WIREPOINTS

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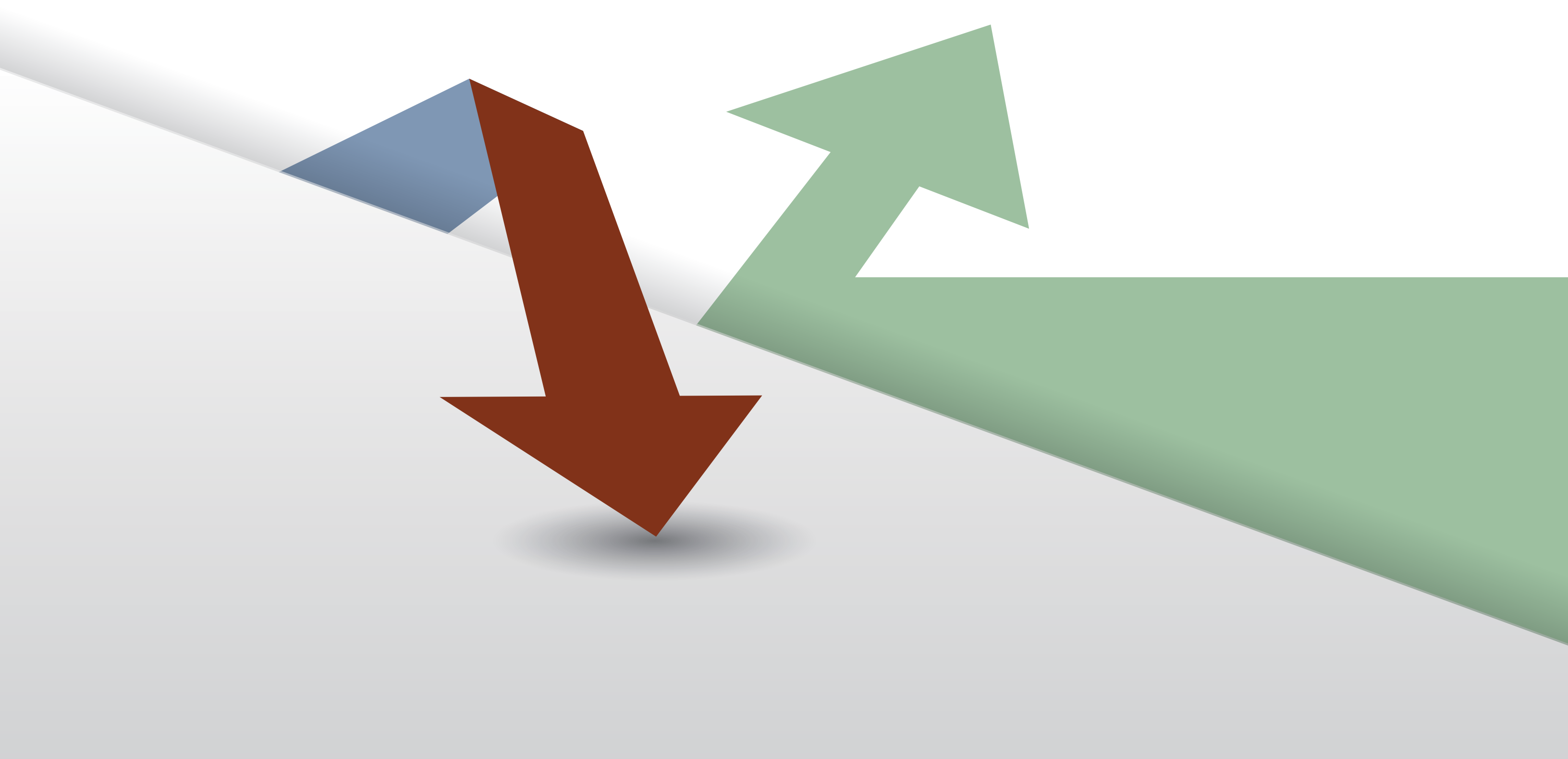
Solving Illinois' Pension Problem:

Why It's Legal, Why It's Necessary, and What It Looks Like

Part 1: Illinois is the Nation's Extreme Outlier

By: Ted Dabrowski, Mark Glennon and John Klingner



Part 1
Illinois is the Nation's Extreme Outlier

Illinois is the Nation's Extreme Outlier

Illinois' General Assembly has refused to solve the state's ever-growing retirement crisis for more than three decades. And for three decades, Illinois' finances have steadily decayed. Debts have grown by billions year after year despite assurances by lawmakers that budgets were balanced and actions had been taken to bring the crisis under control. Illinois is now a national outlier, and in many cases, an extreme outlier – on almost every financial, economic and demographic metric that matters.

Pensions aren't Illinois' only problem, but because their costs dominate government budgets, their impact is felt everywhere. There's no fixing Illinois without changing the current system and dramatically reducing the state's retirement shortfalls.

The costs of retirement debts are overwhelming every constituency in Illinois. Retirement security for most government workers has collapsed in tandem with falling funded ratios. Spending on Illinois' most vulnerable is being crowded out as retirement costs have grown to consume more than a quarter of the state's budget; no other state spends nearly as much on retirements. And ordinary residents who pay for the costs of their public servants are being crushed by the country's highest property taxes and one of the nation's highest combined state and local tax burdens.

The evidence of the state's decay can be captured in just two metrics: the state's credit rating and domestic out-migration.

No state has ever been rated junk before, but today Illinois is rated just one notch above junk with a negative outlook. The rating embodies not just the state's fiscal failures, but also the continued failed governance of the General Assembly. It's not as if lawmakers weren't warned of the consequences of their mismanagement. The big three rating agencies have downgraded Illinois 22 times since 2009.[1]

Illinoisans have fled the state's growing problems in record numbers. No other state lost more people over the last decade than Illinois. What was revered as the country's destination state just 60 years ago is now a state with a shrinking population and the nation's second-largest rate of domestic out-migration.[2]

This first part of Wirepoints' four-part series lays out how Illinois is the nation's extreme outlier and the negative impact that status has on people's lives and livelihoods.

Illinois' worst-in-nation crisis

Illinois is a national outlier when it comes to the financial well-being of the state and its residents.

Illinois has the nation's largest pension shortfalls, both in amount and on a per capita basis. Total retirement debts consume more of Illinois' budget than they do in any other state in the country, by far. And retirement costs have helped drive Illinois' overall tax burden to one of the highest in the nation.

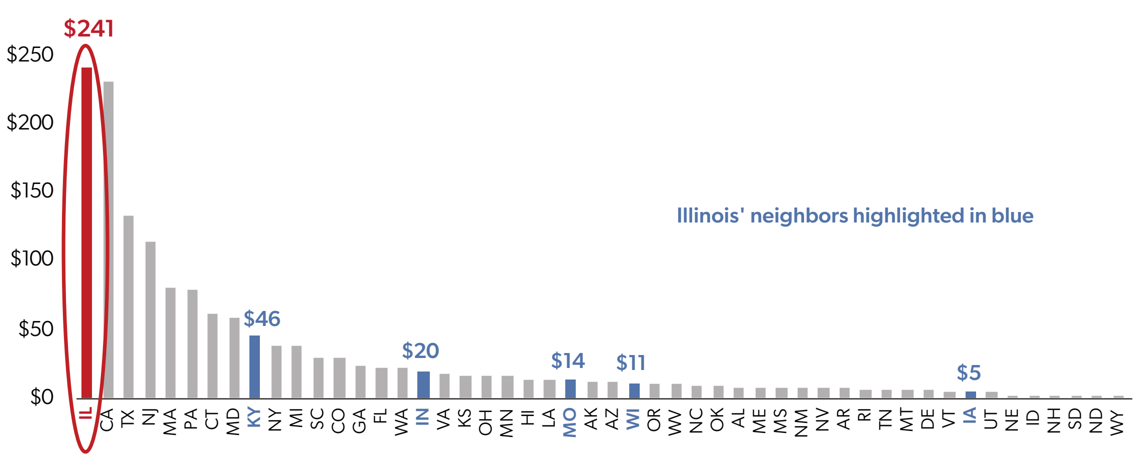
All of that has created a crisis of confidence in Illinois. The state has the nation's lowest credit rating, sitting at just one notch above junk.

And since 2010, Illinois' population has shrunk by more than any other state as residents have left in record numbers. That's contributed to a fall in real property values and a vicious downward spiral for the state.

Moody's Investors Service puts the pension shortfall for Illinois' five state-run pension funds at $241 billion. Illinois' debts dwarf those of its neighbors as well as those of the largest states in the country by population. Illinois is the extreme outlier nationally.[1]

Illinois has the nation's largest pension shortfall

Total unfunded state-level pension debts based on Moody's Adjusted Net Pension Liability, FY 2018 (in billions)



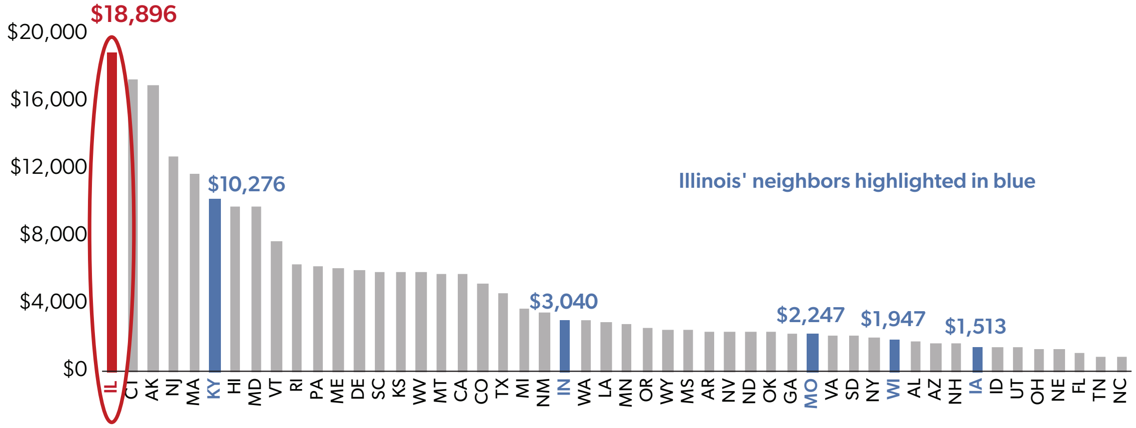
Source: Moody's Investors Service, "FY 2018 State Pension Medians Show Declines Due to Strong Investment Returns"

