

# ACC NEWS



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### **YOUR WEEKLY UPDATES**

Week 31 of 2021



Healthcare



**Ports** 



Shipping



Rail



Supply Chain



Beverages



Retail



C-Stores



Road



Handling



## In this week's update

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### **Climate Change: The Impact on Humanity**

Extreme events, heat waves and catastrophic floods are among the consequences of global warming

Around **166 m** people in Africa and Central

in Africa and Central America needed aid (2015-2019) due to climate-related food emergencies Between
8 and 80 m
more people
at risk by 2050\*

Some **1.4 m** more children with severe stunting in Africa due to climate change in 2050

**4-10%** drop globally in last 30 years

Marine fisheries
40-70% drop in
catch potential
for tropical regions
under high
emissions

Wild fish populations

**4.1%** drop in maximum sustainable yield between 1930 and 2010, some regions at **15-35%** losses

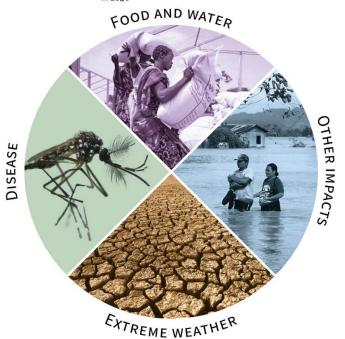


#### Dengue fever

**2.25 b** more people at risk across Asia, Europe and Africa under high emissions scenarios

Vector-borne diseases

Half the world's population at risk of dengue, yellow fever and Zika virus by 2050



#### ▲ Internal migration

Six-fold increase between 2020 and 2050

#### ♠ Water stress

At 2.7°C warming: 122 m people affected in Mesoamerica, 28 m in Brazil, 31 m in rest of South America

#### Natural disasters

Some **12.8 m** displaced yearly by natural disasters such as storms and floods since 2008

#### **▲** Severe heat

**1.7 b** more people exposed, and 420 m people subjected to heat waves, subject to temperature increases from 1.5°C to 2°C

#### **▲ Deadly heat**

Hundreds of millions of city dwellers in sub-Saharan Africa and South/ Southeast Asia affected by at least 30 days of "deadly heat" per year by 2080

#### **♣** Flood displacement

**2.7 m** people displaced annually in the future

#### **▲ Flooding**

At 1.5°C warming, 100-200% increase in population affected by floods for Colombia, Brazil and Argentina, 300% for Ecuador, 400% for Peru

#### Water scarcity due to severe droughts

At 2°C warming, Over **400 m** more people living in urban areas exposed

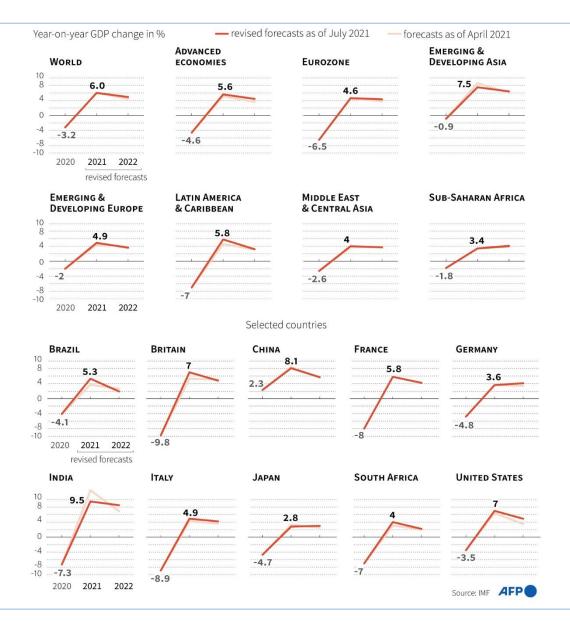
#### Physical work capacity

Up to **250** lost work days/year by 2100, in much of South Asia, sub-Saharan Africa, parts of Central/South America





### **IMF Growth Forecasts**







#### The Economy Is Stronger. These 4 Things Will Determine What Happens Next

- The U.S. economy grew at a strong pace in the spring as the country emerged from the darkest days of the coronavirus pandemic. The question now is what happens next, especially as the delta variant continues to spread. But GDP data is backward looking, and many analysts expect growth to have marked a peak. For the second half of the year, the pace of growth will likely slow down, even as it is likely to remain strong.
- The question is how much the economy could slow. Here are four factors that could determine the path forward:
  - 1. The delta variant and the here-we-go-again impact The pandemic is clearly not over yet. Although few people expect the type of economic impact we saw when the pandemic started last year, it remains a real concern, given that only about half of the U.S. population is fully vaccinated. Some small-business owners and their employees are worried about a repeat of last year, when many were forced to shut down their stores.
  - 2. High inflation: temporary or here to stay? Another risk is inflation. Data this month showed consumer prices surged 5.4% in June from a year earlier, the highest increase in nearly 13 years. On Wednesday, after the Federal Reserve's two-day meeting, Chair Jerome Powell again maintained that these increases are a result of pandemic disruptions to the economy and will be short-lived or "transitory." Others are not so sure. Some economists worry that inflation could prove harder to reverse if Americans and businesses start to expect that prices will be high and act accordingly.
  - 3. The big debate over workers in America Perhaps no issue has split opinions more sharply than why some Americans have remained reluctant to return to work, hindering some sectors like leisure and hospitality.
  - 4. Chips and the supply chain chaos It's a problem that has bedeviled industries from carmakers to homebuilders since last year: A surge in demand from people cooped up at home has led to shortages of key materials, such as chips used in all kinds of electronics and cars, as suppliers struggle to keep up.
- Though some supply chain constraints are starting to ease there's no certainty of when global trade will approach normality. So far, the impact has been manageable overall, though much depends on how long the shortages of key materials last. "If there will be any drag on growth in the second quarter, it could be from inventory," says Bryson, of Wells Fargo. "[There are] lots of supply constraints, businesses can't produce as much and so, because of that, they may have been selling out of their inventory, and that could be a mild headwind to growth."

  n p r





#### US Consumer Confidence Surprisingly Strong In July BARRON'S

- Americans maintained their relatively upbeat attitude in July, according to a survey released Tuesday, bucking expectations for a decline as the US economy recovers from the Covid-19 crisis.
- The Conference Board said its consumer confidence index rose to 129.1 this month from 128.9 in June, despite expectations among analysts that it would decline by about five points.

#### UK supermarkets ask suppliers for payments due to driver shortage theguardian

- Asda, Tesco and Sainsbury's are asking some suppliers for extra payments to cover increased costs after being forced to raise wages for delivery drivers because of widespread shortages.
- In a letter seen by the Guardian, Asda wrote to suppliers that use its collection service asking for a 5% rise in payments for transport costs and blaming the national HGV driver shortage.
- The UK's third largest supermarket, which was recently taken over by the billionaire owners of petrol station business EG Group and private equity firm TDR Capital, said it needed help to deal with a 12% rise in driver costs in some areas.
- Asda said: "Whilst passing on any costs to suppliers is a last resort, the challenges in the logistics industry remain
  unresolved and as a result we are looking to work closely with our supply partners to change the rates we provide
  for this service." In a detailed letter first reported by the Grocer trade journal, they blamed the shortage of delivery
  drivers on a mix of Brexit, which has affected the rights of European drivers to work in the UK, and the Covid-19
  pandemic, which has restricted cross-border travel and sent many drivers home for extended periods of lockdown,
  as well as tax changes and a shortage of testing facilities.
- The government is fast-tracking HGV licensing processes to get more drivers on the road. It has also extended legal working hours and allowed companies to deliver later at night or earlier in the morning. But haulage groups said those measures have not fully resolved the driver issue, which is being worsened by a rising number of Covid-19 cases and associated notifications by the NHS test and trace app instructing workers to isolate.
- Absence rates in the logistics network are estimated to be about 8%, a significant proportion of which are down to workers self-isolating, but retailers and hauliers said the problems caused by the shortage of drivers were far worse.





