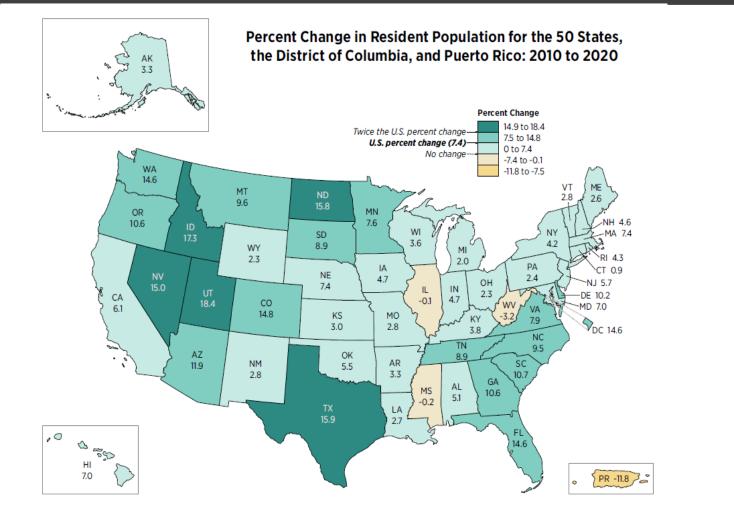
## MINNESOTA STATE DEMOGRAPHIC CENTER DEPARTMENT OF ADMINISTRATION

#### Minnesota's Demographic and Census Overview for 2020 Redistricting

Susan Brower, Minnesota State Demographer August 18, 2021

## Minnesota grew by 7.6% between 2010 and 2020

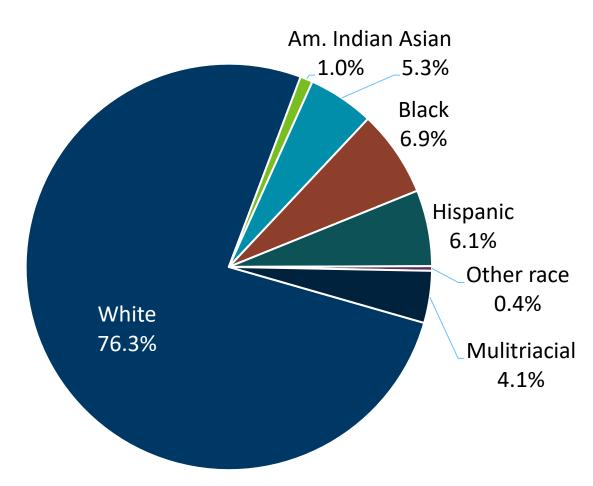


Minnesota's April 1, 2020 Population 5,706,494

## Population growth fully attributable to BIPOC groups

Population Change by Major Race Group	s, 2010-2020		
	2010	2020	Change 2010-2010
Total population	5,303,925	5,706,494	402,569
White non-Hispanic	4,405,142	4,353,880	(51,262)
American Indian non-Hispanic	55,421	57,046	1,625
Asian/Pacific Islander non-Hispanic	214,856	300,081	85,225
Black/African American non-Hispanic	269,141	392,850	123,709
Hispanic/Latino (any race)	250,258	345,640	95,382
Other race non-Hispanic	5,947	20,963	15,016
Two or more races non-Hispanic	103,160	236,034	132,874

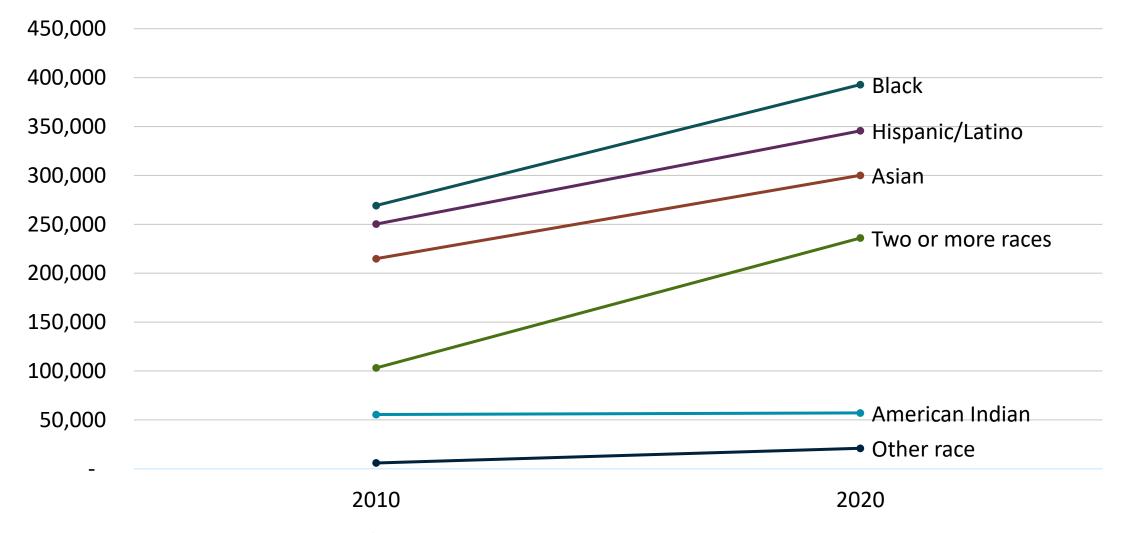
## Minnesota residents belonging to BIPOC race groups are a growing share of the population



