

THE PORTER REPORT

Q4 2018 | RICHMOND, VA INDUSTRIAL MARKET REVIEW

INDUSTRIAL EXPANSION & INVESTMENT SALES DOMINATE YEAR END.

⇒ At the close of the fourth quarter, the **overall industrial market occupancy** has increased to **90%**, up from 89% at the end of the third quarter, with continued leasing activity offsetting the added vacancy of two free-standing facilities - one in Henrico County's East End, proximate to RIC Airport and the other in Henrico's near West End - as well as the addition of a larger industrial facility in the City of Richmond, slated for renovation to smaller bay sizes. Both the **Class A and Class B occupancy** rates have remained unchanged at **94% and 87%** respectively as the quarter closed with an active round of investment sales and strong construction activity.

⇒ New York-based Lexington Realty Trust closed on the purchase of the 118-acre, 1 million-square-foot Altria Trade Center complex on Bermuda Hundred Road in Chesterfield County at a price of \$66 million. Built in 2015, the four-building complex is a tobacco storage facility for Philip Morris and cost approximately \$50 million to construct. Lexington owns hundreds of land leases and office and industrial complexes across the country, and this is the company's first industrial purchase in metro Richmond. Virginia Beach developer Armada Hoffer also closed on the investment sale of the newly built 220,000-square-foot Pepsi Distribution Center, also located in Chesterfield County, to ElmTree Funds for a price of almost \$26 million.

⇒ Pennsylvania-based **Kinsley** has purchased the former Williams Bridge Company complex for \$7.1 million and plans to establish a steel fabrication on the 27-acre site located at the eastern edge of Manchester in the City of Richmond. Kinsley will initially invest \$12.5 million in the location with an employee load of 70 people, including welders, machine operators, fitters, painters, and project managers. The company will occupy approximately 200,000 square feet, including the 119,000-square-foot warehouse that was constructed in 1918 and fronts prominently on Interstate 95. Kinsley owns and operates three similar fabrication facilities throughout central Pennsylvania.

⇒ Richmond-based natural stone fabrication and installation **Classic Granite & Marble** has purchased a 25-acre site on Midlothian Turnpike in Powhatan County for \$2.1 million with plans to construct a 98,000-square-foot three-story headquarters facility which will include corporate offices, showroom, fabrication and warehouse space. The company will relocate from its current facility and estimates an investment of more than \$10 million in the expansion, creating more than 100 additional jobs in the next five years.

⇒ New Jersey-based **Honeywell International Inc.** has filed plans for an addition to its 71-acre campus fronting I-95 in Chesterfield County. The plans call for construction of a 25,000-square-foot building on 1.5 acres and are preliminary at this point, with no published investment estimate or description of the new structure's use. Honeywell's existing facility has been in operation for more than 25 years and employs approximately 350 people in the manufacturing of Spectra fiber, used in personal and vehicular armor by military and law enforcement agencies worldwide. The company operates three facilities in the Richmond metro area, employing a total of 1,200 people.

FEATURED PROPERTY

5851 Quality Way (Prince George, VA)
Southpoint Business Park

50,880 SF Industrial Facility Built 2001

11.277 Acres Total Site • Zoned M-1 • Expansion Potential

Includes 2,110 SF Office, 2,340 SF Conditioned Tech

2 Docks (8' x 10' + 23'w x 14'h) • 1 Drive-In Door (12' x 14' - Ramp)

Space + Shipping Office • 24' to 26' Clear Ceilings

Wet Sprinkler System • 1,200 Amp 277/480 Volt Electrical +

Major Power Distribution Line on Site

Proximate to Rolls Royce Jet Engine Manufacturing & Fort Lee

Available for Sale • Lease Possible

Contact Exclusive Agent: **Richard W. Porter, CCIM, SIOR**

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INDUSTRIAL CONSTRUCTION PIPELINE

