Jones Lang LaSalle

Real value in a changing world

High-Technology Industry

U.S. Office Outlook

Fall 2011

High-tech is a bright spot in an otherwise gray economic picture. Jobs in this industry have grown nearly four times faster than the overall economy during the past 18 months. Cities with large concentrations of high-tech jobs in the growing mobile, search, social media, and cloud computing categories have seen needle moving impacts on office property market fundamentals.

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High-Technology Industry U.S. Office Outlook

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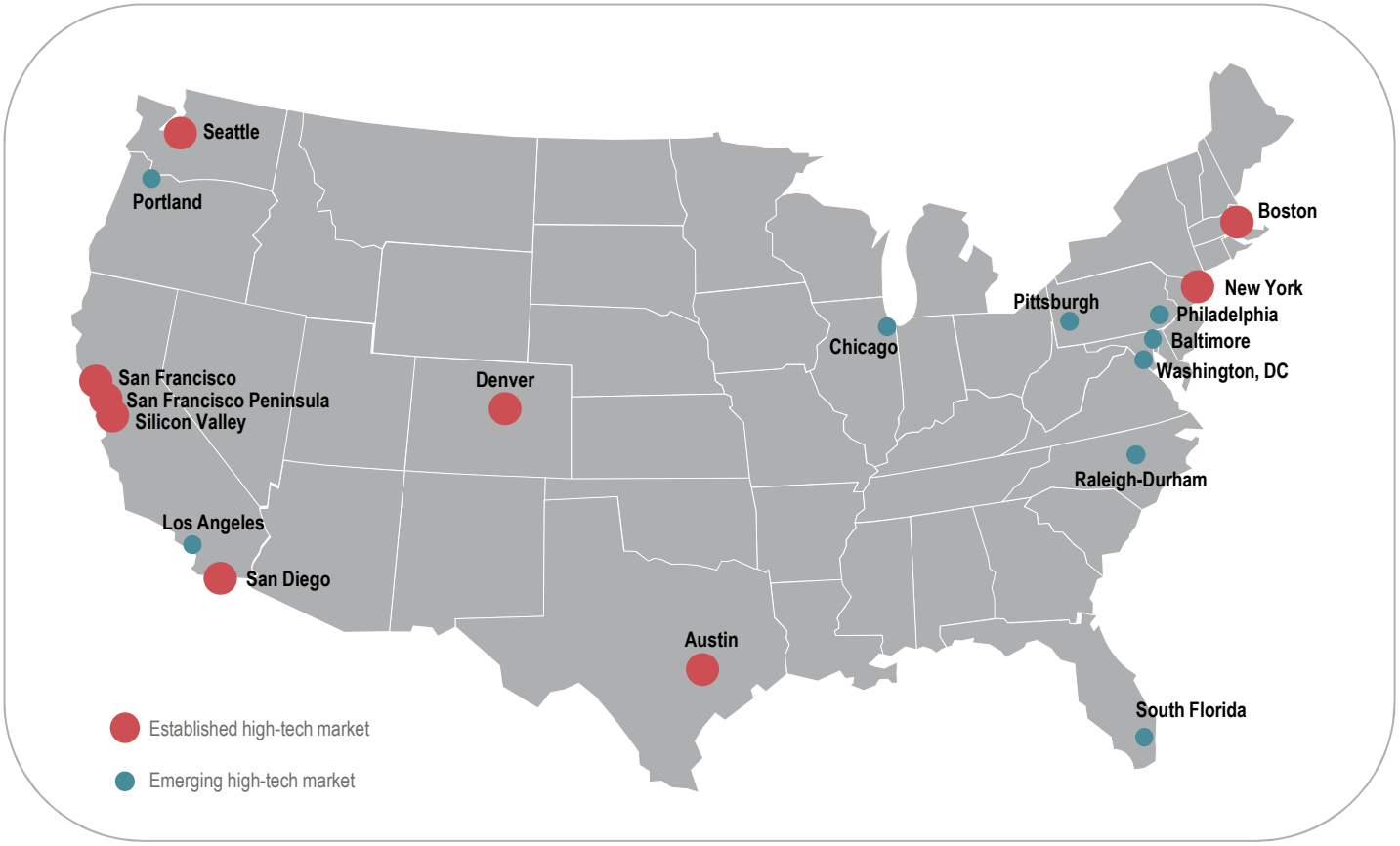
Technology's influence on all aspects of our lives has exploded in recent years. Remember a short time ago, in January 2007, when the iPhone was introduced as a revolutionary mobile Internet communications device? Facebook had a mere 12 million active users versus 750 million today. Few had even heard of Twitter. The world has changed tremendously since then and technology is embedded into nearly everything we do. That's not all; the technology industry's ability to reinvent and innovate is once again a bright spot that's leading economic growth.

Jones Lang LaSalle's inaugural report on the high-tech industry analyzes how key office markets across the nation are responding to high-tech growth and changing occupancy patterns in the workplace. Knowledge of key players driving change, economic and real estate cycle positions, and statistical and transaction scorecards illuminate clear trends that have surfaced over the past 12 to 18 months. Despite generally weak overall economic conditions, results show certain markets are taking leading roles and shaping growth dynamics. More importantly, these markets provide a glimpse into emerging markets and future trends that will help drive leasing and investment decisions.

The high-tech industry in this report includes software and services, technology hardware and equipment, and semiconductors and semiconductor equipment as defined by the Global Industry Classification Standard developed by Standard and Poor's and MSCI Barra for the information technology sector. Biotechnology is not included in this report, but covered in other Jones Lang LaSalle research publications.



Key findings

High-tech industry

- Consumers' unquenched demand for gadgets, apps and new forms of media, and businesses' application of new technologies, such as cloud computing to gain efficiencies has given the high-tech industry the fastest job growth rate in the nation at 5.1 percent since the employment trough was reached in February 2010. Healthcare, energy, and biotechnology are also growing, but at a much slower rate.
- High-tech hiring is a bright spot in an otherwise gray economic picture. While not strong enough to uplift the entire national economy, high-tech strength is impacting office markets across the nation.
- High-tech services, which excludes manufacturing components of this industry and has the greatest direct impact on office space demand, is growing even faster at 3.7 times the rate of other office-using employment categories (5.9 percent vs. 1.6 percent since February 2010).
- Of the 518,000 office-using jobs created since February 2010, 127,000 or 25 percent were high-tech services.
- San Francisco (+16.1 percent), Silicon Valley (+10.6 percent), and Baltimore (+9.0 percent) are experiencing the strongest high-tech services job growth.
- Philadelphia (-2.7 percent), Los Angeles (-1.1 percent), and Denver (-0.9 percent) are experiencing the weakest high-tech services job growth.

Venture capital and IPO

- Rising venture capital and IPO activity is fueling key rapid evolution and growth segments of the high-tech industry.
- Mobile, search, social media, and cloud computing are dominating funding and their geographical clustering is making dramatic impacts on office space demand and conditions.
- High-tech has accounted for 50 percent of total venture capital funding over the past four quarters. Biotechnology and medical devices combined comprised 25 percent.
- Silicon Valley (Bay Area total) dominates venture capital funding at nearly 40 percent of the past four quarter total. Its market share over the same four quarters in 2000 (funding peak) grew by almost eight percentage points, while most other areas remained stable or shrank. New England (12.0 percent) and New York (8.7 percent) received the next highest percentage.
- High-tech growth cycle appears to be early stage with plenty of running room ahead for more hiring. Data indicate that this cycle is markedly different from the tech boom of the late 1990s:

  Venture capitalists are more cautious this cycle, funding has been more contained, and the types of companies that receive funding are more viable.

  High-tech industry strength is near past highs, but high-tech stock valuations have declined and remain near past lows. This suggests earnings are supporting business operations and stock prices are not overvalued.

Office market impact

- National office market recovery underway with established high-tech clusters outperforming and recording strong rent growth, high net absorption, and diminished space availabilities.
- San Francisco, Silicon Valley, Seattle, New York, and Baltimore are the strongest markets on the Jones Lang LaSalle high-tech industry economic cycle clock.
- The top rent growth markets are San Francisco, San Francisco Peninsula, New York, Pittsburgh, and Austin.
- Markets with growing high-tech cluster strength and in position for rising rents and demand over the next 12 months include: Boston, Raleigh-Durham, San Diego, Portland, and Seattle.
- Many of the high-tech markets are already landlord favorable, with more moving in that direction.
- High-tech innovations and a shift in workforce dynamics are changing the way firms view and utilize office space. As these trends become more impactful, property owners will need to employ their own forward-looking strategies to remain relevant.
- Additionally, high-tech tenants are seeking creative space, causing landlords to reconfigure office space to meet those demands: exposed ceilings, brick surfaces, and open work spaces.
- Keep an eye on high-tech clusters, monitor their growth, talent availability, and the mobility of high-tech firms and you might pinpoint the next wave and location of growth.

High-tech industry economics

National employment situation remains weak, but leading growth sectors have emerged

High-tech, healthcare services, and energy-related employment are the strongest sectors of the U.S. economy, which overall has struggled to regain momentum especially in recent months. Unemployment remains high at 9.1 percent as of August and current employment is off by more than 6.9 million jobs from its peak in January 2008. The economy has added back 1.8 million jobs lost from peak to trough, but the job growth rate has slowed dramatically in recent months.

Bright spots in the overall employment landscape are clearly visible, with all three aforementioned sectors surpassing their peak employment levels reached prior to the start of the recession, and still adding jobs. These three sectors account for 649,000, or 35 percent, of the 1.8 million jobs added since the employment trough in February 2010. High-tech employment has charged ahead in the past year, growing its job base by 5.1 percent, surpassing growth of any other sector on a percentage basis.

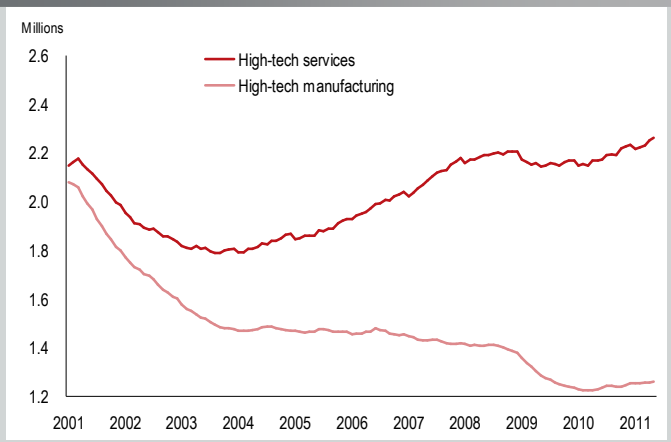
High-tech services leading the charge and driving office demand

Hiring in the subsectors that compose high-tech employment has been robust, driven by consumers' unquenched demand for gadgets, apps, and new forms of media. Digging deeper, the services side of the high-tech employment equation buoyed total sector growth through the recession, while the manufacturing side contracted. During the period from peak employment in January 2008 through June 2011, high-tech manufacturing contracted by 10.2 percent, while high-tech services employment increased by 5.6 percent. The contraction in high-tech manufacturing is a symptom of a structural shift in the overall manufacturing segment.

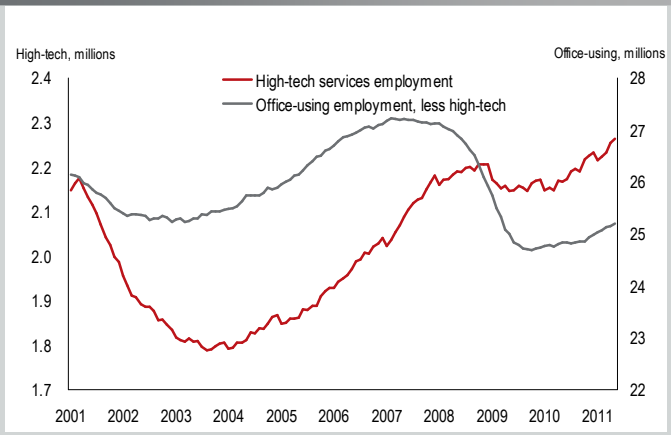
Similar to the overall manufacturing employment sector, high-tech manufacturing employment has been declining as firms continue to reduce labor costs through outsourcing. But since the trough in February 2010, high-tech manufacturing employment growth outperformed the overall manufacturing sector, recording a 3.6 percent increase compared with 2.2 percent, respectively.

Although high-tech hiring has not been strong enough to uplift the national economy, it has been strong enough to make an impact on office demand. Because this recession was rooted in housing-related woes and financial industry decline, many office-using jobs were eliminated during the recession and hiring has been slow through the recovery.

High-tech services jobs vs. high-tech manufacturing jobs



High-tech services jobs vs. office-using jobs



High-tech industry economics

Office-using employment sectors comprise 20.9 percent of total employment, while high-tech services make up just 1.7 percent of total employment. Nonetheless, high-tech services jobs increased by 5.9 percent from the trough, while office-using sectors increased by just 1.9 percent. Though traditional office-users are greater in number, high-tech office-users are increasing at a faster pace, and this growth is more concentrated in specific markets and thus driving office demand to a greater degree in those places.

Silicon Valley is the clear leader concerning the share of high-tech services employment versus total office-using positions. More than one-third of all office-using jobs in Silicon Valley are within the high-tech services sector. Seattle and the San Francisco Peninsula are close runners-up, with 28.5 percent and 27.2 percent of office-using jobs falling within the high-tech services sector, respectively.

Bay Area leads job growth, Baltimore surprising #3 ranking

Leading high-tech services job growth is San Francisco, recording an increase of 16.1 percent in 2010, followed by Silicon Valley where employment increased by 10.6 percent. Baltimore ranked a surprising third, with high-tech services jobs by high-tech contractors moving into the area following the opening of the Defense Information Systems Agency's headquarters at Fort Meade.

Overall high-tech job growth was strongest in San Francisco, at 15.7 percent, followed by Baltimore at 9.0 percent. Silicon Valley, in contrast to its growth in services positions, recorded an increase of just 5.0 percent in the overall high-tech sector, a result of stagnant manufacturing sector growth. New York rounds out the top three, recording 6.3 percent annual growth.

