



Resilient Micropolitan Areas in the Face of Economic Shocks: A Stakeholder Collective Capacity Perspective

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Abstract

Micropolitan areas (between 10,000 and 50,000 people) are not immune to economic shocks that threaten their vitality. Factors related to economic shocks can range from local companies leaving a town or national economic crises affecting local economies. Using the perspective of local micropolitan area stakeholders, this research seeks to identify why certain micropolitan areas recover from an economic shock while others do not. The research included the case study of two micropolitan areas in the U.S. Midwest (one resilient and one vulnerable), based on 22 interviews with key stakeholders representing diverse for-profit and government organizations. Our results reveal differences in the collective capacity and its underlying practices in the two micropolitan areas. We found that stakeholders built collective capacity by aligning effort, interacting face-to-face, supporting participation, sharing identity and building organizational capacity. Collective capacity ultimately enhanced the resilient micropolitan area's ability to adopt place-based, or localized, strategies at a higher rate and larger scale than the vulnerable micropolitan area. The results contribute to theory of constitutive collaboration and help policy makers and stakeholders make informed decisions regarding practices to promote economic resilience.

Keywords

micropolitans, resilience, economic shocks

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Introduction

With populations ranging from 10,000–50,000, micropolitan areas consist of communities that fall in the continuum between small towns and large cities. The U.S. is home to a total of 576 micropolitan areas, constituting 10% of the national population (Wilson et al., 2012). Despite making up a significant part of the U.S. population, these areas have been widely neglected by researchers (Vias, 2012). Their importance, though, should not be underestimated. Indeed, micropolitan areas have the potential to fulfil the needs of migrants moving out of small towns and/or metropolitan areas, seeking instead a lifestyle better suited to medium-sized cities (Vias, 2012).

The dearth of research on micropolitan areas is especially problematic when their existence is often threatened by economic shocks (Brown, 2018), such as when a major employer decides to leave a region. To help ensure the vitality of these communities, it is important that we understand how certain communities are resilient and can respond to economic shocks and recover from them. Economic resilience represents an ability of a region to prepare for and recover from an economic disturbance (Foster, 2012) while economic development represents economic investments towards improving community, individual and business growth (Feldman et al., 2016). Previous work on resilience has emphasised the importance of economic development characteristics that promote resilience in rural communities, such as social infrastructure (eg, social capital; Recker, 2009; Sharp et al., 2002) and natural resources (Crowe, 2006). Generally, smaller size communities are dependent on place-based development which focuses on developing local-based solutions to achieve economic and social outcomes that promote community benefits. Those communities that employ place-based development are more likely to assure community vitality of local businesses and assure industrial recruitment (Sharp et al., 2002). This is because, place-based development assures that policies are situated in their institutional and social context and facilitate recovery from economic shocks. Nevertheless, there is limited literature which has provided evidence about the ways that small communities

build place-based development strategies within a region. Furthermore, it is not well known whether similar strategies play a role in larger communities such as micropolitan areas, which may differ from rural areas in certain social and economic processes such as a larger workforce, government resources, and socioeconomic inequalities (Cortes et al., 2015; Vias, 2012; Brown, 2018; Oliver and Thomas, 2014). To address this gap, this research poses the following question: Why is a micropolitan area resilient to economic shocks?

In answering this question, the current research adopts a collaborative constitutive view which emphasises the situated and emergent practices among stakeholders as the mechanism for organising – mobilising resources and information (Koschmann, 2013). We argue that resilience of an area is determined by the capacity of diverse stakeholders (eg, public-private, city-region-state) to act and adopt *place-based* development or localised economic solutions (Barca et al., 2012). We refer to stakeholders' capacity to act as collective capacity (Koschmann, 2013; Koschmann, 2016a; Orlikowski, 2002). Collective capacity facilitates the adoption of place-based economic development due to increased stakeholder participation, which facilitates voicing the needs and preferences of diverse community groups.

Within this context, the study proceeded through two phases. The first phase identified two micropolitan areas in the U.S. Midwest—one resilient and one vulnerable. The study relied on U.S. Census data regarding Midwestern employment trends (eg, employment drops and recovery) from 2010–2016. The second phase included a qualitative analysis of in-depth interviews with 22 stakeholders, chosen based on their active presence in the city, taking into account their historical trajectories and involvement in major economic activity. The work takes into account the perspectives of key stakeholders in two micropolitan areas including the city government, health organisations, educational organisations, and for-profit organisations.

Our results reveal differences in the collective capacity and its underlying practices in the two micropolitan areas. What we found to be critical to collective capacity were the practices of



aligning effort, interacting face-to-face, supporting participation, sharing identity and building organisational capacity. Collective capacity enhanced the resilient micropolitan area's ability to adopt place-based strategies at a higher rate and larger scale than the vulnerable micropolitan area. These strategies included the following: (1) increasing local business competitiveness, (2) encouraging investment in the community, (3) increasing skills and education, and (3) expanding the experience of the local workforce and addressing infrastructural issues and expressing a willingness to develop new infrastructure.

Economic development in micropolitan areas

Any community is vulnerable to economic shocks. These unforeseen events tend to be created by external factors such changes in markets, unemployment during economic downturns, and extreme weather events. Considering the negative outcomes these shocks can have on a community, it is important to study communities' economic resilience. Without resilience, for example, communities struck by economic shocks can see an increase in crimes (Cortés et al., 2016). Economic shocks can have a negative effect on a community's quality of life, making them corrosive (Freudenburg, 1997) or lacking in trust and characterised by weaker relationships.

Economic resilience and vulnerability to shocks appear to be dependent on a wide range of factors related to the economy and economic shocks. Blanchard and Katz (1999) showed that recovery is often long lasting and has the propensity to create employment declines for up to four years. Nevertheless, the extent of the shock played a role in the length of recovery. Regions that feel the effects of a national economic shock and then a regional economic shock, recover twice as slowly compared to those experiencing just one shock (Hill et al., 2012). Another important factor that concerns recovery is the structure of a community's economy (Doran and Fingleton, 2014). For example, regions with a larger number of major export industries and a smaller income gap were less likely to grow economically (Hill et al., 2012).

A region's economic recovery is also influenced by its import and export strategy and their economic diversification (Briguglio et al., 2009). Similarly, Kolko and Neumark, 2010 showed that economic resilience depends on diversifying economic strategies by focusing on both industry recruitment and self-development.

Another set of factors that help determine economic resilience in smaller communities related to social organisation and industrial recruitment (Flora et al., 1992; Lowe, 2014; Rodríguez-Pose and Wilkie, 2017). Features of the social organisation, such as social capital, represents the norms and trust among community members and actors that facilitate cooperation and community action (Coleman, 1988; Putnam, 1995). Social organisation, for example, has a greater propensity to improve quality-of-life features and a region's recovery (Recker, 2009). These features of social capital influence economic development because they allow communities to navigate their differences, deal with conflicts more effectively and mobilise resources towards community needs (FLORA and FLORA, 1993). Indeed, horizontal and vertical links to other communities were found to be a strong predictors of self-development and, to a lesser degree, industrial recruitment (Crowe, 2006; Sharp et al., 2002).

