

## Technical Memorandum

### Market Overview Study for North Carver

**Prepared for:** Carver Redevelopment Authority  
**Prepared by:** FXM Associates  
**Date:** June 2016

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#### Introduction

At the request of the Carver Redevelopment Authority, FXM Associates has prepared a limited study of current market conditions and trends that could affect development within the North Carver area. The focus of the market assessment was specified by the Redevelopment Authority to be office and industrial/wholesale space potentially suitable for the North Carver urban renewal area.

FXM includes the following industries in the office-using sector: Information; Finance and Insurance; Real Estate and Rental and Leasing; Professional, Scientific, and Technical Services; Management of Companies and Enterprises; and Administrative and Support and Waste Management and Remediation.

Industrial/wholesale includes Manufacturing, Wholesale Trade, and Transportation and Warehousing.

To provide the broadest possible perspective on real estate market conditions and trends that could affect development potential within the North Carver area, and within the limited context of this assignment, FXM utilized two distinct but complimentary approaches. The first involves examination of regional employment trends in industries that generate demand for office and industrial/wholesale space. Plymouth County is defined as the employment region for the purposes of this analysis. The second approach more narrowly defines a real estate submarket encompassing Carver and surrounding towns and analyzes trends in the inventory, occupancy, prices, and net absorption of office and industrial/wholesale space within the defined submarket.

#### Commercial Space Demand

FXM has applied its *Commercial Space Demand Model* to estimate the square footage demand for commercial space based on data from the U.S. Department of Commerce Regional Economic Information System (REIS). These data are used to profile historic trends in employment in the focus industries at the county level, which FXM uses as the regional market for Carver. These employment trends are then projected using linear regression methods and converted to potential square

footage of space demand through 2020 based on square feet per employee norms for each industry.

Table 1 below shows projected change in employment and space demand in **office-using industries** in Plymouth County. The estimated 2015 population within Plymouth County is 506,000, projected to increase to about 520,000 by 2020. Plymouth County currently holds about 220,000 jobs in 24,000 businesses that generate about \$51 billion in sales annually. Carver is a relatively small part of Plymouth County overall, with about 12,000 persons in 2015 (2.4% of county-wide population) projected to increase to about 13,000 by 2020. The town currently holds about 3,200 jobs (1.4% of Plymouth County overall) in 400 businesses generating \$676 million in annual sales<sup>1</sup>. Selected office-using sectors are projected to grow between 2014 and 2020, as shown in Table 1, based on a simple linear extrapolation of historic trends.

Table 1

<b>Projected Job Growth and Space Demand in Office Using Industries Plymouth County 2014-2020</b>				
<b>NAICS</b>	<b>Sectors</b>	<b>Projected Growth 2014-2020</b>	<b>Number of New Jobs 2014-2020</b>	<b>Potential Space Demand 2020</b>
<b>Office-Using Industries:</b>				
51	Information	5.9%	176	52,800
52	Finance and Insurance	27.2%	4,483	1,344,900
53	Real Estate and Rental and Leasing	14.2%	2,163	648,900
56	Administrative & support/waste management & remediation services	7.1%	898	269,400
54	Professional, scientific, and technical services	-0.4%	-87	(26,100)
55	Management of companies and enterprises	-25.3%	-900	(270,000)
<b>net gain totals</b>		<b>9.5%</b>	<b>6,733</b>	<b>2,019,900</b>

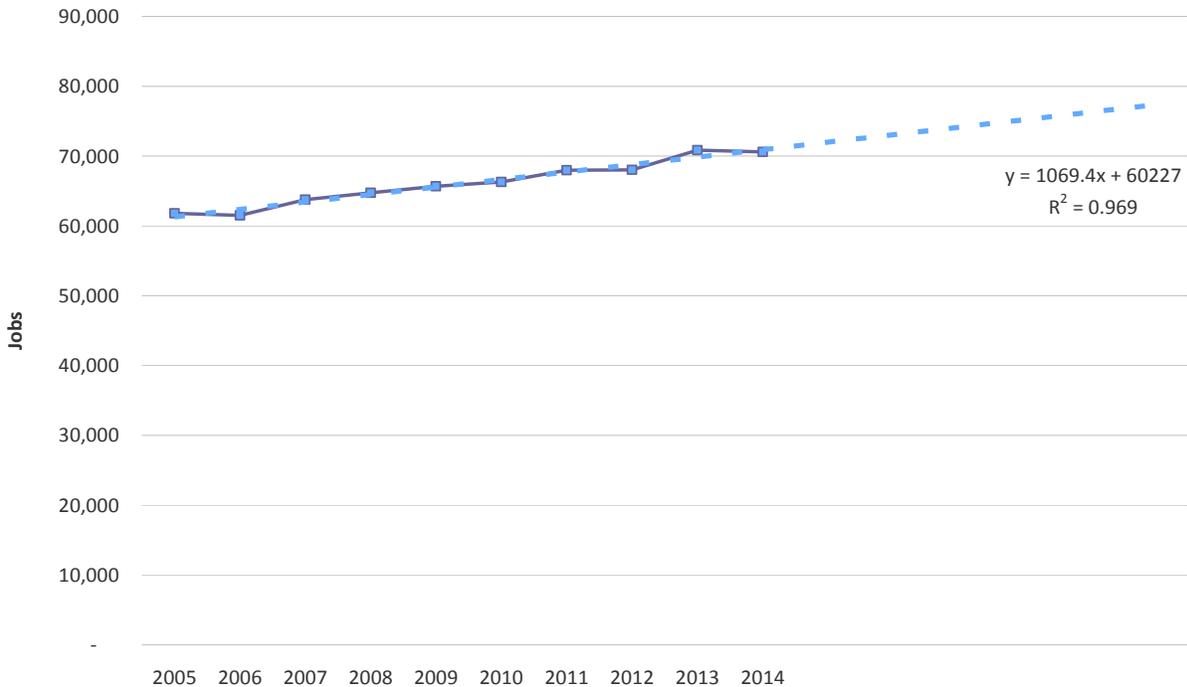
Sources: US Department of Commerce, Regional Economic Information System (REIS), and FXM Associates