Continued job growth in the high-tech sector, specifically on the services side, will drive office market demand. The share of high-tech jobs is increasing, especially as positions in the financial services industry decline or remain stagnant as a result of the recession. Although high-tech services positions represent a relatively small component of office-using jobs in most markets, the share has consistently increased across markets, surpassing peak levels reached during the dot-com boom of the late 1990s. As these high-tech companies continue to secure funding, grow, and add more employees, they will have a greater impact on office market demand. Renewed weakness in the national economy could have a dampening effect on high-tech growth and job creation if business, government, and consumers cut back on purchases. Fortunately, the high-tech sectors driving growth draw on global markets, offer consumers exciting new products and experiences, and provide businesses with increased productivity and efficiency opportunities.

High-technology employment comparison

		Change versus Jan-2008 (peak)		Change versus Feb-2010 (trough)	
All figures in thousands	June 2011 Jobs	Absolute	Percent	Absolute	Percent
High-tech manufacturing*	1,270	-144	-10.2%	45	3.6%
Computer and electronic product manufacturing	1,129	-126	-10.1%	38	3.5%
Electrical equipment manufacturing	140	-18	-11.5%	6	4.6%
High-tech services*	2,281	121	5.6%	127	5.9%
Computer systems design and related services	1,505	86	6.1%	80	5.6%
Data processing, hosting and related services	241	-23	-8.5%	-3	-1.2%
Electronic shopping and electronic auctions	108	19	21.9%	16	17.2%
Other information services	161	30	22.9%	24	17.1%
Software publishers	266	8	3.0%	11	4.2%
Office-using employment	27,450	-1,837	-6.3%	518	1.9%
Financial activities	**7,607**	**-611**	**-7.4%**	**-50**	**-0.7%**
Energy*	685	24	3.6%	24	3.6%
Government	**22,071**	**-315**	**-1.4%**	**-403**	**-1.8%**
Health services	16,735	1,118	7.2%	454	2.8%
Biotech*	**1,217**	**14**	**1.2%**	**22**	**1.8%**
Total nonfarm employment, all sectors	**131,073**	**-6,923**	**-5.0%**	**1,827**	**1.4%**

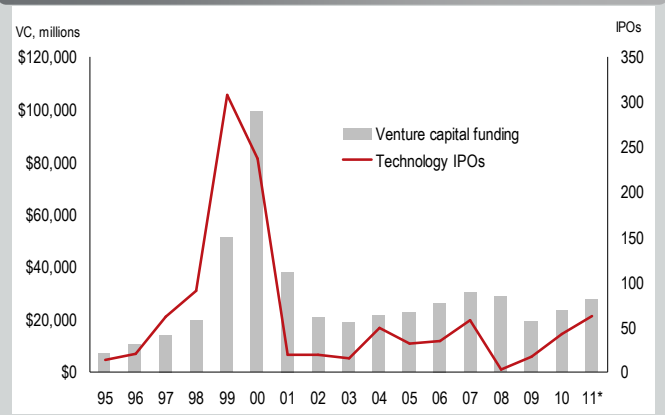
**not seasonally adjusted*

Venture capital, IPO, and high-tech growth cycle

Funding changes geographically and within high-tech industry segments are shaping growth patterns

Innovation, economic development, and job creation in the high-tech industry are fueled by great minds and the availability of venture capital and public market funding. Trends in these funding markets, which lead to new company formations and expansions, provide key insights into measurement of employment growth outlooks. Both venture capital funding and initial public offering (IPO) activity are on the rise, signifying future job growth and additional office space needs.

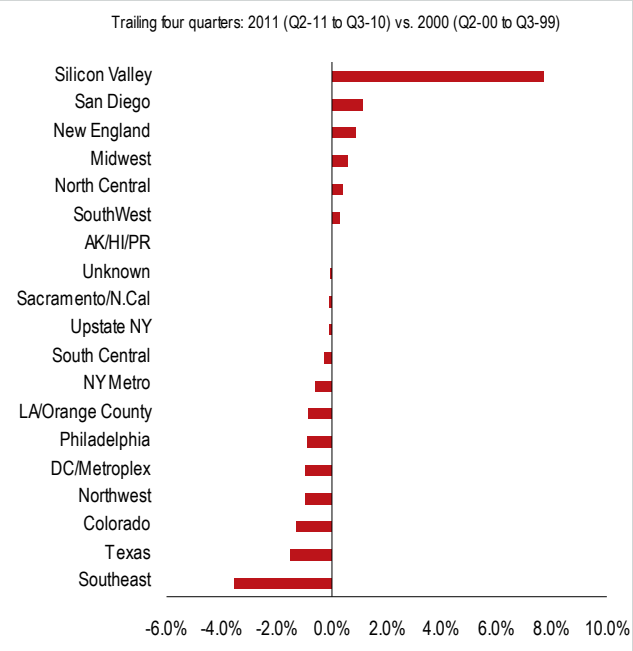
Venture capital and IPO activity



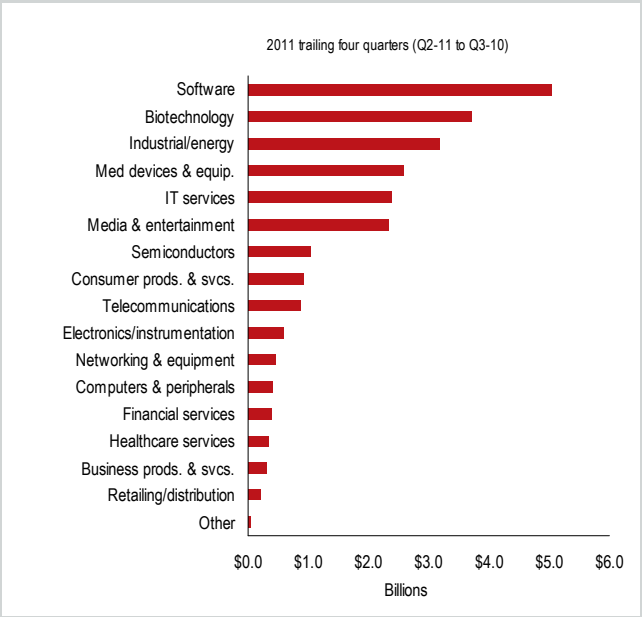
*annualized

Recent gains in venture capital and IPO activity may seem small relative to historical peaks, but important changes have occurred to funding patterns geographically and by industry. Silicon Valley, New England, and NY Metro have received 54.3 percent of all venture funding since tracking began by Pricewaterhouse-Coopers in 1995. Other regions that generated sizable funding amounts over this time period include the Southeast and LA/Orange County regions. What's changed since the dot-com bust is the concentration of venture capital funding. Silicon Valley has steadily increased its market share over the past ten years. Compared to the 1999-2000 peak years, Silicon Valley's share over the past four quarters has increased by 7.7 percentage points to 39.7 percent of the nearly $25 billion in venture capital investments. San Diego and New England were a distant second and third with 1.1 and 0.9 percentage point gains to 3.1 and 11.7 percent, respectively.

Venture capital market share growth 2011 vs. 2000

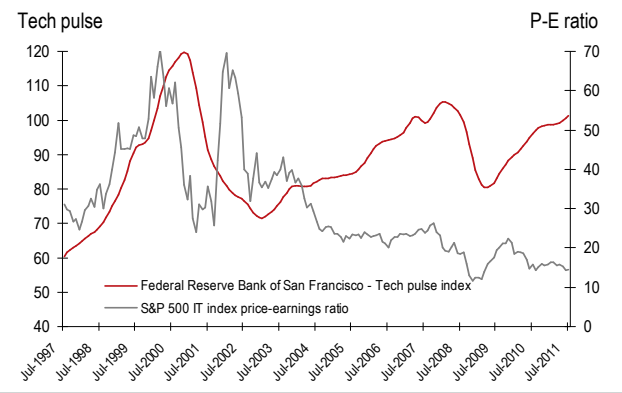


Venture capital funding by industry



Venture capital, IPO, and high-tech growth cycle

Tech pulse index vs. S&P IT index P/E ratio



The industries dominating venture capital activity remain high-tech and biotechnology. Software is the number one invested category at just over 20 percent during the past four quarters, but when combined with all other high-tech related categories including IT services, media and entertainment, and semiconductors, the total venture capital share rises to 50 percent. Biotechnology and medical devices and equipment currently comprise 25 percent of venture capital, which is an impressive and strongly grown figure. Funding levels for these two categories are currently higher than the comparable four quarters ending during the 1999-2000 peak years. Industrial and energy is also a high growth category as it includes many green technology firms.

Funding patterns described above are having significant implications in certain geographies, industries, and most importantly office property markets. The Silicon Valley and San Francisco areas are benefitting from increased overall venture capital funding and growing market share as investors seek out high-tech ventures in fast-growing and evolving search, social media, mobile, and cloud computing categories. These capital infusions have boosted innovation, new company formation and expansion, and job creation that have been felt by increased office space demand and improved office market fundamentals.

Although venture capital funding has increased for biotechnology and industrial/energy, these more capital equipment intensive industries do not produce as many jobs relative to the dollar volume invested. Thus, growth has not been as robust in areas such as New England, San Francisco Peninsula, and San Diego.

While venture capital funding starts the growth cycle, IPOs provide the next level of access to capital and the ability to fund much larger and longer-term expansion opportunities. IPOs also replenish the venture capital supply, leading to more start-ups and future innovation. Thus, as business conditions improved, companies and investors returned to the IPO market in 2010 with renewed enthusiasm after two years of very low activity. Some of the most successful start-ups of the decade recently went public or are currently registered to do so. With new capital and new growth shining on the horizon for many high-tech companies, we can expect to see their presence grow further within local office markets.

Growth cycle different this time?

Strong growth within the high-tech realm has ignited "bubble" talk. Parallels to the rapid growth and subsequent bust of the dot-com era are hard to resist. There are a number of distinctions that make this growth cycle different.

The nature of the high-tech industry has changed substantially since the last cycle. Speculative Internet-based businesses, free-flowing venture capital funding, and overvalued IPOs defined the dot-com bust a decade ago. Cautious venture capitalists and strong underlying valuations define the industry today.

The San Francisco Federal Reserve's Tech Pulse Index, which gauges the industry's strength nationally, has rebounded quickly from early 2009 lows and nearly reached the highest level since the dot-com peak. At the same time, tech stock valuations measured by their price-earnings ratio have declined and remain near past lows, meaning earnings are supporting business operations and corresponding stock prices do not appear overvalued. This combination suggests the current high-tech expansion is early stage with plenty of running room ahead for more hiring to produce more earnings.

Finally, the high-tech growth space is focused in the mobile, search, social media, and cloud computing categories that draw upon a global marketplace. Many of these top high-tech firms generate substantial revenues internationally and showed resilient growth during past years when economic times were even weaker and outlooks more tenuous domestically. The last tech boom was very broad based within the industry, speculative, involved a significant manufacturing component, and depended primarily upon domestic markets for revenue and growth. All of these distinctions suggest this time is in fact different. The ultimate result will only be known by looking in the rear view mirror after the growth cycle plays out.

National office overview

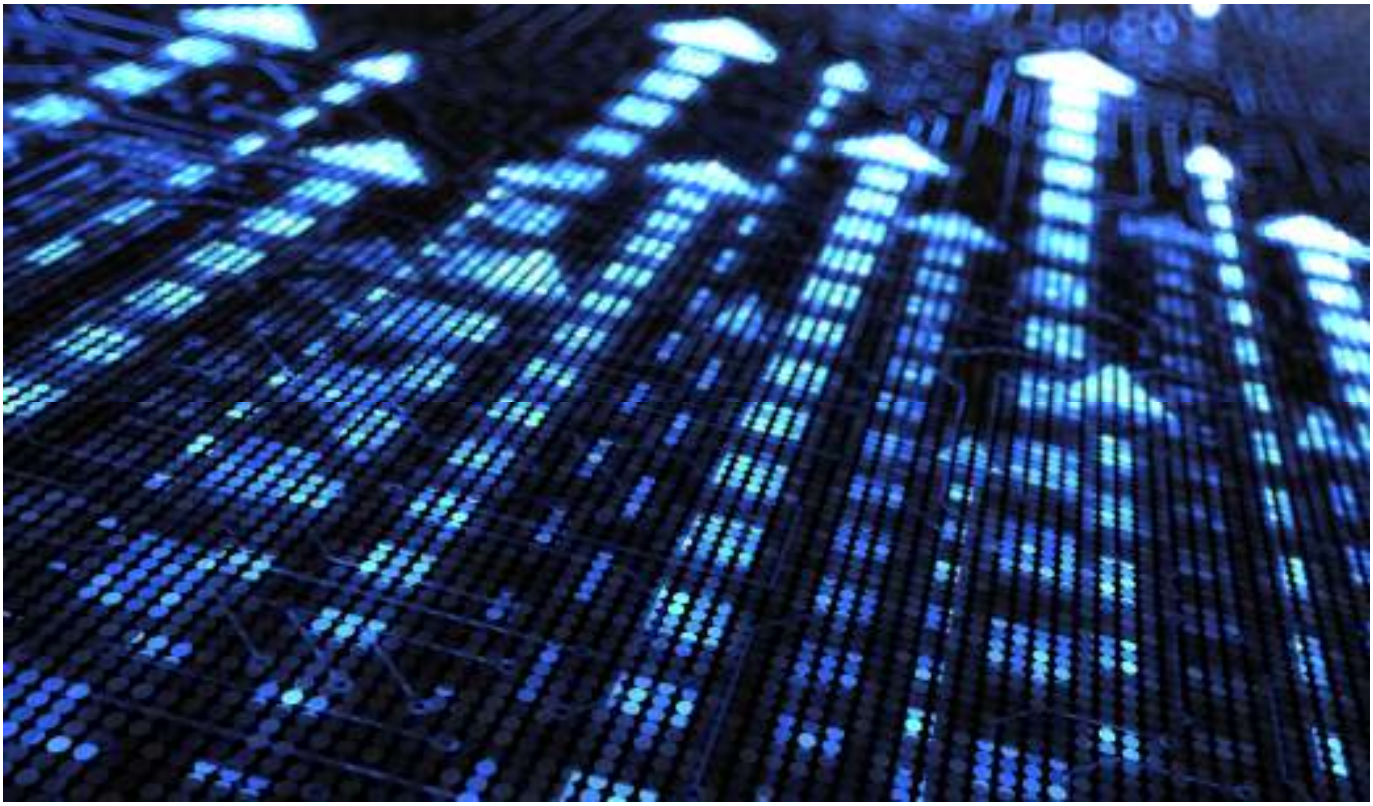
Overview

The U.S. office market strengthened every quarter after reaching cyclical lows in mid-2010. Increased leasing activity and limited new supply deliveries since that time have led to growing net absorption, lower vacancies, and stable overall rents. More than 25 million square feet of space was newly occupied during the past four quarters across the country. That's a net absorption rate of 0.7 percent of total supply, far from the 2.7 percent rate of 2007, but enough to decrease the current vacancy rate to 18.1 percent.