#### Selfridges on the selling block Evening Standard

- The "For Sale" sign is up at trend-setting Selfridges.
- The company's billionaire owners, the Weston family, have launched a formal auction to sell the historic department store business, reported the Evening Standard and other U.K. news sites. Credit Suisse advisors have sent out an information memorandum to potential investors, with the company valued at as much as 4 billion pounds.
- Selfridges has 25 stores worldwide, including its luxurious, 600,00-sq.-ft.
   Oxford Street flagship in London and the Brown Thomas and Arnotts brands in Ireland. The company was founded in 1908 by Harry Gordon Selfridge and was purchased in 2003 by the Weston family in a 598-million-pound deal.



#### Ford considering shipping incomplete F-150s to dealers

- Pictures of thousands of brand new, unsellable Ford F-150s parked in lots in at least three states expressed the semiconductor shortage in real and financial terms. Ford's pain has been especially dreadful; CEO Jim Farley said nine of Ford's Tier 1 suppliers relied on chips from a single chip maker that experienced a fire in its clean room. This break in the supply chain is breaking the knees of Ford's star player.
- Earlier this month, the Detroit Free Press reported the automaker had sourced a supply of chips that would allow it to ship thousands of trucks to dealers and keep production lines going.
- Now, Automotive News reports that Ford is discussing an idea with dealers to ship trucks before the chips are installed. Any dealers receiving such vehicles would get training for service staff on how to install the hardware, and repayment for nearly an hour's worth of labor for each repair.
- This is only an idea for now, and if it became reality, only dealers agreeing to the plan would receive unfinished trucks. A brace of important questions need satisfactory answers before this has a chance of leaving the whiteboard. Dealers won't want the obligation of paying for and insuring trucks on their lots that they can't sell, and more importantly, don't know when they'll be able to sell.





#### Consumers are creeped out by ads that follow them across devices @Marketer.



- Consumers are wary of how companies collect and use their personal information for digital advertising, having witnessed companies fail to protect and properly handle user data. Not many know how it works, but they're aware of its outcomes when they perceive ads as invasive.
- Despite transparency initiatives aimed at educating users, how advertisers use consumer data can be problematic for the consumer. Some advertising practices that presently use third-party cookies can produce experiences consumers are more likely to feel are "creepy."
- In the December 2020 Cheetah Digital and Econsultancy survey of consumers in the US, UK, Australia, Spain, France, and Japan, respondents evaluated brand interactions on whether they perceived them as "cool" or "creepy." About two-thirds felt that ads that follow them across devices are creepy. In the US, 54% felt this was creepy.

#### Internet Users Worldwide Who Feel that It Is Creepy vs. Cool for Brands/Retailers to Interact with Them, by Interaction Type, Dec 2020 % of respondents Recommendations from a brand based on past purchases An email reminder or advert about a product I'd abandoned in an online shopping cart Advertisements on social media sites based on recent shopping experiences on other sites 52% Personalized offers after staying on a brand's site for 2+ minutes 54% A chatbot that has access to past purchase history to help with online shopping 56% Advertisements that follow me across devices Advertisements related to something I'd talked about near a smart device Advertisements from companies I don't know based on my location data 72%

#### 'There are no deliveries because of Brexit,' supermarket worker reveals



- An Italian woman working for a big British supermarket said for most of the week there are no deliveries and she had not seen anything like this in 12 years. The woman, who works in the London area, said a friend who works for another supermarket is also missing deliveries. She said this means her shifts are being cancelled.
- She said many lorry drivers who were transporting supermarket products have left the UK because of Brexit, and deliveries and imports have been difficult.
- "I think what I am seeing now is when the deliveries come it's the same things, milk, cheese, Cadbury chocolate, things you know are made here. I don't think importing is working, it makes me worried to see products missing as I don't know when it's coming back to normal. There are too many empty shelves. "Too many native British people voted for Brexit and shoppers supported Brexit as well, I fear they will say, we will no longer hire people from the EU."





#### **US ECONOMY:** Coronavirus Predictive Indicators for Economic Impact

prevedere

All Categories: Look at these indicators to understand how they are placing upward or downward pressure on the economy.

Last Refresh: 07-26-2021

Category	Indicator	Relationship	Next Update	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	
Business Investment	Average Weekly Hours - Retail	Procyclic	08-04-2021	-0.55%	-0.33%	0.22%	0.00%		NOTES
	Small Business Sentiment	Procyclic	08-14-2021	-5.31%	0.69%	5.64%	5.60%		Values represent the percentage change from the previous year.
	Weekly Economic Index	Procyclic	07-30-2021	2.90%	11.41%	11.45%	10.16%	9.20%	
	Weekly Jobless Claims	Countercyclic	07-30-2021	-36.54%	-86.92%	-81.08%	-74.26%	-72.86%	
Transportation and Tourism	Google Search "Travel Cancellation"	Countercyclic	08-05-2021	-83.80%	-80,56%	-76.52%	-27.91%		In July, 9 out of 10 indicators are signaling economic improvement from the previous year.
	ISM Services Index	Procyclic	08-07-2021	7.50%	19.85%	36.29%	29,45%		
	Restaurant and Bar Sales	Procyclic	08-17-2021	-2.17%	30.14%	70.69%	71.28%		
	Sentiment: Vacation Travel Next 6 Months	Procyclic	08-12-2021	-33.02%	-14.64%	7.77%	25.41%	31.70%	
Consumer Big Ticket Purchases	Auto Sales	Procyclic	08-07-2021	-3.40%	25.74%	59.56%	55.26%		In June, 20 out of 20 indicators are signaling economic improvement from the previous year.  Look to subsequent pages for monthly
	Consumer Sentiment - Discretionary Spend	Procyclic	08-12-2021	-8.65%	8.04%	23.59%	35.45%	27.61%	
	Global Luxury Index	Procyclic	08-26-2021	63.25%	82.77%	91.98%	83.08%	73.31%	
	Home Building Permits Issued	Procyclic	08-21-2021	21.63%	31.87%	38.93%	37.90%		
									trend analysis.
Logistics and Manufacturing	Economic Policy Uncertainty	Countercyclic	07-27-2021	-50.04%	-77.14%	-73.51%	-67.28%	-62.72%	l l
	Industrial Production	Procyclic	08-16-2021	-1.72%	3.99%	11.24%	14.36%		
	Overtime for Hourly Mfg Workers	Procyclic	08-03-2021	4.20%	15.89%	26.53%	33.70%		
	Purchasing Managers Index - Mfg	Procyclic	08-01-2021	22.72%	32.34%	39.57%	33.02%		
Financial	Financial Stress Index	Countercyclic	07-30-2021	-117.06%	-143.04%	-307.45%	-2895.67%	503.87%	
	S&P 500	Procyclic	07-27-2021	46.85%	50.73%	42.86%	36.08%	36.62%	
	US High Yield Index Option - Adjusted Spread	Countercyclic	07-27-2021	-54.01%	-60.18%	-55.24%	-47.05%	-48.03%	
	VIX Volatility Index	Countercyclic	07-27-2021	-61.83%	-60.13%	-37.81%	-44.91%	-40.82%	Upward pressure on economy
									<ul> <li>Downward pressure on economy</li> </ul>