Another way to view the data and analyses summarized in Table 1 is to display the 10-year trends graphically, along with projections to 2020 and estimation as to their reliability. Figure 1 below shows the trend line for all office-using sectors, along with a projected direction for future growth. Most striking is the steady upward growth of this composite sector, resulting in a high r-square value of .968, meaning that, based purely on past trends, one can be 97% confident that the growth will continue to 2020, adding nearly 7,000 new jobs in office space using businesses within Plymouth County overall. As shown by data in Table 1, however, the Finance and Insurance sector is expected to be the dominant demand driver. There are currently (2015 estimates) about 50 employees in this industry in Carver, less than 1.5% of town-wide employment. The Town would most likely have to make a major outreach effort to attract a business within the region to expand within Carver to realize enough of this potential growth to support new development in North Carver.

<sup>1</sup> Source of the population and business data is Nielson *Demographic and Business Facts*, 2015 data.

Figure 1

**Employment Trends in Plymouth County for All Office-Using Sectors, 2014-2020**



The picture for the **industrial/warehouse sectors** is quite different, in that there has been great variance in employment over the last ten years. Figure 2 displays this clearly. Because of this variability, trend projections into the future based on historic patterns of the last ten years are statistically unreliable. However, the graph in Figure 2 also shows that the industrial sectors have been experiencing strong evidence of recovery since 2010. It is still too soon to know whether this trend will continue, but Table 2, which follows Figure 2, presents the picture of growth in both office-using and industrial sectors between 2010 and 2014. For the office-using sectors, growth has been steady since 2005 and continued to be so after 2010, but for the industrial/warehouse sectors, 2010 marked the end of the sharp decline of the previous four years and the beginning of a period of growth, an increase of 10% over the 2010 to 2014 period<sup>2</sup>.

<sup>2</sup> 2014 is the latest year for which the REIS data used in this analysis are available. The US Department of Commerce Regional Economic Information System (REIS) data are preferred for longer term regional employment analyses over the Department of Labor’s ES202 data series (although more current) since they include self-employed persons (about 30% of all jobs) which the ES202 data series does not.

Figure 2

**Employment Trends in Plymouth County for All Industrial/Warehouse Uses 2005-2014**

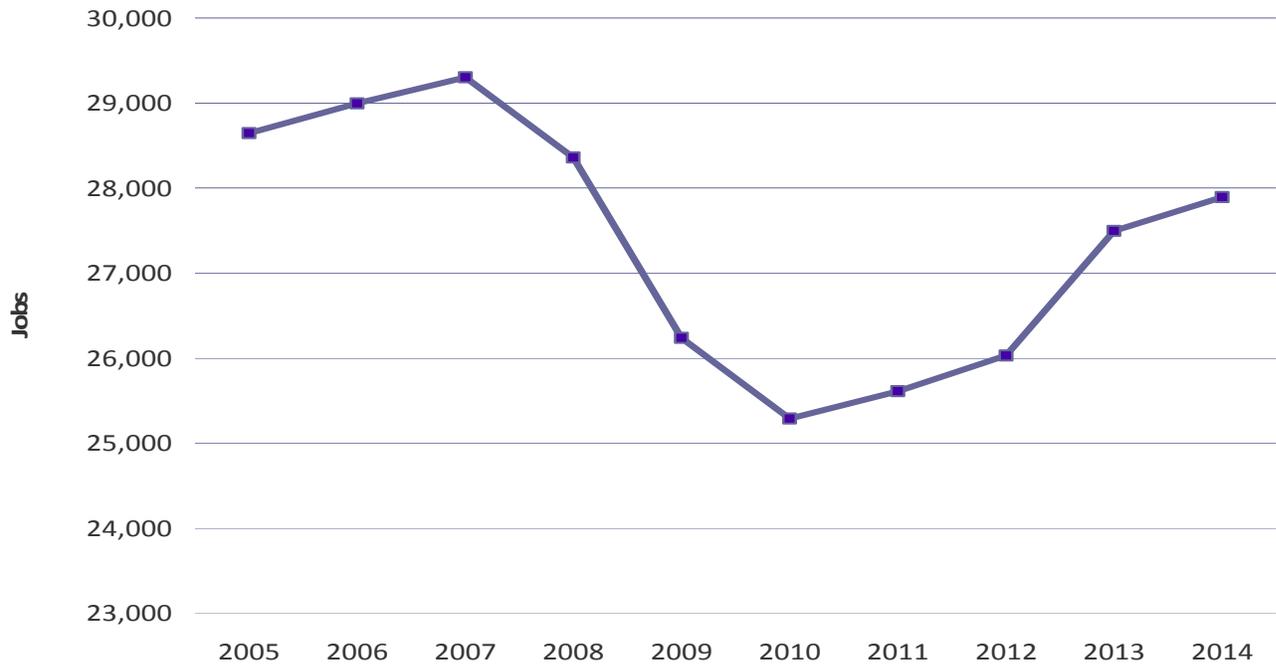


Table 3

**Changes in Employment in Plymouth County, 2010-2014**

NAICS		Δ 2010-2014	% Growth
		2014	2010-2014
31-33	Manufacturing	939	8%
42	Wholesale trade	760	9%
48-49	Transportation and warehousing	903	17%
	total industrial/warehouse	2,602	10%
51	Information	(114)	-4%
52	Finance and insurance	1,216	8%
53	Real estate and rental and leasing	1,809	13%
54	Professional, scientific, and technical services	1,350	7%
55	Management of companies and enterprises	172	5%
56	Administrative and support and waste management and remediation services	(103)	-1%
	total office-using	4,330	7%

Sources: US Department of Commerce, Regional Economic Information System (REIS), and FXM Associates

## **Trends in Office and Industrial Space in the Market Area**

FXM has analyzed historical trends in the total inventory, vacancies, net absorption and rents for office and industrial/warehouse space within the local market area. The local real estate market area is defined to include Carver and the surrounding towns of Kingston, Middleborough, Plymouth, Plympton, and Wareham. This submarket area contains about 130,000 people and 51,000 jobs – Carver holds about 10% of the submarket population and 5% of the jobs. Data for this analysis of supply trends is from Co Star *Property Information Systems*, the leading subscription data source used by real estate professionals. Forecasts of net absorption by Co Star and trend extrapolations of historical data by FXM are also reported in this section.

