Resisting the Next Recession

Measuring Illinois' Economic Resiliency

December 9, 2024

Grace Dunn
Former Research Associate
Illinois Economic Policy Institute

Robert Bruno, PhD
Professor and Director
Project for Middle Class Renewal
University of Illinois at Urbana-Champaign

Frank Manzo IV
Economist
Illinois Economic Policy Institute

Executive Summary

Despite dire predictions from many economic commentators, a national recession was avoided in 2022, 2023, and 2024. However, the risk of a recession remains elevated in 2025 and beyond. This Illinois Economic Policy Institute (ILEPI) and the Project for Middle Class Renewal (PMCR) at the University of Illinois at Urbana-Champaign report explores how Illinois fares on key items that are correlated with a state's economic resiliency and ability to weather the consequences of a recessionary cycle.

Illinois is better prepared for an economic downturn than it was prior to both the Great Recession from 2007 to 2009 and the Covid-19 Recession of 2020. The State of Illinois has:

- Effectively eliminated the General Fund deficit, paid off its bill backlog, and received a total of nine credit rating upgrades since 2020—allowing the state to borrow at lower interest rates and saving money for taxpayers.
- Built its largest ever Budget Stabilization Fund (or "Rainy Day" Fund) balance at more than $2 billion, which is nearly 700 percent larger than prior to the Great Recession.
- Made $700 million in supplementary contributions towards State retirement systems and improved the funded ratio to 45 percent, up from just 40 percent prior to the Covid-19 Recession and the highest level since 2008.
- Rebuilt the Unemployment Insurance Trust Fund balance to $2 billion.
- Implemented a work-share program as an alternative to layoffs, allowing employers to temporarily reduce employees' hours while enabling workers to receive prorated unemployment insurance benefits, which can save jobs, combat unemployment, and lower costs for taxpayers.
- Increased investments in public education through a $2 billion annual increase in funding under the Evidence-Based Formula model—reducing the number of school districts in deficit spending by 55 percent—and through an increase of more than $700 million (77 percent) in Monetary Award Program (MAP) grants to make college more affordable.
- Delivered sustainable transportation which, combined with federal funding from the Bipartisan Infrastructure Law, is investing $41 billion in roads, bridges, public transit systems, rail, and aviation infrastructure over the next six years.
- Invested billions of dollars in climate resiliency and saved carbon-free nuclear power, creating thousands of jobs on the path to 100 percent clean energy.
- Expanded Medicaid under the Affordable Care Act and reduced its number of uninsured residents by nearly 1 million, a 56 percent decrease.

However, research shows that tax systems can affect a state's ability to resist a recession. Illinois ranks 8th nationally in overall tax revenue volatility. Expanding the tax base and generating revenue to invest in education and infrastructure, enhance public services, and improve the State's fiscal health would make Illinois' economy more resilient.

Policy changes, revenue improvements, and investments in education, infrastructure, and energy systems have all strengthened the economy and made Illinois more resistant to the next recession. While no state is "recession-proof" or insulated against national forces that trigger economic downturns, Illinois is far better positioned to withstand these forces than at any point in recent history.

Table of Contents

Executive Summary i

Table of Contents ii

About the Authors ii

Introduction 1

State Revenues and Expenditures 3

1. General Fund 3
2. Budget Stabilization Fund ("Rainy Day" Fund) 4
3. State Pension Funding 5
4. Unemployment Insurance Trust Fund 6
5. Effect of the State's Tax Structure 7

Public Policies and Infrastructure Investments 8

6. WorkShare IL Program 8
7. Investments in Education Funding and Affordability 9
8. Rebuild Illinois 9
9. Climate and Equitable Jobs Act (CEJA) 10
10. Expansion of Health Insurance Coverage 10

Conclusion 11

Sources 13

About the Authors

Grace Dunn is a Former Research Associate at the Illinois Economic Policy Institute. She earned a Bachelor of Arts in Public Policy from the University of Michigan Ford School of Public Policy and is currently pursuing her Master in Public Policy at Harvard University's Kennedy School of Government.

Robert Bruno, Ph.D. is a Professor at the University of Illinois at Urbana-Champaign School of Labor and Employment Relations and is the Director of the Project for Middle Class Renewal. He earned a Doctor of Philosophy in Political Theory from New York University, a Master of Arts from Bowling Green State University, and a Bachelor of Arts from Ohio University.

Frank Manzo IV, M.P.P. is an Economist at the Illinois Economic Policy Institute. He earned a Master of Public Policy from the University of Chicago Harris School of Public Policy and a Bachelor of Arts in Economics and Political Science from the University of Illinois at Urbana-Champaign.

Introduction

The United States has endured 23 economic recessions since 1900 (NBER, 2024). A recession is a downturn in economic activity that is typically defined by at least two consecutive quarters of decreasing inflation-adjusted gross domestic product (GDP) *and* an increase in unemployment lasting more than a few months.[1] Factors which can cause recessions include financial crises, pandemics, public policies, and shifts in global conditions.[2] The worst recession in U.S. history was the Great Depression of the 1920s and 1930s. The three recessions that have occurred since 2000 were the "dot-com bubble" of the early 2000s, the Great Recession of 2007 through 2009, and the Covid-19 Recession (NBER, 2024).

While estimating the likelihood of a recession is difficult, economists have expressed concerns about the possibility of an impending recession since 2022 due to the impact of high inflation. The Federal Reserve began to raise interest rates to address rising inflation in March 2022. This decision was driven by the belief that aggregate demand for goods and services had exceeded supply. Higher interest rates increase borrowing costs for consumers and businesses, which reduces demand in the economy, slows down the consumer and business activity, and puts downward pressure on inflation. The Federal Reserve's actions to raise interest rates led many economists to worry about triggering a recession (Mena, 2024). However, with the economy remaining strong and the Federal Reserve starting to cut interest rates starting in September 2024, it is possible that the United States will achieve a "soft landing," with inflation falling back to the 2 percent target without triggering a downturn (Robb, 2024).

Nevertheless, financial metrics that have historically been reliable indicators of recessions have not allayed concerns about an impending economic downturn. The yield curve—which shows the difference between short-term and long-term interest rates and reflects the market's expectations for growth—"inverted" during the second quarter of 2022 (Moore, 2022). Typically, long-term bonds, like those issued for 10 years, offer higher returns for investors than short-term bonds, such as those issued for just two years. However, an inverted yield curve means that short-term bonds have higher yields, with investors expecting the economy to perform better over the short-term than the long-term (Estrella & Mishkin, 1996; Paul, 2023; Barbuscia, 2024). Yield curve inversions have historically been a reliable indicator of an impending recession in the next six to 24 months, as they had preceded each of the previous 8 recessions (Cleveland Fed, 2024). Similarly, some economists watch "credit spreads," or the difference between yields on corporate bonds and yields on Treasury bonds. Credit spreads peaked in March 2022, indicating that investors required greater compensation for taking on risk in the corporate bond market over relatively risk-free Treasury Bonds, but have since tightened (Ganti, Scott, & Li, 2024).

Measures of consumer sentiment are also watched closely for signs of an economic slowdown. University of Michigan's "Index of Consumer Sentiment," which measurers consumer confidence, hit an all-time low of 50 in June 2022. The index has since rebounded to about 70, but remains below the pre-pandemic reading of 100 in January 2020 (Survey of Consumers, 2024). The Conference Board's "Consumer Confidence Index" was above 100 through most of 2024—below February 2020's pre-pandemic high of about 133 but above the pandemic-induced trough of 86 in April 2020 (The Conference Board, 2024).

