ICYMI
In Case You Missed It …
Don’t be a Wile E Coyote

CCIM Institute’s 2022 Midyear Governance Meetings

Economic Update

Sunday, April 10, 2022

7:45 am – 9:00 am

KC Conway, CCIM, CRE, MAI
CCIM Institute Chief Economist
kc@redshoeeconomics.com

Disclaimer: Not in the fine print…

2022 CCIM Institute's Midyear Governance Meetings
Charlotte, NC

Economic Update: ICYMI 1Q22

This presentation reflects the analysis and opinions of the author, KC Conway, CCIM, CRE, MAI but not necessarily those of **CCIM Institute, the Appraisal Foundation, UMH, or Red Shoe Economics.**

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K.C. Conway Updated Bio

"If you aren't evolving, you are becoming obsolete."

Professional Roles:

- Chief Economist for CCIM Institute (2018-present)
- Co-Founder and Principal of Red-Shoe Economics
- **EXP Commercial** – Economics Advisor (eXp Realty is **fastest-growing real estate tech company** in the world with >75,000 agents
- Instructor for FFIEC (Federal Financial Institutions Exam Council) – Housed at FDIC in DC, FFIEC provides Bank Regulatory Education
- **Appraisal Foundation – Director, Board of Trustees CY 2022** (AF created by 1989 FIRREA legislation to oversee Appraisers)
- **UMH (Manufactured Housing REIT)** – Nominated to BOD pending Proxy Vote June, 2022 succeeding MREIC sale to ILPT

Education & Professional Credentials:

- Emory University Business School – Graduated with Honors 1985
- MAI Designation from the Appraisal Institute (1989 to present)
- Counselor of Real Estate (CRE Designation) since 2009
- CCIM Member

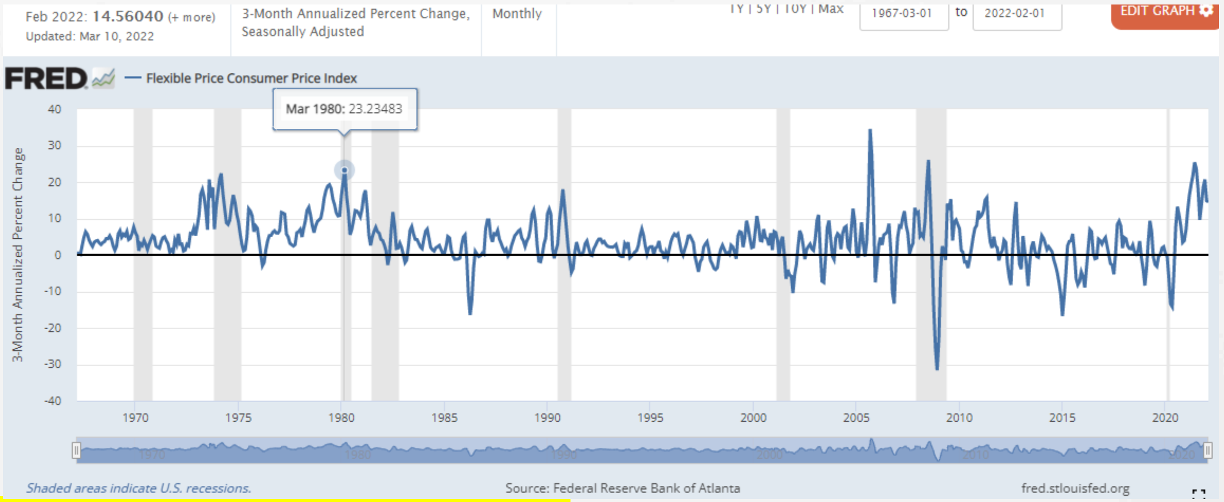
Experience:

- 35 years as an appraiser, bank regulator, CRE underwriter and credit officer, economist, investor, and expert witness
- Specialize in Adaptive Reuse, Affordable Housing and Housing Economics, Manufactured Housing, Site Selection and Land Use Rezoning, Economic Impact Studies, Capital Markets and CRE Finance, Ports & Logistics.
- Advisor to Bank Regulatory Community (FDIC, Federal Reserve, etc.) since 2005. Briefed former FED Chair Bernanke.
- Chief or Senior Appraiser for Wells Fargo Bank, legacy SouthTrust Bank, legacy SunTrust Bank
- **Independent Director to legacy Monmouth MREIC** (50+ year old Industrial REIT **sold to ILPT February 2022**)
- Published in numerous periodicals and Real Estate Journals such as Real Estate Issues, Wall Street Journal, NY Times, FreightWaves, Globe Street, BizNow, Realtors Connections, and Counselors of Real Estate annual Top-10 CRE Issues.
- Presented over 1,000 times in past 20 years to all major CRE Industry Groups including Appraisal Institute, Am. Bankers Assoc, Am. Property Tax Counsel, Counselors of Real Estate, ICSC (retail), MBA, NAHB, NAIOP, RMA, SIOR, and ULI.
- **Specialty areas include:** i) **Adaptive Reuse**; ii) **Ports & Logistics/Supply-Chain**; iii) **Affordable Housing** – especially Mfg. Housing; iv) **Property Tax Appeal**; v) **CRE Finance;** vi) **Expert Witness Appraisal/Valuation.**

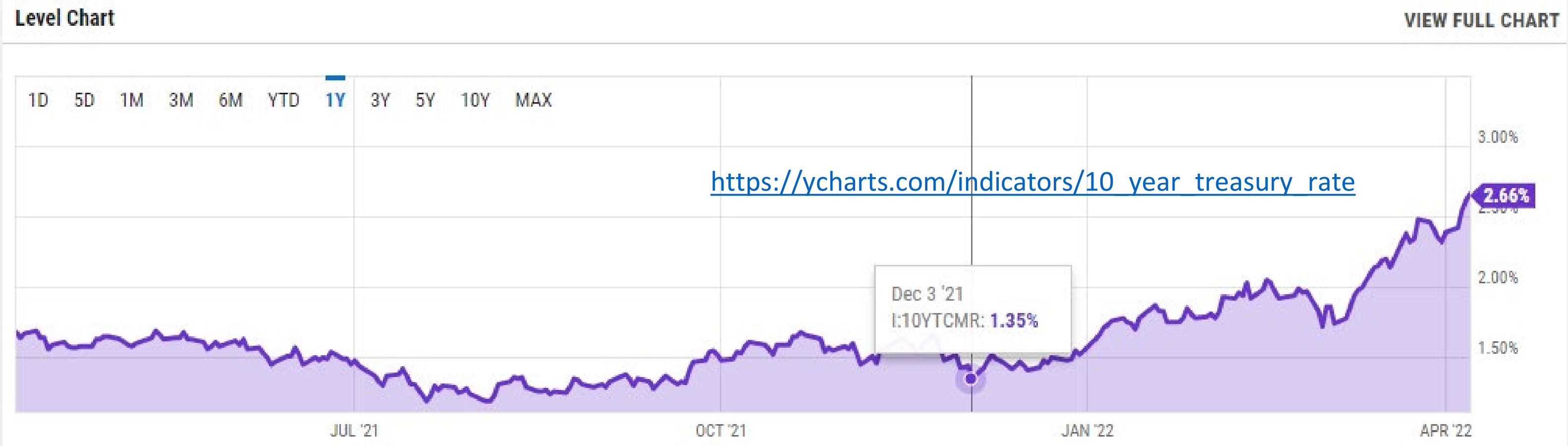
ICYMI from Q1 2022

- **Inflation is NOT Transitory** … It's 1970's SYSTEMIC
  Follow **St. Louis FRB's FRED** & **Flexible CPI**
  Flex CPI: **23.23% Mar 1980 / 23.69% July 2021**

  https://fred.stlouisfed.org/series/FLEXCPIM679SFRBATL/#:~:text=The%20Flexible%20Price%20Consumer%20Price%20Index%20%28CPI%29%20is,incorporate%20less%20of%20an%20expectation%20about%20future%20inflation



- **Interest Rates are RISING** … **10-Yr Tr. 2.70% Apr 8** (Up from 1.35% Dec 3, 2021)



https://ycharts.com/indicators/10_year_treasury_rate

FOMC Minutes from March 15-16

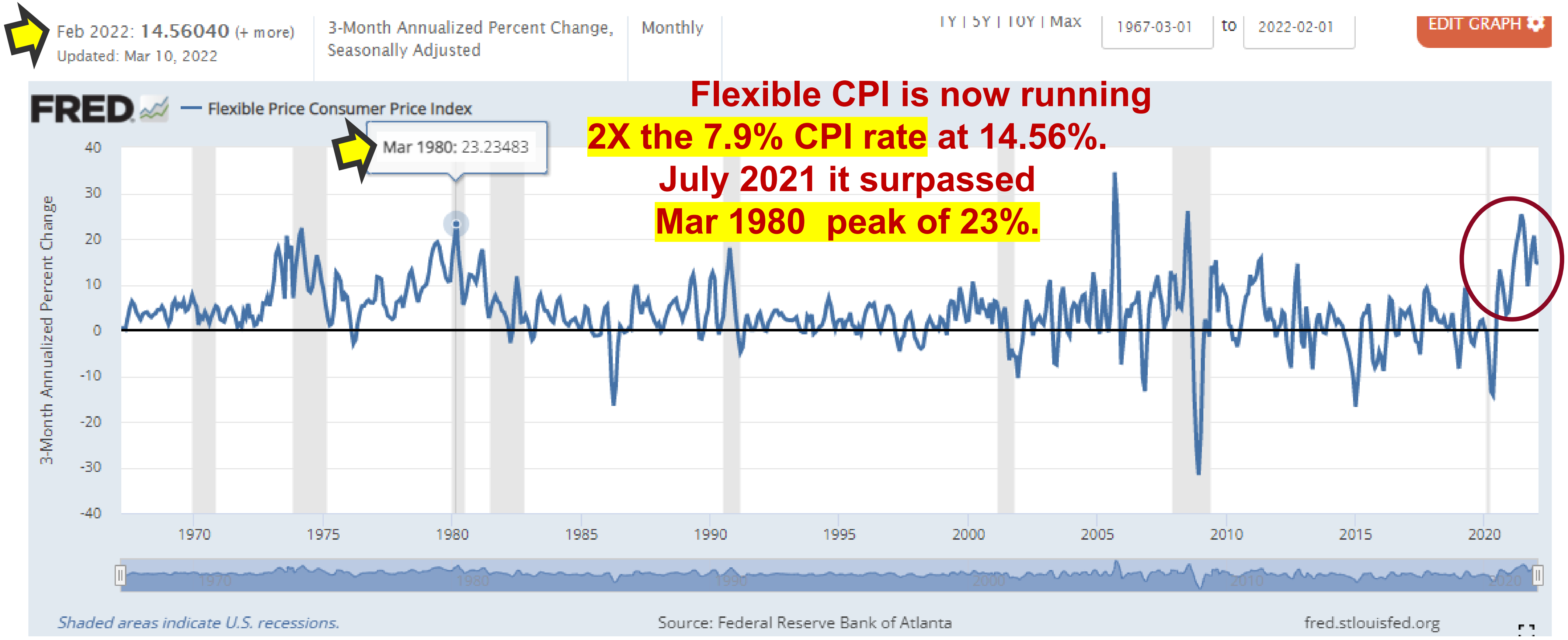
"Participants generally agreed that monthly caps of about **$60B for Treasury securities and about $35B for agency MBS would likely be appropriate,"** per the minutes from March 15-16 gathering. That means the Fed could **trim its roughly $9T balance sheet by more than $1T per year, while hiking rates "expeditiously"**

- **Home Prices (+19% YOY** latest Case-Shiller **(Miami +28%)** / **Kastle Systems "Back to Work" (42%)** and **Back to Recreation (90% TSA & 87% Open Table Restaurants)** / **JOLTS** (Openings 11.3 mm & **Quits 4.4 mm**)

ICYMI: The Real Inflation Rate

Flexible CPI at All Time High

The **Flexible Price Consumer Price Index (CPI)** is calculated from a subset of **goods and services included in the CPI that change price relatively frequently.**



https://fred.stlouisfed.org/series/FLEXCPIM679SFRBATL

Yield Curve: Normal is upward slope; Inverted is downward slope (Recession)