### **Office Space**

Data in Figure 3 show the inventory of office space within the submarket since 2007 as well as vacancy rates. The total inventory of office space has increased over the 10-year period by about 160,000 square feet, an average annual gain of 16,000 square feet. Vacancies have steadily decreased from a high of over 13% in 2010 to about 6% today (2<sup>nd</sup> quarter of 2016).

Data in Figure 4 show historical occupancy of office space in the submarket area as well as average lease rates per square foot. Occupied square feet of office space increase by 169,000 square feet (6.7%) since 2007, an average annual gain of nearly 17,000 square feet per year. While prices have increased by about 14% since their low point in 2010-11, to an average rate of \$18.36 gross per square foot per year in 2016, they are still about 8% below the 2007 average gross rent for office space in the submarket. Rents have declined slightly the past three years.

The picture that emerges from these trends is of a healthy office submarket that is continuing to grow in both new inventory and occupancy by modest amounts, though somewhat price sensitive to competition in surrounding areas. The trend projection in occupancy shown in Figure 5, based on the 2007 to 2016 historical data, is statistically significant and suggests an additional occupancy averaging nearly 30,000 square feet per year through 2021. Figure 6 shows Co Star's projected net absorption and vacancy rate for office space over the next 8 quarters. At 54,000 square feet per year projected absorption and a vacancy rate declining to about 3%, Co Star's projection is even more optimistic than the trend extrapolation. However, as will be discussed subsequently, growth in office space supply and occupancy within the Carver area submarket has been dominated by a single office space category which is medical office space.