- ⇒ 1.5MM SF Deepwater Industrial Park - BTS Planned (Richmond City)
- ⇒ 461,700 SF Virginia I-95 Distribution - Phase I Complete (Richmond City)
- ⇒ 461,700 SF Virginia I-95 Distribution - Phase II Delivery Q3 2019
- ⇒ 437,000 SF Bissell Complex - Phase I Planned (Chesterfield Co)
- ⇒ 324,629 SF James River Logistics Center - Start Q1 2019 (Chesterfield Co)
- ⇒ 246,760 SF Airport Logistics Center - Start Q1 2019 (Henrico Co)
- ⇒ 152,000 SF Northlake Commerce Center - Planned (Hanover Co)

SELECTED INDUSTRIAL TRANSACTIONS

- ⇒ 1,034,470 SF INV SOLD | Altria Trade Center (Chesterfield Co)
- ⇒ 220,825 SF INV SOLD | Pepsi Dist Center (Chesterfield Co)
- ⇒ 185,000 SF SOLD | Williams Bridge Complex (Richmond City)
- ⇒ 184,000 SF SOLD | 1500 Commerce Road (Richmond City)
- ⇒ 75,884 SF INV SOLD | Windsor IV (Flex - Henrico Co)
- ⇒ 67,500 SF LEASED | 13101 N Enon Church Rd (Chesterfield Co)
- ⇒ 36,000 SF LEASED | Richmond Dist Center (B) (Henrico Co)



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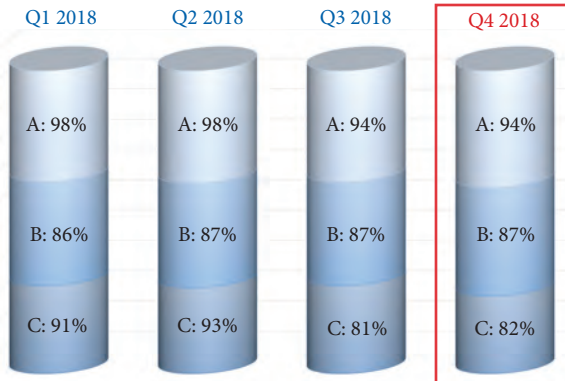
INDUSTRIAL MARKET VACANCY

Q4 2018

VACANT & INVESTOR-OWNED INDUSTRIAL PRODUCT

40K SF MIN RBA* EXCLUDING FLEX & OWNER-OCCUPIED PROPERTIES | *RBA Total: 28.97MM SF in 177 Existing Buildings

Q4 2018: COMBINED OCCUPANCY RATES & NET ABSORPTION (CLASS A & B PRODUCT)



The combined industrial occupancy rate of Class A & B product has increased to 92% from 91% at the end of Q3 2018.

Net Absorption from Q3 2018: 48,006 SF (Class A/B)
 Net Absorption from Q3 2018: -58,585 SF (Class C)

NOTE: CoStar reports an industrial occupancy rate of 95.6%, decreased from 96.3% at the end of the 3rd quarter of 2018, based on a total 116.6 million square feet RBA in 2,786 existing warehouse properties, and a negative net absorption of 570,340 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: 2.35MM SF (44 Buildings)

RBA: 8.2% of Total Market

	Class A	Class B	Class C
Total Bldgs	3	26	15
Total RBA	186,000	1,392,750	768,943
Vacant SF	0	172,239	76,525
Vacancy Rate	0%	12%	10%

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

CLASS B	NWQ	NEQ	SWQ	SEQ
Total Bldgs	9	9	6	2
Total RBA	459,518	475,257	357,595	100,380
Vacant SF	60,000	64,176	48,063	0
Vacancy Rate	13%	14%	13%	0%

CLASS C	NWQ	NEQ	SWQ	SEQ
Total Bldgs	8	3	4	0
Total RBA	450,882	142,170	175,891	0
Vacant SF	64,500	12,025	0	0
Vacancy Rate	14%	8%	0%	0%

Vacancy Rate & Trends

75k < 150k SF RBA

RBA: 7.69MM SF (72 Bldgs)