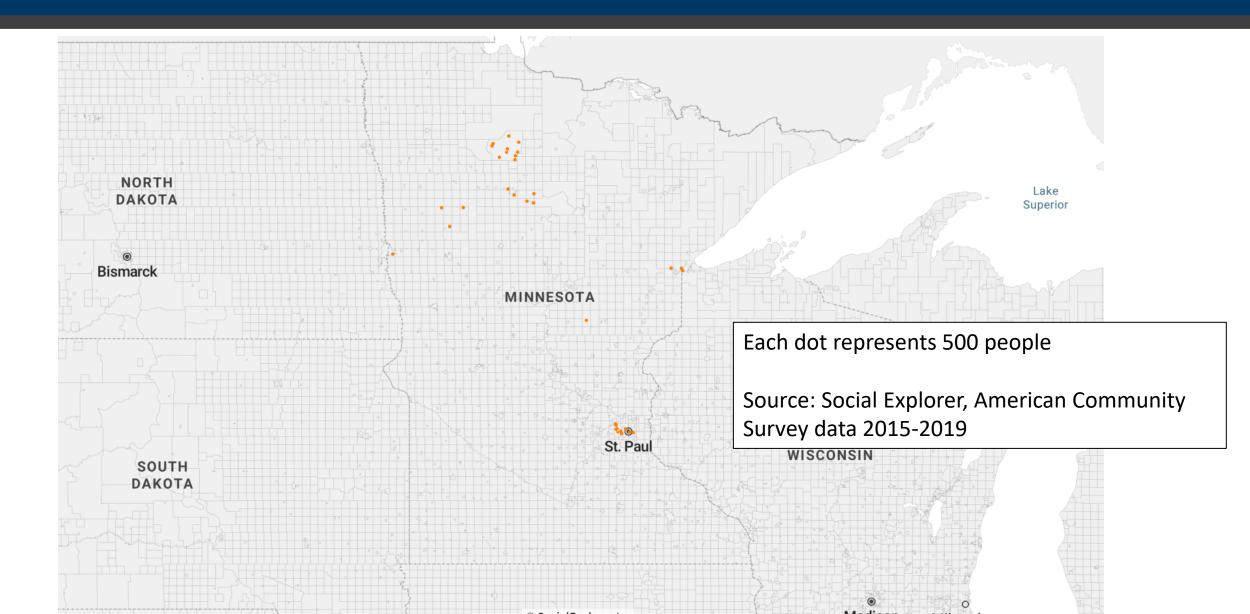
- White non-Hispanic population declined by 51,000 residents
- BIPOC populations grew by 454,000 jointly, now making up 23.7% of the state's population

#### Source: U.S. Census Bureau, 2020 Census

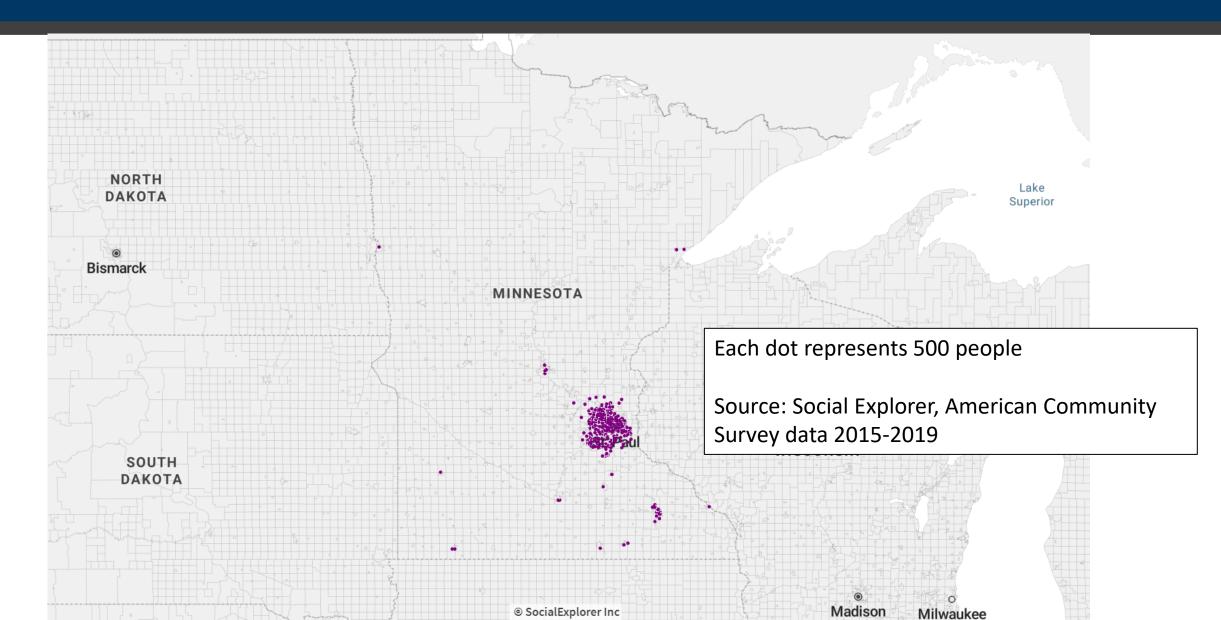
## Growth of BIPOC race groups in Minnesota