In late 2024, economists put the probability of a recession occurring in 2025 at between 27 percent and 33 percent, down considerably from 65 percent in 2022 (Foster & Kahn, 2024; Tyson, 2024). Goldman

[1] The National Bureau of Economic Research Business Cycle Dating Committee monitors and sets dates for official national expansionary and recessionary periods based upon real personal income less transfers and nonfarm payroll employment but has no set rule about what defines recession and does not define state level business cycle dates (NBER, 2023).

[2] The average duration of recessions since 1854 has been approximately 17.5 months (Nguyen, 2018).

Sachs estimated the likelihood of a U.S. recession at just 15 percent, while J.P. Morgan had a 45 percent chance of a recession happening by the end of 2025 (Goldman Sachs, 2024; J.P. Morgan, 2024). The potential for tariffs on imports and retaliatory measures from affected countries, mass deportations, and elevated national debt levels during the second Trump Administration have been cited as factors that could cause a renewed rise in inflation and contribute to a national recession (Horwitz & Kessler, 2024; Wiseman & Rugaber, 2024).[3]

Illinois would not be immune to a national recession. The Illinois Commission on Government Forecasting and Accountability is currently projecting a $618 million budget deficit in Fiscal Year 2026, while the Illinois Office of Management and Budget warns it could be as high as $3.2 billion (Varner, 2024; Sturm, 2024). Additionally, the state's unemployment rate remains above the national average, and the aftermath of a period of high inflation and elevated interest rates continues to put pressure on consumers and businesses. Since 2021, inflation-adjusted economic growth has expanded in 13 of 15 quarters, with contractions in the second quarter of 2022 and the first quarter of 2024 (BEA, 2024). The University of Illinois Flash Index—which provides an instantaneous reading of the Illinois economy through a weighted average of growth rates in corporate income tax receipts, individual income tax receipts, and sales tax receipts—has had a reading above 100 for 44 straight months since April 2021, which signifies an expanding economy (Giertz, 2024). However, the Flash Index has steadily declined from a post-pandemic high of 106 in March of 2022 to 102 as of November 2024. If the Index continues to fall, it could dip into contractionary territory in 2025 or 2026. This could be a warning sign of a downturn. Accordingly, it is important to assess Illinois' *economic resilience*—or ability to weather a recession.

First utilized to assess ecological systems, the concept of *resilience* has been used broadly among a variety of academic disciplines (Holling, 1973; Brand & Jax, 2007; Martin & Sunley, 2015). Research categorizes resilience into four different system outcomes: "ability to bounce back," "ability to absorb," "positive adaptability," and "system transformation" (Martin & Sunley, 2020).[4] These four outcomes in the literature on regional economic resilience have been defined as recovery, resistance, reorientation, and renewal (Martin, 2012; Martin & Sunley, 2015). As examples, states that dedicated larger portions of their gross domestic product (GDP) to state and local government expenditures for public education, human services, and public safety activities had lower risks of entry into the Great Recession, or greater "resistance" to the financial crisis (Gjerde et. al, 2019). There is also evidence to suggest that states which "prioritize economic investment, entrepreneurship, innovation, skilled labor attraction, and infrastructure improvement are likely to have higher long-term growth rates, greater resource bases, and better resilience to unexpected shocks and disruptions" (Gjerde et. al, 2019; Martin & Sunley, 2015). Finally, while unexpected shocks like financial crises or pandemics affect the entire nation, they disproportionately impact states with low or inadequate budget reserves, poor or mismanaged unemployment insurance systems, inaccessible Medicaid programs, and expensive higher education systems (Schlosstein, 1975; Leachman & Sullivan, 2020). The states that are better equipped to handle recessions have healthy revenue streams and strong reserves—allowing them to maintain services and avoid deep spending cuts.

This report, conducted jointly by the Illinois Economic Policy Institute and the Project for Middle Class Renewal at the University of Illinois at Urbana-Champaign, explores whether Illinois is better positioned to resist the effects of a severe recession than it has been over recent years. Specifically, this report

[3] Since 1950, 10 recessions have occurred during Republican presidencies (10 terms) and just 1 began under Democratic administrations (8 terms) (Egan, 2020).

[4] The first two system definitions are mainly used by ecologists and economists whereas the latter are frequently used in psychological sciences, organizational theory, and studies of socio-ecological systems (Martin & Sunley, 2020).

examines items that have been identified in recession resiliency research as having some predictive power, such as the size of budget reserves, investments in education and infrastructure, the condition of the unemployment insurance system, and the accessibility of Medicaid.

STATE REVENUES AND EXPENDITURES

This section examines the State's General Fund Deficit, the Budget Stabilization Fund, State Pension Funding, Unemployment Trust Fund, and the effect of Illinois' tax structure to assess the state's ability to weather a recession.

1. General Fund

To address issues impacting the State's revenues, cash management and expenditures, Illinois implemented an accelerated pension benefit program and provided transfers to defray operating costs. This included up to $1.5 billion in interfund borrowing to the General Funds and the Health Insurance Reserve Fund from various other state funds, and enacting the Managed Care Organization Provider Assessment to provide a three-tier assessment of Medicaid managed care organizations beginning in July 2019 (Illinois Comptroller, 2023). Each of these interventions helped to build budget reserves. Strong budget reserves and the ability to spend them have been shown to be associated with recession resistance (Leachman & Sullivan, 2020).

Although Illinois' General Fund deficits were over $1.4 billion in Fiscal Year 2022, the percent of General Fund deficits to General Fund revenues has fallen significantly (Figure 1). In Fiscal Year 2022, General Fund deficits as a percent of General Fund revenues in Illinois hit their second lowest point since 2007—surpassed only by Fiscal Year 2021. General Fund deficits in FY 2022 represent just 2 percent of the General Fund revenue compared to 12 percent in Fiscal Year 2007. In December 2024, Illinois "Accounts Payable Statement" stood at $1.8 billion, which allows the State to repay vendors within two weeks (Illinois Comptroller, 2024a).

FIGURE 1: STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN GENERAL FUND BALANCES

Revenues, Expenditures, and Changes in General Fund Balances ($ Millions)			
Fiscal Year	**General Fund Deficits**	**General Fund Revenues**	**Deficits Share of Revenues**
2022	$1,479,795	$73,204,339	2.0%
2007	$3,827,544	$30,988,823	12.4%

Source: Authors' analysis of 2022 Annual Comprehensive Financial Report (ACFR FY 22) and 2007 Comprehensive Annual Financial Report (CAFR FY 2007) from the Illinois State Comptroller.

FIGURE 2: STATE OF ILLINOIS' CURRENT BOND RATINGS AS OF OCTOBER 2024

Illinois Current Bond Ratings and Outlook as of October 2024			
Bond Type	**Moody's Investor's Services**	**S&P Global Ratings**	**Fitch Ratings**
General Obligation Bonds	A3 *Positive*	A- *Stable*	A- *Stable*
Special Obligation Bonds	A3 *Positive*	A *Stable*	A+ *Stable*

Source: Illinois State Comptroller "Bond Ratings" as of October 2024.

