CHANGING EXPENDITURE PATTERNS IN ILLINOIS MUNICIPALITIES

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The economic recovery in Illinois following the Great Recession was relatively sluggish. Per capita expenditures by municipalities with a population of 25,000 or larger increased by only about 1% annually between 2012 and 2019 after controlling for inflation. In some instances, these municipalities lost population or had decreases in their tax base. Some made slight shifts to capital expenditures, perhaps to adjust from cutbacks during the recession period but these changes were relatively small. This article exams expenditure trends by size of municipality and location within Illinois. Substantial differences are found between those in the Chicago area versus downstate. Downstate municipalities had the lowest percentage increase in per capita expenditures, and those with populations between 25,000 and 50,000 reported spending less. Cutbacks occurred in health, cultural, education, and sanitation expenditures. We also provide insights into potential impacts of the recent COVID-19 economic downturn on local government expenditures.

INTRODUCTION

The relatively sluggish Illinois economy in the 2008 to 2009 recession recovery added considerable stress on state and local governments in financing public services at desired levels and caused many to adjust revenues and expenditures. High unemployment and the slow economic rebound not only depressed tax bases but also created additional demands for services. Lagging state finances reduced shared revenues such as the Local Government Distributive Fund (LGDF) as the state government struggled to balance its budget.

Combined with economic issues, rising pension contributions meant that during and following the Great Recession, municipalities had to reassess spending patterns, delay infrastructure projects, including planned expansions, and, in some cases, even reduce employment. This article examines changing expenditure patterns in Illinois municipalities with a population of 25,000 or

more, excluding the City of Chicago, between 2012 and 2019 based on data published in the Illinois Office of the Comptroller Data Warehouse.¹

Compounding the economic issues, large downstate municipalities in Illinois such as Decatur (-7.1%), Rockford (-5.0%), and Moline (-4.8%) declined in population during the post-recession period. Losses of businesses and employment threatened both property tax bases and sales tax revenues. Population declines also reduce revenues from LGDF, which is the local share of state income tax, and Motor Fuel Tax.

Since not all Illinois municipalities had yet reached their pre-recession (2009) employment levels, the COVID-19 pandemic downturn will likely adversely affect them even more seriously based on early estimates (McFarland and Pagano, 2020). The current estimated potential impacts depend on fiscal year dates, and those with an April 30 year-end reported only a few months of the downturn. Likewise, revenue structure is important because property taxes have stabilizing effects. The impact of price changes in property values is typically reflected several years later in the assessment cycle, somewhat delaying the effect of tax base declines.

Subsequent analyses incorporate results from a 2018 survey of Illinois mayors regarding fiscal strategies used in responding to the Great Recession (Walzer and Blanke, 2018). Those responses showed that the 91 responding mayors had employed a variety of strategies in the post-recession period. The most prevalent was to increase water and sewer rates (74.1%) followed by delaying replacement of vehicles or equipment (68.2%) and postponing completion of capital repairs or replacements (65.9%). Less frequently reported tactics involved applying for federal or state project funds (40.0%), raising general property tax rates (37.6%), or drawing down unrestricted reserves (36.6%).

Considering the 2018 survey responses, analyses in this article pose several research questions. First, how did inflation-adjusted expenditures for common municipal services change in both level and composition during the post-recession period? Do these changes vary by economic conditions, population size and characteristics, or other factors? Can these trends shed light on the potential impacts of future recessions or economic changes such as the current COVID-19 downturn? Second, what are the effects of the cutbacks on expenditure distributions? Did municipalities divert spending from capital projects or current services to meet other obligations during the recession years and then reinvest in equipment and facilities during the recovery? These

strategies may have long-term spending impacts. Can insights gained in the past seven years help analysts and officials to understand similar changes in the future? Third, how does the structure of municipal expenditures vary by location and municipal size, and can these patterns provide insights into state policy, such as the need for assistance to help specific groups of municipalities respond to the current downturn?

