

# ACC NEWS



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### **YOUR WEEKLY UPDATES**

Week 43 of 2021



Healthcare



**Ports** 



Shipping



Rail



Supply Chain



**Beverages** 



Retail



C-Stores



Road



Handling



# In this week's update

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### Chip shortage could persist for another 2 to 3 years

Chip shortage could persist for another 2 to 3 years, major Chinese consumer goods maker warns AL CNBC



- The global chip shortage could persist for another 2 to 3 years before ending, the president of Hisense, one of China's largest TV and household goods makers, told CNBC.
- Industries from consumer electronics companies to automakers are dealing with a shortage of semiconductors. This has led to shortage of products such as game consoles and manufacturers struggling to keep up with demand.
- Chinese companies, including electric carmakers, are also feeling the pinch.
- Most chips are imported into China and final products are manufactured there before being exported.
- Major executives globally expect the chip shortage to last into 2022. Some even believe it could extend beyond that.
- The chip shortage that started in a surge in demand for personal computers and other electronics for work or school from home during the pandemic now snarls car production around the world.
- Semiconductors are in short supply because of big demand for electronics, shifting business models which include outsourcing production, and effects from the US/China trade war, and are likely to remain in short supply in coming months as demand remains higher than ever.
- But it's not just the automotive industry that's struggling to get enough semiconductors to build their products. AMD and Qualcomm, which sell chips to most of the top electronics firms, have reported shortages and Sony blamed the shortage for why it's so hard to get a PlayStation 5 game console.
- The Covid-19 pandemic has spurred demand for consumer electronics.
- The first wave involved people buying PCs, monitors and other gear for working or going to school remotely. Then, home entertainment gadgets like game consoles, TVs, smartphones and tablets started flying off the shelves.
- The Consumer Tech Association, said that 2020 was the biggest year on record with nearly \$442 billion in retail sales revenue, and projected big demand for game consoles, headphones, and smart home products in 2021.
- All these devices include a ton of chips not just the central processor which can cost tens or hundreds of dollars, but also less expensive little chips for controlling the display, or managing power, or operating a 5G modem.
- The shortage is highlighting a structural change in the semiconductor industry. Many of the top semiconductor companies are now "fabless," which means that they only design the chips and the technology in them. Other companies, known as foundries, are largely contracted to actually make the chips.





### **Understanding Port Congestion**

- MarineTraffic captures and records information relating to vessels in and out of ports, then reporting ion congestion among many other shipping factors.
- They capture four major operational milestones, relating to a vessel calling at a port. Triggered by interaction with geofenced areas, for each call, they record:
  - 1. Arrival at anchorage
  - Departure from anchorage
  - 3. Arrival at port
  - 4. Departure from port
- Using these four events as a base, they derive time spent at anchorage, time spent at port, and the overall turnaround time - which includes the first two measures, plus time spent transiting from anchorage to berth.
- This then allows them to monitor
  - Median time at anchorage: The median time vessels calling at this port spent at anchorage.
  - Median time at port: The median time vessels calling at this port spent at the port
- Being able to understand the whole lifecycle of a vessel's visits at a port, and then see this data aggregated over multiple calls, allows maritime professionals to monitor how congestion levels evolve over time and enables them to make informed estimations on future performance.



Port congestion information can be used by ship operators to improve planning and scheduling, informing clauses
and pricing for charter party agreements, comparing ports, and even as a starting point for streamlining
improvements by port operators themselves.





### **Global Port Gridlock Threatens Economies Everywhere**

- Global ports are growing more gridlocked as the pandemic era's supply shocks intensify, threatening to spoil the holiday shopping season, erode corporate profits and drive up consumer prices.
- Bloomberg's Port Congestion Tracker shows a typhoon in Asia spawned another wild week for shipping in a year
  with multiple challenges a vessel wedged in the Suez Canal, a dozen major storms, rolling Covid lockdowns
  disrupting key manufacturing hubs in China and Vietnam, a shortage of truckers and dockworkers, and a resurgence
  of consumer demand.
- As of Friday, at least 107 container ships were waiting off Hong Kong and Shenzhen, the data show. This worsened when the storm brushed past Hong Kong around midweek, shutting down its stock exchange and idling its ports. Globally, RBC Capital Markets reckons 77% of ports are experiencing abnormally long times to turnaround traffic.
- The latest congestion won't be isolated to Asia for long, as delayed ships loaded with merchandise soon start sailing for the U.S. and Europe. As the Big Crunch of 2021 has repeatedly demonstrated, a bottleneck in one corner of the globe eventually exacerbates a logjam or compounds shortages in another.
- Even if shipping strains ease in China, that "could still mean new surges of vessels arriving at congested ports like LA/LB, shifting the backlog to the destination ports," said Freightos.com, an online shipping marketplace.
- President Joe Biden last week urged the L.A. port to run a 24/7 operation. In the U.K., containers filled with goods and outbound empties were piling up so high at the key port of Felixstowe that at least one container carrier had to reroute cargo through ports in mainland Europe.
- That all spells trouble for the world economy. Concern is already mounting that holiday shoppers won't be able to buy the gifts they want, dealing a blow to retail sales. Companies are worried about their bottom line with executives at Tesla Inc., Target Corp. and other S&P 500 companies mentioning "supply chain" a record 3,000 times during presentations as of Tuesday. And a lack of goods and costlier shipping mean further upward pressure on already heady inflation.
- "Data on sea and air shipping costs, container throughput and transport utilization point to an ongoing supply shock for the global economy," Michael Hanson, senior global economist at JPMorgan Chase & Co., told clients in a report on Thursday.

  Maritime



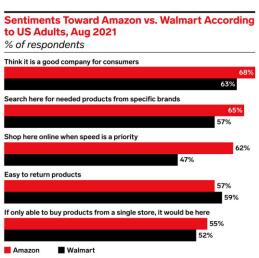


How consumer sentiments toward Amazon and Walmart compare Amazon and Walmart compare US consumers generally hold a higher opinion of Amazon than its closest ecommerce rival, Walmart. More US adults strongly or somewhat agreed that Amazon is a good company for consumers and their go-to when looking for specific brands and fast shipping. That said, Walmart did have Amazon beat, by a small margin, in consumer sentiment about one area: the returns process.

#### Chip shortage implications for manufacturers and retailers eMarketer.



- Semiconductor supply won't catch up with industry demand until late 2022, meaning the chip deficit will continue into 2023 and beyond.
- Here's a look at the implications for manufacturers and retailers:
  - The shortage could cost automakers \$210 billion in lost sales. Other hard-hit industries include consumer electronics, LED and lighting fixtures, and turbines and solar power, per Fierce Electronics.
  - Eight in 10 chipmakers are having a hard time finding employees trained to handle the highly toxic compounds used in manufacturing, per a survey from IPC. COVID-19 factory closures, stringent water-use restrictions due to a drought in Taiwan, and rising material costs are also hindering production.
  - Apple announced it was cutting iPhone 13 production targets for the year by 10m units due to the shortage. The company originally expected to generate \$120 billion in revenues in Q4, up 7% year over year (YoY).
  - With new electronics in short supply, refurbished sales are seeing a bump, according to Decluttr. In May, Xbox One console sales increased 103%, PlayStation 3 sales jumped 38%, and PlayStation 4 accessories and console sales rose 32%.
  - There has been a dramatic change in consumer buying patterns since the advent of COVID-19 some year and a half ago. With people working from and staying home, their tastes and needs have changed with rising demand for home office electronics and home exercise equipment.







#### Intel CEO sees making own chips as a matter of national security **XIOS**

- Intel CEO Pat Gelsinger is putting the pressure on the U.S. government to help subsidize chip manufacturing, insisting the current reliance on plants in Taiwan and Korea as "geopolitically unstable."
- There is bipartisan support for funding the domestic semiconductor industry, but Congress has yet to sign the check.

  The Senate has passed the CHIPS Act that includes \$52b in semiconductor investment but has yet to pass the House.
- "If the world becomes dependent on one location, that's not politically stable, right," Gelsinger said "It also isn't practical. God decided where the oil reserves are. We can decide where the fabs are."
- While many companies design chips in the United States, (including Qualcomm, AMD and Nvidia), most companies rely on Taiwan Semiconductor Manufacturing (TSMC) or Korea's Samsung to manufacture their leading-edge chips.
- Not that many years ago, the U.S. accounted for more than one-third of all semiconductor manufacturing, but only 12% are made here today. Production cost was a big factor in that shift, as other countries in Asia invested to build up their own chip industries.
- "We can't be 30% or 40% more expensive than Asia," Gelsinger said, in an argument clearly aimed at Congress. "So, help us close that gap so that we can build bigger and faster on U.S. soil."
- Gelsinger stopped short of saying that Intel can't afford its manufacturing effort without U.S. government money but did say it can go bigger and faster with that funding.
- "We're investing \$20 billion in capital this year. So, we are gonna be spending our cash flows to build labs and fabs," Gelsinger said. "But we also-- are looking for and-- seeking subsidies-- and support from governments."
- Gelsinger positioned it as a matter of the U.S. controlling its digital future. "Name anything that's more important than that to our nation." Even \$52 billion is just a down payment on what will be needed over the next several years for Intel and the U.S. to catch up. "I believe there will need to be a CHIPS Act 2, maybe a CHIPS Act 3 to fully realize this moonshot," Gelsinger said.

**ACC Comment:** It costs as much to build a chip plant in the US as it costs to build a nuclear power plant. The latter has a longer life and requires less ongoing maintenance expense. The former updates every 6 months, requiring plant updating. Investors prefer the latter.





#### The Car Shortage Is About To Get A Whole Lot Worse

- A critical element in everything from engines to bodies is in short supply
- A global shortage of magnesium could result in a near-total shutdown of the auto industry one that experts say could come by the end of this year.
- Magnesium is used in many aluminum alloys, mainly (at least in auto applications) the 5xxx, 6xxx, and 7xxx-series alloys. These are used in anywhere high strength and low weight are priorities, including: (i) body panels, (ii) fuel tanks, (iii) suspension plates, (iv) brackets, (v) brakes, (vi) engine blocks, (vii) crossmembers, (viii) axles, (ix) impact beams, (x) unibody structures and (xi) wheels.
- Essentially, you can't make cars without aluminum. You can't work with aluminum without using magnesium. And as of December, you may not be able to work with magnesium much — if at all. Amos Fletcher, analyst for Barclays, put it succinctly: "If magnesium supply stops, the entire auto industry will potentially be forced to stop."

#### 



Here's a look at the current labor shortage and what retailers are doing to attract and keep talent:

- **721,000:** The number of retail workers who guit their jobs in August, per the Bureau of Labor Statistics (BLS). The guit rate for retail was 4.7% in August, the highest since April, while the total market quit rate was 2.9%.
- 162%: The increase in retail job openings from August 2020 to August 2021, according to the BLS. Retailers only hired 911,000 workers in August, compared with 922,000 last year.
- **\$1.147 trillion:** The estimated total US retail sales during the 2021 holiday season, up 9.0% from 2020. Brick-andmortar retail sales will be \$935.79 billion, while retail ecommerce sales will reach \$211.66 billion.
- **\$3,000:** How much Amazon is offering as a sign-on bonus for US seasonal workers. The retailer wants to fill 150,000 roles, with an average starting pay of \$18 per hour.
- **49%:** The percentage of retail executives who feel increased pressure to provide employees with growth opportunities, according to an October survey by Accenture. And 83% also felt pressure to improve store environment inclusivity and workplace diversity.





### Bare shelves, no holidays... At last, a biblical kind of Christmas **theguardian**

- Christmas won't be Christmas without any presents," says Jo at the start of Little Women. BoJo is going one better.
- This Christmas, not only will there be no presents, but there will be no anything. After cancelling Christmas altogether last year, this time around he is creating a kind of half-Christmas, Christmas methadone, to ease us back into the festival. There is nothing the man will not do to get himself compared to Churchill. Thanks to his foresight and the happy accidents of the global economy, we will be able to wallow in our beloved blitz spirit, making do and mending, with a safe low dosage of consumerism to tide us over.