Micropolitan areas represent a unique unit of study because their economic and social processes differ from metropolitan areas (Brown, 2018; Cortes et al., 2015; Oliver and Thomas, 2014; Vias, 2012; Mulligan, 2014; Wahl et al., 2007). Because of micropolitan areas' mix of metropolitan and rural characteristics, these areas have become attractive places to live and invest (Cortes et al., 2015; Mulligan, 2014; Oliver and Thomas, 2014; Vias et al., 2002; Vias, 2012), which implies a need for further studies exploring their economic resilience. Indeed, although emerging adults, especially those in the 20–29 year old range, tend to move away from rural and micropolitan areas, up the urban hierarchy, all other age groups are moving into these areas (Plane et al., 2005; Ulrich-Schad, 2015). Moreover, Vias (2012) emphasises that this unique position of micropolitan areas leads to these areas being influenced by both urbanisation and counter-urbanisation processes, which in turn can affect



the social and economic processes of micropolitan communities.

Broadly, micropolitan areas have very similar economic structures to metropolitan areas but with key differences. Micropolitan areas, on average, have a higher portion of employment in blue-collar industries and lower employment in white-collar industries than metropolitan areas. Adding to that, Brown, 2018 found that micropolitan areas consistently have lower rates of business turnover than metropolitan areas. Household income in Midwestern micropolitan areas are lower than in metropolitan areas. In 2018, the average estimates for median household income were \$51744 for micropolitan areas and \$55919 for metropolitan areas. However, income inequality is worse in metropolitan areas compared to micropolitan areas. The average Gini Index in the metropolitan areas (as reported by the ACS 2018 5-year estimates) is 0.451 while the average Gini Index in the micropolitan areas is 0.431. Midwest micropolitan areas are less diverse than metropolitan areas, with an average of 92% white compared to 85% in metropolitan areas. These findings underscore the importance of studying micropolitan areas and the economic resilience processes separate from those of rural and urban areas.

Place-based economic development

Each region has its own capacity for economic development, with limitations and advantages unique to the area (Brinkerhoff and Morgan, 2010). A region's capacity depends on how the area anticipates and reacts to inevitable economic change. This can include a host of variables such as technological innovations in manufacturing processes, customer demand, or natural resource availability. When these strategies are localised, or place-based, they will differ substantially from location to location. How does place-based economic development differ from traditional economic development? Place-based development emphasises the decisions of subnational stakeholders as they possess intimate knowledge of business needs, area strengths and weaknesses, and available resources.

The international trend toward decentralisation of economic development strategies from the national to subnational authorities, forced many smaller units of government to address their community's economic needs (Barca et al., 2012). This resulted from processes of globalisation as the responsibility of addressing local economic development falls to states, counties, municipalities, and other subnational authorities (Deweese et al., 2003). Before globalisation, traditional development policies operated in a top-down approach with national economic policy forming the basis of all subnational economic development. Following globalisation, subnational authorities operated in a bottom-up approach in contrast to the traditional model (Rodríguez-Pose, 2001). In some situations, the decentralisation of economic policy authority has led to increased efficiency and improved governance and equity (Smoke, 2003) but in other situations it has been unsuccessful (Rodríguez-Pose and Hardy, 2015). Successful place-based development strategies incorporate diverse stakeholder involvement (Bentley et al., 2017) including both vertical governance (subnational to national authority) and horizontal governance (subnational across subnational). This outlines the importance of collaboration among diverse stakeholders as they voice the needs of local groups in a complimentary manner.

Rodríguez-Pose and Wilkie, 2017 proposed that place-based strategies differ between places and contexts but can be placed on the following four development axes: increasing local business competitiveness; encouraging investment within the community; enhancing the skills, education, and experience of the local workforce; and addressing infrastructural issues and willingness to develop new infrastructure. Increasing the competitiveness of local businesses includes any activity that provides local businesses opportunities to be more competitive in the market. For instance, a community uses local funds to improve the downtown corridor to attract local consumers, thereby increasing competitiveness of the local community. Encouraging investment within the community involves recruiting outside businesses and boosting local business profits. For example, a community may recruit an international manufacturing business to the



area and use a local transportation company to meet some logistical needs of the new company. Enhancing the skills, education, and experience of the local workforce strategies requires community educational resources such as community colleges and public schools. These entities need to work with business leaders and government officials to meet and anticipate training needs to provide an effective workforce. Finally, addressing infrastructural issues and being willing to develop new infrastructure includes mobilising resources to provide infrastructure updates and innovations to contribute to ongoing and new economic activities. For example, if a local industry wants to expand their operations but this will require a substantial increase in water needs, government officials identify strategies to meet these needs. Expanded operations at the industrial facility will lead to increased employment opportunities.

The axes have close, often overlapping strategies, but when all four are equally balanced place-based strategies can showcase their strength. Each axis supports the others in the way a four-legged stool takes on its share of the load. If a community has attracted a new manufacturing facility to the area (encouragement of investment within the community), they may need to upgrade roads and bridges to accommodate increased and heavier truck traffic (addressing infrastructural issues and willingness to develop new infrastructure). At the same time community and business leaders may coordinate with the local community college to provide vocational training specific to the new facility's needs (increasing skills, education, and experience of the local workforce). To attract consumers to local businesses, improvements to the downtown corridor such as sidewalk widening, art installations, and trash removal (increasing local business competitiveness). Without incorporating all four axes, economic development may be unbalanced and less successful. Overinvestment in one or two axes can lead to dependence, a loss of labour talent, easy access by an external industry competitor, or the subsidisation of a firm that is no longer market competitive. For example, if a community heavily invests in infrastructural issues like expanding a highway from a two-lane route to a four-lane route they may expose a vulnerable

economy to external competition and cause skilled labour to leave the area for other opportunities. Communities that more fully embrace place-based strategies employ location-specific economic development with localised resources. Communities that either use only traditional or limited location-specific development implement fewer place-based strategies. Balanced place-based strategies have been shown to improve long-term sustainably over short-term revenue (Bradly, 2015). Through this lens of place-based economic development strategies, we further show that place-based strategies are incorporated once stakeholders have collaborative agency.”

Collective capacity

As with other complex issues, economic development requires participation from multiple stakeholders as it allows combining distinct resources towards economic outcomes. Collaboration failures between layers of authority can lead to substantial barriers to local economic development (Koschmann, 2016b). Collaboration, whether horizontal and vertical, facilitates coordination of diverse resources and information which ultimately contributing to the attainment of valuable outcomes (Koppenjan and Enserink, 2009a). While horizontal collaboration occurs between groups operating at the same level of government, region, or municipality (Kardos, 2012), vertical collaboration operates between multiple levels of government such as municipalities, counties, states, and national governments. Both types of collaborative efforts, while vital to the local economy, can be challenging. Horizontal coordination between business leaders, elected officials, and government employees at similar levels of operation can present challenges. Suppose two municipalities located near each other want to coordinate an infrastructure improvement project such as expanding a highway from two lanes to a divided four lane highway for ease of transportation between two interrelated industries. This project requires extensive horizontal and vertical coordination between various stakeholders and governments (Koppenjan and Enserink, 2009a). Funding from both municipalities would



need to be pooled into the project as well as engagement from state and federal governments. Additionally, private stakeholders such as business leaders may be involved to help defray some costs to industries as these businesses benefit from the infrastructure projects.