To understand changes in expenditures during the recovery, subsequent analyses examine municipal expenditures in 2012 and 2019. This period was selected because the immediate effects of the Great Recession had largely passed, with municipal officials focusing more on the recovery period. The later year provides the most recent data on spending. This analysis can help show how municipalities are positioned for the economic downturn that started in April 2020.

SAMPLE CHARACTERISTICS

Of the 91 municipalities with populations of 25,000 or more in 2019, information for 43 of them was published in the Illinois Office of the Comptroller Financial Databases in Fiscal Year (FY) 2012 and FY 2019, and 42 of those had home rule authority.² Most of the municipalities had a population under 50,000. While there is some geographical clustering in northeastern Illinois (where most municipalities of this size are located), many are in the central and southern parts of the state (Figure 1). The average size of the 43 sample municipalities is similar to the average size of all 91 municipalities in the same size group (t-test).³

The sample municipalities have home rule authority unless removed by local referendum, which has happened in relatively few instances. Thus, they have more discretion to adjust expenditures and revenues during changing economic conditions. The sample differs widely in economic and employment bases, which offers insights into adjustments to the fiscal challenges. Many of these municipalities, because of their relative size, are employment centers in the region, so their fiscal responses also affected the surrounding area.

On average, populations in the sample municipalities declined 1.1% between 2012 and 2019 (Table 1). Municipalities in Cook County and downstate (i.e., outside the Chicago metro area) lost population compared with others in the Chicago metro area (collar counties), and the declines were consistent for municipalities above and below a population of 50,000.

FIGURE 1
LOCATIONS OF SAMPLE MUNICIPALITIES

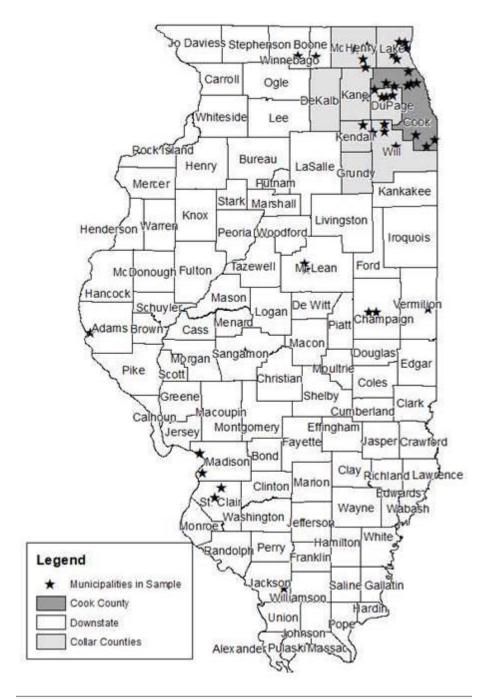


TABLE 1
CHARACTERISTICS OF SAMPLE MUNICIPALITIES

		BY LOCATION			BY POPULATION SIZE	
INDICATOR	SAMPLE TOTAL	COOK COUNTY	COLLAR COUNTIES	DOWNSTATE	OVER 50,000	UNDER 50,000
No. of sample municipalities	43	10	18	15	9	34
Average population 2019	43,991	39,138	38,369	53,974	86,306	32,790
Pop. change 2012-2019	-1.1%	-3.1%	0.9%	-1.8%	-1.3%	-0.9%
EAV per capita FY 2019	\$28,464	\$51,165	\$29,875	\$16,286	\$22,747	\$32,447
Change in EAV/ capita FY 2012-FY 2019 (MPI adjusted)	-10.1%	0.3%	-17.3%	-11.5%	-17.9%	-5.8%
Total spending per capita FY 2019	\$1,831	\$2,201	\$1,540	\$1,899	\$2,053	\$1,676
Change in spending per capita FY 2012- FY 2019 (MPI adjusted)	9.0%	24.8%	12.6%	0.2%	5.5%	12.3%
Median household income, average of 2014-2018 period	\$70,670	\$80,154	\$83,643	\$48,780	\$61,656	\$73,056

Sources: U.S. Census Bureau, Population Estimates Program and 2014-2018 American Community Survey, Illinois Office of the Comptroller, FY 2012 and FY 2019 financial databases, Northern Illinois University Center for Governmental Studies and the Illinois Municipal League, Municipal Price Index.

