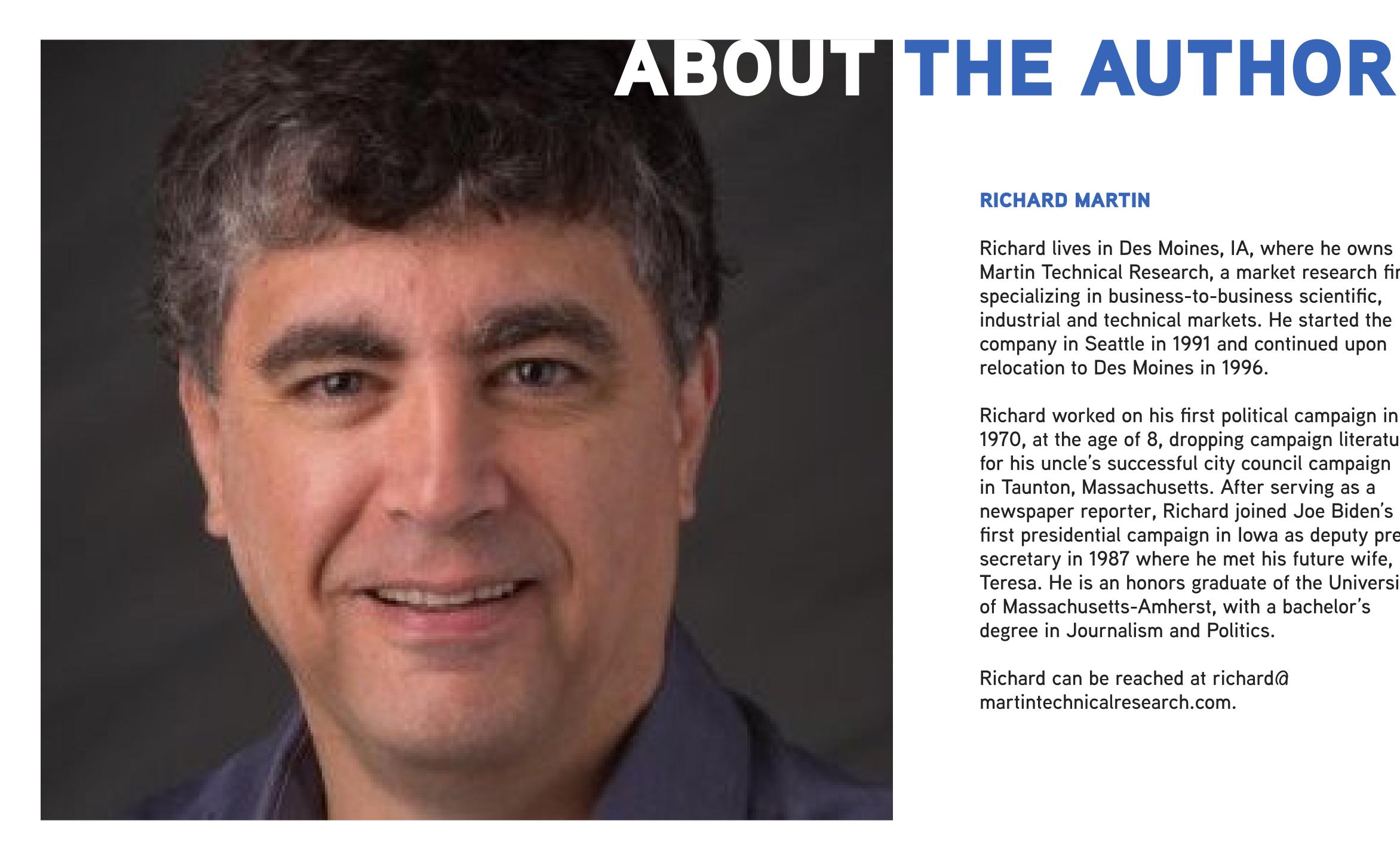


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Richard worked on his first political campaign in 1970, at the age of 8, dropping campaign literature for his uncle's successful city council campaign in Taunton, Massachusetts. After serving as a newspaper reporter, Richard joined Joe Biden's first presidential campaign in lowa as deputy press secretary in 1987 where he met his future wife, Teresa. He is an honors graduate of the University of Massachusetts-Amherst, with a bachelor's degree in Journalism and Politics.

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IT IS HARD TO WIN IN THE INDUSTRIAL HEARTLAND WHEN DEMOCRATS ARE HEMORRHAGING THESE VOTERS

Conventional wisdom about American politics is that there are only three kinds of political turf that matter: the big cities, which are Democratic; rural America, which is Republican; and the suburbs, which is where most of the swing voters are, and therefore where the parties should spend most of their time courting.

There is of course a lot of truth behind that conventional wisdom, especially in a polarized America where party loyalties are getting more entrenched in major swaths of the public. But that turf analysis leaves out a big and profoundly important part of the American electorate: manufacturing-heavy working-class towns that are not part of huge urban areas, but are not farming-dominated rural counties either. These "factory town" counties can be split into two types -- midsized ones with cities more than 35,000 in population that are not attached to the big urban areas, and smaller ones that are just as reliant on manufacturing, but do not have any cities with at least 35,000 people. **These counties contain 40% of voters.** 

The report being released today by American Family Voices and 21st

Century Democrats documents in county-by-county detail how the tripartite conventional wisdom completely misses the biggest electoral earthquake of the last decade. We looked at 853 counties in 10 different states, and found that the Democratic vote losses in these counties from 2012 to 2020 swamped by a 2:1 margin the gains Democrats made in big cities and big city suburbs. If you add in additional losses in rural counties with little manufacturing base, Democrats lost almost 2 million in vote margin in these 10 states alone.

The focal states of this report are PA, OH, MI, IN, IL, WI, IA, MN, MO, and upstate NY. They are in the traditional industrial heartland: eight states in the Midwest (six longtime presidential "battleground" states along with heavily Democratic Illinois and heavily Republican Indiana), plus Pennsylvania, along with 48 counties in upstate New York -- the part of the United States most impacted by deindustrialization. This part of the country swung heavily to Obama in 2008, not quite so decisively in 2012, and then went enough toward Trump to give him his electoral college victory in 2016. Joe

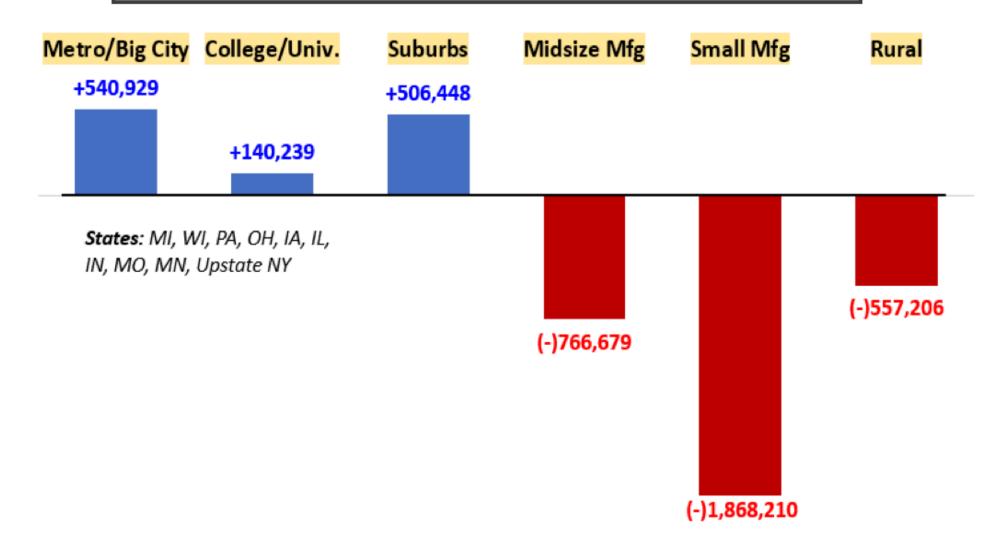
IT IS HARD TO WIN IN THE INDUSTRIAL HEARTLAND WHEN DEMOCRATS ARE HEMORRHAGING THESE VOTERS

Biden won enough of it back in 2020 to allow him the victory, but in spite of Trump's disastrous presidency, it was way too close for comfort.

Voters in these states' cities and suburbs moved significantly toward the Democrats, and this movement allowed Biden's victory. The Democratic presidential candidates picked up almost 541,000 votes in the biggest cities in the states/counties studied, and more than 506,000 votes in the suburban counties of those big cities. They also added to their vote margin in the smaller towns dominated by big colleges and universities, picking up 140,000 plus from their 2012 margins. But outside the biggest metro areas and those college towns, Democrats lost a massive amount of ground -- and the more those local economies were tied to manufacturing, the more ground they lost.

A note here about the more agriculturally-oriented counties as compared to the big cities and their suburbs. Democrats lost a lot of ground in those rural counties: about 557,000 votes from 2012 to

# 10-State Change in Democratic Vote Margin By County Type, 2012-20



IT IS HARD TO WIN IN THE INDUSTRIAL HEARTLAND WHEN DEMOCRATS ARE HEMORRHAGING THESE VOTERS

2020. But those losses were easily overcome -- to the tune of about 2 to 1 -- by the increased margins in big cities and big city suburbs. The central story our report tells is that the hit we took in small and midsized manufacturing counties was the biggest reason Trump won the presidency in 2016 and almost did it again in 2020.

In midsized, working-class towns in these states, Democrats lost major ground. In 2012, these were the most closely contested kinds of counties, and Obama won them overall by a close net margin of roughly 106,000 votes. While a net win in these kinds of counties was crucial for Obama's victory in the battleground states we studied, Democratic performance in the following two elections fell off sharply. Even though Biden did slightly better in these counties than Hillary Clinton did, the Democratic margin change in 2020 went deeply underwater: we lost these kinds of counties by almost 661,000 votes, almost 767,000 votes worse than in 2012.

This report looks at the presidential voting patterns in two different kinds of rural counties: rural counties with a more agriculturally

based economy, and rural counties with a relatively strong manufacturing economy. The Democratic presidential candidates suffered serious losses in both, but the losses were worse in the counties with a bigger manufacturing presence. Our research found that rural counties with a higher reliance on manufacturing jobs 20 years ago shifted harder to the right from 2012-2020 than those with a lower reliance on manufacturing jobs. In the small manufacturing counties we studied, Democrats had a net loss in their voting margin from 2012 to 2020 of more than 1,868,000 votes.

#### The importance of these manufacturing counties

In spite of the inattention they receive from candidates, these factory town counties are not a small part of the electorate. In eight of the ten states we studied, and all of the battleground states, they represent over 40% of the electorate. In four of the ten, they represent well over half of the electorate, 57% or more. In Michigan, they represent 50% of the electorate, and in Minnesota, 49%.

IT IS HARD TO WIN IN THE INDUSTRIAL HEARTLAND WHEN DEMOCRATS ARE HEMORRHAGING THESE VOTERS

The bottom line is that while the Democratic margin in big cities and big city suburbs grew by a little over a million and a half votes in these ten states since 2012 (about 1,550,000) -- more than enough to overcome the 557,000 losses in farm dominated rural counties -- our losses in small and midsized manufacturing counties overwhelmed those gains, with combined losses of about 2,635,000 votes.

The reasons Donald Trump made these kinds of gains in these factory towns are varied and complex, and should no doubt be heavily debated within the Democratic Party for years to come. This report points to the key places we should be looking.

People who run political campaigns must correctly answer key questions related to the Who, What, When, Where, Why and How of the venture. This is true for any complex human endeavor. Political minds tend to immediately focus on Who (the candidate), Why (the case for the candidate), What (policy positions), and How (campaign strategy and tactics). This study says let's try something a little

different. Let's first focus on Where – the small and midsize Factory Town counties – to figure out how to build a lasting and permanent Democratic majority. MAGA voters are not the target.

