VOTER MIGRATION & ELECTORAL TRENDS IN NORTH CAROLINA, 2000–2016

by

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A THESIS

Presented to the Department of Geography
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Master of Science

June 2019

THESIS APPROVAL PAGE

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Title: Voter Migration & Electoral Trends in North Carolina, 2000–2016

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Degree awarded June 2019

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THESIS ABSTRACT

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Master of Science

Department of Geography

June 2019

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Because American electoral procedures are inherently spatial in nature, the distribution of voters across space occupies a central role as electoral politics play out across various scales (Gimpel and Hui 2015). This study explores voter migration at the county-level as a force for shaping the evolution of party support in North Carolina over the last 15 years, and draws on economic geography and labor economics in the United States, the effect of group psychology, and literature on the role of partisanship in voter migration. Using migration data published by the U.S. Census Bureau, I find that the nature of migration diverges significantly between those with a college degree and those without. Using an experimental method based on partisanship, I estimate the degree of partisan change across North Carolina's counties. The calculations line up with changes on the ground, though imperfectly and with the natural limitations of data-driven research.

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ACKNOWLEDGMENTS

I would like to offer my greatest thanks to Dr. Alexander Murphy and Dr. Patrick Bartlein for their guidance and insight as I completed this research project. Additionally, I would like to thank Dr. James Gimpel and Dr. Fred Shelley for their willingness to share their thoughts and to provide feedback. Finally, I would like to thank the UO Geography graduate student community for their endless support and for asking good questions as I navigated the research process.

To all of those working to make elections fairer.

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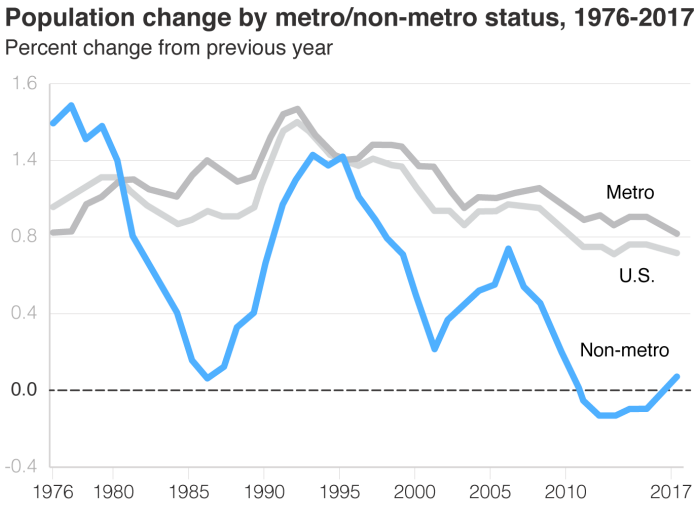
I. INTRODUCTION

There is no shortage of reports showcasing the economic and population losses of rural America. Just months before Donald J. Trump was elected president, *The Atlantic* published yet another story recounting a familiar tale of a rural American-West city struggling to retain its youth, opportunities, and economic vigor (Semuels 2016), and the trend is not specific to any one region. *Rethink Mississippi*, an online publication offering critical analysis of issues facing today's Mississippi, lamented the insistent outmigration from the state: "New Census data, same old story: People keep leaving Mississippi" (McGraw 2017). American Appalachia faces a similar challenge, as the region's natives, and especially those with college and advanced degrees, continue to seek opportunities elsewhere (Kahn 2009). The proliferation of such stories validates recent findings from the U.S. Department of Agriculture (see Figure 1), which noted that rural America experienced its first year of absolute population decline in 2012 with a very distinct geography (see Map 1), a trend that endured for six years before small population increases brought it to a close (2018).

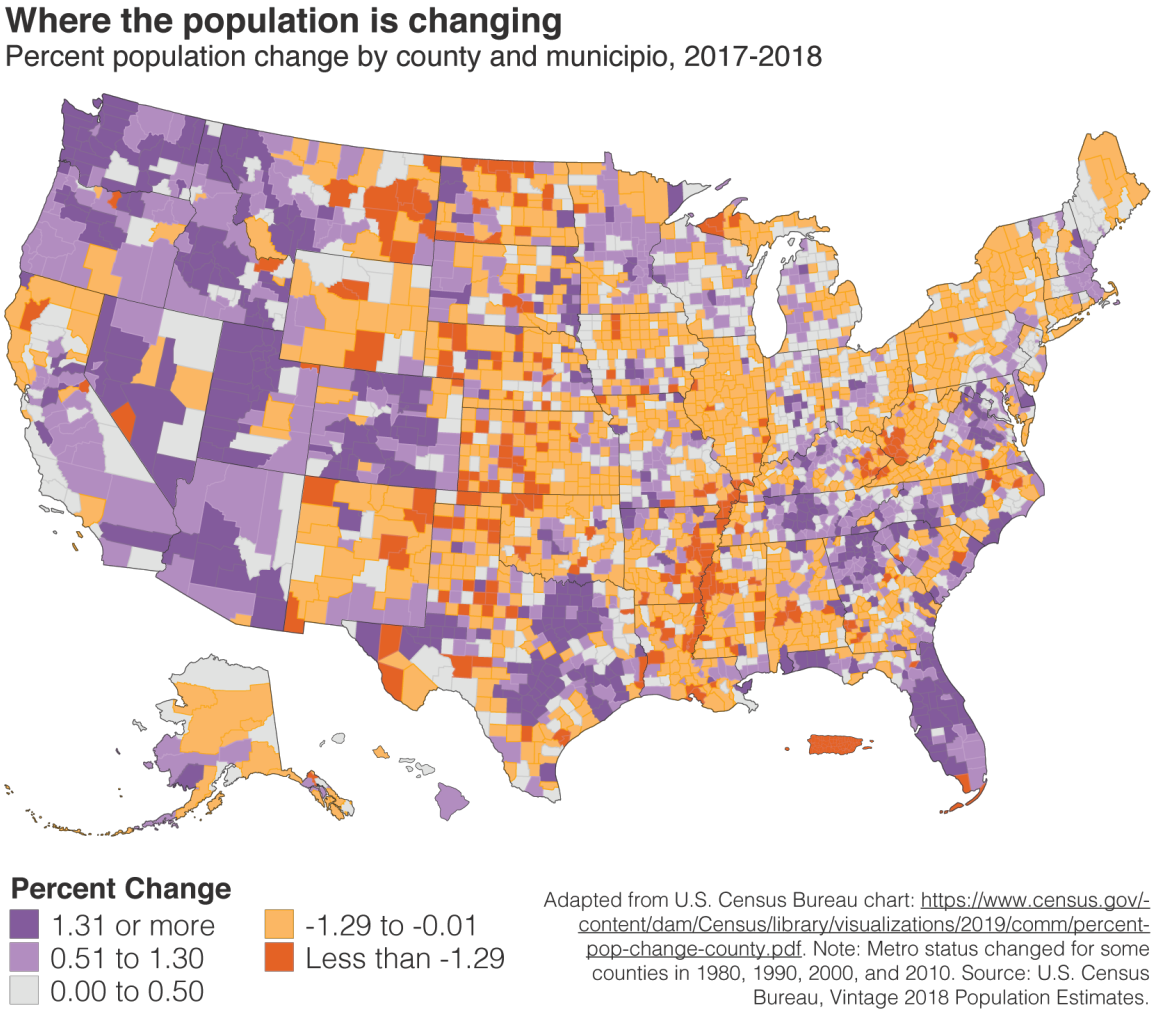
Figure 1. Produced by author based on USDA (2018b).



Adapted from USDA chart: https://www.ers.usda.gov/web-docs/charts/55974/popchangemetnmet2017_450px.png?v=6285.5. Note: Metro status changed for some counties in 1980, 1990, 2000, and 2010. Source: USDA, Economic Research Service using data from the U.S. Census Bureau.

This exodus of people from rural America (which is itself a diverse group, see e.g. Scala, Johnson, and Rogers 2015) seeking opportunities elsewhere, a trend often referred to as 'brain drain,' is usually treated primarily as an economic issue, and indeed, economic

Map 1. Produced by author based on U.S. Census Bureau (2019).



motivations are the primary factor pushing people away from rural towns and into larger cities (see e.g. Borjas, Bronars, and Trejo 1992; Greenwood 1975; Greenwood, Hunt, and McDowell 1986). The emphasis on the economic consequences of such movement, however, obscures its impact on the spatial distribution of voters across the United States, a consequence deserving of additional investigation. Inherent to patterns of interstate migration is the political consequence that as people move, they carry their votes with them.

The movement of people plays a significant role in the American electoral process, but to leave that assumption without further consideration does not do justice to the

potential impact interstate migration has on electoral outcomes. The movement of voters across space is not random, as evidenced by the trends reported by USDA and popular media outlets: the net movement of people in the United States over the last 15 years drains rural areas of their communities and supplies metropolitan areas with higher populations. Moreover, the movement of people in the United States appears to be shaped greatly by education and income (see Dougherty, et al. 2018, Florida 2012, Florida 2018). The socioeconomic forces behind interstate migration flows in the United States cannot be separated from the political consequences, as characteristics such as race, gender, income, and education are often tied to political partisanship (see Gimpel 1999, Pew Research Center 2015, Pew Research Center 2018), and consequently have the potential to shape the geography of party victories.

Indeed, the presence of a political rural/urban divide in the United States and its significance for the American political landscape is rarely contested among scholars and writers across the political spectrum and academic disciplines (consider Scala and Johnson 2017, Vance 2018, Hochschild 2016). A *New York Times* op-ed features a comment from Stanford political scientist Jonathan Rodden that, "as you go from the center of cities out through the suburbs and into rural areas, you traverse in a linear fashion from Democratic to Republican places" (Wilkinson 2018), while *Wall Street Journal* reporter Janet Hook notes "deep splits [in the American electorate] along geographic and educational lines" (Hook 2017). If the movement of people (i.e. voters) across the United States isn't random, then perhaps there is a discernible pattern of movement which then can be studied to identify how flows of people influence the outcomes of elections, even experimentally. As Enos notes at the close of his work *The Space Between Us*, "the complete freedom to move — highly valued in free societies — is the freedom to segregate" (2017, 225). Such an idea occupies a central place in this

project: how do the increasingly homogenous political units relate to patterns of migration? Using North Carolina as a case study, is there evidence of partisan self-sorting when we consider the electoral evolution of the state as well as migration patterns?

North Carolina makes for an interesting subject for two primary reasons: its political heterogeneity and its economic geography. North Carolina remains a swing state, with strong Democratic voting blocs in its urban centers and reliable Republican voters in its rural areas. Additionally, North Carolina attracts migrants from within the state as well as outside the state to areas like Charlotte, Asheville, and the Research Triangle, which boast significant opportunity and robust labor markets especially for the college-educated. Outside of those areas, however, markets struggle to attract new talent in a way urban areas do not, creating dynamic flows of internal migration.

In order to untangle any potential relationship that exists between interstate migration in the United States and the geography of the American political landscape, I opted to use an extensive, data-driven approach and to integrate three largely disparate bodies of literature: **the geography of the emerging** (or emergent) **information economy**, the impact of **identity and neighborhood effects on political affiliation**, and work that focuses on **voter migration** explicitly. Addressing elements of all three types of research provides the appropriate framework and vocabulary to parse out if and how socioeconomics interacts with partisanship and migration to shape the American electoral landscape. The following paper is broken into three sections: one focusing on the literature, a second exploring and breaking down the data in order to build an understanding of movement in North Carolina as it relates to voter migration, and finally, one reflecting on key takeaways, lessons learned, and future directions for research on voter migration.

II. LITERATURE REVIEW

Introduction

The American political system is inherently spatial: U.S. presidents are elected with votes collected at the state-level, our representatives at the district-level, our city councilors at the municipal level. The process of holding elections too is tied to space. Where we live determines where we go to cast our votes, how much representation we have, what kind of identification we need at the polling station, who is on our ballot — the list goes on. Moreover, while coverage of American elections now almost invariably includes a map and some appreciation for the central role space occupies in our elections, we take for granted that the lines that divide states, districts, and counties do not in fact divide immobile populations nor do they create meaningful containers for political life (see John Agnew 1996). Perhaps it seems obvious to point out that on the contrary, the results of elections hinge on the voters that occupy each of these political units, and the character of the voting population changes constantly as policy, demography, economics, and other variables determine who votes for whom and where over time.

Given the nature of American elections, the issue of voter migration is a geographic problem: who moves where, and why? What is the political-spatial impact of certain flows of internal migrants? The relationship between voter migration and the American political landscape remains largely (though not entirely) uninvestigated by geographers, leaving the topic primarily to political scientists. However, one must go far beyond political science literature to meaningfully address voter migration. We must consider the information economy, urban-economic geography, political identity, and group psychology in order to build the framework necessary to tackle such a complex problem. The following section is divided into three parts: a review of relevant literature diving into the changing economic geography of the United States and how it relates to

migration, the effects of gathering like-minded people into the same cities, and a brief overview of some arguments against voter sorting.

The evolving geography of economic opportunity and electoral politics

The economics behind the 'where' and 'why' of interstate migration in the United States

Before diving into the political consequences of internal migration (i.e. the movement of people within the United States), we need to understand where people move and why. The people who move within the United States are not a random or representative segment of the American population. Rather, as Gimpel and Schuknecht note, "because of the costs associated with migration, there is likely to be an economic bias in who moves and who does not," where "internal migrants (as opposed to immigrants) are most likely to be better educated, young, white, and upwardly mobile" (2009, 28). Because such characteristics are not separable from political affiliation and tend to have a relationship with partisan voting patterns (Gimpel and Schuknecht 2009, 35), the migration of people in the United States will in some way shape the political landscape, given that votes are collected based on spatially defined units.

Answering the why of internal migration requires sacrificing some nuance and reducing what is often a multi-scalar and complex choice to a series of variables, but relevant literature has shown that people in the United States move primarily for economic reasons (see e.g. Gimpel and Hui 2015; Borjas, Bronars, and Trejo 1992; Greenwood 1975; Greenwood, Hunt, and McDowell 1986). To explore the 'why' in more detail is an important subject of academic research, but not the focus of this paper. Of greatest importance here is the idea that the decisions of households and individuals to move to a different county or state are largely motivated and shaped by economic opportunity. The 'where,' then, matters significantly and is more easily answered by

U.S. city rankings by GDP in 2010 and change in rank between 1978 and 2010

Rank	City	Real GDP, 2010 $ billion, 2010	Rank change
1	New York	1,180	0
2	Los Angeles	732	0
3	Chicago	496	0
4	Washington, DC	392	3 ▲
5	Houston	341	0
6	Dallas	325	4 ▲
7	Philadelphia	314	-3 ▼
8	Boston	296	1 ▲
9	San Francisco	283	-1 ▼
10	Atlanta	250	5 ▲
11	Miami	236	0
12	Seattle	211	0
13	Phoenix	182	15 ▲
14	Minneapolis	181	0
15	Detroit	179	-9 ▼
16	San Diego	173	4 ▲
17	Baltimore	145	1 ▲
18	Denver	142	5 ▲
19	Riverside	132	17 ▲
20	San Jose (CA)	127	7 ▲
21	St. Louis	125	-5 ▼
22	Tampa	117	11 ▲
23	Portland (OR)	117	8 ▲
24	Pittsburgh	116	-11 ▼
25	Orlando	105	26 ▲
26	Sacramento	102	26 ▲
27	Cleveland	98	-10 ▼
28	Hartford	96	-2 ▼
29	Kansas City	95	-8 ▼
30	Cincinnati	95	-8 ▼

Adapted from CityLab chart: https://cdn.citylab.com/media/img/citylab/legacy/2012/06/27/McKinsey_Top_30_Cities_1978_2010.PNG. Source: Moody's Analytics, McKinsey Global Institute analysis

Figure 2. Produced by author based on Weissman 2012.

considering broadly the economic geography of the United States. Data from the U.S. Census that documents county-level movement (a dataset that will be considered in depth in Chapter 2) provides insight into this matter. Thus, central to any work on interstate migration in the United States is consideration of the evolving economic geography of the country as well as the incentives that direct movement between counties and states over time.

The economic landscape in the United States is highly varied across space in terms of industry, wages, and the strength of labor markets, making it a geography worth studying. Perhaps more importantly, the information economy has wreaked havoc on the longstanding economic system of the United States, undoing historic geographies of manufacturing and heavy industry and transferring capital (and economic might) to tech-heavy metropolitan areas (Florida 2012, Moretti 2012). Figure 2 highlights the shifting geography of American GDP among metropolitan areas, where Midwestern cities like Detroit, Cleveland, and Milwaukee that once powered the United States

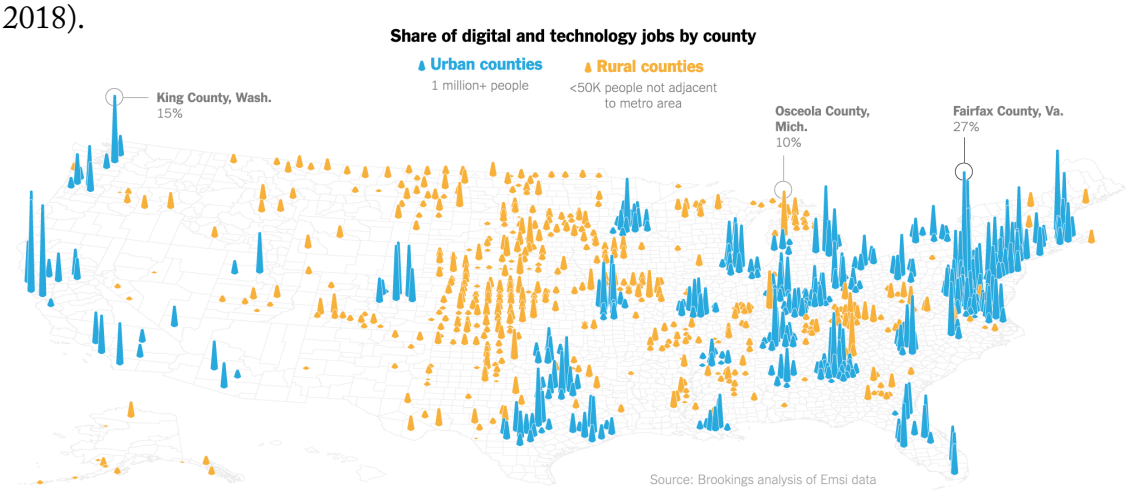
economy have been displaced by coastal metropolitan regions like Washington, D.C., Portland, and the Bay Area.