However, trends in property tax assessed valuation per capita followed the opposite pattern. When adjusted for inflation, Equalized Assessed Value (EAV) per resident declined overall, but especially in larger municipalities in the collar counties, while falling slightly less elsewhere, and increasing in Cook County.

As noted previously, changes in property tax bases usually lag economic changes, so these changes may indicate potential impacts on revenues available in the next several years.

Regardless of population and tax base trends, all groups increased total spending per capita between FY 2012 and FY 2019, with the largest growth (24.8%) in municipalities located in Cook County. This is consistent with these municipalities reporting the highest increase in tax base (18.8%), and many had fewer than 50,000 residents. While the 24.8% growth in per capita spending may seem large initially, it spans seven years and averages 3.7% per year, corrected for inflation.⁴

Not surprisingly, the highest median household incomes (\$83,643) were reported by collar counties and suburban municipalities with populations smaller than 50,000 (\$73,056), although these income figures are not adjusted for spatial differences in cost of living. Anecdotally, some of the smaller, wealthier suburbs increased spending the most, supported by large increases in tax bases. Downstate municipalities, however, reported the lowest median household incomes (\$48,780), reported stable spending patterns (0.2%), and were mid-range regarding spending levels. Their tax bases are well below either those in Cook County or the collar counties.

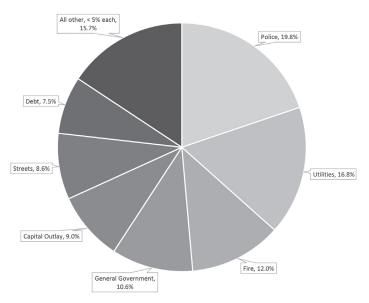
POST-RECESSION EXPENDITURE STRUCTURE AND TRENDS

Given sluggish economic growth, higher pension obligations, and shrinking LGDF revenues, the sample municipalities faced difficult expenditure choices. They had to decide whether to continue with needed capital improvements or to postpone these projects in favor of financing current services. While cutbacks in capital spending can be a temporary remedy, delayed capital spending can mean higher spending in the future.

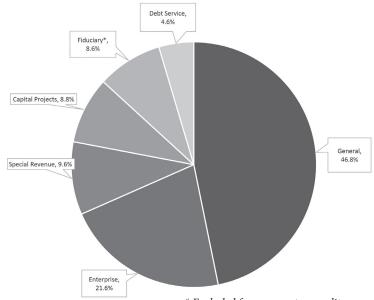
In 2019, the three largest categories for spending by Illinois municipalities were police protection, utilities such as water service, and fire protection (Figure 2). While municipal services are financed through several fund types, nearly half of the spending is from the general fund, and 21.6% of the spending is from enterprise funds. Special revenue funds and capital projects funds finance a narrow range of projects. Fiduciary fund expenditures for pension plans and other retirement benefits were not included when examining current expenditures for services but represented 8.6% of total spending across fund types.⁵

FIGURE 2 COMPOSITION OF FY 2019 EXPENDITURES BY PURPOSE AND FUND TYPE

CURRENT EXPENDITURES BY PURPOSE



TOTAL EXPENDITURES BY FUND TYPE



* Excluded from current expenditures.