- There will be no PlayStation 5 under where the Christmas tree used to be. There will be no jokes in Mrs. Brown's Boys, as usual, but none in the Christmas crackers either. There's no petrol or HGV drivers, of course, but correspondents also report shortages of tennis balls, merlot, white bread, sardines, M&S chicken Kievs, fish sauce, frozen apple strudel, tinned sardines, spring onions, fire alarms, an effective opposition, chocolate Hobnobs, cat vaccines, cat worming pills, bubble bath, Leon fish-finger wraps, marmalade, butter beans, dog-poo bags, goats, crisps, decaf coffee, bulbs (plant), bulbs (light), pigs, blankets, pigs-in-blankets, roofing lead and Harry Potter merchandise, especially wands. The last is hard to take; usually there are more wands than you can shake a stick at.
- On the off-chance you manage to get to 25 December with a full tank and dodge Insulate Britain's armed roadblocks, you'll arrive at houses that are too expensive to heat. The environmentalists ought to be encouraging the free movement of cars this Christmas; there are few people more persuasive on the subject of double-glazing than a chilly mother-in-law. There won't be any turkeys, or at least not dead ones. There are plenty waddling around in barns, but there's nobody to slaughter them. For the handful that do make it to Bernard Matthews' big barn in the sky, there's nobody to drive them to the shops. In a delicious irony, there are shortages of everything except shortages.





#### Christmas shortages: Panicked parents phoning toy shops in tears trying to get hold of must-have gifts 1

- Panicked parents have broken down crying after learning that toys on their children's Christmas wish lists have already sold out because of the global shipping crisis.
- Heightened demand from shoppers combined with an "unwelcome vortex of logistical challenges" means some product lines have sold out entirely, with no more stock expected until the New Year. Other popular items such as trampolines never arrived in the first place, retailers say.
- The Entertainer toy shop chain has predicted that some of the retailer's top sellers, including a Barbie DreamHouse playset and camper van, and some Paw Patrol and L.O.L. Surprise! products, will "definitely run out" sooner rather than later but other firms have already had to turn parents away.
- Le Toy Van, a Surrey-based firm specializing in handmade toys produced in the Far East, supplies retailers including Harrods and Selfridges, and sells directly to consumers.
- Founder Steve Le Van ordered in twice as much stock as normal to see him through Christmas but has completely sold out of a range of dolls houses and wooden train sets.
- "I've had people already on the phone in tears wanting to buy a dolls house," he said. Demand is "extremely" high for October, he added.
- Even when produce and goods are available, a shortage of packaging is hampering firms when it comes to distributing their stock.

### U.S. Inflation Is Highest in 13 Years as Prices Surge 5% yahoo!

- The rapid rise in consumer prices in May reflected a surge in demand and shortages of labor and materials.
- The U.S. economy's rebound from the pandemic is driving the biggest surge in inflation in nearly 13 years, with consumer prices rising in May by 5% from a year ago. The Labor Department said last month's increase in the consumer-price index was the largest since August 2008, when the reading rose 5.4%.
- Expectations are the Federal Reserve will announce a tapering of stimulus next month, with the potential for rate hikes by mid-2022.





#### Grocery store shelves bare? These products may be hard to find amid supply chain disruptions **USATODAY**.

- As the world reaches the two-year mark of the COVID-19 pandemic, more items are becoming scarce because of a supply chain shortage across the globe.
- Fertilizer plants, which lead to the production of carbon dioxide, had to reduce their output because of rising costs, causing shortages in food and other products.
- People have substituted fast food for home-cooked comfort meals, causing chicken to become scarce.
- Brazil is a supplier of most of the world's coffee, but the country has been experiencing a drought that slowed production and transportation of coffee beans.
- Households with small children should be aware that diaper prices have increased because of increases in prices of raw materials, shipping delays and container shortages.
- A customs dispute at the U.S.-Canada border has kept the Alaska pollock, which is used for fish sticks and sandwiches, stored across the border.
- Concerns over the delta coronavirus variant have some customers buying more than usual, as Americans saw at the beginning of the pandemic, in case there is another lockdown.
- With restrictions on indoor dining, most people switched to pickup, takeout and delivery orders, limiting the supply
  of individual ketchup packets.
- Comfort foods expect shortages of Marie Callender's 10-ounce and 15-ounce pot pies. According to parent company Conagra, it would be allocating shipments through Nov. 29 after it "encountered packing material challenges from our tray and carton supplier resulting in a production interruption.
- Toilet paper only 60% of orders are being shipped out. Retailers such as Costco have reinstated purchasing limits.
- Rice Krispie Treats production has been "below service expectations," as stated in an email sent to suppliers.
- Frozen meals concerns over the delta coronavirus variant have some customers buying more than usual, as Americans saw at the beginning of the pandemic, in case there is another lockdown.
- Unilever, cited labor shortages as the reason for reducing flavors produced. The company said it will focus on producing its most popular flavors.





#### Growth in Consumer Spending = Demand for More Retail Space

- The continuing growth in consumer spending was mirrored by an increase in demand for retail space. Absorption of shopping center space accelerated from 8.9 million square feet (msf) in Q2 2021 to 15.7 msf in the third quarter, the largest volume of space to be absorbed since the fourth quarter of 2017. The increase in demand was broad-based geographically. Absorption was positive in 71 of the 81 markets tracked by Cushman & Wakefield, the highest number of markets with positive net demand since the second quarter of 2016. Among the three product types covered in this analysis, power centers (+1.1 msf of net absorption) experienced the lowest level of demand in the third quarter, compared to neighborhood centers (+11.3 msf) and strip centers (+3.4 msf).
- Leasing activity totaled 27.6 msf, down slightly from the 32.5 msf in new leasing reported in Q2 2021, but roughly the same level as Q2 2020.
- The increase in demand was met with a slowdown in new supply growth.
   Approximately 940,000 square feet of new shopping center space was completed in the third quarter, well below the 2.5 msf completed in Q2 2021 and the smallest amount of new store space completed in over 14 years.

#### SPACE DEMAND / DELIVERIES



#### **OVERALL VACANCY & ASKING RENT**



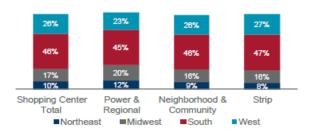
Source: CoStar, Cushman & Wakefield Research

#### SHOPPING CENTER NET ABSORPTION



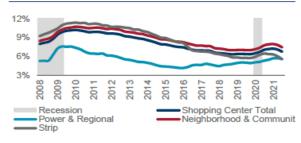
#### LEASING ACTIVITY BY REGION & TYPE, % OF TOTAL

Q3 2021



#### **VACANCY RATE BY TYPE**

Q3 2021



Source: CoStar, Cushman & Wakefield Research





| Overall (All Classes)   |         |         |         |         |          |        |         |
|-------------------------|---------|---------|---------|---------|----------|--------|---------|
| U.S. Industrial Markets | Q3 2020 | Q4 2020 | G1 2021 | Q2 2021 | Q3 2021p | Q3 2   | 021p    |
| United States           | \$6.63  | \$6.77  | \$6.86  | \$7.03  | \$7.18   | \$6.32 | \$7.05  |
| Northeast               | \$7.79  | \$7.86  | \$8.10  | \$8.18  | \$8.51   | \$8.83 | \$6.07  |
| Midwest                 | \$5.02  | \$5.18  | \$5.27  | \$5.32  | \$5.44   | \$4.42 | \$5.23  |
| South                   | \$5.51  | \$5.79  | \$5.84  | \$5.98  | \$6.11   | \$5.47 | \$5.60  |
| West                    | \$9.41  | \$9.63  | \$9.87  | \$10.27 | \$10.67  | \$9.47 | \$11.27 |