Figure 3

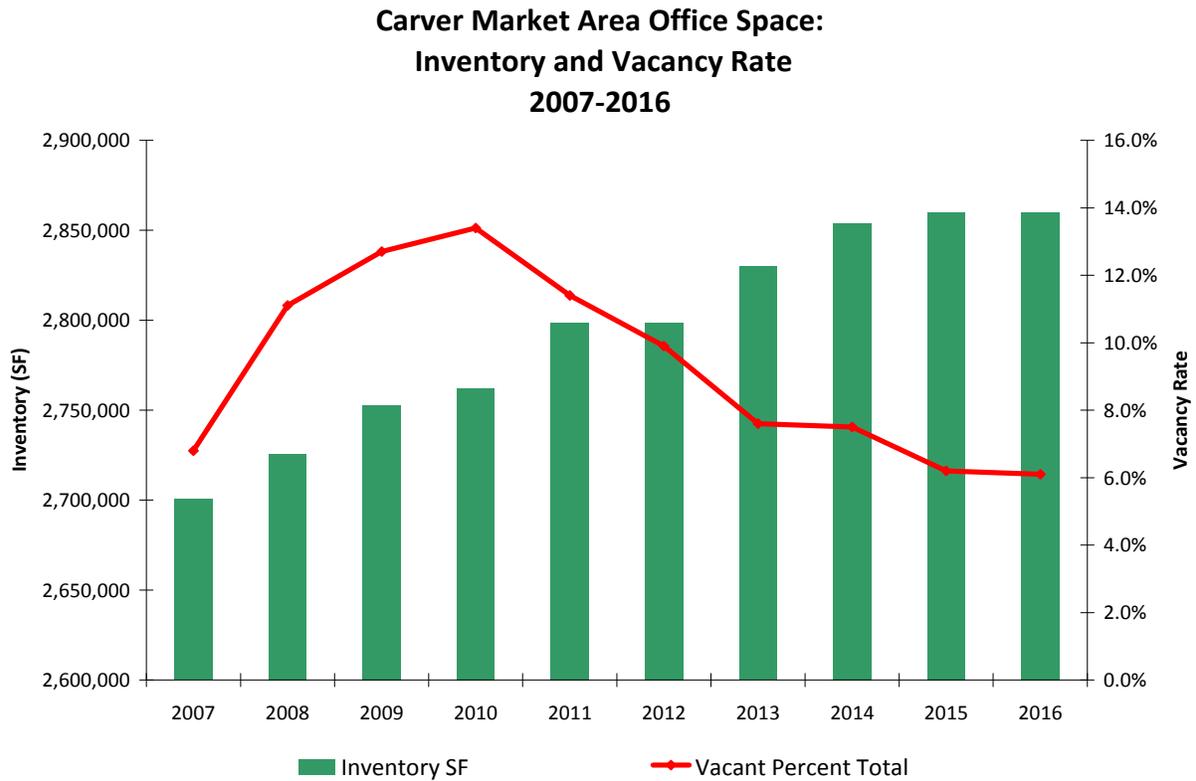


Figure 4

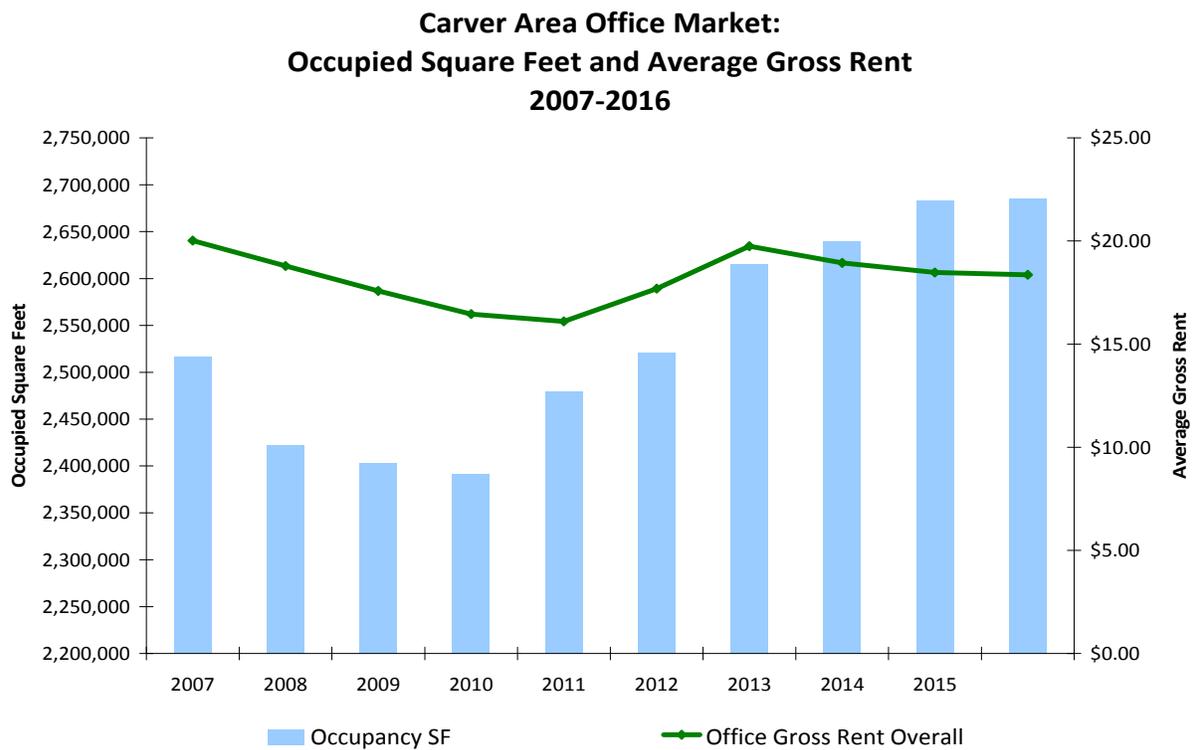


Figure 5

**Carver Market Area Office Space:  
Historical & Projected Occupancy  
2007-2021**

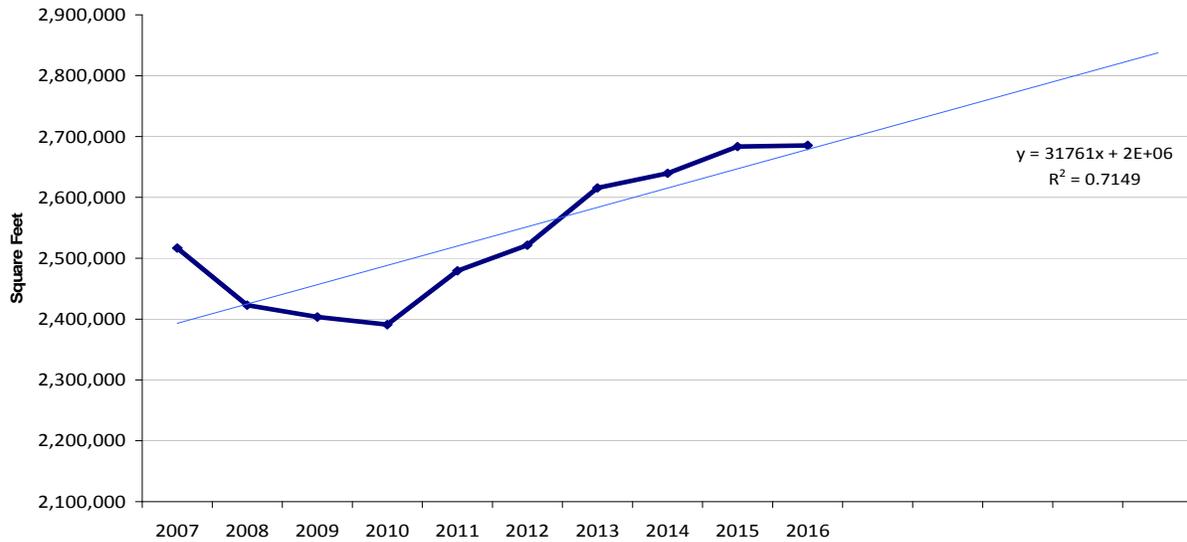
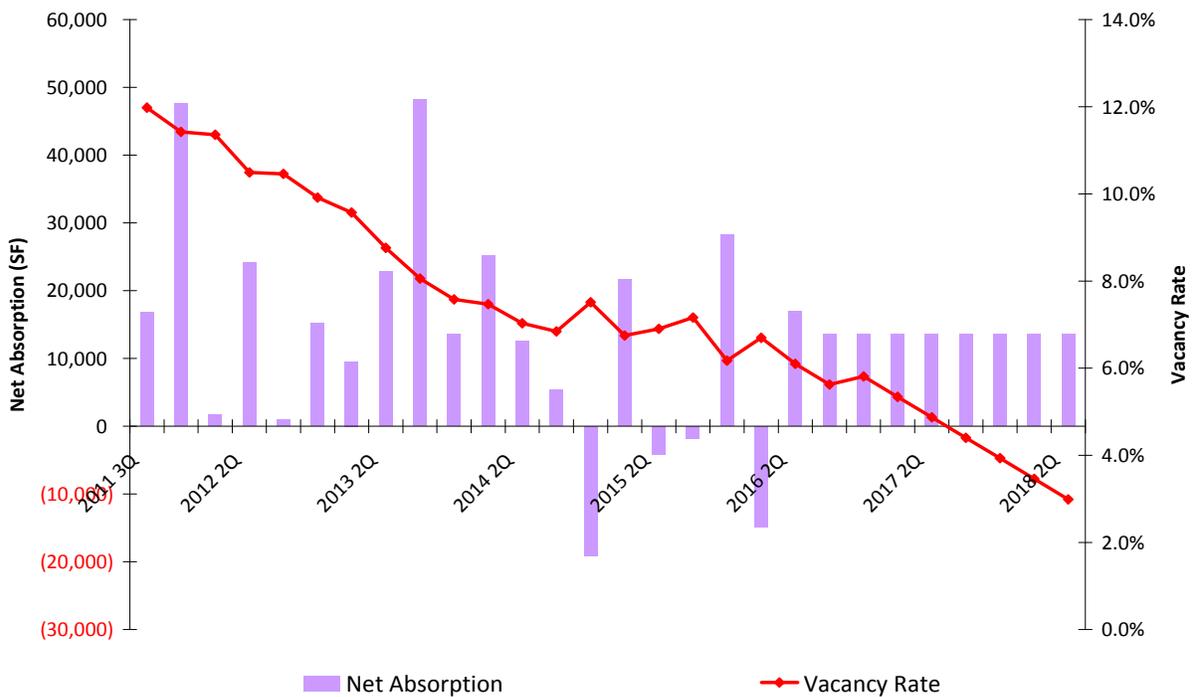