While recent employment and economic growth weakness casts doubt on the strength of the overall recovery, office-using employment growth and strong corporate balance sheets remain in better light and have pushed the office property market slightly ahead of economic recovery. Future growth prospects are highest in the office markets that are heavily influenced by strong high-tech and energy industry growth. Urban areas will benefit from tenant trade-up activity and professional services job growth.

The Bay Area, Boston, New York, Seattle, Texas, and Washington, DC markets have shown the greatest improvement thus far.

Looking forward, tenants could face a period of significantly decreased leverage by the late 2013/early 2014 timeframe should the economic recovery regain strength and broaden to include more industries important to office demand creation. The development pipeline of office inventory under construction totaled just 18.9 million square feet at mid-year 2011, constituting less than 0.5 percent of total supply and far below historical averages from previous cycles. That means few new space options will surface through 2014 across markets, giving vacancy and demand nearly three years to align. Should that scenario emerge, consistent rent growth is likely to appear nationally over the next several years, with quite strong results anticipated in certain market segments driven by high growth industries.

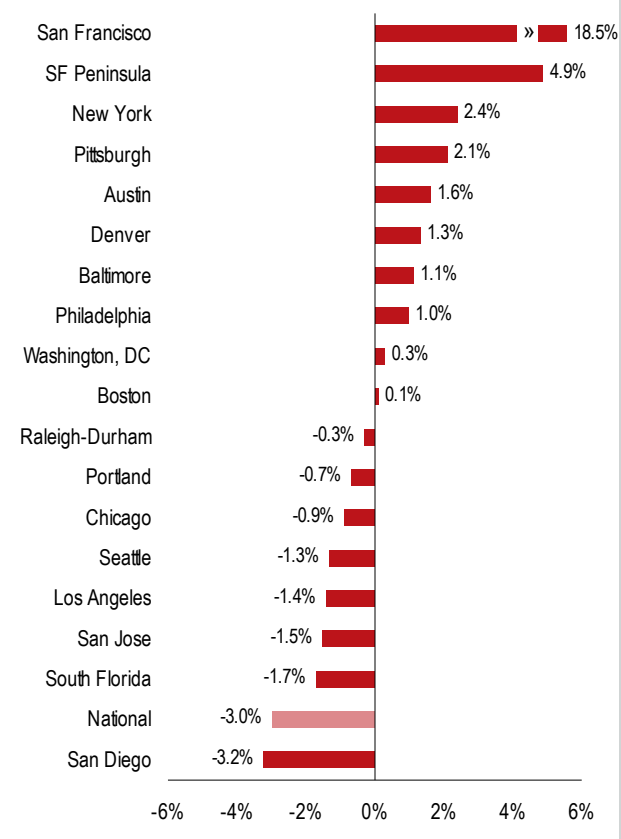


High-tech industry and office market trends

Office markets with strongest high-tech cluster leading recovery

The high-tech industry is driving office demand in a number of markets, with some markets benefitting more than others. Performance of key high-tech industry measures clearly reveal which office markets are experiencing benefits and why. Analysis of job growth strength and the size and concentration of high-tech clusters influences velocity of real estate market movements. The presence or recent establishment of a key high-tech tenant can serve as a catalyst for growth as can venture capital or public markets funding infusions. Additionally, the lack of a large enough cluster can mute impacts on office markets, but suggest when critical mass may emerge. How these factors have played out across high-tech markets offers interesting insight.

Annual change in direct asking rent



Strong job growth has translated into strong demand from high-tech tenants expanding or relocating to San Francisco. The vacancy rate has declined by 130 basis points in one year, and rents are up by 18.5 percent during the same period.

High-tech tenants in San Francisco comprise the largest share of active requirements and competition for space is heating up, moving office market fundamentals slightly ahead of economic growth.

New York City is another prime example, where asking rents increased by 2.4 percent in the past year and vacancy declined by 170 basis points. Although high-tech represents a relatively small component of the overall economy, tenants within the industry took advantage of more affordable rents in better quality spaces following the financial collapse. Some of the most influential high-tech companies have offices in Manhattan, including Google, Amazon.com, Facebook, and Microsoft, among many others. As these companies continue to expand and gain market share in their respective industry niches, their presence will influence high-tech growth and start-up activity in the city, and consequently drive office demand.

The Silicon Valley, synonymous with the high-tech industry, appears to be fundamentally weaker than a year ago, with lower rental rates and an uptick in the vacancy rate. When looking beyond the numbers and at more recent trends, a vastly different story emerges. Leasing activity in 2011 has been robust and concentrated as many Valley tech giants stake their claim on the office market in order to secure space for future growth. In many recent deals, space absorption is not expected to occur until the second half of 2011 or 2012. This will significantly change market statistics. Strong demand is creating limited space availabilities and sharply rising rents (20-30 percent), especially in the hotter Silicon Valley submarkets of Palo Alto, Cupertino, Mountain View, and Sunnyvale.

High-tech growth is driving office market demand in Baltimore, a surprising market leader, with net absorption over the past 12 months representing 2.9 percent of total inventory, the highest of any market. Baltimore's high-tech cluster is largely driven by federal activities, but is nonetheless a growing sector.

While Raleigh-Durham leads the pack in terms of vacancy rate improvement, with a 310 basis point decline in the past year, rents are only beginning to show signs of upward movement. Seattle and Boston appear poised for additional growth driven by the high-tech industry. Both have high annual net absorption rates in the two percent range of total inventory and active start-up and venture capital funding that's helping to drive office market fundamentals forward and ahead of overall economic recovery.

High-tech industry and office market trends

Not all markets with a high-tech presence are benefitting from that industry's growth

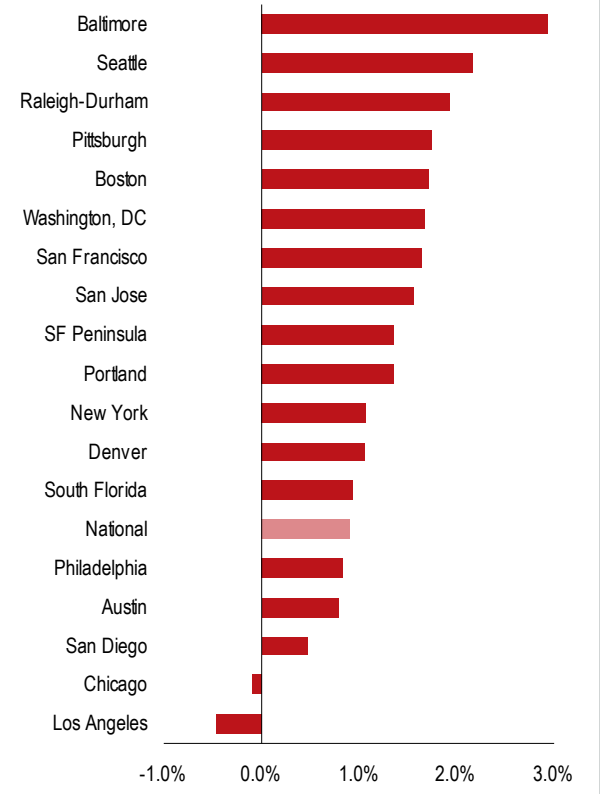
While all of the markets in this report have either an established or emerging high-tech industry, some markets are not experiencing the same robust office demand. Los Angeles and South Florida are key examples. Media and entertainment is one of Los Angeles' largest industries, and high-tech has become increasingly important to the production and distribution of various forms of media. However, the high-tech cluster is fairly small within the market and has had a relatively small impact on office market fundamentals. South Florida houses a handful of prominent high-tech firms, but the cluster is small and dispersed, making it difficult to have an impact on market fundamentals. Additionally, the office markets in both South Florida and Los Angeles were heavily tied to the housing market's boom and bust, and therefore both continue to struggle toward recovery.

Chicago and Washington, DC are markets with burgeoning high-tech industry growth. While the industry has had little impact on their office markets relative to the top high-tech markets, the presence of start-up companies such as LivingSocial (Washington, DC) and Groupon (Chicago), as well as larger firms such as Google and IBM (both markets), has created emerging high-tech clusters in both places. These markets are largely driven by more traditional office users in the financial and professional business services industries, and thus office market performance has been steady, with little impact from high-tech users.

High-tech tenants driving occupier trends

The surge in demand from high-tech firms in some markets is driving office market trends ahead of overall economics. As a result, space options are becoming more limited and rental rates higher than economic fundamentals would normally suggest. These trends are impacting not only high-tech tenants, but others in still-weakened industries, such as financial and legal services, that are surprised by changes to office market conditions, forcing them to act on their real estate decisions ahead of schedule.

12-month net absorption as a percent of inventory



In San Francisco, high-tech tenants comprise the greatest share of active requirements in the market and are fiercely competing for creative space in prime locations. In Silicon Valley, high-tech tenants dominate market demand and have recently wiped out high-quality availabilities in key submarkets. While these two markets may be the outliers in terms of tenant demand from high-tech firms, other markets are seeing an upswing from this industry segment as well, including Seattle, Baltimore, and New York.

A variety of locations are preferred by high-tech firms, and they differ market-to-market. Most high-tech start-ups strive to be near the largest established high-tech firm in their preferred market, while some start-ups prefer to be in the most culturally exciting and amenity-rich areas. In Austin, firms are increasingly looking for space downtown because of its rich cultural vibe and proximity to the University of Texas, Austin and other growing high-tech firms such as Facebook. In San Diego, on the other hand, firms desire to be close to Qualcomm, the largest high-tech employer in the market, even though the firm is located in the suburbs. These tenant desires create coveted high-tech clusters from which firms can utilize the intellectual human capital these clusters possess.

High-tech industry and office market trends

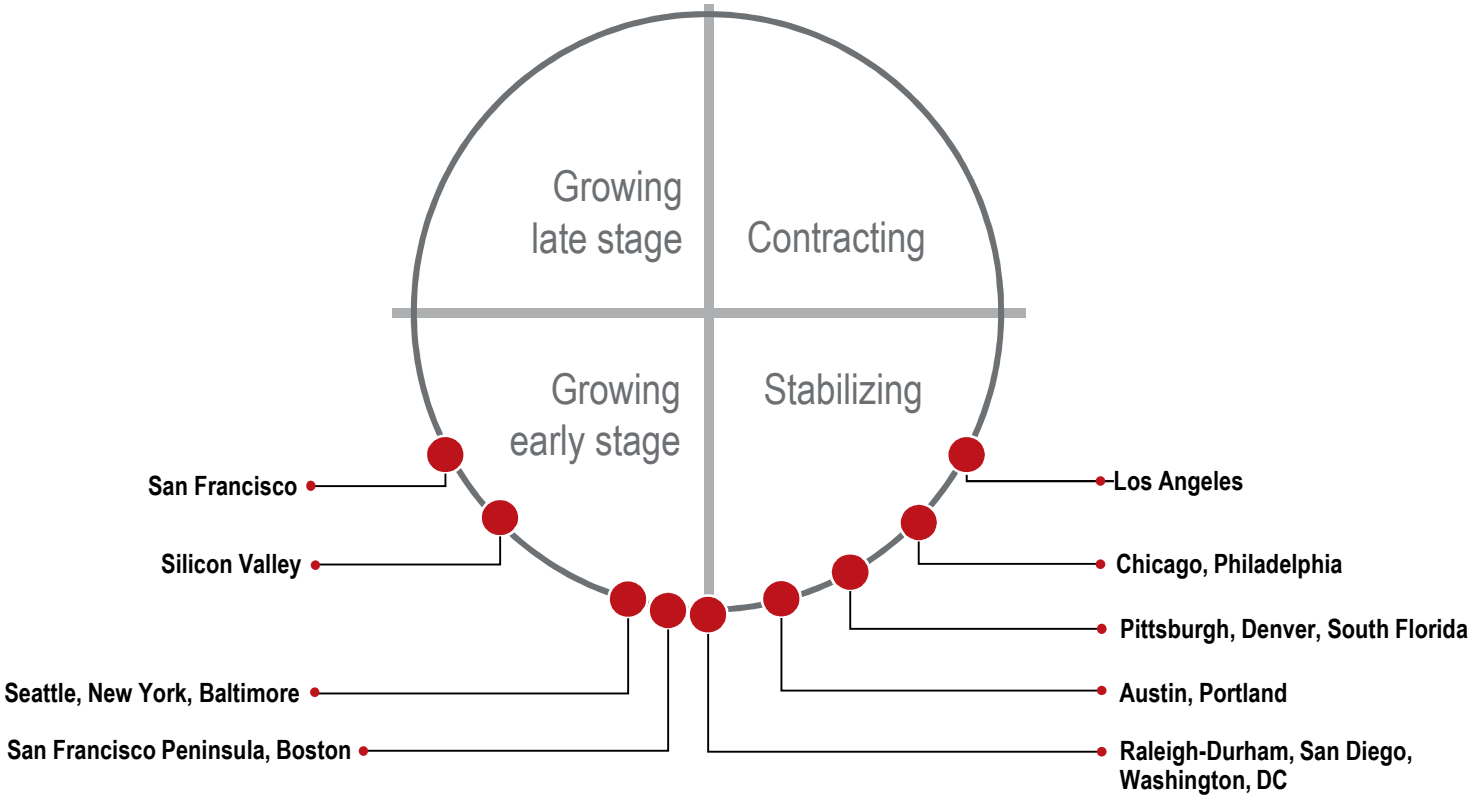
Venture capital funding and IPO activity give high-tech firms an enhanced ability to expand and grow. This growth translates into greater office space needs and drives competition within the industry. Two of the top venture capital funded markets per employee, San Francisco and New York, are experiencing competitive conditions in many submarkets and space categories. A specific trend challenging more sizable and growing high-tech firms is the availability of desirable large blocks of space and large floor plate buildings. Demand for this type of space has translated into renewed demand in formerly obsolete office space, or space that was converted from industrial to office use. Landlords, noticing this trend in their markets, have even re-modeled traditional office space to appear more creative, and have removed dropped ceilings and opened walls to expose original brick surfaces.