A helpful conceptual starting point to explore interstate migration and the aforementioned economic trend is Richard Florida's idea of the "creative class" (Florida 2003). A category of people whose jobs depend on the deployment of creativity, the creative class includes professions from engineering and software development to design and art. It is most useful to consider his hypothesis vis-à-vis the migration of the creative class (a group of almost necessarily college-educated people). He asserts that members of the creative class are flocking to a handful of cities in the United States, which comprise only 10 percent of the state's metropolitan regions. "In other words," he points out, "90 percent of all metropolitan regions in the United States are net exporters of talent—they lose their creative young people" (27).

Research pointing to similar conclusions abounds. Moretti reported a clustering effect in major cities, which served to attract highly skilled and educated workers and intensify the growing divide between wealthy metropolitan areas and the micropolitan and non-metro, non-core counties suffering from population loss (2012). In a study published in 2012, Florida et al. found that the most highly skilled workers in the United States are likely to move to metro[politan] areas (the authors note, however, that "whether regional wages draw skilled individuals to a region, thereby increasing wages or whether highly skilled individuals drive regional wages is uncertain, but the relationship between skills and wages is clear and unambiguous" (371)). Intimately connected is the conclusion of a 2014 study noting that displacement of workers between two metropolitan areas of relatively equal economic capacities is unlikely — instead, displacement tends to be away from economically struggling regions to those with greater economic opportunity (Moretti and Wilson). Indeed, the growing economic inequality between these magnet

metropolitan regions and the rural and micropolitan areas left behind (see Map 2) drove Florida to publish again in 2017, walking back some key components of his earlier writing and focusing instead on the idea of "winner-take-all urbanism," where wealth breeds additional wealth, draining less prosperous cities of talent and skilled workers (Florida 2017).

Map 2. Share of digital and technology jobs by county. Map by *New York Times* (Porter 2018).



Such trends speak to an increasing mobile population largely comprised of young, college-educated, white, wealthy college graduates with the skills to access high-paying jobs settling in metropolitan areas from Washington, D.C. to Denver, CO (see Dougherty, et al. 2018, Gimpel 1999). Indeed, Tables 1 and 2 show the ten cities with the highest shares of 'creative class' members (Florida 2015) and college-educated millennials (Brookings Institute 2018) respectively — seven of the ten overlap. The intention here is not to suggest that these groups are identical; they are most surely not. The important trend to note is the perhaps unsurprising association between young, college-educated people and a prevalence of employment related to the knowledge economy.

In an article following the publication of the Brookings Institute study documenting the geography of college-educated millennials, Florida and Mellander

Table 1. Cities with the highest shares of 'creative class' members (Florida 2015).

City	Share of 'creative class'
San Jose, CA	46.1%
Washington, D.C.	44.6%
Boston, MA	38.8%
San Francisco, CA	37.5%
Hartford, CT	37.0%
Seattle, WA	35.7%
Baltimore, MD	34.8%
Denver, CO	34.3%
Minneapolis-St. Paul, MN	34.1%
Austin, TX	34.1%

Table 2. Cities with the greatest shares of millennials with college degrees (Brookings Institute 2018).

City	Percent of millennials with college degree
Boston, MA	58%
Madison, WI	58%
San Jose, CA	55%
San Francisco, CA	55%
Washington, D.C.	54%
Hartford, CT	50%
New York, NY	47%
Raleigh, NC	47%
Minneapolis-St. Paul, MN	47%
Denver, CO	46%

found that the same group are likely to be found in cities where a substantial segment of the population is "employed in knowledge, professional, and creative occupations" (Florida 2018). Dougherty et al. found a similar pattern, though more explicitly related to movement, when they noted that college graduates by and large move to burgeoning metropolitan areas in order to maximize their professional prospects, and by extension, contribute to the widening gap between the metropolitan and the rural and micropolitan. Though these trends widely identified cannot be universally applied to all college graduates, the extent to which they hold true suggest that they are worth studying.

The knowledge economy, electoral politics, & the role of education

The pattern of movement away from cities and towns facing economic insecurity resulting from the restructuring of the American economy around tech, professional, and

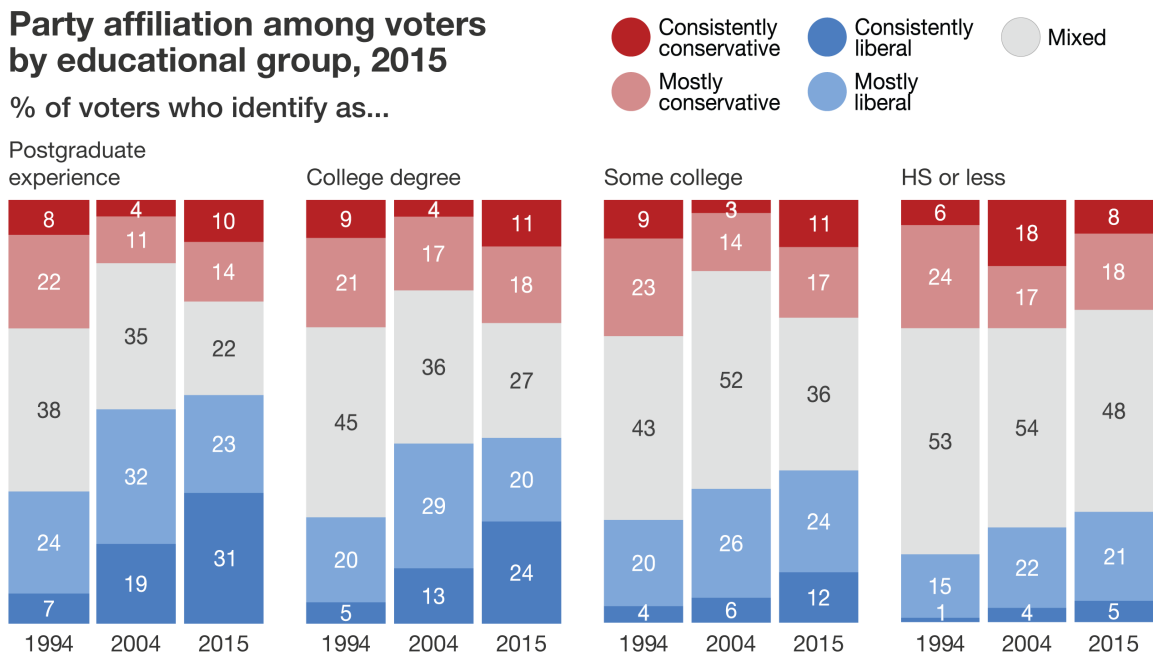
high-skill industry would not be important to political geography if, as suggested earlier, political regions were perfectly heterogenous across counties and states, and if the people moving were a representative segment of the American population. Because neither is true, the political ramifications of interstate migration deserve more in-depth investigation. It is increasingly clear that the individuals and households with the greatest facility to move are college-educated, white, and wealthy or upwardly mobile. Up until the turn of the century, such descriptors would point toward a conservative (and consequently Republican) base of interstate migrants in the United States (see e.g. Gimpel and Schuknecht 2009, Judis and Teixeira 2002) shifting votes among states and counties. Over the last quarter of a century, however, fundamental shifts have changed the way some of those characteristics are related to partisanship and point instead toward a Democratic voting bloc concentrating in urban centers. These very patterns allow for the type of experimental data-driven methods found in this study.

In their discussion of the relationship between demography and political partisanship, Judis and Teixeira note the connection between the economic shift towards tech and the increasingly liberal preferences of the workers pushing that change. They write that, "Democrats are strongest in areas where the production of ideas and services has either redefined or replaced assembly-line manufacturing, particularly in the North and West […] while Republicans are strongest in states […] where the transition to postindustrial society has lagged" (71). They situate their theory around the idea of an "ideopolis," which is defined broadly as metropolitan areas (the apparent new currency of the postindustrial economy) with high concentrations of people involved in the production of "soft technology — entertainment, media, fashion, design, and advertising" (72). Using language strikingly similar to that employed by Florida to describe the creative class, they take his argument a step further by connecting the shift to

electoral politics, writing that, "if you compare 1980, the beginning of the Reagan era, to today, it is clear that almost all of the pro-Democratic change in the country since then has been concentrated in America's ideopolis counties" (76).

Here it is worth noting that individual partisanship is informed by a host of factors and obviously cannot be boiled down to any single demographic characteristic, job, or element of a voter's life. Determining how an individual voter participates in the electoral process and which candidate a given voter will choose is an imperfect art at best — one that is complicated by a series of unpredictable variables, from deeply held values to income and education. These and other moving parts have a role to play in understanding partisan preferences as well as predicting partisan activity. Still, relationships exist between political affiliation and race, income, educational attainment, and other demographic characteristics (Jurjevich and Plane 2012). Even if demographic data cannot paint a full picture of how people cast votes in the United States, they still offer a helpful lens to understand past and present trends in order to create a more robust sense of American electoral politics.

As we saw in the comparison between metropolitan areas with high concentrations of the creative class and those with college degrees, access to higher education is a near prerequisite (if not a universal prerequisite) to participate in a knowledge- and information-driven economy. A college degree is deeply embedded in the current structure of the American economy, allowing for greater access to the high-skill (and generally higher profit) labor that drives markets in the United States. Educational attainment also serves as a helpful demographic characteristic to explore partisanship, and as a result, is of great interest for this study.



Adapted from Pew Research Center chart, http://www.people-press.org/wp-content/uploads/sites/4/2016/04/4-22-2016_01.png. Source: Pew Research Center, see http://www.people-press.org/2016/04/26/a-wider-ideological-gap-between-more-and-less-educated-adults/ 2016/04/26/a-wider-ideological-gap-between-more-and-less-educated-adults/.

Figure 3. Produced by author based on Pew Research Center 2016.

The positive correlation between a college education and liberal political preferences is increasingly relevant (see Figure 3) and widely noted across the United States, though with variation by state, region, and county (which signals of the importance of context when considering the effect of various demographic characteristics on political affiliation (see e.g. Gimpel and Schuknecht 2009, Holbrook 2016). In North Carolina, the relationship between education and political partisanship largely fits what has been shown across the United States — the higher the level of education, the more likely it is that a voter will lean to the left politically (Pew Research Center 2014) (see Figure 3 for a breakdown of each educational group). That relationship has been widely studied and confirmed (see e.g. Robinson and Noriega 2010, Holbrook 2016, Bishop 2008, Judis and Teixeira 2002). I draw on that relationship using an experimental method to investigate how education (and anticipated partisanship) connects with patterns of migration in North Carolina.

Group identity, interstate migration, and voter migration

It's useful to consider again to Enos' assertion that "the complete freedom to move — highly valued in free societies — is the freedom to segregate" (225). The geography of economic opportunity, as it is shaped by tech and professional industries, clearly plays a leading role in shaping patterns of migration of college-educated, mobile people in the United States and in North Carolina. Deciding where to live, however, is not strictly a question of dollars and cents. Similarly, voter sorting is not simply the result of like-minded people gathering in cities with the most economic opportunity. Rather, the geography of professional and knowledge-based jobs interacts with what we know about group psychology — the human desire to live amongst those who are similar to us (in other words, to segregate) and the positive feedback loop that pushes like-minded groups even further towards consensus. **Both the idea of self-selecting communities as well as the effects of such a trend to further homogenize groups have a particular place in the discussion of spatial-political polarization.**

Parsing out how individuals and households make decisions about where to live (explicitly and implicitly) and identifying the effects of like-minded communities occupy is not the focus of this project. Nevertheless, not to consider the role of identity and group psychology in political communities would leave out a significant piece of the puzzle. Fortunately, scholars across disciplines have undertaken substantial research on political identity (Mason 2015, Mason 2016), the small-scale sorting of people (Hui 2013), and the impact that has on voting (Jurjevich and Plane 2012). Integrating their findings helps support the theoretical framework within which I situate the data set forth in this study.

Self-selecting communities, political identity, and the feedback loop

At a time when people are increasingly likely not only to share neighborhoods and school districts with people of similar political stripes, but also more likely to marry them (Iyengar, Konitzer and Tedin 2018), partisan sorting at a minimum seems likely to play some role in shaping the American political landscape. As Gimpel and Hui eloquently assert, "even if a small fraction of partisans make choices on a political basis, the cumulative effect in the long run can greatly augment population differences across space" (2015, 139).

The question of politically motivated migration has yet to be definitively answered (largely a result of a lack of appropriate data, see Jurjevich and Plane 2012), though numerous scholars have tackled the question and called for additional investigation. In their attempt to answer whether communities sort themselves politically, Gimpel and Hui survey movers about their motivations and priorities, ultimately arriving at the conclusion that economic motivations serve as the principal variable shaping migration. They highlight, however, that "people possess a fundamental need to feel valued, sentiments that are undermined if they regularly confront moral and political rejection" (2015, 132). Though economic motivations might determine a selection of potential destinations, finding a community with shared values might push a migrant to choose one location over another, acting as a sort of "tie-breaker" among options that are equally possible (2015, 139). Meanwhile, Hui found that though partisanship didn't figure prominently in the moving equation, partisanship of neighbors did affect respondents' satisfaction with their neighborhoods (2013). She found that those surveyed demonstrated greater satisfaction when people find out that they live among more co-partisans than they had guessed, and less satisfaction if there were fewer co-partisans than they expected. Other research points to the same conclusion: there is at least enough evidence to prop up the

possibility that partisanship places some role in migration, and that it could dramatically alter the electoral geography of the United States (Cho, Gimpel and Hui 2013).

The psychology of belonging and a sense of identity seem to shape decision-making about where migrants move. Indeed, outside of the migration context, partisanship is widely considered to be increasingly salient in that process of identity-making (see Taub 2017, Mason 2015, Mason 2016, Enos 2017). Though Enos approaches partisanship as a function of race and class, he asserts that "partisanship is a social identity" (2017, 163). Mason too, drawing on work from Roccas and Brewer, explores the idea of partisanship as an identity in the context of compounding identities (Taub 2017), whereby the multiple identities a person possesses (e.g. race, religion, income) align more neatly, and perceived differences between groups increase as a result. She too explicitly draws a connection to partisanship, writing that as that process of identity alignment continues to create well-sorted partisans, fewer and fewer voters will identify with multiple perspectives, ultimately pushing them away from moderation (2016, 1). In effect, she argues that the process of alignment has served to boost party identification and political polarization (Mason 2015). If partisanship does indeed contribute to our sense of identities, it could push or pull us based on a desire to live among people who are like us, even if that motivation is not explicit.

Nonetheless, not all partisanship should be treated equally in studies of the relationship between politics and migration. Much of the recent research on voter migration finds that Republicans are likely to comprise most of the migrant population, a result drawn from the observation that most movement has taken place among white, wealthy, and well-educated communities (see e.g. Gimpel and Schuknecht 2009; Gimpel 1999, Cho, Gimpel, and Hui 2013). Holbrook, however, found that most migrants tend to come from either 'purple' or 'blue' states, but writes that, "if a state draws its internal

migrants primarily from conservative or liberal states, then internal migration is likely to play a role in changing state political outcomes" (2016, 66).

Jurjevich and Plane too push back against the long-standing assumption that most migrants are Republicans (2012, 431), arguing instead that the community of internal migrants is "*often* more plural and *considerably* more diverse" than previously believed (442, emphasis in original). Work here suggests that much of the mobile population comes from counties that have moved away from the Republican Party from 2000 to 2016 and that many of them remained in counties that became less Republican (although that trend is less apparent when only considering 2016 results; just under half of all internal migrants left counties won by Democrats in 2016).

Partisan sorting, however, is not simply about like-minded people electing to live in the same places because of the positive feedback loop associated with such a trend. As Bishop notes, "mixed company moderates," and "like-minded company polarizes" (2009, 68). Indeed, there is substantial evidence to suggest that as people settle in more homogeneous communities, social efficiency increases (Enos 2017, 194) but so do extreme views "as a way to conform" (Bishop 2009, 69). Indeed, voter turnout is higher in communities with higher political homogeneity (Bishop 2009). Though the idea is counterintuitive if we assume that underrepresented communities have more at stake if they don't participate, social pressure pushes people in significant political majorities to the polls because "a vote becomes more an affirmation of the group than an expression of civic opinion" (Bishop 2009, 73).

Importantly, where you live (and the community that exists there) interacts with individual preferences and decision-making to produce a different kind of geography, one where space and people interact to draw communities into greater homogeneity. Enos argues that "segregation itself affects group-based bias" (2017, 133). Taken with Mason's

research finding that political identities are increasingly intransigent, we can consider the possibility that living in a landslide county is likely to allow less space for competing perspectives. Crucially, we must integrate one of Enos' key findings: "Space itself shapes our behavior" (2017, 232).

Arguments against voter migration

Bill Bishop, in his aptly named book *The Big Sort*, brought the idea of political sorting into the mainstream with his study of how lifestyle preferences, and by extension, politics, shape people's decisions about where to live. Though Bishop was not the first to bring the question to light, the popularity of the publication attracted significant attention to the issue and led to a number of articles investigating Bishop's findings.

Unsurprisingly, the idea of voter sorting and the degree to which it matters has been debated with detractors and supporters across disciplines, with the definition of a landslide county figuring significantly into the dialogue. Indeed, Bishop bases his argument largely on the increase of landslide counties, which he defines as a county where a presidential election produced a margin greater than 20 points between 1976 and 2004. Strickler makes the case that the "big sort" is overblown. Using Bishop's own definition of landslide counties, Strickler finds little evidence to support the idea of extreme geographic political polarization. He concedes that the trend amounts to something, but not to the degree that Bishop asserts (a relatively common conclusion among those who find the polarization debate to be overdone, see Bialik 2013, Holbrook 2016, Chapman 2018). Taking a wholly ageographic approach, Abrams and Fiorina make the case that technology negates the importance of geography and argue that "a neighborhood big sort could occur without changing either the everyday lives of most Americans or the political process that prevails today" (2012, 208). Where you live has implications for the character

of American politics, and ignoring the inherently spatiality of our political system weakens their argument substantially.