# What explains this Democratic vote decline in manufacturing counties

To explain the Democratic vote decline, we explored a number of factors, starting with the loss of manufacturing jobs over a 20-year period (2001-2020). In general, in both the small and midsized counties we studied, the greater the dependence on manufacturing 20 years ago, the harder the loss of manufacturing was felt, which we found was linked to a larger percentage vote shift to the GOP.

In addition to the presidential voting patterns we studied, we looked at economic, health outcomes, and demographic data. Counties with bigger manufacturing job losses shifted more dramatically to Trump. Counties with manufacturing job losses AND healthcare declines shifted even more to the GOP: 309 counties with manufacturing job

IT IS HARD TO WIN IN THE INDUSTRIAL HEARTLAND WHEN DEMOCRATS ARE HEMORRHAGING THESE VOTERS

losses and health declines shifted nearly a million votes to the GOP from 2012-20 – nearly 50% of the GOP's total gain. Of these, 284, or 92%, were midsize and small manufacturing counties.

We also studied declining union rates in these states, finding that the states we studied lost 429,000 union members from 2001-2020, a whopping 93% of the total loss of union members in the entire country. We also found that in some states, the loss of union members in just 2010 alone vastly exceeded Biden's margin of victory, meaning he would have won easier had the GOP not intentionally undermined unions.

There is a big debate inside the Democratic Party on whether or not we are renting a lot of the higher income suburban voters we won over to our side in the 2016, 2018, and 2020 elections, or whether they will stay with our candidates in the years to come. Many argue that if Donald Trump is not on the ballot, it will be hard both to motivate Democratic marginal voters to turn out, and to keep the suburbanites who voted against Trump on the Democratic side.

But regardless of who is right in that debate, the numbers in this report don't lie: Democrats have been hemorrhaging millions of votes in small and midsized working class counties. We cannot elect Democrats up and down the ballot, let alone protect our governing majorities, if we don't address those losses ASAP, and begin to reverse our fortunes in factory towns.

These trends have been a long time coming, and have multiple and complex factors. Democrats are not going to be able to fix their problems in these counties overnight, and shouldn't expect any easy answers or quick panaceas. But competitive elections are won at the margins. If things continue to get worse for us in small and midsized, working-class counties, we can give up any hope of winning the battleground states of the industrial heartland. If Democrats pay attention to these kinds of places, and figure out policies and political strategies that improve these voters' lives, we can start improving our vote totals in these counties and win a lot more elections.

# INTRODUCTION: -USING ECONOMIC GEOGRAPHY TO ANALYZE VOTING TRENDS

Democrats at all levels are struggling to win working class, "factory town" voters. This trend has accelerated in the presidential elections of 2016 and 2020.

To better understand this Democratic vote deficit, we conducted an examination of the presidential vote in 2012, 2016, and 2020 in 10 states in the Upper Midwest and Great Lakes region with significant manufacturing sectors. We explored linkages between shifting partisan support and four key factors:

- 1) manufacturing job losses
- 2) health changes
- 3) declines in unionization rates, and
- 4) the impact of race.

States analyzed include traditional presidential battleground states of Michigan, Wisconsin, Pennsylvania, Ohio, Iowa, Minnesota, Missouri, as well as Illinois, Indiana, and 48 counties in upstate New York.

This methodology views the electorate through the prism of economic geography and counties are sorted into six different types:

- Large Metropolitan Counties
   (19 out of 853 total counties in the 10 states)
- College Counties (16)
- Suburban Counties (44)
- Midsize Manufacturing Counties (85).
   At times referred to as midsize factory towns.
- Small Manufacturing Counties (480).
  At times referred to as small factory towns.
- Rural Counties (209)

We disregard all third-party votes and look only at the head-to-head vote for Democrats and Republicans. To better highlight candidate competitiveness, we focus on net margins in each county, meaning if Democrats lost 50 votes from 2012-20 and the GOP gained 100, then the net margin away from Democrats is minus 150 votes.

#### THE 6 COUNTY SEGMENTS OF OUR ECONOMIC GEOGRAPHY ANALYSIS

## 1. LARGE METROPOLITAN COUNTIES.

Cities with at least 200,000 population, diversified economies, and are usually Democratic strongholds.

## 4. MIDSIZE MANUFACTURING COUNTIES.

Counties in which the percentage of manufacturing jobs in the county is 13% or higher (the U.S. national average is 9.1%). Many of the counties in this analysis are well above 20%. To be classified as "midsize," a county must also have a city of 35,000 within its county limits. Another way to think about this group: midsize factory towns.

#### 2. SUBURBAN COUNTIES.

Includes not only bedroom communities, but counties that border the Large metros with a high concentration of service industry economic activity and a relatively low rate of manufacturing jobs.

# 5. SMALL MANUFACTURING COUNTIES.

Counties with a percentage of manufacturing jobs of 13% or higher, with no cities of 35,000+ population. These counties are frequently mischaracterized as "rural." Another way to think about this group: small factory towns.

#### 3. COLLEGE COUNTIES.

Areas where a large university or liberal arts school is a dominant economic force in the county.

Much of the county's economic vitality is directly or indirectly tied to the school.

#### 6. RURAL COUNTIES.

Lightly populated counties with limited manufacturing activity. Economy is based on agriculture, forestry, mining, fishing or tourism. There is often a tight economic relationship between rural counties and their neighboring manufacturing counties.

# PRESIDENTIAL VOTING TRENDS: BY ECONOMIC GEOGRAPHY, 2012-2020

#### SUMMARY: 2012-20 Presidential Election Results by County Type, 10 "Factory Town" States

MI, WI, PA, OH, IA, IL, IN, MO, MN, Upstate NY

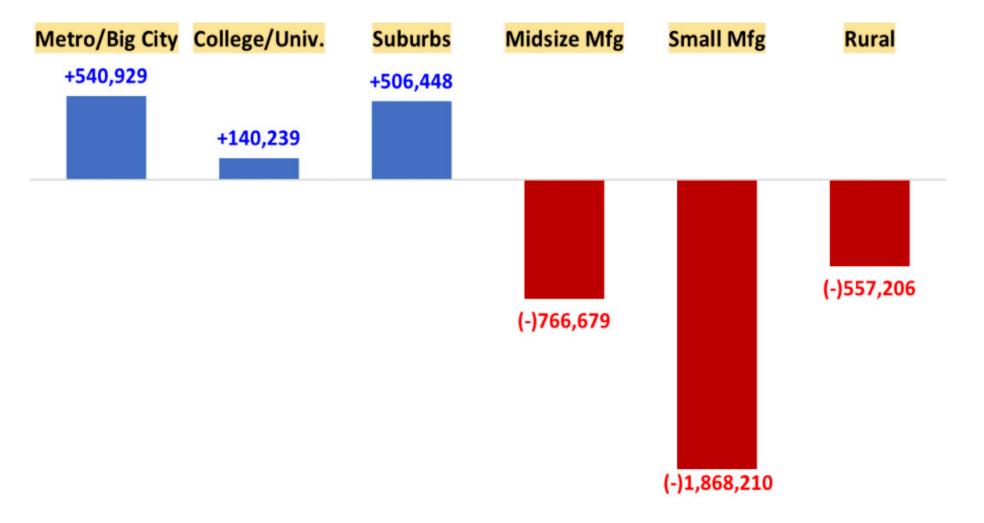
				Counties,	Counties,			% Vote	
		# Counties	# Counties	Dem Vote	Dem Vote	2012 Net Vote:	2020 Net Vote:	Share Chg,	<b>Net Dem Vote</b>
Total/County Type	# Counties	Biden Won	Biden Lost	Share Rose	Share Shrank	Dem vs GOP	Dem vs GOP	2012-20	Chg, 12-20
Metro	19	18	1	13	6	+3,257,866	+3,798,795	1.2%	+540,929
College	16	14	2	12	4	+315,494	+455,733	3.4%	+140,239
Suburbs	44	20	24	29	15	(-) 54,165	+452,283	3.6%	+506,448
Midsize Mfg	85	26	59	15	70	+105,848	(-) 660,831	-4.4%	(-) 766,679
Small Mfg	480	11	469	10	470	(-) 1,288,375	(-) 3,156,585	-8.6%	(-) 1,868,210
Rural	209	7	202	7	202	(-) 370,364	(-) 927,570	-8.6%	(-) 557,206
Total, All 10 States	853	96	757	86	767	+1,966,304	(-) 38,175	-2.8%	(-) 2,004,479

KEY: "Dem vote share" change is from 2012-2020; Blue means Dems won; Red means GOP won. + or (-) = net Dem vote

#### Key findings overall

- A 2 million vote shift away from Democrats: In our 10 states, Obama in 2012 had a net vote margin of +1,966,304 votes over GOP nominee Mitt Romney. Eight years later, Biden's net margin in these 10 states was a negative 38,175 votes. Combined, that's a staggering net shift of -2,004,479 votes away from the Democratic nominee in these 10 states.
- A flip of partisan support in midsize manufacturing counties: In our 10 states, Obama won midsize manufacturing counties by +105,848 votes in 2012. In 2016, Hillary Clinton lost them by 814,690 votes. While Biden improved on Clinton's performance in these midsize factory towns, Trump still had a net margin of +660,831 votes in these counties, a shift of -4.4 percentage points away from Democrats from 2012.
- Huge growth by the GOP in small manufacturing counties: In factory town counties during this time period, Republican net margins skyrocketed, especially in small Factory Town counties. In this segment, the GOP gained a net +1,868,210 votes in 2020 compared to 2012 a gain of +8.6 percentage points. Despite his working-class background, Biden won only 11 of these 480 counties. In contrast, GOP vote share grew in 470 of these 480 small manufacturing counties.





#### Key findings overall, cont'd

- Democratic improvement in metro and college counties: In metro counties, Biden slightly exceeded Obama's net 2012 margin by +1.2%, gaining an additional 540,929 votes. Biden did even better in college counties, improving his vote share by +3.4%. His gain of +140,239 net votes in college counties is a 44% increase in votes over Obama's 2012 performance.
- Biden attracted more suburban county voters, but are Democrats just renting them for now? In 2020, Biden gained a net of +506,448 suburban county voters from 2012. But is 2020 a high-water mark for Democrats with suburban county voters, due to high enthusiasm (and anxiety) for getting Trump out of the White House? It's uncertain if moderate suburban Republicans will continue to vote for Democrats when Trump is not on the ballot. While many suburban voters chose Biden in 2020, many of these same voters did not vote for down-ballot Democrats. This question is critical for maintaining and expanding Democratic majorities in 2022.
- Rural voters continue exodus to GOP: The GOP increased its margin with rural county voters by +557,206 from 2012 to 2020, meaning Democratic performance has dropped by -8.6 percentage points over this same time period.

#### Dem. Performance by County Type, 2012-20

	% of	Dem. Vo	te Share
County Type	Electorate	2012	2020
Metro	26%	67%	68%
Small Mfg	24%	42%	34%
Midsize Mfg	22%	51%	46%
Suburbs	17%	50%	53%
Rural	7%	43%	34%
College	4%	62%	65%

#### The electoral importance of manufacturing counties

The table above shows the percentage of the total electorate each county type represents in our combined 10 states, along with the Democratic share of the vote in 2012 and 2020. At 24%, small manufacturing counties represent the second largest segment of the electorate, followed closely by midsize manufacturing counties at 22% of the electorate.

But Democrats are winning far less than 50% of the vote in these two segments. In fact, they are barely winning one-third of the vote in small factory town counties, making it increasingly difficult to remain competitive in statewide races, and even harder to win in districts that are overloaded with these types of factory town counties due to GOP gerrymandering.

Though metro counties are the largest share of the electorate, in reality, that number is inflated in the 10-state average due to the sheer size of Cook County, IL (Chicago) being included in the metro segment.

The table at right splits out the manufacturing county share of the electorate on a state-by-state basis. In five of the 10 states – Iowa, Wisconsin, Indiana, Ohio, and Michigan – small and midsize factory town counties comprise a 50% or larger segment of the electorate.