Considering that collaboration comes with challenges, past organisational research has focused on effective collaboration mechanisms but have primarily adopted a transactional perspective. The perspective assumes there is some degree of rationality to how people act collectively and considers decision making as merely an aggregation of economic transactions (Jin and Doloi, 2008; Reeves, 2008). Even when social processes such as level of trust and reciprocity are considered, they are captured in a positivistic manner (Abramov, 2009; Jacobson et al., 2008; Renato and Sebben, 2020; Yang Delei, Delei et al., 2018). Positivity is an issue, as collaborative processes are complex and emerge through negotiations and contestations. At a minimum, these practices are entangled to power dynamics and building common identify (Koschmann, 2013; Koschmann, 2016b; Kuhn, 2008). Since this process is never linear, it becomes important to unpack the complexity of how stakeholders become a more successful collaborative unit. This is defined in this research as collective capacity – or the capacity to influence a set of outcomes beyond what individual organisations can do on their own (Koschmann, 2013). Collective capacity is primarily a situated and ongoing practice which involves multiple stakeholders engaging in a myriad of learning processes (Orlikowski, 2002). The collective capacity framework proposes that stakeholders go through a non-linear process to learn how to coordinate work with other stakeholders across diverse boundaries (eg, organisational, time and space). This involves a set of five critical practices which facilitate the learning process and helps stakeholders build capacity to collectively act including aligning effort, interacting face-to-face, supporting participation, sharing identity and building organisational capacity (Orlikowski, 2002). First, aligning effort includes building coordinating across organisational boundaries and assuring that more standard methods are built and that stakeholders learn how to work towards common goals. This includes stakeholders (eg, the city and

a local business) working together to expand their infrastructure services and aligning efforts towards one common project goal. Second, interacting face-to-face assures establishing and maintaining social relationships. Face-to-face interactions assure that stakeholders have a sense of knowing what others do and that they build credibility of their expertise. This includes assuring that stakeholders have the space where they could organise ongoing face-to-face meetings. Third, supporting participation means assuring that all stakeholders are involved in the decision-making. This includes inviting all stakeholders to essential meetings and ensuring that the voices of all people are included. Fourth, sharing identity includes creating common orientation through socialisation and formal events. This includes organising workshops which could promote a common ideology and idealise the idea of working collectively (eg, using “we” pronouns). Lastly, building organisational capacity assures that there are formalised means to sustain the collective capacity. This includes creating formal partnerships and rewarding systems to encourage and sustain the collaborative efforts. While this framework has been tested in organisational work among engineers working on product development (Orlikowski, 2002), previous work has not yet mobilised the framework at the inter-organisational level where boundaries may be more significant considering the distinct goals across organisations. The study outlines the emergent practices through a cross-case comparison which makes the emergent collective capacity practices – often invisible and normalised – more visible.

Methodology

The research consisted of two phases (Figure 1). In phase one, researchers used data from the U.S. Bureau of Economic Analysis (BEA) Regional Economic Accounts to identify two micropolitan area cases. In phase two, researchers identified and interviewed key stakeholders from the two micropolitan areas.

Phase one: case study selection

In this research context, a resilient micropolitan area is one that has undergone a rapid decline

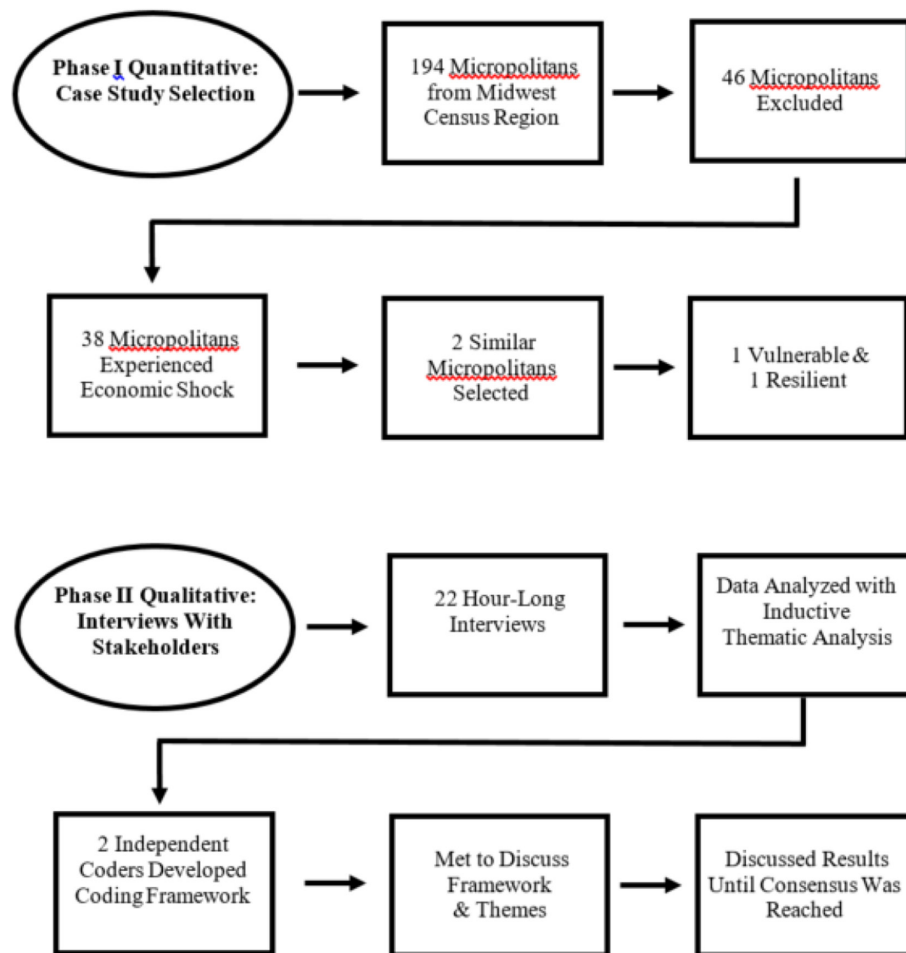


Figure 1 Phases of analysis

in employment, precipitated by the 2008 Great Recession shock, but has recovered all the lost jobs with no decline in incomes or increase in disparities. Data for this analysis was drawn from the BEA’s Regional Economic Accounts for the years spanning 2009–2016. We chose 2009 as the starting year for the Great Recession for several reasons: (i) housing defaults in 2007 and 2008 were highly localised in the U.S, having little impact in the Midwest (Fogli et al., 2012); (ii) the recession became a national problem in the fourth quarter of 2008 with the collapse of several large investment and commercial banks (Farmer, 2012); and (iii) the global recession started in 2009 as international trade and commodity prices fell, leading to sharp gains in unemployment (Bacchetta and van Wincoop, 2016). The BEA produces annual estimates of employment and income by industry at the county level. These data were estimated

using primary data from the following sources: the U.S. Bureau of Labour Statistics for wage and salary employment, the Internal Revenue Service for self-employment, and the U.S. Department of Agriculture for farm employment. As it covers all forms of employment, BEA employment counts are considered the most accurate picture of the labour market (Shaffer et al., 2004). Our units of analysis were $n=194$ core micropolitan counties in the Midwest Census Region, which includes 12 states running from Ohio northwest to North Dakota and southwest to Kansas. The U.S. Census Bureau defines a micropolitan areas—formally referred to as Core-Based Statistical Areas—as any county that includes a population centre containing at least 10 000 but less than 50 000 people, and at least half of the population of the area must reside within the core population area (Office of Management and



Budget, 2010). We exclude suburban counties of micropolitans (n=46) to focus on the primary city.