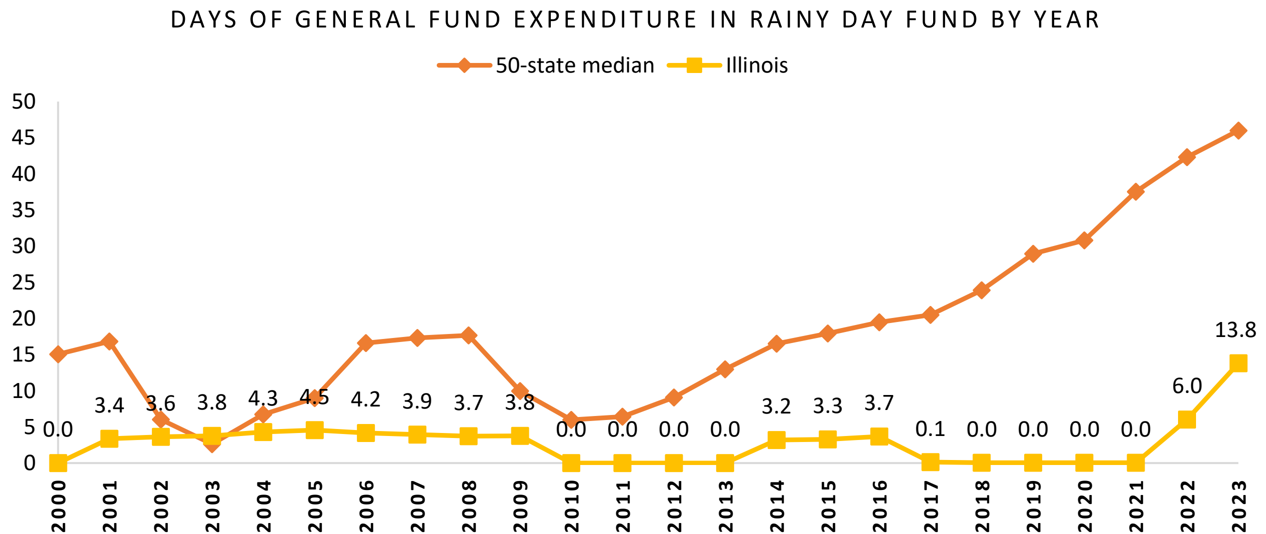
Illinois' improved financial situation has led to multiple upgrades by the major credit rating agencies (The Civic Federation, 2023). Following more than 20 downgrades between 2009 and 2020 due to rising pension liabilities and a substantial bill backlog, Illinois has been awarded nine credit upgrades from S&P Global Ratings, Moody's Investors Services, and Fitch Ratings—or three apiece—for its General Obligation Bonds (Nowicki & Meisel, 2023; Miller, 2021). Figure 2 shows the State of Illinois' Bond Ratings and outlooks for its two major State bond programs as of October 2024. These higher credit ratings allow the State to borrow money at lower interest rates, saving money for Illinois taxpayers. Lower General Fund deficits and better credit ratings put Illinois in a much better position to reduce the depth and severity of the next recession.

2. *Budget Stabilization Fund ("Rainy Day" Fund)*

Emergency reserves are essential to a resilient economy because they can allow the State to maintain funding for essential services and social safety net programs, if necessary, during downturns (Schlosstein, 1975; Gjerde et. al, 2019; Leachman & Sullivan, 2020). The State's Budget Stabilization Fund, or "Rainy Day" Fund, is a necessary tool for preparing for a future economic recession because its purpose is to maintain high bond ratings, reduce short-term borrowing, and ensure the State can address budget shortfalls if deficits occur (ILGA, 2024).

Despite becoming effective in 2001, little was originally deposited in the Budget Stabilization Fund prior to the Great Recession and the Covid-19 Recession, with the Rainy Day Fund never exceeding $278 million (Illinois Governor, 2023). In Fiscal Year 2007, the Budget Stabilization Fund was $276 million, representing 1 percent of General Fund expenditures, allowing Illinois to use the fund to operate state government for only four days (Figure 3). Today, the Budget Stabilization Fund balance is $2.2 billion, or nearly 700 percent larger than it was prior to the Great Recession in 2007 through 2009 (Illinois Comptroller, 2024b). Based on Fiscal Year 2023 data, Illinois can now operate state government using only the Budget Stabilization Fund for approximately 14 days (Figure 3).

FIGURE 3: DAYS EQUIVALENT OF GENERAL FUND EXPENDITURES IN RAINY DAY FUNDS, BY FISCAL YEAR



Source: Pew Charitable Trusts: "Fiscal 50: State Trends and Analysis."

While this is a historic improvement in Illinois' fiscal management, the national median for Fiscal Year 2023 was 46 days (Figure 3).[5] The Rainy Day Fund also represents just 4 percent of the $53 billion General Fund budget for Fiscal Year 2025 (Bae et al., 2024). Fitch Ratings recommends that states maintain reserve funds equal to 10 percent of their annual budgets, which would require a $3 billion deposit (Cotton, 2023). Going forward, continuing to build this Fund balance would strengthen Illinois' ability to resist recession while maintaining essential services (Leachman & Sullivan, 2020).

3. *State Pension Funding*

Pensions play an important role in attaching workers to comparatively lower-paying public service careers, such as public school teachers and state government workers. Research has found that public sector jobs are more stable than private sector jobs during recessions (Kopelman and Griswold, 2014). There are nearly 276,000 active members in Illinois' five state pension systems—the Teachers' Retirement System (TRS), the State Employees' Retirement System (SERS), the State Universities Retirement System (SURS), the Judges' Retirement System (JRS) and the General Assembly Retirement System (GARS)—and approximately 241,000 retired members receiving benefits (Hollinshead, 2023).

In Fiscal Year 2023, Illinois' state retirement systems had a funded ratio of 45 percent and an unfunded liability of approximately $141 billion (Figure 4). The unfunded liability represents the difference between how much the system owes and the actuarial value of its assets. Several factors have contributed to this large unfunded liability, including inadequate contributions, investment losses, and changes in assumptions (Bruno, Kass and Merriman, 2019).

FIGURE 4: ILLINOIS' UNFUNDED PENSION LIABILITIES AND FUNDED RATIOS, FISCAL YEAR 2023 VS. 2019

State Retirement Systems	Fiscal Year 2023		Fiscal Year 2019
Retirement System	**Unfunded Liability ($Millions)**	**Funded Ratio in FY2023**	**Funded Ratio in FY2019**
Teachers' Retirement System (TRS)	$81,896.0	44.8%	40.6%
State Employees' Retirement System (SERS)	$29,836.4	44.7%	37.8%
State Universities Retirement, System (SURS)	$27,686.1	45.8%	42.3%
Judges' Retirement System (JRS)	$1,684.3	44.6%	38.3%
General Assembly Retirement System (GARS)	$279.9	23.5%	16.0%
TOTAL	**$141,382.7**	**44.9%**	**40.3%**

Source: Authors' analysis of the Illinois Commission on Government Forecasting and Accountability's Monthly Briefing for the Month Ended: November 2023 and its *Illinois State Retirement Systems: Financial Condition as of June 30, 2019* report.
*Note: Pension assets are at actuarial value (with asset smoothing).