TABLE 2PFR CAPITA SPENDING TRENDS

SPENDING PER CAPITA	FY 2012	FY 2019	ANNUALIZED % CHANGE (CURRENT \$)	ANNUALIZED % CHANGE (CONSTANT \$)
Total expenditures*	\$1,418	\$1,831	4.2%	1.3%
Capital outlay	\$123	\$164	4.8%	1.8%
Public safety	\$483	\$624	4.2%	1.8%
Police**	\$287	\$362	3.7%	1.4%
Fire**	\$168	\$219	4.3%	2.1%
Utilities	\$260	\$307	2.6%	-1.2%
General government	\$165	\$195	2.6%	-0.1%
Transportation and public works	\$146	\$191	4.4%	1.2%
Streets**	\$118	\$158	4.8%	1.6%
Culture and recreation	\$76	\$79	0.6%	-1.6%
Sewerage and sanitation	\$60	\$68	2.1%	-1.5%
Housing	\$16	\$20	3.4%	0.7%
Health and social services	\$19	\$20	0.3%	-1.9%
Debt service	\$110	\$138	3.7%	0.9%
All other	\$32	\$25	-3.0%	-4.8%
Fiduciary fund expenditures (not counted in total expenditures)	\$113	\$172	7.5%	4.0%

^{*}Excludes depreciation. **Subcomponents do not sum to totals because not all items are shown.

The average sample municipality spent a total of \$1,831 per resident in FY 2019, an annualized increase of 1.3% when adjusted for the Municipal Price Index (MPI – Table 2). However, the municipalities varied widely in expenditure patterns, and population declines in some cases may create the impression of increases in per capita expenditures by reducing the denominator of the formula (population). Nevertheless, the growth in expenditures during this period was relatively small overall.

Of special interest is the ability of municipalities to support infrastructure such as streets, bridges, water/wastewater, and related services. Comparisons in

Table 2 suggest that in some cases, capital projects may have been postponed earlier or deferred to the post-recession period since spending for capital outlays increased 1.8% annually in constant dollars (higher than the 1.3% for total expenditures). The higher increase suggests that some resources were diverted to capital projects, possibly to correct for previous underspending, but the change was small, and capital outlays as a percentage of total spending went only from 8.6% to 9.0%. Also, capital outlays may include intergovernmental aid such as federal grants for infrastructure projects, but detailed information is not readily available to allow for these adjustments, and a closer examination is needed.

Streets and public works (except sewer and solid waste) also represent relatively large municipal expenditures.⁶ While the 1.6% annual increase in constant dollar expenditures for streets surpasses the 1.3% increase for total spending, street expenditures as a percentage of total spending increased only from 8.3% to 8.6%. Again, these comparisons are affected by other local factors such as use of intergovernmental aid and the fact that street projects may involve expenditures over several years, which can affect payments in any one year.

On a broader note but with similar caveats, transportation, and public works (TPW) expenditures went from an average of \$146 per capita to \$191 between 2012 and 2019. This 4.4% annual increase in current dollars represented only a 1.2% increase in constant dollars. Nevertheless, it was on par with total expenditures. Based on only these comparisons, it does not appear that municipalities made major reallocations of local funds for TPW projects. However, as noted, the local amounts may have been leveraged against federal or state funds that allow municipalities to repair and replace infrastructure facilities. Likewise, the 2018 fiscal strategies survey suggested that user fees were increased, which could also help finance these projects. More research on this issue is needed before making a definitive statement.

Expenditures for police and fire protection are typically large among those for common functions since education services in Illinois are provided by school districts, a separate unit of government. The \$483 spent per capita for public safety (police, fire, and inspections) in 2012 increased to \$624 (4.2% annually) by 2019 but was only a 1.8% growth in constant dollars. Police and fire protection departments spend high percentages on personal services as noted previously. Wage increases in the private sector affect the wages that municipalities must pay to attract quality employees. Nevertheless, spending increases for protective services exceeded overall municipal spending changes.

The rates of spending increase differ within the public safety category. Expenditures for police protection, although higher than for fire protection, increased at a substantially lower rate (1.4% versus 2.1%) in constant dollars. The higher increase is explained partly by higher initial expenditure levels in 2012, but it appears that the resources to deliver fire protection increased during the post-recession period given that spending increased substantially more than total municipal spending per capita.

