

Illinois Municipal Policy Journal

Volume 2 | Number 1 | Winter 2017

**A collaboration of the Illinois Municipal League
and School of Public Service at DePaul University**

IN THIS ISSUE:

Drivers & Barriers to Fire
Department Consolidation
p. 1

How Small
Downtowns Grow
p. 17

Immigrant Policy
Context in Illinois
p. 85

Understanding
P3s
p. 103

Tax Increment
Financing
p. 135

ILLINOIS MUNICIPAL POLICY JOURNAL

2017 | Volume 2 | Number 1

ISSN 2573-0614 (print)
ISSN 2573-0630 (online)

PUBLISHER

Brad Cole
Illinois Municipal League

MANAGING EDITOR

Joseph P. Schwieterman
DePaul University

ASSOCIATE EDITOR

Nick Kachiroubas
DePaul University

TECHNICAL EDITORS

Carrie Breitbart
C. Scott Smith
Gina Fanady

PRODUCTION TEAMS

DEPAUL UNIVERSITY

Mallory Livingston
Riley O'Neil
Stijn van der Slot

ILLINOIS MUNICIPAL LEAGUE

Rebecca Turner
Lori Harlan
Kim Cummings
Rachel Caton

Journal Editorial Office

School of Public Service & Chaddick Institute, 14 E. Jackson Blvd., Suite 1600, DePaul University, Chicago, IL 60604
312.362.5731 chaddick@depaul.edu

Copyright © 2017, Illinois Municipal League

All rights reserved. No part of this publication may be reproduced in any form by any means without written permission from the publisher: Illinois Municipal League, 500 East Capitol Avenue, PO Box 5180, Springfield, IL 62705
217.525.1220 iml@iml.org

Published by the Illinois Municipal League

Publisher reserves the right to final review and edit of all articles submitted for this publication.

This publication is provided free of charge upon request.

FROM THE PUBLISHER

Now in its second volume, this edition of the *Illinois Municipal Policy Journal* expands upon the work that was done to initiate this project just one year ago. Combining new scholarly research with real world case studies of best practices, and highlighting communities from throughout Illinois, the articles included here offer a mix of information that should satisfy the curiosities of nearly any reader who practices in or around the realm of municipal government. The need for this information is ever more present as local elected officials and community leaders face the same, if not more, challenges for providing programs and services in an environment of fewer resources. To that extent, the data and analyses have changed with the topics, but the underlying and increasing demands on municipal governments have not.

The partnership that developed this *Journal* continues to prove mutually beneficial and is yielding new interest, both within the state of Illinois and outside its borders, in research that can be conducted, compiled and conveyed to practitioners in a field that, perhaps, has historically been underserved. Though still in its infancy, the *Journal* promises to be a venue for the discourse necessary to address and resolve critical and timely issues. Plans for future publications allow for the flexibility to tackle multiple aspects of specific topics (such as transportation policy, public pension reform and government consolidation as examples) while also sustaining the broad appeal represented in this volume. This expansion of our efforts in this manner could lead to semi-annual publications or occasional papers under the auspices of the *Journal*; time and – as usual – resources will dictate many of those decisions.

It has again been a pleasure to participate in the publication of the *Illinois Municipal Policy Journal*. Our hopes remain true to our original sentiment, that the *Journal* is of value to you, and we look forward to bringing you many more editions in the future. Thank you.

BRAD COLE
PUBLISHER

FROM THE EDITORS

We are pleased to present readers with our second issue of the *Illinois Municipal Policy Journal* (IMPJ). We began this journey last year, in collaboration with the Illinois Municipal League, to create a research-based publication for municipal policymakers, policy analysts and researchers dealing with timely issues that affect communities in our state. In this second issue, we have continued to build toward that vision by featuring notable research from Governors State University, the Morton Arboretum, Northern Illinois University, University of Illinois at Urbana-Champaign and numerous other institutions, including our own DePaul University.

Whereas the inaugural issue was heavily oriented toward finance, this issue is oriented more toward municipal service delivery in a time of greatly constrained budgets. Readers will find insightful analyses of policies being employed to support community-oriented enterprises, improving downtown districts, and enhancing programs devoted to tree and forestry management. Readers will also find a critique of experimental strategies being deployed to promote food-scrap composting as well as improve the lives of those residing in public housing. Other articles offer valuable insights on such issues as immigration, public-private partnerships and government consolidation.

As journal editors and university professors who also regularly engage municipalities in discussions about policy, we are keenly aware that elected officials and administrative staff are being asked to do “more with less.” Many municipal leaders have the desire to experiment with new approaches to problem solving, but they suffer from a dearth of credible and comprehensive information about the effectiveness of various policy options or lack the budget and time to seek out new ideas. Additionally, the demands on municipal leaders’ time require that research be presented in a way that is concise and compelling but also has direct application to municipalities in Illinois. The 10 articles in this issue are written with these needs in mind.

We would also like to draw attention to a new feature of the journal: a listing of seminars and webinars devoted to topics presented in some of the articles. These discussion-oriented events are open to both experts and novices at no cost, and they feature nine researchers who have contributed to this issue. We also provide contact information for each of the corresponding authors of the

articles and encourage readers to reach out if they have specific questions about topics not covered in the articles. Please take advantage of these resources in an effort to discuss, converse and mold these concepts into useful policy ideas in your specific municipality.

We hope readers will enjoy this second issue and find it helpful for carrying out their difficult roles as municipal leaders. We know that each of you work tirelessly to serve the needs of your citizens and communities, yet face continued pressures that restrict municipal revenues. We wish you success in these endeavors.

JOSEPH SCHWIETERMAN,
MANAGING EDITOR

NICK KACHIROUBAS,
ASSOCIATE EDITOR

TABLE OF CONTENTS

From the Publisher i
Brad Cole

Letter from the IMPJ Editorsiii
Joseph Schwieterman and Nick Kachiroubas

ARTICLES

Understanding the Drivers and Barriers to Fire Department Consolidation in Illinois 1
Robert Herrmann and Aaron Deslatte

How Small Downtowns Grow: Lessons from Elmhurst, Naperville and Normal 17
Steve Wilson

Community Supported Enterprises as a Local Investment Strategy 35
Norman Walzer

Promoting Economic Self-Sufficiency via HUD’s Moving to Work Program: Evidence from the Housing Authority of Champaign County 49
Paul E. McNamara, Han Bum Lee and Cathy Strick

Downtown Development Strategies in Illinois: Assessing the Priorities of Municipal Leaders in Illinois 69
Norman Walzer, Mim Evans and Michael Aquino

The Immigrant Policy Context in Illinois: An Overview, Policy Analysis Framework and Implications for Illinois Children..... 85
Elisabet Barrios and Meghan Condon

Understanding Public-Private Partnerships (P3) through a Theoretical Cost Comparison 103
Matt Calcavecchia, Erin Birkenkopf and John Finke

ISSUE BRIEFS

Increasing the Benefits from Urban Trees while Minimizing Costs: Lessons Learned from the Chicago Region Trees Initiative 119
Lindsay Darling, Melissa Cusic, Lydia Scott and C. Scott Smith

Tax Increment Financing: Learning from Research and Municipal “Best Practice” 135
Natalia Ermasova and Amanda George

Curbside Composting In Illinois: Trends and Emerging Best Practices 147
C. Scott Smith, April Janssen Mahajan and Joseph P. Schwieterman

UNDERSTANDING THE DRIVERS AND BARRIERS TO FIRE DEPARTMENT CONSOLIDATION IN ILLINOIS

ROBERT HERRMANN AND AARON DESLATTE
NORTHERN ILLINOIS UNIVERSITY

This study explores the drivers of and barriers to consolidation of fire department services within Illinois. Through interviews and reviews of archival documents, it considers consolidation efforts in four parts of the state that were motivated by a desire for service-delivery improvement, fiscal efficiencies and support from public unions. The findings offer lessons for municipal governments while also noting that state law does not appear to be conducive to consolidation, in part due to incompatibility with pension statutes and unclear statutory guidance. As a result, a general perception exists that the legal process for consolidation is, by design, difficult to navigate.

INTRODUCTION

Fire departments are one of the most recognizable components of a local government. They have expanded their functions from fire suppression, prevention and education into emergency medical services, water rescue, hazardous materials handling and technical rescue, as well as training for threats of active shooters, terrorism and mass-casualty incidents. Illinois is home to more local governments than any other state, and the number of both municipalities and special fire districts have increased over the last three decades, according to the U.S. Census of Governments.

Much like general-purpose local governments, fire departments and districts confront questions of overlapping resources and governmental fragmentation. Fire jurisdictions may have stations in close proximity, overlapping response areas and similar asset-specific investments such as ladder trucks. While almost all fire departments have accepted guidelines for maintaining certain response times from the National Fire Protection Agency (NFPA), the closest station or vehicle with the lowest response time does not always respond to an emergency because of jurisdictional territoriality. Citizens may wait longer for life-saving measures or actions that limit damage to property while the closest fire department personnel are in quarters. These issues have fueled a public discourse over functional consolidation of fire departments.

This article explores the drivers of and barriers to consolidation of fire department services in Illinois. Using a grounded theoretical approach to the research, this work investigates fire consolidation efforts through interviews with practitioners in four local jurisdictions, comparing the antecedent conditions that influenced both failed and successful consolidations. After examining current research into local government consolidation and the context of Illinois, we present a cross-case comparison of consolidation efforts and provide suggestions for policy design.

EMPIRICAL EVIDENCE OF GOVERNMENTAL FRAGMENTATION AND CONSOLIDATION

Governmental fragmentation is the disbursement of political authority and service-delivery responsibilities among a constellation of cities, townships, counties, and single-purpose or special districts (Hendrick and Shi 2015). An empirical reality of this key feature of federalism in the United States is that once such authority is divided between public organizations, voters seldom elect to consolidate it again. According to the 2012 Census of Governments, Illinois leads the nation in the total number of local governments (6,963), a count of local units that is 35% higher than the second-ranked state, Texas (with 5,147 local governments). Illinois leads the nation in both the number of municipalities (1,298) and single-purpose special districts (3,227), while ranking second behind New York for the number of fire-protection districts (837 – a total that has witnessed minor fluctuation from 827 districts in 1997 to 841 in 2007). Table 1 displays the top 20 states ranked by the count of fire districts and shows the dispersed nature of Illinois' special-district landscape. While fire districts account for 74.6% of New York's total special districts, they account for roughly 26% of those in Illinois. Figure 1 displays the top categories of special districts in Illinois.

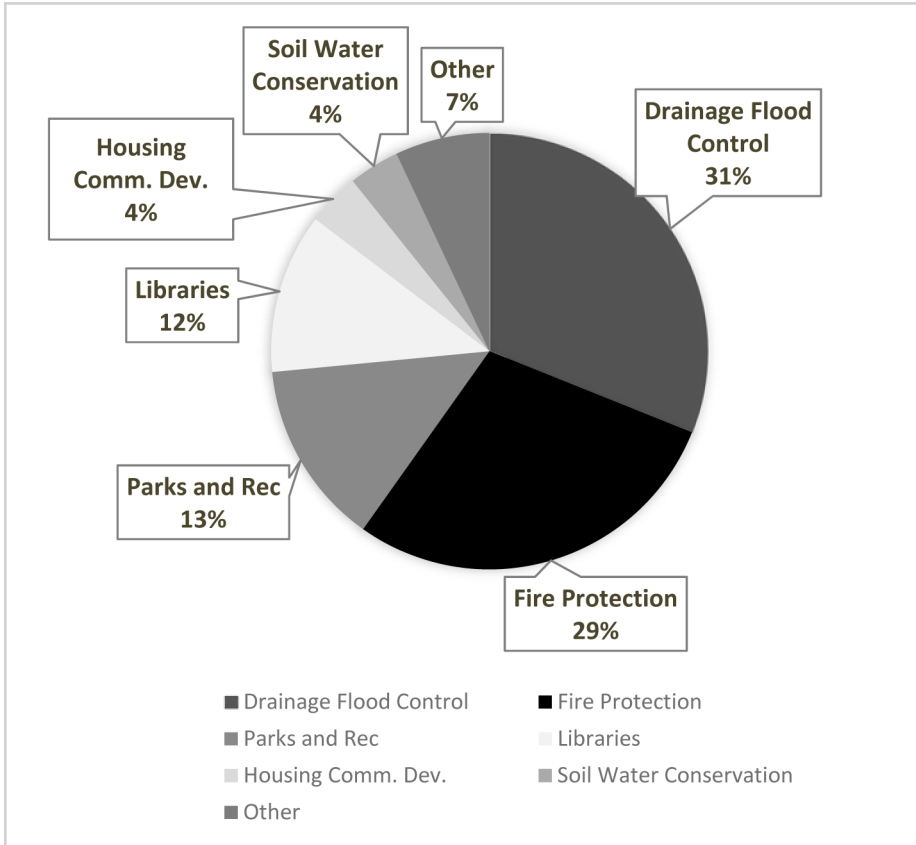
TABLE 1
Fire Districts and Special Districts Totals by State

STATE	FIRE DISTRICTS	TOTAL SPECIAL DISTRICTS	FIRE DISTRICT (%) OF TOTAL
New York	876	1174	74.6%
Illinois	837	3227	25.9%
Nebraska	414	1269	32.6%
Missouri	375	1854	20.2%
Washington	372	1285	28.9%
California	360	2861	12.6%
North Dakota	279	779	35.8%
Oregon	271	1035	26.2%
Colorado	260	2392	10.9%
Montana	219	763	28.7%
New Jersey	184	234	78.6%
Idaho	158	806	19.6%
Arizona	156	326	47.9%
Kentucky	155	628	24.7%
Texas	155	2600	6.0%
Ohio	100	841	11.9%
South Dakota	83	547	15.2%
Arkansas	73	740	9.9%
Connecticut	72	447	16.1%
Wyoming	71	628	11.3%

Source: 2012 U.S. Census of Governments.

FIGURE 1

Fire Districts Were the Second-Largest Type of Special District in Illinois



Source: 2012 U.S. Census of Governments.

Table 2 displays the top 20 states ranked by fire districts per capita, in which Illinois ranks 8th. States with far lower populations tend to be near the top. By this measure, Illinois has roughly 6.5 fire districts for every 100,000 residents, a level of fragmentation that is far less than low-population states such as North Dakota, Montana and Wyoming but more fragmented than larger states such as Florida, New York or Texas. This variety in vertical fragmentation (the proliferation of single-purpose or special districts) in Illinois complicates the legal framework for sharing services or consolidation of local units of governments.

TABLE 2

Fire Districts Per Capita by State (Districts per 100,000)

STATE	FIRE DISTRICTS PER CAPITA
North Dakota	41.48
Nebraska	22.66
Montana	22.13
Wyoming	12.59
South Dakota	10.19
Idaho	10.07
Oregon	7.07
Illinois	6.52
Missouri	6.26
Washington	5.53
Colorado	5.16
New York	4.52
Kentucky	3.57
Rhode Island	3.32
Vermont	2.55
Arkansas	2.50
Arizona	2.44
New Jersey	2.09
Connecticut	2.01
Iowa	1.96
<i>Source: 2012 U.S. Census of Governments.</i>	

This legal landscape was examined in 2015 by the Government Consolidation and Unfunded Mandates Task Force (Task Force) chaired by Lieutenant Governor Evelyn Sanguinetti. The Task Force noted the high burdens that exist under current law for citizen-led referenda, and the Illinois General Assembly's history of tailoring consolidation-related legislation to specific local governments rather than for general application. Related to fire protection, the Task Force noted Illinois state law contained no citizen-initiative process for merging municipalities with fire districts (only for merging similar districts with each other). Among its 27 recommendations, the Task Force proposed standardizing referendum requirements for consolidation to all units of local government and allowing mergers of different types of governments. The recommendations have not been adopted.

While Illinois stands out for the number of units of local governments, the state's difficulties in spurring consolidation are not unique. Scholarly research on consolidation has identified a range of barriers to consolidation. This work has primarily focused on city-county mergers, examining either causal mechanisms for consolidation or evidence of whether such actions produced intended benefits. Evidence for the benefits of mergers has been mixed. Improving the effectiveness and efficiency of government service delivery is a prevalent argument for

consolidation among scholars and policymakers (Delabbio and Zeemering, 2013). Martin and Scorsone (2011) examined three communities in Michigan facing financial hardship from shrinking populations and reduced tax bases, concluding that consolidation reduced costs and generated savings when compared to neighboring communities. Goodman (2015) found counties that

merged experienced spending reductions, while Warner (2011) found local governments achieving greater economies of scale after consolidation. Yet, Martin and Schiff (2011) found no evidence that city-county consolidations improved efficiency, provided an economic boost or distributed services more equitably. Hendrick, Jimenez and Lal (2011) also found economies of scale were not gained through consolidation.

Functional consolidation, involving the merger of departments performing similar services or those with overlapping jurisdictions, is less common. Researchers have suggested fire district consolidation could potentially lower risks of property damage or loss of life via reduced response times (Chevalier et al. 2012; Rubado 2013). Leland and Thurmaier (2014) conclude that such functional consolidations may also be more politically feasible because they involve abdicating less authority to a regional agency. This is applicable to the fire service because municipal boards of trustees and fire administrators may be unwilling to give up control of their organization if restructuring occurs. These political barriers may overcome arguments for efficiency or effectiveness gains despite the ability to utilize and build on existing mutual aid agreements. Mullin (2008) found that consolidated organizations can experience greater expertise yielding better policies and more transparency. The research offers two obstacles to consolidation. First, cross-jurisdictional boundaries can limit how much the public interacts with government. Second, a special-purpose government entity runs the risk of being inefficient from having a singular objective.

DATA AND METHODS

To examine antecedent conditions for functional consolidations of fire districts, this study uses a qualitative, exploratory approach to find common themes about the political, administrative and environmental drivers and barriers to fire department consolidation. This method of qualitative research has the ability to overcome measurement bias and an oversimplification of the data collected, which can occur if the context is lost. To avoid this scenario, the research focuses on four cases and attempts to identify generalizable conditions.

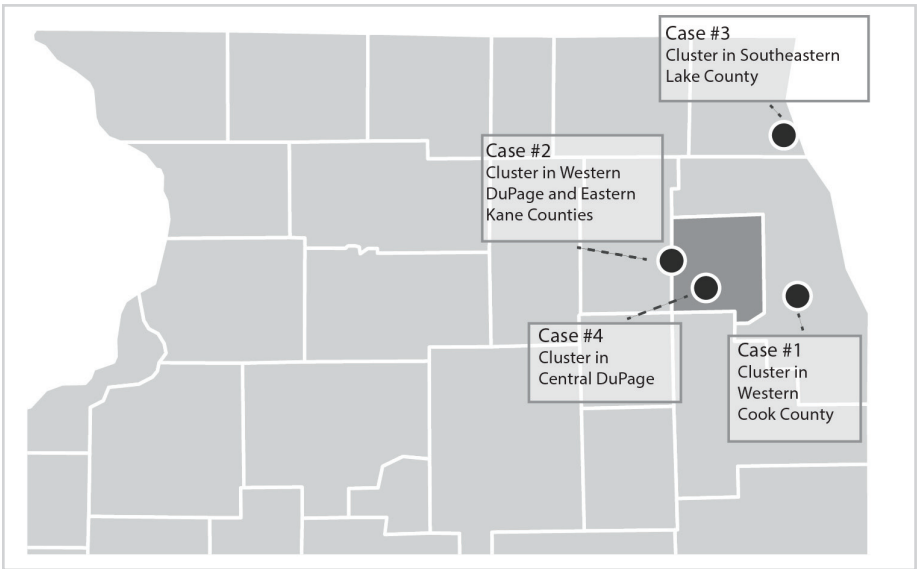
The grounded theory approach for this paper uses semi-structured interviews. This is the appropriate method of collecting data because the information comes from four individuals who have firsthand knowledge and experience with fire departments that attempted consolidation in four Illinois communities. The interviewees were selected because of their involvement

in recent fire department consolidation attempts. The four interviewees were asked 13 questions designed to advance understanding of the motivations and barriers to fire department consolidation. The interviews covered perceived benefits and risks, stakeholder and labor involvement, and the legal framework surrounding consolidation attempts.

FIRE DEPARTMENT CONSOLIDATION EFFORTS IN ILLINOIS

FIGURE 2

Consolidation Efforts in Northeastern Illinois



CASE 1: OPPOSITION FROM WITHIN

The first case involves six fire departments in Cook County – the City of Berwyn, Village of Elmwood Park, Village of Forest Park, Village of North Riverside, Village of Oak Park and Village of River Forest – that attempted to combine into a single department approximately 12 years ago. Scholarly research suggests collaborative efforts that require delegating authority may face greater difficulties when partnering localities are socially, economically and demographically diverse (Feiock, Steinacker and Park, 2009). Mostly older, residential areas within the inner rings of Chicago’s suburbs, the six localities contained blends of commercial and industrial property, served ethnically and income diverse populations, and were staffed with different levels of career and part-time personnel.

The effort was hastened by the Great Recession in 2009, and, as revealed through interviews, fire department administrators felt compelled to “take the lead” in the negotiation process to help drive decision making. Benefits identified from the proposed consolidation included additional information-sharing, increased benefits to citizens due to cross-training of firefighter and paramedic personnel and reduced administrative overhead. There would be a decrease in administrative staff but no changes to unionized labor positions, which was key to garnering labor union support. Additionally, vehicles and stations would not move, but overlaps in coverage would change over time. The purchase of new vehicles would be based on the needs of the response areas. An interviewee stated fire department personnel and stations often will increase relative to population size and industrial or commercial growth within a community. This growth causes fire departments to expand their coverage as specified by National Fire Protection Association (NFPA) guidelines 1710 and 1221, which set response-time requirements and minimum staffing standards. Additionally, the accreditation process and Insurance Services Office (ISO) ratings tend to promote larger and singular fire departments.

Fire departments are often considered for consolidation because personnel work well together through the existing mutual aid system. However, consolidations have been derailed in the past as fire district board members changed, and administrative turnover infused departments with new personnel seeking to retain their autonomy.

Over a period of four to five months at the end of 2014 leading into the beginning of 2015, the six fire departments held two meetings to solidify consensus among department chiefs and personnel, but were unsuccessful. Participants noted the risk of losing institutional knowledge such as particular target hazards unique to each community and the potential of fracturing relationships between fire departments or elected officials. A lack of support for the consolidation came from subordinates who could lose the chance to be promoted. They in turn championed politicians who would not back the consolidation.

A final concern was how pension benefits would be impacted under Illinois law. Illinois enacted its first pension benefit for firefighters in 1849. According to the Illinois Department of Insurance 2015 Biennial Report, the state has approximately 300 suburban and downstate firefighter pension funds. The restrictive portability of the investments in these systems across communities makes it difficult to merge funds from an equity perspective because each potentially merging jurisdiction can be funded at different levels. Partners

with pensions funded at lower levels could potentially be subsidized by those localities with higher funding levels. Ultimately, the participating communities cited these barriers as a justification for why the merger talks were put on hold.

CASE 2: A CHANGE AT THE TOP, AND A CHANGE IN DIRECTION

In 2015, the Village of Carpentersville, Village of East Dundee, Village of West Dundee and Rutland-Dundee Fire Protection District in Kane County began pursuing consolidation. The municipal governments commissioned a study by Emergency Service Consulting International (ESCI) to enhance cooperation and ascertain the feasibility of the merger. Participants identified short- and long-term goals: enhanced collaboration, combined monthly training, relationship building, and, ultimately, the creation of a single fire department. Several benefits were identified: improved services derived from sharing equipment and a computer-based training program, efficiency gains for taxpayers through reducing maintenance costs, and a reduction in the number of administrative chiefs. The merger would also allow for the hiring of new firefighters.

Following the consolidation study, the three municipal fire departments received approval from their boards of trustees to form a committee that would include one elected official and one fire chief from each. The elected official acted as the liaison to the various boards, while the fire chief looked at areas where the fire departments could work more closely.

After the formation of the committee, the effort stalled following a change in fire department leadership within one of the agencies. Under the original vision, all three fire agencies would share a single chief, which was seen as a potential threat to autonomy from the three participants. The third organization was not in a position to participate, because the new chief had come from an outside fire department and was not up-to-speed on the consolidation effort. It was decided that two fire departments would move ahead with a shared fire chief concept approved in the summer of 2016. Opposition came from a fourth member agency of the consolidated dispatch center. That organization was not ready to commit to the consolidation despite existing mutual aid agreements, and was located within a mile of one of the participating departments with neighboring stations in close proximity.

Lastly, Illinois law governing mergers of fire protection agencies was found to be too cumbersome to navigate. In 2014, the Illinois General Assembly passed an act (SB 1681, the Regional Fire Protection Agency Act), which permitted the

consolidation of fire protection services on a regional basis and the creation of regional agencies. However, the legislation does not allow mergers that create a single chain of command. The agencies pursuing the merger have lobbied state lawmakers to streamline this consolidation process. The consolidation has moved forward with two departments sharing a chief and building inspector and all four members of the dispatch center sharing a mechanic. All four departments are actively discussing further efforts to merge.

CASE 3: STAKEHOLDER ENGAGEMENT

A third, successful consolidation effort occurred between the City of Highland Park and the City of Highwood in Lake County, north of Chicago, during the summer of 2016. Highwood was confronting aging infrastructure and equipment, and agreed to explore the merger after a new city manager and fire chief were hired. Both departments worked together through mutual-aid agreements, which placed a greater burden on the more financially secure department. An internal analysis of call volumes and other service arrangements suggested the Highland Park Fire Department could serve both areas without increasing manpower or adding stations.

A merger would enhance services in the under-served community and enhance revenues for the department assuming authority. The extent of this full consolidation requires the Highland Park department to provide fire and emergency medical services as well as building inspections in place of the dissolving fire department. The Highwood Fire Department gave useable equipment including an ambulance to the department now responsible for the area. Furthermore, they are attempting to sell other assets and donate the rest of the equipment. In terms of the finances, the community assuming authority paid fees for its emergency services and building inspections.

The municipal administrations from both organizations had noteworthy roles in addressing risks. Both communities had to enter into an Inter-Local Agreement (ILA), which was then subject to a referendum placed before Highwood voters to dissolve its fire department. The administrators from the dissolved fire department took great care in ensuring that residents, who had to be on board with the consolidation, had factual information and were aware of this opportunity when voting on the referendum. For instance, it would take two additional minutes to reach the new response area, but the time was less than the NFPA standard required. Highland Park wanted to continue to meet that benchmark. Another risk was for the personnel. Municipal administrators

provided information to the community dissolving its fire department. Many firefighters from the department assuming authority started in the fire service at the dissolving department, which strengthened the connections between the two communities. By staying in front of the consolidation movement, the communities maintained momentum.

Labor organizations from both jurisdictions were involved in this consolidation. Highwood's union had to agree to the terms of the local agreement before the process could move forward. Part of the agreement between the union and dissolving department was that the full-time members were offered buy-outs and retirement incentives or received assistance in finding new firefighter positions. The union for Highland Park was assured that municipal and fire department leadership would be looking at calls on a daily basis. If they felt that the workload was too much of a challenge with current manpower, then the union contract would be re-evaluated. Since the merger, the results have been favorable. The additional area covered generates one more call per day and the fire department has met the challenge.

CASE 4: SHARING SERVICES AND AUTONOMY

A fourth case involves six fire departments and districts in two counties in the western Chicago suburbs – the City of Wheaton, Village of Roselle and Fire Protection Districts from Bloomingdale, Carol Stream, Winfield and West Chicago – pursuing collaborative agreements rather than formal consolidation. The effort began when the Carol Stream Fire Protection District changed its standard operating procedures (SOPs) to increase manpower by bringing in other fire departments to assist for larger incidents such as structure fires. The SOPs also had a positive effect of standardizing emergency responses. They were then adopted by the other cooperating departments, which now take part in joint training.

To facilitate this shared-service arrangement, one department had to take the lead in the process and establish buy-in from the neighboring departments and districts. This required cooperating departments to accept changes such as where vehicles were stationed. Fire departments had to adopt SOPs that they did not have a say in creating, representing a loss of autonomy. Transformational leadership appears to have played a large role in the formation of this collaborative arrangement. The fire chief from the Carol Stream Fire Protection District lobbied extensively to other chiefs on behalf of the cooperative. He also spoke at board meetings for his community as well as other surrounding communities.

The effort initially suffered setbacks. One fire district that had mutual-aid agreements in place with Carol Stream joined for a short time but eventually left the cooperative after its board of trustees expressed disappointment with the loss of autonomy. Another fire department was invited to join the cooperative but opted not to. Despite these hitches, the cooperative is considered successful. Emergency responses are quicker, more efficient and safer, with improved incident and patient outcomes. The joint training has improved firefighter safety because the fire companies have an opportunity to foster safe practices for emergency operations larger in scale than they could previously handle. The new SOPs have created consistency by having particular apparatuses and personnel respond to emergencies. They also standardized operations for larger incidents, which gives each fire department an assignment prior to arriving on scene. SOPs that the cooperating departments use are different from mutual-aid agreements in that the latter are less regimented. This places more pressure on the incident commanders, who now have to assign tasks and potentially slow actions down. The six different organizations are still autonomously running each fire department or district. Nevertheless, when it comes to responding to emergencies, participating in training and increasing overall safety, the cooperative has increased efficiency, shared expenses and built trust among the participants. There is a potential for three more fire departments to join in the future.

CONCLUSIONS

The case study approach brought to light some of the notable drivers and barriers to consolidation that warrant additional discussion. Below are some of the themes from the experiences reviewed.

DRIVERS

Fire agency consolidation is premised on classic performance metrics of public administration: efficiency, economy and effectiveness. Improving the effectiveness of fire protection services through lower response times has been a common argument steering the consolidation movement. Lower response times yield fewer losses from emergencies and better outcomes. In terms of efficiency, all four cases also promised varied financial benefits. Cases 1, 2 and 4 sought to save taxpayer money from lower operating costs through sharing equipment and vehicle maintenance costs as well as joint purchasing. Cases 1 and 2 touted cost reductions from fewer administrative staff. Case 3 involved creating a new revenue stream for the community assuming jurisdiction.

A final commonality across the cases that may drive successful consolidation was support from public employee unions. Union members were told that labor positions would be retained, and the mergers would promote safe operations. Agency leaders also pledged to build on existing mutual-aid agreements and training arrangements. Thus, one stakeholder group that could represent significant opposition to a merger was mollified in all four cases.

BARRIERS

Illinois law is outdated and not conducive to consolidation. The case studies describe several issues with the legal process. Case 1 noted that merging is not easily done in part because communities have made differing levels of fiscal commitment to firefighter pension funds. This is an equity consideration that may require efforts at a higher level of government to equalize the financial commitment asked of taxpayers in merging agencies. In Case 2, the consolidation process was not streamlined and did not address combining municipal fire departments with fire districts. Participants in both cases reached similar conclusions to those reported by the Task Force on Local Government Consolidation and Unfunded Mandates. The Task Force reported that consolidation legislation has tended to be narrowly construed for specific jurisdictions, and failed to facilitate mergers across different types of local governmental units. The report also cites an inability to easily merge a township with a bordering municipality because they are different units of general purpose government.

Another finding was that aspects of Illinois consolidation law have become obsolete due to population shifts and technological changes. This includes an out-of-date limit to the maximum size of a consolidating township. Finally, citizens seeking to spur consolidation face a difficult task due to the nature of the legal requirements. They are bound by the number of required voter signatures and a relatively short timeframe before going to a referendum. The barriers from the first two cases help illustrate why consolidation is a difficult endeavor. In Case 3, the economies of scale gained from a merger and trust between the two jurisdictions were enough to overcome these limitations. The jurisdictions in Case 4 bypassed these legal barriers through pursuit of collaborative service arrangements rather than electoral consolidation.

A final barrier present in all four cases can be described as contrasting organizational cultures that reinforce the desire to maintain autonomy. The cases describe a loss of institutional knowledge or fire department history

as barriers to consolidation. Although somewhat intangible, maintaining individual identities is important to the fire service, which is rich in history and tradition.

TAKEAWAYS

Moving forward, fire departments that are attempting to merge should consider building on the drivers and be willing to address the barriers as they go into the process. First, consolidating with the hope of improving service can be built on existing mutual-aid agreements or training arrangements that neighboring departments already have in place. Next, fire departments need to be data-driven. Performance information should be more widely utilized to ascertain whether consolidation enhances key metrics of public administration, including effectiveness, efficiency, economy and equity. Finally, thorough stakeholder analysis must be a part of any consolidation effort. Identifying the mutual interests of all affected stakeholder groups, effectively communicating benefits and answering questions can assist in building coalitions necessary to support the lengthy consolidation process.

Fire departments and municipal leaders must understand that Illinois law makes merging complex, but it ensures that citizens have a say in their emergency services. Open-minded leaders that are invested in the consolidation effort need to be in place to overcome the threat of losing autonomy. These individuals must be capable of utilizing momentum and establishing buy-in from the public, political decision makers and fire department personnel. Backing from these groups is needed because consolidation is a group effort founded on trust and mutual gains. To overcome a loss of institutional knowledge or fire department history, fire department leadership must recognize history without being bound by it. Consolidation may be more likely if there is a change in organizational culture from leadership turnover that can positively impact the efforts. Stakeholders contemplating consolidation should consider these points.

Robert Herrmann is a career firefighter/paramedic in the Village of Buffalo Grove and a graduate of the Northern Illinois University MPA program; Aaron Deslatte is an Assistant Professor of Public Administration at Northern Illinois University.

REFERENCES

- Berry, C. (2008). Piling on: The fiscal effects of jurisdictional overlap. *American Journal of Political Science*, 52(4), 802-820.
- Chevalier, P., Thomas, I., Geraets, D., Goetghebeur, E., Janssens, O., Peeters, D. and Plastria, F. (2012). Locating fire stations: an integrated approach for Belgium. *Socio-Economic Planning Sciences*, 46(2), 173-182.
- Delabbio, D. J. and Zeemering, E. S. (2013). Public Entrepreneurship and Interlocal Cooperation in County Government. *State and Local Government Review*, 45(4), 255-267.
- Faulk, D. and Grassmuck, G. (2012). City-county consolidation and local government expenditures. *State and Local Government Review*, 44(3), 196-205.
- Feiock, R. C., Steinacker, A. and Park, H.J. (2009). Institutional collective action and economic development joint ventures. *Public Administration Review* 69(2), 256-270.
- Goodman, C. B. (2015). Local Government Fragmentation and the Local Public Sector A Panel Data Analysis. *Public Finance Review*, 43(1), 82-107.
- Hendrick, R. M., Jimenez, B. S. and Lal, K. (2011). Does local government fragmentation reduce local spending? *Urban Affairs Review*, 47(4), 467-510.
- Hendrick, R. and Shi, Y. (2015). Macro-Level Determinants of Local Government Interaction How Metropolitan Regions in the United States Compare. *Urban Affairs Review*.
- Leland, S. and Thurmaier, K. (2014). Political and Functional Local Government Consolidation: The Challenges for Core Public Administration Values and Regional Reform. *The American Review of Public Administration*, 44 (4 supply), 29S-46S.
- Martin, J. and Scorsone, E. A. (2011). Cost ramifications of municipal consolidation: A comparative analysis. *Journal of Public Budgeting, Accounting and Financial Management*, 23(3), 311.
- Martin, L. L. and Schiff, J. H. (2011). City-County Consolidations: Promise Versus Performance, *State and Local Government Review*, 43(2), 167-177.
- Mullin, M. (2008). The conditional effect of specialized governance on public policy. *American Journal of Political Science*, 52(1), 125-141.
- Rubado, M. (2013). Local Government Fragmentation: Effects on Quality of Service. In APSA 2013 Annual Meeting Paper.
- Task Force on Local Government Consolidation and Unfunded Mandates (2015, December 17). Delivering Efficient, Effective, and Streamlined Government to Illinois Taxpayers. Retrieved from <https://www.illinois.gov/ltg/issues/localgovernments/Documents/Local%20Government%20Consolidation%20and%20Unfunded%20Mandates%20Task%20Force%20Final%20Report.pdf>.
- Warner, M. E. (2011). Competition or cooperation in urban service delivery? *Annals of Public and Cooperative Economics*, 82(4), 421-435.

HOW SMALL DOWNTOWNS GROW: LESSONS FROM ELMHURST, NAPERVILLE AND NORMAL

STEVE WILSON
WILSON PLANNING + DESIGN

This study evaluates the growth of historically small downtown districts by reviewing the evolution of these areas in Elmhurst, Naperville and Normal, Illinois, over the last 30 years. The findings show that these municipalities, despite facing different planning issues, adopted strategies with notable similarities, thus providing important lessons for other communities. The case studies illustrate how municipalities can improve the quality and draw of downtowns by leveraging historic assets, redeveloping underutilized areas with new attractions, engaging public-private partnerships and managing the inevitable “growing pains.”

INTRODUCTION

Many downtown districts that were historically quite small have made a comeback in recent years. A half-century ago, as retailers left them in droves for malls and strip centers, these places may have seemed all but obsolete. Today, in response to sustained revitalization and investment, however, numerous downtowns of this type have become the showpieces of suburban and downstate communities. Nevertheless, the number of success stories remains limited, and experience shows that strategies successfully used by some can be hard to replicate.

This study seeks to help municipal officials make cost-effective investments in downtowns by providing at least partial answers to two basic questions: First, how can small downtowns grow and be better “walk-around destinations”? Second, how can they accommodate more businesses, residents and attractions while maintaining their special character? To help officials answer these questions, this study examines the recent redevelopment history of the small but expanding downtowns in Elmhurst, Naperville and Normal. All three had successful outcomes, yet developed in fundamentally different ways. This analysis reviews the dynamics of investments in these areas that include a summary of their development histories while exploring common themes and lessons learned.

THE DYNAMICS OF RELATIVELY SMALL DOWNTOWN DISTRICTS

At least 60 small historic downtowns can be found in metropolitan Chicago, and many more, of course, can be found elsewhere in the state. Before World War II, these were the commercial centers of the independent hamlets and towns that were in many ways autonomous from the massive Chicago Loop business district. These areas served as the primary gathering places for community life and commerce.

Today, even after assuming a more suburban orientation and with their dominance as retail centers having waned, these downtowns retain their roles as gathering places while also being sources of community identity. As noted below, these downtowns provide a distinctive character to communities that seek to avoid falling into a “sea” of suburban sameness (Walker, 2009).

Many small downtowns have advantages that are difficult to replicate, which early downtown revitalization programs recognized by positioning the main street (i.e., the central artery that bisects the business district) as something different than other corridors. Rather than trying to compete with the suburban retail centers in a direct way, preservationists advocated that downtowns stay small, focus on local businesses and niche markets, and preserve the unique charm and distinctness of the place (Burayidi, 2013). Some newer retail formats try to capture this by focusing on the style or layout of the buildings, but, in the end, it has proven to be virtually impossible to replicate the other layers of heritage, history and eclectic ownership that make historic downtowns unique (Burayidi, 2013).

Some communities chose to keep their downtowns small and local in orientation to maintain their historic charm (Francaviglia, 1996). These communities often focused on improving the quality of their tenants and the appearance of the district with the goal of attracting still better tenants and more customers (Robertson, 1999). But at some point, these historic downtowns either withered or reached their growth capacity. In the latter case, downtowns that could not or would not accommodate the tenants that wanted to be downtown risked losing them to less-constrained spaces.

Small historic downtowns tend to grow in two ways: through slow and incremental growth, in which redevelopment occurs lot by lot, generally with in-kind support by municipalities; and through larger redevelopment projects, in which entire blocks or half blocks are replaced with development of a different character. Incremental growth is common for established downtowns

or downtowns with a strong historic building stock (Walker, 2009). Larger redevelopment projects are more typical of historic downtowns that have underutilized areas, such as low-value buildings or parking lots that can be replaced with more intense downtown uses (Robertson, 1999). The analysis below, by design, focuses on the larger redevelopment projects that typically have larger growth impacts, are more complex, and often require government initiative and special regulations to ensure success.

The case studies provided below show that as downtowns grow, they don't just perform more effectively, they perform differently. Business clusters emerge that attract more customers than the individual business would alone. Visitors come to comparison shop, or perhaps without a destination or purchase in mind. Many just want the guarantee that there will be enough to do when they arrive. Cars become inconvenient, encouraging people to park and set out on foot, or arrive by other means (Gibbs, 2012).

CASE STUDY SELECTION

To learn more about how small downtowns grow, the three case studies were selected based on the following criteria:

- They were small at the start of their redevelopment process. Small downtowns are generally the size of a town center or large town center, covering 6 to 40 acres. Buildings are typically 1 to 3 stories tall, versus 3 to 8+ stories of larger historic downtowns. They have experienced considerable growth through redevelopment since 1970 through the formation of larger redevelopment projects covering a half block or a full block, but also with incremental growth.
- They are successful in the sense that they are lively, attractive and have a distinct sense of place.
- They have strong economic performance, and are widely recognized locally and regionally as desirable destinations.
- They vary in terms of size, community profile, location and downtown layout.
- They have a university/college campus nearby, and rail transit within or near the downtown.

Reviewing these three cases illustrates how growth can occur in different ways and under different conditions. In this context, “growth” is defined as

an expanding footprint of the downtown area as well as new building stock achieved through redevelopment and infill. It also includes associated increases in pedestrian activity, the number of visitors, rents, property value and tax

TABLE 1
Case Study Comparison

COMMUNITY	NAPERVILLE	ELMHURST	NORMAL
Location Type	Outer Suburb	Inner Suburb	Downstate
Median Household Income (2010)	\$105,585	\$88,236	\$40,380
Population (2016)	147,100	45,950	54,264
Land Area (sq. mi.)	39.2	10.3	18.7
Rate of Population Growth (1960-2016)	11.4	1.2	4.1
DOWNTOWN			
1960 Downtown Footprint	23 acres	37 acres	12 acres
2017 Downtown Footprint	60 acres	66 acres	27 acres
College Population (adjacent to downtown)	3,060	3,350	21,040
2017 Downtown Businesses - Total	337	259	55
Dining	56	46	23
Shopping	122	48	12
Service	155	160	15
Hotel	1 (158 keys)	-	2 (342 keys)
Attractions/performance	4	5	5
Off-street parking (public)	3,530	3,443	2,000
Parking garage spaces	2,220	1,607	1,537
WALKABILITY/ACTIVITY MEASURES			
Walk Score (0-100)	93	90	70
Mid-Block Pedestrian Count (noon, weekday on busiest block)	140 people in 10 min. (very high)	80 people in 10 min. (high)	75 people in 10 min. (high)
Transit Score (0-100)	41	35	50
Railroad Station Boardings	4,000/ weekday (Metra)	2,300/ weekday (Metra)	640/day (Amtrak)
Commuter Station Location	½ mile away, little downtown foot traffic	Central	Central

revenue. Although each case considered has a university and rail station nearby, they have enough dissimilarity to allow the salient differences in strategy to be clearly seen.