The Impact of an Inverted Yield Curve

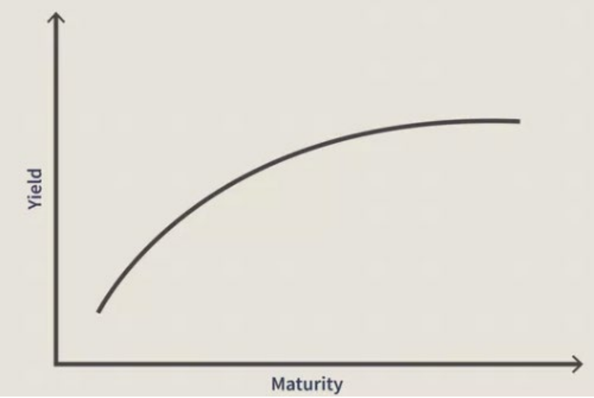
By JAMES MCWHINNEY - Updated March 28, 2022

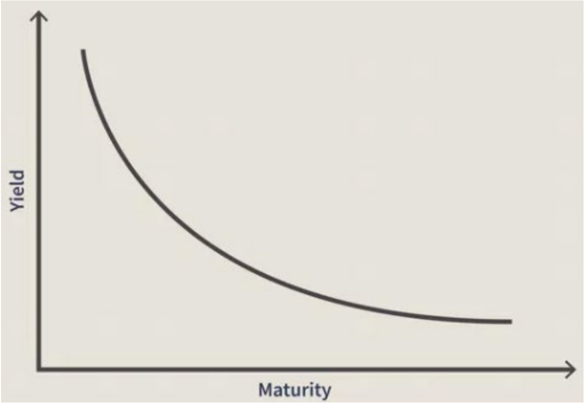
NEWS ALERT March 28, 2022, 9:55 a.m. EDT: The spread between five-year notes and 30-year bonds inverted for the first time since 2006 when five-year yields rose to 2.63%.1

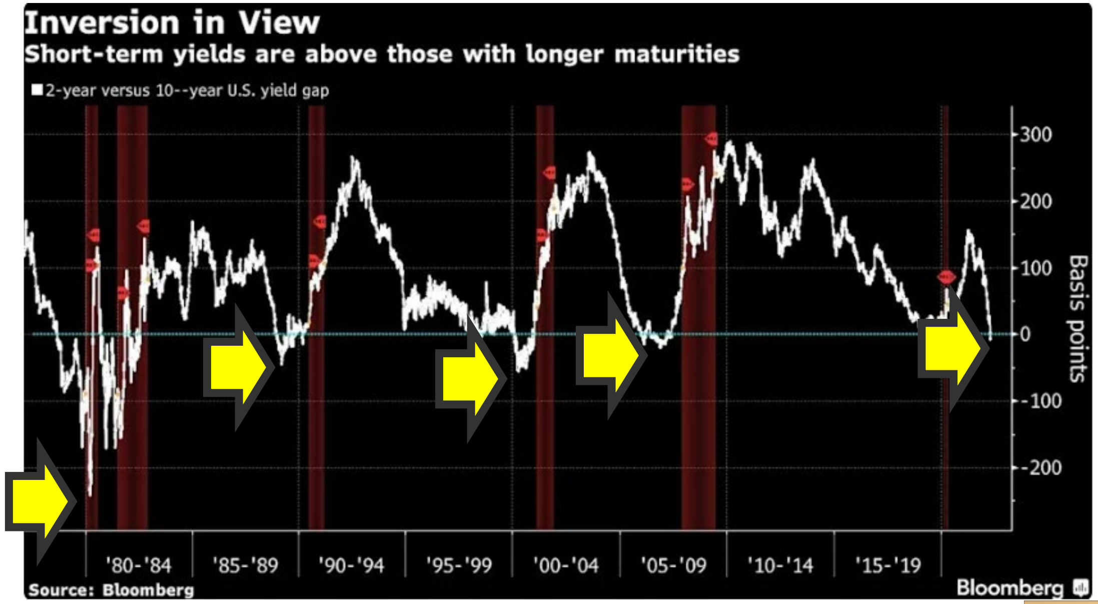
The term yield curve refers to the relationship between the short- and long-term interest rates of fixed-income securities issued by the U.S. Treasury. **An inverted yield curve occurs when short-term interest rates exceed long-term rates. Under normal circumstances, the yield curve is not inverted since debt with longer maturities typically carry higher interest rates than nearer-term ones.**

From an economic perspective, an inverted yield curve is a noteworthy and uncommon event because **it suggests that the near-term is riskier than the long term.**

https://www.investopedia.com/articles/basics/06/invertedyieldcurve.asp#:~:text=An%20inverted%20yield%20curve%20appeared%20in%20August%202006%2C,the%20recession%20in%20December%202007%20by%2016%20months.







ICYMI from Q1 2022

- **Consumer Confidence is Dropping** … It's back to the future – 1980 and 2011 – From 89 pre-Covid to 63 March 2022.

- **But … Look UP…Drone Deliveries for "Pet Meds & Ice Cream are reality in TX:** The first commercial drone deliveries in the U.S. will take off today (April 8 '22) as **Alphabet's Wing** unleashes its aircraft over the suburban towns of Frisco and Little Elm, which are located just north of **Dallas, Texas**. If successful, the service could revolutionize how goods are currently transported around cities. **Wing has partnered with Walgreens** , Blue Bell Creameries, Easyvet, and Texas Health for the initial rollout, meaning **consumers will be able to order prescription pet meds and ice cream,** among other items. (*SeekingAlpha.com*)

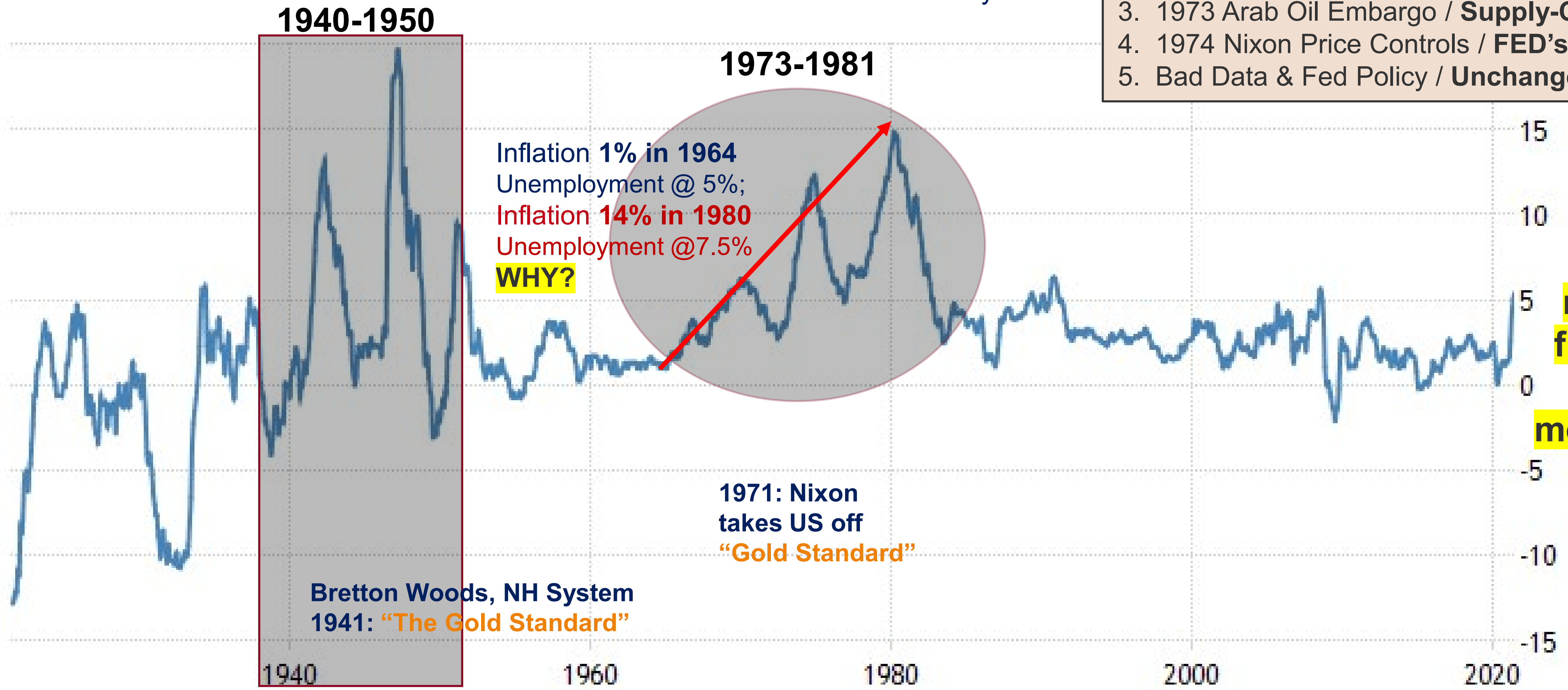
INFLATION: A Historical Perspective – *Can 1977 to 1981 be Repeated?*

WW II War-Time & then Peace-Time Economy

The Great Inflation (1965-1982) was the defining macroeconomic period of the second half of the twentieth century.

What caused 1% to 14%?

1. 1960s Vietnam War **Deficit spending**
2. 1971 Off the Gold Standard / **Rise of Bitcoin**
3. 1973 Arab Oil Embargo / **Supply-Chain**
4. 1974 Nixon Price Controls / **FED's Balance Sheet**
5. Bad Data & Fed Policy / **Unchanged – No Supply-Chain**



10-Yr TR 2.70% range Apr 8 – up from 1.35% range Dec 3, 2021 - a mere 4 months ago.

Mandate #1 → **Employment Act of 1946** – Where Fed's mandate for "**Full Employment**" originated

Mandate#2 → **Humphrey-Hawkins Act of 1978** gave FED it's 2nd Mandate of **"Price Stability"**

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https://tradingeconomics.com/united-states/inflation-cpi

ICYMI: Construction Inflation

Cost of NEW Construction is Skyrocketing **(YOY +16%!)**

Construction Cost Index — ANNUAL INFLATION RATE **+8.9%** APR. 2022

1913=100	INDEX VALUE	MONTH	YEAR
CONSTRUCTION COST	12898.96	+0.8%	+8.9%
COMMON LABOR	24511.71	0.0%	+1.1%
WAGE $/HR.	47.10	0.0%	+1.1%

Building Cost Index — ANNUAL INFLATION RATE **+16.1%** APR. 2022

1913=100	INDEX VALUE	MONTH	YEAR
BUILDING COST	7677.45	+1.5%	+16.1%
SKILLED LABOR	11114.27	+0.1%	+2.9%
WAGE $/HR.	61.44	+0.1%	+2.9%

Construction Cost Index — ANNUAL INFLATION RATE **+8.0%** JAN. 2022

1913=100	INDEX VALUE	MONTH	YEAR
CONSTRUCTION COST	12555.55	+0.6%	+8.0%
COMMON LABOR	24365.52	0.0%	+1.4%
WAGE $/HR.	46.82	0.0%	+1.4%

Building Cost Index — ANNUAL INFLATION RATE **+13.9%** JAN. 2022

1913=100	INDEX VALUE	MONTH	YEAR
BUILDING COST	7359.09	+1.0%	+13.9%
SKILLED LABOR	11055.72	0.0%	+2.6%
WAGE $/HR.	60.99	0.0%	+2.6%

Construction Cost Index — ANNUAL INFLATION RATE **+3.8%** APR. 2021

1913=100	INDEX VALUE	MONTH	YEAR
CONSTRUCTION COST	11849.31	+0.8%	+3.8%
COMMON LABOR	24253.88	+0.4%	+1.4%
WAGE $/HR.	46.59	+0.4%	+1.4%

Building Cost Index — ANNUAL INFLATION RATE **+6.1%** APR. 2021

1913=100	INDEX VALUE	MONTH	YEAR
BUILDING COST	6612.50	+1.0%	+6.1%
SKILLED LABOR	10805.01	0.0%	+1.7%
WAGE $/HR.	59.73	0.0%	+1.7%