The primary variable in our analysis was wage and salary employment for each year between 2009 and 2016. Taken from BEA, this included jobs in private and public establishments, but excluded self-employed individuals, farmers, and other proprietors. For our purposes, we define a rapid decline in employment from the previous year as local employment shock, likely attributable to the 2008 recession directly, or indirectly from reduced national and global demand. While job losses are technically a response to a shock, we use the terms employment decline and employment shock interchangeably (Christiano et al., 2014). We operationalized economic shock or decline as a 3.5 percent drop in employment from the previous year, roughly corresponding to an extreme drop of -1.5 standard deviations below the Midwest average. We operationalized resiliency as the recovery of all the jobs lost, or more, from the point of the shock to 2016. Failure to reach pre-shock employment levels was operationalized as vulnerability. Between 2009 and 2016, 38 of the 240 micropolitan counties experienced an economic employment shock. Of these 38 (Appendix A), most (28 counties) experienced one shock only; a handful (nine counties), though, experienced two and one county underwent even three. The average annual job loss during the shock was 5.7 percent (3.3 standard deviations below mean job loss). Of the 38 micropolitan areas experiencing job losses, only 17 had by 2016 recovered the jobs lost. Ten of these recovered 101–105 percent of the jobs lost, and seven did even better, recovering 105–117 percent. On average, the rate of job loss recovery for these 17 resilient counties was 106.5 percent with a 4.2 standard deviation. Finally, the 17 resilient micropolitan areas were compared. Two micropolitan areas, one resilient and one vulnerable were selected to examine two typical micropolitan areas (Seawright and Gerring, 2008). A comparative case study approach (CCS) was utilized as it allows integrating the advantages of case study methodology and comparative logic (Kaarbo and Beasley, 1999). This approach is especially applicable when the research seeks to generate or refine theory and answer “why” and “how” questions. The case study approach

acknowledges that each context includes many characteristics such as local culture and institutions which shape the phenomena under investigation. As such, the case study approach provides more in-depth descriptions by acknowledging and incorporating the role of the local context. The contrasting nature of CCS is analytically helpful as it shows patterns within data through juxtaposition. In other words, by comparing a resilient and a vulnerable micropolitan area, major themes (eg, resilience) become more visible to the researcher once contrasting examples are observed (eg, presence or lack of collective agency). To select the comparative cases, it becomes important that certain case characteristics, especially those that are not of interest to the study, are similar across cases. These micropolitan areas were similar in a variety of ways including population size (around 25 000 people), presence of a community college, proximity to a metropolitan area, and industry type. According to the Census Bureau, the selected areas were very similar to each other and within the Midwest in many aspects such as poverty rates, educational attainment, food stamp use, and unemployment rates. Both micropolitan areas were about 7% lower than those in the Midwest in the percentage of the population attaining a bachelor’s degree. In terms of distance to a metropolitan area, the resilient micropolitan area was located one and a half hour from a major metropolitan area while the vulnerable micropolitan area was located two hours from a major metropolitan area. In terms of industry type, the majority of the people in both resilient and vulnerable micropolitan areas were employed in manufacturing, retail, educational and health services sectors.

The vulnerable micropolitan area experienced an economic shock that caused a 4.18% decline in employment in 2009. The decline continued to be consistent until 2016. In 2013 the area experienced an additional decline of 3.53% and a 7.52% decline in 2015. Conversely, the resilient micropolitan area experienced a similar economic shock – 4.19% decline in employment in 2009. Unlike the vulnerable micropolitan area, the resilient one experienced a 1.95% employment recovery in 2013 and a 5.77% employment recovery in 2015. Based on our definition of economic shock above, both the vulnerable and resilient micropolitan area



Table 1 Employment and Income Composition of Micropolitans in 2009 and Change from 2016

	Resilient micropolitans				Vulnerable micropolitan			
	Case Micro		Other Micros		Case Micro		Other Micros	
	Base	Percent Change	Base	Percent Change	Base	Percent Change	Base	Percent Change
Shock and Recovery								
Employment Shock (job loss/gain)	-824	-4.19	-1,037	-5.45	-842	-4.18	-935	-5.95
Employment Recovery (job loss/gain)	1 437	7.63	890	6.40	-1,652	-8.57	-616	-4.82
Employment in 2009								
Employment Base (#)	19 650	n.a.	16 019	n.a.	20 123	n.a.	15 723	n.a.
Construction (%)	6.35	30.15	6.53	-1.77	9.30	-8.93	6.33	15.43
Manufacturing (%)	11.36	7.26	15.19	3.58	20.44	-17.55	13.36	4.78
Retail Trade (%)	15.52	0.62	15.13	4.06	12.30	-1.58	13.08	4.72
Transportation & Warehousing(%)	9.85	-9.09	7.88	9.25	n.d	n.d.	4.03	34.88
Finance, Insur., & Real Estate(%)	5.21	-22.66	4.56	-6.96	11.60	-38.17	4.39	-5.77
Administrative Srvs. (%)	3.61	11.13	4.94	4.78	4.91	5.47	4.72	-9.49
Healthcare & Social Srvs. (%)	17.67	-12.01	15.63	9.99	15.25	-4.34	11.92	-4.04
Food, Entertainment, & Tourism (%)	8.35	15.66	8.99	11.00	8.84	-10.40	8.86	8.80
Other Srvs. (%)	6.54	54.67	7.26	-0.92	7.95	5.38	6.92	2.21
State & Local Government (%)	14.96	-4.63	18.84	-9.20	14.77	-10.83	17.41	0.24
Income in 2009								
Earnings Per Job (2016\$)	38 309	12.72	37 352	1.90	42 055	4.46	39 608	8.94
Median HH Income (2016\$)	44 871	7.00	45 094	4.27	49 087	-6.57	48 501	5.96
Poverty Rate ^a (%)	15.03	-0.71	15.12	-0.10	13.04	2.41	14.15	-0.22

Percent reported unless otherwise noted. a=change. n.a.= not available. n.d.= non-disclosed.

experienced one economic shock during 2009–2016. Table 1 compares employment patterns across our two case study communities and other micropolitans in the resilient and vulnerable groups. For example, Table 1 shows that our resilient community before

the recession had a larger employment base in transportation, but a small base in manufacturing, compared to other resilient micropolitans. After the recession, our resilient community gained jobs faster in construction and manufacturing, while



other resilient micropolitans say gains in healthcare, transportation, and retail/tourism.

Phase two: Interviews with stakeholders

Data collection included carrying out 22 interviews (11 in the resilient micropolitan area and 11 in the vulnerable micropolitan area) with key local stakeholders, who were chosen based on their knowledge of economic and non-economic sectors driving economic growth and of historic patterns regarding economic growth. Researchers carried out interviews during two visits to the city during the summer of 2018, including city representatives (eg, planners and City Managers), business affairs representatives (eg, directors of economic development and chamber of commerce), managers working for top companies and business owners, and representatives from diverse sectors including the Health Department, Workforce Development, and the local Community College. The interviews lasted for an average of approximately one hour and included questions regarding economic strategies and programmes in the micropolitan area. Sample questions included the following: “What are the major drivers of economic growth in your city?” “How has the city changed in terms of economic activities natural since you have been here?” “In the last ten years, is the same group of people who have been involved with economic development stayed the same, or has the group changed?” “Do you think the economy is boosting in this city?” “If so, where are most of the jobs? What organisations are most actively engaged in programmes geared towards economic development in your city? In your view, how did the job market change in 2009–2010?” “Do you know why any of these changes happened?”