Illinois' pensions, however, are better funded than they were prior to the Covid-19 Recession (Figure 4). The funded ratio for all five statewide systems has improved from 40 percent in Fiscal Year 2019 to 45 percent in Fiscal Year 2023—a 5 percentage point gain. All five state retirement systems experienced funded ratio improvements of between 4 and 8 percentage points since Fiscal Year 2019. This is partially the result of higher-than-average investment returns but also due to savings from $700 million in

[5] Illinois' Rainy Day Fund (14 days) is now in better shape than New Jersey (11 days), Montana (9 days), and Washington (8 days) (Illinois Comptroller, 2024b).

supplemental pension contributions in Fiscal Years 2022 and 2023 and $2 billion in pension buyouts (McGuireWoods, 2024; Hollinshead, 2023).[6]

From a funded ratio of about 45 percent, Illinois' "pension ramp" plan requires pensions to be 90 percent funded by 2045, which would surpass the 80 percent level recommended by the Government Accountability Office (Hollinshead, 2023; GAO, 2010). In Fiscal Year 2021, Illinois' state-funded retirement systems had a combined funded ratio of 46 percent—the highest at any time since 2008. The funded ratio dipped in Fiscal Year 2022 as a result of investment losses but increased in Fiscal Year 2023 and is expected to rise in fiscal years 2024 and 2025 due to improved investment returns, higher state contributions, and pre-payments (Illinois Governor, 2022; Kozlowski, 2023; Miller, 2024). In Fiscal Year 2025, Illinois is expected to contribute $11.3 billion towards pensions, up from $10.9 billion in Fiscal Year 2024 and representing 21 percent of total revenues in the General Fund (Bae et al., 2024).

While the condition of the state-funded retirement systems poses challenges for the financial well-being of Illinois and hinders the State's ability to invest in public services and infrastructure, marked improvements in funding, including supplementary contributions during the Pritzker Administration, indicate that Illinois is better prepared for a recession that it has been at any time since 2008, including prior to the pandemic-induced recession.

4. Unemployment Insurance Trust Fund

During economic downturns, a rise in unemployed residents causes states to spend more money on unemployment insurance benefits, which deplete Unemployment Insurance Trust Funds (Sprick, 2022). Illinois historically has a higher unemployment rate than the national average. This is primarily because Illinois has a higher labor force participation rate.[7] Illinois' unemployment rate is typically about 1 percentage point higher than the national average (Figure 5).

FIGURE 5: UNEMPLOYMENT RATE METRICS

Unemployment Rate Metrics		
Month	**Illinois**	**United States**
October 2024	5.3%	4.1%
November 2007	5.5%	4.7%

Source: Authors' analysis of the Bureau of Labor Statistics at U.S. Department of Labor data "Tables & Calculators by Subject: Unemployment."

Illinois' Unemployment Insurance Trust Fund balance has been around $2 billion since April 2024 (IDES, 2024a). In August 2024, the fund had a balance of just under $2.0 billion. This is due to a $1.8 billion transfer of state funds due to better-than-expected state revenues, which was also used to pay off a federal loan borrowed during the Covid-19 pandemic (Illinois Comptroller, 2022). However, it only represents 0.5 percent of the total wages subject to the state's unemployment insurance system, which is lower than the

[6] Illinois' pension buyout program allows retiring members and inactive employees to sell a portion of the value of their cost-of-living adjustments for a buyout, which helps improve the financial condition of the five systems (Bae, 2022).

[7] More adult residents are either employed or searching for jobs in Illinois, while people in other states tend to stop looking for work and drop out of the labor force altogether if they are not employed. In October 2024, for example, Illinois had an employment-to-population ratio of 61.6 percent and a labor force participation rate of 65. percent. By contrast, the United States as a whole had an employment-to-population ratio of 60.0 percent and a labor force participation rate of 62.6 percent (BLS, 2024). In Illinois, a larger share of the population is employed (1.6 percentage points more) but a larger share is also looking for work.

December 31, 2007 level of 0.7 percent (Figure 6). Still, Illinois is better off than it has been over recent years, meaning that the state has a greater ability to pay out unemployment insurance claims to combat a future recession.

FIGURE 6: ILLINOIS UNEMPLOYMENT INSURANCE TRUST FUND METRICS

Illinois Unemployment Insurance Trust Fund Metrics			
Year	**UI Trust Fund Balance ($ Millions)**	**State Total Wage ($ Millions)**	**Reserve Ratio**
2024	$1,958	$363,799	0.5%
2007	$1,802	$226,423	0.7%

Source: Authors' analysis of *ET Financial Data Handbook, 394* "Illinois Taxable Financial Data and Taxable Employment and Wage Data" by the U.S. Department of Labor Employment and Training Administration and "Financial Reports from IDES" for August 2024 by the Illinois Department of Employment Security.

5. *Effect of the State's Tax Structure*

Research shows that government expenditures provide a degree of insulation against recessions, but state tax structures are also important. For example, a greater reliance on corporate income taxes can cause states to experience the negative effects of a downturn faster, because corporate tax receipts are more likely to drop quickly when economies begin to slow (Gjerde et. al, 2019; Seegert, 2015, Stark, 2010).[8] In comparison, individual income taxes and a broad state sales tax rate that includes goods and services are less volatile. Local property taxes also "tend to be more stable than sales and income taxes" (Stark, 2010).

Illinois' tax system has some components that make it more resilient to recessions and others that make it less resilient. For example, Illinois has a flat income tax structure and is heavily reliant on property taxes to fund schools and other local units of government. Illinois ranks 7th in the nation in property tax collections per capita and 8th in property taxes as a percentage of personal income (Noggle, Malasi, & Versweyveld, 2018; Walczak, Yushkov, & Loughea, 2024). These taxes are more resilient to recessions (Seegert, 2015; Stark, 2010). However, Illinois' sales tax is not broad because it does not cover most services (Yushkov, Walczak, & Loughead, 2024; CMAP, 2023). Consequently, Pew Charitable Trusts reports that Illinois has the 8th-most volatile tax system nationally, based on data from 2002 through 2021 (Pew, 2023).[9]

Two additional points are worth noting. First, tax codes that are more "progressive," in which more affluent families pay more than low-income and middle-class households, are associated with increased volatility (Gjerde et. al, 2019). However, research also shows that more progressive tax structures can generate higher receipts, which in turn can be invested in infrastructure and public services that lessen the negative impacts of recessions. In other words, the size of public expenditures strengthens a state's resiliency to recession more than its tax structure. Second, tax revenue volatility is sensitive to the nature of a state's economic activity, such as the share of output produced in financial activities or the manufacturing sector, as well as by its demographic characteristic and income distribution (Stark, 2010). Consequently, the root

[8] The tax system's susceptibility to dramatic swings in the economy has been measured by the state's "minimum volatility frontier," or the acceptable minimum volatility to economic shock in exchange for a given amount of tax revenues (Gjerde et. al, 2019; Seegert, 2015).

[9] Illinois had an overall volatility score of 8.4, which was 2.2 points (35 percent) higher than the 50-state combined volatility score (Pew, 2023). The volatility scores are calculated by analyzing the sample standard deviation of the yearly percent change in major tax sources, removing the impact of tax policy changes, and then expressing the volatility score in percentage points.

causes of a downturn and their interactions with a state's economic composition can influence how tax receipts change, affecting the state's ability to resist the worst recessionary impacts.