The case analysis uses a variety of methodologies, including field observations, and a review of literature, data and maps. In addition, the author interviewed more than a dozen representatives of the three cities, including city staff, developers, land owners and design professionals, who were closely involved in various stages of the development process.

CASE STUDY REVIEW

NAPERVILLE (POP. 147,100)

Naperville, an outer-ring suburb located 30 miles west of downtown Chicago, experienced rapid suburban growth beginning in the 1950s. The community grew to be the third-largest city in the metro area after Chicago and Aurora, and has a downtown that was dramatically affected by the suburban growth that surrounds it.

Downtown Naperville is situated in the northern part of the city, near the crossing of the DuPage River and Washington Boulevard, and is bordered by the College of DuPage to the east, Naper Settlement to the south and attractive stable single-family neighborhoods on all sides. The district covers 60 acres but maintains a compact square-shaped form. Most of the shopping and restaurants are concentrated in the center within a few blocks of each other. The liveliest parts of downtown are on the original “main streets” of Washington Street, Jefferson Street and Main Street in the historic core. Anchors include the public library, city hall, the Riverwalk, Hotel Indigo and many national and local retail and restaurant destinations.

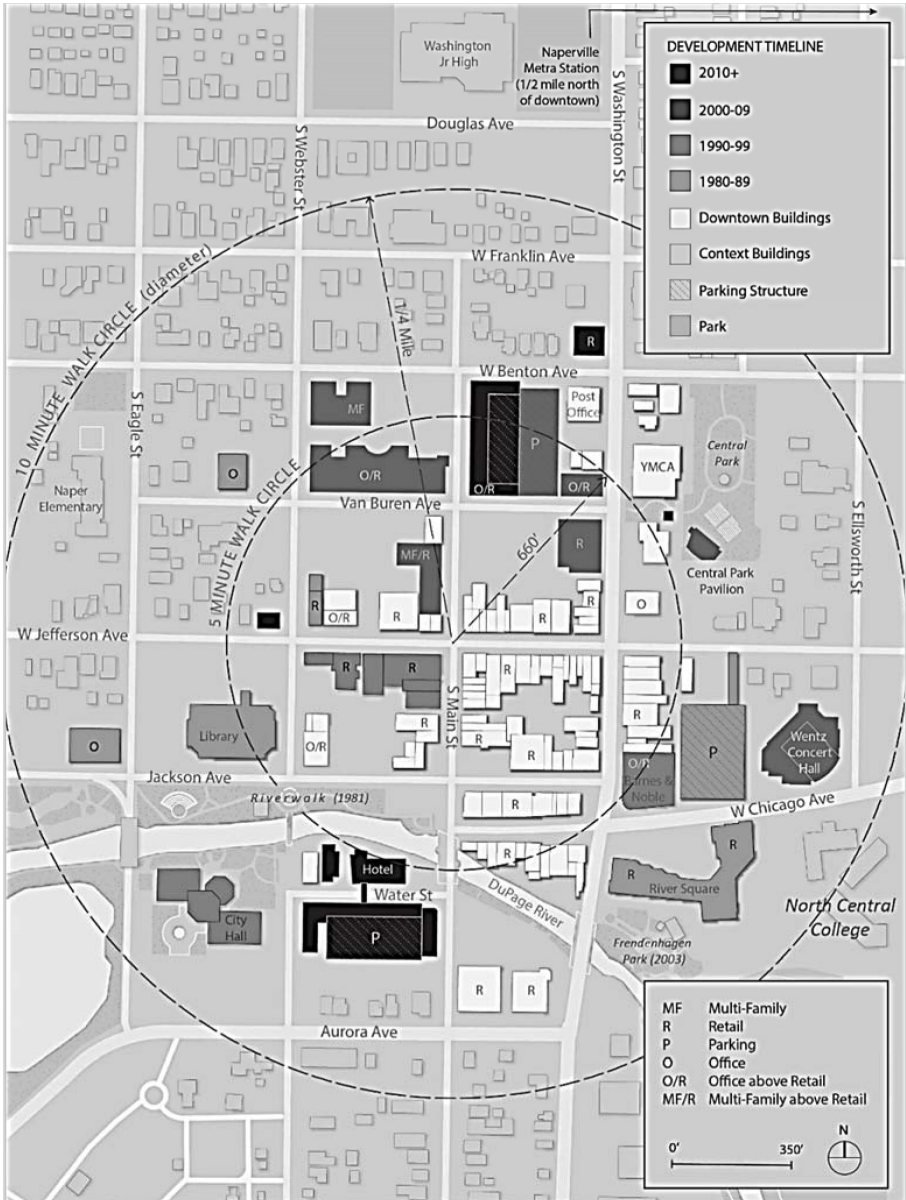
Of the three examples, Naperville has the largest number of businesses and the earliest start in the downtown redevelopment process (Table 1).

ORIGINS AND EARLY GROWTH

In the early 1960s, as businesses left for suburban retail strip centers, downtown Naperville had fallen into a state of decline. By the early 1970s, the problem had become acute. Pessimism loomed when local business owners and city leaders learned of plans for a new regional shopping center that was to open just outside Naperville’s western border (Brown/Heldt Assoc. 1974).

In 1972, the city commissioned the Central District Urban Design Plan to help reposition the downtown. The plan outlined a 20-year growth strategy that would maintain the downtown's compact footprint with continuous retail

FIGURE 1
Naperville Growth Map



frontage, restored facades and double the retail space. The goal was to have it function like the best new shopping centers without looking like one (Brown/Heldt Assoc. 1974). Although many of the proposed improvements were never realized, including the plan's signature project, which would convert all the primary retail streets into pedestrian malls, other projects like Riverwalk park and the new library were ultimately achieved. Most importantly, the stakeholders and city leaders bought into the general strategy and underlying urban design concepts, which ensured that new development would maintain the downtown's compact footprint and urban character.

The most influential and transformative project to come out of the plan, the two-acre Riverwalk park, opened in 1981. This replaced a two-block-long parking lot on the south bank of the river and dramatically changed the appearance of the riverfront, creating a new destination that complemented the downtown commercial activities. In 1986, the new city library was built on land overlooking the new park, and six years later, the new municipal center building was built on the opposite side of the river, following a long political battle to keep it downtown.

LATER GROWTH

The Riverwalk played a critical role in Naperville's revitalization and spurred nearly three decades of retail, restaurant and office growth. In 2000, this amenity was extended further to connect with Frendenhagen Park, which was completed in 2003.

The first round of commercial redevelopment began in the 1980s, exemplified by the completion of River Square in 1988 and two new office buildings on the west side of downtown. Unfortunately, these followed the conventional suburban development formats, with buildings set back behind parking lots. These developments, however, constituted a significant upgrade from the used car lots and other underutilized sites that had previously reduced the area's appeal to pedestrians.

The second round of commercial redevelopment began in the 1990s on underutilized sites within the historic core, including the retail building on Jefferson between Main and Webster in 1996, which contained Talbots and eventually the present-day Apple Store, and the Barnes & Noble building on Washington and Main in 1998. These important projects brought national retailers to downtown Naperville for the first time.

The third round of commercial development continued through the 2000s, beginning with the first phase of the Main Street Promenade in 2003, and the second phase in 2016, and a new retail building on Washington and Benton in 2005, both located on the north edge of downtown. In 2017, the Water Street District opened on the south bank of the river. The district now contains a number of restaurants and retailers and is anchored by the Hotel Indigo, the downtown's first hotel. New public parking garages, meanwhile, were constructed as part of various commercial developments.

The Central Park Pavillion and North Central College's Wentz Concert Hall, completed in 2002 and 2008, respectively, brought two major performance venues to the east side of downtown. Nevertheless, there have only been a couple of housing redevelopments since the revitalization project began, including a senior housing project, which opened in 2005 and was later converted to college housing, and a small condominium building that opened in 2008. Typically, policies favored using upper floors for offices and services, which generate greater benefits for lunch-time business. Still, housing values are very high, and new high-end multi-family housing is being proposed.

ELMHURST (POP. 45,950)

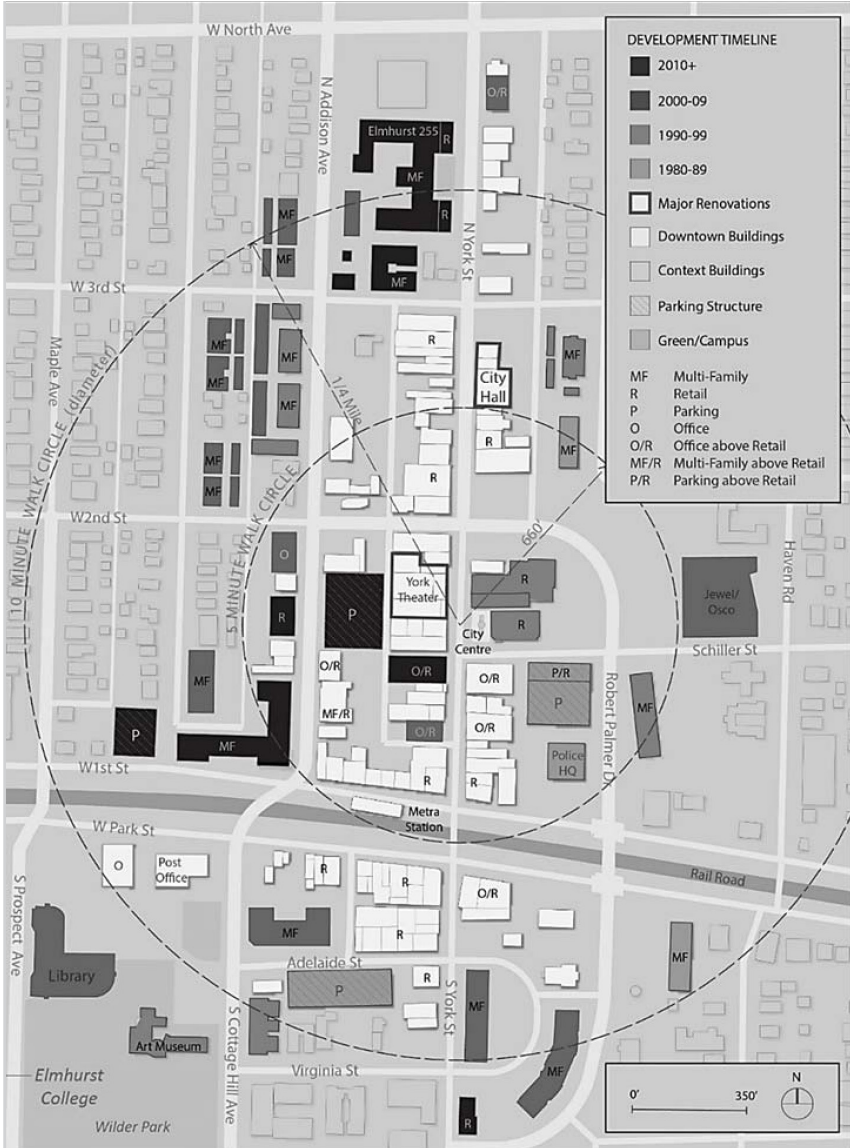
Elmhurst, an inner-ring suburb located 18 miles west of downtown Chicago, is notable for having experienced significant downtown development in recent decades, despite having only modest population growth.

Downtown Elmhurst is located in the geographic center of the city at the crossing of York Street and the Union Pacific rail line. This area is surrounded by attractive, predominately single-family neighborhoods, which transition to multi-family buildings along the downtown edge. Elmhurst College lies a half mile southwest of the downtown core. Nearby, the Elmhurst Metra Station, which is one of the busiest in the Metra system, has over 2,300 boardings per day and generates a great deal of foot traffic for local businesses during rush hour.

Downtown is home to 254 businesses, which puts it in the middle of the three case studies considered here. Most shops and restaurants are clustered around the Metra station and the blocks immediately north and south along York Street. York Theater and the City Centre Plaza are the main downtown anchors, but other notable destinations include the public library, art museum, history museum and city hall.

Originally, the downtown centered on the station and straddled both sides of the tracks, but as it grew, the shops migrated north to the vicinity of the historic York Theater. Today, the downtown is over a mile long, and effectively functions as three distinct districts: the area south of the tracks, which is associated with the college; the two blocks along York Street immediately north of the tracks, and

FIGURE 2
Elmhurst Growth Map



which is the primary retail/restaurant area anchored by York Theater; and the two blocks along York Street north of Second Street, which is anchored by city hall and a new mixed-use housing project.

ORIGINS AND EARLY GROWTH

Since Elmhurst is closer to Chicago than Naperville, it felt the impact of suburbanization much sooner. In 1962, the Oakbrook Center, a regional shopping mall, opened a mere 3½ miles from its downtown. Two years later, its struggling central business district lost its once-prized Sears department store. By 1987 Oakbrook Center had grown to two million square feet and, to make matters worse, had non-compete agreements with all the mall tenants within a five-mile radius.

Although the city began developing plans for revitalization as early as 1973, little progress was initially made. In 1980, the city commissioned the Downtown Redevelopment Program, which laid out what would eventually become the City Centre project. For the next five years, however, progress was modest, and advocates grew concerned that property owners and the city government, which tended to be fiscally conservative, were impeding progress (TPAP, 1990).

By 1987, however, efforts to free up a core city block for redevelopment had begun in earnest. The Jewel grocery store on the block was relocated a block east, and eventually expanded into a Jewel/Osco superstore in 2002. In 1989, a new police station was built just south of the existing one, and the old facility was demolished to make way for a parking garage. In 1992, city hall was relocated a block north into a renovated former school building, freeing up prime acreage on the block.

During this same period, the York Theater and nearby edifices were undergoing major renovations, resulting in the conversion of this aging single-screen theater into a modern multiplex, which opened in 1991. Four years later, the ambitious City Centre project was completed, replete with three new restaurants and a new plaza and fountain. The combined City Centre/York Theater project completely revitalized the core of downtown Elmhurst, drawing foot traffic, strengthening retail sales and bolstering the image of the district.

LATER GROWTH

Several more redevelopment projects soon drew upon the momentum of the above projects. These improvements, however, centered on multi-family housing, beginning with an eight-story apartment building created

in conjunction with City Centre in 1990, which to this day is the city's tallest downtown building. In the 1990s, several four- and five-story condominium buildings emerged in the southern parts of downtown near the Metra station. In the early 2000s, several three- and four-story apartment buildings and townhouses replaced single-family homes north of the tracks adjacent to residential neighborhoods. In 2017, a six-story 200-unit apartment building, Elmhurst 255, which is notable for having ground-floor retail, was completed on an old city parking lot. The result is a major new retail anchor that reinforces the north downtown district around city hall. In 2018, a new 165-unit apartment building is slated for completion on Addison along the tracks.

As in Naperville, Elmhurst placed emphasis on keeping public buildings downtown, showcased by a new art museum and public library developed in 1999 and 2005, respectively, on the district's southwest fringe. These civic uses generate some foot traffic that enlivens the immediate area, but, unfortunately, they are too far-removed to enhance the main retail area.

Unlike downtown Naperville, parking in downtown Elmhurst serves both local businesses and commuters, and a significant share is reserved for Metra riders. In 1987, Elmhurst developed its first two parking garages on Adelaide Street just south of the station, and on Schiller Street next to the new City Centre project, which featured ground level retail. In 2010, the East Parking Garage was added, and in 2016, the Central Parking Garage opened next to the York Theater to serve growing demand in the core downtown area.

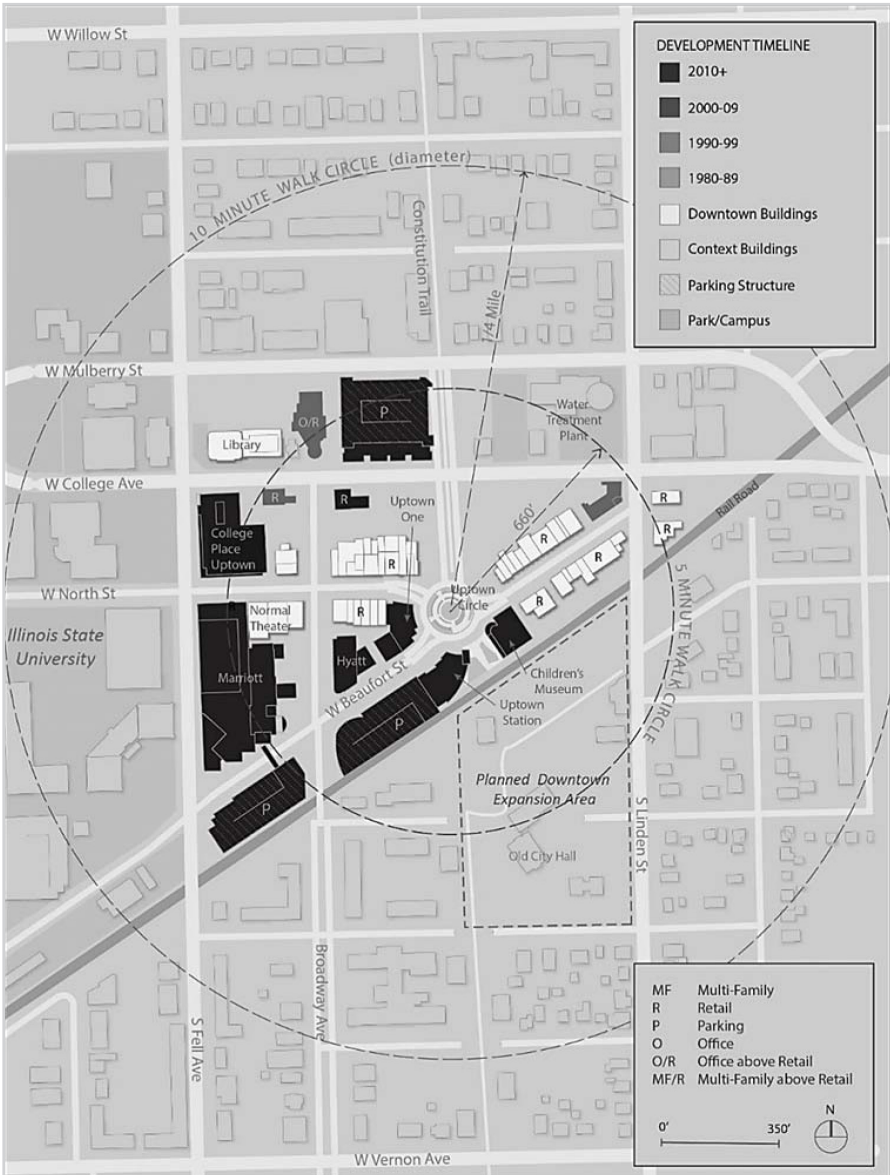
NORMAL (POP. 54,264)

The Town of Normal, home of Illinois State University (ISU), is located 120 miles southwest of Chicago and 60 miles north of Springfield. This community serves as an example of a successful campus town located outside a major metropolitan area. Normal is often regarded as having a "twin city," Bloomington, which has a population of 78,000 and is the county seat.

Downtown Normal, renamed "Uptown" in 2008, was founded at the crossing of two rail lines on the north side of Bloomington. Its dominant land uses include ISU's main campus on the west, neighborhoods of moderate density dominated by student housing on the north and south, and single-family neighborhoods on the east. Nevertheless, its relatively compact footprint covers only 27 acres, making it only half the size of the two other cases evaluated.

Uptown Circle, which is the downtown's signature park and traffic circle, constitutes the center of the new downtown area and is fronted by the town hall, the Children's Discovery Museum and a new mixed-use building called One Uptown on the Circle. The town hall building, called Uptown Station, also

FIGURE 3
Normal Growth Map



houses the Normal-Bloomington Amtrak station, which serves 10 trains per day, generating foot traffic for the local businesses. Although Uptown has just 57 businesses, less than half the number in the other two cases, it boasts several notable anchor institutions, as noted above. Uptown's liveliest parts tend to be along the historic "main streets" of North Street and Beaufort Street.

ORIGINS AND EARLY GROWTH

In the 1970s, the shops along North Street and Beaufort Street were in the midst of a losing battle with suburban retail centers. A lack of investment perpetuated the downtown's decline and created signs of neglect (Farr Assoc. 2001). Despite ISU's bustling campus, which was only a few blocks away and experiencing tremendous growth, few "spillover" benefits to the downtown businesses could be seen (Farr Assoc. 2001).

To remedy this situation, the town commissioned the 2000 Downtown Renewal Plan, a bold redevelopment strategy calling for retaining most of the historic main street buildings while replacing adjacent areas that were underutilized. Uptown Circle, which replaced an intersection that many considered awkward with a traffic circle and park, would be the focal point for redevelopment, although its completion would take years. While many of the plan's details evolved, the framework outlining streets and blocks and the urban design principles that called for a denser urban downtown all remained firmly in place.

The implementation phase began immediately after the plan's adoption in 2001, with a 2003 Tax Increment Finance Plan regarded as a milestone. This plan refined the layout and shifted major projects closer to the university. Town leaders helped steer critical projects to the downtown, including the Children's Discovery Museum, which was given a new home in 2005 that put it on the Uptown Circle when the latter project was finally completed. Even more ambitious in scale was the Marriott Hotel and Conference Center, which would become a major draw and served to elevate the status of Uptown. Finished in 2009, its opening was followed by Uptown Circle's completion the following year and Uptown Station in 2012. In just a few years, Uptown Normal had undergone a complete transformation.

LATER GROWTH

These developments laid the groundwork for other investments, including College Place Uptown, a five-story building with student housing and university offices above retail, which opened in 2010, strengthening the link between

Uptown and ISU. A year later, a four-story apartment building was added to the side of the College Avenue parking deck, followed by the construction of the Hyatt Place Hotel in 2016. In 2017, One Uptown on the Circle, a four-story mixed-use building with high-end residential and city offices over a ground floor restaurant, is scheduled to open. Sidetracked for years due to the Great Recession, it fills one of the three remaining gaps around the circle.

Of the many sites envisioned for redevelopment in the 2000 Downtown Renewal Plan, only two major ones remain, both of which were originally intended to have the tallest buildings in Uptown. These buildings will fill the remaining gaps on the circle, linking the two legs of “main street” together. With most of the units filled, One Uptown on the Circle is demonstrating that a market exists for higher-end non-student housing.

As its growth options became more limited due to this development, the town commissioned the 2015 Master Plan Update to study redevelopment options on the south side of the tracks. The new plan envisions this district being anchored by the relocated and expanded Normal Public Library, and linked to the north side with a new pedestrian concourse under the tracks (Farr, 2015).

FIGURE 4

Aerial view of Normal Uptown Circle



Source: Town of Normal, Illinois

The aerial view in Figure 4 shows Normal's Uptown Circle, which is fronted by the town hall, the Children's Discovery Museum, and a new mixed-use building called One Uptown on the Circle. A portion of the community's Amtrak station is visible at far left.

LESSONS LEARNED

Despite their differences, several common themes emerge from the case study analysis:

1. Each community started with a plan to intensify development while placing emphasis on preserving its historic core. In all the examples, the downtowns were suffering from years of decline and needed ambitious planning to provide a new direction. The municipalities each commissioned plans that established the vision that spelled out the character of the development they sought to create, the priority streets and blocks, and the potential for the redevelopment of older buildings. Although details and priorities changed during the implementation stage, the basic principles endured and proved essential to creating effective standards, policies and regulations.
2. Each community had a transformational redevelopment project in its downtown that accelerated the revitalization process. Naperville's Riverwalk, Elmhurst's City Centre and Normal's Uptown Circle dramatically improved the image of their community's downtown and became major attractions and civic gathering points. Due to their complexity, it took 7 to 15 years to set up and implement these projects after the planning process was complete. Success required sustained support from municipal leaders, staff and stakeholders, who did not waiver during a long and challenging redevelopment process.
3. Each community incrementally improved the quality and performance of historic main streets while adding new activity generators to support them. The municipalities all focused on the appearance of their main streets through such measures as façade improvement programs, streetscape improvements, parks and plazas, public art and other civic projects. Existing landlords and tenants, motivated by these enhancements and the improving prospects for the downtown, or simply taking pride of ownership, initiated their own building and site improvement projects. The growing aesthetic appeal of these areas spurred foot traffic which, in turn, contributed to retail sales.

In all three cases, the main streets continued their historic role of being the highest generators of pedestrian traffic of any downtown street. This may stem

in part from their geographic legacy, but credit also belongs to the programing along these streets and the arrangement of attractions around them. When new commercial projects are located within a block or two of a main street, these cases show, the effect is often more foot traffic from casual walking and window-shopping. Nearby attractions such as parks, museums and hotels serve a complementary purpose, creating a series of overlapping pedestrian routes whose vibrancy generates still more sidewalk activity on the main street, drawing more people eager to join the action (Whyte, 1988).

4. Each community had strong public-private partnerships involving the business community and developers. All three also maintained strong relationships with the downtown businesses. While the municipalities' primary role was setting the direction for the district, managing problems and promoting the downtown, each nevertheless cultivated partnerships with developers interested in pursuing projects critical to the plan's vision but not able to finance them, often due to the fact they were relatively new to the marketplace. Municipalities set high expectations for new development while accepting variations if they would result in the right outcome. In some cases, subsidies were provided to developers to "close the deal" with investors and tenants.

5. Each community managed growing pains by updating plans and streamlining regulations to keep pace with development opportunities coming before them. The financial constraints facing development often results in downtown growth occurring in unconventional ways. Tall buildings sprout up next to short ones, historic edifices are juxtaposed with modern ones, and surface parking lots are left scattered throughout. Quality is often mediocre in the beginning but improves as the district matures. As time goes by, preferences change, building types evolve and public sensitivities shift. The three municipalities, therefore, periodically updated their plans and codes, keeping pace with evolving standards and setting new goals for development.

CONCLUSION

Several trends may work in favor of municipalities seeking to expand the role of small and historic downtowns. Pressures for infill redevelopment may rise as the suburbs mature, causing more growth to turn inward (CMAP, 2017, Reinvestment and Infill). The growing popularity of on-demand ride-sharing services — and eventually autonomous vehicles — may dramatically reduce the need for on-site parking, freeing up valuable land and enabling higher densities

(CMAP, 2017, Walkable Futures). Shifting preferences favoring walkable neighborhoods may draw residents to relatively dense mixed-use areas (CMAP, 2017, Walkable Futures). Similarly, retail customers may favor experience-rich downtown shopping rather than “warehouse-like” environments, in part due to the tendency for more staples being readily purchased online (McGee, 2107) (Corkery, 2017). As the three cases described show, with leadership and vision, small downtowns can be transformed in response to these changes, becoming even more attractive and vibrant than in the recent past.

Steve Wilson is Principal and Owner of Wilson Planning + Design.

REFERENCES

- Barton-Ashman (1980). Downtown Development Program. City of Elmhurst.
- Brown/Heldt Associates (1974). Naperville Central District Urban Design Plan. City of Naperville.
- Burayidi, M. A. (2013). Resilient downtowns a new approach to revitalizing small- and medium-city downtowns. New York, NY: Routledge.
- Chicago Metropolitan Agency for Planning (2017). Alternative Futures: Walkable Communities Strategy Paper. Chicago Metropolitan Agency for Planning.
- Chicago Metropolitan Agency for Planning (2017). Reinvestment and Infill Strategy Paper. Retrieved from <http://www.cmap.illinois.gov/onto2050/strategy-papers/reinvestment-infill>.
- City of Elmhurst (2017). At a Glance: Information on Elmhurst. City of Elmhurst.
- Houseal Lavigne Associates (2016) City of Elmhurst Downtown Plan. Retrieved from <https://www.elmhurst.org/documentcenter/view/168>.
- City of Naperville (2011). Downtown 2030: Planning the Downtown Experience. Retrieved from <https://www.naperville.il.us/contentassets/7fed1bf2ba19496fa9a037f019616748/cmp-naperville-downtown2030.pdf>.
- City of Naperville (2001). Naperville Special Service Areas. City of Naperville.
- Corkery, M. (2017). Is American Retail at a Historic Tipping Point? New York Times. Retrieved from <https://www.nytimes.com/2017/04/15/business/retail-industry.html>.
- Downtown Naperville Alliance (2017). Downtown Naperville 2017 Shopping and Dining Directory. Retrieved from http://downtownnaperville.com/wp-content/uploads/2017/01/01_31_17_dna_directory_final_spreads-1.pdf.
- Farr Associates (2001). Normal Illinois Downtown Renewal Plan. Retrieved from <http://www.normal.org/DocumentCenter/View/5546>.
- Farr Associates (2015). Uptown Normal Master Plan Update. Retrieved from <http://www.normal.org/DocumentCenter/View/6839>.

Filion, P., Hoernig, H., Bunting, T. and Sands, G. (2004). The Successful Few: Healthy Downtowns of Small Metropolitan Regions. *Journal of the American Planning Association*, 70(3), 328-343.

Francois, R. V. and Franklin, W. (1996). *Main street revisited: time, space, and image building in small-town America*. Iowa City: University of Iowa Press.

Gibbs, R. J. (2012). *Principles of urban retail planning and development*. Hoboken, NJ: John Wiley & Sons.

McGee, T. (2017). How Millennials Are Changing Retail Patterns, *Forbes*. Retrieved from <https://www.forbes.com/sites/tommcgee/2017/01/23/the-rise-of-the-millennial/#14cb43e65f74>.

National Association of Realtors (2017, March). Demand for Walkable Communities. Retrieved from <http://www.realtoractioncenter.com/for-associations/smartgrowth/placemaking/walkable-communities/demand-impact.html>.

Project for Public Spaces (2016, October). *Placemaking: What if we built our cities around places?* Retrieved from <https://www.pps.org/wp-content/uploads/2016/10/Oct-2016-placemaking-booklet.pdf>.

Robertson, K. A. (1993). Pedestrians and the American downtown. *Town Planning Review*, 64(3). Retrieved from <https://doi:10.3828/tpr.64.3.4333841j1526j147>.

Robertson, K. (1999). Can Small-City Downtowns Remain Viable? A National Study of Development Issues and Strategies, *Journal American Planning Association*.

Whyte, W. H. (1988). *City: Rediscovering the Center*. Philadelphia, PA: University of Pennsylvania Press.

Walker, P. (2009). *Downtown Planning for Smaller and Midsized Communities*. American Planning Association.

TPAP (1990). *Elmhurst Comprehensive Plan*, City of Elmhurst.

COMMUNITY SUPPORTED ENTERPRISES AS A LOCAL INVESTMENT STRATEGY

NORMAN WALZER¹

CENTER FOR GOVERNMENTAL STUDIES, NORTHERN ILLINOIS UNIVERSITY

This article describes municipal experiences with the creation of Community Supported Enterprises (CSEs) to maintain access to goods and services considered essential to the quality of life and to the viability of the community. Using the results of research involving several major universities, it explains the rationale for CSEs and describes how these organizations have fared in Illinois, Iowa, Vermont and Wisconsin. The concluding section explores how the concept can be applied in rural communities facing long-term decline.

INTRODUCTION

Many smaller municipalities in Illinois, facing a slow post-recession recovery, have experienced population declines to levels below the threshold needed for certain private businesses, such as grocery stores and restaurants, to be viable. Others retain these businesses but have concerns that, due to growing online buying, changing demographics and the continued outmigration of residents, they will eventually close. Adding to the anxiety is the concern of a snowball effect: once core businesses close, the community's ability to attract and retain both residents and employers can be limited.

Communities working to retain these types of businesses often recognize that several trends work in their favor. Most notably, interest in "buying local" is growing; this means increased motivation for supporting local merchants, promoting local entrepreneurship and stabilizing current local business conditions are growing. Shuman (2012) and Cortese (2011) make the argument that communities can promote buying local by calling attention to the positive economic impact it has on the local economy. Similarly, when residents buy local products, rather than standardized merchandise made for mass distribution, they are helping to expand the market for local producers, and in many instances, providing consumers with higher-quality goods.

This article describes the experiences of small communities that have created Community Supported Enterprises (CSEs) to maintain access to goods and services considered essential to the quality of life. The analysis draws from a project funded by the North Central Regional Center for Rural Development

at Michigan State University. As part of this project, the Northern Illinois University (NIU) Center for Governmental Studies led an effort with extension services at both Michigan State University and the University of Wisconsin to gain perspective on these enterprises. The discussion begins with an explanation of the CSE concept and brief case studies, and concludes with ideas about how this concept could be applied more broadly in communities facing long term decline.

THE CONVERGING FORCES FACING SMALLER COMMUNITIES

Many communities seeking to retain local businesses must grapple with the reality of gradual population declines. In 2010, almost 60% of Illinois' 849 municipalities with populations of less than 2,500 had fewer residents than during the previous decennial census. Nearly half of the 133 communities with populations between 2,500 and 5,000 at the time had similarly lost residents over this 10-year period. There are few indications that the trend has reversed.

Pending retirements of business owners also add to concerns about store closures. In many communities, these concerns are magnified by aging populations, which result in diminished mobility. This makes ready access to groceries, pharmacies and places to convene with other residents even more critical to a high quality of life.

At the same time, new communication platforms make it relatively easy for consumers to expand their knowledge of local producers, who often work on a small scale and sometimes only as an extended hobby. The growth of *Etsy*, *Pinterest*, and other web sites offering unique goods or services exemplify some of the shifts in consumer interests and preferences that are underway. The idiosyncratic character of local business can also promote tourism, especially among young adults and Baby Boomers who seek memorable experiences when buying goods or services.²

Communities can also take comfort in the fact that elderly long-term residents of small communities often have significant financial resources at their disposal and are willing to invest in preserving and rebuilding the viability of their community for themselves or for their families. Although perhaps not interested in or able to actively own, manage or volunteer at a business venture, they are interested in staying involved (perhaps on a limited basis if for no other reason than to socially engage with peers) in a worthwhile endeavor.

As a result of these converging forces, there are two main driving forces behind local investment in CSEs: the need to maintain access to essential local goods and services; and the desire to retain or enhance social capital in the community. Such motivations have triggered small groups of local investors to pool funds and invest in a business venture considered important to the future of the area (Walzer and Sandoval).

PRINCIPLES AND APPROACHES OF CSEs

Community support for local businesses has existed for many years, but it has often had an impromptu character. Since the Great Recession and passage of the Jumpstart Our Business Startups Act (JOBS) in 2012, however, this support has become more pervasive and systematic. The JOBS Act and subsequent Security Exchange Commission rules made it easier for groups with less wealth to invest in businesses. The subsequent growth in the use of crowdfunding techniques (which can involve raising funds through the use of websites such as gofundme.com and kickstarter.com) enhance the ability of organized local groups to raise money for favorite local business ventures.

The CSEs described below involve active investment by local residents with a specific intent to start or continue an ongoing business viewed as crucial to the livability of the area. These financial investments are often relatively small and are used to leverage funds from financial institutions. However, the investments go beyond financial contributions, with residents also committing time and effort to participate in the business operations on an in-kind basis. This support lowers operating costs and involves residents directly in the success of the venture. The expected return to the financial investment is not always monetary; rather, the goal is to provide local access to basic services.

CSEs can take several forms. A Social Enterprise may involve an organized effort to accomplish a social purpose, e.g., minimizing the amount of construction material waste that goes to a landfill. In this example, a local group can organize a nonprofit that purchases construction waste and then operates a sales outlet where consumers can purchase and reuse the materials. While the organization uses a business to accomplish its ultimate purpose, the main intent is not necessarily to make a profit. Some initial investment was made to start the venture, but the main focus involves the social motivation.

A Community Supported Enterprise (or Community Supported Business) differs from a social enterprise insofar as the primary motivation is to provide a product or service as well as preserve or enhance social capital in the

community to strengthen its long-term viability. Community investors pool their funds, purchase a business venture and then patronize it to promote its success. Because investors are not expected to continue to make financial contributions to the venture (other than perhaps as customers), the CSE must be economically viable with a sound business model.

Organizations should be regarded by municipal officials as CSEs if they have three basic characteristics. First, they have a social motivation such as providing access to goods or services that are key to promoting social capital, which often involves engagement by residents. Second, although they are not always intended to provide a financial return to investors, they involve a business venture designed to be profitable and sustainable without continued subsidies. Third, they involve local voluntary investments of money and time from individuals who may or may not expect financial remuneration.

Recently, some businesses have appropriated the “CSE” term for various efforts to involve customers in business management decisions. For instance, a brewery with a membership club that selects the type of brew for the next month may claim to be a CSE on the basis that membership dues have been instrumental in shaping the product. However, such an endeavor would not qualify as a CSE using the definition previously provided, due to the fact that it lacks a clear social purpose.

NOTABLE EXAMPLES FROM FOUR STATES

Communities interested in CSEs can benefit from considering brief case studies from Illinois, Iowa, Vermont and Wisconsin. A more detailed discussion of these enterprises is available in Walzer and Sandoval (2016) and Keyser (2015).

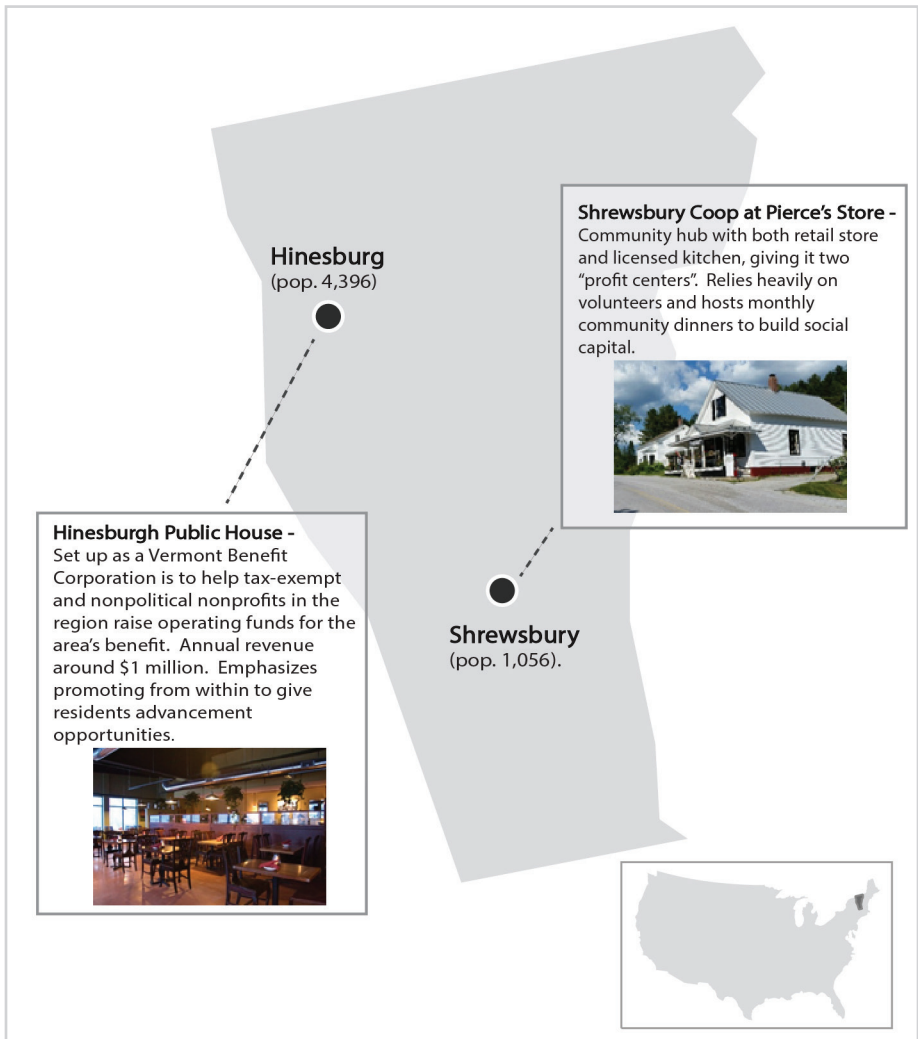
SHREWSBURY COOP AT PIERCE’S STORE, SHREWSBURY, VERMONT (POP. 1,056)

A general store had been part of community life since 1865 and operated by the Pierce family since 1918. In 1993, however, the last surviving Pierce family member reached retirement age and closed the store. This caused considerable concern among residents, who now lacked both a convenient place to buy basic grocery items and a gathering place.³ For generations in this remote community, the store had been the source of considerable social capital.

The Pierce family made bequests to the Preservation Trust of Vermont (PTV) to “draw the community together” while encouraging it to find ways to reopen the store and support other rural development strategies. The store had been

FIGURE 1

Notable Community Supported Enterprises in Vermont



closed for nearly a decade. A \$15,000 bequest in 2001 was sufficient to allow an operator to pay taxes and meet other expenses to reopen the store. In 2007, the PTV requested proposals from local groups to reopen the store in the building that had been vacant since 2001.

A local group responded and raised \$125,000 in contributions from area residents in amounts as little as \$25. The organizing group wanted to incur as little debt as possible. A feasibility study by a local small business development

center claimed that at least 325 patrons within three miles of the store had to spend an average of at least \$15 weekly to make the store viable. Using this information and other market research, the group formed the Shrewsbury Cooperative, and by June 2009, had sold 175 family memberships at \$25 per year. Members receive a 2% discount on purchases but no dividends, although the cooperative is open to anyone.

The business model involves selling products, including fresh meats, cheeses, vegetables, maple syrup and artisan crafts on consignment, mainly from the surrounding area. The store also contracts with a local baker to provide pastries. This approach not only strengthens local ties with townspeople and builds loyalty among patrons, but it also creates a unique shopping experience that attracts tourists and visitors. Tobacco and liquor products were initially not available but have recently been added.

Partly because of the specialized skills needed to operate this type of establishment, the store experienced some employee turnover. This turnover has been largely rectified, as the current operator is a local resident trained in business management practices and familiar with operating a cooperative. The business has also encountered marketing challenges. The cost of stocking merchandise is higher than that of competitors due to the lack of economies of scale in purchasing. This disadvantage, fortunately, is partially offset by coop members volunteering time, which lowers staffing costs. Such volunteerism also reinforces the community's commitment to the store and builds social capital.

According to interviews with store management, the store has not only remained competitive, it has at times achieved profit margins that exceed expectations. In addition, having a licensed kitchen in the store allows residents to make and market food products, giving it a second "profit center." Consideration is being given to hosting wine-tasting events, adding sliced meats and cheeses, and offering other specialized activities in the region. The store currently hosts monthly community dinners and is evaluating opportunities for purchasing adjoining facilities that would allow it to hold larger community events.