Though there is certainly room for discussion about the severity of spatial-political polarization in the United States, using the right metric to measure polarization is a crucial first step. Even Bill Bishop's definition doesn't capture the full range of possibilities. Rather than using the 20-point threshold employed by Bishop and Strickler, defining a landslide county as a county with a margin greater than 40 points, as I've done in this stud,y isolates more intensely homogenized political communities. Additionally, Abrams and Fiorina lean heavily on voter registration margins rather than electoral margins, which is also problematic. A substantial segment of voters do not register with a party (19 states do not allow for party registration with voter registration) and despite clear state-wide leanings, only five states demonstrate party majorities in their voter registration statistics, as independent registration among the other 31 states is roughly 31% (Cook 2018).

Summary

As Holbrook stated, "If we assume that in any given election year state-level outcomes are driven by the types of people who live in states and how their characteristics translate into political preferences (with some allowance for short-term influences to push the marker slightly in one direction or another), then explaining change in outcomes over time must incorporate measure of changes in the underlying population characteristics, as well as how those characteristics influence the vote" (2016, 36).

The central takeaway as we tackle the issue of migration and an evolving electoral landscape rests largely on the transformation of the American economy into an information- and knowledge-focused system. As the economic geography of the United

States changed to reflect this new system, so did the distribution of people as they sorted themselves to fill the growing demand for high-skill labor. As the literature reveals, the people who have flocked to the tech centers in the United States tend to be well-educated, upwardly mobile, and white, and also display a set of political preferences that favor the Democratic party. The literature on group identity and the effect of like-minded groups adds another layer to the question, and sheds light on the psychological effects that follow the clustering of people with similar partisan leanings. These trends lay the groundwork for the American political landscape to be shaped greatly by internal migrants in North Carolina and beyond.

III. DATA ANALYSIS

Introduction

Central to this project is an exploration of county-level migration in North Carolina to assess whether it is possible to detect the trends that feature prominently in public discourse (i.e. a polarized political America) in the data itself. An extensive data approach lends itself well to the pursuit of a coarse sense of widespread migration patterns over recent years, and the appropriate datasets come in several forms: 1) two county-to-county level migration datasets produced by the U.S. Census Bureau in five-year increments from 2006-2010 and from 2011-2015, which identify the origin and destination counties of nearly 700,000 migrants in total over the ten-year period, 2) a single county-to-county level migration dataset that contains the educational attainment of over 140,000 movers between 2007 and 2011, 3) electoral results from twelve statewide elections between 2000 and 2016 (comprised of five presidential, two gubernatorial, and five senatorial elections, all of which are won based on the county-level result), and 4) data collected by Pew Research Center which provides approximate breakdowns of partisanship based on educational attainment (2014).

The aim of the project is not to predict electoral outcomes, to provide exact estimates of how many Democrats left a particular county, or to offer any sort of inscrutable proof that migration shapes elections. Rather, the intent is to consider if and how migration (and a quantitative study of it) might fit into the complex equation that produces electoral outcomes in the United States. With that said, it is important to acknowledge the weaknesses of an extensive, data-driven approach. Single numbers do not allow for the nuance that interviews and qualitative research can provide. The structure of the dataset itself leaves room for substantial error. Margin of error in datasets like the county-to-county migration records sometimes exceeds the values themselves.

Additionally, five-year increments leave room for migrants who move multiple times within that time frame and, indeed, the dataset is incomplete. Not every record has an origin and destination county, which means that any analysis necessarily excludes some movement in the state. Other quantitative studies wrestle with the same data limitations (see e.g. Jurjevich and Plane 2012, Holbrook 2016, Hui 2013); even so, it is the best data available and, when situated properly, has potential to add another dimension to current work in electoral geography and to open the door to future studies.

Data setup

Approach to visualizing

Mapping and visualizing flows between North Carolina's 100 individual counties muddles meaningful trends, as counties are not on their own meaningful containers for communities, economies, or political life. Instead, it makes more sense to group them based on various characteristics and then to map flows between those groups. In order to get multiple perspectives on the nature of migration within the state, I separated counties based on five different sets of criteria (2 based on outside sources, 3 based on electoral results): prosperity zones, based on designations made by North Carolina's own Department of Commerce; statistical designation by the U.S. Census Bureau (i.e. metropolitan statistical area, micropolitan statistical area, or non-metro, non-core); an electoral grouping based on aggregate electoral results from 2000 to 2016; an electoral grouping based on the 2016 presidential election; and an electoral grouping based on the change of the Republican share of votes between the 2000 and 2016 presidential elections.

Processing & notes

All of the datasets were processed using R and the parsetR package (Bostock, Davis, and Russell). I only included records where the origin and destination counties are in North Carolina (i.e. migration that took place within the state). Additionally, I excluded records in the U.S. Census Bureau datasets where either a destination county or origin county was missing so that the analysis only considers complete records.

Brief explanation of the categories

Prosperity zones. The North Carolina Department of Commerce identifies economic regions in the state and groups them into seven groups.

U.S. Census Bureau designation. The U.S. Census Bureau designates counties based on the population size of the urban area. A metropolitan area has an urban population of at least 50,000, a micropolitan area has an urban population of at least 10,000 but under 50,000, and non-metro, non-core counties have urban populations of 10,000 or below.

Median electoral margin. I calculated the median Democratic and Republican margins over the course of 12 senatorial, gubernatorial, and presidential election between 2000 to 2016 and grouped them into six categories based on the degree of change. See Table 3 for an explanation of the categorizations.

Table 3. County categorizations based on median electoral margin.

Democratic margin	Category	Republican margin	Category
0-20 points	ldem	0-20 points	lgop
20.01-40 points	mdem	20.01-40 points	mgop
40+ points	hdem	40+ points	hgop

2016 Presidential electoral value. Using the same rules of categorization that I used for the aggregate value, I assigned "lgop," "ldem," "mgop," "mdem," "hgop," and "hdem" to each county based on the electoral margin during 2016 presidential election.

Republican change electoral value. To identify the Republican shift at the county level, I subtracted the 2000 presidential election Republican share from the 2016 presidential election Republican share to find the *Republican difference* (see Table 4 for examples). Counties that shifted up to 5 points towards the Republican party fall in the "low gain" counties with shifts toward the GOP greater than 5 points and up to 10 points fall into the "medium gain" category, and those with shifts between 10 points and 15 points fall into the "high gain" category. Counties that moved against Republican candidates between the 2000 and 2016 presidential elections have the same numeric divisions, and are called "losses." See Table 5 for the categories and criteria.

The justification for using Republican change rather than Democratic change lies with the evolution of landslide counties in North Carolina between 2000 and 2016. Though a few counties have grown bluer (i.e. more Democratic) with time, the number of counties leaning more towards Republican candidates far outnumbers those where Democrats have made gains (see Electoral Evolution section). Naturally, population is not evenly distributed in the state of North Carolina, so those counties do not necessarily represent a growing substantial majority of voters, but instead demonstrate a striking spatial trend developing over time. With that in mind, I chose to use Republican electoral change to break up counties.

Table 4. Snippet of elections table showing Republican and Democratic differences.

County	Bush	Trump	Republican difference
Bladen	45.63%	53.78%	8.15 pts
Camden	57.51%	70.83%	13.32 pts
Durham	35.64%	18.16%	-17.48 pts

Republican difference = Trump - Bush

Table 5. Rules for categorization based on the Republican change variable.

Republican difference	Category
0-5 points gained	Low gain
5.01-10 points gained	Medium gain
10.01-15 points gained	High gain
0-5 points lost	Low loss
5.01-10 points lost	Medium loss
10.01-15 points lost	High loss
15+ points lost	Very high loss

Electoral evolution in North Carolina

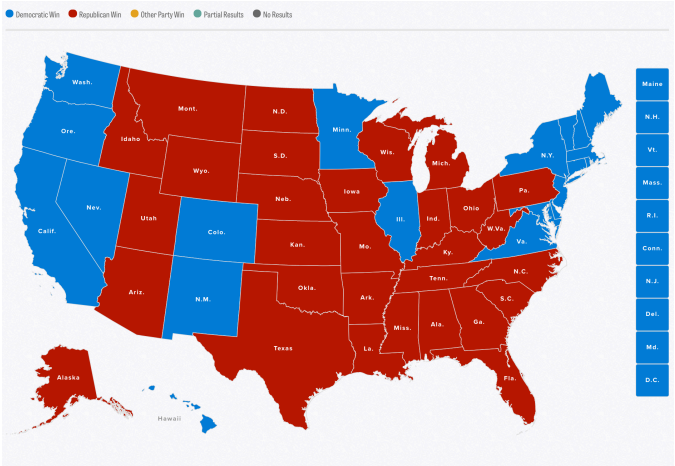
By all accounts, the United States is dealing with an increasingly vitriolic, polarized political system (though not necessarily an unprecedented level of polarization, see Bialik 2013). Indeed, political polarization has grabbed the attention of media outlets across the political spectrum: *Vox.com* ran a headline in September 2017 warning that "rabid partisanship could destroy American democracy" (Drutman 2017) while the *Wall Street Journal* proclaimed that "Political Divisions in U.S. Are Widening, Long-Lasting" (Hook 2017). Janet Hook wrote for the *Wall Street Journal* that, "people who identify with either party increasingly disagree not just on policy; they inhabit separate worlds of differing social and cultural values and even see their economic outlook through

a partisan lens" (Hook 2017). Pew Research Center reported that since 1994, the partisan gap between Democrats and Republicans nationwide has jumped from 15 points to 36 points, a record high since the survey was first conducted (Pew Research Center 2017).

Investigations such as the surveys undertaken by Pew Research Center provide valuable data that assess the attitude of the electorate, but offer only a bird's eye view of American politics by privileging reported attitudes and non-spatial statistics over outcomes of elections and smaller-scale spatial data. By contrast, Agnew and Muscarà assert that, "not only is American politics increasingly polarized ideologically, […] but the country itself is increasingly geographically polarized politically, albeit not at the state level of sections or macroregions, […] but at the scale of counties, suburbs, and municipalities" (2012, 4). Of utmost importance in electoral-geographical studies is the consideration of place and scale. On the issue of place, John Agnew writes that, "the categorical approach [i.e. "non-spatial sorting of people"] suffers from a sort of 'agnosia' or disorder of perception in which representations of space only set boundaries for non-spatial processes" (1996, 131). Such an assertion dates back to the days of Aristotle (Woolstencroft 1980, 540), and perfectly captures what is lost in country-wide surveys with no consideration for place. In order to remedy the "disorder of perception," one must consider that "the hierarchical-geographical context or place channels the flow of interests, influence and identity out of which political activities emanate" (Agnew 1996, 133). In other words, place matters when studying political behavior (Flint 2000), though it is not deterministic. To describe changing political attitudes without consideration of local context means sacrificing a wealth of insight provided by place-based studies that add nuance to any explanation or description of on-the-ground political circumstances.

However, applying the idea that "place matters" to electoral-geographical studies remains insufficient. If geographers are to study the impact of local contexts, how does

Map 3. 2016 presidential election results by state (Politico 2016).



one define 'local'? No single answer exists, and different studies demand attention be paid to various scales in order to grasp relevant complexities. Maps like the one published by *Politico* (see Map 3) reinforce the idea that presidential elections should be studied at the state-level, though that approach obscures the internal heterogeneity of the states' electoral results. To categorize states as either 'red' or 'blue' signals to the viewer that the states are homogeneous containers: The electorate of Mississippi, for example, looks as if it is entirely comprised of right-leaning voters, whereas California appears solidly Democratic.

By contrast, considering voting trends below the state level shows a gradient that transcends state boundaries and is dominated by far more purple than clearly demarcated red or blue zones (Holbrook 2016). Though the extent to which the United States is politically polarized remains up for debate, there are material changes in the political landscape of North Carolina that deserve some discussion and signal a significantly changed American political geography. Chief among these is the evolution of landslide counties over time and the proliferation of what I call 'mega-landslide counties.'

How we define a landslide county, of course, determines how many landslide counties we count. Though there is not a single definition of a landslide victory, the term generally refers to a situation in which one candidate or party wins an overwhelming majority of votes cast. Otherwise called a non-competitive county or district, a landslide win has traditionally been defined as an electoral victory that exceeds twenty points

(where one party or candidate wins 60% of the vote). Bill Bishop used twenty points as a threshold for determining competitive or non-competitive counties in his own work (2008), and FiveThirtyEight and the *New York Times* use a twenty-point threshold in their discussions of landslide electoral victories and the waning competitiveness of American elections (see e.g. Wasserman 2017; Aisch, Pearce, and Yourish 2016).

By this definition, the number of landslide counties has soared in recent years. The number of competitive counties in North Carolina after the 2000 presidential election stood firmly at forty-nine — just short of half of North Carolina's total number of counties. After the 2016 presidential election, only thirty-seven counties remained competitive, a drop of nearly twenty-five percent. Such a trend is not limited to nationwide elections. Senatorial elections are showing similar patterns. During the 2002 senatorial election in North Carolina, sixty counties had margins below twenty points. In 2016, only forty remained. Perhaps more importantly, seventy counties became less competitive between 2000 and 2016 (i.e. showed an increase in margins between the 2000 and 2016 presidential elections), mostly by significant margins.

Averaging the difference in margins across all North Carolina's counties gives some idea of how much counties are changing over time. Some margins stayed relatively the same. For example, George Bush beat Al Gore in Bladen County by 8.36 points. In 2016, Donald Trump beat Hillary Clinton in Bladen county by 9.39 points (producing a less competitive election by only 1.03 points) (see Table 6 for examples).

The average change in the electoral margin between the 2000 and 2016 presidential elections was 6.9 points (average of all *Difference* values for presidential elections) while the senatorial elections between 2002 and 2016 showed an average shift of 8.7 points towards less competitive elections (average of all *Difference* values for senatorial elections). Among the counties that grew less competitive (seventy of one

hundred), the average shift was 12.7 points in presidential elections and 15.3 points between the 2002 and 2016 senatorial elections (average of all *Difference* values for counties that grew less competitive). Such high numbers suggest that shifts away from competitive elections are common and significant.

Table 6. Snippet of elections table showing Republican difference calculation (see footnotes for explanation of processing).

County	Bush	Gore	Margin[1]	Trump	Clinton	Margin*	Difference
Bladen	45.63%	53.99%	8.36 pts	53.78%	44.4%	9.39 pts	1.03 pts
Camden	57.51%	41.93%	15.58 pts	70.83%	25.45%	45.39 pts	29.81 pts
Durham	35.64%	63.72%	28.08 pts	18.16%	77.66%	59.5 pts	31.42 pts

Margin[1] = absolute value of Bush - Gore

Margin* = absolute value of Trump - Clinton

Difference = Margin* - Margin[1]

The average change in the electoral margin between the 2000 and 2016 presidential elections was 6.9 points (average of all *Difference* values for presidential elections) while the senatorial elections between 2002 and 2016 showed an average shift of 8.7 points towards less competitive elections (average of all *Difference* values for senatorial elections). Among the counties that grew less competitive (seventy of one hundred), the average shift was 12.7 points in presidential elections and 15.3 points between the 2002 and 2016 senatorial elections (average of all *Difference* values for counties that grew less competitive). Such high numbers suggest that shifts away from competitive elections are common and significant.

The change in competitive counties, however, has not affected Democratic candidates and Republican candidates equally. The shift away from competitiveness has largely taken place in Republican-leaning counties. In 2000, thirty-five of the forty-nine competitive counties leaned Republican; in 2016, twenty-four of the thirty-seven competitive counties leaned Republican, resulting in a drop of 31 percent in total Republican-leaning competitive counties. Meanwhile, Democratic-leaning competitive counties stayed relatively steady, with an exception in 2008, and shifted only from fourteen. It is worth noting that though the number of counties exhibiting partisan change over those years differs greatly between Democratic- and Republican-leaning counties, the degree of the shift among each group is similar. Republican shares of the vote in counties that swung to favor Republicans (i.e. where the *Republican difference* is positive, see Table 7 for examples) in the 2016 presidential election moved roughly 5.9 points on average (see the Note in the table), while the Democratic share of the vote

Table 7. Snippet of elections table showing Republican and Democratic differences as well as averages calculations (see footnotes for explanation of processing).

County	Bush	Gore	Margin[1]	Trump	Clinton	Margin*	Republican difference	Democratic difference
Bladen	45.63%	53.99%	8.36 pts	53.78%	44.4%	9.38 pts	8.15 pts	-9.59 pts
Camden	57.51%	41.93%	15.58 pts	70.83%	25.45%	45.39 pts	13.32 pts	-16.48 pts
Durham	35.64%	63.72%	28.08 pts	18.16%	77.66%	59.5 pts	-17.48 pts	13.94 pts

Margin[1] = absolute value of Bush - Gore

Margin* = absolute value of Trump - Clinton

Republican difference = Trump - Bush

Democratic difference = Clinton - Gore

Note: Average Republican shift = average of Republican differences where the Republican difference values are positive (i.e. more Republican)

Note: Average Democratic shift = average of Democratic differences where the Democratic difference values are positive (i.e. more Democratic)

among Democratic counties (i.e. where the *Democratic difference* is positive, see Table 7 for examples) shifted 5.5 points. When taken together, the individual partisan shifts suggest a slight advantage held by the Republican party at the state level, though one with a distinct geography shaping it at the county level. The scale of data collection (again) shapes our understandings of the political landscape.

Counties in North Carolina have not merely surpassed the 20-point threshold with greater frequency. Though the average shift is 6.9 points and the state-level partisan shifts suggest still a competitive state, the dataset shows great variation at the county-level; margins in North Carolina have far exceeded the 20-point limit, soaring past 40 points in some cases. The increase in what I call "mega-landslide" counties, or counties where the margin reaches beyond 40 points, demonstrates a very particular partisan pattern and geography. Between the 2000 and 2016 presidential elections, far more Republican-leaning mega-landslide counties have emerged — particularly in the western regions of the state and in pockets along the coast. What was relatively uncommon in 2000 (mega-landslide counties of all partisan leanings only represented 6 percent of North Carolina's counties) grew to represent 26 percent of all counties in 2016. Of those 26 in 2016, 24 were Republican-won, demonstrating more than a 300 percent increase from its 2000 numbers (see Maps 4-8). As is evident in Figure 4, Republican-won counties have remained relatively steady while Republican-won *mega-landslide* counties have exploded. Democratic-won mega-landslide counties, on the other hand, remain flat — as do Democratic wins.