ENR's Cost Indexes by City

1913=100 1967=100 R=REVISED	CONSTRUCTION COST		BUILDING COST	
	JAN '22: 1913	% CHG. YEAR	JAN '22: 1913	% CHG. YEAR
ATLANTA	8066.77	+17.3	5986.91	+24.7
BALTIMORE	9965.04	+6.0	6515.31	+13.9
BIRMINGHAM	8363.01	+11.0	5609.46	+17.8
BOSTON	16962.26	+13.4	9527.56	+16.5
CHICAGO	17977.18	+5.7	9260.51	+13.3
CINCINNATI	11340.56	+9.9	6270.20	+13.1
CLEVELAND	13250.20	+5.0	6903.84	+11.6
DALLAS	7176.09	+16.8	5785.39	+21.7
DENVER	8418.76	+10.2	6021.13	+14.9
DETROIT	12910.01	+5.2	7216.15	+9.8
KANSAS CITY	12623.32	+6.4	7257.26	+10.6
LOS ANGELES	12996.09	+7.6	7293.41	+14.4
MINNEAPOLIS	13811.00	+4.4	7594.45	+13.0
NEW ORLEANS	7545.75	+15.8	6041.18	+35.1
NEW YORK CITY	21335.07	+3.6	10561.93	+6.8
PHILADELPHIA	15013.06	+7.8	8353.08	+7.6
PITTSBURGH	12104.54	+9.4	7095.75	+9.8
ST. LOUIS	13228.25	+5.1	7231.89	+12.0
SAN FRANCISCO	14301.24	+9.2	9007.82	+15.4
SEATTLE	13722.83	+6.8	7648.51	+13.0

https://www.enr.com/ext/resources/static_pages/Economics/2022/0117_CE_WK2-combined.pdf?1642104499

ICYMI - TX Energy: W/O TX, It's Lights-Out & no EV Auto Charge-Ups

Independent Statistics & Analysis
eia U.S. Energy Information Administration

- ✓ **Petroleum: Texas leads all states in crude oil production as it has in every year but one since at least 1970.** The state accounts for about two-fifths of the nation's crude oil proved reserves and crude oil production. Texas not only produces more crude oil than any other state, but usually also more than all the federal offshore producing areas combined. More than one-fourth of the nation's 100 largest oil fields by reserves are in Texas.
- ✓ **Texas rates 1st or 2nd in every energy category** EXCEPT hydroelectric power. The terrain is prohibitive.
- ✓ **Texas also leads the nation in crude oil refining.** The majority of the Texas refineries are clustered near ports along the Gulf Coast, and that region has the largest concentration of oil refineries in the United States. **Texas has almost one-fourth of the nation's operable refineries and nearly one-third of the U.S. total refining capacity.** The state's 31 petroleum refineries can process a combined total of almost 5.9 million barrels of crude oil per day.
- ✓ **Natural Gas:** About one-fourth of the nation's proved dry natural gas reserves and about three-tenths of the 100 largest natural gas fields are located, in whole or in part, in Texas. **In 2020, the state produced one-fourth of the nation's natural gas,** and annual production reached a high of more than 10 trillion cubic feet for the second year in a row.
- ✓ **Electricity: Texas produces more electricity than any other state**, generating almost twice as much as **the second-highest electricity-producing state, FL**

https://www.eia.gov/state/analysis.php?sid=TX

Seeking Alpha

Jan 24, 2022

Energy on watch: Nearly half of Europe's gas supplies are imported from Russia, raising concerns about the willingness of some European nations to take a stand against Moscow. The continent is already dealing with an energy crunch that has resulted in some of the highest heating and electricity bills in the developed world. Looking to stave off such a threat, talks are currently underway with Qatar - the world's largest exporter of LNG - and other nations, in case a Russian incursion was to disrupt energy supplies to Europe.

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St. Louis FED Bullard Spot-on: He has been right on Inflation since Mid-2021

FEDERAL RESERVE BANK of ST. LOUIS

"I think the Fed needs to move aggressively to keep inflation under control," he said, noting that the Fed has a very large balance sheet and a very low policy rate today. "We need to get to neutral at least so that we're not putting upward pressure on inflation during this period when we have much higher inflation than we're used to in the U.S. economy. … **History tells us that the faster we move to that situation, the better chance we'll have of moving inflation back to target** and getting a boom in the U.S. economy to boot."

www.kitco.com › news › 2022/03/23

Bullard: High inflation means Fed must think bigger, faster ...

Mar 23, 2022 · Bullard: High inflation means Fed must think bigger, faster. Reuters Wednesday March 23, **2022** 16:24. March 23 (Reuters) - St. Louis Federal Reserve Bank President **James**...

money.usnews.com › investing › news

Bullard: High Inflation Means Fed Must Think Bigger, Faster ...

Mar 23, 2022 · **March** 23, **2022**. By Reuters | **March** 23, **2022**, at 3:31 p.m. Save. More. **Bullard**: High **Inflation** Means Fed Must Think Bigger, Faster. More. FILE PHOTO: St. Louis Federal Reserve Bank...

www.stlouisfed.org › from-the-president › video

Bullard Speaks with Bloomberg about Raising Rates, Balance ...

Mar 22, 2022 · March 22, 2022. **St. Louis** Fed President **Jim Bullard** talked about the removal of monetary policy accommodation and his expectations for the U.S. economy during an interview o...

www.newsmax.com › 2022/03/18 › id

Fed's Bullard, Explaining Dissent, Says Rates Should Top 3 ...

Mar 18, 2022 · StreetTalk. St. Louis Federal Reserve president **James Bullard** on Friday called for a dramatic increase in the Fed's overnight lending rate to more than 3% this year, a step he feels is...

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US DEBT–The Fed's Big Problem! Our Debt will drive rates higher w/o FED

Decade	Gross debt at start of decade (USD billions)	Avg. Debt Held By Public Throughout Decade (% of GDP)	Major Events
1900	-	4.8%	-
1910	-	10.0%	World War I
1920	-	22.9%	The Great Depression
1930	$16	36.4%	President Roosevelt's New Deal
1940	$40	75.1%	World War II
1950	$257	56.8%	Korean War
1960	$286	37.3%	Vietnam War
1970	$371	26.1%	Stagflation (inflation + high unemployment)
1980	$908	33.7%	President Reagan's tax cuts
1990	$3,233	44.7%	Gulf War
2000	$5,674	36.6%	9/11 attacks & Global Financial Crisis
2010	$13,562	72.4%	Debt ceiling is raised by Congress
2020	$27,748	105.6%	COVID-19 pandemic

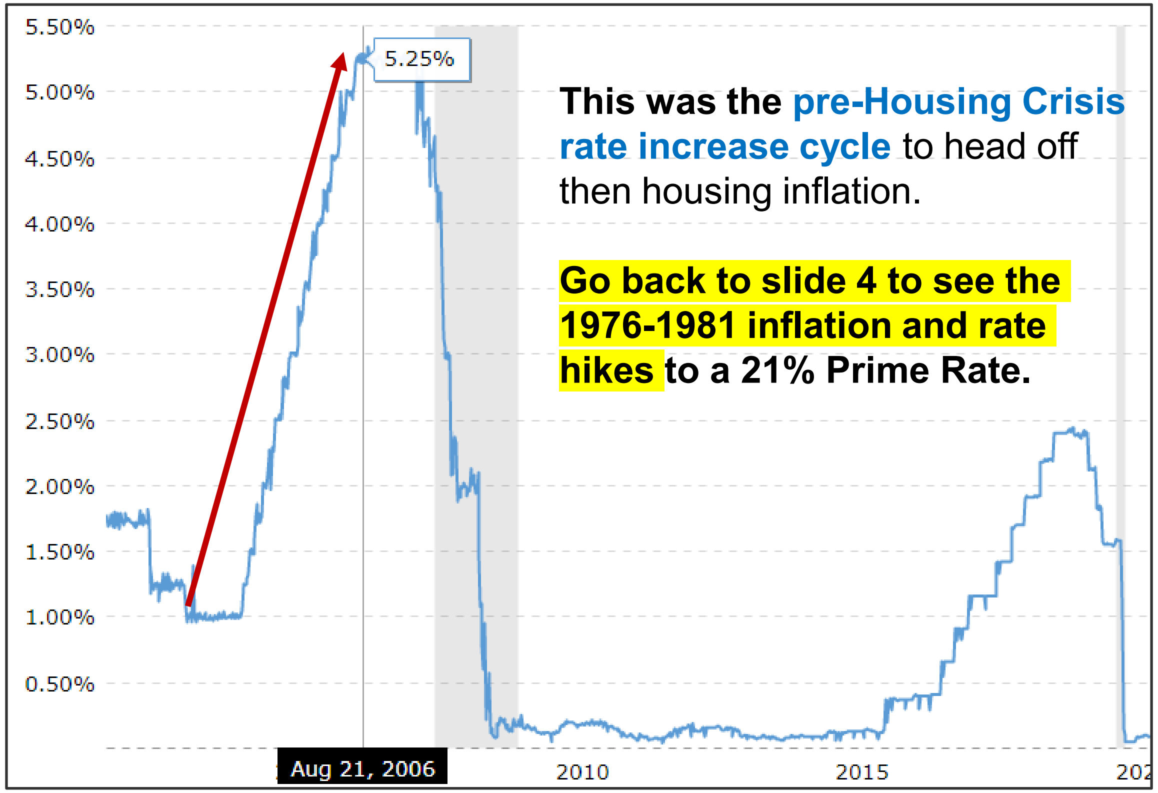
Since 1990, every decade we rack up more than all of previous decades

The FED isn't just battling INFLATION, it's battling FISCAL Deficits that will drive greater Inflation and devalue the US $

https://www.visualcapitalist.com/timeline-150-years-of-u-s-national-debt/

History of FED Rate Hikes: They don't just hike 3 to 4 times – try 8+

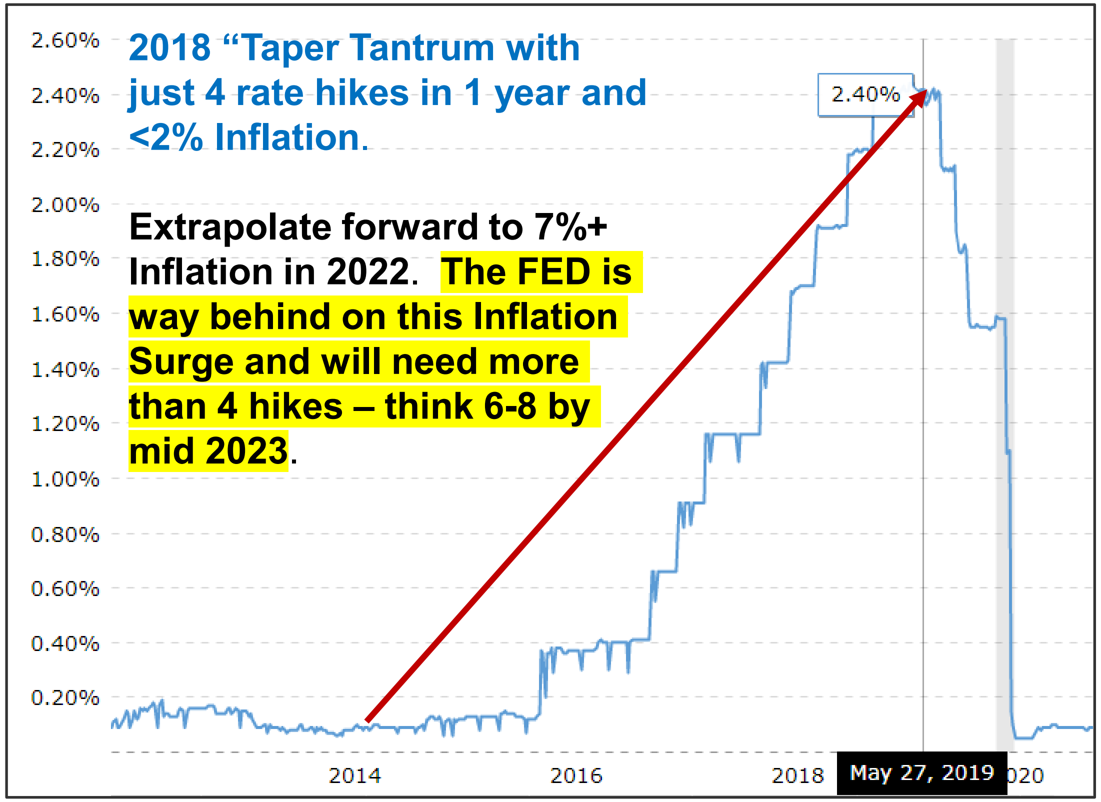
Fed Funds Rate – FOMC Rate Hikes
20-Yr View (1% to 5.25% **2004-Summer 2006**)



This was the pre-Housing Crisis rate increase cycle to head off then housing inflation.

