

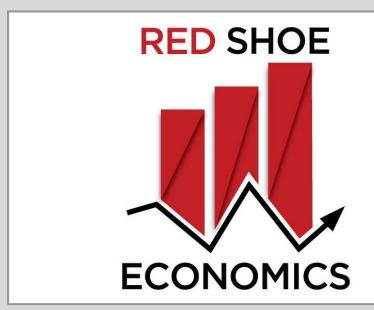




ICYMI In Case You Missed It ...







KC Conway, CCIM, CRE, MAI

CCIM Institute Chief Economist

Principal & Co-Founder of

Red Shoe Economics



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Disclaimer: Not in the fine print...

Fort Bend Economic Development Council – May 19, 2022

K.C. Conway, CCIM, CRE, MAI and CCIM Institute Chief Economist

This presentation reflects the analysis and opinions of the author, K. C. Conway, but not necessarily those of Fort Bend Economic Development Council, CCIM Institute, Appraisal Foundation, UMH REIT, or Red Shoe Economics.

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KC Conway, CCIM, CRE, MAI - Short Bio

Professional Roles:

- Chief Economist for CCIM Institute (2018 to 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



- Emory University Business School Graduated with Honors 1985
- MAI Designation from the Appraisal Institute (1989 to Present)
- Counselor of Real Estate (CRE Designation) (2009 to Present)
- 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, MBA, NAHB, NAIOP, RMA, SIOR, and ULI
- Specialty Areas Include: i) Adaptive Reuse; ii) Ports & Logistics/Supply-Chain; iii) Affordable Housing Especially Manufactured Housing; iv) Property Tax Appeal; v) CRE Finance; vi) Expert Witness Appraisal/Valuation



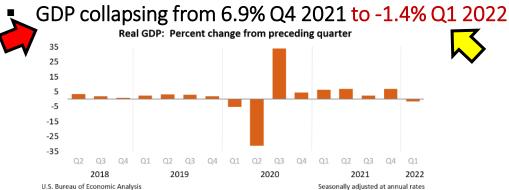
"If you aren't evolving, you are becoming obsolete."



ICYMI the Economy: 25% Flexible CPI; -1.4% Q1 GDP & 3.10% 10-Yr TR

- **Inflation is NOT Transitory** ... It's 1970's SYSTEMIC
 - Follow St. Louis FRB's FRED & Flexible CPI
- Flexible CPI: 23.23% March 1980 | 25.10% March 2022





- Interest Rates are RISING ...
 - 10 Year Treasury 2.96% May 17, 2022 (3.13% May 6th)
 - Up from 1.35% Dec 3, 2021



JOLTS: Openings a record 11.5 & Quits 4.4M

On the last business day of March, the number of job openings was 11.5 million, the highest level in the history of the series which began in December 2000

Case-Shiller Home Price Index:

+19.17% YOY (PHX +32.9% - #1 in US & > Miami)



ICYMI: Consumer Confidence is Plummeting

Consumer Confidence is Dropping ... It's Back to the Future – 1980 and 2011
 From 99.8 January 2020 to 59.4 March 2022 (less than 1-point off June 1980 all-time low)



ECONOMICS

INFLATION: How Does Inflation Impact CRE? Cost of NEW is Skyrocketing!

CONSTRUCTION ECONOMICS

Construction Cost Index	.8.9 %
ANNUAL INFLATION RATE	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%

Construction **Cost Index**

ANNUAL INFLATION RATE

+	8.0	%
	JAN. 20	22

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%

Construction Cost Index

ANNUAL APR. 2021 INFLATION RATE

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

INFLATION RATE

ANNUAL

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%

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%

Building Cost Index

ANNUAL INFLATION RATE

1913=100

K	+	Ö.	%	
		APR. 2	021	
INDEX	JE	MONTH	YEAR	
661	2.50	+1.0%	+6.1%	

BUILDING COST +1.7% SKILLED LABOR 10805.01 0.0% WAGE \$/HR. 59.73 +1.7% 0.0%

Construction Loans and Cost Overruns?

ENR's Cost Indexes by City

	1913=100 1967=100	CONSTRUC	TION COST	BUILDIN	NG COST	
	R=REVISED	JAN '22:1913	% CHG. YEAR	JAN '22: 1913	% CHG. YEAR	
^	ATLANTA	8066.77	+17.3	5986.91	+24.7	1
4	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	l∢
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	4
	NEW YORK CITY	21335.07	+3.6	10561.93	+6.8	١
	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	





Inflation & CRE Values: Are These Increases Sustainable?



Green Street CPPI Past 12 Mos (May '22 YOY)

Green Street CPPI®: Sector-Level Indexes

	Index	Change in	n Commercial Prope	erty Values
	Value	Past Month	Past 12 Mos	From Pre Covid
All Property	155.0	0%	21%	15%
Core Sector	159.8	0%	22%	18%
Apartment	190.7	0%	28%	23%
Industrial	253.9	0%	28%	53%
Mall	93.7	0%	21%	-3%
Office	113.6	0%	6%	-4%
Strip Retail	131.8	0%	35%	17%
Health Care	148.8	0%	8%	4%
Lodging	110.2	0%	14%	1%
Manufactured Home Park	323.8	0%	24%	34%
Net Lease	115.7	0%	21%	17%
Self-Storage	312.9	0%	64%	69%
Student Housing	168.7	0%	15%	9%

#1 - Self Storage: +64%

#2 – Strip Retail: +35%

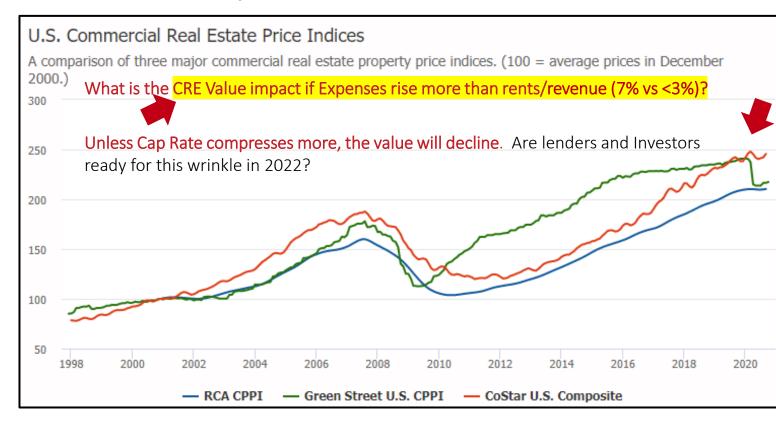
#3 & #4 TIE - Industrial +28% & MF: +28%

#5 - Manufactured Housing +24%



All Property: +21%

All 3 Major CPPIs (Green Street, RCA & CoStar)

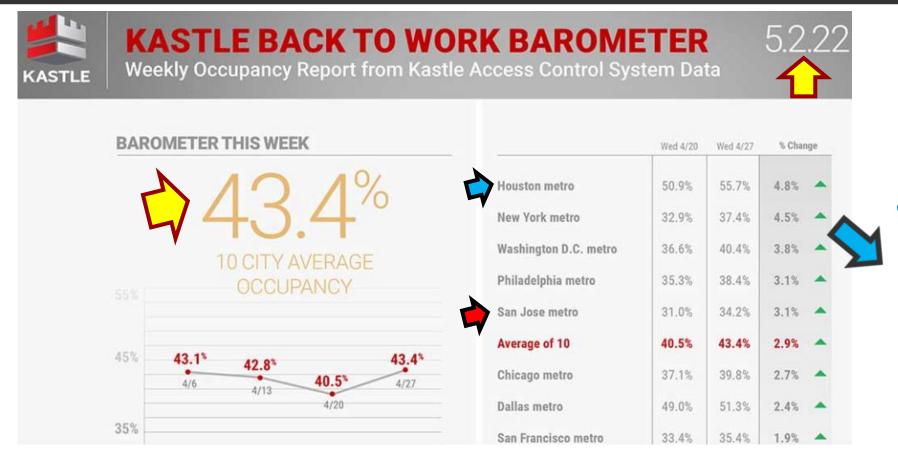




OFFICE & REMOTE WORK:

Kastle Back to Work Barometer

City-by-City Views of America's Office Use





There are NO MSAs outside TX above 45% occupancy.



