

MARGARITA FOSTER | AUGUST 12, 2021 | INDUSTRIAL & WAREHOUSE

#### Industrial Assets Go Mainstream

Warehouse and Distribution Facilities Are More Visible and Sophisticated Than Ever



An 800,000-square-foot distribution facility in Fort Worth, Texas. (CoStar)

Over the past decade, the rise of e-commerce has catapulted the industrial real estate asset class to new heights, especially in terms of space leased and rent increases. Between 2011 and 2020, this asset class posted net leasing demand (or net absorption), that exceeded 7.8 billion square feet and rent increases averaged an unprecedented 4.2% each year, according to CoStar. To compare, over the previous ten years, between 2001 and 2010, net absorption totaled 3.4 billion square feet and annual rents rose, on average by 0.5%.

Historically, for many, the term "industrial" evoked images of manufacturing facilities spewing dust and smoke; however, the surge in online shopping and home delivery has brought transparency to a previously opaque sector, making these product types — and the industry as a whole — more visible and comprehensible to the typical consumer.

For an update on the modern industrial sector — that today is dominated by warehouse and distribution facilities — LoopNet interviewed two professionals well-versed in the evolution of industrial assets. Robert Thornburgh is the CEO of the Society of Industrial and Office Realtors (SIOR), a professional association for top-producing office and industrial brokers across 42 countries. Frank Di Roma is a Toronto, Canada-based principal with international architecture, engineering and design company Ware Malcomb.

## Warehouse and Distribution Facilities Dominate

Thornburgh noted that the notion of archaic industrial facilities was perhaps "more of an issue five or so years ago, but I see and hear less and less of this [concern] today. Changes with sustainability, e-commerce and overall goods movement have been highly visible, and with that, [they have] adjusted the layperson's view of industrial."

Di Roma agreed saying that "due to the growth and popularity of e-commerce companies, the layperson's view of the industrial sector is more accurate than it was years ago. E-commerce and technology demand have increased, and many buildings have been leased for warehouse and distribution purposes," uses that differ from the manufacturing activities carried out in industrial facilities for close to a century.

As U.S. manufacturing migrated to Asia, goods and parts in various stages of completion were shipped to the U.S., causing space that was previously used for manufacturing to instead be employed for assembly and storage. And the manufacturing activities that remain are "incorporating new technologies and sustainable requirements that have altered the vision of industrial buildings," said Di Roma.



A 260,000-square-foot warehouse building in Plainfield, Indiana. (CoStar)

### The Difference Between a Warehouse and a Distribution Facility

Many wonder what the difference is between a warehouse and a distribution facility. "I always think of the intended use," Thornburgh said. "In most instances, you will find that a warehouse is focused on the long-term storage of products and materials. A distribution center is primarily oriented towards the movement or velocity of those general goods in and out — and the timely delivery to the customer."

"The demand for these facilities has grown exponentially and we are seeing design requirements changing to keep up with the growing demand," said Di Roma. Buildings being used for warehousing "require larger bay sizing and higher ceilings to accommodate racking for the storage of products. Distribution facilities [like fulfillment centers] require more parking for employees and trailers, and also need a larger footprint [or floor plate] and an increase in clear heights," Di Roma continued.

Clear height is space that is unimpeded by building features such as joists, lights or sprinklers, which enables users to operate tall pieces of equipment or conveyor systems with vertical components without obstruction.

"The standard across many markets is 40-foot-clear. This height has increased not only to store additional racking, but mainly because these buildings now have multiple floors within them for storing, picking and packing products," Di Roma said.

"The ongoing push in vertical expansion to taller clear heights is based in great part on efficiencies — very simply maximizing more cubic space rather than a larger footprint," Thornburgh added. "It certainly varies by submarket, but it's amazing how fast we have accelerated past 32 feet. Eight feet of increased ceiling height may not seem like a lot, but for today's builders, the extra clearance can be the difference between having an empty building and one that successfully attracts tomorrow's tenants," he said.

Along the e-commerce distribution chain, warehouse and distribution facilities have specific dimensions that make them optimal as break-bulk, distribution, fulfillment and last mile buildings.

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- Frank Di Roma, Ware Malcomb

# The Last Mile

Concerning last mile facilities that enable drivers to quickly deliver goods to specific neighborhoods, Thornburgh noted that "the consistent theme here in virtually every market is one of extremely limited supply and relentless demand pursuing those few options available. With no substantial change to market fundamentals on the horizon, decision-makers looking for last-mile land to develop or space to occupy will be faced with serious challenges in the coming year," and into the future.

"The biggest constraint in many markets is finding land within the urban core," noted Di Roma. "Land prices have increased, making the cost of these facilities increase as well. Since land costs and consumer demand continue to increase at an unsustainable pace, we are seeing further compression of the warehouse space in the land-constrained metro markets. To address this challenge, we are designing multistory logistics centers to service last-mile delivery," Di Roma said. "Any business looking to compete, and gain market share tomorrow will need to improve operational efficiencies. Excelling in a work environment that embraces every facet of emerging technology will be a critical aspect of this."

- Robert Thornburgh, SIOR

# Technology in Warehouse and Distribution Buildings

Thornburgh noted that significant technological change is occurring around drones, autonomous vehicles and artificial intelligence that will only continue to affect industrial assets. Drones are equipped with cameras, enabling them to read bar codes, find items and conduct inventory, especially in high places that are unsafe for humans to reach. Similarly, autonomous vehicles can perform repetitive tasks like retrieving items and placing them on conveyors, protecting humans from injury or physical exhaustion.

"Any business looking to compete, and gain market share tomorrow will need to improve operational efficiencies. Excelling in a work environment that embraces every facet of emerging technology will be a critical aspect of this," said Thornburgh, indicating that industrial property owners and operators are designing and building with an eye toward future technologies.

"Technology is informing and shaping the industry, Di Roma noted. "The lines are blurring between technology and architecture — where machine learning and Al are changing," the dimensions, features and layouts of buildings, so new technologies can be accommodated. Technology such as Automated Storage and Retrieval Systems or ASRS automatically place and retrieve loads from set locations. These machines can be integrated with conveyor systems, enabling goods to move through a warehouse or distribution facility more quickly and with greater precision.

The exteriors of industrial facilities are also being transformed, Di Roma said. Elements such as biomorphic façade design — allowing natural light, fresh air, thermal comfort, etc. into buildings — urban farming and automated loading and vehicle circulation "are concepts that can transform the exterior of industrial facilities and sites," he noted. "All of these exciting technological developments will help shape the industrial buildings of the future."

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