Many markets are moving toward more landlord-favorable conditions. Landlords are keen to get high-tech tenants on their roster, but know that competition among firms is strong, especially among established tech giants. In markets where demand is more pronounced, such as San Francisco and Silicon Valley, landlords have begun to reduce the amount of concessions, including fewer, if any, months of free rent and lower tenant improvement allowances. In markets where high-tech demand is not as pronounced, or where overall office demand continues to struggle to full capacity, concessions remain commonplace.

Scorecard rankings

Economic		Office	
High-tech jobs (services and manufacturing)		**Cost (average asking rent)**	
1. Silicon Valley	188,996	1. New York	$53.49
2. Boston	129,183	2. San Francisco	$40.06
3. Los Angeles	100,510	3. San Francisco Peninsula	$39.00
High-tech services jobs annual growth		**Annual cost growth**	
1. San Francisco	16.1%	1. San Francisco	18.5%
2. Silicon Valley	10.6%	2. San Francisco Peninsula	4.9%
3. Baltimore	9.0%	3. New York	2.4%
High-tech services concentration (% of total office jobs)		**Supply (vacancy rate)**	
1. Silicon Valley	34.4%	1. New York	10.8%
2. Seattle	28.5%	2. Pittsburgh	10.9%
3. San Francisco Peninsula	27.2%	3. Portland	12.5%
Venture capital funding (past 4 quarters)		**Annual vacancy change** (basis point decline)	
1. Silicon Valley	$3.6 billion	1. Raleigh-Durham	310
2. Boston	$2.7 billion	2. New York	170
3. San Francisco	$2.0 billion	3. Boston	150
College education		**Demand** (net absorption past 4 quarters)	
1. New York	57.7%	1. Washington, DC	5.4 million sf
2. San Francisco	51.1%	2. New York	4.3 million sf
3. Washington, DC	47.1%	3. Boston	2.7 million sf

High-tech industry economic cycle



In order to assess each market's position in the high-tech economic growth cycle, Jones Lang LaSalle observed several economic metrics, including high-tech job growth, high-tech office employment concentration, high-tech industry wage growth, venture capital funding, and intellectual human capital. Taken together, these metrics quantify where each market is currently positioned within the high-tech growth cycle, and shows which markets are poised to move forward on the clock.

Positions on the two left quadrants of the clock indicate that the industry is in an economic growth cycle, while positions on the two right quadrants of the clock indicate that the industry is either contracting or stabilizing due to an economic downturn.

The ranking model found that San Francisco is the leading high-tech industry market, positioned at 8:00 based on strong high-tech job growth, wage growth, and venture capital funding. Silicon Valley and Seattle round out the top three, positioned at 7:30 and 6:30, respectively. Silicon Valley's large high-tech services concentration and strong wage growth contributed to its placement, while Seattle's high-tech services concentration and annual job growth moved it to the third position, slightly ahead of New York and Baltimore. Lagging markets include Chicago, Philadelphia, and Los Angeles, all three of which are in the earlier part of the stabilizing quadrant. Weak job growth, wage growth, and limited venture capital funding (with the exception of Philadelphia) contributed to the weaker overall scores.

Metrics used to determine clock position for each market are outlined below:

High-tech job growth: broad measure of economic success and most direct impact on office market

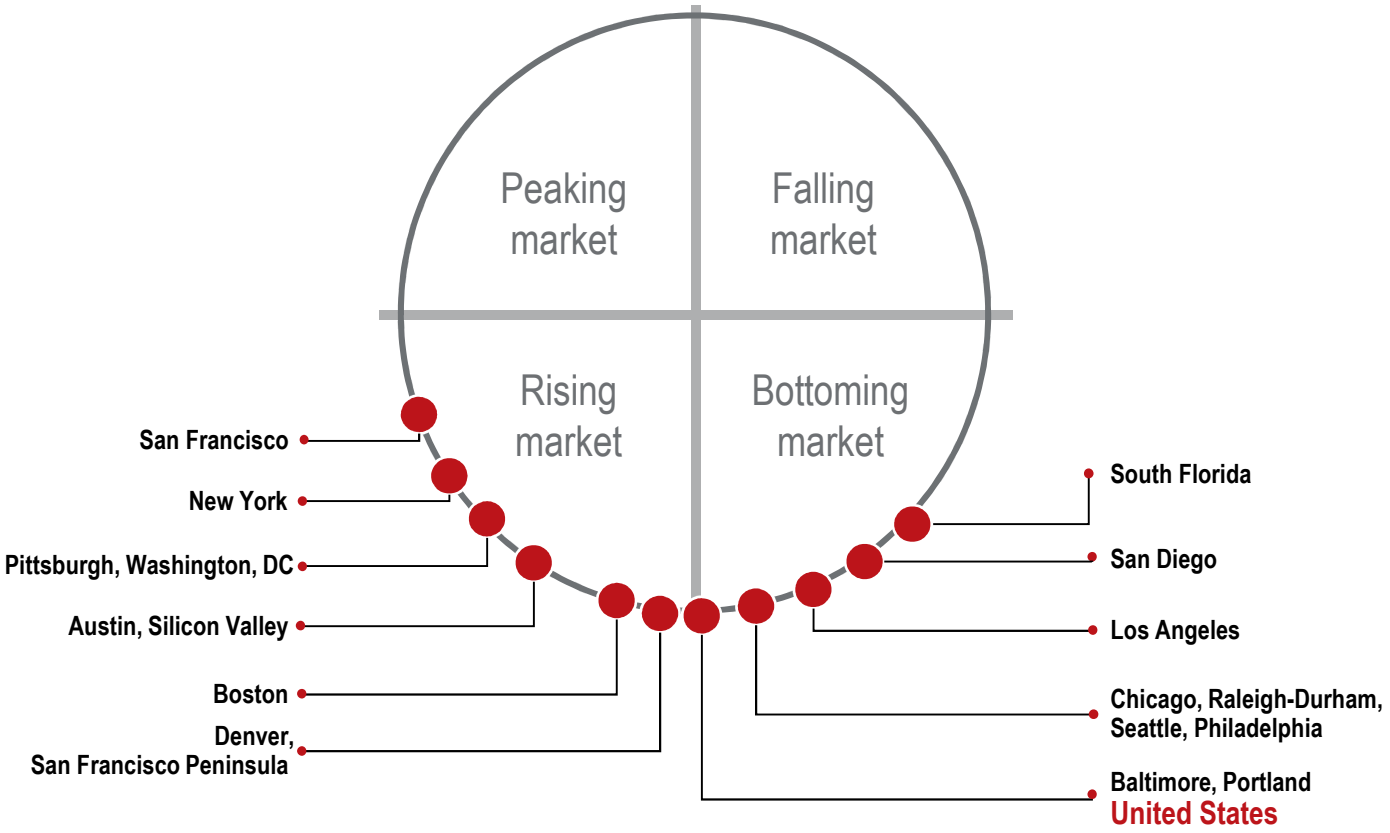
High-tech services concentration: measures jobs in the industry that fall within office-using employment sectors as a percentage. Larger concentrations have greater impact on office space demand when changes to employment occur, providing a strong indicator of how the high-tech industry in each market could move real estate.

High-tech services annual wage growth: serves as a proxy for high-tech services employment's impact on local GDP growth. A strong annual growth rate indicates stronger momentum in the industry cluster.

Venture capital funding per high-tech job: measures the impact venture capital funding has on the industry in each market, and the potential for company growth and new job creation.

Intellectual capital: measures the availability of skilled labor for each market, quantified by the percentage of people with a bachelor's degree or higher.

Office property cycle



The Jones Lang LaSalle office clock demonstrates where each market sits within its real estate cycle. Markets generally move clockwise around the clock, with markets on the left side of the clock generally landlord-favorable and markets on the right side of the clock generally tenant favorable. At the end of the second quarter, the U.S. office sector moved to the 6:00 position on the clock after more than three years of rental declines. The shift to the 6:00 position signaled that the overall U.S. office sector has bottomed from a pricing and rent standpoint and is gradually moving into landlord favorable conditions across numerous market segments.

From a geographic perspective, strong rent growth over the past several quarters is largely being led by the coastal markets and energy markets. The Bay Area (San Francisco and Silicon Valley), along with New York City, D.C., Boston and more recently, Texas markets (Houston, Austin, and Dallas), have seen the highest amount of rent growth. However, even in these markets, disparity remains across submarkets and product type. In NYC, for example, Plaza District and Midtown Trophy rents have grown in excess of 16.0 percent from their market bottom, while most other sectors in NYC have seen more contained rent appreciation in the 1.5 percent to 5.0 percent levels. A similar trend exists in both Silicon Valley and Boston as well with Palo Alto, Back Bay, East Cambridge and Financial District Tower floors showing above-average rental rate growth and other market segments not yet showing significant pricing momentum.

With office employment levels nearly tripling the overall rate of employment growth and tenant expansions increasing at a heightened pace, especially from small and mid-sized occupiers, momentum on the pricing front will continue for landlords over the coming quarters. Tenants will continue to have enhanced leverage in second and third generational product over the next 12 to 18 months with the gap widening between Trophy, Class A, and Class B rents, most notably in suburban non-core product.

High-tech leading workplace revolution, market recovery

Technology is impacting our personal and work lives in new and profound ways. Social media, mobile, and cloud computing capabilities are changing how we communicate, connect, and collaborate. Coupled with generational demographic change in the workplace, businesses are facing a new paradigm that's disrupting traditional thinking about office space. Work is evolving from a "place" to an "activity" and along with it employee expectations. Next generation real estate models are emphasizing collaboration, teamwork, flexibility, and choice to define how physical office environments help employees thrive and enhance work productivity. These models are poised to reduce occupancy costs, better support employee work-life balance and workplace mobility, and increase sustainability.

The implications make it tempting to ponder the extinction of traditional office space configurations altogether and dramatically reduced footprints over time as workplaces serve an ever larger and dispersed community of employees. While that may be premature, the worst economic downturn in decades sharpened the focus on real estate and provided new opportunities to rethink the future. Technology firms are leading real estate industry change on both the utilization and demand fronts. Their products and services are allowing new possibilities to connect and collaborate. Their workforces are largely comprised of the under 30 years old "Millennial" generation who prefer flexible workplaces and flat hierarchies and are digitally-oriented multitaskers who don't have sharp delineations between "work" and "leisure." And, their industry is leading economic growth and new job creation in many regions across the country, driving office market demand. Accordingly, their growing space needs and increased focus on attracting and inspiring top talent in today's highly competitive business environment is advancing the transformation and redefinition of the physical workplace.

Cisco connected workplace reduces real estate costs and boosts employee productivity and satisfaction.
As in many enterprise work environments, the majority of Cisco employees are accustomed to working in standard office cubicles that promote heads-down, solitary work. Cisco Workplace Resources and Cisco IT joined forces to design a flexible work environment that would make employee collaboration and communication easier and heighten productivity.

The Cisco Connected Workplace features an open, flexible layout and functional furniture, and relies on Cisco products and technologies including IP telephony, Cisco IP Phone Extension Mobility, Cisco IP Communicator, and wireless LAN mobility. The new design not only improved employee satisfaction, but also reduced real estate and equipment costs. At one Cisco office facility in Silicon Valley, the concept of workstation neighborhoods that are assigned to teams versus the individual accommodated fluctuations in occupancy demand and achieved increased space utilization through a desk sharing ratio of 3:2 (1,800 employees-to-1,200 desks, averaging approximately 100 square feet per employee).

As these trends become more impactful on workplaces and ultimately office asset values, remaining relevant and competitive will require forward looking strategies. The office is not going away–although fixed walls, drop ceilings, and dedicated desks are becoming vestiges of the past – and it will assume even greater importance with a much stronger "socialization" focus, helping build corporate culture and enable all-important knowledge sharing and innovation.

Baby boomers may still be in charge, but millennials are the future and their preferences will fundamentally change workplace definitions and desired office buildings.

Local markets

Austin

Impact

Local start-ups combined with the migration of out-of-state firms are driving high-tech sector growth, and their increased need for space is starting to put some upward pressure on rents in certain submarkets. Downtown is one area where start-ups continue to settle, but the larger, more mature high-tech sector located in Northwest Austin is where many companies relocate for expansion purposes.

Overview

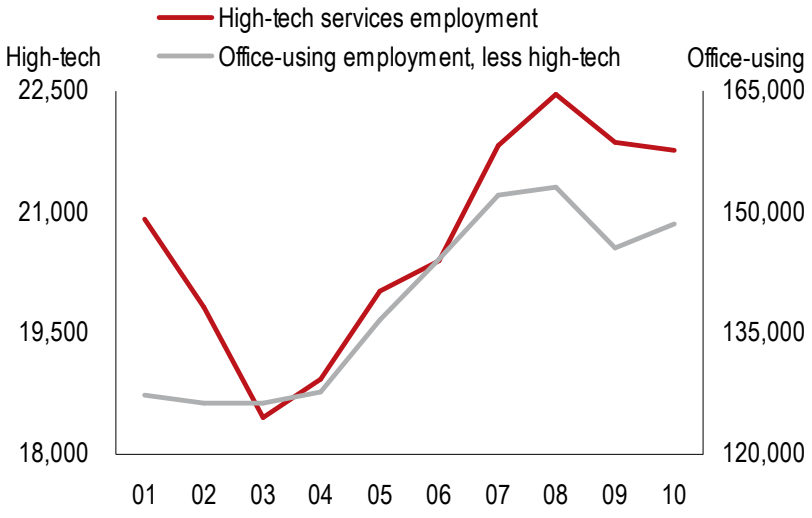
Leasing velocity is gaining momentum and there are signs that market conditions in high-tech focused areas are tightening as vacant space transitions to leased space. Tapping into lower real estate costs and a significant talent pool, the move to Austin for many companies has been an attractive one. Downtown, where social media and mobile application companies are focused, availabilities have been reduced and competition has increased. Facebook is a prime example, having entered the market a year ago and doubling in size since opening its office downtown.

The Northwest submarket may still have a relatively high vacancy rate exceeding 20 percent, but only four blocks of contiguous space over 50,000 square feet remain on the market. Well-established companies such as Polycom, Emerson, Pervasive, Microsoft, and Google are more prominent in this area. On the research and development side, Austin is home to major semiconductor companies such as Cirrus Logic, AMD, Freescale, Samsung, and Intel. Dell, the world's second largest PC manufacturer, is located just north of Austin in Round Rock. Though overall fundamentals still have room for improvement, major Austin submarkets have begun shifting away from tenant favorable toward landlord favorable conditions.