Maps 4-8. County categorization based on 2016 electoral values, 2000-2016.

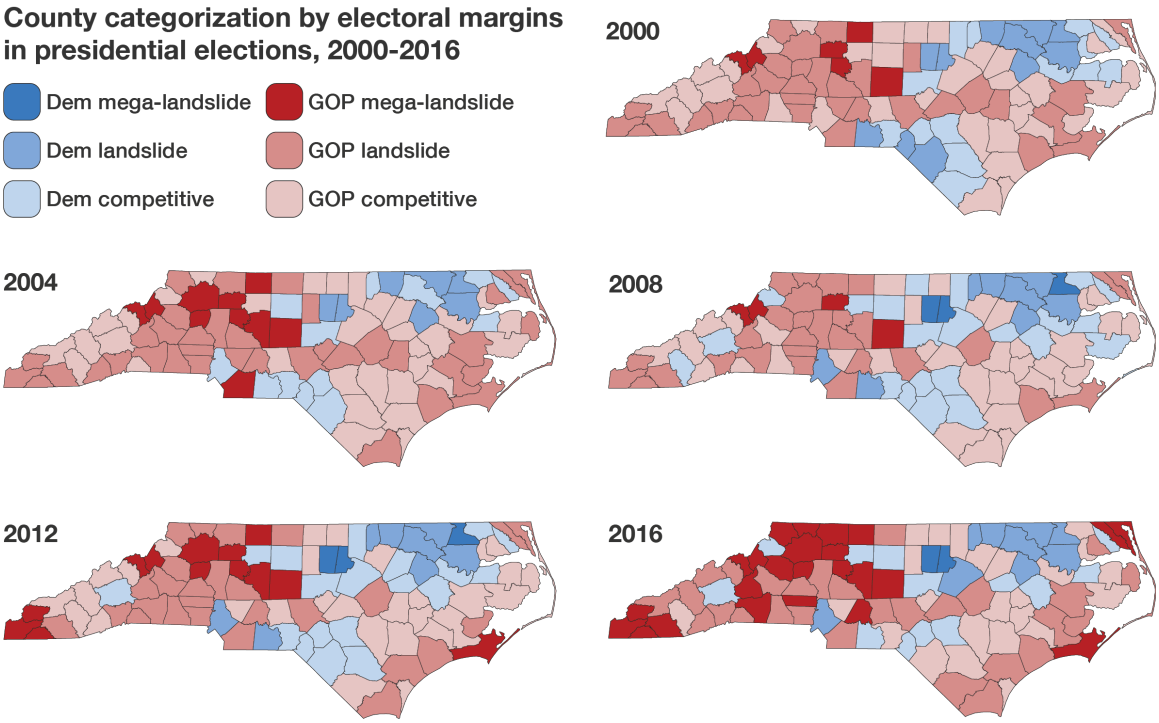
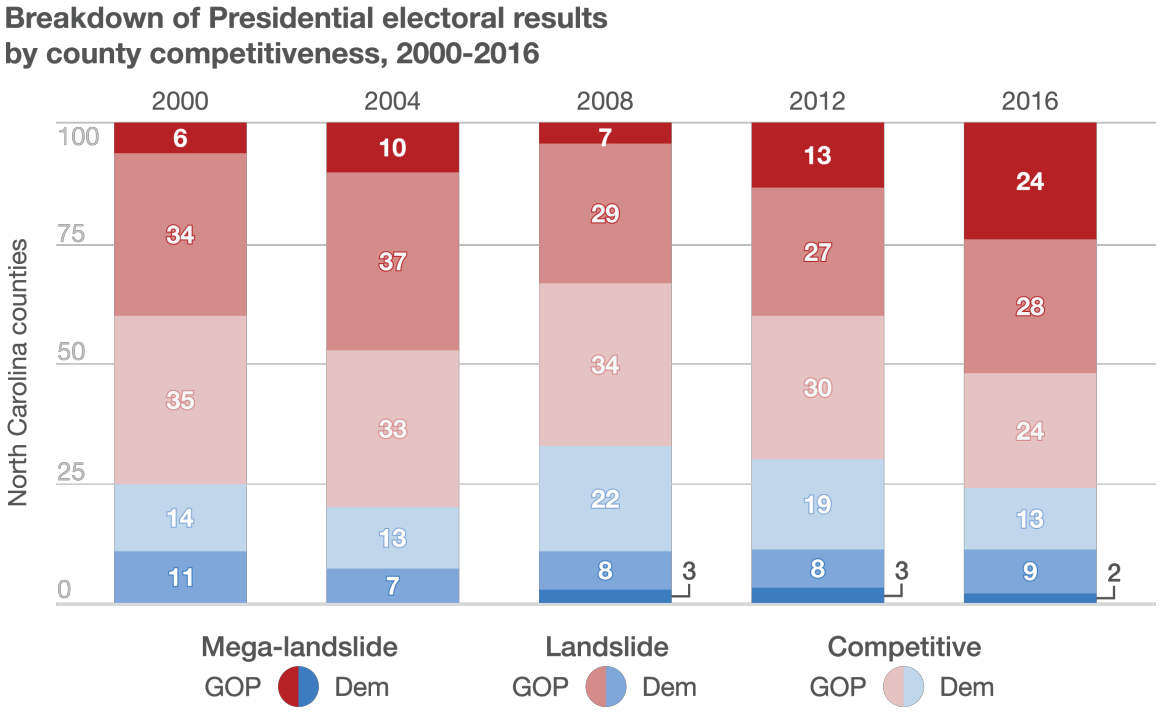


Figure 4.



Experimental partisan shift calculation

Most obviously, such a striking increase in landslide, and perhaps more pertinently, mega-landslide counties demonstrates some shift towards more homogenous voting communities over the relevant years for elections at the national level. The mechanism producing such a change is almost certainly a complex equation of policy preferences, voting access, quotidian variables shaping who votes and when, and migration within and out the state. Data doesn't exist, however, that counts individuals, collects their vote preferences, and identifies whether they have moved, where, and why. Though qualitative measures were not possible for this study, developing some general sense of who is moving where and who they vote for can provide insight into the potential political effects of the migration of different groups.

In order to determine what those patterns might look like, I applied an experimental method using data collected by Pew Research Center documenting how different groups based on their level of education tend to vote (see Figure 5) in conjunction with the 2007-2011 county-to-county migration dataset prepared by the U.S. Census Bureau, which breaks down movers by level of education. By applying the proportions outlined by Pew Research Center to the total number of each type of mover based on their level of education, it is possible to derive a rough estimate of the partisan profile of the movers in North Carolina.

What we find is a series of complex results. There is a strong negative statistical relationship (*Pearson* value = -.511, where the p-value is less than .05) between the counties that are predicted to move to the left between 2007 and 2011 based on the absolute shift via experimental calculation and the actual difference between Republican margins in 2000 and 2016 (i.e. the higher v experimentally calculated Democratic shift, the higher the Republican losses between 2000 and 2016). Additionally, the degree of the

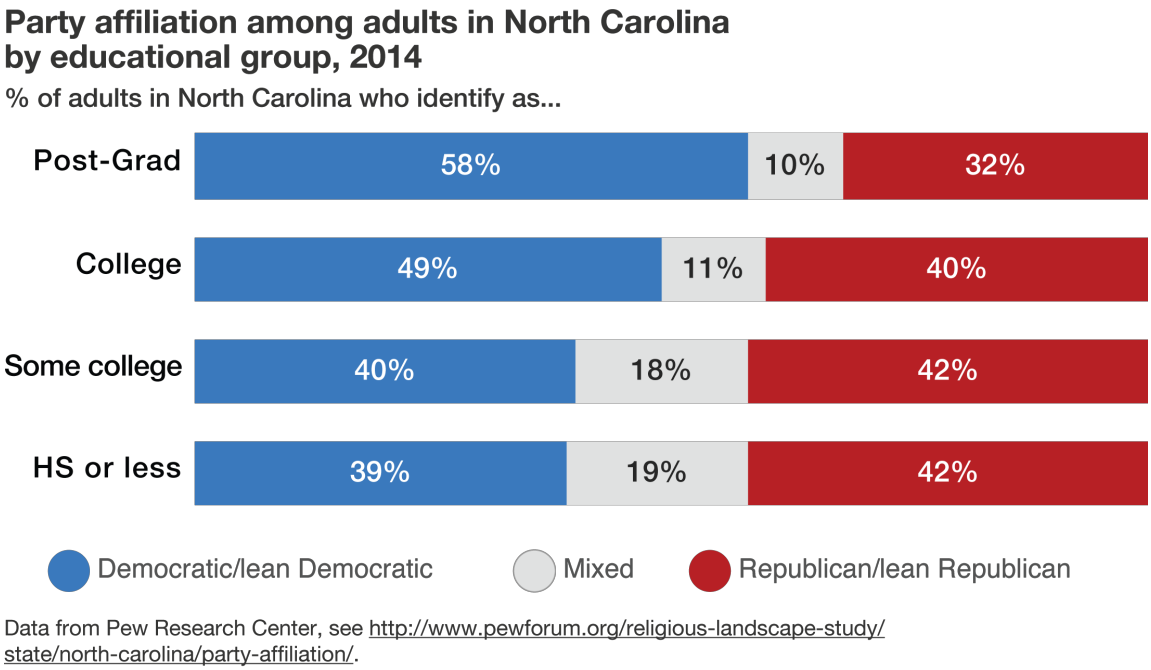


Figure 5. Party affiliation among adults in North Carolina by educational group, 2014 (Pew Research Center 2014).

calculated Democratic shift relative to the county's registered voting population in 2011 shows a negative statistical relationship with Republican margins, though not as strong (i.e. the higher the calculated shift towards the Democratic Party relative to the population of the county, the higher the Republican losses between 2000 and 2016) (*Pearson value* = .357, p-value is less than .05).

The relationship between the calculated shifts and Republican losses between 2008 and 2012 show no significance, however (*Pearson value* = .046, p-value is greater than .05). Crucially, the Republican party's performance across North Carolina's counties between 2008 and 2012 hardly budged (the Republican change, or the difference between Romney's county-level results and McCain's county-level results, only range from -2 points to 7 points, while 2000 to 2016 shows a range of -18 to 14 points). Indeed, while more substantial Republican losses were recorded from 2012 to 2016, the 2016 election was not entirely exceptional (the range of the Republican shifts is -10 to 6 points).

Though the numbers produced by such an experimental approach certainly are not intended to and do not produce a precise picture of partisan migrants, it is useful to compare the results to changes on the ground. What we find is a connection worth investigating between expected Republican losses and actual Republican losses (of course, actual changes and calculated changes do not match up in every case, and in some cases, calculated changes suggest the opposite of on-the-ground changes). Additionally, the segment of the data related to educational attainment represents a mere subset of the entire migration data picture; because Pew Research Center includes a category for 'mixed' preferences, a significant portion of the voting population is left out of the calculation. It is important to remember too that the number of migrants is quite small relative to the populations of their destination counties. The 15,159 migrants whose educational attainments were recorded and who settled in Wake county between 2007 and 2011 comprise a small fraction of the population in a county where the 2011 estimation hovered around 1 million (with a registered voting population of 600,000). The calculated partisan shift (that there were 1,387 more Democrats moving to Wake county than Republicans) would produce just over two thousandths of a point in the favor of Democrats in a presidential election assuming all registered voters participated. Finally, the calculated absolute shift proved to be a much better predictor than the shift relative to the counties' registered voting population.

Interestingly, the calculated shift matched on-the-ground results quite well in cases of counties where Democrats gained ground from 2000 to 2016, but failed to do so for Republican counties. This could be explained by the fact that the absolute shifts are small relative the counties' populations in counties with high Republican gains, leaving the value washed out. For example, the two highest calculated Democratic shifts was 1,387 and 1,045, while the two highest Republican shifts were 72 and 24 (see Table 8).

Alternatively, the failure of the data could be a consequence of the fact that Democrats show a greater propensity to move to counties where they will live among more co-partisans. In any case, the mixed results point to the weakness of this experimental approach, at least in the case of North Carolina.

At the same time, we should not totally dismiss the results. If the calculated shifts resemble any trend we see on the ground, there is something more to investigate. Moreover, we should consider such a hypothetical (that the Democratic population increased by 1,387 people) in the context of the previous discussion of political identity and the effect of like-minded groups. Perhaps even small changes that result from migration could be swept up in a positive feedback loop that pushes new arrivals (and in particular, those already identifying with the general political sentiment) towards the local political consensus—in the process, further embedding their political identities. Equally as compelling is the idea that as counties grow more populous, their electoral results will reflect the political preferences of newcomers (assuming there is substantial political participation among them). If partisanship is unlikely to change dramatically (Pew Research Center 2017), and as populations grow, counties show a greater affinity for one party or another, we can safely assume that more partisans sharing that political preference now live and vote there.

Migration data analysis

U.S. Census Bureau designation

The insights embedded in Map 9, Figure 6, and Figure 7 reveal some of the nuance in migration patterns in North Carolina between 2006 and 2010. The movement suggested by the visualizations corresponds to what is largely discussed in terms of the

urban-rural divide. Although the U.S. Census does not classify counties as "rural," there is a distinctive difference between movement out of metropolitan counties and movement

Table 8. Five counties showing the greatest calculated shifts towards the Republican and Democratic Parties by absolute shifts.

County	Absolute shift	Relative shift	Republican difference
Wake	-1,387	-0.002311	-15.97 pts
Mecklenburg	-1,045	-0.001696	-18.08 pts
Buncombe	-307	-0.001736	-13.83 pts
Durham	-305	-0.00164	-17.48 pts
Forsyth	-265	-0.00115	-13.37 pts
Lee	21	0.000641	-3.11 pts
Greene	21	0.00191	-3.09 pts
Lenoir	24	0.000634	-3.62 pts
Sampson	32	0.000871	3.12 pts
Johnston	72	0.000715	-2.83 pts

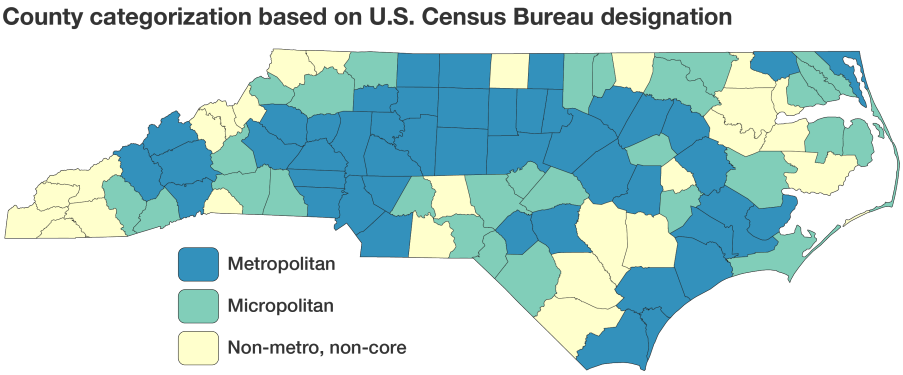
Absolute shift = calculated Republicans - calculated Democrats (where negative values refer to a calculated increase in Democratic voters

Relative shift = absolute shift / total registered voters in December 2011

out of non-metro, non-core counties. The most obvious takeaway is that the vast majority of movement between counties in North Carolina between 2006 and 2010 occurred between metropolitan counties (61% of all movers). Additionally, metropolitan counties attracted the most movers out of the remaining two categories. The majority of movers from all groups — metropolitan; micropolitan; and non-metro, non-core counties — moved to metropolitan counties, representing 80%, 66%, and 51% of their respective groups. The same holds true from 2011 to 2015. In fact, the aggregate movement between the three subgroups is nearly identical; none of the types of flows (i.e. metropolitan to

micropolitan; non-metro, non-core to metropolitan) experience more than a 1-point change.

Map 9. County categorization based on U.S. Census Bureau designation.



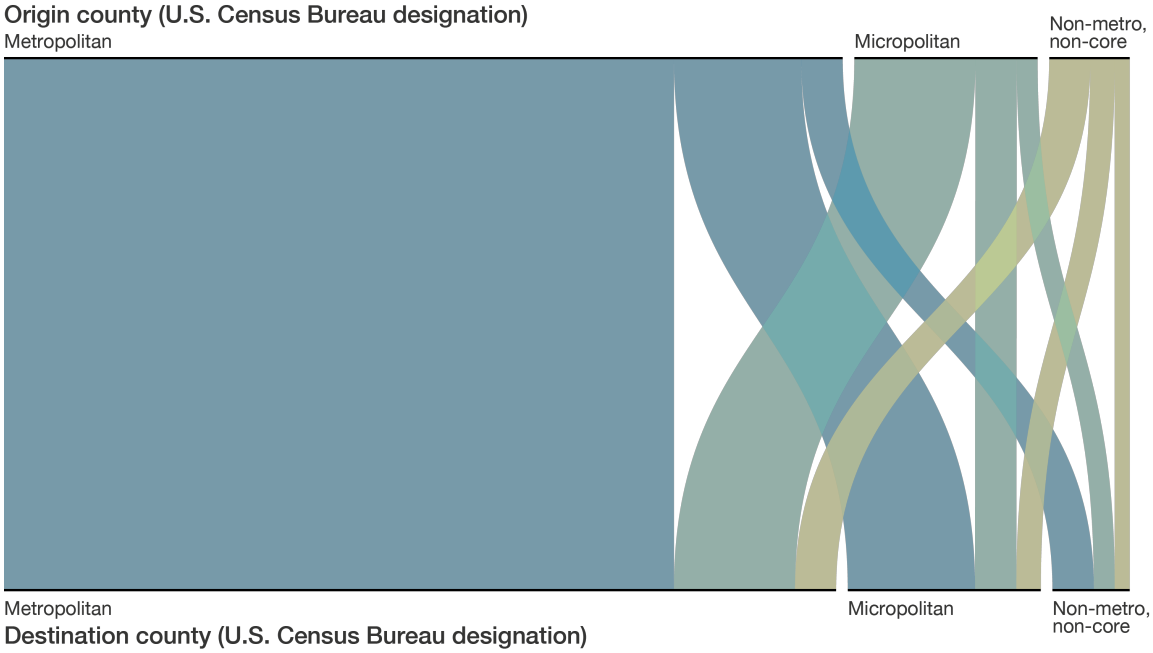
The data demonstrates two important trends between 2006 and 2015: 1) migration within the state of North Carolina primarily took place among and between metropolitan counties, and 2) metropolitan counties received the most in-migrants from the other two subgroups. See Table 9 for a breakdown of counties into regions.

