"Supply chains" are suddenly big news, as coronavirus complications have made it harder to get products, goods, groceries, and many other things to customers who need them.

Just in the last few weeks, the Trump administration asked energy firms to report any supply chain vulnerabilities so that America can keep the lights on. The Biden campaign issued a three-part plan to rebuild supply
chains with much more domestic sourcing and manufacturing of needed products, with a particular focus on medical supplies.

Sectors of the economy, ranging from clothing to farming to healthcare, face serious supply problems because of this production and distribution model that has come to dominate the global economy.

The financial website Investopedia explains that a supply chain is "a network between a company and its suppliers to produce and distribute a specific product to the final buyer" and spells out the reason for companies' reliance on those networks. A sufficient supply chain "results in lower costs and a faster production cycle," which can allow a business to get its products to customers faster and cheaper than its competitors.

The "chain" part of it comes in, according to Investopedia, when we look at "the steps it takes to get the product or service from its original state to the customer." These steps are all metaphorical links in the chain. If one link fails to connect to the next link, then the supply chain breaks down, and the customers don't get what they need on time. A broken supply chain can lead to spoliation of foodstuffs, shortages of necessary products, lost revenues, lost jobs, and bankruptcy.

Lately, the link in global supply chains that have been most likely to fail is located in China, ground zero for COVID-19, and is still subject to periodic, large-scale lockdowns of 100 million people or more.

The *Washington Examiner* reached out to several business professors who teach supply chain management. They all agreed that Chinese sourcing and logistics are a serious problem for companies currently doing business there. Just what to do about this vulnerability generated considerable disagreement.

Arizona State University professor Hitendra Chaturvedi told the *Washington Examiner* that he has been making "the case for Mexico and Latin America creating an alternative to China" in U.S. companies' supply chains.
"We do not tolerate monopolies in business. Why are we tolerating the monopoly of a country when it comes to manufacturing?" Chaturvedi wondered. He warned: "If we do not take steps to break this monopoly, then I am afraid that, temporarily, we will see a reduction of Chinese products, but then, economics will trump everything, and with our short memories, we will go back to the Chinese factories, and the cycle will be repeated again."

Professor Craig Carter, Chaturvedi's colleague at ASU, was less concerned about a future Chinese dominance of supply chains.

"The drive towards efficiency and lean supply chains led many companies to select a single supplier for a particular part or component," Carter explained. "For some sourcing categories, these suppliers were often located in China due to low labor costs. Companies still want the lower prices associated with sourcing from a single supplier. However, the disruption caused by COVID-19 has led many companies to identify a second source of supply. In China's case, this is often referred to as a 'China plus one' sourcing strategy."

Carter argued the coronavirus "has simply sped up a migration to sourcing from suppliers in other parts of Asia. In addition, the pandemic has also sped up the move to near-sourcing."

Michigan State University professor Tobias Schoenherr said that companies need to take a "more balanced" approach to sourcing their products by "not only focusing on low cost but also on flexibility and responsiveness."

He told the *Washington Examiner* that many items "will always be able to be sourced from China without problems, especially off-the-shelf and basic products." But for other items, such as "highly engineered products, or products that are critical for a nation's proper functioning, such as Personal Protective Equipment," including face masks, "domestic sourcing would be advisable."
Schoenherr advocates a "two-pronged approach" by companies' supply chain managers. They ought to take the risk of future regional disruptions and shutdowns more seriously and mitigate this risk by "sourcing a percentage of the need from foreign countries while sourcing the other percentage from domestic sources."

Rutgers University professor Alok Baveja said that we are headed for a "strategic redesign of supply chains." He believes that's likely to be a great thing in the long run. "We anticipate a trend of supply chains getting shorter and faster, which paradoxically can provide higher resilience and, ultimately, higher profitability."

Baveja warned businesses that they need to think about how they run their supply chains "strategically" rather than "focus on temporary solutions or rely on government incentives."

Whatever the specific supply chain strategies companies are using domestically, they appear to have struggled and found a way. Shortages in essential goods, such as toilet paper, near the beginning of COVID-19's landfall in the U.S. are no longer prevalent. Many factories that would have been temporarily idled for lack of demand shifted into supplying things such as masks and other necessary medical equipment. This allowed them to keep their workforces at the ready, to shift back when demand returned.

After a dismal April, retail and restaurant sales saw a dramatic resurgence in May, up over 17%. That would not have been possible if supply chains were failing to get the goods and foodstuffs delivered.

Krow Neva is a trucker in western New York, and thus is near the end of many supply chains. He told the Washington Examiner that he's seen some drop-off in supply but that the goods have kept coming.

Mike Regan, chief of relationship development and co-founder of TranzAct Technologies, a global, third-party logistics firm in Illinois,
said, "They're regaining their balance after having been severely stressed. They're adjusting. And the supply chains are coming back."