HINESBURGH PUBLIC HOUSE (HPH), HINESBURG, VERMONT (POP. 4,396)

In late 2012, two former Ben and Jerry's franchise employees started a community-supported restaurant at a former cheese-processing site in this community. This was legally set up as a Vermont Benefit Corporation to serve residents in nine surrounding communities, all of which were relatively small.

The intent was to provide healthy meals at a reasonable price and to build social capital in the region.

Many stakeholders, including local food producers, restaurant guests, the business' staff and employees, local community building organizations, area producers and investors, had an incentive to make the CSE succeed. Initially, two owners cumulatively invested \$250,000 and obtained a bank loan of \$100,000. They then pre-sold meals to the public for \$500 with an expected return in purchases of \$550 (a 10% return) with the ability to renew their subscription at a later time. The business has a five-member board of directors, and holds regular meetings with the stakeholders (i.e., the initial investors).

While the business must be profitable to survive, it is set up as a Vermont Benefit Corporation (an option under Vermont law that allows a for-profit corporation to incorporate a social mission with its financial goals). The organization's specific mission is to help tax-exempt and nonpolitical nonprofits in the region raise operating funds for the area's benefit. To this end, the HPH regularly hosts local events devoted to assisting these nonprofits, including hosting a monthly dinner with a special menu provided at a fixed price (\$20). A partnering local nonprofit receives half of the revenues generated from the event. These events provide opportunities for nonprofits to increase awareness of their services as well as promote healthy lifestyles. Another regular event, "Burger Night," features hamburgers that are sold at a reduced price for the benefit of low-income populations. Both of these events are built into the enterprise's marketing plan.

Having annual revenues of more than \$1 million, HPH is, by industry standards, profitable. Its business strategy involves managing the venture professionally while promoting staff from within, thereby giving area residents access to quality jobs and advancement opportunities. Management metrics and customer evaluations show that the restaurant is meeting its performance targets. By supporting many community organizations, the cooperative is seen as important to the creation of social capital.

SUPERVALU STORE, TOULON, ILLINOIS (POP. 1,292)

This enterprise came into being following the closing of the only grocery store in this community in late 2006. In response, four local leaders organized a community effort to create a replacement store that would preserve local access to essential items while also instilling a sense of community among residents. At the initial meeting, approximately 50 residents committed a total of \$30,000

to launch the process of purchasing the building and finding an operator. Subsequent efforts raised more than \$80,000, setting into motion the process of purchasing and renovating the store. Considering that the main objective was to provide local access to groceries and help stabilize the Toulon economy, these investors understood that they were not guaranteed any financial return.

The small size of the operation and management turnover delayed the path to profitability. In 2012, however, a store operator in neighboring Wyoming, Illinois, agreed to operate the grocery, which reduced the cost of merchandise (quantity discounts) purchased through the Super Valu grocery distribution franchise.

The SuperValu store, unfortunately, burned in 2014, forcing residents to decide if, or how, they could replace the store, preferably at the same location. At a community meeting, residents decided to replace and reopen the store at a cost not to exceed \$520,000. The necessary capital would be raised in several ways, including the proceeds from fire insurance and \$310,000 in Toulon Tax Increment Finance (TIF) funds paid over a 10-year period. In addition, there was a short-term bank loan, and investors contributed additional funds by buying shares in the venture.

After raising nearly \$500,000, the investment group rebuilt the store using as much local labor as possible. When the new facility reopened in March 2016, the operator had a \$500 monthly lease for the first six months, and then it increased to \$1,000 with a provision for the lease arrangements to be revisited in three years. The ultimate goal is to sell the business to the operator.

To promote local engagement, the store offers complimentary coffee and has a microwave in an area where groups can meet. Customers will find basic staples and numerous carry-out items as well as a small liquor department. Consideration has been given to establishing a delivery service to accommodate the community's aging population and large-group orders.

As in previous examples, an important motivation for this enterprise is to build on (or at least maintain) social capital that augments Toulon's quality of life. The involvement of residents in rebuilding, restocking and returning the store to operation brought the community together around a common goal. The store has been profitable thus far but, as with many small businesses, must compete with larger more established stores, which are particularly easy for the many Toulon residents working outside of the community to patronize. At the same time, the intent of Super Valu was never to provide access to a full

line of grocery items. Rather, it provides staples, a place where residents can congregate and an opportunity for residents to collaborate and invest in the future of their community.

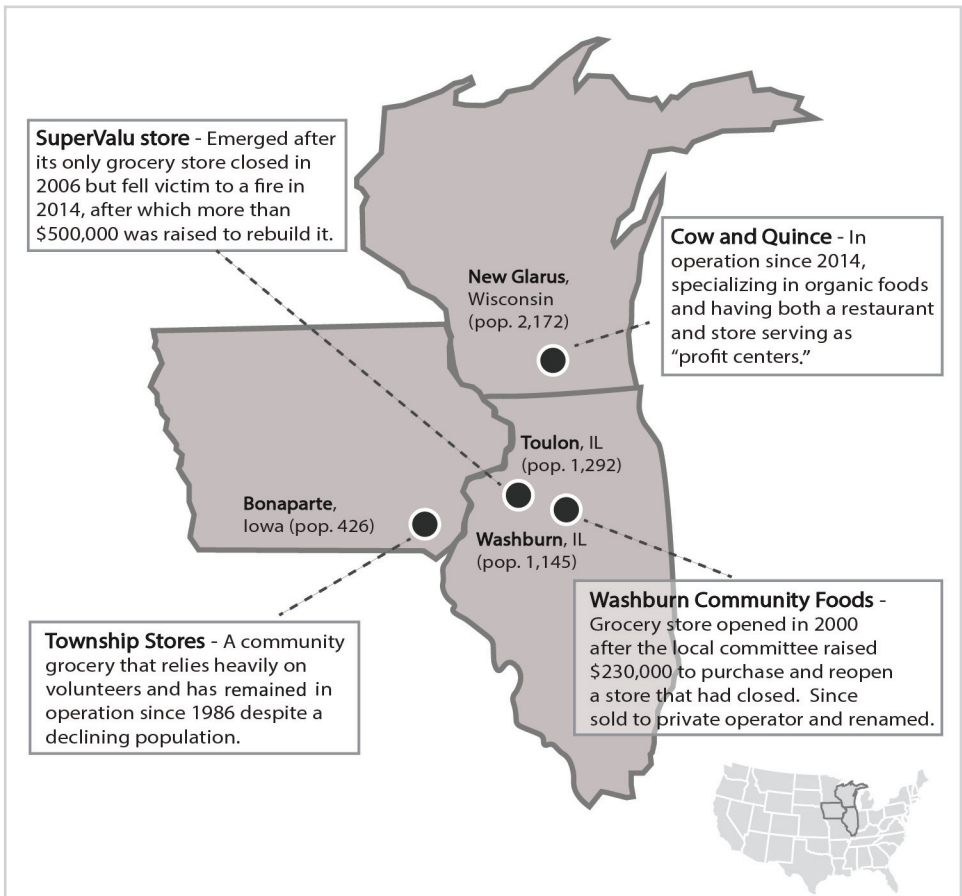
WASHBURN COMMUNITY FOODS, WASHBURN, ILLINOIS (POP. 1,145)

When the owner of the grocery store in this community decided to close in early 2000, a group of residents organized a 16-member committee to consider the alternatives.⁴ The decision was made to raise capital to buy the store from the owner and create a community corporation.

Shares were sold, starting at \$50, to community members and businesses, including a local bank, which bought \$10,000 in shares. Altogether, despite

FIGURE 2

Examples of Community Supported Enterprises in Illinois, Iowa and Wisconsin



having no guarantee or expectation of a financial return, approximately 300 people, a majority of whom were local families, bought shares, raising \$230,000 for the store's purchase and reopening.

After Washburn Community Foods opened in late 2000, however, interest in the project gradually dwindled. In 2006, it was reorganized using the cooperative model, with annual memberships costing \$100 and members receiving 5% cash back on cooperative rebate cards. The cooperative had approximately 40 members, and the store had a paid manager plus several paid staff. In addition, volunteers from the community supported day-to-day activities such as stocking shelves, cleaning and unloading supplies. The volunteer hours could be used to buy memberships in the cooperative.

Despite bringing in locally produced goods and making home deliveries to offset the declining interest in the cooperative, the store barely broke even. Increased competition with retailers in surrounding communities and the high costs of stocking merchandise – a common problem for small operators – took their toll on the profit margin.

The store was then sold to a grocery store owner who briefly operated it before reselling it to the current owner, who has scaled back the inventory so that it has largely taken on the character of a convenience store. Part of the building is leased to a person who operates a café. The store's diminished role is partially attributable to the loss of several key employers in the community during this period. Although neither the goals nor the business approach were flawed, the relatively small size of the Washburn economy remains limiting, making a self-sustaining grocery store a difficult proposition.

OTHER EXAMPLES FROM NEIGHBORING STATES

An example from neighboring Iowa also exemplifies the potential of following a CSE approach to finance local ventures (Walzer and Sandoval). One of the longer-running ventures is Township Stores in Bonaparte, Iowa (pop. 426), which has been in operation since 1986. Even though this rural community declined significantly in population, Township Stores continues to operate while grappling with the costs of maintaining freezers and other installations needed to stock certain types of merchandise. Nevertheless, it provides access to basic groceries and supplies for residents and, in recent years, several antique stores have located in Bonaparte, which should increase downtown traffic.

In New Glarus, Wisconsin (pop. 2,172), Cow and Quince specializes in organic foods raised in the surrounding area. This CSE-financed venture, which opened in 2014, seeks to provide healthy foods through both grocery and restaurant sales while also selling locally-made merchandise. The enterprise offers several membership options, with community members receiving a 10% discount and full members receiving a 15% discount. All are invited to an annual members' dinner as well as monthly prix fixe dinners that feature local and organic foods. Local producers can take some of their payments in trade, meaning that they receive credit for future meals or merchandise. As with other examples, a common feature is involvement and investment by residents, not purely for financial gain but also to promote community engagement, which is seen as a way to enhance social capital and the quality of life.

LESSONS LEARNED

Local economic conditions certainly loom large over the performance of any business. Although the examples show that CSEs can succeed, no single business venture is likely to reverse the fortunes of a community or prevent long-term declines. In some instances, though, the CSE approach may be one of the few logical alternatives available to retain essential services.

Like other business ventures, CSEs cannot always anticipate adverse economic trends that may be on the horizon. As a result, it is important for these enterprises to be integrated into a broad economic development strategy. CSEs can be instrumental to helping a community achieve a wide range of social and economic goals that extend well beyond access to goods and services.

The review of CSE experiences in Illinois and in other states revealed several key factors that are important to success, some of which are common in most local-development initiatives while others are unique to particular communities.

1. Perhaps the most important factor contributing to successful CSE ventures is the identification of a crucial and viable local business enterprise around which local residents can organize. In small towns and sometimes in urban neighborhoods, grocery stores are obvious candidates for community support, but other types of enterprises, such as restaurants or gathering places, are also options. Crucial to these efforts is ensuring that the business venture is sustainable and financially viable, as well as effectively communicating its importance to the community.

At the same time, effective demand for the goods or service is the main determinant of success. Enough interested customers with the financial means to make the venture viable must be found. Although this is, of course, true for any potential business venture, one main difference is that the CSE business model typically involves local contributions of time in the daily operations of the venture to reduce operating costs, which, as previously noted, provide opportunities for social capital development. Likewise, the business venture can operate with a lower profit margin than a purely private business due to the patience of those involved in its financing.

2. By their nature, CSEs are unique local investment opportunities that require sound plans to educate and attract investors. While CSEs are not social enterprises with a mainly altruistic goal, some investors are willing to commit small amounts of funds in order to start or expand crucial local services without expecting financial return. The ability to obtain adequate financial investment depends partly on the business model used and how it is marketed to the community. Since CSEs can involve several different types of organizational structures, including LLCs, nonprofits and cooperatives, it is important that organizers correctly assess the potential of each model for use in a specific setting. Differences in tax treatment can be especially important for certain types of investors.

3. As with most local initiatives, the chances of success are higher when a local champion or leader is willing to spearhead the effort. In the case of CSEs, it is especially important that this person or group has credibility within the community and can convince investors of the soundness of the venture and its potential contributions to the area. Selecting and supporting this local champion is especially important for the credibility of the project.

4. The experiences of CSEs, especially those in Vermont, show the importance of access to technical assistance in addition to private and public financial support. A group of local investors is not likely to generate sufficient capital to launch an enterprise without additional support either from a state agency or local financial institutions. In Vermont, the Preservation Trust provides local groups with both technical assistance and financial support. In the other examples considered, however, most financing was arranged locally. Regardless, the institutions involved may offer financing on more favorable terms and accept lower returns but, in any event, it must still follow appropriate lending practices.

5. Since CSEs involve both human and financial investment, it is especially important to stay in touch with investors and offer continuing engagement opportunities to retain their commitment and keep operating costs low. Successful enterprises usually have multiple profit centers to maintain their economic viability. These may include marketing locally-produced products, hosting community dinners or related activities, and organizing community-wide events. In other words, “investors” in the project receive returns in several ways to ensure their continued involvement.

IMPLICATIONS FOR ILLINOIS

CSEs are not proposed as a panacea for small or declining areas. At the same time, experience demonstrates that, under the right conditions, CSEs can offer ways to retain or improve the residents’ quality of life. While no one would claim that the CSE approach is anything more than one part of a broader local-development or enhancement strategy, it provides a low-cost and low-risk opportunity to directly engage residents in investing in a place where they may have lived for a long time. Thus, small towns may be in a position to help stabilize populations, engage retired residents and raise funds to help make their communities more attractive to potential incoming residents along with enhancing their attractiveness for tourists.

Although the main impetus can, and should, come from residents, experiences in Vermont show the importance of state or regional involvement in providing expertise, guidance, and in some instances, loans or seed money for specific ventures. In Illinois, a variety of agencies are also available to guide and lend support to local initiatives such as those described here. For instance, the Illinois Ventures for Community Action is a not-for-profit organization of community-action agencies that invests in projects that can reduce poverty. Improving the quality of life and building social capital in rural communities can help stimulate local investment opportunities and create jobs that align well with poverty reduction.

Our research revealed no apparent reason why a CSE approach cannot be used to finance agencies that provide human or social services. For instance, funding a building or organization that provided part-time medical and counseling services might help a small community currently without those services. The time to find new ways of sharing these types of expertise is here.

Many parts of rural Illinois with long-term population declines must find and try new approaches to community and economic development. Certainly,

attracting large employers and promoting local entrepreneurship are crucial, but it is also important to find ways in which residents can collaborate and invest to make their community a better place to live and work. Some local groups have found the CSE approach a useful tool toward that end.

Norman Walzer is Senior Research Scholar in the Center for Governmental Studies at Northern Illinois University and directed the CSE project.

¹ Funding for the project on which this article is based was provided by the North Central Regional Center for Rural Development at Michigan State University in collaboration with University of Wisconsin Extension and Michigan State University Extension. Any conclusions or interpretations belong solely to the author.

² Tourism in Illinois has increased substantially and is now a significant source of local revenues in rural areas blessed with natural resources and creative residents but without a large industrial base.

³ For more information on the Pierce Store, refer to <http://www.piercesstorevt.com/contact.us.html>.

⁴ For more information on this organization, refer to <http://washburnillinois.org/resources.html>.

REFERENCES

Cortese, A. (2011). *Locavesting: The Revolution in Local Investing and How to Profit from It*. Hoboken, NJ: John Wiley & Sons.

Keyser, W. (2015). *Community Supported Enterprises: Grass Roots Entrepreneurship*. Rural Research Report, (15)1. Macomb, IL: Illinois Institute for Rural Affairs. Retrieved from http://www.iira.org/wp-content/uploads/2015/02/Community_Supported_Businesses_Grassroots_Entrepreneurship_William_Keyser.pdf.

Shuman, M. (2012). *Local Dollars, Local Sense*. White River Junction, VT: Chelsea Green Publishing.

Walzer, N.& Sandoval, J. (2016, March). *Restoring Economic Vitality to Rural American Communities*. Policy Profiles, (16) 1. Retrieved from http://cgs.niu.edu/Policy_Profiles/restoring-economic-vitality-to-rural-american-communities.pdf.

Walzer, N. & Sandoval, J. (2016). *Emergence and Growth of Community Supported Enterprises*. NIU Center for Governmental Studies. Retrieved from <http://cgs.niu.edu/Reports/Emergence-and-Growth-of-Community-Supported-Enterprises.pdf>.

PROMOTING ECONOMIC SELF-SUFFICIENCY VIA HUD'S MOVING TO WORK PROGRAM: EVIDENCE FROM THE HOUSING AUTHORITY OF CHAMPAIGN COUNTY

PAUL E. MCNAMARA, HAN BUM LEE AND CATHY STRICK
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

This study examines the experience of the Housing Authority of Champaign County (HACC) with the Moving to Work (MTW) program, an initiative of the U.S. Department of Housing and Urban Development to help low-income families achieve greater economic self-sufficiency. The authority's program features mandatory work requirements for working-age and able-bodied adults, promotion of educational attainment and other employment supportive services. Overall, evidence suggests that the implementation of MTW has fostered increased family incomes and higher levels of employment. This result allows the HACC to spread its resources more broadly, thus reaching more families than would have been possible without the program in place.

INTRODUCTION

Since its inception, the U.S. Department of Housing and Urban Development (HUD) has worked to contribute to the social services available to low-income families in the United States. From a federal perspective, public-housing program expenditures through the Section 8 Housing Choice Voucher (HCV) program has ranked among the top 10 benefits and services provided to low-income people, with a cost of \$19 billion in FY2015 (Spar and Falk, 2015). Furthermore, Section 8 Project-Based Vouchers, which allow families to rent private apartments that meet program guidelines, generate additional costs to that amount. At a local level, demand for public housing services remains high despite these expenditures and many public-housing agencies have long waiting lists for entry into their programs.

The Housing Authority of Champaign County (HACC) joined HUD's Moving to Work (MTW) Demonstration program in 2010. The MTW program provides participating housing agencies with greater financial and management flexibility provided certain program features exist, such as participant conditionality based on work or educational-attainment requirements, or time-bound benefits. Specifically, HACC proposed a Local Self-Sufficiency (LSS)

program, which mandated work requirements and participation in a variety of job-preparedness activities for working-age, able-bodied adults. In addition, HACC imposed sanctions for noncompliance with the program requirements while also having requirements about the mix of families served.

A key objective of the LSS program was to promote greater work and educational attainment for program-eligible households through reducing work disincentives along with adding case management and referrals to employment-supportive services, thereby leading to economic independence from the social services. Work requirements gradually become more stringent over time, aiming to move all working-age, able-bodied individuals to work. Through the program, HACC also employs adaptive strategies to improve administrative management systems based on lessons learned from case management, impact assessment and recommendations from a third party evaluator. Challenges in program implementation come from many aspects, such as finding staff with proper skills, financial capacity and subjective determinants of waivers on the work requirements. Additionally, from an evaluation perspective, since the MTW program is not a random-assignment experiment, finding a robust counterfactual group to compare changes in outcomes of interest makes establishing the external validity of findings difficult.

Our analysis comparatively assesses the achievements of HACC, reviews the experience of the program from the perspective of participants, and answers the question of how a public-housing program can promote greater economic self-sufficiency through its program design. Through a review of the quantitative program records and the verbal reports collected through qualitative field research, we assess the progress HACC has achieved in promoting self-sufficiency of its housing participants through implementation of its MTW program.

BACKGROUND

MOVING TO WORK DEMONSTRATION

The Moving to Work demonstration was legislated by Section 204 of the Omnibus Consolidated Reversions and Appropriations Act of 1996 to achieve mainly three statutory objectives: (i) reducing cost and achieving greater cost effectiveness in federal expenditures; (ii) giving incentives to families with children where the head of household is working, seeking work or is preparing for work by participating in job training, educational programs or programs

that assist people in obtaining employment and becoming economically self-sufficient; and (iii) increasing housing choices for low-income families. Currently, 39 public housing authorities (PHAs) are participating in the demonstration program, and HUD's estimates in 2010 indicated that 33 MTW agencies administered about 13% of all Section 8 housing vouchers and 11% of public-housing units, which managed approximately \$3.8 billion in housing voucher and public-housing funding (Cadik and Nogic, 2010).¹ MTW does not directly guide any program approach but instead allows regulatory flexibility for participating agencies to develop their own innovative and locally tailored activities by waiving the traditional statutory requirements established by the U.S. Housing Act of 1937. (Abranvel et al., 2004). Also, MTW agencies are permitted to create one single funding stream, known as an MTW Block Grant, to provide the financial ability to plan, implement and evaluate central MTW activities and reforms (Brick and McCarty, 2012).

HACC'S SELF-SUFFICIENCY PROGRAM

HACC administers a county-wide housing-assistance program to a small metropolitan area, located in east central Illinois, with a population of 205,766 and a median household income of \$46,495 (U.S. Census Bureau, 2016). HACC currently serves approximately 2,000 households, of which the majority are headed by women of color (87%); of these female-headed households, 61% have children. Assisted households earn a median household income of \$15,230 a year and reside in neighborhoods where, on average, 28% of individuals live below the poverty line (HUD, 2017).²

HACC initiated an LSS program in January 2013, requiring all working-age (18-54), able-bodied individuals to work 20 hours weekly (or the number of hours equivalent to earnings from working 20 hours at the minimum wage) or attend educational or job-training programs. In consultation with an LSS staff person (case manager), each head of household creates a self-sufficiency goal (i.e., employment, education or health) that is "certified," with recertification repeated annually. The LSS program requires at least one LSS-Eligible Household (LEH) member to be working a minimum of 20 hours per week or attending educational or job-training programs by the second recertification. By the fourth recertification, one LEH member must work a minimum of 20 hours weekly; and all other eligible members must either work a minimum of 20 hours weekly or attend educational or job-training programs. By the sixth recertification, all LEH members must work a minimum of 20 hours weekly, which is how HACC defines economic self-sufficiency of its assisted households.

Additionally, children aged 5 through 18 are required to be enrolled in school (HACC, 2016).

HACC's LSS program also enforces participation in the Family Self-Sufficiency (FSS) program, providing a variety of job-preparedness services for individuals noncompliant with the work requirements. The FSS program case managers assist program participants by advising on career planning and facilitating referrals to organizations that provide a variety of employment-supportive services, including Illinois Consortium, Illinois Extension, City of Champaign and Urbana Human Relations Office, Champaign-Urbana Public Health, Mental Health Center of Champaign County and more. Non-compliance with the work requirements may result in a loss of housing assistance; however, hardship exemptions exist for households with extenuating circumstances such as illness or loss of employment through no fault of the family member.

QUANTITATIVE EVIDENCE

This study draws upon data from various sources. First, we use six years (2011-2016) of HUD's Picture of Subsidized Households (PSH) publicly available data to compare the change in assisted households' annual income over time. Second, we employ restricted-use administrative data (HUD-50058 Family Report) to examine a longitudinal change in assisted households' employment status and earnings compared with similar variations of households in a traditional, non-MTW agency. The comparison PHA serves a small metropolitan statistical area in Illinois, located southwest of Champaign County. According to HUD's PSH data (2008-2011), both PHAs showed quite similar patterns in employment, income, household composition and disability status, while the data indicated relatively small differences in head of household's age, minority status and family share of rent per month.³ Third, social survey data that we have collected in collaboration with HACC and a comparison PHA are used to compare the change in recipients' educational attainment and mental health.

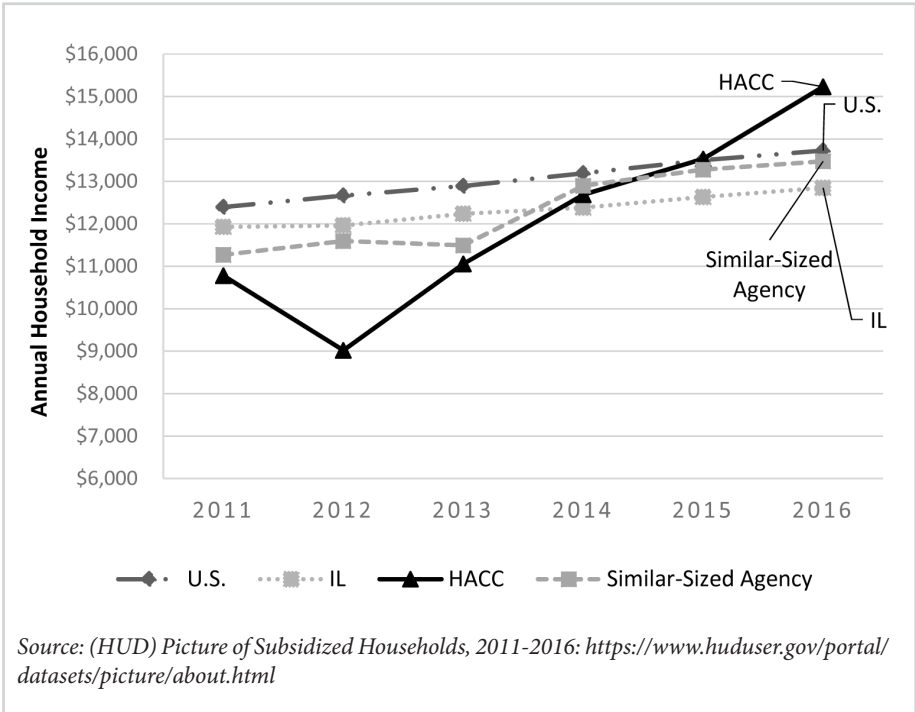
DID HACC'S LSS PROGRAM IMPROVE LABOR MARKET OUTCOMES OF ASSISTED HOUSEHOLDS?

In Figure 1, we show longitudinally the change in the annual total income for assisted households in HACC, compared with all HUD-assisted households in the U.S., Illinois and similar-sized PHAs. Each point represents an annual average income for all households served in that year, and the similar-sized PHAs include housing authorities that administer between 1,000 to 2,999

housing vouchers and public-housing units in Illinois. Given that HACC's LSS program took effect in 2013, we set the analysis period from 2011 to 2016 to show dynamic variations in income before and after the LSS program implementation.

FIGURE 1

Trends in Annual Household Income between 2011 and 2016



Overall, we observe a gradual increase in the annual income for all assisted households over time across different subgroups. HACC-assisted households earned a lower income than other groups in 2011 and had a further decrease of \$1,759 in income by 2012. Notably, HACC showed a substantial income increase in the years immediately following LSS program implementation; however, since the annual total income could contain various income sources, this increased income does not necessarily indicate household gains in employment and earnings. The results show that the annual income of HACC-assisted households increased from \$11,057 in 2013 to \$15,230 in 2016, which was about a 37.7% increase in three years, relative to 6.5% nationally, 5% for all PHAs in Illinois, and 17.2% for the similar-sized PHAs in Illinois.

In order to more clearly understand the economic impact of the LSS program, we compare a change in earnings and employment-adult ratio (defined as the number of employed adults divided by the total number of adults within the household) for all assisted households and LEHs in HACC with those in the comparison PHA. We use repeated cross-sectional data to calculate the average values for the entire housing authority and the subgroups.⁴ Figure 2 shows that, on average, annual earnings for all assisted households in the HACC increased from \$5,041 in 2011 to \$9,680 in 2016, which was a 92% increase in five years, relative to a 13.2% increase in the comparison PHA. Notably, LEHs had a substantial increase in earnings, especially in the years following LSS implementation, from \$8,651 in 2013 to \$14,701 in 2016, representing a \$6,050 (or 69.93%) increase compared to \$929 (or 12.2%) increase in earnings in the comparison PHA. Similarly, Figure 3 indicates that LEHs showed a significant increase in the employment-adult ratio from 0.49 in 2011 to 0.86 in 2016, which was an increase of 0.37, while there was a slight increase (0.03) in the comparison agency.

FIGURE 2

Trends in Annual Household Earnings in HACC and Comparison Agency between 2011 and 2016

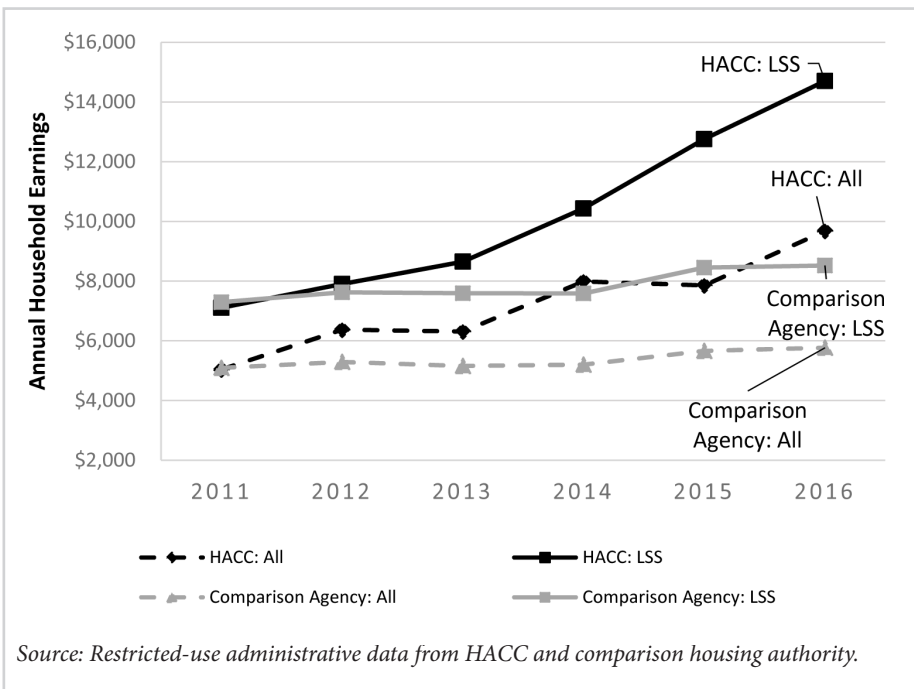
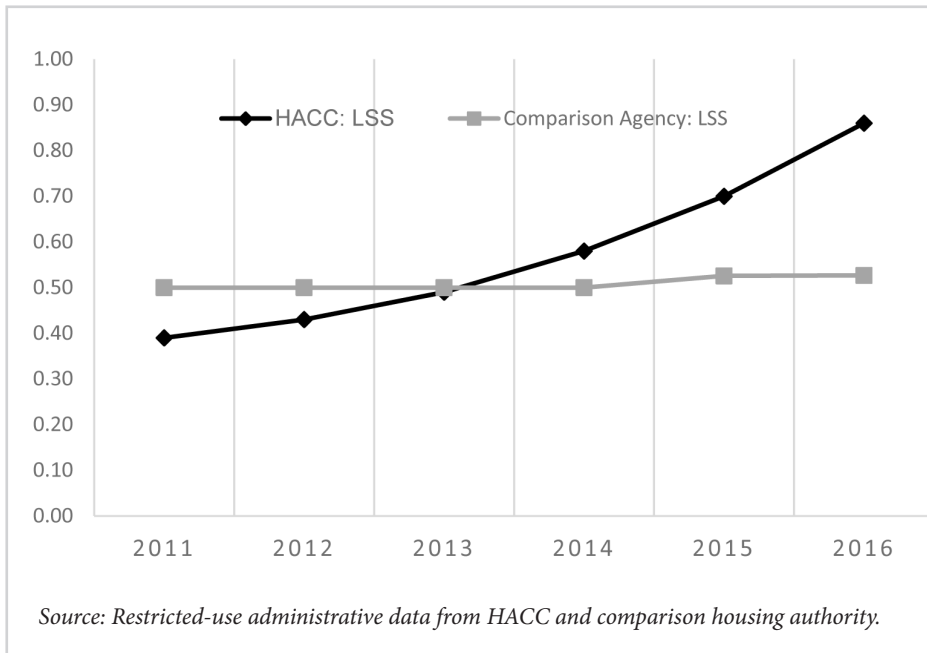


FIGURE 3

Trends in Employment-Adult Ratio for LSS-Eligible Households in HACC and Comparison Agency between 2011 and 2016



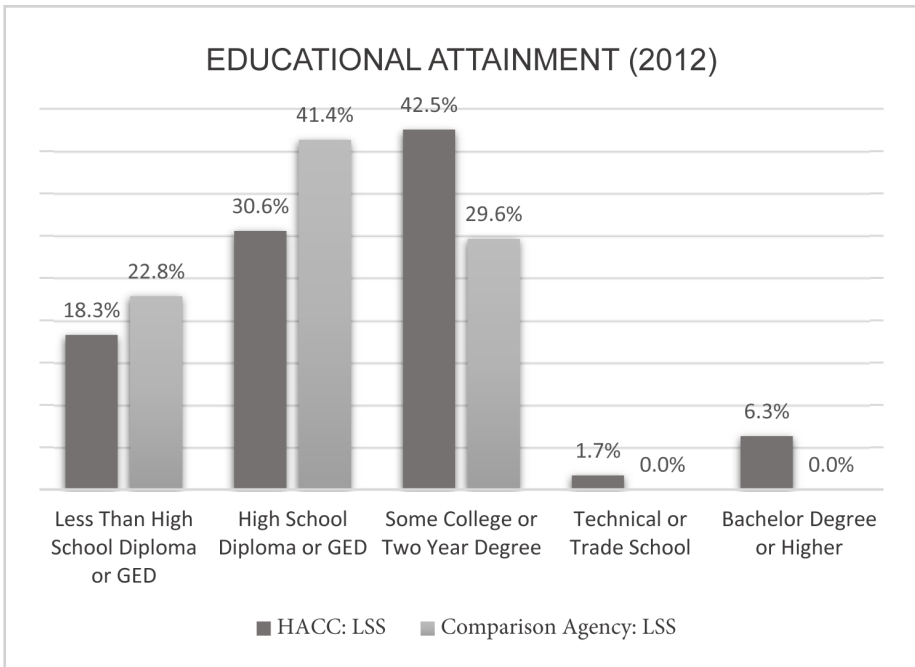
However, it is important to note that, as of January 2016, HACC modified its work requirements for new entries, requiring employment for an LEH member in the household prior to admission (HACC, 2016). As a result, HACC admitted a relatively higher proportion of new entries with younger head of households with employment, thereby contributing to a further increase in earnings and employment in 2016 (McNamara, Strick and Lee, 2017). However, aside from the change in 2016, the increase in earnings and employment-adult ratio is still fairly substantial.

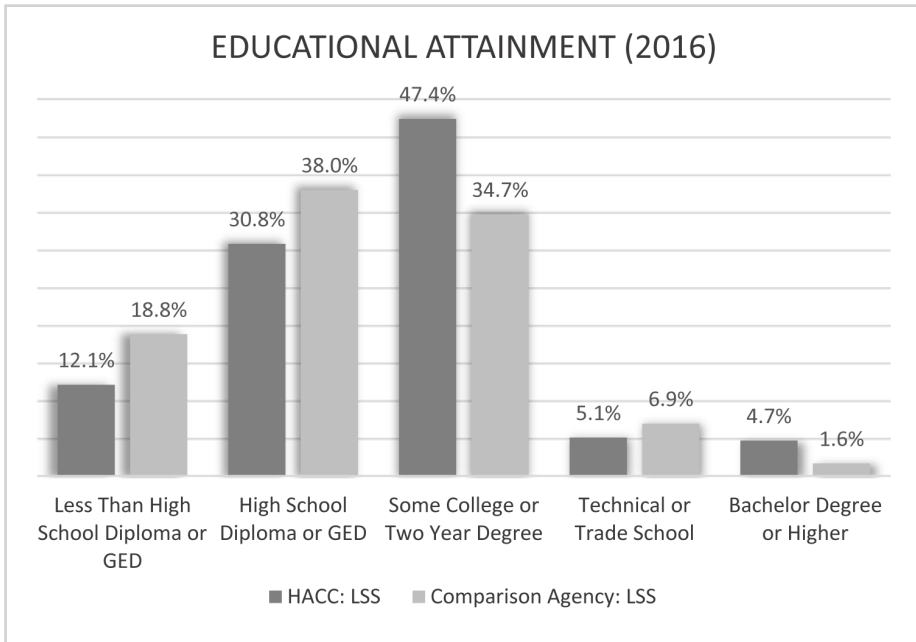
In addition to earnings and employment effects, the LSS program might also contribute to human capital development of assisted households through supporting attainment of higher education. Figure 4 presents the distribution of educational attainments for head of households that met the LSS program eligibility in 2012 and in 2016, in the HACC and a comparison housing agency.⁵ Overall, in both PHAs, the proportion of head of households with less than a high-school diploma or GED decreased while heads with some college or associate degrees increased in 2016. However, because both PHAs showed

similar educational attainment patterns, it seems difficult to discern the impact that the LSS program had on educational attainment of head of households.

In evaluating the efficacy of the LSS, it is important to recognize that labor market achievements can be affected by regional economy. Specifically, a number of literature reviews have summarized the linkages between the suburbanization of low-skilled jobs, the spatial segregation of minorities, and the earnings and employment of low-skilled minorities (Ihlanfeldt and Sjoquist, 1998; Kain, 1992). In addition, Weber, Duncan and Whitener (2002) attest that the success and failure of welfare reform policies (work requirements and time limits) hinge on the availability of low-skilled jobs in nearby areas and supportive services such as job training, childcare and transportation. Furthermore, Lee and McNamara (2017) found that housing-voucher holders in HACC considered access to low-skilled jobs as an important determinant of locational choices, which would increase the likelihood of obtaining jobs matched to their socioeconomic status.

FIGURE 4
 Comparison of Educational Attainments for LSS-Eligible Head of Households in HACC and Comparison Agency between 2012 and 2016





According to the County Business Patterns (CBP) data over the years 2011 to 2015, Champaign County had about 1.5 times the number of business establishments versus the comparison county, while both counties revealed no noticeable change in the number of business establishments over time.⁶ These results imply that the large body of employment opportunities may contribute to an improvement in recipients' economic outcomes in Champaign County.

QUALITATIVE EVIDENCE

In May 2011, HACC contracted with the Department of Agricultural and Consumer Economics at the University of Illinois at Urbana-Champaign to conduct a longitudinal program evaluation of its housing authority, concentrating on the goal of family self-sufficiency. Therefore, to date, we have collected five years of qualitative longitudinal data (McNamara et al., 2017). In 2016 we compared analyses of qualitative key-informant interview findings between three MTW housing participants and two non-MTW housing participants. Each participant had been randomly selected from the pool of study participants in 2011 or 2012 and was interviewed three times between 2011 and 2016. Findings suggest that while basic needs are met through food security and housing assistance at both MTW and non-MTW housing authorities, there are differences in discourse concerning housing-assistance

requirements, housing satisfaction, employment, education, articulating and realizing personal goals, motivation, social support and financial situation. However, interview participants across housing authorities talk similarly about physical and mental health challenges, family structure changes, goals for children, children's school experiences, children's health, neighbors and spirituality (McNamara et al., 2017).

All of the key informants in these comparison analyses were single women with children. Most were members of minority groups. Beginning with a social constructivist theoretical framework to describe how single mothers receiving housing assistance define self-sufficiency, our interview process employed inductive, open-ended interview questions that focused on education, physical and mental health, employment, social support networks, family structure, housing, neighborhoods, neighbors, health care access, and financial and personal goals and motivation. Our goal was to interpret meaning from the women's comments on environment and personal perspectives, seeking to understand how these were affecting their movement toward self-sufficiency. Social constructivism is an ideal interpretive framework employed by qualitative researchers seeking to tell the story from the participant's point of view, and within the culture and context in which the participant interacts (Creswell, 2013; Unger, 2003). Specifically, our study participants described their subjective meanings on situations our questions raised; meanings they formed in a social context through dealings with other people, as well as drawing meaning from their cultural and historical perspective, allowing us to make sense of these subjective meanings participants have about the world.

The interview process was collaborative (Creswell, 2013). The third author (Strick) acted as research coordinator. As an experienced, master's-level social-work clinician having previously counseled similar populations of homeless and vulnerably housed people in the community, she positioned herself within the interview to initiate a space that reflected equality, respect and dignity, inviting study participants to be engaged in a conversation about intimate details of their lives. The research coordinator's previous community social-work experience allowed an opportunity to "learn the culture" (Creswell, 2013, p. 250) of a population similar to the key informants. The research coordinator's relationships with these women grew over time, which was also beneficial to interpreting meaning from the key informants' narratives.

All of the interviews took place at the key informants' homes, either apartment-style or single-family dwellings. Most of these women worked, and they

accommodated our interviews within their busy lives while simultaneously caring for their infant, toddler and/or school-aged children who were home at the time of the interview.

All of the interviews were audio-recorded, and then downloaded to the research coordinator's computer and later transcribed verbatim into a Word document. The research coordinator organized text interview data into a table format and then conducted primary, inductive data analysis informed by a combination of case-study and grounded-theory strategies. Both case-study and grounded-theory approaches use similar strategies to organize, describe and classify data into key themes. The main objective of our case-study approach was to present the cases of individual key informants in detail. However, grounded theory allowed us to interpret some findings into a "unified explanation" (Corbin and Strauss, 2007, p. 107), or theory, from study participants' narratives. Therefore, we used an open coding scheme, interested in identifying large categories that emerged from the case studies, by first identifying meaningful segments of words, then phrases and concepts of interest, then interpreting these phrases into a theme, similar to the interpretative analysis process performed by Dallos and Denford (2008) in their study of families with an eating disorder. Code labels emerged *in vivo*, from participants' own words, or were derived from the social sciences, for example, "high self-esteem." Developing themes required repeated reading of the interview transcripts by the research coordinator, often re-listening to the audio interview while simultaneously reading the transcript, which provided an additional level of descriptive emotional and contextual detail. After codes and themes were identified, the research coordinator interpreted the data through research literature. To ensure trustworthiness, the first author regularly reviewed interview transcripts and the analytic process, offering different perspectives, which were considered and included in the data analysis.

Considering the differences between how MTW vs. non-MTW participants describe self-sufficiency, in Table 1 we find both groups maintain stable housing over time but there is more discourse from MTW participants that this housing assistance is "a stepping stone" to "a better life." Relatedly, since there are no work requirements or term limits in the comparison, non-MTW housing authority head of households are confident of maintaining their housing assistance if they continue to comply with income and family-size requirements. Head of households in the MTW program are more often employed, have longer work histories and cite fewer barriers to employment. Women in the comparison group have some previous work history but are

more often unemployed or employed sporadically and cite barriers such as a lack of child care, poor physical health and lack of employment opportunities. MTW head of households accomplish larger increases in education over time and articulate specific goals, for example, completing education, paying off debt or getting a good job in a specific field. They have plans, work toward their goals, and complete most of their goals. While all of the women described some time to “hang out,” HACC key informants use their free time to increase education and skills.