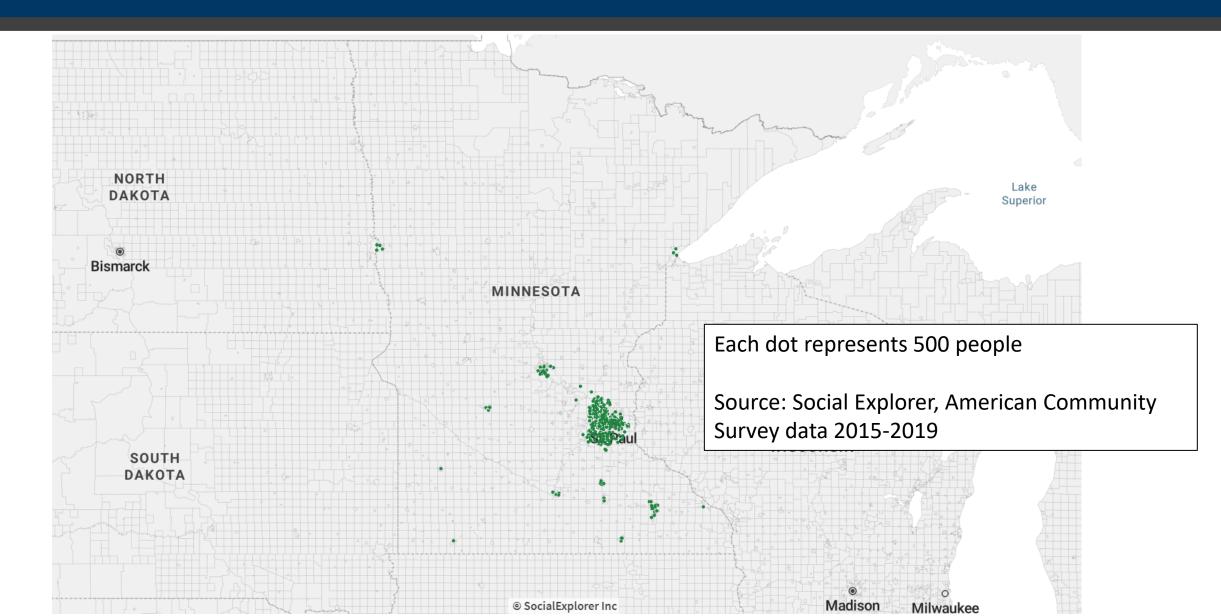
## American Indian Population, 2015-2019



