

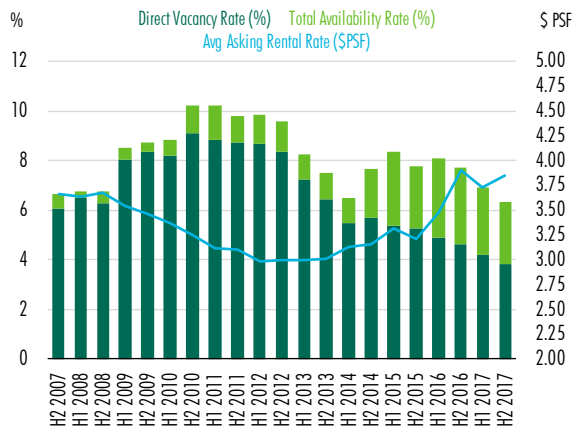
Richmond Warehouse & Flex, Q3 2017

Vacancy tightens to decade low, spurring new spec development

▼ **WHS. Vacancy Rate** **3.9%**
▲ **WHS. Asking Rate** **\$3.85 PSF NNN**
▼ **Flex Vacancy Rate** **7.2%**
▶ **Flex Asking Rate** **\$8.91 PSF NNN**
▲ **RIC Net Absorption** **440,489 SF**

*Arrows indicate change from prior quarter.

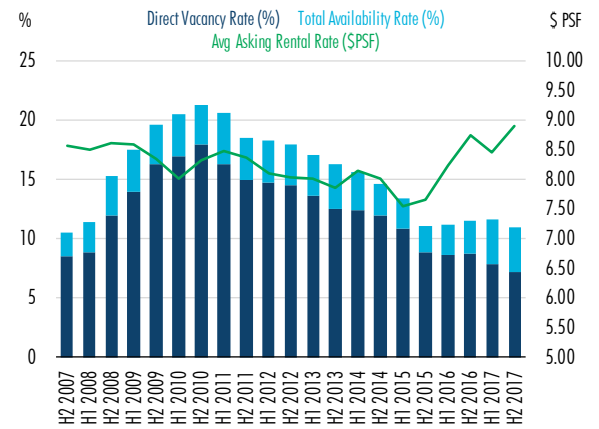
Figure 1: Warehouse Vacancy and Rental Rate Trends



Source: CBRE Research, Q3 2017.

- At close of quarter, a dominant social media company announced plans to build a data center at White Oak Technology Park in eastern Henrico County. This estimated \$1 billion investment will be a multi-phase development of four buildings totaling 2.5 million sq. ft. with completion expected in 2019. The center is expected to employ approximately 100 people.
- Pre-leasing activity of spec construction remains strong with 90.4% of current spec development already committed to. Becknell Industrial broke ground on their third and final building in the Airport Distribution center after inking a deal to lease the entire 202,560 sq. ft. Panattoni also entered the market and plans to break ground on a 461,700 sq. ft. spec warehouse in Q4 2017.
- Richmond's Highbay Index 24'+ vacancy rate tightened 181 bps in Q3 2017 to 1.0% exacerbating the supply and demand imbalance.
- Industrial employment slipped to 125,700 employees while Richmond's total employment however added 5,300 net jobs in Q3 2017.