TABLE 1

Qualitative Inquiry Comparison – Moving to Work (MTW) vs. Non-MTW

	MTW	NON-MTW
Housing	Stable over time A stepping stone Work requirements and term limits	Stable over time Length in housing determined by income and family size
Employment	Employment improves with increased hours and increased income	Unemployed or employed sporadically with barriers of child care, health
Education	Large increases over time to earn degrees	Small increases over time with barriers of serious physical health, domestic violence, student debt, childcare
Goals	Have plans, work toward goals, most complete goals	No concrete plans, most goals unrealized due to barriers of health and childcare
Motivation	Less free time due to employment, but spent mainly on family responsibilities	View self as homemaker Free time activities are home, child and family centered

Table 2 delineates how both MTW and non-MTW households garner most of their social support from their family, some friends and some church members, and purposefully keep their social networks small. However, MTW households increase their social networks with co-workers and school peers, increasing social leverage in the community-at-large. While households in both groups talk about past banking mistakes, for example, with over-drafting an account, MTW households are more currently engaged with financial institutions. Overall, MTW households also perceive that they have more control over

their money and their financial future. They talk about taking responsibility for their actions and how the choices they make affect their financial situation, demonstrating an internal locus of control perspective. Similarly, both MTW and non-MTW head of households report some type of physical health concern.

TABLE 2

Qualitative Inquiry Comparison – Moving to Work (MTW) vs. Non-MTW

	MTW	NON-MTW
Social Support	Family, friends, church members plus co-workers and school friends increasing social leverage	Family, friends, church members More engagement with community resources
Financial Situation	Increased engagement to pay down debt, establish credit, increase credit score, receive mortgage approval	Smaller increases in engagement to establish credit and pay down student loan debt Perceive credit is 'okay'
Financial Future	Exhibit internal locus of control in taking responsibility for choices	Fluctuate in their perception of control over their money due to outside forces, for example, rising costs
Physical Health	Overweight Asthma Smoking Pre-Diabetic Does not affect work performance	Life threatening chronic illness Surgery Chronic illness Negatively affects work performance

Finally, Table 3 documents how the discourse with both groups tends to be similar with respect to mental health challenges resulting in stress, anxiety and depression. However, MTW key informants talk more about serious mental illness, and seeking help. Parenting remains a priority for all the households in these analyses, with single mothers garnering high self-esteem from their ability to feel successful in child-rearing. Similar across MTW and non-MTW households is the way both groups describe their neighbors, and discuss religion, spirituality and God.

TABLE 3

Qualitative Inquiry Comparison – Moving to Work (MTW) vs. Non-MTW

	MTW	NON-MTW
Mental Health	Stress Anxiety Depression Discrimination	Stress Anxiety Depression Domestic Violence
Children	A priority – mothers garner high self-esteem Similar goals – education, basic needs met, God, “stay out of trouble” Children do well in school, have friends, participate in activities	
Neighbors	Same housing and neighborhood over time Neighbors are diverse – work, go to school, retired, disabled, acquaintances	
Spirituality	Similar discourse about religion, spirituality, God	

POLICY IMPLICATION AND CONCLUSION

This article, using both quantitative and qualitative data, examines how work-requirement enforcement, combined with a variety of job-preparedness services, can contribute to economic self-sufficiency for working-age, able-bodied adults in public-housing programs. We review the experience of the Housing Authority of Champaign County (HACC) with a Local Self-Sufficiency (LSS) program to generate lessons of how a local housing authority can promote greater economic self-sufficiency via federal deregulations permitted under the Moving to Work (MTW) Demonstration program.

Our quantitative results show that LSS program participants experienced a substantial increase in earnings and employment, and these findings are parallel to the findings of Rohe, Webb and Frescoln (2016) in which the program’s positive economic effects were only statistically significant when employment-supportive services were combined with work-requirement enforcement. Our key informant analyses also lend support to quantitative evidence by disclosing personal experiences of program participants. Specifically, the program participants understood that they had a finite period to accomplish their goals and they were determined to obtain work and maintain their employment. It appears from the data that the women in the study found ways to “problem solve” to overcome some of the challenges they had experienced over time, such as finding adequate childcare to support their work and education. Although

more research on this is needed, such problem-solving ability may come, in part, from having an internal locus of control over their lives.

From the municipal policymakers' perspective, these results can be important because reducing poor families' reliance on social services would result in a reduction in government expenditure at the federal, state and local levels. It may also reduce the chance of intergenerational poverty. Such reductions ultimately produce positive returns for taxpayers. While these fiscal considerations may be important, they are not the only means of evaluating a program's success. The qualitative data presented here allow other windows into program efficacy, as the reported experiences of participants reveal particular challenges and achievements. The success of the LSS program requires higher levels of collaboration between HACC and other local municipal governments and non-profit organizations to develop and implement innovative and locally tailored strategies.

For HACC key informants, the path toward self-sufficiency has included challenges, such as mental illness in the form of anxiety, depression and hopelessness. The 2014 HACC evaluation report indicates that, on average, LSS-eligible households improved their labor market outcomes but, at the same time, they tended to suffer more from mental illnesses such as depression and anxiety (McNamara et al., 2015). These mental health symptoms may result from or be exacerbated by the additional stress of holding down a job and juggling aspects such as childcare and transportation. Additionally, key informants from our comparison housing authority describe a community lacking job opportunities, which may lead federal housing policy analysts to question whether work requirements are appropriate for economically challenged communities. Still, we need to learn more from the experience of HACC from the continued longitudinal evaluation of the mechanisms – personal, environmental and systemic – that inform a successful transition from housing assistance to self-sufficiency.

Our research and findings would contribute uniquely to understanding and implementation of an economic self-sufficiency program for the current MTW agencies and new entries that are interested in implementing similar programs and share similar operational and environmental characteristics. In 2016, the Consolidated Appropriations Act authorized HUD to expand its MTW demonstration program by an additional 100 housing authorities over the next seven years. The focus of the expansion is on smaller housing authorities (no fewer than 50 PHAs that administer 1,000 or fewer rental subsidy units,

and no fewer than 47 PHAs that administer between 1,001 and 6,000 units). Considering that HACC belongs to a smaller local housing authority and administers a county-wide housing-assistance program to largely rural areas with small cities, lessons learned from HACC's self-sufficiency program would provide useful insight into implementation and effectiveness of work-requirement enforcement and employment-promoting activities for other local housing authorities concerning the potential of the MTW program under the expansion.

Paul E. McNamara is an Associate Professor in the Department of Agricultural and Consumer Economics at the University of Illinois at Urbana-Champaign (UIUC). He serves as the Principal Investigator on the MTW project. Han Bum Lee is a post-doctoral research fellow and Cathy Strick is Visiting Research Coordinator in the Department of Agricultural and Consumer Economics at UIUC.

¹ The terms "authority" and "agency" are used interchangeably in this article.

² Neighborhood poverty estimates are based on the Census 2010 poverty designation at the census tract level.

³ Detailed information is presented in Appendix 1.

⁴ Due to missing data on earnings and individual employment in the comparison agency between 2015 and 2016, we predict earnings and employment-adult ratio using the estimated coefficients obtained with the OLS regressions of retrospective earnings and employment-adult ratio on a set of demographic and economic variables with regional fixed effect and time. Regression results are presented in Appendix 2.

⁵ 2012 social survey data contain 463 observations, including 301 observations from the HACC, which covered about 27% of all LSS-eligible households, and 162 observations from the comparison agency, which covered 26% of all LSS-eligible households. 2016 social survey data contain 751 observations, including 514 observations from the HACC and 237 observations from the comparison agency. Respondents voluntarily completed the survey, and this can cause selection bias that makes the survey samples not represent the total population. Therefore, the results should be interpreted with caution.

⁶ Low-skilled jobs include construction, manufacturing, wholesale trade, retail trade, transportation, warehousing, healthcare and social assistance, and accommodation and food services.

REFERENCES

- Abravanel, M. D., Smith, R. E., Turner, M. A., Cove, E. C., Harris, L. E. and Manjarrez, C. A. (2004). *Housing Agency Responses to Federal Deregulation: An Assessment of HUD's Moving to Work" Demonstration*. Washington, DC: Urban Institute. Retrieved from <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/311009-Testing-Public-Housing-Deregulation.PDF>.
- Brick, C. and McCarty, M. (2012). *Moving to Work (MTW): Housing Assistance Demonstration Program*. Washington, DC: Congressional Research Service.
- Cadik, E. and Nagic, A. (2010). *Moving to work: Interim policy applications and the future of the demonstration. In Report to Congress*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.
- Corbin, J. and Strauss, A. (2007) *Basics of qualitative research. Techniques and procedures for developing grounded theory* (3rd ed). Thousand Oaks, CA: Sage.
- Creswell, J.W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- Housing Authority of Champaign County. (2016). *Housing Authority of Champaign County Moving to Work Year 6 Plan*. Champaign, IL. Retrieved from: <http://www.hacc.net/mtw%20plan/Year%206%20MTW%20Plan.pdf>.
- Ihlanfeldt, K. R. and Sjoquist, D. L. (1998). The spatial mismatch hypothesis: a review of recent studies and their implications for welfare reform. *Housing Policy Debate*, (9)4, 849-892.
- Kain, J. F. (1992). The spatial mismatch hypothesis: three decades later. *Housing Policy Debate*, (3)2, 371-460.
- Lee, H. B. and McNamara, P. E. (2017). Deconcentrating the poor via public housing policy: What really matters? *Socio-Economic Planning Sciences*.
- McNamara, P.E., Strick, C. and Lee, H.B. (2013). *Evaluation of the Moving to Work Program in Champaign County. Progress Report to the Housing Authority of Champaign County*. Champaign, IL.
- McNamara, P.E., Strick, C. and Lee, H.B. (2015). *Evaluation of the Moving to Work Program in Champaign County. Progress Report to the Housing Authority of Champaign County*. Champaign, IL.
- McNamara, P.E., Strick, C. and Lee, H.B. (2017). *Evaluation of the Moving to Work Program in Champaign County. Progress Report to the Housing Authority of Champaign County*. Champaign, IL.
- Rohe, W. M., Webb, M. D. and Frescoln, K. P. (2016). Work requirements in public housing: Impacts on tenant employment and evictions. *Housing Policy Debate*, (26)6, 909-927.
- Spar, K. and Falk, G. (2015). *Federal Benefits and Services for People with Low Income: Programs and Spending, FY2008–FY2013*. Washington, DC: Congressional Research Service.
- Unger, M. (2003). Qualitative contributions to resilience research. *Qualitative Social Work*, (2)1, 85-102.
- United States Census Bureau. (2016). *Quick Facts: Champaign County, Illinois* [Data file]. Retrieved from: <https://www.census.gov/quickfacts/fact/table/champaigncountyillinois/HEA775215>.

United States Department of Housing and Urban Development. (2017). *Picture of Subsidized Households* [Data file]. Retrieved from <https://www.huduser.gov/portal/datasets/assths.html>.

Weber, B. A., Duncan, G. J. and Whitener, L. A. (Eds.). (2002). *Rural dimensions of welfare reform*. WE Upjohn Institute.

APPENDIX 1

Comparison of Descriptive Statistics of Selected PHA-Level Characteristics between HACC and Comparison Agency

	2008		2009		2011	
	HACC	Comparison Agency	HACC	Comparison Agency	HACC	Comparison Agency
Subsidized units available	1,801	1,654	1,805	1,724	2,196	1,804
Number of people per unit	2.75	2.45	2.73	2.46	2.65	2.46
Average family share of rent per month	\$304.75	\$260.54	\$317.10	\$274.39	\$290.93	\$248.71
Household income per year	\$12,283.88	\$10,980.09	\$10,879.00	\$10,385.38	\$10,780.22	\$10,033.86
% Wages are major source of income	38.6%	38.9%	30.3%	32.7%	30.3%	29.9%
% Female head	83.6%	84.9%	83.1%	83.3%	83.7%	83.9%
% Female head with children	56.4%	58.2%	56.4%	58.8%	54.0%	58.0%
% Disabled among head, spouse, co-head, aged 61 or younger	23.9%	27.9%	24.4%	26.1%	27.7%	27.4%
% Head aged 24 or less	4.5%	16.8%	4.8%	18.6%	2.4%	15.2%
% Head aged 25 to 50	61.7%	55.9%	58.6%	52.3%	61.2%	57.2%
% Minority	79.8%	73.3%	81.5%	72.9%	82.3%	74.7%

APPENDIX 2

The OLS (ordinary least squares) Regression Results to Predict Earnings and Employment-Adult Ratio in the Comparison Agency

	EARNINGS	EMPLOYMENT-ADULT RATIO
	(1)	(2)
Head, Age	-6.87* (3.81)	7.03 x e ⁻⁴ *** (2.51 x e ⁻⁴)
Head, Female	-135.61 (141.94)	-0.02* (0.01)
Head, Black	234.40** (117.30)	-0.01* (0.00)
Household Size	281.98*** (51.12)	-5.65 x e ⁻⁴ (1.59 x e ⁻³)
Household, Total Number of Adults	825.04*** (217.51)	-0.30*** (0.01)
Number of Adults with Employment	12,795.08*** (146.14)	0.84*** (0.01)
Public Housing Residents	-349.29*** (131.18)	-0.01 (0.01)
Year	115.86** (48.99)	1.26 x e ⁻⁴ (1.69 x e ⁻³)
Cons.	-1,906.58** (913.09)	0.37*** (0.03)
Obs.	8,137	5,272
R-Squared	0.63	0.92

Notes: Robust standard errors are reported in parenthesis. Coefficients for the regional fixed effects at the Census Tract level are omitted due to the space. * denotes significance at 10%, ** at 5%, and *** at 1% level.

DOWNTOWN DEVELOPMENT STRATEGIES IN ILLINOIS: ASSESSING THE PRIORITIES OF MUNICIPAL LEADERS IN ILLINOIS

NORMAN WALZER, MIM EVANS AND MICHAEL AQUINO¹

NORTHERN ILLINOIS UNIVERSITY CENTER FOR GOVERNMENTAL STUDIES

This article evaluates local economic development practices used to improve downtown districts in Illinois. Using the results of a survey of Illinois mayors, it offers insights into some of the strategies currently employed, describes how they are managed and financed, and provides examples of the efforts underway by several municipalities. The article also ranks the types of assistance needed most by communities seeking to infuse greater vitality into their central business districts.

INTRODUCTION

Recent news media discussions about downsizing and closures of large retail chains have focused major attention on the changing future of retail activities and the impact on downtowns in many communities. Downtowns have played major roles in municipalities in the past and will continue to do so in the future, but their roles are changing with new opportunities for local economic growth and development for communities willing and able to take advantage of them. The challenges are to find those opportunities and reposition the downtown area to reach its potential.

Downtowns traditionally have been shopping and employment centers in many, if not most, places. They generate sales taxes, which serve as major revenue sources for many municipalities; they also provide a significant property tax base. Especially important is that downtown areas are often a social hub in the community with both residents and visitors judging local economic health partly by their condition. Thus, a vibrant and sustainable downtown area contributes to the quality of life in the community which, in turn, helps to attract and retain residents.

However, the roles of downtowns in many municipalities are changing as people shop and interact in different ways. The Internet has dramatically affected shopping patterns in many areas, leading to the downsizing of both stores and malls. Two growing age cohorts – elderly residents and young adults – spend in different ways, directly affecting downtown activities. Older residents

spend relatively more on health and less on clothes and entertainment than Millennials, who often are more interested in travel, health and recreation, entertainment activities and other experiences that they associate with a high quality of life. These trends mean that downtown managers and local officials must identify new ways to market what their municipality has to offer.

At the same time, both age cohorts have expressed a preference for living in a safe and attractive setting with relatively easy access to basic needs and entertainment in a walkable environment (Community and Transportation Preference Survey, 2015). Downtowns can be modified to meet these preferences, but such changes require serious introspection and local creativity.

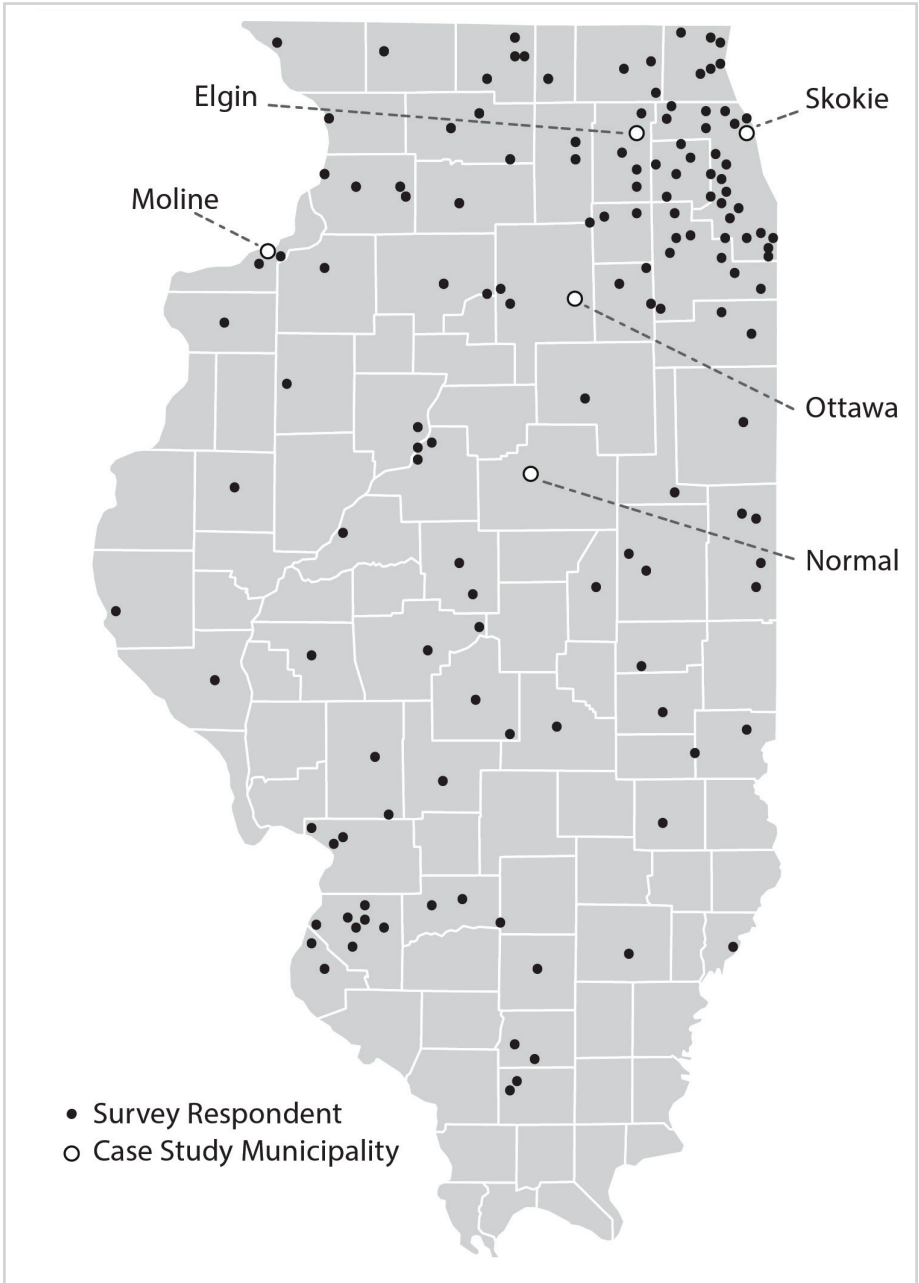
Buildings that previously housed large commercial or industrial enterprises have been converted to different uses to increase traffic in the downtown area and support other downtown businesses. In some cases, these buildings are now home to specialty shops, restaurants and entertainment that attract in-coming residents or tourists. Still other communities have focused on expanding health and recreation opportunities in the downtown area, but also with links to neighboring recreation sites such as a river or trail system.

The result is that municipalities face two main alternatives: Some may allow downtown facilities to remain empty with further deterioration and decay, while other local leaders may explore options for dealing with business closings, identifying new markets and aggressively promoting local attractions. In these cases, municipalities are creating new assets and opportunities that appeal to growing market segments, make the area attractive to tourists and enhance quality of life. These communities see the downtown area as a catalyst for local economic development and act to make it better suited for expected population and economic changes.

This article describes the findings of a survey of Illinois mayors, conducted jointly by the Northern Illinois University (NIU) Center for Governmental Studies (CGS) and the Illinois Municipal League (IML), regarding the importance of downtowns in local economic development practices, how these issues are managed with strategies employed and what financial approaches are used. Statewide, 148 municipalities across Illinois completed the CGS-IML survey, with many providing information about actions underway and examples of advances in downtown revitalization projects (Figure 1).² They also provided examples of strategies used to address downtown enhancement issues and the types of assistance needed in the future to successfully implement them.

FIGURE 1

Communities Responding to Downtown Strategy Survey



CHANGING CONDITIONS AND ROLES OF DOWNTOWNS

Downtowns are strongly linked to overall economic conditions in a city because incomes earned are usually spent in local businesses. The fact that residents now travel longer distances to work – often in larger regional centers – means that downtowns (especially in smaller municipalities) face increasing competition. In mid-size municipalities, some downtown retailers have been lured to shopping centers by agglomeration economies, additional merchandising space and more parking. In the process, they leave smaller former retail sites in the downtown to other uses. The vacated stores can pose local issues but also often represent opportunities for new and different types of ventures that can add life to downtown areas (Evans and Walzer, 2014; Milder, 2017).

According to mayors responding to the CGS-IML survey, downtown areas in many, if not most, Illinois municipalities have experienced the trends described above. Other municipalities have remained vibrant, even during transitions that caused vacancies. The condition of their downtowns fit into several categories from healthy to serious deterioration, depending on size and location of municipalities. In response, municipal leaders reported taking actions in varying degrees to address these situations.

The largest number (88) of respondents (64.7%) reported a traditional downtown around which the city had developed. Along these lines, 59 mayors (43.4%) reported that the streetscape and public space had been significantly improved, suggesting continued investment in downtown areas. Other mayors (54) reported a stable downtown area with 10% or fewer vacancies in commercial buildings. Nearly one-third (29.4%) said that new space was currently available or was under development for commercial uses, and a much smaller group (14.0%) reported a growing central business district with demand for additional space.

At the other extreme, 33.8% reported a more than 10% vacancy rate in commercial buildings, with 23.5% saying that retail functions in the downtown are nearly gone or that many retail buildings had been converted to other uses (24.6%). Nearly one-third reported one or more significant “white elephant” buildings with no obvious interest or prospective buyers.

These findings show the differences in downtown status and conditions in Illinois municipalities, as well as opportunities for new efforts in renewal or enhancement to meet the change in population and demographic needs and

tastes. Later discussions in this article provide examples of strategies underway to adjust to these changing needs.

Healthy and vibrant downtowns are important to local economic development in many ways (Table 1). The largest number (125) of mayors rated the ability of downtowns to create a sense of community and positive image as “very important.” Second highest (105) was the downtown’s role in attracting new business and retaining other potential businesses (101). Respondents also stressed the importance of downtowns in attracting visitors (98) as well as attracting or retaining residents and employees (93).

TABLE 1

Communities Responding to Downtown Strategy Survey

ACTIVITY	LEVEL OF IMPORTANCE				TOTAL RESPONSES	WEIGHTED AVE.
	NOT	SOME-WHAT	VERY			
Attracting new businesses	0.75% 1	20.90% 28	78.36% 105		134	3.56
Attracting and retaining other potential employers	3.03% 4	24.24% 32	72.73% 96		132	3.42
Attracting new and retaining residents	4.48% 6	26.12% 35	69.40% 93		134	3.34
Attracting visitors	3.68% 5	24.26% 33	72.06% 98		136	3.40
Retaining current businesses	1.49% 2	23.13% 31	75.37% 101		134	3.49
Attracting and retaining employees	5.30% 7	38.64% 51	56.06% 74		132	3.07
Creating a sense of community and positive image	—	8.09% 11	91.91% 125		136	3.84

By and large, most respondents (102) reported that downtown is included in the overall economic development strategy with a variety of local enhancement actions. Most-often reported (94) is an action plan for downtown improvements that includes financial incentives to attract businesses (93). Specific activities mentioned include a façade improvement program (81) and a schedule of regular events to promote downtown businesses. Forty-one respondents reported a separate budget set aside for downtown promotion, while a similar number reported a downtown promotion budget in the general fund. No detailed information on exactly how these funds are spent or the outcomes was provided in the survey.

OBSTACLES TO DEVELOPMENT

While conditions and prospects for downtowns are somewhat optimistic, major hurdles must be overcome, according to survey respondents. The most significant obstacles, which respondents ranked *important* or *very important* the most frequently, include residents shopping over the Internet (100), slow population growth or declines in the municipality or region (85), closings of important stores (83), declines in employment with residents relocating to other areas (78), expansions of retail and discount centers in other regions (38) and retiring business owners with no heirs interested in continuing the business (75).

These issues reflect the difficulties associated with accommodating past trends resulting from major demographic changes, shifts in purchasing patterns, and changes in marketing practices allowed by technology advances. These issues will continue in the future, so local officials and community leaders must explore ways to address them using new approaches such as incorporating more local food vendors, promoting other uses such as arts and crafts or entertainment opportunities that are described in the Implementation section.

MANAGING AND FINANCING DOWNTOWN STRATEGIES

According to the survey findings, downtown promotion and enhancement programs are managed and financed differently depending on the size of municipality, local opportunities and institutions.

MANAGEMENT ORGANIZATION AND STRUCTURE

By far, the most frequently reported agencies with at least *some responsibility* for managing downtown strategies were chambers of commerce (69), followed

by municipal staff dedicated to downtown activities (58). Thirty-nine mayors reported a local nonprofit organization dedicated to downtown (34), or the use of private consultants (31).

In a related question asking which agencies had *main* responsibility, however, a municipal staff person dedicated to downtown issues was the most common response (45). Other responses identified groups such as Main Street organizations (13), chambers of commerce (10), other nonprofit organizations (12), downtown development organizations (9) and private contractors or consultants (15). The responses differed by size because larger municipalities usually have larger and more complex downtown areas and typically have more resources including specialized management expertise. Organizations dedicated to downtown promotion can provide more services for these activities and a stronger marketing program.

TABLE 2

Municipal Management of Downtown Strategy

AGENCY DEEMED PRIMARILY RESPONSIBLE FOR MANAGING DOWNTOWN STRATEGY	NO. OF SURVEYED MUNICIPALITIES USING THIS APPROACH
Municipal Staff Person Dedicated to Downtown Issues	45
Private Contractors or Consultants	15
Main Street Organization	13
Other Nonprofit Organizations	12
Chamber of Commerce	10
Downtown Development Organizations	9

FINANCING ARRANGEMENTS

Responding mayors reported a variety of methods used in financing downtown improvements and activities depending on size of city and location. More than two-thirds of respondents – 85 municipalities (69.7%) – reported Tax

Increment Financing (TIF), with 70 (57.4%) reporting reliance on general property taxes. In addition, 59 municipalities (48.4%) reported using sales tax revenues and 39 (32.0 %) reported using state grants. In still other cases, 29.5% (36 municipalities) rely on funds raised by local agencies such as a downtown nonprofit organization or a chamber of commerce. The diversity in funding sources used emphasizes the broad base of downtown support including use of hotel/motel tax receipts (40 respondents) to promote tourism. Detailed information is unavailable on the amounts or relative importance of each revenue source, and multiple sources may be used depending on the program, event or activity.

Downtowns remain an important source of local revenues in many cities by generating both sales and property taxes. Less-active downtowns may have to rely on other revenue sources as shown above. A brief review of investments in downtowns mentioned by responding municipalities disclosed projects to increase parking, create an entertainment plaza, façade improvement programs, demolishing or rehabilitating buildings and landscape improvements. The continued interest in and support for downtown areas in responding municipalities is clear. These areas often represent the most viable and attractive sites for business starts as well as potential residential areas for groups such as the elderly and young adults interested in a walkable environment, access to entertainment and other amenities.

IMPLEMENTATION STRATEGIES

There can be little doubt that future successful downtown areas will include new types of activities and serve clientele with different tastes and preferences. Changing age distributions and merchandising approaches will determine the types of goods and services sold and where they are purchased. The survey responses show that many Illinois mayors recognize these shifts and the potential for downtown areas in local economic development efforts.

Respondents reported unique approaches that build on local assets ranging from expanding arts/crafts activities in the area to providing closer links with area recreational opportunities. Key strategies planned for *the next five years* are described next, followed by examples of municipalities implementing them.

The two most common planned strategies include improvements that increase the functionality and attractiveness of the downtown area (98), and increasing the number of visitors by branding, marketing and providing new attractions (88). Next on the list is to explore opportunities for new uses of the downtown

(81). These strategies represent a consistent effort to reshape the downtown for the needs of future populations.

In the future, the clientele for downtown services, especially younger generations, will probably continue to be interested in residential uses. This opportunity was recognized by 46 mayors, who reported efforts to enhance residential and/or entertainment activities including crafts, theaters, galleries, studio space, music venues and similar attractions (46). To bring about these changes, 39 mayors reported plans to help property owners shift to alternative uses such as office space, services, entertainment and other spaces. These efforts can also include expanding public facilities such as administrative offices, libraries, community centers and related public offices.

Conversion or redirection of downtown uses will be supported by infrastructure changes including upgrading Internet access and/or other communications facilities. These improvements expand the downtown potential in two ways. First, they increase traffic, which expands markets for other businesses currently located there as well as for future businesses. This strategy enhances the downtown as a center of social activities and governmental services. Second, expanding the capacity for advanced communications opens the door for business opportunities arising from future technology advances. Improved communications provide opportunities for services including health and education that will be attractive to future downtown residents.

Another set of strategies reported by mayors involves consciously changing the orientation and purpose of the downtown. Highest among these strategies is to increase local activities such as co-working and live-work spaces that make the downtown area more a center for creative activities and interaction, with less focus on traditional retail even though these efforts also boost other economic activities including retail. Communications infrastructure is a critical component in attracting residents interested in these increasingly common work arrangements.

In a related question, 70.3% of responding mayors reported an interest in further developing outdoor recreational assets (waterfront, trail system, state or federal lands, etc.), either within the municipal boundaries or nearby. These efforts can increase the ability of downtowns to draw other tourists and visitors to the recreational areas as well. However, in some instances, attracting this market may require other types of stores or services tailored to these tourists. Public-private partnerships could be pursued to upgrade both the recreational asset and supporting businesses.

Municipalities in Illinois have built on their unique local attractions and assets by designing innovative approaches to enhance their downtown areas. Some Illinois municipalities have linked their downtowns to unique state or local institutions. This strategy has multiple purposes including upgrading the quality of life, expanding markets for local businesses, and in turn making the state or local institution more attractive for new clientele. Several innovative approaches are reported next but many other equally successful efforts could have been included as well.

Ottawa (pop. 18,656) used its strategic rural location near the intersection of two interstates (I-39 and I-80), proximity to the Chicago area Starved Rock State Park, and location at the confluence of the Illinois and Fox Rivers to work on place-making issues. Ottawa had been known for many years as a heavy manufacturing (glass) area, but much of that industry is gone. Today, Ottawa emphasizes development of its rapidly growing tourism industry.

In addition to traditional economic development efforts highlighting transportation assets and central location, Ottawa also focuses on recreation and cultural assets. Unique festivals draw tourists from the surrounding area, including metropolitan Chicago, with attractions such as arts and garden tours, tours of historic sites and the I&M Canal, and activities in nearby parks and recreation sites. Ottawa has successfully attracted local food producers in a restaurant and brewery that uses local hops in its processes, along with a farmers' market and similar activities. The Illinois Valley Community College campus in Ottawa enhances local education and cultural opportunities for residents, and the city has further plans for cultural and recreational development along the Illinois River.

Perhaps the key to Ottawa's recent success has been the reinvigoration of its downtown through the use of an aggressive and eye-catching TIF-funded beautification program. This effort caused downtown Ottawa to be recognized by the national America in Bloom organization for "Most Dynamic Transformation of a Downtown Streetscape." Complementing this natural beauty has been a major emphasis on preserving Ottawa's historic downtown architecture and filling historic buildings with new shops and restaurants, making downtown the center of the community.

Normal (pop. 54,595) is home to Illinois State University, which is located in close proximity to the central business district. The student body and visiting parents provide a captive market for unique or unusual stores or services. The "uptown" revitalization effort expanded transportation facilities in the area,

which created an uptown circle that provides attractive public space as well as addresses environmental issues. This transportation facility received a National Award for Smart Growth Achievement from the U.S. Environmental Protection Agency (U.S. EPA).

In addition, Normal attracted major hotel and convention center facilities that provide convenient access for visitors that also expand markets for other local businesses. These and similar local investments illustrate an ability to recognize unique or special local opportunities to help reshape the downtown as an economic development asset.

Likewise, **Moline** (pop. 43,052), one of the Quad Cities, is engaged in “The Q” project that plans to create a Quad Cities Multi-Modal Station (MMS), a passenger rail facility located within the downtown area of Moline by 2018. The MMS site is the designated location from which a new passenger rail operation will serve a community that has been without such service for more than 30 years. This rail system will not only create immediate jobs improving rail corridors and building the system, but it will lead to long-term jobs because of private-sector investment in the downtown station area.

“The Q” project has fostered other development projects such as construction of loft apartments and a café in downtown Moline. Another initiative will make approximately eight blocks of potential redevelopment land available for parks, residential or mixed use. This development offers an opportunity to capitalize on market opportunities generated from a true multi-modal facility that integrates rail, bus and river transportation. It also provides connectivity to downtown Moline, which is expected to have substantial new investments in the next five years or so. The project has already gained national recognition through the Federal Sustainable Cities Initiative with additional funding from the U.S. EPA.

Skokie (pop. 64,821), adjacent to the City of Chicago, took a different approach by partnering with Forest City Enterprises and repurposing the 24-acre former GD Searle/Pfizer pharmaceutical campus adjacent to the downtown area and creating the Illinois Science + Technology Park (ISTP) in 2005.

The 661,000-square-foot ISTP provides premium-quality technology access to wetlab space and flexible Class A office buildings for life science, bio/nanotechnology and startup companies. Entrepreneurs can obtain various levels of support including counseling on business decisions, operating space and other financial services via ISTP’s incubator, Science Innovation Labs.

The project has yet to reach its full potential because of the Great Recession and lack of expected state funding. Nevertheless, approximately 1,500 employees work at the park with potential for a much larger number if, and when, a full build-out is completed. The property has recently been sold to a Skokie-based developer, American Landmark Properties, with plans to upgrade and expand the facilities, including an additional 140,000-square-foot build-to-suit option.

Elgin (pop. 112,111) is another example of an Illinois municipality with substantial private and public investment in arts and culture activities and live-work space in the downtown. The Fox River is the major natural feature of downtown, and the city has focused its efforts on areas in general proximity to the river. Since 2000, Elgin has invested more than \$30 million in riverfront development. The combination of existing facilities and new construction has created an arts-entertainment-recreation hub that includes the Gail Borden Public Library, the Hemmens Cultural Center, the Grand Victoria Casino, The Centre community recreation facility, as well as new housing. An additional \$300 million has been invested in public infrastructure.³ A more recent project is Elgin Artspace Lofts, opened in 2012 as a mixed-use development, at a cost of more than \$15 million, with 55 units of live-work space plus nearly 6,000 square feet of retail and community space.⁴ Efforts by Elgin to make its downtown attractive to new businesses are showing signs of success. Last year, a technology firm purchased a downtown building for its headquarters, citing the desire to be part of an active urban neighborhood.⁵ The historic Tower Building was recently purchased and is being renovated to accommodate 45 rental apartments.

Other states have organized statewide efforts to revitalize downtown areas, whether through the National Trust for Historic Preservation's National Main Street Center or a growing number of adaptations that build on local resources. The Illinois Main Street Program lost state funding in 2014 after being supported for several years by a USDA-Rural Development grant. While efforts are underway to re-establish this program with other funding sources, the future of the Main Street program in Illinois is uncertain. Some states have turned to public-private financing arrangements along with broad-base support on downtown development issues. Two examples of states focusing on place-making efforts or natural resource-entertainment opportunities are instructive to consider.

The Pennsylvania Downtown Center administers a nature-based place-making program where local revitalization efforts provide civic, tourism and business

resources to help residents build on unique local assets including hospitality and guest services plus shopping and entertainment opportunities.⁶ The overall thrust is to make communities attractive and desirable places for people to live and work, which, in turn, leads to business attraction and tourism enhancement. Consequently, local leaders can incorporate multiple local assets in revitalizing and marketing their downtowns or entire communities rather than concentrating on specific projects.

The MIPlace Michigan⁷ program targets place-making with a set of coordinated tools that communities can use in local revitalization efforts. At the heart of the program is the recognized need for communities to be places where both businesses and people want to grow and live. This interaction between business, talent and place drives opportunities for residents and local policymakers to design informed development strategies. Effectively using the MIPlace resources requires that participating communities have a well-organized and viable economic development strategy, which is key to any successful local effort and a task that responding mayors rate high in Table 2.

LOOKING AHEAD IN ILLINOIS — TECHNICAL ASSISTANCE NEEDS

When asked about recent successes (during the past three years), 60.1% of respondents reported that past efforts had been moderately or highly successful. While this finding is certainly positive, it also may suggest difficulties in identifying opportunities or in formulating approaches, so mayors were asked about the types of assistance needed in selecting among downtown activities.

When asked about their interest in future efforts to upgrade and enhance their downtowns, 109 (94.0%) asked about possibilities for a statewide thrust to make downtowns more effective in local economic development. They then identified the types of technical assistance that would be needed most in such an effort (Table 3). The largest number of mayors requested technical assistance in creating a plan to recruit downtown businesses (103), help with branding and marketing the downtown (102), access to online economic development tools (100) and planning-visioning based on community input (100). Market analysis (99), surveys of business performance and conditions (99) and training on best local development practices (99) were also mentioned along with other assistance to formulate downtown strategies.

At least limited access to some of this technical assistance already exists in the NIU Center for Governmental Studies *Growing Communities Initiative* (GCI) downtown development toolbox⁸ created with USDA-Rural Development

support in 2014. That website contains technical resources for downtown managers as well as comparisons of best practices in other states. The site will expand as part of the GCI initiative currently in its initial stages in the NIU Center for Governmental Studies.⁹

TABLE 3
Rating of Technical Assistance Services Needed

TOPICS	NO INTEREST	MODERATE INTEREST	EXTREME INTEREST	RATING AVERAGE	NUMBER OF RESPONSES
RESPONSES					
Website development for individual businesses	21	53	21	2.00	95
Recruitment plan for downtown businesses	3	39	61	2.56	103
Market analysis for downtown and/or business potential	4	35	59	2.56	98
Planning revitalization efforts	9	37	52	2.44	98
Branding and marketing	6	44	52	2.45	102
Survey of business performance, conditions and plans	16	48	35	2.19	99
Housing inventory and needs analysis	26	50	20	1.94	96
Training in downtown improvement techniques	11	43	43	2.33	97
Online access to economic development tools	8	41	51	2.43	100
Training on best practices in downtown improvement	6	40	53	2.47	99
Assistance with preparing surveys of visitors, customers, employees or residents	16	49	33	2.17	98
Downtown visioning and community input	11	42	47	2.36	100
Other	2	1	1	1.75	4

While the current toolbox links to downtown development resources in other states, it does not address all of the issues listed by mayors responding to the current survey. In response, GCI is expanding the set of services offered to include additional affordable and easily accessible technical assistance in areas such as market research, strategic planning and implementation strategies, as well as expanded online resources. The budget impasse made it difficult for Illinois municipalities to rely on support from state agencies to help them reshape downtowns into vital local economic development strategies. However, technical assistance can be obtained from agencies such as small business development centers, higher education outreach units and on the Internet. In addition, a coordinated statewide initiative such as *Growing Communities Initiative* can help organize local assistance opportunities plus achieve economies of scale in providing training and other support.

Norman Walzer, Mim Evans and Michael Aquino are Senior Research Scholar, Research Associate and E-Research Assistant in Economics, respectively, at the Northern Illinois University Center for Governmental Studies.

¹ The authors thank the Illinois Municipal League staff for coordinating the survey of Illinois mayors in October 2016. Any comments and observations belong solely to the authors. Additional discussions of the survey results are available in the Illinois Municipal *Review* magazine articles listed.

² Illinois municipalities larger than 5,000 were surveyed electronically in November 2016.

³ For more information, please visit <http://elgindevelopment.com/community/downtown-elgin/>.

⁴ For more information, please visit <http://www.artspace.org/our-places/elgin-artspace-lofts>.

⁵ For more information, please visit <http://www.chicagotribune.com/suburbs/elgin-courier-news/news/ct-ecn-tech-biz-moving-to-elgin-st-0215-20160213-story.html>.

⁶ For more information, please visit <http://www.padowntown.org/programs-services/nature-based-placemaking>.

⁷ For more information, please visit <https://www.miplace.org/communities/rrc/>

⁸ For more information, please visit <http://www.cgs.niu.edu/DowntownDevelopment/index.shtml>.

⁹ For more information, please visit http://www.cgs.niu.edu/DowntownDevelopment/greatdowntownsgrowingcities_4.5.17.pdf.

REFERENCES

Community and Transportation Preference Survey, U.S. Metro Areas (2015). Washington, DC: National Association of Realtors.

Evans, M., Walzer, N. and Blanke, A. (2014). Main Street as a Downtown Revitalization Strategy. *Springfield, IL: DCEO Illinois Main Street Program*. Retrieved from http://www.cgs.niu.edu/Reports/IMSFinal_report.pdf.

Evans, M. and Walzer, N. (2013, December). "The Back to the City Movement: Will it Help Illinois' Smaller Cities?" *Policy Profiles* (13)3.

Lee, J. and Park, K. (2017, April). "Determinants of Downtown Image and Retail Patronage: A Case of Fargo, North Dakota." *Journal of Extension* (55)2.

Milder, N.D. (2017). "Some Strategies for Downtown Revitalization." Retrieved from http://www.cgs.niu.edu/DowntownDevelopment/Toolbox/SomeStrategiesforSmallDowntownRevitalization_CGSweb.pdf.

Milder, N. D. (2005). *Downtown Business Recruitment*. New York: DANTH, Inc.

Walzer, N. and Evans, M. (2017). "Strategies for Downtown Development," *Illinois Municipal Review*, (96)4, 20-23.

Walzer, N. and Evans, M. (2017). "Changing Roles of Downtowns," *Illinois Municipal Review*, (96)3, 6-8.