Data analysis

Data analysis included an inductive thematic analysis of interviews where the researchers inductively identified a set of patterns leading to economic development (Guest et al., 2012). During the initial stage, two coders manually produced a coding conceptual framework about the collective agency processes and place-based strategies. The first coder was the first author and the second was a

Table 2 Collaborative capacity practices (adapted from Orlikowski, 2002)

Practice	Activities comprising the practice
Aligning effort	Using common methods, standardising work
Interacting face to face	Allocating space for face to face interactions
Supporting participation	Decentralisation of roles
Sharing identity	Sharing trust and respect Sharing common understanding
Building organisational capacity	Formalising informal interactions Building partnerships

graduate student in the sociology department. The two coders coded interviews individually and then met to discuss their codes and obtain consensus regarding the coding framework until consensus was achieved. The coding for the collective capacity was done deductively using the concepts from Orlikowski’s framework. The definitions and codes were slightly adjusted to this context as it included collaboration across organisations. The collective capacity included five macro codes: aligning effort, interacting face to face, supporting participation, sharing identity, and building organisational capacity (Table 2). Aligning effort code included instances when stakeholders coordinated work. Interacting face to face included instances when stakeholders discussed in person meetings and socialisation. Supporting participation included instances when stakeholders involved other stakeholders in the decision making. Sharing identity included instances when stakeholders shared a common orientation and collective attitudes. Finally, building organisational capacity included instances when stakeholders created formal processes to support their collaboration and partnering.

RESULTS

The results indicate that place-based economic development is determined by the ability of diverse



stakeholders to act. The collective capacity – or the capacity to influence a set of outcomes beyond what individual organisations can do on their own (Koschmann, 2013). Achieving collective capacity is a process rather than a simple aggregation of individual resources (eg, economic transactions). Our results reveal differences in the collective capacity processes in the two micropolitan areas. What we found to be critical to collective capacity were the process of aligning effort, interacting face to face, supporting participation, sharing identity, and building organisational capacity (Table 2). In the vulnerable city, these practices were absent or only in the incipient phases. This difference led the two micropolitan areas to adopt place-based strategies that differed in scale and nature.

Collaborative capacity: resilient micropolitan

Aligning Effort. One of the initial processes to building collaborative capacity included aligning effort from multiple organisations towards common goals. In the resilient micropolitan, this occurred more than a decade ago when an event stimulated the emergence of a prototype for working collectively. The city stakeholders put up their city as a candidate site for a correctional facility. This occasion was the first time the stakeholders had worked together, so the process was not linear as often is the case with a successful collaboration (Koschmann, 2016a). The space stimulated dialogue among stakeholders, learning about each other and shaping a new understanding of what it would take to work collaboratively (Milam and Heath, 2014). While they did not win the project, the initial dialogue provided sufficient foundation to get the stakeholders together again to re-apply the second year and eventually be awarded the project. This initial event allowed government stakeholders to re-structure their ideas about how working together and separately occurs. Specifically, they realised “if we work together maybe we can do more than we have on our own.” Similar sentiments about working collaboratively were communicated in a meeting with representatives of nine counties. The representatives understood that everyone benefits when neighbouring regions prosper: “If [the neighbour county] grows, we grow because

they’re going to come and do their shopping here and they’re going to do their other things here. So, our city limits is that little line on a piece of paper but we know that it affects everybody else around us.”

Interacting face-to-face. After coming together to win the correctional facility, the city stakeholders built on their inertia in 2006 and worked with county officials for the first time. This occurred when the city started a movement as a newly elected mayor reinforced the importance of collaboration. His efforts included creating space and time to get “people in the same room” and assure face to face communication. The monthly meetings among city officials were allocated for discussions on economic development at the city and regional levels, which ultimately resulted in aligning goals across distinct entities and creating an initial foundation for shared understanding. The business development manager further specified the nature of these discussions and the building of shared understanding: “We talk to this person, what-do-you-hear kinds of things. So we’re all on the same page because in our day-to-day lives we are all talking to people and people say, ‘Well, I heard this. Well, what do we do about that? Is Arby’s opening up or not? Is this happening? Does somebody buy this piece of property? Well, I heard this.’ So, we’re all talking to each other and that’s what has made economic development so much easier and better for [the county] and [the city], is that we’re just talking to each other.”

Supporting participation. While learning local stakeholders and building common identity allowed working toward common goals, the ability to act collectively became possible only once participation improved. This requires changes in the power dynamics and re-structure in stakeholder roles. In the resilient city, we observed that the process of decentralising power had been occurring for a decade. Respondents mentioned the discussions that occurred in the weekly and monthly meetings. In 2009, when the new mayor took office, a new era of decentralising power began to occur. The former mayor controlled the majority of the government functions in the city and exercised his power to hire and fire people. Power



decentralisation allowed participation and building a shared sense of responsibility and identity.

At the core of power decentralisation, we found that exploration (Koschmann, 2016a) or the willingness to look for something new and innovative as a critical practice for the collaboration change. The opposite of exploration is maintaining existing power dynamics and exploration becomes possible only if stakeholders are willing to be vulnerable. The new mayor laid the groundwork for exploration by diminishing his own power and reshaping his responsibilities as well as providing a space where the voices of other stakeholders could be incorporated. When asked about the organisation that played an important role in economic development, the CEO of the local partnership observed that there was not just one. “So, your question was the driving factors. Obviously, it’s in my mind, multi-faceted because you have to have the conditions that are good for economic growth, which would be a good business climate. To do that, you need to have all parties communicating and working together. You need to have your laws in line and the service is aligned to serve both businesses and workers. So, good communication amongst all parties involved, bringing resources together, breaking down those barriers as we’re working together there’s not competition. It’s all for the greater good.”

Power decentralisation was evident among multiple sectors including educational and workforce. The workforce development manager mentioned that, while they had workforce shortages, the problem was addressed only when the governor, schools, businesses and community groups were all engaged: “It’s not just the school’s responsibility. It’s all of our responsibility to make sure that we get the workers and that we’re training them the way we need.”

Sharing identity. As these efforts continued and became a routine, stakeholders started building common identity around them working together. They assigned new symbols to the collaboration change. One of them included labelling the space where they met as discussed by the city planner: “You can see on their doors; it says Collaboration Room 3. That’s when it really just started to happen. That’s when everybody in the community and the region started to come together and work

towards similar goals.” Here in in other instances stakeholders shared a sense of coming together and working as one cohesive group. There was also an ongoing sense of trust and respect. They shared common symbols (eg, collaboration room) which became meaningful, as they represented descriptions and representations that defined norms of operation. The shared identify was quite evident when respondents mentioned the alliance as a critical group in the success of what the city seeks to accomplish.

Building organisational capacity. The next step towards collective agency in the resilient city was observed when collaboration was “scaled up” to gain organisational forms such as alliances and formal strategic plans. These organisational forms allowed collaboration to be taken one step further by providing legitimacy to the collaborative efforts and facilitating resource mobilisation. In the resilient city, respondents reported they had recently created a coalition organisation through which the chamber of commerce formed an alliance with other economic development partners including the visitor’s bureau, community foundation, United Way, and betterment foundation. The goals of the alliance were to unify separate groups that were doing their own work and to build strategic collaboration.

The new alliance group also organised a strategic plan. According to the CEO of the new alliance: “Then we do a strategic plan here and our strategic plan is adopted by 14 other groups in the community. Not that we’re telling them what to do, but to ensure that we’re not contradicting each other and we’re on the same page and there’s a synergy going on of the schools, the development corps, all these same people, so we’re reviewing each other’s and operating as a unit and not a bunch of independent competitive groups. And that, in my opinion, is why [our city] is doing better as that collaboration more than anything.”