The same can be said when debts are measured on a per-capita basis. At nearly $19,000 per person, Illinoisans' pension debt burden is six times larger than the national average. Compared to residents in neighboring Wisconsin and Iowa, Illinoisans' burden is 10-12 times larger.[2]

That burden is overwhelming the state's economy, with state level-debts alone now equivalent to 28 percent of the state's annual GDP. In most of Illinois' neighboring states, the debt is just 3 to 6 percent of the economy.[3]

Illinoisans on the hook for the nation's largest pension shortfall

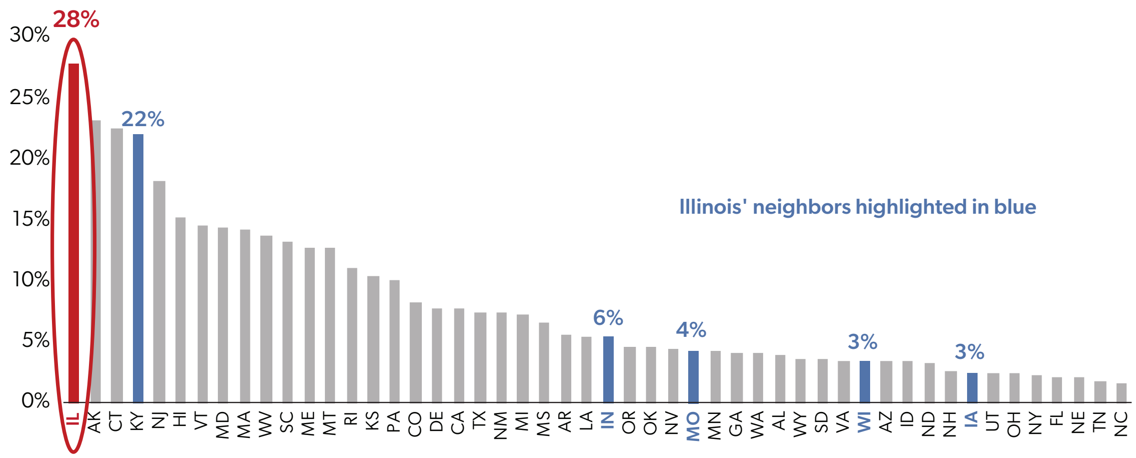
Total unfunded state-level pension debts per capita, based on Moody's Adjusted Net Pension Liability, FY 2018



Source: Moody's Investors Service, "FY 2018 State Pension Medians Show Declines Due to Strong Investment Returns"

Illinois' pension shortfall equals 28 percent of state GDP, nation's highest

Total unfunded state-level pension debts as a percentage of state Gross Domestic Product (GDP), based on Moody's Adjusted Net Pension Liability, FY 2018



Source: Moody's Investors Service, "FY 2018 State Pension Medians Show Declines Due to Strong Investment Returns"

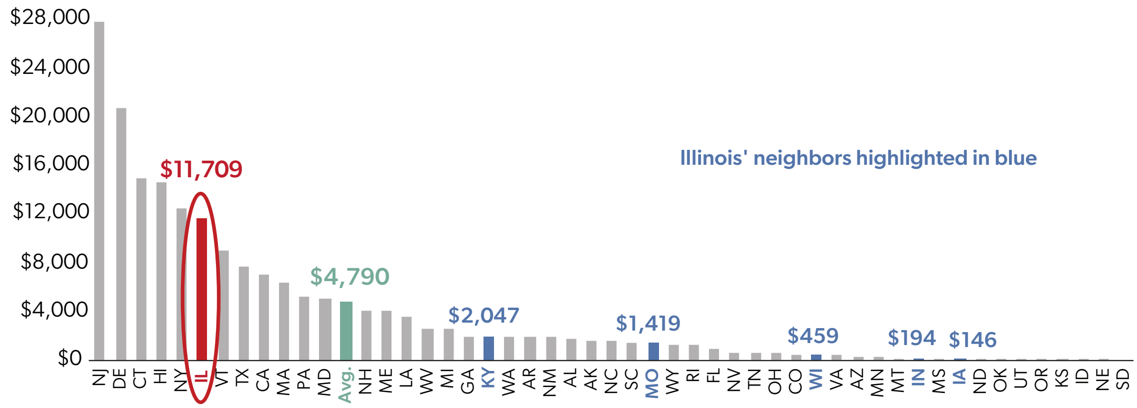
State-level retiree health insurance liabilities add to Illinois’ debt load. According to Moody’s, as of 2018 each Illinois household was on the hook for more than $11,700 in official unfunded retiree health insurance benefits, the nation’s 6th-most. That amount is more than double the national average and six times what Kentuckians owe.

And it’s many times more than what households in states like Wisconsin and Indiana are burdened with.[4]

The combined cost of those retirement debts already consumes more than a quarter of Illinois’ state budget – the most of any state nationally.[5]

Illinois households on hook for over $11,700 in retiree health insurance shortfalls, one of the nation’s highest burdens

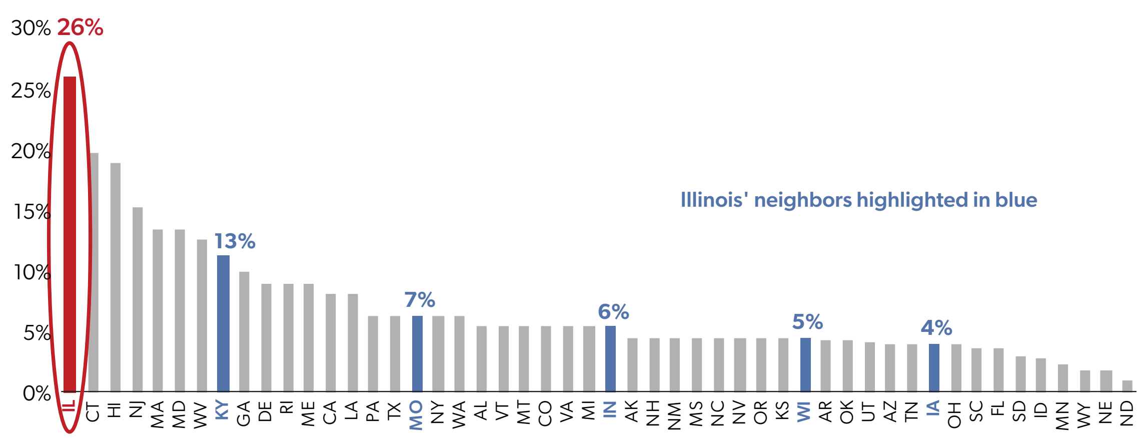
Total official unfunded state retiree health insurance liabilities per household, 2018



Source: Moody’s Investors Service, “FY 2018 State Pension Medians Show Declines Due to Strong Investment Returns”

Illinois’ statutory retirement costs consume 26 percent of budget – the most of any state

Official retirement costs* as a percentage of state revenues, FY 2017



Source: JP Morgan’s Michael Cembalest: “The ARC and the Covenants 4.0”

*Sum of interest on net direct debt, the state’s share of unfunded pension and retiree health liabilities, and defined contribution payments.

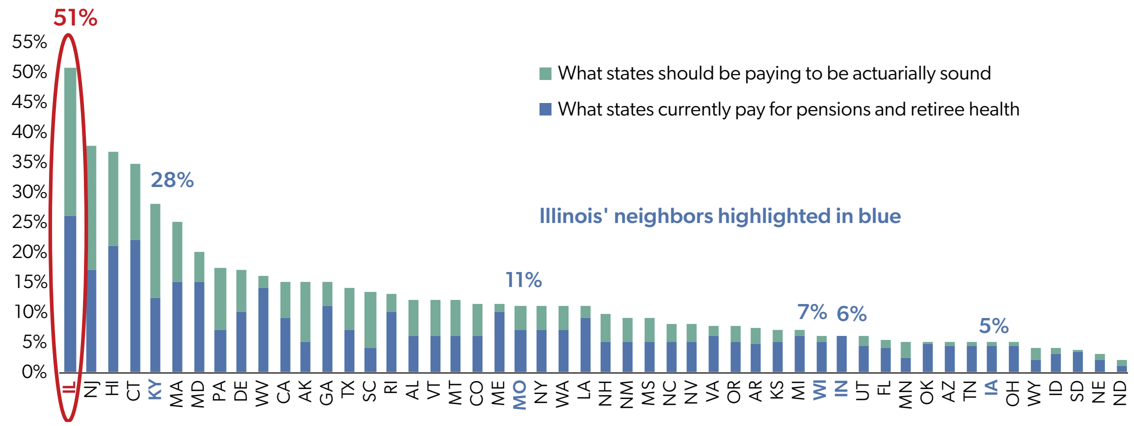
That has crowded out new spending on other core priorities such as education. Billions of state appropriations for K-12 and higher education dollars are being spent on pension costs instead of students in the classroom.[6]

And it's still not enough. Illinois' retirement crisis continues to grow because the state can't afford to pay what it really should to get its retirement costs under control. J.P. Morgan's Michael Cembalest calculates that more than half of the state's budget is needed to make pensions and retiree health insurance actuarially sound. That's the largest share of any state budget, by far. Yet again, Illinois is the nation's extreme outlier.[7]

The problem of crowd out is not going to go away. The Commission on Government Forecasting and Accountability projects that the state's statutory pension costs alone will consume a quarter or more of the budget for the next 25 years. And that's the official, rosy estimate. Additional revisions to the pension funds' assumed investment rates of return and other actuarial assumptions will likely cause official pension costs to consume even more of the budget over the next two decades.[8]