Sewer treatment and other sanitation expenditures differed, but the data are less precise due to use of enterprise funds in some cases, making a more detailed examination of the data necessary before drawing inferences. The \$60 per capita spent in 2012 represented only \$68 in constant dollars, a decrease of 1.5% which conflicts with indications that water and sewer rates increased in some municipalities in the 2018 fiscal strategies survey. Also true is that some of these capital needs are not as immediately obvious as with streets and perhaps can be postponed for longer periods in favor of meeting more immediate service needs. Further, since utilities tend to be managed through funds other than a city's general fund, expenditures in this area do not directly compete with general fund services.

Also, sewerage and solid waste collection is linked with the number of residents, so stable or declining populations do not necessarily trigger expenditure increases except for emergency repairs. Streets, on the other hand, deteriorate due to weather conditions and traffic patterns, which can change with business activity and other factors. The higher visibility of streets may generate more pressure from residents for more immediate repairs or replacement.

Municipalities also engage in debt financing in providing services, especially those that will be used by future generations. The Illinois Office of the Comptroller Data Warehouse includes an expenditure item for debt but with no distinction regarding short-term versus long-term categories. Debt service payments fluctuate with both amount of debt and interest rates. As part of a national recovery strategy, the Federal Reserve has kept interest rates relatively low to stimulate investment. Thus, higher debt expenditures in the current analysis (\$110 to \$138) suggests that sample municipalities may have borrowed during the post-recession period, possibly to take advantage of low rates. Debt payments increased 0.9% in constant dollars, less than the overall increase (1.3%) in constant dollars.

The shift in spending priorities is further shown by several functions for which spending was reduced. Health and social services, for example, decreased 1.9% (constant dollars) during the post-recession period. Culture and recreation activities, such as libraries and parks, declined 1.6% post-recession. These data can be difficult to compare since park districts or library districts provide services in many municipalities. When municipalities have park or recreation departments, they typically represent relatively small components of their budgets. Thus, in cases where municipalities provide libraries, even a small dollar decline can represent a substantial percentage change.

Spending on general government activities, including central management, was stable (-0.1% in constant dollars) since these functions had to continue during this period. In some instances, technology advancements may have displaced employees and reduced expenses. Populations were relatively stagnant or declined in some municipalities, which suggests that the workload in administering services may not have increased substantially.

Rising pension costs are another important factor in understanding changes in municipal expenditures, and in the 2018 fiscal strategies survey, responding mayors reported that pensions were one of the main factors contributing to spending (Walzer and Blanke, 2018). A brief comparison of funding ratios shows that 65% of the downstate police pension funds and 58.6% of the downstate firefighter pension funds were at funding levels between 50% and 80%. Statewide mandates say that pension funds must reach 90% funding by 2040. A more detailed analysis of the pension contributions is available in Blanke and Walzer (2018). Municipal officials face higher expenditures to work down the amortization amounts and bring them in line with targeted levels. In some instances, these requirements can mean that pension contributions will compete for spending on both current services and infrastructure projects driving higher expenditures or possible reductions in staff (Schuster, 2018).

Fiduciary fund expenditures, which are counted separately from current expenditures and do not reflect the full future cost of pension liabilities, increased 4.0% annually after adjusting for inflation. Fiduciary fund expenditures include employer contributions to pension plans and costs of providing employment benefits in the current fiscal year.