Public Policies and Infrastructure Investments

The research on economic resilience recognizes the importance of "automatic stabilizers," or public policies and investments that limit the impact of unemployment spells. For instance, states dedicating a larger percentage of their GDPs to K-12 education and human services have lower risks of entering into recessions than states that spend less in those areas (Gjerde et. al, 2019). This section examines the value of work-share programs, investments in public education and affordability, investments in transportation and clean energy developments, and improvements and expansions to health insurance coverage that are associated with resistance to economic downturns.

6. *WorkShare IL Program*

Work-share programs allow employers to enter into agreements with state unemployment agencies to temporarily reduce the hours of their workers during recessions as an alternative to layoffs, enabling them to retain employees until economic conditions improve (Gilarsky, Nunn, & Parsons, 2020). In the firms that participate in work-share programs, workers keep their jobs instead of being laid off and receive prorated unemployment insurance benefits to supplement the lost earnings from their reduced hours. For example, under a work-share arrangement, an employer might reduce the work hours of the entire workforce by 20 percent, from five days per week to four days per week, instead of laying off 20 percent of its workforce. These arrangements ensure businesses can retain employees until economic conditions improve, reduce both unemployment rates and full unemployment insurance payments for states, and enable workers to keep their jobs and maintain their health and retirement benefits (NCSL, 2024; Wentworth, 2014).

Work-share programs have been shown to help preserve jobs during recessions (OECD, 2010). In Germany, the first country to implement work-sharing back in the 1920s, the programs preserved 432,000 jobs during the Great Recession (Rix, 2010). In Japan, which has had work-sharing since the 1970s, about 400,000 jobs were saved during the Great Recession (Abraham & Houseman, 2013). In the United States, 17 states had work-sharing programs during the Great Recession. In 2009, work-share claims as a percent of total unemployment insurance claims ranged from 1 percent in Florida to 16 percent in Rhode Island (Shelton, 2012). Economic research suggests that, "had all states been like Rhode Island," 220,000 full-time equivalent jobs would have been saved during the Great Recession (Abraham & Houseman, 2013). Work-share programs can also prevent layoffs for state employees (Becker & Roberts, 2020).

Illinois passed a work-share law in 2014, but it was not implemented under Governor Bruce Rauner and was not available during the Covid-19 Recession (Manzo & Bruno, 2020). Research shows that if the program had been implemented from the onset of the pandemic, it could have saved between 43,000 and 124,000 jobs, reduced turnover costs for Illinois businesses by as much as $1 billion, and reduced Illinois' unemployment insurance costs by up to $1 billion (Manzo & Bruno, 2020). Governor JB Pritzker's administration finally implemented the program, called WorkShare IL, in 2021 (Meisel, 2021). Administered by the Illinois Department of Employment Security, WorkShare IL is a new tool that the state can utilize to mitigate the impact of future economic downturns, preventing layoffs and stabilizing the labor market (IDES, 2024b)

7. Investments in Education Funding and Affordability

Research consistently shows that investing in high-quality public education is an economic development policy that boosts incomes, supports employment, promotes a higher skilled workforce, and makes states more economically competitive (Hanushek et al., 2015; Berger & Fisher, 2013; Mitra, 2011). An extra year of education increases an individual's earnings by as much as 10 percent (Stevens & Weale, 2003). A 10 percent increase in spending on public education improves wages by 7 percent, reduces poverty by 4 percent, and improves high school graduation rates by 7 percent (Jackson, Johnson, & Persico, 2015; Baker, 2018). Further, research indicates that individuals that have access to quality public education are more likely to find gainful employment and less likely to be enrolled in public assistance programs (College Board, 2017; Mitra, 2011).

In 2017, Illinois adopted the Evidence-Based Funding Model to prioritize the distribution of new funding to poorly-funded school districts and to students with the most need. To date, the policy has resulted in a $2.1 billion increase in annual funding to the most under-resourced districts (Funding IL's Future, 2024). A total of $1.8 billion of the new investment has occurred during the Pritzker Administration (Illinois OMB, 2024). This includes $350 million in Fiscal Year 2025, the largest part of a $441 million annual increase in overall K-12 education funding between Fiscal Year 2024 ($10.4 billion) and Fiscal Year 2025 ($10.9 billion) (Illinois OMB, 2024; Bae et al., 2024). As a result, the number of school districts in deficit spending has decreased from 410 districts in Fiscal Year 2017 (48 percent) to 183 districts in Fiscal Year 2024 (21 percent), a 55 percent reduction (Illinois OMB, 2024; Illinois OMB, 2019).

Investments in higher education affordability promote economic resiliency. Research finds that a 1 percent increase in the share of a state's population with bachelor's degrees is linked with a 0.8 percent increase in the employment rate (Manzo & Bruno, 2015). In Illinois, public universities and colleges boost the Illinois economy by billions of dollars every year (Manzo & Bruno, 2017). While educational appropriations for public higher education per student in Illinois were more than twice the national average from the 2008 through 2022 Fiscal Years, the main reason for this has been to address unfunded liabilities in state university pensions (SHEEO, 2022; Carlson, 2018).

Illinois has improved the affordability of public colleges and universities. In six years, Illinois has increased funding for Monetary Award Program (MAP) grants to improve financial aid for Illinois residents by $711 million (77 percent) (Illinois OMB, 2024). According to the Partnership for College Completion, "the net price for first-time, full-time, in-state, degree-seeking students who receive any type of Title IV financial aid has been declining in Illinois, indicating effective efforts to address affordability" (PCC, 2023). By increasing investment in K-12 public education spending and working to improve the affordability of public colleges and universities, Illinois has strengthened its recession resistance.

8. Rebuild Illinois

Economic and social science research consistently finds that investing in infrastructure boosts economic activity. For every dollar increase in infrastructure spending, the economy grows by between $1.57 and $2.20 (Zandi, 2010; Arnon et al., 2020). In Illinois, every dollar invested in road and bridge construction returns $1.80 and every dollar spent on road and bridge maintenance returns $2.30 (ILEPI, 2024). For this reason, states that prioritize infrastructure improvement have historically had better resilience to unexpected shocks and disruptions (Prescott & Gjerde, 2022; Huntley, 2021; Martin & Sunley, 2015).

Illinois is a transportation hub for the United States and has a made renewed commitments to investing in infrastructure. Rebuild Illinois was a historic, multi-year infrastructure and jobs program enacted in 2018 to invest $45 billion of dollars into maintaining and modernizing the state's infrastructure systems. In 2024, Governor Pritzker announced a $41 billion investment over six years thanks to sustainable funding from the Rebuild Illinois capital program and the Bipartisan Infrastructure Law (also known as the Infrastructure Investment and Jobs Act, or IIJA) (Illinois Governor, 2024). This includes $30 billion for state roads and bridges through 2030, more than $7 billion for public transit, nearly $3 billion for freight and passenger rail, and nearly $2 billion for aviation (Illinois Governor, 2024). Strong, continuous investments in infrastructure attract and retain new businesses in Illinois, promote good jobs for workers, foster a more seamless flow of goods and people across the state, and ultimately improve Illinois' ability to weather recessions. Indeed, even if a nationwide recession was to occur in 2025, Illinois would still be investing $41 billion over the next six years.