Go back to slide 4 to see the 1976-1981 inflation and rate hikes to a 21% Prime Rate.

Fed Funds Rate – FOMC Rate Hikes
10-Yr View (0.20% to 2.40% **2014-Spring 2019**)



2018 "Taper Tantrum with just 4 rate hikes in 1 year and <2% Inflation.

Extrapolate forward to 7%+ Inflation in 2022. The FED is way behind on this Inflation Surge and will need more than 4 hikes – think 6-8 by mid 2023.

https://www.macrotrends.net/2015/fed-funds-rate-historical-chart

INFLATION & CRE VALUES: Are these increases sustainable?

Green Street

Green Street CPPI Past 12 Mos (Dec YOY)

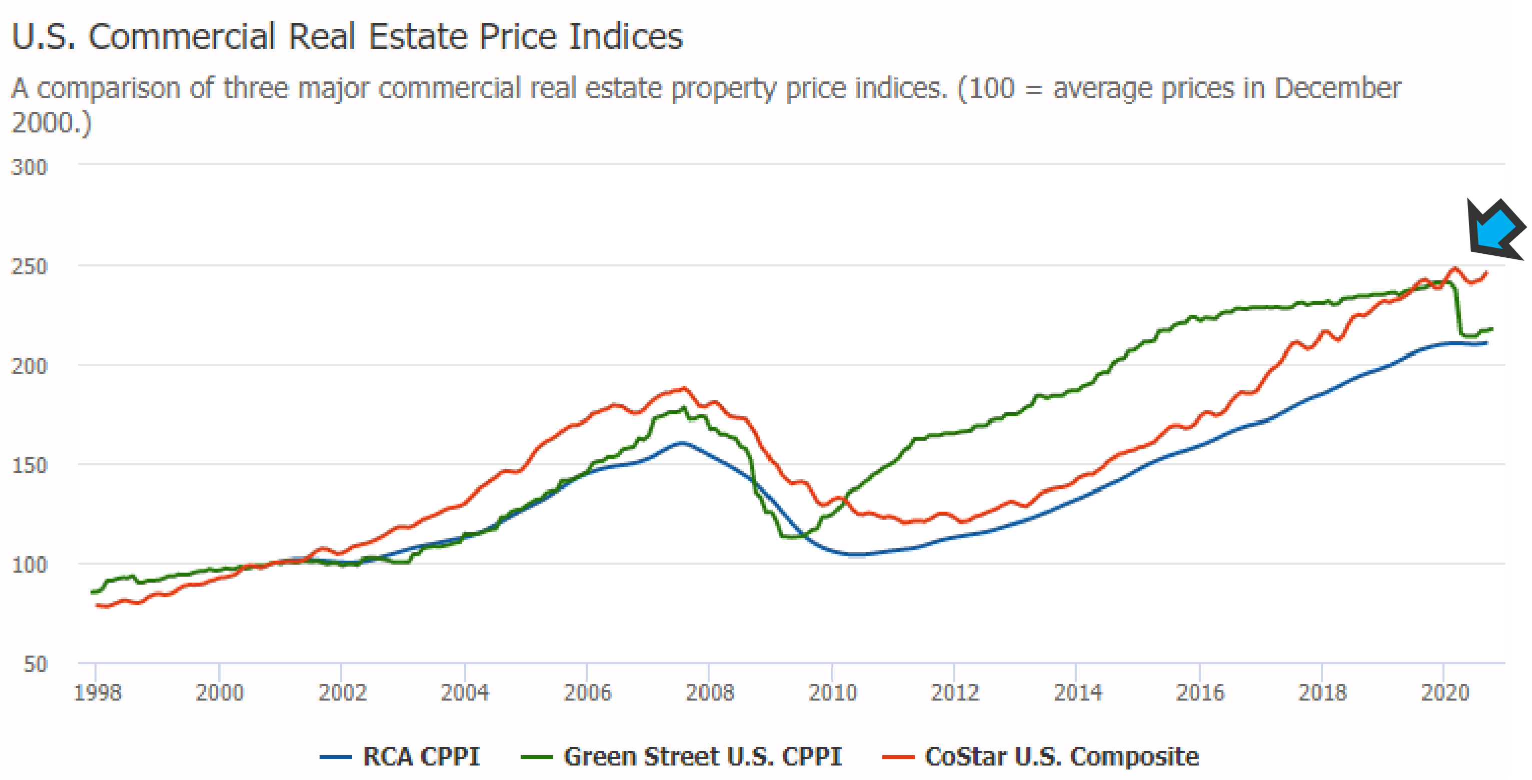
Green Street CPPI®: Sector-Level Indexes

	Index Value	Change in Commercial Property Values		
		Past Month	Past 12 Mos	From Pre Covid
All Property	154.8	5%	24%	14%
Core Sector	159.6	6%	26%	18%
Apartment	189.7	3%	29%	22%
Industrial	253.9	9%	41%	53%
Mall	97.6	16%	27%	1%
Office	113.6	2%	6%	-4%
Strip Retail	126.7	6%	30%	13%
Health Care	150.9	0%	10%	6%
Lodging	107.5	3%	32%	-1%
Manufactured Home Park	323.8	2%	24%	34%
Net Lease	115.7	0%	26%	17%
Self-Storage	306.8	18%	66%	66%
Student Housing	168.7	0%	16%	9%

#1 – Self Storage +66%
#2 – Industrial +41%
#3 #4 TIE – Lodging (+32%) & Strip Retail (+30%)
#5 – MF +29%

Manufactured Homes +24%

All 3 Major CPPIs (Green Street, RC & CoStar



What is the CRE Value impact if Expenses rise more than rents/revenue (7% vs <3%)?

Unless Cap Rate compresses more, the value will decline. Are lenders and Investors ready for this wrinkle in 2022?

CCIM

https://gs-s3-prd-usw2-website.s3.us-west-2.amazonaws.com/uploads/2021/10/06082352/GSCPPI20211206.pdf

Cap Rates & Inflation: Connect the DOTS (Inverse of Stock Multiple)

United States

Cap Rate Survey H2 2021

Introduction

Welcome to CBRE's H2 2021 Cap Rate Survey (CRS), which reflects the views of hundreds of professionals about how sentiment and pricing are changing across multiple dimensions of the commercial real estate market.

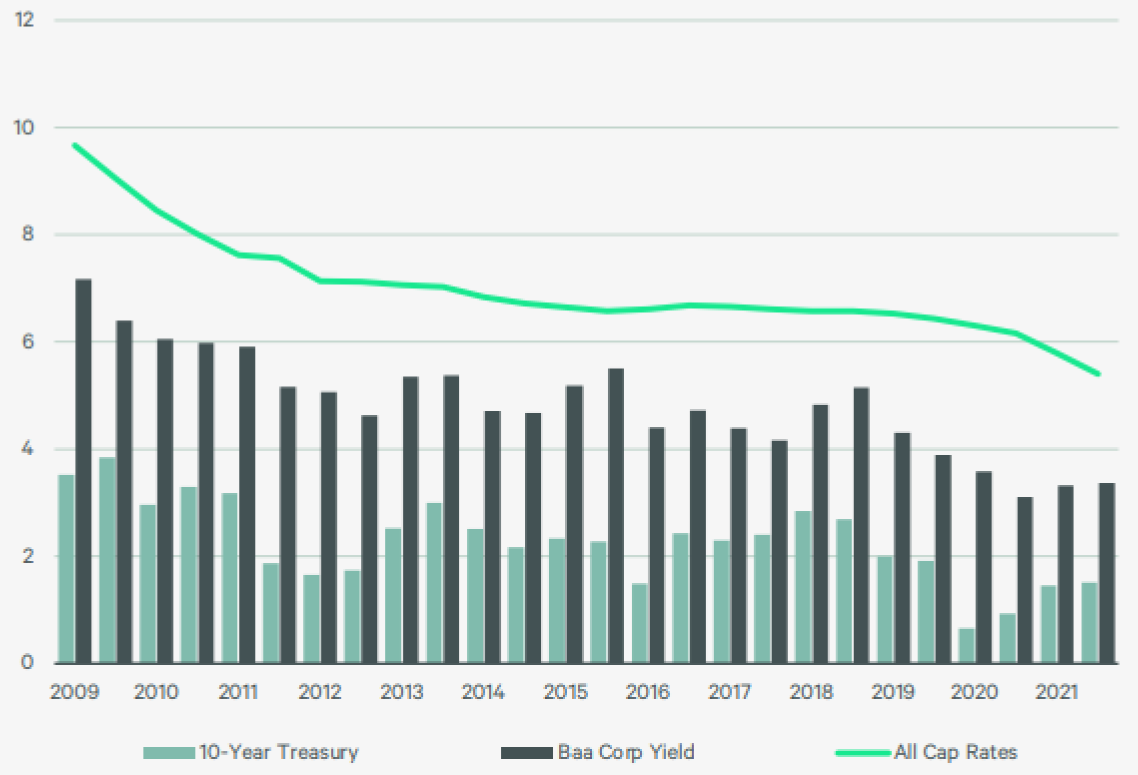
The CRS captures 3,600 cap rate estimates across more than 50 geographic markets to generate key insights from a wealth of data.

Please note the Cap Rate Survey was conducted before the Russia-Ukraine situation intensified dramatically in late February.

What's right, wrong or puzzling about this chart?

Cap Rates falling while Bond Yields and 10-Yr TR rising?

FIGURE 3: Real estate cap rate and bond yield (%)



Source: Federal Reserve, Macrobond, CBRE Research.

Cap Rates & Risk: Connect the DOTS (Inverse of Stock Multiple)

United States

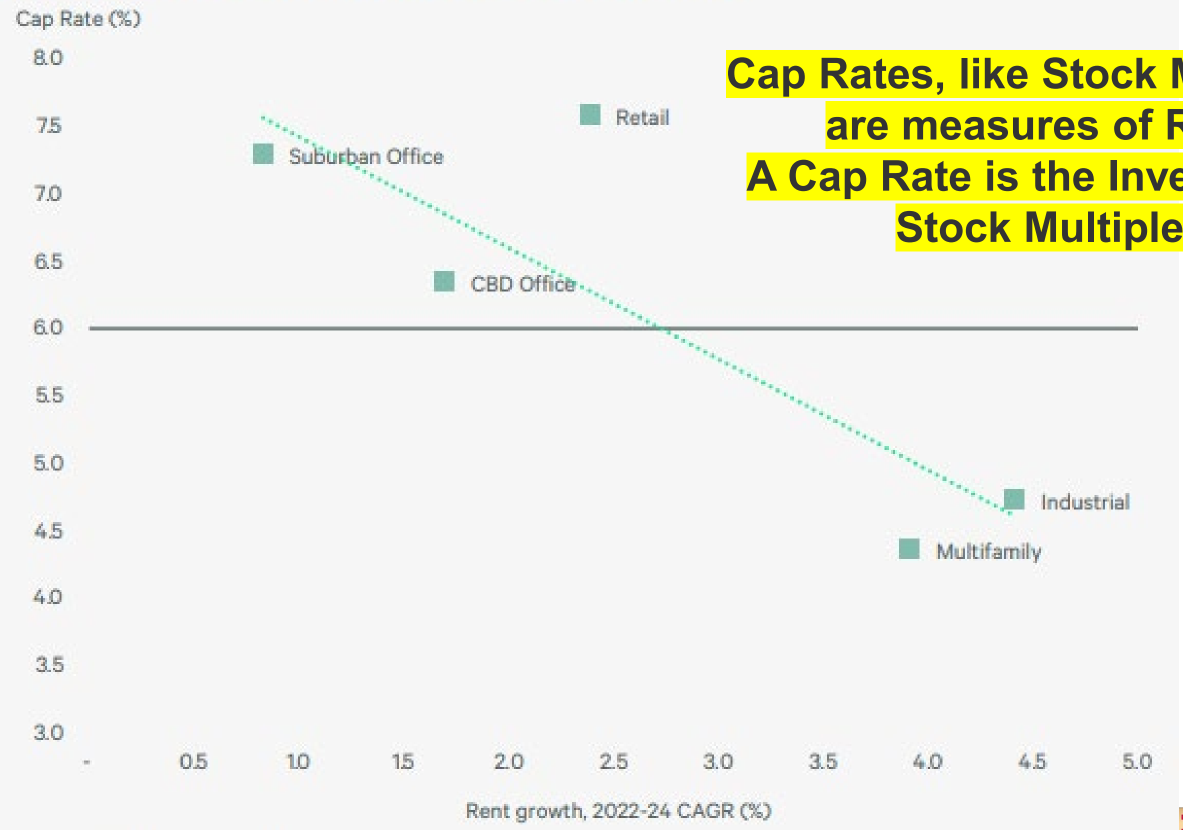
Cap Rate Survey H2 2021

The Cap Rate Survey is highlighting risks and opportunities

Low cap rates for industrial and multifamily properties reflect the solid fundamentals and rent growth prospects that characterize these sectors. Conversely, uncertainty in the office sector suggests there is upward pressure for yields in this space.