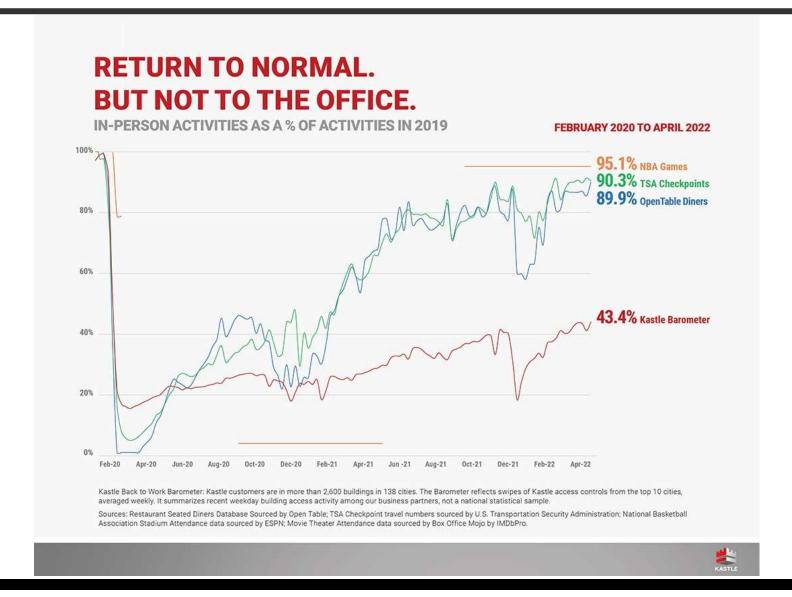
TX (Dallas, Houston) has highest

"Return-to-Office" ratio at 51%-55%

Despite vaccinations & boosters less than half of us are returning to the office!

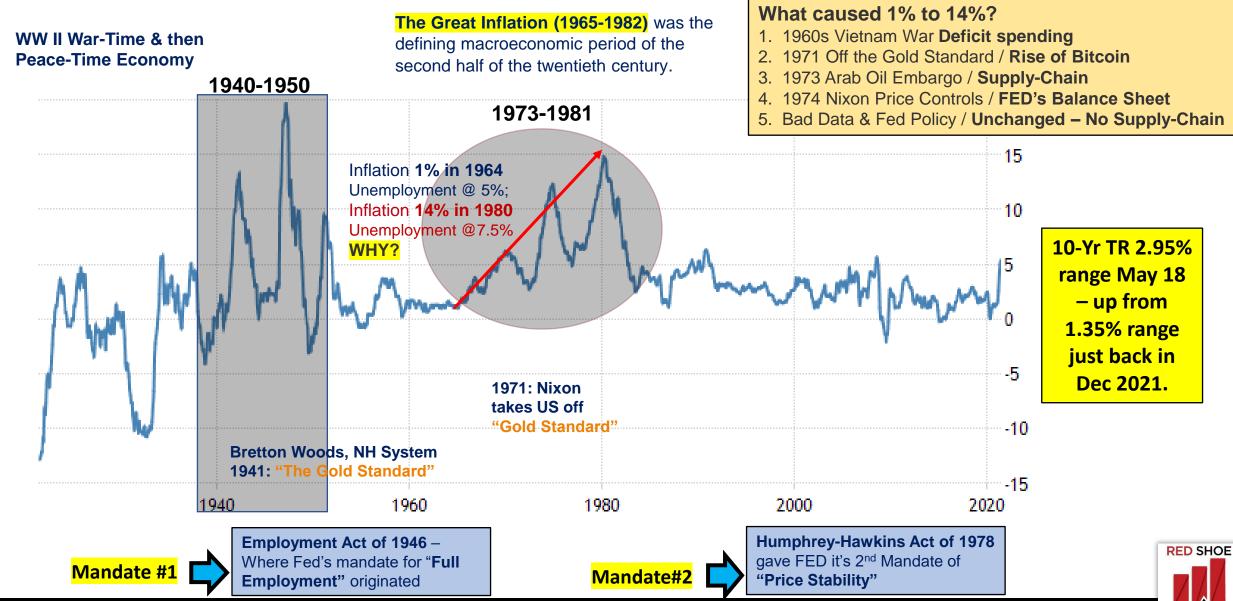


Return to Airports, Basketball & Dining-Out: 90%- 95% Vs <45%Office

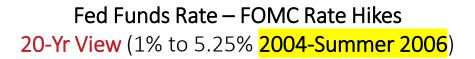


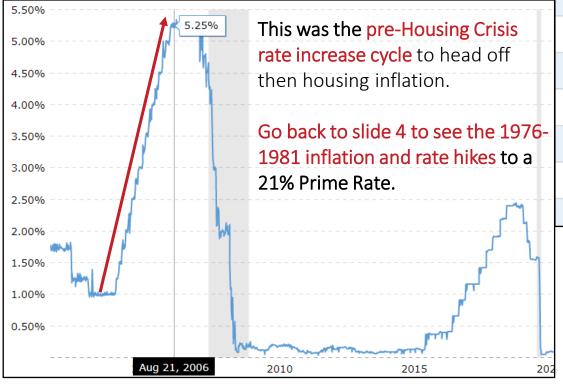
RED SHOE

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



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

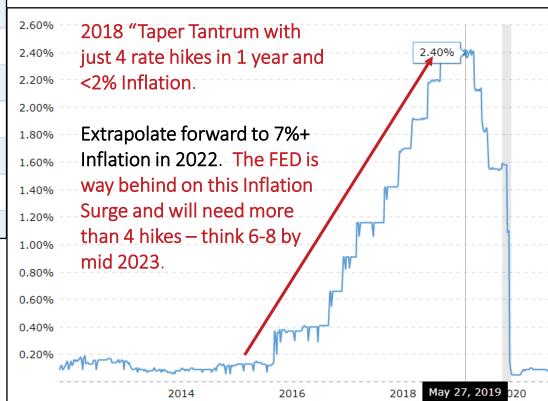






Fed Funds Rate – FOMC Rate Hikes

10-Yr View (0.20% to 2.40% 2014-Spring 2019)







Fed isn't ruling out 75 basis point moves forever, Mester says

Published: May 10, 2022 at 11:59 a.m. ET

The Federal Reserve isn't ruling out 75 basis point moves forever, but a pace of smaller 50 basis point moves "seems about right to me," Cleveland Fed president Loretta Mester said Tuesday.