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#### Store of the Future EDGE<sup>^</sup>

- Worldwide ecommerce sales reached \$2.65 trillion in 2020 and are expected to almost double to \$4.7 trillion by 2025. In fact, ecommerce will dominate retail growth in the near future despite economies opening up.
- Netflix announces it will open it's first-ever store in Tokyo next year to sell merchandise from its popular shows. US grocery delivery service Instacart confirms intentions to move to robotic warehouses which will change its relationship with its 600 or so grocery retailer partners and LVMH-owned beauty retail chain Sephora has said it has bought the British ecommerce beauty brand Feelunique in an effort to grow in a key market where digital adoption is high.
- That is literally just over the past few days. In the week before, Morrisons said it would trial a checkout-free store in the UK and German rapid delivery startup Jokr announced that it had raised US \$170 million to expand its groceries in 15-minute services to more markets.
- Retailers and suppliers are trialing different in-store concepts at a rate we've just never seen before as the pandemic truly ushered in a new era of shopping.
- While ecommerce growth may not experience the same unprecedented growth as 2020, the online shopping revolution of last year has certainly made an impact and it's having permanent repercussions. To compete in this new world and stay ahead of the curve, suppliers must engage differently with a retailer's store network.

### Houston man pleads guilty to \$317M N95 mask scheme $_{SOUTHERN\ DISTRICT\ \mathscr{F}\ TEXAS}$

THE UNITED STATES ATTORNEY'S OFFICE

- A 56-year-old Houston man has pleaded guilty to a scheme to fraudulently sell 50 million N95 masks to the Australian government, the U.S. Justice Department said July 27.
- In early April 2020, Arael Doolittle attempted to sell 50 million 3M N95 masks that he didn't actually have to the Australian government. The government was set to pay more than \$317 million for the masks, but authorities disrupted the sale before it was complete, the Justice Department said.
- Mr. Doolittle is set for sentencing Oct. 25, and he faces up to five years in prison and a possible \$250,000 fine.
- The Secret Service conducted the investigation. Assistant U.S. Attorney Justin R. Martin prosecuted the case. Doolittle faces up to 5 years in federal prison and a possible \$250,000 maximum fine. He has been and will remain in custody pending that hearing.





#### Amazon forecasts slower growth as it laps last year's insane online sales gains RetailWire.

- Amazon CFO Brian Olsavsky said that the retail and technology giant's numbers were down from the mid-30% range
  the company experienced last year in the earlier months of the pandemic, but that it represented a gain over 2019's
  results. In short, year-over-year comparisons would likely look less flattering for Amazon this year based on 2020's
  pandemic-fueled results.
- Olsavsky pointed to the importance of the company's Prime members and third-party sellers to its continuing success. He said that membership continues to increase, and members are spending more with the company than non-members. He did comment, however, that even Prime members have pulled back some on spending in light of the opening of the economy.
- Third-party sellers remain critical to the Amazon retail story. Units sold by marketplace sellers represented 56% of the total on the Amazon platform in the second quarter, up from 53% year-over-year.
- One twist to Amazon's quarter was the inclusion of Prime Day in the numbers. The sales event, which typically took place in July, was pushed to the fall last year due to the pandemic. In 2021, Amazon moved it up to May. Mr. Olsavsky said that the company would have seen its growth rate in the mid-teens if not for the boost it received from the two-day promotion.

### Chip shortage spreads to hit tech earnings, outlooks Seeking Alpha $^{lpha}$

- The global semiconductor shortage that started in the automotive industry has increasingly spread to consumer electronics, which was evident this week as tech companies such as Apple and Microsoft reported earnings and warned about constraints in their supply chains.
- The global chip shortage started when the pandemic quickly accelerated demand in areas like gaming and PCs while slashing demand in the automotive sector. Automakers accordingly cut chip orders, but when the industry staged a faster-than-expected recovery, foundries didn't have the capacity left to restore order volume. On top of things, Weather-related power disruptions at Samsung, NXP Semiconductors and Infineon facilities, plus a fab fire at auto chip giant Renesas, added to a global overreliance on foundry giant TSMC to extend production constraints.





#### Will US consumers throttle back on buying stuff? ■ FREIGHTWAVES

- The economy is re-opening and folks have more spending outlets. Yet the consensus, though not unanimous, is goods-buying will stay elevated for some time.
- Conventional wisdom was with more Americans vaccinated and the economy re-opened, the explosion in goods-buying during the COVID-19 pandemic would moderate to at best a muffled roar. Yet it appears to remain as full-throated as it was in the summer of 2020, and there's no sign that it will ease off any time soon.
- A slowdown in goods-buying was "what we are expecting, but we haven't seen it yet," said Griff Lynch, executive director of the Georgia Ports Authority (GPA), which runs the container port of Savannah, the nation's fourth-largest, and the bulk, breakbulk and roll-on, roll-off port of Brunswick, among other assets.
- The GPA said there is no indication from throughput data and conversations with retailers that use the port that a slowdown in goods-ordering is on the horizon.
- If shippers, third parties and carriers living for nearly 18 months with overstretched supply chains were hoping for some relief from consumers who have had their fill of stuff, they haven't gotten it. "Shippers are in a tough environment," said Phil Levy, chief economist for Flexport, a digital freight forwarder based in San Francisco. Telling them that the consumer isn't easing off on goods purchases is "not what they wanted to hear."
- FreightWaves takes a different view, with a string or two attached. Citing consumer spending data from Bank of America, they said the reversion from elevated goods demand to a more normal goods to services ratio is "well underway," with strong services data posted over the past three months. Still, consumers with strong balance sheets, aided by government fiscal stimulus, continue to prop up goods-buying, he said.
- Under current conditions, any rate relief for shippers will be fleeting, FreightWaves predicted. The typical pre-holiday lull—if one occurs—will be offset by what is expected to be a very strong back-to-school season. Overhanging all of this are depleted inventory levels retailers will need to replenish regardless of what consumers do.
- The pandemic also exposed how interdependent the world's major trading partners are on each other, and how disruptive an event of such magnitude can be. The emergence of the highly contagious Delta variant, and its impact on producing nations with low vaccination levels, is just now being factored into supply chain decisions.





#### UK lorry drivers plan to strike over low pay and poor working conditions theguardian

- Lorry drivers are planning a nationwide strike over their working conditions, prompting warnings that this would magnify food shortages and cripple the country's already creaking supply chains.
- Hauliers are proposing a "stay at home" day next month in response to low pay and working terms, an event
  designed to compound the effect of the UK's lorry-driver shortage, which last week led to widespread stock
  shortages. However, the Road Haulage Association, which represents commercial road haulage companies and has
  more than 7,000 members, warned drivers against taking action saying it would make a "bad situation worse" and
  severely disrupt automated chains.
- So far, the "stay at home" action on 23 August has attracted nearly 3,000 HGV drivers with another 340 joining last week. Lorry driver Mark Schubert said: "For far too many years we have been ignored, exploited and taken for granted. Now our time has come, now we have a window of opportunity to be listened to."

### Semiconductor shortages could last into 2023, Supplyframe says Supply Chain

Average lead times for chip orders are between 25 and beyond 52 weeks as Covid conditions slow production in Taiwan, report says.