Limited collaborative capacity: vulnerable micropolitan

In the vulnerable micropolitan city, stakeholders were mostly silent regarding collaborative efforts. A few stakeholders described collaborative efforts but they were only made recently: “And so within



the last two years, but really within the last year a new entity called the [partnership] was formed, and that's kind of an aggregation of four different organisations which was the economic development organisation for the city and county, the Chamber of Commerce. There was a downtown organisation that kind of championed and handled events within the downtown at [the city]. And then there was the County Tourism and Visitors Bureau. Those four organisations merged into the [partnership].” Additionally, the participations was either lacking or was in the initial phases. The former chamber of commerce director appeared sceptical of recent collaborative efforts: “The chamber, when I was part of it, we were independent. We brought our own revenue in from members, we made decisions that we felt were in the best interest of our members which was our charter, which was our mission. And as soon as that organisation became part of this greater organisation, I think we lost that. Other people will be deciding what's best for the chamber to be doing and how to serve their members. Maybe they'll do a fine job of it, but that's I guess yet to be seen. But I think there's risk. I hope they do very well but there's a tremendous risk, I think, in it.” Finally, the researchers observed either the desire to change or steps toward improving collaboration but these endeavours were only recent. Collaborative discussions and spaces were mentioned as future events rather than occurring ones. The development manager mentioned that the workforce problem could be solved if the partners “would” come together “And I think that if we figure out this problem...I mean the collective we, not just [our partnership], we as multiple entities, we will also attract other businesses.”

Place-based economic development

The second set of results showed that the collective capacity enhanced the resilient micropolitan area's ability to adopt place-based strategies at a higher rate and larger scale than the vulnerable micropolitan area. These strategies included the following: (1) increasing local business competitiveness, (2) encouraging investment in the community, (3) increasing skills and education, and (3) expanding the experience of the local workforce and addressing infrastructural issues

and expressing a willingness to develop new infrastructure. It was observed that the resilient micropolitan engaged in targeted investment using collective agency to adopt a more effective place-based strategies because they engaged local stakeholders in ways unique to the area. The vulnerable micropolitan often did not involve stakeholders in the same manner and their efforts often were more traditional and not based on the individual situation in the area.

Increasing local business competitiveness. Increasing business competitiveness involves adopting strategies that stimulate business growth. Both micropolitan areas engaged in strategies to increase the competitiveness of their businesses, though the resilient one was able to demonstrate breadth and persistence to their programmes. Stakeholders in the resilient micropolitan area spoke of their efforts to enhance downtown development with the goal of enhancing established businesses and attracting new ones, “A good example of [public investment] was along our retail corridor, that was pretty rundown when I came here. Well, the city made pretty significant investment – I would say it's probably 10 million at least at this point – to enhance the corridor.” These downtown development efforts led to a national retailer locating in the area, which resulted in a 30% increase in annual sales tax revenue. Investment in the area has continued with parks being updated, aquatic facilities being built, and a recreational trail system being created. The same employee stated, “When we do our part or when the city does their part, it is all about the economic development. And the other thing we realised is economic development also includes quality of life.” The city was persistent at reaching out to local businesses to help ensure business growth. The effort was consistent from recruitment to retention. The city and chamber organised tours for employees who were considering relocating to work for local companies. They also formed an extension committee to help companies identify funding opportunities and continuously worked with local businesses to improve workforce needs. Finally, the city invested substantial funds in large infrastructure projects and provided assistance with financing these projects through public-private



financing. These infrastructure efforts are further detailed at the end of this section.

The vulnerable micropolitan area adopted projects to increase local business competitiveness but the projects seemed to be of either a smaller scale or focused on traditional financial incentives. These projects included investing public funds in local business, though these projects were spoken of in somewhat vague terms. A business group leader said, “There has been a reinvestment in [city] in basic infrastructures like sidewalks and beautification and attempts to invest in local [businesses].” More traditional business development activities were noted. “We’ve looked at using business districts, using TIFs, changing the way we’re doing increment financing finance to develop loans, we’ve gone out and gotten opportunity zones in the process of getting our new enterprise zone, we’ve seen a rapid interest in growth in the community.”

Overall, the vulnerable micropolitan area did not engage in business development as actively as the resilient micropolitan area. In the resilient micropolitan city, business development efforts were done through partnerships, informal relationships and persistent communication between public and private sector stakeholders.

Encouragement of investment in the community. Encouragement of investment in the community included attracting outside investors into the community. In the resilient micropolitan area this included international industrial recruitment. To achieve this goal, local leaders, in collaboration with state leaders, travelled abroad to meet these companies face to face. A leader of a large manufacturing facility stated, “The single most important factor was the collaboration between local leaders and state leaders to solicit [the company] to come to [the city]. So, early on, way before I was part of the picture, people like [local leaders], the former Governor, some county supervisors, they all participated in a trip to [country] to visit our headquarters to really sell [city] and the [conference] to them as an opportunity.” This strategy yielded an important achievement; an international company purchased an abandoned manufacturing facility in the area, retrofitted the facility to its needs, and is now a major employer in the area. In addition, local leaders recruited

another large manufacturer that produces the raw materials that another local business requires in its manufacturing process. The two companies built a pipeline between their facilities to deliver the raw material directly. This reduced the costs for both companies as raw materials flow from one facility to the other with only initial construction and ongoing maintenance costs. The recruitment of these companies through successful city-state collaboration encouraged significant inward investment within the community.

The vulnerable micropolitan area had less success in attracting investment into the community. Having been gone for some years, one employer returned to the area, but the local leadership took no credit for that outcome. Compared to their counterparts in the resilient micropolitan, these local leaders were more disconnected from investment decisions. They tried to collaborate to enhance investment in the community, but these efforts were ultimately fruitless. A local leader in a business group said, “The city actually did receive a grant to do some manufacturing planning. But at the time, I think there was staff turnover and issues there and that grant was returned.”

Overall, the vulnerable micropolitan made less efforts at attracting investment within the community and was more disconnected from their business leaders. These missed opportunities resulted in less capacity to encourage investment in the area. Conversely, the resilient micropolitan area actively participated in company recruitment through stakeholder collaboration. These efforts eventually resulted in recruitment of major businesses to the area.

Increasing skills, education, and experience of the local workforce. In small-sized areas, a critical strategy for economic development is to increase skills, education, and experience of the local workforce. Indeed, these communities struggle with retaining their population and finding a sufficient workforce to accommodate business operations. As such, respondents from both micropolitan areas stressed the importance of workforce development and viewed it as a major concern for industrial recruitment. Both micropolitan areas strived to meet workforce demands, but the resilient micropolitan area showed higher understanding that workforce development was a joint responsibility between



local government and companies. The director of a workforce development nonprofit agency mentioned that a professional development programme had been created using collaborative efforts from local community college and industrial companies. Local business leaders showed an awareness that workforce development was a shared responsibility. For example, an executive at a local manufacturing facility remarked, “I don’t know of any job that you would go into where you wouldn’t have to be trained. Well, I expect that I’m going to have to train every employee that comes in, ergo I don’t think we have workforce problem. We have the numbers, we have people that want to work, it’s our job to train them.” When the company that this executive works for was opening, it sent several employees to a similar facility within the company to learn how to operate the equipment. This highlights the idea that the business and community leaders took an active role in developing the workforce of the resilient micropolitan area.

The vulnerable micropolitan area had programmes for workforce development. However, these were generally limited to traditional public school-based training. For example, these programmes included providing training regarding career choices, career fairs, and coordinating with local educational resources. They also included working with local schools with programmes raising student awareness of career options throughout primary and secondary schools. A school district employee who led a local career programme said that they “try to offer a variety of programmes [in] their junior and senior year. And then we do career awareness and exploration activities from kindergarten through sophomore year. So, then we hope that helps inform their choice when they’re a junior or a senior.” Many respondents from the vulnerable micropolitan area mentioned the importance of workforce development, but this programme was the only example they provided that addressed workforce shortfalls.