Outlook

The lack of significant new supply coming onto the market over the past few years combined with a recent upturn in demand has caused availability to decrease and rents to rise in certain pockets. Although office space is becoming more expensive in Austin, it is still substantially cheaper than in other high-tech driven markets, making it an affordable alternative for expanding firms. Likewise, for companies already located in Austin the ability to grow into other submarkets, such as Northwest, will continue to act as an attractive incentive.

Austin high-technology employment

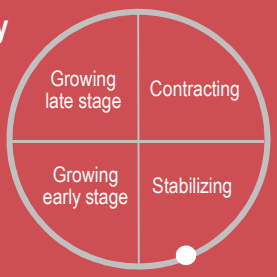


Players: top high-tech firms
By real estate footprint

Dell
Samsung Austin Semiconductor
IBM
Applied Materials
Freescale Semiconductor

Position

High-tech industry
Economic cycle clock



Office property
Market cycle clock

Scorecard

Economic		rank
High-tech jobs / annual growth	45,719 / -0.6%	11/14
Percent of total jobs	8.0%	4
Number of firms	2,426	11
Venture capital funding (past 4 quarters)	$348.1 M	12
Share of U.S. total	1.4%	
College education	40.4%	9
Diversity (non-white / foreign born)	26.7% / 14.8%	13/11

Office		
Cost (average asking rent)	$26.34	11
Annual growth	1.6%	5
Supply (vacancy rate)	21.3%	16
Demand (net absorption sf / %) (past 4 quarters)	359,020 sf / 0.8%	16 15
High-tech concentration (high-tech services vs. office jobs)	12.8%	7

Recent lease activity

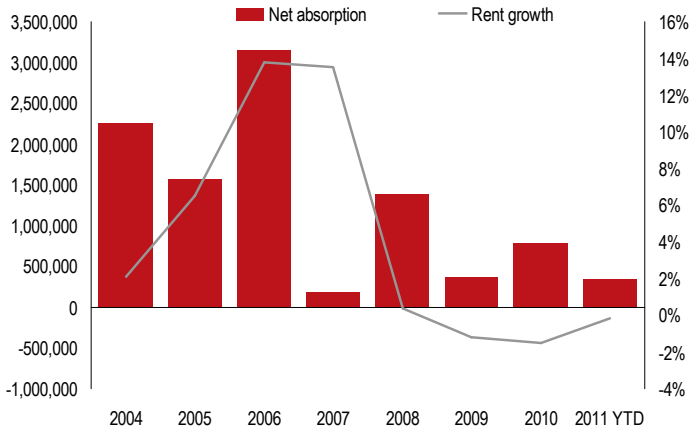
Polycom
7700 West Parmer Lane
124,000 sf

Pervasive
12365 Riata Trace Parkway
94,000 sf

Facebook
300 West 6th Street
60,000 sf

Altera
5113 Southwest Parkway
45,000 sf

Net absorption vs. rent growth



Top headlines

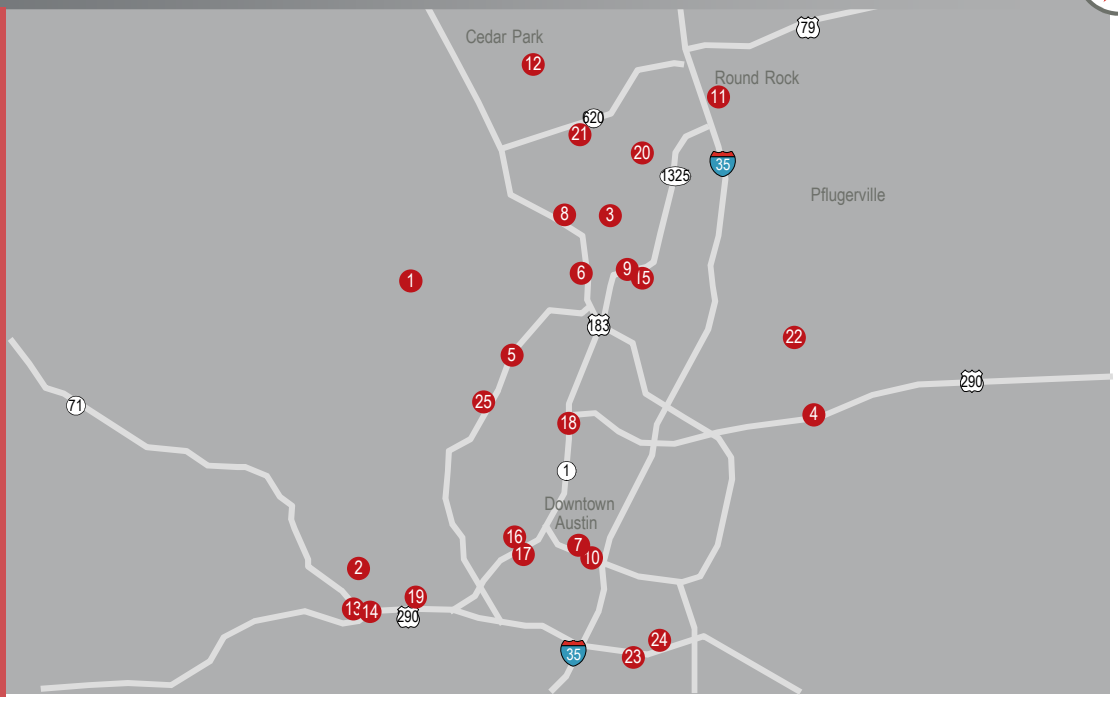
Austin

- eBay offered $2.8M to create 1,000 jobs in Austin
- WhaleShark Media buys UK coupon site eConversions, Ltd.
- Austin incubator aims to grow, influence new technology
- Austin Chamber creates “Tech Partnership” group to foster start-up growth

Top Austin high-technology firms by real estate footprint

Alphabetical order:

1. 3M
2. Advanced Micro Devices
3. Apple
4. Applied Materials
5. Bazaarvoice
6. BMC Software
7. Cirrus Logic
8. Cisco
9. Convio
10. CSC Financial Services Group
11. Dell
12. eBay
13. Freescale Semiconductor
14. Hewlett-Packard
15. IBM
16. Intel
17. LifeSize
18. National Instruments
19. Overwatch
20. Pervasive
21. Polycom
22. Samsung Austin Semiconductor
23. Spansion
24. Tokyo Electron
25. VMWare



Boston

Impact

The high-tech sector has been a significant contributor to office space demand in this economic recovery. Net absorption in the Greater Boston Area has been positive since early 2010, and rents continue to increase since hitting bottom in the third quarter of last year. Fundamentals have improved most in Cambridge, which is home to many high-tech tenants including Google and Microsoft, with rents increasing by 4.8 percent in the past year.

Overview

The submarkets of Cambridge, 128/Mass Pike, and Northwest are the most well known high-tech clusters. Both established and small-sized high-tech firms benefit from first-hand access to the submarket's highly educated workforce and unique urban culture. The 128/Mass Pike submarket is known as a high-tech hot bed and achieves the highest rents in the suburbs. The Northwest office market provides slightly less visibility, but asking rents are 10 percent less on average than 128/Mass Pike and over 50 percent less than Cambridge. Concessions are decreasing in Cambridge, while landlords continue to use tenant improvements to attract tenants to the Northwest and 128/Mass Pike submarkets. Established firms are signing leases up to 10 to 15 years in length, while start-ups and smaller firms remain more cautious.

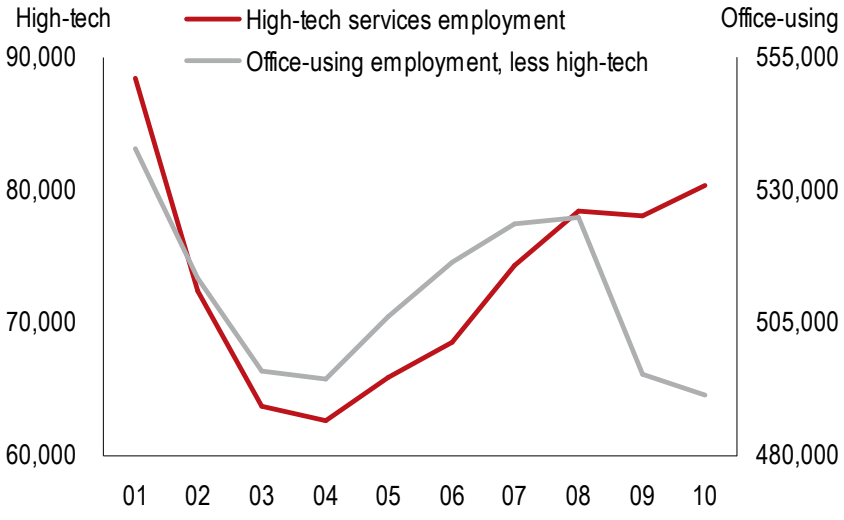
The South Boston Waterfront submarket is an emerging high-tech hub, driven by the establishment of the "Innovation District" where well known firms including Brightcove and Communispace have already moved into the submarket.

In common practice, large public companies have created corporate campuses on the periphery of the Greater Boston market where they can expand into larger spaces and pay lower rents, but still tap into Boston's resources. EMC, Bose, and IBM are some examples of this trend.

Outlook

Many companies may look for more economic space options in the Innovation District as its popularity increases and further development ensues. Those companies with even larger growth plans will move to the suburbs as they outgrow their urban space, seeking larger floor plates and more affordable rents than either of those submarkets can offer.

Boston high-technology employment



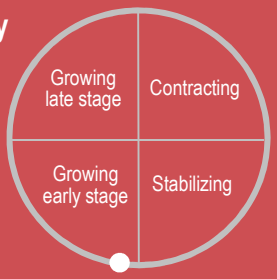
Players: top high-tech firms

By real estate footprint

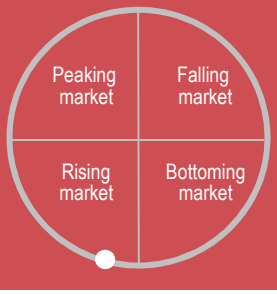
EMC
Oracle
Bose
IBM
Sensata Technologies

Position

High-tech industry
Economic cycle clock



Office property
Market cycle clock



Scorecard

		rank
Economic		
High-tech jobs / annual growth	129,183 / 0.0%	2/13
Percent of total jobs	7.4%	6
Number of firms	5,326	4
Venture capital funding (past 4 quarters)	$2,710.3M	2
Share of U.S. total	10.9%	
College education	43.7%	8
Diversity (non-white / foreign born)	21.4% / 18.1%	14/10
Office		
Cost (average asking rent)	$28.42	8
Annual growth	0.1%	10
Supply (vacancy rate)	19.9%	14
Demand (net absorption sf / %) (past 4 quarters)	2,704,780 sf / 1.7%	3 5
High-tech concentration (high-tech services vs. office jobs)	14.0%	4

Recent lease activity

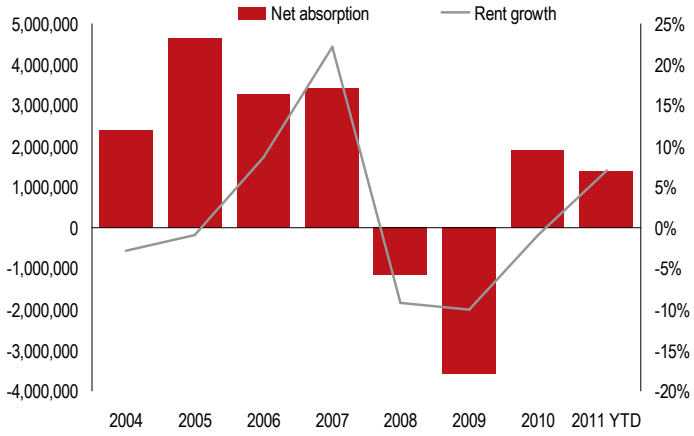
Pegasystems
1 Rogers St. and One Charles Park
163,000 sf

Google
3 Cambridge Center
62,000 sf

DynamicOps
1 Wall Street
37,000 sf

Acquia
30 Corporate Drive
35,000 sf

Net absorption vs. rent growth



Top headlines

Boston

MIT's 2009 Entrepreneur Competition winner, Ksplice, bought by Oracle

Boston tech community falling behind, losing momentum to New York

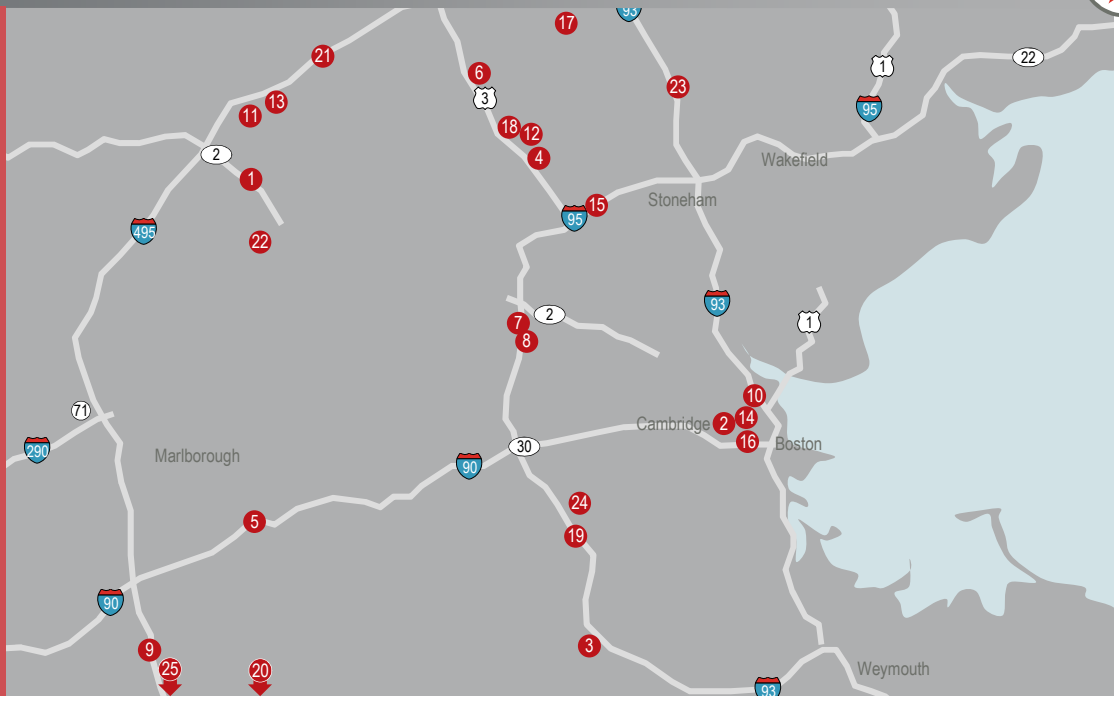
Brightcove, an online video company, will relocate from Cambridge to Boston after leasing 82,000 square feet, doubling in size

A number of start-ups are expanding their space in downtown Boston as they sign mid-sized leases

Top Boston high-technology firms by real estate footprint

Alphabetical order:

1. Agilent Technologies
2. Akamai Technologies
3. Analog Devices
4. Avid Technology
5. Bose
6. Compucom
7. Constant Contact
8. Dassault Systemes
9. EMC
10. Google (with ITA)
11. IBM
12. iRobot
13. Lucent Technologies
14. Microsoft
15. Oracle (with Sun Microsystems)
16. Pegasystems
17. Philips Electronics
18. Progress Software
19. PTC
20. Sensata Technologies
21. Sonus Networks
22. Stratus Technologies
23. Teradyne
24. TripAdvisor
25. Waters Corporation



Denver

Impact

The high-tech industry has spawned new demand for office space throughout the Denver region, particularly in the Northwest submarket, which includes Boulder County and is home to the University of Colorado and other world-class research centers. Rental rates in this submarket have returned to pre-recession levels, and renewed confidence in the economy is leading to an increase in leasing activity. Boulder County is currently home to over 1,200 high-tech firms that range from data storage to software development. These firms dominate the market and are highly desired by landlords looking to fill their buildings.