Figure 2: Flex Vacancy and Rental Rate Trends

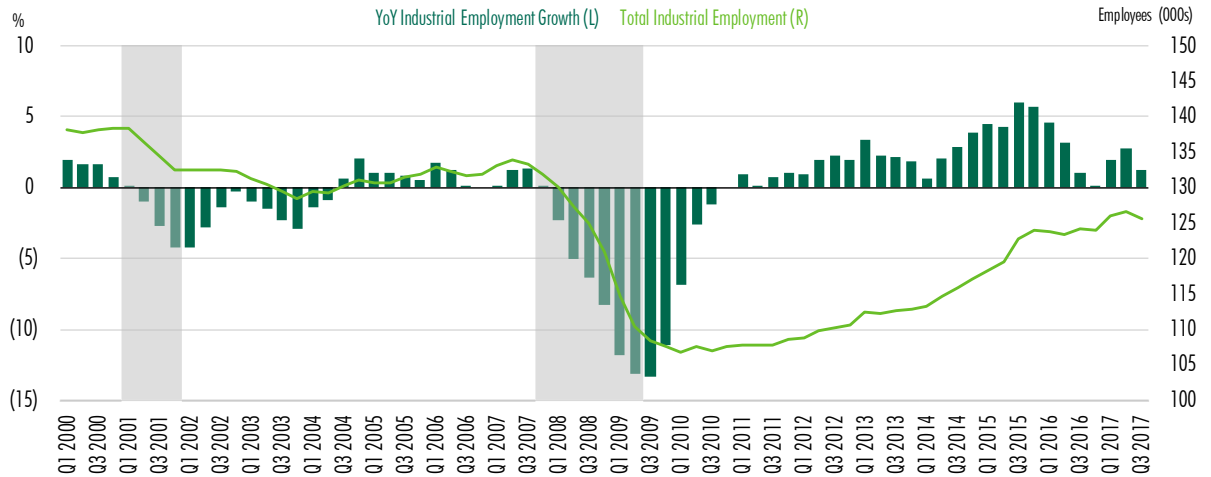


Source: CBRE Research, Q3 2017.

Richmond's overall industrial vacancy rate tightened for the sixth consecutive quarter falling to a decade low of 4.2% in Q3 2017. Industrial-user demand continued to outpace supply as the market posted 440,489 sq. ft. of net absorption in Q3 2017. This increased the total net absorption since the market bottomed out in late 2010 to over 13.4 million sq. ft. Supply however, has only grown by 4.4 million sq. ft. over the same period as 7.9 million sq. ft. of new product has been delivered, of which 90.1% has been built-to-suit, while 3.5 million sq. ft. of existing product has either been converted or demolished.

The lack of available modern high-bay inventory continued to constrain tenants to their current locations. With an imbalance of supply and demand Richmond's average industrial rent climbed to \$4.62 per sq. ft. in Q3 2017 as growth accelerated over the quarter to 4.2%. Rents have been driven up over the past two years as tightening vacancy and availability rates, which fell

Figure 3: Richmond Industrial Using Employment



Source: St. Louis Federal Reserve Bank and CBRE Research, Q3 2017.

to seven-year lows, have elevated landlords' negotiating leverage. Driven by the tight market and sustained rent growth, the surge in industrial development is poised to continue, as Richmond has seen a second multi-national developer, Panattoni, enter the market in the past 24 months. Panattoni purchased a site along I-95 close to the Richmond Marine Terminal and is expected to begin construction of a 461,700 sq. ft. spec warehouse in Q4 2017, with plans for an additional 461,700 sq. ft. The prolonged supply and demand imbalance appears to have reached a tipping point, and we expect to see more developers enter the market as rental rates support new construction.

MACRO ECONOMIC TRENDS REMAIN HEALTHY

EMPLOYMENT & THE ECONOMY

Richmond's overall economy expanded to 628,400 employees in Q3 2017 as Richmond added 5,300 net jobs (3.1% annualized) over the quarter. On an annual basis Richmond's total employment grew by 2.2% (14,400 net jobs added).

While Richmond's overall employment continued to expand in Q3 2017, industrial-using employment saw a slight 0.8% dip in its total employment over the quarter to 125,700. This decline was largely the result of the continued slide in Manufacturing employment as well as contractions in both the Wholesale Trade and Construction sectors.

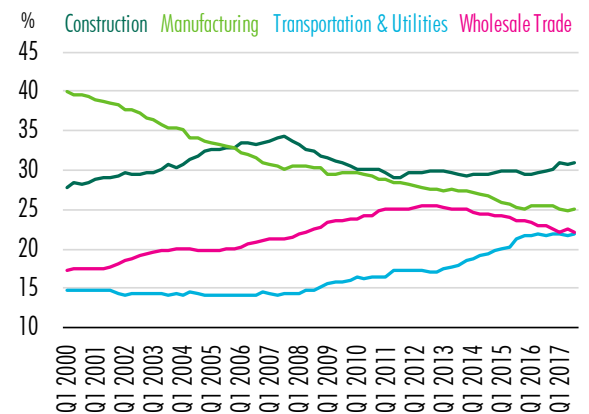
Richmond's recent top industrial performer of late, the Transportation and Utilities sector, added no