What's right, wrong or puzzling about this chart?
High Rent Growth = Lowest Cap Rate; Low RG = High Cap Rate?

FIGURE 14: Asset pricing relative to forecast rent growth



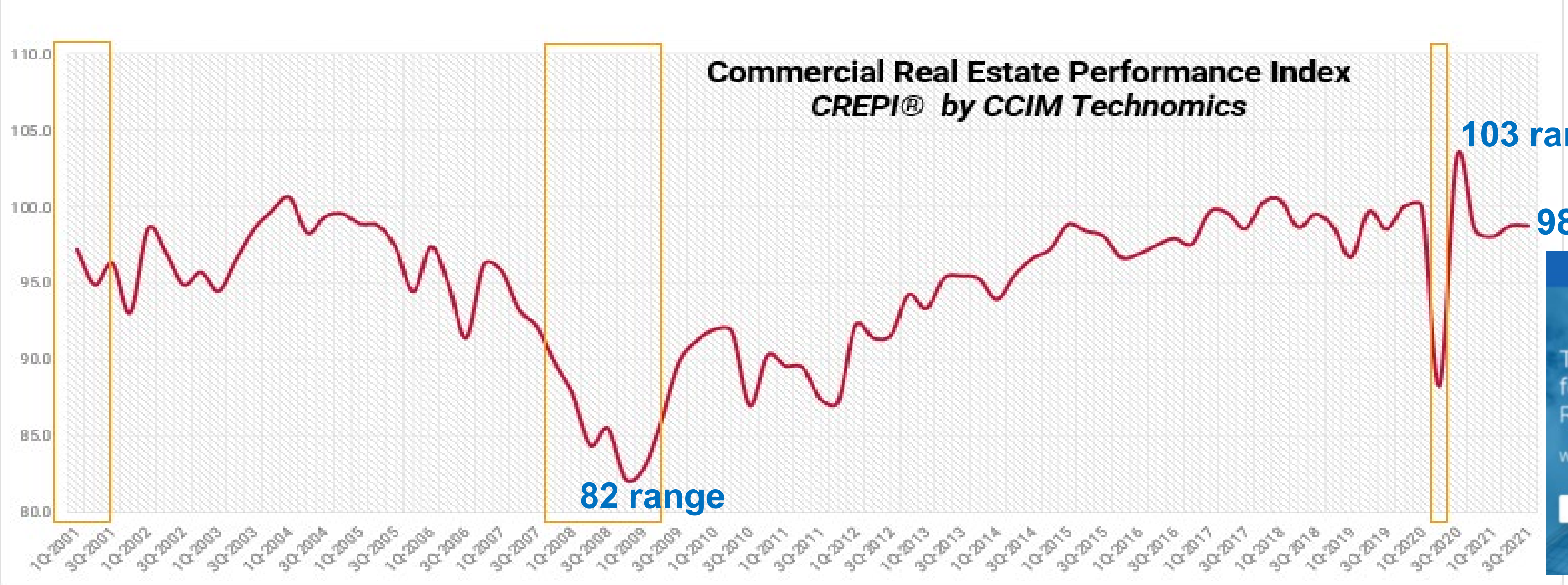
Source: CBRE Econometric Advisors.

Cap Rates, like Stock Multiples, are measures of Risk.
A Cap Rate is the Inverse of a Stock Multiple.

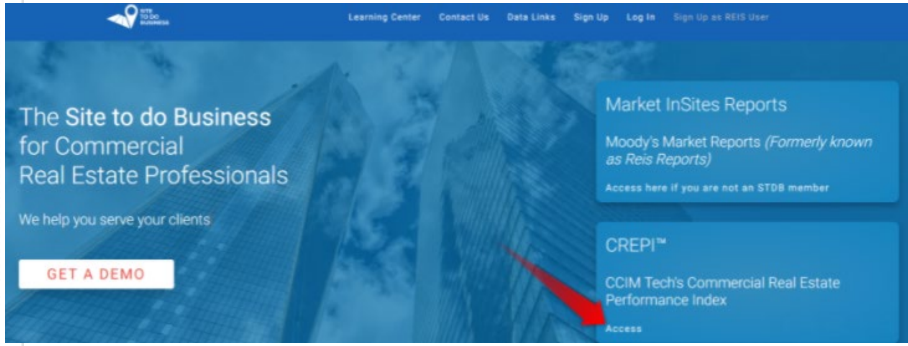
ICYMI: CCIM-TECH's CREPI™ Report

A Broader Measure of the Economy

Go to www.stdb.com to view CREPI™ It is public – NO LOG-IN required.



https://www.stdb.com/crepi



CREPI® Source: **CCIM Technomics**

CREPI® Chart:
4Q 2019 Index = 100
Highlighted areas represent U.S. economic recessions
Current data as of **3Q-2021**

CREPI® Data Components:

1. *University of Michigan Consumer Sentiment Index*
2. *NFIB Business Confidence Index*
3. *Yield Curve Spread between 10-Year and 2-Year Treasuries*
4. *NAHB / Wells Fargo Housing Market Index*
5. *BEA Personal Consumption Expenditures Price Index*
6. *BLS Producer Price Index*
7. *BLS Job Openings and Labor Turnover Survey*
8. *BLS Civilian Labor Force Participation Rate*
9. *S&P 500 Index*
10. *Green Street Commercial Property Price Index*

This index is from CCIM-TECH

CREPI: JOLTS, U-MI & Yield Curve Inversion:

NEWS RELEASE

BUREAU OF LABOR STATISTICS

U.S. DEPARTMENT OF LABOR

For release 10:00 a.m. (ET) Tuesday, March 29, 2022

USDL-22-0553

Chart 1. Job openings rate, seasonally adjusted, February 2019 - February 2022

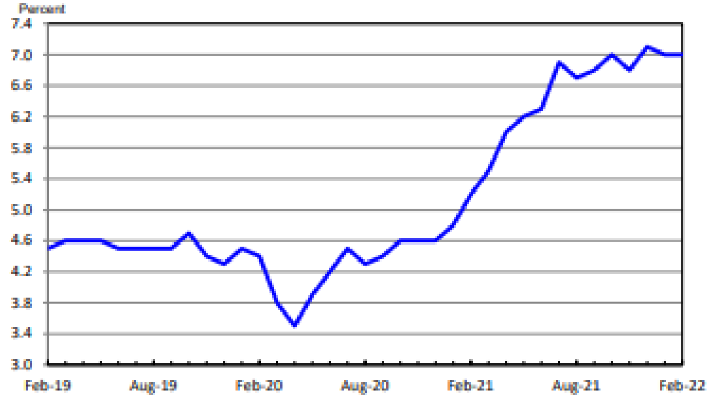
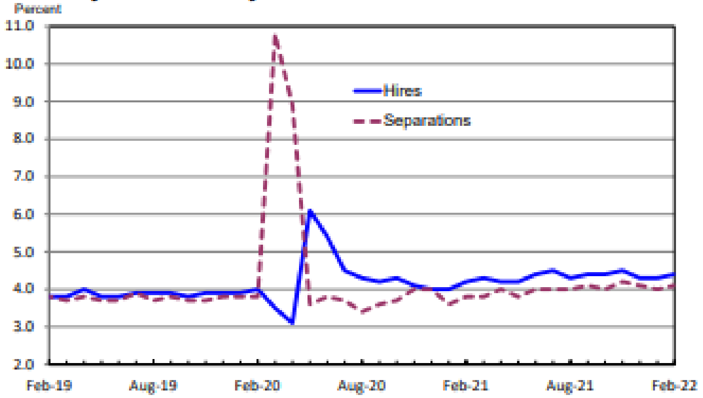


Chart 2. Hires and total separations rates, seasonally adjusted, February 2019 - February 2022



Job Openings

On the last business day of February, the number and rate of **job openings** were little changed at 11.3 million and 7.0 percent, respectively. Job openings decreased in finance and insurance (-63,000) and in nondurable goods manufacturing (-39,000). Job openings increased in arts, entertainment, and recreation (+32,000); educational services (+26,000); and federal government (+23,000). Job openings decreased in the Midwest region and increased in the West region. (See table 1.)

Separations:

Total separations includes **quits**, layoffs and discharges, and other separations. Quits are generally voluntary separations initiated by the employee. Therefore, the **quits rate can serve as a measure of workers' willingness to leave jobs.**

In February, the number and rate of total separations were little changed at **6.1 million** . **Total separations decreased in information (-45,000) finance & insurance** (-41,000). The number of total separations was little changed in all four regions. (See table 3.)

In February, the number and rate of **quits were little changed at 4.4 million**. **Quits increased in retail trade (+74,000); durable goods manufacturing (+22,000); and state and local government education** (+14,000). **Quits decreased in finance and insurance (-30,000).** The number of quits was little changed in all four regions

POPULATION MIGRATION:

Q: Where can you "Out- Run" Inflation? Where is the growth?

A: South (TX, FL, TN, SC #4 & NC #19) & Mtn. Region

U-HAUL®

1. TEXAS (2)
2. FLORIDA (3)
3. TENNESSEE (1)
4. SOUTH CAROLINA (15)
5. ARIZONA (5)
6. INDIANA (12)
7. COLORADO (6)
8. MAINE (29)
9. IDAHO (30)
10. NEW MEXICO (39)
11. SOUTH DAKOTA (25)
12. VERMONT (26)
13. WISCONSIN (13)
14. OREGON (45)
15. WASHINGTON (36)
16. ALASKA (34)
17. MINNESOTA (20)
18. CONNECTICUT (43)
19. NORTH CAROLINA (9)
20. NEBRASKA (32)
21. WYOMING (33)
22. MONTANA (19)
23. GEORGIA (10)
24. OHIO (4)

Top 4 = South / 3 of Top 10 Inner-Mtn

California remained the top state for out-migration, but its net loss of U-Haul trucks wasn't as severe as in 2020. That can be partially attributed to the fact that U-Haul simply ran out of inventory to meet customer demand for outbound equipment.

Texas's growth is statewide, although some of its biggest gains occurred in the suburbs around the DFW Metroplex. **Florida's gains are equally widespread, with considerable growth south of Orlando and along both coastlines.**

U-Haul is the authority on migration trends thanks to its expansive network that blankets all 10 provinces and 50 states. The geographical coverage from more than 23,000 U-Haul truck- and trailer-sharing locations provides a comprehensive overview of where people are moving like no one else in the industry.

