Municipal Disincorporation and the Voluntary Termination of Local Government

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Abstract

When do citizens decide they no longer want local government? The United States phenomenon of *municipal disincorporation*, wherein citizens voluntarily vote their local governments out of existence, offers a unique chance to think about what citizens expect from their governments and what happens when expectations are not met. Using an original, comprehensive dataset of disincorporation activity in the United States, I show that smaller, economically-worse-off places are significantly more likely to initiate a disincorporation vote, and that population density informs outcomes more than population outright. Furthermore, my findings suggest that policy environments where voters have lower costs and greater access to information greatly inform these outcomes. These results are meaningful because they evaluate political *behavior* concerning local government in extreme circumstances, rather than merely political *attitudes*.

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In 2014, the village of Seneca, Nebraska – all of 33 residents – "voted itself out of existence" (Hansen, 2014). The story itself is remarkable: the year prior, a dispute arose over whether livestock could be kept within city limits.¹ The Village Board, which consisted of a quarter of the total village population, found a decades-old law prohibiting the practice, which had never been enforced. When the Board decided to begin enforcement, the villagers' reaction was unique. They petitioned to dissolve the Village Board, and by extension, the village entirely. On election night, voters travelled to nearby Thedford² and voted seventeen in favor of dissolving Seneca versus sixteen in favor of keeping it.

The villagers of Seneca demonstrated an interesting quirk of local politics. They had a variety of more conventional ways to engage with their government: simply obeying the ordinance, petitioning to have it overturned, or even voting out members of the Village Board and replacing them with more congruent alternatives. Instead, they did away with their local government altogether. In the United States, this is known as municipal disincorporation, or dissolution.

In some sense, local government is the core unit of American politics. Alexis de Tocqueville refers to the township³ as the most fundamental unit of democracy because it is the physical space wherein democracy occurs (Tocqueville, 2019). American voters do not all travel to Washington, D.C. to vote; they vote in their communities. The governments serving those communities certainly are not perfect. They can be horrifyingly insolvent, inefficient, or corrupt (Afonso, 2013; C. Berry, 2008; Hogen-Esch, 2011), but given the attachment that many Americans have to their sense of identity, place, and autonomy (Brown and Swanson, 2015; Greider, Krannich, and E. H. Berry, 1991), the act of abolishing local government represents a radical leap.

¹For reference, Seneca is about a half-mile in size, so this was a matter of keeping livestock in one's backyard versus a barn a few feet outside of the village border.

²Thomas County, Nebraska has only one polling place, at the county seat in Thedford. Seneca villagers had to travel fifteen miles to another town to decide their fate.

³In Tocqueville's native French, "township" literally refers to the political institution of the "commune," which is directly analogous to the American town or city.

Thus, a puzzle emerges: who takes the proverbial leap? What kinds of community are willing to consider doing away with local government? And which ones successfully embark on this journey? I bring to bear descriptive evidence of exactly who takes that leap. Building on a pioneering study of disincorporation in New York state Zhang (2019), I analyze an original dataset of all disincorporation activity in the United States over a ten-year period. With a series of logistic and regressions, I find that smaller, economically-worse-off places are significantly more likely to consider dissolving, but factors of size are less informative of who actually does so. I also find that places in the state of New York were both more likely to initiate dissolution but less likely to finalize the process, a consequence of the unique policy environment of that state.

This study makes three key contributions. First, I provide a comprehensive empirical examination of the municipal disincorporation phenomenon, which validates the qualitative approach made by legal scholars such as Anderson (2012) and the quantitative framework laid out by Zhang (2019) to the entire United States. Past scholars in law and public administration have done an excellent job studying disincorporation both in the abstract and in smaller policy contexts, but my contribution takes the next step by evaluating which factors actually seem to matter and which ones do not.

Second, I contextualize this phenomenon within broader political science about local government: by studying disincorporation, a very extreme manifestation of the relationship between citizens and local government, I think about what expectations citizens have of their governments and what happens when those expectations are not met. Citizens expect public goods and services (e.g. Alesina, Baqir, and Easterly 1999; C. Berry 2008) from their governments, but disincorporation necessarily means those provisions become zero. They also care that elected officials in local government are responsive to their needs. Both formal and empirical political science (e.g. Fearon 2012; Hogen-Esch 2011) suggest that replacing "bad" elected officials is easier than dismantling an entire political institution – but disincorporation might be the only option if there are no "good" alternatives available. Moreover, I consider what qualitative features of local government, including a sense of personal and community attachment, might convince citizens to avoid disincorporation even in rational situations. Even when performance is bad, people still care about the role of local government in building and maintaining identity (Brown and Swanson, 2015; Walsh, 2012). Is disincorporating worth that sacrifice for citizens?

Finally, the evidence I bring evaluates political *behavior* rather than merely *attitudes*. It is one thing for citizens to say they want "less government" (Nelson, 2019) it is another entirely for them to eliminate a level of government altogether. By measuring both *whether places disincorporated* and the *vote share* for each attempt, I show how American citizens actually act when faced with a dramatic political and legal opportunity.

What is Disincorporation, and Why Disincorporate?

Municipal disincorporation in the United States is defined as the legal phenomenon culminating in "the termination of a political unit of an incorporated municipality" (Anderson, 2012). When completed, the central legislative, executive, and judicial branches of a local municipal government are done away with entirely. Institutions responsible for providing public goods and services cease to exist, with responsibilities transferred to a different, larger entity – typically the county government or a neighboring municipality, who may annex the dissolved area. The municipal charter is destroyed, and all former municipal assets are transferred to that new level of government, sold off to private interests, or (in rare cases) simply left to rot.

In the United States' legal context, the power of municipalities to disincorporate is determined exclusively at the state level (Stevenson, 2009). As of 2015, thirty-eight states have explicitly-defined codes for disincorporation (Lauer, 2017). There are two distinct types of disincorporation: involuntary, a top-down process in which a state or county revokes a municipal charter; and voluntary, a bottom-up approach in which some combination of voters and local authorities choose to dissolve through some democratic process, typically on the ballot during either a regularly-scheduled or special election. In most states, this process is driven by citizens, who gather signatures for ballot initiatives subject to local thresholds. Once an initiative has received enough signatures, the issue is on the ballot, typically in the next regularly-scheduled election.⁴ Figure 1 is an example of the ballot measure for the disincorporation of Atomic City, Idaho in 2020.

Atomic City Authorized To Disincorporate Due To Financial Necessity					
Party	Name	Total Votes	Percentage		
	IN FAVOR OF	13	86.7%		
	AGAINST	2	13.3%		

Note: This is the Atomic City, Idaho disincorporation ballot result in November 2020. It is taken from the Idaho Secretary of State website, which can be found at https://sos.idaho.gov/elections-division/2020-results-county. Voters had two options: IN FAVOR OF meant approval to dissolve Atomic City, while AGAINST meant disapproval. The initiative was approved 13-2, surpassing Idaho's necessary threshold of 67%.

Anderson (2012) distills the rationales for dissolution into three general categories: *fiscal distress, tax savings*, and *government dysfunction*. First, *fiscal distress* posits that cities facing financial hardship choose dissolution as a preferable alternative to other policy choices, including Chapter 9 Bankruptcy.⁵ We might think of this in theoretical terms relating to overlapping government jurisdictions (e.g. C. Berry 2008; Goodman 2015; Hajnal and Trounstine 2010), wherein costly inefficiencies arise when multiple levels of government (vertically or horizontally)

⁴Some states allow a municipal or higher-level government to initiate the process, and then the voters decide in an election. See Appendix A for a full classification.