"I think the pace we're going right now seems about right to me. We'll be able to get more information after we do a couple of those," Mester said, in an interview on Bloomberg Television.

Mester said she wasn't ruling anything out in the second half of the year. If inflation is not moving down, the Fed might have to speed up the pace of its rate hikes.

1973

	Date	Fed Funds Rate
	Jan. 19	6.0%
	Feb. 23	6.5%
)	March 20	7.0%
	April 17	7.25%
	May 15	75%

May 15	7.5%
June 19	8.5%
July 17	10.25%
Aug. 21	11.0%

1974

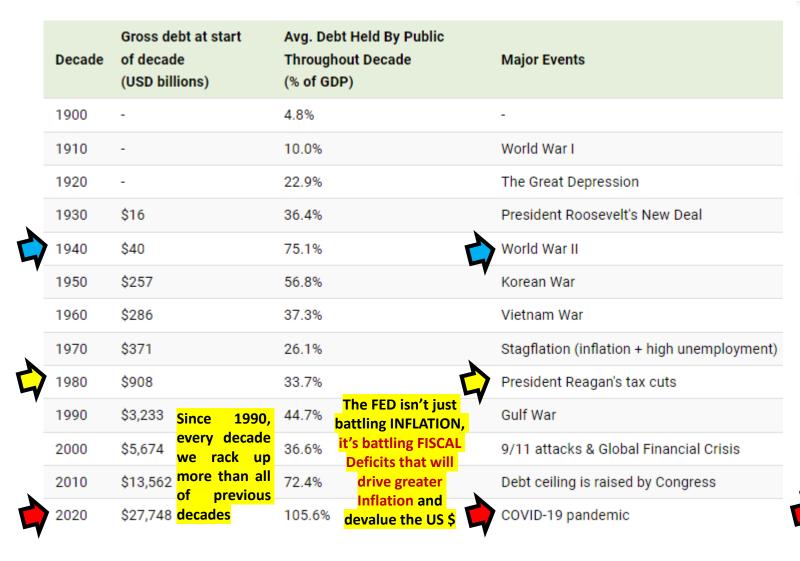
Date	Fed Funds Rate	Event
Feb. 20	9.0%	Recession
March 19	10.0%	Embargo ended in March
April 16	11.0%	Fed raised rates to stop inflation
July 16	13.0%	Inflation at 11.5%; Ford replaced Nixon in August

<u>1979</u>

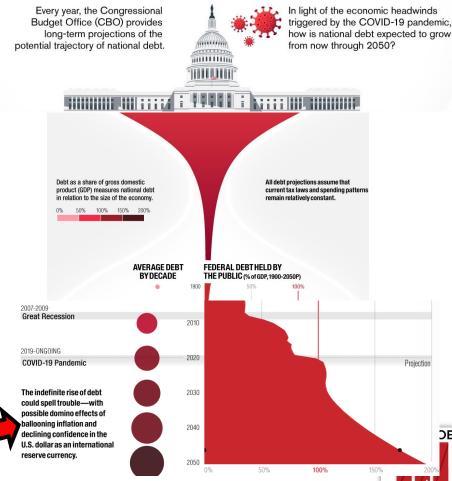
	7
0ct. 8	13.0%
0ct. 22	15.5%

RED-Box area is when FED moved rates **75 to 100 to 200 basis points** at a time.

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



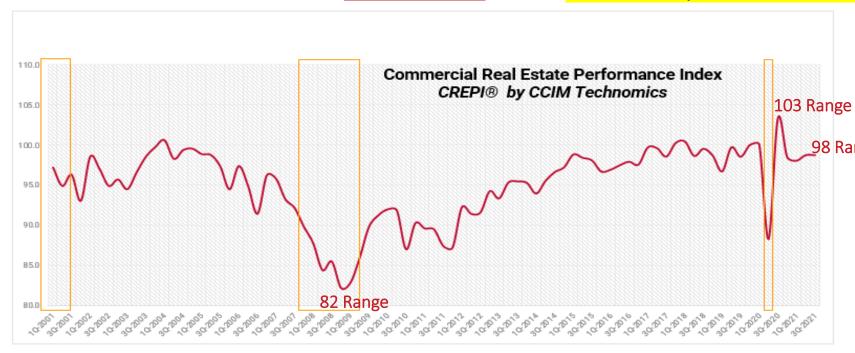
U.S. National Debt



ECONOMICS

ICYMI: CCIM-TECH's CREPI™ Report | A Broader Measure of the Economy

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



Market InSites Reports The Site to do Business for Commercial Real Estate Professionals **GET A DEMO**

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:

- University of Michigan Consumer Sentiment Index
- NFIB Business Confidence Index
- Yield Curve Spread between 10-Year and 2-Year Treasuries
 - NAHB / Wells Fargo Housing Market Index

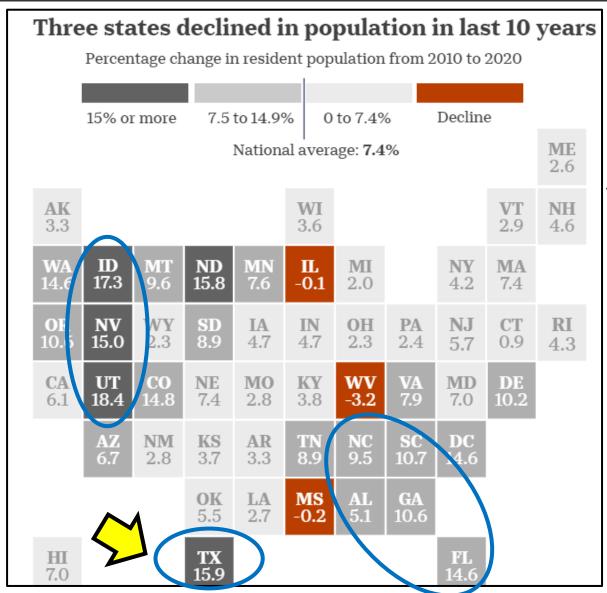
 - BEA Personal Consumption Expenditures Price Index
- **BLS Producer Price Index**
- BLS Job Openings and Labor Turnover Survey
- BLS Civilian Labor Force Participation Rate
- S&P 500 Index
- 10. Green Street Commercial Property Price Index



This index is from **CCIM-TECH**

https://www.stdb.com/crepi

2020 Census Population Migration



MTN (UT +18.4%); SOUTH (TX +15.9% & FL +14.6%)



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.



Population Migration:

Q: Where can you "Out-Run" Inflation?

A: South (1st came U-Haul, then 2020 Census, now Penske)



Penske Truck Rental Top 10 Moving Destinations for 2021 (previous year ranking):



1.Houston, TX (6)

- 2.Las Vegas, NV (1)
- 3.Phoenix, AZ (2)
- 4.Charlotte, NC (Has not ranked since the 2018 list.)
- 5.Denver, CO (3)
- 6.San Antonio, TX (9)
- 7.Dallas, TX (8)
- 8.Orlando, FL (7)
- 9.Austin, TX (4)
- 10.Chicago, IL (Has not ranked since the 2015 list.)