TABLE 3EXPENDITURES BY LOCATION AND SIZE, FY 2019

		BY LOCATION			BY POPULATION SIZE	
SPENDING PER CAPITA	SAMPLE TOTAL	COOK COUNTY	COLLAR COUNTIES	DOWNSTATE	OVER 50,000	UNDER 50,000
Total expenditures*	\$1,831	\$2,201	\$1,540	\$1,899	\$2,053	\$1,676
Capital outlay	\$164	\$278	\$169	\$105	\$131	\$187
Public safety	\$624	\$745+	\$537	\$639	\$694	\$575
Police**	\$362	\$413	\$367	\$332	\$383	\$347
Fire**	\$219	\$304+	\$127	\$257	\$292	\$168
Utilities	\$307	\$229	\$224	\$416	\$394	\$246
General government	\$195	\$296++	\$192	\$150-	\$184	\$203
Transportation and public works	\$191	\$301++	\$154	\$169	\$209	\$178
Streets**	\$158	\$207+	\$144	\$146	\$157	\$158
Culture and recreation	\$79	\$120	\$42	\$91	\$136	\$40
Sewerage and sanitation	\$68	\$27-	\$74	\$83	\$66	\$70
Housing	\$20	\$5	\$5	\$39	\$35	\$9
Health and social services	\$20	\$16	\$3	\$35	\$38	\$7
Debt service	\$138	\$179	\$117	\$137	\$154	\$127
All other	\$25	\$6	\$24	\$36	\$12	\$34
Fiduciary Fund expenditures (not counted in total)	\$172	\$241++	\$99	\$201	\$203	\$151

^{*}Excludes depreciation. Total slightly exceeds sum of components because judiciary and legal spending are not shown due to spending levels of less than \$1 per resident.

^{**}Sub-components do not sum to total because not all items are shown.

^{+ / -} Indicates significant difference at a 10% confidence interval.

^{+ +/ --} Indicates significant difference at a 5% confidence interval.

SPENDING BY LOCATION AND POPULATION

Examining expenditure shares by location and population size sheds light on variations among municipalities. Differences exist in expenditure patterns reflecting unique local conditions and general comparisons for several broad categories.⁸

Common expenditures, such as police and fire protection, were not expected to differ as much as some other services because they are more population-based and less influenced by economic conditions (Table 3). In 2019, expenditures for police protection ranged from \$332 per capita in downstate municipalities to an average of \$413 in Cook County municipalities. A t-test measuring the statistical significance of differences between two group averages indicates no significant variations in police expenditures per capita by county type.⁹

The wide differences in expenditures for fire protection — \$304 per capita in Cook County versus \$127 in the collar counties — may also reflect that fire protection districts in the suburbs offset expenditures otherwise made by municipalities. The districts serve multiple municipalities and allow collaboration in sharing specialized equipment or personnel, resulting in reduced expenditures. A prime example is the Tri-City Ambulance services provided jointly by Batavia, Geneva, and St. Charles along with several other fire protection districts (Walzer and Plasch, 2016). Fire protection expenditures were significantly higher in Cook County and significantly lower in the collar counties.

Expenditures on streets exhibit the smallest variations, perhaps because they are closely linked with residential and business traffic patterns. Major differences can occur when municipalities have large shopping centers or entertainment facilities that regularly draw additional traffic from outside the municipal boundaries and require more infrastructure to accommodate the traffic flows. Municipalities located in Cook County reported the highest average expenditures (\$207), but relatively small differences were reported among other size and location groupings. Overall, transportation costs were significantly higher in Cook County than in other parts of the state.

A somewhat similar situation exists with spending on sewers and sanitation. In this case, municipalities in Cook County differ by spending significantly less (\$27 per resident) than other municipalities. Once again, additional research may show these differences reflect collaborative arrangements for collection

and treatment involving other government agencies. However, relatively small differences are found among reporting municipalities when compared by size.

Fiduciary fund expenditures, which only reflect pension costs that affected FY 2019 budgets, varied significantly with higher spending in Cook County and lower spending in the collar counties.

WHAT HAVE WE LEARNED?

The analysis of spending patterns and trends for Illinois municipalities generated several findings that may help analysts and officials understand the current position of municipalities as they manage the current economic downturn. The recession came so quickly on the heels of a strong U.S. economy that it is difficult to know the full impact on municipal revenues and expenditures. Likewise, the ultimate toll will depend on the duration of the downturn, unemployment caused, and assistance from the federal government, which is under debate as of early September 2020.

However, several observations based on analyses in this article are worth noting. They are followed by a brief discussion of the *City Fiscal Positions 2020* report published by the National League of Cities.

While spending per resident increased in the post-recession period, the increase in total expenditures averaged only slightly more than 1% annually in constant dollars.