Figure 6

**Carver Market Area Office Space:  
Historical & Forecast Net Absorption & Vacancy Rate**



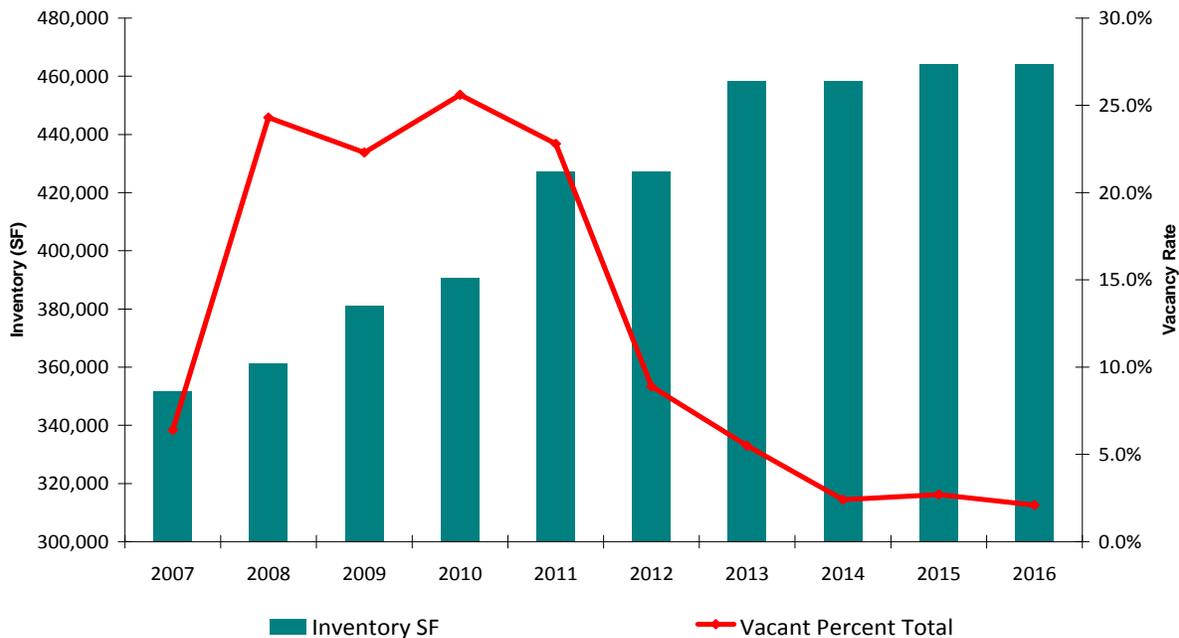
Source: Co Star Property Information Systems, June, 2016, and FXM Associates

FXM also examined a subcategory of the general office market, *medical* office space. As shown in the following Figures 7, 8, and 9, medical office space has accounted for a significant portion of growth in overall office space supply and demand within the Carver area submarket:

- The inventory of medical office space increased by 113,000 square feet (32%) between 2007 and 2016. The average annual increase of medical office space of 11,000 square feet per year accounts for 71% of the average annual increase in the inventory of all office space in the submarket. The vacancy rate has declined from a high of 25% in 2010 to less than 3% in the 2<sup>nd</sup> quarter of 2016.
- Occupancy of medical office space increased by 125,000 square feet between 2007 and 2016. The average annual gain of 12,500 square feet per year represents 74% of the average annual gain of all types of office space.
- Co Star’s projected net absorption is for 35,000 square feet of office space over the next 4 quarters, which is 65% of the projected increase in all office space within the submarket over that period.