In fact, in eight of the 10 states, these factory towns make up more than 42% of the total electorate. Combined, these eight states elect 16 U.S. Senators and 87 Members of Congress, lending even greater urgency for Democrats to understand how to be more competitive with factory town voters in these states.

# Manufacturing County Share of Total State Vote, 2020

<b>ALL 10 States</b>	46%
Illinois	22%
Upstate NY	36%
Pennsylvania	42%
Missouri	45%
Minnesota	49%
Michigan	50%
Ohio	57%
Indiana	57%
Wisconsin	58%
Iowa	65%

#### Measuring the intensity of partisan vote shifts

To measure the intensity of partisan voting shifts from 2012-20, we created a uniform growth scale for both Democratic and GOP gains in performance, as shown below:

Slight growth	0.5% to 2.499% increase in votes from 2012-20
<b>Moderate growth</b>	2.5% to 7.499%
Strong growth	7.5% to 15%
Extreme growth	Anything above 15% growth from 2012-20. Only the GOP
	had growth at these levels.

The tables below show partisan vote growth by county and by county type from 2012-20...

#### Partisan Vote Share Growth by County and County Type, 2012-2020

						Moderate		Extremely	
County Type	Strong Dem	Moderate	Slight Dem		Slight GOP	GOP Vote	Strong GOP	Strong GOP	<b>Grand Total</b>
	Vote Growth	<b>Dem Growth</b>	Vote Growth	Steady	Vote Growth	Growth	Vote Growth	Vote Growth	
Metro	2	7	4	1	1	3	1	0	19
College	1	6	5	0	0	3	1	0	16
Suburbs	12	6	10	4	2	4	6	0	44
Midsize Mfg	1	4	6	6	11	33	22	2	85
Small Mfg	2	1	5	3	13	78	308	70	480
Rural	1	4	2	3	6	31	121	41	209
Grand Total	19	28	32	17	33	152	459	113	853

#### Net Democratic Vote Change by County Type and Partisan Vote Share Growth, 2012-2020

						Moderate		Extremely	
	Strong Dem	Moderate	Slight Dem		Slight GOP	GOP Vote	Strong GOP	Strong GOP	
County Type	Vote Growth	<b>Dem Growth</b>	Vote Growth	Steady	Vote Growth	Growth	Vote Growth	Vote Growth	<b>Grand Total</b>
Metro	188,156	297,265	207,267	(7,222)	1,966	(113,475)	(33,028)	-	540,929
College	16,263	116,885	22,186	-	-	(9,241)	(5,854)	-	140,239
Suburbs	430,928	100,456	43,289	11,294	(7,103)	(40,072)	(32,344)	-	506,448
Midsize Mfg	4,705	37,287	1,724	331	(50,246)	(333,489)	(383,930)	(43,061)	(766,679)
Small Mfg	16,402	1,736	(8,764)	(8,239)	(51,621)	(320,861)	(1,207,231)	(289,632)	(1,868,210)
Rural	1,786	10,389	1,928	(2,255)	(9,767)	(97,789)	(323,212)	(138,286)	(557,206)
Grand Total	658,240	564,018	267,630	(6,091)	(116,771)	(914,927)	(1,985,599)	(470,979)	(2,004,479)

#### Key findings of above table

- Of the 853 counties we studied, 79 (just 9%) had some level of Democratic growth from 2012-20, while 757 (89%) experienced GOP vote growth (yellow highlights).
- In the 565 factory town counties (small or midsize manufacturing), 19 had Democratic growth and 537 had GOP growth.
- A total of 53 metro, college, and suburban counties (blue shaded box in first table) had some level of Democratic vote growth from 2012-20, resulting in a net gain of 1,442,695 votes.
- Meanwhile, 513 small or midsize manufacturing counties (pink shaded box in first table) saw moderate- to extremely strong GOP growth, resulting in a net gain of 2,578,204 votes a margin of +1,155,509 more votes than Democrats gained in metro, college, and suburban counties.

#### State-specific findings by county type

The table and chart below show the net Democratic vote shift by county type from 2012-20:

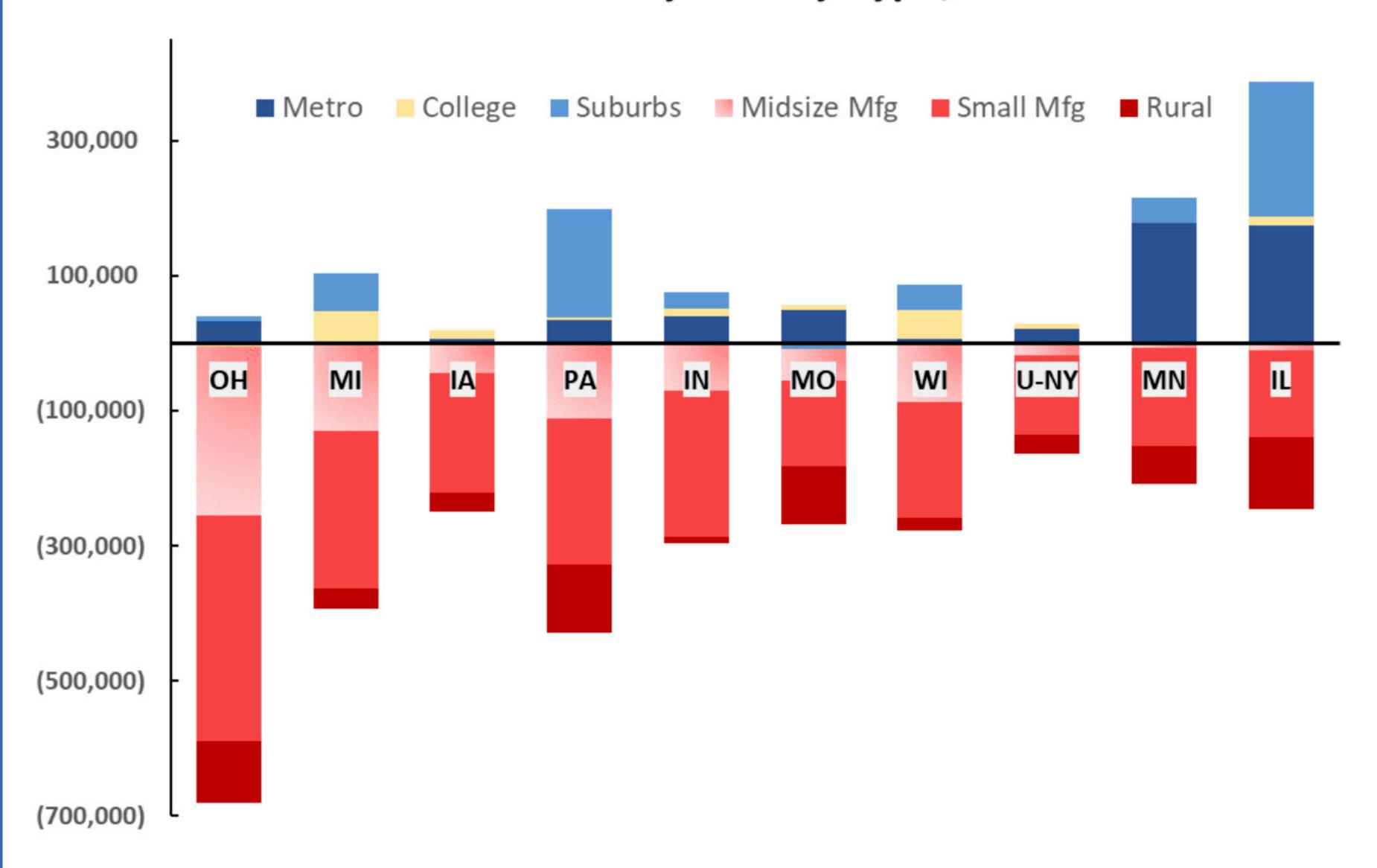
Net Democratic Vote Change by State and County Type, 2012-2020

<b>County Type</b>	ОН	MI	IA	PA	IN	МО	WI	Upstate NY	MN	IL
Metro	33,146	(3,635)	7,081	34,804	39,453	49,081	5,531	21,912	178,847	174,709
College	(5,854)	47,540	11,595	3,508	12,167	7,229	44,569	6,386	-	13,099
Suburbs	6,141	55,653	(1,403)	160,720	24,645	(8,045)	35,811	(2,058)	36,097	198,887
Midsize Mfg	(249,321)	(125,447)	(42,180)	(111,492)	(70,483)	(47,441)	(87,166)	(15,730)	(6,904)	(10,515)
Small Mfg	(333,051)	(233,503)	(177,496)	(216,243)	(215,747)	(127,286)	(171,551)	(117,810)	(145,862)	(129,661)
Rural	(93,000)	(30,992)	(28,135)	(100,582)	(9,485)	(85,722)	(19,531)	(28,860)	(55,108)	(105,791)
<b>Grand Total</b>	(641,939)	(290,384)	(230,538)	(229,285)	(219,450)	(212,184)	(192,337)	(136,160)	7,070	140,728

#### Key findings of above table

- Eight of 10 states have shifted away from Democrats: Only Minnesota and Illinois have gained. Eight other states have suffered a net shift of votes away from Democrats, ranging from a loss of 136,160 in Upstate New York to a 641,939 shift in Ohio. On average, 200,448 votes have shifted away from Democrats in each of the 10 states we studied.
- Dems in all 10 states lost votes in factory town segments: Though some states realized an increase in Democratic performance in metro, college, or suburban county types, all 10 states saw Democratic declines in small and midsize manufacturing counties. This vote shift away from Democrats ranged from a high of 582,372 in Ohio to a shift of 133,540 votes away from Dems in Upstate New York. The average factory town vote shift away from Democrats was minus 263,489 votes.

#### Partisan Vote Shift by County Type, 2012-20



# MANUFACTURING JOB LOSSES:

LINKAGE TO SHIFTING PARTISAN SUPPORT

Manufacturing jobs matter to a community. These jobs tend to be higher paying and often offer health care, union membership, and other benefits like pension plans, deferred savings vehicles, etc. that help build wealth and financial security. Manufacturing job growth in the three decades following the end of WWII helped build a growing, thriving American middle class.

Good paychecks earned by manufacturing workers are a force multiplier for the local economy: they spend it at the barber shop, hair salon, the local restaurant, the grocery store, and the hardware store. When those manufacturing jobs go away, it not only hits the factory worker's family directly, others become collateral damage downstream. The barber and hairdresser, the fry cook and waitress, the grocery store produce manager and deli counter staff, the hardware tool expert and store owner – they all get hit as well.

But nationwide, manufacturing jobs fell sharply across two periods. From 1980 to 2000,

# MANUFACTURING JOB LOSSES CONT'D

two million manufacturing jobs were lost, and from 2001 to 2020, more than 5 million of these jobs disappeared, replaced in many cases by lower paying service jobs offering little to no benefits.

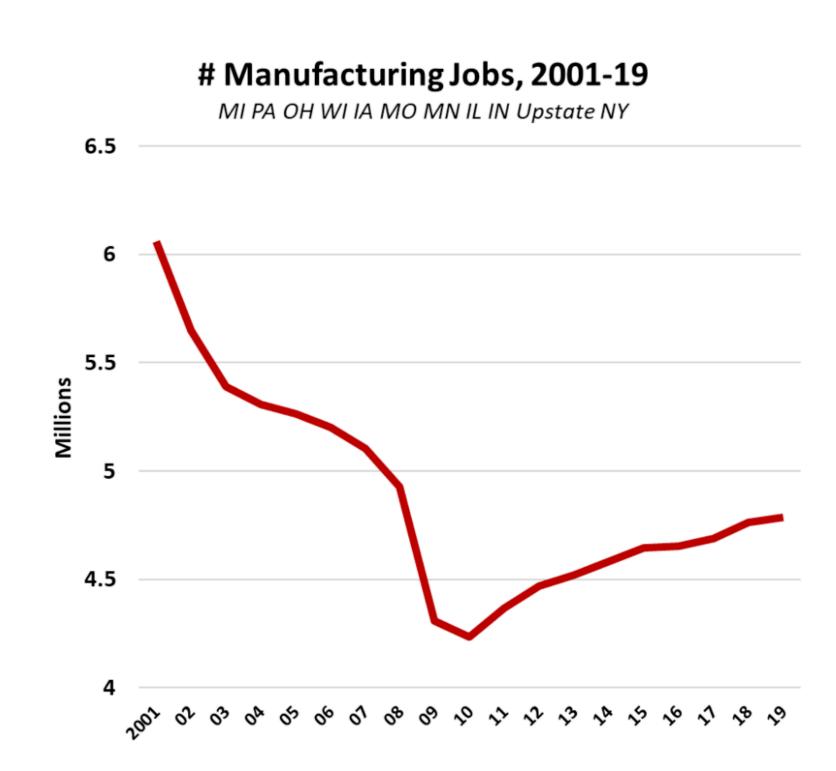
For this study, we focus on the loss of manufacturing jobs in the 2001-2019 period. In 2001, after a very public lobbying effort by then-President Clinton in 2000, China was admitted into the World Trade Organization (WTO). This change, combined with NAFTA and similar trade agreements, had a devastating, decades-long impact on U.S. manufacturing jobs due to outsourcing, plant relocations, growing trade deficits, increased efficiencies, and cheap imports that displaced American workers.