Illinois' true retirement costs would consume 51 percent of budget – the most of any state

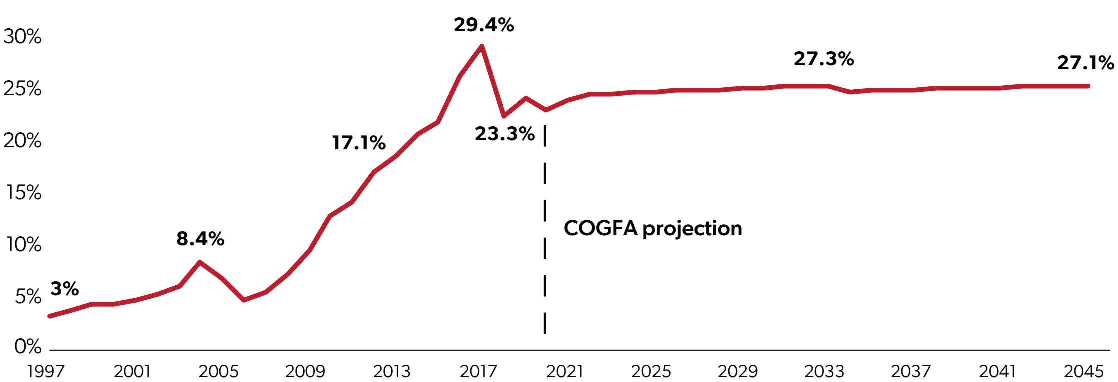
True retirement costs* as a percentage of state revenues, 2017



Source: JP Morgan's Michael Cembalest: "The ARC and the Covenants 4.0"
*Sum of interest on net direct debt, the state's share of unfunded pension and retiree health liabilities, and defined contribution payments.
"True" costs assume a 6 percent plan return and 30 year level dollar amortization.

Pension costs alone will consume a quarter of the state's budget for the next 25 years

State pension costs as a percentage of Illinois general revenues, historical and projected



Source: Commission on Government Forecasting and Accountability

Illinois simply can't compete with its neighbors on services and tax levels when over a quarter of its budget is perpetually consumed by pensions.

The extreme cost of Illinois' retirement debts has also pushed residents' overall tax burdens to punitive levels.

As pension costs have grown to consume nearly half of what the state appropriates on K-12 spending, local school districts have raised local property taxes to pay for Illinois' bloated educational bureaucracy. Add to that the costs of Illinois' local public safety pension crisis and that's helped drive the state's property tax rates to the highest in the nation – more than double what residents in Missouri, Indiana and Kentucky pay.[9]

That statewide average doesn't do justice to how destructive property taxes have become for some homeowners. In many Illinois communities, particularly in Chicago's southland area, effective property tax rates have reached confiscatory levels of 5 percent or more.

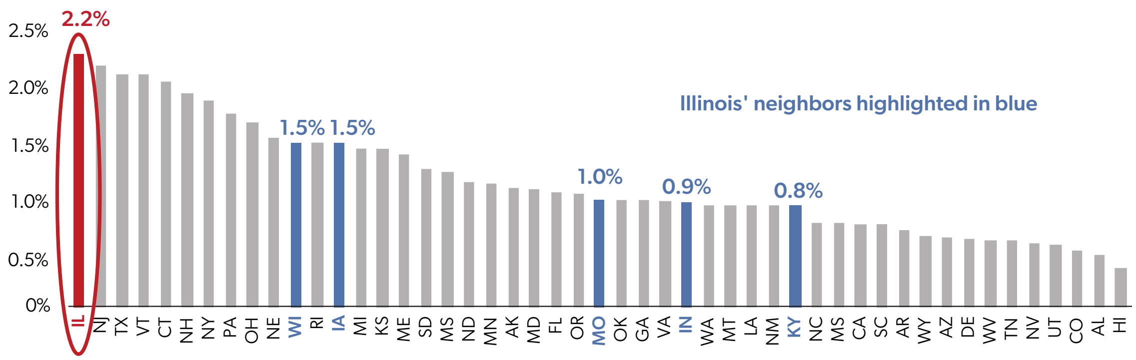
According to Cook County Treasurer Maria Pappas, more than 57,000 Cook County property owners were delinquent on their taxes in 2019. Many are at risk of losing their homes.[10]

But while property taxes impose the most public and painful burden in Illinois, they are only a part of the state's overall tax structure.

Illinois' overall state-local tax burden is one of the nation's highest. Kiplinger and Wallethub both rank Illinois' tax burden as the highest/worst of any state, with Kiplinger calling Illinois the "Least Tax-Friendly State" in the nation. The Tax Foundation says Illinoisans are burdened by the 5th-highest taxes in the nation.[11, 12]

Illinoisans pay the highest property taxes in the nation

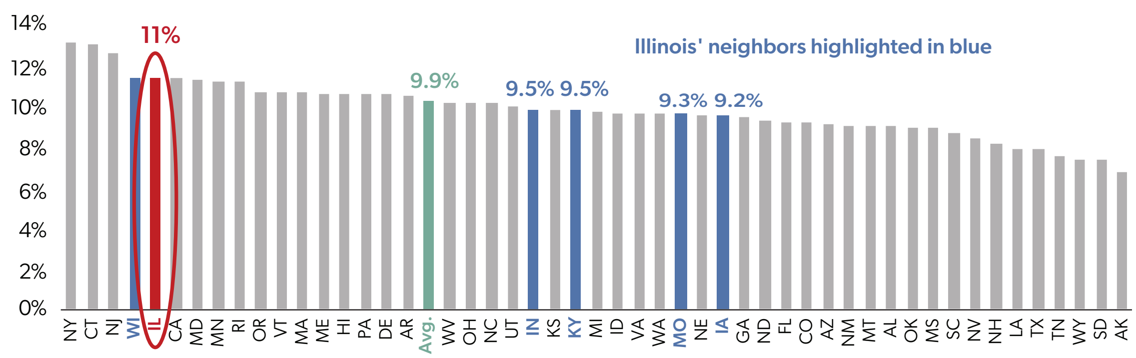
Effective property tax rate: taxes as a percentage of property value, 2019



Source: Attom Data Solutions
Note: Attom does not provide data on Idaho property taxes

Illinoisans burdened by the 5th-highest state/local taxes in the nation

Total state/local tax burden as a percentage of state income, FY 2012*

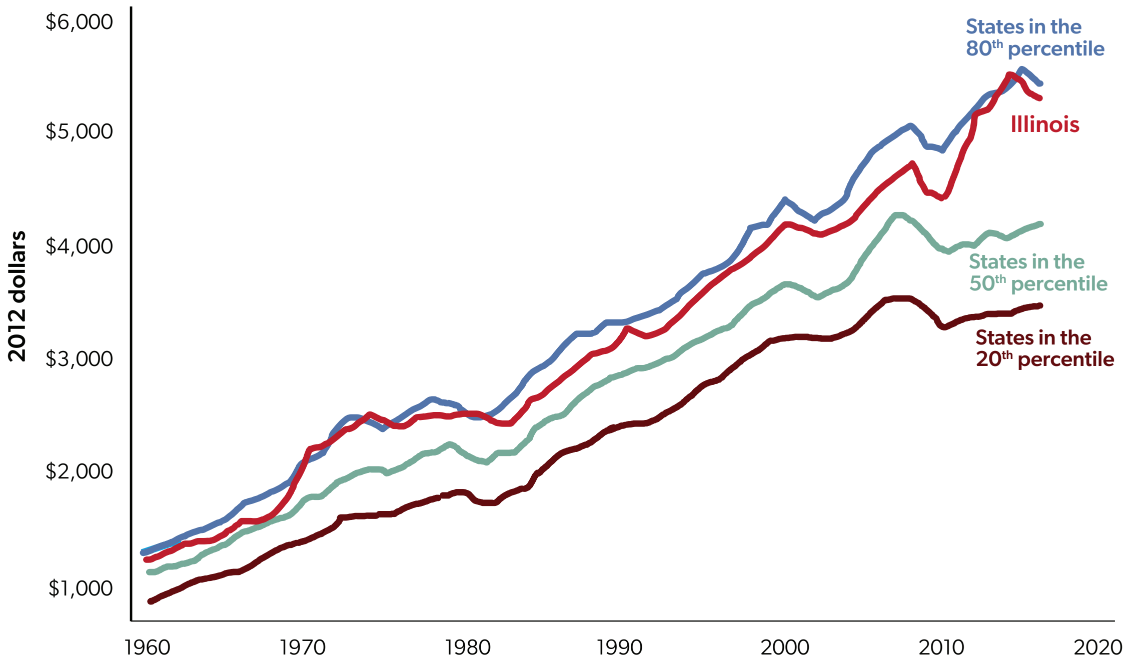


Source: Tax Foundation, "Facts and Figures 2020: How Does Your State Compare?"
*FY 2012 is most recent data available from the Tax Foundation, it serves as a proxy for IL's 2020 taxes given the similar income tax rate.

Federal Reserve Bank of Chicago economist Leslie McGranahan goes further, saying Illinois' combined tax burden has been consistently high for decades. McGranahan says Illinois has consistently ranked near the top of all states for state and local tax revenues per capita – tracking closely with the 80th percentile (the country's top 10 states). Illinoisans have been paying more in total taxes than residents in most other states for the last 60 years.[13]

Illinoisans have paid some of the nation's highest taxes for decades

State and local tax revenues per capita, by percentile



Source: Leslie McGranahan, "Comparing the Finances of Illinois and Other States" Federal Reserve Bank of Chicago, Midwest Economy Blog; Author's calculations based on data from the U.S. Census Bureau and Haver Analytics.

A crisis of confidence

Illinois' damaging budget crowd out and taxes – and the expectations for even more of both – have created a crisis of confidence in Illinois.