May 02, 2022

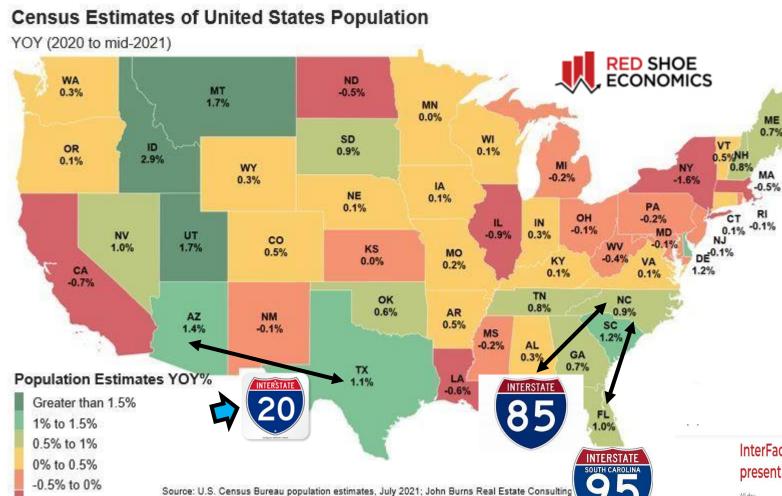
It's May, it's #NationalMovingMonth and Penske Truck Rental's Top 10 Moving Destinations list is back!

Compared to 2020, over 20% more Americans moved in 2021, and the new remote work opportunities enabled an estimated 14-23 million Americans to relocate, according to the U.S. Census Bureau. So, where were Penske Truck Rental's customers moving this past year?

Houston, Texas topped Penske Truck Rental's 2021 Top 10 Moving Destinations list.

Most of the moves in 2021 were into the Sun Belt region, including four major metro areas of Texas: Austin, Dallas, San Antonio and, as previously mentioned, Houston. After a five-year hiatus, Chicago checked back in to fill the No. 10 spot, and Charlotte reemerged in the No. 4 spot after a break since 2018.

2020 Census Population Migration Update – Interstate Corridors



As seen in Burns Regional Analysis and Forecast

Less than -0.5%



The I-85 Corridor has the most YOY 2020-2021 **Population Gr.** (+0.7% GA to +1.2% SC) over any Interstate Corridor

Except I-95 (+0.9% NC to +1.0% FL)

I-40 Nashville to Little Rock and OK City ranks #4 with 1/2% to 1% YOY 2020 to 2021 Population growth (Better than all MW north of it!)

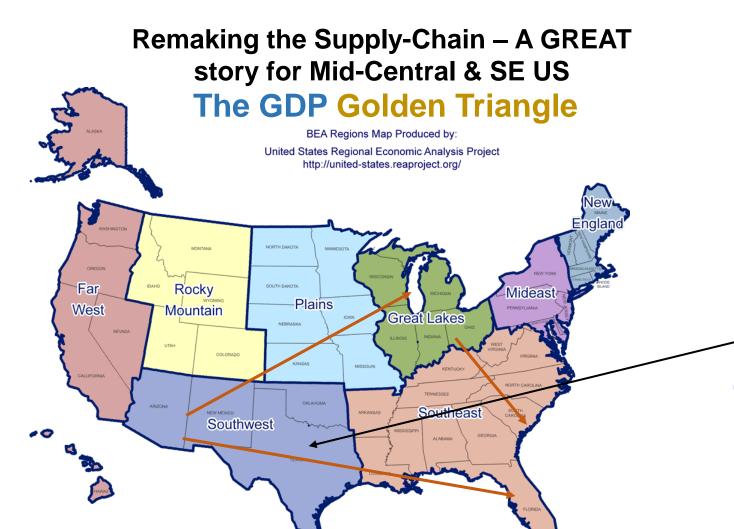
InterFace Industrial Conference - KC Conway presenting

France Media's Southeast Real Estate Business magazine and InterFace Conference Group will host the InterFace I-85 Industrial Corridor conference on Wednesday, April 13, 2022, from 12:30 PM - 6:45 PM at the Hilton Charlotte Uptown



"Golden Triangle" – The heart of Logistics Infrastructure

More North/South (Port Laredo & Gulf north) than West/East from CA to CHI



- Q. What is it about the "Golden Triangle" that makes it tops in GDP, **Logistics & Supply-Chain?**
- A. The best "Freightways!"

Amazon's HQ2 Finalists:

15 of 20 Finalists were located within the

"Golden Triangle"

The Golden Mfg. & Logistics Triangle: SE (#1 @ 22%) + SW + Great lakes

47% US GDP

(GT: $1/3^{rd}$ states = 50% GDP)



The Importance of Rail: Rail Connectivity will Remake US Supply-Chain

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



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

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 & Westcoast.
- Rail mergers are on the horizon post COVID. (Financially 'weak' merges with 'strong' wanting SE & Gulf reach).



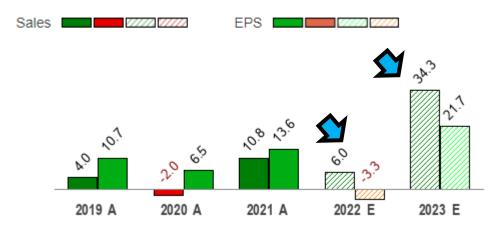
Do Options Traders Know Something About Canadian Pacific (CP) Stock We Don't?

Zacks Equity Research - Tue, May 17, 2022

Canadian Pacific completed the acquisition of Kansas City Southen in December 2021. The enterprise value of the deal is approximately \$31 billion (inclusive of \$3.8 billion outstanding debt). The deal is anticipated to draw synergies (annually) of roughly \$1 billion within three years. Following approval by the regulatory body of CP's control of KCS, it will result in the first single-line rail network connecting three countries, namely the United States, Mexico and Canada. The merged entity will be named Canadian Pacific

Kansas City Limited.

Sales and EPS Growth Rates (Y/Y %)



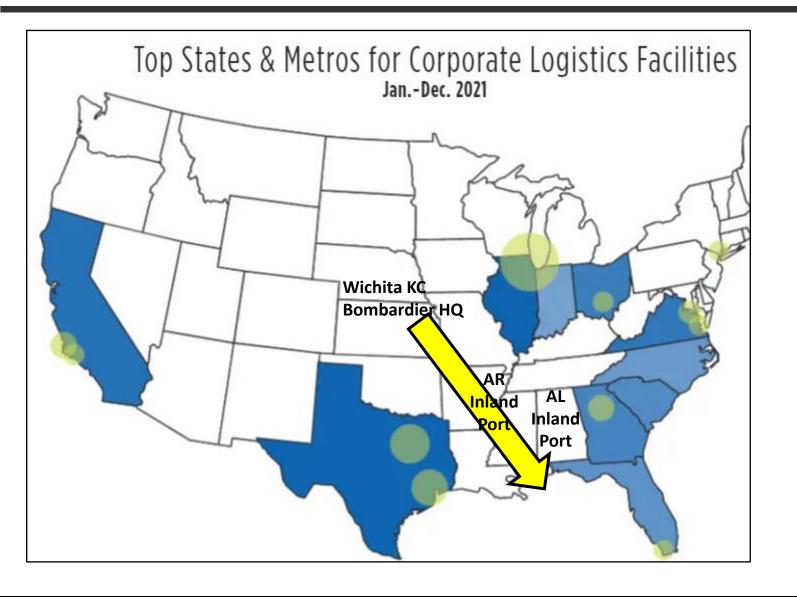
Reasons To Buy:

Gradual improvement in freight-market conditions is aiding the company. Additionally, its measures to reward shareholders are encouraging. In December 2021, Canadian Pacific announced the completion of the buyout of Kansas City Southern for \$31 billion KCS will operate independently of CP until the U.S. Surface Transportation Board gives its decision on the companies' joint railroad control application. The STB review is expected to be completed in the fourth quarter of 2022.