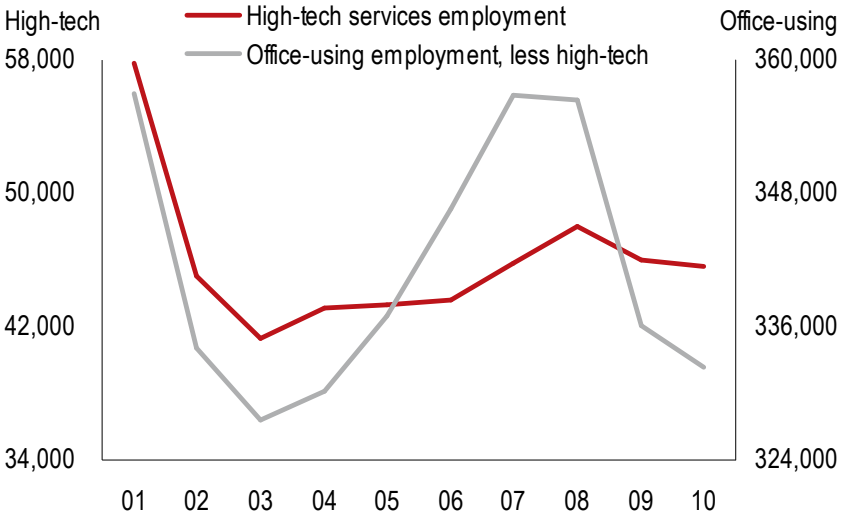
Overview

The greater Denver region is home to a mix of firms within the broader technology realm, but Boulder County leads performance with one of the lowest vacancy rates in the Denver region at just below 11.0 percent of its 9.5 million square feet of office space. Recently, early renewals have become popular as high-tech tenants look to take advantage of rental rates before the market begins to rise significantly. With rents on the rise, many high-tech tenants have seen this as a time to relocate and as a result, very few large blocks remain on the market, especially within Class A buildings. Despite increasing activity, landlords continue to provide ample tenant improvement dollars and free rent to attract and retain tenants, as well as to encourage existing tenants to expand. New activity within the market has created a sense of urgency and greater competition to get the best deal, a trend seen during the high-tech boom of the late 1990s. The Northwest submarket is helping to uplift real estate fundamentals throughout the Denver region, recording the second-lowest vacancy rate behind Midtown during the second quarter, and the second-highest rent behind the CBD during the same period.

Outlook

Boulder County is clearly the most highly concentrated area for the high-tech industry in the greater Denver region. However, as the industry grows in the coming years, surrounding submarkets are likely to be impacted by new space requirements. Although there has not been a high level of construction in the recent years, demand for space could prompt new office construction and even build-to-suit projects for larger requirements. The high-tech industry is expected to play a key role in the recovery and growth in the overall Denver market.

Denver high-technology employment



Players: top high-tech firms

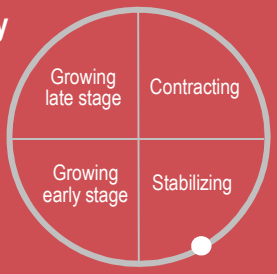
By real estate footprint

Oracle
Seagate Technology
IBM
The TriZetto Group
Xilinx

Position

High-tech industry

Economic cycle clock



Office property

Market cycle clock

Scorecard

Economic		rank
High-tech jobs / annual growth	59,718 / -1.1%	7/15
Percent of total jobs	5.3%	10
Number of firms	6,088	2
Venture capital funding (past 4 quarters)	$617.3 M	9
Share of U.S. total	2.5%	
College education	39.2%	11
Diversity (non-white / foreign born)	18.6% / 12.2%	15/13

Office		
Cost (average asking rent)	$21.82	15
Annual growth	1.3%	6
Supply (vacancy rate)	16.0%	6
Demand (net absorption sf / %) (past 4 quarters)	1,164,297 sf / 1.1%	8 12
High-tech concentration (high-tech services vs. office jobs)	12.1%	10

Denver

Recent lease activity

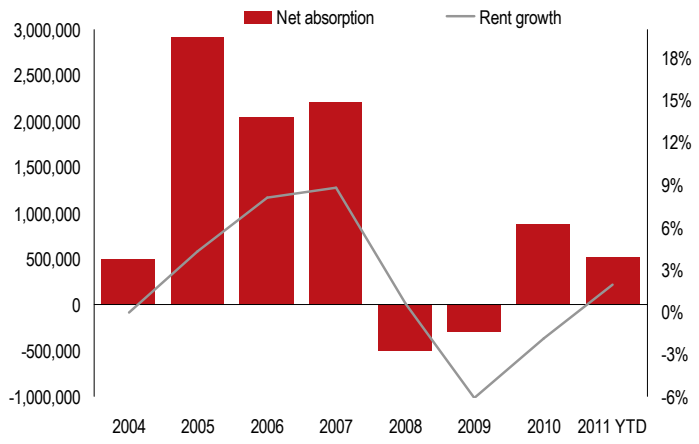
Webroot
385 Interlocken Crescent
116,000 sf

Rally Software
3333 Walnut Street
66,000 sf

Intermap Technologies
8310 S Valley Highway
26,000 sf

Ping Identity
1001 17th Street
20,000 sf

Net absorption vs. rent growth



Top headlines

Denver

Redfin expands to Denver area, first to offer Denver-area consumers access to property history

Boulder named America's best town for start-ups

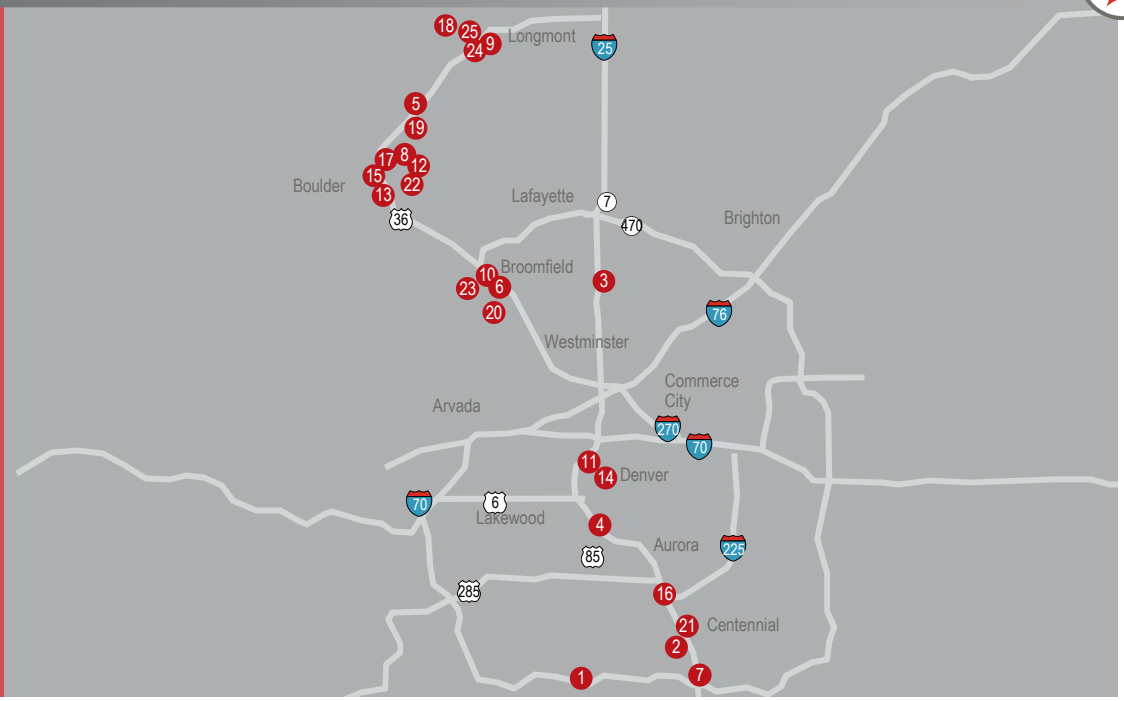
Boulder's Tendril moves headquarters from Pearl Street to 55th Street

TechStars, the nationally recognized technology accelerator, graduated 12 start-ups in its fifth Boulder class

Top Denver high-technology firms by real estate footprint

Alphabetical order:

1. 5280 Solutions
2. CIBER
3. Google
4. Hosting
5. IBM
6. Incentra
7. Intermap Technologies
8. LeftHand Networks
9. LSI
10. Oracle
11. Ping Identity
12. ProStor Systems
13. Quantum Corporation
14. Quark
15. Rally Software
16. Rivet Software
17. RogueWave Software
18. Seagate Technology
19. Spectra Logic
20. Tandberg Data
21. The Trizetto Group
22. Wall Street on Demand
23. Webroot Software
24. Western Digital
25. Xilinx



New York

Impact

After a significant decrease in 2009 resulting from the epic financial collapse, high-tech employment has been consistently increasing every quarter and creating new office space demand. While it is not the main driver of Manhattan's office market recovery that began in mid-2010, resurgence of the high-tech industry has certainly made a substantial contribution. Google's purchase of the nearly three million-square-foot 111 Eight Avenue in Chelsea made a big splash and ushered in an upswing in market activity.

Overview

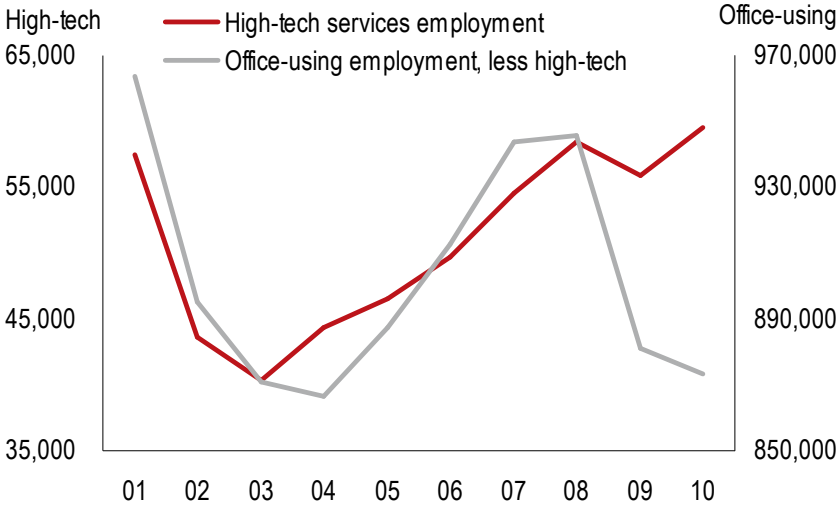
The Midtown South area has become the preferred location for high-tech and creative media firms. This area's allure stems from its unconventional office market, largely comprised of older, low-rise buildings in the hip Chelsea and Flatiron districts. The rebound in high-tech has fueled net absorption in recent quarters for the Midtown South market. For the sixth straight quarter the overall vacancy rate dropped, registering 6.7 percent in the second quarter, the lowest in Manhattan.

High-tech firms are one of the leading components of active leasing requirements in Manhattan with 45 firms seeking a combined total of three million square feet. Having fared better than the overall market during the downturn, tenants are increasingly finding that Midtown South options are limited and many landlords are escalating rents. High demand combined with low vacancy has prompted new construction at 51 Astor Place, a building with a trendy design built to suit the creative tenants that occupy Midtown South.

Outlook

If high-tech employment continues to grow in New York City at the current rate, these firms will need to look for space beyond the tight Midtown South submarket. Should that materialize, surrounding submarkets should catch some of this demand, thus decreasing vacancy rates and assisting in the recovery of the New York City office market as a whole. Yahoo! and Facebook are two such companies that have already decided to lease space in Midtown over Midtown South.