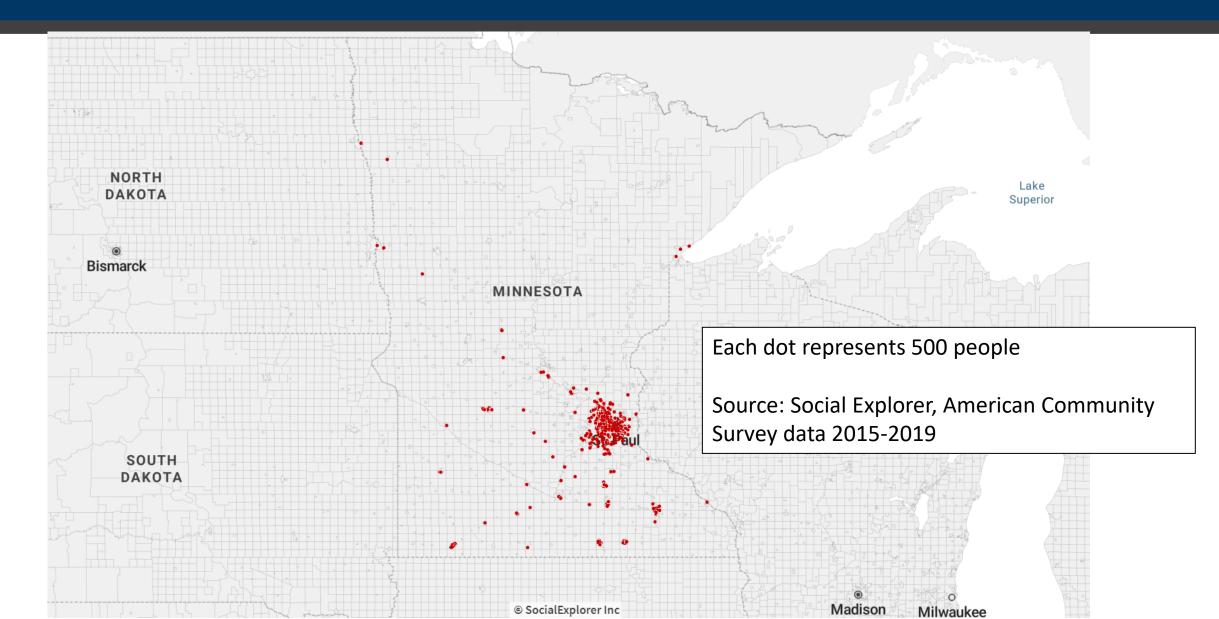
## Asian Population, 2015-2019



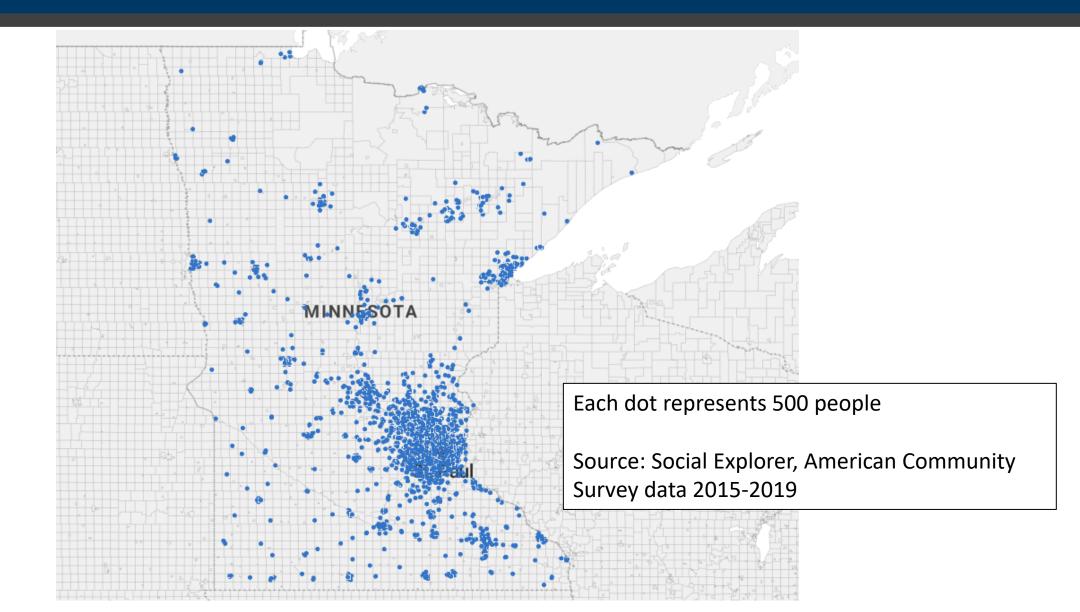
## Black/African-American Population, 2015-2019