| U.S. Industrial Markets         Q3 2020         Q4 2020         Q1 2021         Q2 2021         Q3 2021p         Q3 2021p           Atlanta, GA         \$4.69         \$4.99         \$5.12         \$5.21         \$5.84         \$4.70         \$4.29           Austin, TX         \$10.57         \$11.03         \$11.32         \$11.37         \$11.24         \$10.29         N/A           Baltimore, MD         \$6.87         \$10.31         \$6.27         \$7.79         \$6.88         \$6.37         N/A           Birmangham, AL         \$5.03         \$5.32         \$5.00         \$4.94         \$4.64         \$4.23           Birmingham, AL         \$5.03         \$5.32         \$5.00         \$4.96         \$5.40         \$5.05         N/A           Bolse, ID         \$7.58         \$7.89         \$9.59         \$9.70         \$10.16         \$7.99         \$9.30           Boston, MA         \$9.35         \$9.48         \$9.10         \$8.32         \$10.98         \$7.90         \$12.89           Burfalo, NY         \$6.50         \$6.50         \$6.50         \$6.50         \$6.50         \$6.00         \$4.95           Central Valley, CA         \$6.66         \$6.30         \$6.54         \$6.41         \$6.33         \$6.  |                              |         | Ove     | rall (All Clas | ises)   |          | W/D     | MFG     |
|---|------------------------------|---------|---------|----------------|---------|----------|---------|---------|
| Austin, TX \$10.57 \$11.03 \$11.32 \$11.37 \$11.24 \$10.29 N/A Baltimore, MD \$6.87 \$10.31 \$6.27 \$7.79 \$6.88 \$6.37 N/A Binghamton, NY \$4.72 \$4.72 \$4.91 \$4.89 \$4.94 \$4.64 \$4.23 Birmingham, AL \$5.03 \$5.32 \$5.00 \$4.96 \$5.40 \$5.05 N/A Boise, ID \$7.58 \$7.89 \$9.59 \$9.70 \$10.16 \$7.99 \$9.30 Boston, MA \$9.35 \$9.48 \$9.10 \$8.32 \$10.98 \$7.90 \$12.89 Buffalo, NY \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.00 \$4.95 Central Valley, CA \$6.06 \$6.30 \$6.54 \$6.41 \$6.33 \$6.30 \$5.43 Charleston, SC \$5.65 \$5.74 \$5.74 \$5.98 \$6.10 \$5.94 \$6.40 Charlotte, NC \$5.30 \$5.23 \$5.24 \$5.76 \$6.75 \$5.33 \$9.99 Chicago, IL \$5.55 \$5.64 \$5.56 \$5.58 \$5.67 \$5.45 \$5.46 Clincinnati, OH \$4.52 \$4.44 \$4.45 \$4.42 \$4.48 \$4.39 \$3.94 Cleveland, OH \$4.00 \$4.15 \$4.24 \$4.27 \$4.42 \$4.18 N/A Colorado Springs, CO \$9.48 \$10.03 \$9.97 \$10.05 \$10.12 \$10.06 \$9.57 Columbus, OH \$4.06 \$3.95 \$4.10 \$4.37 \$4.48 \$4.28 \$4.21 Dallas/Ft. Worth, TX \$4.97 \$5.21 \$5.51 \$5.64 \$6.89 \$0.00 \$5.50 El Paso, TX \$4.85 \$4.85 \$5.00 \$5.25 \$5.35 \$5.25 \$5.25 Fort Myers/Naples, FL \$9.04 \$9.19 \$9.16 \$9.19 \$9.36 \$9.05 \$11.40   | U.S. Industrial Markets      | Q3 2020 | Q4 2020 | Q1 2021        | Q2 2021 | Q3 2021p | Q3 2    | 021p    |
| BaltImore, MD \$6.87 \$10.31 \$6.27 \$7.79 \$6.88 \$6.37 N/A BInghamton, NY \$4.72 \$4.72 \$4.91 \$4.89 \$4.94 \$4.64 \$4.23 Birmingham, AL \$5.03 \$5.32 \$5.00 \$4.96 \$5.40 \$5.05 N/A Bolse, ID \$7.58 \$7.89 \$9.59 \$9.70 \$10.16 \$7.99 \$9.30 Boston, MA \$9.35 \$9.48 \$9.10 \$8.32 \$10.98 \$7.90 \$12.89 Burtalo, NY \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.00 \$4.95 Central Valley, CA \$6.06 \$6.30 \$6.54 \$6.41 \$6.33 \$6.30 \$5.43 Charleston, SC \$5.65 \$5.74 \$5.74 \$5.98 \$6.10 \$5.94 \$6.40 Charlotte, NC \$5.30 \$5.23 \$5.24 \$5.76 \$6.75 \$5.33 \$9.99 Chicago, IL \$5.55 \$5.64 \$5.56 \$5.56 \$5.56 \$5.56 \$5.67 \$5.45 \$6.40 Cloralnati, OH \$4.52 \$4.44 \$4.45 \$4.42 \$4.48 \$4.39 \$3.94 Cleveland, OH \$4.00 \$4.15 \$4.24 \$4.27 \$4.42 \$4.18 N/A Colorado Springs, CO \$9.48 \$10.03 \$9.97 \$10.05 \$10.12 \$10.06 \$9.57 Columbus, OH \$4.06 \$3.95 \$4.10 \$4.37 \$4.48 \$4.28 \$4.21 Dallas/Ft. Worth, TX \$4.97 \$5.21 \$5.51 \$5.64 \$6.89 \$9.00 \$5.50 El Paso, TX \$4.85 \$4.85 \$5.00 \$5.25 \$5.35 \$5.25 \$5.25 Fort Myers/Naples, FL \$9.04 \$9.19 \$9.16 \$9.19 \$9.36 \$9.05 \$11.40  | Atlanta, GA                  | \$4.69  | \$4.99  | \$5.12         | \$5.21  | \$5.84   | \$4.70  | \$4.29  |
| Blinghamton, NY \$4.72 \$4.72 \$4.91 \$4.89 \$4.94 \$4.64 \$4.23 Blrmingham, AL \$5.03 \$5.32 \$5.00 \$4.96 \$5.40 \$5.05 N/A Boise, ID \$7.58 \$7.89 \$9.59 \$9.70 \$10.16 \$7.99 \$9.30 Boston, MA \$9.35 \$9.48 \$9.10 \$8.32 \$10.98 \$7.90 \$12.89 Burlfalo, NY \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$4.95 \$6.60 \$4.95 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.30 \$5.43 \$6.30 \$5.43 \$6.30 \$5.43 \$6.30 \$5.43 \$6.30 \$5.43 \$6.30 \$5.44 \$6.40 \$6.66 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.40 \$6.40 \$6.40 \$6.60 \$6.50 \$5.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.40            | Austin, TX                   | \$10.57 | \$11.03 | \$11.32        | \$11.37 | \$11.24  | \$10.29 | N/A     |
| Birmingham, AL \$5.03 \$5.32 \$5.00 \$4.96 \$5.40 \$5.05 N/A Boise, ID \$7.58 \$7.89 \$9.59 \$9.70 \$10.16 \$7.99 \$9.30 Boston, MA \$9.35 \$9.48 \$9.10 \$8.32 \$10.98 \$7.90 \$12.89 Buffalo, NY \$6.50 \$6.50 \$6.50 \$6.50 \$6.00 \$4.95 Central Valley, CA \$6.66 \$6.30 \$6.54 \$6.40 \$5.43 Charleston, SC \$5.65 \$5.74 \$5.74 \$5.98 \$6.10 \$5.94 \$6.40 Charlotte, NC \$5.30 \$5.23 \$5.24 \$5.76 \$6.75 \$5.33 \$9.99 Chicago, IL \$5.55 \$5.64 \$5.56 \$5.58 \$5.67 \$5.45 Cincinnati, OH \$4.52 \$4.44 \$4.45 \$4.42 \$4.48 \$4.39 \$3.94 Cleveland, OH \$4.00 \$4.15 \$4.24 \$4.42 \$4.42 \$4.18 N/A Colorado Springs, CO \$9.48 \$10.03 \$9.97 \$10.05 \$10.12 \$10.06 \$9.57 Columbus, OH \$4.06 \$3.95 \$4.10 \$4.37 \$4.48 \$4.28 \$4.21 Dallas/Ft. Worth, TX \$4.97 \$5.21 \$5.51 \$5.64 \$5.56 \$6.89 \$0.00 \$5.50 El Paso, TX \$4.85 \$4.85 \$5.00 \$5.25 \$5.35 \$5.25 \$5.25 Fort Myers/Naples, FL \$9.04 \$9.19 \$9.16 \$9.19 \$9.36 \$9.05 \$11.40   | Baltimore, MD                | \$6.87  | \$10.31 | \$6.27         | \$7.79  | \$6.88   | \$6.37  | N/A     |
| Bolse, ID \$7.58 \$7.89 \$9.59 \$9.70 \$10.16 \$7.99 \$9.30 Boston, MA \$9.35 \$9.48 \$9.10 \$8.32 \$10.98 \$7.90 \$12.89 Burtalo, NY \$6.50      | Binghamton, NY               | \$4.72  | \$4.72  | \$4.91         | \$4.89  | \$4.94   | \$4.64  | \$4.23  |
| Boston, MA \$9.35 \$9.48 \$9.10 \$8.32 \$10.98 \$7.90 \$12.89 Buffalo, NY \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.00 \$4.95 Central Valley, CA \$6.06 \$6.30 \$6.54 \$6.41 \$6.33 \$6.30 \$5.43 Charleston, SC \$5.65 \$5.74 \$5.74 \$5.98 \$6.10 \$5.94 \$6.40 Charlotte, NC \$5.30 \$5.23 \$5.24 \$5.76 \$6.75 \$5.33 \$9.99 Chicago, IL \$5.55 \$5.64 \$5.56 \$5.58 \$5.67 \$5.45 \$5.46 Clncinnati, OH \$4.52 \$4.44 \$4.45 \$4.42 \$4.48 \$4.39 \$3.94 Cleveland, OH \$4.00 \$4.15 \$4.24 \$4.27 \$4.42 \$4.18 N/A Colorado Springs, CO \$9.48 \$10.03 \$9.97 \$10.05 \$10.12 \$10.06 \$9.57 Columbus, OH \$4.06 \$3.95 \$4.10 \$4.37 \$4.48 \$4.28 \$4.21 Dallas/Ft. Worth, TX \$4.97 \$5.21 \$5.51 \$5.64 \$5.56 \$6.89 \$0.00 \$5.50 El Paso, TX \$4.85 \$4.85 \$4.85 \$5.00 \$5.25 \$5.35 \$5.25 \$5.                              | Birmingham, AL               | \$5.03  | \$5.32  | \$5.00         | \$4.96  | \$5.40   | \$5.05  | N/A     |
| Buffalo, NY \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.00 \$4.95 \$6.50 \$6.50 \$6.50 \$6.00 \$4.95 \$6.50 \$6.50 \$6.50 \$6.50 \$6.00 \$4.95 \$6.50 \$6.40 \$6.40 \$6.40 \$6.40 \$6.40 \$6.40 \$6.40 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.40 \$6.40 \$6.40 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.50 \$6.40  | Bolse, ID                    | \$7.58  | \$7.89  | \$9.59         | \$9.70  | \$10.16  | \$7.99  | \$9.30  |
| Central Valley, CA \$6.06 \$6.30 \$6.54 \$6.41 \$6.33 \$6.30 \$5.43 \$6.40 \$6.40 \$5.65 \$5.74 \$5.74 \$5.98 \$6.10 \$5.94 \$6.40  | Boston, MA                   | \$9.35  | \$9.48  | \$9.10         | \$8.32  | \$10.98  | \$7.90  | \$12.89 |
| Charleston, SC \$5.65 \$5.74 \$5.74 \$5.98 \$6.10 \$5.94 \$6.40 Charlotte, NC \$5.30 \$5.23 \$5.24 \$5.76 \$6.75 \$5.33 \$9.99 Chicago, IL \$5.55 \$5.64 \$5.56 \$5.58 \$5.67 \$5.35 \$9.99 Chicago, IL \$5.55 \$6.64 \$5.56 \$5.58 \$5.67 \$5.45 \$5.46 Cincinnati, OH \$4.52 \$4.44 \$4.45 \$4.42 \$4.48 \$4.39 \$3.94 Cleveland, OH \$4.00 \$4.15 \$4.24 \$4.42 \$4.42 \$4.42 \$4.18 N/A Colorado Springs, CO \$9.48 \$10.03 \$9.97 \$10.05 \$10.12 \$10.06 \$9.57 Columbus, OH \$4.06 \$3.95 \$4.10 \$4.37 \$4.48 \$4.28 \$4.21 Dallas/Ft. Worth, TX \$4.97 \$5.21 \$5.51 \$5.64 \$5.54 \$4.91 \$6.46 Denver, CO \$9.18 \$9.40 \$9.13 \$9.32 \$9.77 \$8.29 \$9.10 Detroit, MI \$6.47 \$6.45 \$6.45 \$6.45 \$6.46 \$6.89 \$0.00 \$5.50 EI Paso, TX \$4.85 \$4.85 \$5.00 \$5.25 \$5.35 \$5.25 \$5.25 Fort Myers/Naples, FL \$9.04 \$9.19 \$9.16 \$9.19 \$9.36 \$9.00 \$11.40  | Buffalo, NY                  | \$6.50  | \$6.50  | \$6.50         | \$6.50  | \$6.50   | \$6.00  | \$4.95  |
| Charlotte, NC \$5.30 \$5.23 \$5.24 \$5.76 \$6.75 \$5.33 \$9.99 \$10.02 \$1.00 \$1. | Central Valley, CA           | \$6.06  | \$6.30  | \$6.54         | \$6.41  | \$6.33   | \$6.30  | \$5.43  |
| Chicago, IL \$5.55 \$5.64 \$5.56 \$5.58 \$5.67 \$5.45 \$5.46 Cincinnati, OH \$4.52 \$4.44 \$4.45 \$4.42 \$4.48 \$4.39 \$3.94 Cleveland, OH \$4.00 \$4.15 \$4.24 \$4.27 \$4.42 \$4.18 N/A Colorado Springs, CO \$9.48 \$10.03 \$9.97 \$10.05 \$10.12 \$10.06 \$9.57 Columbus, OH \$4.06 \$3.95 \$4.10 \$4.37 \$4.48 \$4.28 \$4.21 \$4.21 \$4.28 \$4.21 \$4.29 \$4.29 \$4.29 \$4.29 \$4.20 \$            | Charleston, SC               | \$5.65  | \$5.74  | \$5.74         | \$5.98  | \$6.10   | \$5.94  | \$6.40  |
| Clincinnati, OH         \$4.52         \$4.44         \$4.45         \$4.42         \$4.48         \$4.39         \$3.94           Cleveland, OH         \$4.00         \$4.15         \$4.24         \$4.27         \$4.42         \$4.18         N/A           Colorado Springs, CO         \$9.48         \$10.03         \$9.97         \$10.05         \$10.12         \$10.06         \$9.57           Columbus, OH         \$4.06         \$3.95         \$4.10         \$4.37         \$4.48         \$4.28         \$4.21           Dallas/Ft. Worth, TX         \$4.97         \$5.21         \$5.51         \$5.64         \$5.54         \$4.91         \$6.46           Denver, CO         \$9.18         \$9.40         \$9.13         \$9.32         \$9.77         \$8.29         \$9.10           Detroit, MI         \$6.47         \$6.45         \$6.46         \$6.89         \$0.00         \$5.50           El Paso, TX         \$4.85         \$4.85         \$5.00         \$5.25         \$5.35         \$5.25         \$5.25           Fort Myers/Naples, FL         \$9.04         \$9.19         \$9.16         \$9.19         \$9.36         \$9.05         \$11.40   | Charlotte, NC                | \$5.30  | \$5.23  | \$5.24         | \$5.76  | \$6.75   | \$5.33  | \$9.99  |
| Cleveland, OH         \$4.00         \$4.15         \$4.24         \$4.27         \$4.42         \$4.18         N/A           Colorado Springs, CO         \$9.48         \$10.03         \$9.97         \$10.05         \$10.12         \$10.06         \$9.57           Columbus, OH         \$4.06         \$3.95         \$4.10         \$4.37         \$4.48         \$4.28         \$4.21           Dallas/Ft. Worth, TX         \$4.97         \$5.21         \$5.51         \$5.64         \$5.54         \$4.91         \$6.46           Denver, CO         \$9.18         \$9.40         \$9.13         \$9.32         \$9.77         \$8.29         \$9.10           Detroit, MI         \$6.47         \$6.45         \$6.46         \$6.89         \$0.00         \$5.50           EI Paso, TX         \$4.85         \$4.85         \$5.00         \$5.25         \$5.35         \$5.25         \$5.25           Fort Myers/Naples, FL         \$9.04         \$9.19         \$9.16         \$9.19         \$9.36         \$9.05         \$11.40  | Chicago, IL                  | \$5.55  | \$5.64  | \$5.56         | \$5.58  | \$5.67   | \$5.45  | \$5.46  |
| Colorado Springs, CO         \$9.48         \$10.03         \$9.97         \$10.05         \$10.12         \$10.06         \$9.57           Columbus, OH         \$4.06         \$3.95         \$4.10         \$4.37         \$4.48         \$4.28         \$4.21           Dallas/Ft. Worth, TX         \$4.97         \$5.21         \$5.51         \$5.64         \$5.54         \$4.91         \$6.46           Denver, CO         \$9.18         \$9.40         \$9.13         \$9.32         \$9.77         \$8.29         \$9.10           Detroit, MI         \$6.47         \$6.45         \$6.45         \$6.46         \$6.89         \$0.00         \$5.50           EI Paso, TX         \$4.85         \$4.85         \$5.00         \$5.25         \$5.35         \$5.25         \$5.25           Fort Myers/Naples, FL         \$9.04         \$9.19         \$9.16         \$9.19         \$9.36         \$9.05         \$11.40   | Cincinnati, OH               | \$4.52  | \$4.44  | \$4.45         | \$4.42  | \$4.48   | \$4.39  | \$3.94  |
| Columbus, OH         \$4.06         \$3.95         \$4.10         \$4.37         \$4.48         \$4.28         \$4.21           Dallas/Ft. Worth, TX         \$4.97         \$5.21         \$5.51         \$5.64         \$5.54         \$4.91         \$6.46           Denver, CO         \$9.18         \$9.40         \$9.13         \$9.32         \$9.77         \$8.29         \$9.10           Detroit, Mi         \$6.47         \$6.45         \$6.45         \$6.46         \$6.89         \$0.00         \$5.50           EI Paso, TX         \$4.85         \$4.85         \$5.00         \$5.25         \$5.35         \$5.25           Fort Myers/Naples, FL         \$9.04         \$9.19         \$9.16         \$9.19         \$9.36         \$9.05         \$11.40  | Cleveland, OH                | \$4.00  | \$4.15  | \$4.24         | \$4.27  | \$4.42   | \$4.18  | N/A     |
| Dallas/Ft. Worth, TX     \$4.97     \$5.21     \$5.51     \$5.64     \$5.54     \$4.91     \$6.46       Denver, CO     \$9.18     \$9.40     \$9.13     \$9.32     \$9.77     \$8.29     \$9.10       Detroit, MI     \$6.47     \$6.45     \$6.45     \$6.46     \$6.89     \$0.00     \$5.50       El Paso, TX     \$4.85     \$4.85     \$5.00     \$5.25     \$5.35     \$5.25     \$5.25       Fort Myers/Naples, FL     \$9.04     \$9.19     \$9.16     \$9.19     \$9.36     \$9.05     \$11.40   | Colorado Springs, CO         | \$9.48  | \$10.03 | \$9.97         | \$10.05 | \$10.12  | \$10.06 | \$9.57  |
| Denver, CO         \$9.18         \$9.40         \$9.13         \$9.32         \$9.77         \$8.29         \$9.10           Detroit, MI         \$6.47         \$6.45         \$6.45         \$6.46         \$6.89         \$0.00         \$5.50           EI Paso, TX         \$4.85         \$4.85         \$5.00         \$5.25         \$5.35         \$5.25           Fort Myers/Naples, FL         \$9.04         \$9.19         \$9.16         \$9.19         \$9.36         \$9.05         \$11.40  | Columbus, OH                 | \$4.06  | \$3.95  | \$4.10         | \$4.37  | \$4.48   | \$4.28  | \$4.21  |
| Detroit, MI         \$6.47         \$6.45         \$6.45         \$6.46         \$6.89         \$0.00         \$5.50           El Paso, TX         \$4.85         \$4.85         \$5.00         \$5.25         \$5.35         \$5.25           Fort Myers/Naples, FL         \$9.04         \$9.19         \$9.16         \$9.19         \$9.36         \$9.05         \$11.40  | Dallas/Ft. Worth, TX         | \$4.97  | \$5.21  | \$5.51         | \$5.64  | \$5.54   | \$4.91  | \$6.46  |
| El Paso, TX \$4.85 \$4.85 \$5.00 \$5.25 \$5.35 \$5.25 \$5.25 Fort Myers/Naples, FL \$9.04 \$9.19 \$9.16 \$9.19 \$9.36 \$9.05 \$11.40  | Denver, CO                   | \$9.18  | \$9.40  | \$9.13         | \$9.32  | \$9.77   | \$8.29  | \$9.10  |
| Fort Myers/Naples, FL \$9.04 \$9.19 \$9.16 \$9.19 \$9.36 \$9.05 \$11.40   | Detroit, MI                  | \$6.47  | \$6.45  | \$6.45         | \$6.46  | \$6.89   | \$0.00  | \$5.50  |
|   | El Paso, TX                  | \$4.85  | \$4.85  | \$5.00         | \$5.25  | \$5.35   | \$5.25  | \$5.25  |
| Fredericksburg, VA \$6.25 \$6.27 \$6.83 \$6.80 \$6.72 \$6.12  | Fort Myers/Naples, FL        | \$9.04  | \$9.19  | \$9.16         | \$9.19  | \$9.36   | \$9.05  | \$11.40 |
|   | Fredericksburg, VA           | \$6.25  | \$6.27  | \$6.27         | \$6.83  | \$6.80   | \$6.72  | \$6.12  |
| Ft. Lauderdale, FL \$9.91 \$9.68 \$9.80 \$10.01 \$10.27 \$9.69 \$11.51  | Ft. Lauderdale, FL           | \$9.91  | \$9.68  | \$9.80         | \$10.01 | \$10.27  | \$9.69  | \$11.51 |
| Greensboro/Winston-Salem, NC \$3.87 \$3.88 \$4.01 \$4.06 \$4.08 \$4.19 \$3.68   | Greensboro/Winston-Salem, NC | \$3.87  | \$3.88  | \$4.01         | \$4.06  | \$4.08   | \$4.19  | \$3.68  |
| Greenville, SC \$4.02 \$4.09 \$4.09 \$4.04 \$3.91 \$3.66  | Greenville, SC               | \$4.02  | \$4.06  | \$4.09         | \$4.07  | \$4.04   | \$3.91  | \$3.66  |
| Hampton Roads, VA \$5.68 \$5.80 \$5.96 \$6.11 \$6.29 \$5.66 \$6.02  | Hampton Roads, VA            | \$5.68  | \$5.80  | \$5.96         | \$6.11  | \$6.29   | \$5.66  | \$6.02  |
| Hartford, CT \$5.51 \$5.49 \$5.51 \$5.61 \$5.30 \$5.18 \$4.94   | Hartford, CT                 | \$5.51  | \$5.49  | \$5.51         | \$5.61  | \$5.30   | \$5.18  | \$4.94  |
| Houston, TX \$6.12 \$6.28 \$6.30 \$6.36 \$6.46 \$6.01 \$7.29  | Houston, TX                  | \$6.12  | \$6.28  | \$6.30         | \$6.36  | \$6.46   | \$6.01  | \$7.29  |
| Indianapolis, IN \$4.62 \$4.60 \$4.64 \$4.89 \$4.70 \$4.36 \$4.12   | Indianapolis, IN             | \$4.62  | \$4.60  | \$4.64         | \$4.89  | \$4.70   | \$4.36  | \$4.12  |
| Inland Empire CA \$8.65 \$9.84 \$9.73 \$9.31 \$11.26 \$11.54 \$9.60   | Inland Empire CA             | \$8.65  | \$9.84  | \$9.73         | \$9.31  | \$11.26  | \$11.54 | \$9.60  |
| Jacksonville, FL \$5.35 \$5.07 \$5.07 \$5.43 \$5.46 \$5.21 \$4.57   | Jacksonville, FL             | \$5.35  | \$5.07  | \$5.07         | \$5.43  | \$5.46   | \$5.21  | \$4.57  |
| Kansas City, MO \$4.25 \$4.31 \$4.25 \$4.46 \$4.59 \$3.93 \$3.72  | Kansas City, MO              | \$4.25  | \$4.31  | \$4.25         | \$4.46  | \$4.59   | \$3.93  | \$3.72  |
| Lakeland, FL \$5.29 \$5.32 \$5.26 \$5.29 \$5.33 N/A   | Lakeland, FL                 | \$5.29  | \$5.32  | \$5.26         | \$5.29  | \$5.33   | \$5.33  | N/A     |
| Las Vegas, NV \$9.38 \$9.01 \$9.46 \$10.50 \$10.30 \$9.21 \$9.20  | Las Vegas, NV                | \$9.38  | \$9.01  | \$9.46         | \$10.50 | \$10.30  | \$9.21  | \$9.20  |
| Long Island, NY \$10.90 \$11.64 \$12.06 \$12.12 \$12.45 \$12.22 \$13.30   | Long Island, NY              | \$10.90 | \$11.64 | \$12.06        | \$12.12 | \$12.45  | \$12.22 | \$13.30 |
| Los Angeles, CA \$11.39 \$11.70 \$11.89 \$12.71 \$13.27 \$12.15 \$12.51   | Los Angeles, CA              | \$11.39 | \$11.70 | \$11.89        | \$12.71 | \$13.27  | \$12.15 | \$12.51 |
| Louisville, KY \$4.14 \$4.20 \$4.24 \$4.25 \$4.52 \$4.51 \$3.62   | Louisville, KY               | \$4.14  | \$4.20  | \$4.24         | \$4.25  | \$4.52   | \$4.51  | \$3.62  |
| Memphls, TN \$3.42 \$3.61 \$3.46 \$3.50 \$3.53 \$3.39 \$3.69  | Memphis, TN                  | \$3.42  | \$3.61  | \$3.46         | \$3.50  | \$3.53   | \$3.39  | \$3.69  |
| Miami, FL \$8.57 \$8.68 \$9.04 \$9.24 \$9.17 \$8.84 \$7.58  | Mlaml, FL                    | \$8.57  | \$8.68  | \$9.04         | \$9.24  | \$9.17   | \$8.84  | \$7.58  |
| Milwaukee, WI \$4.42 \$4.58 \$4.49 \$4.61 \$4.43 \$4.09 \$4.43  | Milwaukee, WI                | \$4.42  | \$4.58  | \$4.49         | \$4.61  | \$4.43   | \$4.09  | \$4.43  |
| Minneapolis, MN \$5.10 \$6.71 \$7.11 \$7.06 \$7.19 \$6.07 \$7.64  | Minneapolis, MN              | \$5.10  | \$6.71  | \$7.11         | \$7.06  | \$7.19   | \$6.07  | \$7.64  |