The chart below shows the number of manufacturing jobs from 2001-19 in our 10 states. During that time, the 853 counties in these states lost a staggering 1.3 million manufacturing jobs.

# MANUFACTURING JOB LOSSES CONT'D

While most counties were hurt, midsize and small manufacturing counties were hit especially hard, and they responded by increasing support for Republicans – especially during the Donald Trump years.

While we compare elections results from 2012-2020, we use this 19-year job loss timeframe because it provides a more insightful context for the lived reality experienced for many adult voters in these counties.



#### Key findings for midsize and small manufacturing counties

Over a two-decade period, our 10 states lost 1.3 million manufacturing jobs, catching many of these communities in downward spirals. For those counties highly dependent on manufacturing jobs, these job losses are strongly linked to declines in Democratic vote performance and growth in support of the GOP.

- 537 small and midsize factory town counties increased support for the GOP nominee from 2012-2020. Of these, 382, or 71%, suffered manufacturing jobs losses from 2001-19, with a combined net job loss of 495,725, or roughly 40% of all manufacturing jobs lost in the 10 states.
- The greater the percentage of manufacturing jobs lost, the greater the vote shift to the GOP. In fact, the 22 midsize manufacturing counties that had "Strong GOP Vote Growth" (+15-25-point shift from 2012-20) lost on average 21% of their manufacturing jobs from 2001-19.
- 58 percent of all the small and midsize counties we examined (315 of the 565) suffered a 10% or more loss in manufacturing jobs from 2001-19.

#### Key findings for other county types

- Metro: Despite losing manufacturing jobs, 10 of 14 metro counties increased support for Biden, due to more diverse economies, populations, and longer Democratic histories.
- Suburban counties: Though suburban counties lost 156,742 manufacturing jobs, 28 of 40 increased support for Democrats. Suburban counties are less reliant on manufacturing jobs and have experienced faster overall job growth from 2001-19.
- Rural counties: Rural counties shifted hard to the right from 2012-2020. Culture plays a role, but these counties have lost 36% of their manufacturing jobs since 2001 and experienced the slowest overall job growth (+2% from 2012-20) than any other county segment.

#### What the data show

The table below compares the 2012-20 growth in Democratic or GOP vote share and the number of manufacturing jobs gained or lost from 2001-19. The redder the cell color, the greater the loss of manufacturing jobs. Green colors reflect net manufacturing job gains over this same period.

#### County Level Manufacturing Job Losses Compared to Partisan Vote Share Growth

MI, WI, PA, OH, IA, IL, IN, MO, MN, Upstate NY

						Moderate		Extremely	
	Strong Dem	Moderate	Slight Dem		Slight GOP	GOP Vote	Strong GOP	Strong GOP	
County Type	Vote Growth	<b>Dem Growth</b>	Vote Growth	Steady	Vote Growth	Growth	Vote Growth	Vote Growth	<b>Grand Total</b>
Metro	(28,266)	(114,530)	(194,836)	(10,532)	(19,087)	(107,609)	(5,478)		(480,338)
College	(3,493)	(18,324)	(13,941)			(1,623)	(307)		(37,688)
Suburbs	(65,432)	(39,978)	(19,478)	(16,124)	(566)	(9,424)	(5,740)		(156,742)
Midsize Mfg	1,373	(9,616)	(7,616)	(9,986)	(48,024)	(93,562)	(100,739)	(19,077)	(287,247)
Small Mfg	1,851	401	2,832	(2,062)	(13,318)	(57,604)	(141,744)	(21,657)	(231,301)
Rural	363	(3,269)	(803)	(2,859)	(1,785)	(16,884)	(36,249)	(23,641)	(85,127)
Grand Total	(93,604)	(185,316)	(233,842)	(41,563)	(82,780)	(286,706)	(290,257)	(64,375)	(1,278,443)

#### Key findings of above table by county type

For midsize and small manufacturing counties, GOP vote share growth tracks large manufacturing jobs losses: The large black rectangle shows 537 factory town counties that increased support for the GOP candidate. Of these counties, 382, or 71%, experienced manufacturing jobs losses from 2001-19, with a combined net job loss of 495,725, or roughly 40 percent of all manufacturing jobs lost in the 10 states.

Dependency on manufacturing jobs matters: the density of manufacturing jobs in small and midsize manufacturing counties is significantly higher than that of any other county type (see table). In the 10 states we examined, manufacturing jobs in 2019 comprised 16% of all jobs in small manufacturing communities – down from 19% in 2001. In midsize counties, 13% of all jobs today are in the manufacturing sector, down from 17% in 2001. This density of manufacturing jobs creates a sensitivity for protecting these jobs and an intensity of anger when those jobs leave a community.

Mfg. Jobs/All Jobs, 2001-19									
Mfg%, Mfg%,									
County Type	2001	2019							
Small Mfg	19%	16%							
Midsize Mfg	17%	13%							
Suburbs	10%	7%							
Metro	10%	7%							
College	9%	6%							
Rural	9%	6%							
10 State Avg.	13%	10%							

### Key findings of above table by county type, cont'd

The higher the percentage of manufacturing jobs lost, the greater the vote shift to the GOP: The correlation between GOP vote share growth and the loss of manufacturing jobs is even stronger when we focus on the percentage of manufacturing jobs lost, specifically in midsize and small manufacturing counties. The table below shows that the counties with the largest rightward voting shifts have experienced the highest average percentages of manufacturing job losses.

Partisan Vote Shift Compared to Avg. Percentage of Manufacturing Job Lost										
	Strong Dem	1	Slight Dem		Slight GOP	Moderate		Extremely		
	Vote	Moderate	Vote		Vote	GOP Vote	Strong GOP	Strong GOP		
County Type/# Cos.	Growth	Dem Growth	Growth	Steady	Growth	Growth	Vote Growth	Vote Growth	<b>Grand Total</b>	
Midsize, % Job Loss	53% (1)	<b>-7</b> % (4)	<b>2</b> % (6)	<b>-9%</b> (6)	<b>-13%</b> (11)	<b>-11%</b> (33)	<b>-21%</b> (22)	<b>-38%</b> (2)	<b>-13%</b> (85)	
Small Mfg, % Job Loss	<b>3%</b> (2)	3% (1)	<b>27%</b> (5)	<b>3</b> % (3)	<b>-10%</b> (12)	<b>-7%</b> (79)	<b>-6%</b> (308)	<b>-8%</b> (70)	<b>-6%</b> (480)	
<b>Grand Total</b>	20%	-5%	14%	-5%	-11%	-9%	-7%	-9%	-7%	

### Key findings of above table by county type, cont'd

#### Specifically:

- The 22 midsize manufacturing counties that saw "Strong GOP Vote Growth" (+15-25-point shift from 2012-20) experienced on average a 21% loss of manufacturing jobs from 2001-19.
- The 308 small manufacturing counties with strong GOP growth lost on average 6% of their manufacturing jobs from 2001-19. Job losses in midsize counties also ripple over to these smaller commuter counties (though that impact is not shown in this data).
- Overall, 58 percent 315 of the 565 of small and midsize counties we examined suffered a 10% or more loss in manufacturing jobs during this 2001-19 period.

The table on the following page lists midsize manufacturing counties with manufacturing job loss greater than 10 percent and the net impact on Democratic votes and vote shift from 2012-2020. These 18 counties alone represent a combined shift of 343,614 from Dems to the GOP.

#### Key Midsize Mfg. Counties: Biggest Dem Point Drop

County/ST	Cities in County	2012-2020 County	MFG Jobs	Net Impact on	Dem Point
County/ST	Cities in County	Change	% Change	Dem Vote (v2)	Shift 2012-20
Trumbull OH	Warren 41,557	Extr. Strong GOP Growth	-68%	(34,068)	-17
Marion OH	Marion 36,837	Extr. Strong GOP Growth	-9%	(8,993)	-16
Mahoning OH	Youngstown 66,971	Strong GOP Growth	-19%	(36,680)	-15
Clark OH	Springfield 60,608	Strong GOP Growth	-39%	(14,433)	-11
Jefferson MO	Arnold 21,146	Strong GOP Growth	-11%	(27,109)	-11
Manitowoc WI	Manitowoc 33,736	Strong GOP Growth	-22%	(9,199)	-10
Richland OH	Mansfield 47,821	Strong GOP Growth	-35%	(12,652)	-10
Luzerne PA	Wilkes-Barre 41,498 Hazleton 25,340	Strong GOP Growth	-28%	(28,038)	-10
Stark OH	Canton 73,007 Massillon 32,149	Strong GOP Growth	-36%	(36,044)	-10
Lackawanna PA	Scranton 76,089	Strong GOP Growth	-38%	(17,096)	-10
Genesee MI	Flint 102,434 Burton 29,999	Strong GOP Growth	-52%	(36,489)	-9
Howard IN	Kokomo 58,145	Strong GOP Growth	-33%	(7,954)	-9
Madison IN	Anderson 54,513	Strong GOP Growth	-44%	(9,329)	-9
Lorain OH	Lorain 64,097 Elyria 54,533	Strong GOP Growth	-35%	(25,912)	-9
Dubuque IA	Dubuque 57,637	Strong GOP Growth	2%	(9,045)	-9
Bay MI	Bay City 34,932	Strong GOP Growth	-18%	(10,036)	-9
Muskegon MI	Muskegon 38,401 Norton Shores 23,994	Strong GOP Growth	-2%	(13,044)	-9
Woodbury IA	Sioux City 82,684	Strong GOP Growth	-1%	(7,493)	-8
				(343,614)	

(343,014)

#### Key findings for metro counties

#### METRO: County Level Manufacturing Job Losses Compared to Partisan Vote Share Growth

MI, WI, PA, OH, IA, IL, IN, MO, MN, Upstate NY

								Extremely	
	Strong Dem	Moderate	Slight Dem		Slight GOP	Moderate	Strong GOP	Strong GOP	
<b>County Type</b>	Growth	Dem Growth	Growth	Steady	Growth	GOP Growth	Growth	Growth	<b>Grand Total</b>
Metro	(28,266)	(114,530)	(194,836)	(10,532)	(19,087)	(107,609)	(5,478)		(480,338)

Metro counties – still strongly Democratic, but key areas of GOP growth emerge: Of the 14 metro counties that lost manufacturing jobs, 10 increased Democratic support from 2012-20, despite the job losses. This is somewhat expected, as these counties tend to be more Democratic to start with, have a more diversified economy to absorb job losses, and tend to attract more investment capital than smaller counties.

However, three metro counties that lost a combined 107,609 manufacturing jobs increased support for the GOP from 2012-20, as seen in the table.