RBA: 26.5% of Total Market

	Class A	Class B	Class C
Total Bldgs	22	31	19
Total RBA	2,601,465	3,280,629	1,815,953
Vacant SF	189,378	278,128	266,300
Vacancy Rate	7%	8%	15%

CLASS A	NWQ	NEQ	SWQ	SEQ
Total Bldgs	4	11	3	4
Total RBA	431,144	1.31MM	342,936	520,198
Vacant SF	0	45,740	0	143,638
Vacancy Rate	0%	3%	0%	28%

CLASS B	NWQ	NEQ	SWQ	SEQ
Total Bldgs	2	12	10	7
Total RBA	209,546	1.23MM	1.15MM	691,777
Vacant SF	0	193,128	40,000	45,000
Vacancy Rate	0%	16%	3%	7%

CLASS C	NWQ	NEQ	SWQ	SEQ
Total Bldgs	4	3	10	2
Total RBA	389,305	227,405	986,243	213,000
Vacant SF	0	0	226,300	40,000
Vacancy Rate	0%	0%	23%	19%

Vacancy Rate & Trends

150k SF Min RBA

RBA: 18.92MM SF (61 Bldgs)

RBA: 65.3% of Total Market

	Class A	Class B	Class C
Total Bldgs	34	18	9
Total RBA	12,873,487	3,994,570	2,053,190
Vacant SF	746,557	671,032	499,468
Vacancy Rate	6%	17%	24%

CLASS A	NWQ	NEQ	SWQ	SEQ
Total Bldgs	4	13	2	15
Total RBA	1.15MM	3.80MM	1.56MM	6.36MM
Vacant SF	0	0	461,700	284,857
Vacancy Rate	0%	0%	30%	4%

CLASS B	NWQ	NEQ	SWQ	SEQ
Total Bldgs	2	9	6	1
Total RBA	601,695	1.78MM	1.16MM	450,000
Vacant SF	142,800	153,000	27,000	348,232
Vacancy Rate	24%	8%	2%	77%

CLASS C	NWQ	NEQ	SWQ*	SEQ
Total Bldgs	2	1	4	2
Total RBA	336,138	200,000	711,552	805,500
Vacant SF	0	0	208,924	290,544
Vacancy Rate	0%	0%	29%	36%

*Adjustment in Class C vacancy and RBA attributed to demolition of former tobacco storage warehouses (completed) & planned redevelopment as Deepwater Industrial Park (SWQ City)



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REPORT: THE NEW INDUSTRIAL REVOLUTION

IMPACT OF MOBILE INTERNET, AUTOMATION & AI

The first three industrial revolutions were driven by coal and steam, then electricity and the automobile, then computing. Now we may be witnessing the rise of the fourth: an economy powered by the mobile internet, automation and artificial intelligence.

The sudden ramp-up of technologies ranging from phone components to wireless networks to data centers points to a new kind of automation, more pervasive and smarter than ever before seen. It affects every industry, not just manufacturing, logistics or transportation, and the economic and political ramifications are likely to be on par with the impact of the past 50 years of outsourcing and globalization.

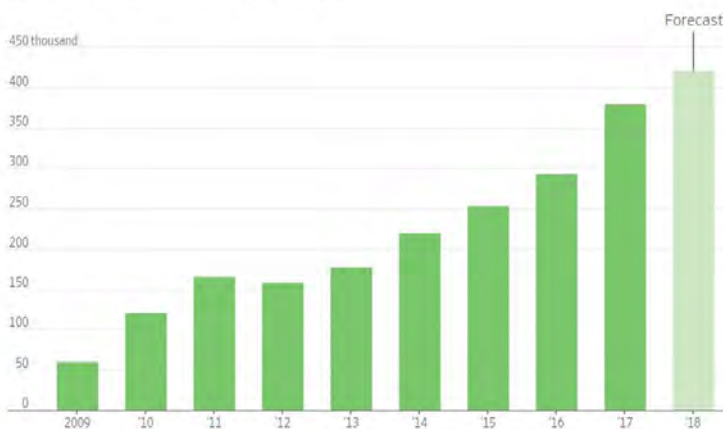
The explosion of smartphones has created a need for the development of new software (from apps to artificial intelligence), new platforms (such as cloud computing and blockchain), new networks (first 4G and soon its successor, 5G), and not least, an array of components that were once prohibitively expensive (all manner of sensors and cameras).

