Virginia	-1.96	23
Minnesota	-2.52	24
Kentucky	-2.54	25
Maryland	-2.70	26
Michigan	-3.23	27
Ohio	-3.50	28
Pennsylvania	-3.89	29
Vermont	-4.13	30
Oklahoma	-4.45	31
Indiana	-4.80	32
<b>Nebraska</b>	<b>-4.80</b>	<b>33</b>
Missouri	-4.89	34
Massachusetts	-4.97	35
Iowa	-5.00	36
Wisconsin	-5.05	37
Hawaii	-5.42	38
New Mexico	-5.62	39
South Dakota	-5.83	40

This ranking jumps around: in 2012-2016 NE only ranked 42<sup>nd</sup> best (10<sup>th</sup> worst)

Kansas	-6.47	41
Connecticut	-6.99	42
New Jersey	-7.13	43
Mississippi	-7.58	44
Illinois	-10.12	45
New York	-10.75	46
West Virginia	-12.22	47
North Dakota	-15.05	48
Wyoming	-15.19	49
Dist. of Columbia	-17.53	50
Alaska	-24.71	51

# Which states does NE lose to/gain from?

*Annual Domestic Migration  
of those age 20+ with a  
BD+ for Nebraska:  
2014-2018 timeframe*

	Age 20+ BD+ Inflow to NE	Age 20+ BD+ Outflow from NE	Age 20+ BD+ Net Flow for NE
State or Group of States			
Colorado	1,064	1,798	-734
Minnesota	482	936	-454
DC area: DC, DE, MD, VA	292	736	-444
California	831	1,228	-397
"SEC" states: AL, AR, LA, MS, TN	300	656	-356
South Dakota/Wyoming	342	676	-334
Illinois	356	684	-328
Missouri	544	842	-298
South Atlantic: GA, NC, SC	539	703	-164
Arizona	254	412	-158
Indiana, Kentucky	226	367	-141
Texas	1,265	1,345	-80
Washington	201	270	-69
Oklahoma, New Mexico	336	373	-37
Ohio, West Virginia	403	311	92
Alaska, Hawaii (few moves in sample)	192	38	154
Florida	928	771	157
Michigan, Wisconsin	460	239	221
Northeast: CT, MA, NH, NJ, NY, PA, RI, VT	855	595	260
Utah, Nevada, Oregon	678	382	296
Kansas	1,143	759	384
Iowa	1,695	1,300	395
Low populated rural: ID, MT, ND	661	82	579
<b>Totals</b>	<b>14,047</b>	<b>15,503</b>	<b>-1,456</b>

*States similar to or more  
rural than Nebraska is*

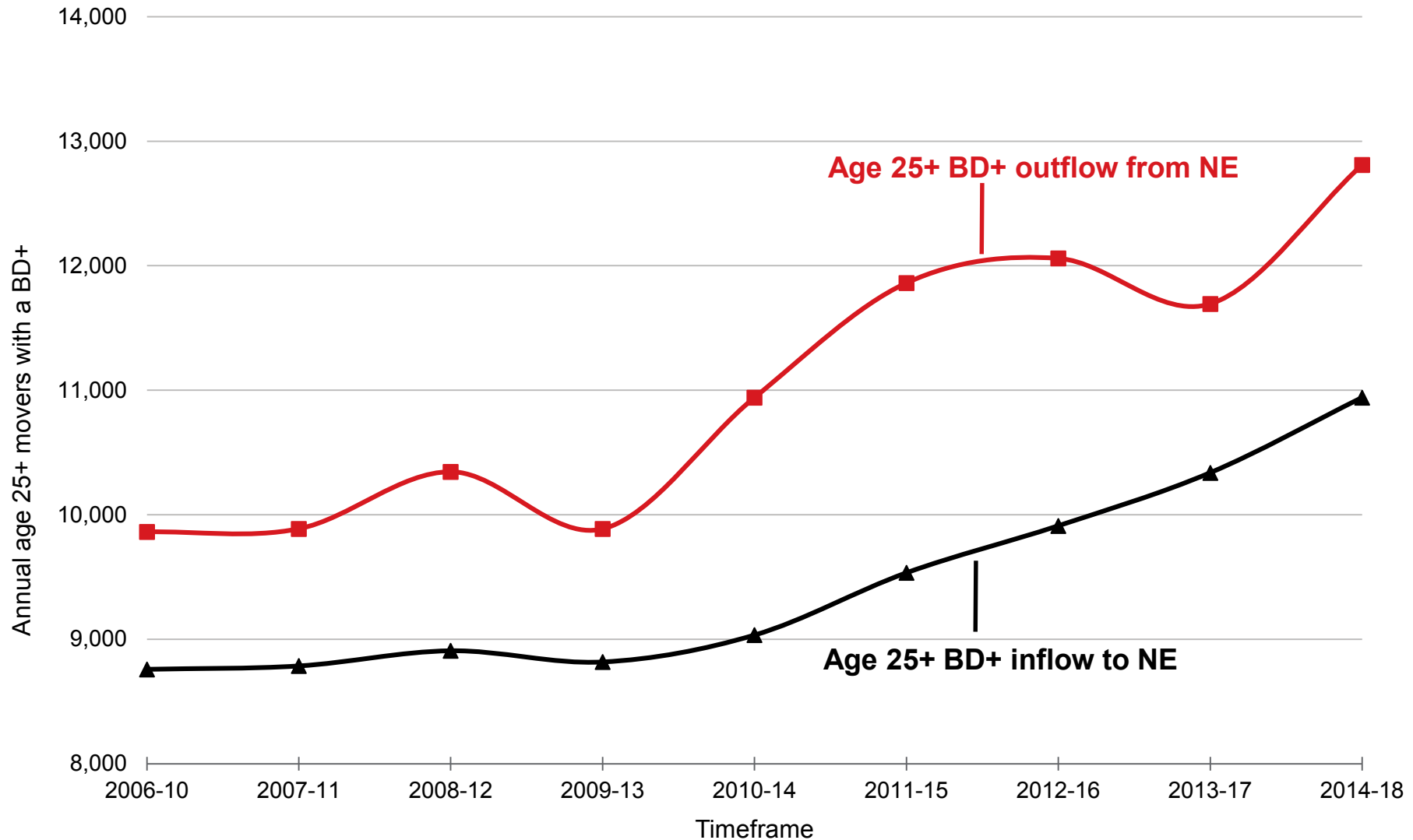
# State-to-State BD+ flows: more stable averages