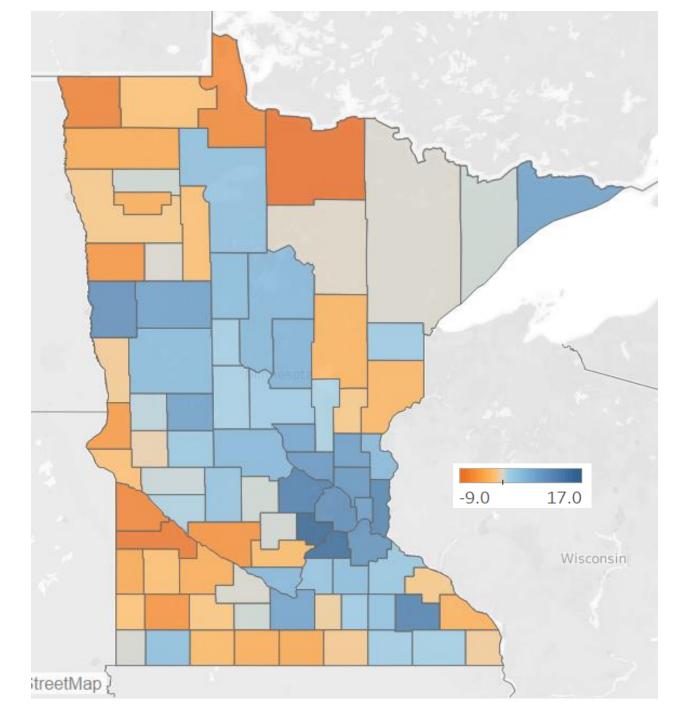


## Hispanic/Latino Population, 2015-2019



## White non-Hispanic Population, 2015-2019





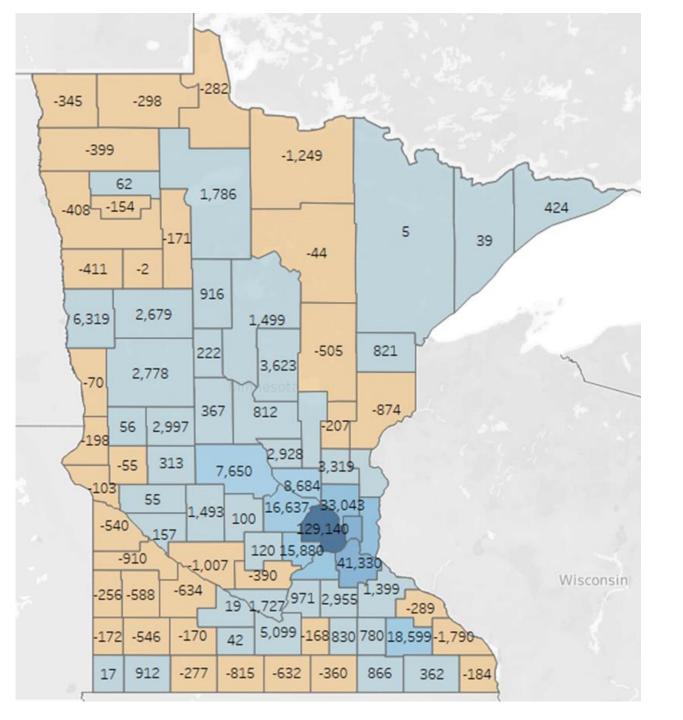
## Percent Change, Total Population, 2010-2020

#### Largest Gains (Percentage)

Rank	County	Numeric change	Percentage Change
1	Carver	15,880	17.4%
2	Scott	21,000	16.2%
3	Wright	16,637	13.3%
4	Olmsted	18,599	12.9%
5	Washington	29,432	12.4%

#### Largest Losses (Percentage)

82	Renville	(1,007)	-6.4%
83	Lake of the Woods	(282)	-7.0%
84	Lac qui Parle	(540)	-7.4%
85	Kittson	(345)	-7.6%
86	Yellow Medicine	(910)	-8.7%
87	Koochiching	(1,249)	-9.4%



### Numeric Change, Total Population, 2010-2020

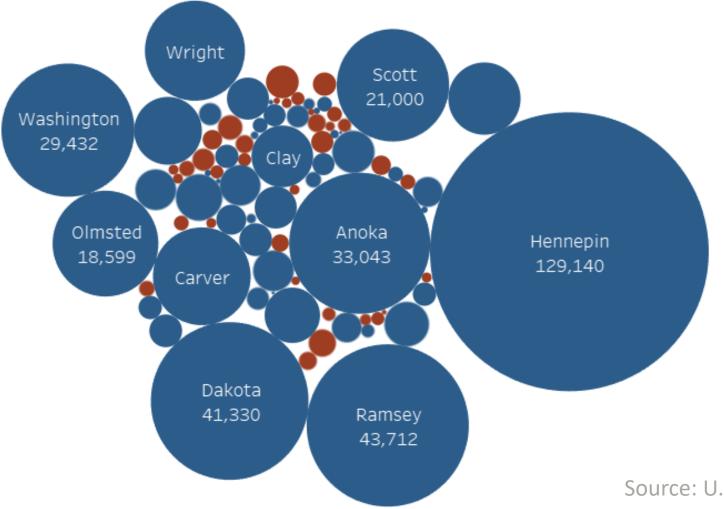
#### Largest Gains (Numeric)

Rank	County	Numeric change	Percentage Change
1	Hennepin	129,140	11.2%
2	Ramsey	43,712	8.6%
3	Dakota	41,330	10.4%
4	Anoka	33,043	10.0%
5	Washington	29,432	12.4%

#### Largest Losses (Numeric)

83	Pine	(874)	-2.9%
84	Yellow Medicine	(910)	-8.7%
85	Renville	(1,007)	-6.4%
86	Koochiching	(1,249)	-9.4%
87	Winona	(1,790)	-3.5%