# Key findings for metro counties, cont'd

Three Metro Counties + 107,000 Mfg Jobs Lost = Moderate GOP Gains						
County Name	# Mfg jobs lost, 2001-19	Raw Dem Vote Change, 2012-20	Raw GOP Vote Change, 2012-20	Change in Dem Margin, 12-20		
Cuyahoga (OH)  City: Cleveland	- <b>39,051</b> (-36% loss)	-31,097	+12,039	-2.9%		
Wayne (MI) Cities: Detroit, Dearborn	-48,747 (-33% loss)	+1,197	+50,967	-4.3%		
Philadelphia (PA) Cities: Philadelphia	- <b>19,811</b> (-48% loss)	+14,984	+36,273	-4.0%		

#### Key findings for suburban counties

#### Suburban & Rural: County Level Manufacturing Job Losses Compared to Partisan Vote Share Growth

MI, WI, PA, OH, IA, IL, IN, MO, MN, Upstate NY

								Extremely	
	Strong Dem	Moderate	Slight Dem		Slight GOP	Moderate	Strong GOP	Strong GOP	
County Type	Growth	Dem Growth	Growth	Steady	Growth	GOP Growth	Growth	Growth	<b>Grand Total</b>
Suburbs	(65,432)	(39,978)	(19,478)	(16,124)	(566)	(9,424)	(5,740)		(156,742)
Rural	363	(3,269)	(803)	(2,859)	(1,785)	(16,884)	(36,249)	(23,641)	(85,127)

#### Increased Democratic support despite manufacturing job losses:

Though suburban counties lost a total of 156,742 manufacturing jobs from 2001-19, 28 of these counties increased support for the Democratic candidate while only 12 counties increased support for the GOP.

#### Key findings for suburban counties, cont'd

Similar to metro counties, manufacturing jobs make up a smaller (7%) portion of all jobs in suburban counties and these counties have much more diversified economies with higher paying service sector jobs. In fact, "all job growth" (table at right) in suburban counties from 2001-19 and 2012-20 exceed every other county type in our study by a wide margin.

All Job Growth by County Type						
County Type	2001-19	2012-20				
Metro	8.4%	10.0%				
College	14.7%	9.1%				
Suburbs	19.3%	10.8%				
Small Mfg	9.2%	7.4%				
Midsize Mfg	3.6%	4.1%				
Rural	2.6%	2.0%				
10 State Avg.	9.3%	7.9%				

#### Key findings for rural counties

#### Big movement to GOP, with job losses playing a key role in that shift:

Overall, rural county voters have shifted hard to the right from 2012-20. Some of this shift is cultural, but jobs and the economy are perhaps even more determinative factors. Not only have rural counties experienced the slowest overall job growth of any county segment (+2.6% from 2001-19 and +2.0% from 2012-20), these counties have lost 36% of their manufacturing jobs since 2001.

Our research found that rural counties with a higher reliance on manufacturing jobs 20 years ago shifted harder to the right from 2012-2020 than those with a lower reliance on manufacturing jobs. In short, the greater the dependence on manufacturing 20 years ago, the harder the loss of manufacturing was felt, resulting in a larger percentage shift to the GOP. This is a finding similar to their small and midsize factory town counterparts.

## Key findings for rural counties

#### RURAL: Partisan Vote Shift in Rural Counties 2012-20 vs. Share of Mfg Jobs in 2001

MI, WI, PA, OH, IA, IL, IN, MO, MN, Upstate NY

Strong Moderate Slight Slight GOP Moderate Strong Strong 2001 % of Mfg Jobs Dem Vote Dem Dem Vote Vote GOP Vote	ote Grand
<b>&lt;5%</b> 0% 0% -1%	6 0%
<b>5%-10%</b> -2% -2% -2% -2% -2% -2% -2%	<b>6</b> -2%

### How candidates can accelerate voting shifts

Job losses on their own don't always cause sizable shifts in political support – after all, these manufacturing job losses happened over 20 years under Democratic and Republican administrations. But when the anger of job losses and community down-spirals is paired with a candidate presenting himself as an economic populist and a champion of the little guy, partisan support can shift quickly and significantly.

Unlike Mitt Romney in 2012, Donald Trump was highly in tune with the frustration and invisibility felt by communities hard-hit by manufacturing job losses. In plain language over the course of five years, he hammered on unfair trade deals that cost American jobs. He positioned himself as standing up to China, both verbally and with punitive tariffs. He also offered up foreigners as easy economic scapegoats.

## How candidates can accelerate voting shifts, cont'd

In so doing, these voters felt – finally! – that someone saw them, understood their situation, and gave voice to their situation. In 2016, they responded by providing Trump the vote margin he needed to win.

Trump then continually cultivated the individuals and communities that had been negatively impacted by manufacturing job losses, using every platform and communications channel available, from Twitter to television to talk radio and in-person rallies. In Donald Trump's first debate with Hillary Clinton, he mentioned "unfair" trade deals 9 times, NAFTA 8 times, and kept reminding people it was Hillary's husband who signed it. This cultivation created a loyalty to Trump that extended into the 2020 election.



Our jobs are fleeing the country. They're going to Mexico. They're going to many other countries. You look at what China is doing to our country in terms of making our product... they're using our country as a piggy bank...

DONALD TRUMP, 2016 DEBATE MODERATED BY LESTER HOLT



Job, economy, and health care consistently rank in the top five issues of concern to voters. Most of the time, "health care" means access to affordable health care. For our research, we wanted a more holistic view of "health" than just medical care. A wide number of health-related factors shape community conditions, influence mindsets, and provide an overall indicator of how well that county and its residents are thriving or struggling, and how each has progressed/regressed over time. All of these in turn influence voting patterns.

For our health data, we used County Health Rankings & Roadmaps (CHRRP), a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. For every county in every state, CHRRP has an overall ranking and raw score in "health outcomes" as well as an overall ranking in nearly two dozen "health factors." The full list of the measures CHRRP includes can be found there. CHRRP also has multi-year data sets, so we could explore changes over time.

## Key findings

In the 10 states we studied, we investigated how outcomes and factors around health impacted county-level partisan vote shifts from 2012-20. Key findings:

- Midsize manufacturing counties have 2nd largest decline in health rankings: Of the six county types we studied, midsize manufacturing counties experienced the second largest decline in combined health rankings from 2010-2020.
- Health ratings are strongly linked to gains/losses in county manufacturing jobs: On average, counties with any level of manufacturing job loss from 2001-2019 saw declines in their health rankings. In contrast, counties with moderate to strong manufacturing job growth realized gains in health rankings from 2010-2020.
- Counties with manufacturing job losses AND healthcare declines shifted hard to the GOP: 309 counties with manufacturing job losses and health declines shifted 993,393 votes to the GOP from 2012-20 nearly 50% of the GOP's total gain. 284, or 92%, of these were midsize and small manufacturing counties.

#### Midsize manufacturing experienced sharp health declines

We blended 2010-20 CHRRP's countyspecific health data rankings to create a unique set of health rankings that could be applied consistently across all counties over time.

We found that from 2010-20, midsize manufacturing counties had the second largest drop in health rankings. Though college counties had a slightly larger drop, this segment also started off with a much higher health rating and the decline is driven by just a few counties.

#### 2010-20 Chg. in Health Rankings

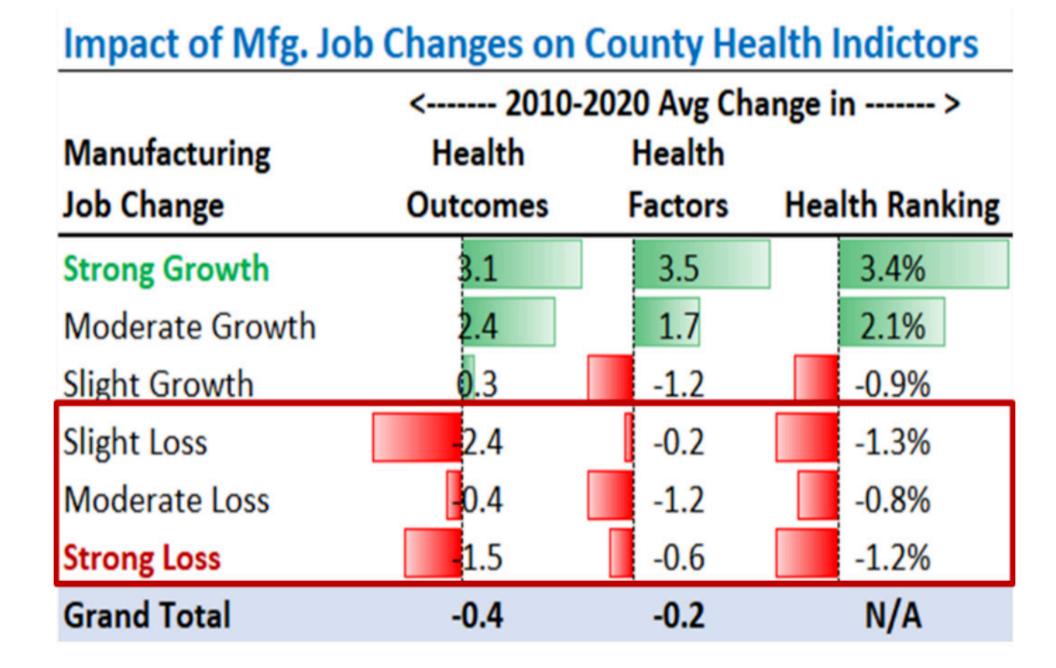
	Avg. Chg. in
County Type	health ranking
College	-6.4%
Metro	-1.3%
Suburbs	0.4%
Midsize Mfg	-5.7%
Small Mfg	0.3%
Rural	1.1%
Grand Total	-0.3%

### Manufacturing job changes and health indicators are strongly linked

We also found a strong connection between the rate of county manufacturing job loss/ growth and its overall health ratings.

The table at right shows that, on average, counties which experienced any level of manufacturing job loss from 2001-19 also saw declines in their health care rankings.

In contrast, counties with moderate to strong manufacturing job growth realized gains in their overall health rankings.



# 50% of GOP vote gain comes from 309 counties suffering manufacturing job loss and health declines

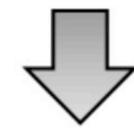
We then combined county-level changes in manufacturing jobs and health to see what effect the two together might have on voting trends. The tables below show the combined impact of jobs and health on Democratic vote share from 2012-20. The first table lists vote details by each graduation while the second table aggregates vote shifts in four segments.

Finding #1: Job loss/health decline segment: 309 counties with manufacturing job losses and health declines shifted 993,393 votes to the GOP from 2012-20 – nearly 50% of the GOP's total gain. 284 of these (92%) were midsize and small manufacturing counties.

Finding #2: Job loss/health gain segment: Counties that lost manufacturing jobs but gained in health shifted 571,421 votes to the GOP candidate from 2012-20, roughly 29% of the total. No other segments exceeded a shift of 300,000 votes from Dems to the GOP.

