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FROM THE PUBLISHER

We are again pleased to present the *Illinois Municipal Policy Journal* to audiences in both the academic and governmental fields. This third volume represents the ongoing collaboration with DePaul University that has solidified into a creative and mutually beneficial partnership to enhance the study and recognition of important municipal topics.

As with our inaugural volume, the *Journal* continues to be a venue where academic research and scholarly study can merge with the application and implementation of local government best practices. Previous editions examined critical topics of current and future concern for local elected officials and their staffs. This edition extends that effort into areas including: pensions, economic development and the sharing economy.

As more and more issues are deliberated at the state and federal levels of government, the reality is that much of the actual work on those issues is being pushed down to the local level. Cities, villages and towns are responsible for the efficient and effective allocation of tax dollars, tangible resources and personnel. And, as has been the case throughout modern history, those local governments are bridging the gap between state or federal mandates and the resident constituents who are paying for or in need of programs and services. Illinois has been at the forefront of many state and national conversations over the years, which is a tribute to the dedication and proactivity of the elected and appointed officials we serve.

The Illinois Municipal League remains committed to publishing the *Illinois Municipal Policy Journal* and other educational and helpful tools, while also advancing the cause of this policy area among the leaders in higher education. We appreciate the researchers, authors, editors and others who have contributed to this finished product. Thank you.

BRAD COLE
PUBLISHER

FROM THE EDITORS

Municipal officials, policy analysts, researchers and others committed to improving communities in Illinois need access to comprehensive and timely research if they are to make informed decisions. With this goal in mind, we are pleased to present Volume 3 of the *Illinois Municipal Policy Journal* (IMPJ), a periodical published by the Illinois Municipal League in partnership with DePaul University. IMPJ seeks to provide valuable, well-researched content on topics that most affect residents throughout our state.

This volume features works by experts from many leading Illinois institutions, including Northern Illinois University, Southern Illinois University Carbondale, Gensler's Chicago office and Twelve Tone Consulting. Experts from these and other organizations explore complex issues ranging from municipal fiscal responsibility, the attitudes of millennials toward home-buying, the funding status of police and fire pension funds, and strategic lessons from other states in policy formation. Among them is this journal's first overseas contributor, Benjamin A. Lyons, from the University of Exeter in the United Kingdom, part of the Southern Illinois University Carbondale team that provides fascinating new insights into the looming pension crisis facing our state.

Closer to home, DePaul University's Chaddick Institute for Metropolitan Development, School of Public Service, and Public Policy Department are well-represented with articles exploring the vexing municipal issues related to the sharing economy, tax-increment financing, electrical aggregation and alternatives to private automobile travel. Insights regarding this final topic were supported by extensive field research, conducted by a two-person team that traveled to downstate municipalities in Summer 2018 to study "municipal excellence" in prioritizing non-automotive forms of transportation. We hope you make plans to attend the special symposium featuring this research that DePaul will host in downtown Chicago on March 6, 2019.

For those eager to delve further into the topics presented on these pages, we encourage you to reach out to the authors for individualized discussions and to take advantage of the supplemental webinars (and the aforementioned symposium) to be offered over the coming year. We plan to host three webinars – featuring municipal economic development strategies, home-buying by millennials, and the sharing economy – between January

and March 2019. Please see page 185 of this journal for more details on those opportunities, all of which are provided at no cost to attendees and aim to further discussion and understanding of these issues.

We hope that the articles included in this volume serve as a resource for elected officials, administrative staff and policy researchers as they strive to address the problems and leverage the opportunities of their communities.

JOSEPH SCHWIETERMAN
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UNDERSTANDING THE PREFERENCES OF MILLENNIALS: IMPLICATIONS FOR CHICAGO'S SUBURBS

WES LEBLANC AND ALICE DAVIS
GENSLER

This study evaluates millennials' preferences and tendencies when choosing where to live. The results indicate that, rather than being evenly spread out across the Chicago metropolitan region, millennial households are located in defined clusters with varying characteristics. Furthermore, this generation prioritizes convenience regarding jobs and amenities to a greater extent than previous generations do; this pivot point with respect to life decisions has broad implications for community leaders, planners and policymakers who are eager to attract these young residents to suburban locations.

INTRODUCTION

The millennial generation, also known as the echo boom, is generally defined as the population cohort born between 1981 to 1997 (Frey, 2018). Members of this cohort, many of whom are the children of baby boomers, are now adults aged 21 to 37. Researchers have paid significant attention to the millennial generation's behavioral characteristics in recent years. Planners and market analysts, for example, have explored this cohort's past and probable future effects on cities and commercial enterprises. Their predictions regarding how the generation will behave as it grows older, relative to historical norms, have ranged from only a minimal departure to an extreme divergence.

This study is intended to help community leaders, planners and policymakers grapple with generational change by evaluating millennials' preferences and tendencies when choosing where to live. The focus is on how suburbs can take steps to attract younger households—a task that will likely grow more important as older generations diminish in number. The results show that millennial households are located within defined clusters rather than being evenly spread out across the Chicago metropolitan region.

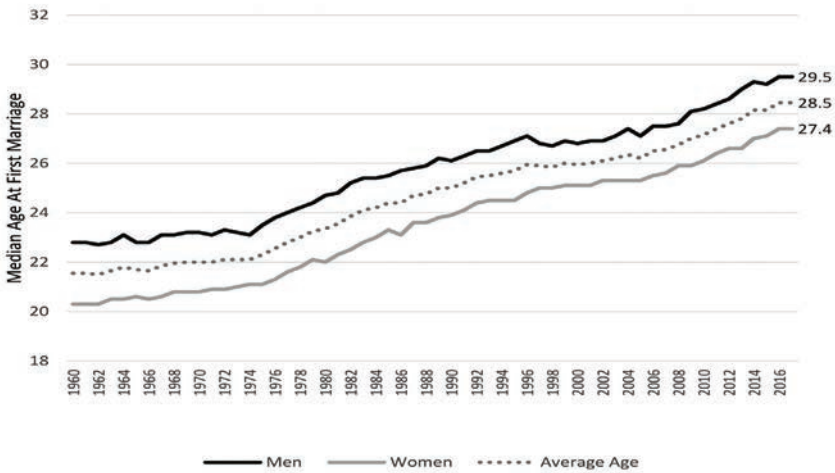
Moreover, members of the millennial generation are now reaching an age at which they will need to make decisions critical to both their families

and preferred residential locations. The paths that millennials take reveal a great deal about how they spend their time, what they value and how they affect community life. As this cohort moves into a more mature life stage, understanding how its members' preferences diverge from historical norms is essential for communities that are undergoing change. Due to the comparatively slow economic growth underway in the Chicago region and in the State of Illinois as a whole (relative to other parts of the country), we expect robust competition for young millennial families.

Unfortunately, many of the data sources that researchers have used to track this cohort are now out of date. For example, the 2010 U.S. Census was conducted when many millennials were in high school or just leaving home. Much of the research on this group's preferences is derived from surveys by prominent institutions, including the American Planning Association (2014), the Brookings Institute (Frey, 2018) and the Urban Land Institute (2015a, 2015b). As millennials make more important life decisions, these surveys' usefulness as long-range predictors will become evident; it may be necessary to reassess this generation's preferences. In the paragraphs below, we expound on these and other issues.

THE MILLENNIAL GENERATION

At approximately 75 million people, millennials are the largest generational group in the United States, having recently surpassed the baby boomers in number (U.S. Census Bureau, 2018). Millennials are also the most racially-diverse generation in history, as well as the most educated, the slowest to marry and the slowest to have children in modern times (Frey, 2018; U.S. Census Bureau, 2018). Notably, the millennial generation has higher debt and lower levels of disposable income than preceding generations did at similar life stages (Federal Reserve Bank of New York, 2018; U.S. Census Bureau, 2018). Simply put, the millennial generation is both large and composed of individuals whose attributes differ in many ways from their predecessors; these factors will shape their choices and behaviors in large and small communities.

FIGURE 1**MEDIAN AGE AT FIRST MARRIAGE BY GENDER, UNITED STATES, 1960–2016**

This chart shows the rising average age of first marriage for both male and female U.S. residents. The sharp increase in average marrying age since 2006 is partially attributable to millennials' decisions to delay marriage. Sources: Centers for Disease Control (2017) and U.S. Census Bureau (2018).

Several statistics illustrate why millennials are now at a key juncture. Their average age (29) is now higher than the average age of first marriage (28.5) and first child (26.5) in the United States. Millennials' tendency to postpone marriage helps explain why, between 2000 and 2018, the median age of first marriage in the United States increased from 25.1 to 27.4 for women and from 26.8 to 29.5 for men (Centers for Disease Control, 2017; U.S. Census Bureau, 2018). Although millennials have waited longer to marry and have children than members of previous generations did, they have now reached a point at which a significant share of them are getting married. Of course, momentous life events such as marriage and childbirth can have a profound effect on other decisions and behaviors that also influence how a population spends time and money, as well as what it values.

In 2000, when women in Generation X (the generation born between 1965 and 1980) were 20 to 35 years old, well over half (57%) of those women were mothers (Centers for Disease Control, 2018; Livingston, 2018). By comparison, as of 2016, just 48% of millennial women in the same age group were mothers. This nine-percentage-point decline makes the millennial motherhood rate

extraordinarily low by historical standards. Millennials' reasons for postponing child-rearing likely include a desire to focus on educational or career attainment and a general societal shift away from marriage. Indeed, compared to previous generations, millennials tend to have higher household incomes and are more likely to live in dual-income households when they become parents due to both their relatively advanced careers and the general increase in U.S. living standards.

Aside from marriage and family, two of the most important choices that a person makes involve place of residence and type of housing. For individuals, housing location has broad implications with regard to employment opportunities, disposable income, spending patterns and access to goods and services. For the community, housing choices have implications for local tax bases, real-estate inventory and development, and demand for services, amenities, business and jobs.

As has been widely reported, millennials have a propensity to rent rather than purchase residential units. This propensity is evident in U.S. Census data: 65% of those under age 35 rent their primary residence (Cilluffo, Geiger, & Fry, 2017; U.S. Census Bureau, 2018). However, many members of this cohort are finally beginning to purchase homes; although the homeownership rate for millennials is still only approximately 35%, well below the 64% national average, this figure is rising. Indeed, the National Association of Realtors (NAR) indicated that millennials now account for the largest group of home buyers, representing 36% of purchases in 2017; this percentage is expected to rise as the generation grows older (NAR, 2018).

Millennials' propensity to rent rather than buy has been linked to the revitalization of major cities across the country. Many downtown areas and their surrounding neighborhoods (i.e., urban cores) have experienced higher population growth rates than nearby suburban municipalities, resulting in a great deal of real estate development. However, the tendency for millennials to relocate to relatively dense urban environments may not necessarily be an expression of a preference for urban dwellings; instead, it may be a necessity: Millennials came of age during the Great Recession and the slow-growth years that followed, and during this difficult period, jobs and housing were scarce. Moreover, members of Generation X tended to remain in their rental housing during this period due to job insecurity and the unexpected need to save larger amounts for down payments on homes than had been the case before the downturn. All these factors put pressure on the urban housing supply.

Developers responded by increasing supply, which resulted in a boom in rental products starting around 2013, and this boom continues today in most major cities, including Chicago. In fact, new rental construction has set records across the country (Fannie Mae, 2018; O'Brien, 2018). This boom has occurred due to not only the millennial generation's basic need for housing but other factors, including this generation's preference for amenity-rich rental housing—a topic that we explore below (American Planning Association, 2014; Urban Land Institute, 2015b).

Although millennials show a strong preference for renting in urban or downtown areas, once they decide to buy homes, they more closely mirror past generations. A good example of this phenomenon is the rising number of millennials who are buying single-family homes in suburban areas. Nationwide, among millennials buying homes, the share who bought in urban or central city areas decreased from 21% in 2015 to 15% in 2017, according to NAR (2018). In 2017, around 57% of millennials who purchased homes chose suburban areas—more than three times the figure for urban areas (NAR, 2018).

Most buyers, regardless of generation, seek short commutes, walkable neighborhoods and good transportation access. Most also seek to live in close proximity to amenities. However, millennials exhibit a particularly strong preference for such benefits, placing a 6% to 10% higher importance on them when buying a home, relative to baby boomers (NAR, 2018). Millennials grew up with access to technology, online retail and the sharing economy; they thus exhibit a discernable preference for experiences rather than products when spending time and money. This apparently contributes to their preference for, and their expectation of, convenient and amenity-rich environments. When buying homes, millennials often gravitate toward environments similar to the urban neighborhoods in which they have been renting.

NAR (2018), in its survey of 7,860 homebuyers across the United States, showed that the strongest influences on locational choice among millennial buyers were neighborhood quality (63% reporting this as a major influence), convenience to jobs (60%) and affordability (49%). Millennials were the only age group that ranked convenience to jobs almost as highly as neighborhood quality (NAR, 2018). Although millennials who move to the suburbs often seek places more affordable than the city, they are perhaps not as willing to forgo access to jobs and amenities as past generations. By comparison, among Generation X, the top-rated factor when buying a home was convenience to schools, which is

perhaps unsurprising given this cohort's higher propensity to have school-age children under their care (NAR, 2018).

NAR (2018) also indicated that 60% of all homebuyers were willing to pay more to live in a walkable community. Among millennials, however, that share was much higher (69%); almost a quarter of this group (24%) were willing to pay “a lot more” for walkability (NAR, 2018). The premium placed on walkability holds for millennial households with and without children, so it is not surprising that 37% of millennial households with school-age children are willing to pay “a lot more” to live in walkable communities (NAR, 2018).

Several other researchers have reported survey results that illustrate a similar pattern. Approximately half of millennial households prefer walkable, mixed-use communities to traditional suburban communities. More than three in five (62%) prefer owning or renting a townhome or apartment over a detached single-family home if doing so means being able to live in a walkable community and have a shorter commute. This preference exists even among households with children. In summary, although millennials tend to gravitate toward the suburbs when making housing purchases, they place greater value on walkable, convenience-oriented communities and less value on large subdivisions with few walkable destinations when compared to members of previous generations.

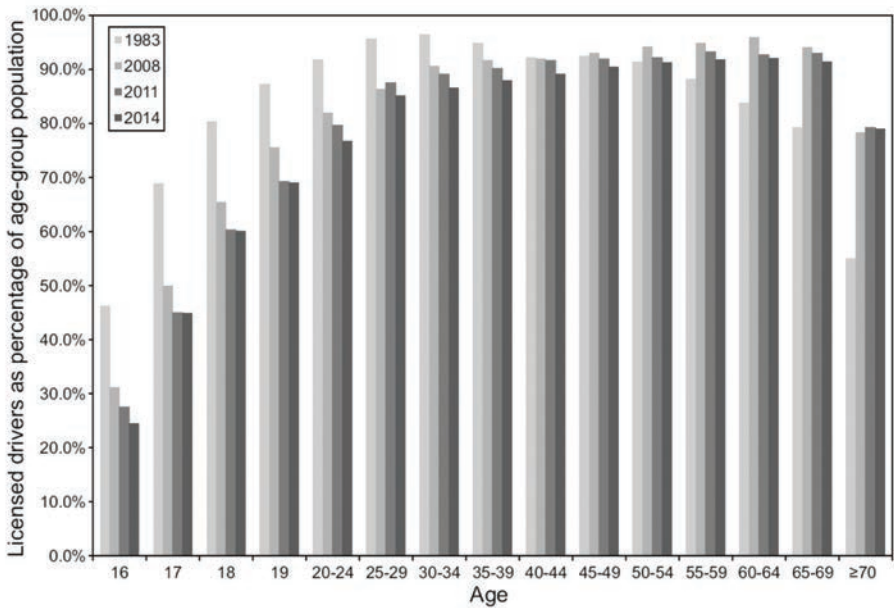
The locational preferences of millennials, as with all generations, can change due to economic factors. As a generation grows wealthier, its members' attitudes and lifestyles tend to change. Even so, millennials' stated preferences for food, retail and particularly transportation have remained relatively stable, which suggests that, unlike members of Generation X, millennials' preferences are unlikely to dramatically change as their household circumstances evolve.

With regard to transportation preferences, millennials drive less than members of prior generations did at the same age and instead rely more on biking, walking, transit and ridesharing. (It is easy to indicate on a survey that one considers walking to be an appealing option, yet it is more difficult to actually do so and even harder to avoid driving or owning a vehicle altogether.) According to a study by the University of Michigan's Transportation Research Institute, the number of people between ages 16 and 44 without a driver's license increased significantly from 1983 to 2014 (Sivak & Schoettle, 2016; Figure 2). The percentage of 16-year-olds with a driver's license dropped by 47% over the same period; remarkably, by 2014, only 24.5% of 16-year-olds were licensed drivers (Sivak & Schoettle, 2016). This represents a profound

change from prior generations that relied on driving for employment access and saw a license as a symbol of adulthood and freedom. By comparison, the oldest population category (age 70+) showed an uptick in the share of people having a driver’s license over the period (Sivak & Schoettle, 2016). Although life expectancy has increased, the share of the population with driver’s licenses has fallen, in no small part due to the millennial generation.

FIGURE 2

PERCENTAGE OF U.S. POPULATION WITH DRIVER’S LICENSES BY AGE GROUP



Source: Sivak and Schoettle (2016).

In summary, the data suggest that millennials are beginning to acquire tendencies that mirror those of earlier generations with respect to homeownership and making delayed transitions into marriage and child-rearing. However, their preferences related to housing type and amenities, including walkability and convenient access to employment, are likely to have a much greater influence on their location selection than was the case for prior generations. Suburban communities and smaller cities and towns that are able to satisfy millennials’ preferences will have greater success in attracting and retaining them. As northeastern Illinois is experiencing a low rate of

population growth, this region's ability to capture millennial households will be increasingly crucial to achieving local economic goals.

METROPOLITAN CHICAGO'S POPULATION TRENDS AND MILLENNIALS

Although the population of metropolitan Chicago has been relatively flat since 2010, there have been pockets of rapid growth comprised heavily of millennials. Despite Chicago's population decline, the city has seen concentrations of this generational population emerge. Nevertheless, the overall rise in the suburban millennial population has been modest. The proportional increase has not been on par with the national average for mature suburbs.

Data from the U.S. Census help illustrate this point. The population of the Chicago metropolitan area's suburbs (i.e., all the areas in the region aside from Chicago) grew from 6,212,291 to 6,884,807 between 2010 and 2018—an increase of 11% that constitutes an average increase of just 0.6% per year. Conversely, the population of Chicago proper fell from 2,890,892 to 2,768,416—a 4% reduction. The region's total population—city and suburbs combined—has been mostly stagnant, growing at less than 1% per year. However, the data do not accurately capture the growth and decline of millennial households due to the timing of the census, which is administered only every 10 years. To gain insights about this generation, it is useful to review Esri (2018) estimates (Table 1), which utilize the U.S. Census and the American Community Surveys as a baseline. Esri provides estimates (and long-range projections) regarding the size of the population in various age categories in each year.

Some generational shifts are evident in these estimates. For instance, the 20-to-40 age group has grown faster in suburban areas than in the city. The suburbs added approximately 60,000 residents in this age range between 2000 and 2018, a rise of 4%; Chicago added only about 10,000, an increase of just 1%. These results need to be interpreted with caution, as the age ranges include both millennials and members of Generation X. Even so, the general trend in favor of the suburbs is clear for residents between ages 20 and 40.

Although precise counts for each age and geographic region are not available, a proxy for the millennial generation can be inferred by comparing these figures with those for the ages between 10 and 30 in 2010, to the population between ages 20 and 40 in 2018, as each range encompassed most millennials. Although these groupings do not precisely match the defined age range of millennials,

TABLE 1

CHANGE IN POPULATION OF CHICAGO METROPOLITAN STATISTICAL AREA (MSA) BY AGE GROUP AND LOCATION, 2010–2018

	2000	2010	2018	CHANGE FROM 2010 TO 2018
Chicago MSA suburbs				
Total population	6,212,291	6,775,230	6,884,807	+109,577 (1.6%)
Population aged 21+	N/A	5,016,881 (74%)	5,257,222 (76%)	+240,341 (4.8%)
Population aged 20-40	N/A	1,713,359 (25%)	1,773,914 (26%)	+60,555 (3.5%)
City of Chicago				
Total population	2,890,892	2,695,598	2,768,416	+72,818 (2.7%)
Population aged 21+	2,006,360 (69%)	2,073,968 (77%)	2,164,536 (78%)	+90,568 (4.4%)
Population aged 20–40	989,085 (34%)	939,086 (35%)	949,340 (34%)	+10,254 (1.1%)

Sources: U.S. Census (2018); age-based estimates from Esri (2018).

they provide a way to approximate how the cohort is dispersed throughout the city and suburbs using data readily available through Esri (2018).

By this measure, Chicago's population grew by 100,000 (+12%) from 2010 through 2018, while the suburbs lost approximately 60,000 residents (–3%). (As previously noted, these estimates are derived by comparing the 10-to-30 cohort in 2010 with the 20-to-40 cohort in 2018.) A similar pattern is found comparing two shorter intervals: the age 15-to-30 population in 2010 and the age 20-to-35 population in 2018. This produces a somewhat less dramatic result: an 8% rise in Chicago and a 1% decline in the suburbs.

The increasing presence of millennials in Chicago is also evident in the Esri (2018) data on population distribution (Table 2). Millennials account for 31% of Chicago's population, but just 23% in the suburbs. Compared to national statistics from the Brookings Institute (Frey, 2018), Chicago's suburbs have

lagged behind the city on this basis. The percentage of people in Chicago’s suburbs who are millennials is on par with the average for mature suburban areas across the country (23.15% vs. 23.6%). Meanwhile, Chicago’s share of millennials (31.4%) is well above the national average for major cities (24.7%; Frey, 2018). Based on previously discussed preferences of millennials, Chicago’s outsized millennial cohort is likely a function of the premium that this generation places on access to jobs and transportation, walkability and amenities (as well as other factors not considered in this analysis, such as immigration, which predominately involves younger populations).

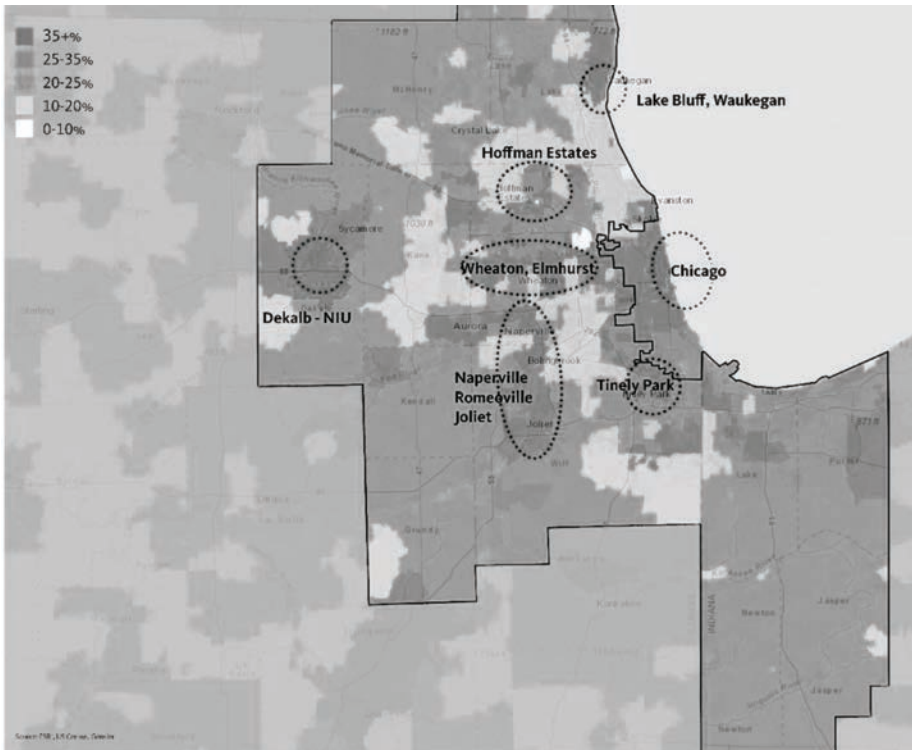
Trends in the supply of housing available for rent may also be a factor. Over the past five years, Chicago has continually added multifamily rental units, giving urban residents a wider range of housing options and a higher level of amenities than were previously available. Additionally, downtown Chicago has seen a record increase in job growth (3.4% between 2016 and 2017), with corporations leaving their suburban campuses and locating nearer the urban talent pool as their baby boomer workers retire. Therefore, to entice millennials to relocate to outside the city (as is happening in other parts of the country), the suburbs and towns outside of Chicago will likely need to address this generation’s desire for environments that are not only conducive to living, working and playing, but that are also walkable and accessible by means of transportation other than private automobiles.

TABLE 2

DISTRIBUTION OF POPULATION BY GENERATION IN METROPOLITAN CHICAGO

	ALL MSA	SUBURBS	CHICAGO
Generation Alpha (born 2017 or later)	2.4%	2.36%	2.64%
Generation Z (born 1999–2016)	23.3%	23.91%	21.87%
Millennial (born 1981–1998)	25.5%	23.15%	31.36%
Generation X (born 1965–1980)	20.6%	20.94%	19.88%
Baby Boomer (born 1946–1964)	21.0%	22.13%	18.09%
Silent and Greatest generations (born 1945 or earlier)	7.1%	7.51%	6.15%

Source: Esri (2018), which used 1998 as the end date for the millennial generation; several other sources used 1997.

FIGURE 3**MILLENNIALS AS A PERCENTAGE OF POPULATION BY ZIP CODE**

Mapping the millennial population by zip code provides further insight into the spatial distributions of millennials throughout the region. As shown in Figure 3, millennials comprise a particularly large share of the population in Chicago, Elmhurst, Hoffman Estates, Naperville, Romeoville, Tinley Park, Wheaton and several other communities. In each case, they account for more than 25% of the population.

However, it is also important to note that some of these differences are due to varying levels of educational attainment. Millennials with a college or university degree are much more likely to have the spending and behavioral preferences discussed above and are also more likely to live independently of their parents. Excluding college towns, the suburban areas that have been most successful at attracting or keeping nonstudent millennials with college degrees are those with a mix of housing typologies (apartments, attached homes and single-family homes), those with good transit options and those that are

relatively affordable (as compared to more established suburbs, such as those in the North Shore area).

According to Zillow, the approximate 2018 median home prices were \$330,000 in Wheaton, \$227,000 in Hoffman Estates and \$380,000 in Lemont. By comparison, the median home prices in neighborhoods such as Northbrook and Barrington were well above \$500,000, with certain North Shore communities exceeding \$1 million. All of these communities have financed new development in recent years to reflect a vision for high density, walkable downtowns, with corridors instead of large-scale “greenfield” housing subdivisions. Clearly, millennials are seeking communities that offer not only a particular lifestyle but also affordable homeownership.

The prevalence of millennials as a percentage of the total population is highest in amenity-rich areas with housing stock that is less expensive than in the prominent North Shore communities. The map in figure 3 illustrates some of the most notable concentrations of millennials in the city and suburbs.

SUMMARY AND IMPLICATIONS

Millennials, by beginning to gravitate to the suburbs, are following a pattern that was the norm for previous generations. However, many of this generation’s preferences remain distinctly different from those of earlier cohorts. Most of the suburbs in the Chicago region are experiencing—at best—modest population growth, so responding to these preferences should be an essential consideration in the pursuit of local economic goals. The suburbs’ success in doing so is also crucial for the region as a whole, as it would help the Chicago metropolitan area attract and retain these residents.

Over time, demographers and planners will gain a deeper understanding of this generation’s adulthood preferences. From the information at hand, several implications stand out.

HOUSING-STOCK MIX AND PRICE POINTS

This generation has exhibited a strong preference for apartments and townhomes, even if it requires renting. Millennial households are willing to pay a premium to live in a walkable community. Suburbs thus have opportunities to create energetic town centers and mixed-use developments, and to provide a greater variety of housing stock. If they do, they will be better positioned

to satisfy millennials' preferences than more spread-out suburbs dominated by single-family, detached housing. The relatively high levels of debt facing millennials are facing may also result in greater sensitivity to purchase price, making it necessary for communities to provide housing at a variety of price points.

MOBILITY CONSIDERATIONS

Although this is not the overriding factor in millennials' home-purchasing decisions, they do appear to emphasize transit and commute considerations more than prior generations did. The data suggest that this generation is more likely than others to change housing types, or live in townhomes and apartments even after having children, because they also consider commute times and transportation factors. Fewer millennials are getting driver's licenses than did members of past generations, which is likely to have negative implications for automobile-centric planning models. This also applies to corporations' location strategies: large employers should consider locating offices close to a variety of transportation options instead of using standalone or isolated campus sites.

HIGH-AMENITY ENVIRONMENTS

As researchers have found in the extensive literature about millennials' penchant for urban living, an overarching theme of this study's data is that this generation's preferences are centered around high-amenity environments. However, these environments can also be created in suburban contexts through deliberate actions and policies. Many of the suburbs that have been relatively successful at attracting nonstudent millennials in recent years have also utilized public-private partnerships to finance new development. These collaborations are often used in pursuit of a vision for high density, walkable downtowns and corridors.

Wesley LeBlanc is Analytics Director and Alice Davis is a Senior Analyst at Gensler in Chicago.

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MANAGING THE SHARING ECONOMY: MUNICIPAL POLICY RESPONSES TO HOMESHARING, RIDESHARING AND BIKESHARING IN ILLINOIS

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This study offers a statewide perspective on three areas of the sharing economy—homesharing, ridesharing and bikesharing—and associated responses by communities to growth in these sectors. It evaluates data on the prevalence of these services throughout the state to assess notable patterns and gaps in coverage. Results show that collaborative economic activity is widespread and rapidly expanding into lower-density and more suburban locations throughout the state. In response, municipalities are becoming savvy, establishing creative regulations and collaborations intended to ensure that the sharing economy is aligned with economic development and planning goals.

From the expansion of Lyft and Uber to the growing popularity of Airbnb, the dramatic rise of the “sharing economy” is transforming the structure of business operations and models in profound ways, creating both excitement and apprehension in Illinois communities. For municipal governments, the sector’s remarkable growth—which has allowed tiny startups to mushroom into commercial giants in only a few years—has coincided with increasing calls for regulations that address stakeholder concerns. In Illinois and elsewhere, these on-demand services have sparked a wide-ranging cultural and political debate about their regulation and their social, economic and environmental effects (A. Smith, 2016). This article shows that peer-to-peer markets are widespread, and that they are expanding into lower-density and more suburban locations throughout Illinois, making it important for local officials to carefully evaluate a range of possible policy approaches prior to taking action.

Most analyses of Illinois municipal policies adopted in response to the sharing economy have focused chiefly on larger and more densely-populated communities within the state (Schwieterman & Livingston, 2018; C. S. Smith & O’Neil, 2018). While useful, these analyses offer an incomplete picture of both the broader trends in and policy options available to communities of

different sizes and characters. As a result, many local officials are left without adequate data or tools to formulate contextually appropriate policies for their communities.

This article addresses this shortfall by reviewing three segments of the sharing economy—homesharing, ridesharing and bikesharing. It discusses trends and provides examples of actions that Illinois municipalities have taken to manage issues presented by these rapidly evolving economic activities. The article collects and combines data from various sources to provide a detailed overview of state-level patterns in the sharing economy—including trends and estimates of the geographic distribution and share of communities where homesharing, bikesharing and ridesharing are active. Finally, it outlines strategies that communities, both large and small, have used to deal with concerns regarding safety, the environment, land use, tax revenues and overall quality of life.

To this end, the article is written primarily for planning departments, municipal leaders and other local stakeholders seeking broad perspectives on issues related to managing or balancing the sharing economy. For the sake of brevity, the article does not consider carsharing (e.g., Zipcar), workspace sharing (e.g., WeWork) or other services that are less prominent outside large urban areas. Likewise, this article does not consider the many political issues being debated at the state level; it focuses instead on strategies being pursued by local governments. Finally, a growing number of academic articles and reports address one or more of the three segments (i.e., homesharing, ridesharing and bikesharing) more exhaustively than we do here (Baron, 2017; Cohen & Shaheen, 2016; Davidson & Infranca, 2016; Miller, 2016; Zervas, Proserpio, & Byers, 2017). We encourage readers seeking more information to review the many works found in this article's reference section or to contact the authors.

HOMESHARING

The emergence of the sharing economy and peer-to-peer platforms has enabled people to make use of underutilized inventory, such as cars and homes, through technology-based fee structures. Homesharing software platforms, such as Airbnb, HomeAway and VRBO, for example, have streamlined participation in short-term rental markets by allowing residents to easily “share,” via searchable online listings, entire homes or spare rooms at prices of their choosing. In the sector's parlance, those offering spaces of accommodation at their own nightly, weekly or monthly rates are referred to as hosts, while those who reserve

available properties that match their price and accommodation preferences (e.g., entire house, shared room) are referred to as *guests*. Most homesharing platforms require photographs of the property, as well as information about the hosts, and encourage guests to post reviews and ratings. Prospective guests are also able to browse the approximate locations of listings on a map, such as the neighborhood in which a given property is located; to protect the host's privacy, the address is only disclosed after payment. Since its launch in 2008, the Airbnb online marketplace has experienced rapid growth, with more than 4.85 million active listings globally as of the time of this writing (Airbnb, 2018). A 2016 report by the Pew Research Center estimated that around 1 in 10 Americans has used a homesharing site, such as Airbnb, to arrange for a stay in someone's home (A. Smith, 2016).

For hosts, the economic value of homesharing platforms derives from the ability to flexibly and efficiently list and rent properties to a growing market of prospective guests with relatively low transaction costs (Henten & Windekilde, 2016). Hosts using Airbnb, for example, pay a 3% commission on every booking, while guests pay a 9% to 12% service fee for each reservation, depending on the length of their stay. A 2015 study of Airbnb bookings in four U.S. cities showed that over 80% of hosts were renting out their primary residences for an average of 66 days per year, earning an average of over \$7,530 annually (Sperling, 2015). For the median household in the United States, this represents a 14% pay raise, bringing the annual household income upwards of \$60,000. In this way, Airbnb and other homesharing platforms have helped create millions of new micro-business owners, similar to small hotel or bed and breakfast operators, who typically use the service to supplement their income (Chandler, 2015; Dillahunt & Malone, 2015).

John Groh, president and CEO of the Rockford Area Convention and Visitors Bureau, has described homesharing as "a welcome addition to the marketplace" (Poullisse, 2017). Groh estimates that Airbnb has been helpful to the city's residents, bringing \$300,000 in supplemental income to the hosts of the approximately 30 properties listed in Rockford in 2017. Groh has also noted that "hosts go out of their way to provide personalized amenities and share information about the community with their guests" (Poullisse, 2017).

Beyond the practical and economic benefits accrued by using homesharing platforms, a wide range of interacting environmental, social and experiential factors, such as a desire to experience "local authenticity," also tend to motivate guests to use peer-to-peer services like Airbnb. Segmentation

analysis of responses, submitted by over 800 tourists who stayed at Airbnb accommodations around the world, identified several accommodation choice profiles (Guttentag, Smith, Potwarka, & Havitz, 2018). For example, one segment of Airbnb guests, labeled *pragmatic novelty seekers*, appear to be driven by a combination of economic frugality, as well as the “perceived excitement, uniqueness, and practicality associated with Airbnb accommodations” (Guttentag et al., 2018, p. 355).

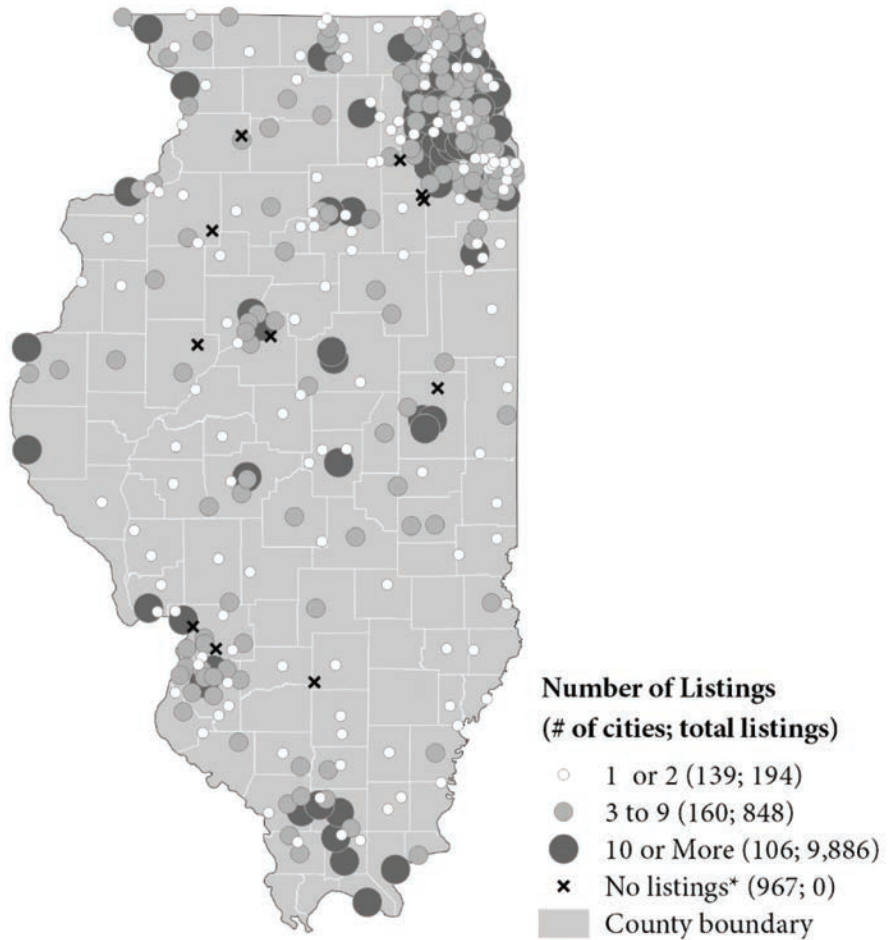
STATEWIDE TRENDS AND DISTRIBUTIONS

Homesharing’s spectacular growth makes it essential for municipalities to continually monitor the sector’s changing characteristics, presence and role in their communities. To gain a better understanding of statewide trends and distributions in this sector, we extracted and compiled a comprehensive inventory of active rental accommodations in Illinois from the Airbnb website in July 2018. Figure 1 presents the geographic distribution of the 10,914 active listings collected as part of that inventory. In total, 401 (29%) of the state’s 1,372 communities (Illinois municipalities and certain unincorporated areas) have at least one property listed on the Airbnb platform; this represents 1 of every 354 households (U. S. Census Bureau, 2017). Airbnb is primarily an urban phenomenon, with 92.5% (10,102) of listings located in metropolitan areas throughout the state, and nearly 67% (7,277) in communities with populations of 75,000 or more (Table 1). More than 84% (9,217) of properties in the statewide dataset are situated within the Chicago metropolitan area, with 6,568 (or 60.1% of the statewide total listings) residing inside the City of Chicago alone.

Outside the Chicago metropolitan area, Airbnb listings tend to be located in communities with populations greater than 40,000, including Champaign (112 listings), Urbana (102), Peoria (69), Belleville (61) and Rockford (56), which collectively account for nearly a quarter of all “downstate” listings. However, smaller communities, with considerable cultural and environmental amenities, also have adequate representation on the Airbnb platform. With 206 listings, historic Galena, for example, has more Airbnb rentals than any other community outside the Chicago metropolitan area; nearly one in every seven households within this architecturally-rich city has a property listed on the platform.

FIGURE 1

AIRBNB LISTINGS BY MUNICIPALITY IN ILLINOIS, 2018



Airbnb listings are heavily concentrated in urban areas, university towns and areas near outdoor attractions, such as the Mississippi River and the Shawnee National Forest near the southern tip of the state. Many municipalities in more rural areas have only one or two listings, but few have no listings. (Only communities with populations exceeding 10,000 are displayed on the map.) Source: Data adapted from listings extracted from Airbnb website July 2018 (<https://www.airbnb.com>).

TABLE 1

AIRBNB LISTINGS, AVERAGE NIGHTLY RATES BY ILLINOIS PLACE CATEGORY, 2018

POPULATION SIZE OR LOCATION	PLACES WITH AIRBNB LISTINGS	AIRBNB LISTINGS (% OF TOTAL IN ILLINOIS)	AVERAGE NIGHTLY RATE	PERCENT OF HH OWNER OCCUPIED	HOUSEHOLDS PER AIRBNB LISTING
Large (≥ 75K)	14	7,277 (66.7%)	\$124.42	59.0%	390
Medium (25K to 74K)	80	1,636 (15.0%)	\$94.97	69.4%	779
Small (< 25K)	307	2,001 (18.3%)	\$146.68	72.9%	1,558
Inside Chicago metro	195	9,217 (84.5%)	\$121.26	74.6%	313
Outside Chicago metro	206	1,697 (15.5%)	\$129.21	68.9%	783
Illinois	401	10,914 (100%)	\$125.34	71.7%	354

Source: Adapted from Airbnb website; American Community Survey, 2012-2016.