## Population change by county (numeric), 2010-2020

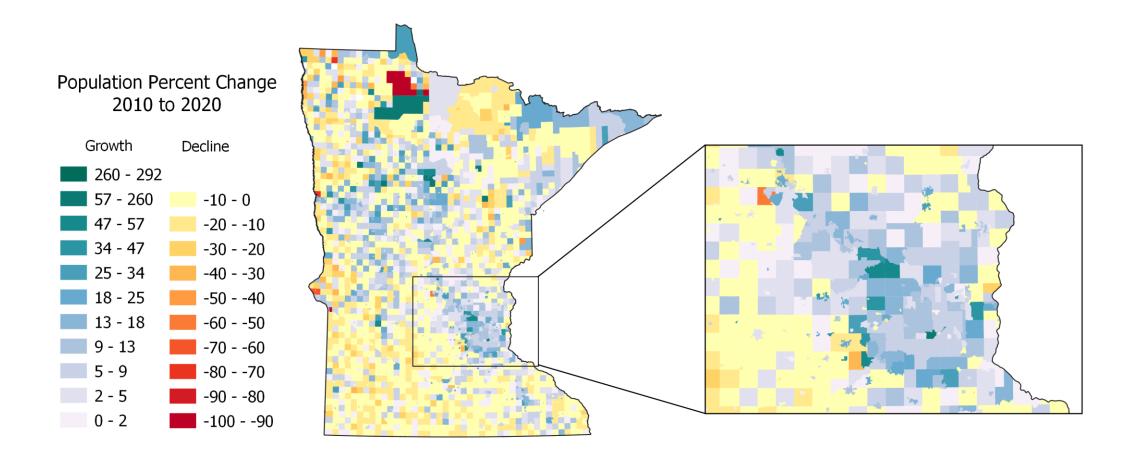


- 51 counties gained population.
- 36 counties lost population.
- The 7-county Twin Cities metro added 313,537 people, 78% of the state's growth.

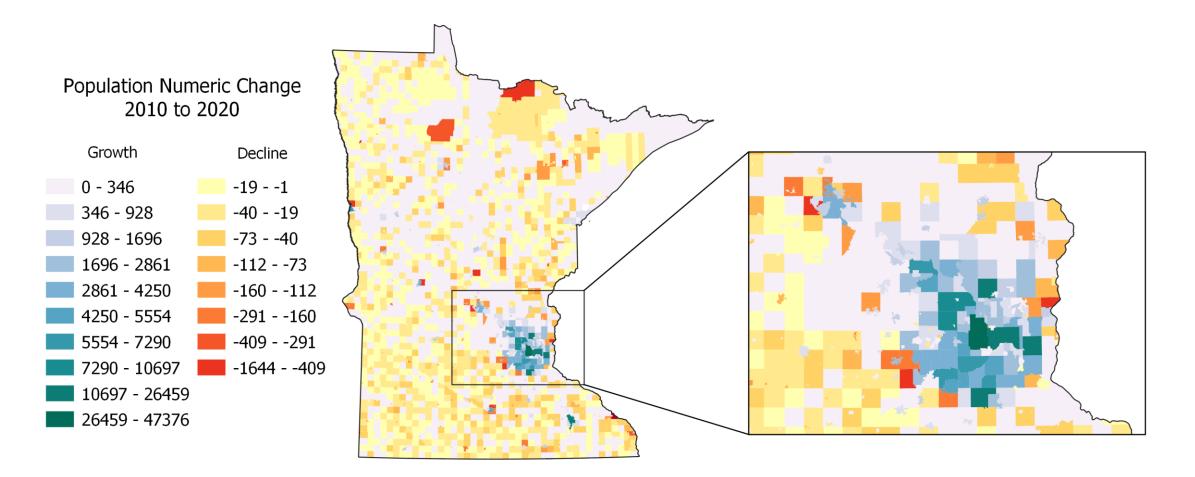
Rank	City	Population added 2010-2020
1	Minneapolis	47,376
2	St. Paul	26,459
3	Rochester	14,626
4	Lakeville	13,536
5	Woodbury	13,141
6	Blaine	13,036
7	Brooklyn Park	10,697
8	Plymouth	10,450
9	Maple Grove	8,686
10	Apple Valley	7,290
11	Bloomington	7,094
12	Shakopee	6,622
13	Moorhead	6,440
14	Otsego	6,395
15	Savage	5,554
16	Edina	5,553
17	Mankato	5,179
18	Prior Lake	4,821
19	St. Louis Park	4,760
20	Rogers	4,698