#### Impact on Dem Vote Share of Mfg Job Loss + Health Changes

	Strong Mfg.	Moderate	Slight Mfg.	Slight Mfg.	Moderate Mfg.	Strong Mfg.	
Health Change 2010-2020	Growth	Mfg. Growth	Growth	Loss	Loss	Loss	<b>Grand Total</b>
Strong Health Improvement	(7,440)	(14,293)	(22,652)	(30,316)	5,753	(58,624)	(127,572)
Moderate Health Improvement	(15,237)	(64,740)	(23,306)	(30,127)	(72,469)	49,075	(156,804)
Mild Health Improvement	(56,726)	(48,678)	(41,089)	(176,625)	(110,531)	(147,557)	(581,206)
Mild Health Decline	(17,383)	(50,545)	(59,026)	(34,621)	(80,913)	(255,024)	(497,512)
Moderate Health Decline	(15,329)	(31,307)	(22,667)	(73,430)	(156,404)	(141,614)	(440,751)
Severe Health Decline	(5,502)	(14,197)	(31,410)	(23,796)	(143,099)	(84,492)	(302,496)
Grand Total	(112,912)	(168,115)	(205,267)	(332,263)	(495,523)	(684,822)	(1,998,902)







#### SUMMARY: Impact on Dem Vote Share of Mfg Job Loss + Health Changes

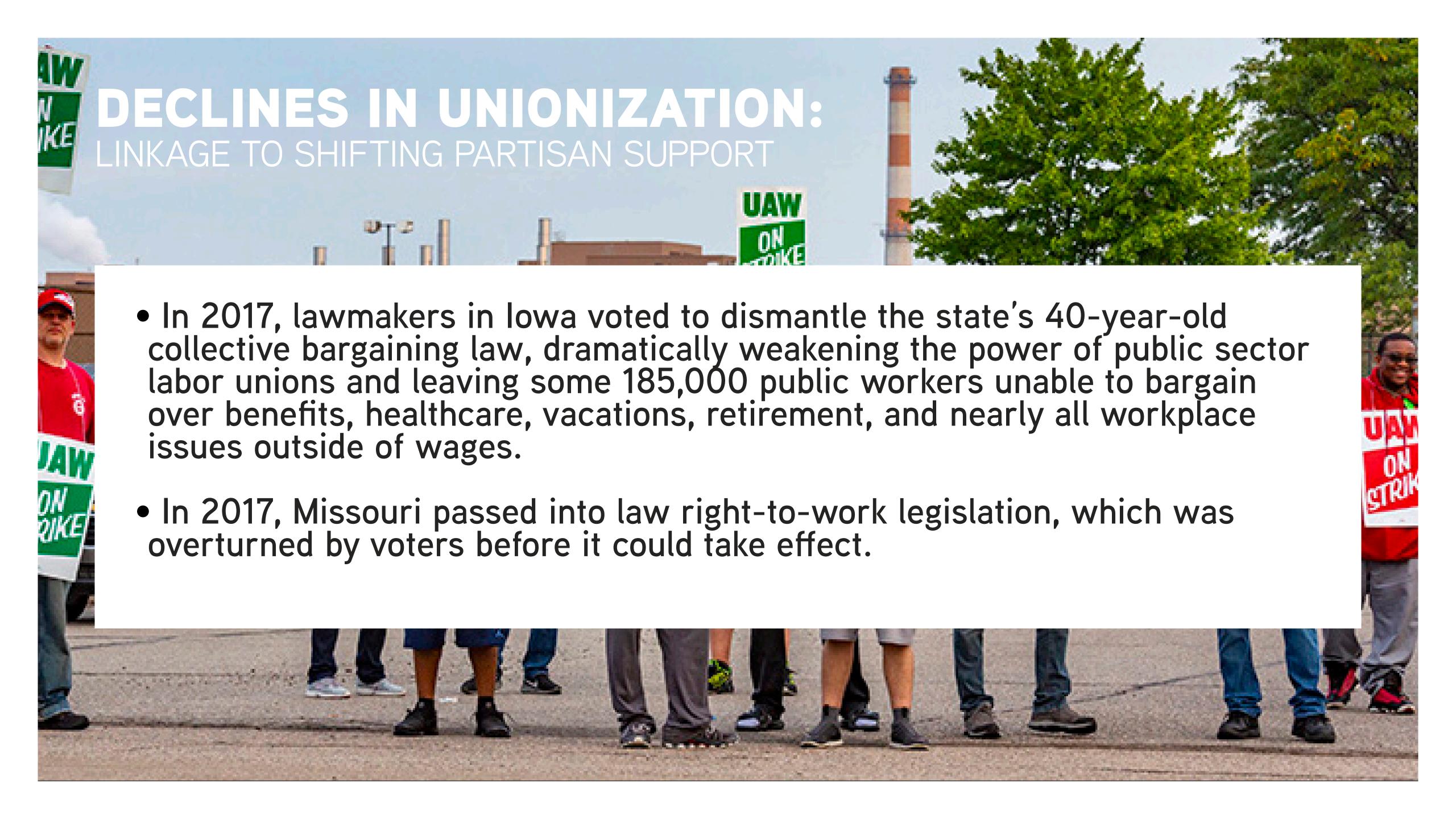
Health Change 2010-2020	Mfg. Job Growth	Mfg. Job Loss	Grand Total
Strong Health Improvement			(127,572)
Moderate Health Improvement	(294,161) votes (15%)	(571,421) votes (29%)	(156,804)
Mild Health Improvement			(581,206)
Mild Health Decline			(497,512)
Moderate Health Decline	(247,366) votes (12%)	(993,393) votes (50%)	(440,751)
Severe Health Decline			(302,496)
Grand Total			(1,998,902)

## DECLINES IN UNIONIZATION: LINKAGE TO SHIFTING PARTISAN SUPPORT

In 2010, Republicans won control of an unprecedented number of state legislatures and governor's offices. They immediately focused on restricting

union rights and activities as part of a broader agenda aiming to cut wages and benefits and erode working conditions and legal protections for all workers—whether union or non-union, in the public and private sectors alike. A fraction of the anti-union legislation in our 10 states:

 In 2011-12 alone, Illinois, Indiana, Michigan, Minnesota, Ohio, Pennsylvania, and Wisconsin all passed laws mandating permanent, statutory restrictions on public employees' collective bargaining rights or ability to collect "fair share" dues through payroll deductions. In only 2 of these 7 states was the legislation stopped: in Minnesota, it was vetoed by the governor, and in Ohio the law was later overturned by voters.



## Key findings

Unions are traditionally strong partners of the Democratic Party, both in terms of voting and financial support, especially public-sector unions. However, over a 10-year period, the GOP and its allies have launched intentional strategies to break unions, reduce membership, and fragment their support for Democrats. Key findings:

- 93% of USA union member losses come from 9 states: From 2010-20, the entire United States lost 462,000 union members. 93% of those losses, or 429,000 members, came in the 9 states we studied (excluding upstate NY).
- A 10% loss in members: On average, our 9 states lost 10% of their union membership over 10 years a rate three times greater than the US average.

### Findings by state

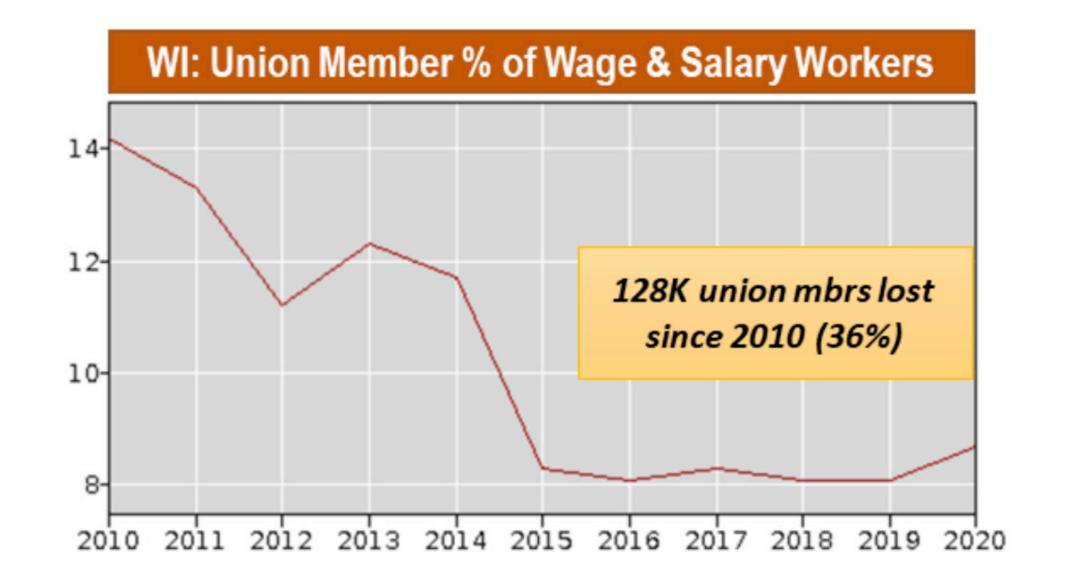
In addition to playing a powerful economic role in securing wages and benefits, unions also play an important role in policy and politics. They give workers a stronger voice in the legislative battles, educate members on the real-life impacts of different candidates and their policies, and mobilize their members to exercise their right to vote. In many cases, unions bring a more progressive perspective to members on key issues of the day.

So when union membership declines significantly, it can have an impact on politics and elections, as well as on workers, wages, benefits, and community well-being.

Examples include...

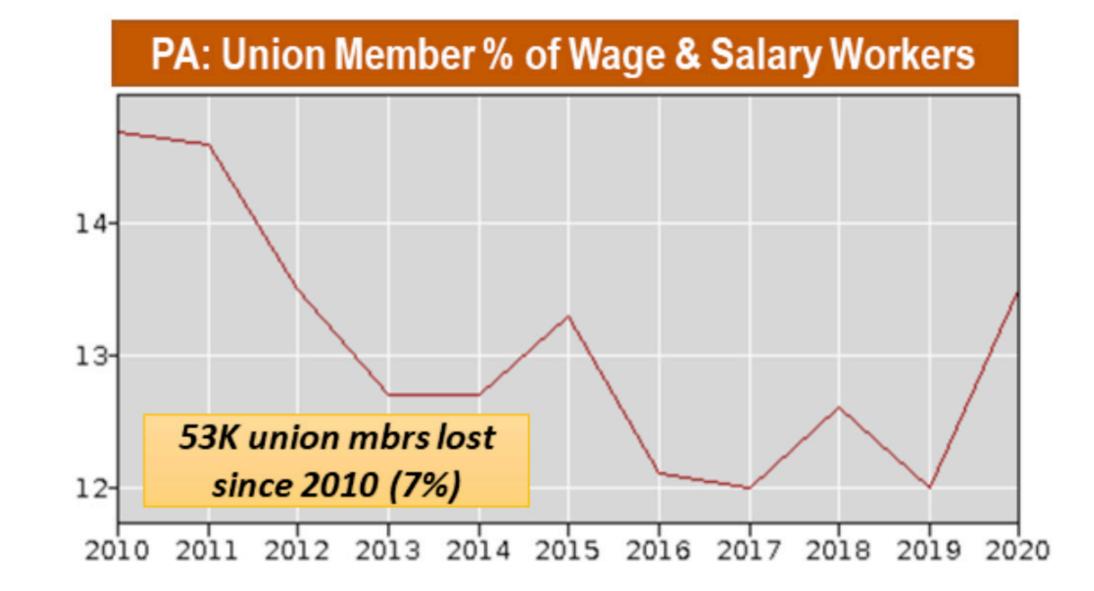
#### Wisconsin

- Wisconsin has lost 128,000 union members since 2010 – a 36% decrease.
- In 2016, Hillary Clinton lost Wisconsin by just 22,748 votes, while Joe Biden won by just 20,682 votes in 2020.



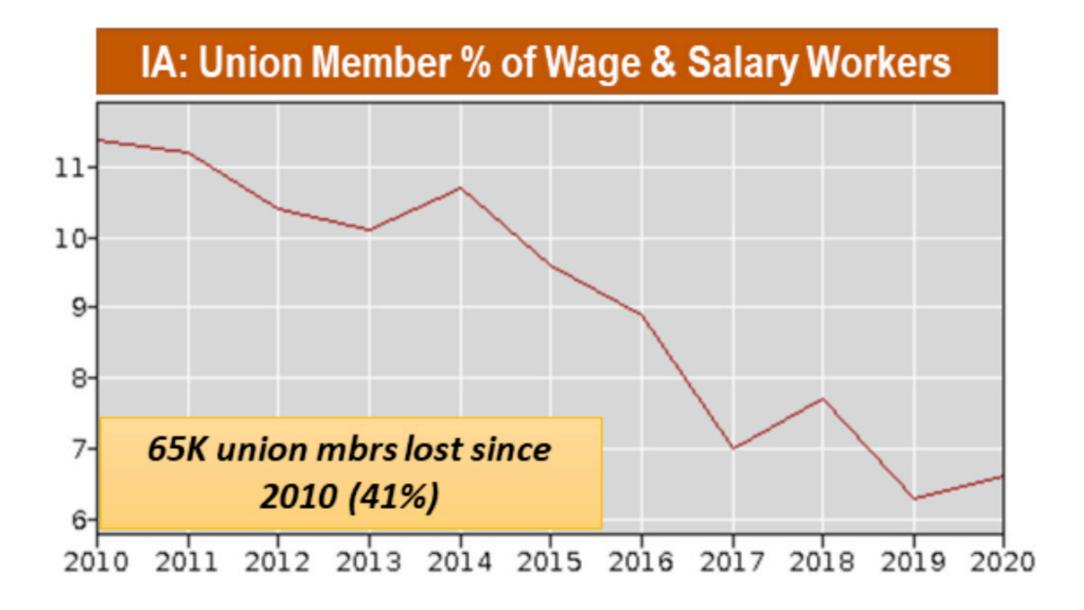
#### Pennsylvania

- Since 2010, Pennsylvania lost 53,000 union members a 7% decrease.
- Hillary Clinton lost Pennsylvania in 2016 by 44,292 votes, while Joe Biden's 2020 margin of victory in the state was 80,555 votes.
- In CD-10, GOP Scott Perry beat Democrat Eugene DePasquale by 25,958 votes in 2020.