The state's credit rating is arguably the most comprehensive indicator of Illinois' financial health. It has collapsed after 22 downgrades from the nation's three major ratings agencies over the past 11 years.[14]

Moody's Investors Service, S&P Global Ratings and Fitch Ratings have each downgraded Illinois to just one notch above junk, the lowest rating of any state. All three have also assigned a negative outlook to Illinois, warning of future downgrades. No state has ever been rated junk.[15]

The City of Chicago is already rated one notch into junk by Moody's, while Chicago Public Schools is four notches into junk. Cook County continues to be investment grade, with an A2 rating, but its rating is stuck between New Jersey and Connecticut, the nation's two worst-rated states excluding Illinois.[16]

Illinois' credit rating was downgraded 22 times between 2009 and 2020

Downgrades by the big-three credit rating agencies, 2009-2020

Date	Moody's	S&P	Fitch
March, July 2009	↓	↓	↓
December 2009		↓	↓
April 2010			↓
June 2010	↓		↓
January 2012	↓		
August 2012		↓	
January 2013		↓	
June 2013	↓		↓
October 2015	↓		↓
June 2016	↓	↓	
September 2016		↓	
February 2017			↓
June 2017	↓	↓	
April 2020			↓

Source: Commission on Government Forecasting and Accountability

Illinois is the lowest rated state in the nation, one notch from junk

State credit ratings by Moody's Investors Service, 2020

Investment grade		
Highest quality, lowest credit risk	Aaa	Delaware, Florida, Georgia, Indiana, Iowa, Maryland, Missouri, North Carolina, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington
High quality, very low credit risk	Aa1	Alabama, Arizona, Arkansas, Colorado, Hawaii, Idaho, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New York, North Dakota, Ohio, Oregon, Vermont, Wisconsin
	Aa2	California, Kansas, Maine, Mississippi, New Mexico, Oklahoma, Rhode Island, West Virginia
	Aa3	Alaska, Kentucky, Louisiana, Pennsylvania
Upper-medium grade, low credit risk	A1	Connecticut
	A2	**Cook County**
	A3	New Jersey
Medium grade, speculative elements and moderate credit risk	Baa1	
	Baa2	
	Baa3	**Illinois**
Speculative grade "Junk"		
Speculative elements, significant credit risk	Ba1	**Chicago**
	Ba2	
	Ba3	Detroit, Detroit Public Schools
	B1	**Chicago Public Schools**
5 additional ratings	⋮	
Lowest rated, in default	C	

Source: Moody's Investors Service
Note: Wyoming is not rated by Moody's Investor Service

The state's low rating has resulted in punitive borrowing costs. Illinois pays interest rates on its debts that are multiple times higher than other states. At over 5.5 percent as of May 2020, Illinois' rate is now five times the 1.1 percent rate it costs AAA-rated states to borrow.[17]

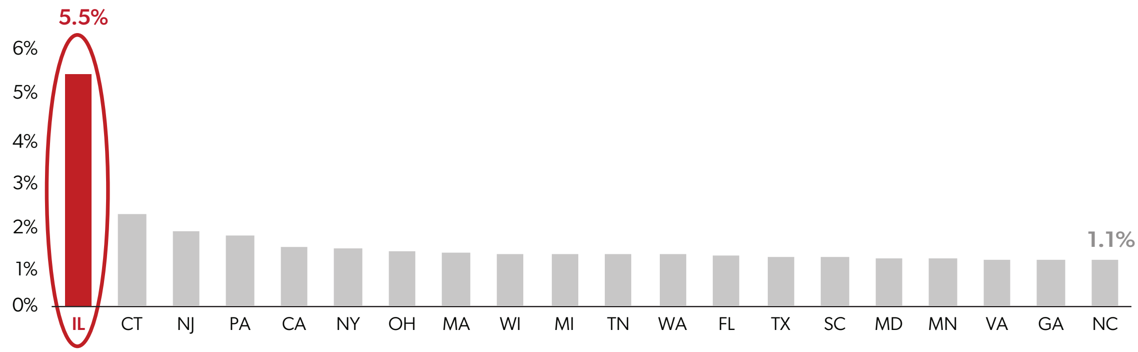
The lack of confidence is costing Illinois jobs and investments as businesses stay out of the state. For example, Warren Buffett says he wouldn't relocate a business to a place like Illinois:[18]

> **"In the public sector, you know, it's a disaster...If I were relocating into some state that had a huge unfunded pension plan, I'm walking into liabilities...And those are big numbers, really big numbers... And when you see what they would have to do – I say to myself, 'Why do I want to build a plant there that has to sit there for 30 or 40 years?'"**

Illinoisans have expressed their own lack of confidence in Illinois by voting with their feet. U.S. Census data show that a net of 1.6 million Illinoisans have moved out of this state since 2000. Only New York and California lost more people. In all, domestic out-migration from Illinois resulted in a net loss of almost 13 percent of the state's population as of 2000.[19]

Illinois pays the nation's highest borrowing rates, by far

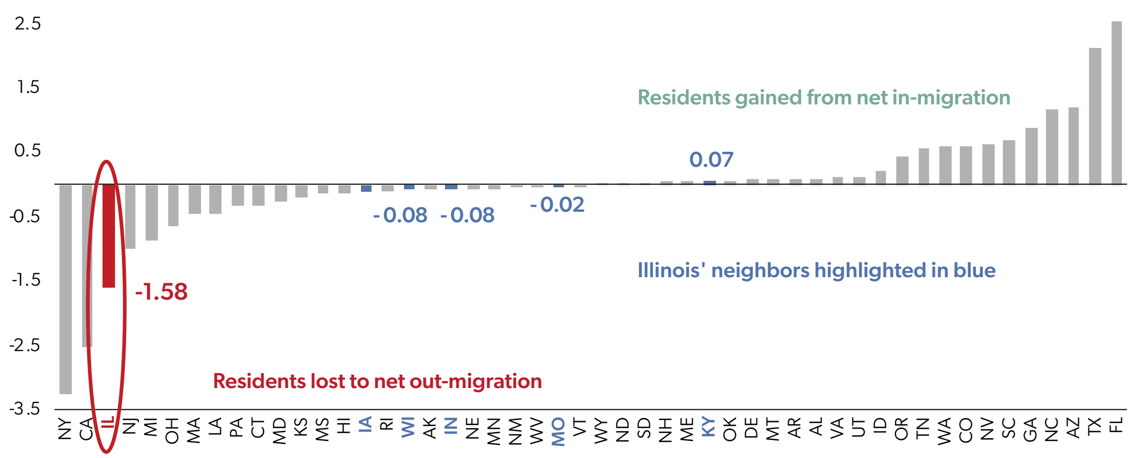
State 10-year bond yields as of May 2020



Source: Bloomberg

Illinois' out-migration losses are 3rd-biggest of any state

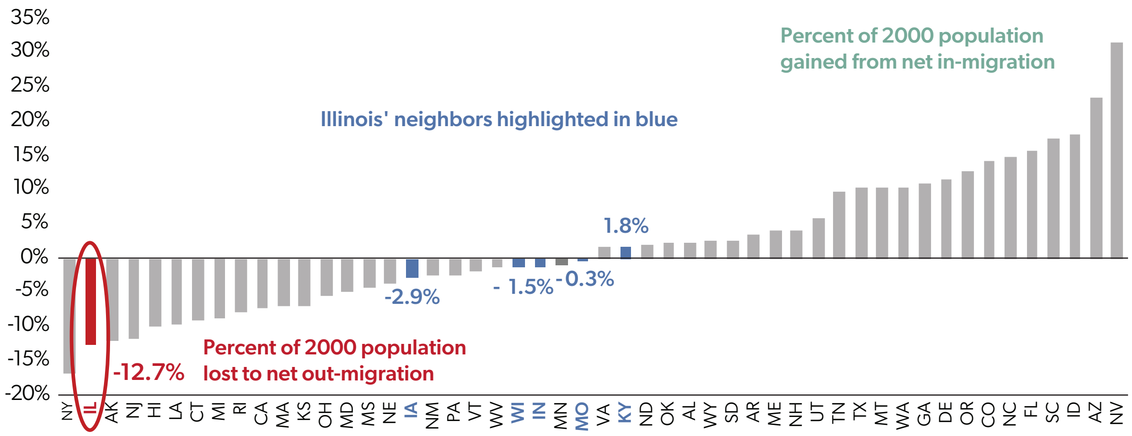
Net domestic migration of residents (in millions), 2019 vs. 2000



Source: U.S. Census Bureau, Annual Estimated Components of Population Change

Illinois is 2nd-biggest net loser to out-migration on a percentage basis

Net domestic migration of residents gained/lost as a percent of population, 2019 vs. 2000



Source: U.S. Census Bureau, Annual Estimated Components of Population Change

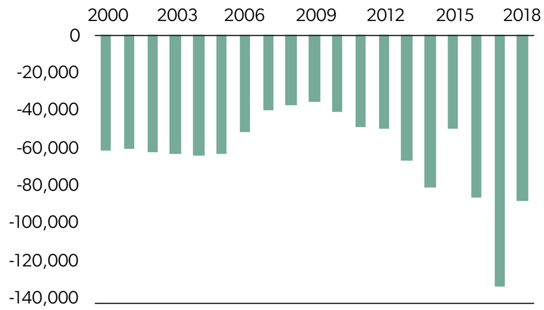
Those losses aren't normal, even for a cold weather state in the Rust Belt. Neighboring states like Indiana, Wisconsin and Iowa have seen far smaller out-migration losses both in nominal and percentage terms.

And as residents have left, they've hurt Illinois' tax base. According to domestic migration data from the Internal Revenue Service, Illinois has lost an average of 62,000 tax filers and their dependents to other states every year since 2000. On average, Illinois lost $2.8 billion in adjusted gross income (AGI) due to out-migration annually.[20]

Those numbers have ramped up in recent years as Illinois' crisis has deepened. Net annual losses of residents have exceeded 80,000 while AGI losses have topped $5 billion.