⁵Detroit, Michigan notably grappled with a question of dissolution following the financial crisis of 2008 as a possible alternative to the city's eventual decision to file for Chapter 9 Bankruptcy. This is despite the questionable legality of municipal dissolution in Michigan, although the hypothetical Detroit case would not have been made by voters, and thus not a voluntary attempt. See Chapman, Lu, and Timmerhoff (2020), Kurtzleben (2014), and Tatum (2019) for more details.

tax and spend from the same resource pool for the same service provision. This predicts that when money is tight, some voters find it best to just abolish the institution – which sets public spending at that level to zero – altogether rather than try to use other policy alternatives to salvage the situation. In stories of *fiscal distress*, citizens rarely seem thrilled when these initiatives succeed, and often express relief when they fail. The village of Prospect, New York was an extreme case. Less than 300 residents, Prospect owed more than a half-million dollars in worker's compensation debt to firefighters, which the town was in no position to provide. Former mayor Frances Righi stated "to lose a village after 125 years... it's pretty sad" (Gymburch, 2015).

Tax savings is motivated by the same mechanisms of inefficiency of overlapping taxation and service provision, but without any situation of financial hardship. By dissolving their local government, citizens hope to save money while still receiving services from elsewhere. This is particularly true in places where a neighboring municipality is willing to annex some or all of the dissolved unit. Unlike *fiscal distress*, which emphasizes reducing local spending to zero, *tax savings* is about eliminating a layer of taxation. Advocates of dissolution in cases of *tax savings* are often more satisfied in the immediate aftermath of successful initiatives. In Brady Lake, Ohio, supporters of dissolution cited high taxes and poor service quality – a waste of public money – which could be better provided by the county government. Resident Linda Rothaermal commented "I'm just happy it's over with, and excited for a new, better future" (Albrecht, 2017).

Government dysfunction, on the other hand, is less question of municipal finance and more about dissatisfaction with the performance of local elected officials. Here, the performance of elected officials was inconsistent with the expectations of their constituents through either policy incongruence or blatant corruption and mismanagement (Giegerich, 2013; Hogen-Esch, 2011). In terms of theory, this speaks to principal-agent problems. Fearon (2012) suggests "bad types" of elected agents are sanctioned by voters, who choose to not reelect them. By the same token, elections are efforts to find "good types" of agent who are congruent with principal expectations. However, *government dysfunction* represents situations where voters conclude that no "good types" exist as alternatives to incumbent "bad types," and thus the only solution is to dissolve the local government entirely. This was quite literally the case in Ophir, Utah. The town had only a few dozen citizens, only one of whom held elected office. Out of necessity, Ophir employed elected officials from outside the town, who misused their positions. Milton Adams, the town's only elected resident, remarked "we were getting controlled by out-of-town people and they had their nose in everything" (Howe, 2016). Ophir had only "bad types," and decided that having no municipal government at all was preferable.

Crucially, not all contexts convince voters to dissolve. There are countervailing incentives against dissolution, which include skepticism that dissolution will actually improve anything (De-Vito, 2018) or that the benefits of keeping local government outweigh the circumstances. Actual service provision, despite the dollar cost, is one benefit. Another is local autonomy, wherein citizens value the sense of control they have over local government relative to a larger, more distant government (Wolman et al., 2008). And in particular, many people have attachment to local identity and community (Brown and Swanson, 2015; Greider, Krannich, and E. H. Berry, 1991), meaning that, despite any ongoing hardship, citizens care about the sense of place and meaning that simply having local government provides. Walsh (2012) emphasizes that the sense of place identity in rural spaces (which are particularly more likely to consider dissolution) makes local government seem a bulwark against larger, higher-jurisdiction counterparts, which would suggest that opposition to dissolution initiatives are about maintaining that identity and autonomy. These perspectives are intertwined, and while difficult to quantify, broad news coverage of dissolution attempts indicates that these values matter deeply to voters facing the prospect of dissolution.

Who Disincorporates?

The empirical social science literature regarding disincorporation is thin. Legal scholarship (e.g. Anderson 2012; Beck and Stone 2017; Scorsone 2014) repeatedly emphasizes the lack of systemic empirical analysis. In particular, there is desire to validate whether the Anderson (2012) rationales accurately describe dissolution activity post-2010.

The state of New York in particular is a hotbed of disincorporation activity. The New York state government directly provides municipalities with grants to subsidize dissolution studies (Parshall, 2022). A dissolution study (also known as a dissolution plan) is a report prepared by a municipal governing body, with consultation from an outside group, which provides estimates of what will happen to a community's legal and economic standing if they decide to disincorporate. It details what will happen to pubic goods and services, municipal assets and liabilities, local ordinances, taxation, and more, giving voters informed estimates regarding the tangible consequences of dissolution prior to a vote. Figure 2 provides an example from one such plan.

Because the state of New York subsidized these plans, those villages paid *lower costs* to consider dissolving and had *better information* regarding the possible consequences. While communities elsewhere may commission studies prior to deciding to dissolve, only the state of New York utilizes these studies as incentives for dissolution activity.⁶

Taking advantage of this, Zhang (2019) studies village disincorporation activity in New York, finding that smaller villages with worse economic well-being were more likely to consider dissolving (meaning that it was put to voters, regardless of result). However, Zhang found no relationship between a village's ethnic diversity and the outcome, and remained agnostic on whether demographic, economic, and information factors apply to disincorporation activity in

⁶It is possible that New York municipalities are using this opportunity to simply take money from the state without seriously considering dissolution. However, NY Gen Mun L § 776 (2014) requires that villages funding a dissolution study also hold at least one public hearing regarding the plan no more than 90 days after it is finalized. The public also must be given notice via newspaper of the hearing(s) ten-to-twenty days in advance. This does not mean that misuse of funds is impossible, but perhaps difficult.



ciency (LGE) program, although the specific amount was not disclosed. The study was finalized in December 2010, and the villagers voted 55-9 to dissolve in March 2011. You can find details of both the plan and subsequent public hearing at http://archive.cgr.org/edwards/index.aspx.

the United States generally. I tackle this challenge in two respects: thinking about which communities *attempt to dissolve*, meaning that they vote on disincorporation at some point; and second, which communities *actually dissolve*, conditional on their attempts.

Measuring Disincorporation Activity

The U.S. Census gazetteer files include legal designations for each place⁷ in the United States. Updated annually, each place has a Legal/Statistical Area Designation (LSAD) code, which categorizes organizational type. LSAD code 57 refers to *Census Designated Place, Economic Census Place*, which is the Census' shorthand for an unincorporated place.⁸ I use the yearto-year changes in the Gazetteer files as the basis for determining dissolution activity. When a municipality dissolves, its LSAD Code updates to 57 in the following year. Thus, I compile every place that did so dating from 2010 to 2020, compiling every place that successfully disincorporated.

Next, I collect news coverage of each place that dissolved, allowing me to ascertain the context in which each dissolution occurred. First, I classify each as *involuntary* or *voluntary*. *Voluntary* dissolutions were ones where I could identify both news coverage that a ballot referendum had taken place, and that the result had been reported with the proper election authorities. Just over three-quarters of these were voluntary. Then, I use these pieces of coverage to construct a full list of places that had *attempted* a dissolution, successful or not, because much of the news coverage referenced neighboring places that voted against dissolving. This approach yields the near-universe of disincorporation attempts since 2010.⁹

The news coverage also allows me to build variables that categorize the Anderson (2012) rationales of *fiscal distress, tax savings*, and *government dysfunction*. Using the written contents of each piece of coverage, I assign each attempt to one of these variables. Each is a binary

⁷The U.S. Census uses the term "place" to refer to any sub-county entity, which includes (but is not limited to) cities and other municipal-level entities. They may be downloaded at https://www.census.gov/geographies/reference-files/time-series/geo/gazetteer-files.html.