THE IMMIGRANT POLICY CONTEXT IN ILLINOIS: AN OVERVIEW, POLICY ANALYSIS FRAMEWORK AND IMPLICATIONS FOR ILLINOIS CHILDREN¹

ELISABET BARRIOS AND MEGHAN CONDON
DEPAUL UNIVERSITY SCHOOL OF PUBLIC SERVICE

This paper presents an overview of the current immigration policy context in Illinois and offers an evidence-based framework designed to support policymakers drafting immigrant policies: the Policy Inclusion Effects (PIE) Framework. Our central argument is that policies targeting specific immigrant groups have both direct effects on the targeted group and spillover effects on broader immigrant and ethnic communities. Spillover effects can be most pronounced among children. A full accounting of policy impact must take both direct and spillover effects into account.

In the absence of comprehensive federal immigration policy, state and municipal policymakers have had to step in, generating an unprecedented amount of immigrant-focused legislation in recent years. Each state has set its own integration parameters for growing immigrant populations, creating 50 immigration policy contexts affecting the educational, economic and life prospects for millions of American children. These differences are present across immigrant groups and policy areas, defining a broad array of opportunities for immigrants and their children. In this paper, we ask how Illinois is faring in this diverse policy climate. We examine the makeup of the immigrant network in the state and the policies that lawmakers have enacted since 1990; we then present a policy analysis framework to guide future decisions in this area.

Throughout the paper, we discuss policies in general, but we focus in particular on the effects on children. Illinois is among the first states expected to reach a tipping point of minority-majority children by 2020, underscoring the importance of understanding the impact of immigrant policy on Illinois' children (Eltagouri, 2016). This demographic shift is greatly due to the growing number of second-generation immigrants: U.S-born children of immigrant parents (Pew Research Center, 2013). Second-generation immigrants grow up between two worlds; hearing messages about being American, and learning lessons about being immigrant. They often reside in *mixed status households*, where not all family members are U.S. citizens. We argue that to understand the true impact of policies targeting immigrants, decision makers must consider this

kind of connection within immigrant communities and families. Additionally, we argue that assessing the effects of policies targeting immigrants requires attention to people beyond the population that a policy explicitly targets. In sum, due to the robust immigrant network in Illinois, and emerging second generations, the future of Illinois is linked to immigrants. This paper presents the current landscape and offers an evidence-based framework designed to support policymakers drafting immigrant policies while addressing native-born needs.

THE POPULATION OF IMMIGRANTS IN ILLINOIS

Illinois hosts the sixth-largest immigrant population in the United States and ranks 11th in terms of the share of state residents who are foreign-born (Lopez and Radford, 2017). Illinois' network of 1.8 million immigrants falls into several legal categories that are central to state policies. Primarily, these are foreign-born naturalized citizens, authorized legal permanent residents (green card holders) and unauthorized immigrants.² State policies are segmented across these various legal categories, yielding differences in privileges and burdens across immigrant networks.

Today, roughly half (882,000 people) of the foreign-born residents of Illinois are naturalized citizens (U.S. Census Bureau, 2014). Of those who are not naturalized citizens, 540,000 people are legal permanent residents (LPRs) (Department of Homeland Security, 2014); this population has remained relatively stable over the past decade. In contrast, Illinois has seen a decline in the number of unauthorized immigrant residents. According to the most recent estimates from the Pew Research Center, which tracks the population of unauthorized immigrants using microdata from the American Community Survey, Illinois is home to roughly 450,000 unauthorized immigrants. Their numbers have declined by 22% in the state since the peak in 2007 (Passel and Cohn, 2016). In fact, Illinois is one of only seven states that has seen a statistically significant decline in the population of unauthorized residents since 2009.

It is important to note that the 1.8 million foreign-born people in an array of legal categories are not the only residents who make up the Illinois immigrant network. In fact, the fastest growing sector of the immigrant network is second-generation immigrants, or native-born children of foreign-born parents. These children add approximately 692,000 people to Illinois' immigrant network (U.S. Census Bureau, 2015). When policy decisions target immigrant groups –

FIGURE 1
Illinois Immigration Trends (2006-2014)

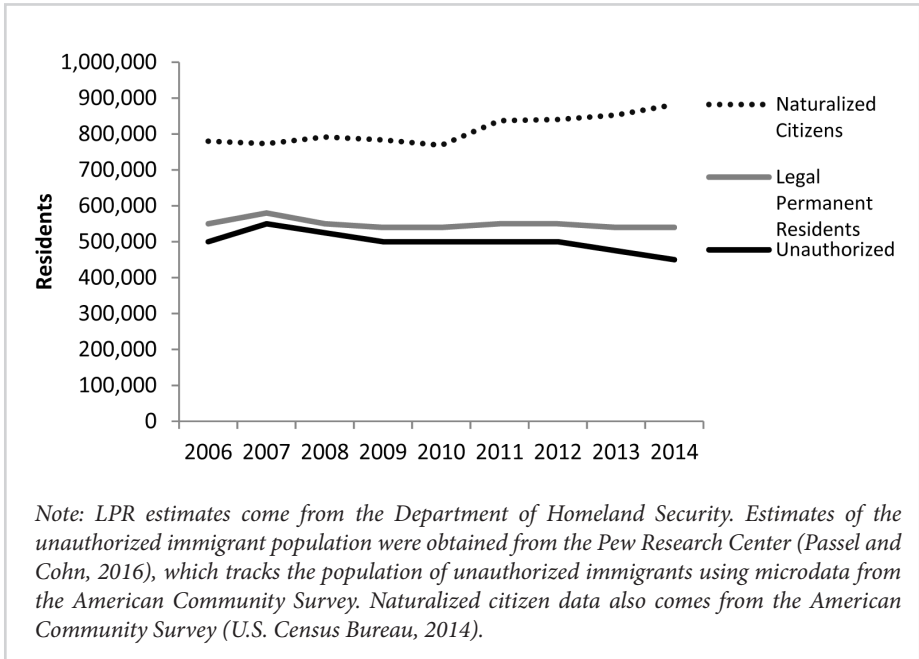
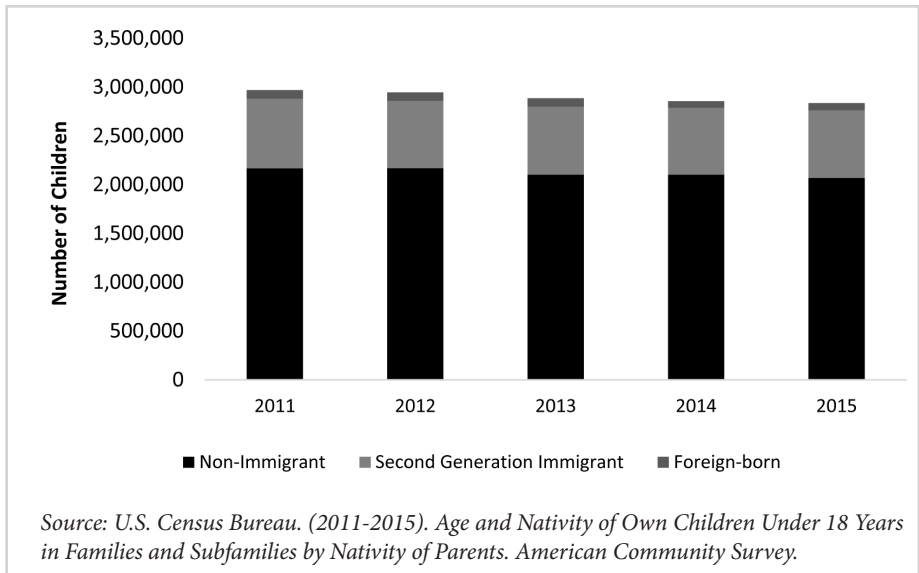


FIGURE 2
Illinois Children by Household Immigration Status



providing or restricting benefits, adding or taking away burdens – these native-born children are affected. Figure 2 displays the population of Illinois children, broken down by the immigration status of their household. The majority of children in our state are native-born and live in non-immigrant households, but a large and relatively steady proportion are second-generation children of foreign-born parents. Most of these parents are naturalized citizens or LPRs.

IMMIGRANT POLICIES IN ILLINOIS

Illinois residents in all of these categories are affected by state-level policy decisions. Though immigration policy is often constructed as a federal responsibility in the media and public debates, states have a significant amount of discretion in the privileges granted to immigrants within their boundaries. States exert their role in shaping immigrant lives by responding to federal immigration actions and by structuring the integration of immigrants within their jurisdictions. Policy observers frequently group state immigrant policies into the broad categories of *restrictive* or *inclusive*. Restrictive policies bar immigrants of certain statuses from privileges such as holding a housing rental agreement, receiving job training or receiving income support; inclusive policies grant access to such programs.

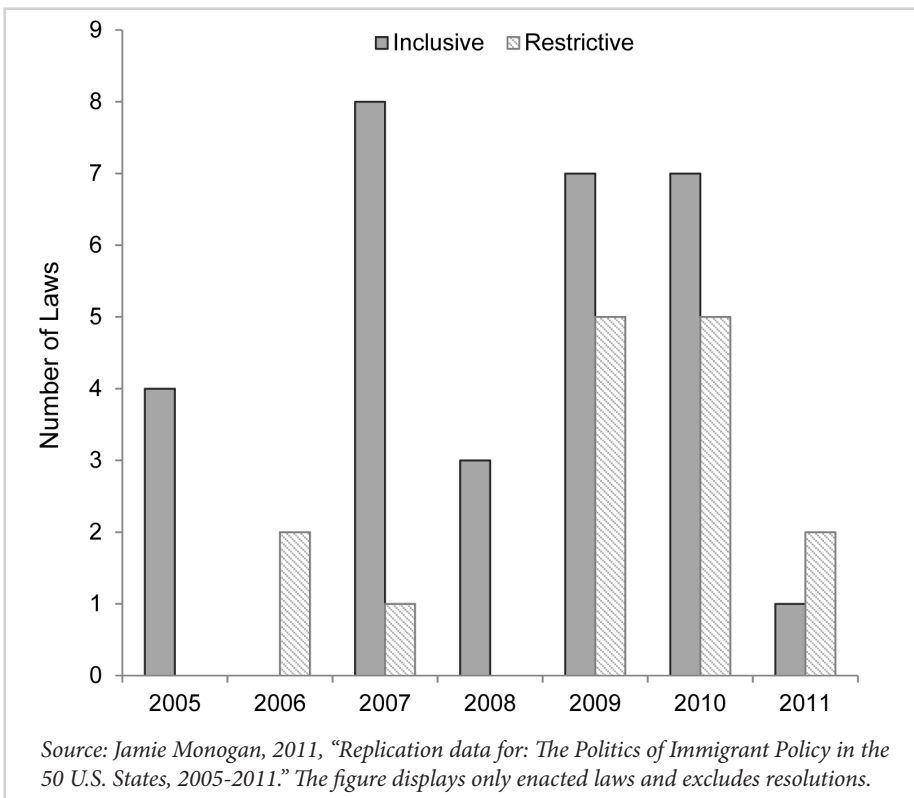
When individual policies are aggregated to evaluate policy environments, states are almost evenly distributed among the restrictive-inclusive spectrum. Illinois largely fosters an inclusive policy environment. For example, a recent RAND report examining the distribution of the most commonly enacted state-level policies targeting unauthorized immigrants classifies Illinois' policy climate as among the most inclusive in the nation (Karoly and Perez-Arce, 2016). Although Illinois is more inclusive than several other high-immigrant states, the current policy context remains mixed for immigrants in the state. Monogan (2011) collected data on state immigrant laws enacted between 2005 and 2011, coding them as either inclusive or restrictive. Figure 3 shows the breakdown of the 45 laws targeting immigrant groups enacted in Illinois during this time span, as coded by Monogan. Of these, 30 were inclusive and 15 were restrictive.

Figure 3 also shows a spike in inclusive policymaking in 2007. Illinois has historically been welcoming towards immigrants; however, the last decade has seen an unprecedented level of pro-immigrant activity across many states, Illinois included. The shift in local policy has been attributed, in part, to a nationwide movement, *La Primavera de los Inmigrantes* (the Spring of the Immigrants) in 2006 (Flores-Gonzales and Guiterrez, 2010, pp. 1-36).

Demonstrations were orchestrated in response to the federal Sensenbrenner Bill (H.R. 4437), also known as the “Border Protection, Antiterrorism and Illegal Immigration Control Act of 2005” (National Conference of State Legislatures, 2017.) In Illinois, advocates organized marches, voter registration and mobilization of immigrants, shaping the state immigrant policy context. While the Sensenbrenner Bill did not see a Senate vote, a portion of H.R. 4437 language passed through the Real ID Act (H.R. 418) of 2005. The Real ID Act establishes proof of legal presence or citizenship as a requirement for a driver’s license, making unauthorized immigrants ineligible. According to Senior Policy Council Fred Tsao of Illinois Coalition for Refugee Rights, the passage of Real ID intensified immigrant rights groups’ efforts to establish driving privileges for unauthorized immigrants. Passing driving privileges for unauthorized immigrants was a 14-year effort culminating in an inclusive state policy: the 2014 Temporary Visitor Driver License (2017). As this example illustrates,

FIGURE 3

Enacted Legislation Targeting Immigrants in Illinois, 2005-2011

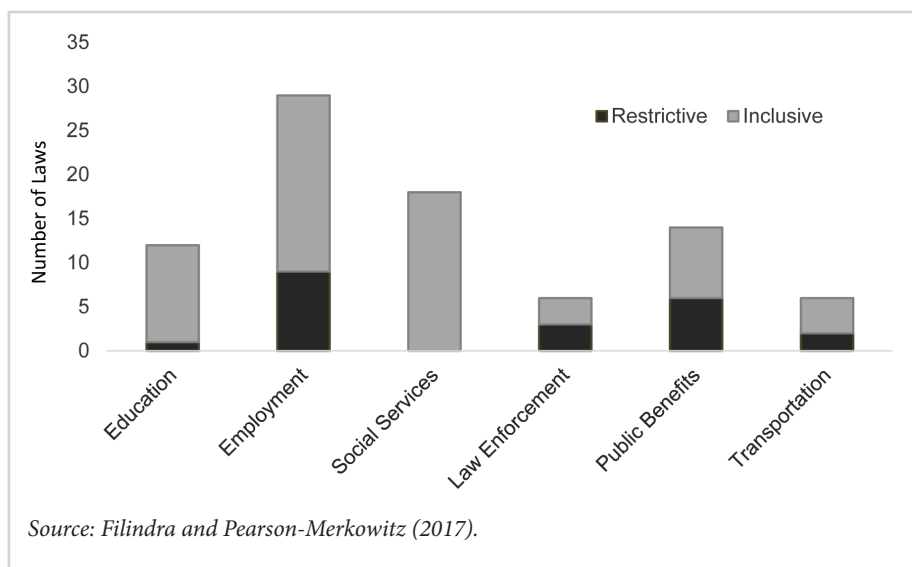


while Illinois is an inclusive state on balance, years of political conflict and effort lie beneath each state immigrant law.

In a newly released major data collection effort, Filindra and Pearson-Merkowitz (2017) have amassed data on all state-level laws that target immigrant groups in the U.S. from 1990 to 2015. An analysis of these data provides a more nuanced look at inclusivity in Illinois.³ Figure 4 displays our analysis of the 85 laws passed during this period that target immigrants. A quarter of these laws (21) were restrictive, and three quarters (64) were inclusive.

FIGURE 4

Inclusivity of Illinois Immigration Policy, by Policy Domain (1990-2015)



Roughly one-third of the inclusive laws between 1990 and 2015 were related to funding for immigrant-related programs. One example is SB 1446, which allocated \$15 million for an English as a Second Language (ESL) program available to authorized immigrants. But policies in other domains were more mixed. For example, labor policies range from H 624, which prohibits unauthorized immigrants from receiving training for skills in critical demand, to SB 2064, allowing foreign medical practitioners to work under certain conditions.

It is important to issue two caveats here. First, these analyses are offered to demonstrate patterns that have emerged over several years in the state; readers

should note that neither of the published academic data sources we draw upon in this section include the most recently enacted laws, leaving out important legislative action. For example, the landmark Trust Act, SB 0031, was signed into law in August 2017. The Trust Act provides protection of immigrant communities by establishing parameters for the detention of immigrants solely on the basis of immigration status. SB 0031 stipulates that without judicial warrant or probable cause of criminal activity, government officials will not be allowed to make immigration arrests in state-funded designated locations, including schools and health institutions. This law has dramatic consequences for immigrant communities, which we revisit in greater detail later in the paper. But it is not included in the counts in Figures 4 and 5.

This important piece of legislation brings us to our second caveat. Counting legislative actions is a common analytic practice, but it provides only a rough proxy for the policy contexts in which people live. Aggregating policies via tallies and other techniques can sometimes mislead analysts about the nature of the policy context if, for example, numerous inconsequential policies are interpreted as outweighing a single policy with great meaning in the lives of a state's residents (Soss et al., 2006). Therefore, we report these tallies to provide a broad-brush overview of Illinois' legislative history in immigration policy, but we caution readers to pay close attention to the specific impact of laws and interpret these counts with caution.

Furthermore, even within the policies we coded as inclusive – those that made one immigrant group eligible for a public benefit – other groups were sometimes excluded. Eligibility differences across immigrant groups are particularly complex when it comes to public benefits, a policy area that is essential to child development and welfare in the state. State benefit programs in Illinois vary widely in inclusiveness (Trusts, 2014).

On the inclusive side of this spectrum are Women, Infants and Children (WIC) and All Kids, children's medical coverage. Both of these programs are available to all immigrants regardless of legal status. Food assistance and Medicaid, however, are only available to a subset of legal permanent residents (LPRs). LPRs are not eligible for several forms of federal assistance until they have been in the country for at least five years. Some states take steps to fill this gap. In Illinois, state food assistance is available to LPRs within the federal five-year ban enacted in 1996 if Illinois applicants are under 19 years of age, have a disability or have 40 work credits. Unless they meet those criteria, these residents must wait for five years before becoming eligible for food assistance

in Illinois. Aid to the Aged, Blind and Disabled (AABD) and Medicaid⁴ are available to LPRs within their five-year ban only for U.S. military applicants and U.S. military family member applicants. (Although H 399 extended AABD eligibility marginally to refugees and asylees.) Illinois General Assistance is available to LPRs after the five-year ban⁵ (Illinois Legal Aid Online, 2017). So, while some LPR families are eligible for some services, the coverage is far from universal and unauthorized immigrants are eligible for far fewer benefits.

What does this patchwork of inclusive and restrictive policy mean for Illinois immigrant residents? We turn now to a new policy analysis framework that that can be applied to assess the impact of state-level immigration policies, especially in cases where eligibility is complex and members of different immigrant groups coexist in families and densely networked communities.

THE POLICY INCLUSION EFFECTS (PIE) FRAMEWORK

Individuals do not operate in a vacuum – they live within family and social networks. These social networks shape attitudes and behaviors, which is important to remember when thinking through the consequences of immigration policy. Because families share resources and networks, the impact of state immigrant policies is not limited to members of the group of immigrants targeted in the legislation. The effects spill over within communities, peer networks and families. People embedded within immigrant networks, regardless of legal category, often benefit or are harmed indirectly by immigrant policies (Karoly and Perez-Arce, 2016).

Reviewing literature on policy effects from across the social sciences, Condon et al., (2016) present a framework that policy analysts and community leaders can employ to think through the broad effects of inclusive and restrictive policy designs: the Policy Inclusion Effects (PIE) Framework. Scholars across several academic disciplines have identified ways in which inclusive and restrictive policies can affect immigrant communities. The PIE Framework is a two-by-two matrix that organizes these various policy implications along two dimensions. The first dimension is order – direct or spillover. Policy analysts interested in assessing the effects of a policy targeting one group of immigrants must consider that the policy will affect the target group directly, but effects are also likely to spill over in families, communities and between children in school.

This phenomenon of spillover is especially important to consider given that 90% of immigrant households in Illinois are mixed status families (Tsao, 2014), and

as we demonstrated in Figure 2, most children living in immigrant households in the state are native-born (second-generation). This large group of children can be affected by policies targeting narrow groups of immigrants. For example, native-born children are less likely to obtain Medicaid coverage if their parents are not U.S. citizens (Watson, 2014). Effects can also spill over to children of native-born parents in high-immigrant ethnic groups and communities. For instance, states with E-verify labor laws intended to prevent unauthorized immigrants from working see a reduction in the number of employed Latino immigrants *and* of low-education U.S. citizens of Latino descent (Raphael and Ronconi, 2009). In the short term, the spillover of E-verify laws on U.S. children in immigrant households limits their parents' employment prospects and the financial resources available to that child. In the long term, E-verify laws may reduce employment prospects and educational attainment for these children.

Sometimes this spillover occurs because of what economists call chilling effects – a drop in use of a benefit or program among eligible people after restrictions are put in place on another immigrant group (e.g., Watson, 2014). Chilling effects stem from confusion about eligibility when people across immigrant networks are eligible and non-eligible. Eligible persons may obtain public benefits despite residing in a mixed-status household, yet U.S. citizens and eligible permanent residents refrain from public benefit program participation partially out of fear that participation in these programs could adversely affect the legal status of non-eligible family members. Chilling effects suggest that policy exclusion of immigrants creates confusion and sends a powerful message to the larger immigrant network. Taking all of this together, it becomes clear that immigrant policies have a *direct impact* on the policy target and a *spillover effect* on people in proximity to policy targets, spanning across legal categories in high immigrant communities; children are particularly vulnerable to these effects in their important developmental years.

The second dimension of the framework is resource type. Policies provide both material and symbolic resources. *Material resources* pertain to access (or lack of access) to tangible means, which contribute to the total pool of resources available for a household or community. Resource sharing multiplies across networks where co-ethnic, high-immigrant households share material resources with other families within their network. The second type of resource is *symbolic*: the messages policies send about immigrants. Symbolic resources manifest in feelings of inclusion or exclusion, social identities, and the way the wider community views a group. While symbolic resources may not be

physically obvious, they influence decisions such as whether to become a naturalized citizen (Van Hook et al., 2006) and educational aspirations (Filindra et al., 2011). Anti-immigrant rhetoric that can surround policy debates has also been shown to affect immigrant political behavior (Pantoja et al., 2001) and shape racial identity (Junn, 2007). Both material and symbolic resources can spill over beyond a target population, touching the lives of people embedded within the larger immigrant networks.

The PIE framework (Figure 5) can be employed to think through the spillover and symbolic effects of policies targeting immigrants who might otherwise be overlooked. For example, consider a hypothetical child: Leo. Leo is a U.S.-born toddler, so Medicaid restrictions on recently arriving LPRs have little immediately apparent effect on him. However, he is less likely to have Medicaid because his mother is not a U.S. citizen (Watson, 2014). Leo's mother is a recently arrived LPR who is directly excluded from a material benefit, healthcare coverage (top left quadrant). Being barred from access to Medicaid carries a symbolic effect of exclusion (top right quadrant). Subsequently, Leo experiences a material and symbolic spillover effect. Leo is less likely to have healthcare benefits even though he is eligible (bottom left quadrant). Also, as Leo matures he will realize his mother and other co-ethnic people do not have the same privileges as others (bottom right quadrant); this may shape his own ethnic identity.

The PIE framework has been applied to show that the effects of restrictive immigration policies go far beyond direct material effects, especially in the case of educational attainment. When states restrict the safety net of public benefits to recently arrived LPRs, children in the excluded category are less likely to graduate high school, but so are low-income children in high immigrant ethnic groups more broadly (Condon et al., 2016). The educational attainment of immigrant and native-born youth are intertwined in American states. In instances where financial stress is high, youth may decide to enter the labor force early rather than persist in education. Additionally, when some youth in a school drop out, peers are more likely to follow suit. Academic performance is influenced by peer performance especially among same-race students (Hoxby, 2000). Feelings of inclusion also play an important role in educational persistence. In other words, if a portion of youth faces obstacles in their educational trajectory, co-ethnic peers will perceive similar challenges. The impact of immigrant policies across youth within immigrant networks suggests that educational attainment trends spill over, affecting youth inside and outside the immigrant policy target.

The application of the PIE Framework by Condon et al., (2016) focused on the inclusion or exclusion of LPRs in state income-support programs during the five-year federal ban on Temporary Aid to Needy Families (TANF) eligibility. The authors found that Latino youth were nine points more likely to graduate high school in states that extended support, even holding state, family and individual factors constant through a quasi-experimental design. To put this in context, this is nearly a quarter of the size of the Latino-white attainment gap. A resident with a high school diploma will contribute considerably more in state and local taxes over their work lifetime compared with a person who

FIGURE 5
The Policy Inclusion Effects (PIE) Framework

		RESOURCE TYPE	
		MATERIAL	SYMBOLIC
ORDER	DIRECT	Material benefits and burdens experienced by the target population	Social and political identities in the target population
			Feelings of membership and sense of inclusion in the target population
		The status and social construction of the target population in the minds of others	
	SPILLOVER	Material resources within families	Identities, feelings of membership and sense of inclusion among family members of targeted individuals
		Material resources in school peer networks (youth only)	Identities, feelings of membership and sense of inclusion among youth in school peer networks of targeted individuals (youth only)
		Material resources held collectively within communities with high numbers of target population members	Identities, feelings of membership and sense of inclusion among others who identify with the target population (e.g., co-ethnic individuals)
		Program participation among eligible individuals (chilling effects)	The status and social construction of the wider, co-ethnic group in the minds of others

Source: Condon et al., 2016.

does not graduate high school. A 9% increase in the graduation rate among high-immigrant ethnic groups would generate a sizable increase in state revenue over time. As this example demonstrates, properly accounting for the economic impact of this kind of policy decision between exclusion and restriction means accounting for the effects on the educational attainment of the co-ethnic peers and family members, not just the recently arrived LPRs who were directly targeted in these policies.

APPLICATION: THE ILLINOIS TRUST ACT

In addition to public-benefit eligibility, the PIE Framework can be applied to laws across policy areas. Here we apply the framework to recently enacted law-enforcement policy: the Trust Act (SB 0031). Recall that the Trust Act holds that officials cannot make immigration arrests in state-funded schools, health institutions, and other designated state-funded locations without judicial warrant or probable cause of criminal activity. At first glance, the Trust Act appears to affect the approximately 450,000 (Passel and Cohn, 2016) unauthorized immigrants susceptible to immigration-related detainment; however, effects of the Trust Act will spill over, particularly on children, affecting a far greater number of Illinois residents.

DIRECT EFFECTS

Illinois is home to an estimated 450,000 unauthorized immigrants who will experience material and symbolic benefits from the Trust Act. A reduced risk of detention or deportation is a *material benefit* since detention and deportation place significant financial burden on immigrant households. While removal orders undoubtedly strain financial resources, detainment or arrest are also economic stressors. In interviews with immigrant families, Dreby (2012) found that even short-term family structural changes (such as having a parent detained for a short period of time) make families susceptible to debt. In the Dreby (2012) study, families disclosed they were dealing with debt years after their family member's detention or arrest. In addition to these direct material effects, the Trust Act also provides a symbolic benefit of inclusion for unauthorized families in Illinois. Francis Velez, a Latino community leader in Illinois commented, "The Trust Act will give me and my community peace of mind that we can go about our lives without fearing that an interaction with police will lead to a deportation" (Kowalski, 2017).

SPILLOVER EFFECTS

The Policy Inclusion Evaluation framework suggests that the Trust Act's effects may also spread beyond the direct policy target population. We can expect to see a spillover effect, particularly among children in immigrant households. Native-born children are not directly affected by The Trust Act, but they are affected via spillover. Research shows that immigration enforcement correlates with school attendance of foreign-born *and* native-born children of immigrant parents (Baczynski, 2013).

Beyond protecting school attendance of children in immigrant households, the Trust Act will likely positively affect children's mental health. In a study of native-born children with unauthorized mothers, the enactment of Deferred Action for Childhood Arrivals (DACA), a federal temporary deportation parole, had a dramatic impact on the mental health of children. Native-born children experienced more than a 50% reduction in anxiety disorder diagnoses when their mothers became eligible for DACA (Hainmueller et al., 2017). Such symbolic spillover effects are significant, and they can extend even beyond households with directly affected parents. Children are perceptive to policy contexts surrounding them, even when their parents are authorized immigrants. In interviews with children in immigrant households, Dreby (2012) found children feared their parents could be "taken away" despite their parents holding legal permanent-resident status. To these children, having an *immigrant* family member implied a risk of deportation. Some of these children also expressed that they would not want their peers to know their parents were immigrants, hinting at the symbolic association around an immigrant identity. In Illinois, 174,000 unauthorized immigrants have at least one native-born, U.S.-citizen child in their household (Migration Policy Institute, 2014). Further, nearly 692,000 children in Illinois have an immigrant parent, and could be broadly affected by the symbolic messages communicated by the Trust Act.

In short, by adopting the Trust Act, Illinois is sending a message of inclusion that will be felt and heard well beyond the intended policy target. Directly, it will benefit 450,000 unauthorized immigrants in material and symbolic ways. They will benefit from a reduced risk of financial strain due to detention and deportation of family members. An additional 692,000 children may experience spillover effects through protection of academic attendance and a reduction of anxiety. This analysis demonstrates the importance of extending impact analysis beyond the direct policy target to include the social networks surrounding it.

Collectively, SB 0031 will reach not just unauthorized immigrants but also children within the immigrant network, reaching 1.1 million Illinois residents. This estimate does not include family members beyond offspring, community members, or co-ethnic youth who are not themselves members of immigrant households, but who attend school alongside other children who are. As Illinois takes up future decisions about immigrant policy, this framework can be employed to avoid underestimating the impact on Illinois residents.

CONCLUSION

Our aim has been to provide an overview of the immigration policy landscape in Illinois and to present a framework for thinking through decisions moving forward. In presenting the estimates above, we have painted with a broad brush. On one hand, certainly not every member of these groups will be affected by the policies discussed. But, on the other hand, these estimates leave out symbolic effects on co-ethnic Illinois residents who are not closely networked with affected immigrants. It is important to note that we expect some of the largest effects of inclusive or restrictive policy decisions among children, and there is good reason to believe educational attainment in broad ethnic and high-immigrant groups will be driven up, or down, by the decisions made about immigrant policies moving forward.

Immigrant networks are interlaced and sensitive to repercussions of policies addressing segments of their community. State policymakers should consider using the PIE method of policy analysis when designing and assessing policy that will affect immigrants, considering both material and symbolic resources that are provided directly to the target population, and that spill over within families, schools and communities. Policy decisions about immigrants have overflowing impacts, molding opportunities for broad immigrant networks in Illinois. We offer a bridge for thinking about the connections between narrow immigrant policy targets and broad immigrant policy implications. When policymakers make decisions about immigrants, they unintentionally make decisions about the integration of their children, spouses, siblings and peers. Policies pluck strings on the immigrant network, rippling material and symbolic effects across generations, and on the health of the state economy. When policy is created to more positively affect immigrant communities, the benefits extend to the U.S. citizens nurtured by immigrant networks. In the words of Latino and Asian farmworker immigrants: *Isang Bagsak*. “We rise together or fall together as one.”

Elisabet Barrios is a Master's of Public Policy candidate at the DePaul University School of Public Service. Meghan Condon is Assistant Professor at the DePaul University School of Public Service.

¹ The authors wish to thank Alexandra Filindra and Shanna Pearson-Merkowitz for access to data, and Matthew Bork for helpful feedback and comments.

² A smaller number of the foreign-born residents in the state are refugees, asylees or lawful temporary residents.

³ Data were used for this analysis by permission of the database authors. This database was developed with financial support from the Pew Charitable Trusts and the Russell Sage Foundation. The analyses and view expressed herein are those of the authors and do not represent the views of the funding organizations.

⁴ By federal mandate, emergency Medicaid is offered to all people.

⁵ Certain LPRs are eligible within the five-year ban including U.S. veterans honorably discharged or on active duty, or their spouse or unmarried dependents; Lawful Permanent Residents who entered the U.S. before August 22, 1996; refugees, asylees, parolees, conditional entrants and those whose deportation is being withheld; members of certain Indian tribes and American Indians born in Canada; Amerasians and close family members admitted beginning March 20, 1988; Cuban or Haitian nationals admitted before April 21, 1980; Hmong or Highland Laotian tribe members legally residing in the U.S. who assisted U.S. personnel during the Vietnam era; abused spouses, widows or children of a U.S. citizen or Lawful Permanent Resident; and victims of human trafficking. The applicability criteria of this example display the complexity and historical-geographical contingency of immigrant law.

REFERENCES:

Baczynski, D. (2013). Education Connection: The Chilling Effects of Student Immigration Tracking Systems Violate Plyler. *Child. Legal Rts. J.*, 33, 212.

Condon, M., Filindra, A. and Wichowsky, A. (2016). Immigrant Inclusion in the Safety Net: A Framework for Analysis and Effects on Educational Attainment. *Policy Studies Journal*, 44(4), 424-448.

Department of Homeland Security (2014). Estimates of Lawful Permanent Residents in the United States 2006-2014. <https://www.dhs.gov/immigration-statistics/population-estimates/LPR>.

Dreby, J. (2012). The burden of deportation on children in Mexican immigrant families. *Journal of Marriage and Family*, 74(4), 829-845.

Eltagouri M. (2016, September 16) In 4 years, majority of children in Illinois will be minorities. *Chicago Tribune*. <http://www.chicagotribune.com/news/local/breaking/ct-illinois-minority-majority-child-population-met-20160916-story.html>.

Filindra, A., Blanding, D. and Coll, C. G. (2011). The power of context: State-level policies and politics and the educational performance of the children of immigrants in the United States. *Harvard Educational Review*, 81(3), 407-438. NCES 2016117REV. *National Center for Education Statistics*.

Filindra, A. and Pearson-Merkowitz, S. (2016). Database of state-level immigration laws, 1990-2015. Chicago, IL: University of Illinois at Chicago.

Flores-Gonzales, N. and Guterrez, E. (2010). Taking the Public Square. In Pallares, A. and Flores-González, N. (Eds.), *¡Marcha!: Latino Chicago and the immigrant rights movement* (pp. 1-36). (Vol. 28). University of Illinois Press.

Hainmueller, J., Lawrence, D., Martén, L., Black, B., Figueroa, L., Hotard, M., ... & Laitin, D. D. (2017). Protecting unauthorized immigrant mothers improves their children's mental health. *Science*, 357(6355), 1041-1044.

Hoxby, C. (2000). Peer effects in the classroom: Learning from gender and race variation (No. w7867). National Bureau of Economic Research.

Illinois Legal Aid Online (2017). Citizen and Immigration: Government Benefits for Immigrants. <https://www.illinoislegalaid.org/legal-information/government-benefits-immigrants>.

Junn, J. (2007). From coolie to model minority. *Du Bois review: Social science research on race*, 4(2), 355-373.

Karoly, L. and Perez-Arce F. (2016). A Cost-Benefit Framework Analyzing the Economic and Fiscal Impacts of State-Level Immigration Policies. RAND Corporation.

Kowalski, D. M. (2017, August 30). TRUST Act Signed into Illinois Law. *LexisNexis Legal Newsroom Immigration Law*. <https://www.lexisnexis.com/legalnewsroom/immigration/b/outsidenews/archive/2017/08/30/trust-act-signed-into-law-in-illinois.aspx?Redirected=true>.

Lopez, G. and Radford, J. (2017, May 3). Facts on U.S. Immigrants, 2015: Statistical portrait of the foreign-born population in the United States. *Pew Research Center: Hispanic Trends*. <http://www.pewhispanic.org/2017/05/03/facts-on-u-s-immigrants-previous-years-data/>.

Migration Policy Institute (2014). Profile of the Unauthorized Population: Illinois. *Migration Policy Institute: Migration Data Hub*. <http://www.migrationpolicy.org/data/unauthorized-immigrant-population/state/IL>.

Monogan, J. (2011). Replication data for: The Politics of Immigrant Policy in the 50 U.S. States, 2005-2011. hdl:1902.1/16471, Harvard Dataverse, V4.

National Conference of State Legislatures (2017). Immigrant Policy Project. <http://www.ncsl.org/research/immigration/summary-of-the-sensenbrenner-immigration-bill.aspx>.

Pantoja, A. D., Ramirez, R. and Segura, G. M. (2001). Citizens by choice, voters by necessity: Patterns in political mobilization by naturalized Latinos. *Political Research Quarterly*, 54(4), 729-750.

Passel, J.S. and Cohn, D. (2016, September 20). Overall the Number of Unauthorized Immigrants Holds Steady Since 2009: Decline in Share in Mexico mostly offset by growth from Asia, Central America and sub-Saharan Africa. *Pew Research Center*. Retrieved from <http://www.pewhispanic.org/interactives/unauthorized-immigrants/>.

Pew Research Center (2013, February 7) Second-Generation Americans: A Portrait of the Adult Children of Immigrants. *Pew Research Center: Social and Demographic Trends*. <http://www.pewsocialtrends.org/2013/02/07/second-generation-americans/>.

- Raphael, S. and Ronconi, L. (2009). The labor market impact of state-level immigration legislation targeted at unauthorized immigrants. *University of California, Berkeley, CA*.
- Soss, J., Condon, M., Holleque, M. and Wichowsky, A. (2006). The Illusion of Technique: How Method-Driven Research Leads Welfare Scholarship Astray. *Social Science Quarterly*, 87(4), 798-807.
- Trusts, P. C. (2014). Mapping Public Benefits for Immigrants in the States. *Pew Research Center Issue Briefs*.
- Tsao, F. (2014). Illinois' Undocumented Immigrant Population: A summary of Recent Research by Rob Paral and Associates. *Illinois Coalition for Immigrant and Refugee Rights*.
- Tsao, F. Personal interview. 15 September 2017.
- U.S. Census Bureau (2014). Citizenship Status in the United States. *American Community Survey* 2011-2014. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_1YR_B05001&prodType=table.
- U.S. Census Bureau (2015). Age and Nativity of Own Children Under 18 Years in Families and Subfamilies by Nativity of Parents. *American Community Survey* 2011-2015. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_1YR_C05009&prodType=table.
- U.S. Census Bureau (2016) State and Local Government Finance: State and Local Data. *2014 State and Local Summary Table by Level of Government and by State: US Summary & Alabama - Mississippi*. Retrieved from <https://www.census.gov/govs/local/>.
- U.S. Census Bureau (2016). Educational Attainment. *American Community Survey*.
- U.S. Census Bureau (2016). State Government Tax Collections: 2016 Annual Survey of State Government Tax Collections. *2016 Annual Survey of State Government Tax Collections by Category Table*. Retrieved from <https://www.census.gov/govs/statetax/>.
- U.S. Bureau of Economic Analysis (2016). Regional Data: Annual State and Personal Income. Table S4 Personal Income by Major Component. Retrieved from <https://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=6#reqid=70&step=1&isuri=1>.
- Van Hook, J., Brown, S. K. and Bean, F. D. (2006). For love or money? Welfare reform and immigrant naturalization. *Social Forces*, 85(2), 643-666.
- Watson, T. (2014). Inside the refrigerator: immigration enforcement and chilling effects in Medicaid participation. *American Economic Journal: Economic Policy*, 6(3), 313-338.

UNDERSTANDING PUBLIC-PRIVATE PARTNERSHIPS (P3) THROUGH A THEORETICAL COST COMPARISON

MATT CALCAVECCHIA, ERIN BIRKENKOPF AND JOHN FINKE
PUBLIC FACILITIES GROUP

This study compares three “P3 approaches” for developing social infrastructure, such as municipal buildings, public university facilities and courthouses. It illustrates why officials should consider each approach to fully understand their financial options. The results are particularly important to understanding the benefits of an “American Approach P3,” which involves tax-exempt bonds issued by a not-for-profit organization; this allows the project to be undertaken by a development team outside of the traditional public-works process, while also allowing short-term operations and maintenance contracts to be competitively bid after completion.

INTRODUCTION

Since the 2016 presidential election, public-private partnerships, or “P3s”, have received a significant bump in popularity in the United States. In June 2017, only a few months after taking office, President Trump rolled out a \$1 trillion infrastructure plan that focuses heavily on P3s as a delivery mechanism for many types of projects. The prominent website, whitehouse.gov, went so far as to claim “The President’s plan will make America dominant by unleashing private sector capital and expertise to rebuild our cities and states.”¹ Gary Cohn, Director of the National Economic Council, added in the *New York Times* that “We like the template of not using taxpayer dollars to give taxpayers wins.”²

Missing from much of the analysis were the details that are critical to all P3 projects. Private investors, of course, do not invest in these partnerships without either a financial commitment from the public sector or the ability to charge sufficient fees to those using the infrastructure being created – or perhaps both of the above – to meet their profitability threshold. If they need a commitment from the public body, they may demand such guarantees as lease payments, land donations or the transfer of revenue from assets typically held by a public agency.

Municipal officials considering using a P3 approach, therefore, are left facing an enormously complex set of choices. Adding to the complexity, many will find it

difficult or impossible to make even basic comparisons of the financial burden associated with development approaches – or “delivery models” – available to them. Due to the fact that each project has its own political, physical or financial idiosyncrasies, comparing the costs can be a formidable task.

In May 2017, our organization, the Public Facilities Group, published a paper, titled *A Theoretical Cost Comparison of P3 and Traditional Public Delivery Models Used in Developing Social Infrastructure*, to offer a framework for making such comparisons. This study breaks down the financial components of the three most common delivery methods used for developing social infrastructure projects for local government agencies. The study’s intent is to answer a basic question: if it were possible to develop the same exact building using different development approaches, which development approach produces the building for the least cost to the public client?

The analysis below uses the method outlined in the above publication to evaluate options for financing *social infrastructure*, which refers to buildings such as city halls, public university facilities, police stations, courthouses, and other facilities that are used by public agencies for their operations. While the national conversation often revolves around *traditional infrastructure* projects (like the heavily publicized I-55 Managed Lane Project that the Illinois Department of Transportation is currently considering for Chicago), local governments have a strong interest in using P3s for developing smaller projects, including buildings and other public facilities.

We limit our analysis to social infrastructure for two technical reasons. First, it is less challenging to draw a fair comparison of the various approaches for financing social infrastructure than other types of infrastructure. Not only are the lease revenues received by the private partner consistent and predictable – thereby lowering ambiguity – but also the construction costs are not subject to the kind of market risks so widely associated with other kinds of infrastructure projects, such as toll roads or parking meters. Secondly, due to our expertise in the social infrastructure market, we were able to obtain accurate data to compare the costs and benefits of three different approaches.

While the information presented focuses on *social infrastructure*, many of the overarching concepts can be applied to traditional infrastructure projects. We revisit this topic in the conclusion section, which offers practical advice for local officials.