| \$9.07                             | \$10.27 |         |                | \$10.67 |          | \$9.47  | \$11.27 |
|------------------------------------|---------|---------|----------------|---------|----------|---------|---------|
|                                    |         | Ove     | rall (All Clas | ses)    |          | W/D     | MFG     |
| U.S. Industrial Markets            | Q3 2020 | Q4 2020 | Q1 2021        | Q2 2021 | Q3 2021p |         | 021p    |
| Nashville, TN                      | \$5.38  | \$5.82  | \$5.12         | \$4.87  | \$5.05   | \$4.91  | \$4.24  |
| New Haven, CT                      | \$6.54  | \$6.59  | \$6.34         | \$6.24  | \$6.32   | \$5.58  | \$6.14  |
| New Jersey - Central               | \$9.10  | \$9.72  | \$11.13        | \$11.34 | \$11.22  | \$10.20 | \$7.58  |
| New Jersey - Northern              | \$9.86  | \$10.14 | \$10.37        | \$10.34 | \$10.94  | \$11.02 | \$8.90  |
| Northern VA                        | \$11.30 | \$11.43 | \$11.89        | \$11.88 | \$11.99  | \$9.94  | N/A     |
| NY Outer Boroughs                  | \$21.06 | \$20.15 | \$20.05        | \$20.04 | \$19.96  | \$19.59 | \$16.50 |
| Oakland/East Bay, CA               | \$11.94 | \$11.76 | \$11.81        | \$12.16 | \$11.88  | \$10.81 | \$13.22 |
| Omaha, NE                          | \$6.40  | \$6.50  | \$6.49         | \$6.46  | \$6.53   | \$5.95  | \$11.00 |
| Orange County, CA                  | \$12.13 | \$12.71 | \$14.37        | \$14.89 | \$15.24  | \$15.66 | \$13.64 |
| Orlando, FL                        | \$6.93  | \$7.17  | \$7.41         | \$7.68  | \$8.21   | \$7.30  | \$7.85  |
| Palm Beach County, FL              | \$10.20 | \$10.13 | \$10.38        | \$10.41 | \$11.07  | \$10.05 | \$8.56  |
| PA I-81/I-78 Distribution Corridor | \$5.02  | \$5.03  | \$5.05         | \$5.13  | \$5.14   | \$5.19  | \$3.75  |
| Philadelphia, PA                   | \$6.03  | \$6.35  | \$6.95         | \$6.93  | \$7.09   | \$7.25  | \$6.23  |
| Phoenix, AZ                        | \$7.49  | \$7.71  | \$7.86         | \$7.96  | \$9,21   | \$7.42  | \$9.27  |
| Pittsburgh, PA                     | \$6.11  | \$6.25  | \$6.58         | \$6.70  | \$6.66   | \$6.39  | \$5.41  |
| Portland, OR                       | \$9.13  | \$9.24  | \$8.78         | \$9.49  | \$9.24   | \$9.20  | \$9.22  |
| Providence, RI                     | \$4.85  | \$4.85  | \$5.75         | \$6.25  | \$6.25   | \$6.50  | N/A     |
| Puget Sound - Eastside             | \$15.25 | \$15.06 | \$14.33        | \$15.72 | \$15.59  | \$11.49 | \$11.04 |
| Raleigh/Durham, NC                 | \$6.48  | \$8.00  | \$8.08         | \$9.57  | \$11.65  | \$5.08  | N/A     |
| Reno, NV                           | \$5.64  | \$6.36  | \$5.88         | \$6.72  | \$6.84   | \$5.88  | \$8.40  |
| Richmond, VA                       | \$4.68  | \$4.66  | \$4.54         | \$5.09  | \$5.22   | \$5.15  | \$5.13  |
| Roanoke, VA                        | \$4.30  | \$4.27  | \$4.29         | \$4.45  | \$4.60   | \$4.06  | \$6.43  |
| Rochester, NY                      | \$5.40  | \$5.40  | \$5.40         | \$5.40  | \$5.40   | \$4.00  | \$4.75  |
| Sacramento, CA                     | \$6.72  | \$6.84  | \$7.29         | \$8.59  | \$9.19   | \$9.33  | \$7.69  |
| Salt Lake City, UT                 | \$6.34  | \$6.37  | \$6.76         | \$7.23  | \$7.02   | \$6.86  | \$7.19  |
| San Antonio, TX                    | \$5.49  | \$5.45  | \$5.97         | \$5.93  | \$6.21   | \$5.64  | \$4.61  |
| San Diego, CA                      | \$13.12 | \$13.24 | \$13.61        | \$14.21 | \$14.61  | \$11.18 | \$14.49 |
| San Francisco North Bay, CA        | \$14.27 | \$14.62 | \$14.68        | \$14.84 | \$15.21  | \$14.21 | \$15.16 |
| San Francisco Peninsula, CA        | \$18.14 | \$18.18 | \$19.19        | \$20.14 | \$20.58  | \$19.66 | \$30.06 |
| San Jose (Silicon Valley), CA      | \$13.76 | \$13.77 | \$14.07        | \$15.12 | \$14.98  | \$12.41 | \$17.52 |
| Savannah, GA                       | \$5.08  | \$5.06  | \$5.11         | \$5.12  | \$5.30   | \$5.18  | N/A     |
| Seattle, WA                        | \$8.79  | \$8.92  | \$9.74         | \$10.04 | \$9.97   | \$9.10  | \$10.37 |
| Southern New Hampshire             | \$6.69  | \$7.70  | \$7.64         | \$7.89  | \$8.16   | \$7.72  | \$5.60  |
| St. Louis, MO                      | \$4.71  | \$4.79  | \$5.03         | \$5.02  | \$5.25   | \$4.97  | \$4.52  |
| St. Petersburg/Clearwater, FL      | \$6.87  | \$6.62  | \$6.66         | \$7.19  | \$8.45   | \$6.89  | \$7.78  |
| Suburban MD                        | \$10.75 | \$10.87 | \$11.13        | \$11.17 | \$11.59  | \$10.30 | N/A     |
| Syracuse, NY                       | \$4.66  | \$4.63  | \$4.91         | \$5.78  | \$5.80   | \$5.79  | \$5.07  |
| Tampa, FL                          | \$6.31  | \$6.51  | \$6.08         | \$6.56  | \$6.38   | \$5.49  | \$4.72  |
| Tucson, AZ                         | \$6.42  | \$6.64  | \$6.56         | \$7.15  | \$7.50   | \$5.97  | \$6.40  |
| Tulsa, OK                          | \$5.20  | \$5.24  | \$5.02         | \$5.01  | \$5.03   | \$5.43  | \$4.81  |