With gradual recovery in freight-market conditions, freight revenues, contributing majority to the top line, increased 4% in 2021. The increase was owing to the increase in freight revenues at key subgroups. Evidently, freight revenues at the coal, fertlizer and sulphur, forest products, metals, minerals and consumer products, automotive and intermodal sub-groups increased 10%, 5%, 6%, 16%, 16% and 10%, respectively, in the first nine months of 2021. We are encouraged by the company's decision to pay dividends even in the current uncertain scenario. Evidently, the company paid dividends worth C\$507 million in 2021, up 8.6% year over year.

ECONOMICS

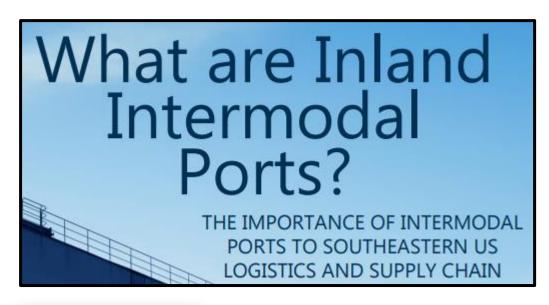
Remaking US Supply-Chain: All but 1 of Top 10 are SE/MW / KS, AR, LA, AL Next!



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

Ports & Inland Waterways: The Remaking of our Supply-Chain to N/S





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



ECONOMICS

Inland Ports & the Remaking U.S. Supply-Chain: ICYMI AL Joins IP Club



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.

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.



- 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.



Port Freeport's Economic Impact: Brazoria getting 1/3rd of Jobs & 60% Eco Impact



Brazoria County

State of Texas

Total Jobs **150,651**



\$3.7 Billion







Total Labor Income

\$9 Billion





\$98.8 Billion





Supply-Chain Connectivity Through Port Freeport





Characteristics:

Draft Class: Deep



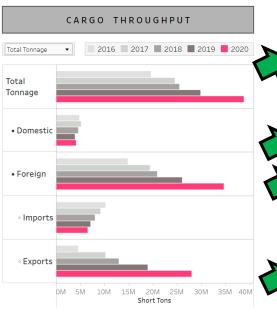
Channel Depth: 45 Feet (To be Dredged to 56 Feet) **Channel Width: 400 Feet**

Major Attributes:

- 14 Berths
- 2 Post-Panamax Cranes
- Deepwater Ship Berths 5 Public and 7 Private

*NEC = Not elsewhere classified

Access to Union Pacific Rail Line



Top Commodities:

- **Liquefied Natural Gas**
- **Crude Oil**
- **Petrochemical Feedstocks**
- Containerized Cargo **Refrigerated Fresh Fruit** Rice
 - **New & Used Automobiles High & Heavy Construction**
- **Equipment**
- **Limestone Aggregate**
- **Project Cargo Steel Products**

тор соммо	DITIES IN	2020		
38,748,662 short tons of Total Tonnage				
Commodity	Short Tons	2019 - 2020		
Hydrocarbon & Petrol Gases, Liquefied and Gaseous	16,492,022	▲ 135.6%		
Crude Petroleum	10,019,780	▼ 20.8%		
Gasoline	2,109,409	▲ 103.6%		
Sodium Hydroxide	1,471,978	▼ 3.9%		
Alcohols	1,223,681	▲ 219.7%		
All Others	7,431,792	▲ 13.3%		



Supply-Chain Through Port Freeport: Autos (keep up with AL!)



Top Commodities:

- Liquefied Natural Gas
- Crude Oil
- Petrochemical Feedstocks
- Containerized Cargo
- Refrigerated Fresh Fruit
- Rice



- New & Used Automobiles
- High & Heavy Construction
- Equipment
- Limestone Aggregate
- Project Cargo
- Steel Products



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FOR IMMEDIATE RELEASE

Contact: Tricia Vela, Public Affairs Assistant

Phone: (979) 233-2667 ext. 4330 Email: vela@portfreeport.com

PORT FREEPORT REACHES MILESTONE IN VEHICLE UNITS HANDLED

FREEPORT, TX (Dece 6, 2021) – Over the last year, Port Freeport has continued to experience rapid growth, reaching a new milestone of 106,000 vehicle units handled in partnership with Amports, who offers vehicle processing and terminal management services.

"What began as a modest facility of al 38 acres and five vessel calls per month, has grown to approxime 75 acres and 12 or more vessel calls per month," said Port Freeport Executive Director/CEO Phyllis Saathoff. "The Port's proximity and efficiency to regional and global markets combined with the superior terminal services offered by Amports, has made Port Freeport a hub for vehicle imports and exports."



Port Freeport | Freeport Harbor Channel Improvement Project

The Freeport Harbor Channel Improvement Project is a \$295 million federal cost-shared project. It consists of the deepening and partial widening of the Freeport Harbor Channel and related navigation improvements.

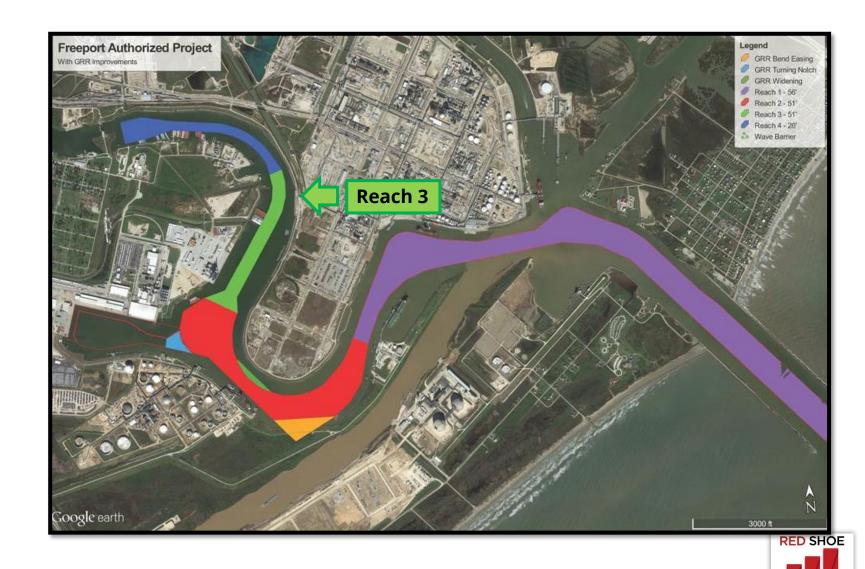
Current Depth: 46 Feet

Authorized Project Depth: 51 – 56 Feet

Expected Completion: 2025

Once complete, Port Freeport will be the deepest port in Texas enabling access to the larger ships of the modern era.

November 2021 | Phase 1 Complete: Reach 3 has been deepened to 51 feet marking the first completed segment of the Freeport Harbor Channel Improvement Project.