- A global shortage of semiconductors could stretch into the first quarter of 2023 and continue to hamper production
  of technology-dependent products like automobiles, according to an industry report from the electronics supply
  chain analysis firm Supplyframe.
- Computer chips are in short supply as semiconductor production and testing have been hampered by a water shortage and Covid-19 outbreaks in Taiwan, where nearly half of the world's semiconductors are manufactured, Supplyframe said in its latest Commodity Intelligence Quarterly (CIQ) report.
- Additional Covid impacts include steep demand recoveries, extended lead times, and dramatic raw material and component price escalations, Pasadena, California-based Supplyframe said.
- Together, those variables are pushing microchip analog device lead times longer, since buffer inventory has now been committed, the firm said. The new average lead times are between 25 and beyond 52 weeks and, in some cases, up to 60 weeks.





#### Annual US home delivery report AlixPartners

**How soon is now?** That's the key question that consumers want answered regarding their e-commerce orders. More than 1,000 US consumers declared that they expect delivery of everything from groceries to health and medical supplies, to home improvement items, within hours or days. Now that consumers are starting to feel more comfortable allowing people into their homes, they also expect delivery drivers to double as installers and trainers for certain products by

assembling everything from furniture to sound systems and showing buyers how to operate them. And when consumers can't wait hours or days to lay hands on their goods, they want to be able to pick up their online orders from a nearby location. When an order doesn't fill the bill, they want to be able to return easily, quickly, and at no cost to them.

## FIGURE 1: CONSUMER EXPECTATIONS FOR DELIVERY SPEED HAVE DROPPED TO 3.3 DAYS—A 40% INCREASE VERSUS OUR 2012 SURVEY RESULTS

Q: When buying an item for delivery, what is the maximum delivery time you are willing to accept for FREE shipping?

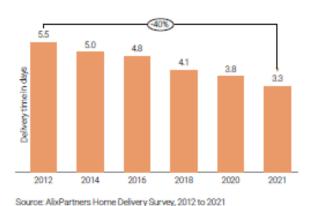
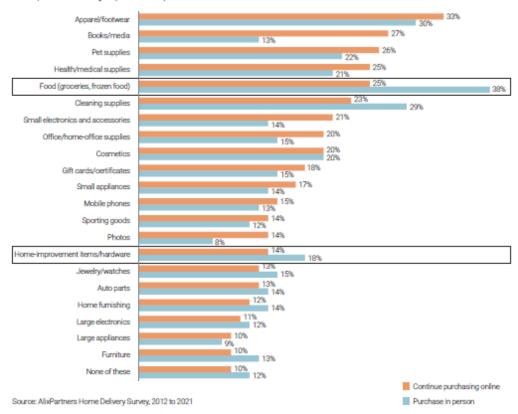


FIGURE 2: ALTHOUGH IN-STORE SHOPPING IS SET TO INCREASE IN MANY CATEGORIES

Q: Once restrictions are lifted on in-person activities, which of the following products do you expect to continue purchasing online, and which will you purchase in person?







#### **5 Last-Mile Trends to Have on Your Radar** Omnitracs

As a vehicle is a machine comprised of many moving parts, the last-mile experience is a machine with numerous moving parts of its own. The customer experience is shifting at an unprecedented rate — with much energy going to innovative technology, an intensifying yearning for convenience, and the pandemic reshaping our lives in real time.

There are five last-mile trends currently cementing our figurative roadway:

- 1. **E-commerce** E-commerce, the process of conducting transactions electronically on the internet, skyrocketed by 44% in 2020. It is both the highest annual e-commerce growth rate in two decades and nearly triple the growth rate of 2019. To no surprise, the pandemic has significantly accelerated e-commerce growth.
- 2. Same-day delivery It began with five-day delivery, then it was two-day, shortly afterward it was next-day, and now we've reached same-day delivery. Every time the bar for delivery windows rises, "fleets struggle with balancing the customer experience with operational costs".
- 3. Contactless delivery Gone are the days of clipboards and electronic pens and they may never return.
  While the pandemic has indeed reshaped our approach to plenty in the last-mile space, there is perhaps no better example of its impact than contactless deliveries.
- 4. **Crowdsourcing** Finding and retaining drivers is a significant challenge in the last mile. Fortunately, emerging models enable local drivers to sign up for delivery operations. This form of last-mile delivery falls under the umbrella definition of crowdsourcing. The success of rideshare applications can account for this expansion into last-mile delivery.
- 5. Customer experience Customer experience is the number one factor driving innovation in the last-mile industry. It's impossible to talk about customers, though, without focusing on drivers. Drivers do more than transport goods from one location to another, although that piece of their role is undoubtedly essential. A driver serves as a brand ambassador for your business the last point of contact for your customer. To keep drivers happy, you have to ensure they're not overwhelmed. So, it's safe to say that providing a positive customer experience goes hand in hand with securing a positive driver experience.

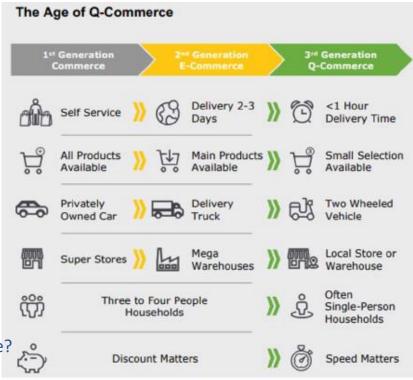




#### The future of on-demand delivery in a post-covid world

• To make money, the on-demand delivery business relies on consumers willing to pay a premium for food or groceries to be delivered (over and above the cost and time of picking up these purchases themselves). They also need a high level of volumes in order to leverage the necessary network benefits of their business model and repay their investment in technology as well as maintain a steady stream of work for couriers. During lockdown people were discouraged from going out, restaurants were closed and there was an increase in disposable income (due not least to lack of opportunities to socialize and savings on the daily commute) which provided a fertile economic backdrop for the on-demand sector.

- On-demand company, Delivery Hero, characterizes the development of the industry in the graphic alongside. It illustrates three phases. Firstly, 'commerce' which, post 2000 then evolved to 'e-commerce' and then, more recently to a third-generation stage, 'Quick' or Q-commerce.
- In the first model, a platform, such as GrubHub, connects the
  consumer with a restaurant and takes a commission on the
  transaction. The delivery is fulfilled by the restaurant itself.
  In the second, the platform, such as Deliveroo, connects the
  restaurant or store with a delivery network, which extends
  on-demand capabilities to restaurants which previously had
  not been present in the take-away market. However, this also
  comes at a cost and with much higher levels of complexity.
- The question remains: in a post-COVID age, will the conditions exist that allow both, one or neither business models to survive?
- A return to restaurant eating and in-store shopping will negatively impact the on-demand delivery world



Source: Delivery Hero





### All aboard the hyperloop: How your commute could be changing

- Josh Giegel wants to start from scratch. The chief executive and co-founder of Virgin Hyperloop foresees us zipping between cities in minutes, a future not as far off as you may think. Here are some of his thoughts;
- We're looking at moving massive amounts of people, at the speed of an aircraft, giving them the opportunity to live where they want to live and work where they want to work. A hyperloop would move as many people and goods as a 30-lane highway.
- We take you inside a tube, which gives you lots of advantages. It's impervious to weather, and you avoid lots of things that cause accidents, like crossings.
- Inside the tube we take almost all the air out, allowing you to go at high speeds with very little energy consumption. We use magnetic levitation technology, so there is no grinding, and everything is contactless and smooth. With electromagnetic propulsion, and 20-30 passengers per pod, we could move thousands of passengers per hour.
- It transforms the math. Look at how long it takes you right now to get across Manhattan. Maybe 40 minutes. You could go from NYC to Washington, D.C., in less time. You could go from LA to Las Vegas in 40 minutes.
- Big ideas don't have to take long periods of time. You can go from a garage to a moonshot idea in a couple of years.
- This decade could end with hundreds of millions of people riding hyperloop. For people who think this technology is many years away, I rode on one. It's right now.
- I have a two-year-old son, and the way he will be able to live is unlike anything we can imagine.
- If you look at the cities of the future, people might want to live in one area, and work in other areas. We're already seeing that with the pandemic. My dream is to live near Yosemite and then work with my team in LA. A hyperloop would give you the potential to do both.