The growth in the smartphone and cloud economy has brought automation to a sector that has traditionally been shielded from its effects: knowledge work. Here, though, it is less about replacing workers than enhancing their abilities by automating tasks such as sifting through large amounts of data and giving them access to tools such as predictive analysis, while also inventing new jobs such as data scientist and drone operator. The new economy... also requires a great deal of infrastructure, even if it tends to be invisible in our everyday lives. In the U.S., that means thousands of miles of fiber-optic cable and hundreds of thousands of cell towers. Globally, it means an explosion of internet traffic.



Rise of the Robots

Estimated global shipments of industrial robots



Source: International Federation of Robotics

Combine mobile, the cloud and automation with commerce, and you get a transformation of how we distribute goods of every kind, both consumer and industrial. The headline-grabbing dimension of this transformation is its effect on physical retail and the transfer of those jobs into warehouses... Globally, 381,000 industrial robots were shipped in 2017.

The most visible impact of the rise of ever-more-capable automation is that employment in manufacturing and the skilled trades has dropped even as total productivity in the U.S. (and nearly every other developed country) has increased.

This growing population of industrial robots doesn't even count what could be the biggest automation accelerant of all: autonomous vehicles. Truly autonomous vehicles are still in the testing stage, but investment in autonomous-vehicle research shows hockey-stick growth.

Critical to the newfound abilities of all this automation is artificial intelligence. Current AI doesn't think like people do; it just takes data and finds patterns in it. Even so, machine learning—essentially, a very advanced version of pattern matching—has set the bar in a number of fields and is now arguably the hottest trend in all

REPORT: THE NEXT INDUSTRIAL REVOLUTION

IMPACT OF MOBILE INTERNET, AUTOMATION & AI

of AI research. It is notable that 2018 is projected to be the first year in which China eclipses the U.S. in total R&D spending.

China has vowed to become a powerhouse in AI within 15 years and launch a “robot revolution” to remain competitive in manufacturing even as wages rise. It is also leveraging Big Data to create a form of surveillance capitalism—in which economic value is created and controlled through the harvesting of data about every aspect of people’s daily activities—the likes of which the world has never seen.

REPORT: Kroger and Ocado to Build First Robotic Warehouse in Cincinnati



Kroger Co has chosen its hometown of Cincinnati for the first of 20 high-tech warehouses it plans to build with UK-based Ocado Group Plc in a bid to dominate the U.S. grocery delivery business.

Kroger, the largest U.S. supermarket operator, is battling Walmart Inc and Amazon.com Inc in the fast-growing online segment that accounts for anywhere from 1 percent to 4 percent of the \$800 billion U.S. grocery market. In May, Kroger paid roughly \$248 million for a minority stake in Ocado, an online grocer, and struck an exclusive deal for the U.S. market. Kroger will spend \$55 million on the partners’ first project - a 335,000-square-foot facility in Monroe, Ohio, a suburb north of Cincinnati.

Ocado’s “sheds” house hives of robots that pick and pack groceries. The company’s newest machines can pull together a 50-item grocery order in as little as five minutes - potentially slashing Kroger’s labor costs.

The project is expected to create 410 jobs and is subject to securing state and local incentives. The facility is scheduled to open by 2021.

Amazon was the top online grocery seller before its \$13.7 billion purchase of Whole Foods Market last summer that spurred rival grocery sellers to invest in cost-saving automation.

Kroger, Walmart and Ahold Delhaize each have partnered with technology companies that build automated order fulfillment warehouses.



REPORT: How Autonomous Cars Will Shape Our World

Nobody had an inkling that ride-on-demand services like Uber would change our travel habits so quickly and dramatically. This new industry is on its way to becoming a multitrillion-dollar business—bigger than Amazon and Walmart combined.

