THE PORTER REPORT

Q2 2020 | RICHMOND, VA INDUSTRIAL MARKET REVIEW

INDUSTRIAL MARKET MAINTAINS MOMENTUM THROUGH MID-YEAR.

➪ At the mid-year mark, the **overall industrial market occupancy** has decreased to **92%** from 93% at the end of the first quarter, with the largest addition to the Class A vacancy the 226,809 square feet in the former GSA facility on Bermuda Hundred Road in Chesterfield County (SEQ). **Class A occupancy** has decreased from 96% to **95%** while **Class B occupancy** has increased from 90% to **92%**. Speculative warehouse construction activity has resumed with multiple deliveries scheduled for the second half of the year.

➪ **Amazon** continues to expand its metro area footprint with the announcement that the e-commerce giant has leased a new facility in Chesterfield County at 1601 Bellwood Road (SEQ). With a total of 321,000 square feet, the facility is nearly identical to Amazon's location in Hanover County's Enterchange at Northlake (NWQ), and both facilities were built by local developer Devon USA. Amazon is operating out of the new building and will use the facility for sorting and delivery of packages, adding 100 jobs to their existing workforce of more than 10,000 full-time employees statewide. The company also leased the 798,000-square-foot former Ace Hardware distribution center facility on Hardware Drive in Prince George County (SEQ) in the first quarter of the year. Including the new Chesterfield County facility, Amazon's metro area footprint exceeds 4.1 million square feet in six major distribution/sorting facilities located in five separate counties. Devon has filed preliminary plans for the last phase of the Bellwood Road park, which will include a 133,000-square-foot building, and has said they are in negotiations with an interested tenant for that building.

➪ **Chesterfield County Economic Development Authority** acquired 353 acres proximate to the county's Meadowville Technology Park at a price of $21.05 million, which is approximately $59,500 per acre. The property is the site of the former American Tobacco plant and fronts on Bermuda Hundred Road, which connects to Meadowville Technology Park, home to Amazon, Niagara Bottling, and Medline. Cartograf recently selected Meadowville as the location for its first U.S. manufacturing plant in an announcement made in the fall of last year. The 353-acre property has road and utility infrastructure in place and is zoned I-3, a heavier industrial designation than Meadowville. This will allow Chesterfield EDA to target major manufacturing type uses.

➪ Richmond-based pharmaceutical company **Phlow Corp** has been awarded a $354 million contract to manufacture medicines and ingredients needed to treat COVID-19, creating an American supply chain for products primarily made overseas. The total contract value is up to $812 million, which includes a four-year base award of $354 million with an additional $458 million included as potential options. Phlow plans to build a warehouse facility on wooded land adjacent to AMPAC Fine Chemicals in Petersburg and will use some chemicals produced at the AMPAC plant. Phlow plans to hire 350 people, many of whom will be trained at VCU labs.

FEATURED PROPERTY

AIRPORT LOGISTICS CENTER

Adjacent to Richmond International Airport (RIC)

Building 2: 241,180 SF Warehouse/Distribution Facility

Office Built to Suit • Situated on 16.2 Acres Zoned M-2C
Pre-Cast Concrete Construction • 7" Unreinforced Floor Slab
32' Clear Ceilings • 1000 Amp 3 Phase Electrical
ESFR Sprinkler System • 60 mil TPO Roof Membrane System
LED Lighting with Motion Sensors • 52' x 50' Bay Spacing
24 Exterior Docks + 2 Drive-In Doors • 19 Trailer Parking Spots
155' Truck Court • 254 Car Parking Spaces

Contact Exclusive Agent:
Clifford B. Porter, CCIM, SIOR
804.521.1442 | cliff@porterinc.com

BECKNELL INDUSTRIAL

INDUSTRIAL CONSTRUCTION PIPELINE

- ➪ 405,000 SF Willis Commerce Center - Delivery Q3 2020 (Chesterfield Co)
- ➪ 320,853 SF James River Logistics Center - Leased (Chesterfield Co)
- ➪ 260,000 SF Cardinal Commerce Center Phase I - Q4 2020 (Hanover Co)
- ➪ 246,760 SF Airport Logistics Center (1) - Leased (Henrico Co)
- ➪ 241,180 SF Airport Logistics Center (2) - Delivery Q3 2020 (Henrico Co)
- ➪ 238,000 SF Northlake Commerce Center - Delivery Q3 2020 (Hanover Co)
- ➪ 133,039 SF James River Logistics Center - Q1 2021 (Chesterfield Co)
- ➪ 100,000 SF Winding Brook Phase I - Proposed (Hanover Co)