⁸There are approximately 31,000 unique places in the United States, roughly a third of which are unincorporated. The Census Bureau estimates that more than 120 million people live in these places as of 2019, according to https://www.census.gov/library/stories/2020/05/america-a-nation-of-small-towns.html.

⁹This is a bold claim, but one that is defensible. Appendix B details in full the risks to identification and the steps I take to address them.

variable within my data. My schema, while not the most technologically-sophisticated, proved quite effective:

Fiscal distress: I look for keywords and phrases including, but not limited to, "high cost," "city expenses," "economic/financial distress/issues," "budget/revenue", and "debts." These cases often included negative feelings from voters and town officials about the process, indicating a sentiment of regret that local circumstances had arrived at that point. Figure 3 is a specific example of a case identified as *fiscal distress*.

Figure 3: Fiscal Distress Example

More small municipalities are finding it better to discontinue The Gazette Mitchell Schmidt Jan. 17, 2016 5:00 am In fall 2014, Ricklefs found her city caught in a budgeting nightmare. City expenses — including mandatory payments for law enforcement, library service and emergency management — were outweighing the community's meager revenue.

Note: This is an excerpt from coverage regarding the dissolution of Center Junction, Iowa. Phrases such as "city expenses... were outweighing the community's meager revenue," highlighted in red, led me to classify the Center Junction disincorporation as *fiscal distress*. That particular article can be accessed at https://www.thegazette.com/news/more-small-municipalities-are-finding-it-better-to-discontinue/.

Tax savings: beyond the specific phrase "tax savings," which was abundant, I look for keywords and phrases including "few services (versus) pay in taxes," "property tax," "savings," and the absences of keywords and themes for *fiscal distress*. These captured the sentiment that local residents merely wished to save money and were not being pressured by negative economic circumstances. Figure 4 is a specific example of a case identified as *tax savings*.

Figure 4: Tax Savings Example

Altmar residents narrowly approve dissolving their village government

Updated: Mar. 23, 2019, 12:08 a.m. | Published: Nov. 11, 2010, 1:35 a.m. By <u>Debra J. Groom, The Post-Standard</u>

Those who wanted the village dissolved say they receive few services for the hundreds they pay in taxes. Those who wanted to maintain the village say the village would not be as livable without a village government and the services it provided.

Note: This is an excerpt from coverage regarding the dissolution of Atmar, New York. Phrases such as "those who wanted the village dissolved say they receive few services for the hundreds they pay in taxes," highlighted in red, led me to classify the Atmar disincorporation as *tax savings*. That particular article can be accessed at https://www.syracuse.com/news/2010/11/do_not_publish_altmar_resident.html.

Government dysfunction: the rarest of the three, these almost never involve keywords and contexts of the other rationales. Instead, I find keywords and phrases including "dysfunction/cover-up/corruption/mismanagement" and others which indicated negative or suspicious activity on the part of local elected officials. Figure 5 is a specific example of a case identified as *government dysfunction*.

Figure 5: Government Dysfunction Example
Amelia residents vote to dissolve village By: WCPO staff
Posted at 12:50 AM, Nov 06, 2019 and last updated 9:39 AM, Nov 25, 2019 Gerber said she had hoped it wouldn't come to that, but many residents thought dissolving was the answer to what they say had been years of "cover-ups" from the current administration.
"Did a lot of records requests and found that money was being spent without anyone's knowledge," Gerber told WCPO last month. "Not letting council know, which is the reason why I resigned because hundreds of thousands of dollars were being spent and we weren't told."
"If they would just be up front and let people know, I think none of this would've happened, honestly," said Dani Speigel, a resident of Amelia for 27 years. Spiegel said the last straw came when council passed an emergency ordinance in 2018 to implement a one percent earnings tax
without notifying residents. "I think he's made too many people upset with this income tax and not being up front," she said, refrring to Hart "People caught him in too many lies."
<i>Note:</i> This is an excerpt from coverage regarding the dissolution of Amelia, Ohio. Phrases such as "cover-ups from the current administration;" "the last straw came when council passed a one percent earnings tax without notifying residents;" and "people caught him (the mayor) in too many lies," highlighted in red, led me

Table 1 summarizes disincorporation activity by state, and Figure 6 maps all of these places. Of the 92 places that registered an attempt, more than half (N = 57) are in New York, with another 19 in Ohio. Most of the rest are scattered across the Midwest, with just a few West of the Rocky Mountains. None are in the South.¹⁰

to classify the Amelia disincorporation as *government dysfunction*. That particular article can be accessed at https://www.wcpo.com/news/local-news/clermont-county/amelia/amelia-residents-vote-to-dissolve-village.

¹⁰There is debate as to whether or not Missouri is in the U.S. South. This paper errs on the side of "no," although full debate is beyond that scope.

State	Total Attempts	Fiscal Distress	Tax Savings	Government Dysfunction
Iowa	2	100%	0%	0%
Idaho	1	100%	0%	0%
Illinois	2	100%	0%	0%
Kansas	2	0%	50%	0%
Missouri	5	40%	40%	20%
Nebraska	1	0%	0%	100%
New York	57	7.02%	80.70%	3.51%
Ohio	19	42.11%	15.79%	31.58%
Oregon	1	100%	0%	0%
Utah	2	0%	50%	50%

Table 1: Disincorporation Activity by State, 2010-2020

Note: There were 92 attempts. All other U.S. states had zero attempts between 2010 and 2020. *Total Attempts* is just the number attempts in each state over that time interval. *Fiscal Distress, Tax Savings*, and *Government Dysfunction* are the respectively the proportion of attempts in each state that I classify as a particular rationale. For eight attempts I am unable to find any news coverage to provide context and assign a rationale; this is why the percentages in each row do not necessarily add up to 100%.



Note: There were 92 total attempts. Each point represents a Census-level place. Alaska and Hawai'i are removed for scale, as no attempts occurred in those states between 2010 and 2020. Eight attempts lacked the necessary information to assign a rationale; those are left as NA.

The data, therefore, are place-years between 2010 and 2020 (e.g. "New York City-2010", "New York City-2011"), with variables indicating a place's legal status. Places that cannot disincorporate, either by statute (see Appendix A) or because they are already not incorporated, are dropped from the analysis.¹¹ I construct a variable *attempt* which takes the value 1 if that place voted on a disincorporation attempt in that year (regardless of outcome) and 0 otherwise. Additionally, I include *petition threshold* and *ballot threshold* for initiating and finalizing an attempt, which represents the relative difficulty of the process.¹²

Because of the unique incentives in the state of New York, I use a binary variable taking the value 1 if the place is in New York state and 0 otherwise. Broadly, I interpret the value of the New York variable as representing the lowered costs and increased information regarding dissolution uniquely available to places in New York.

I merge these data with tables from the American Community Survey (ACS) 5-year estimates.¹³ My ACS variables¹⁴ are relatively straightforward. Following the Zhang (2019) approach,¹⁵ I measure *population* and *population density*, as well as *proportion white*. I also use his operationalization of the concept of economic well-being by measuring the *median home*

¹¹This includes places where voters can only initiate the attempt but not finalize it, or vice versa. For instance, Florida residents cannot start the process, but Florida voters get to decide the outcome. Conversely, Georgia voters may petition to initiate a dissolution, but the outcome is determined by a judge. Places in both states are dropped.