ECONOMICS

Port Freeport | Velasco Container Terminal Expansion

Port Freeport Velasco Terminal Expansion, Texas

Ship Technology | January 2020

The construction of the **container terminal is being completed in two phases with an estimated investment of \$129.6M.** The first phase, completed in 2014, created a general cargo area of 22 acres, which can be converted to support container operations.

Phase two will add two new berths, namely berth 8 and berth 9 and 14 acres of cargo storage area to the terminal. Berth 8 will measure 1,050ft, upon its completion in 2022. In addition, two new post-Panamax gantry cranes will be added to each berth at the <u>port</u>.

Approximately 2,000ft of rail spur from the Union Pacific Railroad to the American Rice facility will be relocated under the second phase.

The container <u>terminal</u> will have the <u>capacity to have</u> completion of the expansion.

rup to two million TEUs a year, upon

For perspective, Charleston SC is 2.5m



Port Freeport Receives First Container Vessel in New All-Water Express Service from Asia

Port Freeport | December 2021

On December 10th, the M/V ZHONG GU FU JIAN (2010 built, Chinese Flagged) berthed at Port Freeport's Velasco Container Terminal. The arrival of the 902-foot long 4,963 TEU vessel marks another milestone for Port Freeport as the first container vessel to offer all-water service from Asia into Port Freeport.

"Port Freeport's recent announcement of completing the first portion of the Freeport Harbor Channel Improvement Project and the ongoing expansion of the Velasco Container Terminal has garnered the attention of the steamship lines," said Phyllis Saathoff, Executive Director/CEO of Port Freeport. "The current disruptions in the supply chain have encouraged carriers and shippers to consider alternate ports of entry and with these additions, Port Freeport is an enticing alternative."



Port Freeport | 250 Acre Multimodal Industrial Park

Port Freeport Looks Ahead to Two-Phase Industrial Mall

The Facts | January 2020

As part of long-term strategic plans, **Port Freeport's multimodal industrial park is almost ready for phase one of construction, CEO Phyllis Saathoff said.**

The 2 million square feet of warehouse space on a stretch of land adjacent from the port's administration building will completely rail-served and construction should begin in 2020, Director of business and Economic Development Jason Muira said.

The first phase of the project will be construction of one or two of the four warehouses that will largely be used for packaging product, Saathoff said.

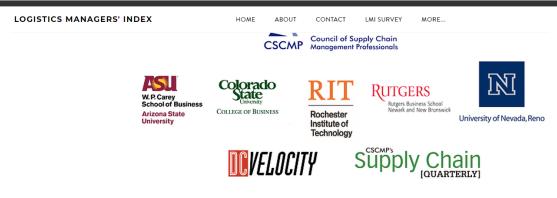
The project will be about \$100 million with developer Trammel Crow Co. and should bring economic growth, revenue and jobs to the area, Miura said.

The rail-served land is part of a \$21 million Parcel 14 development project that was first announced in 2017. In June, Port Freeport completed construction on the first phase of the Parcel 14 Rail Development project.

"Approximately 21,000 linear feet of rail track has been constructed consisting of a 6,000- foot lead track **spurring from the Union Pacific main line** at Cherry Street, that crosses SH 36, and then connects to three ladder tracks of approximately 5,000 feet each," according to a news release from the port this summer.



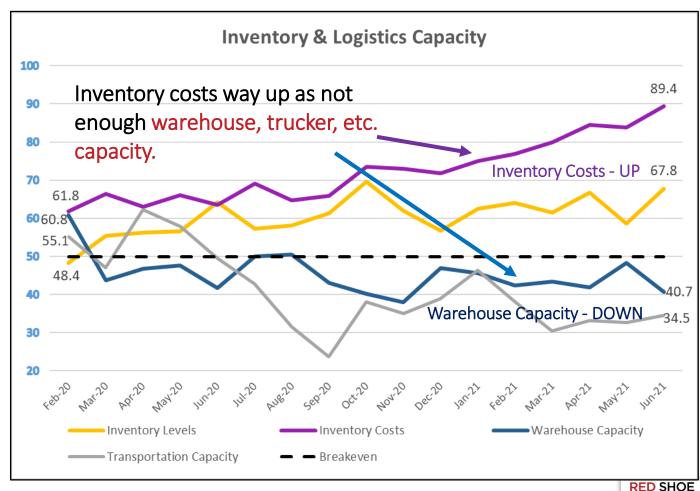
The LMI Metric for Logistics: 5 Universities + 2 Leading LIs on Supply-Chain



June 2021 LMI (Logistics Managers Index) = 75.0

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.



Logistics & Supply-Chain Resources

SupplyChain247

Site Selection Magazine – SiteSelection.com





- Journal of Commerce JOC.com
- gCaptain
- American Association of Railroads (aar.org)
- Freight Waves Freightwaves.com
 - LMI (Logistics Managers Index) LMI.org
- CBRE "Retail to Industrial Conversion" Flash
- reports Summer 2020Port Websites and Retailer Websites and 10(q)
- quarterly SEC filings (great intel)
- Site-To-Do-Business (STDB.com)







The Nerve Center of the Global Supply Chain









L&T Risks to Monitor: China's Latest COVID Lockdowns

What does it mean for US ports, warehouses and Supply-chain for 2H 2022?

Xi's lockdowns will pull the rug out from under US truckers this summer







The three largest cities in China are going to be removed from the world market. According to analysts, at least 40% of China's GDP has been taken offline and this was before lockdowns began in Beijing. The vast majority of this GDP is directly related to global manufacturing. Removing it means removing the flow of containers from the world economy.

Pain at the ports. Tight restrictions aimed at limiting COVID-19 transmission in China mean more lockdowns—and more supply chain constraints. Shanghai is the biggest container port in the world and has been locked down since late March. By one estimate, 30% of global shipping delays are originating in Asia. Those delays are massive: one in five cargo ships is stranded in a port somewhere in the world. The bottlenecks have a snowball effect, forcing cost increases for businesses and, analysts say, could further escalate inflation. [Fortune]

 $\frac{https://fortune.com/2022/04/23/china-lockdowns-inflation-supply-chain-nightmare-shanghai/?cid=other-eml-onp-mip-mck&hlkid=157fd573c0fe4615b4932da1053f08ed&hctky=11938776&hdpid=726dc631-aaf9-4678-bf6a-8e0a3e7dc880$



L&T Risks to Monitor – Subprime Trucking wiping out capacity

What does it mean for moving containers from ports and rail to warehouses? And Supply-chain?

Big Trucking's secret trick to impress Wall Street — and slam mom-and-pop fleets

The price of a used truck has doubled in the last year



America's biggest trucking companies have lots of used tractors and trailers. Some of those companies quietly made tens of millions of dollars in 2021 and the first three months of this year by selling old trucks in their fleets.

"Gain on sale/disposal from property or equipment" is a sleepy, oft-ignored line of any company's quarterly or annual financial statement. But now, trucking companies have been using their outsized used equipment sales wins to offset other headwinds in the industry: increasing wages, hefty insurance premiums and, as of this year, a record upswing in diesel.



There are about 275,000 trucking companies in the U.S., according to the Federal Motor Carrier Safety Administration, but a whopping 86% of them are teeny-tiny — with six or fewer trucks. Just 120 companies have 1,000 or more trucks.