Table 9. County breakdown based on U.S. Census Bureau designation.

U.S. Census Bureau designation	Number of counties
Metropolitan	46
Micropolitan	28
Non-metro, non-core	26
Total	**100**

Figure 6.

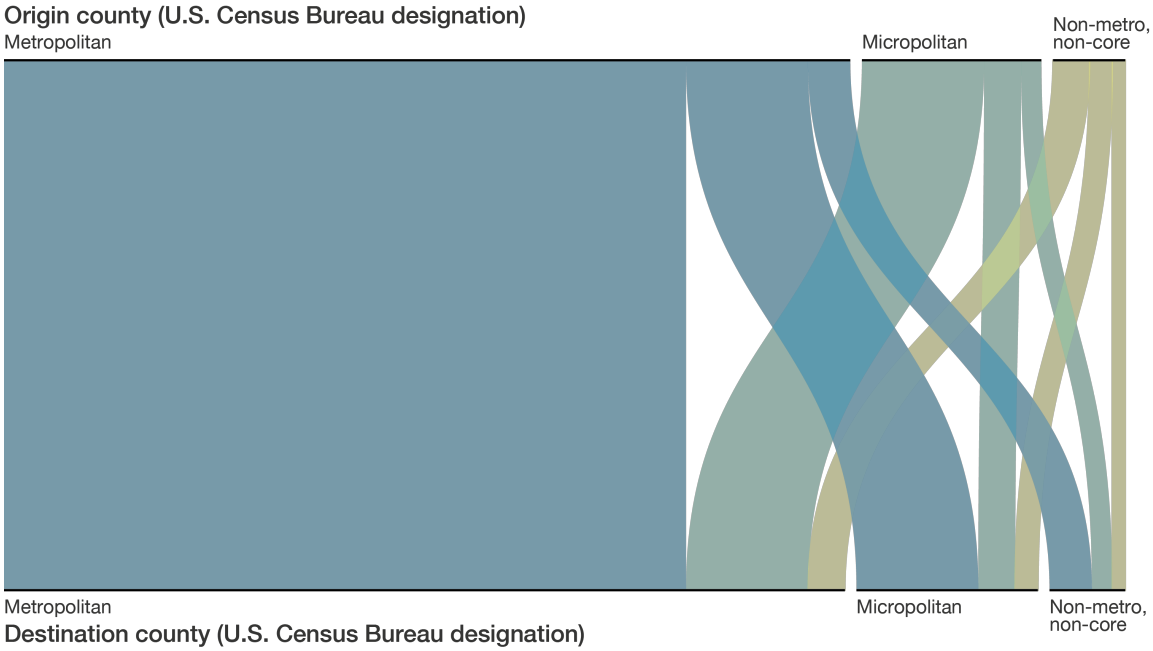
Migration flows based on U.S. Census Bureau designation, 2006-2010



Total movers: 325,434

Figure 7.

Migration flows based on U.S. Census Bureau designation, 2011-2015



Total movers: 345,403

Prosperity zones

Refer to Map 10 and Table 10 to see the breakdown of counties and prosperity zones. Across the eight regions, the greatest share of migrants moved within the same region (those numbers are slightly lower in the Northwest, Northeast, and Sandhills regions) (see Figures 8 and 9). Perhaps unsurprisingly, most of the migration within North Carolina took place in the North Central and Southwest parts of the state — the homes of the Research Triangle and Charlotte, respectively. Roughly 44% of migrants in the state left one of those two regions, and those two regions received 45% of new arrivals. Piedmont, the home of Greensboro and the Winston-Salem metropolitan areas, nearly rivaled the Southwest, with 10,000 fewer migrants leaving Piedmont than the Southwest in both the 2006-10 and 2011-15 periods (roughly 1% of the total migrating community in North Carolina in each cycles). Two key takeaways include 1) the most mobile regions in North Carolina are those with substantial urban centers (Charlotte, Raleigh, and Greensboro are the three most populous cities in North Carolina), and 2) though most migrants moved within their own regions, the North Central, Southwest, and Piedmont regions received the second-largest number of migrants across the remaining five prosperity zones.

Map 10. County categorization based on the North Carolina Department of Commerce Prosperity Zones.

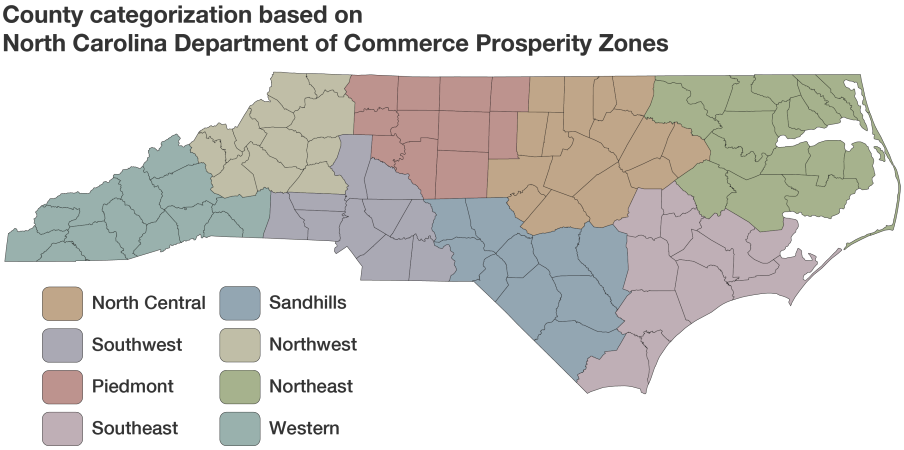
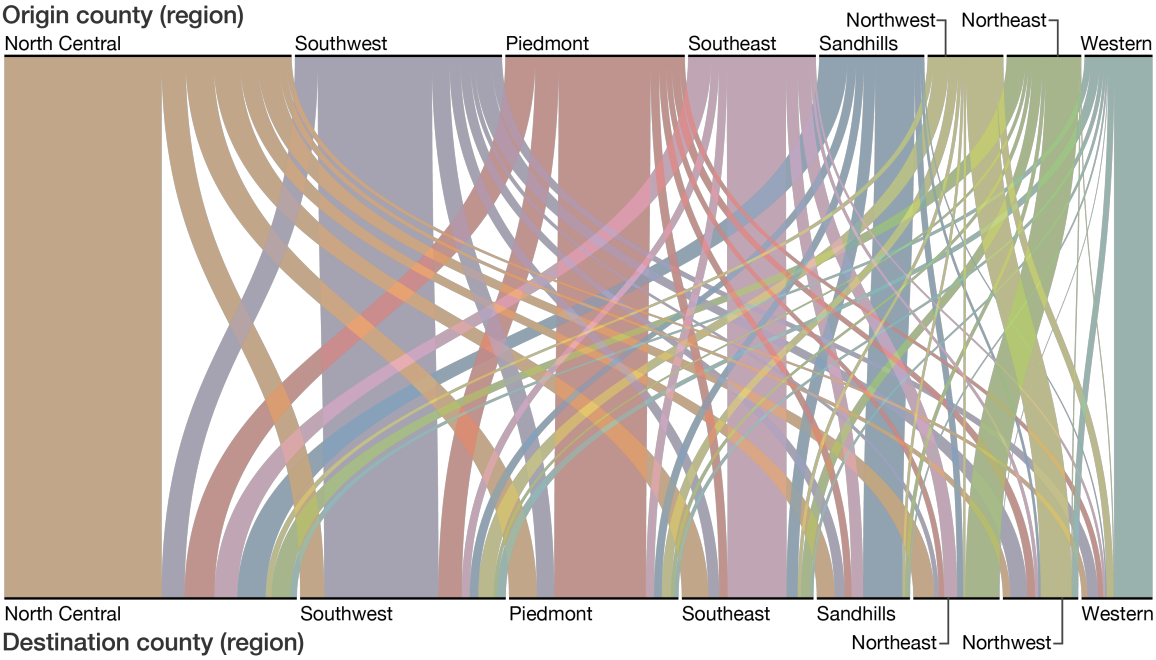


Table 10. County breakdown based on North Carolina Department of Commerce designation.

Prosperity zone	Number of counties
North Central	15
Northeast	17
Northwest	12
Piedmont	11
Sandhills	10
Southeast	12
Southwest	10
Western	13
Total	**100**

Figure 8.

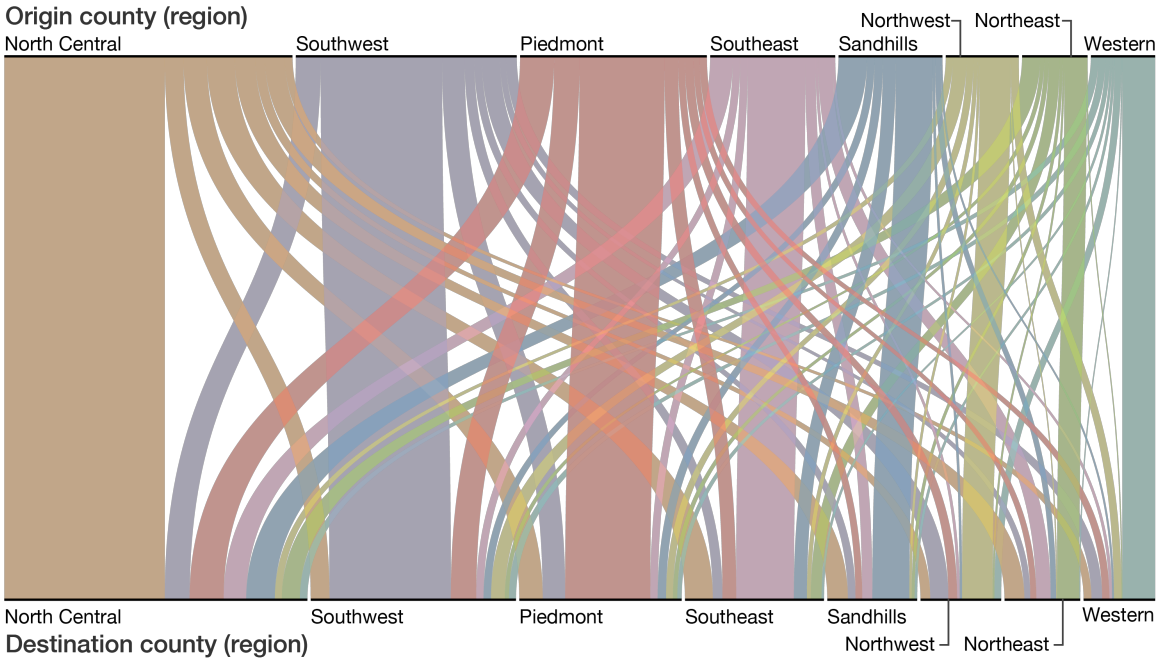
Migration flows based on regions designated by North Carolina Department of Commerce, 2006-2010



Total movers: 325,434

Figure 9.

Migration flows based on regions designated by North Carolina Department of Commerce, 2011-2015



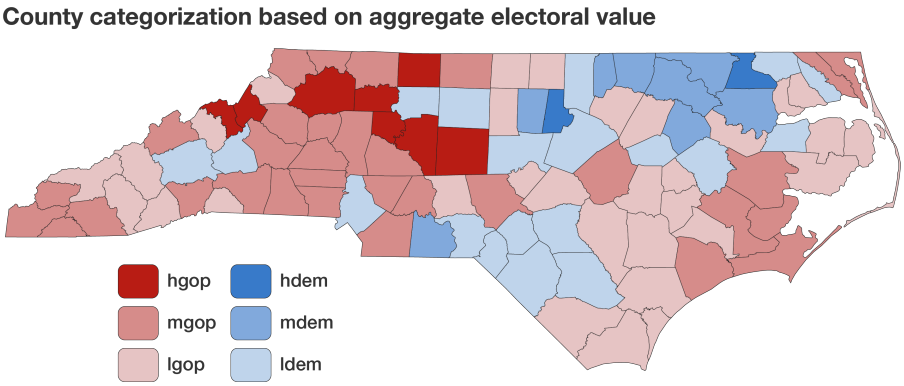
Total movers: 345,403

Aggregate electoral value

See Map 11 for the geography of the aggregate electoral value. Both the 2006-10 and 2011-15 cycles show strikingly similar trends, which suggests that little changed in the nature of migration as it relates to the aggregate electoral value in North Carolina over the 10-year period. Based on the aggregate value, partisan leaning seems to have had little effect on how many people migrated — migrants from *ldem*, *mdem*, and *hdem* counties accounted for roughly one half of all migrants in the North Carolina while the remaining half of internal migrants came from *lgop*, *mgop*, and *hgop* counties in both cycles (though Republican-leaning counties comprise 71% of all counties in North Carolina). Migrants from *ldem* counties comprised 37% of all movers, and importantly, the *ldem* category includes Mecklenburg, Wake, Guilford, and Forsyth counties, which are the four most populous counties in the state (U.S. Census Bureau 2011). Additionally,

hdem and *hgop* counties produce little movement, comprising only 6% and 4% respectively of all out-migrants in the state.

Map 11. County categorization based on aggregate electoral values.



Separating counties based on aggregate electoral values neutralizes the effect of temporal shifts and focuses on median values over a given period. As a result, the trends we find reveal little about the relationship between an evolving political landscape and interstate migration in North Carolina. With that in mind, I opted not to create sankey diagrams and future work should avoid aggregate metrics that do not acknowledge the extent of change over time. See Table 11 for the county breakdown.

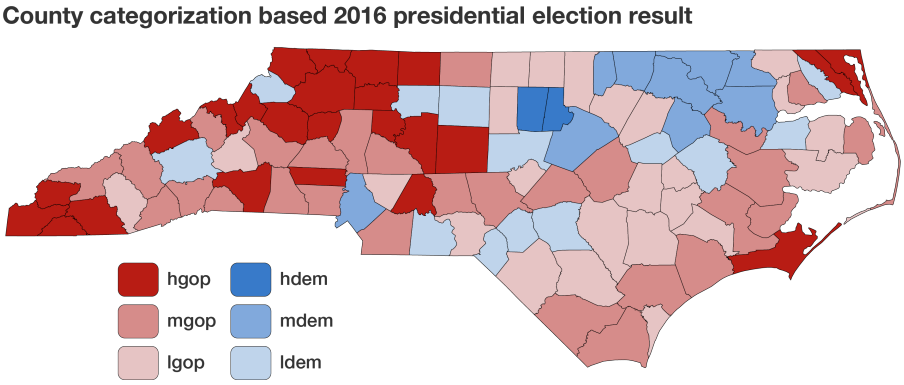
Table 11. County breakdown based on aggregate electoral value.

Aggregate electoral category	Number of counties
hgop	8
mgop	32
lgop	31
ldem	19
mdem	8
hdem	2
Total	**100**

2016 Presidential electoral value

The 2016 Presidential election produced a substantial number of Republican-won landslide counties (*mgop* in Table 6) — 28 counties in total (see Map 12 and Table 12). The migration in and out of those counties reflects the high share of the category, comprising 23% of all of in-migrants in the state. More interesting is the fact that *ldem* and *mdem* categories follow despite only holding 13 and 9 counties respectively. Table 6 offers a complete view of the distribution of counties within the categories compared to the relative populations of each category. Indeed, though Democratic mega-landslide counties (or those with margins that exceed 40 points) are few in number, they contain far more people than Republican-won mega-landslide counties, which are substantially more sparsely populated.

Map 12. County categorization based on 2016 presidential election result.



Interestingly, migration among Democratic-won and Republican-won counties is nearly equal, with Republican counties carrying a slight advantage. The representation of each category is broadly reflective of the distribution of population each category holds (see Figures 10 and 11 for comparison). For example, *mgop* has the largest share of North Carolina's population (25.28%), and 24% of migrants from 2006 to 2015 left *mgop* counties. Among counties with high margins, there is little exchange (i.e. very few people left *hgop* counties to move to *hdem* counties, and very few left *hdem* counties to live in *hgop*

counties). Though this metric is more helpful than the aggregate value (as it does not incorporate and wash out temporal differences), it still fails to contend with the electoral change that has taken place over time at the county level in North Carolina. Identifying the evolution and integrating it meaningfully into the measure is an important element of studying migration *and* electoral change in North Carolina over space and time.

Table 12. County breakdown based on 2016 electoral value.

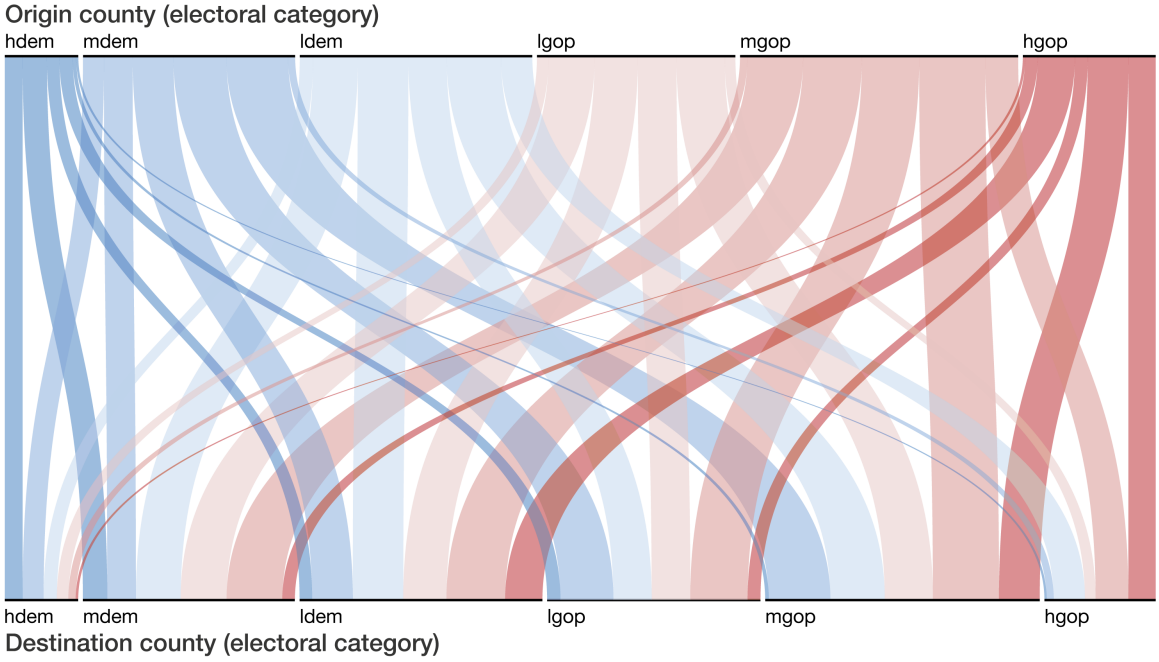
Presidential electoral category	Number of counties
hgop	24
mgop	28
lgop	24
ldem	2
mdem	9
hdem	13
Total	**100**

Republican change electoral value

Central to the Republican change metric is the idea of incorporating temporal shifts in partisan support across the counties of North Carolina. It's important to highlight, however, that some counties showing a Republican loss over the test period still voted for Donald Trump in 2016, and some counties where Republicans made gains voted for Hillary Clinton. Above all, the variable is intended to use change over time (rather than the most recent results) as the center point for the migration data. Additionally, in the discussion of the results, I use 'Democratic-leaning' as a shorthand for losses experienced by the Republican party. Though that is not universally the case, the rigidity of the two-party system and electoral stagnation of third-party candidates functionally means that a loss for one major party is a victory for the other.