#### Our thoughts;

- Moving freight from west coast ports to the midwest can take hours instead of days.
- Moving freight across the ocean will surely follow, moving goods from China to the U.S. in hours instead of weeks. Imagine eliminating port congestion and shipping lanes?
- Hyperloops can be created in underground tunnels, obviating the need for land title and political turmoil.





#### HyperPort would fire shipping containers around at transonic speeds **NEW ATLAS**

- Hyperloop Transport Technologies has presented an ultra-high-speed shipping port logistics system it says can shift up to 2,800 containers a day, covering hundreds of kilometers in minutes – while decreasing emissions wherever it's rolled out.
- The whole thing would be like a giant cargo-carrying version of the pneumatic tube systems that once blasted thousands of messages around every hour, back when things were all black and white. As long as those things were around, innovators dreamed of one day building scaled-up versions big enough to move passengers and cargo.
- The model here is HyperloopTT's port logistics system, which it's spent some 20,000 hours developing in partnership with Hamburger Hafen und Logistik AG of Germany, a logistics and transport company that runs a number of container terminals and has a business name that makes it all sound a lot more exciting than it probably is.

• It's built a full-size prototype passenger capsule measuring 32 m (105 ft) long, featuring the company's own proprietary "Inductrack" mag-lev technology and sensor-embedded "Vibranium" carbon fiber skin. The system plans to reach speeds of 760mph when up and running.









#### Warehouse space in high demand as companies shift to e-commerce

• Just as the housing market across most of the country is red-hot, so too is commercial real estate, specifically warehouse space.



- Lizzy Newsome owns Kappa Toys on the Las Vegas Strip. It's where you go if you want to pick up the latest Japanese action figures or maybe a retro Batman dice kit. Newsome said her business more than doubled its projected sales in the past year, which meant she had to find a bigger warehouse to put all those toys in.
- "Honestly, the new space is, like, 10 times bigger. We have, like, 400 square feet right now, and we're moving into a 4,000-square-foot warehouse," she said.
- Now that Kappa has more warehouse space, it'll be able to shift some of the focus to online offerings, Newsome said. And that shift to e-commerce is in part what created the need for bigger and more warehouses.
- A new report from the real estate firm CBRE says e-commerce is expected to grow to a quarter of all retail sales by 2025. If that happens, the U.S. will need an additional 330 million square feet of distribution space to handle it.
- "Retailers, general wholesalers, third-party logistics providers are seeking accommodation," said Matt Walaszek, a research analyst at CBRE. "They need space to store their goods, and then with all the supply chain volatility, we're expecting even more demand for warehouse space."

#### How much more consolidation can the industry take?



- DSV's recent purchase of Agility, for 23.2 x EBITDA, would seem to highlight a lack of acquisition opportunities at the top end of the global logistics sector.
- In recent years, the industry has experienced rapid consolidation, with the leading players DHL, K+N, DSV, UPS, FedEx and XPO all undertaking significant acquisition programs to develop scale, generating purchasing power over shipping lines and airlines, capitalizing on growth opportunities, especially within the e-commerce segment.
- The potential for future deals seems small and shrinking. Suitors would likely need to offer an attractive premium to entice owners to sell. Therefore, companies with ambitious growth plans may have to adopt a different approach from traditional acquisition strategies if they want to build scale whilst maximizing shareholder value.





#### Broad supply chain issues behind international intermodal container delays: NS FREIGHTWAVES

- The challenges in timely delivery of international intermodal containers are more about the wider congestion issues facing the supply chain and less about any capacity limitations on Norfolk Southern's network, executives said during NS' second-quarter 2021 earnings call on Wednesday.
- "It's not an issue of capacity. It's an issue of throughput," said NS Chief Marketing Officer Alan Shaw during NS' (NYSE: NSC) earnings call on Wednesday.
- Shaw explained that the accessorial program for the international intermodal product is to help encourage the timely movement of boxes. NS' customers had wanted additional capacity at the terminals, and the accessorial program has been a means to bring about that capacity, Shaw said.
- "Our customers in certain locations needed more space for storage. And so, we responded to the market: We added satellite lots in some areas, we reconfigured ... at Landers, our heavily international facility in Chicago, and we've been able to accommodate a lot more international units, dwelling on our terminals because that's what our customers need. Our accessorials in this case are an activity-based service and price that we apply to the market," Shaw said.

### Race to the bottom in Chinese parcel prices continues

- The parcels market in China is unlike anywhere else in the world. Its consumers or netizens have taken to e-commerce with great verve, drawn in by successful early starter e-retailers, rapid delivery times and low prices. The scale of the market makes it stand out too. By volume, China's parcels market is nearly 5 times larger than the United States.
- But the development of the market has created intense competition. The market is dominated by the "Tongda" companies YTO, STO, ZTO, Best and Yunda, in addition to premium operator S.F. Express and China Post. In a bid to gain market share, the operators are locked in a price war which has, according to the China State Post Bureau, seen average parcel prices fall by 57.1% over the past decade.
- Due to the influence of such significant entities in the market, making predictions around its future is challenging. However, the situation of ever-decreasing parcel prices is unlikely to persist over the medium term. Additional efficiency gains look set to become harder achieve, with margins being squeezed towards breaking point. Diesel prices are under pressure to increase in the short term, whilst labour costs in China are continuing to rise sharply.





#### Wind Turbine Installation Vessel Capsizes Off China **Ucaptain**

- Four people are missing after a wind turbine installation vessel partially capsized in the South China Sea off Huizhou, China.
- The WTIV Shengping 001 was working on China General Nuclear Power Corporation's Huizhou Gangkou Phase 1 when the incident occurred on Sunday, July 25.
- Reports say 65 people were on board the jack-up and four are missing, prompting a search and rescue involving multiple air and sea assets.



#### FBX Overview FREIGHTOS Smooth shipping

- Asia-US West Coast prices are \$18,345/FEU. This rate is 566% higher than the same time last year.
- Asia-US East Coast prices are \$19,620/FEU and are 487% higher than rates for this week last year.
- On the heels of natural disasters in Canada and Europe, Typhoon In-Fa made landfall on China's central coast at the end of last week, disrupting operations at ports in Shanghai and Ningbo, and cancelling flights at airports in the region. Operations are expected to rebound by mid-week.
- Lockdowns due to the coronavirus outbreak in Vietnam continue to cause serious problems for logistics in the region.
   Miranda Qin, Project Manager at Seabay Logistics, a China-based freight forwarder and logistics provider on the
   Freightos.com marketplace, reports that operations are being significantly impacted in many ways ranging from
   "cancelled flights, sailings and rail service, to increasing difficulty securing containers or chassis, or even getting email
   replies from our logistics partners there."
- These disruptions and sustained peak levels of demand continue to put tremendous pressure on ocean rates, keeping them extremely elevated or climbing, even as carriers announce significant upcoming surcharges on ex-Asia lanes.
- Prices on transpacific lanes, with the aforementioned update, are now at record highs of \$18,346/FEU to the West Coast, more than 6x its level a year ago, and an astounding \$19,620/FEU to the East Coast, more than quintuple its rate last July even as the peak of peak season may still be ahead of us.