REPORT: THE NEXT INDUSTRIAL REVOLUTION

IMPACT OF MOBILE INTERNET, AUTOMATION & AI

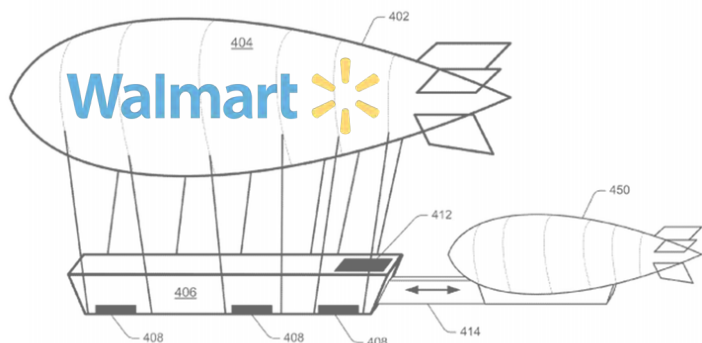
According to the World Economic Forum, the digital transformation of the auto industry will deliver **\$3.1 trillion annually in societal benefits** by reducing the number of crashes, the impact of carbon emissions and the cost of car ownership, including maintenance, fuel and insurance.

A 2017 study from Intel predicted that the global autonomous-vehicle market will generate \$7 trillion annually by 2050—both directly (industrial use) and indirectly (savings from shorter commutes and a reduced need for emergency services).

Everything around us will be altered by autonomous vehicles—our roads, our warehouses and even our definition of what a car can be.

Autonomous technology and advancements in other fields will give rise to blimplike “floating warehouses,” with drones that deliver goods to your door (Amazon and Walmart have applied for patents to create such a vessel).

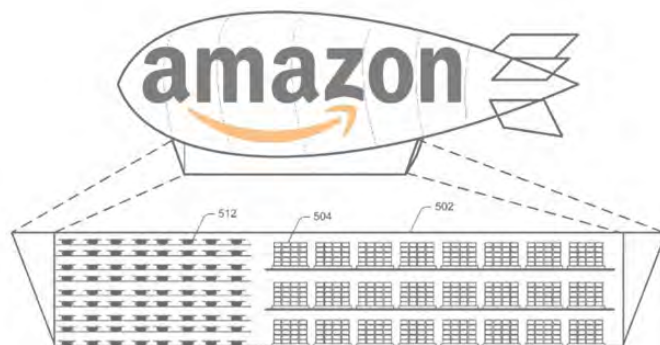
Operated autonomously or by a remote human pilot, these warehouses, flying 500 to 1,000 feet in the air, will slash the costs of fulfilling online orders and the number of delivery trucks—to the detriment of shippers like FedEx and UPS.



Kiss conventional car design goodbye. Autonomous vehicles won't look like cars for long. “Once you eliminate the need for a steering wheel and a driver, the design possibilities are endless,” says the car designer Dan Sturges. Cars will offer much more than mobility. They'll be our personal assistants and come with flexible design features: a pop-up workstation that turns into a baby-changing table, a gym that becomes a mobile exam room that can transmit test results to your doctor.

Drastically different car design means drastically different roadways. Instead of lane lines and street signs, a network of smart devices—embedded in vehicles and infrastructure—would communicate on the fly to accommodate traffic. The road itself could suggest a faster route for you to take.

Driverless vehicles could be a death knell for motorcycles. As autonomy makes transport safer, city planners, insurance companies and car manufacturers may see motorcycles as an unnecessary danger. New technology may present an opportunity to make more all-terrain vehicles, especially for industry. Honda is developing an ATV that can carry just about anything except a driver. These machines could be used in various settings, from farming and construction to search and rescue.



Sources:

WSJ - Inside the New Industrial Revolution (By Christopher Mims | November 12, 2018)

Reuters - Kroger and Ocado to build first robotic warehouse in Cincinnati (By Lisa Baertlein | November 19, 2018)

WSJ - How Autonomous Cars Will Reshape Our World (By Samuel I. Schwartz | October 27, 2018)