SELECTED INDUSTRIAL TRANSACTIONS

- ➪ 129,000 SF SOLD | 1720 Port Walthall Drive (Chesterfield Co)
- ➪ 96,117 SF LEASED | 2700 Distribution Drive (Henrico Co)
- ➪ 78,000 SF LEASED | 3310 Deepwater Term Rd (Richmond City)
- ➪ 52,500 SF SOLD | 3215 Williamsburg Road (Henrico Co)
- ➪ 47,584 SF SOLD | 1900 Chamberlayne Avenue (Richmond City)
- ➪ 41,320 SF LEASED | 2100 Tomlynn Street (Henrico Co)
- ➪ 39,405 SF LEASED | 2400 Distribution Drive (Henrico Co)
- ➪ 353 Acres SOLD | Bermuda Hundred Road (Chesterfield Co)

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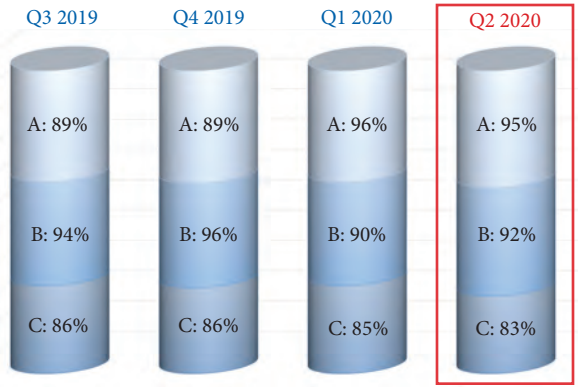
INDUSTRIAL MARKET VACANCY

Q2 2020

VACANT & INVESTOR-OWNED INDUSTRIAL PRODUCT*

40K SF MIN RBA* EXCLUDING FLEX & OWNER-OCCUPIED PROPERTIES | *RBA Total: 31.8MM SF in 197 Existing Buildings

OCCUPANCY RATES & NET ABSORPTION



Class A/B Combined Occupancy: 94%

Net Absorption from Q1 2020
Class A/B: -110,805 SF
Class C: -122,026 SF

CoStar reports an industrial occupancy rate of 95.2%, a slight increase from 95.1% at the end of the 1st quarter of 2020, based on a total 117.2 million square feet RBA in 2,804 existing warehouse properties, and a negative net absorption of 102,939 square feet for the quarter. CoStar's industrial RBA includes both owner-occupied and investor-owned properties, but excludes flex space, defined as 50% minimum office.

Vacancy Rate & Trends
40k < 75k SF RBA
RBA: 2.91MM SF (55 Buildings)
RBA: 9.1% of Total Market

	Class A	Class B	Class C
Total Bldgs	4	30	21
Total RBA	226,043	1,606,640	1,073,002
Vacant SF	49,043	241,056	137,279
Vacancy Rate	22%	15%	13%

CLASS A	NWQ	NEQ	SWQ	SEQ
Total Bldgs	0	2	1	1
Total RBA	0	132,000	54,000	40,043
Vacant SF	0	9,000	0	40,043
Vacancy Rate	0%	7%	0%	100%

CLASS B	NWQ	NEQ	SWQ	SEQ
Total Bldgs	10	10	6	4
Total RBA	528,418	521,022	356,820	200,380
Vacant SF	72,500	93,276	23,280	52,000
Vacancy Rate	14%	18%	6%	26%

CLASS C	NWQ	NEQ	SWQ	SEQ
Total Bldgs	10	3	6	2
Total RBA	538,333	142,170	284,679	107,820
Vacant SF	65,213	12,025	60,041	0
Vacancy Rate	12%	8%	21%	0%

Vacancy Rate & Trends
75k < 150k SF RBA
RBA: 7.53MM SF (71 Bldgs)
RBA: 23.7% of Total Market

	Class A	Class B	Class C
Total Bldgs	24	30	17
Total RBA	2,780,031	3,192,915	1,560,925
Vacant SF	180,801	20,694	343,620
Vacancy Rate	7%	1%	22%

CLASS A	NWQ	NEQ	SWQ	SEQ
Total Bldgs	5	11	3	5
Total RBA	514,065	1.31MM	331,460	627,319
Vacant SF	0	73,680	0	107,121
Vacancy Rate	0%	6%	0%	17%

CLASS B	NWQ	NEQ	SWQ	SEQ
Total Bldgs	2	14	10	4
Total RBA	209,546	1.52MM	1.10MM	363,200
Vacant SF	0	20,694	0	0
Vacancy Rate	0%	1%	0%	0%