*Annual Domestic Migration  
of those with a BD+ for  
Nebraska (all ages):  
average of 2006-2010,  
2010-2014, and 2014-2018  
timeframes*

State or Group of States	BD+ Inflow to NE	BD+ Outflow from NE	BD+ Net Flow for NE
Colorado	774	1,290	-516
"SEC" states: AL, AR, KY, LA, MS, TN	363	687	-324
Arizona	227	545	-318
Fast growing west: NV, OR, WA	373	583	-210
Virginia, West Virginia, DC	190	383	-193
California	752	942	-190
Southwest oil related: NM, OK	286	468	-183
South Atlantic: GA, NC, SC	411	592	-181
Ohio	258	409	-151
South Dakota	348	490	-142
Minnesota	465	605	-140
Illinois	380	518	-138
Philly area: PA, NJ, MD, DE	243	350	-107
Missouri	663	722	-58
Texas	1,049	1,073	-24
Florida	553	490	62
Kansas	954	840	114
Utah	351	217	134
Alaska, Hawaii (few moves in sample)	193	47	146
Iowa	1,392	1,234	157
Industrial Midwest: IN, MI, WI	753	521	232
New York and Northeastern states	638	393	245
Low populated rural: ID, MT, ND, WY	652	354	298
<b>Totals</b>	<b>12,266</b>	<b>13,753</b>	<b>-1,487</b>

# Nebraska is attracting more people with a BD+, but the outflow has also increased

*Nebraska age 25+ annual inflow and outflow of those with a Bachelor's Degree or more education*