There was a slight shift in spending on capital items compared with current services during the recovery, but the inability to completely remove the effects of external funding make generalizing to future periods difficult.

Overall, wide differences in expenditure trends exist with municipalities in Cook County increasing expenditures (constant dollars) more than elsewhere. Downstate municipalities had the lowest percentage increase in per capita expenditures, and those with populations between 25,000 and 50,000 reported spending less in constant dollars.

Cutbacks occurred in health, cultural, and education costs plus sewerage and other sanitation expenditures. Presumably, these reductions freed resources to expand other services.

Spending for general administration decreased 0.1% annually in constant dollars, so the recovery brought little, if any, expansion in administration.

What, if any, light can the experiences following the Great Recession shed on the recovery from the (hopefully short-term) current economic downturn? The situations and conditions between the Great Recession and the pandemic downturn differ completely, so the relevance of past experiences is not completely clear. Inflation has been kept relatively low in recent years as an expansionary economic development practice. While interest rates are likely to continue at this level in the near term, at some point, deficit spending may stimulate inflation. Until that time, municipal costs may not be seriously affected by price increases.

The impact of the COVID-19 lockdown on businesses has already been substantial as was reported in a May 2020 survey of conditions in the Midwest by the Federal Reserve Bank of Chicago (Hauser and Walstrum, 2020). Consequently, the pandemic has substantially reduced municipal revenue expectations. Given that the fiscal impacts in this survey were only for the early months of FY 2020, they are likely to be much more serious in the next several years. This is certainly the perspective at the national level according to the 2020 National League of Cities report (McFarland and Pagano, 2020). The timing of the fiscal year is crucial in these estimates, however, because year-ends in April or May occurred shortly after the start of the COVID-19 pandemic.

However, nationwide responses from 485 cities with more than 10,000 in population indicated that nearly 90% of cities expect to be less able to deliver the same services as in FY 2020. On average, respondents reported that the revenue growth in 2020 was at or near zero. They also estimated that general fund revenues could decrease as much as 13% in 2021 and reported declines in both sales and income tax receipts (McFarland and Pagano, 2020).

The response to the National League of Cities survey in Illinois was limited (12 municipalities), which makes it difficult to apply the national findings. However, there can be no question that the impact of the recession on municipal finances will be significant over time and that additional support from the state and federal government will be important trends in finances that should be monitored closely.

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Norman Walzer retired as Senior Research Scholar at the NIU Center for Governmental Studies and now works on special projects researching state and national policy issues. Previously, he was founding director of the Illinois Institute for Rural Affairs located at Western Illinois University. In 2019, the Illinois Municipal League awarded him a Lifetime of Service Award for work on projects affecting Illinois municipalities.

ENDNOTES

- ¹ The sample includes only those municipalities in Illinois with populations larger than 25,000 that reported to the Illinois Office of the Comptroller in both 2012 and 2019 so that the same municipalities are included in both years to minimize distortions.
- ² U.S. Census Bureau. (2019). Annual estimates of the resident population for incorporated places: April 1, 2010 to July 1, 2019. https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-cities-and-towns.html
- ³ A t-test of the mean size of the sample and all municipalities shows no statistically significant difference.
- ⁴ We correct for inflation using the Municipal Price Index (MPI) (Walzer and Blanke, 2020). Although inflation has not been a major issue in recent years, the index shows that during periods of relatively low inflation in the private sector, its impact on municipalities is higher because of a high concentration of expenditures for personal services. Wage increases typically outpace price increases for commodities in the private sector, and local competition for skilled workers raises wages for municipal employees, thus raising municipal costs. For instance, the cost of items purchased by municipalities in Illinois increased 23.9% between 2010 and 2019 compared with a 17.2% increase in the Consumer Price Index (CPI).
- ⁵ Care must be exercised when examining fiduciary fund expenditures because they reflect only employer contributions in the current fiscal year. They do not show the cost of pension liabilities, i.e., pension benefits that will be owed when current employees eventually retire. Fiduciary funds are a relatively small proportion of current spending with unfunded liabilities being a well-documented future cost.
- ⁶ A more complete listing of the services included in each category is provided in the Appendix.
- ⁷ Short-term debt only appears in the comptroller databases to the extent that it is not paid off within the year it is issued. Debt that is issued and paid off within the same year is not reported as short-term debt outstanding. And the debt service expenditure category does not distinguish service of short-term debt versus long-term debt.
- ⁸ Since some municipalities experienced major population changes since 2010, annual population estimates by the U.S. Census Bureau were used to calculate per capita expenditures.