¹²For example, Alabama requires that 75% of voters in a municipality sign a petition to initiate a dissolution, which is quite difficult. That variable would be coded as 0.75. On the other hand, Iowa voters need just 5% of voters, which would be coded as 0.05. I interpret the increase of these variables as increases in the relative difficulty of starting and finishing a dissolution. However, I do not assume that these increases are conceptually linear (e.g. a change from 5% to 10% is not the same as a change from 75% to 80%).

¹³I use the 5-year estimates because "the primary advantage of using multiyear estimates is the increased statistical reliability of the data for less populated areas and small population subgroups." For more information, visit the ACS Summary at https://www.census.gov/data/developers/data-sets/acs-5year.html.

¹⁴The exact coding schema and definitions for each variable are in Appendix C.

¹⁵Zhang (2019) does a few things differently. That study uses an ethnic fractionalization index (HHI) to measure diversity. However, many of the places in my data (unlike the ones just in New York) are too small to fully develop an HHI. Furthermore, that study measures economic well-being using local public debt shares, which are not consistently available at the place-level nationwide.

value.¹⁶ Table 2 summarizes the ACS data.

Disincorporation Attempt	No	Yes
N	143, 511	92
Population (Mean)	9,703.968	1,792.304
Population (Median)	878	567
Population Density (Mean)	1,250.265	1,398.425
Population Density (Median)	870.875	947.469
Proportion White (Mean)	0.871	0.939
Proportion White (Median)	0.939	0.964
Median Home Value (Mean)	141,306.400	104,379.700
Median Home Value (Median)	93,600	94,250

Table 2: Summary of ACS Data

Note: Observations are place-years. All data come from the ACS 5-Year Estimates and are incorporated places as designated by the United States Census Bureau, and are eligible to both initiate and execute a dissolution attempt. Population density is measured as persons per square mile. Median Home Values are in United States Dollars real-adjusted to 2010, and are the median value measured at the unit of observation. Thus, the Median Home Value (Mean) row is the mean of all observed medians, and the Median Home Value (Median) row is the median of those medians.

Who Tries?

To better understand which factors influence attempts to disincorporate, I construct a logistic regression framework which evaluates the effects of my covariates on the predicted probability of making an attempt. The model for that predicted probability p_i as a function of k covariates takes the form

$$\operatorname{logit}(p_i) \sim \beta_0 + \beta_k X_{ki}$$

where *i* units are place-years. The covariates for the main analysis, following Zhang (2019), are *population* and *population density*, *proportion white*, and *median home value*. I also use the

¹⁶Alternate measures of the concept of economic well-being, as well as additional demographic factors, can be found in Appendix D.

New York binary variable and the state-level *petition threshold*. These models were constructed¹⁷ using two subsets of data: all incorporated places and only villages. The vast majority of attempts were villages (N = 82), and analyzing the data at that level might be more insightful. Table 3 reports these results.

	Depende	ent variable:
	Disincorpo <i>All Places</i>	ration Attempt Villages Only
	(1)	(2)
log(Population)	-0.466***	-0.260^{*}
	(0.118)	(0.144)
log(Population Density)	0.242	0.224
	(0.155)	(0.184)
Proportion White	2.132^{*}	0.582
1	(1.270)	(1.178)
log(Median Home Value)	-0.512^{***}	-0.909***
	(0.171)	(0.216)
New York	4.506***	3.055***
	(0.334)	(0.630)
Petition Threshold	1.773*	-0.282
	(0.956)	(1.989)
Observations	140,976	34,484
	*p<0.1; **p	0<0.05; ***p<0.01

Table 3: Factors Influencing Disincorporation Attempts

Note: Observations are place-years. Models are Logistic Regression. New York is a binary variable. Population Density is measured as persons per square mile. The model constants have been removed for space. A full set of marginal effects plots can be found in Appendix E.

¹⁷I take the natural logarithm of *population, population density*, and *median home value* because the distribution of those variables is more approximately-normal than the unscaled variables. Additional model specifications are reported in Appendix D.

Similar to Zhang (2019), places with a smaller population and lower housing values are more likely to attempt a disincorporation. *Population density* is not statistically significant here, but it is when using alternate specifications for the concept of economic well-being (see Appendix D). *Proportion white* is positive for both models, indicating that whiter places seem more likely to attempt to dissolve, although the statistical significance is weak for *all places* and uninformative for *villages only*. New York places were considerably more likely to attempt to dissolve than their non-New York counterparts. Somewhat surprisingly, there was divergence regarding *petition threshold*: across all places, higher petition thresholds were actually more likely to try dissolving, but the relationship ceases to be statistically meaningful when sub-setting the analysis to villages only. Broadly, these results are a validation of Zhang (2019) applied nationwide. Now, I go a step further and explore which places ultimately choose dissolution.

Who Succeeds?

Figure 7 maps where each successful or failed dissolution attempt occurred. Failed attempts are largely clustered in New York State, away from the New York City metropolitan area. Outside of New York and Ohio, nearly every attempt succeeded.

The approach for looking at which places successfully dissolve, conditional on attempting, is very similar. However, I switch to OLS regression because I measure two outcomes side-by-side: *success* is a binary variable indicating that the place indeed voted to dissolve, and *vote share* is the proportion of the vote in favor of dissolution. I utilize the same ACS covariates and the New York binary variable from the previous section and switch from *petition threshold* to *ballot threshold*, which is the vote share required for the attempt to succeed.¹⁸

To better understand the role of different rationales for dissolving, I supplement the analysis with the factor variables *fiscal distress*, *tax savings*, and *government dysfunction*. There were

¹⁸While the minimum threshold nationwide is 50%, several municipalities attempting to dissolve were in states that required vote shares exceeding 60% or 67%.



eight confirmed dissolution attempts for which I could not find locale-specific news coverage, and thus could not assign a dissolution rationale. These attempts are dropped from the analysis in the latter two models. Because each of the three rationales is mutually exclusive under the remaining data, I leave one out in order to avoid multicollinearity issues. Here, *fiscal distress* is left out, meaning that the coefficients on the other two rationales should be interpreted with respect to *fiscal distress*. I do not subset to just villages at any point due to power considerations. Table 4 reports these results.

Although much of the statistical significance from earlier is lost, some trends stand out. First, while *population* is no longer statistically significant (and the coefficient estimates are quite small anyway) *population density* is now statistically significant and negative across all four models,

	Dependent variable:					
	Success	Vote Share	Success	Vote Share		
	(1)	(2)	(3)	(4)		
log(Population)	0.048 (0.051)	-0.010 (0.022)	0.051 (0.054)	-0.014 (0.023)		
log(Population Density)	-0.135^{**} (0.055)	-0.052^{**} (0.024)	-0.138^{**} (0.060)	-0.049^{*} (0.026)		
Proportion White	0.256 (0.467)	-0.066 (0.204)	0.360 (0.521)	-0.002 (0.222)		
log(Median Home Value)	-0.268^{**} (0.120)	-0.077 (0.052)	-0.277^{**} (0.125)	-0.078 (0.053)		
New York	$egin{array}{c} -0.377^{***} \ (0.121) \end{array}$	-0.066 (0.053)	-0.234 (0.173)	0.026 (0.074)		
Ballot Threshold	-1.822 (1.693)	0.412 (0.739)	-1.770 (2.205)	0.890 (0.941)		
Tax Savings			-0.109 (0.164)	-0.106 (0.070)		
Government Dysfunction			0.069 (0.185)	-0.061 (0.079)		
Observations R ²	92 0.230	92 0.221	84 0.215	84 0.225		

Table 4: Factors Influencing Successful Disincorporation

*p<0.1; **p<0.05; ***p<0.01

Note: Observations are places. All models are OLS. New York, Tax Savings, and Government Dysfunction are binary variables. Population Density is measured as persons per square mile. Tax Savings and Government Dysfunction in columns (3) and (4) are interpreted with respect to an omitted variable, Fiscal Distress. Success is a binary variable and Vote Share is continuous between 0 and 1. The model constants have been omitted for space. Table D4 in Appendix D reports results omitting other rationales.

suggesting that more-dense places are less likely to finalize the dissolution, and vice-versa. The models being OLS makes interpretation more clear: a one-unit increase in the log-population density of a place is correlated with a thirteen- to fourteen-percentage decrease in *success*, and similarly such an increase is associated with about a five percent decrease in *vote share*.