9. The Climate Equitable Jobs Act (CEJA)

In addition to public infrastructure, Illinois has invested $25 billion in the development of clean energy systems since 2018, or an average of nearly $4 billion per year, from both public and private sources (Climate Central, 2024). This includes $11 billion in solar and wind energy projects, or about $1.5 billion per year (Climate Central, 2024). Much of this investment, however, has occurred following passage of the bipartisan Climate and Equitable Jobs Act (CEJA) in 2021 (Illinois EPA, 2024). CEJA puts Illinois on the path to 100 percent renewable energy by 2050, stabilizes nuclear power in Illinois, dedicates renewable energy credits to school solar projects, promotes energy efficiency, and delivers new jobs in a burgeoning sector. While the benefits of this law will take many years to play out, the job creation component would help mitigate the consequences of a near-term economic slowdown. Put differently, if a recession was to occur in 2025, Illinois would continue investing billions of dollars per year in clean energy infrastructure improvements (Climate Central, 2024).

CEJA creates 280,000 job-years for Illinois residents on the path to 100 percent clean energy, with every one gigawatt of utility-scale wind and solar power installed creating 7,300 total jobs (ILEPI, 2023). It saves 24,000 jobs by keeping Illinois' six carbon-free nuclear plants open. The law also has strong equity provisions to promote a more diverse workforce. The Climate Works Pre-Apprenticeship Program recruits candidates from historically underrepresented populations and conducts career readiness training for building trades careers. Contractor incubator and accelerator programs provide training, mentorship, and access to low-cost capital for small businesses. CEJA creates a Displaced Energy Workers Bill of Rights to provide two years of advance notice of power plant closures (ILEPI, 2023). The energy investments set into motion by CEJA create thousands of middle-class jobs, support disadvantaged communities, and stabilize Illinois' energy portfolio. Each of these features would help mitigate the worst effects of an economic slowdown.

10. Expansion of Health Insurance Coverage

Recessions worsen health outcomes. Data show that workers who lose health insurance due to unemployment may forgo medical treatment because of its high cost (Banks, Karjalainen, & Propper, 2020; ANA IL, 2022). Prior to the Affordable Care Act (ACA), as unemployment increased, health insurance coverage rates fell as people lost their employer-provided coverage. Accordingly, the Great Recession had disproportionately negative effects on the health outcomes of those living in poverty and those suffering unemployment spells (Backhaus et al., 2022).

However, since the ACA became law, health insurance coverage in the United States has improved significantly (Gangopadhyaya & Garrett, 2020). Part of the increase in health insurance coverage can be attributed to the Medicaid expansion in the law. Medicaid expansion has been shown to improve health outcomes, deliver financial security, and enhance economic mobility (CBPP, 2020; Creedon et al., 2022). During the Covid-19 pandemic, loss of health insurance coverage due to job loss was lower in Medicaid expansion states than in non-expansion states (Benitez, 2022). Illinois is one of 40 states to have adopted the ACA's provision to expand Medicaid to adults at or below 138 percent of the poverty line (KFF, 2024; Rudowitz, Corallo, & Garfield, 2021).

The share of Illinois residents with health insurance coverage has consistently been higher than the national average (Figure 7). In 2010, the first year that data was available before the ACA was fully implemented, 86 percent of Illinois residents had health insurance coverage compared to less than 85 percent of the total civilian population in the United States, a difference of 1.7 percentage points. By 2023, 94 percent of Illinois residents had health insurance compared to 92 percent of the overall U.S. population, a difference of 1.7 percentage points. The number of uninsured Illinois residents fell from about 1,746,000 in 2010 to 763,000 in 2023, a decrease of 56 percent (-983,000 uninsured residents) (Census, 2024). Illinois' Medicaid expansion and overall improvement in health insurance coverage bolsters financial security and economic mobility.

FIGURE 7: SHARE OF TOTAL CIVILIAN POPULATION WITH HEALTH INSURANCE COVERAGE

Health Insurance Coverage		
Year	**Illinois**	**United States**
2023	93.8%	92.1%
2010	86.2%	84.5%

Source: Authors' analysis of American Community Survey data (1-year estimates), "Health Insurance Coverage," from the U.S. Census Bureau.

Conclusion

Research shows that economically resilient states can buttress the negative effects of recessions based on several fiscal practices, public policies, and investment decisions. In general, Illinois is positioned much better on these items than it has been in previous years.

The elimination of the bill backlog and reductions in the General Fund deficit, the improvement in the Budget Stabilization Fund, the dedication to making full pension contributions with supplemental payments when possible, and the rebuilt Unemployment Insurance Trust Fund are each positive factors making Illinois more resilient to the next recession. However, Illinois still lags the national average on these metrics, and lawmakers should consider ways to continue building on this momentum with each budget cycle that passes without an economic downturn. Changes in tax policy could have either positive or negative effects on the state's ability to weather a recession. For instance, an expanded sales tax to cover services could provide more resiliency for the State of Illinois, depending on how it is structured.

Recent public policies and investment decisions have also improved Illinois' economic resiliency. The implementation of a work-share program can decrease layoffs, boost incomes, and reduce the financial strain on the Unemployment Insurance Trust Fund in the next recession, as long as employers have wide knowledge of the program. Although more must be done in order to bring state funding to adequate

levels—and to reduce the state's overreliance on property taxes—Illinois is now investing billions of dollars more per year in K-12 education, higher education, and college affordability due to the Evidence-Based Funding Model and other recent commitments. Tens of billions of dollars to build, repair, and modernize Illinois' transportation infrastructure, public buildings, and energy systems are currently underway thanks to sustainable revenues from the Rebuild Illinois infrastructure and jobs program and the Climate and Equitable Jobs Act, as well as federal funding. This work would continue during any upcoming recession, ensuring that Illinois workers continue to be employed. Finally, Illinois' decision to expand Medicaid ensures that more residents have health insurance even if they lose their jobs. Each of these public policy changes and capital programs strengthens the economy and makes it more resistant to recessions.

No state is "recession-proof." Like all 50 U.S. states, Illinois remains susceptible to broader economic forces. As such, continued monitoring and preparedness are essential for the State to navigate potential economic challenges in the future. Bringing its Budget Stabilization Fund to 10 percent of General Fund expenditures to protect investments in people and in infrastructure and deliver financial stability—and improved credit ratings—would give businesses greater confidence to relocate or expand in the state. Additional contributions to pay down pension liabilities when tax revenues come in higher than expected would also strengthen the state's economic resilience. Similarly, by continuing to invest in high-quality infrastructure systems and public education, Illinois can continue to take steps toward mitigating the impact of future economic downturns.

Sources

Abraham, Katharine and Susan Houseman. (2013). *Short-Time Compensation as a Tool to Mitigate Job Loss? Evidence on the U.S. Experience during the Recent Recession*. University of Maryland; W.E. Upjohn Institute.

American Nurses Association Illinois (ANA IL). (2022). "What Happens to Healthcare During a Recession?"

Backhaus, Andrew, Hanno Hoven, Cristina Di Tecco, Sergio Lavicoli, Arne Conte, and Nico Dragano. (2022). "Economic Change and Population Health: Lessons Learnt from an Umbrella Review on the Great Recession." *BMJ Open*.

Arnon, Alexander, Zheli He, and Jon Huntley. (2020). "Short-Run Economic Effects of the CARES Act." University of Pennsylvania.

Bae, Julie. (2022). *Illinois State Retirement Systems: Financial Condition as of June 30, 2021*. Commission on Government Forecasting and Accountability.

Bae, Julie. (2020). *Illinois State Retirement Systems: Financial Condition as of June 30, 2019*. Commission on Government Forecasting and Accountability.