CLASS C	NWQ	NEQ	SWQ	SEQ
Total Bldgs	4	3	9	1
Total RBA	377,305	229,749	831,073	122,798
Vacant SF	0	147,126	196,494	0
Vacancy Rate	0%	64%	24%	0%

Vacancy Rate & Trends
150k SF Min RBA
RBA: 21.36MM SF (71 Bldgs)
RBA: 67.2% of Total Market

	Class A*	Class B	Class C
Total Bldgs	38	22	11
Total RBA	14,054,800	4,789,556	2,518,693
Vacant SF	685,026	483,629	391,979
Vacancy Rate	5%	10%	16%

CLASS A	NWQ	NEQ	SWQ	SEQ*
Total Bldgs	5	14	3	16
Total RBA	1.30MM	4.05MM	2.02MM	6.68MM
Vacant SF	83,217	375,000	0	226,809
Vacancy Rate	6%	9%	0%	3%

CLASS B	NWQ	NEQ	SWQ	SEQ
Total Bldgs	3	11	6	2
Total RBA	786,826	2.19MM	1.16MM	653,684
Vacant SF	181,800	229,829	27,000	45,000
Vacancy Rate	23%	10%	2%	7%

CLASS C	NWQ	NEQ	SWQ	SEQ
Total Bldgs	2	1	6	2
Total RBA	336,138	200,000	1.18MM	805,500
Vacant SF	0	0	221,000	170,979
Vacancy Rate	0%	0%	19%	21%

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FEATURED PROPERTIES

Q2 2020

PORTER REALTY

Cliff Porter
CCIM, SIOR
804.521.1442
cliff@porterinc.com

Staples Mill Corridor

3017 Vernon Road
34,150 SF Office/Warehouse
Includes 14,552 SF Office
4 Docks + 1 Ramp, 3.04 Acres
14' to 20' Clear, Zoned M-1
1200 Amp 3 Phase Electrical
Enterprise Zone Location
Available: Call for Information

Master Planned Park

Airport Logistics Center (3)
129,750 SF Planned
Pre-Cast Concrete Construction
Clerestory Glass, Office to Suit
135' Truck Court Depths
60' Loading Bay, Trailer Parking
Multiple Drive-In Doors
For Lease: Call for Information

Warehouse/Distribution

Airport Logistics Center (4)
187,500 SF Planned
Pre-Cast Concrete, 7" Floor Slab
LED Lighting, ESFR Sprinkler
Rail Potential, All Utilities On Site
1/1,000 SF Car Parking Ratio
RIC International Airport Area
For Lease: Call for Information

Downtown Richmond Area

909 Oliver Hill Way
8,252 SF Total Building
With 1,157 SF Office Mezzanine
24 Parking Spaces + Additional
5 Drive-Ins & 1 Platform Dock
1.72 Acres Fully Fenced
For Lease: Call for Information
Owner/Agent

Byron Holmes
CCIM, SIOR
804.521.1448
byron@porterinc.com

Rt 60 Development Site

Anderson Hwy (Powhatan, VA)
31.48 Acres Total Available
Zoned Commercial
Over 700' Frontage on
Route 60 West of Route 288
Served by Two Crossovers
Water & Sewer Available
For Sale: $1,490,000

Automotive Facility

6915 Hull Street Road
3,824 SF Total Building
Free-Standing Automotive Service
Facility, Drive-In Access
Zoned C-5, Built in 1988
Just West of Chippenham Pkwy
For Sale: $495,000
For Lease: Call for Information

42,000 Vehicles Per Day

14717 Hull Street Road
10 Acres Zoned C-3
Preliminary Site Plan Complete
Utilities Available
Located Across from Woodlake
Desirable Southsie Location
Near Ashbrook & Hancock Village
For Sale: $2,140,000

New Construction

16633 Jefferson Davis Highway
10,000 SF Office/Warehouse
Can Subdivide to 3,000 SF
5 Drive-In Doors (14' x 14')
3 Phase Power, Zoned C-5
18' to 20' Ceilings, Dock Loading
I-95 Access @ Woods Edge Rd
For Lease: $7.95/SF Net

Kevin Cox
804.521.1468
kevin@porterinc.com

Hanover Air Park Location

11201 Hopson Road
Office/Warehouse Units
Suite A: 3,960 SF Available
19' to 22' Ceiling Height
10' x 10' Drive-In Loading
Zoned M-3 Industrial
I-95 Access @ Sliding Hill Rd
For Lease: $10.00/SF Gross