As before, *proportion white* is not statistically significant, although positive coefficient estimates for *success* hit at the possibility an effect exists but cannot be detected with the current sample size. Places with lower *median home value*, my operationalization of worse economic conditions, are also more likely to dissolve; a log-unit increase is associated with roughly a twenty-seven percent increase in *success*. While not statistically significant for *vote share*, the estimates suggest that the relationship with *median home value* may also be negative. Moreover, the coefficient signs and interpretations for *New York* are completely reversed from earlier; allelse equal, New York municipalities who face a vote to disincorporate are thirty-seven percent less likely to finalize the process, even though *vote share* changes far less. This is buttressed by the inclusion of *ballot threshold*, which – while statistically insignificant by itself – included as a control accounts for difference in difficulty that New York municipalities face compared to non-New York counterparts.

Relative to *fiscal distress*, neither *tax savings* nor *government dysfunction* seem more or less likely to receive support for dissolution. While admittedly under-powered, on the margin it does not seem to be the case that any rationale is particularly more or less likely to result in a successful vote. It may be noteworthy that the sign for *government dysfunction* changes from *success* to *vote share*, which weakly suggests that places undergoing *government dysfunction* were more likely to approve the process, but without overwhelming support.

Discussion

Reviewing both who tries and who succeeds yields insights about the nature of voluntary disincorporation throughout the United States. First, the results from who tries are a nationwide validation of Zhang (2019); smaller places doing relatively worse economically are more likely to formally consider disincorporation. Although New York, the subject of the Zhang (2019) study, plays an outsized role in the overall sample, these factors seem to generalize overall. Furthermore, it reinforces the Anderson (2012) notion that financial hardship serves as a selection mechanism into which places may realistically consider dissolving. While it is true that I have not classified *fiscal distress*, for instance, for every single observation, it validates the notion that the concept of fiscal distress matters. It is possible, albeit difficult, to apply the Anderson (2012) rationales to new contexts in a way that is still meaningful.

Furthermore, the finding that smaller places are considerably more likely to consider dissolving, even accounting for the relevant legal population thresholds, hints at a theoretical threshold past which dissolution is never going to be an option. The largest place to actually vote on dissolution was Depew, New York, with a population of just 15,283. Even many large villages have populations well over 30,000 people, roughly twice the size of Depew. While not a causal measure, one way we can think about establishing this threshold is by revisiting the logistic regression model. On Figure 8, the predicted probability of attempting a disincorporation is very close to zero throughout, but the confidence interval begins to widen at roughly 5.75 on the log scale, which corresponds to a population of about 300. I do not claim that 300 is indeed that threshold, but my data suggests that only places under that threshold are serious candidates for disincorporation.



Big cities are not immune to the concerns of smaller ones, but the prospect of losing one entirely seems to be a political non-starter. It is one thing to talk about disincorporation as an option for communities; it is entirely another to initiate the legal process and see it to completion, and places under a certain population threshold may never find themselves in that position, no matter the circumstance.

The outsized role of the state of New York suggests that policymaking tailored to disincorporation activity can matter in a meaningful way. While I do not explicitly measure the lowered costs and better information that New York voters have relative to other states, and I make no causal claims, the evidence is strongly suggestive that the New York policy of subsidizing dissolution studies is effective in getting citizens to at least consider dissolving. When the costs are low and times are tough, there is less risk in starting the conversation about disincorporation as a realistic option. Future research might look at the New York policy specifically as a causal treatment: what is the casual effect of the policy on generating new dissolution activity?

When looking at who succeeds, the story changes a bit. Outright population seems to matter less than population density, suggesting that the spatial arrangement of citizens is more informative for who succeeds. Theory might suggest that more-densely populated regions, and thus more likely to be subject to overlapping and inefficient jurisdictions of government (C. Berry, 2008), would be more likely to approve dissolution and remove a layer of the inefficiency. Instead, it seems to be the opposite: sparser communities have more support for dissolution. Beyond the scope of the Anderson (2012) rationales, this might be where the qualitative mechanisms of community (e.g. Greider, Krannich, and E. H. Berry 1991) begin to push back. Sparser places might have less emotionally invested in keeping a local government, and thus are more willing to do away with them when circumstances become difficult.

While the Anderson (2012) rationales are effective at classifying disincorporation activity in a neat manner, they do not actually seem to be informative of overall support for or against actually disincorporating. Although statistically insignificant, the most generous interpretation suggests that *tax savings* might be the least-supported option, relative to the others. This might speak to community attachment in contextualizing each rationale. While I do not measure attachment, a story of communities voting to dissolve as a last-resort during *fiscal distress* or to do away with hopelessly corrupt officials during *government dysfunction* might be more sensible than communities hoping for a few dollars worth of *tax savings*. In particular, it is important to look at the coefficients under *vote share* because they represent the actual variation in citizen behavior under these circumstances.

Once again, the policy circumstances of New York matter. The key takeaway is that the sign of the coefficient changes from earlier. Abstaining from any causal claims, it seems quite reasonable that *lower costs* incentivize New Yorkers to consider dissolution, but the *better information* acquired at that lower cost serves as a deterrent. Even though the significance and magnitude change when looking at *vote share* and the inclusion of rationales, the marginal impact is meaningful. Perhaps the true decrease in support is much closer to zero, but the empirics imply that whatever decrease is enough to flip election results – a six percent decrease in support along with a thirty-seven decrease in actual disincorporations strongly suggests that just enough people in just the right places are impacted.

Finally, this study only looks at disincorporation activity as an outcome and not as a cause of other phenomena. Even though disincorporation is the end of the local government, it is not the end of the story for the people who live there. What happens to communities after the fact warrants more attention; is dissolution the proverbial "nail in the coffin" for communities already imperiled? How do citizens' relationships with other governments change once they have voted one out of existence entirely? And are these outcomes the same for places that dissolved involuntarily? The effects of disincorporation on other political outcomes, if they indeed exist, are an exciting avenue for future research.

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Broadly, there are two types of disincorporation: voluntary and involuntary. *Involuntary* disincorporation is a top-down process in which the state or county revokes a municipal charter, which sometimes is automatically triggered when that municipality falls below a certain population threshold.



Voluntary disincorporation is a bottom-up process in which some combination of voters and local authorities choose to dissolve through some democratic process. Table A1 outlines the dissolution procedures in each U.S. state. The **Voluntary Restriction** column shows if there is a population-based restriction on voluntarily attempts to dissolve, or if the process is not started by a petition (but finished via referendum). **Petition Threshold** simply describes how many voters need to sign a petition in order to put the issue to a vote, and **Ballot Threshold** is the vote share required to succeed. Data is from Anderson (2012) and Lauer (2017), and I manually checked each statute to verify if or when they have changed since 2010.