Figure 10.

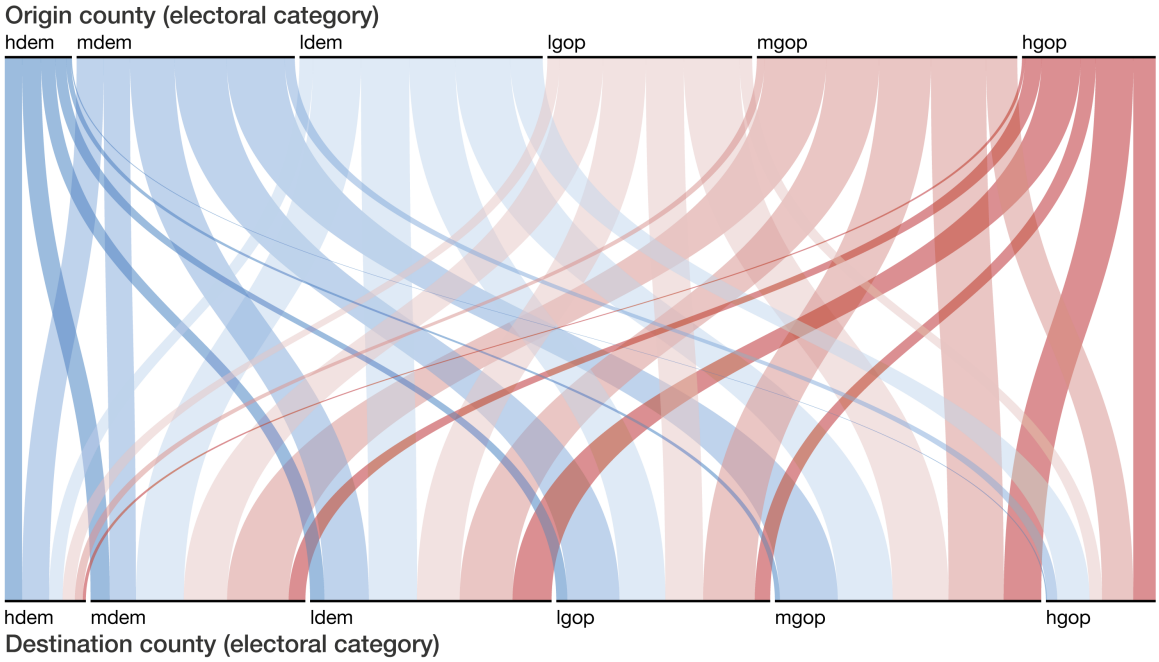
Migration flows based on the electoral margins of the 2016 presidential election, 2006-10



Total movers: 325,434

Figure 11.

Migration flows based on the electoral margins of the 2016 presidential election, 2011-15

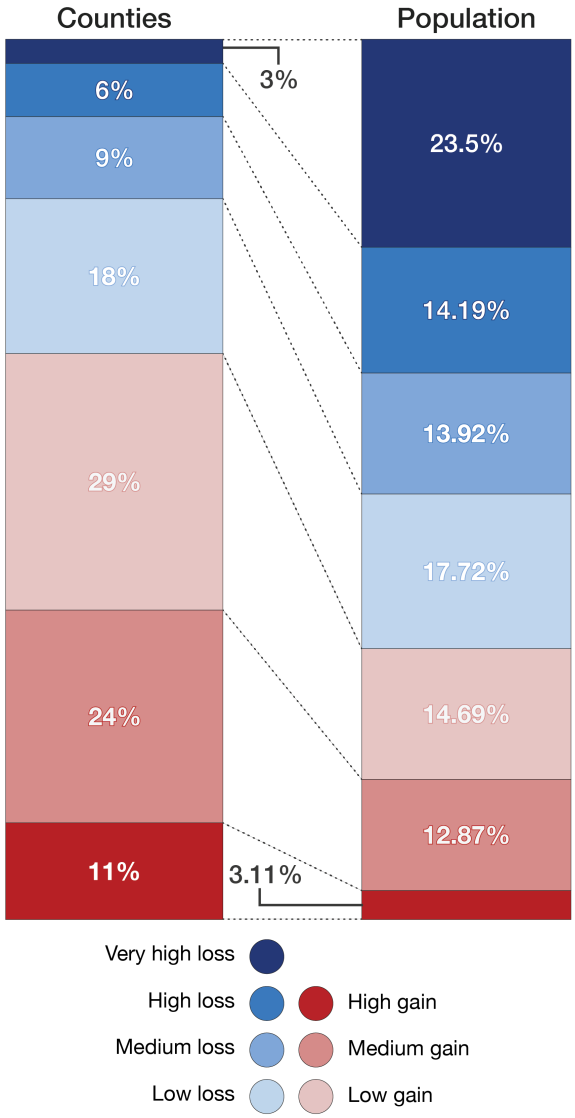


Total movers: 345,403

When we consider how partisan preferences have changed (based on presidential election results in 2000 and 2016), particular relationships between Democratic shifts and migration stand out: two-thirds of those moving in North Carolina are leaving counties that have shifted to favor Democratic candidates more since 2000 and 2016, and roughly two-thirds of those movers choose other counties that have shifted to favor Democratic candidates (see Map 13). Notably, those same Democratic-leaning counties comprise just over a third of all of the state's counties (36 out of 100), meaning that they are punching above their weight in terms of the number of migrants they attract (see Figure 12). Additionally, as the shift towards the Republican party increases, the probability that a migrant chooses another county that moved to favor the Republican party increases as well (e.g. a higher proportion of migrants that left *medium gain* counties moved to other counties with a Republican shift than those migrants who left *low gain* counties). Despite that trend, movement to counties that have shifted to favor

Figure 12.

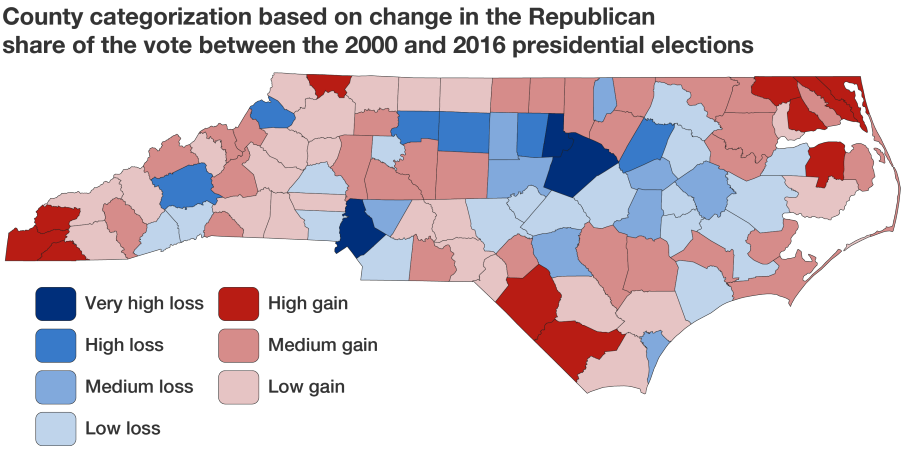
Counties by competitive category and their populations based on GOP shift



Population data from July 2016. Source: North Carolina Office of State Budget and Management.

Democratic candidates (even from Republican-leaning counties) greatly outnumbered movement to counties that shifted to the right from 2000 to 2016 (see Figures 13 and 14).

Map 13. County categorization based on Republican shift value.



Strikingly, the distribution of population among the groups varies greatly. Though the *very high loss* category only contains three counties (not coincidentally Mecklenburg, Wake, and Durham counties), 19% of all migrants leave those counties and it receives 19% of all migrants as well. Those three account for the most significant labor markets in the state. See Table 13 for the county breakdown.

Summary of migration trends in North Carolina from 2006-2015

1. Most migration in North Carolina takes place between and among metropolitan counties (although it remains unclear whether one metropolitan experiences net worker displacement, per Moretti and Wilson 2014) — a person who is moving is most likely to move to a metropolitan county, regardless of where they're moving from.

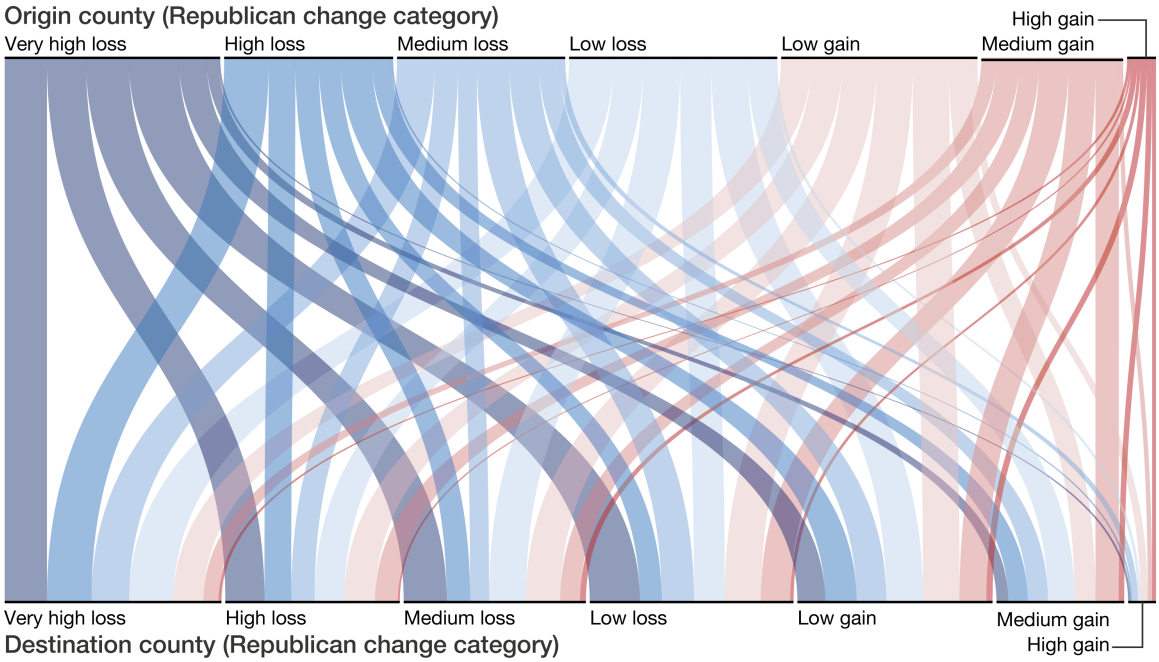
2. Most migration in North Carolina takes place between and among metropolitan counties (although it remains unclear whether one metropolitan experiences net worker displacement, per Moretti and Wilson 2014) — a person who is moving is most likely to move to a metropolitan county, regardless of where they're moving from.
3. People tend to move within their own regions. If they don't stay in their own region, they're likely to move to the regions that are home to Mecklenburg (Charlotte), Raleigh (Raleigh), or Guilford counties (Greensboro).
4. The most mobile populations in North Carolina live in counties that have moved to the left politically between 2000 and 2016. Furthermore, as the degree of Republican gains increase, the more likely it is that movers from those counties migrated to another Republican-leaning county.

Table 13. County breakdown based on the GOP change value.

Republican party change category	Number of counties	Share of total population
High gain	11	3.11%
Medium gain	24	12.87%
Low gain	29	14.69%
Low loss	18	17.72%
Medium loss	9	13.92%
High loss	6	14.19%
Very high loss	3	23.5%
Total	**100**	**100%**

Figure 13.

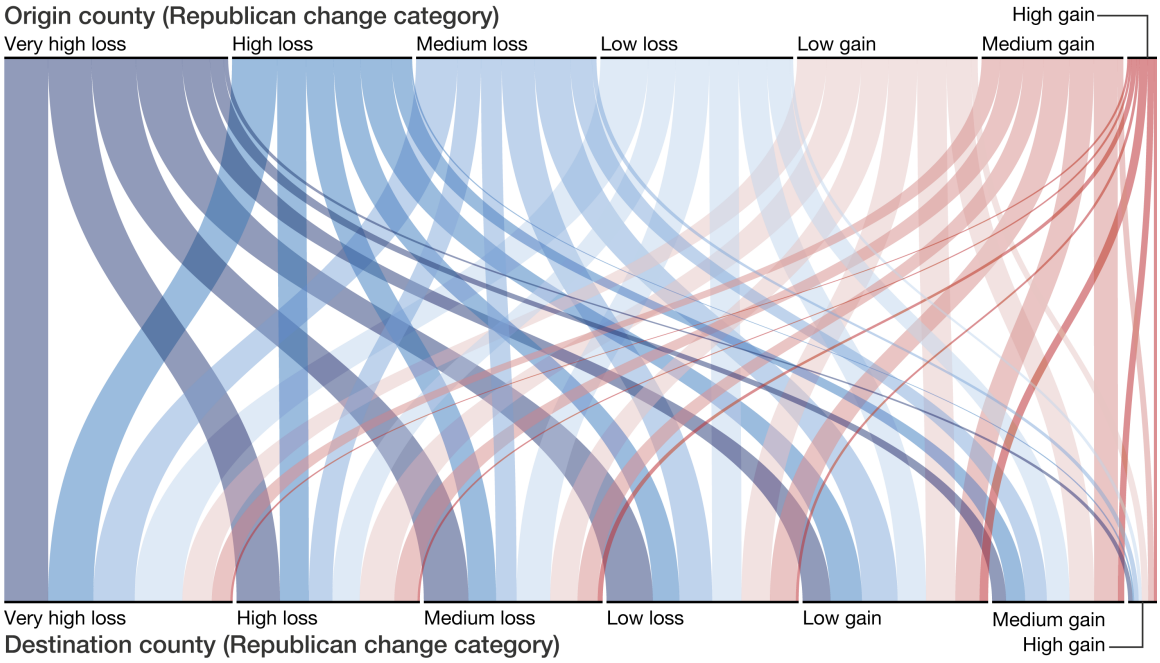
Migration flows based on Republican change category, 2006-2010



Total movers: 325,434

Figure 14.

Migration flows based on Republican change category, 2011-2015



Total movers: 345,403

Educational attainment

With an idea of the nature of movement in North Carolina, we can dive into the role of educational attainment plays in pattens of migration. The most powerful way to study the role of educational attainment is to compare the migration patterns of different groups, consider the way such groups tend to vote (based on aggregate data), and to explore how such patterns might push elections in one direction or another. See Tables 14-18 for a review of the migration data grouped by educational attainment.

Table 14. Advanced degree holders by GOP change category.

Republican party change category	Migrants by origin county	Share of total
High gain	177	1.61%
Medium gain	450	4.09%
Low gain	1,141	10.38%
Low loss	1,505	13.69%
Medium loss	1,432	13.02%
High loss	2,335	21.24%
Very high loss	3,955	35.97%
Total	**10,995**	**100%**

Table 15. Bachelor degree holders by GOP change category.

Republican party change category	Migrants by origin county	Share of total
High gain	291	1.16%
Medium gain	1,915	7.60%
Low gain	2,694	10.69%
Low loss	3,398	13.49%
Medium loss	3,601	14.29%
High loss	5,266	20.90%
Very high loss	8,027	31.86%
Total	**25,192**	**100%**

Table 16. Migrants with some college by GOP change category.

Republican party change category	Migrants by origin county	Share of total
High gain	780	1.78%
Medium gain	5,189	11.86%
Low gain	7,559	17.28%
Low loss	8,073	18.45%
Medium loss	6,662	15.23%
High loss	6,441	14.72%
Very high loss	9,047	20.68%
Total	**43,751**	**100%**

Table 17. High school graduates by GOP change category.

Republican party change category	Migrants by origin county	Share of total
High gain	912	2.53%
Medium gain	5,306	14.70%
Low gain	7,442	20.62%
Low loss	6,220	17.23%
Medium loss	4,614	12.78%
High loss	5,142	14.25%
Very high loss	6,460	17.90%
Total	**36,096**	**100%**

Advanced degree holders

Approximately three-quarters of the 10,000+ advanced-degree holders left counties that shifted away from the Republican party between 2000 and 2016, and the majority of those remained in counties that did the same. Given that the *loss* counties only comprise roughly a third of North Carolina's counties, those counties that moved away from the Republican party are significantly overrepresented in terms of their mobile

Table 18. Migrants without a high school degree by GOP change category.

Republican party change category	Migrants by origin county	Share of total
High gain	735	3.07%
Medium gain	4,117	17.17%
Low gain	4,382	18.28%
Low loss	3,542	14.77%
Medium loss	3,583	14.95%
High loss	3,328	13.88%
Very high loss	4,286	17.88%
Total	**23,973**	**100%**

advanced-degree holders. More than a third of the movers left *very high loss* counties (i.e. those that experienced a shift of 15 points or more to favor Democrats between 2000 and 2016) — remembering that only 3 counties fall in that category: Wake, Durham, and Mecklenburg. Within that group of advanced degree-holders who left counties in the *very high loss* category, a third of those remained in a *very high loss* county. Moreover, they receive roughly a third of *all* internal migrants with an advanced degree. It likely will not come as a surprise to note that those three counties are the homes of North Carolina's economic regions with the deepest ties to an information- and knowledge-driven economy: Raleigh and Charlotte.