New York high-technology employment



Players: top high-tech firms

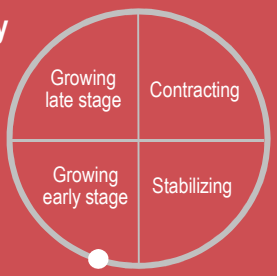
By real estate footprint

Bloomberg, Inc.
Google
AOL, Inc.
InterActiveCorp
IBM

Position

High-tech industry

Economic cycle clock



Office property

Market cycle clock

Scorecard

Economic		rank
High-tech jobs / annual growth	59,916 / 6.3%	6/3
Percent of total jobs	3.3%	13
Number of firms	4,014	6
Venture capital funding (past 4 quarters)	$1,589.6 M	4
Share of U.S. total	6.4%	
College education	57.7%	1
Diversity (non-white / foreign born)	42.7% / 27.5%	5/6
Office		
Cost (average asking rent)	$53.49	1
Annual growth	2.4%	3
Supply (vacancy rate)	10.8%	1
Demand (net absorption sf / %) (past 4 quarters)	4,627,062 sf / 1.1%	2 11
High-tech concentration (high-tech services vs. office jobs)	6.4%	14

New York

Recent lease activity

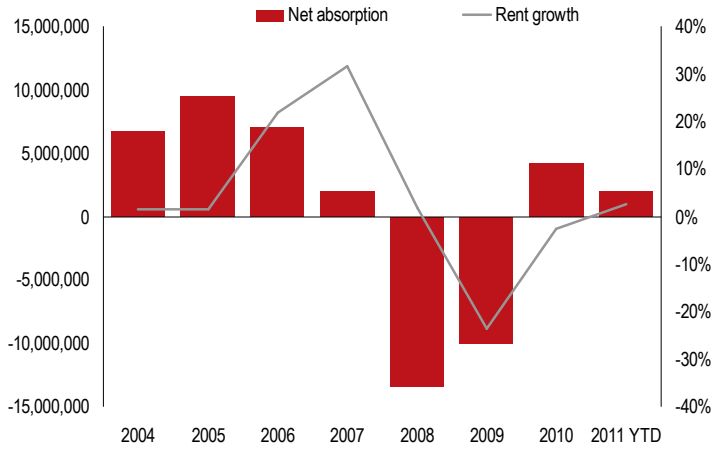
Bloomberg
120 Park Avenue
400,000 sf

Amazon.com
1325 Avenue of the Americas
36,000 sf

LinkedIn Corporation
350 Fifth Avenue
32,000 sf

Seamless Web
1065 Avenue of the Americas
29,000 sf

Net absorption vs. rent growth



Top headlines

New York

- Mayor Bloomberg offers millions for university to build a high-tech campus in New York
- New York start-ups ride tech boom, biggest venture capital deal generator outside Silicon Valley in 2010
- Google purchases 111 Eighth Avenue, one of Manhattan's largest buildings
- Manhattan's tech start-ups settle in the Flatiron District and Chelsea

Top New York technology firms by real estate footprint

Alphabetical order:

1. Advent Software
2. Amazon.com
3. AOL
4. Bloomberg, Inc.
5. Computer Associates International
6. Computer Generated Solutions
7. Dealogic
8. Donovan Data Systems
9. DoubleClick
10. EPIQ Systems
11. Facebook
12. Google
13. IBM
14. InterActiveCorp
15. Internap Network Services Corp.
16. LinkedIn
17. Microsoft
18. Sapient
19. Seamless Web
20. SSandC Technologies
21. Sungard Systems International
22. Take-Two Interactive Software
23. WebMD
24. Yahoo!
25. Ziff Davis Media

San Diego

Impact

The high-tech industry continues to expand, establishing a stronghold in software development and consumer electronics manufacturing. This growth has been a boon for the local office market and has translated into a sizable amount of occupancy. Qualcomm, a smartphone chip developer and one of San Diego's largest high-tech employers, has experienced steady growth on the heels of increased demand for new technologies. Their presence helps to serve as a catalyst for start-up and complementary business activity in the region, boosting the high-tech sector overall.

Overview

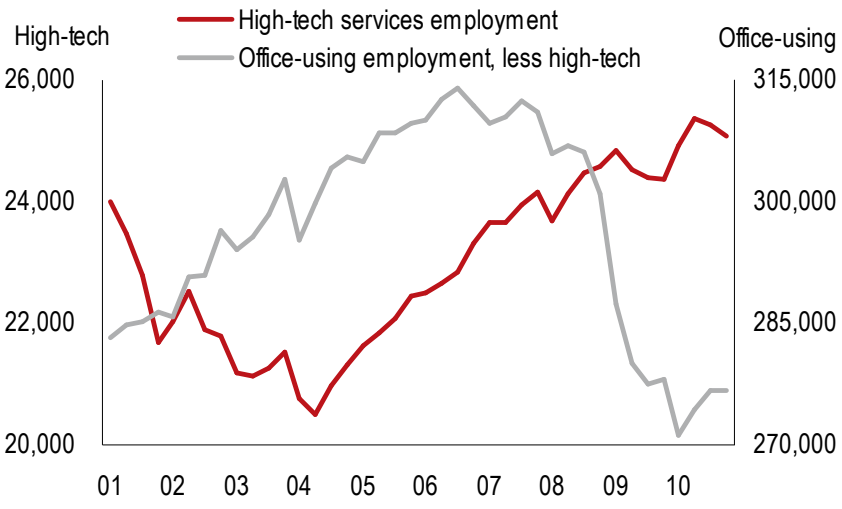
Sorrento Mesa is San Diego's premier high-tech submarket, and is home to Qualcomm and a variety of software and web-based companies. As one of the region's only Fortune 500 firms, Qualcomm's expansion has spurred the growth of peripheral firms that benefit from the healthy venture capital environment and proximity to intellectual capital. The University of California, San Diego is a driving force in the submarket, supplying top talent to the high-tech firms nearby. Venture capital funding flows to start-ups and small firms that partner with or compete against Qualcomm, further bolstering industry growth.

The number of high-tech tenants touring the market has been relatively steady for the past year. Firms seeking large contiguous blocks of space are discovering they have few options, especially in their preferred submarkets. Landlords continue to offer concessions to attract tenants, but as demand picks up, particularly for Class A space, these offers will diminish. Large firms are inking deals ahead of schedule to take advantage of more affordable rates before stronger demand drives up asking rents.

Outlook

Thanks to a well-educated and growing workforce paired with an established high-tech cluster that continues to spin off new and exciting start-up companies, demand for space to house these firms will remain solid for the foreseeable future, especially in Sorrento Mesa.

San Diego high-technology employment



Players: top high-tech firms

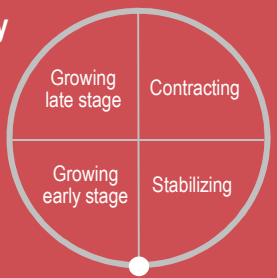
By real estate footprint

Qualcomm
Northrop Grumman
SAIC
L-3 Communications
Sony

Position

High-tech industry

Economic cycle clock



Office property

Market cycle clock

Scorecard

Economic		rank
High-tech jobs / annual growth	50,798 / 1.8%	9/7
Percent of total jobs	5.0%	12
Number of firms	2,586	9
Venture capital funding (past 4 quarters)	$756.6 M	8
Share of U.S. total	3.0%	
College education	34.0%	14
Diversity (non-white / foreign born)	28.9% / 22.7%	11/7

Office		
Cost (average asking rent)	$25.80	12
Annual growth	-3.2%	18
Supply (vacancy rate)	17.6%	11
Demand (net absorption sf / %) (past 4 quarters)	380,265 sf / 0.5%	14 16
High-tech concentration (high-tech services vs. office jobs)	8.3%	13

San Diego

Recent lease activity

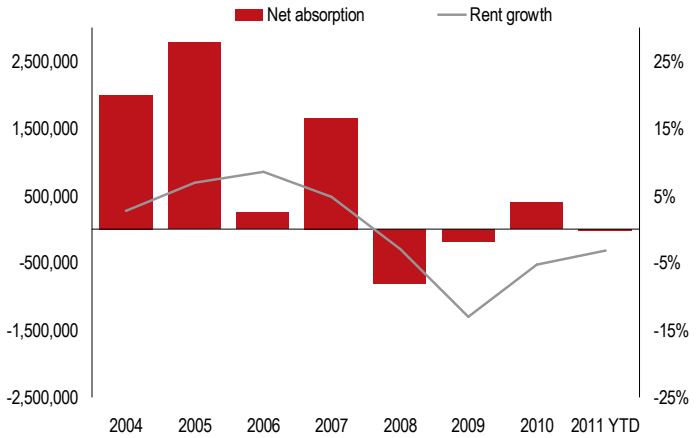
Sony
8929 Terman Court
132,000 sf

Information Systems Labs
10070 Barnes Canyon Road
30,000 sf

Altec Lansing
9330 Scranton Road
14,000 sf

Salient Federal Solutions
10431 Wateridge Circle
12,000 sf

Net absorption vs. rent growth



Top headlines

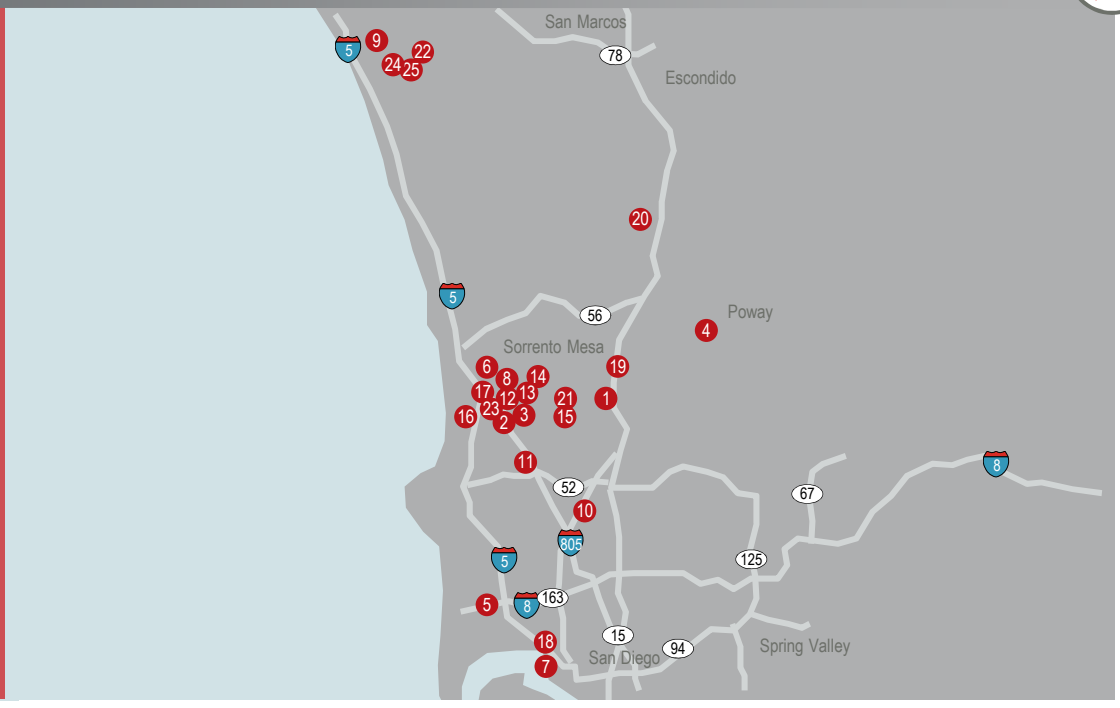
San Diego

- Tech companies struggle to find qualified local applicants – thousands of jobs available
- San Diego venture capital steady despite flaccid national economy
- Number of tech start-ups double in Q1 2011
- UCSD, CalTech bring photonics to silicon

Top San Diego high-technology firms by real estate footprint

Alphabetical order:

1. AIRSIS
2. Altec Lansing
3. Anakam
4. Cohu, Inc.
5. Computer Sciences Corp
6. DefenseWeb Technologies
7. ESET
8. Information Systems Labs
9. Interknowlogy
10. L-3 Communications
11. Mitchell International
12. Novatel Wireless
13. Qualcomm
14. Quality Systems Integrated
15. RF Industries
16. SAIC
17. Salient Federal Solutions
18. Sentek Consulting
19. SmartDraw.com
20. Sony
21. Technology Integration Group
22. ViaSat
23. Websense
24. Yahoo!
25. Yontoo Technologies



San Francisco

Impact

Booming high-tech industry growth is creating strong demand for office space. Stiff competition between tenants for the best quality space is moving market rents toward pre-recession highs in some buildings. Companies involved in cloud computing, search, mobile, and social media ventures are the hottest players in the market today and landlords are chomping at the bit to get these firms in their buildings. The excitement has drifted into the capital markets space and investors are snapping up properties at rates last seen in 2007. The resurgence in tech is electrifying not only San Francisco, but the entire Bay Area.

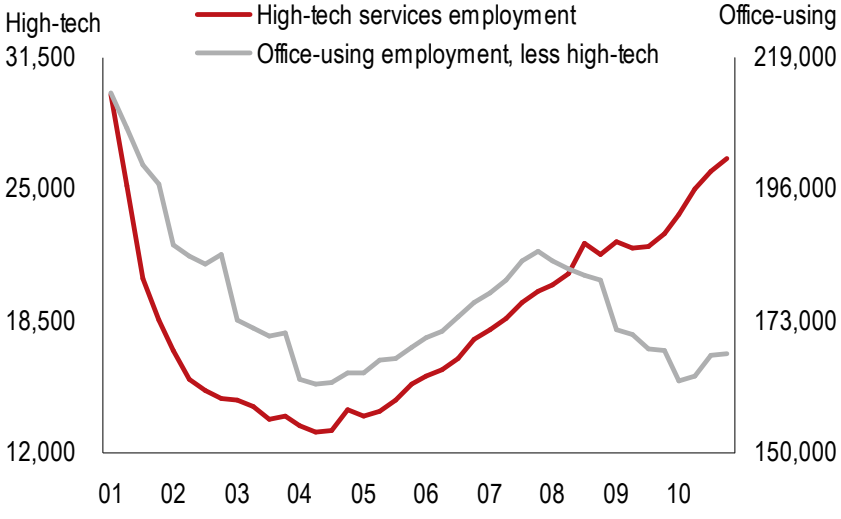
Overview

High-tech firms make up a disproportionate share of active requirements in the market, with roughly 90 firms seeking more than 2.5 million square feet combined. The South of Market (SOMA) submarket is the hottest high-tech office market and boasts the lowest vacancy rate citywide at just 6.9 percent. Few desirable spaces remain within SOMA and demand is overflowing to adjacent submarkets that typically cater to financial and legal firms. In those submarkets landlords are courting high-tech companies in a number of ways, including remodeling offices into "cool-creative" space that incorporates exposed-beam ceilings, original brick surfaces, and open work areas, as well as offering free rent and attractive tenant improvement packages now that rents are 25 percent above 2009 lows. A shift in market dynamics is resulting in landlords and tenants brokering deals more quickly, particularly start-ups. Mature high-tech firms continue to negotiate along traditional timelines, although market energy is creating a sense of urgency not prevalent 18 months ago. Because of stiff competition on both sides of the table, tenants and landlords are acting quickly to secure the best deals. High-tech is making a strong comeback, uplifting the local economy as well as the office market.

Outlook

As the high-tech industry matures and company growth stabilizes, SOMA should continue to serve as the premier tech cluster for the San Francisco office market, and contribute to growth in other submarkets. Sustained demand for office space could prompt speculative development in future quarters. Several redevelopment projects already underway will solidify SOMA's top position in the San Francisco office landscape.