jobs on net over the quarter. Despite a slight contraction in Q3 2017, the Construction sector expanded 4.3% (1,600 net jobs) over the year, making it Richmond's third-fastest growing employment sector. The strong annual growth in the Construction sector is indicative of Richmond's overall market as its commercial and residential construction pipelines swell. With the industrial-using sector shedding 1,000 net jobs during the quarter, Richmond's annual industrial employment expansion slowed to a modest 1.3%.

PORT OF VIRGINIA SEES STRONG GROWTH

In conjunction with the Panama Canal expansion, the Port of Virginia's continued investment in the Richmond Marine Terminal has driven a steady increase of port-related industrial requirements ,

Figure 4: Richmond Industrial-Using Sectors Employment Market Share



Source: St. Louis Federal Reserve Bank and CBRE Research, Q3 2017.

Figure 5: Richmond Warehouse and Flex Snapshot

Submarket	Rentable Market Area (SF)	Direct Vacant (SF)	Vacancy Rate (%)	Availability Rate (%)	Average Asking Rate (\$/SF/Yr)	Quarter Net Absorption (SF)	YTD Net Absorption (SF)	Under Construction (SF)
Warehouse Market								
Northeast Quadrant	28,838,826	458,395	1.6	2.5	5.17	70,442	360,021	356,040
Northwest Quadrant	15,769,522	569,941	3.6	5.3	5.20	(18,896)	45,537	320,853
Southeast Quadrant	18,660,071	475,679	2.5	6.8	3.99	249,107	786,178	-
Southwest Quadrant	34,559,983	2,263,857	6.6	9.7	3.23	69,373	279,088	660,039
Warehouse Market Totals	97,828,402	3,767,872	3.9	6.3	3.85	370,026	1,470,824	1,336,932
Flex Market								
Northeast Quadrant	1,997,291	95,015	4.8	10.6	7.59	845	36,492	-
Northwest Quadrant	5,982,791	453,286	7.6	10.7	9.50	38,502	201,265	112,885
Southeast Quadrant	453,139	24,812	5.5	9.6	10.29	(11,992)	(6,192)	-
Southwest Quadrant	2,397,567	209,890	8.8	12.5	8.72	43,108	49,038	14,443
Flex Market Totals	10,830,788	783,003	7.2	11.0	8.91	70,463	280,603	127,328
Industrial Market Totals	108,659,190	4,550,875	4.2	6.8	4.62	440,489	1,751,427	1,464,260
Richmond Highbay Index ¹								
Clearance 32'0"+	8,378,197	48,539	0.6	2.4	4.11	164,897	889,358	1,336,932
Clearance 24'1"-31'11"	4,310,262	-	-	8.9	3.79	-	-	-
Clearance 24'0"	3,636,316	109,583	3.0	3.6	4.66	131,100	(33,163)	-
RHBI 24'+	16,324,775	158,122	1.0	4.4	4.02	295,997	856,195	1,336,932
RHBI Sub 24'	4,184,065	329,829	7.9	16.7	4.13	(1,479)	130,300	-
Highbay Total	20,508,840	487,951	2.4	6.9	4.08	294,518	986,495	1,336,932

Source: CBRE Research, Q3 2017.

Note: The "Market" consists of industrial properties greater than or equal to 10,000 sq. ft.

Figure 6: Top 3 Lease or Sale Transactions Over the Quarter

Tenant Name	Building Park/County	Quadrant	Size (SF)	Type
1. MDH	Interport Business Center	NEQ	620,296	Ind. Sale
2. Confidential	Airport Distribution Center	NEQ	202,560	Ind. Lease (BTS)
3. Temperpack Technologies Inc.	Richmond Distribution Center	NEQ	133,000	Ind. Lease

Source: CBRE Research, Q3 2017.