THE DELIVERY MODELS COMPARED

There are essentially three approaches that are often considered for the development of social infrastructure: Traditional Public Delivery; Performance Based or Availability Based P3; and a Tax-Exempt Not-for-Profit P3. The latter is often known as “the American Approach” due to its growing prevalence in this country. In the following section, we review the basic elements of these three approaches.

APPROACH 1: TRADITIONAL PUBLIC DELIVERY

Under the Traditional Public Delivery model, the public sector can select from a variety of delivery approaches, such as Design Bid Build, GC-CM/Construction Manager at Risk and Design Build, to build social infrastructure. Although we will not attempt to explain each one here, it is important to note that, while each differs in application, they can all be grouped in this category for a simple reason: delivery is typically financed using the same financing mechanism – tax-exempt General Obligation Bonds (G.O. Bonds).

G.O. Bonds offer the most advantageous rates and, therefore, may appear to always offer the lowest cost of financing. Nevertheless, there is a major downside: in a typical public delivery model, regardless of the actual approach implemented, it is common to see the construction timeline extended by 25% to 50% over a privately delivered building of comparable quality and complexity. One reason for this is the difficulty for decision makers to reach a consensus on key issues, which is particularly problematic at large governmental agencies, where decisions can drag out for many months.³ The lengthening timeline is costly, of course, extending the construction term and the capitalized interest costs. It also increases overhead and labor costs, rental-equipment expenses, and exposes the project to inflationary risks. Making matters worse, in some cases these costs are multiplied as they cascade downward through each level of subcontractors.

In the *Governor George Deukmejian Courthouse: Evaluation of Cost-Effectiveness Report* issued by the state of California’s Administrative Office of the Courts (AOC), the AOC determined that the privately delivered Long Beach Courthouse project had been completed nearly two years faster than the publicly delivered San Bernardino Justice Center. This is because the former’s construction process was privately managed, allowing for the various phases to overlap and be fast-tracked. Also, this project used private financing, which is not subject to the timing of state bond sales. Conversely, for the state-financed

San Bernardino Justice Center, the delay in financing proved to be a problem – so much so that, according to the report, its “construction start was delayed by nine months because of a cancelled bond sale.”⁴

In an audit of King County’s Ninth and Jefferson Building, the King County (Washington) Auditor’s office yielded a similar conclusion. The project was first bid as a Traditional Public Delivery (a GC/CM project), but encountered significant cost overruns resulting in a complete cessation of work. King County then restructured the project as a P3 project using the American Approach delivery model. Upon completion, an audit produced by the King County Auditor’s office found significant project savings due to the American Approach model’s use of private-sector development expertise and tax-exempt debt. According to the report, private expertise allowed for a 13% reduction to the overall cost per square foot for the building and parking garage, and “an estimated 50-percent reduction in the cost per square foot for the building itself.”⁵

These two cases, of course, are not necessarily representative of all projects, and it should be noted that if a public agency is regularly engaged in building projects of a certain nature (or has hired staff with significant experience), the resulting expertise should allow for a relatively fast construction timeline, reducing delays. However, the public sector’s desire for consensus decision making, potential financing delays and the involvement of multiple departments can adversely impact the construction timeline.

APPROACH 2: AVAILABILITY OR PERFORMANCE BASED P3

The second approach considered, the Availability Based P3, leverages many of the benefits of private involvement. As defined by the Performance Based Building Coalition, it has these features⁶:

- The private partner accepts responsibility to design, build, finance, maintain and, in some cases, operate infrastructure;
- The agreement covering this relationship is for a longer-term, usually 30 – 40 years;
- There is a firm price for the term of the agreement for capital repayment, operating and maintenance, and refurbishment; and
- There is no charge on the title required by the private partner, as they finance the sponsors’ (i.e., the client) promise to make the monthly

payments, conditional on the facility being available and performing to agreed standards or Key Performance Indicators (KPIs).

One of the main attractions of this model is that the public client does not begin payment until construction is complete, and the client is not subject to construction or operations risk. In fact, this entity is not obligated to pay for any part of the facility that is not “available” for use. One downside is that the model uses private equity and conventional debt, which results in a higher cost of financing than tax-exempt debt.

Availability Based proponents acknowledge this point, but argue that savings from the reduced construction timeline and private-sector expertise more than offset the increase in cost. Also, the public client benefits from risk transfer and from a long-term maintenance contract, which relieves the public client from operations and maintenance management. This helps alleviate the problem of deferred maintenance concerns that has led to the erosion of quality of many public facilities.

In 2013, the Long Beach Courthouse in California became the first social infrastructure project completed using the Availability Based P3 model in the United States. The other projects using this approach are also under construction. One is UC Merced in California, which is using the approach to construct new facilities that will double the existing campus size. This project, budgeted at \$1.14 billion, should be completed in 2020. The other project is the Long Beach Civic Center, for which the City of Long Beach, in partnership with the Long Beach Port Authority, has committed to the development of a \$520 million civic campus.

There are several public university projects currently under construction involving social infrastructure, which are sometimes described as using Availability Based P3s. In these projects, the private developer builds any new facilities required by the deal through a ground lease arrangement with the public university. The private partner owns and operates the facility, frequently taking on operations of other existing student housing facilities, for a specified term. They collect revenue from the student rents and sometimes receive additional subsidies from the school. We have excluded these projects from our analysis for a simple reason: although the development of a new student housing facility could be classified as a “social infrastructure P3,” these projects are more accurately defined as the privatization of university student housing.

APPROACH 3: TAX-EXEMPT OR AMERICAN APPROACH P3

The third approach, the American Approach (or New American Approach or American Model), combines private-sector development expertise with the use of tax-exempt lease revenue bond debt, either 63-20 or 501(c)(3) bonds, also referred to as lease revenue bonds, which are two common forms of financing widely used by public and nonprofit organizations. Internal Revenue Service regulation grants a not-for-profit entity access to tax-exempt bonds either through conduit 501(c)(3) bonds or on behalf of 63-20 bonds for qualified activities, including the acquisition or construction of facilities for lease to local government.

This approach operates similarly to the Availability Based P3, with two important distinctions:

- Financing occurs through tax-exempt bonds *issued by a not-for-profit organization*, allowing the project to be developed by a private-sector development team outside of the traditional public works process, but still achieving the benefit of tax-exempt debt.
- They are short-term, competitively bid operations and maintenance contracts, as opposed to a long-term operations and maintenance package.

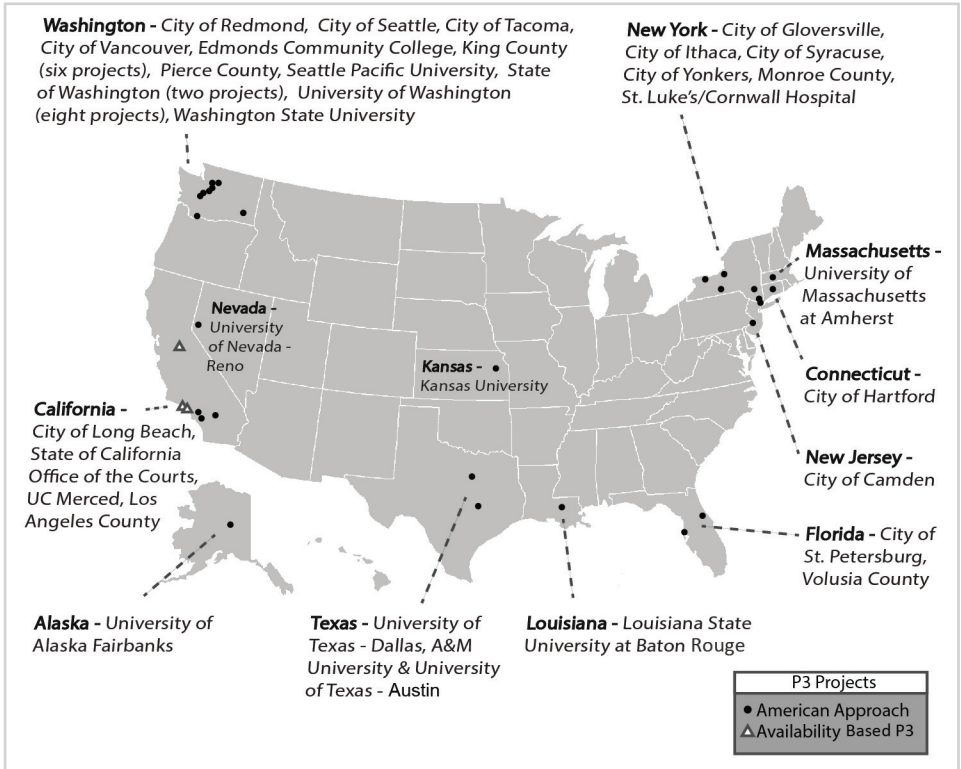
This approach also involves tax-exempt Lease Revenue Bonds, which, as the term implies, are issued by the non-profit and paid off by the proceeds from leasing activity. These bonds generally have a slightly higher interest rate than G.O. Bonds, which are typically used in Traditional Public Delivery. Currently, the margin is about 35 basis points.

Advocates for the American Approach argue that the increase in margin is more than made up for by reduced construction timelines and increased efficiencies of private development. The public client is also protected from construction risk. American Approach projects also cover operations and maintenance, but where they differ from the Availability Based P3 is in advocating for short-term, market-driven contracts where the pricing stays competitive and the public client can replace a management firm that is underperforming.

In 1995, The Commodore Duchess, a \$7 million campus housing project for the University of Washington, became the first American Approach P3 project to begin development. This was before P3 was regarded as a widely accepted development approach. Since then, at least 37 projects, totaling over \$3 billion in development costs, have been developed across the United States using the

American Approach delivery model (Figure 1), although none are located in Illinois or its neighboring states.

FIGURE 1
P3 Project Locations Involving Municipal Facilities



THE MODEL COMPARISON

In comparing the three delivery models described above, it is important to emphasize that the study we reference is a *theoretical comparison*. While we have used data from real-world examples, every project is unique. The data inputs we have used to calculate the financial outcomes of each model are well vetted, making this study an accurate representation of how each model would comparatively perform, provided a controlled environment were possible.

Because the Long Beach Courthouse project is the only completed social infrastructure project using the Availability Based P3 model in the United States, we have used specific details of this project to determine many of our

data inputs for analyzing the theoretical Availability Based models represented in our comparison. For the Traditional Public Delivery model and the American Approach model, we have used generalized data points based on industry standards that are typical of the market instead of using specific data inputs from an actual completed project.

There are many examples of public facilities built using the American Approach – enough that we can create an accurate hypothetical project that is realistic in its data inputs. The same also applies to Traditional Public Delivery models. While the following tables provide a summary of our findings, it is important to note that in our previously mentioned *Theoretical Cost Comparison* study, you will find detailed explanations of how we generated the model and determined our data inputs. You can find the original report on our website listed in the reference section.

PROJECT COST ANALYSIS ABSENT OPERATIONS AND MAINTENANCE COSTS

In contrasting the three models, the Traditional Public Delivery model is found to be the most expensive, more than \$34 million more expensive than the American Approach. The more favorable interest rate on G.O. Bonds and the lowest private developer/construction manager fee should give the Traditional Public Delivery model the financial advantage. However, the extended development timeline increases costs by 15%, and the increase in term produces a higher capitalized interest cost.

The Availability Based P3 model is \$29 million more expensive than the American Approach. Among the reasons for this are the inclusion of the \$9 million debt service reserve fund, the increased developer fee of 12%, and the equity and conventional debt costs, respectively at 14.48% and 6.88%.

DEBT SERVICE

While the overall construction cost is often heavily publicized when explaining a project's budget to city officials, voters and the media, the importance of debt service over the full term of financing is often underappreciated and can dramatically affect the project's real cost. Our analysis is based on a term of 30 years and annual interest rate of 3.5% for Traditional Public Delivery and 3.85% for the American Approach. For the Availability Based P3, we blended the annual interest rate on debt and the return on equity achieving an annual interest rate of 7.41%.

TABLE 1 Social Infrastructure Delivery Model Comparison

	TRADITIONAL PUBLIC DELIVERY	AVAILABILITY BASED P3	AMERICAN APPROACH P3
Summary of Funding and Project Assumptions	Tax-Exempt: G.O. Bonds	Taxable Private Equity and Debt	Tax-Exempt: 63-20/501(c)(3) Bonds
Initial Estimated Cost (absent fees and capitalized interest)	\$200,000,000	\$200,000,000	\$200,000,000
Percentage of Added Cost Related to Increased Timeline	15%	N/A	N/A
Construction Cost of Project	\$230,000,000	\$200,000,000	\$200,000,000
Loan-to-Cost Ratio	100%	93% ⁷	100%
Percentage of Equity Investment	N/A	7% ⁷	N/A
Interest Rate on Debt	3.50%	6.88% ⁷	3.85%
Required Equity Yield (IRR)	N/A	14.48% ⁷	N/A
Construction Period in Years	2.5	2	2
Interest Rate on Invested Funds	1%	N/A	1%
Gross Square Feet	313,824	313,824	313,824
Fees and Soft Costs			
Construction Costs or Turnkey Costs	\$230,000,000	\$200,000,000	\$200,000,000
Loan Origination/Discount Fees*	\$2,300,000	\$2,000,000	\$2,000,000
Legal, Accounting, Admin*	\$2,300,000	\$2,000,000	\$2,000,000
Capitalized Interest/ Construction Interest and Cost of Equity	\$19,666,024	\$2,337,821	\$15,291,220
Debt Service Reserve Fund	N/A	\$9,000,000	N/A
Project Developer/Construction Management Fee	\$8,050,000	\$24,000,000	\$9,000,000
Typical Fee Percentage for Private Developer/CM	3.50%	12%	4.50%
Total Funds Used	\$262,316,024	\$257,337,821	\$228,291,220
* Typically 1% of construction cost.			

The debt-service calculation results in monthly debt-service payments of \$1,177,916 for Traditional Public Delivery, \$1,070,248 for the American Approach, and \$1,783,862 for the Availability Based P3. The American Approach model has a higher interest rate than Traditional Public Delivery model but maintains the lowest debt service payment of \$1,070,248 per month. This is due to the lower construction cost achieved through private-delivery efficiency and an interest rate close to that of the Traditional Public Delivery model. Total annual debt service is \$1.29 million less than the Traditional Public Delivery model.

The Availability Based P3 model has the costliest annual finance obligation (debt service plus equity return) due to its higher blended cost of capital of 7.41%. Under the Availability Based P3 model, the public agency will pay \$8.56 million more per year in annual finance obligation than if they had selected the American Approach or \$7.27 million more than if they had chosen the Traditional Public Delivery model.

OPERATIONS AND MAINTENANCE

Based on our debt-service calculations, it would be easy to draw the conclusion that the Availability Based P3 approach is too costly to be considered a viable option for financing public social infrastructure. Advocates of this model, however, argue that one of the primary benefits rests in cost guarantees for the operations and maintenance of the project, which helps alleviate deferred maintenance issues, thereby providing long-term savings.

As readers of this journal know, there are legitimate reasons why public entities suffer from deferred maintenance. For example, money is often channeled away from preventative maintenance projects such as roof repairs and building systems updates due to budget demands related to the immediate needs of the community.

Regardless of the cause, deferred maintenance issues are real and can result in a facility that needs to be replaced prematurely. To address deferred maintenance, the Availability Based P3 uses a long-term operations and maintenance (O&M) package that provides risk transference and guarantees to the public client. The assumption is that the private partner assumes responsibility for operating and maintaining the facility during the life of the debt, which ultimately extends the life of the facility and saves the public client money.

We have compared the O&M package used in the Long Beach Courthouse project with typical O&M costs for privately developed and managed buildings of similar complexity and size within the Los Angeles and Long Beach area. The O&M package for Availability Based projects uses an availability payment approach that factors a predetermined O&M fee into the projected costs of operations, which involves long-term maintenance, and concessionaire risk and profit. The cost of utilities and labor are directly passed through to the public agency. The courthouse's O&M package is a 35-year contract that includes annual inflation adjustments. Due to the fact we cannot predict the direction of future cost changes, we have not included any escalations in our calculations. Our estimates for the American Approach are based on an operations and maintenance package that is competitively bid every 3-5 years.⁸

OPERATING AND MAINTENANCE COST PER SQUARE FOOT

To make comparisons about O&M costs for each approach, we estimated these expenses *per square foot*. The Building Owners and Managers Association (BOMA) tracks these costs across the United States. Using the BOMA Market Standard for high-end buildings in the Long Beach/Los Angeles area for 2010, we determined this cost per square foot to be \$10.04, which is used as an input in both the American Approach and Traditional Public Delivery models.⁹

Under the American Approach model, the not-for-profit building owner hires a professional property management firm and employs them under short-term competitively-bid contracts. This incentivizes the firm to meet the public agency's expectations and ensures that costs are kept at market rates. Short-term competitively bid management contracts are typical of the private sector O&M practice for privately financed, long-term assets. The public client is at risk for any major repairs or replacements to the building after the warranty period has expired; to deal with this risk, a repair and replacement reserve is often maintained. The BOMA rate mentioned above, which is the assigned O&M rate in the scenario we consider, incorporates repairs and replacements in its pricing.

While the O&M cost would not be part of the financing package for a publicly delivered project, the public agency would still be responsible for these costs. It is difficult to ascertain an accurate operations and maintenance cost for publicly operated and managed facilities. For our scenario, we have assumed that the public agency is appropriately and efficiently maintaining the building. As a result, we have assigned the Traditional Public Delivery model the BOMA

rate mentioned above. Considering the likelihood of increased costs related to deferred maintenance, however, this is likely below the actual cost, as we would expect this amount to be significantly higher in actual practice.

The Availability Based model's cost was estimated to be \$35.64 per square foot, a figure derived from the Long Beach Courthouse Project Agreement.¹⁰ In contrast to the O&M arrangement represented by the two tax-exempt models, the Availability Based P3 operations and maintenance package provides risk guarantees that hold the private partner responsible for faulty or worn-out components of the building. The premiums associated with the transfer of risk and the possibility of bearing responsibility for replacing any faulty or worn-out building components contribute to the higher cost in O&M.

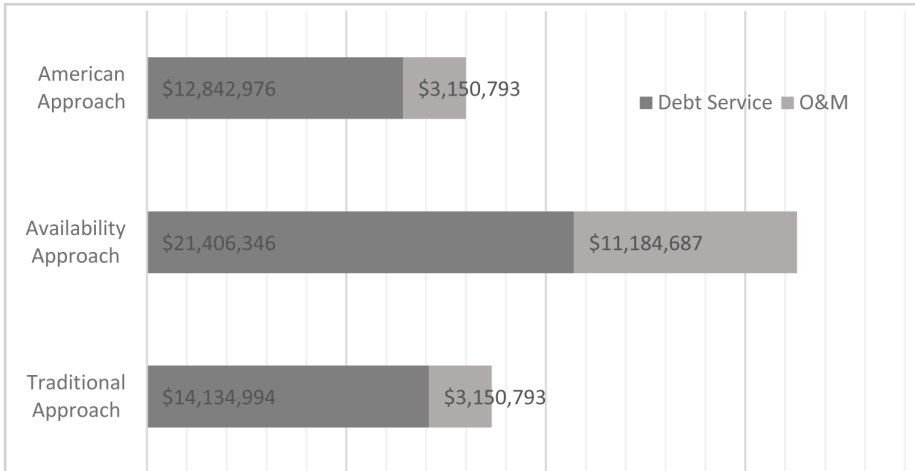
A notable feature of the Availability Based approach is that the O&M contractor is typically present in the planning phase and makes suggestions on materials that would provide for optimal O&M costs over the life of the facility. Premium and higher-cost materials should produce a lower cost in operations and maintenance with a benefit derived by the public agency. However, for the first 30 years of the project, when the building is in its best condition, the savings related to maintaining the building are not realized by the public client who is also paying for the higher quality materials that are incorporated into the construction cost of the project.

Using the assumptions outlined above, therefore, we find that the Availability Based long-term O&M contract is 3.5 times more expensive than the BOMA Market Standard. The result is an annual cost difference of \$8 million for our hypothetical project. Please refer to the endnote section for additional discussion of the magnitude of the cost difference.¹¹

THE FINAL LEASE PAYMENTS

By combining Debt Service and O&M we establish the lease payments for each respective delivery model in our theoretical building (Figure 2). The Availability Based model has an annual lease payment of \$32,591,033; the Traditional Public Delivery has an annual lease payment of \$17,285,787; and the American Approach P3 has a \$15,993,769 payment. In other words, the American Approach model is \$1,292,018 less costly per year than the Traditional Public Delivery model and less than half the cost of the Availability Based P3, making it the least costly development model in our comparison.

FIGURE 2
Final Lease Payments



CONCLUSIONS

In the hypothetical analysis evaluated above, the American Approach delivers the project at the lowest cost. Although an attempt was made to use data that reflects the *most likely* financial scenario, this approach still emerged as the most cost-effective when one lowers the borrowing cost for the Availability Based P3 and reducing its fees, or decreases the Traditional Public Delivery construction timeline. In short, even after evaluating scenarios with different data inputs, none of the models presented have outcomes that change their cost-performance ranking.¹² In our analysis, an Availability Based P3 is always the most expensive, Traditional Public Delivery is significantly less expensive, and the American Approach is the least expensive of the three models.

Why does the American Approach outperform the other two? To summarize, the answer lies in both the differing cost of constructing the facility and its financing. When the American Approach is used, there is a significant cost savings achieved as a result of private-sector efficiency and expertise – as well as a reduced development timeline. This approach also benefits from the financial advantages of tax-exempt financing. In other words, it takes the best aspects of private development and of Traditional Public Delivery and combines them to produce a benefit for the public client.

Another factor that is important to consider is that, while a long-term O&M contract that comes with the Availability Based P3 is compelling, the private

sector does not take on financial risk without substantial fees to cover its potential future costs. Whether it is a health insurance premium or an O&M package, the customer pays for that risk transfer; in the case of O&M that cost is typically embedded in the lease payments.

Another advantage of the American Approach, especially for smaller communities, including many Midwestern municipalities, is that this model has a “bottom threshold” (i.e., minimum size) of about \$20 million. On projects costing less than \$20 million, the increase in financing and issuance costs are not sufficiently offset by timeline reduction and private-sector expertise. Compare this with the Availability Based P3, which has a threshold of \$200 million. The dramatically lower threshold means that, for smaller communities, a police station or a city hall is an eligible project for P3 development.

Municipalities in Illinois have been slow to embrace the P3 movement for projects involving new public facilities. Although the City of Chicago has been at the forefront of the movement, particularly with regard to transportation-related projects, the movement has not gained traction as quickly as one might have expected in light of the state government’s financial difficulties. It nonetheless behooves municipal officials to consider some of the creative approaches that are becoming available.

Of course, each community faces its own set of operational, political and financial variables. Our analysis cannot account for all of these local factors, and all projects will differ. Moreover, market conditions and interest rates will certainly change in the years ahead. As a general rule, however, our results show that the American Approach deserves to be part of the “choice set” among local governments exploring private-public partnerships for the creation of social infrastructure.

Matt Calcavecchia and Erin Birkenkopf both hold the title of Vice President at Public Facilities Group. John Finke is President of Public Facilities Group.

¹ For more information, please visit <https://www.whitehouse.gov/blog/2017/06/08/president-trumps-plan-rebuild-americas-infrastructure>.

² For more information, see *New York Times* article Trump Plans to Shift Infrastructure Funding to Cities, States and Business. Retrieved from <https://www.nytimes.com/2017/06/03/us/politics/trump-plans-to-shift-infrastructure-funding-to-cities-states-and-business.html>.

³ For more information, see Group Decision-Making: Consensus rule versus majority rule. *ScienceDirect*. Retrieved from <http://www.sciencedirect.com/science/article/pii/S2212017313002090>.

⁴ For more information, see Administrative Office of the Courts (2014, June). *Governor George Deukmejian Courthouse: Evaluation of Cost-Effectiveness Report to the California Legislature as Require by Senate Bill 75, 1*. Retrieved from <http://www.courts.ca.gov/documents/jc-20140627-itemD.pdf>.

⁵ For more information, see King County Auditor's Office, *Final Oversight Report on Ninth and Jefferson Building Project, 9*. See Appendix 3. Retrieved from <http://publicfacilitiesgroup.org/wp-content/uploads/2017/04/A-THEORETICAL-COST-COMPARISON-OF-P3-MODELS.pdf>.

⁶ For more information, see <http://www.p3buildings.org/availability-payment-based-public-private-partnerships-p3-a-comparison-to-traditional-delivery-approaches/>.

⁷ For more information, see Administrative Office of the Courts (2014, June). *Governor George Deukmejian Courthouse: Evaluation of Cost-Effectiveness Report to the California Legislature as Require by Senate Bill 75, 34*. Retrieved from <http://www.courts.ca.gov/documents/jc-20140627-itemD.pdf>.

⁸ This ensures market rates during the 30-year term of the debt on the project. Also, the American Approach does not employ a concession agreement and the absence of concessionaire risk and profit means the facility is maintained at cost.

⁹ We used a BOMA report detailing individual O&M costs per square-foot for high-end real estate in the Long Beach/L.A. market in 2010. By adding together typical O&M cost categories we determined the approximate O&M for a theoretical high-end facility similar to the Long Beach Courthouse project. See appendices 6 & 7 of the original report here: <http://publicfacilitiesgroup.org/wp-content/uploads/2017/04/A-THEORETICAL-COST-COMPARISON-OF-P3-MODELS.pdf>. See also Long Beach Judicial Partners LLC (2010, December). *Project Agreement for the Design, Construction, Financing, Operation, Maintenance and Management of the New Long Beach Court Building*, 123. Retrieved from <https://judicialcouncilwatcher.files.wordpress.com/2012/12/pr990-1.pdf>.

¹⁰ We made this calculation by adding the Base Operating Cost of \$33.27 per square foot with Market Operating Charges, such as roads and grounds maintenance, exterior janitorial, elevator systems, security systems and operating insurance. See *Long Beach Judicial Partners LLC* (2010, December). *Project Agreement for the Design, Construction, Financing, Operation, Maintenance and Management of the New Long Beach Court Building*, 123. Retrieved from <https://judicialcouncilwatcher.files.wordpress.com/2012/12/pr990-1.pdf>.

¹¹ Stated another way, the product of subtracting \$10.04 per square foot from \$35.64 per square foot is \$25.60 per square foot above what BOMA considers the Market Standard for the L.A./Long Beach area. The significant increase in cost is likely the product of risk premiums and profit, since the public client could conceivably pay for privately managed operations and maintenance at \$10.04 per square foot. If they were to invest the remaining \$8 million annually, at the end of our 30-year term they would have accrued \$241 million (not including interest accrued). That is enough to build the building again.

¹² For additional hypothetical scenarios that reflect changes in our original assumptions, see *A Theoretical Cost Comparison of P3 and Traditional Public Delivery Models Used in Developing Social Infrastructure*. Retrieved from <http://publicfacilitiesgroup.org/wp-content/uploads/2017/04/A-THEORETICAL-COST-COMPARISON-OF-P3-MODELS.pdf>.

REFERENCES

Public Facilities Group (2017, May). *A Theoretical Cost Comparison of P3 and Traditional Public Delivery Models Used in Developing Social Infrastructure*. Retrieved from <http://publicfacilitiesgroup.org/wp-content/uploads/2017/04/A-THEORETICAL-COST-COMPARISON-OF-P3-MODELS.pdf>.

Administrative Office of the Courts (2014, June). *Governor George Deukmejian Courthouse: Evaluation of Cost-Effectiveness Report to the California Legislature as Required by Senate Bill 75*. Retrieved from <http://www.courts.ca.gov/documents/jc-20140627-itemD.pdf>.

Long Beach Judicial Partners LLC (2010, December). *Project Agreement for the Design, Construction, Financing, Operation, Maintenance and Management of the New Long Beach Court Building*. Retrieved from <https://judicialcouncilwatcher.files.wordpress.com/2012/12/pr990-1.pdf>.

King County Auditor's Office (2011, March). *Final Oversight Report on Ninth and Jefferson Building Project*.

ISSUE BRIEF

INCREASING THE BENEFITS FROM URBAN TREES WHILE MINIMIZING COSTS: LESSONS LEARNED FROM THE CHICAGO REGION TREES INITIATIVE

LINDSAY DARLING, MELISSA CUSTIC, LYDIA SCOTT AND C. SCOTT SMITH
THE CHICAGO REGION TREES INITIATIVE, THE MORTON ARBORETUM,
DEPAUL UNIVERSITY

This issue brief summarizes the benefits that trees provide to both the “built environment” and municipal planning goals. Drawing on a survey administered to public officials, it reviews strategies that municipalities use to maximize the benefits of trees, while providing evidence that trees provide both aesthetic and key functional purposes. The findings also show, however, that the management of trees comes at a cost and is frequently one of the first services to be scaled back when municipal budgets are tight.

INTRODUCTION

Urban trees are a form of “green infrastructure” that make cities and towns more livable in often under-appreciated ways. This issue brief seeks to broaden the understanding among municipal officials on the benefits of active urban forestry programs. After reviewing research in this area, it evaluates the ways in which municipal governments in the Chicago region practice urban forestry management. The final sections of this report consider strategies for conducting tree inventories and developing management plans while also acknowledging the challenges facing communities that do not allocate sufficient budgeting for even the most basic programs in these areas.

QUANTIFYING THE BENEFITS OF TREES

Although the benefits trees provide are often passive and hard to quantify, recent research has shown that trees and other types of green infrastructure save governments money and increase the quality of life for residents. One estimate suggests that the approximately 157 million trees within the seven-county Chicago region provide \$51.2 billion in ecosystem services and compensatory value (Nowak et al., 2013), a figure that does not factor in stormwater uptake

or water filtration. Without these trees, municipalities would be forced to implement more costly, engineered solutions to achieve the same benefits.

One important ecosystem service provided by urban trees is stormwater management. Communities in the Chicago region have cited flooding as one of their greatest concerns (Chicago Regional Trees Initiative (CRTI), unpublished data), especially with the increasing intensity and frequency of storm events (Brandt et al., 2017). Urban trees help alleviate stormwater runoff and improve water quality in several ways. First, trees intercept rainfall in their leaves and structures, slowing the velocity of rain before it hits the ground. This process increases the likelihood that rainwater penetrates the soil instead of running off (Brack, 2002). A 20-inch-diameter oak tree located in a Chicago residential neighborhood, for example, is estimated to intercept 2,600 gallons of water each year (National Tree Benefits Calculator, 2017). Trees also pull water from the soil through evapotranspiration, alleviating saturated soils and allowing future rainwater to penetrate the ground (Scharenbroch, Morgenroth and Maule, 2016; Walsh, Fletcher and Burns, 2012). The combination of intercepted rain and water taken from the soil greatly reduces the volume of water that enters drainage systems thereby reducing flooding in urban areas.

Urban areas are typically hotter than less-developed places, because impervious surfaces (such as pavement and buildings) capture the sun's energy and release it as heat (Arnfield, 2003) – a phenomenon known as the urban heat-island effect. This effect has been found to exacerbate human discomfort, heat-related health incidences, and even mortality rates due to reduced air quality (Heisler and Brazel, 2010). Trees help minimize the urban heat-island effect by shading heat-absorptive surfaces and cooling the air via evapotranspiration (Akbari, Pomerantz and Taha, 2001). Decreases in urban air temperatures also mean that buildings need to use less energy for cooling, thereby reducing energy use and their associated carbon footprints (Akbari, 2002; Sawka, Millward, McKay and Sarkovich, 2013). Improving public health outcomes and reducing energy use help municipalities boost their bottom line.

Urban residents also often perceive trees as valuable due to their ability to provide shade and enhance aesthetics (Lohr, Pearson-Mims, Tarnai and Dillman, 2004). Research has shown that these and other positive perceptions of trees translate into higher property values. Past research has shown that houses with trees tend to sell for 3.5 to 4.5% more than houses without trees (Anderson and Cordell, 1988), and properties with trees spend less time on the market than treeless properties (Donovan and Butry, 2011). Furthermore,

people are willing to spend more time and money in commercial districts that have lush tree canopies (Wolf, 2005), and residents who are surrounded by greener environments report a higher quality of life (Hipp, Gulwadi, Alves and Sequeira, 2015).

Trees are also positively correlated with human health, as they improve air quality by removing nitrous oxide and fine particulate matter (Brack, 2002), reducing impacts to individuals with compromised pulmonary systems (Donovan et al., 2013). People who live in greener areas tend to be more active and are less likely to be overweight (Bell, Wilson and Liu, 2008), and living on a street with more trees improves cardiovascular health (Kardan et al., 2015). Trees also increase social cohesion and encourage residents to spend time outdoors, which can result in lower crime rates (Kuo, 2003; Kuo and Sullivan, 2001). These social benefits are often difficult for municipalities to quantify, but they are integral to quality of life and the desire to live in a particular community or neighborhood.

To summarize, research shows that trees have an overwhelmingly positive impact on communities. One credible estimate indicates that each dollar spent on managing urban forests returns benefits ranging from \$1.37 to \$3.09 annually (McPherson, Simpson, Peper, Maco and Xiao, 2005).

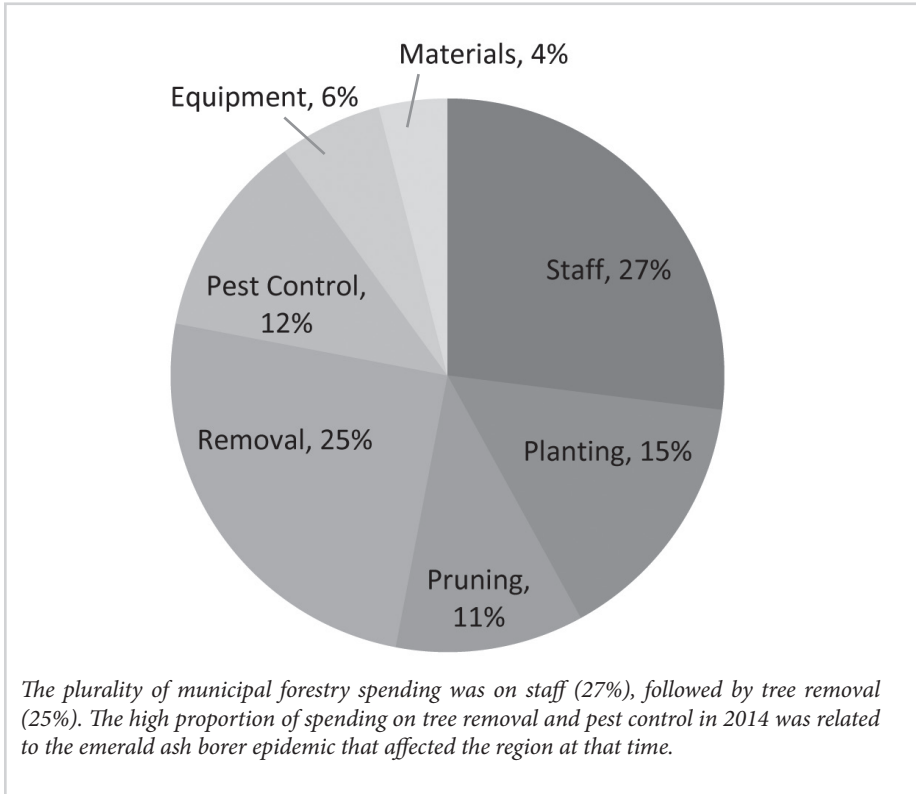
A SURVEY OF MUNICIPAL URBAN FORESTRY MANAGEMENT

CRTI conducts a biennial survey to track municipal spending, management practices and attitudes on urban forestry. In 2014, this survey was sent to 284 municipalities and 26 park districts and yielded responses from 132 municipalities and 20 park districts (a 49% overall response rate). The survey included 63 questions subdivided into the following sections: administrative and program profile (including budgets), tree disorders and diseases, tree planting, maintenance of trees and tree removal.

Despite the documented benefits summarized above, some municipalities consider the costs associated with managing their urban forests overwhelming and, as a result, shy away from planting new or even caring for existing trees. Survey responses indicate that the average municipal forestry budget (excluding Chicago) is about \$5.8 million, or less than 5% of the average total municipal budget. The majority of forestry departments reported that they are short-staffed and do not have enough funding to adequately manage their trees. In most communities, staff has little to no formal forestry training. Even though most communities do not have adequately trained staff, municipalities spent

a plurality of their forestry budgets on this category (Figure 1). Communities expressed that their greatest need going forward was more funding for staff, trees and equipment, and for better training.

FIGURE 1
2014 Distribution of Forestry Budgets



Maintaining urban trees generates some predictable expenses related to planting, watering and pruning. Grants that have been administered by CRTI in the Chicago region have found that a two-inch-caliper tree generally costs between \$200 and \$300 with an additional \$150 for planting costs. Municipalities also routinely prune trees to ensure good structure and remove hazardous branches. On average, municipalities spend about 11.9% (± 9.7) of their tree budget on routine pruning.

Urban trees can also incur costs from forces that are less predictable, such as pests, diseases and severe weather. For example, the emerald ash borer (EAB)

has been a major threat to ash trees throughout the Chicago region such that, by 2013, many such trees were visibly failing due to infestation. Municipalities in the Chicago region on average spent \$234,000 (37% of their forestry budget) in 2014 on treating or removing EAB-damaged trees. Nowak et al., (2013) estimated that the EAB epidemic could result in \$4.2 billion in compensatory damage throughout the region. The damage caused by EAB is not an anomaly. In the past, Dutch elm disease caused catastrophic damage to elms beginning in the 1960s. Foresters are also concerned about the future threat posed by the Asian long-horned beetle (currently present in Ohio), which has the potential to destroy many maple trees in the area.

It should be noted here that the 2014 CRTI survey was sent at the height of the EAB epidemic. As a result, the survey did not capture an average year in forestry management given that municipal resources were directed towards treating and removing ash trees. In 2014, budgets were derailed, regular pruning stopped and planting all but halted because of EAB. CRTI conjectures that, going forward, a smaller portion of the budget will be dedicated towards removing and treating trees.

When talking to municipal leaders, CRTI staff often hear the concern that damage caused to and by trees during storm events makes trees too costly and dangerous to plant. Many municipalities in the region have experienced frequent storm damage over the past decade. The CRTI survey found that between 2004 and 2014, 24% of communities reported experiencing major storm damage more than six times, and 32% of communities reported experiencing major storm damage four to six times. While trees can require substantial spending by municipalities, there are also ways to reduce these costs through strategic and proactive forestry management.

PROACTIVE MANAGEMENT AND TAKING INVENTORIES OF TREES

Management practices for trees have changed dramatically in the past couple of decades. Previously, trees were largely planted for aesthetic reasons. Now that their contributions to a city's infrastructure are better understood, urban planners and land managers are utilizing trees in a more strategic manner. Municipalities are increasingly keeping records of their trees, proactively pruning and tending to them, and ensuring that they are planting trees where they will have the biggest impact. Since 2013, CRTI has worked with municipalities to help them manage their urban trees and improve the skills of those who care for them.

Informed management requires good data, and the cornerstone of urban forestry management is a tree inventory. These inventories catalog the trees that are present in a given area. There are a variety of inventory types, from sample inventories that measure a subset of trees and extrapolate the results to understand species composition across an area, to complete inventories that record the location, species, size, health and management history of each individual tree (Figure 2). Inventories allow foresters to ensure that they have a diverse, sustainable urban forest, and to track issues relating to tree health. In this example, a community has completed a spatially referenced, comprehensive tree inventory. Such an inventory allows foresters to monitor how trees change over time and to track management activities.

FIGURE 2

Example of a Complete Urban Tree Inventory



This complete inventory has an interactive feature to show the species, size, health and management history of each tree in a community. Such inventories allow foresters to track species composition of their entire urban forest as well as the performance of individual trees.

The diversity of tree species in an area is one of the best ways to measure urban forest resilience to pests and diseases (Santamour Jr., 2004). Most insects and diseases that affect trees only affect a single genus, such as EAB with ash species and Dutch elm disease with elm species (Brasier, 1991; Poland and McCullough, 2006). Both EAB and Dutch elm disease have been devastating, because municipalities aggressively planted these two genera in the past. Inventories from 2012 (before EAB established in the Chicago region) have shown that ash made up nearly half of the street trees in some municipalities (CRTI, unpublished data). These municipalities are now dealing not only with the expense of removing and replacing these trees, but also the loss of benefits that the trees provided. Tree inventories allow foresters to track the distribution of their trees, and to make sure that an adequate distribution of species and genera are planted. As municipalities replace these dead and dying ashes, it is especially important to increase diversity through the planting of underutilized species. CRTI recommends that no more than 5% of a single species, 10% of a genus and 15% of a family are planted in an area.

Complete inventories that include the specific location of each tree allow managers to track the health, growth and management of individual trees. This allows foresters to observe trees over time, to monitor performance of new species, identify potential problem areas where species or age diversity might be low and to follow up on specific tree issues such as disease or damage. In addition, it allows trees to be mapped in conjunction with other municipal infrastructure to offset impacts from gray infrastructure or reduce potential conflicts. Tracking can also ensure that trees are being pruned in regular cycles and respond to threats as they present themselves, which helps with budgeting.

Trees can pose a significant risk to power lines, property and people, especially during inclement weather. Given the costs associated with cleanup after storms – including equipment rental, disposal of debris and overtime for staff – municipal leaders sometimes consider trees as high-risk and high-cost. However, it has been found that in communities where trees are routinely inspected and maintained, overall costs including tree management, storm cleanup and liability are reduced (Vogt, Hauer and Fischer, 2015). However, many communities in the Chicago region do not proactively prune their trees; according to the CRTI survey only 55% of communities reported having a proactive forestry management plan to mitigate risks and only 60% of communities reported conducting risk assessments on their trees.

The International Society of Arboriculture has created a standardized method for assessing risk in trees (called the Tree Risk Assessment Qualification or TRAQ), and arborists can receive a certification for this training. Conducting risk assessments on trees, especially when the assessment is included as part of a tree inventory, can help municipalities create a management plan for proactively pruning and maintaining trees. It may also show that municipalities have conducted due diligence in maintaining urban trees, which may be helpful if a tree does cause damage. In fact, many municipalities begin risk assessment activities after a lawsuit is filed against them, when they realize that proactively managing risk can help avoid future liability (Koeser, Hauer, Miesbauer and Peterson, 2016). Proactively managing risk may also provide peace of mind that residents and property are protected.

Proper tree care and maintenance can expand the life of a tree, and mature, healthy trees offer more ecosystem services than smaller trees (Nowak, Crane and Dwyer, 2002). By proactively caring for the urban forest, municipalities can maximize the benefits that each tree gives while reducing the costs that it can incur (Vogt et al., 2015). A thoughtful management plan can provide the guidance necessary to achieve that balance.