Winding Brook Location

11601 Lakeridge Parkway
7,925 SF Office/Medical Building
4 Suites From 1,875 SF
38 Parking Spaces Total
Off I-95 @ Lewistown Rd (Exit 89)
Winding Brook Location
New Construction - Hanover County
For Lease: $19.00/SF Warm Shell

Route 1 Frontage

14471 Washington Highway
10,000 SF Industrial Facility
4.55 Acre Site Zoned M-2
2" Water Line Serving Property
Possible Additional Acreage
860' Frontage on Route 1
Located 3.8 Miles from I-95
For Sale: $995,000

Upscale Business Park

Park Central Drive
Development Opportunity
8.619 Acres Available
Zoned O-S (Henrico County)
Medical/Office/Warehouse Uses
Located 1.2 Miles from I-95
Immediate Access off E Parham Rd
For Sale: $225,000/Acre

123 North 18th Street
2,113 SF Retail/Automotive Facility
Zoned B-5, Opportunity Zone
Downtown Richmond Shockoe Bottom
Enterprise Zone Location
For Sale: $550,000
Co-Listed with: Cliff Porter
CONTACT: WILSON FLOHR
804.521.1458

Anderson Highway (Powhatan Co)
Join Virginia Physicians Family
Practice! 36.84 Acres Total
Mixed Use Development Potential
Retail Pad Sites from 1.59 Acres
For Sale: ~$29,900/Ac (Unsubdivided)
Co-Listed with: Byron Holmes
CONTACT: DICK PORTER
804.521.1443

14909 Hull Street Road
Former Chiropractic Office
1,149 SF Masonry Construction
1.9 Acres Zoned A
Paved & Striped Parking
Rt. 360 Frontage Chesterfield Co
For Sale: $725,000
CONTACT: BYRON HOLMES
804.521.1448

10985 Leadbetter Road
Hanover Industrial Air Park
Parcel 1: 5.658 Acres Zoned M-3
For Sale: $925,000
Parcel 2: 0.836 Acre Zoned M-3
Site Plan Approved: 7,200 SF
For Sale: $155,000
CONTACT: KEVIN COX
804.521.1468

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FEATURED PROPERTIES

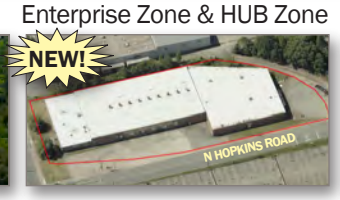
Q2 2020

PORTER REALTY

Signature Airport Location

5800 South Laburnum Avenue
182,842 SF Industrial Facility
Active CSX Rail on 8.86 Acres
Zoned M-2, 24' to 27' Ceilings
New Roof, Lighting, Heaters
RIC International Airport Area
Opportunity/Enterprise Zone
For Sale: $9,600,000

Enterprise Zone & HUB Zone



1306 Jefferson Davis Hwy
Up to 78,000 SF Facility
Front: 48,000 SF (18' Clear)
Rear: 30,000 (20' Clear)
3.2 Acres Zoned M-1
Wet Sprinklers, Heavy Electrical
Lease: $3.50/SF Base
Sale Possible: Call for Information

I-95 Access @ Rives Road

3800 Corporate Road
6.515 Acres Outside Wetlands
Zoned M-1/B-2
Water/Sewer Available
Immediate I-95 & I-295 Access
4 Miles to I-85/Petersburg, VA
~875' Frontage on Rives Road
For Sale: $300,000

I-95 Frontage

Corporate Road (Prince George)
10 Acres Available Off Rives Road
Just South of Metro Richmond
Immediate I-95 & I-295 Access
Industrial Zoning, Low Tax Locality
Utilities Proximate
NEW PRICING!
For Sale: $150,000

Dick Porter
CCIM, SIOR
804.521.1443
dick@porterinc.com

71,000 Vehicles Per Day

13204 Hull Street Road
2,785 SF Available for Lease
Ample Parking, Zoned C-2
Convenient & Highly Visible
Brandermill Location
Building + Pylon Signage
For Lease: $25.00/SF NNN
Owner/Agent

Broad Street Visibility

8006 West Broad Street
14,303 SF Freestanding Retail
1.53 Acres Zoned M-1
Includes 1,600 SF Mezzanine &
Conference Room, Wet Sprinkler
78 Parking Spaces
For Sale: $2,000,000
Co-Listed with: Cliff Porter

39,000 Vehicles Per Day

8400 West Broad Street
7,998 Available Immediately
Free-Standing Retail Building
Excellent Signage & Visibility
Ample Parking, Located
Near Broad St & Parham Rd
Available: Call for Information
Owner/Agent

Fredericksburg Complex

46 Commerce Road
20,450 SF Building on 5.7 Acres
12,650 SF Shop + 10 Bay Doors
48 Commerce Road
12,785 SF Building on 2.35 Acres
Includes 6k SF Shop + 4 Bay Doors
For Sublease: Call for Information
Co-Listed with: Kevin Cox

Bob Porter
CCIM, SIOR
804.521.1441
bob@porterinc.com

New Flex Construction!