However, as the Republican gain increases, the number of mobile advanced-degree holders decreases. Only about 15% of advanced-degree holders moved from a county that leaned more the right in 2016 than in 2000 (1,768 movers). Counties that shifted significantly to favor the Republican party from 2000 to 2016 (i.e. *high gain* counties) lost more advanced degree holders than they gained, although they were few to begin with relative to other categories. In fact, nearly no advanced-degree holders moved

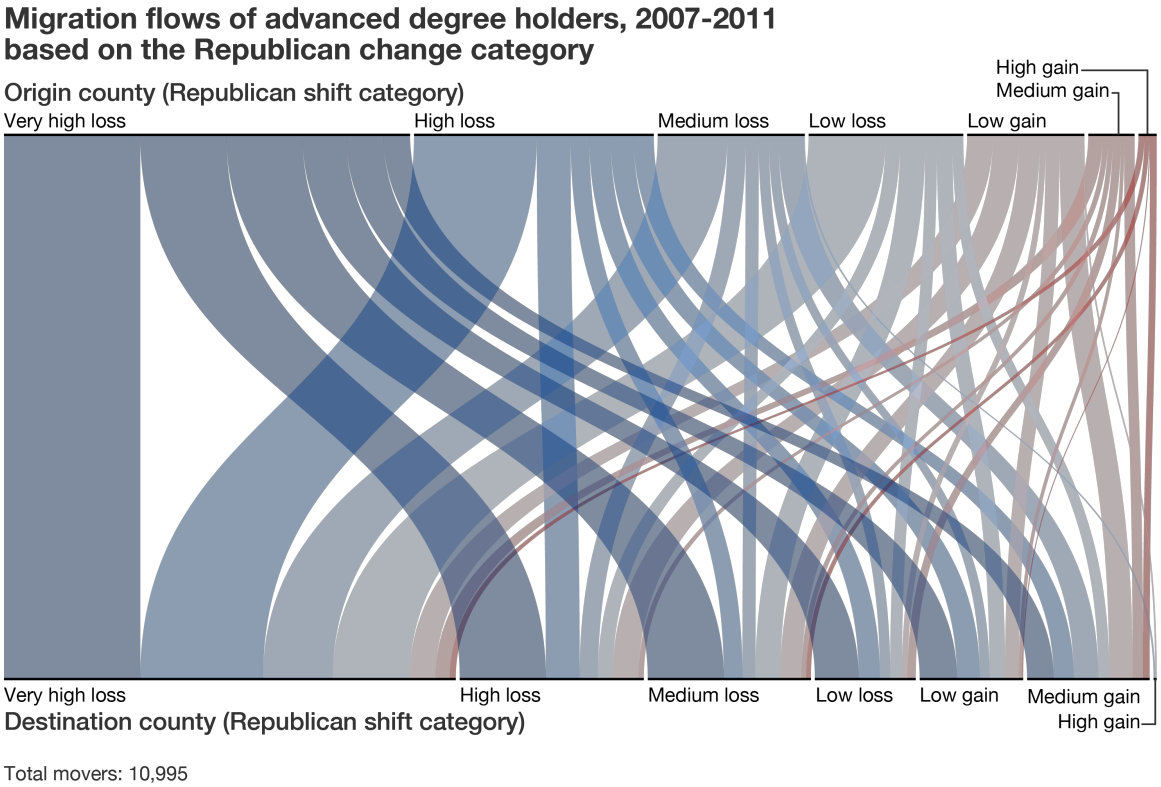
to a *high-gain* county. Although Republican-leaning counties tend to have lower populations, population does not entirely explain the difference between Republican-leaning and Democratic-leaning counties (see Table 19 for comparison of share of mobile advanced-degree holders and population).

Table 19. Representation of advanced degree holders among GOP shift categories.

Republican party change category	Share of mobile advanced-degree holders (ADH)	Share of total population / ratio of ADH to population	Rank by population
High gain	1.61%	3.11% / .518	7
Medium gain	4.09%	12.87% / .318	6
Low gain	10.38%	14.69% / .707	3
Low loss	13.69%	17.72% / .773	2
Medium loss	13.02%	13.92% / .935	5
High loss	21.23%	14.19% / 1.496	4
Very high loss	35.97%	23.5% / 1.531	1
Total	**100%**	**100%**	

The majority of mobile, advanced-degree holding movers already live in areas leaning to the left politically, and are very likely to move to a place where a similar political environment prevails (see Figure 15). Advanced-degree holders are the group most likely to lean heavily to the left politically, which arguably makes their apparent preference for Democratic-leaning counties predictable. Naturally, the motivating factor behind choosing a new home does not have to be explicitly political. However, that an overwhelming majority of the group demonstrates a tendency to live in areas that have moved away from conservative politics cannot be ignored. It is possible for identities, such as partisanship, education, and economic opportunity, to converge to produce such patterns (Enos 69), and the data suggest that we make room for partisanship in that equation.

Figure 15.



College graduates

The pattern of movement among those with a college degree is strikingly similar to that of migrants with advanced degrees (see Table 20), although it favors *loss* counties slightly less. Across the board, mobile migrants with a bachelor's degree are much more likely to move to a Democratic-leaning county than a Republican-leaning one, regardless of their origin county category. A little over 80% of all internal migrants left counties where Republicans performed worse in 2016 than in 2000, which suggests that counties that have leaned towards Democrats in recent years are also home to the most mobile populations. The likelihood that a migrant lands in a Democratic-leaning county increases with the degree of the loss experienced by Republicans from 2000 to 2016 (i.e. a migrant leaving a *very high loss* county is more likely than a migrant leaving a *low loss* county to move to a Democratic-leaning county). Close to a third of internal migrants with college

degrees left one of those same three counties that figure so prominently for advanced degree holders (Wake, Mecklenburg, and Durham counties), and roughly a third of those remained in one of those three counties (30%). An overwhelming majority (close to 87%) of migrants that left *very high loss* counties moved to another county where Republicans lost ground (see Figure 16).

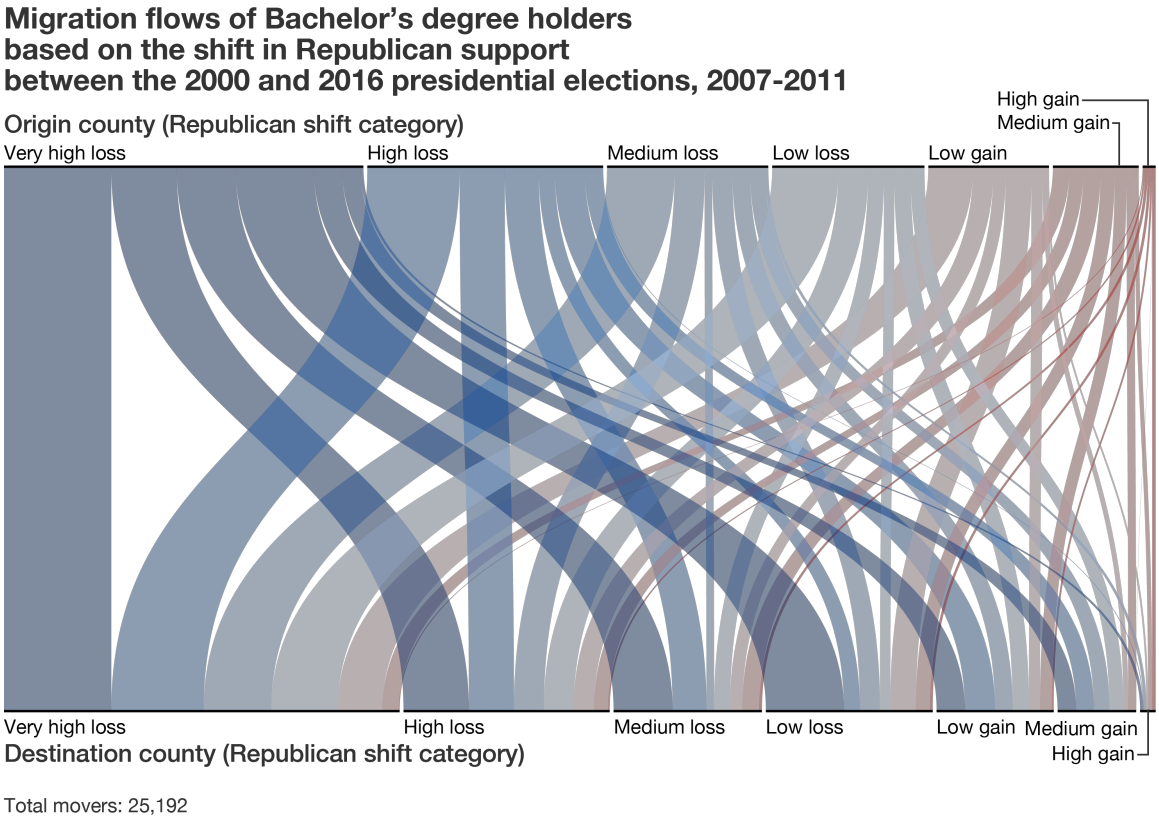
Like the trend exhibited by advanced degree holders, mobile college graduates are overrepresented in counties where Republicans performed less well from 2000 to 2016, though the pattern is not correlated with differences in population. Just over 1% of mobile college graduates live in counties where Republicans have made significant gains in recent years, and although those migrants had a higher chance of moving to another Republican-leaning county than other groups, still close to 60% of them moved to a county that shifted away from the Republican party; over a quarter stayed in *high gain* counties, the highest of all individual categories.

Table 20. Representation of college graduates among GOP shift categories.

Republican party change category	Share of mobile college graduates (CG)	Share of total population / ratio of CG to population	Rank by population
High gain	1.16%	3.11% / .373	7
Medium gain	7.60%	12.87% / .591	6
Low gain	10.69%	14.69% / .728	3
Low loss	13.49%	17.72% / .761	2
Medium loss	14.29%	13.92% / 1.027	5
High loss	20.90%	14.19% / 1.473	4
Very high loss	31.86%	23.5% / 1.356	1
Total	**100%**	**100%**	

Note: Share of total population refers to the share of North Carolina's residents that live in a county category

Figure 16.

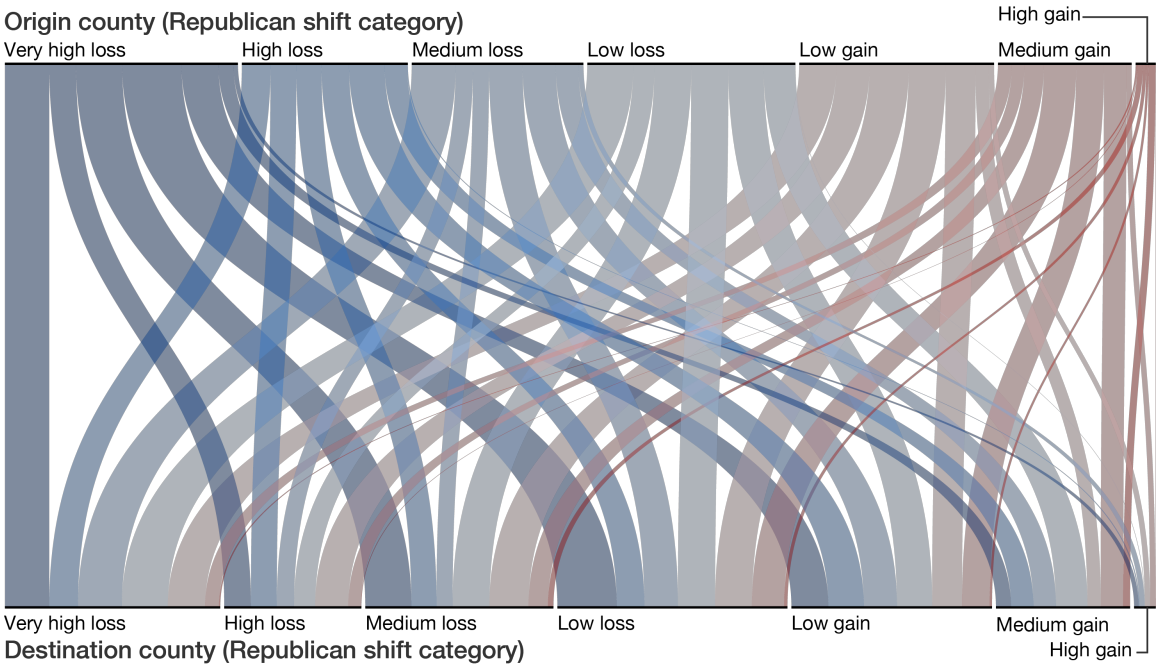


Migrants with some college

Migrants with college degrees or higher display a particular type of movement within the state: the pattern suggests that most mobile people in the state already live in a county that leaned away from Republicans from 2000 to 2016 and similarly display a strong preference for counties that show less and less support for the Republican party (indeed, the proportion of migrants with a college degree or higher than left a *gain* county to move to a *loss* county is quite small, which suggests that most highly educated, mobile migrants already live in counties where Republicans have lost ground). The pattern among those without a college degree, however, shows substantial change (see Figure 17).

Figure 17.

Migration flows of movers with some college education based on the shift in Republican support between the 2000 and 2016 presidential elections, 2007-2011



Total movers: 43,751

Migrants without a college degree

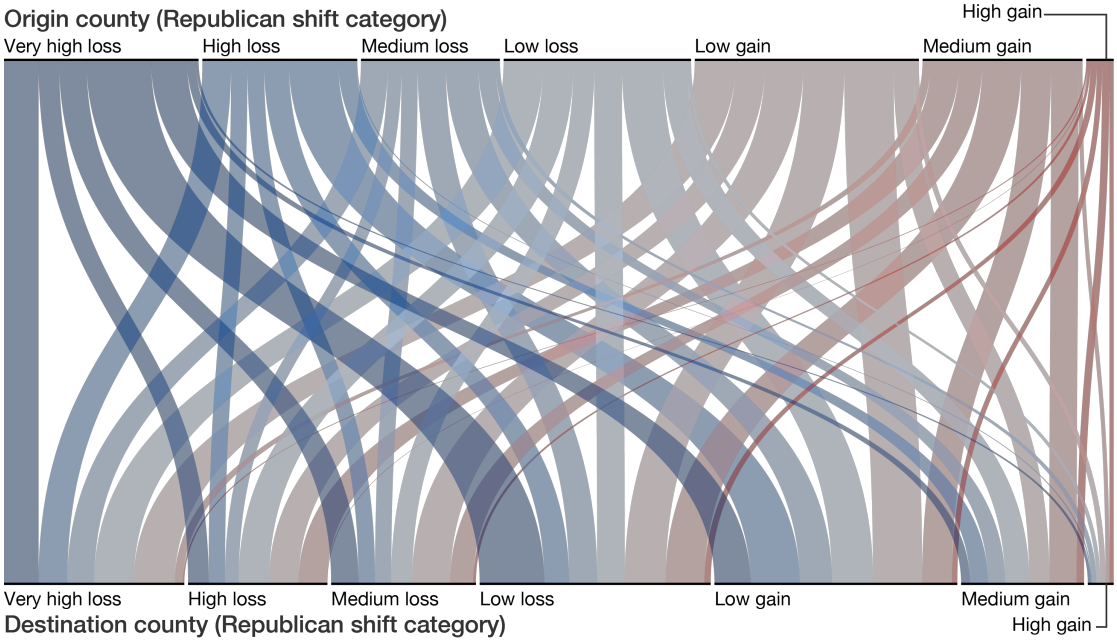
Among the segment of migrants without a college or advanced degree, we see a significant drop in the number of people with some college leaving *very high loss* counties as well as a decrease in the proportion of migrants leaving *loss* counties and moving to *loss* counties (see Figures 18 and 19). In fact, as educational attainment decreases among internal migrants, it is increasingly likely that a migrant moves between two counties that both favored the Republican party in recent years (5.30% and 4.15% of migrants with an advanced degree and a college degree respectively fall into this category; 10.05%, 14.02%, 16.86% of migrants with some college, a high school degree, and less than a high school degree respectively moved between two counties where Republican support has increased). Additionally, and perhaps unsurprisingly, as educational attainment decreases, there is a greater chance that a migrant is moving between two counties with opposite

electoral trends; in other words, a migrant with a high school degree is much more likely to move from a county that has leaned more toward the Republican party to a county where Republican support has faltered or vice versa than a migrant with a college or advanced degree (the difference is stark: 45.56% of migrants with a high school degree moved between counties with divergent electoral patterns, while only 25.77% of those with an advanced degree fall into that category).

It is worth noting that among migrants without a college degree, anywhere from 37% to 47% will still move between counties where Republicans lost ground between 2000 and 2016. This is likely a function of the facts that a) those counties have a disproportionately large share of the state's population, and b) greater economic opportunities are is available in counties that are more densely populated (and also tend to be more Democratic).

Figure 18.

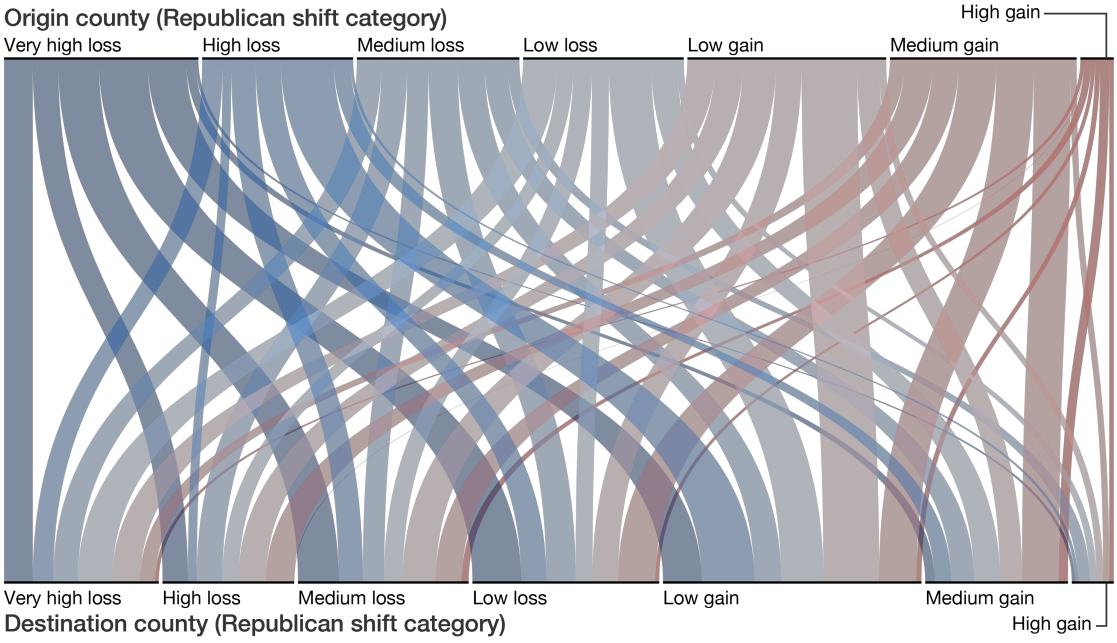
Migration flows of high school degree holders based on the shift in Republican support between the 2000 and 2016 presidential elections, 2007-2011



Total movers: 36,366

Figure 19.