L&T Risks to Monitor: Trucking Wages – Think all Supply-Chain wages

What does it mean for US ports, warehouses and Supply-chain for 2H 2022?

Walmart Dangles \$110,000 Starting Pay to Lure Truck Drivers

The retailer has also started training workers from other departments to become truck drivers to grow its in-house fleet

Walmart Inc. WMT 1.17% ▲ is raising starting pay for in-house truck drivers to as much as \$110,000 a year and expanding a program that trains its existing workers to become drivers.



The company, in a bid to keep its supply chain running smoothly, is setting starting salaries for its truck drivers between \$95,000 and \$110,000 a year, up from an average starting salary of \$87,000, said a Walmart spokeswoman.

The push comes as the trucking industry continues to grapple with challenges in recruiting drivers even as wages for truck drivers have risen steadily throughout the Covid-19 pandemic, though some data shows freight demand may be cooling. Last month, the trucking industry lost 4,900 jobs, the first monthly decline in nearly two years, federal labor statistics show.



In the U.S., median annual pay for heavy-truck and tractor-trailer drivers was \$47,130 in 2020, the most recent annual data available, according to the Bureau of Labor Statistics, and has increased by about 3% to 4% annually since 2016.

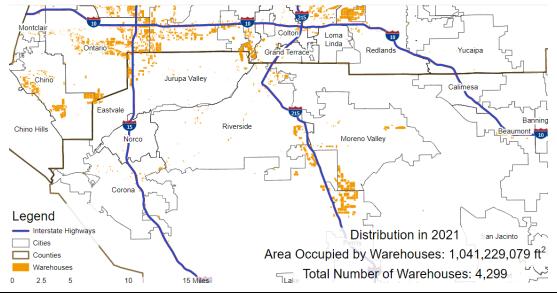


L&T Risks to Monitor: Anti-Warehouse Movement / NIMBY-ism!

What does it mean for LA/LB & Inland Empire, Supply-chain & future of Inland Ports?

Los Angeles Times





Over the last 20 years, I've watched open land and farmland in the Inland Empire become a gridlocked sea of warehouses. These giant boxes have worsened traffic, air quality, cancer rates and chronic health problems in the region and have cemented poverty here. The industry once touted as a blue-collar miracle is instead filled with temp jobs rife with health and safety issues, wage theft, little job security and a future in which robotic workers are predicted to reign supreme.

The Inland Empire is at a breaking point. More than a dozen groups throughout its vast 27,000-square-mile region are attempting to pass moratoriums on warehouse construction. But conservative politics and development money continue to win out. City councils in what are known as "diesel death zones" routinely sacrifice the health of residents for economic benefit in areas that often have Black and Latino populations.

Last year the Robert Redford Conservancy for Southern California Sustainability at Pitzer College, which I oversee, began creating an animated map of warehouse growth in the Inland Empire that reaches back to 1975. Recently published, the map makes warehouses in the Inland Empire look like the spread of a disease. What began at a couple of World War II military logistics sites in San Bernardino and Mira Loma, a town in Riverside County, has grown into a behemoth with millions of square feet of warehouse space.

L&T Risks to Monitor: Automation in Logistics & Autonomous Shipping

Is Port Freeport Preparing for Autonomous Vessels?



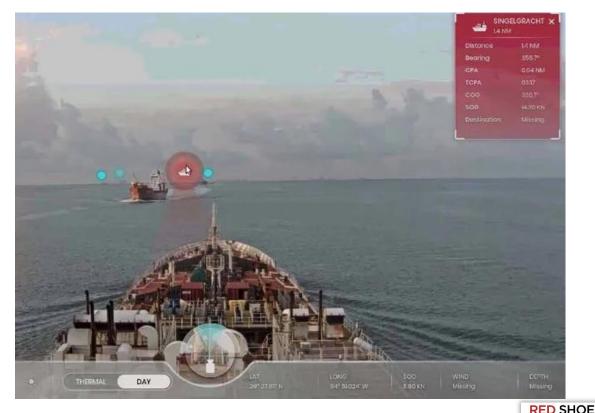
Autonomous cargo ship completes 500 mile voyage, avoiding hundreds of collisions

Scooter Doll - May. 13th 2022 9:36 am PT ¥ @SCOOTERDOLL

The "world's first" autonomous commercial cargo ship has successfully completed a near-500 mile voyage in the congested waters of Tokyo Bay, traveling without human intervention for 99% of the trip. The 750 gross-ton vessel was powered by Orca AI, whose software helped the ship avoid hundreds of collisions autonomously.

Orca AI is a developer of safety software platforms designed specifically for maritime vessels. Founded in 2018 by two naval technology experts, the company combines sensors with existing safety systems onboard to help improve the safety and navigation of ships on crowded waterways.

Headquartered in Israel, Orca AI looks to bridge sea-bound ships to the shore with 24/7 insights to ensure shipping companies keep their cargo safe and efficient at all times, all while providing the technology to bring autonomous cargo ships to reality.





L&T Risks to Monitor: Automation in Logistics and the Warehouse

Watch FedEx Logistics! Forget robots and think autonomous everything displacing workforce!

FedEx Logistics opens global headquarters in Memphis

Apr. 06, 2022 5:49 AM ET FedEx Corporation

(FDX)By: Niloofer Shaikh, SA News Editor

Seeking Alpha $^{\alpha}$

- Logistics subsidiary of shipping giant FedEx (NYSE:<u>FDX</u>)
 has <u>opened</u> a new global headquarters in downtown
 Memphis, Tennessee.
- The company has invested more than \$50M to renovate the building.
- Udo Lange, president & CEO of FedEx Logistics said, "From this magnificent facility, our employees will collaborate, innovate, and serve our global customers."
- A subsidiary of FedEx Corp., FedEx Logistics said it provides air and ocean cargo, warehousing and distribution, customs brokerage and other services to customers.
- On March 30, 2022, the company <u>announced</u> its intention to begin testing of Elroy Air's Chaparral autonomous air cargo system next year.



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*).

Amazon Q1 Earnings: Free Cash Kept Deteriorating

May 02, 2022 5:58 AM ET | Amazon.com, Inc. (AMZN) | 18 Comments | 4 Likes

Summary

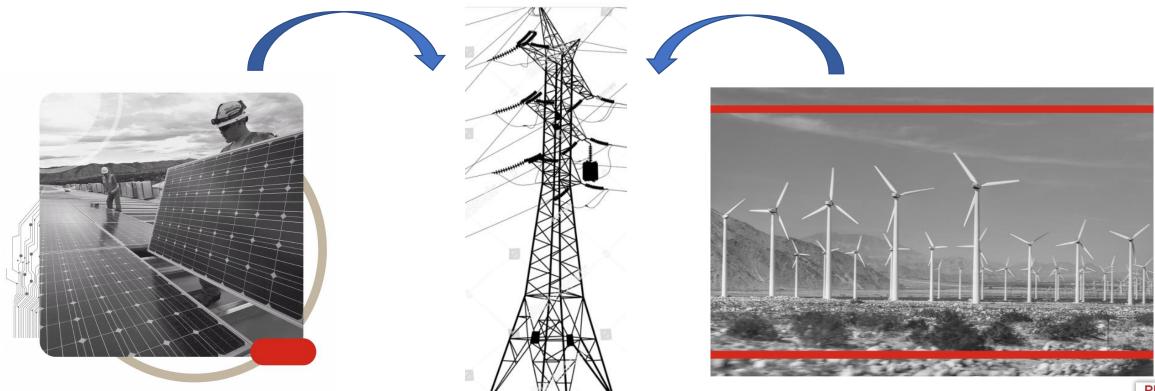
- After reporting its Q1 earnings, Amazon's share price fell 14% on Friday, the biggest one-day drop since July 2006.
- It reported an unexpected loss in the first quarter and revenue growth was the worst since the dot-com bubble burst in 2001.
- In particular, its free cash kept deteriorating, especially after accounting for its lease obligations.
- AWS is a bright spot, posting 57% YoY growth in profits and announcing a landmark agreement with Nasdaq.
 - However, even after the large price correction, the stock is still valued at a substantial premium given its current fundamentals.