219 Turner Road
82,000 SF Office/Warehouse
Suites from 2,500 SF
18' Ceilings, Drive-In Loading
Zoned C-4, Opportunity Zone
Located Near Chesterfield Mall
Delivery Fall 2020
For Lease: $10.00/SF IG

Branchway Business Center

11311 Business Center Drive
Suite A: 2,500 SF Office/Whse
Suite C: 2,500 SF Office/Whse
Suite D: 2,900 SF Office/Whse
Dock Loading, Ample Parking
Zoned I-1, Well Maintained Park
For Lease: Call for Information
3 Months Rental Abatement

Lakeridge Industrial Park

10470 Wilden Drive
Up to 7,998 SF Contiguous
Suite B: 2,666 SF (Avail 02/20)
Suite C: 2,666 SF
Suite D: 2,666 SF
Dock Loading, 14' Ceilings
Ample Parking, Zoned M-2
For Lease: $9.00/SF MG

Diamond Area Location

2057 West Moore Street
Residential Land Site
0.357 Acre Total Zoned R-6
Prime Richmond City Location
Proximate to The Diamond &
Arthur Ashe Boulevard
Off Hermitage Rd & W Leigh St
For Sale: Call for Information

Wilson Flohr
804.521.1458
wilson@porterinc.com

50-Door Distribution Facility

3609 East Belt Boulevard
16,590 SF Total Building
Includes 3,000 SF Office
4.78 Acres Zoned M-1
Paved/Fenced Storage Area
Includes Concrete Pad for Potential
Shop/Additional Warehouse
Available: Call for Information

Free-Standing Retail

501 East Nine Mile Road
9,034 SF Showroom Facility
Includes 4,500 SF Office &
Showroom on 1.32 Acres
1 Drive-In Door, Zoned B-3
I-64 Access @ Airport Drive
For Sale: $550,000
Co-Listed with: Cliff Porter

Just East of Downtown RVA

2601 Magnolia Street
Approximately 1 Acre Available
Fenced Graveled Yard
Zoned M-1 Industrial
Possible Billboard Lease Rights
Immediate I-64 Access @
Route 360/Mechanicsville Tnpk
Available: Call for Information

I-64 @ Mechanicsville Tnpk

Glenfield Business Center
Suite 2501: 21,175 SF Available
7,645 SF Office, 5 Docks + 1 Ramp
Suite 2541: 12,000 SF Building
Multiple Dock & Drive-In Doors
East of Downtown Richmond
For Lease: Call for Information
Co-Listed with: Cliff Porter

Robert Porter III
804.521.1455
rep3@porterinc.com

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NAVIGATING THE PANDEMIC

Report: Warehouse Crunch Will Tighten

Excerpt from The Loadstar: Warehouse Space Crunch Will Tighten as 'Lean' Supply Chains Fatten Up

By Ian Putzger | June 10, 2020

A new report by Prologis Research [the world's leader in logistics real estate solutions] suggests that, in the US market alone, for the next two or three years, 150 to 200 million square feet of new warehouse space will be needed every year.

This demand will be driven by two dynamics – the accelerated adoption of e-commerce and higher inventory levels – in response to supply chain disruption firms have suffered as a consequence of the pandemic. With supply chains so lean, many retailers could not respond adequately to sudden changes in demand. To avert similar experiences in future, mean stock levels could go up between 5% and 10%, which would translate into aggregate demand for an additional 285-570 million square feet of space.

"Several customer groups stand out for having very lean supply chains at present, including food & beverage, electronics/appliances, healthcare and diversified retail. In the 'new normal', the logistics real estate demand created by a reassessment of ideal inventory levels could be concentrated in customer industries that held little buffer stock, pre-Covid," the Prologis Research team concludes.

Another 46 million square feet will be needed to accommodate each percentage point shift of retail sales from brick-and-mortar outlets to online sales channels. Based on the 30% growth rate of e-commerce from March through mid-April, Prologis estimates that 140-185 million square feet could be required in this segment.