Migration flows of movers with less than a high school degree based on the shift in Republican support between the 2000 and 2016 presidential elections, 2007-2011



Total movers: 23,973

Key takeaways

1. Migrants with bachelor's degrees or higher are much more likely than other education groups to live in and move to a county where Republican performance suffered greatly over the last five presidential elections.
2. Migrants with bachelor's degrees or higher are overrepresented in the mobile population between *loss* counties.
3. Patterns of migration among groups with less education more closely reflect the distribution of population among the respective counties.

The data demonstrates undeniably that at a minimum, education and migration are not independent of each other, though the nature of the relationship between them cannot be defined conclusively. Above the specifics of the dataset, the existence of such a

relationship is, from my perspective, a key takeaway. That education shapes both political preferences in addition to patterns of migration as we have seen sends the important message that we should be considering elections and migration in tandem. Studies of migration must situate the patterns around variables like education (among other demographic variables) if we are to take seriously the potential impact of voter migration.

IV. CONCLUSION

The Economic Innovation Group published findings from its Distressed Communities Index, reporting that, "the falling total number of Americans in distressed zip codes reflects a shift in the geography of economic distress towards rural areas" (2018). Eduardo Porter opens his piece titled "The Hard Truths of Trying to Save the Rural Economy" writing that, "there are 60 million people, almost one in five Americans, living on farms, in hamlets and in small towns across the landscape. For the last quarter century the story of these places has been one of relentless economic decline" (2018). The title alone betrays the economic bias that feature prominently in most discussions of contemporary rural America. Porter highlights the power of urban cluster economies and the geography of opportunity in the United States, and even points to the election of Donald Trump as an explanation for increased attention to the issue. Like most popular writing on changes in rural America, however, the piece fails to make the important step of considering the political consequences of this new economic geography (and critically, the migration that results from it) in the United States. Such an omission is a crucial one if we are to contend with the increasingly homogenous political communities in the United States.

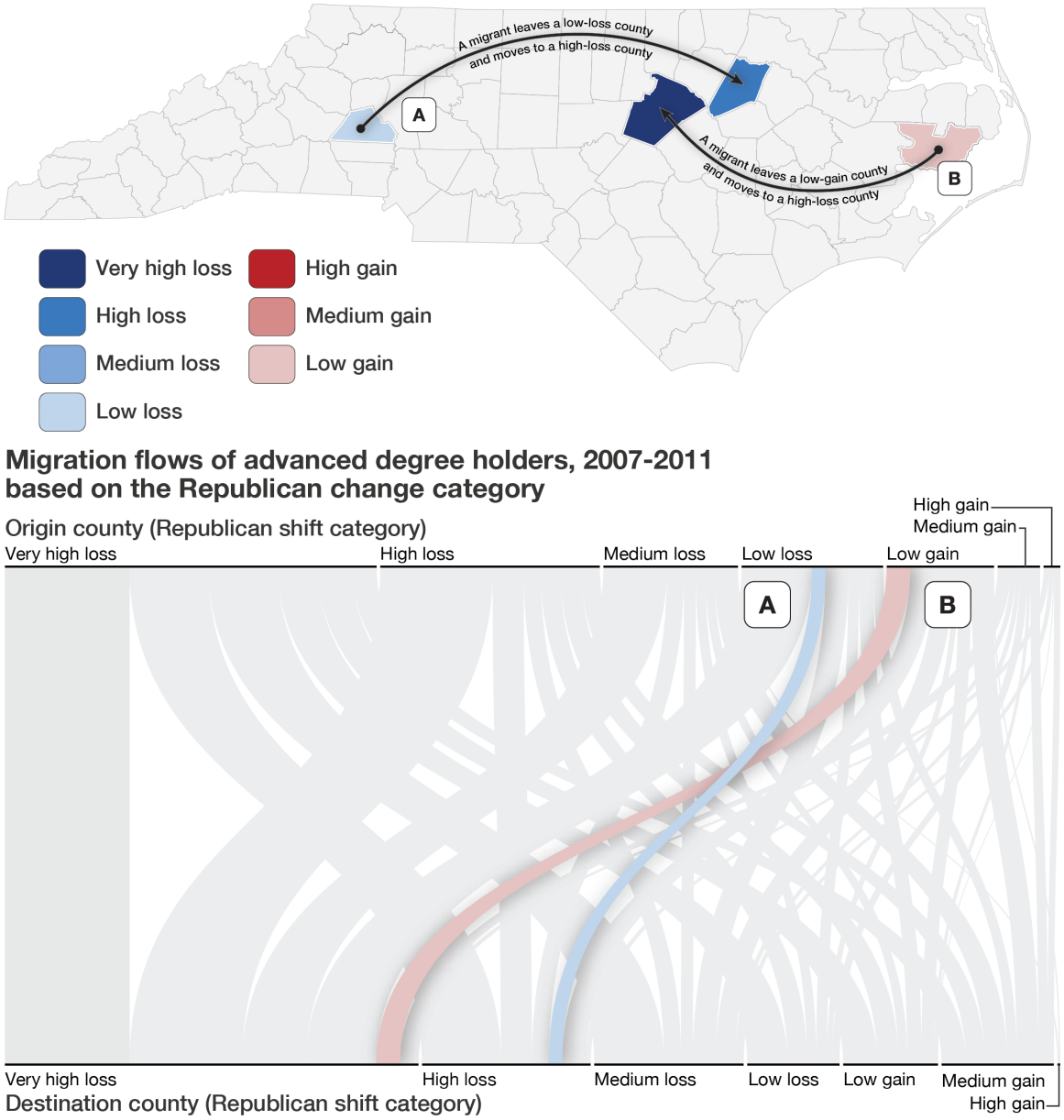
The central challenge to identifying, quantifying, or characterizing this relationship is the lack of data (as reported by other scholars, see e.g. Jurjevich and Plane 2012, Holbrook 2016, Hui 2013). To deal with this, two paths forward seem the most promising. One is to embrace more fully a data-driven approach, like the experimental method implemented by Jurjevich and Plane. They created a complex equation for guessing partisan affiliation of migrants based on a series of demographic characteristics and drew conclusions about the electoral impact of migration in the United States. Though this runs the risk of rendering a verdict based on bad or inappropriately analyzed

data, it allows for an extensive approach unhindered by the limitations of a small-scale study. Additionally, this body of work would benefit greatly from further ground-truthing and studies like those run by Hui (2013) and Gimpel and Hui (2015). Interviewing migrants about how they made choices regarding their resettlement could offer more insight into the process of voter sorting. Finally, should these two research paths yield more evidence of voter sorting, scholars can make the case for a large-scale data-driven study of migrants that includes their partisan leaning or affiliation in addition to the details of their move (i.e. origin county, destination county, origin census block, destination census block). Only then can researchers draw more concrete conclusions about the impact of voter sorting. As it stands, we are left with studies that hint at what is possible (and indeed, probable given the significant impact of the changed American economic geography), but without the details that would empower us to address the consequences more fully.

Of central importance to American electoral structures is the spatial distribution of voters, a reality that came sharply into focus after Donald Trump's 2016 popular loss and electoral win. As urban centers continue to attract high-skill, highly educated people, the question of the electoral impact of migration in the United States will only become more important. This body of research would benefit greatly from more involvement from geographers, and should push us to think more critically about how the spatial structure of American elections produces certain results across space. Perhaps most importantly, it is imperative that we begin to consider the political consequences of the oft-discussed "brain drain." It is hard to overstate the importance that such a trend could play in reshaping the political landscape in the United States; as Gimpel and Hui note, "Even if a small fraction of partisans make choices on a political basis, the cumulative effect in the long run can greatly augment population differences across space" (2015).

APPENDIX A. HOW TO READ A SANKEY DIAGRAM

How to read a sankey diagram



Sankey diagrams are visualizations that show flows and proportions, where the width of the lines in the diagram correspond to the proportion of a value relative to the whole. Throughout this paper, I have used sankey diagrams to demonstrate migration within the state of North Carolina. As mentioned earlier, however, it is impractical and

not very useful to show movement between each of North Carolina's 100 counties. Instead, I have divided the counties into different categories based on several criteria, and then used those categories to show movement within the state with the added context the category provides. As an example, consider the diagram below, where North Carolina's counties are divided based on their designations made by the U.S. Census Bureau as either metropolitan; micropolitan; or non-metro, non-core counties.

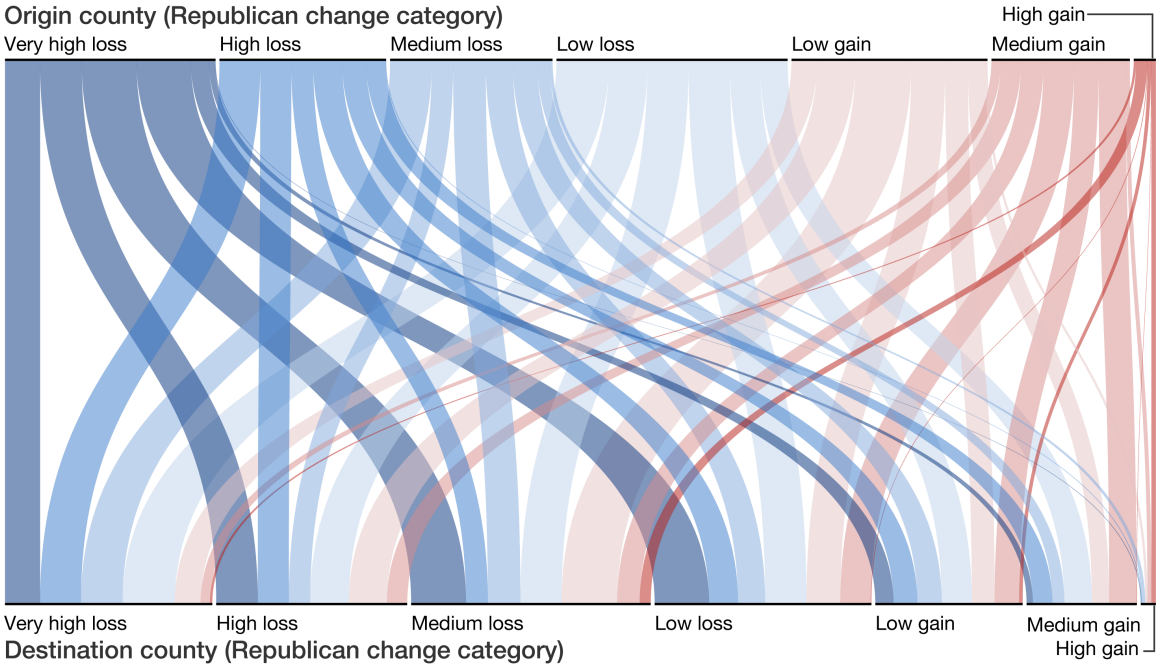
The categories at the top of the chart (the 'origin' county) indicate where movers leave and in what proportions. What we notice is that the vast majority of people moving in North Carolina are leaving metropolitan counties, whereas a much smaller group is leaving non-metro, non-core counties. The bottom line (the 'destination' county) tells us where these movers are electing to settle — in metropolitan; micropolitan; or non-metro, non-core counties. By using sankey diagrams, we can see general patterns of movement based on the described criteria. For example, we notice that though the majority of people leaving metropolitan counties are moving to another metropolitan county, some move to micropolitan counties, and an even smaller amount leave metropolitan counties to settle in non-metro, non-core counties. The key for making sense of the sankey diagrams here is to establish clearly the rules of a categorization and then to consider the 'origin' and 'destination' sides of the visualization to get an idea of the nature of inter-county migration in North Carolina.

APPENDIX B. MIGRATION AND INCOME

Migration and income

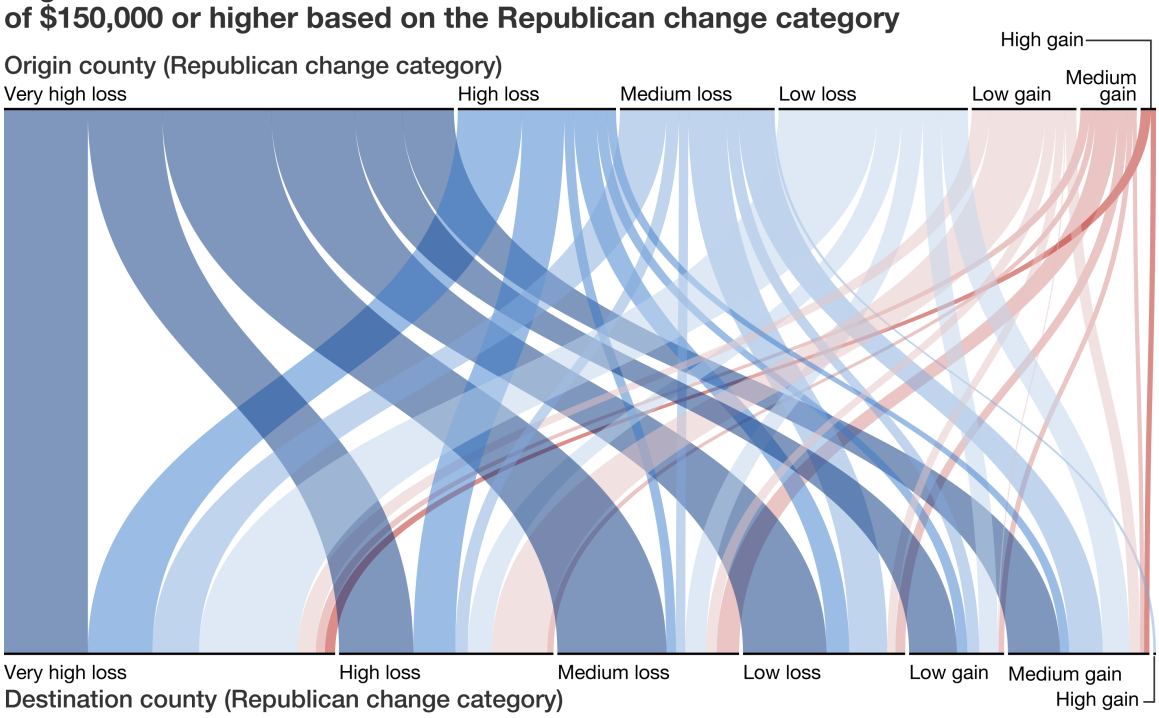
Though migration and education dominates the data analysis, I also sorted migrants by income, which adds another dimension to the research. See the three following sankey diagrams for an idea of how income shaped migration in North Carolina between 2007 and 2015.

Migration flows of movers with a household income between $15,000 and $24,999 based on the Republican change category



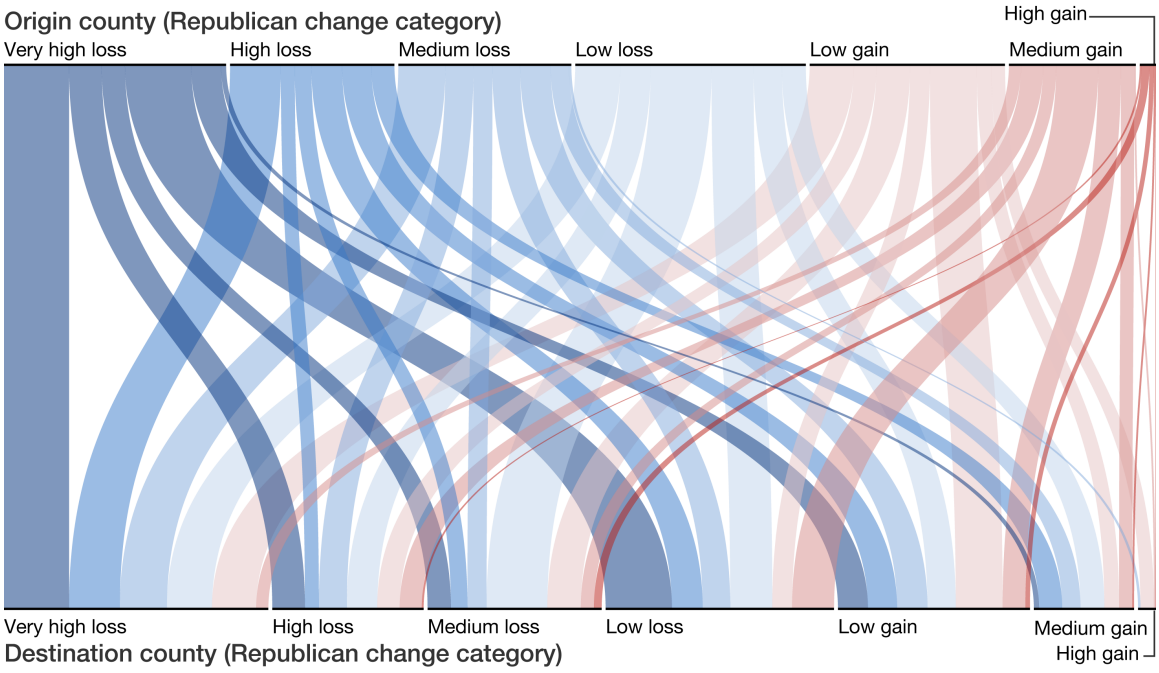
Total movers: 26,259

Migration flows of movers with a household income of $150,000 or higher based on the Republican change category



Total movers: 10,533

Migration flows of movers with a household income between $35,000 and $49,999 based on the Republican change category



Total movers: 36,559

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