⁹ A t-test of the mean size of the sample and all municipalities shows no statistically significant difference.

REFERENCES

Blanke, A. & Walzer, N. (2018). Insights into rising pension costs in Illinois municipalities. *Illinois Municipal Policy Journal* 3(1): 117-134.

Hauser, J. & Walstrum, T. (2020, June 25). Results from a special Chicago Fed survey of business conditions on the impact of Covid-19 on manufacturers. *Midwest Economy Blog*. Federal Reserve Bank of Chicago. https://www.chicagofed.org/publications/blogs/midwest-economy/2020/manufacturers-survey-results

McFarland, C.K. & Pagano, M.A. (2020). City fiscal conditions 2020. National League of Cities. https://www.nlc.org/sites/default/files/users/user57221/City_Fiscal_Conditions_2020_FINAL.pdf

Schuster, A. (2018, April 11). Harvey pension crisis leads to mass layoffs. *Illinois Policy*. https://www.illinoispolicy.org/harvey-pension-crisis-leads-to-mass-layoffs/

Walzer, N. & Blanke, A. (2020). Illinois municipal price index, 2019. *Illinois Municipal Review* 19(5): 23-27.

Walzer, N. & Blanke, A. (2018). Municipal fiscal responses in the post-recession era. *Illinois Municipal Policy Journal* 3(1): 67-82.

Walzer, N. & Plasch, C.P. (2016). Shared services as a response to governmental fragmentation. *Illinois Municipal Policy Journal* 1(1): 1-14.

APPENDIX

DEFINITIONS OF EXPENDITURE CATEGORIES

Below is a summary of items included in the expenditure categories explored in this paper. These categories are based on classifications in financial reports submitted to the Illinois Office of the Comptroller and compiled in their financial databases.

CATEGORY	DESCRIPTION	COMMENTS
Capital outlay	Code 280T in comptroller data — category cannot be dissected further	Not consistently reported across municipalities. Some streets expenditures could be considered capital projects but are reported under streets, for example. More research is needed to adjust for discrepancies in reporting.
Public safety	Code 252T — includes police, fire, and regulation/building inspections	
Utilities	Code 271T, "Public Utility Company" — includes water, electric, and public transit such as bus service	Only three sample municipalities provided electrical service in FY 2019.

CATEGORY	DESCRIPTION	COMMENTS
General government	Code 251T — includes financial administration, central staff, and general grounds/buildings costs	
Transportation and public works	Code 255T — includes streets, airports, parking meters, and parking facilities	Transportation and transit services are meant to be reported separately in the comptroller data scheme, with transportation referring to infrastructure while transit refers to services such as bus lines. More research would be needed to verify the extent to which overlaps or inconsistencies exist between these categories.
Culture and recreation	Code 257T — includes parks, libraries, and "other"	"Other" can include facilities such as museums and performing arts centers.
Sewerage and sanitation	Code 275T, "Environment" — includes sewage and solid waste management	
Housing	Code 258T — cannot be dissected further	
Health and social services	Code 256T, "Social Services" — includes welfare, health, hospital operations, cemeteries, and other human services	
Debt service	Code 259T — includes principal and interest on debt	Does not represent debt outstanding.
All other	Code 260T, "Other (Explain)"	Unpacking expenditures in this category requires reading individual financial reports for local context. The financial reports include an "explanations" section where this can be clarified, but it is not consistently filled out.