"Changing the Ending" for ESG: Think About the Following

Q. What is biggest HEADWIND to ESG and CRE?

A. NIMBY fighting ESG Infrastructure like HVTLs that transmit the renewable energy to where it is needed in cities, at factories and Commercial R.E. Buildings.



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



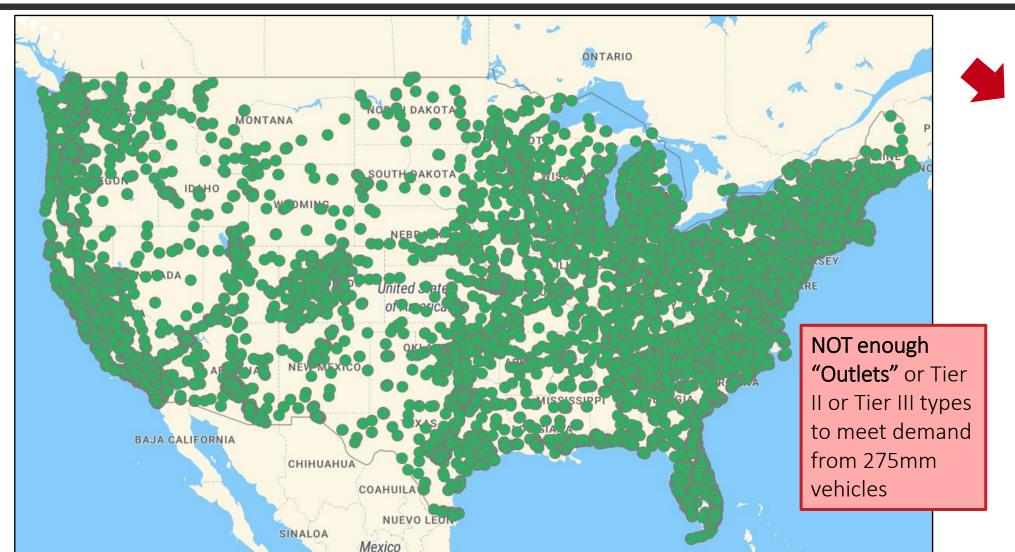
- ✓ Petroleum: Texas leads all states in crude oil production as it has in every year but one since at least 1970. The state accounts for about two-fifths of the nation's crude oil proved reserves and crude oil production. Texas not only produces more crude oil than any other state, but usually also 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 EXCPET 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 near 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 production 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



Seeking Alpha^α

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.

ESG Impact on CRE: EV Charging Stations – "Model T Phase"



We are in "Model-T" phase of refueling and need ...

ESG Infrastructure like many more refueling stations – **and who pays** at Office, Retail, etc.?

US Public EV Charging: 46,588 Stations

Stations Owned by Top 10 Networks: 37,525 Stations



ESG Investing: Property Assessed Clean Energy (PACE) Financing



ABOUT C-PACE

How Can C-PACE Help You?

C-PACE or "Commercial Property Assessed Clean Energy" is a financing solution which could help you fund energy and water efficiency upgrades to commerical properties. C-PACE highlights include:

- 100% financing of hard and soft costs
- Attached to the property, not the property owner
- Reimburse costs up to 24 months post CO
- Longer terms than conventional loans



Most commercial properties are eligible Offices, hotels, multi-family housing, retail, manufacturing, medical and more



Energy conservation upgrades covered HVAC systems, windows, insulation, lighting, cool roofs, etc.



Water conservation upgrades covered Low-flow plumbing fixtures, pressure reduction, insulating pipes, etc.



Clean energy generation qualifies Solar panels attached to the structure



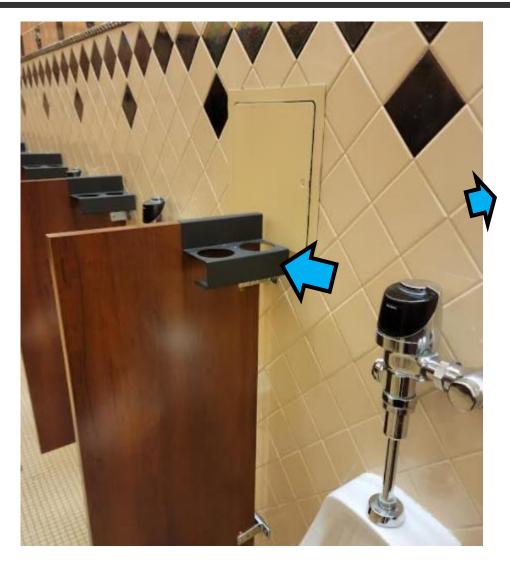
Property Assessed Clean
Energy
TX Pace Authority Tops in US

Charlene Heydinger – President of TX PACE

<u>Charlene@TexasPACEAuthority.org</u>



COVID's lasting Innovation may not be MASKS ... a little closing humor



Cupholders in Public Restrooms at Las Vegas Hotel Casinos – and not just single cupholders, but double cupholders for the 2-for-1 drink specials in the casinos as they reopen.

Texas's lasting impressions should be:

- The Energy State Lights-Out if the U.S. doesn't get it! Colonial Pipeline a Big-bleepin-Deal
- Most Back to Work State Kastle System (Houston #1 in Kastle System "Back to Work Barometer")
- U-Haul's #1 state for in-migration in 2021 was TX
- TX does Ports, Logistics & Supply-Chain. Don't overlook importance of Port Freeport and your 3 Class I Railroads! For TX, Port Freeport can become what Port of Savannah became for Atlanta a big economic deal for the State and no threat to Port of Houston.

Conclusion: Be a Road Runner & know your BBQ-Sauce!

Be a Road Runner, NOT a Wile E. Coyote





Red-Shoe Economics BBQ-Sauce is the polite way to call BS on something.

Follow RSE on LinkedIn, order a bottle or two, and sprinkle it on anything BS – such as FRB Monetary Policy speak, Misleading Gov data, and most all of California - lol

www.RedShoeEconomics.com

"If you are going through hell, keep going." Winston S. Churchill



RedShoeEconomics.com

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 on 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.



Economics

- 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
- ArcGIS StoryMap Building

KC Conway, CCIM, CRE, MAI Principal, Futurist

Beverly Keith, CCIM, CRE, CRX Principal, Business Strategist

> Caylinn Peterson, CCIM Project Research Strategist

Stacy BarringtonCorporate Operations Strategist