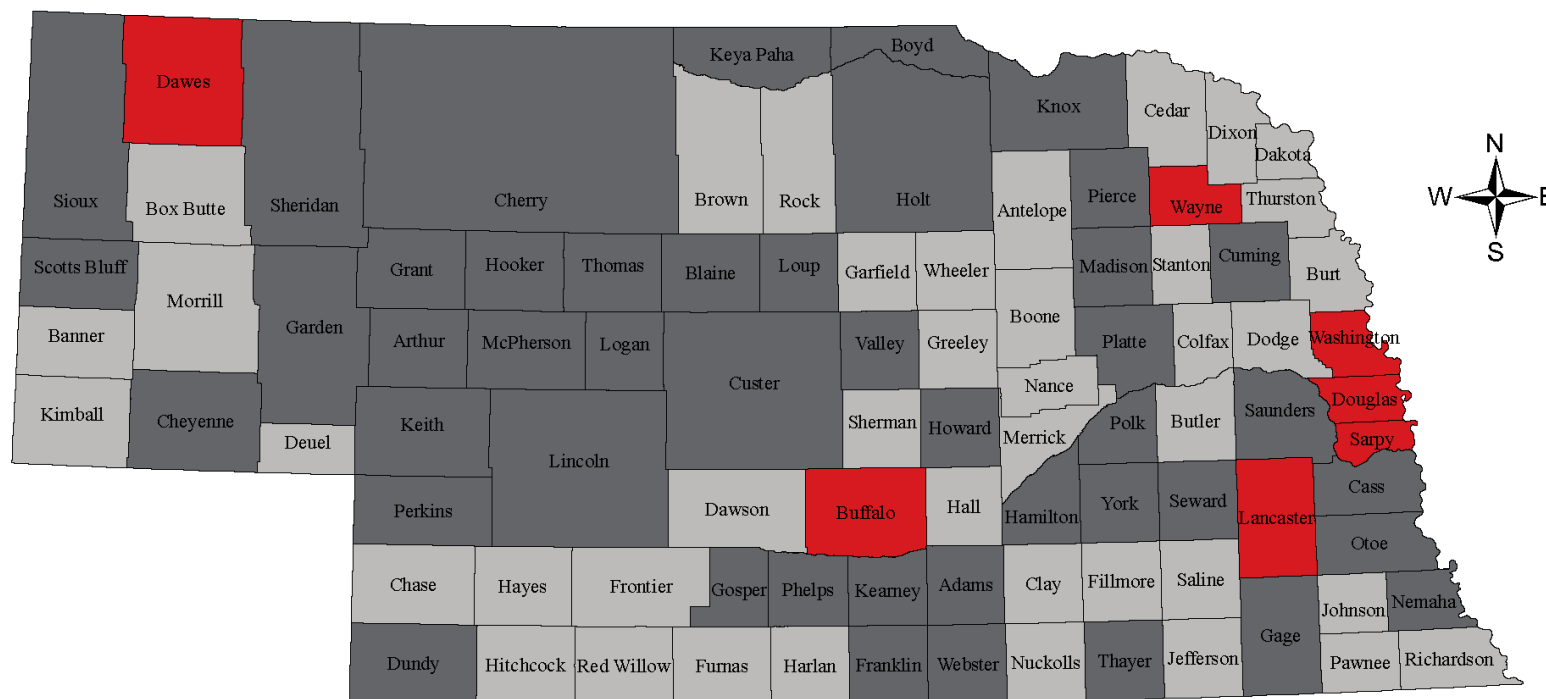


# Brain Break



# Only 7 counties are above the state average regarding higher education

*Percent of age 25+ population with a Bachelor's Degree+ for Nebraska counties in 2015*



**Note: The percentage of Nebraskans aged 25+ with a Bachelor's Degree or more is 30.6%**

- Less than 20.0% (41 counties)
- 20.0 to 30.5% (45 counties)
- At or above state average of 30.6% (7 counties)

# What do you remember about brain drain by race?

## So what do you think the brain drain patterns will be by geography?

### 79%

Brain Drain from the “Big 3” counties (-1,486 of -1,869 in NE)

*Other NE areas:*

*11 counties with city of 10,000-49,999: -179 or 10%*

*79 rural counties (no city of 10,000): -204 or 11%*

### 88%

Portion of Nebraska’s Brain Drain from the 7 counties above the state average in BD+ %

# Nebraska College Locations:

By evaluating 2010 Census data for four college ages (18-21) vs. four high school ages (14-17) we can identify counties that are “net importers” of college students

Name the college:

UNL  
UNK  
Wayne St.  
Chadron St.  
Hastings College  
Creighton, UNO  
Concordia  
Doane University  
Northeast CC  
Peru St.

Geography	Total Age 18-21	Total Age 14-17	Difference	Rank
<b>Nebraska</b>	<b>105,810</b>	<b>100,113</b>	<b>5,697</b>	<b>n/a</b>
Lancaster	24,906	13,344	11,562	1
Buffalo	4,401	2,427	1,974	2
Wayne	1,807	440	1,367	3
Dawes	1,395	449	946	4
Adams	2,519	1,690	829	5
Douglas	28,829	28,003	826	6
Seward	1,626	950	676	7
Saline	1,293	797	496	8
Madison	2,213	1,949	264	9
Nemaha	640	384	256	10
Frontier	233	152	81	11
Red Willow	655	599	56	12
Grant	24	23	1	13
Arthur	12	23	-11	14
Loup	14	32	-18	15

Only 13 of 93 counties had more students of college age

Top 10 net exporting counties; some have colleges

→ <b>Gage</b>	923	1,200	-277	84
<b>Lincoln</b>	1,695	1,986	-291	85
<b>Holt</b>	332	624	-292	86
<b>Otoe</b>	559	895	-336	87
<b>Dawson</b>	1,178	1,525	-347	88
→ <b>Platte</b>	1,508	1,919	-411	89
<b>Saunders</b>	789	1,283	-494	90
<b>Cass</b>	981	1,528	-547	91
→ <b>Hall</b>	2,734	3,408	-674	92
<b>Sarpy</b>	7,407	9,446	-2,039	93



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Nemaha	640	384	256	10

Annual age 25+ brain drain:

Douglas: -1,119  
Lancaster: - 206  
Adams: - 179  
Buffalo: - 159  
Madison: + 63  
5 low populated: - 79  
Total of 10  
college counties: -1,679

90% of state's brain drain



# What can we take away from this info?

- While Nebraska's brain drain is wide spread and occurring in many areas, it is also concentrated into certain types of areas (those with colleges)
  - Retention strategies can then be targeted in areas that those with a BD+ might move away from

<u>County</u>	<u>BD+ Inflow</u>	<u>BD+ Outflow</u>	<u>Net flow (age 25+)</u>	
Douglas	4,284	5,403	- 1,119	
Lancaster	2,368	2,574	- 206	
Sarpy	1,537	1,698	- 161	
"Big 3" total	8,189	9,675	- 1,486	"Big 3" total flows dwarf the others
Buffalo	199	358	- 159	
11 City of 10k	1,275	1,454	- 179	
79 Rural	1,477	1,681	- 204	By age 25, many moves have already occurred.

# We can look at the under age 25 BD+ flows, but they are highly variable/not very consistent

Under age 25 (usually 21-24)	Annual Movement of those with a BD+			Average
	2006-2010	2010-2014	2014-2018	
Inflow	2,149	1,962	2,551	2,221
Outflow	-2,380	-2,814	-2,028	-2,407
Net flow	-231	-852	523	-187

Consistent  
net outflow

Age 25 to 29				
Inflow	2,160	3,254	3,208	2,874
Outflow	-2,981	-4,181	-4,125	-3,762
Net flow	-821	-927	-917	-888

Age 55+				
Inflow	1,189	1,628	1,988	1,602
Outflow	-1,691	-1,914	-2,240	-1,948
Net flow	-502	-286	-252	-347