Bae, Julie, Anthony Bolton, Zach Hollinshead, Lynnae Kapp, Ally O'Malley, and Robin Thompson. (2024). *State of Illinois Budget Summary: Fiscal Year 2025*. Commission on Government Forecasting and Accountability.

Baker, Bruce. (2018). *How Money Matters for Schools.* Learning Policy Institute.

Banks, James, Heidi Karjalainen, and Carol Propper. (2020). "Recessions and Health: The Long-Term Health Consequences of Responses to the Coronavirus." *The Journal of Applied Public Economics*, 41(2): 337-344.

Barbuscia, Davide. (2024). "U.S. Treasury Key Yield Curve Inversion Becomes the Longest on Record." *Reuters*.

Berger, Noah and Peter Fisher. (2013). *A Well-Educated Workforce Is Key to State Prosperity*. Economic Policy Institute.

Bureau of Economic Analysis (BEA). (2024). "Regional Data: GDP and Personal Income." Illinois data from 2020Q1 through 2024Q2. U.S. Department of Commerce.

Becker, Hailey, and Lily Roberts. (2020). *Improving the Worksharing System to Absorb Employment Shocks*. Center for American Progress.

Benitez, Joseph. (2022). "Comparison of Unemployment-Related Health Insurance Coverage Changes in Medicaid Expansion vs. Nonexpansion States during the COVID-19 Pandemic." *JAMA Health Forum.*

Brand, Fridolin Simon, and Kurt Jax. (2007). "Focusing the Meaning(s) of Resilience: Resilience As a Descriptive Concept and a Boundary Object." *Ecology and Society*, 12(1).

Bruno, Robert, Amanda Kass, and David Merriman. (2019). *A "Pension Crisis" Mentality Won't Help: Thinking Differently About Illinois' Retirement Systems*. University of Illinois.

Bureau of Labor Statistics (BLS). (2024). "Databases, Tables & Calculators by Subject: Unemployment." U.S. Department of Labor.

Carlson, Andy. (2018). *Issues Brief: Fiscal Challenges in Illinois*. State Higher Education Executive Officers Association (SHEEO).

Center on Budget and Policy Prioriies (CBPP). (2020). "The Far-Reaching Benefits of the Affordable Care Act's Medicaid Expansion."

Census. (2024). *American Community Survey* (1-year estimates). U.S. Census Bureau.

Cleveland Fed. (2024). "Yield Curve and Predicted GDP Growth." Federal Reserve Bank of Cleveland.

Climate Central. (2024). "Clean Energy Investment in Each State: Illinois."

Chicago Metropolitan Agency for Planning (CMAP). (2023). *Plan of Action for Regional Transit for Northeastern Illinois*.

College Board. (2017). "College Education Linked to Higher Pay, Job Security, Healthier Behaviors and More Civic Involvement: New College Board Report."

Cotton, Max. (2023). "As Illinois' Rainy Day Fund Reaches Major Milestone, State Comptroller Says It Needs to Keep Growing." *WGEM*.

Creedon, Timothy, Samuel Zuvekas, Steven Hill, Mir Ali, Chandler McClellan, and Judith Dey. (2022). "Effects of Medicaid expansion on insurance coverage and health services use among adults with disabilities newly eligible for Medicaid." *Health Services Research*.

Egan, Matt. (2020). "Stocks Perform Better When a Democrat Is in the White House. History Proves It." *CNN*.

Employment and Training Administration (ETA). (2024). ET Financial Data Handbook 394. U.S. Department of Labor.

Estrella, Arturo and Frederic Mishkin. (1996). "The Yield Curve as a Predictor of U.S. Recessions." *Current Issues in Economics and Finance*, 2(7). Federal Reserve Bank of New York.

Foster, Sarah and Amy Sims. (2023). "Survey: Recession by July 2024 Likely Despite Resilient Economy." Bankrate.

Funding IL's Future. (2024). *EBF Advocacy Toolkit for ISBE F26 Budget Hearings*.

Ganti, Akhilesh, Gordon Scott, and Timothy Li. (2023). "Credit Spread: What It Means for Bonds and Options Strategy." Investopedia.

Gilarsky, Melanie, Ryan Nunn, and Jana Parsons. (2020). "What Is Work Sharing and How Can It Help the Labor Market?" Brookings Institute.

Giertz, Fred. (2024). "About the Flash Index." University of Illinois System.

Gilarsky, Melanie, Ryan Nunn, and Jana Parsons. (2020). "What Is Work Sharing and How Can It Help the Labor Market?" Brookings Institute.

Gjerde, Kathy Paulson, Peter Prescott, and Jennifer Rice. (2019). "The Impact of State Fiscal Policy on States' Resilience Entering the Great Recession." *The Journal of Regional Analysis & Policy,* 49(1): 13-30.

Goldman Sachs. (2024). "The Probability of a U.S. Recession in the Next Year Has Fallen to 15%."

Government Accountability Office (GAO). (2010). "State And Local Government Pension Plans: Governance Practices and Long-term Investment Strategies Have Evolved Gradually as Plans Take On Increased Investment Risk."

Hanushek, Eric A., Guido Schwerdt, Simon Wiederhold, and Ludger Woessmann. (2015). "Returns to Skills Around the World: Evidence from PIAAC." *European Economic Review*, 73 (January): 103-130.

Holling, C. S. (1973). "Resilience and Stability of Ecological Systems." *Annual Review of Ecology and Systematics*, 4(1973): 1-23.

Hollinshead, Zachary. (2023). *Monthly Briefing For the Month Ended: November 2023 – Special Pension Briefing*. Commission on Government Forecasting and Accountability.

Horwitz, Gabe and Jim Kessler. (2024). *10 Reasons Why Trump Is Bad for Business*. Third Way.

Huntley, Jon. (2021). "Explainer: Economic Effects of Infrastructure Investment." Penn Wharton Budget Model.

Illinois Department of Employment Security (IDES). (2024). (a). "Financial Reports from IDES."

Illinois Department of Employment Security (IDES). (2024). (b). "WorkShare IL."

Illinois Comptroller. (2024). (a). "Welcome to The Illinois Office of Comptroller."

Illinois Comptroller. (2024). (b). "Rainy Day Fund."

Illinois Comptroller. (2024). (c). "Bond Ratings."

Illinois Comptroller. (2023). *Annual Comprehensive Financial Report: For Fiscal Year Ended June 30, 2022*.

Illinois Comptroller. (2022). "Comptroller Mendoza Pays Off COVID19 Unemployment Insurance Loan."

Illinois Comptroller. (2008). *Comprehensive Annual Financial Report: For Fiscal Year Ended June 30, 2007*.

Illinois Economic Policy Institute (ILEPI). (2023). *Climate and Equitable Jobs Act: Pro-Climate, Pro-Worker, Pro-Equity*.

Illinois Environmental Protection Agency (EPA). (2024). "Climate and Equitable Jobs Act."

Illinois General Assembly (ILGA). (2024). "(30 ILCS 122/) Budget Stabilization Act."

Illinois Governor. (2024). "Gov. Pritzker Announces $41 Billion Multi-Year Plan, Largest in State History."

Illinois Governor. (2023). "Gov. Pritzker Announces the State's 'Rainy Day' Fund Will Make History, Exceeding the $2 Billion Milestone."

Illinois Governor. (2022). "Governor Pritzker Lowers Pension Liabilities Through Extended Buyout Opportunities, Additional Payments."