## Minnesota's fastest growing cities, 2010-2020

## Change in Total Population by City and Township (Percent), 2010-2020

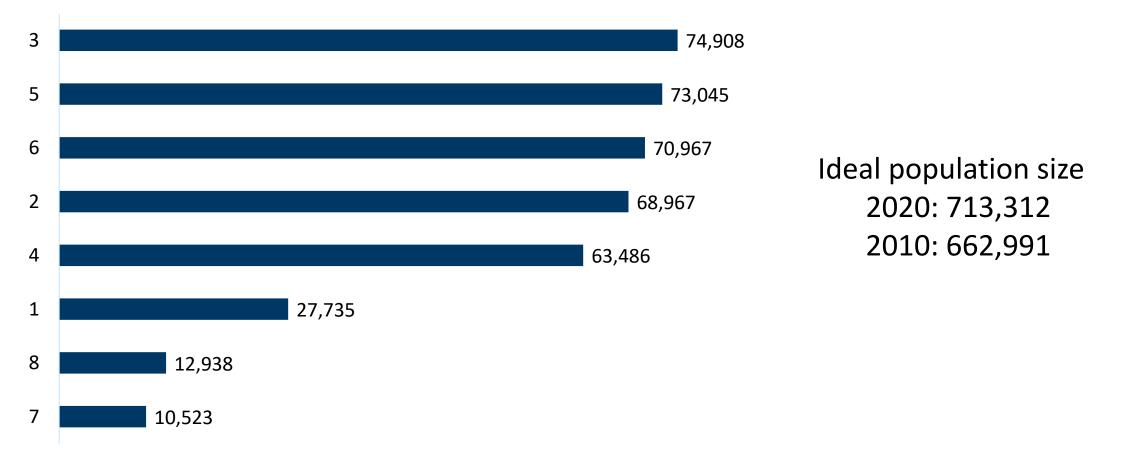


## Change in Total Population by City and Township (Numeric), 2010-2020

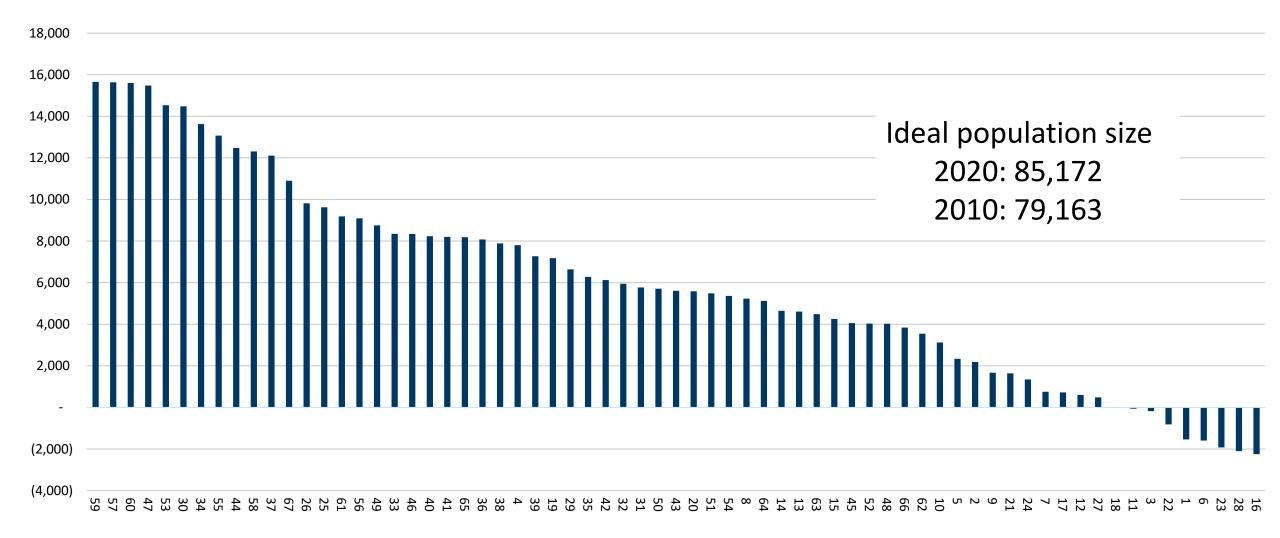


## Growth in Minnesota's U.S. Congressional Districts

Population Change by Congressional District, 2010-2020



### Change in State Senate Districts, 2010-2020



## What is Differential Privacy?

- A new method the U.S. Census Bureau has used in the 2020 census data to protect the privacy of individual respondents.
- The U.S. Census Bureau has had a longstanding requirement to ensure that the data from individuals and individual households remains confidential.
- With the vast amounts of data available and greater computing power available to more people, the Census Bureau now believes that individuals' characteristics (race, age, location, etc.) provide enough of a re-identification risk that they need to be protected.
- Differential Privacy injects "noise"—or random people—into the data so that real information about an individual or household cannot be discerned through database reconstruction and linkage attacks.

## What Data Are Affected?

- <u>All</u> published data directly from or derived from the 2020 Census will have differential privacy applied except for a select few items that will remain the same as the actual 2020 Census count.
- The items that are NOT affected by DP are:
  - State Total populations (required for apportionment)
  - Block level housing unit counts
  - Block level group quarters unit counts by type

## What Data Are Affected? (Continued)

- Variables that will have noise injected:
  - All race and ethnicity
  - Over/under 18 years of age
  - Location (block)
  - Status of housing units (occupied/vacant)