Our analysis also shows that Airbnb properties are available for rent in communities across the economic spectrum. In the City of Chicago, for example, while the greatest share of listings are located in middle- to higher-income neighborhoods (the West Town [828], Near North Side [659], and Lake View [540] neighborhoods each have over 500 listings), Airbnb rental properties in lower-income neighborhoods within the city’s south and west sides are also prevalent and growing. In 2016, the lower-income, south-side neighborhood of Englewood, for example, was one of the more popular areas for Airbnb hosts in Chicago (Vivanco, 2016). In 2018, the number of active listings in Englewood and West Englewood, combined, exceeded 100.

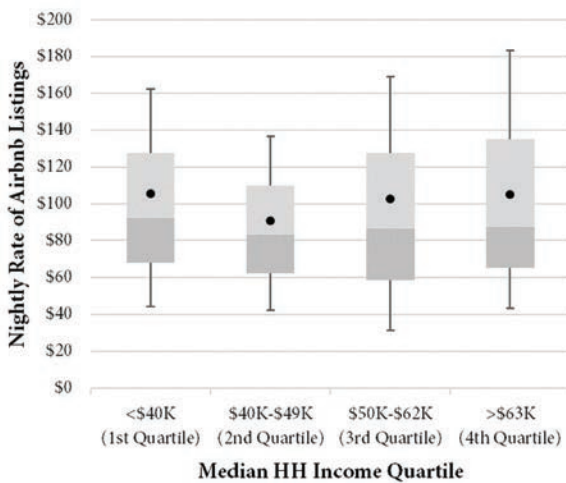
The statewide Airbnb data also suggest that average nightly rates vary across and within communities. Of communities with 40 or more listings, for instance, the average nightly rate ranges from \$59.65 in Peoria to \$233.79 per night in Galena. Surprisingly, however, the average rates of Airbnb listings across communities, by household income quartile, is rather consistent, with a mean of \$105 per night in both lower-income and higher-income communities (Figure 2 and Table 2). Even communities with relatively modest nightly

rates, such as Springfield, averaging \$82.02 per night and 12th on our list of communities with 40 or more listings, reportedly made a combined \$218,000 from 2,920 guest stays in 2017 (Jiminez & Thomas, 2018).

Overall, college markets tend to experience much more extensive booking activity than other places in the state. Demand is especially strong during commencements at the University of Illinois at Springfield. Hosts in this city appear to be comprised heavily of senior women and empty-nesters with available rooms in their homes, condos or apartments that they are willing to share (Jiminez & Thomas, 2018). This has been interpreted as evidence that homesharing can help older residents with limited incomes stay in their homes. Champaign and Urbana rank 11th and 38th in total population in Illinois, respectively (U.S. Census Bureau, 2017), but rank sixth and seventh in total Airbnb-host earnings. As it does in Springfield, a booking surge tends to occur during the University of Illinois’s spring commencement and over homecoming weekend, when hotel rooms can be scarce. In 2017, Champaign’s hosts earned \$554,000 from 5,140 stays, while Urbana’s earned \$371,000 from 2,920 stays (Wood, 2017).

FIGURE 2

AVERAGE NIGHTLY RATES OF AIRBNB LISTINGS BY COMMUNITY MEDIAN HOUSEHOLD INCOME QUARTILE, 2018



This box and whisker diagram shows the distribution of nightly rates for Airbnb properties in Illinois communities, grouped by median household-income quartile. The shaded boxes represent the interquartile range, i.e., the range between the 1st (bottom) and 4th (top) quartiles. The line separating the two shaded areas is the median. The whiskers (or vertical lines extending from each box) represent the range of prices, from the minimum to maximum, with outliers removed. These results show that the interquartile range varies little between income categories, but the upper bound tends to be higher in wealthier communities. The black dot represents the mean of the nightly rate in each income category. Data adapted from listings and nightly rates extracted from Airbnb website (<https://www.airbnb.com>).

TABLE 2

AIRBNB LISTINGS, AVERAGE NIGHTLY RATES BY ILLINOIS PLACE CATEGORY, 2018

PLACE	HH PER LISTING	POPULATION	HOUSEHOLDS	LISTINGS	AVERAGE RATE
Galena	6.7	3,402	1,383	206	\$233.79
Forest Park	39.4	14,137	7,287	185	\$83.32
Oak Park	73.3	51,989	21,546	294	\$88.15
Savoy	81.7	8,118	3,430	42	\$78.52
Lincolnwood	149.6	12,637	4,190	28	\$78.39
Urbana	152.1	41,941	15,511	102	\$107.39
Wadsworth	154.6	3,646	1,237	8	\$70.25
Riverwoods	156.0	3,759	1,248	8	\$433.75
Evanston	157.9	75,472	28,887	183	\$124.40
Chicago	158.7	2,714,017	1,042,579	6,568	\$126.57
Carbondale	162.4	26,066	10,068	62	\$162.41
Carterville	171.1	5,742	2,224	13	\$184.38
Willow Springs	173.8	5,677	2,259	13	\$97.31
Calumet Park	188.4	8,320	3,014	16	\$82.81
Oglesby	195.5	3,834	1,564	8	\$209.75
West Dundee	215.9	7,369	3,023	14	\$102.86
Schiller Park	216.8	11,813	4,335	20	\$57.25
Stone Park	218.5	4,936	1,311	6	\$110.00
Ottawa	221.2	18,707	7,742	35	\$159.71
Brookfield	228.8	18,966	6,865	30	\$62.60
Hillside	230.4	8,165	2,995	13	\$148.38
Lyons	235.2	10,571	3,998	17	\$120.24
Wonder Lake	237.2	3,739	1,423	6	\$243.33
Anna	241.4	4,332	1,690	7	\$512.43
Cherry Valley	244.3	3,129	1,466	6	\$141.33
Carmi	250.7	5,065	2,256	9	\$123.89
Chicago Ridge	256.4	14,368	5,127	20	\$75.75
Libertyville	269.3	20,435	7,541	28	\$139.68

Franklin Park	270.0	18,290	6,481	24	\$53.50
Metropolis	272.1	6,366	2,721	10	\$159.70
Crete	282.1	8,215	3,103	11	\$67.55
Sumner	286.0	5,094	286	1	\$125.00
Belleville	293.2	42,729	17,884	61	\$74.52
Paxton	296.3	4,276	1,778	6	\$63.33
Lake Villa	297.8	8,916	2,978	10	\$371.90
Sparta	305.5	4,378	1,833	6	\$134.17
Morton Grove	313.0	23,413	8,139	26	\$78.04
Barrington	318.1	10,449	3,817	12	\$98.67
Clarendon Hills	319.2	8,641	3,192	10	\$136.60
Marion	320.7	17,703	7,376	23	\$274.04
Stickney	334.1	6,778	2,339	7	\$58.57
Olympia Fields	334.8	4,888	2,009	6	\$516.00
Winnetka	337.0	12,437	4,044	12	\$83.83
Woodstock	343.3	25,232	9,268	27	\$128.04
Maywood	347.9	24,029	7,307	21	\$65.62

This table shows the municipalities with the lowest ratio of households per Airbnb listing. For example, Galena, which ranks at the top, has one Airbnb listing per 6.7 households. Forest Park and Oak Park rank highest in metropolitan Chicago. Average prices also vary widely between locations. Sources: Adapted from Airbnb website; American Community Survey, 2012-2016.

MUNICIPAL ISSUES AND POLICY RESPONSES

The trends outlined above suggest that homesharing is indeed a widespread phenomenon in Illinois, and likely to expand considerably over time due to its popularity among hosts, guests and, increasingly, local leaders (DuPuis & Rainwater, 2017). However, coinciding with this growth are escalating tensions and debate as to whether the immediate-party benefits transfer positively to the broader public and, perhaps of more concern, whether Airbnb-style homesharing complies with or potentially undermines existing municipal regulations and associated quality-of-life goals.

On one side, people argue that existing municipal regulations may be outdated or protectionist, yielding unfair benefits to conventional businesses instead of the general consumers and homeshare hosts who stand to gain most from the

technology. Others counter that software platforms such as Airbnb actually breach important laws and impose social costs on the public at large. For example, homesharing has generated complaints about noise, parking and unfair competition. A nationwide survey found that public safety (57%), non-compliance with current standards (52%) and the inability of cities to collect revenue on this activity (45%) were among the most significant concerns of homesharing among local elected officials (DuPuis & Rainwater, 2017). Critics further contend that homesharing has the potential to undermine labor unions and exacerbate the affordable housing crisis (Lee, 2016). A recent study of the economic effects of the sharing economy on the hotel industry showed an 8% to 10% loss of revenue for incumbent firms, with lower-priced hotels and hotels that do not cater to business travelers being the most affected (Zervas et al., 2017). At a municipal level, the loss of tax revenue from hotels is often an acute problem.

Condominium and homeowner associations are often quickest to respond to concerns about homesharing; such responses represent a form of self-regulation that can reduce pressure on city hall to take action. Recognizing the intensity of critical views, Airbnb entered into a voluntary tax agreement with the State of Illinois in 2015 to collect and remit a 6.17% state lodging tax on behalf of its users. Pursuant to this agreement, Airbnb remitted about \$9 million in state lodging taxes from approximately 7,000 hosts in 2017 (Jiminez & Thomas, 2018).

Chicago is one of several cities across the country that has taken a direct-taxation approach, in response to concerns about the mushrooming number of Airbnb listings and compliance with municipal regulations on hotels and motels. A 2016 city ordinance stands out for its complexity and expansiveness (Lentino, 2016). Spanning 63 pages, it subjects homesharing companies to a 21.2% tax, one of the highest tax rates in Illinois, and includes taxes imposed by the county and other levels of government. Significantly, the rate is approximately 4% higher than the rate paid on hotel rooms, with the additional amount (estimated to generate \$2.5 million to \$3 million annually) designated to fight homelessness.

The ordinance also imposes registration and licensing requirements on hosts (Shafroth, 2016). During registration, hosts must provide their name, address, contact information and primary residence, as well as the listing type (single-family home, unit in a multi-unit building, entire home or single room for rent). This information is stored in a database, available for city use. As an

accommodation to hosts and the platforms serving them, however, the city has made assurances that the information will only be used to regulate compliance and respond to emergencies.

Springfield also directly taxes Airbnb, levying a 7% bed tax, previously applicable only to hotels and motels, which is expected to generate approximately \$15,000 annually. Rockford opted to enter into a voluntary agreement with Airbnb that requires the company to collect and remit the city's 5% hotel tax on behalf of its hosts. Naperville, Oak Park and Schaumburg also collect local taxes from Airbnb, and many more cities are likely to enter the fray in the next several years.

Airbnb has also publicized its willingness to work with municipalities to avoid a regulatory response (Ting, 2016). For many cities, the first action typically involves forging voluntary taxation agreements. Over the past four years, Airbnb has entered into such agreements with more than 350 municipalities across the United States (Poullisse, 2017). This is a simpler way for many municipalities to deal with revenue concerns than direct taxation, which can be administratively and legally complex. However, a downside to this approach is that communities often forgo obtaining detailed data on where and when guests are staying, thereby complicating "transparency" issues on the part of Airbnb.

Special events that raise the sector's profile often prompt smaller cities to create policies to deal with homesharing. For example, the Marion city council approved an ordinance regulating short-term rental agreements in advance of the August 2017 total solar eclipse (the city was located in the path of totality where the sun was completely blocked by the moon for over two minutes) in anticipation of a boom in tourist bookings due to the natural phenomenon. The ordinance permits prospective hosts to share their homes, but only for 30 days or less. It also stipulates that hosts pay \$50 for a license, and ensure their homes are in compliance with building and fire codes (Kristof, 2017). Prior to this, homesharing had been largely invisible in the community, and as such, only loosely regulated.

At the time of the eclipse, Carbondale had a more established Airbnb market, partly due to the presence of its Southern Illinois University campus. Nevertheless, the solar eclipse drew increased scrutiny to the sector there. In response, the city adopted an ordinance that requires those offering "vacation rental units," including Airbnb hosts, to obtain licenses through the city's

Development Services Department when transient guests are scheduled to stay at a vacation unit for less than 30 consecutive days (Ruch, 2017).

Some communities have focused attention on non-financial aspects of the sector, such as the need for participatory interaction (e.g., public hearings), micro-zoning (allowing community members to vote on banning homesharing in their voting district) and requisite variances when short-term rental activity via homesharing fails to comply with the current zoning category. As the sector evolves, communities are likely to act in response to these and other concerns, while remaining open to the community economic development opportunities afforded by such short-term rental arrangements.

RIDESHARING

Services provided by Lyft and Uber go by several different names, including *ridehailing* and *ridesourcing*.¹ In this article, however, we use the term *ridesharing*—the term most commonly used by municipal governments—to describe the service of providing on-demand transportation services that are booked and paid for electronically through smartphone-based software applications. Like homesharing services, online applications for *ridesharing* are also used to rate transaction-specific experiences of producers and consumers, in this case, drivers and passengers. The companies that manage these platforms are often called *transportation network companies* or *transportation network providers* (TNCs or TNPs), due to their reliance on sophisticated algorithms that optimize customer-routing requests across a large fleet of privately-owned and operated vehicles.

Ridesharing became widely available after Uber's 2009 launch of its now-popular UberX service, which reached one billion trips in 2015 and over 10 billion trips globally as of the time of this writing (Anderson, 2018). Lyft entered the on-demand, *ridesharing* market in 2012, and quickly spread to most regions of the United States, including smaller metropolitan areas. Although other companies also operate in the for-hire vehicles sector, they tend to be small operations, limited to areas where regulations restrict the scale of Lyft and Uber. Austin, Texas, for example, established its own nonprofit *ridesharing* program, RideAustin, beginning in 2016, shortly after Uber and Lyft pulled out of the city subsequent to disputes over local regulations.

Since its inception, the *ridesharing* sector has expanded beyond its standard single consumer, four-passenger economy service to include vehicles of

different sizes that offer wheelchair accessibility, premium and luxury vehicles with professional drivers and carpool services permitting multiple parties to share a ride and split the fare, even when traveling between different locations (Table 3). In some cities, TNCs have also ventured into product delivery (e.g., food) and the active transportation sectors (e.g., bike- and scooter-sharing and their electric equivalents).

This growing selection of shared-mobility services is gaining popularity among riders who are increasingly able to optimize their personal trip-making experiences throughout the day, balancing both convenience and cost. For example, carpool services like Uber Pool (marketed as uberPOOL) and Lyft Line have disadvantages, typically entailing slightly longer journeys due to the loss of privacy and the time devoted to picking up and dropping off other travelers; on the other hand, the average Uber Pool trip price is about 40% less and Lyft Line 25% less than the average trip cost for solo-ride services (Schwieterman & Livingston, 2018). For travelers without pressing time concerns, these *ridesplitting* options (the official term used by the U.S. Department of Transportation) are especially popular. Furthermore, even more fiscally-friendly options are being offered in select large markets; Uber Express Pool, for example, generally requires riders to walk several blocks to and from designated pickup and drop-off points. Riders on these semi-fixed route services typically save around \$2 to \$4 compared to Uber Pool; as a result, it is not uncommon for Uber Express Pool to cost less than half of UberX, with fares for the shortest trips hovering around \$3, only slightly higher than most transit fares. Lyft has rolled out a similar product, Lyft Shuttle, in Chicago, but it remains confined to certain heavily-traveled corridors.

In addition to providing customers with alternative modes of transportation, ridesharing is commonly recognized as creating other social, economic and environmental benefits. Ridesharing provides opportunities for travel in areas with limited accessibility via public transit. Uber and Lyft provide a convenient alternative to getting behind the wheel after a night at the bar, which, according to some, has reduced incidents of drunk driving (Best, 2014). Like homesharing, ridesharing has also created employment opportunities for workers looking to supplement their income or even work full-time with some level of independence. Some ridesharing advocates also point to the potential environmental benefits that ridesharing may afford, including reductions in vehicle use and ownership (SUMC, 2016). In contrast, critics have emphasized a variety of negative outcomes associated with ridesharing, such as a potential

increase in urban traffic congestion, safety concerns among smartphone-distracted rideshare drivers, the competitive relationship that Uber and Lyft have with public transit services and serious concerns over issues of data privacy and security (Henao, 2017), among other concerns.

TABLE 3

PRESENCE AND QUANTITY OF UBER AND LYFT SERVICES IN ILLINOIS BY PLACE AND LOCATION, 2018

CATEGORY	DESCRIPTION	LYFT AND UBER PRODUCTS	AVERAGE RATE IN ILLINOIS (PER MINUTE; PER MILE; BASE)
Economy	Standard cars, drivers that accommodate up to four passengers	Lyft; UberX	(\$0.18; \$0.91; \$1.84)
Carpool	Ride costs split between travelers heading in similar direction (i.e., ridesplitting)	Lyft Line; Lyft Shuttle; uberPOOL; Uber Express	(\$0.17; \$1.00; \$1.79)
Accessibility	Rides that are wheelchair accessible; come equipped with car seats; or have bilingual drivers	Lyft Access; Uber Wav; Uber Español	(\$0.21; \$1.00; \$1.79)
Plus	Larger cars that accommodate up to six passengers	Lyft XL; Uber XL	(\$0.30; \$1.61; \$3.21)
Premium	Higher-end cars and drivers of different size classes	Lyft Lux; Lyft Lux Black; Lyft Lux Black SUV; Uber Select; Uber Black; Uber SUV; Uber Lux	(\$0.43; \$3.21; \$8.12)
Ridehailing	Hailing of taxis via TNC application	Uber Taxi	Standard taxi rate for area

Data derived from Uber and Lyft application programming interface (API) service endpoints.

A systematic literature review found that the effects of ridesharing on urban development are complicated and, in many cases, uncertain. Recent studies have shown that ridesourcing has the potential to complement and compete with public transit, increase and decrease traffic congestion and raise or lower energy consumption and greenhouse gas emissions, depending on research context and methodology (Jin, Kong, Wu, & Sui, 2018). Adding to this complexity, the Bureau of Labor Statistics Occupational Outlook Handbook states that the growing demand for ridesharing services is likely to increase the number of self-employed workers among taxi drivers, ridehailing drivers

and chauffeurs by 40% between 2016 to 2026, while direct employment by larger firms is projected to decline 15% over the same period (BLS, 2018). The extent to which this tradeoff will affect long-term wages and job security in this occupation remains uncertain.

STATEWIDE TRENDS AND DISTRIBUTIONS

In the early 2010s, shared mobility services in Illinois were primarily confined to higher-density, mixed-use urban communities within the Chicago metropolitan area, as well as Springfield and Urbana (Cohen & Shaheen, 2016). However, over the past three years, ridesharing has expanded to include communities of all sizes throughout the state. In fact, according to our analysis, only 10 communities in Illinois do not have either Uber or Lyft services at present, whereas over 50% (695 of 1,368 places) are served by both companies (Table 4).

Figure 3 shows the geographic distribution of Uber and Lyft services throughout the state, with the size of the circle representing the general population category (small, medium or large) as opposed to the number of trips. A greater share of smaller communities (i.e., with populations under 25,000) have access to Lyft, relative to Uber, services—98.8% versus 48.1%, respectively—whereas the two companies have comparable representation in medium to larger-size communities throughout the state. A total of 406 (or 37.7% of the total) communities *outside of metropolitan Chicago* have both Uber and Lyft services, which indicates that the complete range of ridesharing products is not yet available in all areas. The absence of Uber in smaller communities is likely a source of frustration among municipal leaders seeking to provide the broadest possible range of technology-oriented services to their residents. Carpooling services such as Uber Pool—including the newly introduced Uber Express Pool—and Lyft Line are limited primarily to metropolitan Chicago. Among the four places commonly regarded as Chicago’s “satellite cities”—Aurora, Joliet, Elgin and Waukegan—Uber Pool operates in all four, while Lyft Line is available only in Waukegan.

TABLE 4

PRESENCE AND QUANTITY OF UBER AND LYFT SERVICES IN ILLINOIS BY PLACE AND LOCATION, 2018

POPULATION SIZE OR LOCATION	PLACES WITH UBER SERVICES	AVERAGE NUMBER OF UBER SERVICES	PLACES WITH LYFT SERVICES	AVERAGE NUMBER OF LYFT SERVICES	PLACES WITH BOTH UBER AND LYFT SERVICES
Large (≥ 75K)	14 (100%)	5.4	13 (92.9%)	4.9	13 (92.9%)
Medium (25K to 74K)	77 (96.3%)	5.9	77 (96.3%)	5.6	75 (93.8%)
Small (< 25K)	613 (48.1%)	2.2	1,259 (98.8%)	3.0	607 (47.6%)
Inside Chicago metro	290 (100%)	7.0	289 (99.7%)	6.5	289 (99.7%)
Outside Chicago metro	414 (38.4%)	1.2	1,060 (98.3%)	2.2	406 (37.7%)
Illinois	704 (51.5%)	2.4	1,349 (98.6%)	3.1	695 (50.8%)

Source: Data derived from Uber and Lyft application programming interface (API) service endpoints.

MUNICIPAL ISSUES AND POLICY RESPONSES

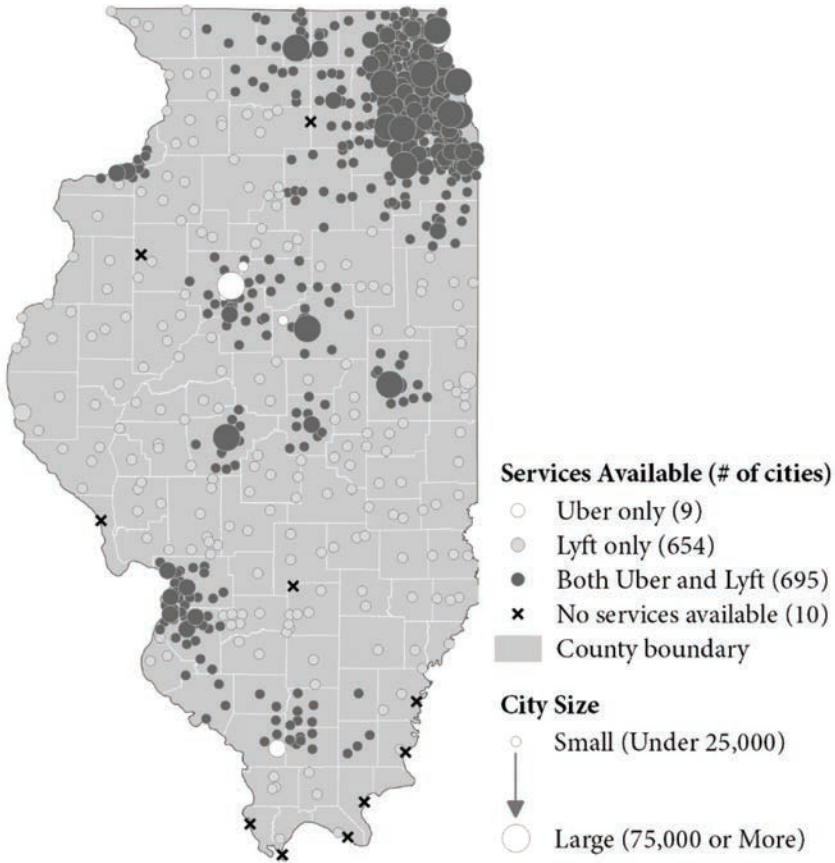
Just a few years ago, the rapid growth, excitement and disruption surrounding the emergence of ridesharing was generating confusion among municipalities regarding how to deal with these companies when they first appeared in their towns. Now that ridesourcing is increasingly a part of day-to-day life in many cities, the focus has shifted more to managing community-specific aspects of their benefits and drawbacks relative to a given policy context. Indeed, cities—through legislative bodies, planning commissions, municipal departments and public transit agencies with often shared or overlapping responsibilities—have responded to ridesourcing in different ways.

The extent to which municipalities must or can regulate ridesharing is partly determined by the state. Illinois, like most other states nationwide, created a regulatory class for ridesharing and passed legislation establishing statewide minimum requirements for insurance, driver qualifications, fare

disclosure and more. In July 2015, after a legislative process that included a gubernatorial veto of stricter rules, the Transportation Network Providers Act, 625 ILCS 57/1 et seq., became law. The Act established basic standards with which ridesharing companies and drivers must comply; it also prohibits municipalities from regulating these companies less restrictively.

FIGURE 3

AVAILABILITY OF LYFT AND UBER SERVICES BY PLACE, 2018



Uber remains largely unavailable in most of the smaller downstate municipalities, although Lyft is widely available. Places without either service are limited primarily to places at considerable distances from large population centers, such as locations along the Ohio River in the southeastern part of the state. Source: Information adapted by the Chaddick Institute from data collected via the Uber and Lyft application programming interfaces (API). Only communities with populations exceeding 1,000 are displayed on the map.

Many municipalities, including Aurora, Joliet, Naperville, Champaign, Decatur and Urbana, have not imposed rules beyond the state requirements, while others have intensified via the addition of local provisions. Others have addressed concerns beyond those addressed by the state (Baron, 2017); for example, many jurisdictions throughout the state license TNCs and require them to pay annual fees. Springfield, Peoria and Bloomington have imposed licensing fees, ranging from \$1,500 to \$3,000, whereas Rockford requires a \$2,500 application fee. As of October 2017, Chicago imposes a \$10,000 annual fee on TNCs, in addition to other administrative, accessibility and ground transportation per-ride fees.

Municipalities have also adopted various provisions related to driver qualifications, vehicle standards, advertising, operations and pricing (Baron, 2017). While no city in Illinois has capped the number of TNC vehicles in their community—although two Chicago aldermen have considered such a cap (Wisniewski, 2018)—Chicago, Bloomington and Normal have increased the minimum TNC driver age to 21 and require operators to comply with annual vehicle inspections and other vehicle standards. Bloomington and Normal, for instance, require TNCs to use vehicles no more than 10 years old and to submit a proposed plan for conducting background checks on each potential driver through a city-approved, third-party vendor. Chicago and Evanston also ban the display of advertising signage on ridesharing vehicles, partly because of the potential for increased risk of injury to drivers, passengers or pedestrians. Other municipality-specific expansions to the state law regulate TNC operations (e.g., pickup and drop-off zones, as well as the personal hygiene, appearance and conduct of drivers) and dynamic or surge pricing. It should be noted that lawsuits by members of the taxi and livery industries are actively challenging the legality of city policies that regulate ridesharing separately.

Understanding the implications of TNCs for communities is further complicated by the fact that ridesharing companies are not always forthcoming with their data which, in some ways, has made it difficult for government officials to understand the current status, historical trends and magnitude of these services within their communities. Overall, municipal officials in Illinois and elsewhere must continue to evaluate both the trends and municipal responses to the new and transformative changes occurring in the mobility sector.

BIKESHARING

Public bikesharing systems (BSS), which make bicycles available to the general public on an as-needed basis, are increasingly providing neighborhoods and communities throughout Illinois an entirely new option for travel that is invigorating and often faster than walking or even taking a bus or train. The growth of such systems is being fueled by a number of factors, including the latent demand for convenient and efficient non-motorized travel and a desire among municipalities to provide a broader range of mobility options in their communities. For example, while Illinois remains largely auto-dependent, regarding both transportation infrastructure and travel behavior, bicycling has become the fastest-growing mode of transportation over the past several years, partly because of increases in the availability of bicycles via BSS, as well as municipal investments in active transportation, more generally (U.S. Census Bureau, 2017).

Planning for both publicly- and privately-owned bikesharing systems typically occurs at the municipal level, given the reliance of such systems on access to public rights-of-way, including sidewalks, space for system kiosks and, at times, electrical hookups. The initial rollout of BSS in the United States in the early 2010s relied only marginally on conventional models of transportation planning, partly because planners lacked awareness of the associated infrastructure and the information necessary to adequately forecast demand for this new mode of transport (e.g., bicycle counts, surveys). As a result, planners were compelled to swiftly familiarize themselves with BSS technology, negotiate suitable business models with stakeholders and investors, identify optimal system sizes and scopes and, when planning for a dock-based system, determine—often with considerable input from the broader community—locations for bikesharing stations that would best serve the public and simultaneously leverage the existing transportation network (Wiedel, Hurley, Briski, Kubly, & Haley, 2014).

Some cities pursued a more conservative approach to system implementation—opting to delay development to allow time for feasibility analyses and more extensive periods of public input (e.g., Philadelphia, Portland, Los Angeles) while others forged ahead quickly, adopting a higher-risk, “fail-fast” approach characteristic of technology startups (Klein & Vega-Barachowitz, 2015). In some cases, the latter approach led to failures, such as the Orange County Transit Authority’s Fullerton and Seattle’s Pronto systems. Nonetheless, the initial surge of BSS adoption in U.S. cities over the past eight years has

dramatically elevated the visibility and role of active transportation in urban areas within a relatively short period of time.

Shifts toward greater bicycle mode share are likely to continue, given the latent demand for bicycling via bikesharing. For example, according to a 2015 survey of U.S. residents, 53% of respondents stated that they would like to ride bicycles more, but over half (52%) indicated a lack of access to a working bike (Schmitt, 2015). Bikesharing caters to this unmet demand by removing some of the risks and costs associated with bicycle ownership, including concerns about theft, maintenance and seasonal bike storage. Bikesharing is also being bolstered by demographic shifts and preferences in the population that favor (re)urbanization, active transportation (within urban and suburban settings, as well as across socio-demographic groups) and an overall willingness to participate in sharing economies connected via mobile technologies (McNeil, Macarthur, & Dill, 2017; TED Books, 2013; Townsend, 2013; Wolfe, 2013).

In the early 2010s, the most prevalent type of bikesharing systems in the United States were station- or dock-based systems, where bikes are rented from and returned to fixed stations dispersed throughout a service area. Typically, in station-based systems, the front tire of the bike is locked inside a secure dock when the vehicle is not in use. Bikes are unlocked when riders swipe or scan their credit cards or fob keys on the control device mounted on the pod. When a rider finishes a trip, the bike must be locked back into a docking station, or the rider faces a hefty fee, often exceeding \$100.

In the past few years, there has been marked growth in dockless systems. *Dockless-shared bikes* differ from their dock-based counterparts in that users are not required to find a dock at the conclusion of a trip. Rather, these bikes can be parked and secured flexibly and efficiently by utilizing a technology commonly called *wheel-lock tech*, which locks a bike's tire and prohibits wheel rotation so that it cannot be easily ridden away. Like docked systems, which allow users to view the location of bike stations on smartphone applications, dockless bikes are located by riders via an online map. Unlocking them generally requires scanning a quick response code affixed to the bike or punching in a dynamically-assigned code on a locking interface.

This type of bikesharing is generally less expensive than docked systems, for the simple reason that operators do not incur the cost of installing and maintaining docking stations. Clearly defined *geo-fenced areas* (i.e., allowable zones for dropping off bikes) are often created, to ensure that bikes stay within

areas designated for customer use. Annual membership fees are usually not required to use these bikes; users typically pay just \$1 to \$2 for trips up to 30 minutes, well below the cost that non-members pay for using a docked bike. In addition, companies provide discounts for riders with limited financial means.

A rapidly growing variant of dockless bikesharing is the *dock-based/dockless hybrid*, a form of bikesharing that involves a mix of components of the two major models described above. Boston-based Zagster is currently the leader, and the only company of significant size, in this subcategory. Zagster generally deploys a mix of docked and dockless bikes in the areas it serves. The bikes must be unlocked with a key stored inside and tethered to a lockbox that can only be opened upon payment. Unlike most other providers, this allows Zagster's dock-based bikes to be locked to many different types of fixtures, including bike racks, street poles and street furniture. The benefit to cities that use this type of locking mechanism, called a *lock-to system*, is that it gives users flexibility at the drop-off point while assuring that bikes are ultimately locked to *something*. This prevents bikes from being dropped, for example, in the middle of a driveway or sidewalk.

The dockless movement is being enhanced by the popularity of *e-bikes*, which run on electric power, thereby reducing or eliminating the rider's exertion. These systems are especially popular in hilly areas, where biking can be tiring. Most bikesharing systems using e-bikes utilize a dockless model, as do electronic scooter systems, which have also recently become popular. At this writing, however, Illinois has yet to see bikesharing systems with e-bikes on a significant scale. The state also does not currently have any formal scooter systems. However, this appears likely to change as consumers across the country gain familiarity with them.

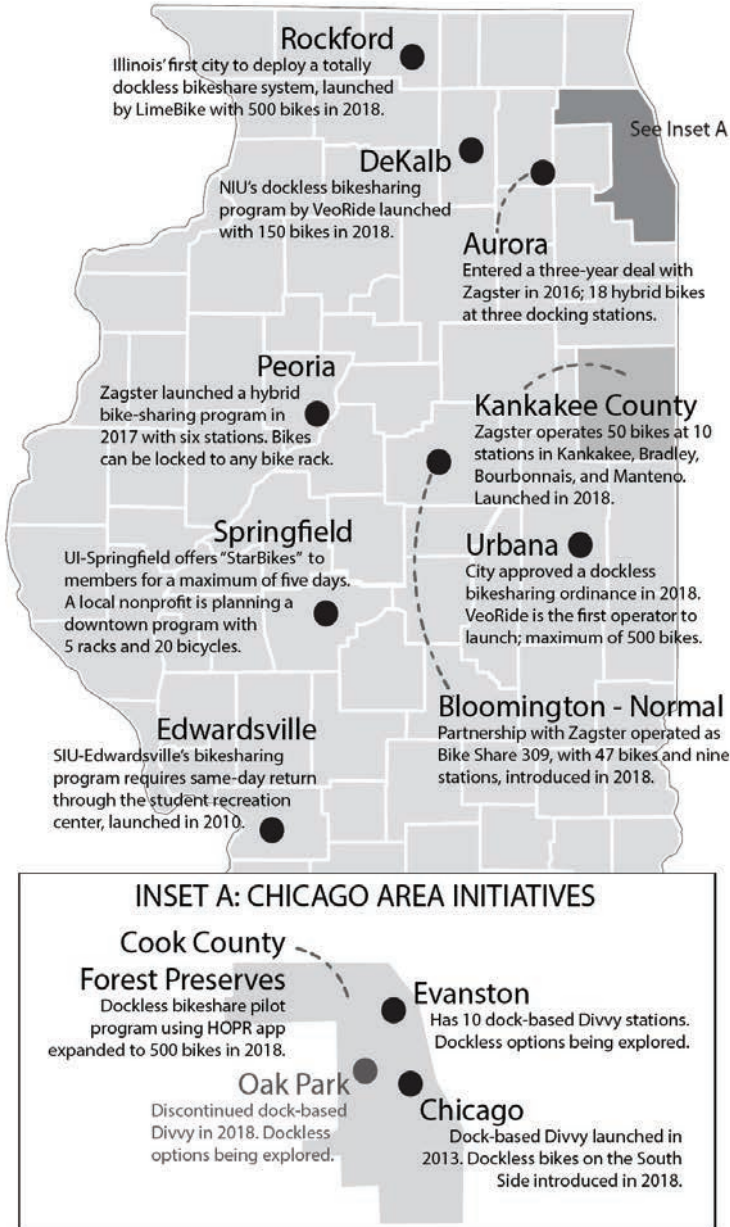
STATEWIDE DISTRIBUTIONS, MUNICIPAL ISSUES AND INITIATIVES

Unlike homesharing and ridesharing, accessing comprehensive data on bikesharing across municipalities is complicated because cities have a relatively large number of vendors from which to choose, and the extent to which each vendor makes their clients' data accessible to the broader public is inconsistent. For these and other reasons, developing a comprehensive state inventory of bikesharing systems is outside of the scope of this article. Nonetheless, we estimate that at least 9 of the 10 largest cities in Illinois offer some kind of

bikesharing service, while some, including Urbana, have recently approved ordinances allowing bikeshare companies to operate (Figure 4).

FIGURE 4

BIKESHARE INITIATIVES IN ILLINOIS BY PLACE, 2018



The size and structure of existing bikeshare systems across the state vary greatly. By far the most extensive system is Chicago's Divvy, a docked public bikeshare system that officially launched in June 2013. With over 13.8 million logged rides across 585 stations through December 2017, and plans to add another 36 stations, Divvy is one of the largest and most successful bikeshare systems in the country. Like other large, dock-based programs across the United States, most of the system's \$18 million startup capital costs were acquired via the Congestion Mitigation and Air Quality federal grant program, with the understanding that the bikeshare system would improve Chicago's transportation performance in multiple ways (C. S. Smith & O'Neil, 2018). Drawing from performance characteristics of similar systems implemented prior to Divvy (e.g., Montreal, Washington DC, New York), Chicago's new bikeshare system was expected to replace short automobile trips with bike trips, improve access to transit and replace shorter transit trips, thereby simultaneously reducing private vehicle miles traveled and relieving pressure on congested roads and transit lines. The bikeshare system also aligned with many of the regional transportation goals specified in the Chicago Metropolitan Agency for Planning (CMAP) GOTO 2040 plan (the Chicago region's metropolitan planning organization), which intended, among other objectives, to increase cycling participation and better link "transit, housing, and energy use through livable communities" (CMAP, 2010).

As they have in other cities across the country (Day, 2006; Fishman, 2015; League of American Bicyclists, 2013), criticisms about the extent to which lower-income communities have benefitted from Chicago's Divvy bikeshare system have arisen, with many pointing to a dearth of stations in the city's south and west sides. The lack of dock-based infrastructure in these parts of the city, together with a variety of other factors, led Chicago to pass a dockless bikeshare pilot project on the far south side. Launched in the summer of 2018, the project encourages private companies to distribute their bikes to potential riders, subject to restrictions concerning the geographic extent, fleet size and type of locking technology. The relatively extensive requirements for participation in the program have raised questions about whether the density, distribution and connectivity of the dockless bikes are likely to result in a successful rollout (Bordenkircher & O'Neil, 2018; Greenfield, 2018). Results from the pilot are expected to be publicized by early 2019.

Evanston, which has 10 Divvy stations and 100 bikes, has emerged as another vigorous promoter of bikesharing. The city provides targeted subsidies to make

its bikes widely available. Over the past year, local cycling advocates have pushed for a dockless program that would provide comparative data on the merits of this approach, relative to the more traditional Divvy system (Holtzman, 2018). Oak Park has enjoyed less success than Evanston at promoting this transportation option and, in fact, ended its \$80,000 per annum subsidy of Divvy after two years in 2017, resulting in the complete elimination of its 13 bikeshare stations. As in Evanston, local advocates in Oak Park are discussing the possibility of a dockless pilot (McMahon, 2018).

Among Chicago's satellite cities, Aurora is another innovator, partly due to the persistence of Mayor Tom Weisner, who has publicly expressed a desire to make bicycles widely available to give residents and visitors a new way to experience the city (Lord, 2017). To this end, the city entered into a three-year contract with Zagster, which introduced 18 hybrid bikes at three docking stations in and around Aurora's downtown. Riders must be 18 or older to qualify for access to daily, monthly or seasonal passes. Once a pass is purchased, the first hour of riding is included and each hour thereafter costs just \$1. Each station costs the city an average of \$10,800 per year, resulting in a total expense of approximately \$32,400 annually. It is projected that Aurora will recover about 50% of this cost through revenues generated from membership sales and bike rentals. City officials are reportedly considering corporate sponsorships to help lower the costs to the city (Lord, 2017).

Rockford has also been willing to experiment, becoming the first Illinois city to deploy a completely dockless system. In early 2018, the city entered into a three-year contract with Lime Bike to launch a program involving 500 bikes. This program's bikes have a rear-tire locking mechanism that is activated by a QR code scan that uses a mobile app. Users pay \$1 for the first 30 minutes, with students paying just \$0.50. Early reports indicate that the program is performing well (Curry, 2018).

Peoria's Mayor, Jim Ardis, stated in a news report that bikesharing is an effective way to make the city "more pedestrian and more bicycle-friendly" (Cook, 2017). As such, the municipality collaborated with Zagster in 2017 to create City Cycle, a program initially encompassing six stations and 31 bikes. Costs to users vary according to the type of plan purchased. After paying an annual \$25 membership fee (\$16 for students), users can ride for the first hour at no additional charge, with each additional hour costing \$3 (Tarter, 2017). Non-members have the option of paying \$30 to use a bike for a full day.

An even more expansive program exists in Normal, which entered into a contract with Zagster in 2016 to support the Bike Share 309 program that encompasses 47 bikes at nine stations. This is apparently the most extensive program in Illinois outside of metropolitan Chicago. The city pays Zagster an annual fee plus 7% of the rental proceeds. Officials believe the city can recoup 20% of its investment through bike rental fees, with another \$10,000 reportedly being collected annually from the BroMenn Medical Center for advertising on bikes and stations (Beigh, 2016). Those affiliated with Advocate Health Care, Illinois State University, Illinois Wesleyan University or the Town of Normal are offered annual memberships at half the cost of the regular \$30 fee. For members, the first hour is included; non-members pay \$1 per half-hour (visitbn.org). Several college towns in Illinois, including Edwardsville, also have bikesharing systems (Figure 4).

