

Amid a Global Supply Chain Crisis, How the Port of New Orleans Has Avoided Major Shipping Delays

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Container ship at the Port of New Orleans. Photo by Marco Rasi, from Above New Orleans, by Marco Rasi and Richard Campanella

As ships by the hundreds await berths at major world ports and consumers worldwide endure delayed deliveries, locals might ponder why we haven't seen such logjams at the Port of New Orleans—and whether problems elsewhere might represent an opportunity here.

In many regards, those maritime traffic jams are the product of the sheer success—and vulnerability—of the globalized economy, which itself is partly traceable to two breakthroughs from the 1960s and 1970s. One was containerization, and the other was just-in-time manufacturing.

Containerization entails the pre-packing of cargo into standardized boxes designed for intermodal transportation—from truck to train to ship and back again—with a minimum of human handling.

While containerization predates World War II, the concept accelerated in the late 1950s, when a former trucker named Malcolm McLean honed the process through his company, Sea-Land Service, and started making profits in 1960. In subsequent years, McLean set the standards for containerization, and ports worldwide adopted the new technology. Soon, shipping firms relocated their wharves from historic waterfronts to align with new interstates and rail lines. They retooled themselves with giant gantry cranes and front-loaders to lift the containers, replacing the longshoremen who formerly handled crates. While thousands of dockworkers would eventually lose their jobs, millions of consumers benefitted, as shipping times and costs plummeted, prices on imports dropped, demand increased, and trade increasingly globalized.

The Port of New Orleans readied itself for the transformation. Shippers around 1970 envisioned a mega-facility named Centroport to be built in eastern New Orleans, where trucks, trains, and vessels could travel the just-completed I-10, myriad rail lines and the newly excavated Mississippi River-Gulf Outlet Canal. Competing ports made similar changes, and world shipping revolutionized.

Then, in 1973, the Organization of the Petroleum Exporting Countries (OPEC) imposed an oil embargo, effectively snapping supply chains across the globe. Nightly newscasts featured scenes of frustrated motorists lined up at gas stations, not unlike the social-media images today of fleets of ships anchored offshore.

One consequence of the 1973 embargo was that world oil prices would remain high for years to come, catalyzing an economic boom in Louisiana—but also setting the stage for a painful bust in the 1980s. Another consequence came out of Japan, whose economy was gravely threatened by the oil shortage. Few firms felt the crisis worse than the Toyota Motor Corporation, which strove to make its manufacturing process leaner and more efficient.

An engineer named Taiichi Ohno led the way in developing what would later be called the “just-in-time” production model, which endeavored to eliminate all forms of waste, be it in time, money, or materials. Instead of making parts and paying to warehouse them until needed, Toyota made them as needed, or outsourcing them and scheduling their delivery “just in time” for installation.

The just-in-time approach reduced costs and streamlined manufacturing. But it needed suppliers, who in turn needed efficient means of shipping the parts to the right place at the right time. Toyota needed containerized shipping—and so did every other manufacturer adopting lean, fast production models.

Shippers responded in kind, and so did ports, trains and trucks—all of which enticed more industries to operate “just in time.” Savings were passed on to consumers, even as profits mounted.

The intertwined rise of containerization shipping and lean manufacturing fueled a rise in global productivity which further burgeoned as China became an industrial powerhouse. Exports from throughout Asia, many of which were high-tech products heavily reliant on intricate just-in-time supply chains, flowed particularly to those importation ports on the American west and east coasts that were located closest to the nation's largest population centers.

New Orleans got its fair share, and its containerization capacity also grew dramatically, even after it abandoned the Centroport idea and returned to wharves on the Mississippi River, where the blue cranes and intermodal lines operate today.

Then came the COVID-19 shutdown in March 2020. Assembly lines ground to a halt, and parts could no longer be manufactured just in time. Goods piled up in warehouses or on storage lots, awaiting key components like computer chips, which forced incoming shipments to wait for space to open up. To make matters worse, trucking companies, like so many other employers during the pandemic, found themselves short of drivers. That led to more backlogs and logjams.

Demand remained strong—think of all those online purchases people made to avoid going to the store—but the supply chain behind it had been broken. The worst vessel jams occurred at precisely those ports that catered the most to containerized imports derived from the broadest just-in-time supply chains.

Which brings us to the Port of New Orleans, where officials report zero waiting time for arriving ships to berth. The reason largely reflects the broad trade geography of the Port of New Orleans. Its position on the Mississippi River near the Gulf of Mexico enables it to be both a river and sea port, serving a vast hinterland as well as a global foreland.

This means our port attains a substantial share of its business from bulk cargo, like grain or coal, coming from the interior. These “piled” commodities move on barges and other river vessels, not ocean-going containerized ships, and they are exported from places like Ohio and Kentucky, not imported from China or Japan. Current international shipping disruptions are primarily import-driven, and being primarily in the domestic export business allows the Port of New Orleans to have greater control of its own destiny.

The Port of New Orleans also handles lots of breakbulk cargo, like metals, rubber, and specially shaped items transported as individual units. Like bulk products, breakbulk tends to be at the beginning of supply chains, not at the end, and it does not require shipping containers—which are also in short supply across the world. As container shipping costs have spiked in recent months, breakbulk is becoming a more attractive alternative.

Another strength of the Port of New Orleans is its multi-modal capacity. At many major import-dominant facilities, the long lines to get cargo *in* to the port are due to their limited ability to get cargo *out*. This is less of a problem at New Orleans, where six “Class 1” rail lines access the various wharves, more than any other deep-water port in the country.

Barges offer yet another option. Bulk and breakbulk cargo may be offloaded directly from vessel to barges, which frees up limited warehouse and silo space. More robust barge and rail traffic means less reliance on trucks—thus circumventing the nationwide trucker shortage.

Shipping companies have taken notice. Those that call exclusively at West or East Coast ports are learning the hard way about over-relying on a singular business blueprint, and are looking for better options. Port officials here are currently in contact with retail importers seeking an alternate transfer point for their cargo headed to major inland hubs like Memphis and St. Louis. As the putative “gateway to the Mississippi Valley,” New Orleans is well-positioned for this role.

Make no mistake, containerization is absolutely critical to regional shipping, and facilities are currently expanding, as evidenced by the four new 150-foot-tall gantry cranes en route to local wharves. But in a few years they may not be enough. Demand for container shipping is growing so fast that authorities with both the Port of New Orleans and the Port of Plaquemines are planning on creating new facilities downriver, to avoid the low air draft of the Crescent City Connection. If such new capacity is built, it may well attract shippers who are looking for an alternative to those backlogged ports you’re seeing on the news.

Increasing container capacity is one way to keep regional shipping relevant in global commerce. Retaining diversity in cargo and operations is equally vital. Dealing with multiple kinds of cargo (bulk, breakbulk, and container) and investing in multi-modal transport (rail, truck, and barge) are good ways for New Orleans to hedge its bets in anticipation of the next supply chain breakdown.

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