Figure 7

**Carver Market Area *Medical* Office Space:  
Inventory and Vacancy Rate  
2007-2016**



Source: Co Star Property Information Systems, June, 2016, and FXM Associates

Figure 8

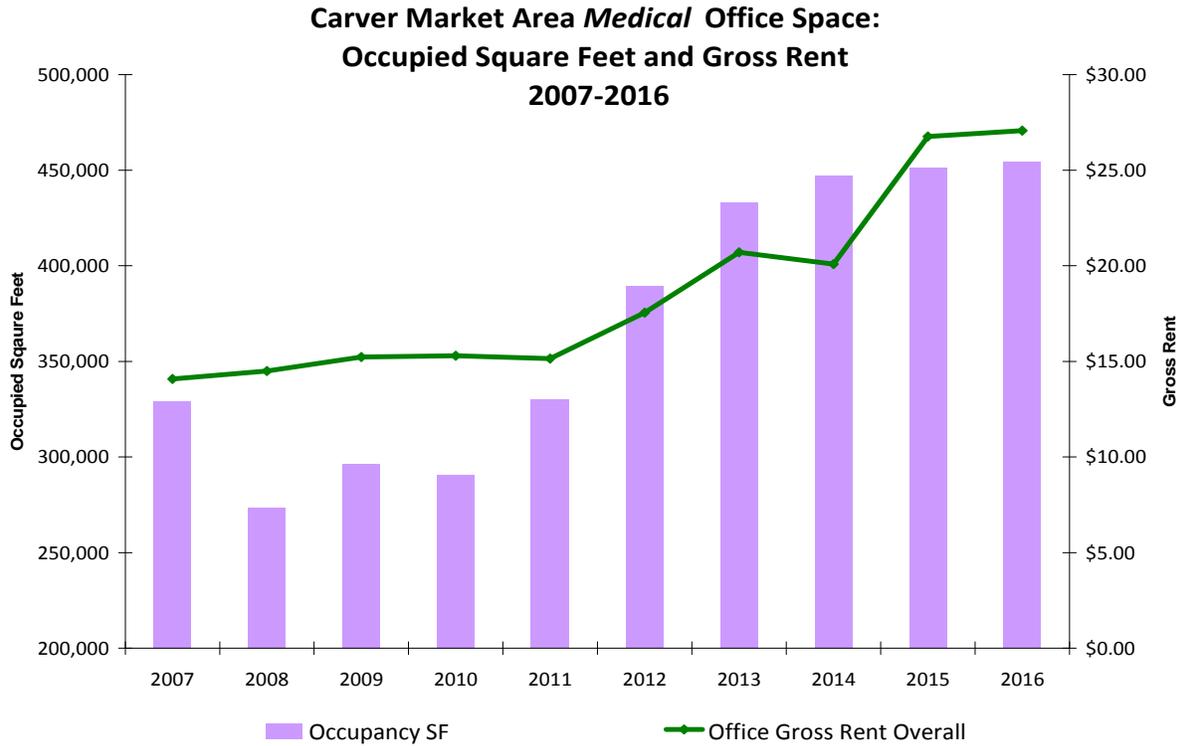
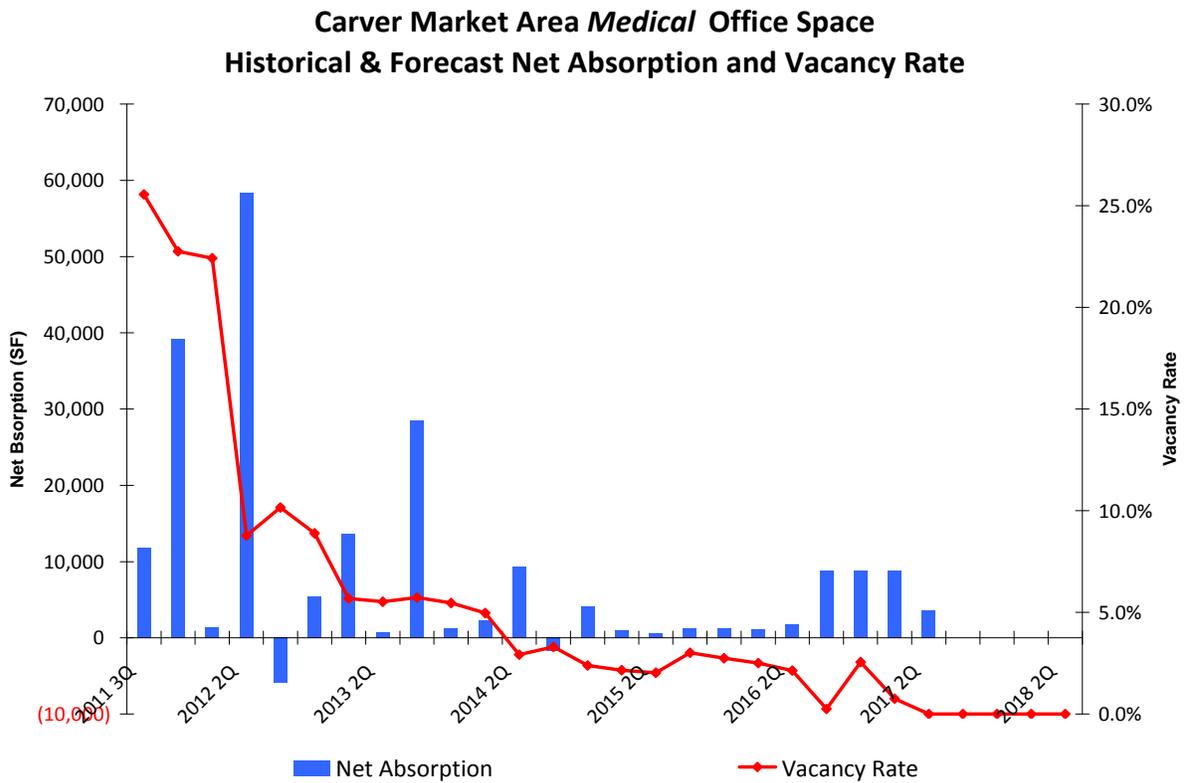


Figure 9



Also noteworthy in the analysis of trends in medical office space is the significant increases in average annual gross rents. As shown in Figure 8, since 2007 rents for medical office space have increased by \$13 per square foot per year, a 92% gain in average rents. At \$27 per square foot in the 2<sup>nd</sup> quarter of 2016, office space gross rents are 50% higher than the \$18 per square foot average for all office space. It is unclear why the Co Star forecast shown in Figure 9 projects vacancies declining to near zero but no net absorption projected by 2018 – there is no indication that growth in demand for medical services away from traditional hospitals has abated. It is also unclear whether Carver’s location relative to the population served by medical offices would be seen as advantageous by prospective medical office space developers.

### **Industrial Space**

As defined by Co Star and others in the real estate community, “industrial” space includes warehouse, distribution, cold storage and manufacturing uses. The picture of industrial space in the Carver area submarket, not unlike the employment trends in manufacturing, wholesale trade, transportation and warehousing previously discussed, is a mixed one.