#### Space in its markets "effectively sold out," Prologis CEO says | FREIGHT WAVES

- The world's largest logistics warehouse operator said publicly on Friday what everyone has sensed and experienced for many months: There is no more space to be had, at least right now.
- Prologis Chairman and CEO Hamid R. Moghadam said in the San Francisco-based ¾ earnings report that "space in our markets is effectively sold out." Given that Prologis operates 995 million square feet of logistics warehouse space in 19 countries, that represents a lot of markets.
- The company's third-quarter results were "underpinned by record increases in market rents and valuations, Moghadam said. Vacancy rates are at "unprecedented lows," he added.

#### Freight railroads support bottleneck relief at port terminals FREIGHTWAVES

- The U.S. freight rail industry is praising public and private measures encouraging supply chain partners to adopt operational practices that are 24 hours a day, seven days a week in order to relieve bottlenecks in the supply chain.
- "Railroads have long been 24/7 operations and have remained a resilient, vital part of keeping goods moving across the nation during this challenging time," said Ian Jefferies, president of the Association of American Railroads.
- The ports of Los Angeles and Long Beach, retailers such as Walmart and parcel carriers FedEx and UPS have said they are expanding container operations to help open capacity and address the bottlenecks at port terminals.
- The plans to expand operations come as President Joe Biden discussed transportation challenges with supply chain stakeholders in a virtual meeting on Wednesday.
- To address the supply chain congestion, the freight railroads have taken steps such as increasing coordination across railroads in busy hubs, rerouting traffic, increasing storage capacity to offload containers, working with trucking partners to move shipments from intermodal terminals to warehouses, facilitating on-property chassis pools and offering incentives to customers that can work on the weekends, according to AAR.

**ACC Comment:** Now if they can maintain these practices as normal codes of action, it may provide national supply chain relief. But it still does not address the longer-term capital and interstate cooperation and mutual inter-support that is needed for long-term U.S. import/export competitiveness.



the entity

from



### **Supply Chain Update**

### Texas high-speed rail investors form station development company Progressive

Texas high-speed rail investors intend to form an entity that will develop train stations in Dallas, Houston and Grimes County near College Station, where the permitted high-speed rail line terminals will be located.

- To be known as the Texas High-Speed Rail Station Development Corp. (SDC), will be independently owned by a consortium of Texas investors and separate Texas Central.
- Cadiz Riverfront Holdings and Cadiz Development Houston LLC will form SDC and be led by John Kleinheinz and Jack Matthews. The group owns approximately 52 acres in the Cedars neighborhood just south of downtown Dallas; approximately 45 acres in Houston formerly known as the Northwest Mall approximately 59 acres in Grimes County near College Station.
- The parcels owned by this group include the sites of the future Texas high-speed rail stations, as approved by federal and state authorities and the surrounding developable acreage.

# First Ukraine export train on its way to China RailFreight.com



- The first export train from Ukraine to China commenced a few days ago, and it's on its way. It departed from the Lisky container terminal in Kiyv, and its destination is Xi'an. This is a historically significant development since there have been no export trains from the Eastern-European country to China before.
- The train consists of 43 40-foot containers carrying lumber. In total, Ukraine has received 52 trains from China so far. The country is steadily attempting to establish itself as a New Silk Road transit and final destination, while the first east-bound train is undoubtedly a milestone.
- At present, Ukraine cannot make full use of the factor of their geographical location because Ukrainian railway and port infrastructure is still outdated," said Ukrainian infrastructure minister Oleksandr Kubrakov.

**ACC Comment:** The Ukraine produces approximately  $\frac{2}{3}$ 's of world sunflower oil production. This opening of a land-based export channel potentially represents a looming change in global sunflower oil availability. China is moving away from reused cooking oil due to the toxicity in this unhealthy practice. Chinese companies are aggressively acquiring olive oil milling and bottling companies to replace the recycled oil now being banned – sunflower oil to follow suite?





#### Just-in-Time Economy Becoming a Problem for Europe, Lagarde Says SupplyChainBrain

- European Central Bank President Christine Lagarde warned that the globalized nature of the euro area's economy makes it highly vulnerable to systemic shocks from supply chain disruptions.
- "There are signs that the global economy could increasingly be a source of shocks for Europe rather than a stabilizer against volatility," Lagarde said.
- Bottlenecks affect the "euro area more than other economies by virtue of our exposure to globalization," she said.
- In the 2021 Per Jacobsson Lecture at the International Monetary Fund on Saturday, Lagarde highlighted an issue that's currently upending world commerce, from shipping to semiconductors to food.
- The just-in-time inventory management that has ruled global trade for decades is "highly vulnerable to systemic shocks," Lagarde said.
- This "imported volatility" might increase rather than decrease, she said.
- Lagarde said the dynamics of international trade may shift as more firms end up holding permanently higher inventories as an insurance policy against disruptions.