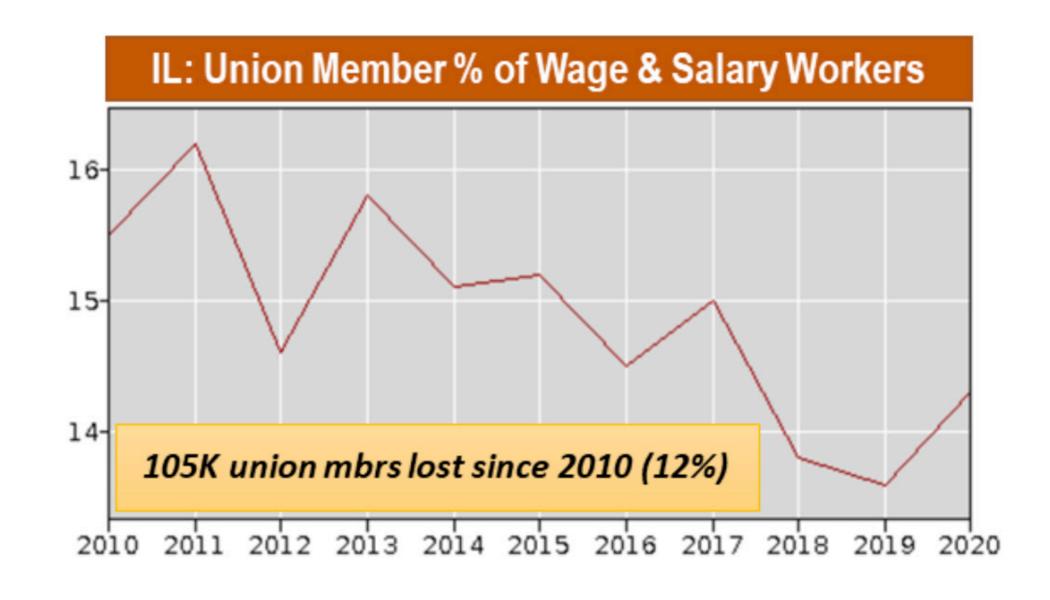
#### lowa

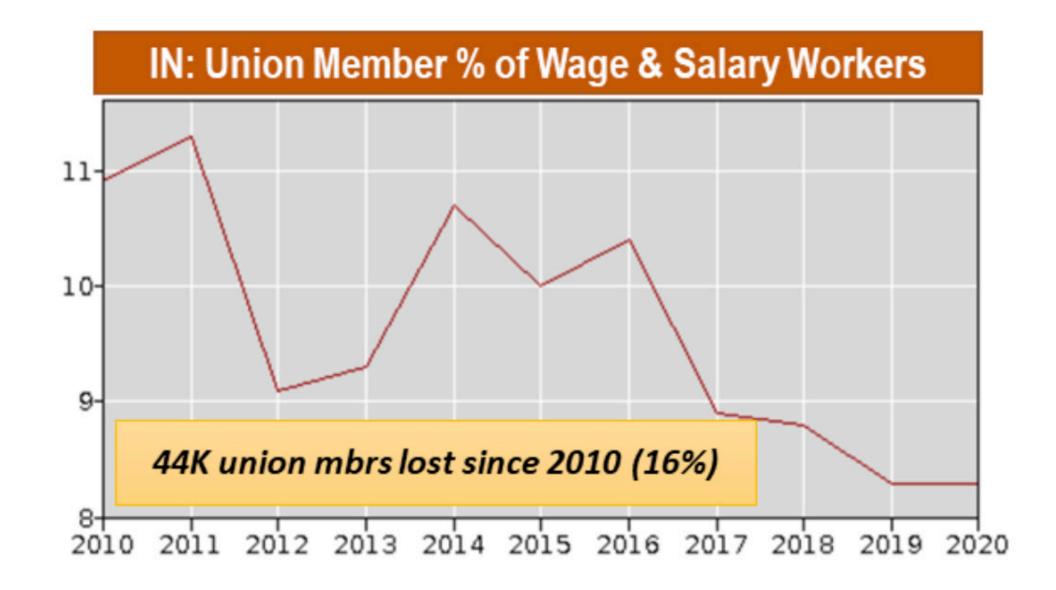
- Since 2010, Iowa has lost 65,000 union members – a 41% decrease.
- In the 2018 Iowa gubernatorial election, Kim Reynolds (R) defeated Democrat Fred Hubbell by just 36,289 votes.
- In CD-2, Mariannette Miller-Meeks (R) beat Democratic incumbent Rita Hart by just 6 votes in 2020.
- In CD-1, Ashley Hinson (R) beat Democratic incumbent Abby Finkenauer by 10,741 votes in 2020.
- In CD-3, incumbent Democrat Cindy Axne beat David Young (R) 6,208 votes in 2020.



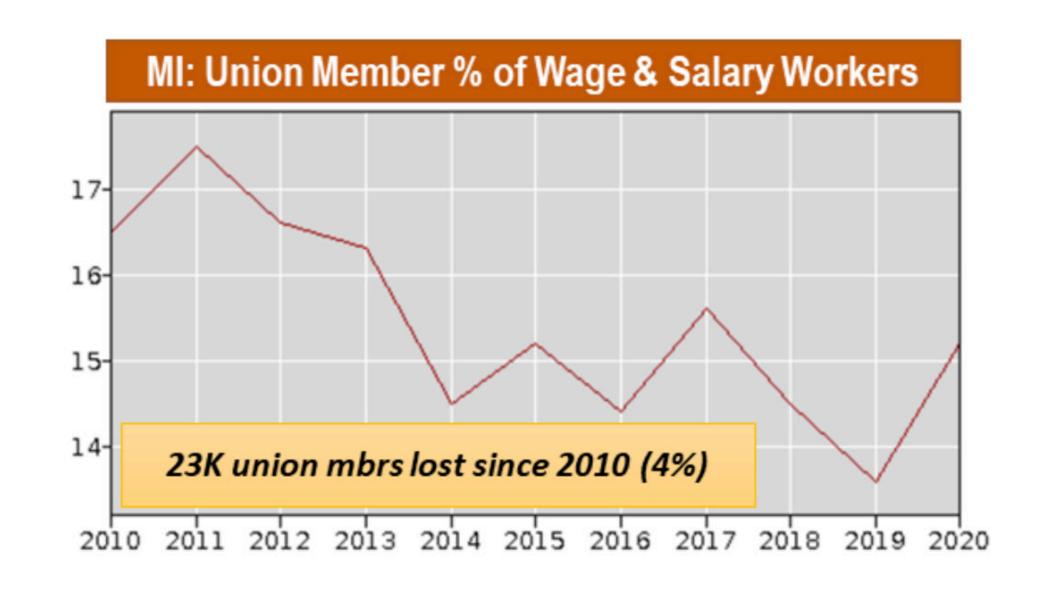
### Union membership trends in other states

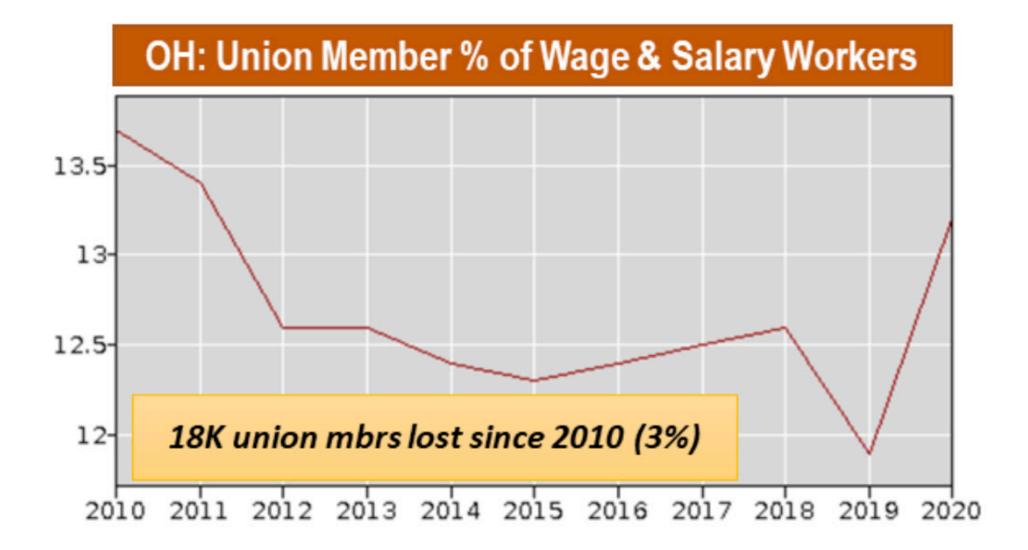
Of the states we studied, only Minnesota saw a net gain in union members from 2010 to 2020. The following charts show union member changes (# and %) for the six remaining states.