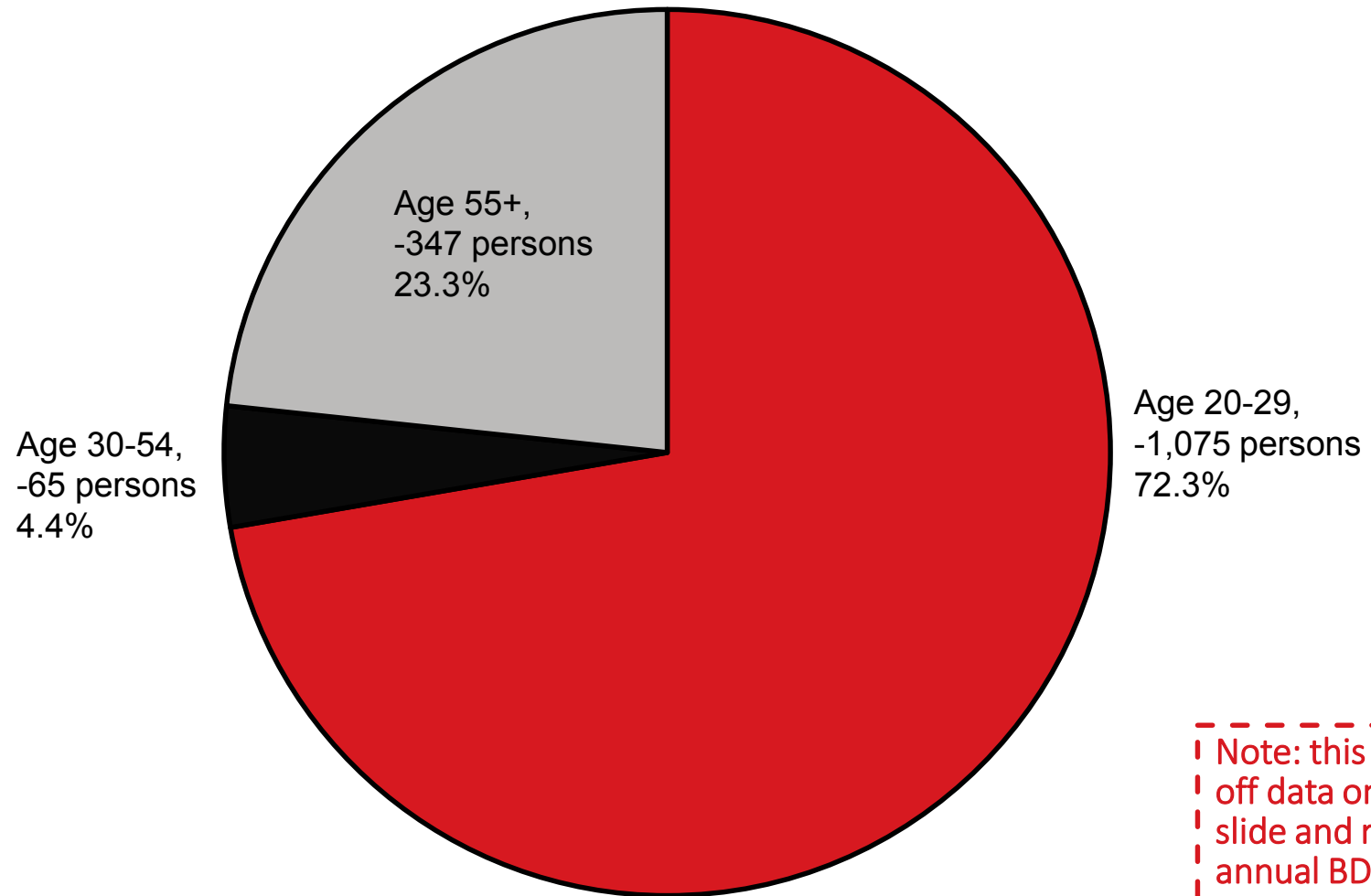
All ages				
Inflow	10,496	12,256	14,047	12,266
Outflow	-12,037	-13,720	-15,503	-13,753
Net flow	-1,541	-1,464	-1,456	-1,487

Under 25  
BD+ flows  
are larger  
than among  
all ages 55+





Like total population migration patterns, brain drain occurs among 20-somethings and seniors  
*Distribution of Nebraska's brain drain for major age groups (average of recent timeframes)*



Note: this is based off data on the prior slide and reflects annual BD+ net migration.