#### 

- The Port of Savannah surpassed 5m TEUs for the first time in its history in FY2021 as the U.S. economy bounced back from COVID-19 shutdowns.
- Georgia Ports Authority said Monday that Savannah recorded 5.3m TEUs in its 2021 fiscal year, growing cargo
  volumes by 20% or nearly 900,000 TEUs compared 2020. In doing so, Savannah becomes the first container terminal
  in the Southeast or Gulf Coast to move 5m TEU or more.
- Trade in autos and heavy machinery also saw significant growth with roll-on/roll-off volumes reaching 703,528 vehicle units for an 18% increase year-over-year. The Port of Brunswick alone handled more than 685,000 units.
- "American companies continue to choose the Port of Savannah as a critical gateway to global trade," said Georgia Gov. Brian Kemp. "Our ports play a major role in Georgia being named the number one state for business eight years in a row. I am thankful to GPA for their great work over the past year to grow Georgia's trading capacity and expand our world-class business environment."
- In fiscal year 2021, Georgia Ports Authority added 210,000 TEUs of capacity at the Port of Savannah through expanded container handling space and equipment at Ocean Terminal. With the Savannah Harbor Expansion Project now nearly 90 percent complete, a high-tide depth of 54 feet will allow vessels in the 16,000+ TEU range to take on heavier loads with fewer tidal restrictions. The project should wrap up in December 2021.

#### Shanghai Mega-Ports Shuttered as Typhoon In-Fa Slams East China Captain

- Typhoon In-Fa, the powerful storm battering regions around Shanghai, has forced some of the world's biggest shipping ports to halt operations until at least Tuesday.
- All of Shanghai's ports and some in neighboring regions remain shut after closing over the weekend due to the extreme weather, according to people familiar with the situation. The idled ports include Yangshan, part of the world's biggest cluster of container terminals, which sits offshore to the south of Shanghai.
- In-Fa slammed into Zhejiang province to the south of Shanghai, prompting local authorities to evacuate more than 100,000 people and shut schools, markets and businesses. Shanghai, China's financial hub, was hit hard by stormy weather over the weekend, with images of street flooding, flying debris and uprooted trees shared on social media.





#### 

- This week Russian President Vladimir Putin met with the country's shipbuilding executives to review plans to prioritize short sea shipping with the hope of bypassing the Suez Canal.
- "We are focusing on the South-North corridor, primarily moving cargo via the Caspian Sea," said Alexei Rakhmanov, Chief Executive of United Shipbuilding, Russia's largest shipbuilding company. "This year, we are starting to design a containership that will ply the Caspian Sea with Helsinki as its final destination. In this way, we will be opening up routes that do not depend on foreigners."
- According to the Kremlin, by building smaller vessels capable of short sea shipping, it's possible to load cargo in northern Iran or western China and take it to Helsinki via the Russian Port of Olya on the Caspian Sea. They believe this route will take only seven or eight days to reach Helsinki from Olya at an average speed of 10 knots.
- "We are zealously working on many new products," said Rakhmanov. "In the case of civilian shipbuilding, I am referring to the opening of basically new segments, including small boats, which few businesses have dealt with systematically, and solutions for Russian cities."
- This is not Russia's first plan to bypass the Suez Canal. In March President Vladimir Putin revealed a plan to capitalize on the polar ice melt from global warming by investing in Arctic shipping and development. This plan to reroute cargo via the artic will also require shipbuilding efforts and, this week, Russia announced plans to build new icebreakers that are powered by liquified natural gas. Russia already has numerous heavy icebreakers (including heavy nuclear ships), while the United States doesn't have a single heavy icebreaker that doesn't catch fire and break down routinely.

#### US rail regulators target container demurrage billing Joc.com



The US Surface Transportation Board wants the seven Class I railroads to explain their policies and practices for demurrage fees, but the agency is holding off on regulating them more — for now.

#### US imports to keep driving global shipping imbalance Joc.com



North American companies are signaling that they will need to build up larger inventory buffers to meet strong US consumer demand, something that will keep up pressure on ocean freight.



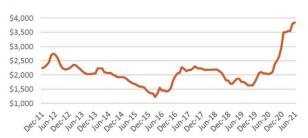


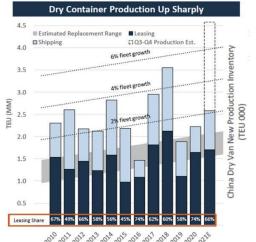
#### South African container terminals rocked by IT disruption PORT

- Container terminals in South African ports have been impacted by "disruption" to their operator's IT systems.
- Transnet, which operates major national infrastructure including ports in Cape Town and Durban, released a statement on 22 July experiencing disruption to some of its IT applications, with the source of the problem being identified.
- "Port terminals are operational across the system, with the exception of container terminals, as the Navis system on the trucking side has been affected," the statement wrote.
- "In the Eastern Cape, terminal operations have been halted due to inclement weather conditions and will continue manually once it is safe to do so.
- "The Ports Authority continues to operate, and vessels moving in and out of the ports are being recorded manually."

### Containers are being built at a record pace. It's still not enough American Shipper

- On Tuesday, the world's largest container-equipment leasing company, Triton International, announced record results and provided the latest intel on box production.
- The price of a new container, which had stabilized at around \$3,500 per twenty-foot equivalent unit (TEU) earlier this year, has risen again and is now at \$3,800 per TEU. Prices are "at unprecedented levels," said John O'Callaghan, Triton's global head of marketing and operations,
  - during the call with analysts.
- The price of a new container at this time two years ago, pre-COVID, was around \$1,600 per TEU, less than half the current level.









#### \$32,000 container move from China to LA American Shipper

- Shippers jockey for limited vessel space, but some companies are getting priced out of the market for international freight transportation.
- The blows to the global supply chain never seem to end in 2021, resulting in delays that have sharply reduced the system's effective capacity and put upward pressure on shipping rates that began reaching record highs months ago. Purchasing ocean transportation has become so expensive that many companies with lower-value commodities can't afford to import anymore, analysts and logisticians say.
- Vessel operators have no extra ships to meet a tidal wave of freight demand, containers are in short supply or can't get quickly repositioned where needed, and destination ports are piling up with boxes because they can't keep up with the volume. The logjam, which is adding weeks of delay for major export trades from Asia, has been exacerbated by a series of weather- and COVID-related events, as well as operational mishaps.

#### How extreme is the situation?

- One ocean carrier told a company it would cost \$32,000 to ship a group of standard containers from Shanghai to Los Angeles, Craig Grossgart, SVP of ocean at SEKO Logistics, said during a briefing for reporters late last month.
- "It was a nice way for the carrier to say, 'We're not interested in any more business,' " Grossgart said.
- The quote was an outlier the type primarily for customers asking to move large backlogs of boxes all at once but is an indication of how desperate some shippers are and how selective carriers can be when they hold the cards.
- On Wednesday, the Freightos Baltic Daily Index adjusted its methodology for tracking ocean shipping rates to include for the first-time premium surcharges required for bookings, substantially raising transparency into the real cost paid by cargo owners.
- The index shows Asia-U.S. West Coast rates at \$18,345, six times higher than a year ago, and the price for shipping to the U.S. East Coast quadrupled to \$19,620 per forty-foot equivalent unit. Rates from Asia to Northern Europe climbed 4% since last week and are more than eight times higher than a year ago and 2.5 times more than at the start of the year.
- Soaring transportation inflation is more than some can absorb.