Don't ask me to explain AL @ #46. They don't move during SEC Football

States with MOST Out-Migration

45. NEW YORK (42)
46. ALABAMA (22)
47. MASSACHUSETTS (47)
48. PENNSYLVANIA (41)
49. ILLINOIS (49)
50. CALIFORNIA (50)

Don't ask me to explain AL as they didn't come out well in 2020 Census either. Maybe a delayed impact from Toyota, Mercedes, Walmart & Airbus hiring. **United Van Lines moving report has AL @ #6 for Most Move-Ins."**

Methodology: *Growth states are calculated by the net gain of one-way U-Haul trucks entering a state versus leaving that state in a calendar year. Migration trends data is compiled from more than 2 million one-way U-Haul truck customer transactions that occur annually.*

https://www.uhaul.com/Articles/About/U-Haul-Growth-Index-Texas-Is-The-No-1-Growth-State-Of-2021-26380/

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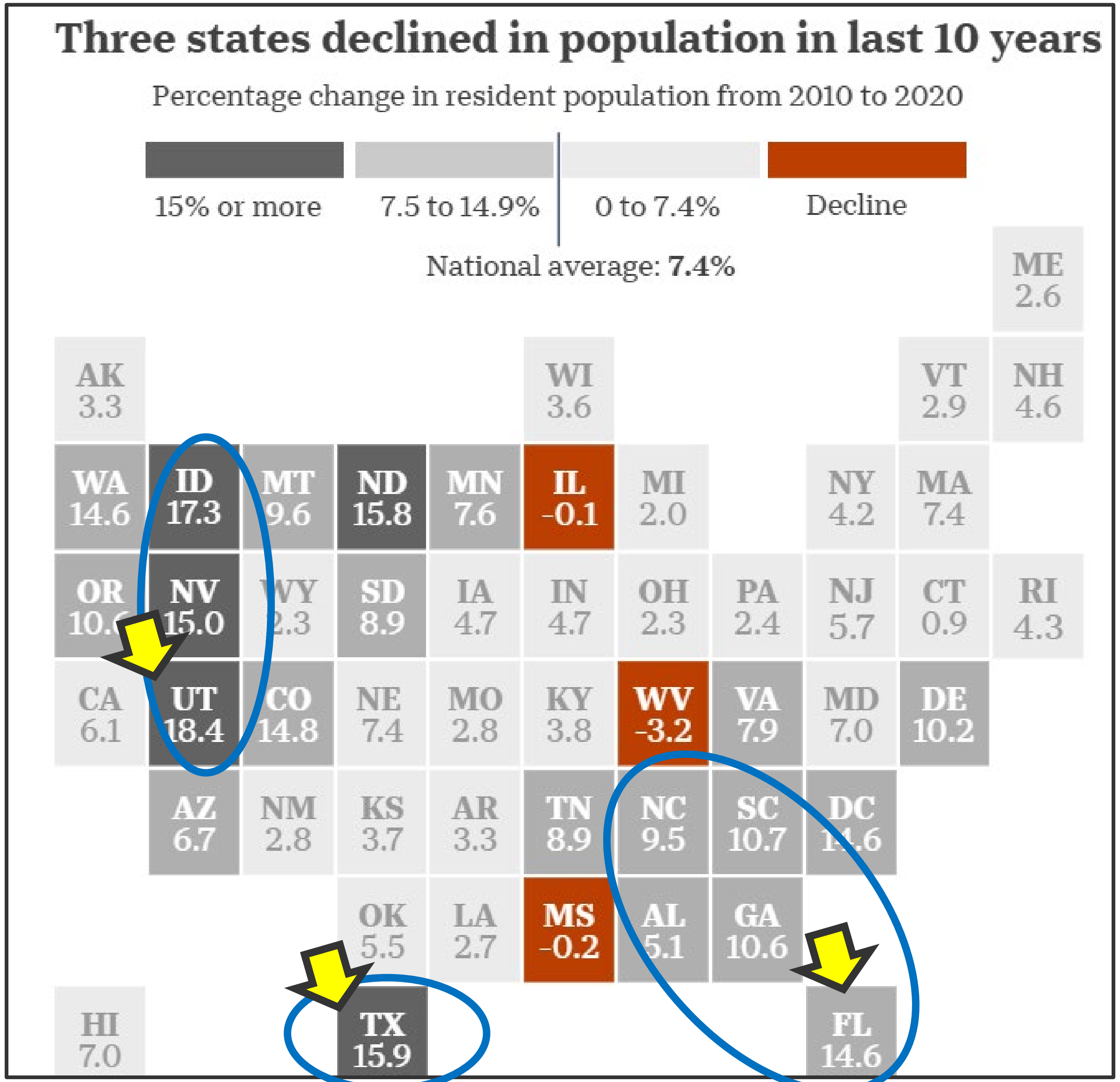
2020 CENSUS POPULATION: MTN (UT +18.4%); South (TX +15.9% & FL +14.6% & NC +9.5% & SC +10.7%)



Q. Where can you "**Outrun Inflation**" in 2022?
A. **UT, TX, FL & SE** (Growth is 1.5-2X 7.5% Inflation)

What's going on nationally?
The U.S. population increased by 7.4% since the last census **from about 309 million to 331 million – the slowest growth rate the nation has seen since 1940.**

Regionally, the South saw more than 10% increase in population, followed by the West, Northeast and Midwest. Jarmin said the numbers reflect an ongoing trend of growth shifting to the South and West: **Since 1940, there's been a combined net shift of 84 House seats to the South and West regions**.

https://www.usatoday.com/in-depth/news/nation/2021/05/01/illinois-mississippi-west-virginia-lost-residents-census-data-shows/4857864001/

Urban Land Institute

2022 United States | Canada
EMERGING TRENDS IN REAL ESTATE®

Exhibit 2-7 Local Market Perspective: Investor Demand

Weak — Average — Strong

Nashville	4.73
Austin	4.73
Boston	4.59
Charlotte	4.57
Raleigh/Durham	4.53
Inland Empire	4.50
Denver	4.48
Salt Lake City	4.46
Dallas/Fort Worth	4.44
Phoenix	4.43
Tampa/St. Petersburg	4.42
Boise	4.41
Atlanta	4.40
Seattle	4.39

Investors want to go SOUTH (Nashville & Carolinas) and **Inner Mtn** (Boise, Denver & Salt Lake)

Overall Ranking

1	Nashville
2	Raleigh/Durham
3	Phoenix
4	Austin
5	Tampa/St. Petersburg
6	Charlotte
7	Dallas/Fort Worth
8	Atlanta
9	Seattle
10	Boston
11	Salt Lake City
12	Denver
13	San Diego
14	Washington, DC–Northern VA
15	Miami

Exhibit 2-8 Local Market Perspective: Development/ Redevelopment Opportunities

Weak — Average — Strong

Tampa/St. Petersburg	4.35
Nashville	4.27
Raleigh/Durham	4.24
Charlotte	4.18
Phoenix	4.15
Dallas/Fort Worth	4.12
Atlanta	4.08
Denver	4.04
Austin	4.04
Salt Lake City	4.04
Fort Lauderdale	3.94
Seattle	3.93
Boise	3.92
Inland Empire	3.92
Washington, DC–Northern VA	3.90

Note:
NO "Strong" Development Opportunity MSAs. WHY?

https://knowledge.uli.org/en/reports/emerging-trends/2022/emerging-trends-in-real-estate-united-states-and-canada-2022

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Remaking Supply-Chain to N/S:

Rail Connectivity (Inland Port, Intermodal, etc.)

The 7- Class I RRs Note: CN (red) KCS (brown) CSX (blue)

KC Southern:

- Only direct route to all of Mexico.
- Link KCS with BNSF or CSX to create a mega RR/E-commerce power!

CSX:

- The East coast RR line serving East coast ports.
- CSX and NFS are to SE & Mid-Atlantic what UP is to CA & West-coast.
- Rail mergers are on the horizon post COVID. (Financially 'weak' merges with 'strong' wanting SE & Gulf reach).

Port Freeport:

+ 3 Class 1 RR connections;
+ 'Saudi Arabia' of Natural Gas;
+ The 'Port of Savannah' for Dallas

Port of Mobile:

+ 5 Class 1 RR connections;
+ Only CN to Gulf RR connection;
+ New WalMart Container Terminal;
+ Airbus + auto mfg. state (Mercedes);
+ New RoRo by 2022 / Rebuild AL Bill to fund

AAR.org – American Assoc. of RRs

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LOGISTICS: The Supply Chain & Rail Story is **KSU & Canadian Rail Merger!**

The long-standing negotiation pertaining to the takeover of the Kansas, MO-based railroad operator **Kansas City Southern KSU finally came to a conclusion**.

Per **Canadian National Railway Company CNI, the company will not upgrade its $33.6-billion (inclusive of $3.8-billion outstanding debt) offer to purchase Kansas City Southern.**

A Brief Flashback to the Takeover Drama

In March 2021, Canadian Pacific reached a merger agreement with Kansas City Southern, under which the former agreed to acquire the latter for approximately $29 billion.

KSU initially turned down the CP offer as it preferred the Canadian National offer. However, in a twist to the events, **Canadian National suffered a regulatory setback. On Aug 31, the U.S. Surface Transportation Board (STB) gave its verdict against CNI's proposal** to set up a voting trust.

Following this sentence, advisors, decided earlier this month that **Canadian Pacific's proposal constitutes a "Company Superior Proposal"**

What are Inland Intermodal Ports?

THE IMPORTANCE OF INTERMODAL PORTS TO SOUTHEASTERN US LOGISTICS AND SUPPLY CHAIN

Prepared For:

Jim Wilson & Associates, LLC

Prepared By:

RED SHOE ECONOMICS

Inland Waterways 2020

- Inland River Ports
- Coastal Ports

Remaking the US Supply- Chain from LA to CHI moving North/South from Gulf & SE Atlantic North to America's 4th-Coast (Great Lakes).

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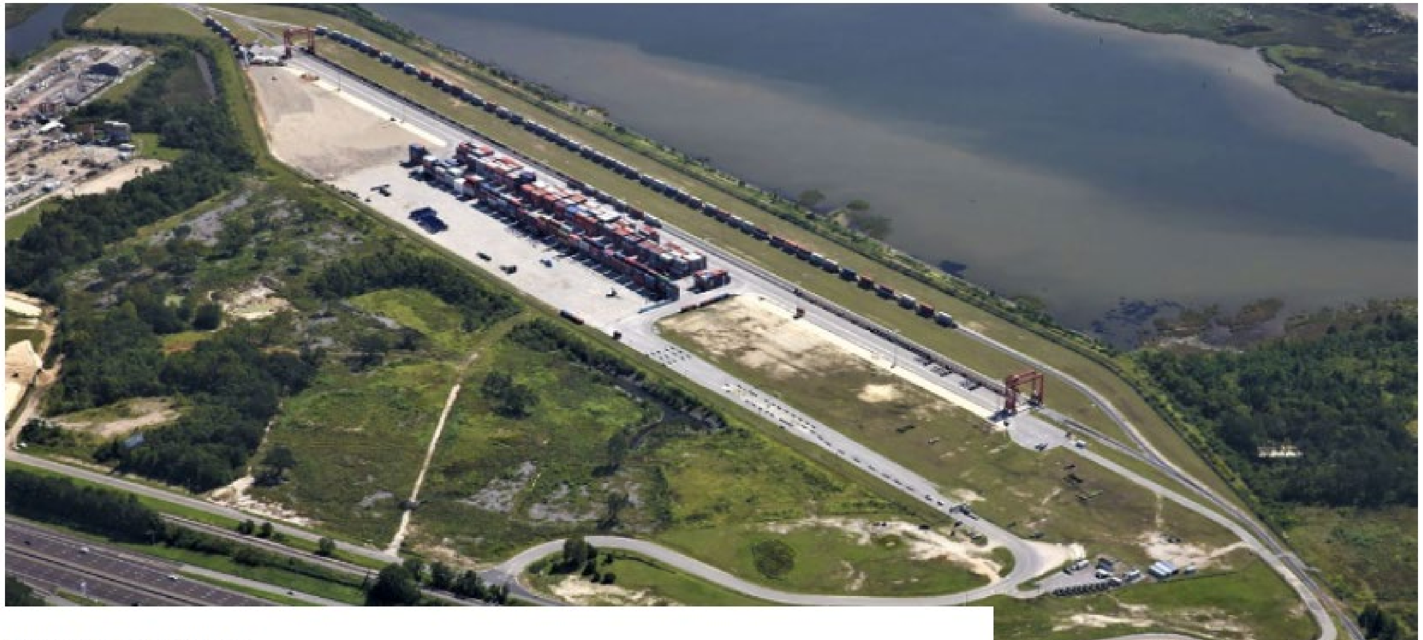
Inland Ports & the Remaking U.S. Supply-Chain – AL now Joins IP Club



PORTS & TERMINALS

Alabama Port Authority To Build Inland Intermodal Transfer Facility Near Montgomery

February 2022: The board of directors of the Alabama Port Authority has approved the purchase of **272 acres near Montgomery, Ala**., for more than $2 million. The port plans to build an inland container intermodal transfer facility at the site.