#### Dream of Lao people coming true as bullet train for China-Laos railway arrives in Vientiane



 The electric multiple unit (EMU) train was officially delivered to the Laos-China Railway Co., Ltd., a joint venture in charge of the railway's construction and operation, at a handover ceremony in the newly-built China-Laos Railway Vientiane Station with the attendance of Chinese Ambassador to Laos Jiang Zaidong and Lao Minister of Public Works and Transport Viengsavath Siphandone.







CEOs Expect Supply Chain Leaders to Balance Optimization and Business Growth Gartner

CEOs and business executives anticipate that some sort of economic boom lies ahead. They expect their chief supply chain officers (CSCOs) to ensure supply chains are optimized, resilient, and ready to enable business growth, according to the annual Gartner CEO and Senior Business Executive Survey. More than two-thirds of CEOs plan to use the current disruption as an opportunity to focus on redesigning the business. Meanwhile 80% in supply chain-intensive industries plan to increase investments in digital capabilities coupled with expectations that these investments will deliver a 2% boost to operating margins.



### 80,000 shipping containers piled in Port of Savannah yahoo!

- The Port of Savannah is approaching crisis point. It has nearly 80,000 containers 50% more than normal stacked up. About 700 containers have been left there for a month or more. In September, 4,500 containers sat in the port for weeks, waiting to be collected by the trucks or boats that take them to their next destination.
- These issues have become common in ports around the world. After falling shipping demand in the first half of 2020, a surge at the end of that year led to delays, port traffic jams, and blockages across the supply chain. A lack of shipping containers and dock workers made it worse. Now, containers are getting jammed up in ports because of both rising demand and a continuing shortage of staff to unload them and take them to their destination.
- The traffic jam in Savannah shows no signs of easing up, Griff Lynch, who oversees the port and is executive director
  of the Georgia Ports Authority, said.
- "The supply chain is overwhelmed and inundated ... It's not sustainable at this point," he told news.yahoo.com. The fact 4,500 containers sat for weeks in September was "bordering on ridiculous," he said.





### Putting high port volumes into perspective (C.H. ROBINSON

Here's a rough estimate of the load volumes at the LA/LB ports and how it converts to truckload service.

- On average, each ocean vessel carries ~8,000 twenty-foot equivalent units (TEUs). While not a direct comparison, roughly 2.5 TEUs fit in a single 53' trailer/container. Using these rough estimates:
  - 1 ocean vessel carries ~3,200 truckload or intermodal loads
  - 70 anchored vessels carry 224,000 truckload or intermodal loads
  - ~200,000 TEUs (this number varies) are in the terminal already, equating to an additional ~80,000 53' loads
- In August, the Los Angeles/Long Beach volumes were ~840,000 TEUs, which roughly converts to 336,000 truckload or intermodal loads for the month (~84,000 weekly loads). Typically, 17 container ships arrive in Los Angeles every three days on average, so resolving the backlog will take a significant amount of time.

**ACC Comment:** Longer intermodal car trains hold 200 containers each, double-stacked 400 per train. That requires 1,050 trains to remove these cans from the port area. On the US east cost, most road bridges do not allow doublestacked trains to pass underneath, causing a request to Congress for additional infrastructural funding (\$97B) to adapt.

#### Idle containers Bloomberg

- Intermodal, like other modes, faces the situation of containers that are not in the right locations. This is caused by an imbalance of imports and exports, loaded containers being used as storage, and the ongoing truck and chassis shortages across the country. All these factors are limiting the effectiveness of terminals.
  - Intermodal containers as storage strategies For some companies, holding inventory in containers at a port is cheaper than current warehouse costs. In other instances, it may be the only option for storage. According to WSJ citing Cushman and Wakefield PLC, "about 98% of warehouses in Southern California's logistics-heavy Inland Empire region are fully occupied, and the entire Western U.S. has a 3.6% vacancy rate." Source: The Wall Street Journal
  - Intermodal container dwell times increase Dwell time for containers at 11 major railroad depots in September averaged 9.8 days. This is up significantly from 6.7 days in May and 5.9 days in February. The dwell time for containers in Los Angeles reached almost 16 days.





### Trapped trailers (C.H. ROBINSON

- As in IM, trapped/loaded trailers continue to be an issue for truckload. The practice of using trailers and containers on chassis as variable storage continues to create challenges for fully optimizing the shared fleet across modes.
- These insights from carriers and an analyst explain the impact of low trailer utilization:
  - Potential capacity increase from optimization: "...capacity could increase 3% to 4% if trailers were turned efficiently ... said Derek Leathers of Werner"
  - Trailers are used past normal retirement dates: A major LTL carrier shared they are running trailers past normal retirement dates due to capacity needs and an inability to find new trailers to replace aging ones.
  - Trailer orders and production remain flat: U.S. trailer orders recovered to 13,600 units. Most original equipment manufacturers are not entering orders for 2022 yet. Production was flat on a per-day basis. The industry is in a holding pattern until the supply chain improves.
  - Trailer productivity continues to diminish: Productivity of trailers continues to worsen as measured by ton miles per active trailer: This metric is expected to deteriorate further with a forecast down 4.8% from the Q2 2020 by this time next year.
    - ❖ Q3 was down 1.2% as compared to pre-pandemic levels.
    - Q3 was down 3.5% as compared to Q2 2020.
  - Addressing these issues and increasing capacity requires a faster rate of turning equipment and strategies to free up trapped trailers, containers, and chassis from being used as short- and long-term variable storage.

### Wells Fargo gives bearish bond outlook, cites supply chain bottlenecks and inflation as key risks NEC



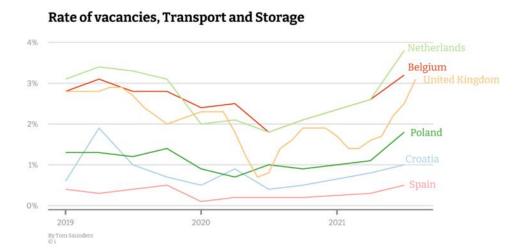
- Inflation, whipped up by the supply chain crisis, will push bond yields higher over the next several weeks, according to Wells Fargo Securities' Michael Schumacher.
- The firm's head of macro strategy believes the benchmark 10-year Treasury Note yield could reach 1.9% before year-end — a 23% jump from Wednesday's close.
- "Number one is inflation. It's everywhere," he told CNBC's "Trading Nation" on Wednesday.





### Lack of parking, fines for breaks and general circumstances turns drivers away from UK 1

- Drivers and unions have warned that facilities and working conditions in the UK are inferior to those in Europe and that the UK's supply chain crisis will not be eased until facilities and working conditions catch up with the rest of Europe. At this point in time, the UK has a shortage of more than 100,000 qualified drivers, and its level of vacancies is rising faster than those on the continent as well.
- Although data from the EU's labor force survey has shown that vacancies in the transport and shortage sector are increasing in almost every country in Europe, the problem has increased most dramatically in the UK, where the vacancy rate has almost doubled from 1.7% at the start of the year to 3.1% by August.
- Multiple factors have contributed to the shortage. For instance, drivers stated they are forced to pay for overnight spaces or park in lay-bys where they are not covered by insurance due to a shortage of service stations, and facilities such as showers, toilets, and cafés are far inferior to countries such as France and Germany.
- The European Transport Workers Federation General Secretary, Livia Spera, said: "In general parking areas are in a very bad state everywhere. We have been lobbying for change for at least ten years. There are not enough facilities, and those that are available are in a very bad state."







#### How fast can LA clear out its ships? American Shipper

- Now that the ports of Los Angeles and Long Beach have moved to 24/7 operations, pressure is mounting to reduce the backlog of ships at anchor in San Pedro Bay.
- But more coordination will be required among the links in the Southern California supply chain before that can happen. And with 25 more container ships filled with holiday inventory from Asia scheduled to anchor within the next three days, results have to come fast.
- As part of the 24/7 plan, instead of waiting for cargo owners to pick up their cargo when they are ready a "pull system" the ports are using a "push system" to identify cargo owners and get them to pick up their containers.
- "It also means getting commitments from the liner shipping companies to have an equal number of exports and empty containers returned to give truckers the round-trip economics they need and reduce gate turn times," said Port of Los Angeles Executive Director Gene Seroka at a press conference on Thursday.
- "In effect, if we can continue to push out this cargo like we've shown in early days with our rail partners on the trucking side, that will give us more room on the terminal to bring in these ships even quicker."
- Many of the 18,000 truck drivers who haul the containers in and out of the ports and adjacent container yards are not yet convinced of the potential of the ports' 24/7 push system. Commenting on the plan at the Port of LA, announced on Wednesday by President Biden, the Harbor Trucking Association, which represents drayage truckers, said alleviating the congestion and reducing ship backlogs will not be accomplished merely by moving to 24/7 operations.
- "It should be noted that thousands of empty containers sitting in motor carrier yards on top of chassis are unable to be returned into the port complex because of overly restrictive appointment requirements," the association said.
- At the same time, however, exports at the port were at record lows. Outbound loaded containers at the port fell to 76,000 TEUs, a 42% drop compared to last year and the lowest since 2002. The ratio of imports to exports came in at a high of 6:1, the widest monthly gap recorded at the port.
- John Porcari, who is coordinating the move to 24/7 operations as port envoy to Biden's Supply Chain Disruptions Task Force, said that getting major big-box retailers to commit to 24/7 operations for at least the next 90 days represents the other half of the solution to clearing out the ports. He believes the change represents a "nationwide" opportunity.





#### Trans-Atlantic carriers diverting from congested Savannah to Charleston in Joc.com



- Three ocean carriers have decided to temporarily switch US calls to Charleston instead of Savannah as more than 20 vessels are anchored off the Georgia port.
- Savannah switches to fixed receiving dates for exports
- The Georgia Ports Authority has begun offering fixed earliest receiving dates (ERDs) and will sync up cutoff dates with ocean carriers to address two of the top concerns of exporters in Savannah.

#### Ex-Seattle trucking rates leap on congestion, container shortages JOC.com



A flood of imports into the Pacific Northwest is boosting spot truckload rates out of Seattle as shippers facing delays and intermodal container shortages seek new routes for freight moving inland.

## Moody's Analytics has warned that problems "will likely get worse before they get better." Moody's Analytics



- "As the global economic recovery continues to gather steam, what is increasingly apparent is how it will be stymied by supply-chain disruptions that are now showing up at every corner," Moody's wrote in a report.
- How long before things return to normal? "We are in for at least four to six months for it to actually catch a break," said Nick Vyas, executive director at the Kendrick Global Supply Chain Management Institute at University of Southern California Marshall School of Business.

#### Brexit: Drop in UK-EU trade hits smaller businesses as they are forced to shun exports CITYA.M.

- A fall in trade between the UK and EU shows UK small and medium sized enterprises are increasingly shunning EU exports.
- The latest data from the Office for National Statistics shows a second consecutive monthly fall in trade, with the effects of Brexit and the global pandemic resulting in the total exports of goods, excluding precious metals, falling by £1.3bn, or 4.6 per cent in August 2021. This was in part due to a £0.6bn, or 4.3 per cent, fall in exports to the EU.
- Total exports of goods, excluding precious metals, in the three months to August 2021 decreased by £1.2bn, or 1.5 per cent.