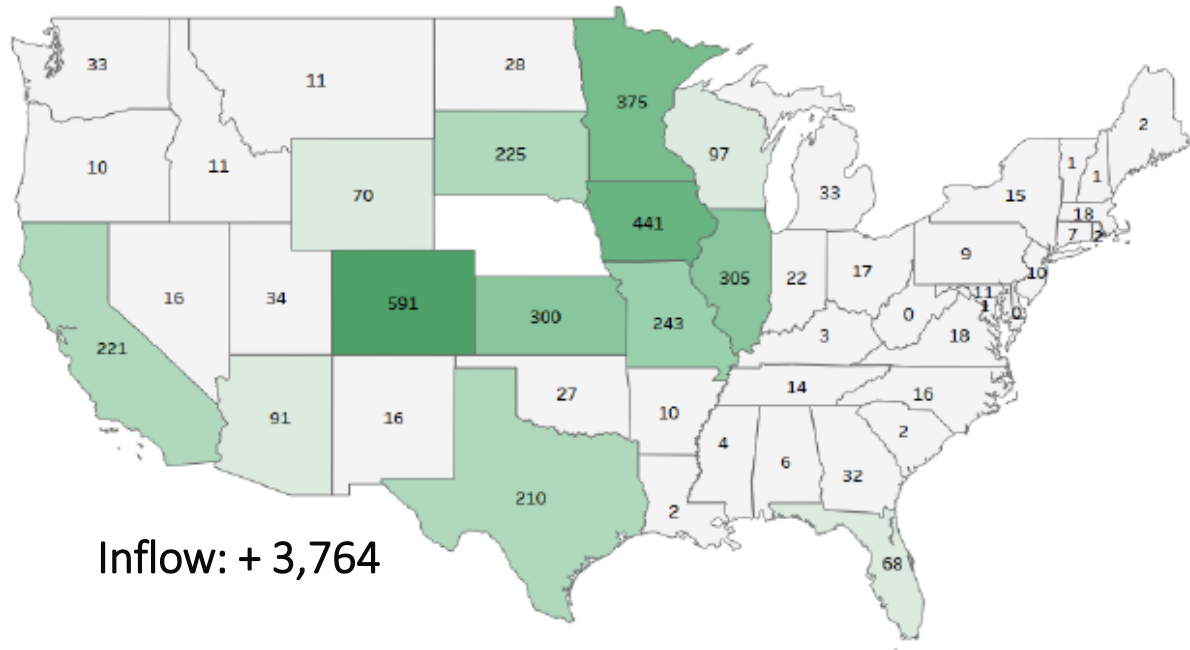
**Final Note on Higher Education:**  
 contrary to statements I've heard,  
 Nebraska does not have a net  
 outmigration of freshmen for  
 college (although we likely lose  
 many with the highest ACT  
 scores, e.g. to Ivy League schools)

Fall 2018 First-Time  
 Freshmen Migration  
 (compiled Oct 2019)  
 Source: IPEDS



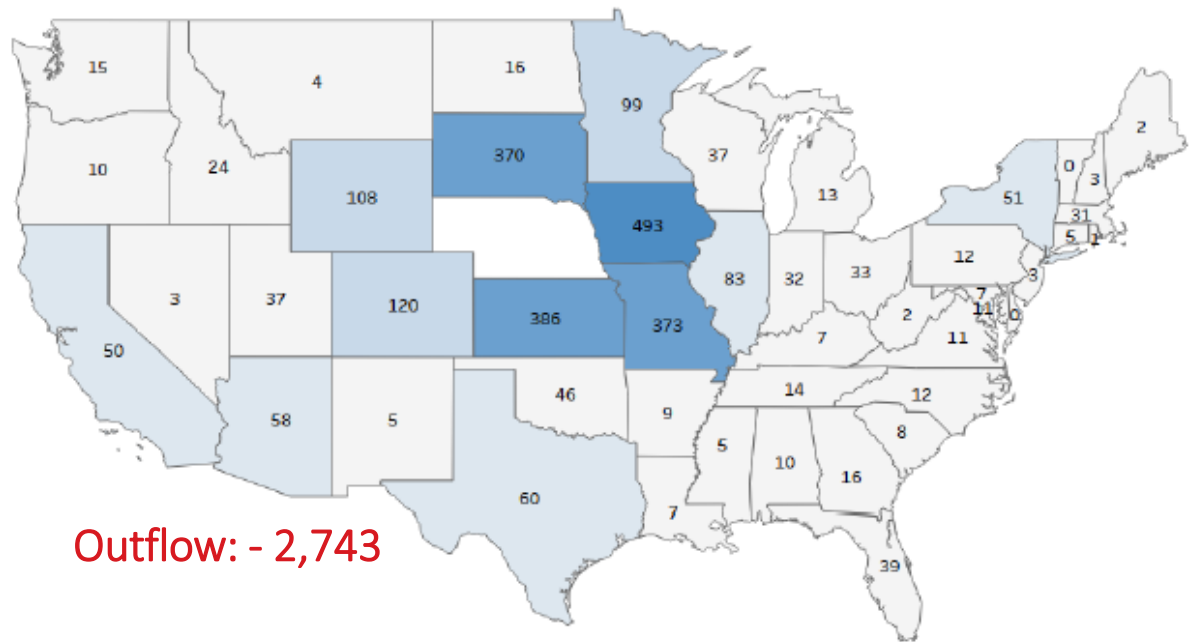
Link:  
[https://ccpe.nebraska.gov/sites/ccpe.nebraska.gov/files/FS\\_Migration.pdf](https://ccpe.nebraska.gov/sites/ccpe.nebraska.gov/files/FS_Migration.pdf)

## In-Migration of Out-of-State First-Time-Freshmen



Inflow: + 3,764

## Out-Migration of Nebraska Resident First-Time-Freshmen



Outflow: - 2,743

## NEBRASKANS WORK! *Select State Rankings*

Most know NE has one of the lowest unemployment rates, but what about...