Groceries are expected to lead this trend, followed by healthcare and consumer products. The rise in consumer delivery volumes is going to put the focus on locations that are closer to end consumers, Prologis finds, pointing to tight delivery windows and the need to keep final-mile costs down. [Researchers] also predicts a rise in warehousing demand, driven chiefly by concerns about potential future supply chain disruption. A 5% increase in inventory levels would require 400-500 million square feet of new warehousing space, the firm pointed out.

In addition to space needed for higher inventory levels and accelerated e-commerce adoption, Prologis sees even more demand springing from shifts in manufacturing locations, such as on- and near-shoring, but this is unlikely to manifest itself in the near term.

"These changes, being more costly and complex than relatively simple distribution network shifts, are likely to be a long-term trend that plays out over years," say the study's authors.

Excerpt from Wall Street Journal: Warehouse Demand Surges as Retailers Reset Supply Chains

By Jennifer Smith | June 21, 2020

Demand for U.S. warehouse space is rebounding as upheaval from the coronavirus pandemic pushes businesses to retool their supply chains. Industrial real-estate activity, such as lease renewals and new leases, jumped 43% from April 15 to May 14 from the previous 30-day period, recovering more quickly than expected from the economic shocks of the pandemic. Total transactions for the year are 2.8% higher than at this time in 2019 even though activ-

ity fell 29% between March 15 and April 14 as lockdowns aimed at halting the spread of the coronavirus extended across the U.S.

Retailers and food and consumer goods suppliers ramped up their e-commerce operations during that period after a surge of orders from housebound shoppers during quarantine. Companies are also securing new space to modernize their distribution operations, including locations near big population centers, for what they expect to be continued strong demand for services such as online grocery delivery.

Demand for warehouses of 100,000 square feet or more held up the best... Transactions for those bigger facilities fell just 5% during the first month of the pandemic before surging to the highest monthly level this year for facilities of that size in the period ending May 14.

The push for more storage space comes as retailers are re-evaluating their logistics networks in the wake of the upheaval during coronavirus-driven shutdowns. Merchants were already moving goods closer to customers, and the pandemic is accelerating those shifts, said Jess Dankert, vice president of supply chain for the Retail Industry Leaders Association.

Some retailers relied heavily on stores to fulfill online orders during the pandemic, Ms. Dankert said, while others are looking to build "dark store" fulfillment centers in urban areas and shift away from larger facilities in more remote locations. "There's a repositioning of the inventory and adapting systems for this new Covid-era of shopping," she said.

Short-term leasing, "under 12 months, was very active for us in March and April," said Chris Caton, head of global strategy and analytics for industrial real-estate giant Prologis Inc. Prologis estimates that businesses could increase their inventories by 5% to 10% over the long term to guard against the kind of demand shocks that cleared out grocery stores shelves during the first weeks of the pandemic lockdowns.

Higher inventory levels and the accelerating growth of e-commerce, which typically requires about three times as much space as traditional distribution operations that serve stores, could increase U.S. warehouse demand by as much as 400 million square feet over the next two to three years, the company forecasts.

CoStar News: Coronavirus Reveals the Weak Links in Global Supply Chains Why China Stands to Lose and US Stands to Benefit in the Wake of COVID-19

By Brooks Staley | May 6, 2020

The COVID-19 crisis has profoundly affected global economies in an unprecedented way, putting millions out of work all at once, slowing commerce to a crawl and wreaking havoc on equity markets. And yet the effects of the pandemic may also prove instructive, illustrating plainly some of the systemic weaknesses and deficiencies that were papered over and unexposed during the steady economic growth of the most recent expansion.

In particular, supply chains of unwieldy length depending solely on Chinese manufacturing and ports have shown themselves to be extraordinarily brittle. Also, confidence in the trustworthiness of the Chinese government after initial assurances minimizing the severity of the COVID-19 crisis was found to be misplaced, resulting in an erosion of trust after the government reversed its previous stance and forced manufacturers to shut down operations in January.

Given the lessons being swiftly taught worldwide by breakdowns in supply chains for businesses and consumers alike, there are ramifications that should have long-lasting and far-reaching impacts for manufacturers, domestic markets and ultimately industrial investors looking to capitalize on the shifting composition of supply chain management.