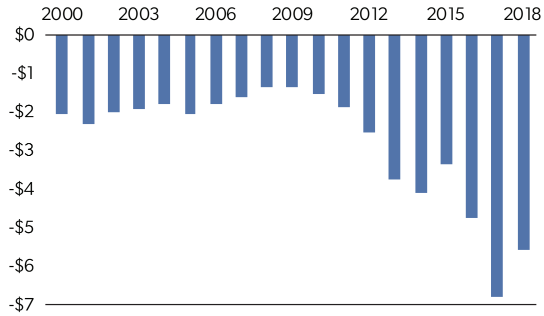
As Illinois loses a record number of people to other states...

Annual Illinois residents (tax filers and dependents) lost due to net domestic out-migration



...its tax base is taking a big hit, too.

Annual adjusted gross income (AGI) lost due to net domestic out-migration, (in billions)



Source: IRS - SOI migration data

The impact of losing those residents and their income is even bigger than it first appears. One year's worth of losses don't just affect the tax base the year they leave, but also all subsequent years. The losses build on each other, year after year. Add up the compounded losses since 2000 and Illinois' cumulative AGI loss totals $410 billion.[21]

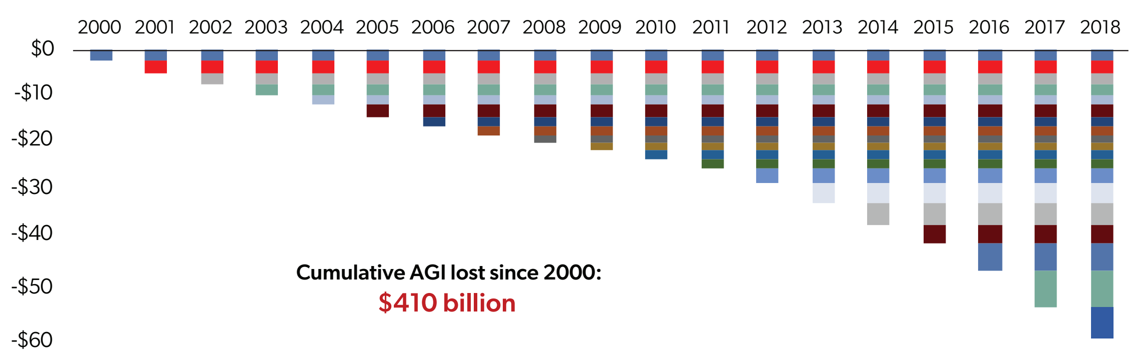
The taxes lost as AGI has left have contributed to the state's deepening fiscal woes. Illinois' record losses to out-migration have been just one part of the state's overall demographic collapse. Net foreign immigration to Illinois has fallen by half since 2001. And the state's net natural increase (births minus deaths) is down more than 50 percent.

All those demographic factors combine into a single fact: Illinois is shrinking. There are 170,000 fewer people in Illinois today than in 2010. No other state lost as many people and, in fact, only four states nationally lost population over that time period.[22]

A falling population has perpetuated Illinois' downward spiral. Lower demand for homes, in tandem with growing debts and rising taxes, has pushed real home values down. U.S. Census Bureau data show Illinois median home values have grown just 11 percent since 2005, the 6th-worst growth nationally. That's far short of inflation, which was up 30 percent over the same period.[23]

Illinois has lost a cumulative $410 billion in AGI since 2000

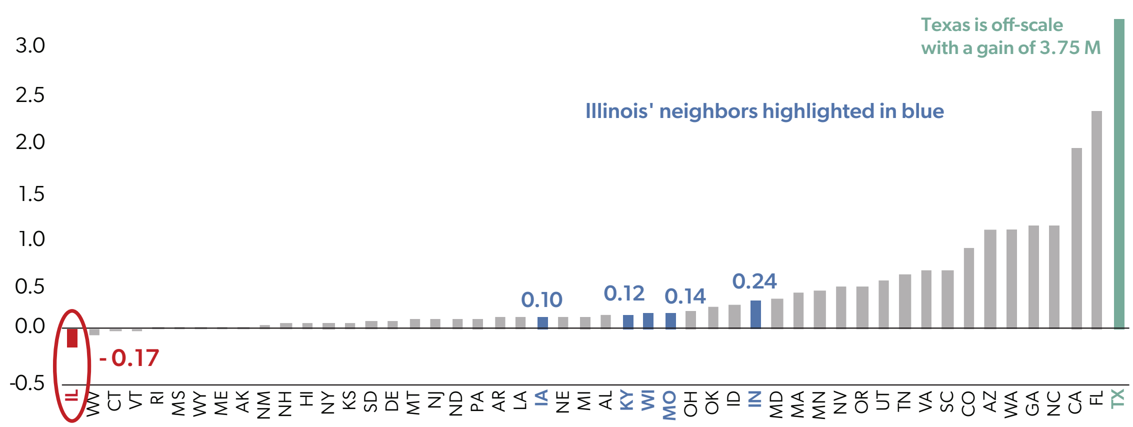
Annual cumulative net adjusted gross income (AGI) lost due to net domestic out-migration (in billions)



Source: IRS - SOI migration data

Illinois has lost more population than any other state

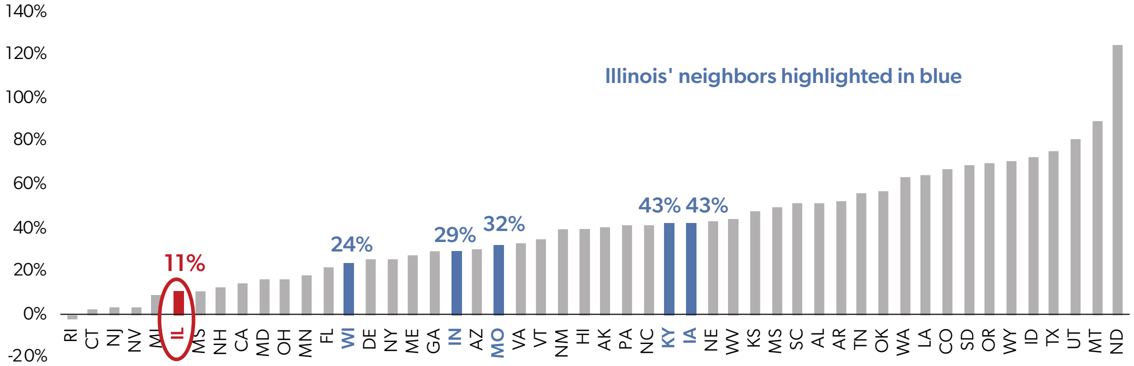
Total change in state population (in millions), 2019 vs. 2010



Source: U.S. Census Bureau, Annual Estimated Components of Population Change

Illinois ranked 6th-worst in median home value growth between 2005 and 2018

Total growth in median home value of owner-occupied housing units, 2018 vs. 2005



Source: U.S. Census Bureau, ACS "Median value: Owner-occupied housing units"

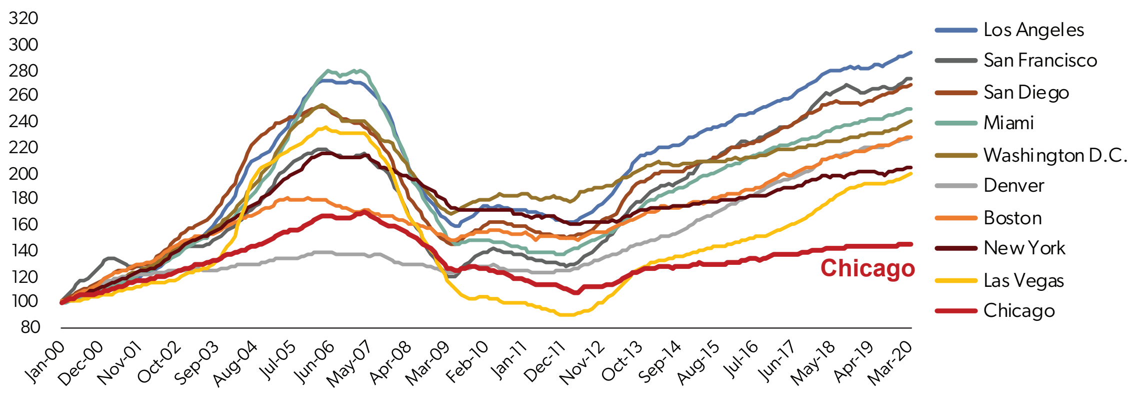
Chicagoans, in particular, have been hit hard since 2000 when it comes to their home values. Windy City residents would have been far better off today if they'd owned property in any of the other nine cities that make up the Case-Shiller 10-City Composite Home Price Index.[24]

Chicago home prices have grown just 44 percent since 2000. By comparison, inflation was up 46 percent over the same time period. Meanwhile, home prices in Los Angeles grew four times those in Chicago, or 181 percent. Prices in Miami, up 143 percent, and Washington D.C., up 130 percent, have grown three times more than those in Chicago.

All these facts reflect Illinois' outlier status before the COVID-19 crisis. The damage inflicted by the virus and the economic shutdown will inevitably make those numbers even worse.

Chicago home prices have stagnated compared to properties in other big cities

Case-Shiller Home Price Index, January 2000 - March 2020



Source: S&P CoreLogic: Case-Shiller 10-City Composite Home Price SA Index

Illinois' per capita debts are overwhelming

Another way to understand the depth of the retirement crisis is to look at Illinois' $420 billion in Moody's-calculated retirement debts on a per household basis. (See the Appendix for a full breakdown of the $420 billion.)