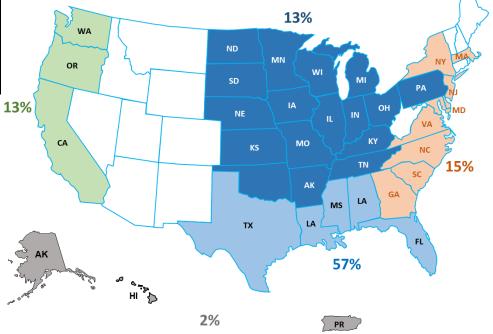
#### America's top 50 power ports – based on tonnages

|    | Port                             | Total tons |  |    | Port                        | Total tons |  |
|----|----------------------------------|------------|--|----|-----------------------------|------------|--|
| 1  | Houston, TX                      | 284.9      |  | 26 | Valdez, AK                  | 25.2       |  |
| 2  | South Louisiana, LA              | 233.0      |  | 27 | Charleston, SC              | 24.6       |  |
| 3  | New York, NY and NJ              | 136.6      |  | 28 | Port Everglades, FL         | 24.0       |  |
| 4  | Corpus Christi, TX               | 111.2      |  | 29 | Seattle, WA                 | 23.0       |  |
| 5  | Beaumont, TX                     | 101.1      |  | 30 | Pittsburgh, PA              | 21.8       |  |
| 6  | New Orleans, LA                  | 92.2       |  | 31 | Tacoma, WA                  | 21.5       |  |
| 7  | Long Beach, CA                   | 80.7       |  | 32 | Portland, OR                | 19.4       |  |
| 8  | Baton Rouge, LA                  | 73.4       |  | 33 | Oakland, CA                 | 19.3       |  |
| 9  | Los Angeles, CA                  | 63.0       |  | 34 | Paulsboro, NJ               | 18.4       |  |
| 10 | Virginia, VA                     | 61.7       |  | 35 | Jacksonville, FL            | 17.7       |  |
| 11 | Lake Charles, LA                 | 58.0       |  | 36 | Kalama, WA                  | 17.0       |  |
| 12 | Mobile, AL                       | 56.9       |  | 37 | Two Harbors, MN             | 16.9       |  |
| 13 | Plaquemines, LA                  | 52.8       |  | 38 | Marcus Hook, PA             | 16.7       |  |
| 14 | Baltimore, MD                    | 44.2       |  | 39 | Philadelphia, PA            | 16.3       |  |
| 15 | Savannah, GA                     | 41.9       |  | 40 | Boston, MA                  | 16.0       |  |
| 16 | Texas City, TX                   | 41.3       |  | 41 | Honolulu, HI                | 14.3       |  |
| 17 | Huntington Tristate              | 36.8       |  | 42 | Detroit, MI                 | 13.3       |  |
| 18 | Cincinnati-Northern Kentucky, KY | 36.6       |  | 43 | Indiana Harbor, IN          | 12.2       |  |
| 19 | Port Arthur, TX                  | 33.9       |  | 44 | Mid-America Port Commission | 12.0       |  |
| 20 | Duluth-Superior, MN and WI       | 33.7       |  | 45 | Cleveland, OH               | 11.9       |  |
| 21 | St Louis, MO and WI              | 31.3       |  | 46 | Vancouver, WA               | 11.0       |  |
| 22 | Tampa, FL                        | 30.0       |  | 47 | Galveston, TX               | 11.0       |  |
| 23 | Freeport, TX                     | 29.8       |  | 48 | San Juan, PR                | 10.4       |  |
| 24 | Richmond, CA                     | 28.5       |  | 49 | Chicago, IL                 | 10.0       |  |
| 25 | Pascagoula, MS                   | 25.8       |  | 50 | Longview, WA                | 9.7        |  |

US River System
Gulf Ports
West Coast

East Coast Islands & Alaska









#### Walmart boosting off-peak container processing in LA by up to 50% American Shipper

- Big-box retailers including Walmart, along with FedEx and UPS, have detailed plans to expand container operations at the ports of Los Angeles and Long Beach as part of the Biden administration's efforts to unclog a massive bottleneck at the country's largest container terminal complex.
- The details came ahead of a virtual meeting President Joe Biden held with port leadership and dock labor on Wednesday to discuss transportation challenges throughout the supply chain.
- "Unlike leading ports around the world, U.S. ports have failed to realize the full possibility offered by operation on nights and weekends," the White House underscored in a statement on Wednesday.
- "Moving goods during off-peak hours can help move goods out of ports faster. For example, at the Port of LA, goods move 25% faster at night than during the day. These commitments will help unlock capacity in the rest of the system including highways, railroads and warehouses by reducing congestion during the day."

**ACC Comment:** Although this will assist in the challenge, it remains to be seen whether supporting infrastructure such as dray drivers, rail and intermodal can cope with extended operating hours and equipment availability and whether transload operators can handle increased and 24/7 volumes. These changes need to be institutionalized in order to be successful.

### Hapag-Lloyd and CMA CGM 'temporarily' steering 2 services away from Savannah American Shipper

- Hapag-Lloyd and CMA CGM have announced two services are "temporarily" bypassing Savannah, Georgia.
- CMA CGM said Wednesday that its Amerigo service, which connects the western Mediterranean to the U.S. East Coast, will "temporarily stop calling Savannah due to severe congestion in this port eight to 10 days and in order to
- The service instead will call South Carolina's Port of Charleston, beginning with the scheduled arrival of the CMA CGM La Traviata on Nov. 27.

protect schedule integrity and weekly sailing frequency."







#### Inflation alert: Container ship owners see boom through 2022 American Shipper

- Unprecedented demand for container ships will not end anytime soon, according to executives of companies that rent vessels to ocean carriers. Their overwhelming confidence is yet another ominous sign for beleaguered cargo shippers
   — and another signal that inflation could persist.
- Managers of container-ship leasing companies (so-called tonnage providers) spoke during Capital Link's New York
   Maritime Forum on Wednesday. Execs on panels are notorious for "talking their book" product-tanker panelists
   have been touting an imminent recovery for the past 11 years and it hasn't happened yet but container-ship lessors
   have the transaction history to back up their bullishness.
- The price liners are willing to pay to lease ships reflects the degree they need vessels to carry cargo. For the rare ship still left to lease, rates are at stratospheric highs. And what tonnage providers see in recent deals strongly implies that liners do not expect a market decline in 2022.
- According to Global Ship Lease, "Back in November of last year, we used the term 'super cycle' and co-panelists were laughing. But we really think that this is now playing out. This is not going to be some short-term strong market. We see continued strength for at least the next couple of years, save for a black swan event."
- Danaos Corp., said, "Our customers [liners] are faced with fantastic freight rates and they see the depth in the market in terms of cargoes that are going to need to be transported. "They see this is a market that is going to remain strong, and they need the assets to carry those cargoes because they're making huge amounts of money. Paying \$40,000, \$50,000 or \$60,000 a day to charter a ship is actually a blip compared to what they're making."

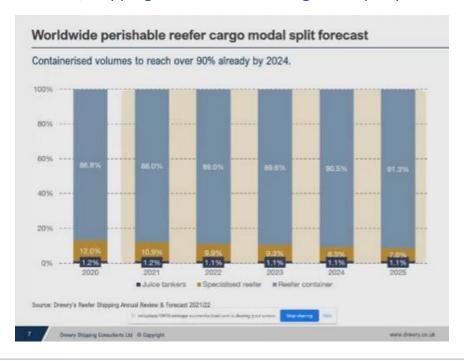
**ACC Comment:** Leasing vessels to supplement individual ocean capacity availability is the easy part of the "challenge" equation. The harder parts follow thereafter as these vessels, particularly if bulk carriers, will need to access smaller US ports where unloading infrastructure and downstream transportation and handling is limited. This harkens back to the stevedore days where consignments are handballed off ships and palletized dockside. This implies an ability to move the goods in large volumes from ports to inland destinations and whether those destinations or ramps can accommodate additional inbound loads, only now transported in 53' trailers on rail chassis. We assume that trailers have been secured to load into and that unions controlling port labor have been consulted.





### Current situation in shipping and logistics not expected to improve soon (Fresh

- The shipping industry has faced massive challenges since the beginning of the global pandemic. How are they going to manage this situation and how do they move forward from here?
- The overall view is that this situation is not going to change in the near future, it may in fact get worse before it gets better. Shipping costs are not likely to go down soon as high reefer costs are being driven by the high demand for dry cargo and frozen goods mainly into China. This is also causing an imbalance in container flow.
- Reefer cargo is higher risk and so less attractive and less profitable for carriers, so there is a risk that that they will not invest in the reefer trade. Also, large parts of the world remain unvaccinated and it only takes one part of the chain to fall before the congestion increases again, according to the panelists it will be a few years until any normality is restored, but even then, shipping costs will remain high than pre-pandemic levels.





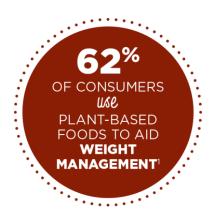


### **Beverages, CBD & C-Stores**

### NRA: Declining disposable income dampens demand for on-premise eating RESTAURANT DIVE

- Pent up demand and shifting consumer choice could provide a boost to restaurants even as the industry faces significant economic headwinds, Hudson Riehle, SVP of the National Restaurant Association's research and knowledge group, said at DoorDash's second annual Main Street Strong Conference on Wednesday. Over 90% of consumers reported wanting to use restaurants in their daily lives, Riehle said.
- About 47% of diners aren't eating on premise as often as they would like, and about one-third of consumers said the same about off-premise dining, according to NRA data.
- Other NRA data showed customers wanted restaurants to deploy additional technology and offer more outdoor seating, indicating that many diners want pandemic adaptations to stay.
- While diner demand for restaurant experiences is strong and could help full-service restaurants recover from a tumultuous 18 months, unfavorable macroeconomic conditions abound, Riehle said. High inflation, supply chain problems, labor shortages and a dip in diner spending money could undermine the industry's progress.
- Riehle notes the challenge is income levels. "As that stimulus wears off, we're actually looking for a real disposable income to drop 1% to 2%," he said.











### **Healthcare Update**

#### Maersk drops container fees to \$1 for COVID supplies ■FREIGHTWAVES

- International container shipping company Maersk announced it is partnering with the Princeton Foundation for Peace & Learning to assist in delivering COVID-related supplies to India.
- Using the services of its Special Project Logistics (SPL) unit, Maersk has dropped the charges of seven 40-foot containers to a symbolic nominal freight fee of \$1 per container to deliver donated supplies from entities including Harvard University's Boston Children's Hospital, BE Industries, Geisinger Health, Burke Rehabilitation Hospital and BAXT Cosmedical.
- "Several donors and organizations had donated supplies worth millions of dollars; however, they all were struggling with the shipment process disrupted by COVID," said Ashutosh Pathak, founder of the Princeton Foundation.
- "We thank Maersk and the government of India profusely for enabling us to establish this streamlined pro bono international shipment and waiver of integrated goods and service taxes. We look forward to working closely with donors, Maersk and the government of India in this humanitarian aid service."
- Earlier this summer, India experienced a large second wave of COVID cases, at its peak averaging 400,000 new cases a day. Since India has come off those record highs, this Friday the country opened its borders again for tourists in preparation of its September-November festival season, leaving medical professionals to believe a third wave is soon to come.

### In Major Shift, Hearing Aids May Soon Be Sold Without A Prescription

- For decades, the FDA has regulated hearing aids as medical devices, which adds to the cost and effort of getting fitted for one. The FDA's draft rule, which still faces a 90-day comment period before it's finalized, would allow hearing aids to be sold over the counter.
- The Food and Drug Administration on Tuesday took a major step toward bringing down the cost of hearing aids by making them available over the counter. The freedom to buy hearing aids without a fitting or test by a specialist is likely to make them cheaper and the market more competitive. The cost of hearing aids can run into the thousands.
- They often are not covered by insurance companies or traditional Medicare, the federal health program for people over 65, although private Medicare Advantage plans sometimes cover them.