The drafting of technical guides and tools to assist cities with the strategic planning of public bikeshare systems has coincided with this steady expansion of bikesharing in Illinois and across the country. One of the earliest such reports, *Bike Sharing in the United States*, by the Toole Design Group (TDG) and Pedestrian and Bicycle Information Center (PBIC), proposed steps that jurisdictions could take to plan, implement and sustain bikeshare programs. The guide surveyed and documented bikeshare business models, infrastructure considerations, and funding options and shared specific performance metrics useful for monitoring and evaluating system success (TDG & PBIC, 2012).

In the following year, the Institute for Transportation and Development Policy (ITDP) published a global evaluation of BSS to show how cities of different sizes, densities and degrees of development had structured their bikeshare systems. While the document argues against the existence of a single model for bikeshare implementation—rather, the report emphasizes that cities must, ultimately, develop systems specifically adapted to their own local contexts—it does identify critical characteristics of more successful programs, including provisions for dense station networks, fully automated locking systems, real-time monitoring of station occupancy rates and pricing structures that incentivize short trips (ITDP, 2013).

As bikeshare operational frameworks continue to become more intricate, planning documents are becoming more focused in their scope, offering prescriptive design recommendations. For example, the National Association of City Transportation Officials' *Bike Share Station Siting Guide* (2016) emphasized the importance of site location planning in program success,

detailing best practices in station placement and design and explaining how to leverage bikeshare stations to enhance walkability and broaden the reach of transit in urban settings.

CONCLUSION

Past research on the sharing economy in Illinois has typically been limited to a specific economic segment or confined to trends and policies within the Chicago metropolitan area. This article has expanded the area of concern to explore trends in three major areas of the sharing economy and associated responses by communities throughout the state. The services offered by these three segments hardly represent the entirety of the collaborative economy; however, they have, in some cases, led to substantial transformations to everyday employment, travel and mobility opportunities for Illinois residents living in various places, whether large or small.

Indeed, one of the principal findings of this research is that nearly all communities in Illinois are engaged in at least one of these three segments, with several experiencing considerable activity across two or more. Our data suggest that nearly a third of Illinois locales (and all of the larger ones) have at least one Airbnb listing, and all but a handful of communities have access to private ridesharing services. While bikesharing remains largely an urban phenomenon, the rise of dockless systems speaks to their growing appeal among medium-size communities throughout the state, with at least eight such programs launched within the past year. We can also observe that the categories of services provided within these three sectors are growing rapidly, capturing existing market segments while simultaneously becoming more differentiated, inducing consumer demand and fundamentally changing the ways that people experience mobility and accommodation. We anticipate that these technology-based services will continue to evolve, expanding existing services into emerging markets and creating new ones.

This report examined various distributions of the sharing economy throughout the state, summarizing differences in the character of activity according to community population size and location. Future research will go further, analyzing variations across the subcategories of sharing in these segments (e.g., in terms of homesharing, whether hosts are sharing a single room in their house, their entire house or a secondary residence, and, in terms of ridesharing, trends in TNC–public transit partnerships and wheelchair accommodation) to

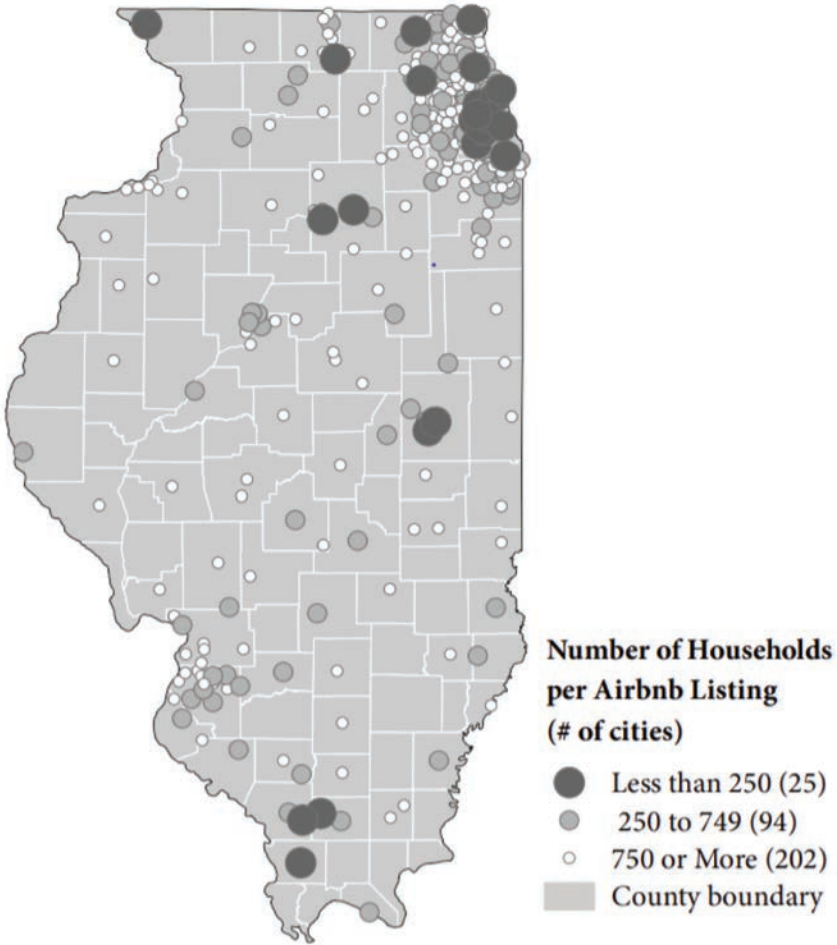
develop more nuanced insights into how such patterns influence and encourage community economic development and opportunities for more sustainable transportation.

We also found that local officials have adapted to, and are assisting in, shaping the sharing economy in their communities. Whether entering into a voluntary taxation agreement with homesharing companies, adopting vehicle standards for ridesharing contractors or specifying locking requirements for bikeshare bikes, communities throughout the state are becoming savvy, developing creative solutions intended to direct collaborative consumption in ways that align with overall municipal goals. A recent National League of Cities' (NLC) report emphasizes, "Technology can improve lives and solve problems, but decision making must be intentional—local leaders ensure every day that our cities are cities for all—and the sharing economy and broader innovation economy is now a core component of our future" (National League of Cities, 2017, p. 16). Illinois is becoming a laboratory for such intentional local solutions.

APPENDIX

FIGURE 5

NUMBER OF HOUSEHOLDS PER AIRBNB LISTING THROUGH ILLINOIS



This map shows the frequency of Airbnb listings relative to the number of households in a municipality. The dark circles represent municipalities in which there is more than one Airbnb listing per 250 households. These areas are most pervasive in metropolitan Chicago and near college campuses. Lighter areas indicate places with proportionately fewer listings per household.

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FOOTNOTES

¹ Joseph P. Schwieterman served as co-author of this section of the study.

² A 2018 report by Twelve Tone Consulting (Bordenkircher & O’Neil, 2018) also discusses some critical elements municipalities should consider when planning for dockless systems such as the following: operations and maintenance; ethical standards and data laws; fleet size and rebalancing with regard to parking; and safety. Operations and maintenance focus on several concerns: the city’s right to remove bikes and terminate the pilot; placing all liability and fees on dockless vendors; requiring vendor contact information on bicycles; and laying out a detailed bike maintenance checklist. Ethical standards and data laws are intended to ensure fairness: equity in underserved neighborhoods; multilingual and non-smart-phone requirements; Americans with Disabilities Act compliance and mobility options; and data sharing. Fleet size, rebalancing and parking concentrate on multiple system features: the number of bikes allowed in the initial launch; phasing strategy for the fleet number; designated hours for maintaining and rebalancing bikes; and geo-fence boundary requirements. The final elements that cities should consider relate to safety: education; insurance coverage; helmet law considerations; and gamification requirements to incentivize good behavior.

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CHOOSING COMMUNITY CHOICE AGGREGATION: THE EXPERIENCE OF ILLINOIS MUNICIPALITIES IN THE ELECTRICITY MARKET

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This study explores the community choice aggregation policy model in the electricity market of Illinois by reviewing community experiences under Public Act 96-0176. This act gave municipalities the authority to aggregate residential and small commercial retail electrical loads when approved by a referendum. Through an analysis of more than 700 referendums, 82% of which passed, the current study evaluates variables that affect voting behavior and draws new insights on the direction of a state's electrical policy. The results show that fluctuations in the electricity market, coupled with shifts in utility regulation, are affecting residents and municipalities in different but often predictable ways.

Since the late 1990s, Illinois has had a deregulated electricity market that has allowed customers to choose from multiple retail electricity suppliers. In 2009, Public Act 96-0176 gave municipalities and counties the authority to aggregate residential and small commercial retail electrical loads within their boundaries, providing participating local governments the ability to negotiate on their own behalf. With this authority, municipalities could conceivably negotiate for advantageous rates and green energy generation and generally have more control over their electricity provision than an individual consumer would have operating alone in the market (Burke & Stephens, 2017). The law requires municipalities to submit their intention to act as the community aggregation authority to voters in the form of a referendum. If the referendum receives a majority vote, the municipality can negotiate on behalf of all eligible customers—with the exception of those users who opt out of the program. Since 2009, over 700 Illinois cities, villages, towns, townships (Public Act 97-0823) and counties have held referendums on community choice aggregation, with a passage rate of 82%.

Although a large number of Illinois municipalities have held referendums, there has been little systematic analysis of the factors that go into passage and how various municipalities have engaged in the negotiation process. With

nearly 10 years having passed since the aggregation authority was established, an assessment of the effectiveness of this policy tool and the experience of Illinois municipalities that have used aggregation could benefit other states as they contemplate expanding the use of the community choice aggregation model.

This article will first provide a description of the community choice aggregation policy model and its use in Illinois. Next, the article will describe, in aggregate, the general trends of referendum support in the state. A focus will be placed on what, if any, variables relate to levels of support for a community choice aggregation referendum in Illinois municipalities. The article will conclude with a discussion of the current state of electricity aggregation and address how fluctuations in the electricity market, coupled with shifts in utility regulations, may affect policy experiences and the future promise of community choice aggregation as a strategy for electricity procurement.

BACKGROUND

Traditionally, electricity markets have been structured at the state level, where a single utility would be responsible for generation, transmission and distribution for a particular geographic area. In these markets, the Federal Energy Regulatory Commission regulates interstate commerce relating to electricity markets and state-level utility boards responsible for regulating the retail market, as well as generation and transmission within their state's boundaries. Illinois has a deregulated electricity market at both the wholesale and retail level, which was established beginning in the late 1990s. In 1997, the state passed the Illinois Electric Service Customer Choice and Rate Law, which phased in competition in the retail electricity market. Before this legislation was passed, a small number of monopolistic entities regulated by the state dominated electricity generation, transmission and distribution. In 1997, the legislation allowed new suppliers to enter the market while the traditional, vertically-oriented utility monopolies were encouraged to restructure operations and, in particular, divest parts of their electricity generation assets.

Beginning in 1999, large industrial and commercial electricity users were able to choose suppliers, whereas smaller commercial users could exert market choice in 2000 and residential users gained full access to the market in May 2002 (Borders, 2001). The phased-in approach also included specific provisions to protect consumers from significant price fluctuations that could accompany the transition to a less-restrictive market by requiring a rate freeze that was initially set to expire in 2005, but was extended to 2007 to ensure a smooth

transition (Carlson & Loomis, 2008). According to an analysis by Carlson and Loomis (2008), when compared to neighboring states, the deregulation experience in Illinois reduced the average retail price for electricity. This contributed to the momentum that sped toward experimenting with innovative market mechanisms.

The issue of enabling aggregation within the context of electricity deregulation was given consideration as early as 2003 when the Illinois Commerce Commission issued a report to the General Assembly discussing the prospects of municipal aggregation in light of the nascent deregulatory environment (Illinois Commerce Commission, 2003). When the report was written in 2003, no alternative retail electricity suppliers operated in Illinois residential markets. This was likely due to the higher costs suppliers had to spend to serve thousands of customers, the fluctuating load profiles of residential users and the rate freeze mentioned above. Aggregation could make the market more attractive for suppliers and consumers in the event that the rate freeze would be lifted. In the absence of private entities organizing to aggregate consumers, municipal governments could naturally serve that role because they are geographically concentrated and situated to potentially be a legitimate voice for the customers in their jurisdiction. Aggregation lessens the load profile for suppliers, making usage more predictable and, therefore, providing more incentive for additional electricity suppliers to enter the residential service market and offer competitive rates.

Municipal aggregation was first implemented in the United States in 1997 after Massachusetts passed the nation's first community aggregation legislation and the Cape Light Compact was established to serve customers in the communities of Cape Cod and Martha's Vineyard (Lichtenstein & Reid-Shaw, 2017). Subsequently, Ohio (1999), California (2002), Rhode Island (2002), New Jersey (2003), Illinois (2009) and New York (2014) have all pursued some variant of community choice aggregation as of 2018.

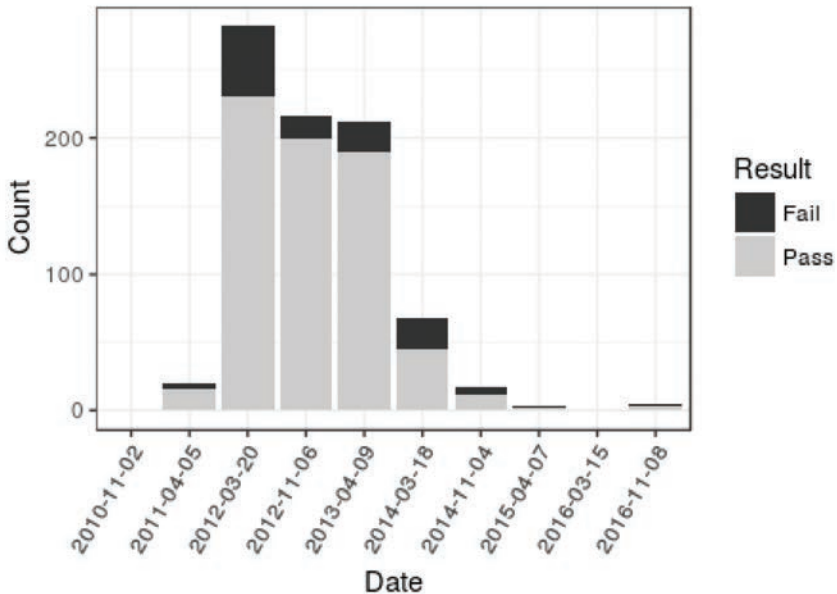
The mechanisms and governance structures of municipal aggregation can differ across states. With regard to establishing aggregation, in some cases, such as in Massachusetts, New Jersey, New York and California, the municipality initiates the process through approval by its board or council. In Illinois, Rhode Island and Ohio, aggregation is pursued after the majority of voters approve a referendum. In each case, state regulators have a role in overseeing implementation and in regulating suppliers. However, the municipality is the lead actor in negotiating with prospective suppliers.

Most states have an opt-out scheme whereby once an agreement is made by a municipality with an electricity supplier, all eligible customers within the municipality are automatically switched to the new supplier. Prior to the switch, customers are notified by mail, and if a consumer wants to purchase his or her electricity supply from another provider, he or she has the ability to opt out. Customers under aggregation generally do not see a different bill or have any service disruption because the electricity distribution is still provided by the investor-owned utility with whom they would have interacted prior to aggregation. This opt-out scheme is seen as preferable to an opt-in scheme. In some states, the latter is possible, but mobilizing enough consumers to opt in is difficult if the objective is to secure favorable electricity rates and encourage green energy production.

In Illinois, the legislation authorized community choice aggregation in 2009 as an amendment to the Illinois Power Agency Act. Public Act 96-0176 allows for both an opt-out and opt-in program, with the latter only being possible with the passage of a referendum during a scheduled primary or general election. The act also provides specific wording for a referendum and excludes municipalities that own and operate their own electric utilities from participating in aggregation.

FIGURE 1

COMMUNITY CHOICE AGGREGATION REFERENDUMS IN ILLINOIS, 2010-2016



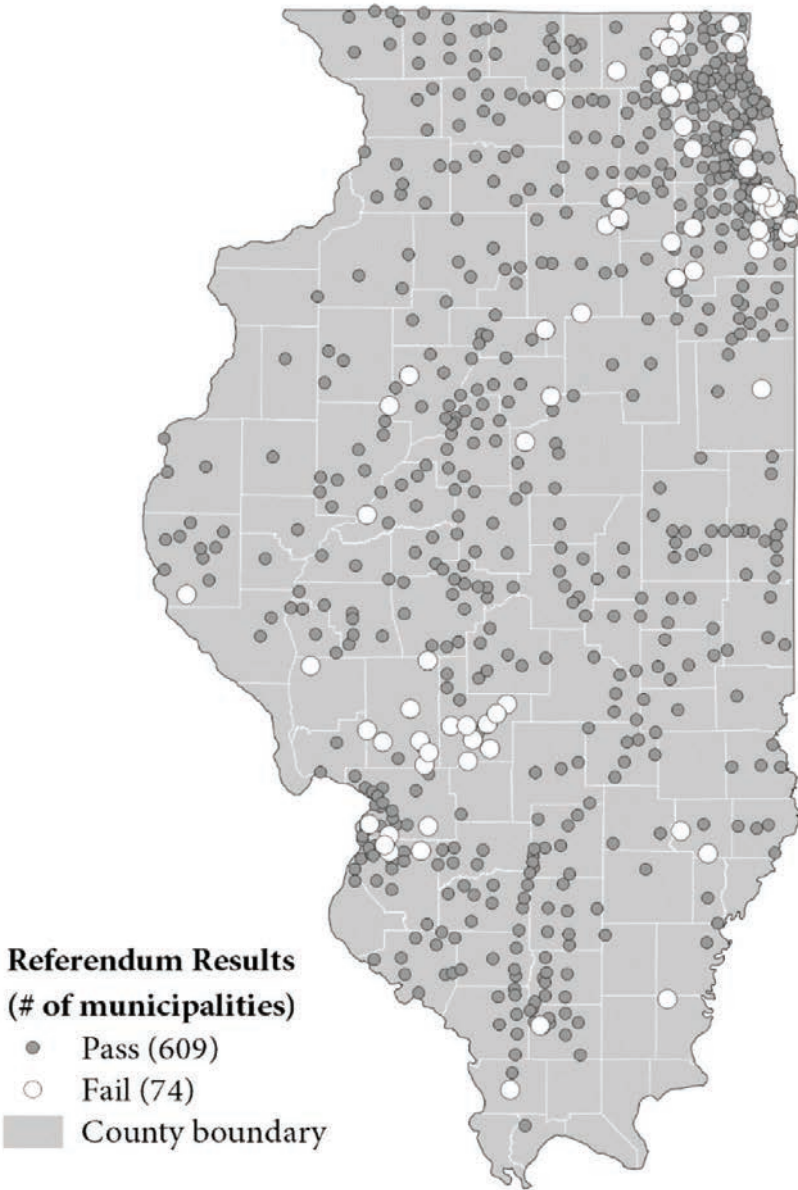
ILLINOIS REFERENDUM PROCESS

Public Act 96-0176 went into effect on January 1, 2010, and the state saw the first referendum placed on a local ballot the following November. In addition to cities and villages, unincorporated parts of counties and townships can hold referendums. Since 2010, 975 referendums have been conducted. There have been 62 held in counties, 87 held in townships and 826 held in cities, villages or towns. Several local governments held multiple referendums after an initial failure, including eight counties and 53 cities, villages or towns. While the rate of referendum passage in Illinois cities has been high at nearly 82%, the strength of support has varied. The data used in this study are restricted to cities and villages due to the large number. As Figure 1 shows, 2012 saw an initial surge of referendums in cities and villages, but the number of referendums declined significantly by 2014.

Figure 2 depicts all of the municipalities that have conducted aggregation referendums, with symbols indicating success or failure. Although the success of the referendums has been pronounced statewide, there are several discernible areas of opposition in the outer Chicago suburbs, as well as in the southwestern part of the state.

As mentioned above, for a municipality to have the authority to establish an aggregation of consumers and participate in an opt-out scheme, the municipality must hold a referendum that explicitly asks voters to grant it this authority. Rational theories of voting (e.g., Downs, 1957) would suggest that support for municipal aggregation should be strong. There are few downsides for individuals to vote in favor of an aggregation referendum. First, as required by state law, individuals have the right to opt out of any aggregation agreement signed by the city: An individual consumer can keep his or her current electricity provider or choose a different provider. Second, the deregulated nature of Illinois' electricity market was not necessarily adversely affected by the appearance of aggregation legislation. In fact, it could be argued that the market would be enhanced, as the proliferation of entities eligible to aggregate electricity supply would make more potential suppliers enter the market; and for those companies already participating in Illinois' market, the emergence of aggregation could offer more stability and incentives to remain in the market. Third, aggregation holds the promise of lower electricity prices for individual consumers. For those participating in aggregation schemes sponsored by municipalities, a primary benefit is that the aggregated entity can have a better negotiating position due to its size. Fourth, municipalities that engage in

FIGURE 2
ELECTRICITY REFERENDUM ELECTION RESULTS



aggregation have the potential to negotiate agreements beyond simply price. Efficiency measures and the provision of green energy are also often advertised as benefits of aggregation. For communities with residents interested in clean energy, aggregation could be a vehicle to increase its utilization.

Although the majority of cities in Illinois that held referendums passed electricity aggregation, a not insignificant number have failed. As more states contemplate adopting community choice aggregation, understanding the referendum process and experience in Illinois could be instructive. Additionally, over 300 Illinois municipalities have not elected to hold aggregation referendums. While the popularity of the mechanism has waned since 2012, electricity markets remain volatile. With the aggregation legislation still in effect, Illinois municipalities may revisit using referendums in the future in the face of uncertain market fluctuations.

DATA COLLECTION AND ANALYSIS

The literature lacks empirical studies on community choice aggregation referendums. As a preliminary effort, this project seeks to explore some of the underlying variables that influence support. Looking to previous studies on direct democracy and voting on referendums in U.S. state and local contexts, this study adopts similar assumptions about the types of variables that can explain support or opposition to local referendums. If the referendum mechanism is a requisite step in the process of adopting aggregation, looking at potential factors that affect support can be useful. With over 700 aggregation referendums executed in Illinois since 2010, there is a sufficient amount of data to analyze. This study constructed and employed a data set of each electricity aggregation referendum conducted since the legislation was passed. The Illinois Board of Elections website was consulted to construct a list of all of the Illinois communities that have conducted referendums. Next, election totals were compiled by visiting the websites of the proper election authorities. In Illinois, elections are administered at the county level with the exception of a handful of the state's large cities. Vote totals approving and rejecting each municipality's referendum were collected, and the percentage of support, which serves as the response variable, was calculated.

This study uses select variables from the 2015 American Community Survey's five-year estimates as explanatory variables. In a state with over 1,000 municipal governments, local referendums usually are not widely publicized

in the traditional print and broadcast media. Furthermore, the initiation of putting an electricity aggregation measure on the ballot is the responsibility of the municipal government as dictated by state statute. There is little evidence that electricity aggregation referendums were pushed by grassroots political groups. Because of the localized, elite nature of the referendum process and agenda-setting in this context, choices that voters make on whether to support or oppose community aggregation can be considered within the context of the literature on low-information elections.

In these contexts, factors such as length of tenure in a community, education and ethnicity can often act as predictors of support (Delmas & Locke, 2015; Holian & Kahn, 2015; Nelson, Uwasu, & Polasky, 2007). Because the particular nature of aggregation is focused on electricity supply, communities with a higher percentage of homeowners are assumed to be more inclined to support electricity aggregation. In addition, the American Community Survey includes a question on household heating fuel. Being situated in a climate with harsh winters, home heating is a necessary household expense. A higher percentage of households that rely on electricity for home heating should correspond to higher levels of support for electricity aggregation.

One peculiarity of municipal aggregation in Illinois has been the divergence in how municipalities have implemented the program. Once a referendum has passed in a municipality, local authorities issue a call for proposals from a state-licensed “alternative retail electric supplier.” Suppliers make bids, and the municipality enters into a contract with its preferred supplier. These contracts have generally lasted for a period spanning 12 to 36 months. Upon the expiration of an agreement with a supplier, the municipality can restart the solicitation process or discontinue municipal aggregation. In the event of the latter, electricity users are automatically switched to one of the large, investor-owned utilities.

Market dynamics and changes in electricity pricing since 2013 have primarily resulted in the elimination of price gaps between the major investor-owned utilities (i.e., Ameren and ComEd) and alternative suppliers in recent years. Thus, many municipalities have decided to suspend their aggregation programs (Rockrohr, 2017). According to data kept by the Illinois Commerce Commission, as of July 2018, over 200 units of local government have passed referendums and either suspended their aggregation programs after the expiration of an initial contract or declined to negotiate an aggregation agreement. This termination of the policy serves to create two subsets of

TABLE 1

REGRESSION MODEL RESULTS

(Standard errors shown in parentheses below coefficients)

	DEPENDENT VARIABLE		
	Percentage of Support for Aggregation in Communities		
	that have held referendums	with expiring aggregation agreements	that have continued aggregation agreements
% White population	0.037	-0.012	0.007
	(0.030)	(0.042)	(0.042)
% with bachelor's	0.141**	0.067	0.065
	(0.060)	(0.079)	(0.074)
% owner-occupied	0.082	0.137	0.174***
	(0.056)	(0.085)	(0.062)
% below poverty	0.065	0.126	0.197
	(0.087)	(0.153)	(0.090)
% unemployed	-0.307***	-0.527***	-0.069
	(0.132)	(0.176)	(0.157)
% Hispanic	-0.014	-0.042	-0.010
	(0.050)	(0.066)	(0.067)
% with electric heating fuel	0.141***	0.136	0.084*
	(0.043)	(0.090)	(0.043)
% 65 and over	0.302***	0.248***	0.369***
	(0.087)	(0.120)	(0.100)
Constant	44.348***	38.320***	49.129***
	(8.276)	(14.339)	(8.932)
Observations	688	211	382
R	0.096	0.178	0.080
Adjusted R	0.084	0.142	0.058
Residual std. error	10.939 (df = 678)	8.731 (df = 201)	9.116 (df = 372)
F statistic	7.972*** (df = 9; 678)	4.851*** (df = 9; 201)	3.588*** (df = 9; 372)

Note. *: $p < .1$; **: $p < .05$; ***: $p < .01$.

municipalities: Both subsets had supported aggregation referendums, but one group decided to close its programs as the electricity markets shifted. Both subsets exhibited similar levels of support in the aggregate, with a passage rate of 64% for those municipalities that let their aggregation programs expire compared to a passage rate of 63% for those municipalities that continued to sponsor aggregation.

The model being used in this article is concerned with understanding what variables affect levels of support for municipal aggregation referendums in communities where elections on the issue have been held and discerning the differences in levels of support for the referendums in communities that allowed aggregation agreements to expire versus those where they have continued. For each of these sets and subsets, the percentage of “yes” votes for aggregation represents the measure for the response variable. The analysis focuses on cities, towns and villages that have held referendums. Although townships and counties have also held aggregation referendums, they have been excluded from the analysis to ensure that the analysis only contains governmental units that are similar across the state. Some municipalities have held multiple referendums after the failure of an initial effort. The explanatory variables used are the demographic and housing measures mentioned above and listed in Table 1.

RESULTS

For all Illinois cities, villages and towns that have held electricity aggregation referendums, results show that municipalities with higher percentages of their population aged 65 and older are more likely to show higher levels of support for aggregation. The age variable is statistically significant in the first model and has a positive coefficient in each of the three models considered. There are several possible explanations for this finding. Some studies of direct democracy have found that older voters show higher levels of civic connectivity and, thus, are more likely to support elite-generated ballot measures (Button & Rosenbaum, 1989; Davidson & Cotter, 1993). Additionally, the potentially favorable electricity rates associated with aggregation could be more meaningful for retired populations living on fixed incomes.

Not surprisingly, the percentage of households that use electricity as the source of heating fuel has a positive and statistically significant relationship with support for electricity aggregation. If a fundamental part of the appeal

of aggregation is to provide municipal governments with better bargaining power in the electricity supply market than their constituents could achieve individually, then communities with higher percentages of electricity use for heating would have an interest in aggregation.

From the standpoint of class and demographics, some of the results are surprising. Education was expected to have a significant positive relationship with degree of support for aggregation. Some of the prominent literature on direct democracy suggests that people with higher levels of education are more enthusiastic about direct democracy mechanisms such as referendums, and come to the ballot box informed about the topics at hand (Inglehart, 1990). If that assumption has validity, it could explain the relationship between education and referendum support. Utility markets are complex, and the referendums were not prominently covered in the media. Previous research has suggested that communities with a lower median income and smaller proportions of residents with a college education have lower participation rates when it comes to voting on referendum questions (Nelson et al., 2007; Vanderleuw & Engstrom, 1987).

More surprising was the relationship between levels of unemployment and support for aggregation. Although only significant at $p < .05$, the model suggests that when holding other variables constant, each percent increase in unemployment in a community corresponds to a 0.32% decrease in support for electricity aggregation. Although the model was tested to ensure the avoidance of multicollinearity (with variance inflation factors < 2), unemployment levels could suggest an interest in avoiding risk with regard to electricity prices—particularly if the implications of the establishment of an aggregation scheme were not clearly understood by voters. Other variables by which economic conditions in communities could be inferred—such as the percentage of households below poverty—showed a positive (but not statistically significant) relationship to aggregation support.

With regard to the subset of municipalities that have let their contracts expire after successful passage of a referendum, the unemployment rate factors prominently in referendum support levels in a negative direction and has a higher degree of significance and influence. Higher percentages of a population with people 65 and older were also found to be positively related to referendum support, but not to the same extent as they were in the universe of all municipalities that have held referendums.

In multiple explanations provided by municipalities after they have allowed aggregation agreements to expire, the overriding stated reason is that the price advantages of aggregation had evaporated with changes in the electricity market and pricing mechanisms. Municipalities that have decided to continue their aggregation programs have often used aggregation to include green energy options, so their motivation may not simply be based on pricing alone.

In looking at the results relating to communities that have continued electricity aggregation, electoral support for the referendums is positively associated with the over-65 population percentage as well as the percentage of owner-occupied homes. One possible explanation for this finding could be, following Fischel (2009), that trust in local government may be higher in communities with higher proportions of homeowners and older populations, giving local leaders confidence in negotiating electricity supply agreements that do not overwhelmingly outperform offers that individuals can obtain themselves on the market with regard to price.

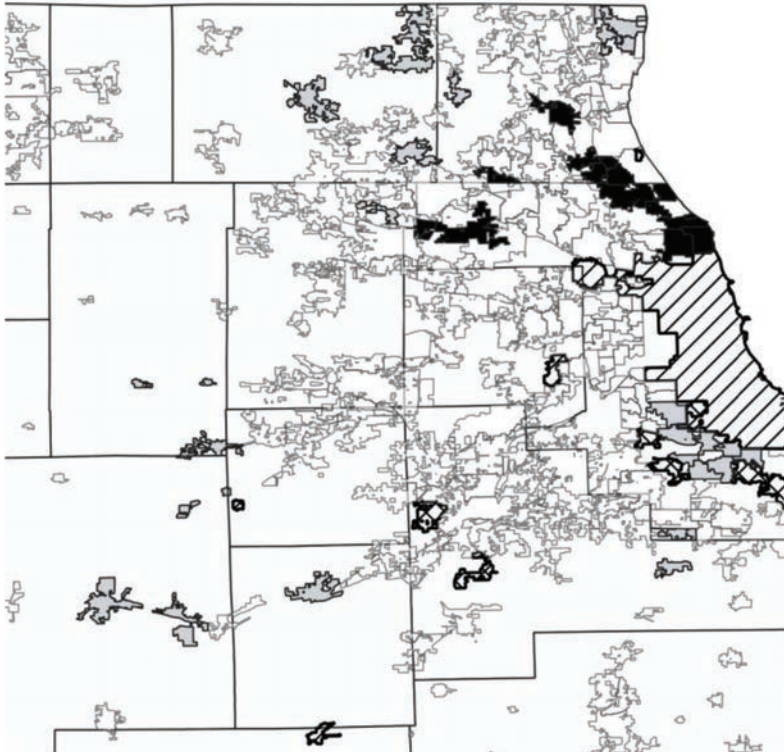
Given the R^2 values for the models analyzing support in all referendum communities and those that have continued to execute aggregation agreements, there could be confounding variables that could help add robustness to the model. Measures of political ideology or partisanship, for example, have been found to be significant in studies of local open space referendums (Nelson et al., 2007) and in local referendums related to support for public transit (Kinsey, Bartling, Peterson, & Baybeck, 2010). With many municipalities seeing aggregation as a way to encourage green energy provision, a measure for partisanship could be useful for future researchers.

As was mentioned at the outset of the article, Illinois' implementation of municipal aggregation is relatively unique in that referendums must be passed to give the municipality the authority to negotiate with electricity suppliers on behalf of their residential consumers, and with over 600 referendums on the issue being held, it far surpasses the volume held in Ohio cities and villages ($n = 331$; Public Utilities Commission of Ohio, 2017). One question that arises from this experience is whether any spatial patterns of support exist. There was little explicit electioneering nor high-profile campaigning for support or opposition on matters relating to aggregation referendums. In some cases, city governments initiated their own publicity campaigns (City of Urbana, 2012), while in others, the advocacy was limited to energy consultants speaking before city councils (City of Hickory Hills, 2011). Testing for spatial clustering could determine if any localized dynamics in various parts of the state influenced referendum support.

For the spatial analysis, Moran's I is computed. Moran's I is a measure of global spatial autocorrelation that can show if municipalities with similar rates of support for electricity aggregation tend to cluster together. A Global Moran's I with higher values indicates higher levels of spatial clustering compared with the null hypothesis. The values are computed as a cross-product between the variable being measured, expressed as deviations from the mean and its spatial lag, which is based on a weights matrix measuring distance between observations. Because of the geographic size of Illinois and the fact that not all municipalities held aggregation referendums and those that did were not contiguous, a k-nearest neighbor weights matrix was used to determine proximity. Using Luc Anselin's GeoDa software (Anselin, Syabri, & Kho, 2006), Moran's I was conducted on the percentage of "yes" votes for all referendum elections in Illinois cities, towns and villages, returning a score of 0.26 (pseudo $p < .001$). This suggests that there is spatial clustering.

FIGURE 3

LOCAL INDICATOR OF SPECIAL ASSOCIATION (LISA) CLUSTER MAP



Spatial clustering can be visualized by mapping a local indicator of spatial association (LISA; Anselin, 1995). The LISA map shows local Moran scores by municipality and depicts spatial clusters of high-high and low-low values as well as spatial outliers where neighbors exhibit high-low and low-high values. High and low values are defined by their relativity to the mean, and the values mapped are those that show significant local clustering or outliers.

Figure 3 shows the LISA cluster map for northeastern Illinois. In terms of spatial clusters of significance, the most prominent high-high cluster lies in the north suburbs of Chicago, where higher education and older populations are evident. In the near southwest suburbs of Chicago, low-low spatial clustering is evident, meaning that municipal neighbors with lower levels of support for electricity referendums are concentrated. These patterns of clustering mimic the evolution of class and racial divides in Chicago's suburbs identified by Walker (2018). Given the preliminary results of the local clustering analysis, future research could possibly benefit from developing a geographically weighted regression model to assess the importance of spatial variability.

THE FUTURE OF AGGREGATION IN ILLINOIS

Illinois has been at the forefront of implementing community choice aggregation, and its use of the referendum as an initiating device makes it rather unique among the six states that allow aggregation. As other states pursue aggregation schemes, and as the Illinois legislature contemplates expanding aggregation by referendum to natural gas loads (see HB 5101, introduced in 2018 at the 100th General Assembly), analyzing the patterns of support can be useful for understanding aggregation's proliferation. As the previous analysis suggests, age, education and use of electricity as a heating fuel are all positively correlated with aggregation support.

The recent trend seen in many municipalities that have decided to suspend their aggregation programs after successful referendums suggests an uncertain future for this policy. To understand the future efficacy of aggregation, situating it within the context of the evolving Illinois energy markets is essential. At the time of the spike of aggregation referendums in 2012, the state witnessed a confluence in which wholesale electricity prices on the spot market were relatively low and ComEd—the large investor-owned utility whose pricing was subject to state regulatory approval—was stuck in high-priced, long-term contracts minimizing its ability to compete in a deregulated environment (Haas, 2014).

Thus, aggregation municipalities were able to secure advantageous pricing from alternative suppliers and, in many cases, multi-year agreements. Unusually cold winters in 2013 and 2014 resulted in higher wholesale prices for electricity and, in turn, influenced the prices alternative suppliers offered to municipalities, as some early adopters were in the process of renegotiating rates. Additionally, the operator of the regional power grid, PJM Interconnection, increased the capacity charge to suppliers (Prejzner, 2014). This charge is levied on consumers to ensure there is enough supply to meet potential demand. Finally, in 2014, the alternative retail energy suppliers—who were largely responsible for entering into aggregation contracts with municipalities—faced more stringent regulatory oversight after numerous issues with fraud and overpricing of consumers in the deregulated market (Office of Consumer Counsel, 2017).

With these factors combining to radically diminish the pricing advantages that were apparent at the beginning of the 2010s, municipalities that are not suspending aggregation programs are pursuing other added values to justify maintaining their programs. Oak Park, for example, moved from an initial agreement that began in January 2012 with a supplier who offered 100% wind-powered renewable energy credit at 5.79 cents per kilowatt-hour to a contract in April 2014 that increased to 7.47 cents per kilowatt-hour of conventionally generated electricity. Participants were given the option of paying 7.57 cents per kilowatt-hour for the 100% renewable energy credits; 13% of the village's residents already participated in the program. Beginning in 2016, the village board negotiated a rate of 6.799 cents per kilowatt-hour of standard power and a 0.3 cent per kilowatt-hour fee on all users that would go into a village-controlled fund designated for renewable energy projects (Pavlicek, 2017). The most current agreement combines the rate provided by the supplier and the ComEd rate and maintains the allocated fee for renewable energy projects (Schering, 2018).

Other municipalities continuing aggregation have had different experiences. In 2018, Clarendon Hills was able to negotiate a fixed rate slightly higher than ComEd's, but the supplier will issue 100% renewable energy credits for all participants (Fieldman, 2018). In the City of Columbia in Monroe County, the city council negotiated a higher rate than was being offered by Ameren, the regulated utility that covers southern Illinois (Saathoff, 2018). The diversity of experiences with aggregation suggests that the present and future evolution of the policy is uncertain. From the supply side, shifts in state and federal regulatory emphasis can continue to influence pricing. From the demand side,

technological change, economic activity and growing interest in green energy alternatives could provide the impetus for more cities to establish or resurrect their aggregation programs. Illinois' experience can also provide an example to other states that may be considering aggregation as a strategy for increasing consumer choice and possibly encouraging green energy generation.

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MUNICIPAL FISCAL RESPONSES IN THE POST-RECESSION ERA

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This article examines the fiscal challenges Illinois municipalities faced following the 2009 recession and the ways in which they responded. In order to shed light on the strategies and actions employed during this post-recession period, Census of Governments' data were used to identify the impacts on municipal revenues and expenditures from 2007 to 2017, and over 90 mayors and managers of Illinois municipalities were also surveyed. The results suggest that state aid to municipalities did not keep pace with inflation between 2007 and 2015, and the most common strategies used to maintain balanced budgets were increasing water and sewage charges and delaying infrastructure projects.

This article examines how municipal officials responded to the slow statewide recovery following the Great Recession ending in 2009. As the Illinois economy recovered slower than in other states, unemployment remained high, major employers closed or temporarily cut back employment and the state adjusted its revenues shared with local governments. This article analyzes results from an electronic survey sent to mayors with 91 unique responses across the state describing changes in both expenditures and revenues during the post-recession recovery. The effects of the recovery differ by municipality, as do the responses, since they were tailored to local conditions.

Some adjustments brought about long-term changes in services provided and financing approaches. Reductions in capital spending to preserve current operations were cited by mayors, as was greater use of technology in delivering services. Increases in user fees and charges were relatively common methods to offset reductions in sales tax revenues, and, in some cases, property tax collections. This article provides insight into local decisions during the past five to six years and suggests approaches that could be useful in other municipalities.

The 2009 recession and subsequent slow recovery in Illinois affected municipalities of all sizes. High unemployment and losses in critical jobs, including relatively high-paying manufacturing jobs, reduced tax revenues in many municipalities. Downstate municipalities were hit especially hard by the recession. This article

explores the responses of municipalities to budget shortfalls in recent years and describes the results with implications for future trends.

The lagging state economy and associated finances reduced state-shared revenues on which many municipalities rely to finance local services. In some cases, that resulted in significant program cutbacks and difficult budget decisions. Conditions worsened with no state budget for several years and serious fiscal uncertainty that discouraged business investment.