Residents in the City of Chicago are burdened with $141 billion of those retirement debts. That's the total overlapping city, county and state debt, based on Moody's calculations, each Chicago household is saddled with. Divide that shortfall between the city's one-million-plus households and the burden works out to $135,000 each. Call it a "shadow mortgage."[25]

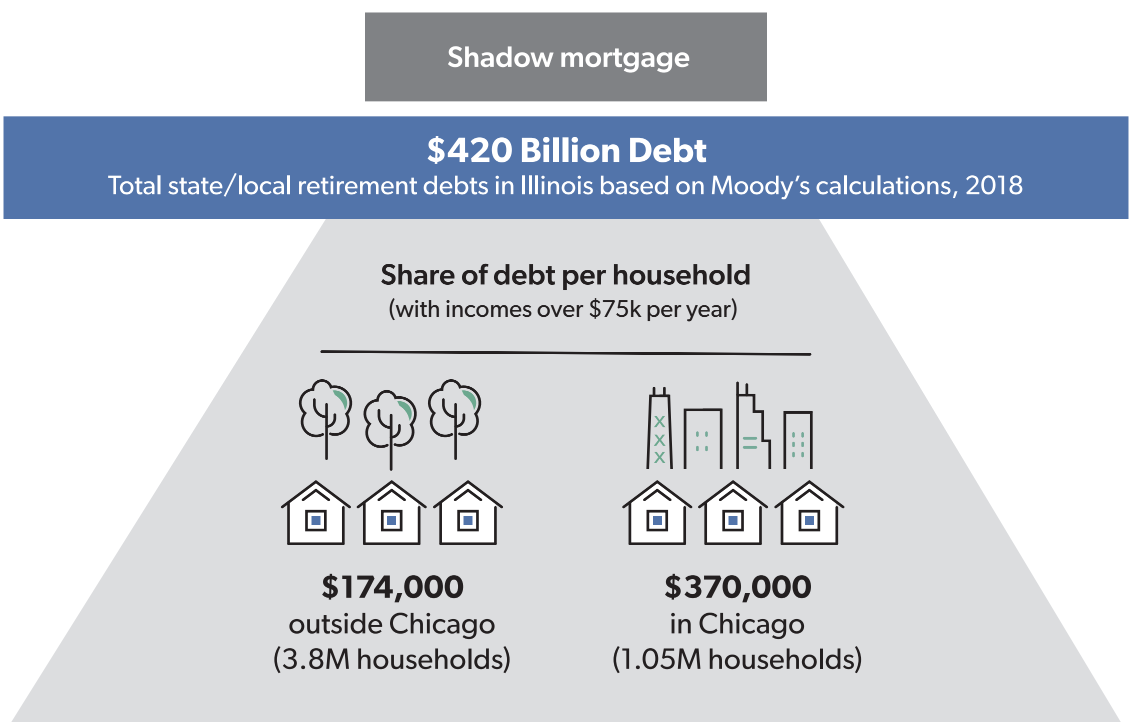
Take the remaining $279 billion in debt and divvy it up among the 3.8 million households outside of Chicago, and their burden amounts to $74,000 each.

The true household burden is far larger

The reality is many Illinois families don't have the means to contribute toward Illinois' retirement shortfalls. Nearly 15 percent of all Illinoisans are in poverty and just 44 percent of Illinois households make more than $75,000 – a proxy for which households are more capable of taking on a shadow mortgage.[26]

When the burden of that $420 billion debt is placed solely on those households earning $75,000 or more, Chicagoans are saddled with $370,000 each. And non-Chicago households are on the hook for $174,000 each.

The amounts are overwhelming and will only get worse as Illinoisans continue to escape that shadow mortgage. As more Illinoisans leave, the debt on those that remain will grow even larger.



Source: Moody's Investors Service; Commission on Government Forecasting and Accountability; 2018 pension fund actuarial reports
Note: Debts prorated by population. Moody's does not provide its own debt estimates for downstate and suburban retirement data, so official data was used instead.

Conclusion

Illinois' outlier status isn't just a grim anecdote. Illinois' reputation as financially irresponsible has serious consequences, encapsulated in its near-junk status and its record flight of residents.

The state has reached the point where gimmicks used to avoid real reform – the same ones that landed Illinois its rating – are no longer available. The impact of COVID-19 has only further restricted the state's options. Borrowing any meaningful amount, without additional federal backing, will be extremely difficult. Tax hikes will inflict additional harm on residents and businesses that have been crippled by the economic shutdown. Shorting the pension funds will trigger even more punishment from rating agencies. And reamortizing pension debts further into the future won't be accepted by the agencies either.[1]

The state's retirement debt is insurmountable without significant changes to Illinois pension systems. But before a solution can be adopted, a proper diagnosis of the problem must be performed.

The second part of Wirepoints' four-part series will cover how overpromised benefits, and not underfunding, has been the main cause of the state's retirement crisis. And it will show how overly generous pension and retiree health insurance benefits have driven those unaffordable promises.

Appendix
The Numbers

Summary of Illinois' state and local retirement shortfalls

Illinois had $288 billion in official state and local public sector retirement shortfalls in 2018. That was made up of $134 billion in unfunded pension debt for its five state-run pension funds. Additionally, Illinois has a $56 billion retiree health insurance shortfall and $11 billion in pension obligation bonds. Local government retirements were short another $87 billion. As large as those amounts are, the official numbers vastly understate the true size of Illinois' debts.[1]

Illinoisans are on the hook for $420 billion in retirement debts based on Moody's calculations

State and local government retirement debt based on official government assumptions vs. Moody's Investors Service calculations,* FY 2018 (numbers may not add due to rounding)

Retirement funds	Government-reported retirement shortfalls (in billions)	Moody's calculated retirement shortfalls* (in billions)
State of Illinois		
Illinois' five state pension funds	$133.7	$240.8
Retiree health insurance debt	$56.1	$54.4
Pension obligation bonds	$11.0	$11.0
State subtotal	**$200.7**	**$306.1**
City of Chicago		
Chicago's four city funds	$28.9	$39.8
Chicago Teachers' Pension Fund	$12.0	$22.7
Park District fund	$0.8	$1.1
Retiree health insurance debt	$3.0	$2.9
Chicago subtotal	**$44.6**	**$66.5**
Cook County		
Cook County Pension Fund	$6.8	$10.9
MWRD Pension Fund	$1.1	$2.3
Forest Preserve Pension Fund	$0.1	$0.3
Retiree health insurance debt	$2.3	$1.7
Cook County subtotal	**$10.3**	**$15.1**
Suburban and downstate (government-reported data only)*		
Firefighter pension funds	$5.3	$5.3
Police pension funds	$7.1	$7.1
Illinois Municipal Retirement Fund	$4.5	$4.5
Retiree health insurance debt**	$15.1	$15.1
Suburban and downstate subtotal	**$32.0**	**$32.0**
Total retirement debts	**$287.7**	**$419.7**

Source: Moody's Investors Service; Commission on Government Forecasting and Accountability; 2018 pension fund actuarial reports

*Moody's does not provide its own debt estimates for downstate and suburban retirement data. Official data used instead.

**Includes school districts' share of Teachers' Retirement Insurance Program debt, colleges' share of College Insurance Program debt and municipalities' retiree health debt.

Official government numbers use rates near 7 percent to discount future obligations, while true market rates are far lower.[2]

Financial experts—from Nobel prize winners like Stanford's Prof. William F. Sharpe and University of Chicago's Prof. Eugene Fama to other academics including Hoover Fellow Joshua Rauh and Jeremy Gold—criticize the use of inflated discount rates.[3, 4, 5, 6]

Moody's Investors Service uses more appropriate discount rates based on AA-rated corporate bonds, resulting in pension shortfalls that are far higher than official estimates. The discount rate used by Moody's for its 2018 calculations was 4.14 percent.[7]

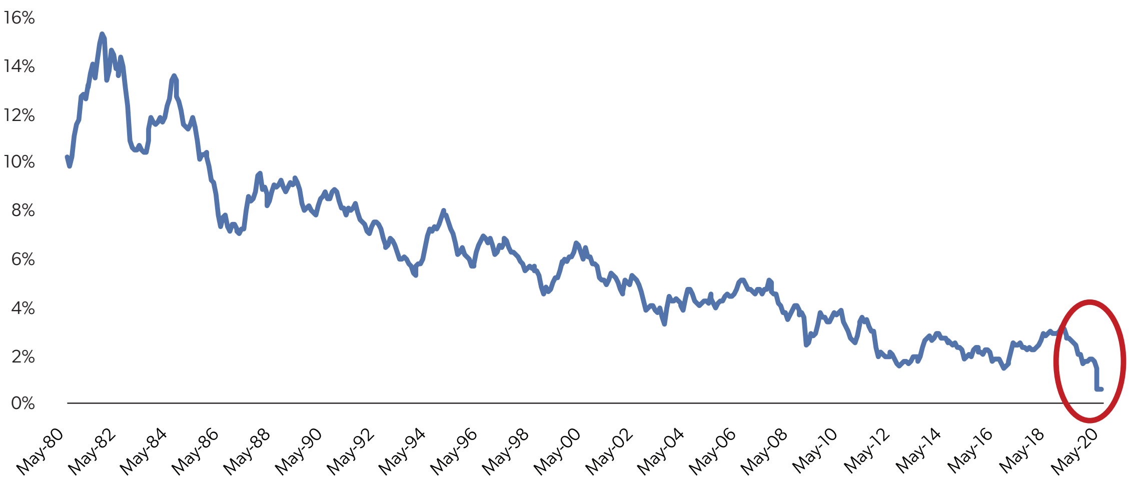
When Illinois' debts are added up based on Moody's analysis, Illinoisans are subject to $420 billion in state and local retirement shortfalls.

That's a 46 percent increase in the debt Illinoisans are on the hook for when compared to official numbers.