EXPANDING WITH PURPOSE

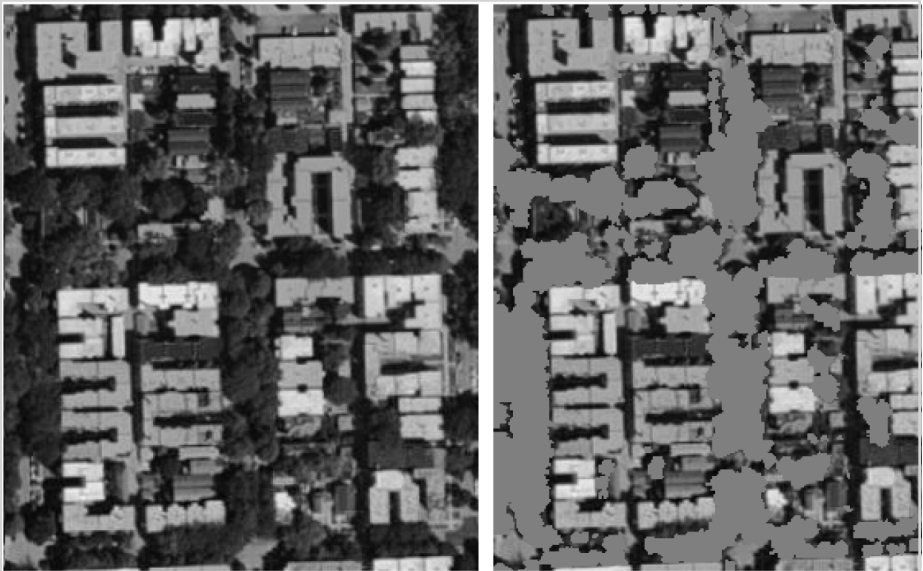
The benefits that trees provide are generally positively correlated with the extent of their canopy (Schwarz et al., 2015), and by understanding where canopy does and does not exist, planners can identify where additional trees might have the biggest impact. The U.S. Forest Service has created a protocol for mapping tree canopy at a sub one-meter resolution using high-resolution imagery and Light Detection and Ranging (LiDAR; Figure 3) (O’Neil-Dunne, MacFaden, Royar and Pelletier, 2013). This protocol has been implemented in scores of cities across the United States, including the entire seven-county Chicago region. The Chicago region dataset is freely available for download on the Chicago Metropolitan Agency for Planning’s data hub.¹

Mapping canopy can help forest managers visualize the extent of trees in a more complete way than using an inventory alone. Municipal tree inventories only capture the trees that are publicly owned, which are usually a small subset of the trees in a municipality. Across the Chicago region, it is estimated that 70% of trees are on private land (Nowak et al., 2013). Trees provide equal ecosystem services regardless of where they are growing. That is, even if the municipality does not actively manage trees that are on private property, these

trees contribute the majority of stormwater mitigation, heat-island reduction and other critical infrastructure services. It is therefore essential to consider privately-owned trees when identifying where additional trees could have the biggest impact.

FIGURE 3

High-Resolution Mapping Used to Identify Tree Canopy at a Sub One-Meter Resolution



On the left, a satellite image shows tree cover at a representative location in northern Chicago. At right, this same area is shown with the tree canopy highlighted using the U.S. Forest Service's Urban Tree Canopy protocols.

Once municipal planners have mapped the canopy, they can more effectively focus on where new trees would have the greatest impact. To do this, flood maps, maps of surface temperature, air quality, socio-economic characteristics and other data can all be considered. These sorts of strategies have been implemented in Baltimore (Troy and Grove, 2008) and New York City (Locke et al., 2010), and are currently being completed by CRTI in the Chicago region. When identifying places for tree plantings, municipal planners and public-works departments should consider their broader goals. For instance, if flooding is a problem they should identify areas with extensive impervious cover, that are in flood plains, or that have had previous flooding issues. Due to the extensive flooding recently experienced in the northeastern part of Illinois,

as well as the highly publicized disasters in Florida, Puerto Rico and Texas, attention to this issue will no doubt rise.

Identifying priority areas for tree plantings can also give municipalities an advantage on grant applications, which frequently are awarded to projects that address multiple issues and/or address issues at a larger scale. If municipalities can show that trees will be planted in under-resourced areas, or that they will have extensive environmental benefits locally and/or outside of where the trees will be planted, they may be more likely to receive a grant (CRTI, unpublished data).

BEST PRACTICES IN URBAN FORESTRY MANAGEMENT

Practicing effective forestry management, including the collection and utilization of data, can be challenging for municipalities, as it requires long-term planning, trained staff and consistent budgeting. Nevertheless, many municipalities are doing it well, and can attest to how it has helped their financial bottom line and improved the quality of life of their residents.

The Village of Homewood, Illinois, has a tree inventory, an urban forestry management plan, trained and certified urban forestry staff, and excels at communicating with its residents. This allows it to proactively manage the damage caused by EAB. This southern suburb was one of the region's first municipalities to create a management plan for the borer, which was first found in Michigan in 2002. In 2008, Homewood stopped planting ash trees in case the insect migrated to the region. When EAB was discovered in the Chicago metropolitan area, Homewood was able to act quickly by using its comprehensive inventory to locate all ash trees in its jurisdiction as well as prioritize which trees should be removed first. Homewood was also able to budget for the crisis ahead of time and was not hit with unforeseen expenses. Many other municipalities that were hit especially hard by EAB did not fare as well as Homewood and were forced to remove and replace a large number of hazard trees in a single year. Residents often balk at the removal of seemingly healthy trees, but because Homewood had already established a good relationship with stakeholders, it was able to effectively communicate its reasoning for removing the doomed trees.

Homewood further reduced the cost of tree removal by recycling the wood. Rather than paying to dispose of its wood waste, as many other communities do, Homewood arranged to have their ash trees turned into lumber or chipped, which saved hundreds of thousands of dollars. The municipality's forest is now

more resilient than ever. The ashes were replaced by 83 different species that Homewood's inventory showed were currently underplanted. This will allow the municipality to fare better during the next pest or disease outbreak.

The Village of Riverside, Illinois, one of the first planned municipalities in the country, was designed by the renowned landscape architect Frederick Olmstead. Olmstead imagined the community as a place of respite from Chicago's urban bustle. He emphasized the use of native plants so that the community would exemplify the natural areas that surrounded it. Today, Riverside almost exclusively plants trees that are native to Illinois. Using this reduced palette of tree species can be challenging, as it makes it more difficult to plant a diverse, and thereby resilient, forest. However, Riverside's up-to-date and complete inventory of its trees allows it to ensure that every block has a diversity of species.

This inventory has helped Riverside plan for the future. Urban trees are thought to be especially sensitive to climate change, as they frequently live in stressful environments with alkaline, salty, compacted soils. The additional stress from hotter days and inconsistent rain might be more than many urban trees can handle. Riverside has partnered with the U.S. Forest Service's Northern Institute of Applied Climate Science to improve its forest's ability to cope with climate change. Together, they have identified which native tree species are likely to be able to cope with the region's predicted hotter and dryer climate. Going forward, Riverside will increase planting of these species and reduce plantings of species that are not expected to be able to endure these conditions. Its tree inventory and careful planting practices will ensure that its investment will generate benefits for decades to come.

The Village of Oak Park, Illinois, with its wide parkways and historic architecture, provides an attractive setting for people to enjoy its ecologically rich urban forest. The village's decades-long commitment to nurturing its trees was formally acknowledged in 2015, when it was recognized as Illinois' first municipal arboretum in response to an application submitted jointly by the village and its independent park district through the Morton Arboretum's ArbNet Arboretum Accreditation Program. The distinction was, in part, enabled by the village's development and maintenance of a comprehensive tree inventory, which not only helped the general cataloging of trees, but also improved the efficiency with which village staff manages and monitors tree diversity, health and upkeep.

Information concerning tree height, trunk diameter and canopy have also been used by Oak Park to monetize a tree's social and ecological benefits, while information concerning genus, species and variety have been used to identify and track progress toward achieving various performance targets. For example, the village has established a biodiversity-related goal in which no single species family should comprise more than 10% of the overall tree population. The village also works collaboratively with its park district, residents, and contractors to share information about pruning schedules and tree-maintenance best practices.

INEQUITY IN FOREST RESOURCES

The majority of the forestry management techniques described above require trained forestry staff and funds. In the Chicago region, municipalities with

FIGURE 4

Differences of Median Earnings for Municipalities by Status of Forestry Activity

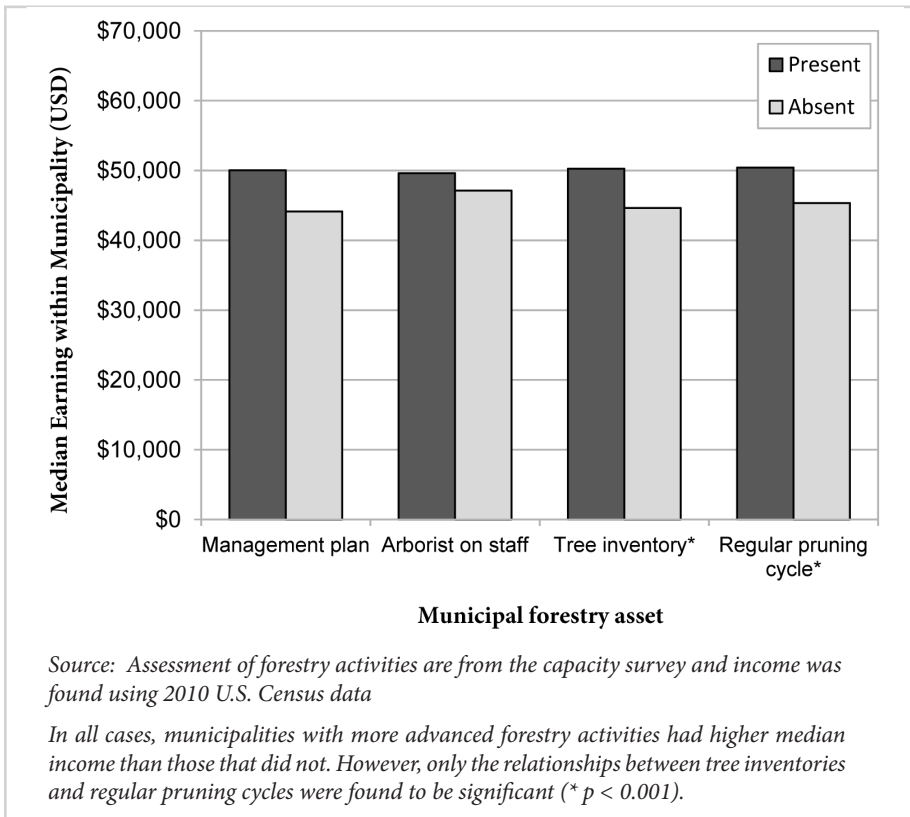
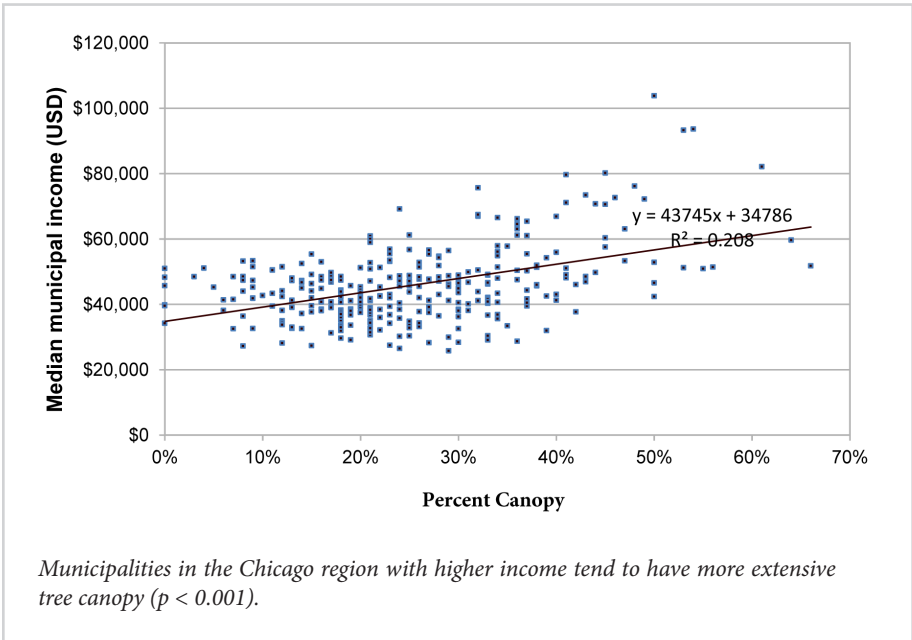


FIGURE 5

Relationship between Median Income of Municipalities and Canopy Abundance



higher median incomes are more likely to have an arborist on staff, to have an inventory, to prune on a regular cycle and to have an urban forest management plan (Figure 4). Lower-income communities not only tend to have less capacity to manage trees, but also lower canopy cover (Figure 5). This means that the communities that could most benefit from the ecosystem services that trees provide have less access to that resource.

Numerous governmental and not-for-profit organizations are working to address this inequity. Many forestry grants are preferentially awarded to under-resourced communities; however, these communities frequently lack the capacity to apply for these grants. CRTI has held workshops to help train communities on how to apply, while the Community Trees Program of the Morton Arboretum offers one-on-one technical assistance on grant applications for municipal forestry programs.

Other forms of assistance are also available. For example, the Community Trees Program offers assistance on the development of forestry management plans. CRTI provides a compendium of resources developed by their 100+ partners and offers training and networking opportunities for municipal

and park district staff and volunteers on multiple forestry topics. Similarly, Openlands in Chicago provides forestry training for volunteers to help plant and maintain trees in under-resourced communities in and near Chicago. The Delta Institute has several tools and reports that can aid the development of green infrastructure in communities. In many cases, there are also resident groups (e.g., beautification committees, garden clubs and environmental justice groups) that can be consulted to aid in the planting and care of trees. Formalizing relationships with these community groups can provide validation of their efforts and increase community commitment and capacity, while securing a workforce of engaged volunteers.

CONCLUSION

Urban trees are a significant investment for municipalities, but their benefits far outweigh their costs. Trees create more pleasant and livable urban areas and save municipalities money through stormwater mitigation, heat-island reduction, air quality improvements, increased property values and numerous other benefits. Proactive management of existing trees – coupled with planting new trees in locations where they will have the largest benefits – has allowed municipalities to maximize the benefits that trees can provide while minimizing their costs. However, proactive management of trees requires investment, and many of the communities that have the greatest forestry needs do not have the capacity to invest in their trees. A number of organizations and grants have been established to help these municipalities, so that the forestry resource is more equitably distributed.

Respectively, Lindsay Darling, Melissa Custic and Lydia Scott are the Data and GIS Analyst, Coordinator and Director of the Chicago Region Trees Initiative. C. Scott Smith, Ph.D., is the Assistant Director of the Chaddick Institute for Metropolitan Development at DePaul University.

¹ For more information, please visit <https://datahub.cmap.illinois.gov/dataset/high-resolution-land-cover-cook-county-2010>.

REFERENCES

Akbari, H. (2002). Shade trees reduce building energy use and CO₂ emissions from power plants. *Environmental Pollution*, 116(SUPPL. 1), 119-126.

- Akbari, H., Pomerantz, M. and Taha, H. (2001). Cool surfaces and shade trees to reduce energy use and improve air quality in urban areas. *Solar Energy*, 70(3), 295-310.
- Anderson, L. M. and Cordell, H. K. (1988). Influence of Trees on Residential Property Values in Athens, Georgia (U.S.A) : A Survey based on Actual Sales Prices. *Landscape and Urban Planning*, 15, 153-164.
- Arnfield, A. J. (2003). Two decades of urban climate research: a review of turbulence, exchanges of energy and water, and the urban heat island. *International Journal of Climatology*, 23(1), 1-26.
- Bell, J. F., Wilson, J. S. and Liu, G. C. (2008). Neighborhood Greenness and 2-Year Changes in Body Mass Index of Children and Youth. *American Journal of Preventive Medicine*, 35(6), 547-553.
- Brack, C. L. (2002). Pollution mitigation and carbon sequestration by an urban forest. *Environmental Pollution*, 116(SUPPL. 1).
- Brandt, L. A., Derby Lewis, A., Scott, L., Darling, L., Fahey, R. T., Iverson, L., ... Swanston, C. W. (2017). Chicago Wilderness region urban forest vulnerability assessment and synthesis : A report from the urban forestry climate change response framework Chicago Wilderness pilot project. *Gen. Tech. Rep. NRS-168. Newton Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station*, (April), 142.
- Brasier, C. M. (1991). *Ophiostoma novo-ulmi* sp. nov., causative agent of current Dutch elm disease pandemics. *Mycopathologia*, 115(3), 151-161.
- Darling, Lindsay. (2017). Chicago Region Trees Initiative Tree Inventory Database.
- Donovan, G. H. and Butry, D. T. (2011). The effect of urban trees on the rental price of single-family homes in Portland, Oregon. *Urban Forestry & Urban Greening*, 10(3), 163-168.
- Donovan, G. H., Butry, D. T., Michael, Y. L., Prestemon, J. P., Liebhold, A. M., Gatzliolis, D. and Mao, M. Y. (2013). The relationship between trees and human health: Evidence from the spread of the emerald ash borer. *American Journal of Preventive Medicine*, 44(2), 139-145.
- Heisler, Gordon M.; Brazel, Anthony J. (2010). The urban physical environment: temperature and urban heat islands Chapter 2. In: Aitkenhead-Peterson, Jacqueline; Volder, Astrid, eds. *Urban Ecosystem Ecology. Agronomy Monograph 55. Madison, WI: American Society of Agronomy, Crop Science Society of America, Soil Science Society of America: 29-56.*
- Hipp, J. A., Gulwadi, G. B., Alves, S. and Sequeira, S. (2015). The Relationship Between Perceived Greenness and Perceived Restorativeness of University Campuses and Student-Reported Quality of Life. *Environment and Behavior*, 48(10), 1292-1308.
- Kardan, O., Gozdyra, P., Mistic, B., Moola, F., Palmer, L. J., Paus, T. and Berman, M. G. (2015). Neighborhood greenspace and health in a large urban center. *Scientific Reports*, 5, 11610.
- Koeser, A. K., Hauer, R. J., Miesbauer, J. W. and Peterson, W. (2016). Municipal tree risk assessment in the United States : Findings from a comprehensive survey of urban forest management. *Arbicultural Journal*, 1375(4), 218-229.
- Kuo, F. E. (2003). Social Aspects of Urban Forestry: The Role Of Arboculture in A Healthy Social Ecology. *Journal of Arboculture*, 29(3), 148-155.
- Kuo, F. E. and Sullivan, W. C. (2001). Environment and crime in the inner city: Does vegetation reduce crime? *Environment and Behavior*, 33(3), 343-367.
- Locke, D., Grove, J., Lu, J., Troy, A., O'Neil-Dunne, J. and Beck, B. (2010). Prioritizing preferable locations for increasing urban tree canopy in New York City. *Cities and the Environment*, 3(1).

- Lohr, B. V. I., Pearson-Mims, C. H., Tarnai, J. and Dillman, D. A. (2004). How urban residents rate and rank the benefits and problems associated with trees in cities. *Journal of Arboriculture*, 30, 28-35.
- Mcpherson, G., Simpson, J. R., Peper, P. J., Maco, S. E. and Xiao, Q. (2005). Municipal Forest Benefits and Costs in Five US Cities. *Journal of Forestry*, 103, 411-416.
- Nowak, D. J., Crane, D. E. and Dwyer, J. F. (2002). Compensatory value of urban trees in the United States. *Journal of Arboriculture*, 28(4), 194-199.
- Nowak, D. J., Hoehn, R. E. I., Bodine, A. R., Crane, D. E., Dwyer, J. F., Bonnewell, V. and Watson, G. (2013). Urban trees and forests of the Chicago region. *Resour. Bull. NRS-84. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station*. 106.
- O'Neil-Dunne, J. P. M., MacFaden, S. W., Royar, A. R. and Pelletier, K. C. (2013). An object-based system for LiDAR data fusion and feature extraction. *Geocarto International*, 28(3), 227-242.
- Poland, T. M. and McCullough, D. G. (2006). Emerald ash borer: invasion of the urban forest and the threat to North America's ash resource. *Journal of Forestry*, 104(3), 118-124.
- Santamour Jr., F. S. (2004). *Trees for urban planting: diversity uniformity, and common sense*. C. Elevitch, *The Overstory Book: Cultivating connections with trees*.
- Sawka, M., Millward, A. A., Mckay, J. and Sarkovich, M. (2013). Growing summer energy conservation through residential tree planting. *Landscape and Urban Planning*, 113, 1-9.
- Scharenbroch, B. C., Morgenroth, J. and Maule, B. (2016). Tree Species Suitability to Bioswales and Impact on the Urban Water Budget. *Journal of Environmental Quality*, 45(1), 199-206. Retrieved from <https://doi.org/10.2134/jeq2015.01.0060>.
- Schwarz, K., Fragkias, M., Boone, C. G., Zhou, W., McHale, M., Grove, J. M., ... Cadenasso, M. L. (2015). Trees grow on money: Urban tree canopy cover and environmental justice. *PLoS ONE*, 10(4), 1-17.
- The National Tree Benefits Calculator. (2017, July). Casey Trees and The Davey Tree Expert Co. Retrieved from <http://www.treebenefits.com/calculator/>.
- Troy, A. and Grove, J. M. (2008). Property values, parks, and crime: A hedonic analysis in Baltimore, MD. *Landscape and Urban Planning*, 87(3), 233-245.
- Vogt, J., Hauer, R. J. and Fischer, B. C. (2015). The Costs of Maintaining and Not Maintaining the Urban Forest : A Review of the Urban Forestry and Arboriculture Literature. *Arboriculture & Urban Forestry*, 41(6), 293-323.
- Walsh, C. J., Fletcher, T. D. and Burns, M. J. (2012). Urban Stormwater Runoff: A New Class of Environmental Flow Problem. *PLoS ONE*, 7(9), e45814.
- Wolf, K.L.(2005). Business district streetscapes, trees, and consumer response. *Journal of Forestry*, 103(8), 396-400.

ISSUE BRIEF

TAX INCREMENT FINANCING: LEARNING FROM RESEARCH AND MUNICIPAL “BEST PRACTICE”

NATALIA ERMASOVA AND AMANDA GEORGE
GOVERNORS STATE UNIVERSITY

This issue brief describes some of the notable research on Tax Increment Financing (TIF) and reviews challenges associated with the use of this technique. It also presents an example of how a local community has adapted to changing economic conditions in the wake of the Great Recession to restore momentum behind a large-scale TIF project. This brief also illustrates some of the research generated by student-faculty collaborations at our state’s teaching-oriented universities.¹

INTRODUCTION

Tax Increment Financing (TIF) provides an innovative and flexible way for local governments to redevelop communities or to stimulate local economic development. An early adopter of this strategy, the state of California touted it as a “catalyst for redevelopment” in 1952. By the 1970s, state and local governments nationwide had gradually increased their use of this tool. Today, every state except Arizona uses this technique in some manner, as it is regarded as potentially beneficial both for new businesses, developers, and residents as well as existing businesses located within the created districts.

This issue brief reviews research on this form of financing and provides a practical example of how a community has responded to the changing investment climate in the wake of the Great Recession. It illustrates how communities must constantly adjust their strategies and expectations when using this financial technique.

PERSPECTIVE

The central idea behind TIF is that it can foster economic development in an area that might otherwise not have such development. Were it not for the creation of the TIF district, property would remain vacant or underutilized,

to the detriment of local taxing bodies, development goals and existing infrastructure (Mikesell, 2014).

When a TIF district is established, local taxing bodies continue to collect the base amount of property tax that they currently receive from within the district's boundaries. When additional (incremental) taxes are generated, the associated "increment" goes into a special fund, which can be used to reimburse the developer's qualified costs, make additional improvements or reduce the outstanding economic developmental costs of the municipality (Figure 1). The public agency that established the district can also use the funds to repay the tax-exempt debt used to finance the redevelopment project. When the TIF district is abolished – often after 23 years – the tax base is returned to the original jurisdiction. If the project is successful, however, the new tax base will be considerably larger than before the redevelopment activities began.

To use this financial tool, however, the sponsoring local government needs to prepare a detailed proposal for a specified area. Although the requirements vary from state to state, they often can include "blight" and "but for" tests. The "blight" test measures the area's degree of deterioration and economic decline, while the "but for" test measures the possibility of future development of the TIF district without a TIF program implementation. Passing these tests requires demonstrating that without TIF assistance, growth or development at the proposed level would not otherwise occur.

The Government Finance Officers Association's *An Elected Official's Guide to Tax Increment Financing*, a standard reference tool, notes that the state of Illinois stipulates that an area is blighted if it meets a specified number of factors that include dilapidation, deterioration, obsolescence, having structures below minimum building code and declining assessed value (Greifer, 2007, pp.14-15). Other analyses show, however, that carefully adhering to such requirements does not eliminate the tension associated with trying to achieve the dual goals of eliminating blight *and* stimulating development at the same time (Chapman et al., 1998; CivicLab, 2013).

Since the 1990s, this tool has been much more widely used for economic development than for the elimination of blight, though the requisite use of the term "blight" is still often found in the reasoning behind the establishment of TIF districts. Furthermore, many scholars have found that TIFs tend to be concentrated in areas with rapidly growing property value, which violates the spirit of the "but for" criteria (Dye and Sundberg, 1998; Brueckner, 2001; Gordon, 2003; Briffault, 2010). One study shows, for example, that the use

of this financing technique is less pervasive in communities with household incomes less than \$25,000 than in communities with higher incomes (Felix and Hines, 2013).

Dye and Merriman (2000) found that cities with larger populations, higher municipal tax rates, and larger proportions of non-residential property are more likely to use this form of financing than others. According to Pacewicz (2013), the use of this technique is also skewed by the fact that development professionals sometimes have “incentives to use the TIF in ways that are not aligned with the city’s fiscal outlook and lock them into ever-higher rates of TIF spending.” On a more positive note, TIFs can play a strategic role in securing the relationships necessary to foster successful public-private partnerships.²

All these issues point to the need for municipalities to follow “best practices” that include reporting requirements, formal feasibility studies, and an annual audit of project revenue and expenses. California and Minnesota require municipalities to clearly articulate why the TIF is needed to ensure efficient use of public funds (and to avoid paying too much to developers) and to justify public subsidies for private development (Lefcoe, 2011). These requirements, of course, need to be rigorously enforced, which is often challenging. In California, for example, approximately 25% of cities do not file the required reports (Lefcoe, 2011).

DECIDING WHETHER TO ESTABLISH A TIF

The legal basis for TIF in Illinois can be found in the state’s Tax Increment Allocation Redevelopment Act, which was passed in 1977. Through 2016, 514 municipalities had created 1,397 TIFs in the state (Comptroller Illinois, 2016). A survey of municipalities shows that the average TIF project in Illinois produced four dollars of private investment for every dollar of tax increment investment. The investment of the \$225 million of property tax increment induced \$900 million of private investment, for a total of \$1.125 billion (Illinois Tax Increment Association, 2016).

Local governments use TIF for many different purposes, including attracting new business, promoting downtown redevelopment, aiding blighted areas, relieving fiscal distress, providing off-budget financing to avoid political opposition, capturing tax revenues from overlapping jurisdictions, and retaining or expanding existing businesses. Due to the inherent unpredictability of economic cycles, however, outcomes are often subject to considerable uncertainty, particularly when TIFs have a full 23-year lifespan. According

to Haider and Donaldson (2016, p.14), for example, TIF projects “launched during or at the onset of an economic recession are unlikely to experience a strong increase in property values.” Similarly, Das, Larson and Zhao (2010) found that TIF districts created in positive economies tend to perform better than ones created during (or near) recessionary periods.

The success of TIFs also varies in accordance with the types of land uses involved. Haider and Donaldson (2016) found that single-purpose land-use developments do not tend to foster significant appreciation of property values or higher rates of growth. Other research shows that mixed-use developments that provide new residential developments in combination with other land uses are more likely to be successful (Bhatta, Merriman and Weber, 2003; Carroll and Sachse, 2005). Wang (2009) emphasizes the importance of carefully specifying “the goal of each TIF before adoption” to assure that policies are aligned with expectations.

The politics associated with this tool can also be complex. Lefcoe (2011) suggests that, when TIF is used in blighted areas, existing residents often do not benefit, due to the elimination of residential housing in favor of commercial projects and gentrification in low-income areas. Moreover, using this tool can worsen the fragmentation of local governments by creating competition between neighborhoods and neighboring governments (Briffault, 2010; Ferkenhoff, 2014; Smith, 2009). In addition, residents can suffer when incremental revenues from these taxing districts fail to meet expectations, forcing the municipality to turn to other sources to meet bond obligations. In short, TIF is a powerful tool, but the research shows that it is fraught with political, economic and financial uncertainty. Chicago has been particularly aggressive in using this tool. Gibson (2003) found that TIF districts in the city were generally located in neighborhoods with higher vacancy rates, older structures, higher unemployment rates, lower percentages of white residents and lower income households. This same research nonetheless shows that these districts tend not to be located in the most blighted areas. Gibson suggests that these areas tend to be “disadvantaged, but not too disadvantaged” due to the difficulty of making TIF projects successful and financially sustainable in the most blighted parts of the city. This tool has played a particularly large role in regenerating downtown Chicago. The school system, however, is often regarded a net loser, due to the fact that, when a city uses this technique, it does not see the incremental revenue until the district expires. In Illinois, this can exacerbate the mistrust that already exists between school districts and municipalities. Nevertheless, there are also many success

stories that point to the enormous benefits that can result from well-managed TIF projects.

CHANGING EXPECTATIONS AFTER THE GREAT RECESSION

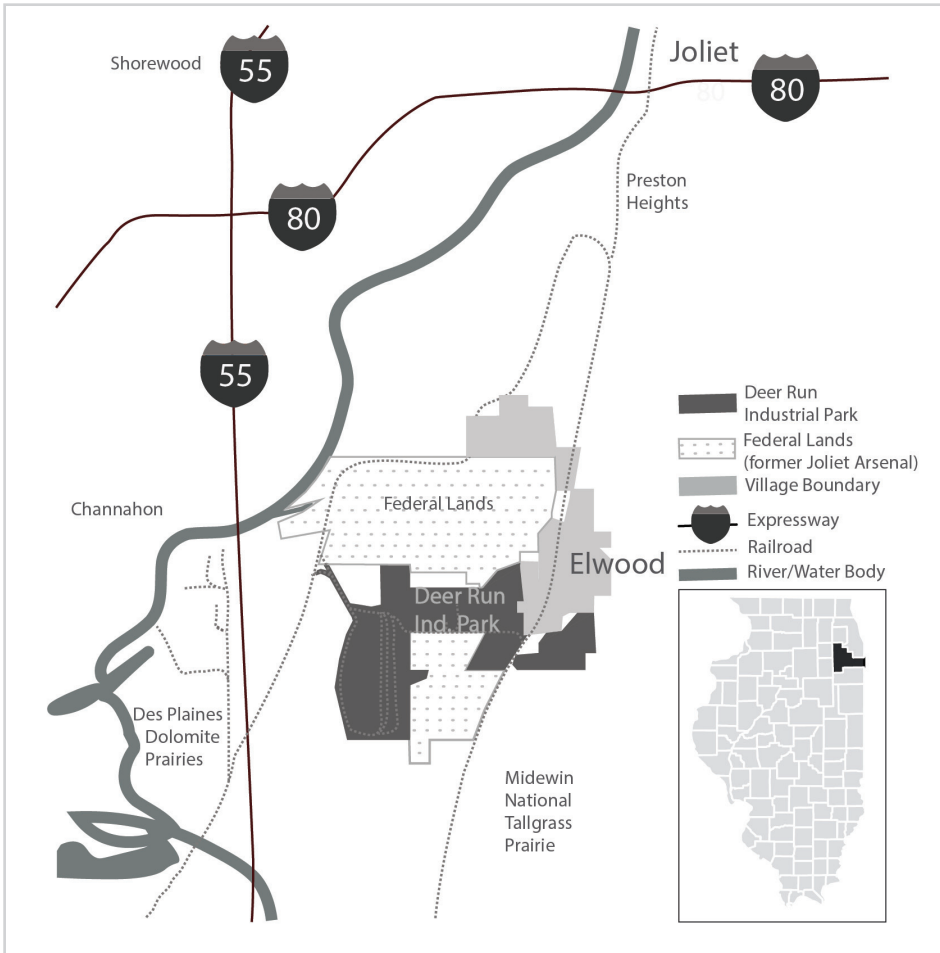
Virtually all communities with TIF districts have had to reassess their expectations in the wake of the Great Recession. The changing economic climate has been particularly difficult for projects relying on retail and manufacturing jobs. The Village of Elwood, Illinois, is among the many communities that have substantially modified a TIF project due to these changing conditions. While its example is instructive, the views presented here should not be interpreted as representing the views of the Village of Elwood; the following conclusions were developed independently.

Elwood is a small community with approximately 2,300 residents in Will County, approximately 10 miles from Joliet, the county seat. For generations, this crossroads remained a farming community, but in the 1930s, it became home to a growing number of workers from the rapidly expanding Joliet Army Ammunition Plant, formerly known as the Joliet Arsenal (Arsenal). By the 1980s, the Arsenal was in a severe state of decline, and the property became a Superfund site that suffered from a range of problems, including runoff from a coal-fired power plant that had contaminated a river. This created extreme planning challenges that could not be resolved within the budget constraints of the village government. The environmental problems associated with the site were expected to worsen as the aging facilities deteriorated.

Working with prominent consultants and financial institutions, Elwood created the Deer Creek Industrial District on 1,820 acres of the former Arsenal land, which was annexed and rezoned by the village in 2000. The state of Illinois provided loans and grants for local water, sewer and transportation improvements. Industrial real-estate company CenterPoint began construction in 2000 and the facility opened in 2002. This TIF district was situated in an area with extensive rail service by both BNSF and Union Pacific railroads, and near the busy interchange of I-55 and I-80 (Figure 1), which is regarded as holding considerable strategic importance for the logistics sector. The district was envisioned to host a large intermodal rail yard, businesses and warehouses, and, once fully built, it would encompass more than 2,500 acres. Situated on an interface of eastern and western United States railroad systems, Elwood sought to leverage its strategic location for logistics and warehousing.

Furthermore, the project was expected to create as many as 8,000-12,500 industrial, manufacturing, commercial and retail jobs (O'Brien, 2000). The industrial park was planned to include manufacturing, retail stores, restaurants and hotels (Monson, 2013). The economic development plan for the industrial park illustrates the goal of dividing the property in parts for intermodal, commercial, services, power plant and industrial development.

FIGURE 1
Elwood, Illinois, and its Surroundings



Such ambitious mixed-use development, however, was obviously not feasible during and immediately after the Great Recession. As in many, if not most, of the TIF districts in the country established in the years leading up to the Recession, a gap emerged between *planned* acreage and *actual* acreage in most land-use categories. Although the acreage for intermodal use exceeded expectations, other sought-after aspects of the projects did not materialize. Conditions were made worse by the well-publicized challenges facing the state, which experienced an average annual Gross Domestic Product (GDP) growth that lagged behind the national average. Illinois' real estate crisis was particularly severe, which likely made achieving many types of development targets impossible. (See "Retail Construction in Illinois: Why the Slump," on page 123 of Volume 1 Number 1 of the *Illinois Municipal Policy Journal* for a summary of the fall in retail development). Although its economy has been improving, in 2017, Illinois ranked 11th worst among U.S. states in unemployment, while also experiencing a gradual loss in population.

Through 2014, the number of jobs generated at the Elwood industrial park totaled about 3,800, with employment almost entirely concentrated in the intermodal category. Tax proceeds lagged behind expectations, and concerns over the debt associated with the project grew. In response, the village took the innovative step of constructing *two* balance sheets: one with net position *including* the Deer Run Industrial Park TIF, and another with net position *excluding* the Deer Run Industrial Park TIF. This helped stakeholders appreciate the scale of the debt in the district against the background of the village's general assets and liabilities.

Through a series of strategic steps, legal actions, and, eventually, a financial restructuring, the village is working to gradually adjust the goals for the industrial park. It is conducting extensive research on its options and developing a plan to pursue a new set of industrial and intermodal opportunities. Supported by consultants and gaining the full cooperation of the project developer, CenterPoint, Elwood is collaborating on an expansion that is anticipated to increase its intermodal and manufacturing development.

The village is also working with CenterPoint on a variety of projects to enhance safety and promote other goals in the community. Efforts are being made to address the rise in truck traffic, including movements to and from the nearby CenterPoint facility in Joliet. Elwood's bond rating now stands at AA, and the village anticipates that development will grow appreciably over the next 10 years. A sense of optimism has returned.

CONCLUSION

There are several takeaways from this analysis that warrant attention from municipal leaders. First, the literature suggests that TIF is an enormously powerful tool that can generate large benefits. However, it also shows that navigating the politics surrounding this tool often becomes more difficult during periods of slow economic growth. Such conditions add to the challenges facing the taxing bodies affected by the creation of these districts, particularly when they receive “pushback” from local residents. In the relatively slow-growth conditions that currently characterize many parts of Illinois – in which taxing bodies face the prospect of gradually declining revenue – the apprehension over the use of this tool can manifest itself in accusations that the benefits of TIF are not spread equitably. This problem is compounded by the fact that many residents often do not fully understand the tool’s complexity or timeline.

Secondly, current academic research is mixed regarding whether this form of financing can be highly effective in some of the most blighted neighborhoods. Some research suggests that TIF districts have been most effective in areas that already had at least some momentum for development. As a result, local governments may need to consider other tools when trying to abet a turnaround in some of their most distressed areas.

Finally, the case study example from Elwood demonstrates how strategies for promoting development can and should be regularly re-evaluated in light of changing economic conditions. This community shows how planners can respond to the changing realities of a marketplace by modifying the goals of a TIF district to capitalize on emerging opportunities.

In a similar vein, TIF plans should be developed cautiously and used in combination with other incentives or as part of more comprehensive public-private partnership efforts. Local governments should also work with legal counsel and financial experts throughout the planning process to mitigate the risks, as was done in the case-study example described above.

Overall, this financial tool is expected to remain a central component of planning and financial strategies at a time when municipal budgets throughout Illinois are extremely tight. This research shows that communities must retain a “hands on” role that involves constantly re-evaluating and repositioning TIF districts in response to emerging challenges and opportunities. In the reference section, readers will find a listing of some of the notable literature on this powerful development tool.

Natalia Ermosova is Assistant Professor of Public Administration at Governors State University. Amanda George is a graduate of the university's Master in Public Administration Program and conducted research for this article as part of her classwork.

¹ Substantial editorial and substantive contributions to this article were provided by Joseph P. Schwieterman, professor of Public Service Management at DePaul University.

² For more information regarding successful public-private partnerships, see page 103.

REFERENCES

- Bhatta, S.D., Merriman, D. and Weber, R. (2003). Does tax increment financing raise urban industrial property values? *Urban Studies*, 40(10), 2001-2021.
- Briffault, R. (2010). The most popular tool: Tax increment financing and the political economy of local government. *The University of Chicago Law Review*, (4)1, 65-95.
- Brueckner, J. K. (2001). Tax increment financing: A theoretical inquiry. *Journal of Public Economics*, 81(2), 321-343.
- Carroll, D.A. and Sachse, J. (2005). In Kalambokidis L. (ed.), *Declining Cities During Times of Fiscal Constraint: Is Tax Increment Financing Effective for Residential Redevelopment?* Washington, D.C.: National Tax Association.
- Chapman, J. I., Gorina, E., Park, P., Llewellyn, S. and Murray, C. (2012). Municipal fiscal stress and the use of tax increment financing (TIF): Transplanting TIF to the UK. *The Town Planning Review*, 83(2), 195-212.
- CenterPoint (2013). *Project overview*. CenterPoint Properties. Retrieved from <http://www.centerpoint-intermodal.com/overview.html>.
- Comptroller Illinois (2016). *TIFs Reports*. Retrieved from <https://illinoiscomptroller.gov/services/local-government-division/upload-tif-reports/>.
- Cook County report (2016). *TIFs Report*. Retrieved from <http://www.cookcountyclerk.com/tsd/DocumentLibrary/2015%20TIF%20Report.pdf>.
- Council of Development Finance Agencies (2008). *Recommended Practices: Effective Tax Increment Finance Program Management*. Retrieved from <https://www.cdfa.net/cdfa/cdfaweb.nsf/ordredirect.html?open&id=recpracTIF.html>.
- Das, K.V., Larson, K. and Zhao, Z.J. (2010). Tax increment financing as a value capture strategy in funding transportation. *Transportation Research Record: Journal of the Transportation Research Board*, 2187, 1-7.
- Dye, R. F. and Merriman, D. F. (2000). The effects of tax increment financing on economic development. *Journal of Urban Economics*, 47(2), 306-328.
- Dye, R. F. and Sundberg, J. O. (1998). A model of tax increment financing adoption incentives. *Growth and Change*, 29(1), 90-110.