### Canada border officers vote to strike, warn of supply chain disruption American Shipper

- Thousands of Canada Border Services Agency personnel have overwhelmingly voted to authorize a strike –
   something that could throw a wrench into port, cross-border trucking, airfreight and international parcel operations.
- The strike could happen as early as Aug. 6, the Public Service Alliance of Canada and its Customs and Immigration Union said on Tuesday. The union represents some 8,500 CBSA employees, including officers serving at ports of entry across the country.
- The threat of a strike comes as Canada prepares to reopen its land border to nonessential travel for the first time since March 2020. The timing wasn't lost on the union, which warned that a strike could lead to "significant disruption to the flow of goods."
- The impacts could bring delays to commercial traffic parcel deliveries and duties collection, the union said.

#### The Problem With Demurrage **Ucaptain**

- Demurrage is an issue that is necessary, but nobody likes. Simply put, it is a cost levied by the vessel owner when a vessel outstays its allowed time in port. It is a fundamental part of the contract for carriage of goods as set out in the charterparty document.
- It is obviously important. An examination of charterparty documents shows that approximately 75% of the clauses are to do with in-port operations. When we look at the utilization of dry cargo vessels, we see that over 45% of their time is spent in port. So, it's clear that this waiting time is a commercially and contractually important issue.
- There are solutions to this. The first is simple. If the vessel owning industry were to adopt digital Statement of Facts, then the process of handling the SOF could be reduced or in many cases eliminated altogether. Electronic documents for the SOF can be created that will integrate directly into the trading systems or standalone laytime calculators.
- There is a need to improve the demurrage calculation process. By having automated calculators that understand the trade terms in the trade contract and charterer party we can approach the goal of Straight Through Processing (STP) with much reduced manual intervention. The manual processing used today simply adds friction to the process and creates errors in interpretation that delay the acceptance of claims. Manual handling of the demurrage claim should be reserved for the 20% of really complex claims that are beyond the capability of today's systems.





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

#### QuikTrip Celebrates 900th Store Milestone Convenience Store

- QuikTrip is celebrating the opening of its 900th convenience store, located in Corsicana, Texas.
- Over the course of the company's 63 years, it has grown to 12 states. Four more states Tennessee, Arkansas, Alabama and Colorado — are scheduled to enter the pipeline in the next year, reported Tulsa World.
- "We are proud of the strategic progress QT has made over the course of our 63-year history," QuikTrip Marketing Director Steve Wilson said in a statement. "To think back on this small grocery store that was started decades ago and look at where we are now, opening our 900th sophisticated convenience store, is truly humbling.

#### British wine sector celebrates scrapping of "arduous and unnecessary" wine import paperwork food ingredients 1000



- UK ministers have pledged to cut red tape for British wine importers, saving local consumers up to £130 million (US\$178.8 million) a year, according to government-published estimates.
- The change would scrap the requirement of wine-specific paperwork time-consuming and costly VI-1 certificates on all imports of wine into Great Britain.
- The move aims to remove a "significant burden" on the UK's wine trade, which is the second largest in the world in value terms. Industry analysis suggests that VI-1 certificates add £0.10 (US\$0.14) to every bottle of imported wine.

#### EU to Suspend Increase in Tariffs on American Whiskey Pending Talks on Steel/Aluminum Disputes Kane's Beverage News

- The U.S. and the European Union announced the start of talks to resolve the issue of global excess capacity in the steel and aluminum industries and said they "agreed to avoid changes in issues "that negatively affect bilateral trade," including tariffs. The entire dispute should be ended by year-end, they said.
- "This news couldn't come soon enough," said Distilled Spirits Council of the U.S. President/CEO Chris Swonger. "Distillers across the United States are breathing a huge sigh of relief after bracing for a 50% tariff on American Whiskeys in just a matter of days that would have forced many craft distillers out of the EU market.
- Tariffs imposed on U.S. spirits slashed Kentucky Bourbon exports 35% in 2020, with shipments to the European Union plummeting by nearly 50%. Sales to the UK, formerly Kentucky's largest market in the EU, also have been decimated by 50%.

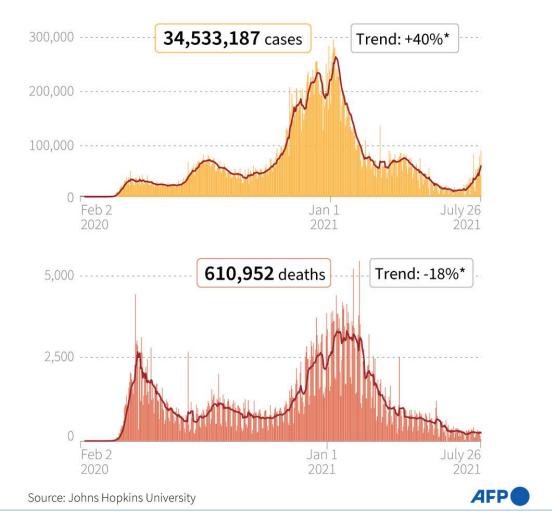




### **Healthcare Update**

### **Covid-19 in the United States**

Cases and deaths per day, rolling 7-day average







### **Healthcare Update**

#### Hospitals in Florida, Louisiana postpone elective surgeries HOSPITAL REVIEW

- Several hospitals and health systems in Florida and Louisiana are postponing elective surgeries amid an uptick in COVID-19 patient hospitalizations.
- In Florida, Health First in Rockledge is limiting elective procedures at its four hospitals, according to Florida Today. The pause will take effect July 29 and continue through Aug. 15.
- Health First said about 25 percent of its surgeries are affected and that patients will be directly contacted with instructions about rescheduling.
- Additionally, Jacksonville, Fla.-based Baptist Health asked its surgeons to delay some elective surgeries that require an overnight stay because of an uptick in COVID-19 hospitalizations.
- Louisiana hospitals are also canceling electives as they grapple with rising COVID-19 cases.

#### Dozens of new viruses discovered in 15,000-year-old glacier ice

- Scientists have collected viruses from almost-15,000-year-old ice cores, taken from glaciers on the Tibetan Plateau. Dozens of species were found to be unknown to science, which could provide an intriguing look back at the history of viral evolution.
- In the new study, led by researchers from Ohio SU, ice cores were drilled from the Guliya ice cap on the Tibetan Plateau, which were dated as far back as 14,400 years old. The team then analyzed these cores for what kinds of viruses they contained, and the genetic codes of 33 viruses were identified. Four of these were found to belong to known types of bacteriophage, viruses that prey on bacteria, but at least 28 of them didn't match any known type.
- "These are viruses that would have thrived in extreme environments," says Matthew Sullivan, co-author of the study.
  "These viruses have signatures of genes that help them infect cells in cold environments just surreal genetic signatures for how a virus is able to survive in extreme conditions."
- The researchers say that being able to better study ancient microbes can help better understand the history of their evolution, and how they handled changing climates in the past – and how well they might in future. The sterilization method could also come in handy for finding traces of viral genetic sequences in samples taken on the Moon or Mars.