### **Healthcare Update**

### Scientists Search for Cause of Mysterious Covid-Related Inflammation in Children KHN

- More than 5,200 of the 6.2 million U.S. children diagnosed with covid have developed multisystem inflammatory syndrome in children, or MIS-C. About 80% of MIS-C patients are treated in intensive care units, 20% require mechanical ventilation, and 46 have died.
- Throughout the pandemic, MIS-C has followed a predictable pattern, sending waves of children to the hospital about a month after a covid surge. Pediatric intensive care units which treated thousands of young patients during the late-summer delta surge are now struggling to save the latest round of extremely sick children.
- Doctors have no way to prevent MIS-C, because they still don't know exactly what causes it, said Dr. Michael Chang, an assistant professor of pediatrics at Children's Memorial Hermann Hospital in Houston. All doctors can do is urge parents to vaccinate eligible children and surround younger children with vaccinated people.
- Given the massive scale of the pandemic, scientists around the world are now searching for answers.
- Although most children who develop MIS-C were previously healthy, 80% develop heart complications. Dante's
  coronary arteries became dilated, making it harder for his heart to pump blood and deliver nutrients to his organs. If
  not treated quickly, a child could go into shock. Some patients develop heart rhythm abnormalities or aneurysms, in
  which artery walls balloon out and threaten to burst.
- Doctors have gotten better at diagnosing and treating MIS-C; the mortality rate has fallen from 2.4% to 0.7% since the beginning of the pandemic. Adults also can develop a post-covid inflammatory syndrome, called MIS-A; it's even rarer than MIS-C, with a mortality rate seven times as high as that seen in children.
- In a July study, researchers identified rare genetic variants in 3 of 18 children studied. Significantly, the genes are all involved in "removing the brakes" from the immune system, which could contribute to the hyperinflammation seen in MIS-C, said Dr. Janet Chou, chief of clinical immunology at Boston Children's, who led the study. Most children with MIS-C test negative for covid, suggesting that the body has already cleared the novel coronavirus from the nose and upper airways. That led doctors to assume MIS-C was a "postinfectious" disease, developing after "the virus has completely gone away," said Dr. Hamid Bassiri, a pediatric infectious diseases specialist and co-director of the immune dysregulation program at Children's Hospital of Philadelphia.





# **Healthcare Update**

### Pharma industry trends and solutions in 2021 Logistics

- Like all fulfillment and distribution operations right now, the pharmaceutical industry is dealing with a host of new pressures. Not only is the world looking to it for help eradicating a global pandemic, but the ways in which the sector gets drugs out to the patients who need them is evolving.
- Concurrently, the industry is dealing with new regulatory rules and changing customer preferences. These and other trends not only impact pharmaceutical manufacturers themselves, but they're also changing the way the top three medical distribution firms (AmerisourceBergen [ABC], Cardinal Health and McKesson) run their supply chains.
- The labor shortage is also forcing pharmaceutical companies to rethink their current distribution operations and invest in more automation to offset the problem. "Everyone is trying to reduce their reliance on labor, pharmaceuticals included," says Daniel Johnson, account executive at Fortna.
- Some manufacturers are looking at how to take over some of the distribution processes traditionally handled by wholesale distributors or pharmacies.
- "They're looking for ways to pull some of that business back," says Johnson, "with the goal of adding more value for customers as the industry continues to tighten up and more competition emerges—a.k.a. Amazon." How?
  - Embracing the e-commerce channel One of the biggest shifts taking place in pharmaceutical distribution is that more and more consumers are buying over-the-counter (OTC) products that are non-controlled online.
  - Struggling with DSCSA ambiguity With the Drug Supply Chain Security Act coming into full effect in 2023, pharmaceutical companies are also considering how this new law will influence fulfillment, regulatory compliance, and the software/hardware they'll use to manage both.
  - Reducing scan and pick times As part of the DSCSA compliance requirements, some pharmaceutical
    manufacturers and distributors may change the way they collect, capture and use supply chain data.
  - Top-notch systems Looking ahead, expect pharmaceutical companies and their distributors to adopt software that can be validated (versus just adding bolt-on programs over time) using documented evidence that confirms systems were correctly installed, meet specifications like good manufacturing practice (GMP) codes and will accommodate users' needs.





# **Cybersecurity Update**

#### **Definition: WannaCry ransomware**

The WannaCry ransomware is a worm that spreads by exploiting vulnerabilities in the Windows operating system.

#### **Definition: What is integrated risk management (IRM)?**

Integrated risk management (IRM) is a set of coordinated business practices and supporting software tools that contribute to an organization's ability to understand and manage risk holistically across all departments and third-party dependencies.

#### What is extortionware? How does it differ from ransomware?

Prevention is the only line of defense against an extortionware attack. Learn how extortionware works and why it can be more damaging than ransomware.

#### **Definition: malware**

Malware, or malicious software, is any program or file that is intentionally harmful to a computer, network or server.

#### 4 types of ransomware and a timeline of attack examples

- 1. Locker ransomware blocks access to computer systems entirely. This variant uses social engineering techniques and compromised credentials to infiltrate systems. Once inside, threat actors block users from accessing the system until a ransom is paid. A pop-up on the victim's screen may appear saying, "Your computer was used to visit websites with illegal content. To unlock your computer, you must pay a \$100 fine," or "Your computer has been infected with a virus. Click here to resolve the issue."
- **2. Crypto ransomware** is more common and widespread than locker ransomware. It encrypts all or some files on a computer and demands a ransom from the victim in exchange for a decryption key.
- 3. **Double extortion ransomware** encrypts files and exports data to blackmail victims into paying a ransom. With double extortion ransomware, attackers threaten to publish stolen data threaten to publish stolen data if their demands are not met.
- **RaaS** involves perpetrators renting access to a ransomware strain from the ransomware author, who offers it as a pay-for-use service. RaaS creators host their ransomware on dark net sites and allow criminals to purchase it as a subscription -- much like a SaaS model.

  TechTarget





### **Alternative Energy Update**

This tron-inspired tesla electric bike's hubless wheels radiate a drag racing character YD

Draped in a completely metallic finish, the bike is destined to have time-traveled from future. The clear geometric lines and the definitive aerodynamic build will put most of the other Tesla bike concepts to shame.

• The long wheelbase of the Dust Tesla defies the structural stability, but hey, it has arrived from the future, where technologies are definitely beyond our comprehension. Those hubless wheels and the swingarm on the electric bike evoke a sense of dynamism which is hard to give a miss.



#### 0 to 60 mph in 2.5 seconds. a range of 520 miles and packed with tech Luxury launches Luxury

Electric vehicle start-up Lucid recently started production of its first EV sedan named Air and is on schedule to begin customer deliveries this month. Here are 10 interesting things you should know about the Lucid Air that could change the whole luxury car segment in the coming years.

- 1. It has autonomous driving
- 2. It has an unprecedented EPA range of 520 miles
- 3. Relatively small battery with superfast charging
- 4. Blistering performance
- 5. Windscreen that could cover the state of Texas
- 6. A ton of displays
- 7. Luxurious enough to beat the Germans at their game
- 8. Shrunken down components for weight-saving and maximum cabin space
- 9. Wicked headlights
- 10. Out-of-the-box design







### **Alternative Energy Update**

### Mate Rimac has big, electric plans for Bugatti WIRED

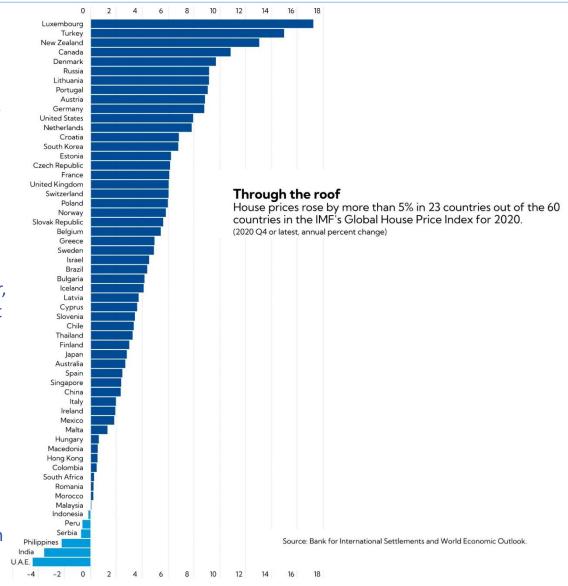
- At the age of 20 Mate Rimac was making his own electric cars. Now he's taking over Bugatti. In 2008, he replaced the broken engine of his ageing BMW race car with an electric motor from a forklift truck. Today, he is the founder and chief executive of Rimac Automobili (RA), a producer of electric hypercars and electric vehicle (EV) drivetrains sold to some of the world's most prestigious carmakers. He is also about to become the CEO of Bugatti, at the age of 33.
- The company has received investment from Porsche and Hyundai, both of which are customers, along with Aston Martin, Koenigsegg, Mercedes, Renault, Pininfarina, Jaguar and more. Harry and Meghan's electric Jaguar E-Type wedding car was Rimac's work.
- Rimac's first business venture converted internal-combustion cars to electric, but he soon realised the numbers didn't stack up. "I did three conversions then I stopped because I realised how bad it is from a technical and commercial standpoint. It doesn't make any sense. I saw very early on that, using platforms that aren't designed to be electric and making an EV out of it, is really bad".
- Not afraid of telling a century-old industry where it is going wrong, Rimac also applies this logic to car makers who still use the same platform for electric and internal combustion vehicles. "You see this with big OEMs (original equipment manufacturers). They are still complaining about bringing electric cars to market and how nobody buys them. Yes, because your electric cars suck."
- Rimac says today's mobility model needs to shift to one where cars are shared between multiple users and, eventually, drive themselves; a change he believes will push car utilization from 3% to 80%. "Cars won't stand around wasting resources and space in cities," he says. "The roads will be used more efficiently; there will be fewer accidents, less traffic. All of these multiplier effects come with autonomous electric cars that are not owned by the users."
- It would seem obvious to say RA has been successful, but the CEO has a different idea of success. "We still burn cash, we still raise money from investors, and we haven't yet started shipping the Nevera. When I can sit back and say 'wow, look at what we have done', I picture it in a way that we have the campus built, that we ship cars every week to customers all around the world, are a leader in high-performance cars, and have truck-loads of batteries and powertrains going to OEMs every day. That's when I see 'chapter one' closed."





### **Housing Prices Through the Roof Around the World**

- While most economic indicators deteriorated last year, house prices largely shrugged off the effects of the pandemic. Of the over 60 countries in the IMF's Global House Price Index, three-quarters saw increases in house prices during 2020, and this trend has largely continued in countries with more recent data.
- Over a decade ago, a turnaround in house prices marked the onset of the Global Financial Crisis. However, the twin booms in household credit and house prices in many countries before that crisis—and many previous housing crashes—appear less prevalent today. Hence, in a plausible scenario, a rise in interest rates, a withdrawal of policy support as economies start to recover, and a restoration of the timely supply of building materials, could lead to some normalization in house prices.





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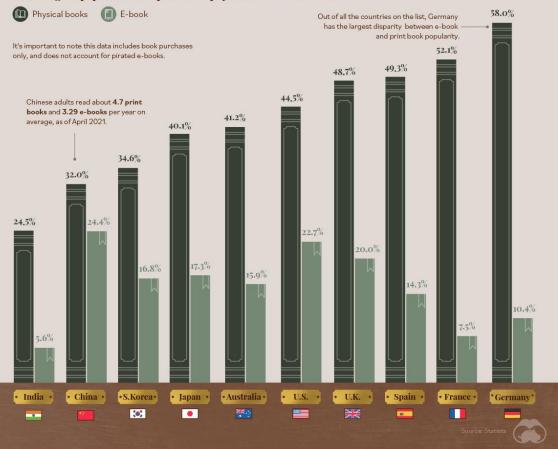
### **The Staying Power of Physical Books**

VISUAL CAPITALIST DATASTREAM

# The Staying Power of Physical Books

When e-books first took off in the 2000s, many predicted it would be game over for print-but this didn't prove to be true.

#### Percentage of population that purchased physical vs e-book in 2020







### **Charting the Continued Rise of Remote Jobs**