In addition, mandates by the federal or state government, often without funding, caught local leaders between shrinking revenue sources and a need for staff to provide high-quality services. Persistently low state support for services such as education created pressures on property taxes, making Illinois second highest in effective property tax rates, following New Jersey.¹ Even though property taxes for municipal services represent a relatively small portion of the total property taxes collected, municipal officials were limited by public pressure in their ability to rely on this source when revenues such as sales taxes and shared revenues declined. A growing number of employee retirements with pension obligations further increased the fiscal pressures. While some pension contributions paid for past underfunding, pension costs were an increasing share of the overall municipal budget.

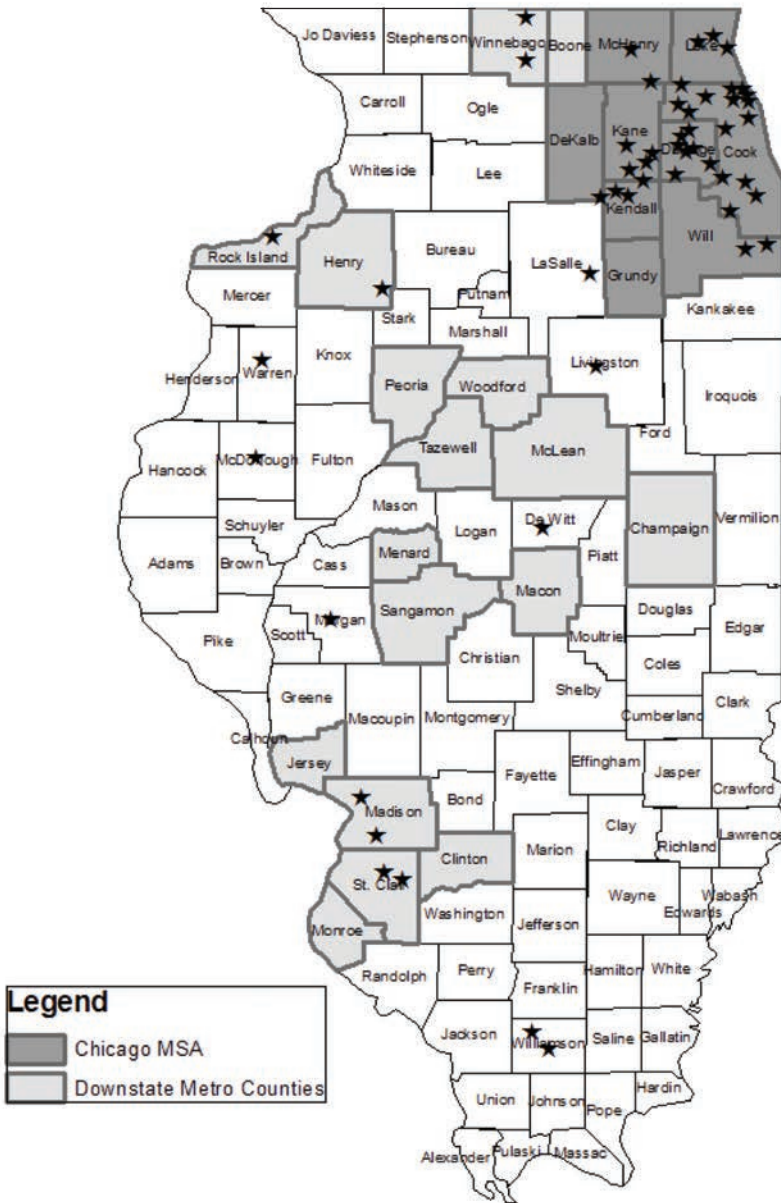
The fiscal situation is more difficult in non-home rule municipalities or those facing property tax extension limitations, tax rate limits and less flexibility in other revenue-raising powers. Likewise, the economy in many small and rural municipalities did not respond well in the post-recession period, further enhancing the need for innovative ways to finance essential services.

DESCRIPTION OF ANALYSES

Comparisons of municipal responses to budget shortfalls in Illinois municipalities following the 2009 recession used Census of Governments' (CoG) data to identify the effects on municipal revenues and expenditures from 2007 to 2017. This work expands on a previous study of fiscal performance in Chicago-area communities (Brewer, Vitone, & Schweiterman, 2016). An electronic survey of mayors and managers in municipalities larger than 5,000 in 2018 (91 responses) by the Northern Illinois University (NIU) Center for Governmental Studies (CGS) and the Illinois Municipal League (IML) sheds further light on actions during the post-recession recovery using approaches from past studies.

FIGURE 1

FISCAL STRATEGIES SURVEY RESPONSES



The map does not include all responding municipalities because some respondents did not identify their location in the CGS-IML FY 2018 fiscal strategies survey.

Municipal responses are grouped by region to better understand conditions leading to specific strategies used. Sample respondents mainly represent those with populations between 5,000 and 75,000 distributed across the state (Figure 1). Responses are grouped by location in the Chicago-Naperville-Elgin metropolitan statistical area (Chicago MSA), downstate metropolitan areas (i.e., all Illinois metropolitan areas outside of the Chicago MSA) and non-metro counties. The average population size of responding municipalities is 26,000, the average household income is \$53,000 and 48.4% have home rule authority. If anything, smaller municipalities may be slightly overrepresented in the sample, making the findings more appropriate to conditions and strategies in this group.

CHANGING ECONOMIC AND FISCAL CONDITIONS

The adverse effects of the Great Recession on municipal finances are well documented, but more important for current purposes is what happened in subsequent years and possible long-term effects. Mayors reported the overall effects on the local economy to provide a background for discussing responses. Slightly more than half (54.7%) reported a general slowdown in activity (less than 5%) but with no large employer layoffs or terminations. Important to note is that the survey was conducted prior to recent closures in large retail chains such as Macy's and Bergner's that relate more to longer term changes in purchasing patterns or business financing strategies than the recession.

The remaining mayors reported either that several large employers had cut back operations temporarily but had regained employment (18.6%) or that at least one large employer closed permanently (11.6%). Some (10.5%) reported long-term effects, indicating the municipality does not expect to reach pre-recession levels in the future. Only 5.8% reported closure of three to five large employers with job losses for several years or indefinitely.

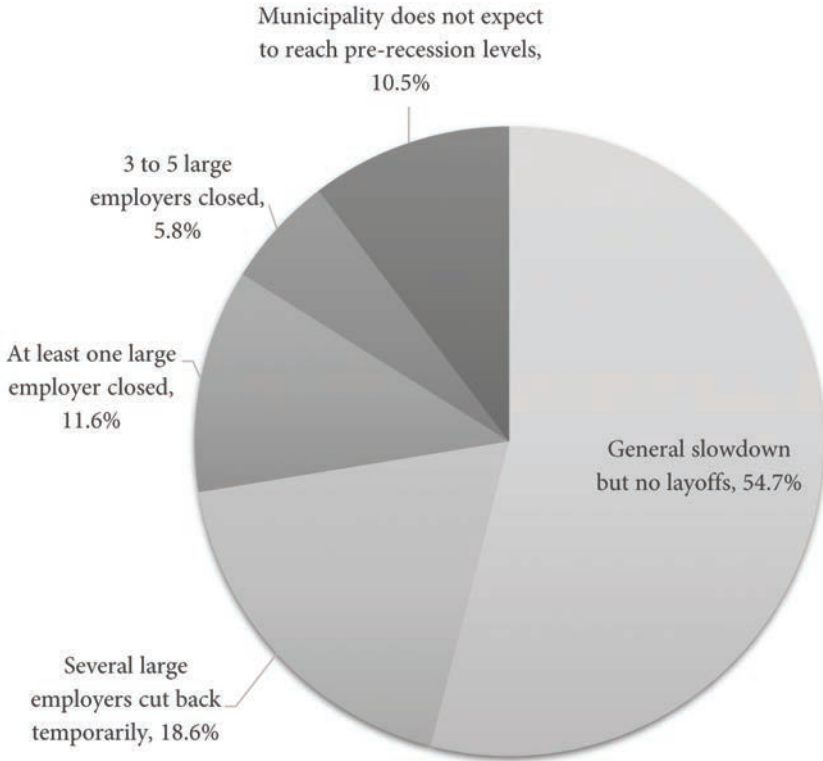
When asked about economic conditions since 2015, mayors were evenly divided between expecting a continued slow recovery during the next several years (27.0%), stable conditions with no significant anticipated employment changes in the next year (30.3%) and clear signs of steady growth—2% in the next several years (30.3%).

Municipalities in the Chicago metropolitan area or downstate metro areas such as Champaign and the Quad Cities gave more positive responses. However, no significant correlation has existed between population size and economic

conditions since 2010 or 2015, which was unexpected due to the broader economic opportunities available in larger municipalities.

FIGURE 2

ECONOMIC TRENDS SINCE 2010



Source: CGS-IML, FY 2018 Fiscal Strategies Survey

The effects of the post-recession recovery are more evident in mayors' responses regarding the effects on FY18 municipal revenues. One-third reported sufficient FY18 revenues to provide current levels of service and some with a budget surplus, so the effects of the recession may have passed in these cases. Another 25.6% reported revenues adequate to meet the current needs but not sufficient to cover inflation. One-quarter (25.6%) said revenues were inadequate to provide current services but with no immediate employment cutbacks expected.

However, 15.6% of mayors reported employee cutbacks. Most municipalities reporting cutbacks are in the Chicago metropolitan area with lower median household incomes and populations between 10,000 and 50,000. Three are in rural parts of Illinois, and two are in downstate metropolitan areas. An average of five employees were reported in the cutbacks. Furthermore, in 38.4% of respondents, revenues matched expenditures (+ or -1%) with 16.4% reporting a surplus of 1% to 4% on April 30, 2018. An additional 13.7% had a surplus of 5% or more with nearly the same number (19.2%) reporting budget deficits of 1% or more. Deficits were more common in municipalities with populations below 50,000 and in those with lower incomes in the Chicago MSA.

Budget shortfalls arose from several primary factors according to mayors who rated factors on a scale of 1 to 5 in terms of importance. Higher pension contributions ranked an average of 4.3, with 77.3% listing pensions as essential or very important. The second most significant was underperforming local economies including lower sales taxes reported by 57.1% as a significant factor leading to stress. Cutbacks in state aid were listed as important or very important by 45.2% of respondents.

The financial literature considers reserves sufficient to pay at least two months of bills to be prudent (Sohl, Blanke, & Walzer, 2016), so mayors were asked about the number of days of unrestricted net cash reserves on hand at April 30, 2018. Among the 84 mayors responding to this question, 16.7% reported 60 or fewer days available with another 17.9% reporting 61 to 90 days. The remaining 65.5% of municipalities reported reserves of more than 90 days. Thus, by these responses, most of the Illinois municipalities responding had weathered the financial storm and are on solid financial footing.

When asked about expected economic conditions in the next two years, responses were generally optimistic but with some reservations. The largest number (51.3%) had a favorable view, with more local businesses expanding than stagnant or declining. Almost as many (42.5%) expect a stable economy with no significant pending business expansions or contractions. Fewer (12.5%) were optimistic about local businesses growing and prospering. Respondents optimistic about the next two years are located in the Chicago MSA, downstate metro areas and rural Illinois. Those expecting the local economy to remain stable were typically mid-sized with populations between 10,000 and 50,000.

While a large number of mayors expecting a positive future are an important finding, the processes used to overcome financial setbacks exhibit a variety of

strategies. The approaches used are important to understand because some may have long-term implications for financing and delivering services. They typically included revenue increases plus expenditure adjustments affecting both capital outlays and current operations.

ADJUSTMENT STRATEGIES

Past research reveals a pattern of common strategies followed during periods of fiscal retrenchment (Clark & Ferguson, 1983; Kim & Warner, 2016; Maher & Deller, 2007; Pagano, 1993; Walzer & Jones, 1992) and usually reflects efforts to avoid or minimize the immediate effects on local public services. Often high on the list is delaying planned projects to expand future services, especially capital items, until the budget situation improves (Pagano, 1993).

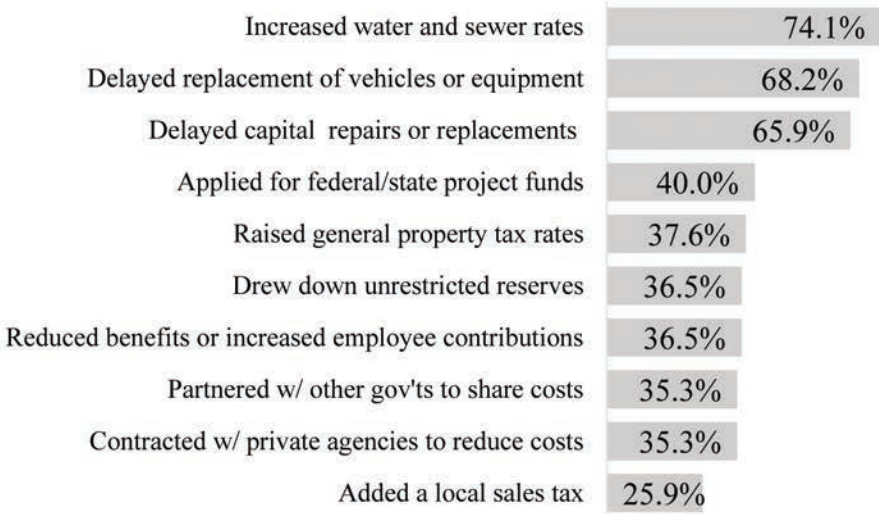
Another common approach involves postponing vehicle or equipment replacements knowing this short-term option may mean higher costs in the future. Political pressures influence the fiscal adjustment strategies used. Several mayors in the survey expressed an intent to preserve essential services and hold the line on property taxes. With short election cycles, mayors face more pressure to preserve services in the short term while limiting the local tax burden instead of taking a longer range view. This approach may have been required by losses in other revenues.

Least preferred strategies include personnel layoffs and terminations because of the immediate effects on service delivery and, in some instances, negotiation restrictions (Maher & Deller, 2007). Smaller pay increases may also be an option but depend on contract arrangements and related issues. When revenue adjustments are considered, it may be more politically acceptable to increase service charges since they primarily affect those benefitting directly from the services (Weinzierl, 2018).

Mayors identified potential strategies in adjusting to budget shortfalls, including both revenues and expenditures (Figure 3). The strategy most often reported (74.1%) by the 85 responding mayors was to increase water and sewer rates. Since these may operate as enterprise funds with revenues dedicated to specific uses, it is not clear that the rate increases are solely in response to fiscal cutbacks unless general revenues supplemented user fees in the past. However, a recent national study shows that adding or increasing service charges can prevent reductions in those services (Kim & Warner, 2016).

FIGURE 3

FINANCIAL ACTIONS TAKEN SINCE 2015



Note: For simplicity, actions taken by fewer than 2% of respondents are not shown.

The next two common strategies include postponing the replacement of vehicles and equipment (68.2%), followed closely by delayed capital infrastructure spending (65.9%). These strategies are relatively easy to impose without immediately affecting services. However, they only work for so long, and replacement costs may be higher in the future when the equipment or facilities deteriorate even more.

Revenue adjustment strategies were also relatively common but can be more challenging to use, especially when they involve tax increases, than delaying infrastructure or maintenance. Within this category, 40.0% of respondents applied for state or federal project funds to support current operations, and 36.5% had drawn down unrestricted reserves. Those using reserves were mainly populations less than 50,000, with lower median incomes. Municipalities with fewer than 25,000 people more often pursued grant funding for operations including downstate municipalities such as Jacksonville and Macomb or those in the Chicago MSA including Sugar Grove and Willowbrook.

Increasing property taxes (37.6%) or reducing employee benefit costs, such as requiring employees to pay a higher share (36.5%) of benefits, were next in

importance. These strategies are not available to all municipalities because of negotiations and tax rate limitations. Smaller municipalities and those in the Chicago MSA more often raised property taxes. Few downstate municipalities reported reducing benefits or increased employee contributions, and usually, those that did had populations between 25,000 and 50,000.

Finding lower cost ways to finance services through partnerships with other public agencies, or contracting with private agencies, was reported by one-third of responding municipalities. These strategies involved contracts with other public agencies (35.9%) or with private businesses to reduce costs (35.9%). Contracting was rarely reported by respondents outside the Chicago MSA and was mainly used in those with populations between 25,000 and 75,000.

Mayors also described types of contracting or cost sharing with other agencies. Most common are communications arrangements for police, fire and emergency services with high fixed costs that can be reduced by expanding the population served. Several respondents including Rockford, Lake Forest and Grayslake participate in shared safety communications. Likewise, Batavia, Geneva and St. Charles collaborate on a central dispatch center that answers 911 calls for police, fire and ambulance services in the three cities as well as fire and ambulance services in Elburn.

Other municipalities in DuPage County reported participating in shared dispatch services via the countywide *DuComm* arrangement that serves 44 agencies in DuPage County, which is one of the largest consolidated 911 centers in Illinois. Additional examples of shared services include joint purchasing arrangements for items such as salt, fuel or other materials, as well as sharing personnel with specialized expertise that can manage operations for larger agencies. Municipalities involved in such shared purchasing or procurement arrangements include Yorkville, Glencoe and Lincolnwood. Numerous other examples of municipalities sharing staff and equipment exist across Illinois.

One-quarter of respondents (25.9%) added a sales tax to generate additional revenues with the most common reported uses of the revenues being capital improvements, especially roads and streets, which supports previous discussions about delaying capital projects. These sales tax increases may also support capital projects in the future. Other municipalities such as Marion, Oak Lawn and Carol Stream reported sales tax rate increases with the revenues allocated to the general fund. Use of this strategy varied with population size and local authority.

One-fifth of respondents (21.2%, not shown in table) reported postponed or smaller wage adjustments for non-bargaining employees, and 11.8% increased an existing utility tax. An additional 10.6% reported imposing a utility tax or added a tax to a previously untaxed utility.

Nearly one-tenth (9.4%) borrowed from enterprise accounts (mainly water/sewer) for current operations, shifted services to other governmental agencies to reduce costs (8.2%) or borrowed short-term to finance current operations (8.2%). These strategies suggest serious fiscal pressures resulting from the lagging recovery, the severity of the recession and the options available for making adjustments. However, relatively few (14) municipalities reported cutting employees in the past three years, and the average reduction was not large (five employees or fewer). These positions may not include those lost from not replacing retirees, which is a more probable short-term strategy.

Several municipalities shared innovative practices not classifiable elsewhere in the Fiscal Strategies Survey. Kewanee conducts citizen satisfaction surveys to identify core services and continuously improve them. Schaumburg saved personnel costs by carefully reviewing vacant positions and only filling positions that clearly maintain or improve current service quality. North Chicago is exploring the possibility of contracting with a private security company to provide several services. Monmouth eliminated its community/economic development director position and now collaborates with the chamber of commerce on local development issues. In any event, there is clear evidence that some municipal officials and managers made significant local adjustments in the post-recession years.

LONG-TERM EFFECTS

The short-term impacts of the recession were described, and the responses also caused longer term adjustments in municipal revenues and expenditures as local officials managed the fiscal setbacks. Some of these changes will affect the financing and delivery of services in the future. Reorganization of service delivery brought about by fiscal responses may have positive outcomes as public agencies collaborate to increase the use of technology or find less expensive ways to provide high-quality services.

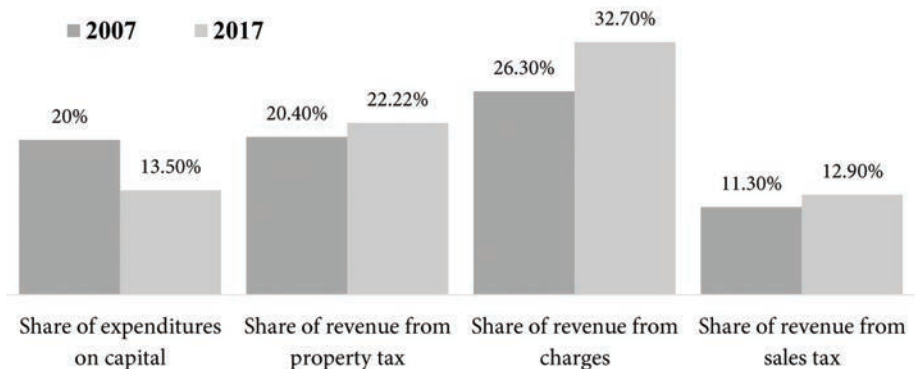
In other instances, delayed investments in capital or cutbacks in operating expenditures may adversely affect future residents. The comparison of shifts in the revenues collected and resulting expenditures is provided next based on

comparisons of data from the 2007 and 2015 CoG surveys (latest available).² This data source has the most consistent information for comparing fiscal changes in the sample municipalities. Responding municipalities differ widely in economic experiences with many showing significant recovery while, in others, revenues exceeded expenditures. This section describes several critical financial trends.

First, property taxes did not keep pace partly due to an underperforming local economy that increased reliance on user charges including utility taxes. Figure 4 shows the impact of these trends with an increase in the relative importance of fees and charges as a percentage of revenues collected between 2007 and 2015. This change in revenue structure may continue in the future depending on how the local economy and the property tax base respond.

FIGURE 4

SELECTED REVENUE/EXPENDITURE RATIOS

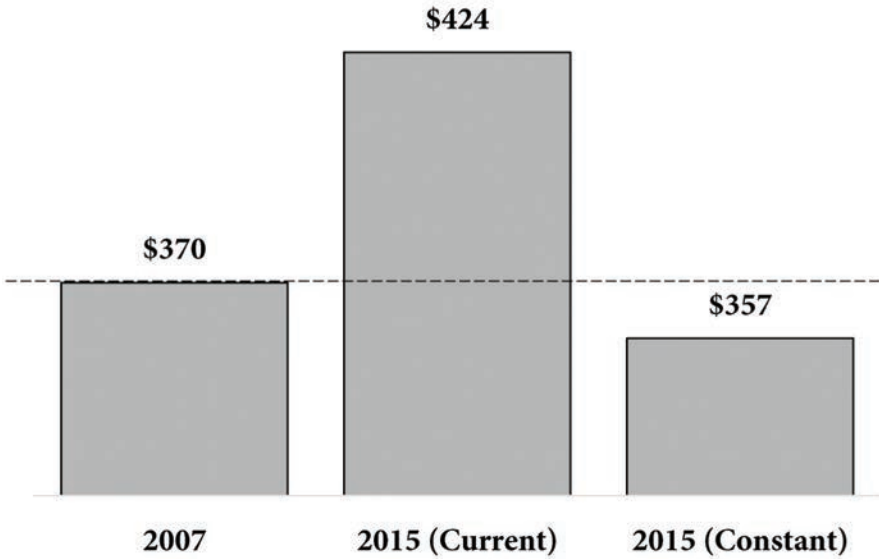


Source: U.S. Census Bureau, 2007 CoG and 2015 Annual Survey of Government Finances

In nominal terms, state aid per resident increased from \$370 to \$424 since 2007. However, after adjusting for inflation using the Illinois Municipal Price Index (MPI), state aid *decreased* to \$356 per resident (a 3.7% loss). The CGS-IML Fiscal Strategies Survey identified declining state aid as a leading factor underlying budget shortfalls. By comparison, revenue from federal agencies remained relatively constant at less than \$25 per resident or 1.5% of total revenues. The loss in the purchasing power of state aid made municipalities rely more on other sources.

FIGURE 5

STATE AID TO MUNICIPALITIES PER CAPITA, 2007 AND 2015



Source: U.S. Census Bureau, 2007 CoG and 2015 Annual Survey of Government Finances

Thus, municipalities became slightly more reliant on property taxes. In 2007, 20.4% of municipal revenues were from property taxes but had increased to 22.22% by 2015. While local property values may have declined in some cases during this time period, property taxes remain one of the most stable revenue sources for municipalities. Likewise, sales taxes increased slightly from 11.3% of total revenues to 12.9%.

Municipalities also became significantly more dependent on service charges and fees, which increased from 26.3% of total revenues to 32.7%. The average municipality collected \$434 per resident for services in 2007 but collected \$613 in 2015. A recent study reported that cities with more resilience in fiscal crises tend to pursue new service charges as a way to maintain service levels (Barbera, Jones, Korac, Saliterer, & Steccolini, 2017).

Second, expenditures and services had similar types of adjustments. For instance, some mayors reported postponing capital projects and delaying equipment replacement to maintain current operations. Those decisions should appear in capital expenditures in 2017, representing a smaller percentage than

in 2007, especially in those communities still feeling the effects of the recession. In 2007, 20.0% of total expenditures went for capital expenditures, but in 2015, capital expenditures represented only 13.5% of expenditures.

Related to the declining share of expenditures for capital, several mayors reported spending less on repairs for roads/bridges and water/sewer facilities than needed to keep them in acceptable condition. The median respondent in the survey reported it should spend \$1.3 million on water/sewer systems and \$1.9 million on streets each year, but the median respondent expects to spend \$1 million on water/sewer and \$1.5 million on streets. Deferring capital projects may mitigate the need for other fiscal adjustments in coming years, but infrastructure will continue to age as some cities fall behind on maintenance. The median municipality in the survey estimated that it would cost \$12 million to repair existing sewage treatment systems, and such projects will likely require bond issues or further service charge increases in the future.

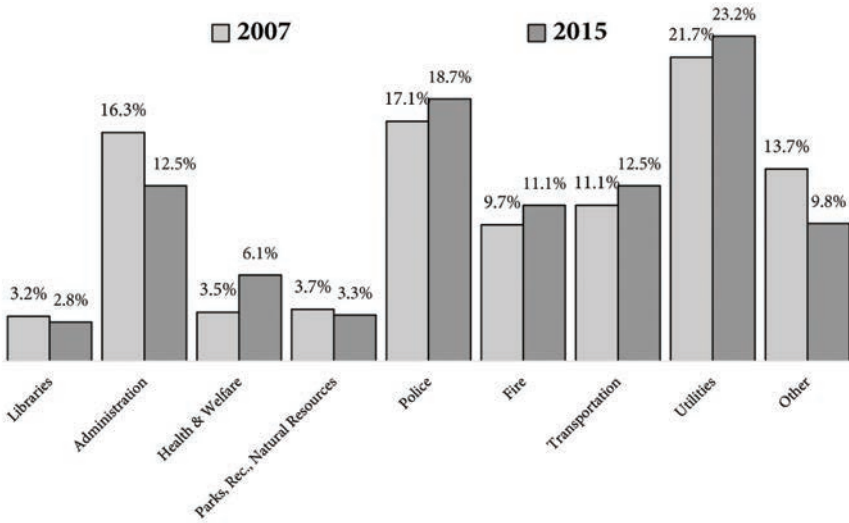
After adjusting for inflation using the MPI,³ capital expenditures decreased from \$328 to \$209 per capita, including both construction and vehicle/equipment purchases. These figures confirm that local governments experiencing budget shortfalls resorted to incremental measures to minimize the short-term impact on service delivery by delaying the replacement of equipment and so on (Levine, 1978; Scorsone & Plerhoples, 2010; Johnson, Oliff, & Williams, 2011). Clearly, there are implications for future financing needs.

The composition of expenditures by service type also shifted since 2007. Expenditures for administration decreased from 16.3% to 12.5% of aggregate spending. These cutbacks may reflect better use of technology but also indicate more focus on other services, including police and fire, both of which increased in the share of expenditures. For example, in the Fiscal Strategies Survey, the Village of Schaumburg implemented online payments for all services to make it more convenient for residents and to reduce the costs of processing transactions. Health and welfare costs also increased during this period as one might expect. The same is true for utility expenditures funded with higher charges for services to meet increasing utility costs.

Total expenditures increased from \$1,638 to \$1,845 per capita between 2007 and 2015, with the increase distributed across several service areas. Expenditures on police protection increased by \$65 per resident (Figure 6). Utility spending increased \$74 per resident, and fire protection costs increased \$46. Administrative expenditures decreased \$36 per resident. Total

expenditures for parks, recreation and libraries remained relatively constant, but the share of expenditures decreased as spending in other areas increased. Not all municipalities have park/recreation districts or libraries, with those services provided by special districts.

FIGURE 6
SHARE OF TOTAL EXPENDITURES



Source: U.S. Census Bureau, 2007 CoG and 2015 Annual Survey of Government Finances

PRIMARY FINDINGS

Six findings from the study stand out:

- State aid to municipalities in Illinois did not keep pace with inflation between 2007 and 2015, forcing greater reliance on charges and sales taxes. Several cities such as Marion, Oak Lawn and Carol Stream increased sales taxes to support general fund operations, while other cities increased sales taxes to fund future capital projects.
- Equalized Assessed Valuation declined 24.1% between 2008 and 2015, requiring some municipalities to raise property tax rates to maintain revenues. Declining property values have also caused some smaller municipalities including Jacksonville, Macomb, Sugar Grove and Willowbrook to pursue grant funding for operations.

- The most common strategies used to maintain balanced budgets involved increasing water/sewer charges plus delaying infrastructure projects and equipment replacement. The median city expects to spend less on infrastructure repairs than is sufficient to keep water/sewer systems, roads and bridges in acceptable condition, so cities might need to issue bonds or increase service charges again to support future construction projects.
- Administrative expenditures decreased, while spending on police, fire protection, utilities and health/welfare increased. Some administrative cost savings reflect collaboration and shared services. For example, municipalities such as Yorkville, Glencoe and Lincolnwood participate in shared purchasing or procurement agreements.
- Areas most often reported in service sharing arrangements include communications for police, fire and emergency services. In addition, joint purchasing and sharing personnel with specialized expertise were cited in several cases. An example of shared communication services is the *DuComm* arrangement, which is one of the largest 911 centers in Illinois, serving 44 agencies in DuPage County.
- A majority of responding mayors reported more than 90 days of unrestricted reserves, which exceeds the recommended minimum of 60 days cited in the professional literature, suggesting that some are well on the way to recovery and are prepared for potential shortfalls in the future.

Municipalities in Illinois responding to the 2018 survey were adversely affected by the recession, and some made significant adjustments in their finances. In part due to political pressures to maintain current services and hold the line on property taxes, they followed traditional approaches such as delaying capital and construction. In some instances, however, rising pension costs and related expenditures caused cutbacks in personnel. The more positive news is that a majority of municipalities survived the financial changes and see a more positive future for the next few years.

Norman Walzer is a senior research scholar, and Andy Blanke is a research associate at the Northern Illinois University Center for Governmental Studies. They thank Rebecca Turner, IML, for assistance in the municipal survey.

FOOTNOTES

¹ More information on Tax Foundation research is available at <https://taxfoundation.org/how-high-are-property-taxes-your-state>

² The Census Bureau collects data on all municipalities' finances every five years and conducts a more limited annual survey. There were 163 Illinois cities with data in both the 2015 survey of government finances and the 2007 Census of Governments finances.

³ More information on the Municipal Price index is available at <https://cgs.niu.edu/publications/MunicipalPriceIndex.shtml>

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FINDING ECONOMIC DEVELOPMENT STRATEGIES THAT WORK: EVIDENCE FROM THE SUBURBS OF METROPOLITAN CHICAGO

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This study explores incentives suburban governments offer to foster economic development. Drawing from survey responses from 45 municipalities and interviews with local administrators in metropolitan Chicago, the study shows many creative strategies, ranging from sales-tax-sharing arrangements to downtown building improvement programs being used to give communities an edge in a highly competitive market. Communities are particularly satisfied with tax increment financing (TIF) districts in the central business districts. However, few appear comfortable developing TIF for projects without a commercial component; many are looking for alternatives to this pervasive strategy.

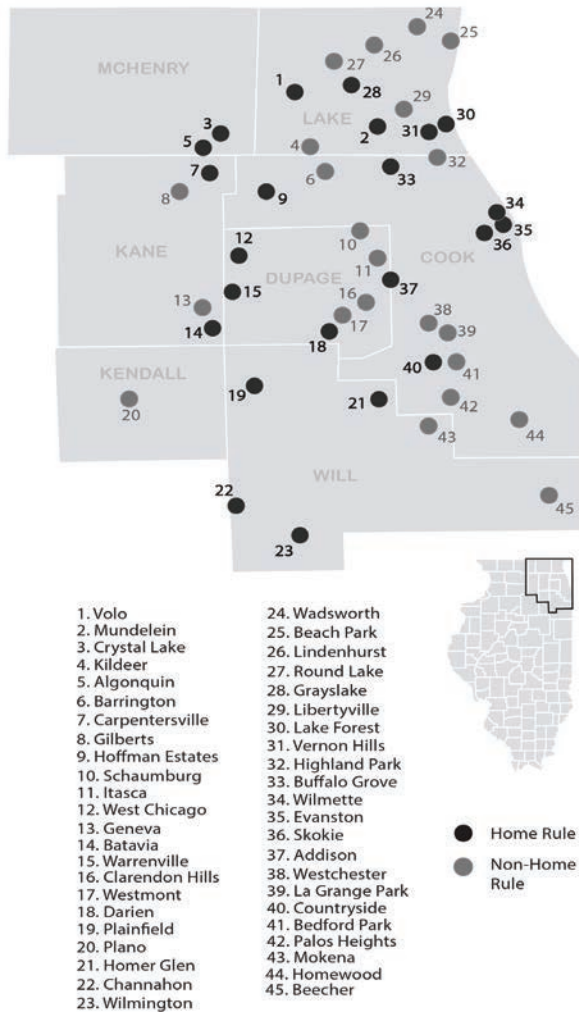
Most municipal officials are probably keenly aware that the economy in Illinois has not expanded as rapidly as it has in other parts of the United States since the Great Recession of 2008 through 2009. In response, many are vigorously pursuing strategies to foster economic development. Because a healthy rate of economic growth is essential to sustaining high levels of service, economic development strategies appear to have been assigned a high priority by municipal leaders.

To better understand the efforts being made to stimulate economic development, this issue briefly reviews the results of a survey of municipal officials in metropolitan Chicago. The impetus of the survey (as well as the original research inquiry beginning in 2016) was the authors' interest in providing municipal administrators—particularly economic development staff—with insights on strategies other communities in the region are employing. Such information can help refine strategies and direct limited resources to the most worthwhile projects.

The project focuses on municipalities in Cook, DuPage, Kane, Lake, McHenry and Will counties, but it excludes Chicago due to the city's massive size and differing characteristics. In late 2016, 159 municipalities were asked to participate

in a survey focusing on their economic development programs. Forty-five communities, nearly equally divided between home rule and non-home rule, responded before the cutoff in February 2017, resulting in a 29% response rate. Although most respondents represented suburban municipalities, some (such as Evanston) are often described as “city suburbs” or even “cities” in their own right, and others have a largely rural quality. However, all have economies linked to the metropolitan region. For editorial convenience, we describe them in the analysis below as “suburbs.”

FIGURE 1
RESPONDENTS TO ECONOMIC DEVELOPMENT SURVEY



After reviewing survey responses, the researchers selected eight municipalities for interviews to better understand programs outside of TIF: Batavia, Bedford Park, Crystal Lake, Grayslake, Highland Park, Homewood, Libertyville and Mundelein. These communities were chosen to provide a geographically diverse mix of responses in the Chicago metropolitan region. Representatives took part in semi-structured telephone interviews that focused primarily on the effectiveness of economic development programs that do not involve TIF districts. A summary of the findings appears below.

FINDING 1:

NEARLY ALL THE MUNICIPALITIES SURVEYED HAVE FUNCTIONAL ECONOMIC DEVELOPMENT PROGRAMMING AND DEDICATED STAFF SUPPORTING THEM

On average, responding communities employ approximately one full-time-equivalent (FTE) worker devoted to economic development per 18,000 residents. Proportionally, fewer are employed in home rule communities (one employee per 20,408 residents) than in non-home rule communities (one per 15,625; Table 1). However, due largely to their smaller populations (16,654 vs. 30,818), non-home rule communities tend to have smaller staffs devoted to this function. Only 22% of responding non-home rule municipalities (5 of 23) have more than one FTE worker dedicated to economic development efforts, compared to 41% of home rule municipalities (9 of 22).

Perhaps unsurprisingly, those percentages are much higher in communities utilizing TIF: for example, that 41% of home rule communities with more than one FTE worker dedicated to economic development jumps to 56% among communities with at least one TIF district (9 of 16). Similarly, only 8% of non-home rule municipalities that employ TIF have no staff dedicated to economic development (1 of 12), compared to 36% of non-home rule municipalities that do not employ TIF (4 of 11).

These figures do not include staff members who indirectly support economic development, such as planning and mayoral office personnel. As a result, they may understate the human resources devoted to the task by a considerable margin.

TABLE 1
FULL TIME STAFF MEMBERS EMPLOYED PER MUNICIPALITY IN SAMPLE

	HOME RULE MUNICIPALITIES	NON-HOME RULE MUNICIPALITIES
Average number of FTEs employed by municipal staff	196 <i>230 among those w/ TIF</i>	97 <i>136 among those w/ TIF</i>
Average number of FTEs dedicated to economic development efforts per municipality	1.27 <i>1.51 among those w/ TIF</i>	1.27 <i>1.11 among those w/ TIF</i>
Average number of residents in a municipality per FTE dedicated to economic development efforts	20,408 <i>17,543 among those w/ TIF</i>	15,625 <i>14,306 among those w/ TIF</i>
Share of municipalities with 0 FTEs dedicated to economic development efforts	23% (5 of 22) <i>With TIF: 19% (3 of 16)</i>	22% (5 of 23) <i>With TIF: 8% (1 of 12)</i>
Share of municipalities with 1 or fewer FTEs dedicated to economic development efforts	59% (13 of 22) <i>With TIF: 44% (7 of 16)</i>	78% (18 of 23) <i>With TIF: 67% (8 of 12)</i>

Regardless of home rule status or population, providing financial and human resources for economic development is the norm. Furthermore, the interview responses suggest that officials believe if their municipality did not devote resources to this function, it would be in a disadvantaged position relative to its peers.

FINDING 2:

MOST SUBURBAN MUNICIPALITIES CONSIDER ENHANCING THE TAX BASE THEIR FOREMOST ECONOMIC DEVELOPMENT PRIORITY; NONETHELESS, THEIR PROGRAMS ARE NOT ALWAYS DESIGNED WITH THIS AS THE HIGHEST PRIORITY

Survey participants rated the “highest priority intent” of their economic development programs. The options presented to them were based on those

used in previous literature (“Introduction to Economic Development,” 2015) that categorized the programs’ goals by (a) job creation, (b) job retention, (c) tax base enhancement or (d) quality of life improvement. Although these responses may not capture all goals, they can be used to determine whether goals and actions tend to converge or diverge.

Respondents indicated enhancing the tax base was their highest priority goal, with 54.5% of home rule municipalities and 79.2% of non-home rule municipalities surveyed. However, when participants were asked to categorize the *type of economic development, non-TIF programs in place*, the majority of programs were designed to improve quality of life.

This discrepancy can be partially attributed to most programs’ multiple priorities. For example, a municipality initiating a TIF district may ultimately be pursuing all four goals—job creation, job retention, tax base enhancement and quality of life improvement. Increasing sales tax revenues and fostering employment may loom large, but infrastructure improvements in the district may be primarily considered as being made to bolster quality of life.

Even so, these results, together with some of the remarks from our interviews, suggest a lack of clarity about overall economic development goals can become an issue. Therefore, municipal policymakers and executive staff should think carefully about their programs’ highest priorities to ensure that outcomes reflect these priorities.

FINDING 3:

TAX INCREMENT FINANCING DISTRICTS ARE THE MOST COMMONLY REPORTED ECONOMIC DEVELOPMENT ACTIVITY IN SUBURBAN MUNICIPALITIES

As might be expected, TIF is the most pervasive type of program employed by communities in the sample. Almost two-thirds (63%, 28 of 45) reported having at least one TIF district, and 36% (16 of 45) reported having more than one. At the same time, 37% (17 of 45) reported not using this financial tool at all. Altogether, the 28 municipalities utilizing this mechanism had a combined total of 57 districts, an average of 1.3 per community. Evanston reported having the most active districts (six).

TABLE 2

ECONOMIC DEVELOPMENT STRATEGIES IN HOME RULE VS. NON-HOME RULE MUNICIPALITIES

	HOME RULE MUNICIPALITIES	NON-HOME RULE MUNICIPALITIES
Number of municipalities	22	23
Average municipal population	30,818	16,654
Number of municipalities w/ TIF	16 (73%)	12 (52%)
Total number of TIFs	35	22
Average number of TIFs per municipality with at least one TIF	2.2	1.9
Number of municipalities with “quality of life” as highest priority for economic development efforts	7 (32%)	3 (13%)
Average planned improvement per TIF	\$35,081,903 <i>(median: \$22,750,000)</i>	\$58,776,202 <i>(median: \$25,000,000)</i>
Average to-date public contribution	\$4,668,486 <i>(median: \$1,311,678)</i>	\$15,749,238 <i>(median: \$1,246,413)</i>
Average to-date private contribution	\$18,292,294 <i>(median: \$3,335,996)</i>	\$57,733,546 <i>(median: \$2,517,998)</i>
Ratio of private-to-public average to-date contribution per TIF	3.9:1 <i>(2.5:1 median ratio)</i>	3.7:1 <i>(2.0:1 median ratio)</i>
Total average amount spent to-date per TIF	\$20,438,110 <i>(median: \$5,603,959)</i>	\$63,794,332 <i>(median: \$5,603,959)</i>

Average calculated using only responses from municipalities that listed some contribution amount; those that did not enter any amount were not included in the calculation.