Overall, workforce-development activities included classes helping students with career awareness, local businesses recognising their role in training their workforce and collaborating with business, educational, and community leaders

to identify which professional skills were most salient. The results show similar awareness about the importance of increasing skills, education, and experience of the local workforce, yet the approach of the resilient micropolitan seemed to be more effective in meeting the needs of businesses.

Addressing infrastructural issues and willingness to develop new infrastructure. Infrastructure refers to such resources as physical buildings, energy distribution, waste and water management, telecommunication, transportation networks, schools, parks, green and open spaces. In the resilient micropolitan area, infrastructure proved to be a critical component in recruiting manufacturing facilities. Whenever they provided the necessary and cost-effective capacity for business operations, infrastructure development was essential to industrial recruitment. A city engineer in the resilient micropolitan area mentioned the importance of the water and wastewater development efforts to attract a large plant to the area, “Industries come and say: ‘Hey, we need 2 million gallons a day of capacity.’ That’s when we work in cooperation with each other. So, as they’re building their plant, we’re working on our plant to increase capacity as well.” These efforts cost the city “tens of millions of dollars” and were achieved collaboratively through public-private partnerships. Regional organisations assisted the city and wrote an economic development grant to fund the infrastructure expansion. Another example of place-based strategies coming to life as a result of government-industry collaborative efforts included building a housing unit. “And then the betterment foundation has actually been a partner for housing development in the north part of the community. They had some property. It’s like 62 acres that is right in the heart of the community. It’s never been developed. It’s been ag land. But it’s surrounded by housing that the city, the [alliance] and the Betterment came together and said, ‘Okay, how can we support because we have the need for a certain range of housing?’ I think it’s 150-plus, 150,000, and so how can we get that housing developed in our community in order to support these jobs that are coming.”

The vulnerable micropolitan area struggled with developing its infrastructure for economic



development primarily from a lack of coordination and planning by area leaders. A high-level employee stated, “So they had never done a street study or hydraulic study. They built a brand-new water tower on the highest point of land in the city but had done it without doing a hydraulic study and then we’re surprised they couldn’t get water to it.” This reflects a lack of planning and ability to address infrastructural issues in an effective way to recruit potential economic investment in the community. The willingness to address infrastructural issues places a community at an advantage to those areas that choose not to or are unable to.

Overall, the willingness to develop new infrastructure along with the strategies that addressed present infrastructural issues all involved collaborating with industrial businesses. The resilient city wanted to meet the industry’s needs, such as delivering the necessary water supply and wastewater management, creating development grants to address infrastructure needs, and building a water tower. The resilient micropolitan area wholeheartedly embraced this strategy and extensively put it in practice. The vulnerable micropolitan struggles to build infrastructure and mentioned issues with planning that resulted in unsuccessful projects.

The effect of collective capacity on economic resilience

We contend that the resilient micropolitan area was much more successful in recovering from an economic shock than the vulnerable micropolitan area because of the capacity for balanced place-based economic strategies implemented by a well-organised coalition of local stakeholders. Both micropolitan area experienced an economic shock of about 4.2% decline in employment in 2009, yet the resilient micropolitan area employment rate began rising in 2013. Stakeholders from the resilient micropolitan area involved in the alliance worked towards a common goal of economic advancement implementing the four axes of place-based strategies: increasing local business competitiveness; encouraging investment within the community; enhancing the skills, education, and experience of the local workforce; and

addressing infrastructural issues and willingness to develop new infrastructure.

The resilient micropolitan began developing collective capacity prior to experiencing an economic shock. Stakeholders recognised that their form of governance was not functioning in an effective manner and moved to a city manager model in place of a politically motivated mayor as the municipal executive. To identify potential projects and local stakeholders, the city conducted an industry study to best plan how to move towards a growing economy. The results of the industry study led stakeholders to realise that traditional economic development must be completed in conjunction with quality-of-life improvements, educational opportunities, and infrastructure investments. Following this watershed moment, the city conducted several additional short- and long-term studies to identify areas in the community that needed to be addressed. They identified possible place-based strategies like downtown improvements, area specific labour force training, quality of life developments, and substantial recruitment of outside businesses for inward development.

The timing of these projects and community improvements coincided closely with the employment recovery observed in 2013. Several stakeholders stated they began seeing results of their collaborative efforts. As shown in Figure 2, recognising a shortage of local housing, a nonprofit organisation partnered with a city committee to identify available property to develop. The coalition applied for a state tax credit for rural development and partnered with a developer to construct a new development within the city limits. The city provided infrastructure support and tax increment financing making the project affordable for the developers. The new housing development provided desirable housing to potential new employees to area businesses and provided additional property taxes to the community. The new housing represented an inward investment that the community identified and devoted resources to ensure the success of the project. Additionally, the modernization of the wastewater treatment facility brought two major employers to the area, which required the involvement of private business, local utilities, the alliance, and several stakeholders.

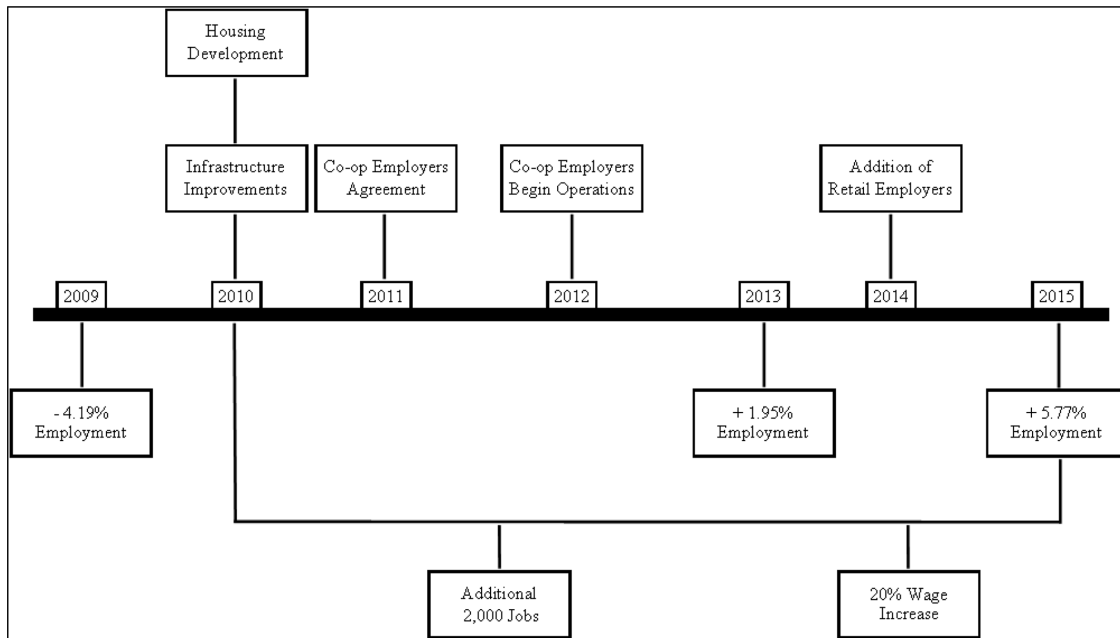


Figure 2 Timeline of Economic Recovery—Resilient Micropolitan

The project embodies both place-based strategies of increasing local business competitiveness and encouragement investment in the community. The development director of the alliance related that a cooperative agreement between the community and the two employers occurred in 2011 and they began operations in fall of 2012. In addition to this and the other projects undertaken by the community, the opening of these employers corresponded with the observed 1.95% employment recovery in 2013. These examples provide support for a relationship between collaborative capacity and resilience as the employment rate continued to improve two years later in 2015. The development director continued highlighting local economic successes from these economic development efforts undertaken by the resilient micropolitan area by reporting the creation of nearly 2000 new jobs in the last five years and a wage increase nearing 20%. Stakeholders recognised the importance of the creation of jobs that were high paying and desirable to expand their local economies. They stressed the importance of collaboration with several other organisations and businesses like the public health department, local government, industry leaders, and the alliance. Collaboration among stakeholders assured that the community expanded the wastewater treatment facility and created available housing which

made certain the two employers were recruited. Subsequently, employees were recruited and retained in the city. These collaborative and other place-based strategies overall contributed to increased resilience following the economic shock.