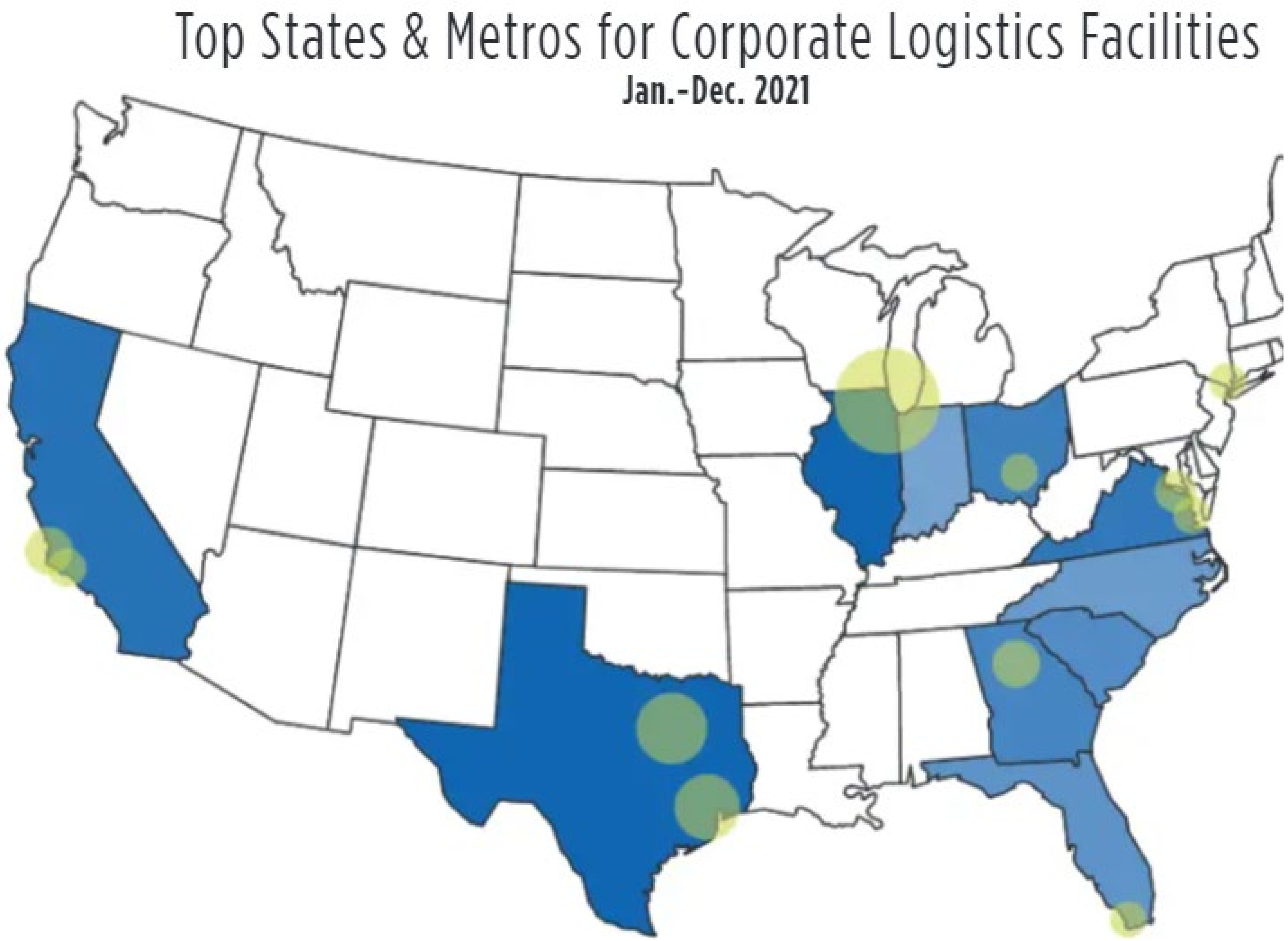
The plan has been under consideration for quite some time, driven by the desire to provide intermodal rail service from the Port of Mobile's container terminal and the central region of the state.

"This project will provide our shippers cost-competitive transportation services to and from one of the nation's fastest-growth containerized cargo gateways," said **John Driscoll, director and CEO of the Alabama Port Authority**, the state agency that oversees the Port of Mobile.

The project, once in motion, **will re-establish regular CSX intermodal rail service at the Port of Mobile, with the possibility of extending farther inland in the future.** CSX has committed up to $12.5 million for infrastructure improvements for the facility.

https://www.waterwaysjournal.net/2022/02/07/alabama-port-authority-to-build-inland-intermodal-transfer-facility-near-montgomery/

Remaking U.S. Supply-Chain: All but 1 of Top-10 are SO or MW



Top 10 States by project

Texas	237
Illinois	222
California	129
Virginia	92
Ohio	86
Georgia	79
South Carolina	66
Florida	65
North Carolina	57
Indiana	54

Source: Conway Projects Database

Build Your Own Shipping Vessel: Retailers Respond

Loctek is one of many companies to find creative measures to sidestep historic shipping delays. Last year, several major retailers began chartering cargo ships.

In the Fall, Coca-Cola, Target, and Costco revealed they had begun chartering bulk freighters usually reserved for hauling raw materials like coal and grain. **In August, Walmart announced it was chartering smaller vessels in order to avoid backlogs at ports in Southern California. Meanwhile, Lululemon and Home Depot told investors they had begun relying more heavily on-air cargo** to deliver goods on time.

As supply-chain snags continue into 2022, retailers may have to continue to find new ways to avoid major delays.

Inland Waterways 2020

- Inland River Ports
- Coastal Ports

- Loctek has a $32.6 million contract with Huanghai Shipbuilding to build a 1,800 TEU cargo ship.
- The company said it made the purchase to combat shipping delays and meet a surge in online sales.
- The furniture maker is one of many companies to take extra steps to avoid historic shipping delays.

https://www.businessinsider.com/furniture-company-loctek-building-cargo-ship-supply-chain-crisis-2022-2

ICYMI - The LMI Metric for Logistics

5 Universities + 2 Leading LIs on Supply-Chain

LOGISTICS MANAGERS' INDEX HOME ABOUT CONTACT LMI SURVEY MORE...

CSCMP Council of Supply Chain Management Professionals

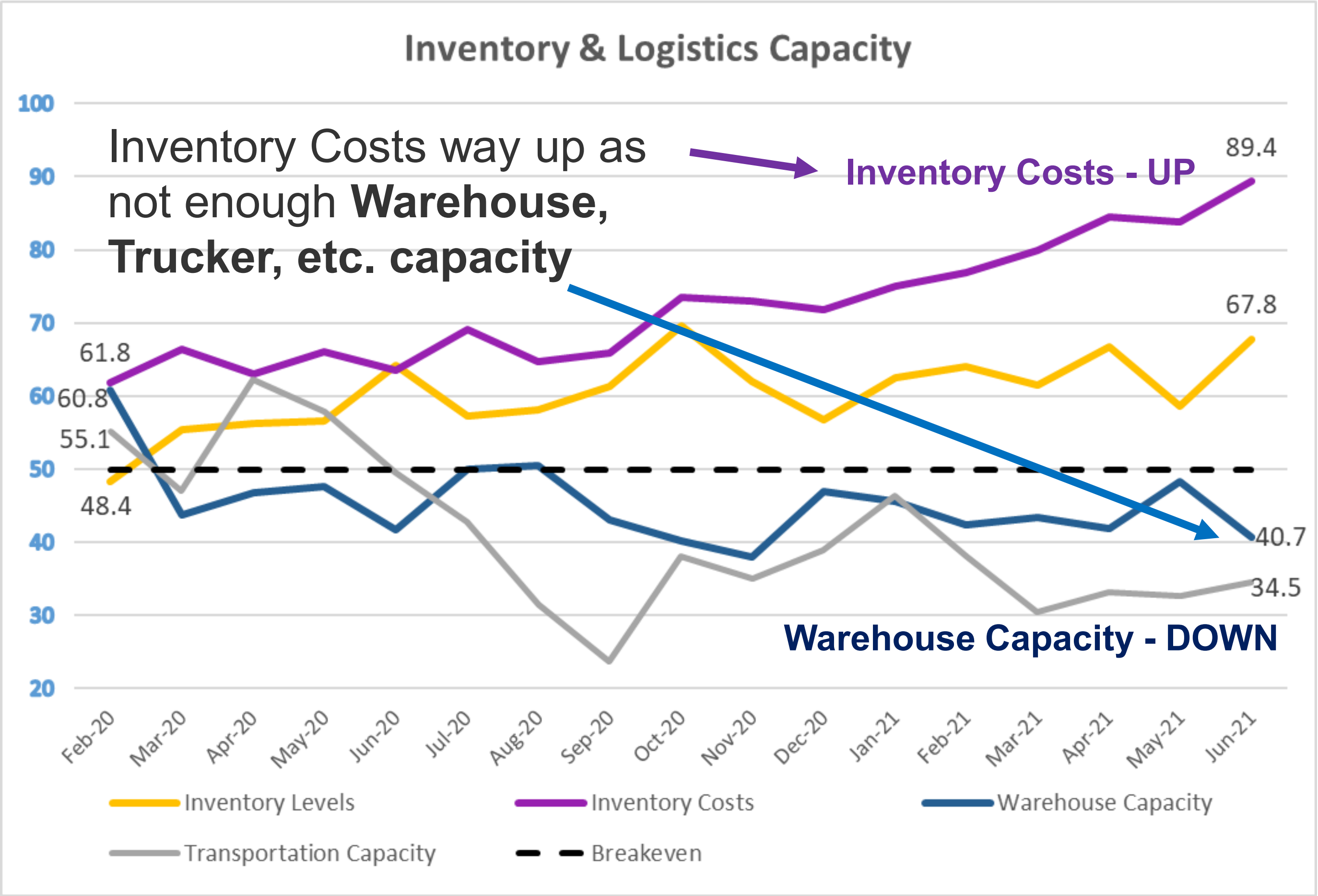
W. P. Carey School of Business Arizona State University · Colorado State University College of Business · RIT Rochester Institute of Technology · Rutgers Rutgers Business School Newark and New Brunswick · University of Nevada, Reno

DC VELOCITY · CSCMP's Supply Chain [QUARTERLY]

June 2021 LMI *(Logistics Managers Index)* = 75

June 2021's LMI comes in at 75.0, **the second-highest in the history of the index.** The overall index rate has now come in above the 70-point mark in five consecutive months, the longest streak in the history of the LMI.

LMI Methodology: The LMI score is **a combination of eight unique components that make up the logistics industry, including: inventory levels and costs, warehousing capacity, utilization, and prices, and transportation capacity, utilization, and prices**. The LMI is calculated using a diffusion index, in which any reading above 50 percent indicates that logistics is expanding; a reading below 50 percent is indicative of a shrinking logistics industry.



http://www.the-lmi.com/june-2021-logistics-managers-index.html

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EV Auto Manufacturing to Explode in the Southeast!

The NC to AL and I-85 Corridor

Automotive News

May 17, 2021

Hyundai Motor Group ready to spend big in the U.S.

The South Korean automaker will invest $7.4 billion in the U.S. by 2025 as it seeks to become the third-largest maker of eco-friendly vehicles.

The South Korean automaker said it will invest $7.4 bill in the U.S. by 2025 to produce a "suite" of electric vehicles, upgrade factories and develop smart mobility technologies.
Hyundai Motor Group, which includes Hyundai, Kia and Genesis, aspires to sell 1 million electric vehicles globally and take a 10 percent market share to leapfrog to the front of the EV field by mid-decade. Hyundai is launching a global battery-electric brand that uses the Ioniq name from its current hybrid and EV hatchbacks.

The new investment plans — although Hyundai has not yet spelled them out — illustrate a significant new issue for the industry as it rushes to electrify: **Importing vehicles into the U.S. is a passing luxury**. Automakers must consider local production for vehicles and batteries as they turn to EVs, and that will come with vast new capital investment. Shipping the heavy and technologically advanced vehicles from overseas factories appears to be a nonstarter.