As shown by data in Figure 10, the inventory of industrial space decreased by 138,000 square feet between 2011 and 2012, a 3% loss. Since that time the inventory has gained back about 32,000 net new square feet of space and vacancies have declined from 9% to 3.5% today. More importantly, occupancy of industrial space has increased by 270,000 square feet since the low point in 2012, as shown in Figure 11. Rents have recovered slightly from their 2013 low point, but are still below their peak in 2008.

As shown by data in Figure 12, Co Star is projecting an average net absorption of 18,000 square feet of industrial space per year through the 2<sup>nd</sup> quarter of 2018 and declining vacancy rates.

Figure 10

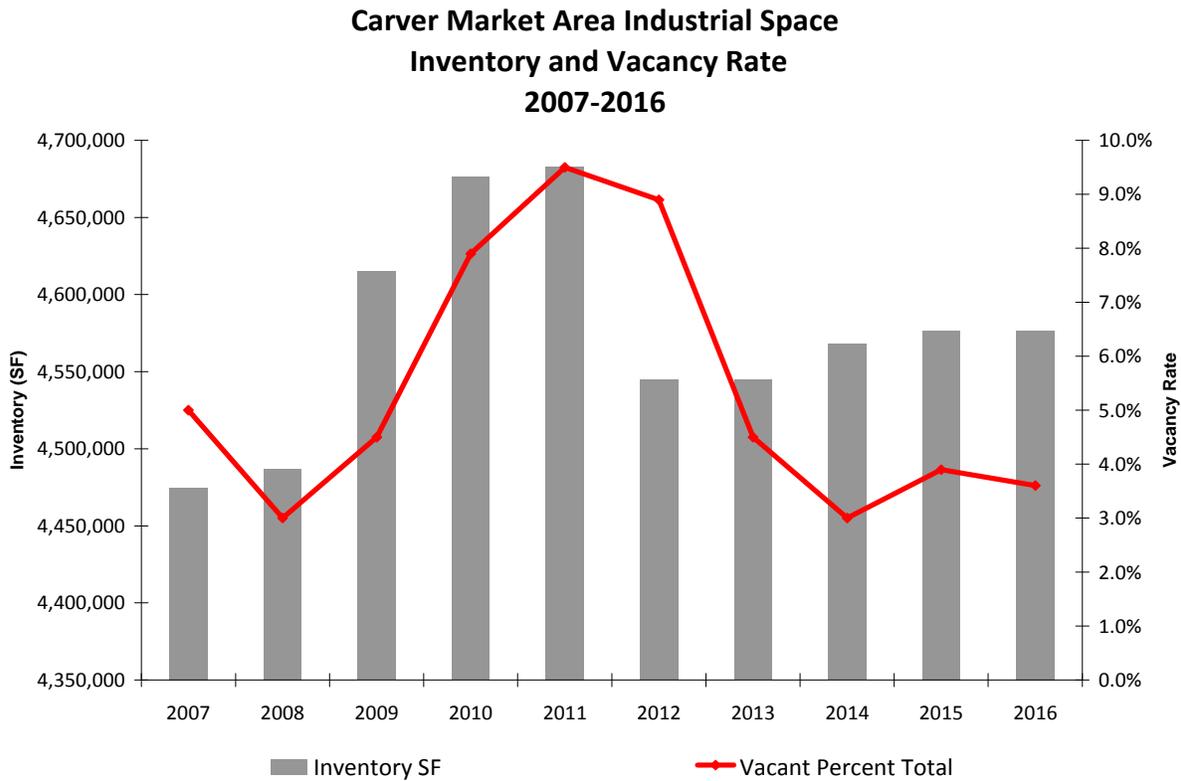
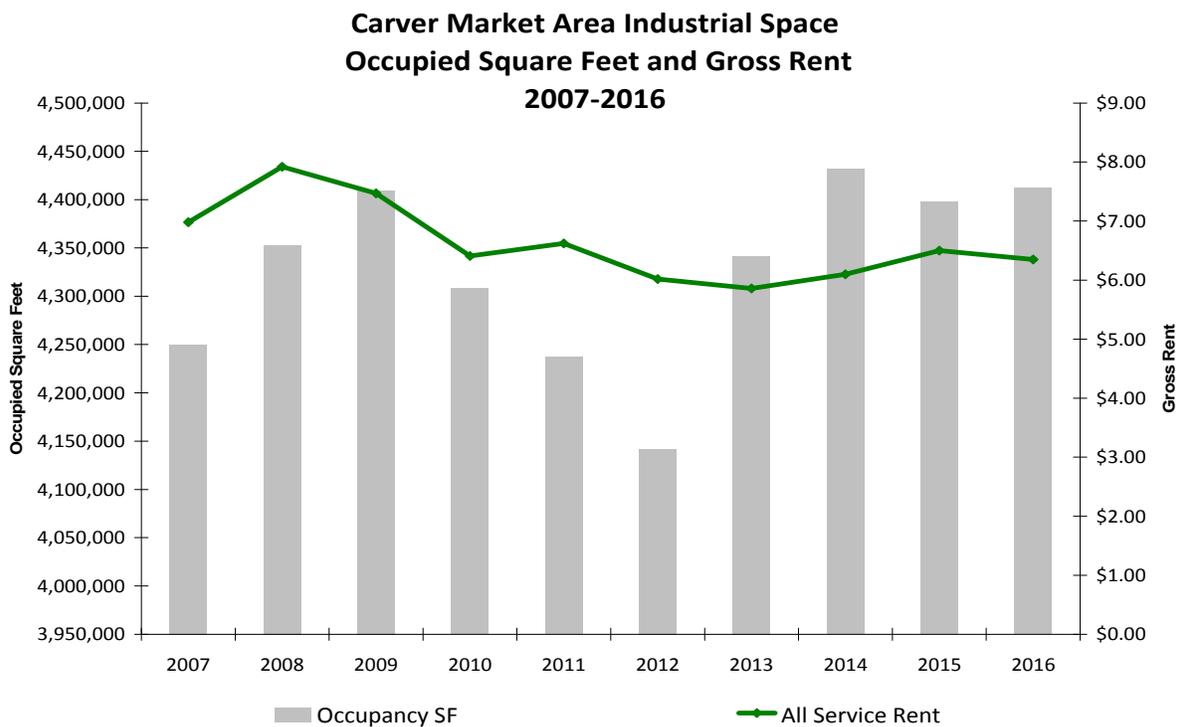
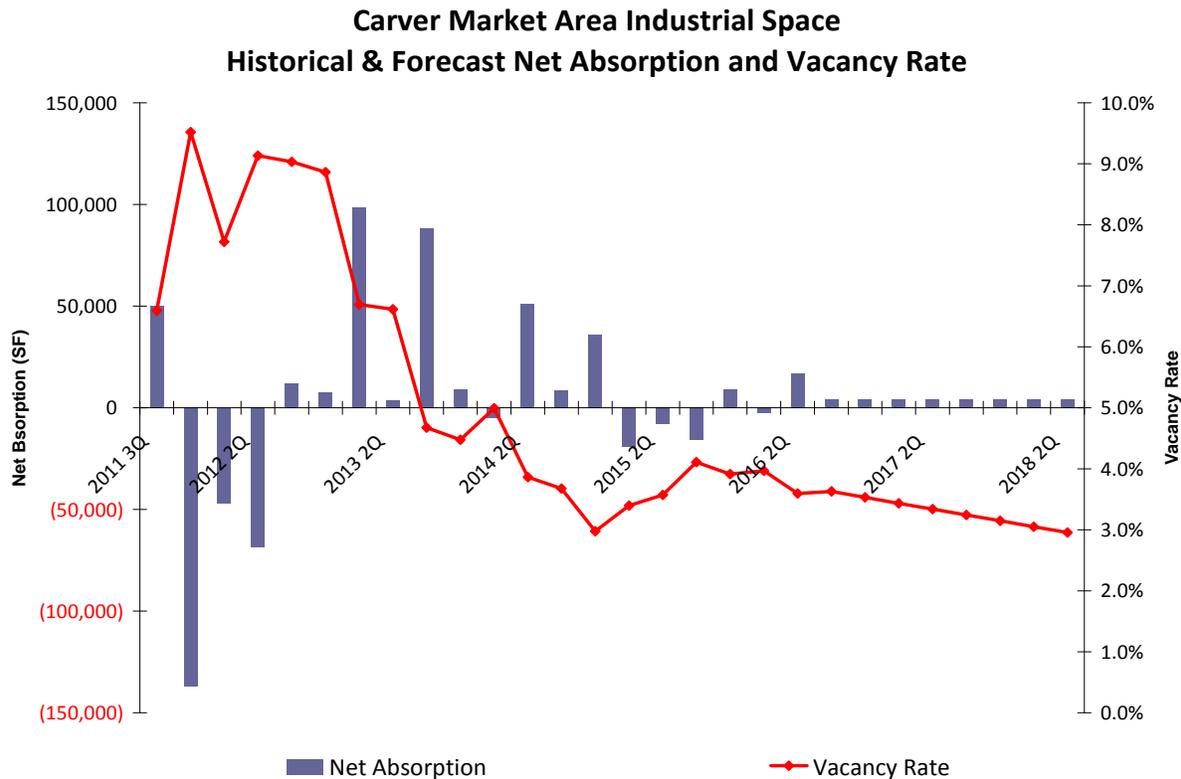