Discussion

Contribution to organizational collaboration

Micropolitan areas and other small communities are increasingly threatened by economic shocks (Brown, 2018). The ability of the region to become resilient is critical for the vitality and quality of life in these communities. As such, there is an increasing need to understand how micropolitan communities can be better prepared to address future shocks. Since micropolitan areas differ from rural and urban areas (Cortes et al., 2015; Vias, 2012; Brown, 2018; Oliver and Thomas, 2014), the research outlines different strategies which are specific to their size. Specifically, this research outlines that collective capacity is key to developing place-based strategies.

We found that creating collective capacity allowed city stakeholders to implement policies



and programme that were successful in creating local jobs and retain their population. The findings of this research contribute to the literature on organisational management at by improving understanding regarding how stakeholders build collective capacity and are capable to act. The organisational collaboration literature is dominated by positivity (Cross and Sproull, 2004; Foss et al., 2010; Hansen, 1999; Koppenjan and Enserink, 2009b). Positivity posits that tools and governance mechanisms drive collaboration. The perspective of these studies often seeks to identify simple interventions that can be incorporated across contexts to facilitate interactions among stakeholders. These views are nevertheless removed from the everyday realities where many collaborations fail in practice (Koschmann, 2016b). These failures are mostly attributed to the complexity of the collaborative process. A constitutive view seeks to refine these complexities by describing the configuration of processes which lead to successful collaboration. In the resilient city, these included aligning effort, interacting face to face, supporting participation, sharing identity, and building organisational capacity. In practice, collective capacity meant that public and private stakeholders were willing to listen to each other, reflect on new perspectives that were different from their own and through ongoing dialogues coordinate efforts towards common outcomes. Aligning effort occurred as stakeholders slowly negotiated new meanings such as the possibility of cross-sector collaboration when working on bidding for projects. This initial foundation was further solidified through participation as power became decentralised and stakeholders were further included which helped build a sense of shared responsibility towards economic development. Finally, collaboration was scaled up as stakeholders built organisational capacity through formed a formal alliance, strategic plans and a common vision of the city. This provided legitimacy and solidified the motivations for acting collaboratively. In sum, a decade long continuous dialogue, distribution of responsibilities and formal partnerships provided the foundation for the stakeholders to implement place-based economic development projects.

Collective agency resulted in adoption of place-based economic development. The resilient micropolitan area adopted place-based strategies at a higher rate and larger scale than the vulnerable micropolitan area. These strategies included localised solutions in the following areas: (1) increasing local business competitiveness, (2) encouraging investment in the community, (3) increasing skills and education, and (3) expanding the experience of the local workforce and addressing infrastructural issues and expressing a willingness to develop new infrastructure. How exactly are place based strategies different from other strategies? We found that place-based strategies closely reflected the local capacities of microapolitan areas. An example of a place-based strategy included investment in programmes geared at expansion of water and wastewater capacity which ultimately facilitated the recruitment and retention of important industrial actors to the area. While this decision involved significant amount of financial risk for the city, the city was well aware of their local capacities, such as natural capital (eg, corn) and the need to strengthen it. They worked closely with the industries to build the infrastructure needed for taking full advantage of the local natural capital. Additionally, the resilient micropolitan area invested more resources in community-development programmes such as housing development. The housing development decision responded to the local needs of developing and motivating the local workforce to stay in the area. Overall, the resilient micropolitan area managed to incorporate more localised solutions because of their ongoing stakeholder collaboration where communication increased visibility of existing issues in their community.

Limitations

Importantly, these interviews represent stakeholders' interpretations regarding resilience. While the stakeholders interviewed in this project represent central institutions which have a good historical perspective, their perspective can be partial and not representative of other actors (eg, community members).



Data availability statement

Some or all data, models, or code generated or used during the study are proprietary or confidential in nature and may only be provided with restrictions (eg, anonymized data). Data from this research includes interview transcriptions. Interview data which refers to the micropolitan context and identity of the respondents will be excluded.

Conclusions

The current research studies the topic of economic resilience in the context of micropolitan areas. An understudied geographic region, micropolitan areas call for further attention considering their experience with economic shocks. In this context, researchers know little about communities' adaptive capacities to economic shocks. This research was conducted with 22 stakeholders who worked for a wide range of local institutions within two micropolitan areas in the Midwest. The micropolitan areas were selected based on census data regarding micropolitan areas that had experienced job losses and job recoveries. First, the results indicate that economic development is determined by stakeholders' collective agency. Achieving collective capacity was achieved through aligning effort, interacting face to face, supporting participation, sharing identity, and building organisational capacity. Collective capacity enhanced the resilient micropolitan area's ability to adopt place-based strategies at a higher rate and larger scale than the vulnerable micropolitan area. These strategies included the following: (1) increasing local business competitiveness, (2) encouraging investment in the community, (3) increasing skills and education, and (3) expanding the experience of the local workforce and addressing infrastructural issues and expressing a willingness to develop new infrastructure. This research contributes to a constitutive perspective of collaborations which was a decade long continuous dialogue among diverse stakeholders. Collective capacity allowed incorporating more localised solutions as participation increased visibility of existing issues in their community.

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Appendix A

38 micropolitans with shocks	Employment shock	Employment recovery	Case studies
1	-19.57	-26.43	
2	-11.68	-15.27	
3	-4.92	-11.76	
4	-7.00	-7.64	
5	-5.72	-8.03	
6	-4.18	-8.57	Vulnerable micro-politan
7	-14.68	4.24	
8	-4.95	-5.09	
9	-5.40	-4.00	
10	-4.58	-4.78	
11	-11.64	2.67	
12	-4.25	-4.34	
13	-4.79	-3.73	
14	-6.66	0.00	
15	-6.31	0.00	
16	-3.57	-2.28	
17	-4.55	-1.20	
18	-5.42	0.00	
19	-4.14	-1.18	
20	-3.86	-0.60	
21	-4.17	0.00	
22	-4.00	0.00	
23	-3.55	0.00	
24	-6.89	3.95	
25	-3.68	1.53	
26	-3.50	1.65	
27	-4.67	3.80	
28	-4.30	4.44	
29	-3.63	4.48	
30	-3.78	4.88	
31	-3.80	5.20	
32	-6.49	8.45	
33	-3.57	6.42	



38 micropolitans with shocks	Employment shock	Employment recovery	Case studies
34	-4.19	7.63	Resilient Micropolitan
35	-3.64	8.56	
36	-3.63	11.47	
37	-3.78	12.76	
38	-5.48	17.91	