State	Voluntary Restriction	Petition Threshold	Ballot	Statutes	Additional Notes
			Threshold		
Alabama	Population <1,100	75% voters	75%	AL Code § 11-41-20	Also requires approval from
					a probate judge
Alaska	Unrestricted	25% voters	50%	Alaska Stat. §	
				29.06.450 to 530	
Arizona	Unrestricted	67% voters	50%	AZ Rev Stat § 9-102	Can also be dissolved by
				and -132	county supervisors follow-
					ing successful petition
Arkansas	No Procedure				
California	Unrestricted	25% voters	50%	Cal. Gov. Code §	Requires Local Agency
				56751 and § 57400 to	Formation Commission
				57426	endorsement
Colorado	Unrestricted	25% electors	67%	Colo. Rev. Stat. § 31-	
				3-101 to 31-3-202	
Connecticut	No Procedure				
Deleware	No Procedure				

Florida	No Petition		50%	Fla. Stat. § 165.051	Disincorporation is ini-
				and 165.061	tiated by the municipal
					legislature but may be
					finalized by voters
Georgia	Unrestricted	50% voters	NA	GA Code § 36-30-7	Judge of County Superior
				and -7.1	Court decides dissolution
					outcome
Hawai'i	No Procedure				
Idaho	Unrestricted	50% electors who voted	67%	Idaho Code Ann. §	
		in last general municipal		50-2201 to -2214	
		election			
Illinois	Unrestricted	50% electors who voted	50%	65 Ill. Comp. Stat. §	
		in last general municipal		5/7-6-1 to -8	
		election			
Indiana	Population >500	2% vote cast in last Sec-	67%	Ind. Code § 36-5-1 to	When smaller than 500, de-
		retary of State election		-19 and § 36-5-1.1-1 to	cided by the county execu-
				-11	tive
	Population <500	25% voters	NA		
Iowa	Unrestricted	5% voters	50%	Iowa Code § 368.3	Referendum must include a
				and § 368.11	plan for disposal of assets
					and liabilities

Kansas	Population <2,000	50% voters	67%	Kan. Stat. Ann. §	
				15-111 and 80-1101a to	
				80-1118	
Kentucky	Unrestricted	20% voters	50%	Ky. Rev. Stat. Ann. §	Municipality has no long-
				81.094	term debt or debt in excess
					of city assets
Louisiana	Population <2,500	50% taxpayers qualified	50%	La. Stat. Ann. §	
		to vote		33:231, 251 to 266	
Maine	Population >10	50% voters in last guber-	67%	Me. Stat. tit. 30-A, §	Requires approval of state
		natorial election		7201 to -7504	legislature
Maryland	Unrestricted	3% voters in last guber-	NA	Md. Code, Local	Determined by Maryland
		natorial election		Gov. Law § 4-313 and	Department of Legislative
				4-314	Services
Massachusetts	No Procedure				
Michigan	No Procedure				Michigan uses the language
					of dissolution but only to set
					up consolidation.
Minnesota	Unrestricted	33% voters in last city	50%	Minn. Stat. § 412.091	
		election		to 412.093	
Mississippi	No Procedure				

Missouri	Prior to 2016	50% voters	60%	Mo. Rev. Stat.	When population is less
				§ 80.570 to 80.670	than 100, a petition result
				(2015)	is sufficient without a subse-
					quent election
	After 2016	25% voters	50%	Mo. Rev. Stat.	
				§ 80.570 to 80.670	
				(2016)	
	Population <100	75% voters	75%	Mo. Rev. Stat.	
				§ 80.570 to 80.670	
				(2015)	
Montana	Unrestricted	15% voters in last munic-	60%	Mont. Code Ann. § 7-	Can also be initiated by
		ipal general election		2-4901 to -4920	60% of municipal governing
					body
Nebraska	Population <800	33% voters	50%	Neb. Rev. Stat. §	Can also be initiated by 67%
				17-215 to -219.03 and §	of village board
				23-297	
Nevada	Unrestricted	50% voters	NA	Nev. Rev. Stat. §	Decided by county commis-
				265.110 to § 265.180	sioners after debts are se-
					cured
New Hampshire	No Procedure				
New Jersey	No Procedure				

New Mexico	Unrestricted	25% voters	50%	N.M. Stat. § 3-4-1 to	Provision must be made
				-9	to resolve municipal debts
					prior
New York	Population <500	20% voters	50%	N.Y. GMU § 17-A	When population is more
				(Consol. 2015)	than 500, it can be trig-
					gered with 5,000 signatures
					outright
	Population >500	10% voters	50%	N.Y. GMU § 17-A	
				(Consol. 2015)	
North Carolina	No Procedure				
North Dakota	Unrestricted	25% voters in last regular	50%	N.D. Cent. Code §	
		municipal election		40-53.1	
Ohio	Population <5,000	40% voters in last regu-	50%	Ohio Rev. Code §	
		lar municipal election		703.20 to 703.21	
Oklahoma	Unrestricted	33% voters in last gen-	50%	Okla. Stat. tit. 11,§	Requires 40% turnout
		eral election		7-101 to 107	
Oregon	Unrestricted	10% voters	50%	Or. Rev. Stat. §	
				221.610 to .650	
Pennsylvania	No Petition	NA	50%	53 PA Cons Stat § 732	Initiated by municipal gov-
				to 74 1	erning body and requires a
					partner willing to annex
Rhode Island	No Procedure				

South Carolina	Unrestricted	50% voters	67%	S.C. Code Ann. § 5-1-	Involuntary dissolution
				100	triggers if population is be-
					low 50 or by determination
					of Secretary of State
South Dakota	Population <250	50% of real property	NA	S.D. Codified Laws §	Determined by circuit court
		owners		9-6-1 to -12	
	Population <1,000	15% voters in last general	50%	S.D. Codified Laws §	Requires 40% turnout
		election		9-6-1 to -12	
Tennessee	Unrestricted	10% voters	50%	Tenn. Code Ann. § 6-	
				52-101 to -304	
Texas	Population <400	67% voters	50%	Tex. Loc. Gov. Code	If the population is less than
				§ 62	400 and the municipality
					has outstanding debt, it re-
					quires 67%. If no debt, just
					25%. If the population ex-
					ceeds 400, than it requires
					400 signatures.
	Population <400	25% voters	50%	Tex. Loc. Gov. Code	
				§ 62	
	Population >400	400 voters	50%	Tex. Loc. Gov. Code	
				§ 62	

Utah	Unrestricted	25% votes cast in last	50%	Utah Code § 10 2-701	
		Congressional election		to -712 and 17-34-1 to	
				-6	
Vermont	No Petition				Unclear but seems similar
					to PA
Virginia	No Petition	NA	50%	Va. Code Ann. § 15.2-	Process initiated by town
				3700 to -3712	council
Washington	Unrestricted	50% voters	50%	Wash. Rev. Code §	
				35.07	
West Virginia	Population <10,000	25% voters	50%	W. Va. Code § 8-35-1	
				to -2	
Wisconsin	Population <1,000	33% voted for village of-	67%	Wis. Stat. § 61.187	
		ficers in previous elec-			
		tion			
Wyoming	No Procedure				

A Identifying Unsuccessful Disincorporation Attempts

A key claim of the paper is that my dataset of disincorporation attempts is near-universal. This claim is strong, and a key concern is that the methodology used cannot identify every failed attempt. This appendix breaks down threats to identification and my approach to mitigate these threats.

Anderson (2012) and Stevenson (2009) explain that disincorporation procedures are determined at the state level. Appendix A provides a comprehensive list of which policies are active in which states. I can immediately rule out municipalities in states that prohibit the procedure altogether. Similarly, I can reduce the scope of allowed places subject to a population threshold limiting the practice. Places cannot fail a disincorporation attempt if attempts are disallowed in the first place. Furthermore, because the U.S. Census Gazetteer files have a direct classification of which places are incorporated and which places are unincorporated, I can rule out places that are already unincorporated.