However, the study revealed TIF districts are more prevalent in the home rule communities surveyed than in the non-home rule communities. Among those with home rule, on average, each community contains 1.7 TIF districts, compared to just 1.0 in non-home rule communities. Furthermore, home rule communities tend to rely more heavily on private contributions, boasting a median private-to-public investment ratio of 2.5 to 1, compared to a 2.0 to 1 ratio in non-home rule communities. Private contributions also tend to be

larger, with a median of \$3.3 million in private contributions per TIF in home rule communities, compared to \$2.5 million in non-home rule ones. However, TIF projects in non-home rule communities tended to be larger in scope. According to survey respondents, the average (median) planned improvement for TIFs in non-home rule communities was \$25 million, compared to \$22.7 million in home rule communities.

Of course, much criticism has been directed at this form of financing (Byrne, 2009). A recent *Illinois Municipal Policy Journal* article points to the need to exercise caution and continually reassess TIF districts (Ermasova & George, 2017). Nevertheless, municipalities remain bullish about them. Of the TIFs, 24.5% (14 of 57) were reported to be “extremely effective,” compared to 24.5% “somewhat effective” and 24.5% “neutral” (neither effective nor ineffective). Significantly, only 3.5% were reported as either “somewhat ineffective” (1 of 57) or “extremely ineffective” (1 of 57). A larger share of TIFs in home rule communities (31%, 11 of 35) was reported as extremely effective, compared to just 14% (3 of 22) of TIFs in the non-home rule municipalities.

The highly structured and rigid nature of these districts appears to make them appealing. Municipalities must designate specific parcels for inclusion, provide evidence of blight and prepare development plans. The nature of these tax districts—while controversial in many communities—forces municipal policymakers to formulate specific goals and objectives. The result is often a formal framework that makes a district’s performance more clearly defined than certain other development strategies.

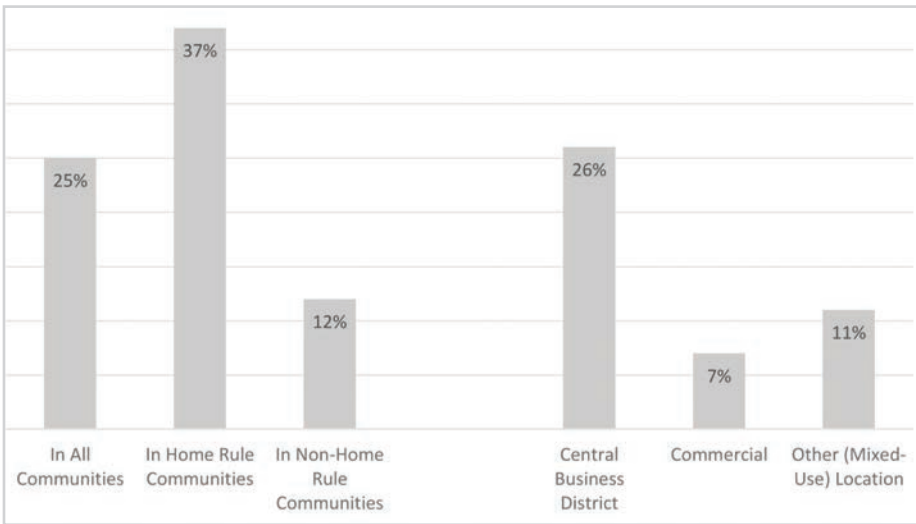
FINDING 4:

TAX INCREMENT FINANCING DISTRICTS THAT ENCOMPASS CENTRAL BUSINESS DISTRICTS WERE RATED PARTICULARLY EFFECTIVE AMONG RESPONDENTS

Survey respondents could classify TIF districts as predominantly oriented toward (a) a central business district, (b) commercial, (c) industrial, (d) housing or (e) mixed-use. Those in central business districts were found to be most prevalent, accounting for 47% (27 of 57) of TIFs, well above the number classified as commercial (23%, 13 of 57) and mixed-use (16%, 9 of 57). It is important to note, however, that nearly all of the mixed-use districts have a commercial component. Commercial development—whether in the central business district or elsewhere—appears to be a necessary component of a taxing district’s creation.

Moreover, TIFs involving central business districts are rated more highly than those in other areas. Of the 27 examples reported in the survey, 26% (7 of 27) are rated as “extremely effective” and another 26% as “somewhat effective.” Conversely, of those oriented toward commercial use, just 7% (1 of 13) are rated as “extremely effective,” with 46% (6 of 13) considered “somewhat effective.” However, the projects in central business districts appear to be slightly smaller in scale; the median total planned improvements of TIF projects in central business districts was \$25 million, and the median of total planned improvements for all TIF projects reported was \$26.7 million.

FIGURE 1
PERCENT OF TAX INCREMENT FINANCING PROJECTS WITH WHICH MUNICIPAL OFFICIALS ARE “EXTREMELY SATISFIED” BY LOCATION AND PROJECT TYPE



Few respondents reported having created TIF districts primarily for industrial and housing-related purposes. In fact, only two districts fell into each of these categories. The small sample makes it impossible to evaluate their effectiveness, but such low prevalence suggests planners are reluctant to harness this form of financing solely for these types of projects. Municipalities seeking to encourage this type of development through TIF apparently feel a need to add commercial use into the mix.

FINDING 5:**OUTSIDE OF TAX INCREMENT FINANCING, QUALITY OF LIFE PROGRAMS ARE THE MOST WIDELY USED STRATEGY TO FOSTER ECONOMIC DEVELOPMENT**

Due to the documented problems associated with TIF, interview respondents expressed eagerness to learn about other economic development strategies, including those oriented toward quality of life. Nearly two-thirds (64%) of the respondents reported having at least one program unrelated to TIF that had quality of life improvement as its primary goal. (As noted earlier, this may be a somewhat oversimplified assessment due to the need for respondents to select one of four possible responses, job creation, job retention, tax base enhancement or quality of life, even when projects had multiple goals.) Nevertheless, it appears that quality of life goals are often subservient to other goals, particularly in non-home rule communities. For example, 32% (7 of 22) of home rule municipalities surveyed said “quality of life” was their highest priority for economic development efforts, compared to 13% (3 of 23) of non-home rule municipalities.

The interviews also illuminated how quality of life programs work in practice. The interviewee from Batavia noted the community’s downtown streetscape program is designed to attract more people to the area and provide the area with a more distinctive artistic element. Investments in a pedestrian-friendly zone and multiple sidewalk and street enhancements have helped achieve these goals, which have added to the area’s role as an arts and events center and has, in turn, attracted a large number of residents and visitors. There has also been a “multiplier effect”: people visiting the zone for one purpose, then spending time and money on other activities, such as shopping or eating. Art created in the zone can now be found around town, improving the entire community’s culture and “feel.” When asked how the city regarded its initial investment’s success, administrators readily pointed to a six-story mixed-use facility that will include apartments, commercial space and public parking on formerly underutilized property. When completed, this facility will be the largest project in the redevelopment zone.

A second example is Crystal Lake’s Three Oaks Recreation Area (Three Oaks), which was the product of a \$15 million investment by the city that transformed a vacant gravel pit into a public amenity that includes a public beach, a splash pad, nature trails, fishing, a restaurant and other attractions. The city pursued the project during the Great Recession, thus securing attractive pricing from

contractors. Three Oaks, which has spurred a variety of nearby redevelopment projects, has consistently attracted residents and visitors interested in boating, fishing and swimming areas as well as public events. As in the Batavia redevelopment, Three Oaks visitors patronize nearby establishments, creating the “multiplier effect.”

A third example is Highland Park’s Ravinia business district’s special service area (SSA). Business and municipal leaders supported the SSA’s creation to attract traffic from the nearby Ravinia Festival, which is known for its 3,400-seat pavilion, lawns and amenities that serve large crowds during major musical performances. Many individuals who visited the festival were unaware of the nearby Ravinia business district. To rectify this situation, the SSA provides an annual levy of \$90,000 used to market the zone’s amenities and fund special events that attract residents and visitors who, in turn, support its restaurants and other businesses. Municipal leaders stated that financing from the service area has given their community a high degree of marketing exposure. Recently, a microbrewery and small boutique hotel have expressed interest in doing business in the district.

FINDING 6:

PROGRAMS TO ENHANCE THE TAX BASE ARE THE SECOND MOST PERVASIVE ECONOMIC DEVELOPMENT STRATEGY EMPLOYED BY THE SURVEYED COMMUNITIES, BEHIND ONLY TAX INCREMENT FINANCING

Almost two-thirds of respondents (64%) reported having at least one tax base enhancement program. A common feature among many such programs is sales tax sharing with local businesses. These programs are also rated highly effective.

Several examples illustrate the importance being ascribed to this goal. Highland Park has entered into sales tax sharing agreements with larger sales-tax-producing vendors. Although the program has mostly been used with car dealerships making major investments in their properties, other businesses have benefitted as well. Each potential agreement is considered on a case-by-case basis with the percentage of sales tax shared varying by the investment being contemplated. Administrators see the program as a way to attract large businesses, including those redeveloping expansive properties that might otherwise remain underutilized. Crystal Lake reports having a similar program where sales tax is shared but only for “large ticket” retailers, including

car dealerships. A car dealership that makes significant improvements to its property can receive 50% of the sales tax it generates over a 10-year period or a maximum of \$1,000,000, whichever comes first.

Mundelein has a Business Incentive Grant (BIG) program for small businesses, who can apply annually for \$125,000 allocated from the municipal budget for property improvements. The grant has a 50/50 match expectation. Local businesses can propose up to \$50,000 in property improvements and receive up to \$25,000 through the program. However, most grants are of a lesser amount, typically in the \$10,000 to \$25,000 range. A local administrator noted that local businesses have been able to use BIG funds to “pay for things that are not as sexy such as wiring, heating and piping.” An underlying motive is to foster improvements that will raise property values, thereby increasing property tax collections over the long term.

Grayslake reports having a similar program focused on its central business area—the Downtown Business District Enhancement Project—which makes funding available for local businesses making improvements to their properties. The project has helped revitalize much of its downtown and encourages compliance with the village’s architectural standards. The village board reviews proposals on a case-by-case basis and has final discretion over the grants awarded. The typical award usually covers 10% to 12% of the total project cost. Funding is dispersed *after* improvements have been completed and the building is deemed compliant with the village’s architectural standards.

Homewood reports having a sales-tax-sharing program, but it has had mixed results. One of its goals was to redevelop a shopping plaza that had been largely vacant. Retailers were offered 50% of sales tax generated over a 15-year period or a total incentive of \$3.5 million, whichever came first. Administrators cited a decline in retail sales and a lack of participation by other taxing bodies having jurisdiction over the property for the less-than-stellar performance.

Of course, a great deal of interplay occurs between the goals of creating and retaining jobs and expanding the tax base. For example, when discussing job creation and retention success, the Mundelein interviewee noted that by providing incentives to small businesses for property improvements, the BIG program helps keep jobs in their communities while enhancing the tax base over the long term. Communities with sales-tax-sharing programs involving large retailers consistently point to the benefits of retaining businesses to support the tax base—and lessening their incentive to relocate, which would

result in job losses. This belief was expressed in the Crystal Lake, Highland Park and Libertyville interviews.

This is not to suggest that all programs are deemed successful. Bedford Park's job creation and retention program is one such example. The village offered companies a financial incentive (\$5,000 per new hire) for businesses in the municipality that hire village residents in response to a posted job vacancy. The incentive was capped at 10 people per company per two years. Companies were to notify the village when job openings occurred. Administrators reported the program did not work as well as hoped, in part due to companies and residents not taking advantage of the program to the desired extent.

Other strategies leverage local strengths that cannot easily be replicated elsewhere. Batavia's municipal government, for example, owns its electric utility. Local administrators believe they have been able to keep a large manufacturer in the municipality by offering a long-term power contract with reduced rates. The city is able to provide these attractive rates due to the manufacturer's status as a high-demand and steady user of electricity, which allows the city to keep unit costs low when purchasing electricity from its supplier.

Although many communities have experimented with various strategies, the evidence suggests that TIF remains a stalwart, and it is often a default strategy, particularly when it comes to stimulating development in central business districts and commercial properties. Nevertheless, programs that employ other means to bolster the quality of life and enhance the tax base are quite pervasive. Although more analysis is needed to understand such programs' effectiveness, the benefits of having elected officials and administrators to share their experiences, learn from their neighbors, and experiment with new tactics will make economic development highly dynamic for years to come.

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SOCIAL IDENTITIES AND THE ILLINOIS PENSION PROBLEM: ROLES OF POLITICS, GEOGRAPHY AND MEDIA

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This article explores attitudes toward the Illinois pension system and analyzes the impact of demographic and geographic characteristics on information intake and beliefs regarding pension management and funding. Using data from a statewide telephone poll of 1,000 registered voters, as well as other sources, it evaluates some of the complex social factors that influence views on this issue. The results show that Chicagoans regard the severity of the problems facing the Chicago and Illinois pension systems as more substantial than other Illinois residents do, while gender, political and labor identities also correlate with particular views.

INTRODUCTION

Over the last several years, Illinois and hundreds of its municipalities, including the City of Chicago, have struggled under the heavy burden of paying the costs for long-underfunded public employee pension programs. That some of the programs are underfunded is not in dispute; however, the magnitude and nature of the pension crisis is a matter of considerable debate among political officeholders and activists on both sides of the issue.

Whether the pension system is in crisis, whether it is bankrupting the state and whether it could be fully funded under a new policy regime are hypothetical questions that lack conclusive answers. There is little consensus regarding the pension problem, with activist media on both sides using the word “stealing” to describe the actions of, alternately, public employees (Andrzejewski, 2011) or the state (Rosenfeld, 2013). Illinois residents’ beliefs about the situation and

potential ways of resolving it, however, may shed light on the role of social identity and identity-related media use in how these residents have come to understand the pension issue and its public policy implications.

Recent research has identified effects among social identity, media and information use, and beliefs about contested issues that extend beyond what would typically be attributed to motivated reasoning (Braman, Kahan, & Grimmelmann, 2005; Hindman, 2009; Veenstra, Hossain, & Lyons, 2014). This model of social identity influence suggests that group affiliation and norm adherence further motivate the expression of particular beliefs about contested, identity-salient topics. The pension issue in Illinois is one such topic, with significant implications for vote choice, and ultimately, for public policy decisions. Given the extent to which this issue pits various classes of stakeholders against one another, it also suggests that the activation of a number of salient social identities—political, labor-related and geographic—might influence the mode of processing and ultimately incorporating relevant information into a belief structure. This study examines how those social identities might simultaneously affect an individual's intake of information and formation of beliefs related to the pension topic.

LITERATURE REVIEW

There is already an extensive body of literature on the politics of public pension programs, as well as the impacts of social identity, union membership and geographic location on these programs. Some of the most notable research on these themes is unpacked below, in separate sections.

PUBLIC EMPLOYEE PENSION PROGRAMS

Although political and legal battles have, in recent years, brought the pension problem in Illinois to the fore, state and local budgetary concerns associated with financing employees' retirement benefits date back decades. The number and size of these programs grew dramatically during the 1970s (Weber & Perlman, 1984), coinciding with a period of stagnant real growth in Gross Domestic Product (GDP) and tax receipts (Zarnowitz & Moore, 1977). Indeed, more than four decades ago, Bahl and Jump (1974) were already arguing that "fiscal economists and other scholars of state and local finance have devoted too little attention to the budgetary implications of public employee retirement programs" (p. 490).

The largely uncontrolled growth of these plans may be accounted for by the fact that the political incentives driving them functioned as a one-way ratchet. Democrats in state and local governments have ideological reasons for supporting generous employee compensation, but are also practically and politically motivated to ensure contentment of union members, who are more likely to vote than non-members (Thom & Randazzo, 2015). However, their Republican colleagues have also been historically incentivized to support these programs, given their ability to minimize a potential Democratic advantage with spending that does not compromise the current budget (Anzia & Moe, 2017). For all lawmakers, public employee pensions permit the immediate creation of benefits that will not be paid until relatively distant future years. For their part, unions have engaged with the issue of pension promotion, not only through collective bargaining, but also by supporting pension-friendly candidates (Thom & Randazzo, 2015).

Political interest in these programs underwent a sharp renewal subsequent to the economic crash of 2008. While many state and local governments had failed to fully fund their programs, they were not forced to address the significant associated fiscal problems until their underlying assets abruptly and considerably decreased in value. Some state plans, writ large, were fully funded in 2001, but that level had dropped to 86% by 2007, and then to 65% in 2010, although state-by-state funding levels were not predicated on party control of government or density of union membership (Coggburn & Kearney, 2010). While it may be the case that “the normal politics of public pension benefits is bipartisan” (Anzia & Moe, 2017, p. 45), such politics have been upended throughout the 2010s, especially given the profound polarization concerning labor issues (Jochim & Jones, 2013).

Due to its historically extensive underfunding, Illinois has seen public employee pensions at the heart of an ongoing budget battle (Zorn, 2017) as it has worked its way into the worst funding position of any state (Pew Charitable Trusts, 2015). As of 2013, Illinois was funding only 39% of its required actuarial contribution, thereby earning it a grade of “F” from the Urban Institute (n.d.) on its funding ratio. By some measures, the City of Chicago’s municipal pension situation is as bad as that of the state as a whole, due to considerable underfunding of its pension obligations even before the 2008 stock market crash; Chicago ranks among the nation’s least diligent large cities (Pew Charitable Trusts, 2013).

As the pension issue and its complex nature became an increasingly important part of the news and political agendas in Illinois, citizens might be expected

to seek guidance from trusted leaders that they see as connected to the issue, which would likely include political and labor elites. As such, pension-related social identities may direct people to develop pension-related beliefs that conform to those prescribed by group norms.

SOCIAL IDENTITY INFLUENCE

Recently, several distinct lines of research have begun to examine the influence of social group membership on the beliefs and knowledge held by group members. Specifically, studies examining the belief gap hypothesis (Hindman, 2009; Veenstra, Hossain et al., 2014) and the cultural cognition model (Braman et al., 2005; Kahan, Braman, Slovic, Gastil, & Cohen, 2009) have considered the effects of political ideology and partisanship on beliefs and knowledge about a variety of contested, but factual, topics.

Each of these approaches builds on the concepts of biased processing (Cohen, 2003) and identity bolstering (Kahan, 2013) to evaluate the influence of a particular social attribute on beliefs or knowledge about a particular topic. However, individuals' connections to social groups may frequently be in conflict within the context of any given contested issue (Barkan, 2014; Roccas & Brewer, 2002). This can be explicit, as in the case of a Catholic Democrat seeking guidance related to reproductive rights. It can also assume a more latent form, if a given identity characteristic lacks the strong group structure that characterizes political parties or religions.

Models of social identity influence posit that individuals who acknowledge and value group belonging are influenced toward beliefs supported by group norms via the transfer of attitudes from elites, within general membership, and through communication channels (Huddy, 2013). This notion of elite influence on group members squares with well-established patterns in the development of public opinion (Zaller, 1992). However, the process whereby identity influences beliefs appears to be highly idiosyncratic. Hindman (2009) found different influences on the seemingly related beliefs that global warming is occurring and that it is primarily caused by human activity. A subsequent study found considerably distinctive patterns of effects on a handful of "culture war" science topics (Veenstra, Hossain, et al., 2014). Narrowly defined beliefs about the benefits and risks of vaccines (Veenstra, Jurkowski et al., 2014), and the risks fracking presents to the environment and individuals (Veenstra, Lyons, & Fowler-Dawson, 2016) have also shown disparate patterns of influence on apparently similar belief outcomes.

In the case of the fervently contested pension issue, and specifically, the belief that public employee pensions are “bankrupting” Illinois and the City of Chicago, political and labor identities have special relevance. Political party membership and ideological affiliation are particularly powerful social identities that exert a profound influence on individuals’ attitudes and beliefs (Conover & Feldman, 1981). Union membership engenders a similarly powerful identity (Cregan, Bartram, & Stanton, 2009; C. Kelly & Kelly, 1994; J. Kelly, 1998), with elite preferences that are likely to mirror those attributed to leaders in the Democratic Party (Anzia & Moe, 2017). Given the localized nature of the municipal pension problem, place-based identity should also be expected to be highly relevant (Stedman, 2002).

UNION MEMBERSHIP AS SOCIAL IDENTITY

Studies of union members’ behavior suggest that, like political partisanship, union-identity influence is driven by leadership (e.g., Fullagar, McCoy, & Shull, 1992), via attitudes of solidarity (Cregan et al., 2009; Twigg, Fuller, & Hester, 2008). Indeed, union organizations employ leadership strategies and group-based mobilization to promote collective, value-oriented socialization instead of individual orientations (Cregan et al., 2009; Shamir, House, & Arthur, 1993). So, through mutual struggles in the workplace and “inspirational leadership,” union workers cultivate social identification with the union, which, in turn, solidifies collective attitudes and behavior (Cregan et al., 2009, pp. 701-702; see also J. Kelly, 1998).

Social identity theory proposes that, to boost their self-esteem, individuals associate with groups they perceive as distinct from others (Tajfel & Turner, 1986). Kelly (1998), and Cregan et al. (2009) suggest that workers’ involvement with workplace struggles, against perceived injustices and in the context of management disputes, strengthens this identity, pursuant to the process of group distinction, where “‘we’ is defined in opposition to ‘them’” (Badigannavar & Kelly, 2005, p. 527; Cregan et al., 2009, p. 704). Logically, others make sense of union identity as deriving from the organizational space in which members work and associate. Such communal interaction builds collective identity (e.g., Yu, 2014).

Because “social identity plays a major role in determining the strength of collectivism” (Cregan et al., 2009, p. 704; C. Kelly & Kelly, 1994; Metochi, 2002), union-identifiers would be more likely to subscribe to beliefs that are more common to the group and serve the group’s interests (e.g., unions are not

bankrupting the state). We suppose that, in addition to collectivist attitudes and behaviors, union membership also results in adherence to shared beliefs about issues that may affect unions.

PLACE-BASED IDENTITY

Identities are derived from and shaped by the contexts in which individuals find themselves, including geography (Adams & Marshall, 1996). Mass communication scholarship has demonstrated the existence of relationships among place-based orientations, media exposure and democratic outcomes, such as knowledge and participation. Media are particularly important to this matrix, because place-based identity development is open-ended and fraught with ambivalence (Paasi, 1986). Local news, in particular, helps to shape public opinion within a socially circumscribed place, and local media channels can indirectly influence who will be regarded as a leader, relative to one's place-based identity (Paasi, 2002). McLeod and his colleagues (1996) explored this role of the media in relation to dimensions of community integration, and determined that psychological attachment, discussion networks, city vs. group orientation, localism vs. cosmopolitanism and city vs. neighborhood orientation all contribute to the strength of media influence. Research along this line has shown strong links among identification with one's community, consumption of local media and civic engagement (McLeod et al., 1996; Paek, Yoon, & Shah, 2005).

In the present case, the split between Chicago, the third-largest city in the United States, and the mostly rural remainder of Illinois may promote the development of place-based identification that biases residents' beliefs in favor of local contexts and norms. Such geographic areas may act similarly in aligning norms and making salient different kinds of media and information sources, resulting in disparate beliefs about objective realities like the pension plans in the City of Chicago and at the state level.

Irrespective of the role and effects of national media, the links between local media and place-based identity are strong (Grindle, 2007). Local media, including local newspapers, radio and television, function as storytellers in neighborhoods (Gürses, 2015), providing a shared field of experience that helps to reinforce local identity, partly because of their ability to cover stories related to that identity more thoroughly than national media outlets can (Mahrt, 2008).

HYPOTHESES AND RESEARCH QUESTIONS

Though we have good reason to expect results indicating that political and labor identities are related to beliefs expressed about the Illinois and the City of Chicago pension systems, we currently lack a clear understanding of the mode by which demographic and geographic identities might influence those beliefs. Thus, this analysis begins with two exploratory research questions and two hypotheses, related to a range of potentially relevant social identities.

Research Question 1. What demographic characteristics predict the belief that public employee pensions are bankrupting Illinois and Chicago?

Research Question 2. Do such beliefs differ among residents of Chicago, the Chicago suburbs and the rest of Illinois?

Hypothesis 1. Union members are less likely than non-members to believe that public employee pensions are bankrupting Illinois and Chicago.

Hypothesis 2. The belief that pensions are bankrupting Illinois and Chicago is related to (a) Republican partisanship and (b) conservative political ideology.

Following on recent social identity research, we expect identity-relevant media to track with the influence of the identities themselves, by providing a channel for the transmission of group norms from leaders to members.

Research Question 3. How does the use of (a) local newspapers, (b) local television news and (c) social media for news relate to beliefs that pensions are bankrupting Illinois and Chicago?

Hypothesis 3. (a) The use of conservative media is related to greater belief that pensions are bankrupting Illinois and Chicago than the use of liberal media.

Regarding place-based identity, we propose research questions about the relevance of local media and highly egocentric social media to pension beliefs. Each of these research questions and hypotheses focuses on a different dimension of the deepening pension issues facing the City of Chicago and the state.

METHODS

The hypotheses are evaluated using data collected by the Paul Simon Public Policy Institute in its annual Illinois-wide poll. Data were collected via live telephone interviews with 1,000 registered voters, from February 28 to March 10, 2015. A Spanish-language version of the questionnaire and a Spanish-speaking interviewer were made available, as needed. Respondents using cellphones comprised 30.7% of the sample. Participants were drawn: 20% from the City of Chicago, 50% from the remainder of Cook County and the five “collar” counties (DuPage, Kane, Lake, McHenry and Will), and 30% from the remainder of the state. The sample was 51.3% female and 74.2% white, with a median education level of an associate’s degree, and a mean age of 58.1 ($SD = 17.4$; Paul Simon Public Policy Institute, 2015).

VARIABLE CONSTRUCTION

The predictive model uses variables grouped into the following three categories:

1. POLITICAL AND UNION AFFILIATIONS

Two political orientations were measured with single items. Partisanship was measured by asking respondents to place themselves on a scale running from strong Democrat (1) to strong Republican (7). Those who indicated they belonged to another party were placed at the midpoint (4) of this two-party partisanship scale ($M = 3.55$, $SD = 1.96$). Political ideology was measured by asking respondents to place themselves on a scale from very liberal (1) to very conservative (5; $M = 3.05$, $SD = 1.22$). Another item asked respondents whether they were members of a labor union (15.9% union members). Social identity is often measured by binary group membership or by degree of identification with a group (such as our partisan identity scale; Greene, 1999), but is also sometimes gauged using more fine-grained multi-item measures (Huddy, Mason, & Aarøe, 2015). This study’s reliance on secondary analysis limited these variables to single-item measures.

2. MEDIA USE

Five types of media use were measured, using items asking respondents how many days in a typical week they used the following media: social network sites to get news or news headlines ($M = 2.46$, $SD = 3.10$); local newspapers, including online ($M = 3.49$, $SD = 2.90$); local television news, including online

($M = 4.89$, $SD = 2.67$); conservative online political commentary ($M = 1.36$, $SD = 2.21$); and liberal online political commentary ($M = 1.38$, $SD = 2.22$).

3. BELIEFS ABOUT PENSIONS

Two beliefs about the effects of pension underfunding were measured with single items asking respondents whether they agreed or disagreed with the statements, “Pensions for public employees are bankrupting the state” (54.5% agreed), and “Pensions for public employees are bankrupting the city of Chicago” (55.8% agreed). These two variables were strongly correlated ($r = .81$); however, as this study aimed to identify minor differences between measures that seemed to be tapping similar cognitive concepts, each was modeled as a dependent variable in an individual analysis.

RESULTS

Two identical analyses of covariance models were used to test influences on the two outcome beliefs. Geographic area (i.e., City of Chicago, Chicago suburbs, downstate Illinois) and union membership were included as factors, with nine variables included as covariates: age, race (coded as white), gender (coded as female), education, political partisanship (coded as Republican), political ideology (coded as conservative), social media use for news, conservative online media use and liberal online media use.¹ Because of missing values on some variables, total usable N was 649 for the Illinois model and 588 for the Chicago model.

To establish some context for the pension dispute, which has received little attention in public opinion scholarship, our first research question asks what demographic characteristics predict beliefs about Illinois and Chicago pensions. Gender, coded as female, negatively predicted both beliefs—that is, women were less likely to believe that pensions were bankrupting the state and city (Illinois, $p < .001$; Chicago, $p = .001$).² Race, coded as white, positively predicted both beliefs (Illinois, $p < .001$; Chicago, $p < .001$).³ Age positively predicted the belief that pensions were bankrupting Chicago ($p = .010$), but was not a significant predictor of beliefs about Illinois pensions.⁴

The second research question asked how pension beliefs were distributed across three differentiable regions of the state: the City of Chicago, the Chicago suburbs and “downstate.” The main effect of region was not significant in either model (Illinois, $p = .064$; Chicago, $p = .076$).⁵ However, similar patterns of differences

in *estimated marginal means* (the expected mean, if all other variables except the variable under consideration are held at their overall means, in the sample) emerged in both models, with Chicago residents expressing greater belief that pensions were bankrupting the state and city than did suburbanites or downstate residents (Table 1).

TABLE 1

ESTIMATED MARGINAL MEANS FOR BELIEF THAT PENSIONS ARE “BANKRUPTING” THE STATE OR CITY: PERCENT RESPONDING “YES”

	PLACE OF RESIDENCE				UNION AFFILIATION		
	City	Suburbs	Downstate	Statistically Significant	Union	Non-Union	Statistically Significant
Are pensions bankrupting Illinois?	57%	49%	44%	Yes	38%	61%	Yes
Are pensions bankrupting Chicago?	59%	49%	47%	No	40%	63%	Yes

Note: Marginal means, shown above, measure the expected result if all other variables except the variable under consideration are held at their means. For example, the percentage response of city dwellers to the question, “Are pensions bankrupting the city” is the expected level, if the degree of partisanship, union membership and other variables are at the statewide mean. This allows for a comparison of the differences across populations, while controlling for confounding factors.

Our first two hypotheses proposed that, while union membership would be related to relatively lower belief that pensions were bankrupting the state and city, Republican partisanship and conservative ideology would be related to greater expression of such beliefs. Union members were less likely to hold that belief for both Illinois ($p < .001$) and Chicago ($p < .001$).⁶ Republican partisanship was related to greater belief (Illinois, $p = .043$; Chicago, $p = .007$).⁷ However, conservative ideology was not significantly related to greater or lesser belief (Illinois, $p = .084$; Chicago, $p = .239$). Our third hypothesis proposed that partisan media relationships would track with the partisanship findings. Hypothesis 3a and Hypothesis 3b were both supported, as conservative online media use was related to greater bankruptcy belief (Illinois, $p = .010$; Chicago, $p = .013$), while liberal online media use was related to lesser expression of such

beliefs (Illinois: $p = .022$; Chicago: $p = .022$).⁸ These results are summarized in Table 2.

TABLE 2

PERCENTAGE OF POPULATION BELIEVING THAT PENSIONS ARE BANKRUPTING ILLINOIS OR THE CITY OF CHICAGO

	IDEOLOGY					PARTY AFFILIATION						
	Liberal-Conservative					Democrat-Republican						
	1	2	3	4	5	1	2	3	4	5	6	7
<i>Estimated marginal means for each group*</i>												
Bankrupting Illinois	51%	46%	50%	56%	55%	40%	60%	38%	51%	60%	50%	61%
Bankrupting Chicago	57%	44%	52%	59%	56%	40%	58%	46%	55%	62%	51%	64%
<i>Raw percentages for each group**</i>												
Bankrupting Illinois	43%	47%	53%	65%	67%	38%	63%	38%	59%	73%	59%	73%
Bankrupting Chicago	50%	45%	54%	70%	65%	36%	61%	42%	64%	77%	64%	77%

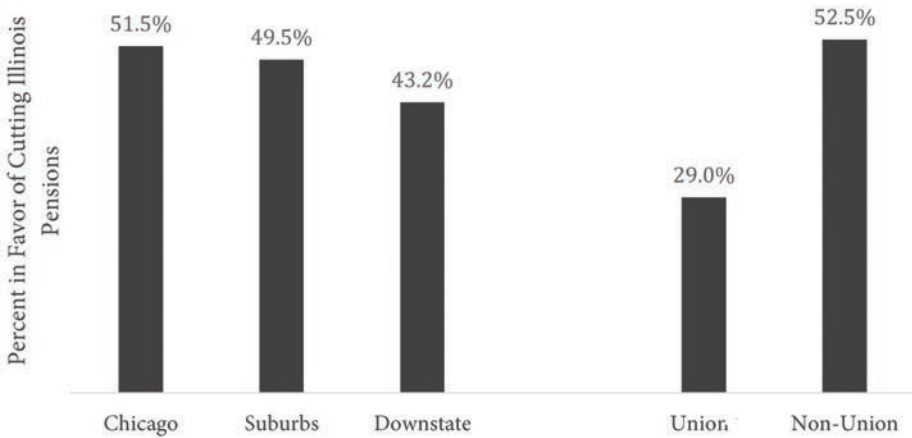
Notes: *Cell entries are estimated marginal means for each group. These estimates hold demographic variables constant to identify the unique influence of group variables. **Cell entries are raw percentages for each group.

Finally, our third research question explored the role of local television, local newspapers and social media news-seeking. Two of these were significantly and negatively associated with the belief that pensions are bankrupting Illinois (local TV, $p = .015$; social media, $p = .038$).⁹ However, none of the three were significantly associated with the belief that pensions are bankrupting the City of Chicago. Interpreted broadly, the results support Hypothesis 1 and Hypothesis 2a, but not Hypothesis 2b.

It is also instructive to review the different responses categorized by place of residence and union affiliation, without holding constant the variables mentioned above. Table 1 shows the percentage of Illinoisans who support cutting pensions according to place of residence and union affiliation in 2015, 2016 and 2017. The lower part of this table shows the margin of difference between support and opposition to cutting pensions from 2015 to 2017, with

negative numbers indicating that opposition exceeds support. Figure 1 shows results from 2017 in graphical form. The data in these illustrations support the earlier conclusion that downstate and union members tend to be far more skeptical of the idea that cutting pensions will resolve financial problems facing pension systems than do others in the state. In Chicago, 51.5% support cutting pensions, compared with 49.5% in the suburbs and 43.2% downstate.

FIGURE 1
SUPPORT FOR CUTTING PENSIONS IN ILLINOIS
BY REGION AND UNION MEMBERSHIP (2017)



Residents of metropolitan Chicago—both in the city and suburbs—consistently rate the state’s pension problems as being more severe than those in downstate areas. An even wider gap exists between union and non-union workers.

TABLE 3

PERCENT IN FAVOR OF AND IN OPPOSITION TO CUTS IN STATE SPENDING ON PENSION BENEFITS FOR STATE WORKERS' RETIREMENT

	2015		2016		2017	
	Attitude Toward Cuts in State Spending on Pension Benefits for State Workers' Retirement					
	Favor	Oppose	Favor	Oppose	Favor	Oppose
Chicago	48.0%	47.5%	53.0%	37.5%	49.0%	46.0%
Suburbs	46.6%	45.2%	50.4%	43.8%	45.8%	46.8%
Downstate	38.0%	56.7%	44.7%	47.0%	40.3%	54.0%
Union	28.4%	66.7%	37.1%	56.3%	26.0%	68.0%
Non-Union	49.0%	44.8%	53.1%	39.6%	49.4%	44.4%
	Margin of Difference between Support for and Opposition to Cutting Pensions					
Chicago	0.5%		15.5%		3.0%	
Suburbs	1.4%		6.6%		-1.0%	
Downstate	-18.3%		-2.3%		-13.7%	
Union	-38.3%		-19.2%		-42.0%	
Non-Union	4.2%		13.5%		5.0%	

Note: Across the three periods considered, individuals living downstate and those affiliated with a union consistently expressed less support for the idea that pensions should be cut. A negative margin of difference indicates that opposition exceeds support for the proposition that pensions should be reduced. In 2016, the union membership question was for the household rather than the individual.

CONCLUSIONS AND DISCUSSION

This study sought to understand social identity and media influences on beliefs that public employee pensions are “bankrupting” Illinois and the City of Chicago, and to examine differences between the two. Although these two beliefs are likely to be close to each other in a given individual’s cognitive network, and therefore likely to share many of the same cognitive connections (e.g., thoughts about public employees, the history of public corruption in Illinois and Chicago, one’s opinions of the governor and mayor), demographic and media-use differences emerge, providing a way to distinguish between the two concepts. Most notably, local television and social media news use only

play a significant role in predicting beliefs about the Illinois pension system, failing to significantly predict beliefs about the City of Chicago pension system; age operates the same way, but in the opposite direction. This suggests key differences in the information environment around these two related stories, perhaps owing to the varying relevance of the Chicago pension story relative to other media markets around the state.

That Chicago residents diverge from the rest of the state on these beliefs, but more so on the Chicago-specific belief, suggests that there may be a cognitive interactive effect at play. Both pension systems have direct relevance for this group of people, and their thinking about these two problems may compound itself to make them see each as worse than other Illinoisans do. Another possible explanation is that they are more acutely aware of the dangers of underfunded pensions and the potential implications for the state of Illinois, based on current issues that the City of Chicago is experiencing. Moody's downgraded the city's debt rating in February 2015, for example.

Not surprisingly, union identity is highly relevant to pension beliefs. Individuals who belong to labor unions are significantly more likely than other Illinoisans to believe that pensions are not bankrupting the state.¹⁰ This belief reflects the collective, value-oriented socialization that unions attempt to foster, via mobilization, at the expense of individual orientation. Our findings suggest that unions are already highly mobilized in this way around the pension issue.

As expected, Republican partisanship, though not conservative ideology, predicted beliefs that pensions were bankrupting the state. Moreover, partisan media were found to reinforce this position. This fits with findings of previous literature (Veenstra et al., 2014) examining partisanship and ideology as social identities, and their influence over beliefs about objective realities that have nonetheless become contested along deeply political lines. Similarly, we find that party plays a stronger role than ideology, perhaps because the issue is more topical and policy-oriented than representative of a deeply ingrained worldview. The findings also support the model of belief formation that flows from elites, through largely internal communication channels, to rank and file members. One limitation of this study is a lack of available data describing local policy coverage, especially in state and local partisan media.

As with any single study, there are a number of additional limitations to consider. First, social identity is sometimes difficult to operationalize and measure. Specifically, our study more accurately measures union membership

than social identity, per se. The context for local media sources is also somewhat murky. Our geographic categories are not mutually exclusive, when it comes to individuals' complex senses of self—people can express multiple place-based identities. Many people live in the suburbs, but work in the city or vice-versa. Relocation is another factor complicating place-based identity. Over a lifetime, an individual might live in all three places, and feel different levels of attachment to each of them.

The broad media exposure measures typical to public opinion surveys are also rather blunt. For instance, in terms of actual content, there is no clear distinction between local and national media. Additionally, social media further blur the lines between local and national media by spreading content through social networks unconstrained by geographical boundaries. Little research attention has been paid to issue agendas in local media, or local politics in social media, but the reach of these stories and the impact of actual events may play a role in geographically circumscribing attitudes. For example, the Illinois Supreme Court ruling that overturned a law that unconstitutionally cut existing pensions was noted in the *Chicago Tribune* as threatening “a similar law [Chicago] Mayor Rahm Emanuel pushed through to shore up two of the four city worker retirement funds” (Pearson & Geiger, 2015). However, the downstate *Belleville News-Democrat* (“Illinois Supreme Court,” 2015) did not mention municipal pensions at all in its report on the ruling.

The manner in which the survey questions are worded might also affect the results. For example, the term “bankrupting” may be problematic due to its semantic connotations and unclear meaning in the minds of some respondents (the state government cannot declare bankruptcy in a way similar to private corporations). Respondents might believe that pensions are a serious problem, but not bankrupting the state. Other respondents might believe that pensions are merely one variable out of many responsible for city and state financial problems. Future studies could build upon our findings by addressing the identity, media and belief measurement shortcomings mentioned previously, by comparing beliefs about pension struggles in states and municipalities around the nation, and by conducting an analysis of the actual content in local news. This would necessarily involve expanding from our narrow focus on “bankrupting” to a broader range of pension-related concerns.

Future studies of pension attitudes in the state should also proceed under the assumption that these attitudes have crystallized (Bishop, 1990). From 2015 to 2017, the Simon Institute fielded another question in its statewide survey,

asking in general about support for pension cuts. The basic pattern of our findings—more hostility to pensions in Chicago than in the rest of the state, and less hostility from union members—holds for this measure across this time period. Post-2015 surveys do not measure attitudes about the City of Chicago’s municipal pensions. In each year, Chicagoans offered net support to cutting pensions, and the suburbs did so in 2015 and 2016. At the same time, Illinoisans outside of metropolitan Chicago were, on the whole, opposed to cutting pensions in all three years (see Table 3). While the additional data cannot speak to attitudes about Chicago municipal pensions, seeing the same geographic pattern of state pension hostility is suggestive of a broader trend. As such, additional media exposure and coverage of developments (such as subsequent years’ budget battles) may not result in significant changes in public opinion. It is likely that, with attitudes falling consistently along these lines, a major policy shift or exogenous shock to the system would be required to produce change (Collingwood, Lajevardi, & Oskooii, forthcoming).