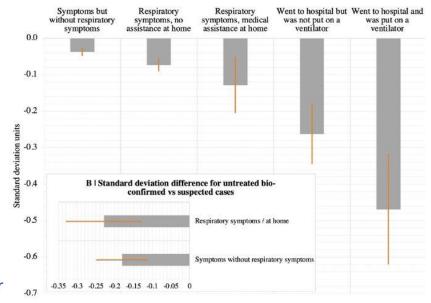


### **Healthcare Update**

#### UK study detects cognitive deficits in recovered COVID-19 patients **NEW ATLAS**

- A large new study published in The Lancet journal EClinicalMedicine has detected significant cognitive deficits in recovered COVID-19 patients. The research found the more severe the case, the greater the persistent cognitive problems, with hospitalized patients put on ventilators showing a decline equivalent to seven IQ points.
- Early in 2020, before the pandemic kicked off, Imperial College London researcher Adam Hampshire was working with the BBC on a big, UK-wide cognitive survey. Called the Great British Intelligence Test, the project was designed to get a broad overview of the nation's intelligence.
- As of December 2020, researchers had collected data from 81,337 subjects. Around 12,000 subjects surveyed reported contracting COVID-19.
- "The scale of the observed deficit was not insubstantial," the researchers write in the newly published study. "The 0.47 SD [standard deviation] global composite score reduction for the hospitalized with ventilator sub-group was greater than the average 10-year decline in global performance between the ages of 20 to 70 within this dataset. It was larger than the mean deficit of 480 people who indicated they had previously suffered a stroke (-0.24SDs) and the 998 who reported learning disabilities (-0.38SDs). For comparison, in a classic intelligence test, 0.47 SDs equates to a 7-point difference in IQ."
- "There is a worrying association between COVID-19 illness and a broad range of higher cognitive function in the early chronic phase," Hampshire notes on Twitter. "More research is needed to determine how long these deficits last and their biological/physiological basis."

Figure 2 - Cognitive deficits in people with suspected and confirmed Covid-19 illness







## **Cybersecurity Update**

- The story of 2020 is of the devastating COVID-19 pandemic, and of how the world adapted. The story of malware in 2020 then, is a story of how the tools and tactics of cybercrime and cybersecurity changed against a backdrop of enormous changes to ordinary life.
- The novel coronavirus outbreak that began in the city of Wuhan in China was declared a global pandemic on March 12, 2020. Any thoughts that cybercriminals might be above exploiting the catastrophe were quickly disabused.
- Instead, they adapted and doubled down. As the world watched in alarm at the outbreak spreading, criminals preyed upon people's fears mercilessly, with an avalanche of coronavirus phishing emails and scams.
- Globally, governments tried to stop their hospitals from being overwhelmed by ordering lockdowns, stay-in-place orders, and school closures. By April 2020, half the world's population had been asked or ordered to stay at home.
- As entire businesses switched to remote working, IT teams found themselves trying to fit months-long projects into days, with security an unfortunate but understandable casualty. Faced with a new landscape, cybercriminals ditched some old tactics and placed a new emphasis on gathering intelligence. And as people adapted to their "new normal," scammers exploited their isolation with a resurgence in tech support scams. New adversaries crawled out of the woodwork, too. April's global shutdown was accompanied by a huge rise in the use of stalkerware, shorthand for the type of mobile monitoring and spyware apps that are sometimes deployed by abusive partners.
- The pandemic also created new challenges to online privacy. As countries turned to digital contact tracing to contain outbreaks, a stark dichotomy emerged: It is possible for people to have personal privacy or effective contact tracing, but probably not both. Around the world, the progress of privacy-preserving legislation slowed to a crawl.
- And what began as a global health crisis soon became a global economic crisis too, with almost no business left unscathed. The fate of different industry sectors was mirrored in the number of cyberattacks they suffered. As the manufacturing and automotive sectors contracted, attackers simply turned their faces to agriculture and other essential industries instead. Ransomware gangs reneged on early promises to stay away from hospitals and hit new lows, attacking hospitals and medical facilities in organized campaigns.
- If 2020 taught us anything, it's that cybercrime stops for nothing.
- There are no targets, and no opportunities for exploitation, that are beyond the pale.







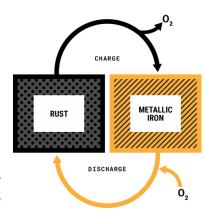
### **Alternative Energy Update**

#### MSC Wants World's First Hydrogen Cruise Ship **Captain**

- Swiss-based shipping group MSC, Italian shipbuilder Fincantieri and gas group Snam are joining forces on a feasibility study with a view to building the world's first hydrogen-powered cruise ship. The three companies will look at a series of logistical and technological issues over the next 12 months to assess whether to proceed with the project, they said in a joint statement on Monday.
- The aim is to promote the use of hydrogen in shipping to reduce emissions while attracting the investment needed to scale up the business, they said.
- "We want to be on the front line of the energy revolution in our sector and hydrogen can greatly help in this direction," said Pierfrancesco Vago, the executive chairman of MSC's cruise division.
- The European Union this month announced an ambitious climate change package that will introduce duty on high-carbon shipping fuel that has not been taxed previously.
- Hydrogen is widely viewed as having an important role to play in reducing emissions in heavy transport sectors that are difficult to electrify, though costs will first need to fall.
- "Maritime transport today accounts for some 3% of CO2 emissions worldwide ... the use of hydrogen can help achieve net-zero emission targets," said Snam CEO Marco Alvera.

#### Disruptive iron-air grid-scale battery is 10% the cost of lithium NEW ATLAS

- Boston's Form Energy is building a commercial-scale pilot of a remarkable new grid-scale battery project that could make a huge contribution to long-term energy storage as the world moves away from fossil fuels. These simple iron-air batteries store up to 100 hours of energy at a tenth the cost of a lithium battery farm.
- Tesla kicked the grid-level energy storage sector off in 2017 when it built the world's biggest battery in South Australia. The project was a huge success, and spawned many similar, larger developments worldwide. But there are inherent issues with lithium batteries.
- Another key advantage of a system like this comes at the end of its service life; the materials
  are highly recyclable.







### **Alternative Energy Update**

#### Porsche's electric van cabin looks to the "day after tomorrow" NEW ATLAS

- With a lack of auto shows to prepare for and attend, Porsche spent some of 2020 flipping back in its design annals and giving the world a look at "Unseen" concepts it had developed but never made public. One of them was the silky-smooth Renndienst, a modernized electric take on a classic VW T1 Porsche factory race team service van. As far as we knew at the time, the Renndienst was entirely a 1:1 exterior model, but this week, Porsche dives inside to show the van's unique 1-2-3 layout.
- To fill out the Renndienst's interior, Porsche's chief designer Michael Mauer teamed up with head of interior design Markus Auerbach and director of UX design Ivo van Hulten. Their mission was to supply the "futuristic and edgeless" van with an equally futuristic travel cabin, a vision for the "day after tomorrow."



The Renndienst's central driver seat initially looked like it might be a simple nod to the van's motorsports origins, but Mauer explains that it's more a way of giving an autonomous van a more Porsche-like driving experience. In this way, the driver can completely zero in on the road ahead like an F1 driver. When switched over to autonomous mode, he or she can spin around to face the rear passengers.

• As for the panel van-like absence of rear side windows, Porsche must have realized that aspect looks much cooler from the outside than the inside because it has done a little updating. The interior renderings show only the left side of the rear cabin going without side windows, the right gaining a more traditional rectangular window. The idea is that a passenger can either retreat into quiet, low-light privacy on the left or enjoy the passing view on the right.















### **The Good Old Days**







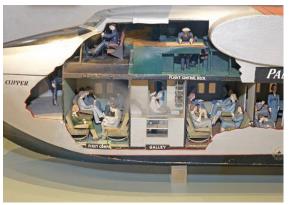
Economy Class Pan Am 1960's



Boeing 377 Stratocruiser berths 1950's



Business Class Boeing 747 1970's



Pan Am Clipper 1930's



1st Class 1940's





### Here's How the Climate Crisis Is Impacting the Water Cycle