Using my list of positively-identified disincorporations, I assembled every bit of local news coverage I could find regarding each occurrence. I spent many, many hours on local newspaper websites, the Google News search utility, and the internet archive *wayback machine*, among others. Many of these were written in the context of other attempts; often, a village facing a disincorporation vote would reference events that transpired in a neighboring village some time prior. The key limitation here is that the trail eventually ends without verification that the list is complete. An anonymous reviewer of the paper pointed this out concisely:

Suppose success is correlated with some variable Z, such as region. It seems that places in the South do not successfully disincorporate. Imagine, though, that many villages in Texas attempt disincorporation, but all fail. The procedure described would fail to identify these instances given a lack of success in any state bordering Texas.

This is a real concern! There are a number of actions that I have undertaken to address it:

A.1 Comprehensive Google Searches

Google and its Google News search engine are wonderful tools for gathering qualitative data. For each state that allows voluntary dissolution, I entered these variations on the following query:

```
state + municipal/village/town/city + disincorporation/dissolution
```

This had the query restriction that the returned results must include "disincorporation" or "dissolution." I scoured the first ten pages that Google and Google News returned for each search query. Because there are thirty-eight states that allow voluntary dissolution initiated and executed by voters, this sums to 304 unique searches and 3,040 pages of results. I found exactly one new disincorporation attempt this way: Atomic City, Idaho, in 2020.

A.2 Random Sampling

The same anonymous reviewer suggested that I randomly sample places across the United States and search for coverage of disincorporation by the same process as above. I randomly sampled 300 place names from my data and ran a similar set of queries:

```
place name + state + municipal/village/town/city + disincorporation/dissolution
```

Many of these searches returned less than a page of news results, so I ran the sampled entries through the main Google search engine¹⁹ as well. I found no new disincorporation cases via this method, either standalone or mentioned in articles about other municipalities. For some ones in New York state and Ohio, I did find coverage of cases I had already confirmed, however.

Some final caveats: this procedure is imperfect and can certainly miss non-successful attempts. It is concerning that, of the 92 cases I confirmed, eight were only mentioned in coverage of other attempts and not by themselves. That is nearly a ten percent miss rate! Despite this

¹⁹The Google search engine actually flagged my search activity multiple times throughout this process. I was required to pass a captcha screening once every 20 searches or so.

major concern, I lack the coverage to pour through every single article written by every single local newspaper and left hoping that I was as comprehensive as possible. To the extent that there are indeed missing entries, it is not for a lack of effort.

Furthermore, I only analyze attempts that took place between 2010 and 2020 because, as of this writing, those are the years for which ACS data is consistently available to allow panel data analysis. I have also found other attempts in 2021 and 2022, including states such as Kentucky and Texas that had no attempts during my interval. News coverage of those attempts did not reference prior recent attempts in those states.

A.3 ChatGPT

In late 2022, a new A.I. Chatbot called ChatGPT debuted to the concern of universities and New York Times columnists everywhere.²⁰ ChatGPT was trained on a massive corpus of internet text, which may have included disincorporation information that I had missed. I asked ChatGPT what it knew about municipal disincorporation and whether it could provide any examples of disincorporation activity. I was pleasantly surprised by its understanding of the phenomenon, but it was unable to provide any additional examples that I might have missed. Figure B.1 is a sample of my conversation with ChatGPT on the topic.

²⁰https://www.nytimes.com/2023/01/16/technology/chatgpt-artificial-intelligence-universities.html



ration. It has a surprisingly sophisticated understanding of the phenomenon, but only one of the three examples it provided actually disincorporated. You can learn more about, and even use, ChatGPT at https://openai.com/blog/chatgpt/.

B Data Collection

My data come from three sources: the U.S. Census gazetteer files, an assortment of United States local and regional newspapers (both detailed in Appendix B), and the U.S. Census American Community Survey (ACS) 5-year estimates, which have the most-precise estimates of various socioeconomic and demographic variables at the place level. This way, I could match places as defined by the gazetteer files one-to-one with ACS data.

The ACS Data were collected using the tidycensus package in R. Broadly, my ACS variables fall into three categories: *population/demogrpahic*, *economic*, and *education*. Only the first two are used in the body of the paper; the rest address concerns about additional factors leading to dissolution activity.

The variables I used exactly are as follows. From the gazetteer files:

- LSAD, the Legal/Statistical Area Designation Code, which is used to classify cities, towns, villages, and other types of place-level entity.
- FUNCTSTAT, the Functional Status Code, which indicates whether a place-level government is currently functioning. All non-functional entities were dropped.
- Land Area in square miles, which was used to construct the *population density* variable used in the paper.

And from the ACS, the population/demographic variables:

- B01003_001, which is the *total population*.
- B01002_001, which is the *median age*.
- B06001_XXX, a set of variables collectively capturing the total population *younger than 25* and *older than 65*.

• B02001_002, the total population *identifying as white*, which is used to construct the *proportion white* variable used in the paper.

The economic variables:

- B1701_002, the total population living under the *poverty* level in the last 12 months.
- B19010_001, the median household income.
- B2500_001, the median home value.
- B23001_XXX, a series of variables used to construct the *unemployment rate* variable.

And the education variables B15002_XXX, which were used to construct the variables *proportion* with high school degree (or higher) and proportion with bachelor's degree (or higher).

Population density is calculated by dividing total population by the land area of each place. *Proportion white* is calculated by dividing the total number of white people by that place's total population. *Proportion with high school degree* and *proportion with bachelor's degree* are calculated by dividing the total number people with those degrees or higher divided by the population of adults 25 and older, which is typical in the social science literature.

Within my analysis, I take the natural logarithm of the variables *population*, *population den*sity, median income, and median home value. This is because each is variable, pre-transform, is quite right-skewed, and the log transformation makes each variable more approximately-normal. Figure C.1 shows the distribution of these variables pre- and post-log transform.



C Alternate Model Specifications

The ACS variables used in the main paper – *population, population density, proportion white*, and *median home value* – are the ones closest to replicating the Zhang (2019) study. However, concerns over both alternate conceptualizations of "economic well-being" and other relevant covariates, particularly education levels, exist. This appendix section reports alternate model specifications to the main paper.

My main operationalization of "economic well-being" is *median home value*, and my alternate operationalizations of that concept are *poverty*, *median income*, and *unemployment rate*. The interpretation of signs on the coefficients is as follows: *negative* signs on *median home value* and *median income* mean the place is doing worse; conversely, *positive* signs on *poverty* and *unemployment rate* mean the place is doing worse. Because the results with each alternate specification are largely the same, my overall interpretation of a place's economic well-being does not change.

Table D1 shows results for these alternate specifications in all places, and Table D2 shoes those results for just villages. Table D3 adds more demographic and education control variables.

Table D4 reports models for who succeeds when leaving out other disincorporation rationales, *tax savings* and *government dysfunction*, due to multicollilnearity issues. Table D5 reports models regarding successes including more demographic and education control variables.