Although these attitudes appear fairly robust, our findings illustrate the potentially crosscutting challenges for politicians and policymakers, as the more Democratic and union-friendly City of Chicago nonetheless shows greater hostility to pensions. The issue may remain combustible in Chicago while continuing to fly under the radar in the many other municipalities facing their own shortfalls.

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FOOTNOTES

¹ The original analyses included income, which was not a significant predictor in either model. Because the variable had nearly 20% missing cases, considerably reducing the statistical power of the models, it was omitted from the final analyses.

² Illinois, $F(1, 634) = 13.37$, $p < .001$; Chicago, $F(1, 573) = 11.14$, $p = .001$

³ Illinois, $F(1, 634) = 14.07$, $p < .001$; Chicago, $F(1, 573) = 21.53$, $p < .001$

⁴ $F(1, 573) = 6.72$, $p = .010$

⁵ Illinois, $F(2, 634) = 2.76$, $p = .064$; Chicago, $F(2, 573) = 2.59$, $p = .076$

⁶ Illinois, ($F(1, 634) = 21.43$, $p < .001$); Chicago, ($F(1, 573) = 20.39$, $p < .001$)

⁷ Illinois, $F(1, 634) = 4.10$, $p = .043$; Chicago, $F(1, 573) = 7.39$, $p = .007$

⁸ Conservative beliefs: Illinois, $F(1, 634) = 6.63$, $p = .010$; Chicago, $F(1, 573) = 6.23$, $p = .013$; Liberal beliefs: Illinois, $F(1, 634) = 5.25$, $p = .022$; Chicago, $F(1, 573) = 5.31$, $p = .022$

⁹ Local TV: $p = .015$; Social media: $p = .038$

¹⁰ In terms of understanding the cognitive networks from which we formulate beliefs, the geographic, union and partisan associations that we have found to overlap shed more light on the complex nature of social identity influences and how they might be derived through analysis. In terms of public policy, they help those hoping to mobilize opinion on the pension situations to understand the origins of beliefs among different classes of stakeholders.

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INSIGHTS INTO RISING PENSION COSTS IN ILLINOIS MUNICIPALITIES

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This article examines the funding status of downstate (which includes suburban) Illinois police and fire pension funds in relation to professional recommendations, the numbers of participants, benefits, actuarial assets and liabilities. In addition, relationships between municipal characteristics and changes in funding ratios are analyzed to provide insight into the factors associated with changes in funding ratios. The article concludes with a discussion of potential approaches for addressing rising pensions with possible implications for Illinois.

INTRODUCTION

In recent years, a long-standing financial problem plaguing municipalities has become, perhaps, the most serious issue facing municipal leaders, posing a risk of disastrous results in the near future. Pension issues have been increasing for many years, and they have recently surfaced because of changing demographics and shifting finances that resulted from, to some extent, the Great Recession of 2009. The slow post-recession recovery in Illinois, low investment returns and financial issues leading to cutbacks in state-shared resources aggravated the issue (Walzer & Blanke, 2018). Population declines, along with increasing numbers of elderly residents and increases in municipal employees nearing retirement age, will worsen these financial issues. Municipalities must replace retirees because pension payments for previous retirees will increase.

The financial status of a pension fund depends on the number of pensioners, employer contributions, active participant contributions and returns earned on investments. The latter is difficult to predict, but low rates in the post-recession recovery adversely affected the financial performance of suburban and downstate funds. Likewise, the unattainable interest rates used to calculate the required employer contributions prior to the recession weakened the financial status of the funds.

Illinois is certainly not alone in trying to resolve the rising cost of pensions. Likewise, retirement incomes are becoming more important in affecting the

future of local economies. This is especially true in rural areas, where retirees and elderly residents are relatively numerous and growing components of the population base. Thus, discussions that target ways to reduce pension benefits and costs must consider the possibility of significant adverse effects toward these economies (Deller, Stallman & Miller, 2017).

The fiscal situation in Illinois has been more pressing following the passage of an Illinois statute in 2010 that authorized the state Office of the Comptroller to intercept state shared revenue distributions if local governments did not contribute to public safety pension funds according to the recommended actuarial standards (SB 3538, PA 96-1495). The news media reported several instances in which enforcing this statute resulted in significant cutbacks in the availability of local personnel who provide essential services. Several cities have authorized property tax increases to meet the growing pension liabilities. In Harvey, layoffs of public safety personnel due to court-ordered pension payments made the news. These situations led to further discussions about the possibility of allowing municipalities to declare some form of bankruptcy as a possible next step.¹

In a 2018 survey by the Northern Illinois University (NIU) Center for Governmental Studies (CGS) and the Illinois Municipal League (IML), discussed elsewhere in this issue (Walzer & Blanke, 2018), municipalities stated that higher pension contributions were one of the most important factors underlying the FY2018 budget shortfalls. The average municipality in the survey had slightly less than 60% funding in its police or fire pension funds, which is consistent with the data discussed later in this article.

In other cases, the increasing fiscal issues caused municipalities to consider alternative financing methods, such as borrowing, to meet pension obligations. These practices may create other issues in the future, especially in municipalities facing tax and debt rate limits (Campbell, 2018). In some cases, cities have considered privatizing assets to service pension debts. For example, the City of Alton is exploring the option of privatizing its sewer system and water-treatment plant to achieve this end.² This approach warrants careful analysis by local management to ensure sustainable funding. Privatizing an enterprise that operates at a loss could contain costs and provide a one-time source of revenue from an asset sale; however, it also means forgoing future revenue from service charges if operations improve.

These issues are still in flux and are debated on a case-by-case basis. Pension obligations at the state level resulted in attempts to shift a larger portion of the costs to local government agencies, such as schools and possibly public universities.³ Clearly, decisions about these issues will seriously affect local public financing in Illinois.

At the very least, the growing pension issue is reshaping the level of services provided and the amounts that residents pay for them. This article reviews the pension issue, its severity, and the strategies that municipal leaders have taken to address the concern. Two primary data sources are used in the analyses: the biennial pension reports published by the Illinois Department of Insurance (IDOI) and a survey of mayors conducted by NIU's CGS in collaboration with IML.⁴

The discussion begins by describing the pension system, the professional funding standards, and the changing funding ratios. The financial statuses of suburban and downstate police and fire funds are then discussed to determine their changing effects on municipal finances, along with ideas about future expectations. The third section analyzes factors associated with changes in funding ratios and actions reported by mayors in response to the changing fiscal conditions. The strategies used in other states to address similar issues are briefly discussed to explore the options that Illinois could consider. The final section summarizes the results and the possible approaches, including those currently under consideration.

STATUS OF PENSION FUNDS

Overall, Illinois has 671 pension funds, and 15 are classified by the Illinois Department of Insurance as large funds—statewide and state financed, City of Chicago or Cook County funds. The remaining 656 funds (downstate police and fire funds) operate independently in municipalities that have populations of 5,000 to 500,000 and a full-time police force or full-time fire workforce. This article focuses mainly on the downstate police and fire funds. The analysis excludes pensions for teachers and for employees in the City of Chicago because to adequately explore their issues warrants separate articles. Some other types of municipal employees, such as managers and administrators, have pensions covered under the Illinois Municipal Retirement Fund (IMRF), but the analysis excludes this fund because it does not have the same funding concerns as other plans in the state.

Statewide, 591,687 public employees participate in pension funds, and 491,657 people currently receive pension benefits. Combined, pension funds have \$170.23 billion in actuarial pension assets and \$355.42 billion in actuarial liabilities, meaning less than half of anticipated pension liabilities could be met with current funding (Illinois Department of Insurance, 2017, p. 5). However, funding levels vary widely by fund. For example, IMRF has \$43.23 billion in assets and \$47.81 billion in liabilities, so 90.41% of the fund is covered. On average, about 57% of the downstate police and fire pensions are covered.

Each program is funded at locally-determined amounts and varies in operating procedures and benefits, which may explain some of the variations in funding levels described later. Basic information regarding the number of active participants and pensioners in these funds illustrates the wide variations in funding levels and the number of active participants and pensioners. For example, according to 2016 Illinois Department of Insurance data, 12 downstate fire funds and one police fund were fully funded, so their assets met or exceeded the actuarial-based liabilities. Most, but not all, of these funds are in smaller municipalities. Possible explanations for these differences are explored later in this article.

When examined according to the changes in the funding ratio between 2012 and 2016, the number of police funds in which the funding ratio increased (206) surpassed the number of declines (143). However, changes in the funding ratio for fire funds were more evenly split: 135 funds declined and 142 funds increased. The pension funds that gained funding were predominately in midsized cities with higher incomes. Some pension plans gained funding in every part of the state, but most were located in metropolitan counties.

A more detailed examination of the funds according to funding ratio shows that 65% of the police funds and 58.6% of the fire funds were in the 50% to 80% funding range, with 80% regarded as a bare minimum by federal agencies and some rating groups. The adequacy of this level has been debated with the recommended goal being a higher funding level to avoid fiscal stress in payout periods (Brainard & Zorn, 2012; Miller, 2012). However, nearly one-third (29.2%) of the police funds and 25.6% of the fire funds are significantly underfunded by this criterion. Only 15.8% of the fire funds and 5.7% of the police funds surpassed the 80% level. Those at this level are typically in smaller or midsize municipalities (with average populations of 20,000) in the collar counties of the Chicago metropolitan statistical area. Next, we discuss the fire and police funds in terms of size and financial conditions.⁵

POLICE PENSION FUNDS

An analysis of suburban and downstate police funds shows roughly similar trends and conditions across employment-size groups (Figure 1). The average police pension fund has 1.2 active participants per pensioner, regardless of municipal size. In addition, pension funds with more active employees have a proportional number of pension beneficiaries, so the funds did not necessarily have more participants per pensioner.

The average salary and pension benefits are higher in pension funds with more participants, which, to a degree, may reflect higher living expenses in larger municipalities. The largest police pension funds are located in the collar counties or at the core of downstate metropolitan areas, such as Rockford and Springfield. The smallest police pension funds are located mainly in places with less than 10,000 people. However, salaries are determined by employees' average length of time in service and depth of experience, as well as other measures, so a more sophisticated analysis is needed to understand these differences. Notable differences are the 3.7% increase in the number of active participants in the large police funds and the 3.2% decline in the smallest funds, both of which occurred between 2012 and 2016. Likewise, the number of pensioners increased in every police pension fund size group, but the increase was highest in those with fewer than 10 participants. These trends reflect demographic shifts in smaller communities toward a smaller and older population, and these shifts are occurring throughout the country.

The funding status of the police funds improved between 2012 and 2016. Increases in funding ratios were highest in the funds with the greatest number of active participants and second highest in those with the smallest. The average funding ratio was 59.0% in the largest police funds, and the growth between 2012 and 2016 was 3.1%. The average funding ratio of the fire funds was 55.8%.

The outstanding liability per participant differs by size of the police fund. In the case of the smallest funds, the liability (\$415,666) was more than the outstanding liability in funds with 10 to 49 participants, but less than that for funds with 50 or more participants. The largest unfunded liabilities per participant were in the largest pension funds. Police pension funds with fewer than 10 participants had an average of \$553 in unfunded liabilities per resident, and the largest funds (more than 100 participants) had an average of \$823 in unfunded liabilities per resident.

FIGURE 1

SUBURBAN AND DOWNSTATE POLICE PENSIONS BY FUND SIZE

INDICATOR	FEWER THAN 10 PARTICIPANTS	10–49 PARTICIPANTS	50–99 PARTICIPANTS	MORE THAN 100 PARTICIPANTS
	(40 FUNDS)	(236 FUNDS)	(51 FUNDS)	(21 FUNDS)
Average No. of Active Participants in 2016	7	25	66	156
Average Salary, 2016	\$58,373	\$80,060	\$86,771	\$91,918
Change in Participants, 2012–2016	–3.2%	0.3%	0.4%	3.7%
Change in Average Salary, 2012–2016	11.0%	10.2%	8.2%	8.1%
Average No. of Pensioners in 2016	6	19	57	141
Participants per Pensioner in 2016	1.2	1.3	1.2	1.2
Average Benefit, 2016	\$33,812	\$50,223	\$53,266	\$58,453
Change in Pensioners, 2012–2016	28.0%	18.6%	16.2%	10.9%
Change in Average Benefit, 2012–2016	4.2%	10.1%	14.6%	15.0%
Actuarial Assets and Liabilities in 2016				
Actuarial Funding % in 2016	42.7%	58.4%	56.7%	59.0%
Actuarial Funding % in 2012	40.3%	57.2%	56.2%	55.9%
Unfunded Liabilities per Participant, 2016	\$415,666	\$388,325	\$476,252	\$479,034
Unfunded Liabilities per Resident, 2016	\$553	\$731	\$824	\$823

Source: Calculated from Illinois Department of Insurance, Biennial Pension Report 2017, Profile Reports of Individual Retirement Systems and Pension Funds.

FIRE PENSION FUNDS

Examining the status of fire funds is more difficult because some fire protection districts (FPD) serve areas that cover multiple municipalities. In this case, municipalities are not responsible for the service, so the financial obligations do not affect municipal decisions directly. Of the 281 downstate fire pension funds, 84 are in FPDs, which typically have smaller funds, with 44% having fewer than 10 participants.

The salaries and benefits paid to firefighters in FPDs are consistent with those in other pension funds of the same size. However, FPD pension funds typically have higher actuarial funding, with the average FPD pension plan at 71.9%; the average municipal fire pension plan is at 54.1%, with consistent differences across size categories. FPDs share services with multiple communities, so they may have access to additional managerial expertise or the ability to share resources in meeting retirement costs. Regardless, the following figures must be reviewed carefully because of differences between pension plans for individual fire departments and shared FPDs.

When funding levels are compared according to the number of participants, relatively little variation is found, with the range being only 52.9% in funds with 50 to 99 participants to 60.0% in those with 10 to 49 active participants (Figure 2). Equally important is that the funds of each size increased in funding status between 2012 and 2016, but the growth was relatively small in the context of percentage. However, the movement was in a positive direction. The current analysis could not include the internal interest rate adjustments, and these changes could reduce the funding level in specific cases.

Examining the fire pension funds according to the number of participants provides additional insight into the differences among the funds. For example, the number of active participants decreased between 2012 and 2016 in three fund size groups, and this decrease was especially pronounced in those funds with fewer than 10 active participants. One possible explanation may be that retirees were not replaced because of fiscal conditions. Additional discussion of the effects of fiscal changes during the post-recession recovery is found in the other article by Walzer and Blanke in this volume.

Integral to this issue is the effect caused by the discrepancy between the number of participants paying into the fund and the number of pensioners receiving benefits. That concern was identified as an important question for Social

Security and other retirement programs (Reznik, Shoffner, & Weaver, 2006). Nationally, the ratio of active participants to pension beneficiaries decreased consistently between 2001 and 2012 (Wang & Peng, 2016; Public Fund Survey, 2012).

According to this criterion, the smallest funds are in a better position, with 1.2 actives per pensioner; the larger funds are at a 1:1 ratio. The aging of the population suggests that an increased number of retirees is present in these funds and that, assuming they will not always be replaced, for fiscal reasons, the ratio of actives to pensioners is likely to decrease. This trend may reduce the funding ratio and place additional pressure on the fund, depending on the rates of return on investments.

The average change in salaries for participants ranged from 9.9% to 12.1% during this period, with the highest percentage in the smaller funds. However, the salary level also affects these percentages. The average of \$62,757 paid in smaller municipalities, when compared with the \$93,856 paid in those municipalities with the largest number of active participants, means the same compensation increase is a higher percentage of a smaller base.

Because the benefits paid to pensioners are based mainly on salaries at retirement age, it makes sense that the average benefit paid to pensioners in the smaller funds (\$29,073) is lower than that paid in the larger funds (\$56,921). The dollar benefits paid correspond to the salaries of active participants, and those benefits steadily increase with the number of participants.

Somewhat unexpected is the average change in pension benefits when compared with the size of the fund. The smallest funds increased by 4.0%; the largest funds increased by 18.2%. The explanation for this significant difference is not completely clear but reflects the differences among the compensation levels and the lengths of service. The smaller fire pension funds were primarily located in places with populations numbering less than 10,000 people, and those places might have had relatively fewer instances of retirement between 2012 and 2016.

Another important indicator of pension status is the unfunded liabilities per participant and the changes made in recent years. In 2016, funds with the smallest number of active participants had an average of \$304,118 per participant; the largest funds had an average of \$563,748. In other words, the unfunded liability was \$606 per resident in the average municipality.

FIGURE 2

SUBURBAN AND DOWNSTATE FIRE PENSION FUNDS BY NUMBER OF PARTICIPANTS

INDICATOR	FEWER THAN 10 ACTIVE PARTICIPANTS (83 FUNDS)	10–49 PARTICIPANTS (144 FUNDS)	50–99 PARTICIPANTS (40 FUNDS)	100+ PARTICIPANTS (14 FUNDS)
Average No. of Active Participants, 2016	3	26	65	141
Average Salary, 2016	\$62,757	\$83,198	\$88,230	\$93,856
Change in Active Participants, 2012–2016	–6.6%	0.3%	–0.5%	–1.1%
Change in Average Salary, 2012–2016	12.1%	10.7%	11.1%	9.9%
Average No. of Pensioners, 2016	2	19	57	131
Active Participants per Pensioner in 2016	1.2	1.1	1.0	1.0
Average Benefit, 2016	\$29,073	\$46,863	\$52,379	\$56,921
Change in Pensioners, 2012–2016	34.7%	16.2%	12.3%	8.8%
Change in Average Benefit, 2012–2016	4.0%	13.3%	12.8%	18.2%
Actuarial Assets and Liabilities, 2016				
Actuarial Funding % in 2016	58.0	60.0	52.9	55.8
Actuarial Funding % in 2012	56.0	59.3	51.1	53.3
Unfunded Liabilities per Participant, 2016	\$304,118	\$389,949	\$538,636	\$563,748
Unfunded Liabilities Per Resident, 2016	\$376	\$505	\$839	\$836

Source: Calculated from Illinois Department of Insurance, *Biennial Pension Report 2017, Profile Reports of Individual Retirement Systems and Pension Funds*.

FACTORS ASSOCIATED WITH FUNDING CHANGES

Overall improvements in the funding ratios for the pension funds occurred during the period of study, but these improvements varied considerably according to location. In this section, a multivariate analysis is conducted to compare the characteristics of municipalities that achieved improvements in funding ratios with the characteristics of municipalities that experienced no changes. Barth, Hilliard, Jahera, Joo and Lee (2016) examined determinants of funding ratios for local pension funds between 2011 and 2013. They reported that pension funds with larger asset sizes were more likely to have higher funding because they had better access to investment expertise. In addition, they found that pension funds with stronger assumptions about investment returns had higher funded ratios, although this might reflect an overstatement of assets (Stalebrink, 2014).

Another recent study reported similar findings on the changes in pension-funding levels between 2001 and 2009 (Wang & Peng, 2016). They found that the most significant factors that affected changes in pension funding were actual investment returns, changes in investment return assumptions, and the levels of employer and employee contributions. Several community- and fiscal-related factors—including outstanding long-term debt, union membership, and changes in the ratio of participants to beneficiaries—did not seem to effect changes in pension funding.

In this analysis, we explore factors that changed the actuarial funding percent for 524 suburban and downstate police and fire pension funds between 2012 and 2016. The total population size in 2010 and the ratio of the total assets in 2012 to the population are included as control variables that affected the overall fund size and community served. Unemployment rates and the median age are used as economic and demographic control factors. Last, we explore the following factors, which affected pension fund management in 2012:

- Employer contributions per participant
- Share of total fund assets in equities
- Active participants per pensioner
- Assumed interest rate

Overall, the regression analyses accounted for slightly more than one-fourth of the variation in changes in pension funding between 2012 and 2016 (adjusted R^2 of 0.231). Municipalities with lower unemployment rates in 2012 were

more likely to improve their pension funding by 2016. Pension funds with more employees paying into the fund and more employer contributions per participant in the past improved the funding ratio, and this finding is consistent with those of a recent study (Wang & Peng, 2016).

In addition, economic recovery benefitted pension funds by providing a larger share of fund assets that could be invested in equities. Interestingly, the assumed interest rates were associated with declining pension funding relative to liabilities. Pension funds with stronger assumptions about investment returns had a higher risk of being unable to meet obligations in the sense that funding levels might have been overstated and might have led to lower contributions (Miller, 2012; Stalebrink, 2014). Actuarial asset valuations include assumptions on future investment returns. In the future, the actual value of pension assets may be lower than expected if it depends on risky investments (Elder & Wagner, 2016).

OPTIONS DISCUSSED FOR PENSION REFORM

In other states, work is underway to address pension concerns, and the literature on actions being considered is growing (Cipriani, 2014; Smith & Dove, 2016). In Illinois, several options have been proposed, such as consolidating downstate public safety pension funds or converting the defined benefit formula to a defined contribution status. In addition, a statewide property tax was suggested, along with modifying or removing clauses in the Illinois Constitution that prevent changes in benefits. There is insufficient space to discuss these proposals in detail; they are examined elsewhere, so they are only briefly described in the following section (Primo & Jares, 2017).

EFFORTS UNDERWAY IN SEVERAL STATES

Some states, including Utah and Michigan, have realized savings in local costs by offering defined contribution plans to new employees (Smith & Dove, 2016). Many traditional public sector pensions are defined as a benefit in which the employer promises to provide a set benefit when employees retire, based on salary and years of service. Under a defined contribution plan, such as a 401(K) or 403(b), employees make tax-exempt contributions toward their retirement benefits and the employers make matching contributions. In general, defined contribution pension plans are less expensive for employers because more of the investment responsibility is shifted to the employees (Smith & Dove, 2016).

Pennsylvania adopted a hybrid benefit/defined contribution pension plan for new employees (Pew Charitable Trusts, 2017). Care must be taken in adopting defined contribution pension plans and other tiered systems because they may not directly reduce outstanding liabilities for current employees and retirees (Miller, 2012). However, these reforms can reduce the rate at which pension costs increase going forward.

In 2013, Kentucky enacted a pension reform that limited the cost of living adjustments, and it adopted a different tier of pension benefits for new employees (Pew Charitable Trusts, 2013). In 2012, the total unfunded pension liability in Kentucky exceeded the total state tax revenue. Thus, the state enacted a reform that not only prevented pension plans from providing the cost of living adjustments before they were funded, but also eliminated the automatic cost of living adjustment provisions. The new tier of the pension plan includes defined contributions by the state and employee savings that are set aside in a manner similar to 401(K) plans. In addition, appropriations to repay the state pension debt increased in this reform. In 2018, further legislation that made similar reforms to teachers' pensions was passed.⁶

Arizona passed a pension reform referendum in 2016. Proposition 124, which became SB 1428,⁷ reduced the rate of cost of living adjustments. The reform chained the cost adjustments to the Consumer Price Index, with a maximum increase of 2%. In addition, the law allowed new employees to choose between a traditional defined benefit pension and a defined contribution plan. In 2017, SB 1442 passed, and it applied the same reforms for corrections officers.⁸

Indubitably, pension reform requires overcoming opposition from the affected groups. Teachers protested the 2018 pension reform in Kentucky because it reduced their retirement benefits. Police officers in Arizona initially opposed the pension reforms in the state for similar reasons. Some people have argued that reducing pension benefits can limit the ability of managers to recruit and retain highly qualified personnel (Quinby, Sanzenbacher, & Aubry, 2018).

Pension reforms passed in other states resulted from compromises between legislators, managers and employees. In the case of Pennsylvania, unions in the public sector offered less resistance to pension reforms because the immediate effect to their benefits was less severe. In addition, enacting the reform protected their benefits from the possibility that more drastic cuts would be enacted in the future. In Arizona, some police officers ultimately voted for Proposition 124 because the compromise ensured their retirement benefits would remain sustainable.

OPTIONS CONSIDERED IN ILLINOIS

Several approaches to reducing pension costs in Illinois have been offered. Most of these proposals involve, in some way, reducing pension benefits and/or requiring agencies to contribute at actuarially-determined levels. The statute authorizing the state Comptroller to intercept state funds distributed to local governments that are currently not contributing at required levels was mentioned earlier. It has caused the municipalities to take action and make significant policy changes. Further actions regarding this approach will be necessary for local officials to work through the issues.

Many discussions have occurred in regard to amending the Illinois Constitution to allow government agencies to refine both the benefits received and/or the participants' contribution levels. The Illinois Supreme Court ruled that the constitution protects these rights; thus, changes would require amendments at that level. Various proposed approaches and results are discussed in detail elsewhere, so they are not presented here. Perhaps the most frequently advanced option has been to change pensions from a defined benefit to a defined contribution and to allow participants to manage their funds.

Another proposal supported by the Illinois Municipal League is to consolidate downstate funds into one professionally and efficiently managed fund. Given the importance of the return on assets invested and the opportunity to apply more sophisticated investment and management practices in larger funds, this approach can improve the condition of these pension systems as a whole. Several options can be pursued, and legislation has been proposed to reorganize the various public safety pension funds.

In regard to financing, proposals to establish a statewide property tax to fund outstanding state pension liabilities were advanced. These liabilities are separate from the downstate police and fire funds, but they still pose a major fiscal issue that ultimately affects local governments. According to an analysis of state liabilities, Haasl, Mattoon and Walstrum (2018) suggested such a tax could be imposed at reasonable rates and still generate sufficient funds to help retire the state pension obligations within a 40-year period.

In these analyses, it is assumed that the state will fully pay the typical costs of the pension benefits. Imposing property taxes to retire the local liabilities from additional property taxes is probably not entirely suitable, primarily because Illinois already has the second highest effective property tax rates in the nation.

This situation nearly forces local governments to divert funds from other uses, to find ways to offload services to other governments and to modernize their delivery systems for providing local services at lower costs. The recent passage of state and local tax limitations on deductions in calculating federal income taxes makes matters even worse.

Given the gravity of the situation in some municipalities and the obstacles encountered in removing obligations, in 2015, Governor Bruce Rauner's administration proposed that municipal governments be allowed to pursue bankruptcy status for pension issues.⁹ This approach would require state legislation and would be a dramatic new direction following in the wake of what occurred in Detroit, Michigan. However, this idea is not being actively discussed, though it is sometimes mentioned as an option for municipalities in severe fiscal distress.

WHAT DID WE LEARN?

Several key points were derived from the current analysis of the downstate police pension funds:

- In 2016, fire funds with 10 to 45 participants had the highest funding ratio (60%), and the next highest ratio (59.0%) was reported for police funds with more than 100 active participants. The funding ratios showed clear differences: The average of the 40 funds with fewer than 10 participants was 42.7%; the average of the largest police funds was 59%.
- Overall, the funding ratios of the police funds and the fire funds increased slightly between 2012 and 2016, and more substantial increases occurred in funds with more active participants. Though some funds were fully funded, the averages for the other funds were well below the recommended minimum of 80% or higher funding. According to the 2012 through 2016 trends, it will take a substantial amount of time to reach this percentage.
- The number of pensioners increased the most in the smaller fire funds (34.7%). Growth in the number of pensioners was slightly higher in the fire funds than in the police funds, though the percentage was partly affected by a smaller number of pensioners in the fire funds.
- The estimated unfunded liability per resident in the fire funds ranged from \$376 in the smaller fire funds to \$836 in the larger funds. For police funds,

the unfunded liabilities ranged from an average of \$553 per resident in the smaller funds to \$823 per resident in 2016.

- Comparing the factors associated with changes in funding ratios between 2012 and 2016 shows that unemployment and the assumed interest rate are negatively correlated with changes in pension funding ratios. Alternatively, municipal contributions per participant, the share of assets invested in equities and the ratio of participants to pensioners are positively correlated. Municipality size is only marginally related to changes in funding ratios. The ability of these variables to predict changes in funding ratios is weak, and more research is underway to refine the model.
- A survey of mayors in 2018 clearly shows that pensions are a serious issue, and that mayors are grappling with ways to finance current services and to meet higher pension obligations, some of which involve paying for unfunded contributions in the past. In several instances, the choice involved dismissing personnel from essential services and selling assets.

Pension liabilities could pose serious concerns for intergenerational equity, because current residents are facing higher taxes or reduced services so that retirement benefits for past public servants can be funded (Smith & Dove, 2016). Furthermore, the population in Illinois is aging, and the number of residents at retirement age is expected to increase faster than the working-age population in many parts of the state.¹⁰ Service reductions are underway, at a time when a larger share of the population is becoming more dependent on public services.

SUMMARY AND CONCLUSIONS

Pension obligations have become a major issue throughout Illinois. Although several are fully funded, the average funding ratio hovers in the 50% and higher range, indicating that a substantial amount of future resources must be diverted to pensions. While Illinois is not alone in addressing these issues, it is relatively unique that the Illinois Constitution, reinforced by the courts, guarantees pensioners' rights to their current benefits. These requirements limit the options to revise financing available for local governments working with employees currently in the system.

Several proposed alternatives to address these issues are being discussed. Until these issues are resolved, it is indubitable that financial decisions will be difficult

for many municipal officials as they try to work through the system. The aging of the population and pending retirements in the next decade or beyond will make decisions even more difficult.

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FOOTNOTES

¹ <http://www.chicagotribune.com/ct-bruce-rauner-municipality-bankruptcy-met-20150204-story.html>

² <https://www.thetelegraph.com/news/article/Alton-Council-OKs-sewer-treatment-plant-sale-12718396.php>

³ https://www.ilnews.org/news/state_politics/gov-bruce-rauner-s-pension-cost-shift-concept-draws-opposition

⁴ The Illinois Pension Code (40ILCS 5/1A-108) requires the Illinois Department of Insurance to prepare biennial reports of the status of the pension funds in Illinois. See: http://insurance.illinois.gov/Reports/Pension/pension_biennial_report_2017.pdf

⁵ The authors assume that in most cases the number of participants corresponds with population size of municipalities but recognize that unique local circumstances may cause variations in this relationship.

⁶ <https://www.courier-journal.com/story/news/politics/2018/04/10/kentucky-pension-reform-bill-becomes-law-tuesday-impact-teachers/502128002/>

⁷ <https://www.azleg.gov/legtext/52leg/2r/laws/0002.pdf>

⁸ <https://www.azleg.gov/legtext/53leg/1R/laws/0163.pdf>

⁹ See endnote 1.

¹⁰ Illinois Department of Public Health, Population Projections for Illinois Counties 2010 to 2025. https://data.illinois.gov/dataset/438idph_population_projections_for_illinois_counties_2010_to_2025

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CASE STUDY

STRATEGIC MODELS TO REJUVENATE THE ILLINOIS ECONOMY: LESSONS FROM OTHER STATES

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This article considers four possible state policy models from which Illinois could draw in order to improve its economic performance. Data was collected primarily through case study analysis, including critiquing recent policies enacted by the four states considered: Massachusetts for its high-wage, knowledge-based economy; Minnesota for its egalitarian approach to economic development; Texas for its low taxes and business incentives; and Indiana for its manufacturing policies. The conclusion suggests that Illinois may be well-served by incorporating elements of each model in different regions.

Illinois' recent struggles with public finance and the execution of basic governance tasks are widely known. Beyond the highly-publicized budget crisis that was alleviated to some degree in the summer of 2017 after a lengthy impasse, Illinois continues to struggle to grow its economy and maintain its population base. In 1980, Illinois ranked 7th in per capita income, but by 2016, the state had fallen to 14th (U.S. Census Bureau, 2018, 1982). Population growth has been stagnant for many years and actually turned negative during the 2014 to 2017 period. Recently, Illinois fell behind Pennsylvania and is no longer the nation's fifth most populous state.

In light of Illinois' difficulties, it is instructive to look outside its borders for possible policy role models, especially given the long-standing reputation of particular states as "laboratories of democracy." Ideally, Illinois should aspire to be an economically prosperous state with low levels of inequality, high population, job growth—including in the traditionally strong manufacturing sector—and reasonable levels of taxation. This article considers Massachusetts, Minnesota, Texas and Indiana as possible models. Of course, no state can excel at everything; for example, states appear to face a choice between expensive, high-tax, high-service, knowledge-based economies, or a low-wage, low-tax, low-skill model (Florida, 2015). The former tend to have higher incomes, while

the latter usually excel in job creation. Low levels of taxation may exacerbate inequality, depending on how revenues are spent, though states with knowledge economies can also suffer from this problem. Massachusetts and Minnesota both fit the high-cost, knowledge economy model, but Minnesota experiences greater income equality. Texas and Indiana epitomize the low-cost job creation approach, but Indiana has done more to nurture and preserve its manufacturing sector.

Of course, Illinois does not have the same history, resources or governmental structures as these other states. Even if Illinois emulated one of the other models, the response would need to be adapted to Illinois' unique circumstances. For example, Illinois is more urbanized than Indiana, Minnesota and Texas; it is less well known than Massachusetts for its universities, and it has a higher cost of living than all but one of the four states considered. Furthermore, Illinois' Constitution presently prohibits a graduated income tax, and its workers' compensation system places a greater financial burden on manufacturers than those in most other states. Nevertheless, much can be learned by looking across state boundaries and exploring what has been tried elsewhere.

Contemporary economic development strategies are often classified into locational or entrepreneurial approaches. The former tries to reduce the cost of production through deregulation or market-based incentives, such as favorable taxation policies, while the latter promotes growth by creating a more productive population and/or business sector (Jansa, 2018). There is a long-running, albeit unresolved, debate about the effects of various policies. For example, research on state tax incentives suggests that such policies can provide economic benefits, especially as businesses become less bound by location, but these benefits can also be overestimated (Bartik, 2005). Nevertheless, excessive tax cuts or incentive use can undermine a state's ability to invest in infrastructure, workforce training or education—areas that also foster positive economic outcomes (Clark & Montjoy, 2001).

Different ranking systems have emerged to assess the degree to which states adhere to these approaches. For example, the Tax Foundation's "State Business Climate Index" and various offerings from the business press tend to focus on tax levels and related cost-of-business factors. Alternatively, the "State New Economy Index," published by the Information Technology & Innovation Foundation, focuses on the ability of states to develop entrepreneurial, knowledge-based economies. A broader, more egalitarian approach is apparent in the "Opportunity Index," which measures educational opportunity,

health and the strength of community institutions in addition to economic performance. This tool is the product of a partnership between two nonprofit organizations, Child Trends and Opportunity Nation.

Before providing case studies of the various state policy models, it is useful to review the relative performance of states on different aspects of economic performance. Table 1 and Table 2 compare the states listed above, an unweighted group average of those in the Midwest region outside Illinois (defined as Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio and Wisconsin), and the country as a whole using different widely accepted outcomes. Table 1 shows Illinois' current status with respect to these goals, while Table 2 shows how the state has evolved between 1980 and 2015, an era of deindustrialization, income stagnation and increasing income inequality to which Illinois has struggled to adapt.

TABLE 1

ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF SELECTED STATES, REGIONS AND THE U.S.

STATE	PER CAPITA INCOME (2016) ⁱ	INEQUALITY RANK (2016 – GINI INDEX) ⁱ	PERCENT W/ B.A. OR HIGHER (2016) ⁱ	K-12 SPENDING PER PUPIL (2016) ⁱⁱ	STATE/ LOCAL TAX BURDEN (2017) ⁱⁱⁱ	PERCENT EMPLOYED IN MANUFACTURING (2016) ⁱ
Illinois	\$31,502	8 (tie)	32.9%	\$14,180	10.0	12.4%
Massachusetts	38,069	13 (tie)	41.2%	\$15,593	9.01	9.1%
Minnesota	33,225	39 (tie)	34.2%	\$12,382	10.24	13.5%
Texas	27,828	9	29.0%	\$9,010	7.99	8.9%
Indiana	26,117	35 (tie)	24.6%	\$9,856	8.63	18.8%
Midwest States	28,551	34	28.7%	\$11,275	8.95	15.8%
Entire United States	29,829	25.5	30.3%	\$11,762	8.57	10.3%

Sources: U.S. Census Bureau (i), *Governing* magazine (ii), *WalletHub* (iii).

There are two bright spots in the tables: Illinois is a moderately wealthy state and has a relatively high level of educational attainment. However, population

and job growth are slow. Manufacturing jobs have decreased more quickly than in other Midwestern states, and taxes are relatively high. Income inequality is also well above the national average and exceeds rates in the traditionally egalitarian Midwest region even more.

TABLE 2

PERCENTAGE CHANGES ON VARIOUS DIMENSIONS FROM 1980-2016

STATE	POP-ULATION INCREASE	EM-PLOYMENT INCREASE	MANU-FACTURING EM-PLOYMENT CHANGE	NOMINAL PER CAPITA INCOME INCREASE (1979-2016)	INCREASE IN PORTION W/ B.A. OR HIGHER (OVER 25)
Illinois	12.5%	22.9%	-50.4%	291%	126.9%
Massachusetts	17.5%	27.0%	-64.2%	410%	106.0%
Minnesota	35.9%	43.5%	-36.9%	346%	104.8%
Texas	89.4%	103.6%	-50.2%	286%	81.3%
Indiana	20.0%	30.3%	-39.0%	266%	98.4%
Midwest States	14.9%	25.1%	-39.7%	293%	93.1%
Entire United States	40.6%	52.2%	-54.0%	309%	85.9%

Source: Author calculations based on U.S. Census Bureau data.

CASE 1 | MASSACHUSETTS

A HIGH-WAGE/HIGH-TAX KNOWLEDGE MODEL

The data in Tables 1 and 2 support the idea that Massachusetts is a state that has successfully adopted a knowledge-based economy. It has a wealthy, well-educated population, and a relatively high tax burden (albeit lower than Illinois’). As Table 2 shows, income growth in Massachusetts has vastly exceeded that in Illinois. Based on the U.S. Census Bureau’s 2012 to 2016 American Community Survey’s five-year estimates, a large proportion of Massachusetts’ population (45%) works in high-end occupations focused on management, business, science and the arts; only 37% of Illinoisans work in such jobs (U.S. Census

Bureau, 2018). Education spending levels in Massachusetts are well above the U.S. average, while its universities, especially Massachusetts Institute of Technology (MIT), have generated much of the state's success in building high-technology companies. In fact, a study conducted in the 1980s found that over 70% of high-tech companies had been nurtured by MIT departments or labs (Osborne, 1988). A more recent analysis found MIT has the ability to “import” the founders of companies into Massachusetts (Roberts & Eesley, 2009).

Beyond MIT, the state has used its public higher-education system to build on this advantage and promote economic development by nurturing human capital. The Massachusetts Department of Higher Education (n.d.) identifies the state's primary asset in economic competition as the “educational level of our people and our workforce and the inventiveness and competence of the creative individuals and organizational leaders who drive our innovation-dependent, knowledge-based economy” (p. 1). The state has also adopted several initiatives to promote its knowledge sector. Specific policies have included using community colleges to identify and nurture students for Science, Technology, Engineering and Mathematics (STEM) careers and connecting high schoolers interested in such work with college students already majoring in those subjects. More broadly, Massachusetts' focus on human capital includes proposed initiatives to improve career technical education, retrain adults in growth sectors of the economy, provide matching grants to higher education institutions to collaborate with industry on emerging technologies and fund apprenticeship programs (Massachusetts Executive Office of Housing and Economic Development, 2018).

Based on input from business and technology leaders in the state, Massachusetts' STEM Advisory Council was created in 2009 by former Governor Deval Patrick's Executive Order #513 and was later codified into law by statute in 2014 (Governor's STEM Advisory Council, 2013). The 20 to 30 members of the council are appointed by the governor and include members of Congress, public and private university presidents, school superintendents, representatives of business and labor, a teacher and others. Its mission is to coordinate the state's pre-K to university STEM education initiatives at an annual cost of approximately \$1.5 million, funded through the Office of the State's Secretary of Education (Massachusetts Fiscal Year 2018 Budget, 2017). Due in part to the council's efforts, the state has been recognized by the National Governors Association and the State New Economy Index as a top STEM performer (Governor's STEM Advisory Council, 2013). Specific initiatives include @

Scale, which combines public and private sector funding to build upon existing sector strengths, supported by a STEM Pipeline Fund. In addition, the state hosts an annual STEM summit, runs a public awareness campaign directed at students and oversees a Data Dashboard to aid program evaluation.

Illinois' relatively well-educated population, documented in the tables above, positions the state well to emulate Massachusetts' model. In the policy realm, Illinois has taken a few steps to emphasize higher education as a force for economic development, at least with respect to the role of research universities. Governor Rauner advocates creating a new branch of the University of Illinois, located in Chicago, that would promote applied research and the creation of new knowledge-based companies in areas related to computing and data, agriculture and other fields (Rhodes, 2017). In his 2018 State of the State address, he said, "What Stanford and Berkeley and Harvard and MIT are to the coasts, partnerships of the U. of I., U. of C., and Northwestern can even surpass for Illinois" (Rauner, 2018b). While Illinois' ongoing governmental dysfunction makes actual implementation uncertain, funding for the initiative was included in the state's FY 2019 budget.