The automaker did not say **which of its U.S. plants will receive the investments**, or if it plans to build factori **Hyundai operates one assembly plant in Montgomery, Ala., while Kia operates a factory in West Point, Ga.**, and another in Mexico.

https://www.autonews.com/manufacturing/hyundai-motor-group-ready-spend-big-

I-85 Corridor:

- **Charlotte to Atlanta**
- **SK Batteries** - Commerce GA
- **KIA** in WestPoint GA
- **Hyundai in AL & GA**
- **Port of Mobile**

Hyundai and MORE along I-85 Corridor in West GA

Hyundai Affiliate Plans $240M Transmission Plant in Georgia
A South Korean auto parts supplier will invest more than $240 million to build a transmission factory in west Georgia, with plans to hire 678 workers.

Hyundai Transys announced plans Tuesday for the **new factory in West Point, adjoining an existing Hyundai Transys factory and a Kia Motors Corp factory**. Both are parts of Hyundai Motor Group, the Korean auto conglomerate that sells cars under the Kia and Hyundai brands.

Hyundai Transys says the new plant will build eight-speed transmissions. **The 620,000-square foot (58,000-square meter) plant will be part of the Kia campus just off Interstate 85 in West Point near** the state line with Alabama.

The company, created by a merger of two Hyundai affiliates last year, also makes axles and vehicle seats. It has operations in South Korea, the United States and seven other countries. **The company said the investment will create 165 others jobs and its total employees in Georgia will rise above 1,700 once the new plant is complete**.

https://www.usnews.com/news/politics/articles/2020-12-01/hyundai-affiliate-plans-240m-transmission-plant-in-georgia

Greensboro NC

Perseverance Pays For Greensboro

Proving once again that good things come to those megasites who wait, the 10-year-old Greensboro-Randolph Megasite in central North Carolina was announced in early December as the location chosen by Toyota Motor North America for a $1.29 billion, 1,750-job EV battery manufacturing plant.

"We stayed the course, and our perseverance paid off big on December 6th," says Brent Christensen, CEO of

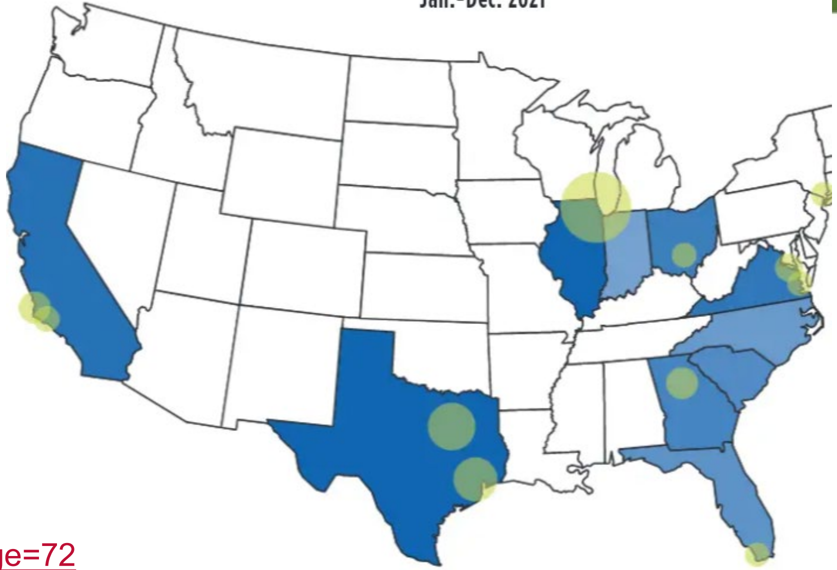
In announcing its decision, Toyota said the 1,825-acre (740-hectare) megasit[e] about 20 miles (32 km.) southeast of Greensboro "met and exceeded" the company's needs, citing onsite rail, a robust highway system, renewable energy and a "world-renowned education system." The Greensboro-Randolph Megasite was the bridesmaid in an earlier deal, the Mazda Toyota

https://siteselection.com/digitalEdition/2022/jan/#page=72

Another Win for Greenville's Automotive Cluster

EV bus maker **Proterra**, based in Silicon Valley, is making a major expansion to its East Coast manufacturing base. On December 14, the company announced plans for an EV battery plant in Greer, South Carolina, not far from the company's bus manufacturing plant in Greenville. According to a release, Proterra has committed to a minimum investment of $76 million and expects to create more than 200 jobs at the 327,000-sq.-ft (30,380-sq.-m). facility at the Carolina Commerce Center.

Top States & Metros for Corporate Logistics Facilitie
Jan.-Dec. 2021



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https://siteselection.com/digitalEdition/2022/jan/#page=72

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Vietnamese VinFast picks NC RTP for EVs

Triangle Business Journal
By Evan Hoopfer and Lauren Ohnesorge –
Mar 25, 2022 **Updated** Mar 25, 2022

An international carmaker has **picked the Greater Triangle region for its first U.S. manufacturing site**, a win that could mean as many as 13,000 jobs on buildout, multiple sources told *Triangle Business Journal*.

Sources identified **the carmaker as Vietnamese firm VinFast** and said the company plans to spend as much as $6.5 billion, and produce both electric batteries and vehicles at Chatham County's Triangle Innovation Point megasite, formerly known as the Moncure Megasite. The site was recently rejected by semiconductor giant Micron. VinFast plans to occupy more than 1,000 acres in Triangle Innovation Point, and at least three sources said an official announcement could come as early as next week.

VINFAST

Upcoming models

2023 VinFast VF 8 SUV ›

2023 VinFast VF 9 SUV ›

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Rivian – Picks GA for EV Mfg. GA is Winning Site Selection again!

We just checked more of their boxes. The site itself and speed to market were difference-makers as they really fell in love with this site."

– Pat Wilson, *Commissioner, Georgia Department of Economic Development*

The high-powered electric pickup truck won over Kemp, and Georgia won over Rivian. Site considerations included logistics, environmental impact, renewable energy production, availability and quality of talent, and overall fit with Rivian culture, the company said. The firm also wanted the plant to be within 100 miles of an international airport.

The firm's existing plant in Normal, Illinois, was recently approved for its own 623,000-sq.-ft. expansion. That will bring the total footprint of the Normal plant to about 4 million sq. ft., with additional plans to expand warehouse, storage and production capacity onsite. "Rivian's hiring in Normal is scaling rapidly," the company said, "with plans to hire an additional 800 to 1,000 employees in Normal by the second quarter of 2022."

Conyers GA 1 hour East of ATL along I-20

https://siteselection.com/digitalEdition/2022/jan/#page=100

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One Last ICYMI

The Big Mac Index by the Economist

What is the Big Mac Index?

The Big Mac Index is the price of the burger in various countries that are converted to one currency (such as the US dollar) and used to measure purchasing power parity.

It all started in 1986 when The Economist magazine decided to estimate the currencies' value by country based on the prices of Big Mac at McDonald's fast-food restaurants.

Thus, The Economist introduced a simple indicator of the fundamental value of currencies globally.

What does the Big Mac Index show, and why exactly was it taken as an indicator?

It's pretty simple. Big Mac is the most well-known product in McDonald's' fast-food chain. Besides, the same ingredients are used for Big Mac in any country: meat, bread, cheese, lettuce, onions, etc. Therefore, The Economist experts use Big Mac alone instead of determining the cost of a consumer basket (more complex

https://fxssi.com/big-mac-index

Price of a Big Mac in US $ from low to high in adjacent table:

Low

Russia - $1.74

Mexico - $3.34

China - $3.83

Highest:

Euro Region - $4.95

U.S. - $5.81

Switzerland - $6.98

Country	Dollar/national currency exchange rat	$1 in terms of the Big Mac Index expressed in national currency	Price of Big Mac	Currency is undervalued / overvalued by %
Russia	77.42	23.24	$1.74	-69.99
Turkey	13.42	4.30	$1.86	-67.94
Indonesia	14382.00	5851.98	$2.36	-59.31
Malaysia	4.19	1.72	$2.39	-58.92
Romania	4.41	1.82	$2.40	-58.65
Ukraine	28.37	11.88	$2.43	-58.14
India	74.62	32.70	$2.55	-56.18
South Africa	15.47	6.87	$2.58	-55.61
Azerbaijan	1.70	0.77	$2.65	-54.41
Taiwan	27.81	12.91	$2.70	-53.59
Egypt	15.71	7.31	$2.71	-53.44
Philippines	50.98	24.44	$2.79	-52.05
Hong Kong	7.80	3.79	$2.82	-51.44
Moldova	18.00	8.95	$2.89	-50.28
Oman	0.39	0.20	$2.99	-48.59
Jordan	0.71	0.36	$2.99	-48.54
Vietnam	22650.00	11876.08	$3.05	-47.57
Hungary	317.51	169.02	$3.09	-46.77
Lebanon	21500.00	12048.19	$3.26	-43.96
Colombia	3942.00	2228.92	$3.29	-43.46
Mexico	20.65	11.88	$3.34	-42.49
Pakistan	176.52	101.55	$3.34	-42.47
Peru	3.84	2.22	$3.36	-42.14
Guatemala	7.69	4.48	$3.38	-41.81
Japan	115.23	67.13	$3.38	-41.74
Poland	4.09	2.42	$3.44	-40.81
Croatia	6.72	4.07	$3.52	-39.33
Qatar	3.64	2.24	$3.57	-38.55
Honduras	24.61	15.32	$3.62	-37.77
Nicaragua	35.46	23.06	$3.78	-34.95
South Korea	1205.50	791.74	$3.82	-34.32
China	6.37	4.20	$3.83	-34.02
Thailand	33.30	22.03	$3.84	-33.83
Chile	798.60	533.56	$3.88	-33.19
Bahrain	0.38	0.26	$3.98	-31.52
Saudi Arabia	3.75	2.58	$4.00	-31.19
Czech Republic	21.68	15.32	$4.11	-29.34
Costa Rica	642.59	456.11	$4.12	-29.02
Kuwait	0.30	0.22	$4.13	-28.97
Sri Lanka	202.41	144.58	$4.15	-28.57
Argentina	105.02	77.45	$4.29	-26.25
Brazil	5.31	3.94	$4.31	-25.77
Singapore	1.35	1.02	$4.36	-24.90
Australia	1.42	1.10	$4.51	-22.39
New Zealand	1.52	1.20	$4.60	-20.87
United Arab Emirates	3.67	2.93	$4.63	-20.34
Britain	0.75	0.62	$4.82	-17.10
Denmark	6.64	5.51	$4.82	-17.02
Euro area	0.89	0.76	$4.95	-14.72
Venezuela	4.54	3.96	$5.06	-12.87
Canada	1.27	1.17	$5.32	-8.38
Israel	3.18	2.93	$5.35	-7.92
Uruguay	44.04	41.14	$5.43	-6.59
Sweden	9.33	9.29	$5.79	-0.43
United States	1.00	1.00	$5.81	0.00
Norway	8.92	9.81	$6.39	10.03
Switzerland	0.93	1.12	$6.98	20.16

Big Mac Index

Conclusion: In Case You Missed It …

Be a Road-Runner, NOT a Wile E Coyote

“If you are going through hell,
keep going.”

Winston S. Churchill

Red Shoe Economics is an independent research and consulting firm exclusively serving today's commercial real estate community providing organic research initiatives, reports and insights on the impact of applied Economics on our industry. The company's four pillars include Economics, Forecasting, Valuation and Consulting.

Our promise is to deliver unique content providing the most comprehensive, concise and cutting-edge information of the economic impacts on commercial investments, trends and transactions - eight days a week! As a WOSB, Red Shoe Economics is dedicated to giving back to the industry we serve by furthering the advancement of women in commercial real estate.

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- Macro and Micro Analysis
- **Rezoning Impact Analysis**
- Corporate Earnings Analysis
- Ports & Logistics Industry Trends
- **Housing Economics**
- Commercial Real Estate Impacts
- State & Local Government Taxation
- Current CRE Conditions

Forecasting

- **Association Presentations**
- Red Shoe Review
- Industry/Corporate Webinars
- Podcasts/Articles/ SME Interviews
- Real Estate Finance reports
- **Special Projects (LIHTC or NIMBY)**

Valuation

- USPAP Appraisal Review
- Bank Regulatory Compliance
- **Valuation Analysis**
- Highest & Best Use Advisory
- **Property Tax Expert Witness**

Consulting

- **Adaptive Reuse Advisory**
- Site Selection Validation
- **Financing Feasibility**
- Market & Feasibility Studies
- **Ports & Logistics Advisory**
- Retail Industry Insights
- ESG / DEI Advisory at CRE level
- **Story-Map Building**

KC Conway, CCIM, CRE, MAI
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