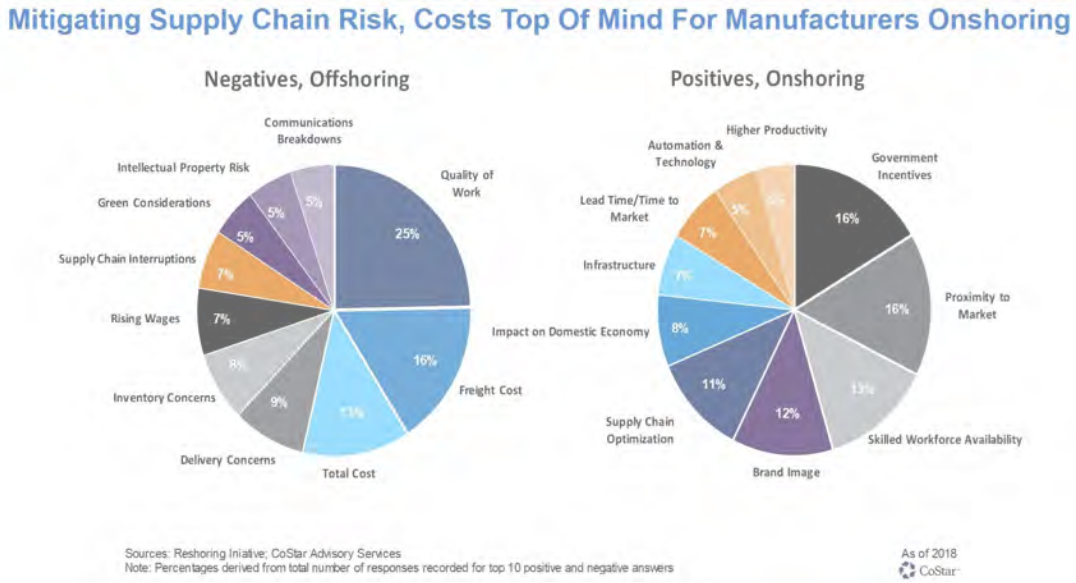
NAVIGATING THE PANDEMIC

Report: Coronavirus Reveals Weak Supply Chain Links

Although the true extent of the frailty inherent in supply chains built without redundancies may just be coming to light, it is likely that the current state of the global economy may only exacerbate trends that were already taking place. Spurred by a number of concerns, including rising wages, total cost considerations and an administration driving an extended trade war with China, the average monthly value of imports from China fell more than 6% between 2015 and 2019, a drop of nearly $2.6 billion.

Over the same period, U.S. imports from other Asian countries, the European Union and Mexico all grew by double-digit percentages, with Vietnam in particular appearing to pick up a great deal of the slack afforded by China's diminished export numbers. The conclusion appears certain: China cannot remain the world's sole factory for the long term, and numerous other destinations look set to reap the rewards.

The most likely outcome of the shakeup prompted by the COVID-19 outbreak is a greater focus on building redundancies and increased resiliency into supply chains at all levels. No single country is likely to benefit in a lopsided manner from firms moving production out of China. Instead, a combination of reshoring, which involves shifting operations either to other Asian nations with low-cost labor pools or to regional trading partners like Mexico or Canada, and onshoring a smaller amount of production back to the U.S., will allow companies to diversify supply chains and mitigate the supply risk associated with concentrating in a single nation.



For companies that have chosen to onshore production after a sustained period using offshore suppliers, a number of negative factors related to supply chains prompted their return. Though quality of work and necessity for rework was cited a quarter of the time among the top 10 reasons for abandoning an offshoring strategy, freight costs, delivery or inventory concerns and supply chain interruptions made up 40% of the negatives associated with the practice, according to a 2018 study by Reshoring Initiative.

Similarly, among the benefits cited by respondents to the study were lead times, supply chain optimization and proximity to market, altogether accounting for 34% of the top 10 positives for onshoring production.
It should be noted that most onshored manufacturing is often highly complex, high-value-add work producing goods such as computer, electronics, auto and heavy equipment. This type of manufacturing is also extensively automated and requires higher skilled workers for the jobs that do end up being created.

A distinct lack of those highly skilled workers domestically limits the amount of offshore jobs that are likely to return onshore from places like China. In contrast, manufacturing goods that require low-skilled labor and are difficult to automate constitute the bulk of production being reshored elsewhere, and are almost certainly not going to return to the U.S.