Massachusetts deemphasizes the use of large incentive packages to recruit businesses, compared to other states (Jansa, 2016). Instead, it targets sectors where it already has a competitive advantage, such as clean energy, financial services and life sciences/biotechnology (Baker & Polito, 2015). Building on the strengths of its existing research universities, it has dominated seed funding for biotech in recent years (Bloomfield, 2015). It has also led in attracting venture capital (Baker & Polito, 2015). Another facet of its strategy involves developing regional industry clusters "as a means of achieving job growth and economic prosperity outside the metropolitan Boston region" (Baker & Polito, 2015, p. 5). By contrast, observers of economic development in Illinois argue, "the geographic area outside Chicago lacks any long-term thinking" (Nowlan & Johnson, 2014, p. 90). Although there have been efforts in the past to adopt a regional economic development framework, they have not been sustained, as the state's fiscal crisis seems to have undermined long-range planning. A recent report by the Governor's Rural Affairs Council (2017) acknowledges that a lack of state resources may force more local efforts and initiatives in rural downstate areas.

In some ways, Illinois has set about adopting its own model of using higher education to stimulate the economy. In autumn of 2017, Illinois and Chicago leadership jointly announced a plan to establish "The 78," a major development

on Chicago's near south side that will include residential, housing and cultural space. A vital component of this plan includes establishing the Discovery Partners Institute, a research institute led by the University of Illinois System. The objective of the Institute is to serve as a network for research and innovation among Illinois universities and to attract high-caliber students and companies to work collaboratively. It might also help to encourage skilled young workers to remain in Illinois after college.

FIGURE 1

FOUR STRATEGIC MODELS CONSIDERED AS CASE STUDIES



CASE 2 | MINNESOTA

A MORE EGALITARIAN HIGH-WAGE/HIGH-TAX MODEL

Despite its extensive social welfare system and an economic development plan that stresses equity and economic mobility, Massachusetts has failed to

develop an egalitarian economy. As shown in Table 1, its record in this realm is closer to Illinois.' This failure is significant, as economic inequality could slow income growth, make middle-class needs such as housing unaffordable, harm public health and exacerbate social problems such as crime and drugs (Brown & Robinson, 2016; Florida, 2017; Metropolitan Planning Council, 2017). Relatively egalitarian compared to Massachusetts and Illinois, another possible model for Illinois is Minnesota, which enjoys a high-wage economy with well-educated workers and growing incomes.

Minnesota features high taxes, relative progressivity and elevated levels of public spending. Its progressive tax system has been a long-standing feature of the state's fiscal strategy. This became even more central to its strategy in 2013 when the legislature passed HF 677 on the final day of its spring session at Governor Mark Dayton's urging. The bill added a new 9.85% bracket, compared to the previous 7.85%, for the top 2% of earners. The new rate, which puts Minnesota among the top five nationally in income tax progressivity, kicks in at approximately \$250,000 for married couples (Helgeson, Brooks, & Stassen-Berger, 2013).

Minnesota's progressive tax system has allowed it to pursue an economic strategy that enhances productivity and quality of life by "operating a high-quality public sector" (Kolderie & Blazar, 1988, p. 293). Reflecting this idea, Governor Dayton has argued, "To progress, we have to invest. We have to invest in jobs; in education; in transportation; in the health of our people, communities, and environment" (Dayton, 2011). An illustration of this penchant for investment can be seen in school funding. Minnesota accounted for 70.4% of total school support at the state level in 2016. Illinois, which depends much more heavily on local property taxes, funded only 24.8% of the aggregate that same year (National Education Association, 2017). Minnesota's tradition of equitable funding is rooted in its history; in 1971, Governor Wendell Anderson initiated the so-called "Minnesota miracle," hiking the state's share of educational expenditures from 43% to 70% while also substantially boosting the state's overall rank in state school spending (Elazar, Gray, & Spano, 1999).

In addition to strong wages and income growth, Minnesota has performed well with respect to increasing employment and population, at least by Midwestern standards, as shown in Table 2. Recently, comparisons between Minnesota and Wisconsin, culturally and demographically similar states, have served as a "test case" of the high-wage/high-tax versus low-tax/job-creator models in the Midwest. Under Governor Scott Walker, Wisconsin has tried to shift to

the latter approach in contrast to Dayton's more expensive investment focus. Both governors took office in 2011, but their administrations have followed dramatically different paths. While Walker has reduced collective bargaining for state employees and cut taxes and spending, Dayton has embraced progressive taxation, a higher minimum wage and increased state support for education (Jacobs, 2013). From 2010 to 2014, Minnesota's population, jobs and income all grew more quickly than Wisconsin's (Markusen, 2015). A later study found that these trends continued after the income tax increase of 2013 (Cooper, 2018).

Like Massachusetts, Minnesota has deemphasized the use of significant tax incentives to lure businesses (Jansa, 2016). Instead, it has favored more focused government interventions in the economy. Examples include encouraging direct foreign investment and targeting particular industries and regions as a form of proto-industrial policy (Elazar et al., 1999). Other states, such as Maryland, have adopted similar approaches, but Minnesota is a leader in this realm.

Minnesota's model is not without flaws. Its egalitarian policies do not necessarily cross racial lines, and gaps between whites and non-whites on measures such as income, poverty and educational attainment are higher in Minnesota than in most states (Gee, 2016). For example, it ranked last among the states in terms of financial equality among races and has failed to integrate diverse newcomers who have come to the state as a result of its economic success. Additionally, a 2013 survey by the Minnesota Chamber of Commerce found that one-fourth of Minnesota companies throughout the state had an unfavorable business climate (Jacobs, 2013). Specifically, businesses complain that high taxes discourage firms from locating or staying in the state, harming their ability to recruit highly competent executives (Davey, 2014).

These observations notwithstanding, Minnesota's example still provides much for Illinois to emulate. Its population diversified later than was the case with Illinois, and its strong income growth rates suggest the possibility of better distribution across ethnic and racial lines in the future. Similarly, its tax structure clearly has not precluded prosperity.

Several efforts are underway to move Illinois in the direction of Minnesota. The state legislature raised its personal income tax from 3.75% to 4.95% in 2017, in part to allow it to better support programs relied upon by marginalized populations. Furthermore, there is a discussion about whether the state should hold a constitutional convention to create a graduated income tax that would

move the state away from its current flat-rate structure. A concerted push is being made to change the formulas through which funds are allocated to primary and secondary education to better support school districts that have limited ability to raise property taxes to pay needed expenses. The deep divisions in the state political establishment, however, suggest there is little consensus about the desirability of such actions.

CASE 3 | TEXAS

A LOW-WAGE/LOW-TAX/JOB-CREATION MODEL

As shown in Table 2, Texas is an exceptionally strong performer with respect to employment and population growth. The economy and jobs are growing more quickly than in other sizable knowledge-based economy states, such as New York and California (Kotkin, 2018). This success is sometimes credited to its low-tax, low-service-provision model of governance that reduces labor costs through its right-to-work law, low state minimum wage and minimal workers' compensation costs (Texas Public Policy Foundation, 2008). Moreover, Texas is among the most aggressive states in using tax incentives to attract businesses from elsewhere (Jansa, 2016). It has a wide variety of programs, including initiatives to attract high-tech employers and university researchers whose work can import or create jobs. It advertises its Texas Enterprise Fund as "the largest 'deal closing' fund of its kind in the nation" (Office of the Texas Governor, 2018). While it is difficult to confirm independently whether this claim is accurate, other states perceive Texas to be a leader in offering big-ticket incentives. For example, when trying to enhance funding for a similar program in Florida, former Governor Rick Scott dubbed the idea a "Let's beat Texas fund" (Brinkmann, 2015).

Since the Texas Enterprise Fund was created in 2003, it has spent nearly \$610 million through the end of 2016 (Office of the Texas Governor, 2017). Projects supported through the program must meet various criteria, including the number of jobs created, projected wages and demonstrated competition from another jurisdiction. The governor, lieutenant governor and Speaker of the Texas House of Representatives must all sign off on proposals. The current House Speaker, Joe Straus, has become critical of the program due to concerns that its benefits center too much on the Dallas-Fort Worth area at the expense of other regions. Previously, the State Auditor's Office (2014) issued a critical report on the Texas Enterprise Fund. Among other criticisms, it cited inadequate application reviews, including the lack of bona fide competition

from outside the state for the awardee, an inability to determine the actual number of jobs created and a lack of sanctions when promised hiring goals were not met.

Texas is a favorite reference point for Governor Bruce Rauner when he discusses states that he believes Illinois should emulate. In his 2016 State of the State Address, for example, he exclaimed, “We should be kicking Texas’ tail! . . . Instead of letting Indiana and Texas take our workers, let’s go compete and take their jobs!” (Rauner, 2016). The subtext of these arguments is that Illinois needs to lower taxes and labor costs. Some aspects of Texas’ success may be difficult to copy, however, as its border location helps increase immigration and international trade. Illinois lacks these same primary resource extraction advantages (McNichol & Johnson, 2012).

Illinois has several natural advantages that suggest it could emulate parts of the Texas strategy. Most notably, the cost of living in Illinois is relatively low compared to those in coastal regions. As previously noted, Illinois’ Constitution prohibits the imposition of local income taxes, which is attractive to manufacturers and makes the burden of income taxes lower than in many other states. Furthermore, Illinois has extensive land situated in close proximity to major transportation corridors and airports, comparatively lax zoning laws and a relatively skilled workforce, particularly in manufacturing. Large parcels of land within or near metropolitan Chicago are also available at a relatively low cost, particularly south of the city, which sets the state apart from many others with respect to available land for new industries.

Texas’ experiences also suggest some of the limitations of the low-cost/low-tax model. While it has enjoyed strong population growth, Texas underperforms in areas such as educational attainment and health insurance coverage. It suffers from elevated income inequality, which may be a side effect of its pro-growth policies, and has the highest poverty rate of the states discussed in this article (U.S. Census Bureau, 2018). Furthermore, Texas has the largest percentage of minimum wage workers of any state, and many jobs pay low wages with few benefits (McNichol & Johnson, 2012). Disparities in educational opportunities between white and minority students could harm the state’s ability to compete in the future (Tienda, 2015). Summarizing the limitations of the Texas model, one textbook on the state’s political system notes, “For many Texans, modest wages, absence of fringe benefits like employer-managed health care, underfunded schools, hospitals and social services, and environmental degradation are the norm” (Jillson, 2014, p. 52).

CASE 4 | INDIANA

A MIDWEST LOW-WAGE/SMALL-GOVERNMENT MODEL EMPHASIZING MANUFACTURING

As noted, some aspects of Texas' success may not be replicable for Illinois. This caveat is not the case with regard to Indiana, which lacks any particular natural resource or locational advantages over Illinois. Like Texas, Indiana uses an economic development strategy that emphasizes low taxes and putatively business-friendly labor policies, such as right-to-work laws and heavy use of tax incentives (Hicks, 2018; Jansa, 2016). It has adopted a reduced cost model of government that features balanced budgets but low benefits. Pensions for state workers, for example, can be one-third less than those in Illinois in comparable jobs, although the Indiana system is actuarially sound (Powell & Davey, 2011).

On the whole, Indiana's budget and tax stability appear to promote job growth by creating a positive image in the minds of business decision makers (Kelly, 2018). During the administration of former governor Mitch Daniels, the state transformed its primary economic development agency from a traditional state government model to a public-private partnership structure. As the former governor's first priority in 2005, Indiana passed legislation to consolidate seven economic development agencies into one to adopt a more streamlined approach (Rathiel, 2005). Modeled after a similar structure in Michigan, the agency is directed by the governor and a hand-picked president in consultation with a 14-member board representing Indiana's various economic sectors and geographic regions. Designed to provide greater flexibility in offering tax incentives, the agency might have reduced the state's overall costs somewhat due to its less static emphasis on negotiation and deal-making (Sagamore Institute, n.d.). Due to its ability to respond quickly to private sector needs, the National Governors Association (2016) identified it as a trendsetter in economic development.

Indiana relies on manufacturing as its economic base. In fact, its economy depends more on this historically important sector to the Midwest than any other state (Gabriel, 2016). Governor Rauner advocated emulating Indiana in his 2018 budget address, noting, "manufacturing jobs, many of which go to union workers, are up 110,000 in Indiana over the last eight years, while manufacturing jobs in Illinois are up only 8,000 in that same time period." The governor has also supported following Indiana in adopting a right-to-work law in Illinois, and some evidence shows that doing so could promote higher population growth (Hicks, LaFaive, & Devaraj, 2009).

As Table 2 depicts, however, Indiana's economic approach has not raised incomes. In fact, the state has trailed Illinois in this measure. In addition, further job growth might prove unsustainable if labor markets tighten. While Indiana's incentive-based approach to economic development subsidizes firms that hire new workers, when employees are hired away from existing firms that do not receive tax breaks, this practice ultimately adds little in the way of overall job growth when unemployment is low (Hicks, 2018). Unsurprisingly, this approach might also be perceived as unfair to existing businesses. Furthermore, such policies starve communities of funds that could upgrade physical or human capital.

Anticipating such concerns, Indiana has adopted two initiatives in recent years that temper the low-cost model by trying to foster wage growth and a more diversified economy. First, Indiana has used revenue from a toll road lease to create a venture capital fund to invest in the high-technology sector (Kelly, 2018). Second, and more publicly prominent, the state introduced the Indiana Career Council. Created in 2013 by HB 1002 to upgrade the skills of the state's labor force, the organization is overseen by a 16-member board that coordinates workforce development activities throughout the state. According to its strategic plan, "workers need different and higher-level skills, but not necessarily a four-year degree" (Indiana Career Council, 2014, p. 7). The plan emphasizes the idea of "working learners" who upgrade their skills throughout their careers, often while continuing to work; it also seeks to tie education more directly to the needs of employers. In 2015, Indiana was one of six states recognized by the National Governors Association for best practices in aligning training with employer needs, due in large part to the Indiana Career Council's initiatives.

Illinois has particular advantages in vocational training that could be leveraged to emulate the Indiana model to a greater extent. The state has an extensive community college system that offers vocational training at a low cost to students. The City Colleges of Chicago, one of the largest schools of its kind in the country, has more than 150 corporate sponsorships that support training programs. Furthermore, several public universities with programs emphasizing practical skills have suffered enrollment declines, and thus have the ability to take on many more students in vocational fields. However, fluctuations in state funding for the Monetary Award Program (MAP) grants, which support university educations for students of low-income families, suggest that our state's commitment to providing gateways into careers for disadvantaged

populations has wavered. In the most recent state budget, however, MAP grant funding was slightly increased.

CONCLUSION

The case study approach used in this article prohibits clear conclusions about whether there are causal relationships between specialized policies and a state's wellbeing. Myriad policy changes, as well as social and economic factors not discussed in these brief cases, certainly affect states' incomes and levels of economic growth. Moreover, state economies are intimately tied to regional issues that undoubtedly involve clusters of states. As such, the information presented here should be viewed primarily as a springboard for further analysis and discussion.¹

At the same time, it behooves Illinois to learn from the aforementioned state models. At least some Illinois officials agree; in his 2016 State of the State address, Governor Rauner said, "I am convinced that there is a way we can blend economic growth of states like Texas with the heart and compassion of states like Massachusetts." Although not explicitly mentioned in that address, Massachusetts' high income is another outcome to which Illinois should aspire.

Without dismissing the governor's reference to Texas, the high-income/high-tax/high-service knowledge economy model would fit Illinois well. Despite having substantial tax burdens, states such as Massachusetts and Minnesota have been able to grow income more quickly than Illinois. This is significant because a wealthier Illinois would have fewer budget problems due to natural revenue growth. Given its fiscal crisis, however, Illinois has not been able to budget toward nurturing good jobs, but instead, must pay off unfunded debt and pension liabilities. However, the state is not doomed by the 2017 tax increase. Less than a decade ago, California faced budget problems similar to those in Illinois. With a \$27 billion deficit, a poor credit rating and high pension debt, it was widely regarded as ungovernable (Fallows, 2013). By 2013, the state had a budget surplus, and in subsequent years was able to invest more in services such as education. In addition, Illinois' choice to raise income taxes, rather than the sales tax, was probably a good one from the perspective of maximizing employment and minimizing inequality (Cutler, Shields, & Davies, 2018).

Given Illinois' regional divisions, divergent models might be more relevant to different parts of the state. Massachusetts might be a good model for the Chicago area, while downstate might want to emulate Indiana. There can be

little doubt that Chicago's status as a global city benefits Illinois as a whole (Nowlan & Johnson, 2014). Moreover, the city's downtown has become one of the most dynamic job-creating urban knowledge economies in the nation, with the most highly educated population of the five biggest U.S. cities (Hinz, 2018). While U.S. Census Bureau (2018) data rank Illinois 11th overall in graduate/professional degree attainment, this highly-credentialed workforce is concentrated in the Chicago metropolitan area.

Downstate Illinois lacks this advantage. Also, it must contend with a relatively high tax rate and stricter labor regulations in competing for manufacturing jobs. For example, past minimum wage increases have had minimal impact on employment in the Chicago metropolitan region, where prevailing wages are higher, but the same wage increases have caused job losses downstate (Powers, 2009). This impact should be acknowledged when future hikes are considered. Similarly, high workers' compensation costs in Illinois are more likely to affect the viability of the downstate economy.

Illinois then may want to nurture the knowledge economy in the Chicago area while emphasizing job growth downstate. This strategy could include Governor Rauner's idea of local right-to-work zones, which would make downstate manufacturing more competitive with states such as Indiana. More importantly, Illinois should adopt Indiana's strategy of training workers for the more highly skilled manufacturing jobs of the future. This emphasis is especially vital given trends toward offshoring and automation that are likely to affect the lowest-paid, least skilled jobs first. Large incentive packages, to the extent that they are used, should be targeted more toward downstate areas while avoiding excesses such as Wisconsin's recent Foxconn deal, which could cost the state over \$200,000 per job (Stein, 2018).

As the Massachusetts' example suggests, attending to regional economic needs is of utmost importance, followed by knitting those strands into a larger whole. In practice, this means nurturing some aspects of the knowledge economy downstate. Rust Belt areas with colleges and universities have best withstood the region's broader economic decline (Austin, 2017).² Illinois could also learn how to better administer economic development programs from other states. Massachusetts law requires each new gubernatorial administration to develop and publish a strategy in this area within a year of taking office (Baker & Polito, 2015). This practice could benefit Illinois in terms of long-term planning. Indiana has privatized some economic development functions to make them less bureaucratic and nimbler; Governor Rauner attempted to follow this

example, but his efforts have been partially stalled due to legislative infighting (Geiger, 2016).

Further research could more systematically examine the outcomes associated with various approaches. For example, it could build on existing econometric analyses of the effects of tax policy on state economies (Reed, 2009). Alternatively, it could revisit efforts to measure the impacts of policies designed to enhance productivity through education and training (Hart, 2008).

Nothing in the above discussion should imply that policy change alone would likely rejuvenate Illinois' economy. States' relative economic positions change little, even over extended time frames; states such as Connecticut typically stay the wealthiest, and those in the Deep South, like Mississippi, remain poorest (Gelman, 2008). Perceptions matter a great deal in this realm as well, and Illinois has not built a reputation for effective governance or business climate (Nowlan & Johnson, 2014). By looking at other states as role models, however, Illinois could improve policy, perception and performance.

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FOOTNOTES

¹ A pervasive issue in this line of research involves the difficulty of isolating the impacts of specific policies on state economies. To address this concern, one approach would be to examine border areas of states that adopt different economic policies. Comparisons between Minnesota and Wisconsin after their 2011 policy divergence are ripe for analysis. However, more systematically assessing the economic outcomes in border counties of such states would be a particularly effective experiment. As states change their approaches to incentive programs, raising or lowering taxes, or investing in education and training programs, economic outcome data at the county level could provide researchers with a better sense of causality.

² Research in other Midwestern states has found that rural school systems often lavish the most resources on students who are least likely to stay in their hometowns, leaving those who do remain with insufficient skills to find success in the contemporary economy (Karr & Keflas, 2009). This practice is something downstate schools need to be aware of when designing curricula.

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CASE STUDY

PROMOTING ALTERNATIVES TO PRIVATE VEHICLE TRAVEL IN ILLINOIS CITIES: FIVE CASE STUDIES OF EXCELLENCE

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This article presents five case studies highlighting municipalities outside of the Chicago metropolitan area that have made substantial progress in promoting non-automotive forms of travel. Charleston and Urbana are featured for their work promoting bicycle travel, Peoria for its transit service, and Galesburg and Rock Island for promoting walkability. With insights drawn from site visits, interviews, and U.S. Census Bureau and Federal Transit Administration data, the cases explore the unique strategies employed by each municipality and the factors they have in common, such as the effective use of external consultants, the development of intergovernmental support and deliberate communication with residents.

Cities that lie outside of major metropolitan areas often face formidable barriers when trying to increase residents' walking, bicycling and transit use. Low population densities and limited employment in central business districts—paired with a lack of strong advocacy organizations or well-developed bus and rail systems—often create major roadblocks to reducing reliance on private car and truck travel. These factors often manifest in strong cultural and political opposition to infrastructural investments for bicyclists, walkers and transit users, as such developments are perceived to potentially divert time and resources away from improving streets and roads for vehicular travel.

Some cities, however, have achieved significant success in promoting these alternatives, and they deserve recognition for their efforts. To cultivate an understanding of their achievements, this article provides five case studies of excellence, with each case focusing on an Illinois municipality outside of the Chicago metropolitan region that has made substantial progress promoting non-automotive forms of travel. After a brief review of the methods used to select these communities, a case study on each community will be presented. Charleston and Urbana are featured for their work promoting bicycle travel,

Peoria for its transit service, and Galesburg and Rock Island for their work promoting walkability.

As the cases show, the strategies employed by these communities have much in common: all have effectively garnered community support, made a mode of transportation that does not involve automobile travel a budgetary priority and resisted temptations to scale back the programs in the face of obstacles. They have all had the benefit of supportive councils and cooperative relationships with local organizations or advocacy groups, yet as the cases show, each adheres to a set of strategies with a distinctly local flavor.

By design, the cases were selected from Illinois communities outside of the Chicago and St. Louis metropolitan areas. This is not to suggest that municipalities in these areas do not deserve recognition for their efforts; rather, the authors determined that properly evaluating their achievements would require different measurement techniques and criteria beyond those considered in this study. It is the authors' hope that these five cases provide lessons relevant to all communities in our state.

METHODS FOR SELECTING CASES

The cases were selected after conducting two tasks. First, the authors reviewed data about transportation patterns from the U.S. Census Bureau and National Transit Database (NTD), collecting and evaluating data for all Illinois communities with a population of more than 20,000. Data from both sources were evaluated to identify the strongest performers, with a particular emphasis on trends observed since 2009. The period prior to 2009 was excluded partially to avoid the confounding effects of the Great Recession on cities throughout the state, which was beyond the scope of analysis. Evaluating the effects of that downturn would have required an entirely different set of tools.

The census data provide information about journey-to-work patterns related to bicycling, walking or transit use. These enumerations, provided through the American Community Survey, are often used in transportation analysis to understand how people rely on different modes of travel. These widely disseminated estimates are regarded as reliable and comprehensive; however, a limitation of this tool is that it does not provide information on trips unrelated to work or school, which account for well over half of all trips in many cities. The NTD conversely encompasses all trips but is primarily limited to bus, rail and paratransit service.

The second step was more qualitative; it involved identifying cities that have adopted best practices and those that have made commitments to creating and sustaining a more balanced transportation system over long periods of time. Once finalists were selected, a two-person research team visited each location in July of 2018 to meet and interview officials and advocates to discuss municipal policies and projects. Telephone interviews were subsequently conducted. From this information, the following five case studies of excellence were prepared.

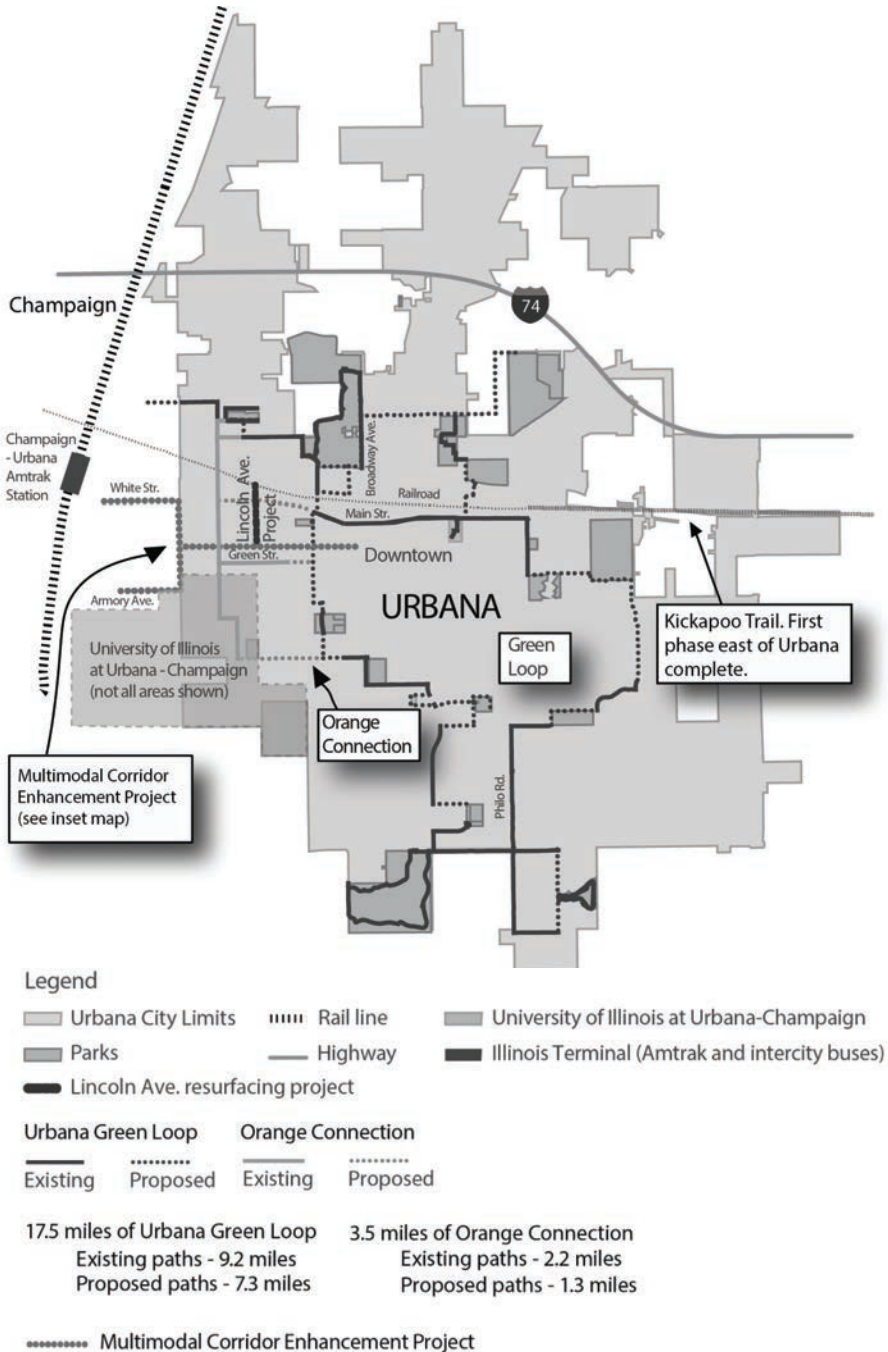
CASE 1 | URBANA

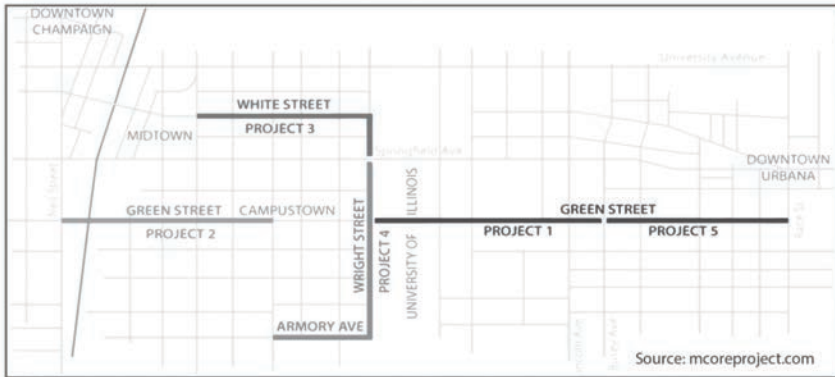
BUILDING PARTNERSHIPS TO PROMOTE BICYCLE PLANNING

The degree to which the City of Urbana has encouraged non-motorized travel through the creation of trails, roadway engineering and a commitment to “complete streets” principles has made it a regional leader in bicycle policy. This city’s success is evident in the growing scale of its trail and bike lane system, testimonials from stakeholders and data from the American Community Survey. The latter showed that 6.7% of Urbana’s population used bicycling as their primary mode of transportation to work in 2016, more than twice as high as most other cities of its size. Although it is not surprising that the share of residents traveling by bike in this city tend to be higher than most due to the large and growing student population at the University of Illinois, Urbana also recorded an impressive 1.8% increase in bike-to-work travel since 2009. Most other university towns we evaluated had much smaller percentages of increase.

Urbana, with a population of 41,989, has seen a decrease in serious injuries and fatalities involving cyclists. This is exemplified in a 7% decline in the five-year rolling average of “A” injuries between 2014 and 2016 (where “A” injuries are those categorized as being “most severe” and consist of those resulting in major injuries and fatalities).¹ It is noteworthy that the drop in injuries took place while the bicycle and motor vehicle traffic rose sharply. Craig Shonkwiler, the assistant city engineer at Urbana’s public works department, noted that while improving safety issues was not the city’s initial motive for making infrastructure improvements, it has been an integral part of its bike-related programs.²

FIGURE 1
 NOTABLE AMENITIES AND FACILITIES FOR BICYCLE TRAVEL IN URBANA, ILLINOIS





The Multimodal Corridor Enhancement Project involves redesigning key corridors and transforming them into Complete Streets. Construction started in 2016 and will be finished in 2020. This initiative is separated into five distinct projects.

Map by Stijn van der Slot, DePaul University

As might be expected given Urbana's contiguous boundary with Champaign, the city also adopted a partnership-oriented approach, with its flagship project involving bike travel. The Green Street Multimodal Corridor Enhancement project (MCORE) was undertaken cooperatively by the City of Champaign, the University of Illinois at Urbana-Champaign and the Champaign-Urbana Mass Transit District.³ Supported by funds from a federal Transportation Investment Generating Economic Recovery (TIGER) grant, the city embarked on its implementation in 2017 with a phased construction timetable allowing for a projected 2020 completion. This multijurisdictional initiative encompasses five projects, each with its own set of bicycle, pedestrian and transit components. The first phase ("Project 1") features raised bicycle lanes and green color-backed bicycle symbols along Green Street from Wright Street to Lincoln Avenue. The two-stage left turn boxes at the Goodwin Avenue and Green Street intersection complement bicycle lanes that sweep behind the transit loading platforms, allowing bicyclists to move around buses and transit riders boarding and alighting at stations. The city has already finished building Green Street from Wright Street to east of Lincoln Avenue, with landscaping slated for completion in the fall of 2018.

Another ambitious undertaking, the Lincoln Avenue and Springfield Avenue Resurfacing project, is planned for construction in 2019 and further demonstrates Urbana's commitment to multimodal travel. Among its key features are design changes and improvements to the pavement along a portion of Lincoln Avenue between Green Street and University Avenue. Improved

curbs and concrete medians separating opposing traffic lanes create a more controlled environment that benefits cyclists. The project also calls for eliminating the notorious safety hazard at the busy intersection of Lincoln Avenue and Main Street by installing enhanced bicycle and pedestrian crosswalks.

The Urbana Green Loop and Orange Connection are showpieces of the city's expanding trail system. This integrated system of paved trails connects downtown, including the Illinois Terminal (located in Champaign, the intermodal station used by Amtrak and intercity bus lines), residential neighborhoods and many popular campus locations. The Orange Connection runs mostly north to south on Urbana's west end, while the Green Loop primarily extends east to west near its downtown and through the University of Illinois campus. To date, 9.2 miles of the Green Loop and 3.5 miles of the Orange Connection have been completed.⁴ When finished, the system will extend 21 miles, more than twice its present length. Recent additions bring the total on-street bikeway mileage within Urbana to 19.5 "centerline" miles (distances measured at the street centerline).

Urbana designs its projects for a 20- to 30-year lifespan, which requires emphasis on good design and, in many cases, years of strategic spatial planning. The city has benefited from a mostly harmonious relationship between staff and its city council as well as strong and vocal constituent support, which has helped make bicycling a part of its political and civic culture. The roots of this collaboration date back to at least 2000, when the city council first began advocating and lobbying for a bike plan. Eight years later, the city published its first bicycle master plan, which was updated in late 2016 and stands out for having clear performance measures and guidelines.⁵ The plan lays out improvements needed in order to move each construction project from the concept stage to reality and calls for the city to draw upon recommendations from both the Vision Zero Initiative (a global program to eliminate traffic deaths) and the National Association of City Transportation Officials.

FIGURE 2

MASTER PLAN AND GREEN STREET CORRIDOR, URBANA, ILLINOIS



Left: Urbana Bicycle Master Plan; Right: Bicyclist and walkers on the Green Street Multimodal Corridor

Several initiatives illustrate the synergy that Urbana has with the University of Illinois and its larger neighbor, the city of Champaign, each of which has independently invested in trails and bicycle infrastructure:

- In July 2018, Urbana passed an ordinance giving it the authority to regulate dockless bikes, including where they can be parked. The following month, a dockless program was launched through a three-way agreement between the city, Champaign and the University of Illinois. Operated by VeoRide, a university-oriented provider of dockless bikes in several U.S. cities, this program allows users to ride for \$0.50 per minute or purchase a daily, monthly or annual subscription. VeoRide has reportedly submitted the serial numbers of 500 bikes, the maximum allowable for a dockless carrier in Urbana.⁶

- Planning is also underway to complete the Kickapoo Rail Trail, which presently runs 6.7 miles east of Urbana to neighboring St. Joseph. The Kickapoo is slated to eventually extend 24.5 miles, providing a direct link to Danville and other parts of Vermilion County. Built on former CSX Railroad right-of-way (a route that was once part of the Peoria and Eastern Railway), this trail will traverse one of the state's most diverse ecosystems when it is completed.
- Each May, Urbana and Champaign jointly host a Bike to Work Day, which attracts hundreds of riders, including many university students, and raises the profile of cycling in the region.

These and other initiatives make bicycling a prominent part of the city's culture. In 2014, Urbana was named Illinois' first gold-level bicycle-friendly community by the League of American Bicyclists.⁷ The Prairie Cycle Club, a social group for bicyclists in Champaign and adjacent counties, has a strong presence in the community and helps raise awareness of its bicycle-related agenda through sponsored rides and other programs.⁸ The result is a populace that sees bicycle travel as an essential component to their community's quality of life.

CASE 2 | CHARLESTON

INTEGRATING BICYCLE PLANNING INTO THE COMMUNITY'S "DNA"

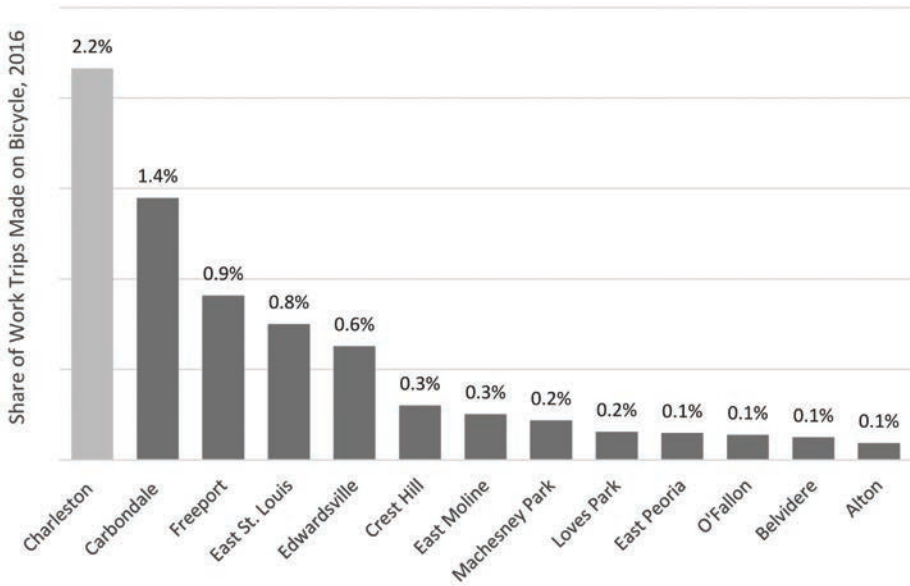
Charleston promotes bicycle travel in ways that are not typical of cities with relatively small populations or locations that are distant from major metropolitan areas. This city of 21,838 is located 139 miles from St. Louis, the nearest major metropolitan area, and stands out in its ability to mobilize and sustain grassroots support via a broad coalition of bicycle advocates. The coalition includes, but is not limited to, students and professors at Eastern Illinois University, hospital staff from Sarah Bush Lincoln Health Center, Bike and Hike (a local sporting goods store), local foundations and the municipal government. A supportive city council has also allowed staff and advocates to concentrate on advancing a broad set of policies that encompass both on-street and off-street improvements.

The results are evident: The American Community Survey shows that the share of Charleston's population using bicycling as their primary mode of transportation rose from 1.7% in 2014 to 2.2% in 2016, a 0.5% increase (Figure 2). While these numbers remain small, they are far higher than most

communities of a similar size, some of which have virtually no reports of using bicycles to reach the workplace. In addition, even as recently as 2010, the share of Charleston's commuters who bicycled to work was only 1.1%.

TABLE 1

SHARE OF WORK TRIPS MADE VIA BICYCLE IN 2016 IN ILLINOIS CITIES WITH POPULATIONS 20,000–30,000



Charleston and Carbondale easily had the highest shares of work trips made via bicycle in 2016, attributable to both the creation of bicycle infrastructure and the large student populations. The rise in share since 2014 in Charleston has been particularly large. Not shown: Collinsville and Granite City, both 0.0%. Source: American Travel Survey (2016).

Some of the groundwork for its bike-friendly policy was laid in the early 1990s, when the city council commenced work on the *Charleston Tomorrow* plan, deepening the city's understanding of its economic and social challenges. Momentum for bicycling grew when the city received a state transportation grant in the late 1990s to create the Lincoln Prairie Grass Trail, a crushed-limestone path extending nearly 13 miles between Charleston and neighboring Mattoon. Steve Pamperin, the city planner, noticed that employees at Sarah Bush Hospital had begun using the trail to cycle to work, an early sign of the degree to which the public would eventually embrace bike-related

improvements.⁹ Soon after the Lincoln Trail's completion, the city added bike lanes on 4th Street, 6th Street, 7th Street and Grant Avenue. This encouraged more residents to travel by bike and to ride off the trail and on local roads.

The city's sophistication in long-range planning has also grown considerably over the past two decades. By the mid-1990s, a report entitled *Charleston Tomorrow* was adopted by the city council. Organized as part of the state's Competitive Community Initiative, the report identified the need for a more strategic approach to city improvements, leading to the development of the Charleston Comprehensive Plan, which was adopted in 1999 and updated in 2009.¹⁰ As part of the plan, municipal staff sought ways to take advantage of their city's unique topographic features by promoting rail/trail corridors for recreational use as well as a broader, community-wide pedestrian and bicycle system. Although most of Charleston (like many cities in central Illinois) lies on flat and arable land, Lake Charleston, on its southeast edge, is surrounded by steep glacial ravines regarded as being ideal for mountain biking and hiking. The presence of these beautiful natural features created a demand for outdoor recreational activity, which has long spurred advocates to informally champion the development of more hiking and biking amenities.