Illinois' total debts will get far larger, however, as Moody's updates its calculations with even lower discount rates. As of April 30, 2020, that rate had fallen to 2.8 percent, a reflection of the continued collapse in long-term yields. Structurally, those rates have fallen in tandem with the 10-year U.S. Treasury rate, which is now below 1 percent.[8, 9]

10-year Treasury Bonds are at record low rates, below 1%

10-Year Treasury constant maturity rate (monthly)



Source: U.S. Federal Reserve

Summary of Illinois' pension fund finances

FY 2018 core financial data of Illinois pension funds ($ in millions)

Pension fund	Actuarial assets	Accrued liability	Unfunded liability	Funded ratio
State of Illinois				
Teachers' Retirement System	$51,731	$127,019	$75,288	41%
State Employees' Retirement System	$17,478	$47,926	$30,448	36%
State Universities Retirement System	$19,348	$45,259	$25,911	43%
Judges' Retirement System	$1,013	$2,722	$1,709	37%
General Assembly Retirement System	$58	$376	$318	15%
State total	**$89,627**	**$223,301**	**$133,674**	**40%**
City of Chicago				
Municipal Employees' Annuity and Benefit Fund	$4,196	$16,809	$12,613	25%
Policemen's Annuity and Benefit Fund	$3,145	$13,215	$10,070	24%
Firemen's Annuity and Benefit Fund	$1,130	$6,156	$5,026	18%
Laborers' Annuity and Benefit Fund	$1,468	$2,653	$1,185	55%
Public School Teachers' Pension and Retirement Fund	$10,969	$22,923	$11,954	48%
Park Employees' Annuity and Benefit Fund	$367	$1,142	$775	32%
City of Chicago total	**$21,275**	**$62,897**	**$41,623**	**34%**
Cook County				
County Employees' Annuity and Benefit Fund	$10,513	$17,304	$6,791	61%
Forest Preserve Employees' Annuity and Benefit Fund	$203	$337	$134	60%
Metro Water Reclamation District Retirement Fund	$1,470	$2,601	$1,131	57%
Cook County total	**$12,186**	**$20,242**	**$8,056**	**60%**
Suburban and Downstate				
Illinois Municipal Retirement Fund	$46,993	$51,518	$4,524	91%
Suburban and Downstate Police Pension Funds	$8,697	$15,777	$7,080	55%
Suburban and Downstate Firefighter Pension Funds	$6,296	$11,564	$5,268	54%
Suburban and Downstate subtotal	**$61,986**	**$78,859**	**$16,872**	**79%**
Grand total	**$185,074**	**$385,299**	**$200,225**	**48%**

Source: Illinois Department of Insurance, Biennial Pension Report 2019

FY 2018 core financial data of Illinois pension funds ($ in millions)

Pension fund	Total employee contribution	Total employer contribution	Actuarially Determined Contrib. (ADC)	% of ADC paid	Annual benefit payout	Asset-to-payout ratio
State of Illinois						
Teachers' Retirement System	$938	$4,180	$7,081	59%	$6,336	8.2
State Employees' Retirement System	$254	$1,929	$2,739	70%	$2,498	7.0
State Universities Retirement System	$367	$1,677	$1,862	90%	$2,499	7.7
Judges' Retirement System	$14	$136	$168	81%	$150	6.8
General Assembly Retirement System	$1	$21	$32	66%	$23	2.5
State total	**$1,575**	**$7,943**	**$11,882**	**67%**	**$11,507**	**7.8**
City of Chicago						
Municipal Employees' Annuity and Benefit Fund	$138	$350	$1,050	33%	$889	4.7
Policemen's Annuity and Benefit Fund	$107	$588	$924	64%	$760	4.1
Firemen's Annuity and Benefit Fund	$46	$250	$412	61%	$329	3.4
Laborers' Annuity and Benefit Fund	$18	$48	$129	37%	$162	9.1
Public School Teachers' Pension and Retirement Fund	$184	$784	$856	92%	$1,437	7.6
Park Employees' Annuity and Benefit Fund	$12	$28	$51	54%	$75	4.9
City of Chicago total	**$505**	**$2,047**	**$3,422**	**60%**	**$3,652**	**5.8**
Cook County						
County Employees' Annuity and Benefit Fund*	$134	$549	$563	98%	$783	13.4
Forest Preserve Employees' Annuity and Benefit Fund*	$3	$3	$11	33%	$17	11.9
Metro Water Reclamation District Retirement Fund	$21	$87	$65	134%	$160	9.2
Cook County total	**$158**	**$640**	**$638**	**100%**	**$959**	**12.7**
Suburban and Downstate						
Illinois Municipal Retirement Fund*	$414	$948	NA	NA	$2,162	21.7
Suburban and Downstate Police Pension Funds**	$120	$562	$562	100%	$654	13.3
Suburban and Downstate Firefighter Pension Funds**	$80	$418	$430	97%	$495	12.7
Suburban and Downstate total	**$614**	**$1,928**	**NA**	**NA**	**$3,311**	**18.7**
Grand total* **	**$2,852**	**$12,558**	**$17,882**	**70%**	**$19,430**	**9.5**

Source: Illinois Department of Insurance, Biennial Pension Report 2019; Commission on Government Forecasting and Accountability; 2018 actuarial reports

*Employer contribution and ADC paid taken from 2018 Comprehensive Annual Financial Reports.

**ADC based on Illinois Department of Insurance actuarial calculations.

***Grand total ADC includes an estimated IMRF ADC of $948 million, which assumes IMRF's 2018 ADC was equal to the fund's employer contribution.

Summary of Illinois' pension fund beneficiaries and benefits

FY 2018 Membership data of Illinois pension funds

Pension fund	Total active members	Total beneficiaries	Total payroll	Current average salary (COGFA)
State of Illinois				
Teachers' Retirement System	160,425	120,453	$9,762,392,560	$60,853
State Employees' Retirement System	61,396	73,179	$3,965,372,328	$64,587
State Universities Retirement System	74,950	66,908	$4,264,293,749	$56,895
Judges' Retirement System	936	1,193	$182,482,348	$194,960
General Assembly Retirement System	132	417	$10,711,024	$81,144
State total	**297,839**	**262,150**	**$18,185,252,009**	**$61,057**
City of Chicago				
Municipal Employees' Annuity and Benefit Fund	31,285	25,899	1,734,595,691	$55,445
Policemen's Annuity and Benefit Fund	13,438	13,631	1,205,324,446	$89,695
Firemen's Annuity and Benefit Fund	4,481	5,028	440,369,844	$98,275
Laborers' Annuity and Benefit Fund	2,715	3,856	211,482,201	$77,894
Public School Teachers' Pension and Retirement Fund	28,958	28,550	2,094,830,446	$72,340
Park Employees' Annuity and Benefit Fund	3,187	2,854	129,923,175	$40,767
City of Chicago total	**84,064**	**79,818**	**$5,816,525,803**	**$69,192**
Cook County				
County Employees' Annuity and Benefit Fund	19,671	18,602	$1,533,721,507	$77,969
Forest Preserve Employees' Annuity and Benefit Fund	536	531	$34,071,319	$63,566
Metro Water Reclamation District Retirement Fund	1,832	2,475	$187,849,708	$102,538
Cook County total	**22,039**	**21,608**	**$1,755,642,534**	**$79,661**
Suburban and Downstate				
Illinois Municipal Retirement Fund	176,517	133,226	$7,321,479,593	$41,477
Suburban and Downstate Police Pension Funds	12,989	11,083	$1,144,711,642	$88,129
Suburban and Downstate Firefighter Pension Funds	9,231	8,632	$835,434,043	$90,503
Suburban and Downstate total	**198,737**	**152,941**	**$9,301,625,279**	**$89,115**
Grand total	**602,679**	**516,517**	**$35,059,045,625**	**$58,172**

Source: Illinois Department of Insurance, Biennial Pension Report 2019; Commission on Government Forecasting and Accountability

Pension benefit data of recently retired, career pensioners

(Members retired after 1/1/2017 with 30-plus years of service)

Pension fund	Final Average Salary	Average current pension	Average retirement age	Average expected total payout**
State of Illinois				
Teachers' Retirement System	$108,183	$79,379	59	$2.6 million
State Employees' Retirement System	$85,976	$54,317 + Social Security	59	$1.8 million + Social Security
State Universities Retirement System	$92,820	$71,282	59	$2.3 million
Judges' Retirement System*	$199,780	$175,047	72	$4.1 million
General Assembly Retirement System*	$89,698	$87,974	65	$1.8 million
State total	**$99,066**	**$70,612**	**59**	**$2.3 million**
City of Chicago				
Municipal Employees' Annuity and Benefit Fund***	$79,544	$58,447	60	$1.8 million
Policemen's Annuity and Benefit Fund***	$108,136	$81,400	58	$2.5 million
Firemen's Annuity and Benefit Fund	$123,400	$97,283	61	$2.6 million
Laborers' Annuity and Benefit Fund	$82,475	$62,018	60	$1.8 million
Public School Teachers' Pension and Retirement Fund	$93,903	$74,304	62	$2.3 million
Park Employees' Annuity and Benefit Fund***	$67,513	$43,295	60	$1.3 million
City of Chicago total	**$94,362**	**$70,375**	**60**	**$2.1 million**
Cook County				
County Employees' Annuity and Benefit Fund****	$77,817	$60,762	56	$2.2 million
Forest Preserve Employees' Annuity and Benefit Fund****	$65,221	$51,149	57	$1.8 million
Metro Water Reclamation District Retirement Fund***	$117,710	$84,218	59	$2.5 million
Cook County total	**$83,718**	**$64,194**	**57**	**$2.2 million**
IMRF, Downstate and Suburban Police and Firefighter funds excluded due to lack of member data				

Source: Pensioner data obtained from individual Illinois pension systems via 2020 FOIA requests; 2018 actuarial reports; Wirepoints calculations

Note: Unless otherwise noted, the pension data in this table was obtained from individual member data received from each fund via FOIA.

*Judges and General Assembly fund: Members retired after 1/1/2017 with 20-plus years of service.

**Estimated total payout is based on approximate life expectancies from Social Security's actuarial life tables. Current ages as of 2020 were used to determine pensioners' life expectancies.