	Dependent variable:						
	Disincorporation Attempt						
	All Places						
log(Population)	$egin{array}{c} -0.466^{***} \ (0.118) \end{array}$	$egin{array}{c} -0.511^{***} \ (0.114) \end{array}$	-0.473^{***} (0.110)	-0.474^{***} (0.110)			
log(Population Density)	0.242 (0.155)	0.247^{*} (0.148)	0.248^{*} (0.141)	0.264^{*} (0.143)			
Proportion White	2.132^{*} (1.270)	2.531** (1.270)	2.941** (1.325)	3.013^{**} (1.331)			
New York	4.506^{***} (0.334)	$\begin{array}{c} 4.423^{***} \\ (0.325) \end{array}$	4.276^{***} (0.320)	4.233^{***} (0.319)			
Petition Threshold	1.773* (0.956)	1.702* (0.957)	1.798* (0.955)	1.692^{*} (0.949)			
log(Median Home Value)	-0.512^{***} (0.171)						
log(Median Income)		$egin{array}{c} -0.776^{***} \ (0.262) \end{array}$					
Poverty Rate			1.597^{*} (0.860)				
Unemployment Rate				3.585*** (0.993)			
Observations	140,976	141,478	143,601	143,601			

Table D1: Factors Influencing Disincorporation Attempts - Alternate Economic Measures

Note: The leftmost column is the same model from Table 3 column 1 in the body of the paper. Observations are place-years. Models are Logistic Regression. New York is a binary variable. Population Density is measured as persons per square mile. The model constants have been removed for space.

	Dependent variable:						
	Disincorporation Attempt						
	Villages Only						
log(Population)	-0.260^{*} (0.144)	$egin{array}{c} -0.343^{**} \ (0.139) \end{array}$	-0.327^{**} (0.132)	$egin{array}{c} -0.335^{**} \ (0.133) \end{array}$			
log(Population Density)	0.224 (0.184)	0.195 (0.166)	0.158 (0.157)	0.199 (0.161)			
Proportion White	0.582 (1.178)	1.274 (1.240)	1.799 (1.322)	2.054 (1.361)			
New York	3.055^{***} (0.630)	$2.819^{***} \\ (0.612)$	2.662*** (0.597)	2.478^{***} (0.609)			
Petition Threshold	-0.282 (1.989)	-0.566 (1.983)	-0.624 (1.931)	-1.316 (1.975)			
log(Median Home Value)	-0.909^{***} (0.216)						
log(Median Income)		-1.075^{***} (0.302)					
Poverty Rate			2.505^{***} (0.924)				
Unemployment Rate				5.314*** (1.177)			
Observations	34,484	34,595	35,093	35,093			

Table D2: Factors Influencing Disincorporation Attempts - Alternate Economic Measures

Note: The leftmost column is the same model from Table 3 column 2 in the body of the paper. Observations are place-years. Models are Logistic Regression. New York is a binary variable. Population Density is measured as persons per square mile. The model constants have been removed for space.

	Dependent variable:		
	Disincorporation Attemp All Places Villages On		
	(1)	(2)	
log(Population)	-0.514***	-0.293**	
	(0.121)	(0.147)	
log(Population Density)	0.205	0.181	
	(0.154)	(0.184)	
Proportion White	2.355*	0.796	
	(1.281)	(1.235)	
log(Median Home Value)	-0.214	-0.802^{***}	
	(0.232)	(0.272)	
New York	4.544***	2.921***	
	(0.330)	(0.628)	
Petition Threshold	1.618*	-0.779	
	(0.948)	(2.000)	
Proportion Older than 65	-0.928	-0.857	
	(2.033)	(2.488)	
Median Age	-0.014	-0.019	
	(0.020)	(0.023)	
Proportion with High School Degree	-0.779	-0.530	
	(1.199)	(1.497)	
Proportion with Bachelor's Degree	-2.311	-0.527	
	(1.453)	(1.493)	
Observations	139,348	34,004	

Table D3: Factors Influencing Disincorporation Attempts - Additional Covariates

Note: Observations are place-years. Models are Logistic Regression. New York is a binary variable. Population Density is measured as persons per square mile. The model constants have been removed for space.

	Dependent variable:					
		Success			Vote Share	
	(1)	(2)	(3)	(4)	(5)	(6)
log(Population)	0.051 (0.054)	0.051 (0.054)	0.051 (0.054)	-0.014 (0.023)	-0.014 (0.023)	-0.014 (0.023)
log(Population Density)	-0.138^{**} (0.060)	-0.138^{**} (0.060)	-0.138^{**} (0.060)	-0.049^{*} (0.026)	-0.049^{*} (0.026)	-0.049^{*} (0.026)
Proportion White	0.360 (0.521)	0.360 (0.521)	0.360 (0.521)	-0.002 (0.222)	-0.002 (0.222)	-0.002 (0.222)
log(Median Home Value)	-0.277^{**} (0.125)	-0.277^{**} (0.125)	-0.277^{**} (0.125)	-0.078 (0.053)	-0.078 (0.053)	-0.078 (0.053)
New York	-0.234 (0.173)	-0.234 (0.173)	-0.234 (0.173)	0.026 (0.074)	0.026 (0.074)	0.026 (0.074)
Ballot Threshold	-1.770 (2.205)	-1.770 (2.205)	-1.770 (2.205)	0.890 (0.941)	0.890 (0.941)	0.890 (0.941)
Tax Savings	-0.109 (0.164)		-0.178 (0.203)	-0.106 (0.070)		-0.046 (0.087)
Fiscal Distress		0.109 (0.164)	-0.069 (0.185)		0.106 (0.070)	0.061 (0.079)
Government Dysfunction	0.069 (0.185)	0.178 (0.203)		-0.061 (0.079)	0.046 (0.087)	
Observations R ²	84 0.215	84 0.215	84 0.215	84 0.225	84 0.225	84 0.225

Table D4: Factors Contributing to Successful Disincorporation - Other Rationales

Note: Observations are places. Columns 1, 2, and 3 have success as the dependent variable; columns 4, 5, and 6 have vote share. All models are OLS. New York, Fiscal Distress, Tax Savings, and Government Dysfunction are binary variables. Population Density is measured as persons per square mile. Because the rationales are factors, each model omits one to avoid multicollinearity issues. Success is a binary variable and Vote Share is continuous between 0 and 1. The model constants have been omitted for space.

	Dependent variable:				
	Success	Vote Share	Success	Vote Share	
	(1)	(2)	(3)	(4)	
log(Population)	0.048	0.058	-0.010	-0.008	
	(0.051)	(0.056)	(0.022)	(0.024)	
log(Population Density)	-0.135^{**}	-0.147**	-0.052^{**}	-0.063**	
	(0.055)	(0.061)	(0.024)	(0.027)	
Proportion White	0.256	0.257	-0.066	0.015	
	(0.467)	(0.531)	(0.204)	(0.230)	
log(Median Home Value)	-0.268^{**}	-0.210	-0.077	-0.088	
	(0.120)	(0.138)	(0.052)	(0.060)	
New York	-0.377***	-0.263^{*}	-0.066	-0.018	
	(0.121)	(0.132)	(0.053)	(0.057)	
Ballot Threshold	-1.822	-1.518	0.412	1.132	
	(1.693)	(2.268)	(0.739)	(0.983)	
Median Age		0.004		0.001	
C C		(0.012)		(0.005)	
Proportion Older than 65		-0.130		0.139	
		(1.170)		(0.507)	
Proportion with High School Degree		0.821		0.506*	
		(0.689)		(0.298)	
Proportion with Bachelor's Degree		-1.058		-0.080	
		(0.753)		(0.326)	
Observations	92	84	92	84	
<u>R</u> ²	0.230	0.245	0.221	0.232	

Table D5: Factors Contributing to Successful Disincorporation - Additional Covariates

Note: Observations are places. All models are OLS. Columns 1 and 3 are the same as results from Table 4. New York is a binary variable. Population Density is measured as persons per square mile. Success is a binary variable and Vote Share is continuous between 0 and 1. The model constants have been omitted for space.

D Marginal Effects Plots

This is the full set of marginal effects plots for the main logistic regression analysis.