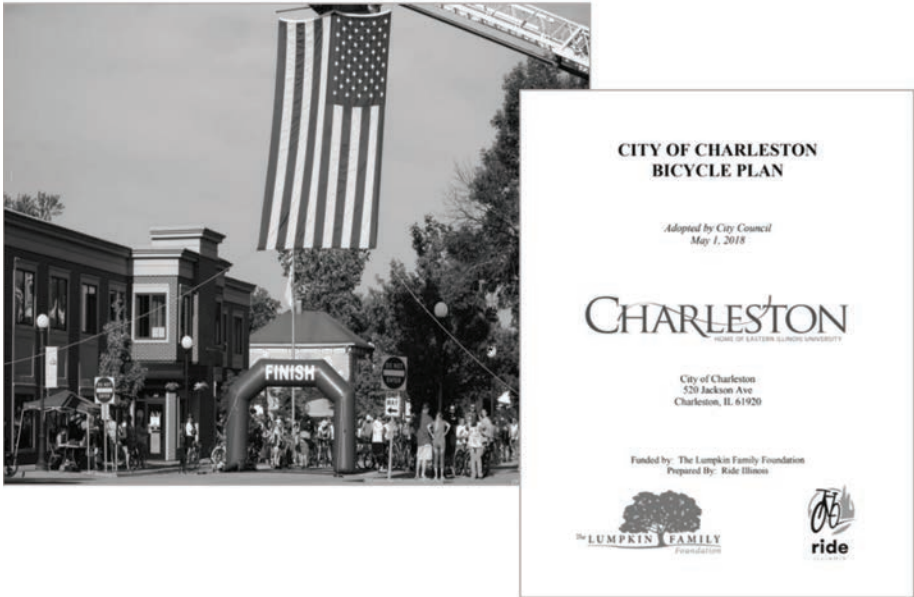
In 2013, advocacy groups headed by community leaders such as Brendan Lynch—the advocacy director of Bike and Hike and a board member of the local chamber of commerce—set into motion the first significant steps toward creating the Lake Charleston Bike Trails.¹¹ Drawing upon recommendations from the U.S. Forestry Service and the International Mountain Biking Association, local stakeholders solicited a great deal of public input and then spent 18 months hand-building these trails. In May 2018, the city opened nine miles of new hiking and biking trails to the public.¹² While little data exists on how many riders use this network, they are said to have quickly become popular among residents and visitors. Local bike shops—including Bike and Hike—have reportedly been selling more accessories (including adult helmets and bike lights) as a result.

Charleston crossed another milestone in May 2017 when the Lumpkin Family Foundation provided funding to allow Ride Illinois, a nonprofit organization devoted to cycling, to create a formal bike plan for the city.¹³ This spurred public workshops to solicit feedback and the creation of new committees to pursue more bike-related goals. After about a year of work, the city council approved and incorporated the City of Charleston Bicycle Plan into its comprehensive plan. As a result, funds for bicycle-related improvements became integrated

into the city's capital project budgeting cycle, providing resources for more trail expansion. According to Lynch, the sustained commitment to include bicycling in every city plan is "changing the DNA" of Charleston.

FIGURE 3

CHARLESTON, ILLINOIS' INVESTMENTS IN BIKING



Left: Finish line at the Charleston Bike Race in downtown Charleston; Right: City of Charleston's 2018 comprehensive bike plan.

Pamperin credits the city council for recognizing that tourism, transportation and infrastructure are critical conduits to economic development and business expansion. For example, the Lincoln Prairie Grass Trail connects Charleston to neighboring Mattoon, strengthening community, economic and recreational ties between the two cities. The Lake Charleston Trails, meanwhile, serve a recreational role and, based on recent reports, support efforts to recruit students and professors to the university as well as medical professionals to the hospital. In 2017, the trail system won the city of Charleston's recognition by earning the prestigious Governor's Hometown Award, an honor granted by the Serve Illinois Commission, which is part of the Governor's Commission on Volunteerism and Community Service.¹⁴

Due to these efforts, Charleston has become a regional destination for bike-related activities and events. For example, the Charleston Chamber of Commerce hosts the Tour de Charleston, a premier downstate cycling event that draws hundreds of cycling enthusiasts to the community each summer. In fall 2018, the city held the Heart of Illinois Cyclocross Race, a USA Cycling-sanctioned event. In addition, Charleston has been designated a 2019 host for the hundreds of cyclists who will be part of Ride Illinois' Grand Illinois Bike Tour.

Several more bike improvements are on the city's horizon:

- By the summer of 2019, Charleston anticipates using Illinois Transportation Enhancement Program funds to pave the Lincoln Prairie Grass Trail, slated for completion by late 2019. This paved trail will include additional bike parking areas to be paid for through grant funding and will remove barriers to entry and encourage more residents to commute by bike. City officials and advocates plan to use the project's completion to draw attention to the advantages of biking and walking.
- By 2019, the city hopes to complete the installation of wayfinding signs and arterial lanes, both being critical components of the bike plan.
- A more distant goal—connecting the on-street bikeways to the lake and its trail system—is regarded as a way of bringing together different parts of the trail system. It also supports the city's intention of receiving certified "bicycle-friendly community" status from the League of American Bicyclists.

The pairing of grassroots advocacy efforts and strong policy initiatives has allowed Charleston to achieve a great deal over a relatively short period of time. This public and private partnership, from advocacy to execution, has succeeded in spite of the limitations on capital funding stemming in part from the absence of significant population growth in this community. This has required city officials to focus on projects generating the greatest payback within a tightly managed budget.

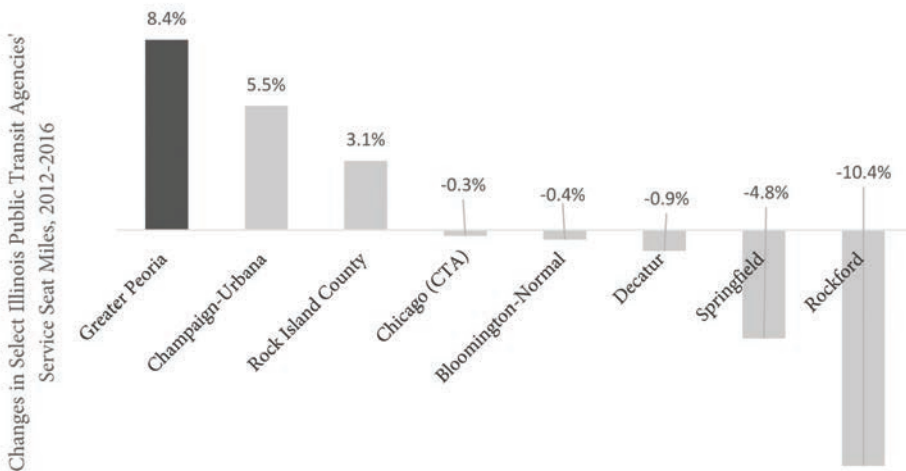
CASE 3 | PEORIA

PRESERVING A TRANSIT CULTURE THROUGH DIFFICULT TIMES

Peoria has one of the highest rates of transit ridership measured on a per capita basis of any metropolitan region in the state. The system handles 9.1 trips per regional resident annually, which is substantially more than Bloomington, Rockford or Springfield.¹⁵ Moreover, unlike most other areas with populations in the 100,000 to 150,000 range, where transit accounts for no more than 2% of work-related trips, the share in metropolitan Peoria stood at 3.8% in 2017, the most recent year with fully available data. Between 2009 and 2016, the share of residents in the region using buses for work trips increased by 1.2%.

TABLE 2

CHANGES IN SERVICE SEAT MILES BETWEEN 2012 AND 2016 AT PUBLIC TRANSIT AGENCIES IN ILLINOIS



The Greater Peoria Mass Transit District expanded seat miles of service by 8.4% between 2012 and 2016 spurred by new Sunday service and decisions to maintain routes despite a softening demand resulting from falling gasoline prices. Many other districts in the state cut service.

The Greater Peoria Mass Transit District, which operates under the name CityLink, has bus routes that serve about three-quarters of the urbanized area, including its most economically and socially underserved communities. This

is a high level of coverage considering that the region has more dispersed development patterns. Peoria has sustained a commitment to transit despite vicious industrial cycles that have led to dramatic changes (and often reductions) in employment at its manufacturing facilities from year to year. The transit system experienced significant declines in ridership in 2016 and 2017, which reduced passenger boardings by more than 20%, before enjoying a modest rebound in 2018.¹⁶ During the first six months of 2018, traffic was up 1.1% over the same period in 2017, a trend attributable in part to a sharp industrial rebound.

Doug Roelfs, General Manager of CityLink, attributed much of the recent jump in transit ridership to higher fuel prices, which has made driving more expensive.¹⁷ Nevertheless, the rebound also stems from a commitment to maintaining an expansive transit system of 1,699 bus stops in spite of past traffic drops, to continue to connect citizens who do not have ready access to cars with access to jobs, an emphasis that dates back many years.¹⁸ In fact, many of Peoria's original bus routes were created from a desire to bring employees to plants operated by construction equipment company Caterpillar, which has production facilities both downtown and on the metropolitan area's periphery.

The connectivity provided by this system revolves heavily around the CityLink Transit Center, a downtown hub at 407 SW Adams Street that opened in 1999. This canopied facility, equipped with multiple bus lanes and a heated indoor waiting area, is shared with Amtrak Thruway buses (coaches offering connections to Chicago via Bloomington-Normal), major intercity bus lines (including Greyhound, Trailways and Peoria Charter Coach) and CountyLink, the on-demand service funded by the county but operated by CityLink. Using smaller vehicles, CountyLink offers \$6 rides that often extend well into rural parts of Peoria County.¹⁹ Such synergy between local and long-distance buses is absent in many other metropolitan regions in our state, making it a compelling example of the connectivity provided by offering both private and public bus services under one roof. The transit center has long been equipped with a private daycare center, which is used by families reliant on public transportation. It is also within a few blocks of Peoria's minor league baseball stadium, Dozer Park, and a major Caterpillar production facility, both of which are important traffic generators.

Ridership on CityLink consists heavily of regular users who have no other modes of travel available to them—an increasingly common situation. To serve these riders better, CityLink has implemented several notable initiatives:

- CityLink added Sunday service on some routes in 2014, making it a seven-days-per-week operation.
- CityLink purchased new Remix route study software in 2017 to analyze data about route productivity, giving it a new tool to assess options for changing and consolidating routes, thereby stretching its limited operating dollars.
- CityLink is aggressive in offering incentives for college students at local colleges, including Bradley University and Illinois Central College, delivering both discounted passes and one-way trips for \$0.50 for students. The agency has also increased service and streamlined schedules to reduce running times between Pekin and Peoria, which has increased ridership.

The transit system also benefits from strong intergovernmental support. The city has helped stimulate transit use by promoting real-estate development around major transportation corridors and along the Illinois River in and near downtown. The latter strategy has resulted in new condominiums, parkland and other public open spaces, museums and entertainment that are favorably situated for transit use. As a result, according to Roelfs, younger citizens are driving less and using transit more.

The Tri-County Regional Planning Commission, the region's metropolitan planning organization, recognizes that the system needs to modernize and expand after years of largely maintaining the status quo.²⁰ According to Eric Miller, the commission's acting director, these efforts are essential in bridging the gaps that persist despite past efforts to better connect people to jobs.²¹ The system has not changed with the times to the degree that he and others believe is necessary. Illustrative of this problem is the fact that no major routes have been added in recent years. To close the gaps, the Peoria-Pekin Urbanized Area Transportation Study, an entity affiliated with the planning commission, has conducted an extensive technical analysis about ways to increase the system's coverage. A study published in 2015 outlined a wide range of federally funded transportation projects that could be implemented through 2021, plus high-priority corridors in which to channel investment.²² Each community in the Peoria urbanized area is invited to discussions about the use of any federal money received.

FIGURE 4

CITYLINK FACILITIES AND SERVICES IN PEORIA, ILLINOIS



Upper left: The canopy-covered bus platforms at the CityLink Transit Center in downtown Peoria; Lower left: A departing bus on CityLink's airport route, which runs every 30 minutes on weekdays. Right: The climate controlled waiting room at Transit Center.

According to Roelfs, there is hope that the transit system can pivot in the next several years. The construction of a second transit center north of the existing one, a facility called the Northside Transfer Zone, is a future project deemed necessary to expanding the service area to all of the urbanized regions. The preferred location for the transfer zone, a 1.2-acre redeveloped site near Interstate 74, would allow the agency to speed up service and attract riders in rapidly growing parts of town. The agency is working to ease concerns of neighborhood residents wary of this facility's construction and other challenges associated with such a significant undertaking. In addition, the city has been aggressive in rolling out diesel-electric hybrid buses and creating solar-powered bus shelters. CityLink also plans to install more sheltered bus stops and increase ADA-compliant service. In 2019, the agency will install automatic vehicle location software on its buses, thereby providing better information about passenger journeys, including the locations where they can board and alight buses.

These efforts exemplify CityLink's commitment to sustaining levels of service that are higher than those available in most other metropolitan areas of Peoria's size while gradually modernizing its buses and station as new technologies come to the fore.

CASE 4 | GALESBURG

MAKING PEDESTRIANS A PRIORITY

Galesburg's commitment to more pedestrian-friendly streetscapes, downtown revitalization and railroad grade separations has significantly increased foot traffic in the community. In 2016, 6.4% of the community's residents used walking as their primary mode of transportation to work, which is tied for the highest (with Rock Island, featured in Case 5) among the 11 cities outside the Chicago region with populations in the 20,000 to 40,000 range that do not have major universities. By comparison, in the 10 other Illinois cities of this category, an average of just 1.8% of people walk to work. Galesburg, which has a population of over 31,000, has seen a 0.8% increase in this measure since 2009, which is also well above most other cities of the same size.

TABLE 3

SHARE OF POPULATION THAT WALKS TO WORK AMONG ILLINOIS MUNICIPALITIES WITHOUT MAJOR PUBLIC UNIVERSITIES WITH POPULATIONS BETWEEN 20,000 AND 40,000



Source: American Travel Survey (2016). Based on 2016 American Travel Survey data, a higher share (3.8%) of Galesburg's population walked to work in 2016 than any other city in the state in the 20,000 to 40,000 range except Rock Island (featured in Case 5).

The size of Galesburg's downtown, which is laid out on a grid, hearkens to a time when the population was larger (the city had 37,000 residents in 1960, approximately 20% more than today). The area's building stock, however, is well-preserved and testifies to its rich cultural and industrial history. Galesburg is home to Knox College (a nationally-ranked liberal arts college), the birthplace of Ferris wheel inventor George Washington Gale Ferris, Jr., and poet Carl Sandburg, and a major junction on Western railroads. Tracks extend in six directions from Galesburg—which has the country's second largest BNSF railyard—and eight Amtrak trains, including two Chicago-to-California runs, stopping daily.

FIGURE 5
PEDESTRIAN ORIENTED SPACES IN GALESBURG, ILLINOIS



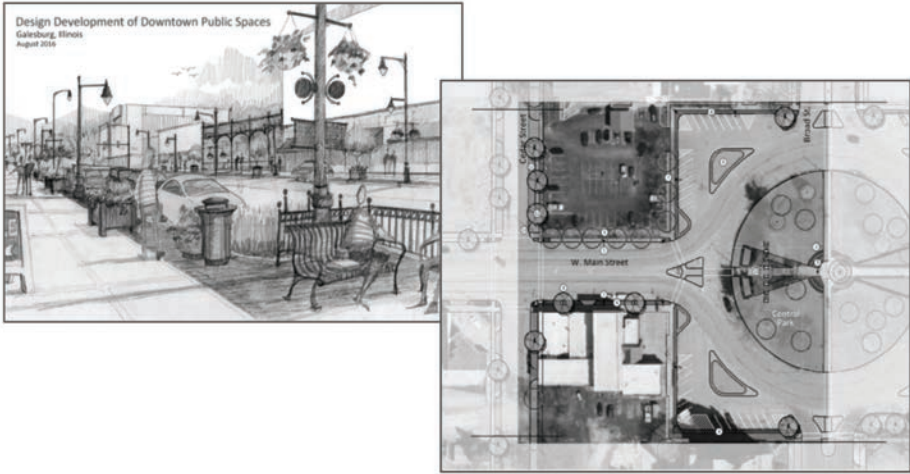
Top: Wide and well-maintained sidewalks on Main Street in Galesburg; Bottom: Passengers detrain the California Zephyr at Galesburg's Amtrak station, a short walk from downtown.

Largely a result of the intensity of rail activity, Galesburg has developed a more sophisticated approach to attracting and prioritizing funding for the creation of grade separations and “quiet zones” (i.e., crossings at which locomotive horns do not need to be sounded due to the presence of alternative safety measures) than most cities in Illinois. With a total of three grade separations costing more than \$57 million, it has made tremendous strides in completing projects due to its working partnerships with BNSF, support from the state government and active stakeholder involvement. The Bickerdyke Bridge, an overpass grade separation and quiet zone above BNSF rail tracks, was constructed on Seminary and Kellogg Street in 2014. The Reverend Jon A. Sibley Sr. Underpass, finished in 2018 (named for a citizen who was said to have spent his life building bridges between residents), was a particularly important milestone, putting East Main Street traffic below one of its busiest rail lines while also providing pedestrians with wider sidewalks. The city utilized funds from BNSF’s crossing closure incentives, the Illinois Commerce Commission and the Illinois Department of Transportation to help pay for quiet zone improvements. In 2015, Galesburg implemented a gas and electric utility tax to fund capital projects throughout the city. A 2019 project, the Park Plaza, is slated to draw upon this funding to further advance the downtown’s revitalization efforts.

According to Wayne Carl, Galesburg’s director of planning and public works, the grade separations have improved connectivity and public safety—outcomes considered critical to keeping downtown as the focal point of community life.²³ The closing of several retail stores at the once-popular Sandburg shopping mall in 2017 near the edge of town further contributed to the area’s vibrancy by redirecting shopping activity to downtown stores. Recognizing the difficulty of keeping this area well-patronized, the city has made sidewalk improvements, landscaping and citizen interaction with businesses, culture and entertainment the top priorities in its plan.

Galesburg turned to outside experts, the Springfield-based Massie & Associates firm, in 2016 to create its *Downtown Galesburg Strategic Plan for the Future*, which was the product of extensive citizen involvement.²⁴ Described as a “guiding document” for the 60-block area encompassing downtown and close-in neighborhoods, the plan weaves together transportation and business development goals with strategies for historic preservation and expansion of downtown living. Priorities include public art and supporting businesses such as a grocery store, a brewery, theaters and existing and proposed housing developments.

FIGURE 6 DESIGN DEVELOPMENT PLAN FOR GALESBURG



Images from Galesburg's final 2016 report on design development for public spaces.

The “walking culture” that exists in Galesburg is a combination of historical factors and recent planning initiatives. Downtown Galesburg is in close proximity to apartments, condominiums and the 1,400 students who attend Knox College. The Seminary Street Historic Commercial District has 30 businesses and the Discovery Depot Children’s Museum (one of the city’s largest attractions), as well as several loft apartments on the street’s east side.²⁵ A building at 246 E. Main Street has become a mixed-use development success story, housing lofts and the Galesburg Community Foundation, which supports a wide range of local initiatives.²⁶

In accordance with the plan, the city has adopted best practices in sustainability to preserve and support national and state historic districts. Sections of Broad, Kellogg and Seminary streets are brick-paved, which slows vehicle traffic and recreates the historic aesthetic of downtown Galesburg. The primary sidewalks downtown are 14 feet wide. Walking and biking paths connect citizens to local parks and nearby Lake Storey, a popular recreational area, and the recently renovated Rotary Park has a new walking path around the park’s perimeter. Plants are suspended above sidewalks to provide shade and add a decorative element.

The city actively solicits public input through online surveys and public meetings. The Heart and Soul Project, implemented in 2015 through 2017, was a particularly large undertaking and allowed residents to submit ideas to enhance the city's future.²⁷ The county's public health department encourages residents to walk and bike as part of a well-being initiative while city fire chief Tom Simkins organizes a Safe Routes to School program that includes "walking school buses" (i.e., groups of students walking to and from school with chaperones). The city council has supported "Complete Streets" concepts to enhance both safety and economic development and has added bike lanes in previously slated reconstruction projects, such as along Fremont Street and North Seminary Street.

A third rail quiet zone was installed in August 2018 at a crossing near the Galesburg Railroad Museum, which is housed in a historic railroad edifice adjacent to the Amtrak station. The team working on Galesburg's comprehensive plan has recommended that the city consider converting Main Street into a three-lane road (it currently has four lanes) with bike lanes in each direction. A parks and recreation master plan is taking into account residents' desire to have more walking and biking trails.

Galesburg seeks to eventually connect all biking and walking trails to city sidewalks, making connectivity easier for those opting to avoid motor vehicles. Recognizing that retail sales throughout the region (and the country as a whole) have been soft in recent years, the community is striving to attract people by providing an ample mix of cultural, dining and retail amenities. For example, a plan is underway to erect a new Railroad Hall of Fame building in the heart of the city that will be within easy walking distance of the Amtrak station.

Galesburg's sophistication in downtown planning is rare for a city that is far removed from a major metropolitan area and has fewer than 40,000 residents. The city leverages technical tools, including quiet zones and a gas and electric utility tax, in ways uncommon among municipalities of its size. Goodwill between city hall and residents gives local planners the ability to experiment with strategies promoting pedestrian activity that are more commonly associated with affluent Chicago suburbs with much larger budgets.

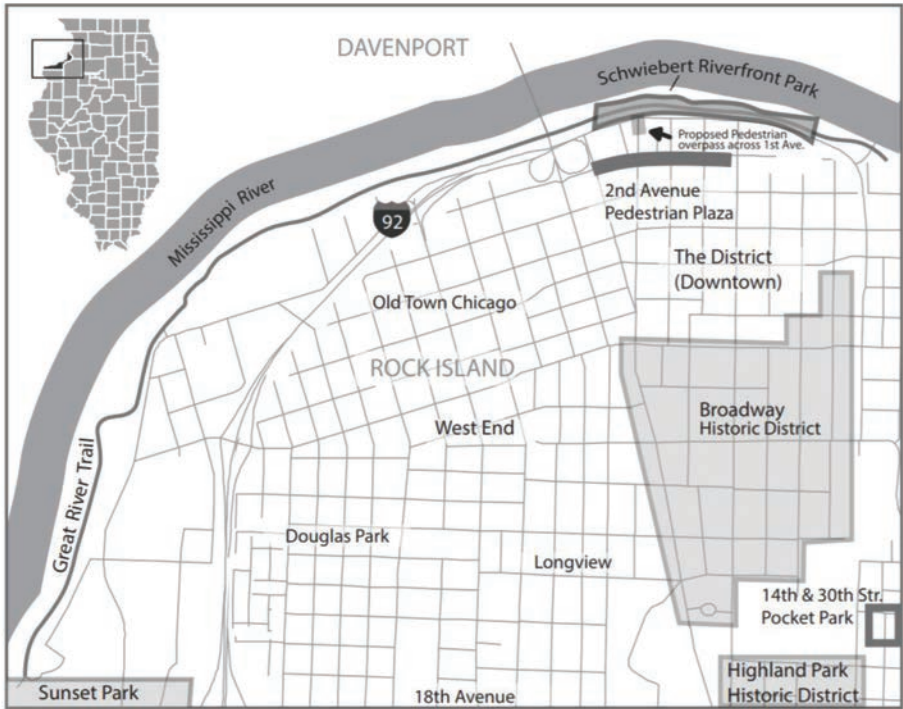
CASE 5 | ROCK ISLAND

STRENGTHENING HISTORIC DISTRICTS AND SERVING DIVERSE POPULATIONS

Rock Island supports the needs of its increasingly diverse population—including its sizable immigrant community—by investing heavily in projects that make it a more walkable city. Sidewalk reconstruction, new plazas and the inclusion of upper-floor housing in redevelopment projects have gradually transformed its downtown into a more vibrant and culturally-rich place. The payoffs of these efforts are evident in U.S. Census data: In 2016, 6.4% of Rock Island’s population used walking as their primary mode of transportation to work, an increase of 1.6% from 2012. By comparison, most cities of Rock Island’s size have only half that number (see Table 3 in the section on Galesburg).

Once having a Mississippi River waterfront lined with heavy industry—including a vast International Harvester manufacturing facility—in recent decades, Rock Island has struggled to make the transition to a more service-oriented economy. However, the transition has been abetted by the cooperative relationship that exists between municipalities of the Quad Cities, encompassed by Moline and Rock Island as well as Bettendorf and Davenport, Iowa, on economic development initiatives. World Relief, a humanitarian assistance organization with offices in Moline, has spurred the emergence of concentrations of immigrant communities in this metropolitan cluster. In Rock Island’s school district, more than 30 languages are spoken.²⁸ It is common for both adults and children in the immigrant communities to rely on walking as their primary mode of transportation.

The seven aldermen who comprise Rock Island’s city council have unanimously supported Complete Street policies, in which walkability is a preeminent goal. This governing body appointed Thomas Thomas as city manager in 2012 and Randy Tweet for this post in 2017, both of whom were committed to historic preservation and improvements to the downtown area popularly known as The District. Under Tweet’s leadership, the city council and city administration have made retail and community development top priorities, with each infrastructure project including a pedestrian component.

FIGURE 7**DOWNTOWN AND CLOSE-IN NEIGHBORHOODS OF ROCK ISLAND, ILLINOIS**

Rock Island's programs to enhance walkability have centered on its downtown ("The District") and historic districts. Schwiebert Riverfront Park, along the Mississippi River, is in close proximity to its central business district. Map by Stijn van der Slot, DePaul University

The cornerstones of these efforts are redevelopments that focus sharply on renovations of existing downtown buildings, most of which involve apartments or lofts on the top floors. The city's downtown revitalization plan, prepared by Chicago-based Houseal Lavigne Associates, and Renaissance Rock Island—the "umbrella name" for three organizations that support this effort—takes a positive view of public/private collaborations. Synergy between the undertaken projects has been a boon to The District, while in nearby residential neighborhoods there is a similar push to preserve older buildings that are well-situated to create pedestrian-oriented streetscapes. Roadway resurfacing is also tied to larger historic preservation goals with an eye toward walkability. When large-scale resurfacing projects are undertaken, for example, it is expected that sidewalk improvements will be part of the mix.

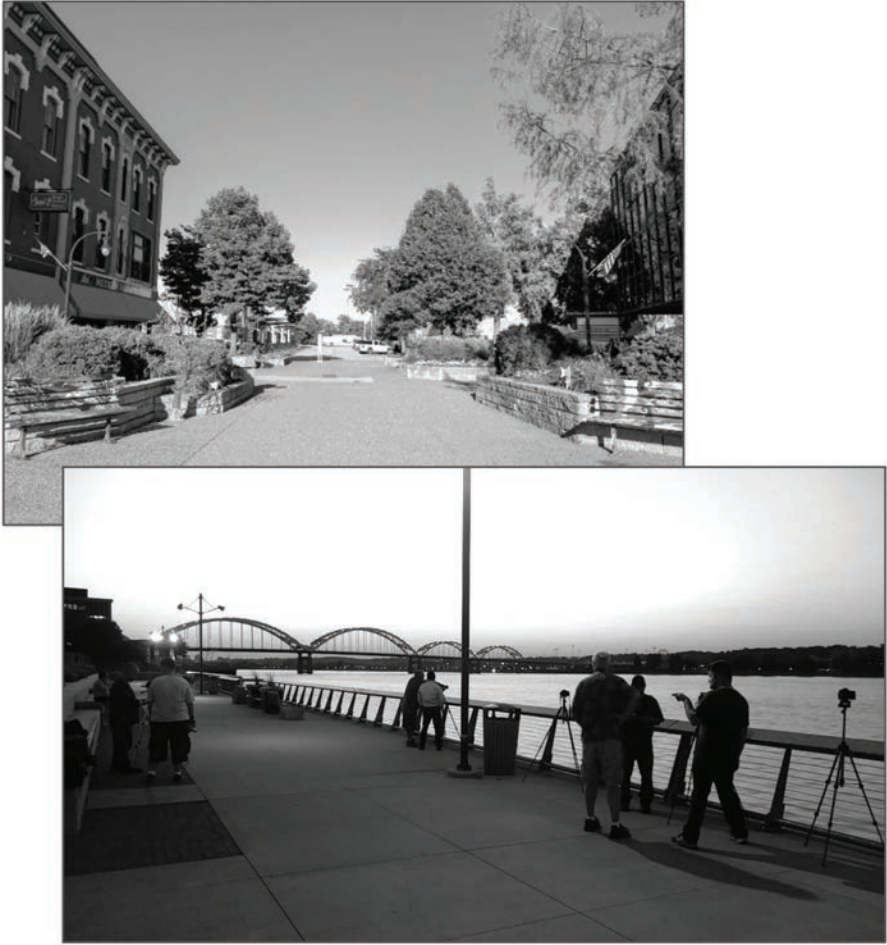
The groundwork for such strategies dates to the administration of Mark Schwiebert—mayor from 1989 to 2009—who, along with his staff, spent years working to relocate an underutilized casino to create an amenity that was ultimately named Schwiebert Riverfront Park in his honor. This 80-acre park opened in 2010 and offers striking vistas of the river, the Davenport skyline, and the historic railroad bridge that for a century served trains of the Rock Island Lines, the bygone major railroad once bearing the city’s name. This \$10 million amenity includes a performance pavilion, open green space and a splash park, giving walkers in The District another high-profile destination. The park was equipped with a landing dock in 2014.

Several more recent initiatives in The District exemplify the broad range of strategies being employed to make foot travel easier and more pleasant:

- When the demolition of a building at 14th and 30th streets was imminent, the city saw an opportunity to create more public open space and held numerous public meetings to solicit input about the best way to use the land. In response, the city attended to the building’s removal for the creation of a “pocket park” with murals, street furniture, bike racks and parking for food trucks, which quickly became popular upon completion.
- On 1st Avenue, east of downtown, efforts are now underway to create a two-way bike path, a railroad quiet zone and crosswalk “bump outs” to make street crossing shorter and safer for pedestrians.
- The city has set out to create a woonerf or “living street” on which all travel is reduced to walking speed, and the roadway is raised to be even with the sidewalks. Woonerf is a Dutch word, derived from the widespread application of this technique in the Netherlands. Although this novel idea has yet to receive the needed funding (a 2017 bid for state transportation funding was unsuccessful), Tweet and his staff continue to actively pursue the idea. Even if the woonerf is not built, The District is much more alive today than just a few years ago, particularly in the area around the reduced-traffic pedestrian plaza along 2nd Avenue from 17th to 18th Street.

FIGURE 8

PEDESTRIAN-ORIENTED SPACES IN ROCK ISLAND



Top: The Second Avenue Pedestrian Plaza, notable for its extensive landscaping; Bottom: Photographers gather at sundown at the Schwiebert Riverfront Park.

FIGURE 9

AN ILLUSTRATION FROM ROCK ISLAND'S ECONOMIC DEVELOPMENT FRAMEWORK SHOWING ITS EMPHASIS ON PLACEMAKING

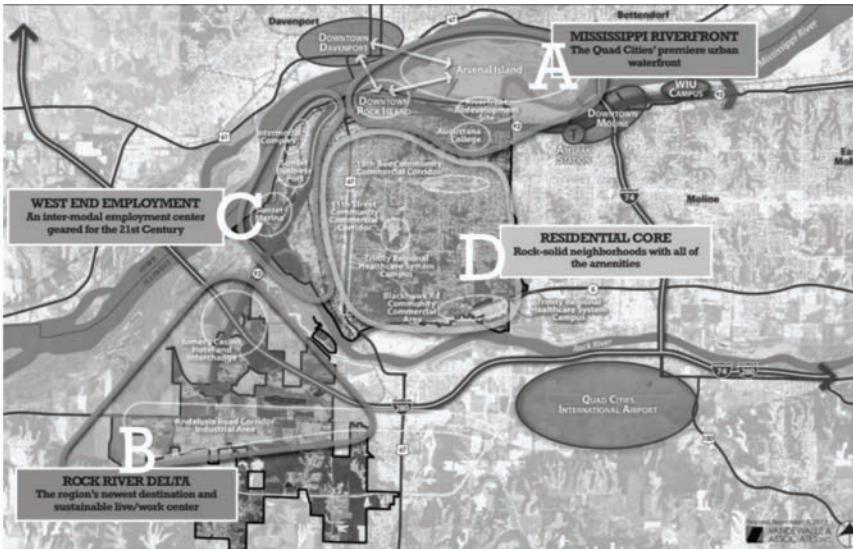


Image from Rock Island's 2014 Strategic Development Plan

Another strategy has been to increase city maintenance and repair of sidewalks. Prior to Tweet's term in office, the city offered a 50/50 sidewalk and curb replacement program, allowing homeowners and businesses to pay just half the cost of sidewalk resurfacing adjacent to their property; the city paid for the rest, up to \$50,000. Tweet's policy, however, is to fully fund such reconstructions, eliminating the match requirement while also making more dollars available. While the city typically completed 10 to 12 sidewalk projects annually in the old program, it now completes closer to 45 per annum. According to Tweet, the city has improved 134 locations in the last three years.

An emphasis on walking is also evident in the city's Safe Routes to School programs, which include engineering, education and encouragement components. At Longfellow Elementary School in 2018, the city provided approximately \$250,000 toward crosswalk, curb and sidewalk improvements to create a safer walking environment. Two other institutions, Frances Willard Elementary and Rock Island Academy, created walking and biking routes for student convenience and safety. Yard signs are routinely set up to spread awareness of the routes and reinforce safety practices.

Municipal staff in Rock Island consider making their city a vibrant and walking-oriented city closely tied to increasing its mainstream tourism appeal. In order to weave together its historic districts and expansive downtown more effectively, the city envisions creating a streetscape plan, one that may draw upon Complete Street principles. As these examples show, Rock Island stands out for its visionary efforts to fuse historical preservation, aesthetic improvement and pedestrian convenience to give its community a distinctive identity.

WHAT THESE CASES TEACH US

These five cases are instructive due to their similarities: In each instance, municipal leaders and community advocates adopted new ways of thinking about problems stemming from almost total reliance on private motor-vehicle travel. Each city created policies with the backing of coalitions of stakeholders and maintained nearly continuous communication with businesses, civic boosters and residents as a whole. Outside consultants were brought in to help prioritize capital projects and stretch limited budgets. The communities understood the importance of prioritizing good design to ensure that their investments had long-lasting effects.

Building public support proved critical to overcoming the obstacles. Few of the communities had the benefit of well-established advocacy organizations pushing for sustainable forms of travel. Urbana complemented the plans being pursued by Champaign and the university to maximize the value of its investments. Charleston leveraged informal efforts made by advocates and recreationalists while cultivating public support for an ambitious bike trail plan. Galesburg successfully contended with a street system riddled with railroad tracks that belonged to a carrier with headquarters more than 700 miles away. Rock Island improved its waterfront and studied the needs of its growing immigrant populations before moving ahead with ambitious programs to promote walkability. Peoria shifted its thinking away from providing transit service primarily for transporting workers to and from manufacturing plants and moved toward diversifying its service, including adding bus runs on Sundays.

Each of the five cities capitalized on the goodwill between the city council, city staff, development entities, and in the case of Peoria, a metropolitan planning organization able to represent an entire cluster of municipalities. The public input process was not formulaic or undertaken as a necessary evil. The

testimonials we heard from each official also made it clear that community leaders excelled in engaging constituents in a frank and interactive manner.

These cases are filled with examples of how years of work to build trust and goodwill can pay dividends. Urbana's staff cooperated with Champaign's staff and university leaders to create a culture conducive to long-range bicycle travel. Charleston acted on the friendships and trust between its city council, advocacy groups and a sporting goods store to create trails that improved access to its natural areas. Peoria used its long history of support for transit to sustain bus service even after precipitous ridership drops when most cities opted to make cuts. Galesburg worked closely with residents to build excitement around programs to transform its downtown into a more pedestrian-friendly place, while Rock Island worked in a highly sophisticated way with organizations long committed to urban redevelopment.

These five cities have come a long way in their bid to make it easier to walk, bike and use transit. This not only increases mobility and fosters economic development, but it could also lay out a path for boosting public health and safety. Each city deserves recognition as a case study of excellence.

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FOOTNOTES

¹ To read more about fatality and serious-injury reports, visit <https://reportcard.cuuats.org/summary/>

² Interview with Craig Shonkwiler, July 23, 2018

³ More information about the Green Street MCOE project can be found at <https://www.urbanaindinois.us/node/7242>

⁴ View the 2016 Urbana Bicycle Master Plan and learn more about the Green Loop and Orange Connections trails on pages 192–193 at https://www.urbanaindinois.us/sites/default/files/attachments/2016_Urbana_Bicycle_Master_Plan_0.pdf

⁵ For more information on the plan, visit <https://www.urbanaindinois.us/bicycle-master-plan>

⁶ For information about the dockless program, visit <http://www.news-gazette.com/news/local/2018-08-16/c-us-first-shareable-bikes-expected-hit-streets-start-ui-semester.html>

⁷ To view Urbana's Bicycle Friend Community report card, visit <https://www.urbanaindinois.us/sites/default/files/attachments/bfc-report-card.pdf>

- ⁸ For more information, visit <http://www.prairiecycleclub.org/>
- ⁹ Interview with Steve Pamperin and Brendan Lynch, July 23, 2018
- ¹⁰ For more information, visit the Charleston County website at https://www.charlestoncounty.org/departments/zoning-planning/CompPlan_history.php
- ¹¹ Interview with Steve Pamperin and Brendan Lynch, July 23, 2018
- ¹² For more information, visit https://www.charlestonillinois.org/vertical/sites/%7B48D19AF4-26A9-444F-A5B9-99631D71D5F2%7D/uploads/Trail_Map_2.1.pdf
- ¹³ To view the plan created by Ride Illinois for Charleston and Mattoon, visit <http://rideillinois.org/bike-plans-charleston-mattoon/>
- ¹⁴ For more information about the Governor's Hometown Award, visit <https://www2.illinois.gov/sites/serve/Pages/GHTA.aspx>
- ¹⁵ Federal Transit Database, June 12, 2018
- ¹⁶ Federal Transit Database, June 12, 2018
- ¹⁷ Interview with Doug Roelfs, July 24, 2018
- ¹⁸ For more information about bus stops, see page 57: <https://tricityrpc.org/wp-content/uploads/Envision-HOI-1.pdf>
- ¹⁹ To learn more about CountyLink, visit <http://www.ridecitylink.org/countylink>
- ²⁰ For more information about Peoria's regional collaborations, visit <https://tricityrpc.org/>
- ²¹ Interview with Eric Miller, July 24, 2018
- ²² To read about the Heart of Illinois Long Range Transportation Plan, visit <https://tricityrpc.org/wp-content/uploads/Envision-HOI-1.pdf>
- ²³ Interview with Wayne Carl, July 24, 2018
- ²⁴ Galesburg's downtown design development plan can be found at http://www.ci.galesburg.il.us/assets/1/22/Galesburg_Design_Development_of_Downtown_Public_Spaces_Final_Report.pdf
- ²⁵ To read more about the historic Seminary Street district, visit <https://seminarystreet.com/history.aspx>
- ²⁶ Public response to the Galesburg loft apartments was recorded in the following article: <http://www.galesburg.com/x425603874/Loft-apartments-draw-an-overwhelming-response>
- ²⁷ To learn more about the Galesburg Heart and Soul project, visit <http://www.galesburgheartandsoul.com/>
- ²⁸ Interview with Randy Tweet, July 24, 2018. Read more about Renaissance Rock Island at <http://www.rocksolidrockisland.com/who-we-are/>

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- Caldwell, J., & Yanocha, D. (2016). Is it time to reexamine your bike code? A review of cycling policies in Illinois municipalities. *Illinois Municipal Policy Journal*, 1(1), 109–121.
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- City of Urbana (2016). Urbana Bicycle Master Plan. Retrieved from: https://www.urbanaininois.us/sites/default/files/attachments/2016_Urbana_Bicycle_Master_Plan_0.pdf

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WEBINARS AND WORKSHOPS

Readers of the Illinois Municipal Policy Journal are invited to the following programs featuring the research in this volume. These discussion-oriented events are sponsored or co-sponsored by DePaul University's Chaddick Institute for Metropolitan Development. They are moderated by a faculty member from that university. To take part in these events, all of which are free of charge, or to be added to the listserv, please email chaddick@depaul.edu or call (312) 362-5731.

TUESDAY, JANUARY 22, NOON-1:00 P.M.

Webinar: "Innovative Municipal Strategies to Promote Economic Development"
Presenters: Nicholas Kachiroubas, Andy Blanke and Norman Walzer
Co-hosted by the Chaddick Institute and School of Public Service, DePaul University

TUESDAY, FEBRUARY 5, NOON-1:00 P.M.

Webinar: "Chicagoland Millennials: Implications for the Suburbs"
Presenters: Alice Davis and Wesley LeBlanc
Co-hosted by the Gensler and Chaddick Institute

WEDNESDAY, FEBRUARY 20, NOON-1:00 P.M.

Webinar: "Municipal Policy Responses to the Growth of Bikes sharing, Ridesharing and Homesharing in Illinois"
Presenters: Brandon Bordenkircher, Riley O'Neil and C. Scott Smith
Co-hosted by Chaddick Institute and Twelve Tone Consulting

WEDNESDAY, MARCH 6, NOON-1:30 P.M.

Lunch Symposium: "Promoting Alternatives to Private Vehicle Travel in Illinois Cities: Five Case Studies of Excellence"
Presenters: Joseph P. Schwieterman, Lauren Crabtree and C. Scott Smith
14 E. Jackson, Suite 1600, Chicago
Co-hosted by Chaddick Institute and Sustainable Urban Development Program, DePaul University. A networking session for graduate students from Illinois universities will immediately follow the symposium.

Be sure to check chaddick.depaul.edu for possible changes in the time and location of these events.



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