# Impact of Differential Privacy on Congressional Districts (2010)

		Total pop	ulation		White non-Hispanic				Black/African-American non-Hispanic			
Congressional	Summary File		Numeric	Percent	Summary File		Numeric	Percent	Summary File		Numeric	Percent
District	(2010)	DP (2010)	Difference	Difference	(2010)	DP (2010)	Difference	Difference	(2010)	DP (2010)	Difference	Difference
1	644,787	644,782	-5	0.0%	573,596	573,468	-128	0.0%	13,642	13,607	-35	-0.3%
2	732,515	732,687	172	0.0%	626,655	626,757	102	0.0%	23,650	23,704	54	0.2%
3	650,185	650,212	27	0.0%	512,639	512,584	-55	0.0%	50,236	50,308	72	0.1%
4	614,624	614,539	-85	0.0%	424,833	424,717	-116	0.0%	59,514	59,563	49	0.1%
5	616,482	616,431	-51	0.0%	402,523	402,449	-74	0.0%	93,434	93,482	48	0.1%
6	759,478	759,432	-46	0.0%	685,794	685,845	51	0.0%	18,221	18,229	8	0.0%
7	625,512	625,486	-26	0.0%	565 <i>,</i> 870	565,682	-188	0.0%	4,701	4,600	-101	-2.1%
8	660,342	660,356	14	0.0%	613,232	613,636	404	0.1%	5,743	5,647	-96	-1.7%
Minnesota (all)	5,303,925	5,303,925	0	0.0%	4,405,142	4,405,138	-4	0.0%	269,141	269,140	-1	0.0%
		Hispanic/	'Latino		Asian				American Indian			
Congressional	Summary File		Numeric	Percent	Summary File		Numeric	Percent	Summary File		Numeric	Percent
District	(2010)	DP (2010)	Difference	Difference	(2010)	DP (2010)	Difference	Difference	(2010)	DP (2010)	Difference	Difference
1	33,517	33,756	239	0.7%	14,325	14,297	-28	-0.2%	1,438	1,387	-51	-3.5%
2	34,803	34,862	59	0.2%	29,412	29,411	-1	0.0%	3,155	3,180	25	0.8%
3	25,801	25,915	114	0.4%	43 <i>,</i> 855	43,862	7	0.0%	2,043	2,034	-9	-0.4%
4	46,505	46,454	-51	-0.1%	62,836	62,911	75	0.1%	3,594	3,559	-35	-1.0%
5	58,639	58,583	-56	-0.1%	32,477	32,538	61	0.2%	7,766	7,731	-35	-0.5%
6	18,361	18,297	-64	-0.3%	21,542	21,532	-10	0.0%	2,988	3,049	61	2.0%
7	24,063	24,130	67	0.3%	4,761	4,725	-36	-0.8%	17,064	17,086	22	0.1%
8	8,569	8,278	-291	-3.4%	3,788	3,748	-40	-1.1%	17,373	17,394	21	0.1%
Minnesota (all)	250,258	250,275	17	0.0%	212,996	213,024	28	0.0%	55,421	55,420	-1	0.0%

Source: NHGIS Privacy Protected Microdata File, University of Minnesota, from U.S. Census Bureau data

## Impact of Differential Privacy on House Legislative Districts (2010)

	Total population				Black/African- American non- Hispanic		Hispanic/Latino		Asian non- Hispanic		American Indian non-Hispanic	
	# Dif.	% Dif.	# Dif.	% Dif.	# Dif.	% Dif.	# Dif.	% Dif.	# Dif.	% Dif.	# Dif.	% Dif.
Largest Positive Difference	120	0.3%	96	0.3%	52	12.2%	94	6.1%	92	15.3%	34	20.3%
Largest Negative Difference	-93	-0.3%	-124	-0.5%	-55	-23.3%	-106	-15.7%	-53	-30.6%	-27	-27.6%
MAPE		0.0%		0.0%		-1.2%		-0.4%		-1.3%		-0.4%

Source: NHGIS Privacy Protected Microdata File, University of Minnesota, from U.S. Census Bureau data

## A note about census blocks

- Census blocks are the basic geographic units from which political districts and other geographies are built.
- Blocks range in size from 0 to 3,011 people.
- ~260,000 blocks in Minnesota.
- The accuracy of census blocks that have been made differentially private is very, very low.

## Examples of DP-protected census blocks

	Ramsey Co. (	Census Tract 40	)7.05 <i>,</i> Block		Hennepin Co. Census Tract 1048, Bl				
		1008				4000			
		Differentially			-	Differentially			
	File	Private Data	Difference		File	Private Data	Difference		
White NH	34	39	5	White NH	79	76	-3		
Black NH	8	2	-6	Black NH	2,644	2,640	-4		
Hispanic/Latino	10	0	-10	Hispanic/Latino	93	98	5		
Asian NH	0	5	5	Asian NH	183	185	2		
Am. Indian NH	3	0	-3	Am. Indian NH	3	5	2		
Pacific Islander NH	0	0	0	Pacific Islander NH	0	0	0		
Other Race NH	0	0	0	Other Race NH	0	1	1		
Two or more races NH	0	2	2	Two or more races NH	9	38	29		
Total	55	48	-7	Total	3,011	3,043	32		



Thank you

Email: susan.brower@state.mn.us

General questions can be directed to: demography.helpline@state.mn.us Website: mn.gov/demography