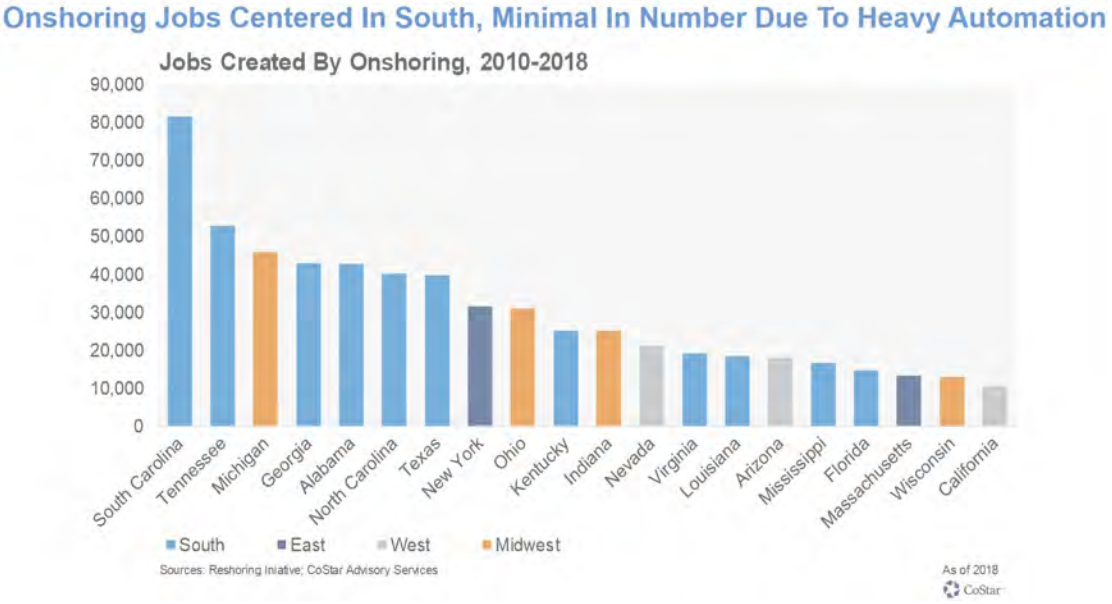
For industrial investors domestically, an added benefit may be found in inventory shortages created by the crisis. For decades, one prevailing motivation for supply chains was suppressing costs through just-in-time strategies, implementing push-pull management or other ways to reduce inventory and associated holding costs. Invento-

ry-to-sales ratios dropped across the board prior to the Great Recession, most precipitously for manufacturers. The relatively recent rise in e-commerce forced a moderate rise in inventories, though remaining well below the ratios of the 1990s and early 2000s.

Now, however, with widespread demand causing unforeseen shortages for consumer goods, intermediate goods and raw materials alike, it is not unreasonable to expect that firms at a number of levels in the supply chain will see the added benefit of increasing inventories in the short or medium term, despite the associated storage costs. That should contribute to minor increased demand for warehouse space once economies begin to reopen and will likely push average inventory to sales ratios above 1.4 for the manufacturing and retail segments of the market.

Given that this is largely in response to COVID-19, a "black swan" occurrence, companies are unlikely to sustain heightened inventory carrying costs permanently. Rather, this should prove to be a one-time boost for the segment when entering the next expansionary cycle and then dissipate along with the psychological effects of current shortages.

There are a number of considerations for investors targeting markets that are likely to experience tailwinds from reshoring and potential onshoring of manufacturing from China. Most manufacturing is expected to reshore to other parts of Asia, a factor that will help keep steady port traffic in West Coast markets such as Los Angeles, Seattle and Oakland, and East Coast ports such as New York, Norfolk, Savannah and Jacksonville should see similar returns to stability in the numbers of imported TEUs, or 20-foot-equivalent units, a measurement used in the maritime industry to record international containerized freight volumes.



Increased manufacturing activity in Mexico could likewise boost industrial demand in Los Angeles and the nearby Inland Empire, but could also provide additional demand in Texas markets and eastern ports.

For markets likely to experience smaller boosts from onshoring of overseas production, it's evident from jobs created from onshoring operations between 2010 and 2018 that Southern markets are heavily favored given their lower costs for labor, the often considerable subsidies made available by these states and business-friendly policies that eschew red tape and barriers to entry. Additionally, the same states are usually equally popular for foreign manufacturers looking to locate manufacturing facilities in the U.S. market.

Though industrial investors in states attractive to firms considering onshoring will benefit directly from increases in the local manufacturing base, the reality of increased reshoring rather than onshoring should reinforce already established national and regional distribution hubs over the longer term, allowing crucial increased stability of supply chains globally and helping to mitigate risk for industrial assets across the U.S. from future disruption.

While this may be of little help in the current crisis, it is reason for cautious optimism for industrial investors looking ahead to a return to economic normalcy.