¹ CBRE|Richmond created and tracks the Richmond Highbay Index (RHBI). This select group of industrial buildings is a collection of institutional quality warehouse and distribution buildings that provide the highest functionality for the modern industrial user. This smaller cross section provides a better representation of the true "state" of the market. The total number of buildings and square feet tracked is not static, buildings are added or removed as they are delivered or become obsolete.
² The RHBI 24+ (Richmond Highbay Index 24+) is the highest quality subset, limited to the RHBI's top tier buildings, requiring a minimum clearance height of 24 ft.
 ** CBRE handled transaction.

within the Richmond market. According to CBRE's North America Seaports & Logistics Annual Report, the Port of Virginia increased its overall seaport and logistics rank to 5th in 2017 in North America, up from the 9th in 2016. This increase is largely due to its strong connection to both the inland-port facilities in Front Royal and Richmond, and the Richmond Marine Terminal, as well as taking advantage of the having strong rail integration in North America.

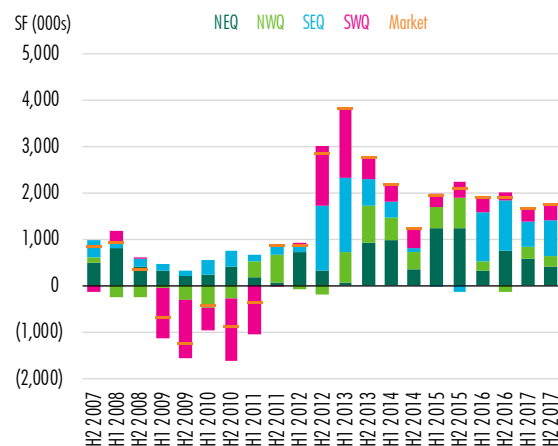
Subsequent to the expansion of the Panama Canal, the Port of Virginia has hosted the largest ship to ever call on the East Coast numerous times. So while the overall number of ship calls has slipped, the Port of Virginia handled 8.4% more cargo over the past 12-months, as its total 12 month volume grew to 2.8 million Twenty-Foot Equivalent Units.

NET ABSORPTION & USER DEMAND

Richmond experienced a modest decline in its net absorption over the quarter to 440,489 sq. ft. in Q3 2017. This came on the heels of 859,492 sq. ft. net absorption in Q2 2017. User demand, nonetheless, continued to surge in Q3 2017 increasing to 5.7 million sq. ft. of user requirements in the market, more than double the total demand from the previous year.

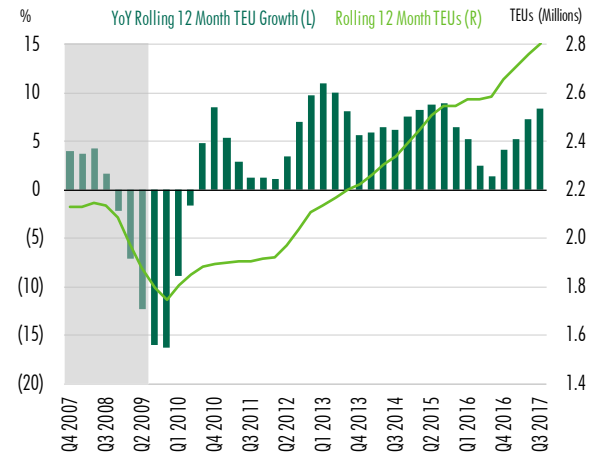
Climbing to an overall total of 1.8 million sq. ft., annual warehouse net absorption increased to 1.5 million sq. ft. and flex grew to 280,603 sq. ft. Richmond's warehouse sector continued to see the bulk of the demand in Q3 2017, absorbing 370,026 sq. ft. on net as users took advantage of a rare

Figure 7: Rolling 12 Month Net Absorption by Quadrant



Source: Port of Virginia and CBRE Research, Q3 2017.

Figure 8: Port of Virginia 12 Month TEU Volume & YoY Growth Rate



Source: CBRE Research, Q3 2017.

uptick in the available supply of Richmond's highbay inventory in Q2 2017. Of the total warehouse net absorption in Q3 2017, Richmond's highbay product accounted for 79.6%. The flex market also remained active, absorbing a more modest 70,463 net sq. ft. in Q3 2017.