Figure 11



Source: Co Star Property Information Systems, June, 2016, and FXM Associates

Figure 12



Source: Co Star Property Information Systems, June, 2016, and FXM Associates

An issue for capturing potential demand is how Carver compares to surrounding towns with respect to commercial property taxation. Table 4 shows that Carver’s combined commercial/industrial/personal property tax rate is considerably higher than that of surrounding communities, while the residential rate is comparable.

Table 4

**2016 Property Tax Rates for Carver and Surrounding Towns**

Town	Residential	CIP
<b>Carver</b>	\$ <b>17.03</b>	<b>\$26.26</b>
Kingston	\$ 17.61	\$17.61
Middleborough	\$ 15.92	\$16.94
Plymouth	\$ 16.27	\$16.27
Plympton	\$ 17.66	\$17.66
Wareham	\$ 13.52	\$13.52

Source: Mass. Dept. Of Revenue, Division of Local Services

## Summary Findings

- FXM's analysis of market trends suggests growth in demand for office space within Plymouth County overall as well as the more narrowly defined Carver area submarket, comprising the communities of Carver, Kingston, Middleborough, Plymouth, Plympton, and Wareham. Medical office space has been the predominate source of growth in recent years within the local submarket, significantly surpassing other categories of office space users in increased inventory, occupancy, and average gross rents.
- The north Carver location is well-served by east-west highway accessibility, and has reasonably good connections north-south within the context of the defined submarket. It is not, however, as close to the population and employment center of Plymouth County overall and may lack the appeal of more urbanized areas for attracting many office space users. The potential for medical office space, a specific promising growth sector, requires a closer examination of the needs and preferences of these users than is possible in this analysis.
- The market for industrial/warehouse space has improved in recent years as evidenced by recent employment and inventory growth and declining vacancy rates. Price is an issue for potential development of new space and Carver's relatively high commercial tax rate is not favorable in this regard. However, ease of access to the regional highway system is a key location determinate for distribution and warehousing, as is a large parcel of land, both of which favor this type of development in North Carver.
- FXM's limited analysis has not attempted to compare all site features and other location attributes particular to the target area in North Carver with potentially competitive sites within the region and submarket and with the needs of specific types of users. Land prices, accessibility to population and labor markets for particular types of businesses, water and sewer availability and costs, broadband and other utility infrastructure and costs, relevant state programs and other sources of prospective development and business referrals, more detailed analysis of specific growing industries, local labor force skills and their match to prospective growth industries, and so forth are considerations beyond the scope of this study but will bear on prospective development in North Carver.