#1

Labor force  
participation of single  
mothers with kids  
under six – 81%

#2

for age 25-64 with a bachelor's degree+ in the labor force – 90%  
  
in % of married-couple families with  
both spouses in the labor force – 61%  
  
for share of families in poverty that have a householder or spouse  
who worked "full time and year round" – 29%  
  
for age 55-64 labor force participation – 74%

#3

for age 16-19 labor  
force participation –  
53%

#4

for age 65+ labor force  
participation – 22%  
  
for portion of workers that have  
more than one job – 8%

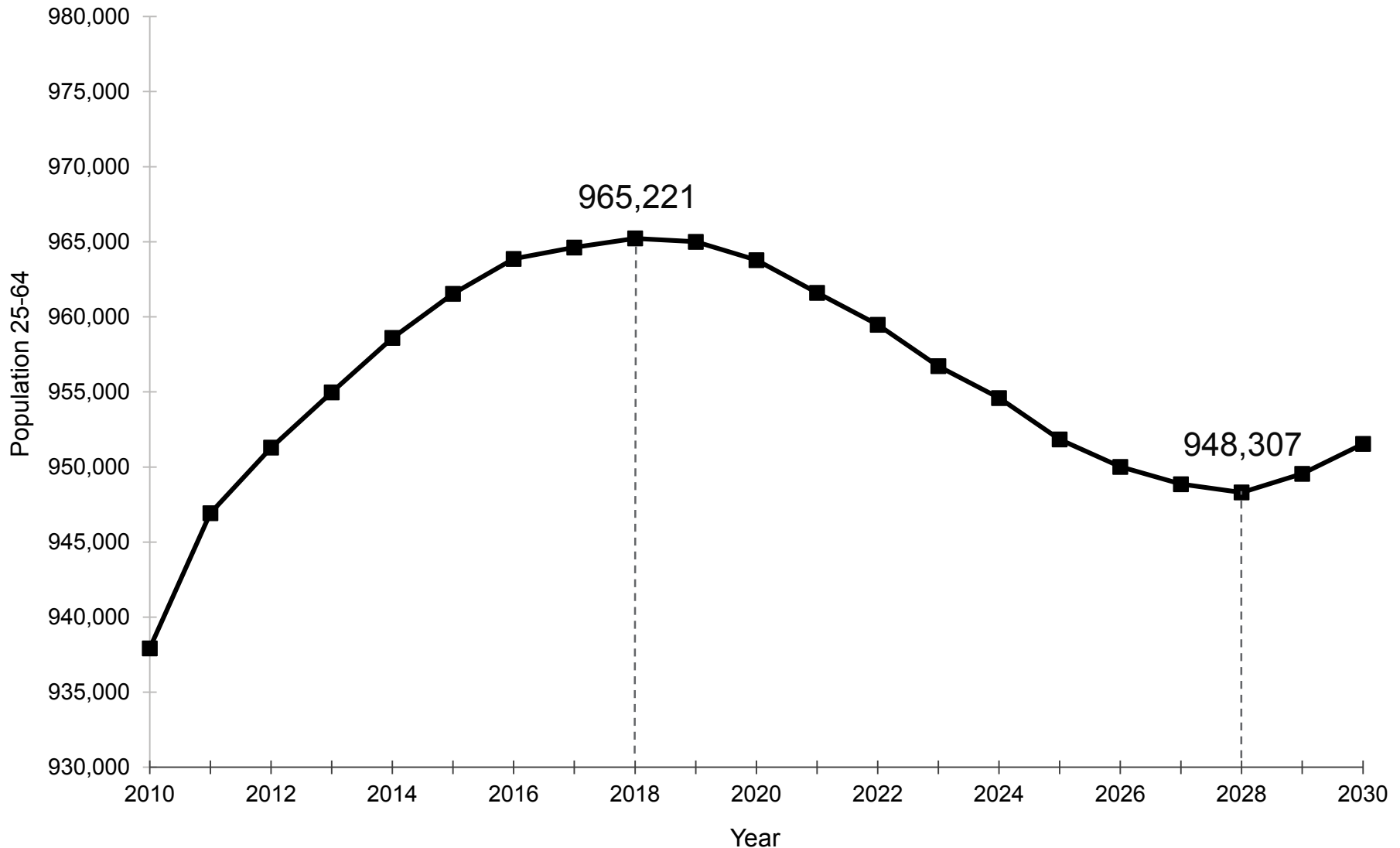
#5

for kids under six with all parents  
in the labor force – 72%



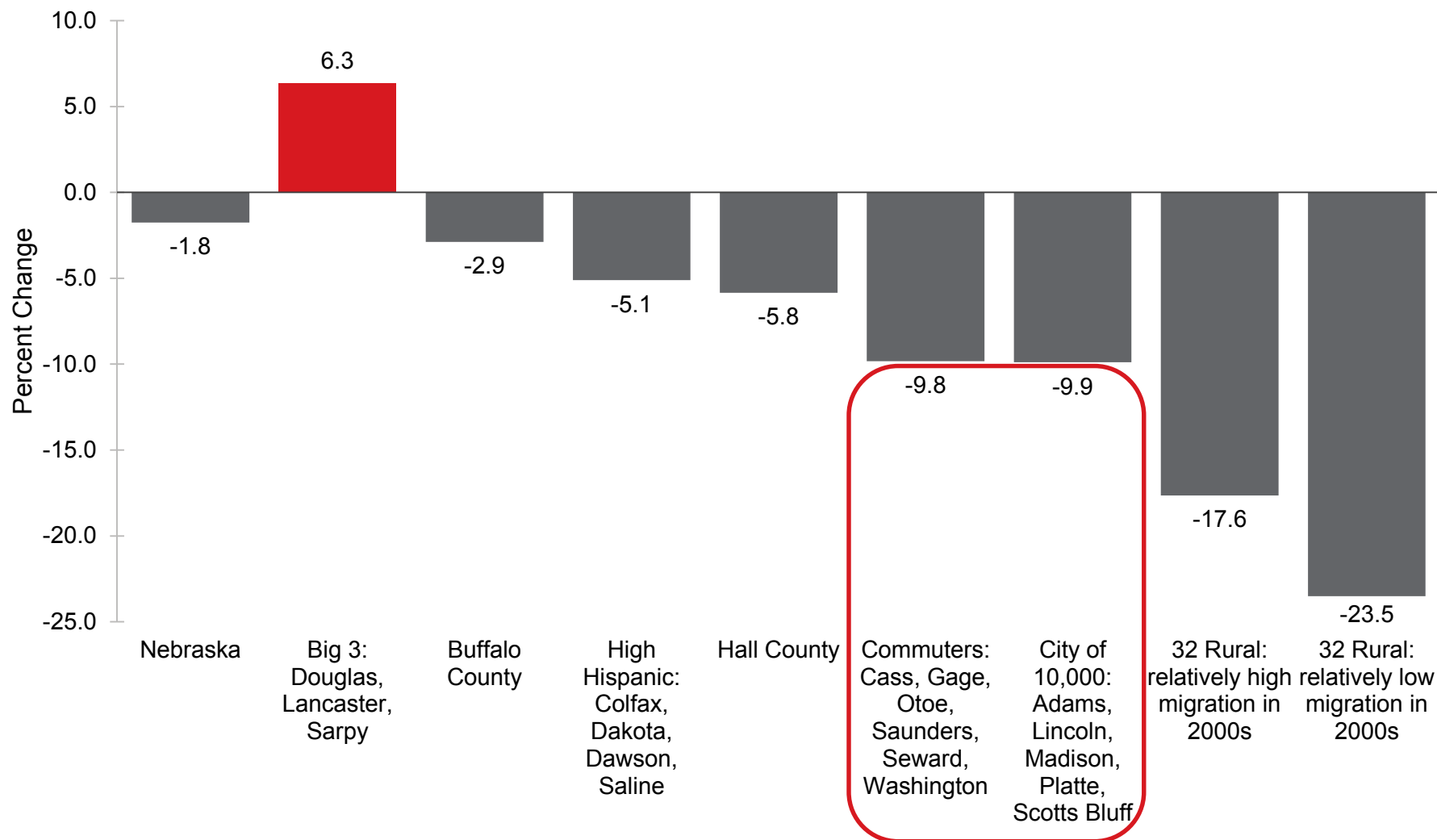
# The prime age workforce is peaking and will decline for about the next 10 years

*Nebraska projected age 25-64 population 2010 to 2030*



# Nearly all Nebraska counties will have a decline in their prime age workforce

*Projected percent change in age 25-64 population by county or county type 2018 to 2028*



# Annual Retirements

8,000

My estimate of the current number of annual retirements given age and labor force participation rates