The Southeast Quadrant continued to lead Richmond's warehouse market with 249,107 sq. ft. of net absorption following significant leasing activity in the Enterchange at Walthall industrial park. Richmond's Northeast Quadrant followed with 70,442 sq. ft. net absorption after Temperpack Technologies Inc. leased 133,000 sq. ft. in the Richmond Distribution Center. Over the year, the Northeast Quadrant continued to show the greatest highbay absorption at 343,500 net sq. ft. while the non-highbay market held strongest in the Southwest Quadrant at 310,788 net sq. ft.

DIRECT VACANCY & TOTAL AVAILABILITY RATES

Richmond's industrial market tightened to its lowest levels of both direct vacancy and total availability in more than a decade at 4.2% vacant and 6.8% available. Supply in the warehouse market was even more constrained in Q3 2017 with a 77 basis points (bps) decline in its vacancy over 12 months to 3.9%, and a 183 bps decline in its total availability over the same period to 6.3%. The Northeast Quadrant continued to see the leanest vacancy and availability rates in the warehouse market, ending Q3 2017 at 1.6% and 2.5% respectively. While much of the activity remained concentrated in the warehouse market, the flex

market also performed well over the past year tightening 205 bps over 12 months to 7.2% vacant.

Vacant supply within the Richmond Highbay 24+ Index dwindled to a record-shattering 1.0% in Q3 2017 following a 181 bps decline in its vacancy rate over the quarter.

AVERAGE ASKING RENTAL RATES

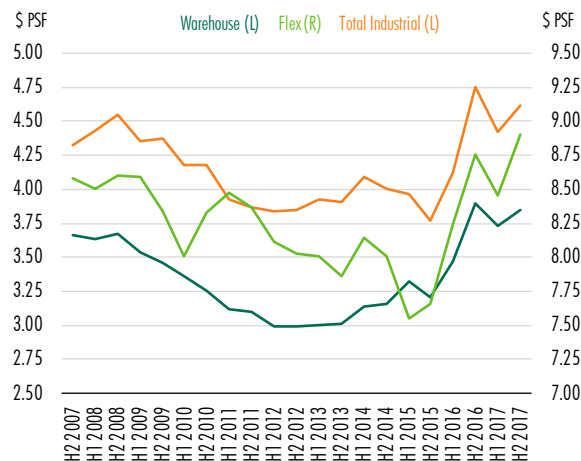
With demand out pacing supply, the average market rental rate rose for the seventh-consecutive quarter, gaining 4.2% over Q2 2017 to \$4.62 per sq. ft. in Q3 2017. The average warehouse asking rent climbed 3.0% during Q3 2017 to \$3.85 per sq. ft., with some landlords asking now over \$5.00 per sq. ft. Richmond's average flex rent grew 5.1% over the same period to \$8.91 per sq. ft.

Warehouse landlords took advantage of the lack of available product, increasing same-building rents by an average 4.9% during the quarter. Meanwhile the average same-building rent growth within the flex market was a more modest 1.4% over the quarter. With burgeoning demand and virtually no supply, average industrial rent in the Northeast Quadrant accelerated at Richmond's fastest pace, gaining 12.4% over the quarter to \$6.04 per sq. ft. The average Highbay asking rental rate reached a new post-recession high of \$4.08 per sq. ft. as landlords pushed same building asking rents by an average of 5.8% over the year.

DEVELOPMENT PIPELINE

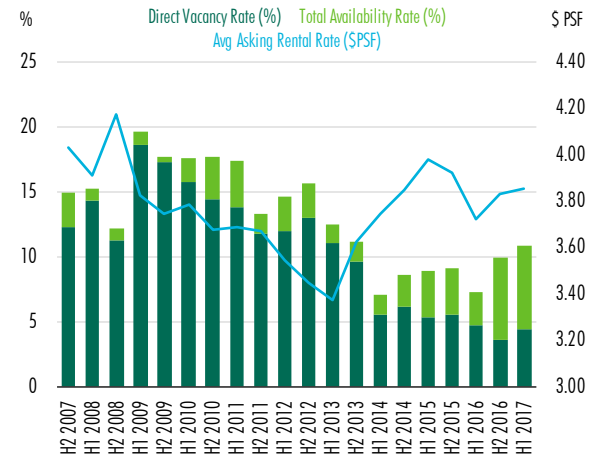
Richmond's development pipeline continued to grow over Q3 2017 as scarce supply has sparked a

Figure 9: Average Asking Rates



Source: CBRE Research, Q3 2017.