- Gibson, D. (2003). Neighborhood Characteristics and the Targeting of Tax Increment Financing in Chicago. *Journal of Urban Economics*, 54, 309-327.
- Gordon, C. (2003). Blighting the way: Urban renewal, economic development, and the elusive definition of blight. *Fordham Urban Law Journal*, 31(2), 305-337.
- Ferkenhoff, E. (2014). *TIF districts: A beginner's guide to Chicago's 'shadow budget.'* Chicago Bureau. Retrieved from <http://www.chicago-bureau.org/tif-districts-a-beginners-guide-to-chicagos-shadow-budget/>.
- Civic Lab. (2013). *How do TIFs work?* Retrieved from http://www.civiclub.us/tif_illumination_project/how-do-tifs-work/.
- Felix, R. A. and Hines, J. R. (2013). Who offers tax-based business development incentives? *Journal of Urban Economics*, Elsevier, 75(C), 80-91.
- Fortino, E. (2013, September 4). Elwood takes legal action against CenterPoint over prevailing wage dispute. *Progress Illinois*. Retrieved from <http://progressillinois.com/quick-hits/content/2013/09/03/elwood-takes-legal-action-against-centerpoint-over-prevailing-wage-dis>.
- Greifer, N. (2007). *An Elected Official's Guide to Tax Increment Financing*. GFOA Research & Consulting Center.
- Haider, M and Donaldson, L. (2016). Can Tax Increment Financing Support Transportation Infrastructure Investment? *IMFG Papers on Municipal Finance and Governance*, 25, 1-34.
- Illinois Department for Revenue (2015). *Revenue Report*. Retrieved from <http://tax.illinois.gov/AboutIdor/TaxResearch/JulyFY2015RevenueReport.pdf>.
- Illinois Tax Increment Association (2016) *About TIF*. Retrieved from <http://www.illinois-tif.com/about-tif/faqs/>.
- LaPlante, J. (2001). Who Uses Tax Increment Financing? Local Government Adoption Catalysts. *Municipal Finance Journal*, 2, 78-97.
- Lefcoe, G. (2011). Competing for the next hundred million Americans: The uses and abuses of tax increment financing. *The Urban Lawyer*, 1, 427-482.
- Leone-Cross, L. (2015, June 17). Elwood suit alleges CenterPoint destroyed documents. *The Herald-News*. Retrieved from <http://www.theherald-news.com/2015/06/17/elwood-suit-alleges-centerpoint-destroyed-documents/ar2u7qr/>.
- Man, J. Y. (1999). The impact of tax increment financing programs on local economic development. *Journal of Public Budgeting, Accounting & Financial Management*, 11(3), 417. Retrieved from <http://pracademics.com/attachments/article/1104/man.pdf>.
- Man, J. (2001). *Effects of tax increment financing on economic development*. In C. Johnson & J. Man (Eds.), *Tax increment financing and economic development*. Albany, NY: State University of New York Press. 1010-1112.
- Merriman, D. F., Skidmore, M. L. and Kashian, R. D. (2011). Do Tax Increment Finance Districts Stimulate Growth in Real Estate Values? *Real Estate Economics*, 39(2), 221-250.
- Mikesell, J. (2014). *Fiscal administration: Analysis and applications in the public sector* (8th ed.). Belmont, CA: Thomson/Wadsworth.
- Miles, M. P. and Covin, J. G. (2007), Strategic Use of Corporate Venturing. *Entrepreneurship Theory and Practice*, 31(2), 183-207.

- O'Brien, K. (2000, June 11). Elwood Sees Opportunity Just Around The Corner. Retrieved from *Chicago Tribune*: http://articles.chicagotribune.com/2000-06-11/news/0006110053_1_village-boardwater-system-water-rate-hike.
- Operating Budget, Village of Elwood (2014). Retrieved from <http://villageofelwood.com/DocumentCenter/View/49>.
- Orlofsky, J. (2013). *Complaint for Accounting, Declaratory Relief, and Specific Performance*. Chicago, IL: Circuit Court of Cook County, Illinois.
- Pacewicz, J. (2013). Tax increment financing, economic development professionals and the financialization of urban politics., *Socio-Economic Review*. 11(3), 413-430.
- Savage, J. and Black, G. (1995). Firm-Level Entrepreneurship and Field Research: The Studies in Their Methodological Context. *Entrepreneurship Theory and Practice*. 3(2), 83-107.
- Smith, B. C. (2009). If you promise to build it, will they come? The interaction between local economic development policy and the real estate market: Evidence from tax increment finance districts. *Real Estate Economics*, 37(2), 209-234.
- TIF Portal. (2016). *City of Chicago*. Retrieved from <http://webapps.cityofchicago.org/ChicagoTif/>.
- U.S. Bureau of Labor Statistics (2016). *Major economic indicators*. Retrieved from <http://www.bls.gov/>.
- Village of Elwood (2000). *Economic development plan for the proposed Deer Run Industrial Park*. Retrieved from <http://www.villageofelwood.com>.
- Village of Elwood. (2009). *Deer Run Industrial Park Economic Development Project Area Tax Incremental Financing District*. Elwood, IL: Village of Elwood.
- Village of Elwood. (2014) *Annual operating budget fiscal year ending 04/30/2014*. Prepared by Roberta D. Day. Retrieved 27 May, 2016 from the Village of Elwood website: <http://www.villageofelwood.com/government/documents/201314GFOABudget.pdf>.
- Village of Elwood (2014). Comprehensive Annual Financial Report 2013. Retrieved from <http://villageofelwood.com/ArchiveCenter/ViewFile/Item/55>.
- Village of Elwood (2015). Successful bond management nets \$375,000 savings for the village. Retrieved 7 September, 2017 from the Village of Elwood website: <http://www.villageofelwood.com/Archive/ViewFile/Item/78>.
- Village of Elwood (2016). CAFR 2016. Retrieved from <http://www.villageofelwood.com/Archive/ViewFile/Item/145>.
- Wang, H. (2009). *The adoption and effects of different types of TIFs*. PhD Dissertation in School of Public and Environmental Affairs, Indiana University.
- Weber, R. and Laura Goddeeris, L. (2007). *Tax Increment Financing: Process and Planning Issues*. Lincoln Institute of Land Policy Working Paper.
- Will County Clerk (2016). *TIFs reports*. Retrieved from <http://assets01.aws.connect.clarityelections.com/Assets/Connect/RootPublish/will-il.connect.clarityelections.com/Tax%20Extension/2015%20Reports/TIF%20Information/Bolingbrook%20TIF%202.pdf>.

ISSUE BRIEF

CURBSIDE COMPOSTING IN ILLINOIS: TRENDS AND EMERGING BEST PRACTICES

C. SCOTT SMITH, APRIL JANSSEN MAHAJAN AND JOSEPH P. SCHWIETERMAN
DEPAUL UNIVERSITY

The curbside collection of food scraps for composting has become a popular way for municipalities to pursue sustainability goals and divert waste from landfills. This issue brief summarizes the paradigm shift in waste management from disposal to materials recovery, with special attention to food waste and composting. By reviewing the general trends underway nationwide as well as evaluating the evolution, scope and structure of programs in three Illinois communities, it identifies context-specific “best practices” for communities considering instituting or expanding their food-scrap collection efforts.

RESIDENTIAL MUNICIPAL COMPOSTING PROGRAMS: EVOLUTION AND TRENDS

Communities across the United States are slowly expanding their waste-management services to include the large-scale collection of food scraps for composting. Recent research indicates that about 200 communities had curbside collection programs nationwide in 2015, up from only about 25 a decade before (Yepsen, 2015). Illinois has mirrored the national trend, experiencing a recent surge in municipal composting programs. At least 20 communities throughout the state have rolled out curbside food-scrap collection services since 2015 (Illinois Food Scrap Coalition [IFSC], 2017).

While the motivation for developing a curbside composting program varies from city to city, several inter-related factors often spur their creation, including: (i) pressures to comply with national, state and even county-wide waste-diversion mandates and related policies; (ii) civic environmentalism and the development and widespread implementation of community sustainability initiatives; (iii) improvements in organics collection and processing infrastructure, including growth in local composting facilities; (iv) reductions in landfill capacity and, in some cases, increases in disposal costs; and (v) a desire to leverage the multifold social, economic and environmental benefits of large-scale composting, more generally.

This article explores key aspects of municipal food-waste collection programs in Illinois by drawing on in-depth interviews with public officials, reviews of prior studies and examinations of published data. We begin by summarizing factors that are influencing the development and structure of large-scale food-scrap collection programs across the country, with special attention paid to the governance of and markets associated with commercial composting. Second, we share the experiences of three Illinois communities that have taken different paths toward adopting food-scrap collection programs. Finally, we conclude by identifying a set of emerging best practices that may be helpful for municipalities that are considering developing or expanding a food-scrap collection program.

FROM LOCAL WASTE REMOVAL TOWARD MATERIALS RECOVERY

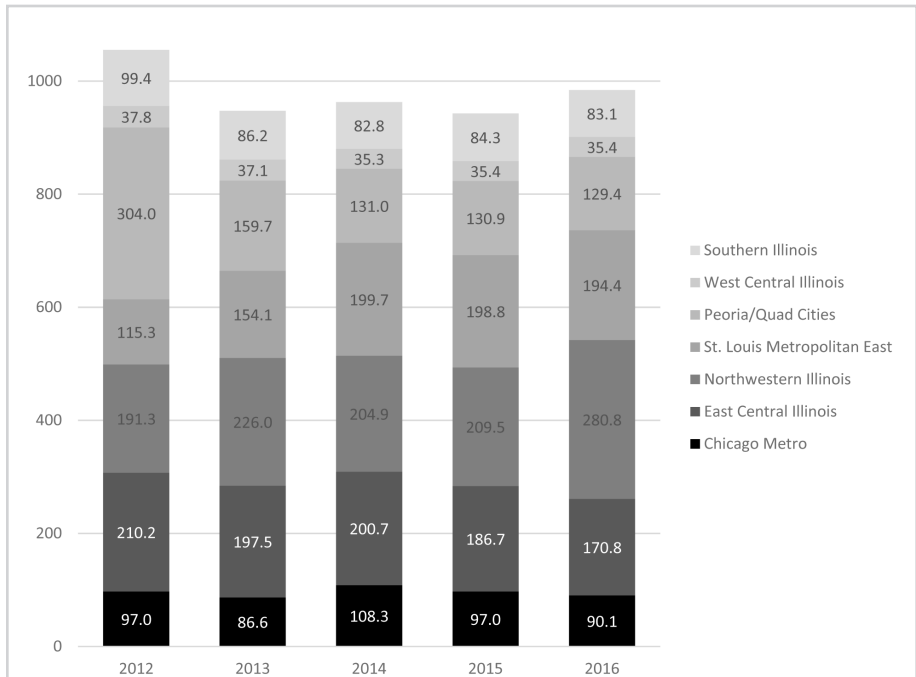
The gradual but widespread transition toward large-scale food-scrap collection should be regarded as part of the longer-term shift in municipal solid waste (MSW) management away from *waste removal* toward *materials recovery*. Coordinated, citywide waste removal has its roots in the sanitary reforms of the late 19th and early 20th centuries (i.e., the Progressive Era), when cities came to the realization that public health could only be achieved through extensive and inclusive infrastructure improvements that benefit everyone (Corburn, 2009). These early efforts gave rise to the development of city sanitation districts responsible for street sweeping, refuse collection, landfill disposal, and other public health-related services largely crafted to protect city dwellers from the byproducts of disposal including noxious odors and disease (Gilstrap, 2012). These services gradually became more mechanized through a variety of technological innovations in transportation (e.g., motorized, large-capacity trucks and barges) and trash processing (e.g., incineration, recycling) (Louis, 2004).

As the environmental movement gained momentum during the 1970s, federal agencies and policies focused on both reducing human contact with waste, and eliminating uncontrolled disposal and recovering valuable materials from the waste stream. One influential policy, the Resource Conservation and Recovery Act of 1976 (RCRA), instituted a nationwide phase-out of unlined waste landfills, resulting in a shift toward fewer and larger disposal facilities. Subsequent rises in disposal costs, together with continued urbanization and local resistance to landfill development, encouraged states and cities around the country to postpone the siting of new landfills by avoiding the dumping of otherwise valuable resources.

Interest in diverting materials from landfills escalated as ever-larger amounts of solid waste were generated, resulting in per capita MSW in the county jumping from 2.68 pounds per day in 1960 to a peak of 4.74 pounds per day in 2000, a 176% rise (U.S. EPA, 2016). Because Illinois residents tended to generate more waste per capita than those in other states (about 20% more per capita in 2007), communities found it necessary to pay haulers to make additional trips to the landfill, increasing waste management costs and consuming, in some cases, scarce landfill capacity (Don Fullerton and Sarah Miller, 2011). In some regions, shortages of landfill space became an issue (Figure 1). Although total available landfill capacity has remained rather stable across Illinois in recent years, the Chicago metropolitan region, which is home to 67.6% of the state's

FIGURE 1

Trends in Available Landfill Capacity by Illinois Region (millions of tons), 2012-2016



Source: Illinois Environmental Protection Agency Landfill Capacity Reports, 2012-2016.

Available landfill space has diminished modestly since 2012, although the declines have been much more significant in the highly populous Chicago metropolitan area as well as in the Peoria/Quad Cities area and East Central Illinois. The St. Louis metropolitan area and Northwestern Illinois regions have seen large increases in available capacity.

total population, accounted for only 9.2% of the state's share in 2016 (90.1 million tons, or 10.4 tons per person). Landfills in this metropolitan region also have the lowest life expectancy in the state at 11.5 years, and have the fewest incentives to expand due to increasing population density, competing land uses and lack of political interest.

Beginning in the mid-1980s, materials recovery through large-scale municipal curbside recycling programs accelerated dramatically throughout the United States, resulting in a three-fold increase in the share of total waste diverted from landfills between 1985 (when 10.1% of waste was diverted) and 2010 (when diversion was 34.0%) (U.S. EPA, 2016). The diversification of municipal waste streams not only curbed many one-way trips to landfill and incineration facilities; it also encouraged a broader transformation of the waste economy, via the development of systems for collecting, processing and marketing post-consumer and post-industrial waste (DePaolo, 1994; Scheinberg, 2003). By 2014, for example, the rate of lead-acid battery recycling in the country had risen to 99% (2.81 million tons) and the rate of corrugated box recycling had surpassed 89% (27.3 million tons) (U.S. EPA, 2016). Likewise, between 2008 and 2014, Illinois experienced substantial growth in the material recovery of metal (a 40.8 percentage point increase), paper (a 10.2 percentage point increase), and textiles (a 17 percentage point increase), which helped boost the statewide diversion rate from 19.1 to 37.3 over the same period (DCEO, 2015).

After 2010, however, recycling rates plateaued, with only 0.15% annual growth recorded between 2010 and 2014 nationwide (U.S. EPA, 2016). Materials recovery in Illinois has also been relatively static for many of the primary recycling groups, including beverage containers, plastics and glass (Don Fullerton and Sarah Miller, 2011). These slowdowns are, in part, due to an easing of consumer demand for recycled products, downturns in prices of recyclable commodities and challenges related to expanding the municipal collection of recyclable goods (Mueller, 2013; Tonjes and Mallikarjun, 2013). This stabilization in recycling has led states, counties and municipalities across the country to gradually turn to the composting of organic waste as a way to achieve greater social, economic and environmental benefits, including landfill diversion.

ENHANCING YARD WASTE DEBRIS COLLECTION TO INCLUDE FOOD SCRAPS

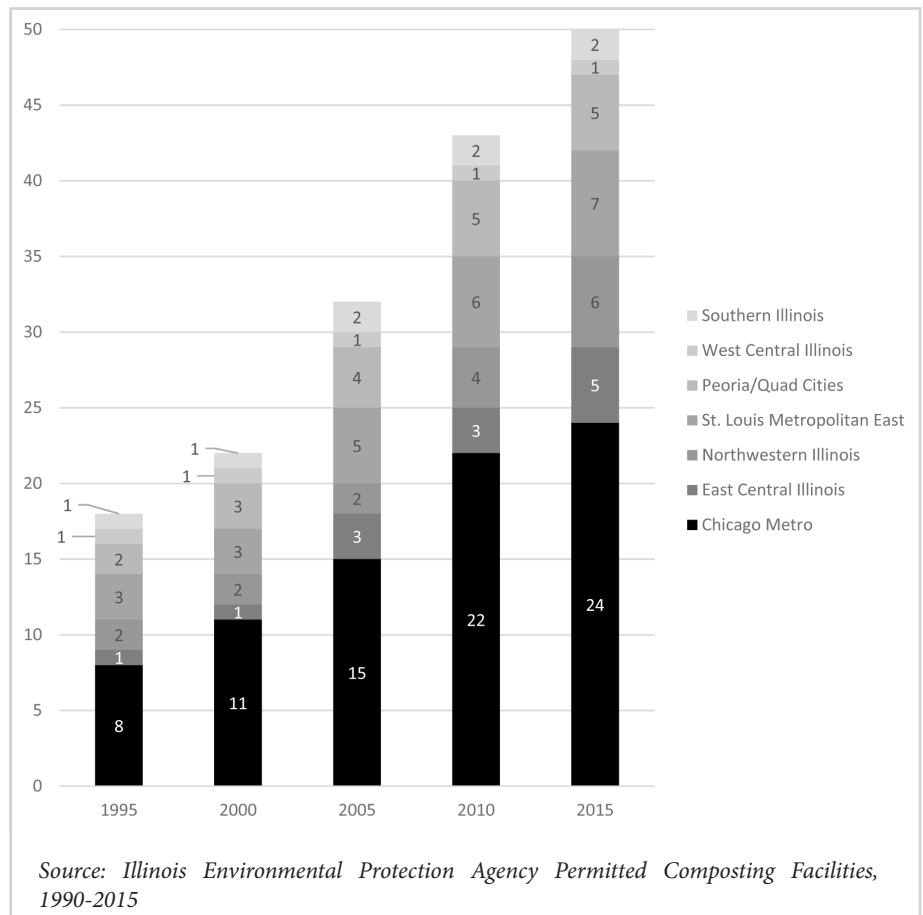
The large-scale municipal composting of organics is not altogether new. Indeed, communities across the country started the incremental process of diversifying

their MSW systems to include curbside organic waste collection and composting nearly three decades ago. In Illinois, this process began in earnest with the passage of Public Act 85-1430 under the Illinois Environmental Protection Act, or EPA Act. The Act banned landscape debris (e.g., grass clippings, leaves and brush) from being placed in landfills beginning on July 1, 1990.

The ban also led to the local development of new composting facilities throughout Illinois, including 24 new establishments in the Chicago metropolitan region alone (Figure 2). This growth in composting facilities was concurrent with a drop in the number of conventional landfills, from 43 in 2012 to 38 in 2016 (IEPA, 2017). According to one recent study, at least 20 other states have instituted similar yard-waste bans (Brenda Platt, Nora Goldstein and Craig

FIGURE 2

Active Composting Facilities in Illinois, (cumulative count by year) 1990-2015



Coker, 2014). In 2014, an estimated 5,000 facilities across the United States were licensed to accept organic material, marking a dramatic increase in the local capacity to process solid organic waste.

Developing local capacity for composting yard debris was a prerequisite to reducing organic materials sent to landfills. Between 1960 and 1980, the composting of MSW organic matter was negligible, but it increased to 2.0% in 1990 after the aforementioned yard-debris bans took effect (U.S. EPA, 2016). By 2014, yard debris comprised about 13.3% (34.3 million tons) of total MSW generation, 61.1% (21.0 million tons) of which was recovered via composting. In a relatively short period of time, yard debris became the second-largest category of material diverted from landfills when measured by weight, achieving a rate just below paper and paperboard (68.2%). In contrast, only 5.1% of food waste generated nationwide was recovered for composting (2.0 of the total 38.4 million tons generated). In fact, at 21.6%, food scraps represented the single largest category of material landfilled in the country in 2014.

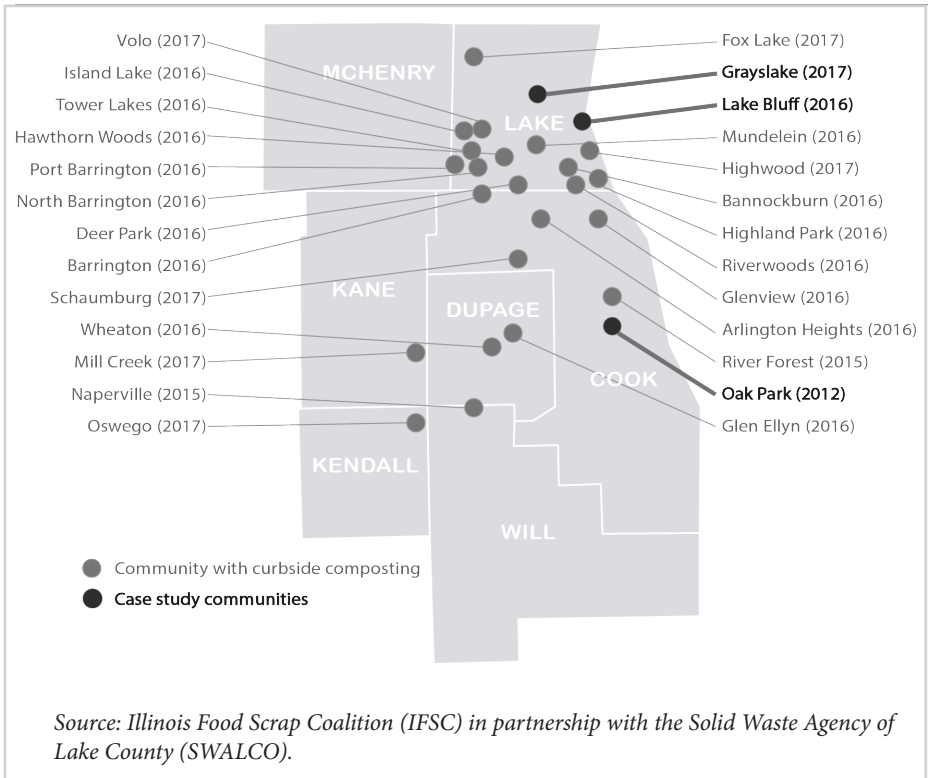
That residents of our country habitually throw away valuable organic resources has not been lost on the general public, non-profit groups, and public entities that have championed and/or adopted ambitious food-scraps collection programs to reverse the pattern. In 2000, San Francisco established its program for curbside collection of food scraps, the first in the United States. Five years later Toronto, Canada, launched its Green Bin collection program, the material from which is composted in the city's own processing facilities. Cities of all sizes across the United States followed suit: large (e.g., Seattle [2005], Denver [2010], Portland, Oregon. [2011], New York City [2013]); medium (e.g., Boulder, Colorado [2010], Cambridge, Massachusetts [2011], Berkeley, California [2012]); and small (e.g., Ann Arbor, Michigan [2010], Oak Park, Illinois [2012]). BioCycle's latest survey identified close to 200 communities across the country with curbside composting programs, representing nearly three million residents in 19 states (Yepsen, 2015).

Spearheaded by advocacy groups including Seven Generations Ahead, schools, Community Assistance for Recycling and Composting Education (SCARCE), and the Solid Waste Agency of Lake County (SWALCO), Illinois signed into law Public Act 96-0418, which exempted commercial composting establishments from the restrictive local siting portion of the facility permitting process designed primarily for conventional landfills and hazardous-waste management sites. In 2013 these permit exemptions were extended to small composting facilities via HB 2335 and HB 3319, which allowed rural farms

to expand the materials accepted for composting, including food scraps; expanded the volume of food waste that could be accepted by “garden compost operations”; and allowed urban farms to enjoy the same permit exemptions as rural farms. Prior to 2009, no Illinois facilities held permits to accept and compost food waste.

In recent years, and in response to changes in the permitting of food composting, Illinois has experienced a groundswell in the municipal collection of food scraps for composting. According to a recent inventory, 26 communities in the state have such programs (Figure 3) (IFSC, 2017). Notably, all of them are located in counties within the Chicago metropolitan region (i.e., Cook [6], DuPage [3], Kane [1], Kendall [1] and Lake [15]). Together, the municipalities represent 673,012 residents and 249,202 households (U.S. Census Bureau, 2017), although not all residents can or do fully participate in their respective composting program. Some of the momentum behind composting in urban locations is being driven

FIGURE 3
 Illinois Communities that offer Curbside Collection of Food Scraps, 2017



by the recognition that healthy soil promotes food access in economically distressed neighborhoods. Research by Howard Rosing and Jacob Horn of DePaul University explores this idea by analyzing the wide range of composting policies in North American cities and determining how gardeners in Chicago think about and practice composting (Rosing and Howard, 2016). Their analysis suggests that links between urban gardening and composting will likely grow stronger as the food-waste collection systems grow more sophisticated.

MUNICIPAL CASE STUDIES

To provide an illustration of municipal “best practices,” we evaluated published reports and inventories of composting programs throughout Illinois. In addition, we reached out to municipal officials from three communities to gain insights about the evolution and structure of their respective food-scrap collection programs. These communities – Oak Park, Grayslake and Lake Bluff – were selected to illustrate some of the methods underway in three very different contexts.

To inform our case studies, we interviewed Karen Rozmus, Oak Park’s outgoing Environmental Services Manager, who was influential in spearheading the village’s CompostAble food-scrap collection program and had just recently retired. We also spoke to Village Administrator Drew Irwin and Assistant Village Manager Kevin Timony to inform our understanding of Lake Bluff’s and Grayslake’s composting programs, respectively.

Each public official was asked open-ended questions about the origin and characteristics of their food-scrap collection program. The semi-structured interviews also included additional conversation-style follow-up questions that provided opportunities for participants to communicate extended meanings, clarifications, or interpretations about particular aspects of their programs. Interviewees were also encouraged to share stories about a broad range of experiences related to their program’s evolution, development, goals and effectiveness. This in-depth and interpretive data-gathering strategy yielded information about each program that was both comparable across all three communities as well as nuanced and place-specific. Table 1 summarizes key characteristics of the three municipal programs and contexts, including community population size, program participation rate, program launch date, frequency of food waste collection and the types of organic materials accepted.

TABLE 1 Characteristics of Select Municipal Curbside Food-Scraps Collection Programs in Illinois

COMMUNITY	VILLAGE OF OAK PARK	VILLAGE OF GRAYSLAKE	VILLAGE OF LAKE BLUFF
Launch date	4/1/2012	4/1/2016	3/1/2017
Households subscribing and (participation rate)	1,208 subscribe of 21,612 households (5.6%)	<175 subscribe of 7,699 total households (<2.3%)	Not available
Community goal(s)	reduce landfill waste	derived from SWALCO 60% Recycling Taskforce	derived from SWALCO 60% Recycling Taskforce
Service availability	year-round	yard-waste season (YWS)	year-round
Pick-up frequency	weekly in YWS; bimonthly in winter	weekly	weekly
Membership	optional (subscription)	optional (subscription and PAYT)	optional (basic services)
Sign-up procedure	online or by calling village	calling waste hauler; purchase stickers at local shops for PAYT	calling hauler
Cost for residents	\$14.42 per month in YWS; prorated in winter season	\$78.80 per YWS; \$2.29 per sticker service	no charge to residents, part of basic services
Cart / container	96-gallon (or smaller) cart provided with bucket and box of compostable bags	35-gallon cart can be rented for \$3/month, or use own cart up to 32-gallon	35-gallon cart can be rented for \$60/year; or use own cart or Kraft bags up to 32-gallon
Organics accepted	landscape waste; soiled paper; most food scraps	landscape waste; soiled paper; most food scraps	landscape waste; limited food scraps
Hauler	Waste Management	Waste Management	Groot
Composting location	Land & Lakes and Willow Ranch Composting Romeoville, IL	Midwest Organics Chicago, IL	Village of Lake Bluff Public Works Dept. and DK Organics, Lake Bluff, IL
Drop-off	not available	community-wide*	not available

* Drop off option available at no additional cost all year

OAK PARK, COOK COUNTY (POP. 52,080)

Having been launched more than five years ago, the Village of Oak Park's CompostAble curbside organics collection program is the longest-running program in Illinois. This voluntary and subscription-based service has grown steadily, beginning with 110 households as a pilot program and reaching 1,200 households at the time of this writing, with new members regularly joining. Oak Park's program is also one of the more comprehensive collection systems in our state, in that it offers year-round service and supports collection of yard debris, paper (e.g., pizza boxes), and both vegetable and animal food scraps including meat, dairy and egg products.

The roots of the program date to at least early 2011, when the village was engaged in contract negotiations with waste haulers. Oak Park's then Environmental Services Manager recommended to the village board that its present hauler be asked to collect food scraps as a way to "sweeten the pot" during the negotiation process (Karen Rozmus, 2017). At that time, the present hauler had, under Public Act 96-0418, already requested and received permits from the state to operate sites that accepted food scraps, some of which were in operation. The village worked closely with the hauler to devise a new contract that incorporated composting services. By April 2012, food-scrap collection in conjunction with yard waste began and was processed in a composting facility in Romeoville, Illinois, about 20 miles from Oak Park.

Oak Park has historically prided itself as being a leader in sustainable practices and has been on the forefront of policies that promote environmental education and social equity (Village of Oak Park, 2017). As such, it was relatively easy to find residents who were eager to participate in a pilot program aimed at collecting food scraps for composting. Subscription costs were initially set at \$14 per month, equivalent to the monthly cost of a weekly yard waste sticker. Large volume bins (96 gallons) were used as opposed to standard bins (35 gallons) for collection in part because the hauler had extra bins of the desired color readily available. The larger bins also allowed the village to offer residents the option to share the service with neighbors to lower costs while simultaneously allaying overflow concerns. Between April and November 2011, the 110 households who participated in the pilot program expressed overwhelmingly positive feedback, and at the end of the pilot period many requested that the village extend and expand the program. The hauler agreed to do bi-weekly collections in the winter months, inspiring the village to develop

a more formal program open to residents who use village waste-management services (i.e., largely residents living in single-family dwellings).

Oak Park has continued to expand the program to more residents as well as extend participation to village operations and other public and not-for-profit organizations. Presently, 10 schools, 10 churches, two park district facilities, the Oak Park River Forest Food Pantry, Oak Park Farmers Market, and special events including the village's extensive block parties now participate in the municipal food-scrap collection program.

The village estimates that Oak Park households each throw away between 14 and 18 pounds of food-scrap per week. Although the village has not adopted discrete waste-diversion targets, it estimates that about 50% of waste generated from *participating* residential households and 55% of waste generated from village-related activities are being diverted from landfills. The village's William Beye Elementary School, for example, regularly achieves a 90% or higher landfill diversion rate as part of its Waste-Free-Wednesday cafeteria program due, in large part, to Oak Park's municipal food-scrap collection.

The village hopes to greatly expand participation in its composting program by fostering awareness among residents through various education and marketing campaigns. Other incentive mechanisms, including a Pay As You Throw (PAYT) system, where residents would pay a per-unit fee for disposing of landfill waste, have also been considered by the village as a way to encourage recycling and composting. One of the greatest challenges for higher-density communities such as Oak Park concerns how to extend the program to multi-family households, which represent over 50% of the village total but do not qualify for village-operated residential household waste, recyclable material and yard-waste collection services.

GRAYSLAKE, LAKE COUNTY (POP. 21,117)

In April 2016, the Village of Grayslake began allowing residents the opportunity to co-mingle food scraps with landscape waste as part of its established yard-debris pickup program. The village's scraps subscription service and landscape waste/food-scrap sticker service offers pickup of food scraps during the yard-waste season (YWS, or April through November) via a private hauler.

The curbside service allows residents to compost food scraps by purchasing stickers or sourcing a rigid container, without having to commit to a subscription service. Residents opting to utilize the PAYT service can pay

\$2.29 for waste stickers that are made available at local grocery, pharmacy and hardware stores. For those who do wish to subscribe, the cost is \$78.80 for the eight-month season. Use of a 35-gallon cart costs an additional \$3.00 per month, or residents can use their own (rigid and lidded) container of 32-gallon capacity or less.

Grayslake's municipal curbside composting program is different from the services offered by the other two case-study communities in that it offers its residents a *drop-off* option. Two to three large food-scrap containers complement the single-stream electronics, textile and shoe recycling collection bins located at the village's recycling center. Here, residents may drop off food-scrap along with other recyclable goods year round. The weekly tipping costs for this service are folded into the village's comprehensive waste-hauling contract.

FIGURE 4
Residential Food Scraps Drop-Off Location, Grayslake, Illinois



Source: Solid Waste Agency of Lake County (SWALCO). The signage clearly specifies the types of foods, as well as accompanying paper and cartons, permitted to be placed in the cart. This facility is open daily, except Sunday, during designated hours.

The village, located in Lake County, benefits by being an active member of the Solid Waste Agency of Lake County's 60 Percent Recycling Task Force. The Task Force has put forward ambitious landfill-diversion goals, including achieving a county-wide 60% recycling plus composting rate by 2020, a goal that the village is actively pursuing (Kevin Timony, 2017).

Grayslake is taking steps to make its food-scrap composting program a year-round service. Toward this end, it has strategically negotiated its hauling-contract terms, enabling year-round service if a set participation threshold of 175 households is achieved. That is, if 175 households sign up for the Landscape Waste/Food Scraps Subscription Service by September 1 each year of the contract, then the private hauler would provide collection services at \$11.40 per participating household per month during winter months. A common practice with initial curbside recycling services, this agreement allows both the municipality and the hauler to assume some portion of risk.

LAKE BLUFF, LAKE COUNTY (POP. 5,672)

The Village of Lake Bluff began its food-scrap composting program in early 2017, introducing it to the community as a pilot program. Taking advantage of existing, year-round landscape waste-collection services, the new contract with a private hauler and composter allows residents to commingle food scraps and landscape waste. Participants dispose of their yard debris and food scraps in large paper bags, or a 32-gallon bin available for rent at a cost of \$60 per year. Similar to Oak Park, the Lake Bluff program is open to all residents who qualify for village-operated waste-management services.

Organic materials explicitly restricted from weekly pick-up include meat, poultry, seafood, paper products, teabags and coffee filters. While these restricted items are compostable and typically accepted at commercial facilities, the village opted for a cautionary approach during the pilot phase in order to avoid confusion, contamination and address local concerns for wildlife. The lower-density village has considerable green space and wildlife, and has historically experienced problems with raccoons and other animals removing refuse from garbage bins. Over the first seven months of programming, however, the village has received only two related complaints, opening up the possibility of accepting more categories of food waste if the program is deemed successful (Drew Irwin, 2017).

Similar to Grayslake, the Village of Lake Bluff is located in Lake County and actively participates in the 60 Percent Recycling Task Force. Advancing

task-force diversion goals was one of the primary motivations driving the establishment of the pilot program.

DISCUSSION AND EMERGING BEST PRACTICES

This article has shown that municipalities are playing important roles across the country and in Illinois to improve environmental performance through food-scrap collection. The growth in curbside composting in Illinois can be attributed to a variety of factors, including state policies that have banned disposing of yard debris in landfills, and easing permitting for large- and small-scale composting facilities in both rural and urban areas. The three case studies also showed that, similar to materials recovery via recycling, composting programs can be successfully implemented in communities of different sizes (small, medium and large) with different population densities (low to high).

Within the past several years, reports have been written about the multifold benefits of composting as well as the challenges and best practices associated with developing municipal food-scrap collection services. The Illinois Food Scrap Coalition (IFSC), for example, identifies six key challenges that are impeding the development of an Illinois-wide food-scrap composting industry and over 20 solutions to address them (IFSC, 2015). The present study does not attempt to replicate such work, but rather provides additional clarity about trends and emerging best practices in light of recent activities in Illinois. We emphasize *emerging* because most of the programs referred to in this paper are truly in their formative stages, unlike recycling, which has achieved relatively high rates of participation only by working through multiple arrangements of collection, contracts and processing. We conclude, then, with a few key insights and emerging best practices for municipalities that are considering adopting or expanding food-scrap collection.

ENCOURAGE AND UTILIZE BROADER-SCALE COORDINATIVE EFFORTS

Municipal composting programs tend to arise more readily when county or other subregional institutions coordinate information-sharing and goal-setting across communities. The Solid Waste Agency of Lake County has coordinated with public entities and non-profits to give it an influential role in promoting awareness around the topic of recovering food waste in Illinois. For example, in 2015, it worked with Seven Generations Ahead, U.S. EPA Region V, and other organizations to create a half-day Food Scrap Composting Forum, which resulted in the development of the Illinois Food Scrap Coalition (IFSC) with

the mission to advance “food scrap composting in Illinois through program implementation, policy and advocacy” (IFSC, 2015).

The solid-waste agency also worked locally with community partners in Lake County to coordinate data collection efforts, such as encouraging its 43 member municipalities to request bids from their residential haulers for year-round curbside collection of organics. This information is continually reported back to municipalities to inform their own contract negotiations and formal requests for proposals (Walter Willis, 2017). The agency also helped five of its municipal members enact commercial franchises in 2014, whereby one hauler was given exclusive rights to collect waste, recyclables and organics from all the businesses in their jurisdictions, resulting in considerable savings.

Similar to other collection services, the costs of curbside composting decrease at larger scales. Expanding route densities, therefore, creates more opportunities for such services to increase their profit base, which could, in turn, reduce costs for municipalities. This is crucial for expanding such services given that year-round collection of food scraps can cost two to four times more than conventional refuse collection.

As reported earlier, a number of municipalities in Lake County have participated in the 60 Percent Recycling Rate Task Force and have taken steps to advance their respective waste-diversion targets. In this way, subregional entities such as counties or councils of governments can work with municipalities to develop a performance target platform that community commissions and other local entities can adopt to promote sustainability goals.

THERE IS NO UNIVERSAL MODEL PROGRAM

Perhaps the key lesson from this study is that multiple paths can be taken to develop and structure food-scrap collection programs and that no single approach is likely to be applicable or successful in all municipal contexts. This said, it would be advisable for municipalities to arrive at a context-sensitive solution through an incremental, transparent process that leverages stakeholder input, broader-scale coordinative efforts and opportunities for contract negotiation.

For medium and large cities, this process may entail working through an environmental commission to guide a feasibility study to estimate present and future waste-generation rates and potential capture of organic wastes from the residential, commercial and institutional sectors. Such a feasibility study can

also help assess the adequacy of regional composting capacity, and the logistics and costs for transferring materials and the optimal times for negotiating and phasing in such a service to residents. Moreover, municipal leaders should keep in mind that successful programs tend to begin with a pilot, which provides insights into the logistics of collection and a community's receptiveness, before commencing with a more general programmatic rollout.

C. Scott Smith, Ph.D., is Assistant Director and Joseph P. Schwieterman is Director of the Chaddick Institute for Metropolitan Development at DePaul University. April Janssen Mahajan is a graduate student in the Sustainable Urban Development Program.

REFERENCES

- Platt, B., Goldstein, N. and Coker, C.. (2014). *State of Composting in the US: What, why, where and how?* (p. 131). Institute for Local Self-Reliance.
- Corburn, J. (2009). *Toward the Healthy City: People, Places, and the Politics of Urban Planning* (1st ed.). The MIT Press.
- DCEO. (2015). *Illinois Commodity/Waste Generation and Characterization Study Update* (p. 323). Illinois Department of Commerce and Economic Opportunity.
- DePaolo, A. R. (1994). Plastics Recycling Legislation: Not Just the Same Old Garbage. *BC Envtl. Aff. L. Rev.*, 22, 873.
- Fullerton, D. and Miller, S. (2011). *Waste and Recycling in Illinois: Illinois communities cope with waste in different ways* (The Illinois Report) (pp. 70–80). Institute of Government and Public Affairs, University of Illinois, Urbana-Champaign.
- Irwin, D. (2017, July 21). Village Administrator for Village of Lake Bluff, IL.
- Gilstrap, C. (2012). Recycling in History. In C. Zimring and W. Rathje, *Encyclopedia of Consumption and Waste: The Social Science of Garbage*. 2455 Teller Road, Thousand Oaks, CA 91320 United States: SAGE Publications, Inc. <https://doi.org/10.4135/9781452218526.n280>.
- IEPA. (2017). *Illinois Landfill Disposal Capacity Report*. Illinois Environmental Protection Agency.
- IFSC. (2015). *Food Scrap Composting Challenges and Solutions in Illinois Report* (p. 84). Illinois Food Scrap Coalition.
- IFSC. (2017). Service Providers - Illinois Food Scrap Coalition. Retrieved August 8, 2017, from <http://illinoiscomposts.org/resources/service-providers/10-illinois-composts>.
- Rosing, Howard and Horn, J. (2016) *Fostering a Local Soil Culture: Food Scraps, Municipal Solid Waste Policy, and Community Garden Composting in Chicago*. Presented at Society for Applied Anthropology conference. May 29-April 2, 2016. Vancouver, BC, Canada.
- Rozmus, K. (2017, July 28). Environmental Services Manager, Village of Oak Park, IL.

- Timony, K. (2017, July 10). Assistant Village Manager for Village of Grayslake, IL.
- Louis, G. E. (2004). A Historical Context of Municipal Solid Waste Management in the United States. *Waste Management & Research*, 22(4), 306–322. <https://doi.org/10.1177/0734242X04045425>.
- Mueller, W. (2013). The effectiveness of recycling policy options: Waste diversion or just diversions? *Waste Management*, 33(3), 508–518. <https://doi.org/10.1016/j.wasman.2012.12.007>.
- Scheinberg, A. (2003). The proof of the pudding: urban recycling in North America as a process of ecological modernisation. *Environmental Politics*, 12(4), 49–75.
- Tonjes, D. J. and Mallikarjun, S. (2013). Cost effectiveness of recycling: A systems model. *Waste Management*, 33(11), 2548–2556. <https://doi.org/10.1016/j.wasman.2013.06.012>.
- U.S. Census Bureau, D. I. S. (2017). American Community Survey (ACS). Retrieved August 5, 2016, from <http://www.census.gov/people/disability/methodology/acs.html>.
- USEPA. (2016). *Advancing Sustainable Materials Management: 2014 Fact Sheet*. United States Environmental Protection Agency.
- Village of Oak Park. (2017). Environmental Initiatives. Retrieved September 14, 2017, from <http://www.oak-park.us/your-government/environmental-initiatives>.
- Willis, W. (2017, July 6). Executive Director of the Solid Waste Agency of Lake County (SWALCO).
- Yepsen, R. (2015). BioCycle Nationwide Survey: Residential Food Waste Collection in the US. *BioCycle*, 56(1), 53.

WEBINARS AND WORKSHOPS

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

WEDNESDAY, FEB. 14, 2018 — NOON-1 P.M.

Webinar: Strategies to Improve Downtown Districts: Lessons from Illinois Municipalities

Presenters: Norman Walzer and Mim Evans, Northern Illinois University; Steve Wilson, Wilson Planning + Design

Co-hosted by the Municipal Design Review Network

WEDNESDAY, MARCH 7, 2018 — NOON-1 P.M.

Lunch Presentation: A Review of Recent Policies Affecting Immigrant Children in Illinois.

Presenters: Elisabet Barrios and Meghan Condon, DePaul University
14 E. Jackson Blvd., Suite 1600, Chicago, IL

Co-hosted by DePaul's Master in Public Policy Program

WEDNESDAY, MAY 2, 2018 — NOON-1 P.M.

Webinar: Municipal Innovations in Environmental Policy: Case Studies in Composting and Forestry Management

Presenters: Lindsay Darling, Chicago Region Trees Initiative; C. Scott Smith, Joseph Schwieterman and April Janssen Mahajan, DePaul University

Co-hosted by DePaul's Sustainable Urban Development Program

Printed 2017/12: 1,200



Educate. Advocate. Empower.

Illinois Municipal League

Phone: 217.525.1220 | Fax: 217.525.7438

500 East Capitol Avenue | P.O. Box 5180 | Springfield, IL 62705-5180

www.iml.org

**DEPAUL
UNIVERSITY**

**CHADDICK INSTITUTE FOR
METROPOLITAN DEVELOPMENT**



The Chaddick Institute for Metropolitan Development

Phone: 312.362-5732

243 S. Wabash Avenue | Chicago, IL 60604

las.depaul.edu/chaddick