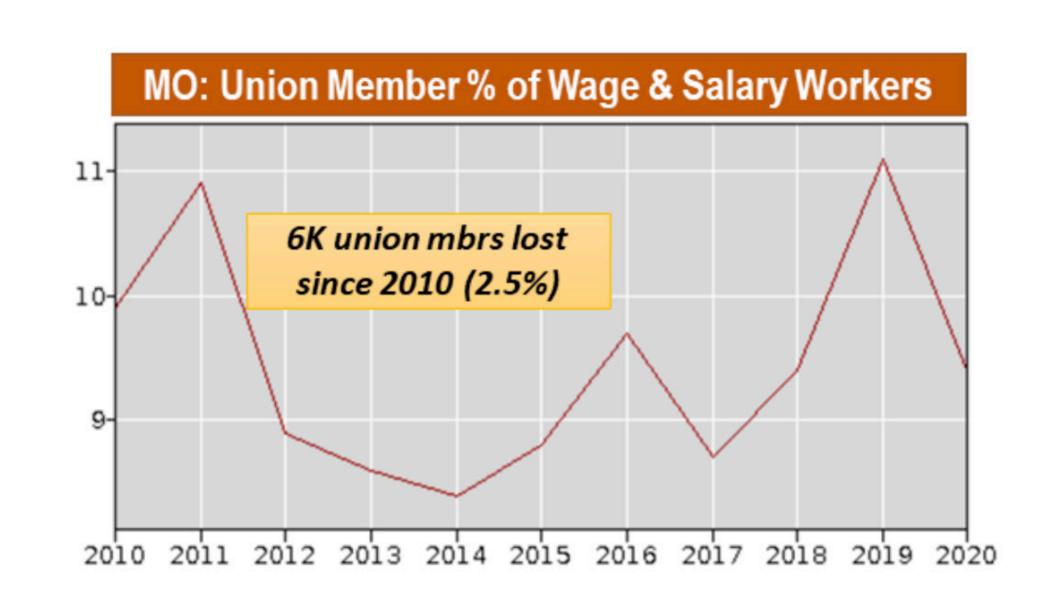


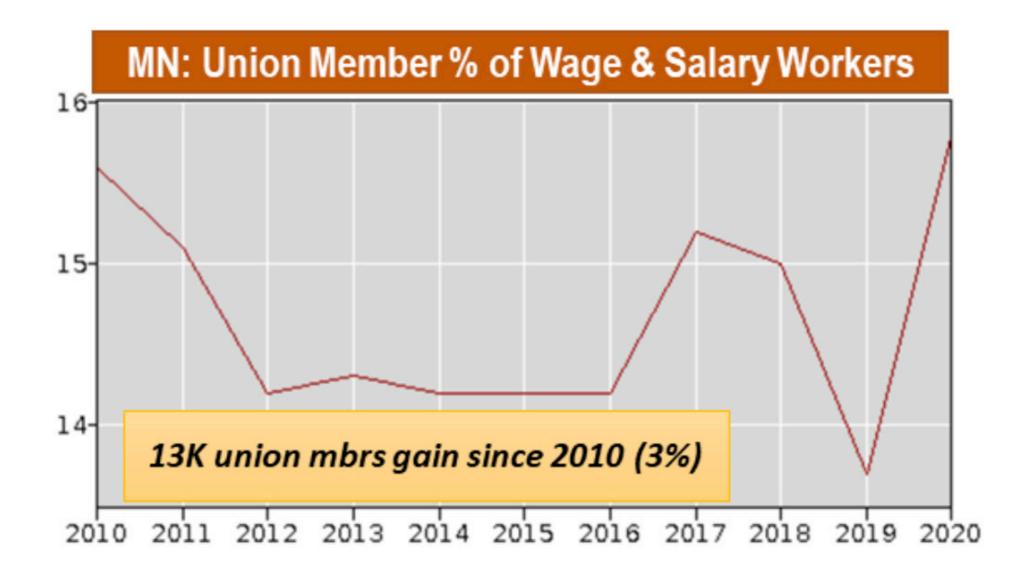
### Union membership trends in other states





#### Union membership trends in other states







We found that in counties suffering manufacturing job loss from 2001-19, those with more diverse populations shifted more Democratic while those with larger shares of White population (85%+ and above) shifted harder to the right politically.

The table at two pages below sums up our findings. The shaded boxes show the intensity of partisan vote shift from 2012-20 for the 618 counties that lost manufacturing jobs from 2001-19. Each county is broken down by its share of White voters and ranked against three categories of manufacturing jobs losses – slight, moderate, and strong losses.

## Key findings

While Donald Trump and the GOP used a constant stream of racist dog-whistles in the 2016 and 2020 elections, we found that the more racially diverse a county is, the less likely it is to shift to the GOP in response to manufacturing job losses and economic adversity.

- More diverse counties (<85% White) that suffered manufacturing jobs losses gave Biden 762,959 more votes compared to 2012, despite the job losses.
- Counties with strong manufacturing losses that are 90% or more White shifted a total of 613,254 votes to the GOP, or 31% of the total vote shift from 2012-20.
- In factory town counties, the biggest GOP growth areas are in midsize manufacturing counties that are 75% to 95% White and in small manufacturing counties that are 85% White and higher. Many of these big GOP shift counties used to be relatively Democratic, or at least competitive.

Impact on Dem Vote Share of Mfg Job Loss + County Racial Makeup						
<b>County Racial</b>	Slight Mfg	Moderate	Strong Mfg			
Makeup	Job Loss	Mfg Job Loss	Job Loss	<b>Grand Total</b>		
<75% White	(928)	346,296	98,455	443,823		
75% to 85% White	173,128	133,438	12,570	319,136		
85% to 90% White	(18,540)	(121,588)	(183,184)	(323,312)		
90% to 95% White	(205,455)	(428,120)	(266,296)	(899,871)		
>95% White	(280,468)	(425,549)	(346,958)	(1,052,975)		
<b>Grand Total</b>	(332,263)	(495,523)	(685,413)	(1,513,199)		

#### # Counties in Each Category

County Racial	Slight Mfg	Moderate	St	rong Mfg		
Makeup	Job Loss	Mfg Job Loss		Job Loss	Gr	and Total
<75% White	1	17		11		29
75% to 85% White	11	29		11		51
85% to 90% White	17	24		29		70
90% to 95% White	43	83		46		172
>95% White	73	115		108		296
<b>Grand Total</b>	145	268	•	205		618

#### Avg. Percentage Vote Change from Democrats, 2012-20

<b>County Racial</b>	Slight Mfg	Moderate	Stro	ong Mfg		
Makeup	Job Loss	Mfg Job Loss	Jo	b Loss	Gra	nd Total
<75% White	(6)	(1)		(3)		(2)
75% to 85% White	1	(3)		(4)		(2)
85% to 90% White	(5)	(5)		(8)		(6)
90% to 95% White	(8)	(9)		(11)		(9)
>95% White	(11)	(12)		(12)		(12)
<b>Grand Total</b>	(9)	(9)		(10)		(9)

154 counties with strong manufacturing losses are 90% or more White (highlighted in black rectangles). On average, these counties shifted between 11-12 voting percentage points away from Joe Biden in 2020, or a total of 613,254 net votes compared to 2012.

Meanwhile, the 80 more diverse counties (<85% White) that suffered some level of manufacturing job losses gave Biden 762,959 more net votes compared to 2012. In fact, even the 22 more diverse counties hit hardest by manufacturing job losses (in blue rectangles) gave Biden 111,025 more net votes in 2020 compared to 2012.

### Findings by county type

Regarding race, the biggest shifts to the GOP are midsize and small manufacturing communities with populations 75%-95% white. Anything about 95% already likely leaned strongly right. Many of these large GOP shift counties used to be relatively Democratic, or at least competitive.

A few examples: The midsize manufacturing counties showing moderate GOP vote growth w/ 75%-85% White lost 50,946 manufacturing jobs. These counties include Saginaw MI (-6% drop in Dem vote share), Macomb MI (-6%), Rock Island IL (-5%), Racine WI (-4%), Black Hawk IA (-6%), and Summit OH (-3%).

The midsize manufacturing counties showing strong GOP vote growth w/ 85-90% White lost 61,173 manufacturing jobs. These counties include Lorain OH (-9% drop in Dem vote share), Stark OH (-10%), Kenosha WI (-8%), Woodbury IA (-8%), Erie PA (-8%), Luzerne PA (-10%).

## SOURCES, METHODOLOGY & MAPS

To complete this study, we utilized numerous data sources, all of which are outlined below. The primary unique identifier we used to compile all data sources is the Federal Information Processing Standard (FIPS) county code. We compiled all this data into a single Excel spreadsheet using FIPS codes and then used basic math, pivot tables, and conditional formatting to drill deeper into the data, spot trends, and sum up cumulative impact of vote totals, job losses, health indicators, etc. by county type.

Below are pertinent notes about our methodology and sources by topic.

**County-level analysis:** Our county-level analysis will help readers better understand what is happening at a high level in the state and its geographies. However, there are limitations to county-level analyses, namely that multiple

trends within a county are not easily understood. For example, in Cuyahoga County, OH (Cleveland), Democratic vote share is dropping overall, but in some parts of the county, Democratic vote share is increasing. We recognize these limits while believing this higher-level analysis is an important contribution to the field.

Analysis through a lens of "economic geography": Rather than use a traditional urban-suburban-rural framework, we analyze election trends through a lens of "economic geography," splitting each state into six distinct county types. These county types are listed in the table below.

In particular, we shine a spotlight on small manufacturing counties – the epicenter of the Trump political earthquake – which most political observers previously would have perceived as rural. These counties are not rural.

The key to Democrats winning in these 10 states is to win back voters in these small factory towns by bringing back good jobs to these areas. They do not have to be manufacturing jobs per se, but any type of high-paying, high-benefit jobs that cannot be outsourced or replaced by machines.

Voting results data: We downloaded vote totals from the relevant Secretary of State websites. We removed third party candidate vote totals so we could examine trends solely between the two major political parties. The term "net vote shift" means the net vote shift from one party to another in a county, factoring in both vote gains for one party and vote losses for the other. For example, if Democrats lost 50 raw votes in a county from 2012-20 while the GOP gained 100 votes, the "net vote shift" away from Democrats is -150 votes. This "net vote shift" gives a better measure of trends within that county.

Manufacturing job data: To develop our county classification system, we used "% of manufacturing jobs" in the county instead of county manufacturing GDP because jobs = human beings = voters. The national percentage of manufacturing jobs is 9.1% and we used a threshold of 13% to identify counties with an above average level of manufacturing activity. We pulled county-level manufacturing and total job data from the Bureau of Labor Statistics from June 2020 as our starting point in county classifications. We also consulted with on-the-ground operatives in states to go beyond the data to understand the true nature of certain counties and how they are viewed politically and culturally.

For county manufacturing job gains or losses from 2001 to 2019, we used Bureau of Economic Analysis data on "Total Full-Time and Part-Time Employment by Industry (CAEMP25). We also used "Total Employment" by

county from this same source.

Health data: For county-specific health data, we used 2010 and 2020 data from The County Health Rankings & Roadmaps program (CHRRP) [https://www.countyhealthrankings.org/]. CHRRP is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. For every county in every state, CHRRP has an overall ranking and raw score in "health outcomes" as well as an overall ranking in "health factors." We created a county-specific score of these rankings so we could measure health changes over time for different types of counties in the 10 states we analyzed.

Union affiliation data: County-specific union affiliation data is not publicly available, so we used statewide union affiliation data from the Current Population Survey from BLS [https://www.bls.gov/webapps/legacy/cpslutab5.htm]. To derive a unionization rate for various years, we divided union members in each state by the total number of wage and salary workers in each state. We did not include those workers represented by a union, but who are not union members (~1.3% of all wage and salary workers on average).

Race, ethnicity, and demographic data: The US Census was our primary source for all population and demographic data. With the 2020 Census not yet available, we relied on the 2019 estimates provided by the Census Bureau.

Employment, unemployment, manufacturing employment and income information: For unemployment rate, all employment, manufacturing employment, and household income by year, we used data from the US Department of Agriculture's Economic Research Service [https://data.ers.usda.gov/reports.aspx?ID=17828].

**Detailed income data:** For detailed income data, we use IRS Statistics of Income (SOI) data. Multiple years and types of income were pulled to try to identify fluctuations in aggregate income levels and types.

#### Target Counties for Democratic Vote Growth Opportunities in Each State

Campaigns have finite resources that must be allocated optimally to win: money, staff, volunteers, and the candidate's time. The "Vote Growth Opportunity" maps provided over the next 14 pages assume that a generic Democratic candidate is running in each state. Here we identify high priority counties for Democrats: the Large Metropolitan counties, the college counties, some of the suburban counties, and a handful of Midsize and Small Factory Town counties. However, there is no such thing as a generic candidate. Each nominee in a general election brings their political record and their personal background to the race. Accordingly, campaigns must adapt the Vote Growth Opportunity map to reflect the strengths of particular candidates.

For example, in the 2022 Pennsylvania Senate race, there would be different Vote Growth Opportunity maps for each of the potential nominees in the general election to win the open

seat now held by retiring Republican Pat Toomey. The current Democratic field consists of Malcolm Kenyatta, Val Arkoosh, John McGuigan, Eric Orts, John Fetterman, Conor Lamb and potentially Sharif Street. Each of them should develop a customized Vote Growth Opportunity map for the general election. Remember, these close races are won at the margins. Here in lowa, Dems just lost a congressional seat by six votes! Potential Democratic nominees based in eastern Pennsylvania should slightly modify the PA cookie-cutter Vote Growth Opportunity map we show here, and consider additional focus on a Midsize Factory Town County such as York, along with the Small Factory Town Counties of Lebanon, Lycoming and Schuylkill.

On the other hand, Democratic nominees from central or western Pennsylvania should modify our Vote Growth Opportunity map and strongly consider spending a little more time and resources in Blair County (Midsize Factory Town) as well as the Small Factory Town Counties of Westmoreland, Butler and Beaver. And so forth... and so on... for each state.