Figure 10: Highbay Vacancy, Availability & Asking Rental Rates

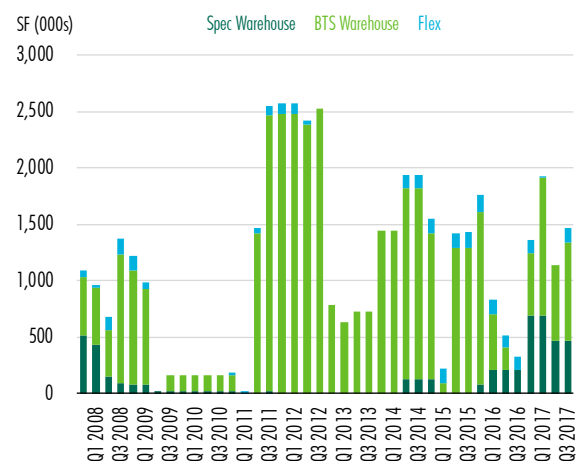


Source: CBRE Research, Q3 2017.

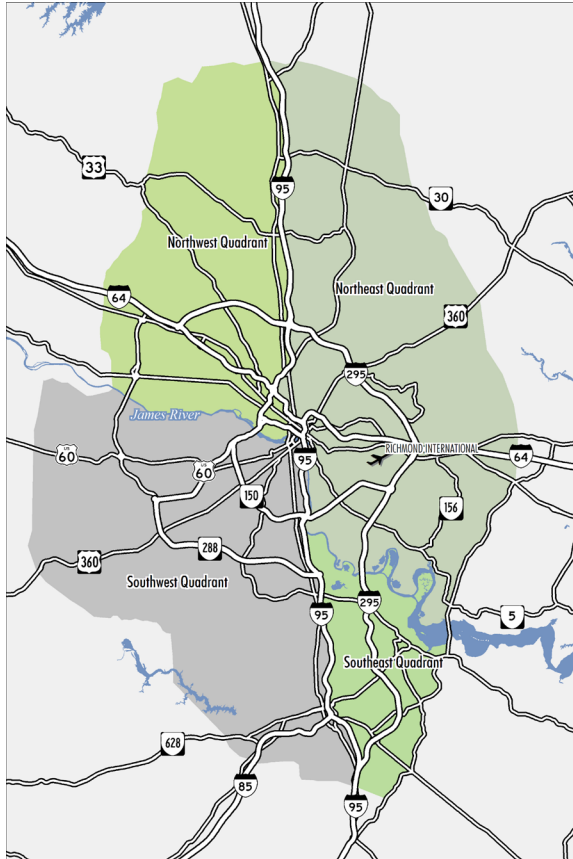
wave of new construction. In the past months, Becknell Industrial has broken ground on three new highbay buildings in the Airport Distribution Center. At 216,000 sq. ft. the first building has already delivered and is fully leased to Premier Fixtures, the second has been mostly leased by Bunzl (114,009 sq. ft.) with 39,405 sq. ft. remaining. The third building, 202,000 sq. ft. was fully leased to an undisclosed tenant and just broke ground. Of the three buildings, only 6.7% of the 572,040 total sq. ft. remains uncommitted.

Panattoni also purchased an 62-acre site close to the Richmond Marine terminal with plans to deliver a 461,700 sq. ft. spec warehouse in Q3 2018, projected to break ground in Q4 2017. Overall the total product under construction rose to 1.5 million sq. ft.

Figure 11: Richmond Development Pipeline



Source: CBRE Research, Q3 2017.



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