Illinois Office of Management and Budget (OMB). (2024). *Illinois State Budget: Fiscal Year 2025*.

Illinois Office of Management and Budget (OMB). (2019). *Illinois State Budget: Fiscal Year 2020*.

J.P. Morgan. (2024). "The Probability of a Recession Now Stands at 35%."

Jackson, C. Kirabo, Rucker Johnson, and Claudia Persico. (2015). *The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms*. National Bureau of Economic Research; Northwestern University; University of California, Berkeley.

Kaiser Family Foundation (KFF). (2014). "State Health Facts: Health Coverage & Uninsured."

Kopelman, Jason L. and Harvey Rosen. (2014). *Are Public Sector Jobs Recession-Proof? Were They Ever?* Griswold Center for Economic Policy Studies.

Kozlowski, Rob. (2023). "Illinois Adds $200 Million to Its 2024 Pension Contribution." *Pensions & Investments*.

Leachman, Michael and Jennifer Sullivan. (2020). *Some States Much Better Prepared than Others for Recession*. Center on Budget and Policy Priorities.

Manzo IV, Frank and Robert Bruno. (2020). *Implementing a Work-share Program in Illinois*. Illinois Economic Policy Institute; University of Illinois at Urbana-Champaign.

Manzo IV, Frank and Robert Bruno. (2017). *High-Impact Higher Education: Understanding the Costs of the Recent Budget Impasse in Illinois*. Illinois Economic Policy Institute; University of Illinois at Urbana-Champaign.

Manzo IV, Frank and Robert Bruno. (2015). *Policies that Support Employment: Investments in Public Education, Investments in Public Infrastructure, and a Balanced State Budget*. Illinois Economic Policy Institute; University of Illinois at Urbana-Champaign.

Martin, Ron. (2012). "Regional Economic Resilience, Hysteresis and Recessionary Shocks." *Journal of Economic Geography*, 12(1):1-32.

Martin, Ron, and Peter Sunley. (2020). "Chapter 2: Regional Economic Resilience: evolution and evaluation." *Handbook on Regional Economic Resilience*, 10-35.

Martin, Ron and Peter Sunley. (2015). "On the Notion of Regional Economic Resilience: Conceptualization and Explanation." *Journal of Economic Geography*, 15(1): 1-42.

McGuireWoods. (2024). "Illinois Gov. Pritzker FY 2025 Budget Proposal." McGuireWoods Consulting.

Meisel, Hannah. (2021). "Illinois Finally Implementing Work-Share Program That Could've Saved Up To 124K Jobs During COVID." *NPR Illinois*.

Mena, Bryan. (2024). "Here's Why High Interest Rates Haven't Caused a U.S. Recession." *CNN*.

Miller, Isabel. (2024). "State Pre-Pays $422 Million in Pension Payments." *CapitolFax.com*.

Miller, Rich. (2021). "Illinois Turns the Corner on Its History of Credit Downgrades." *Chicago Sun-Times*.

Mitra, Dana. (2011). *Pennsylvania's Best Investment: The Social and Economic Benefits of Public Education*. Pennsylvania State University.

Moore, Simon. (2022). "The Yield Curve, a Reliable Recession Indicator, Just Sounded an Alarm." *Forbes*.

National Bureau of Economic Research (NBER). (2024). "Business Cycle Dating."

National Bureau of Economic Research (NBER). (2023). "U.S. Business Cycle Expansions and Contractions."

National Conference of State Legislatures (NCSL). (2024). "Work-share Programs."

Nguyen, Janet. (2018). "A History of U.S. Recessions." *Marketplace*.

Noggle, Eric, Erion Malasi, and Luke Versweyveld. (2018). *2018 Illinois' National Ranking: A State-by-State Comparison of Tax Rates, Tax Revenues, Government Spending, Business Climate and Employment Trends.* Commission on Government Forecasting and Accountability.

Nowicki, Jerry and Hannah Meisel. (2023). "State Gets 9th Recent Credit Upgrade as Administration Faces Scrutiny for Pandemic Unemployment Handling." *Capitol News Illinois*

Organisation for Economic Co-operation and Development (OECD). (2010). "Chapter 1: Moving Beyond the Jobs Crisis." *OECD Employment Outlook 2010*.

Paul, Trina. (2023). "Understanding the Yield Curve: Why Economists Use It to Predict Recessions." *Fortune Recommends*.

Partnertship for College Completion (PCC). (2023). "Exploring Equitable Public Higher Education Funding Models in Illinois."

Pew. (2023). "Fiscal 50: State Trends and Analysis." Pew Charitable Trusts.

Prescott, Peter and Kathy Paulson Gjerde. (2022). "The Impact of State Fiscal Policy on States' Resilience During the Great Recession." *Journal of Regional Analysis & Policy*, 52(1): 1-18.

Rix, Sara. (2010). "Saving Jobs Through Work Sharing." *Insight on the Issues*. AARP Public Policy Institute.

Robb, Greg. (2024). "Powell Holds Out Hope for Soft Landing." *MarketWatch*.

Rudowitz, Robin, Bradley Corallo, and Rachel Garfield. (2021). "New Incentive for States to Adopt the ACA Medicaid Expansion: Implications for State Spending." Kaiser Family Foundation.

Schlosstein, Ralph. (1975). "State and Local Government Finances during Recession," *Challenge*, 18 (3): 47-50.

Seegert, Nathan. (2015). *The Performance of State Tax Portfolios During and after the Great Recession*. University of Utah.

Shelton, Alison. (2012). *Compensated Work Sharing Arrangements (Short-Time Compensation) as an Alternative to Layoffs*. Congressional Research Service. U.S. Congress.

Sprick, Emily. (2022). "How Is the Unemployment Insurance Program Financed?" Bipartisan Policy Center.

Stark, Kirk J. (2010). "The Federal Role in State Tax Reform." *Virginia Tax Review*, 30: 407-444.

State Higher Education Executive Officers Association (SHEEO). (2022). "SHEF: State Higher Education Finance FY 2022."

Stevens, Philip and Martin Weale. (2003). *Education and Economic Growth*. National Institute of Economic and Social Research.

Sturm, Alexis. (2024). *Illinois Economic and Fiscal Policy Report*. Illinois Office of Management and Budget.

Surveys of Consumers. (2024). *University of Michigan.*

The Conference Board. (2024). "U.S. Consumer Confidence." Economy, Strategy & Finance Center.

The Civic Federation. (2023). "State of Illinois FY2024 Debt Burden and Credit Ratings."

Varner, Benjamin. (2024). *Three-Year Budget Forecast (FY 2025 – FY 2027)*. Commission on Government Forecasting and Accountability

Verthein, Austin and Marguerite McHale. (2022). *Monthly Briefing for the Month Ended: November 2022*. Commission on Government Forecasting and Accountability.

Wentworth, George. (2014). "Work-Sharing: Averting Layoffs and Saving Jobs." National Employment Law Project.

Wiseman, Paul and Christopher Rugaber. (2024). "Trump's Economic Plans Would Worsen Inflation, Experts Say." *The Associated Press*.

Yushkov, Andrey, Jared Walczak, and Katherine Loughead. (2024). *2025 State Tax Competitiveness Index*. Tax Foundation.

Zandi, Mark. (2010). "Testimony of Mark Zandi Before the House Budget Committee: 'Perspectives on the Economy.'" Moody's Analytics.