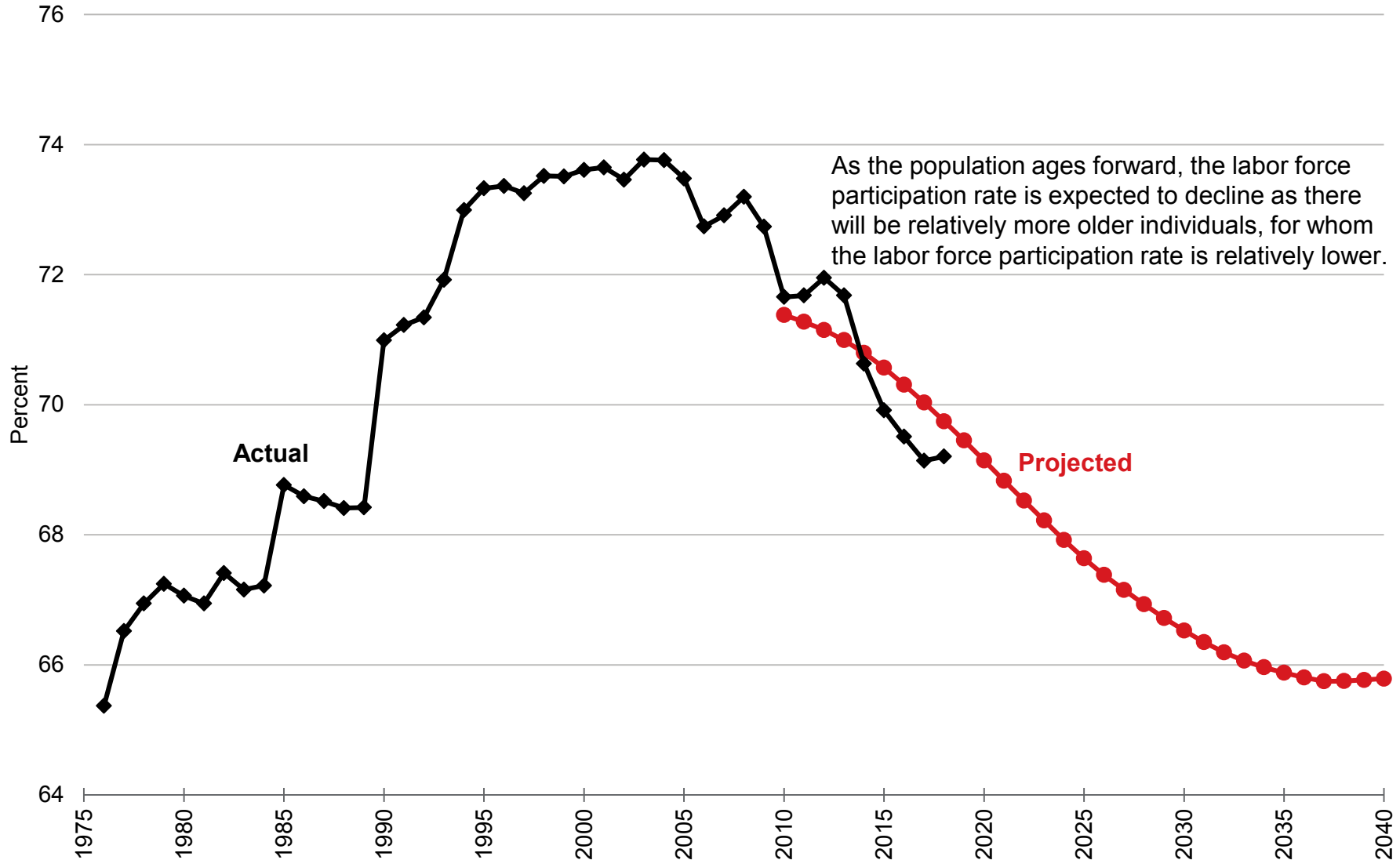
*Up from 4,000 per year around 2010*

2033

Year that annual retirements will fall back to 4,000 per year

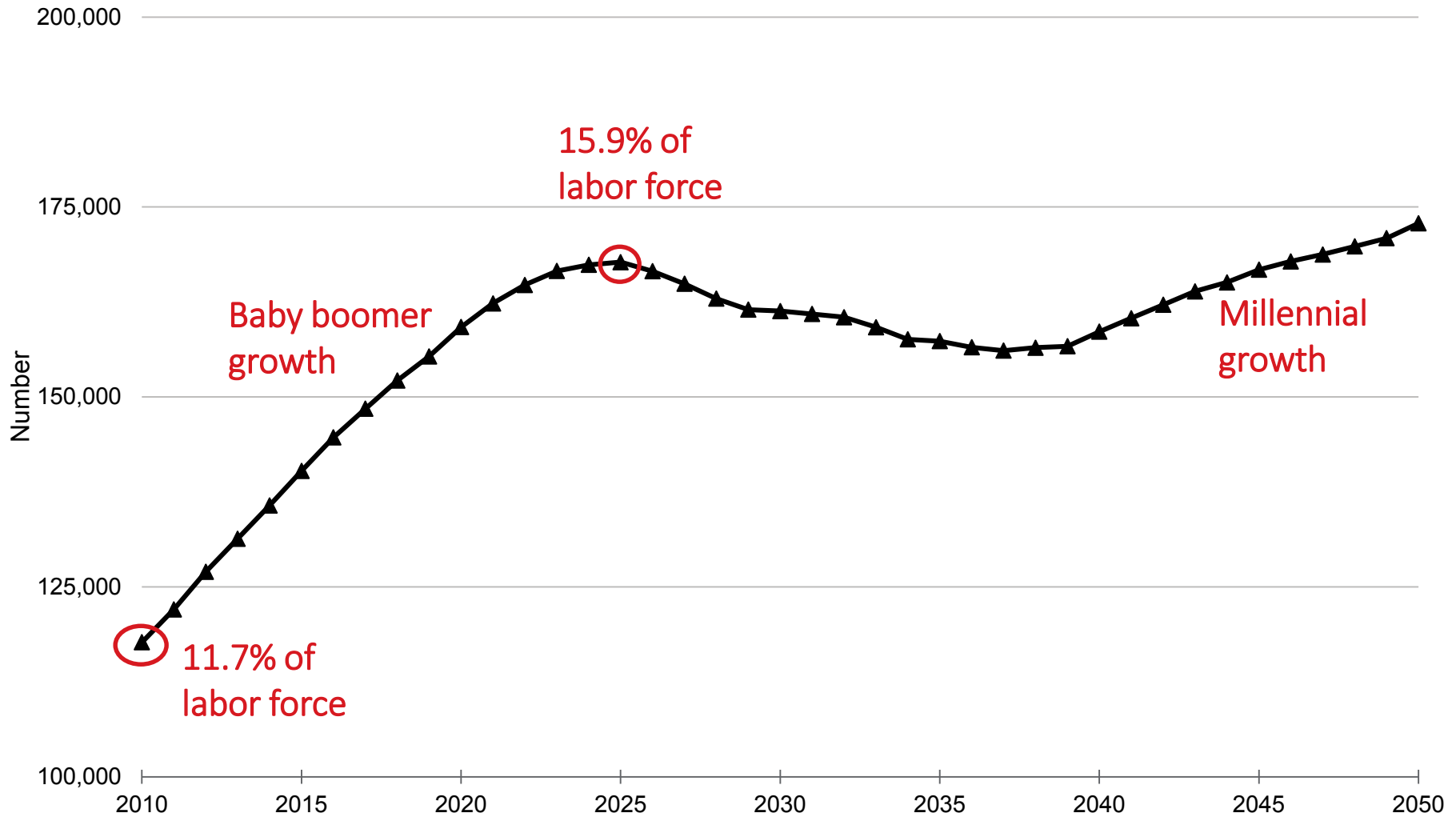
# The decline in Nebraska's labor force participation that started in 2005 is expected to continue

*Nebraska actual and projected labor force participation rate 1976 to 2040*



# A larger number and share of Nebraska's workforce will be relatively older

*Projected number of Nebraskans age 60+ in the labor force*



# The End Comments, Q & A



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