***Final Average Salary for recently retired career retirees obtained from fund's 2018/2019 actuarial report.

****Cook County and Cook County Forest Preserve FOIA requests did not provide data. FAS and beginning pension data for recently retired, career members from funds' 2018 CAFRs were used as a proxy. Average total payout assumes life expectancy of 82.

Summary of Illinois' state retiree health insurance funds

Illinois owes $68 billion in retiree health insurance benefits to more than 560,000 government workers

Financial data and membership of Illinois' state retiree health insurance programs, 2018 ($ in millions)

Program	Total active and retired members	Accrued liabilities	Assets	Unfunded liabilities	Funded ratio
State Employee Group Insurance Program (SEGIP)	264,579	$40,093	$0	$40,093	0%
Teachers' Retirement Insurance Program (TRIP)	268,783	$26,327	-$18	$26,345	-0.1%
College Insurance Program (CIP)	33,271	$1,820	-$64	$1,885	-3.5%
Total	**566,633**	**$68,240**	**-$82**	**$68,323**	**-0.1%**

Source: 2018 actuarial valuations of Illinois' State Employee Group Insurance Program (SEGIP), Teachers' Retirement Insurance Program (TRIP) and College Insurance Program (CIP).

The state is on the hook for a vast majority of Illinois' retiree health insurance debt

Employers' share of Illinois state retiree health insurance liabilities, 2018 ($ in billions)

Employers	SEGIP		TRIP		CIP		Total	
	Accrued liability	Share	Accrued liability	Share	Accrued liability	Share	Accrued liability	Share
State of Illinois	$40.1	100%	$15.1	57.3%	$0.9	49.5%	$56.1	82.2%
School districts	$0.0	0%	$11.2	42.7%	$0.0	0%	$11.2	16.5%
Community colleges	$0.0	0%	$0.0	0%	$0.9	50.5%	$0.9	1.3%
Total	**$40.1**	**100%**	**$26.3**	**100%**	**$1.8**	**100%**	**$68.2**	**100%**

Source: 2018 actuarial valuations of Illinois' State Employee Group Insurance Program (SEGIP), Teachers' Retirement Insurance Program (TRIP) and College Insurance Program (CIP).

Illinois is the nation's extreme outlier

[1] "State of Illinois Budget Summary: 2020." Commission on Government Forecasting and Accountability, (Aug. 2019). https://cgfa.ilga.gov/Upload/FY2020BudgetSummary.pdf
[2] Dabrowski, Ted and Klingner, John. "Illinois' demographic collapse: Fewer immigrants, fewer babies and fleeing residents – Wirepoints Special Report." Wirepoints, (Mar. 2019). https://wirepoints.org/illinois-demographic-collapse-fewer-immigrants-fewer-babies-and-fleeing-residents-wirepoints-special-report/

Illinois' worst-in-nation crisis

[1] "Most large local governments' pension liabilities dropped in FY 2018, but set to rise notably by fiscal 2020." *Moody's Investors Service*, (Dec. 2019). https://www.moodys.com/research/Moodys-Most-large-local-governments-pension-liabilities-dropped-in-FY--PBM_1208298
[2] Ibid.
[3] Ibid.
[4] Ibid.
[5] Cembalest, Michael. "The ARC and the Covenants 4.0." *J.P. Morgan*, (Oct. 9, 2018). https://www.jpmorgan.com/jpmpdf/1320746272624.pdf
[6] Dabrowski, Ted and Klingner, John. "Administrators over kids: Seven ways Illinois' education bureaucracy siphons money from classrooms – Wirepoints Special Report." *Wirepoints*, (June 2018). https://wirepoints.org/administrators-over-kids-seven-ways-illinois-education-bureaucracy-siphons-money-from-classrooms-wirepoints-special-report/
[7] Cembalest. "The ARC and the Covenants 4.0."
[8] "June 2020 Financial Condition." COGFA.
[9] "U.S. Property Taxes Levied on Single Family Homes in 2019 Increased to More Than $306 Billion." *ATTOM Data Solution*s, (April 9, 2020). https://www.attomdata.com/news/market-trends/attom-data-solutions-2019-property-tax-report/
[10] Glennon, Mark. "42% Jump in Property Tax Delinquencies as Cook County IL Treasurer Warns of Problems 'Beyond Human Imagination.'" *Wirepoints.* https://wirepoints.org/thirty-percent-jump-in-property-tax-delinquencies-as-cook-country-treasurer-warns-of-problems-beyond-human-imagination-wirepoints/
[11] Mengle, Rocky and Muhlbaum, David. "The least tax friendly states in the U.S." *Kiplinger,* (Nov. 5, 2019). https://www.kiplinger.com/slideshow/taxes/t006-s001-10-least-tax-friendly-states-in-the-u-s-2019/index.html
[12] Cammenga, Janelle. "Facts and Figures 2019: How Does Your State Compare?" *Tax Foundation*, (March 19, 2019). https://taxfoundation.org/facts-figures-2019/
[13] McGranahan, Leslie. "Comparing the Finances of Illinois and Other States." *Federal Reserve Bank of Chicago*, (June 12, 2019). https://www.chicagofed.org/publications/blogs/midwest-economy/2019/comparing-finances-of-illinois-and-other-states
[14] "State of Illinois Budget Summary: 2020." p.174, *COGFA.*
[15] Dabrowski, Ted and Klingner, John. "Fitch downgrades Illinois to one notch above junk, warns state will be challenged to maintain investment-grade rating." *Wirepoints*, (April 17, 2020). https://wirepoints.org/fitch-downgrades-illinois-to-one-notch-above-junk-warns-state-will-be-challenged-to-maintain-investment-grade-rating-wirepoints/
[16] "Most large local governments' pension liabilities dropped." *Moody's.*
[17] Bloomberg market data
[18] Full transcript: "Billionaire investor Warren Buffett speaks with CNBC's Becky Quick on 'Squawk Box' today." *CNBC* (Feb. 25, 2019). https://www.cnbc.com/2019/02/25/full-transcript-billionaire-investor-warren-buffett-speaks-with-cnbcs-becky-quick-on-squawk-box-today.html
[19] "State Population Totals and Components of Change: 2010-2019." *U.S. Census Bureau.* https://www.census.gov/data/tables/time-series/demo/popest/2010s-state-total.html
[20] "SOI Tax Stats - Migration Data." *Internal Revenue Service.* https://www.irs.gov/statistics/soi-tax-stats-migration-data
[21] Ibid.
[22] "State Population." *U.S. Census Bureau.*
[23] "Median value: Owner-occupied housing units." *U.S. Census Bureau, American Community Survey.* https://data.census.gov/cedsci/advanced
[24] "CoreLogic Case-Shiller Home Price Indices." *S&P Global.* https://www.spglobal.com/spdji/en/index-family/indicators/sp-corelogic-case-shiller/sp-corelogic-case-shiller-composite/#overview
[25] "US states' pension liabilities fall in fiscal 2018." *Moody's.*
[26] "Income in the past 12 months." *U.S. Census Bureau, American Community Survey.* https://data.census.gov/cedsci/advanced

Conclusion

[1] Buswick, Geoffrey and Yocum, Blake. "Illinois fiscal 2021 budget anticipates, and needs, additional federal aid." S&P Global (June 2020). https://www.spglobal.com/ratings/en/research/articles/200601-illinois-fiscal-2021-budget-anticipates-and-needs-additional-federal-aid-11514461; Aaron, Thomas and Blake, Timothy. "Illinois governments' pension-related credit risks deepen in wake of coronavirus." Moody's, (May 2020). https://www.moodys.com/research/Moodys-Illinois-governments-pension-related-credit-risks-deepen-in-wake--PBM_1229886

Appendix: The Numbers

[1] "US states' pension liabilities fall in fiscal 2018 amid higher investment returns." *Moody's Investors Service*, (Sept. 2019). https://www.moodys.com/research/Moodys-US-states-pension-liabilities-fall-in-fiscal-2018-amid--PBM_1195186; "Most large local governments' pension liabilities dropped in FY 2018, but set to rise notably by fiscal 2020." *Moody's Investors Service*, (Dec. 2019). https://www.moodys.com/research/Moodys-Most-large-local-governments-pension-liabilities-dropped-in-FY--PBM_1208298

[2] *Yieldbook: FTSE Pension Liability Index*. https://www.yieldbook.com/m/indices/FTSE-pension-liability.shtml

[3] Glennon, Mark. "Harshest critics of public pensions are Nobel Prize winning economists." *Wirepoints*, (July 26, 2015). https://wirepoints.org/harshest-critics-of-public-pensions-are-nobel-prize-winning-economists-wp-original/

[4] Fenner, Elizabeth. "12 Questions for Nobel Prize winner Eugene Fama." *Chicago Magazine*, (Dec. 10, 2013). https://www.chicagomag.com/Chicago-Magazine/December-2013/Q-and-A-with-University-of-Chicago-Economist-Eugene-Fama/index.php?r=9775F8198256H0T

[5] Rauh, Joshua. "Hidden debt, hidden deficits: 2017 Edition." *Hoover Institution*, (May 2017). https://www.hoover.org/research/hidden-debt-hidden-deficits-2017-edition

[6] *The Pension Forum*, Society of Actuaries. (Jan. 2003). https://www.soa.org/globalassets/assets/library/newsletters/pension-forum/2003/january/pfn0301.pdf

[7] "US states' pension liabilities fall in fiscal 2018." *Moody's*.

[8] *Yieldbook*: *FTSE Pension Liability Index*.

[9] Board of Governors of the Federal Reserve System (US), "10-Year Treasury Constant Maturity Rate [DGS10]." *FRED, Federal Reserve Bank of St. Louis*.

About Wirepoints

Wirepoints is a nonpartisan, nonprofit organization dedicated to telling the truth about Illinois' financial and economic condition. We are fiscal realists that oppose the failed, bipartisan governance that has perpetuated Illinois' decline. We provide research, analysis and news in a way that's understandable to ordinary citizens and are committed to promoting policies that will make this state competitive again in tax burdens, public services and economic opportunity.

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