San Francisco high-technology services employment



Players: top high-tech firms

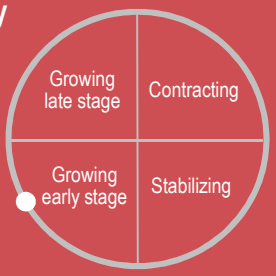
By real estate footprint

Salesforce.com
Dolby Laboratories
Zynga
Adobe
Google

Position

High-tech industry

Economic cycle clock



Office property

Market cycle clock

Scorecard

Economic		rank
High-tech jobs / annual growth	27,736 / 15.7%	16/1
Percent of total jobs	6.0%	8
Number of firms	1,503	16
Venture capital funding (past 4 quarters)	$2,044.1 M	3
Share of U.S. total	8.3%	
College education	51.1%	2
Diversity (non-white / foreign born)	43.4% / 34.4%	4/4
Office		
Cost (average asking rent)	$40.06	2
Annual growth	18.5%	1
Supply (vacancy rate)	16.2%	7
Demand (net absorption sf / %) (past 4 quarters)	1,221,751 sf / 1.7%	7 7
High-tech concentration (high-tech services vs. office jobs)	13.7%	5

San Francisco

Recent lease activity

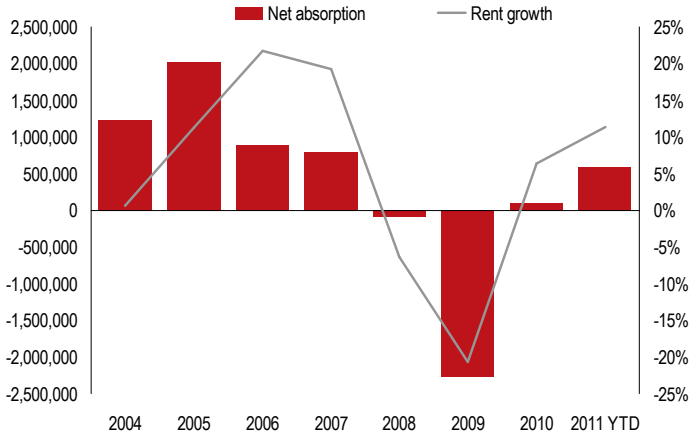
Zynga
650 Townsend Street
346,000 sf

Twitter
1355 Market Street
200,000 sf

DropBox
185 Berry Street
88,000 sf

Aliph
99 Rhode Island Street
60,000 sf

Net absorption vs. rent growth



Top headlines

San Francisco

City officials hopeful that tech companies will revitalize newly designated incentive areas in Central Market Corridor and the Tenderloin

Salesforce.com purchases 14 acres in Mission Bay with entitlements for 2 million square feet of buildable space

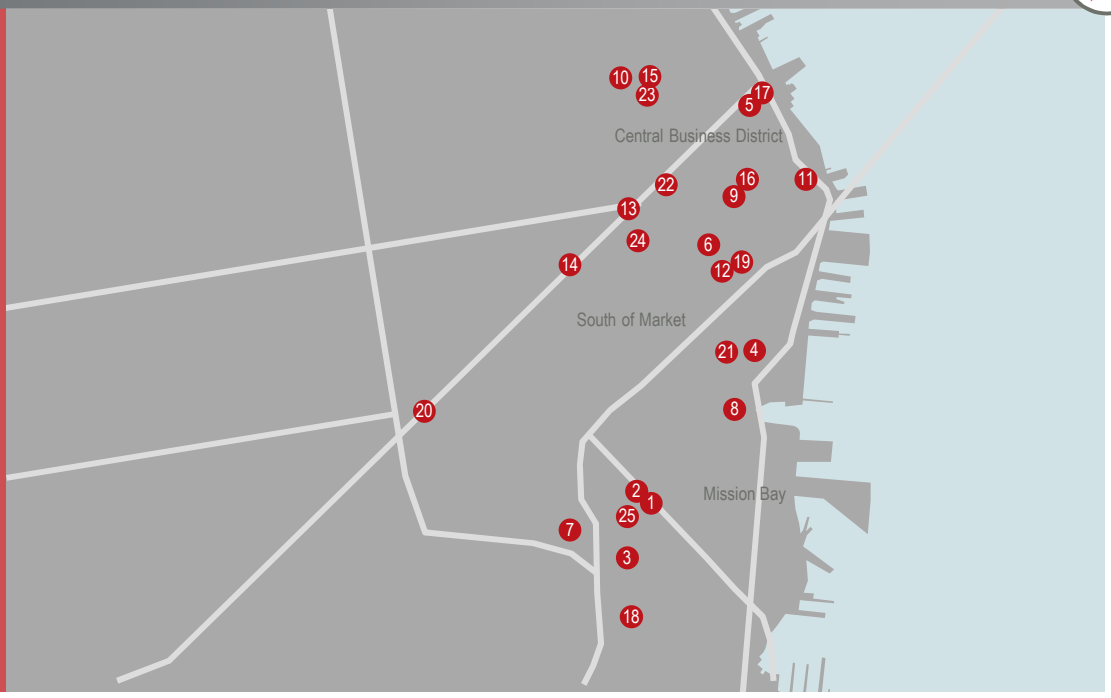
Tech activity not sign of tech boom, but a new direction in the economy

High-tech industry focused office incubators mushroom to meet start-up demand

Top San Francisco high-technology firms by real estate footprint

Alphabetical order:

1. Adobe
2. Advent Software
3. Aliph
4. Ancestry.com
5. Autodesk
6. CBS Interactive
7. Dolby
8. Dropbox
9. eBay
10. Expedia
11. Google
12. Hewlett Packard
13. Macys.com
14. Microsoft
15. Oracle
16. Riverbed
17. Salesforce.com
18. Sega
19. Symantec
20. Twitter
21. Ubisoft
22. Visa
23. Yahoo!
24. Yelp
25. Zynga



San Francisco Peninsula

Impact

While its location between Silicon Valley and San Francisco put the Mid-Peninsula right in the middle of the current high-tech boom, growth rates have not been as robust as those of its neighbors. However, recent spill-over into the southern part of the market paired with the perceived notion that high-tech is driving much of the demand has led to an improvement in real estate fundamentals. Additionally, a lack of supply has placed a premium on quality space and allowed landlords to push rents up throughout the market.

Overview

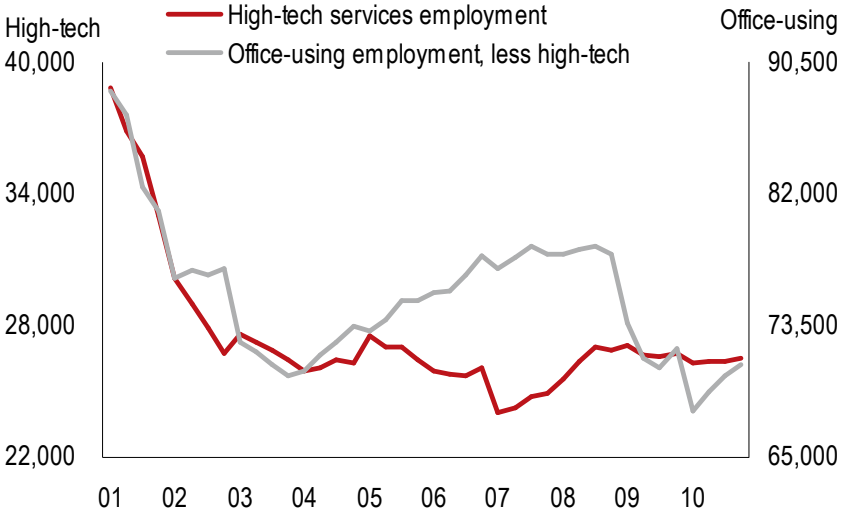
Primarily known for its concentration of life sciences companies, such as Genentech, recent activity in the market has begun to diversify its tenant base. In early 2011, Facebook leased approximately one million square feet in Menlo Park, just north of Palo Alto and Stanford, in one of the largest deals since 1991. Other social media and gaming companies have since jumped on the bandwagon. Electronic Arts, headquartered in Redwood Shores, recently acquired Playfish, a social entertainment company that works closely with Facebook. Google-owned YouTube also has a large presence in the market with plans to stay put, having recently renewed on much of its occupied space.

While activity in the Mid-Peninsula has been modest for the past four quarters, Silicon Valley's buzz is beginning to influence the area. Many high-tech companies, especially smaller start-ups have begun to favor areas such as San Mateo, Burlingame, and Redwood City as good alternatives to its popular neighbors, by placing them within close proximity to both markets. Easy access to the freeway and other modes of public transportation has also added to its attraction.

Outlook

With social media and related platforms growing at an exponential rate, more start-ups are expected to emerge in the Mid-Peninsula area. Current improvements in market fundamentals paired with a lack of supply among blocks over 100,000 square feet will create a more competitive market in coming months. Tenants and landlords will experience a shift in negotiating leverage as high-tech demand continues to creep into the market.

San Francisco Peninsula high-technology employment



Players: top high-tech firms

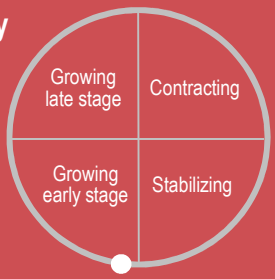
By real estate footprint

Oracle
Facebook
Electronic Arts
Sony
YouTube (Google)

Position

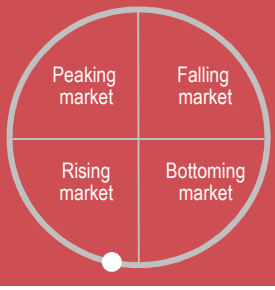
High-tech industry

Economic cycle clock



Office property

Market cycle clock



Scorecard

Economic		rank
High-tech jobs / annual growth	33,362 / 0.1%	14/12
Percent of total jobs	11.5%	2
Number of firms	1,057	18
Venture capital funding (past 4 quarters)	$1,418 M	5
Share of U.S. total	5.7%	
College education	43.8%	7
Diversity (non-white / foreign born)	36.4% / 33.3%	8/5

Office		
Cost (average asking rent)	$39.00	3
Annual growth	4.9%	2
Supply (vacancy rate)	19.2%	13
Demand (net absorption sf / %) (past 4 quarters)	366,630 sf / 1.4%	15 9
High-tech concentration (high-tech services vs. office jobs)	27.2%	3

San Francisco Peninsula

Recent lease activity

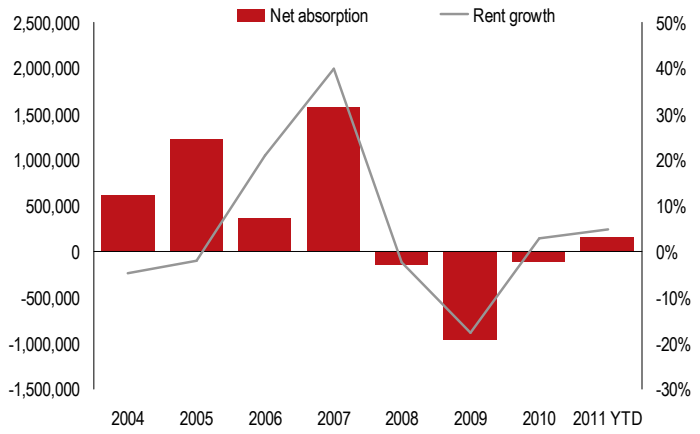
Ion Torrent Systems
7000 Shoreline Court
69,000 sf

Trion Worlds
1200 Bridge Parkway
52,000 sf

Ingenuity Systems
1700 Seaport Boulevard
42,000 sf

EFI Solutions
303 Velocity Way
40,000 sf

Net absorption vs. rent growth



Top headlines

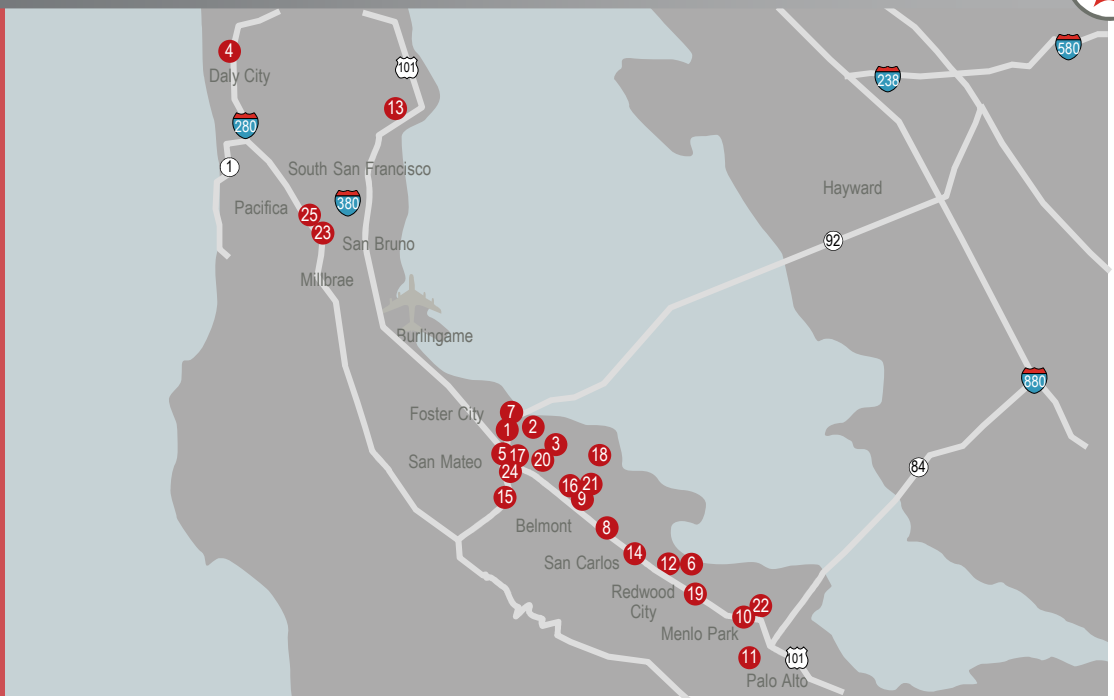
S.F. Peninsula

- Facebook to move, completes biggest office deal since 1991, then announces further expansion plans
- After losing YouTube five years ago, San Mateo creates council to attract new tech companies
- San Mateo-based Jumio develops video credit card scanner for online transactions
- Digital Chocolate announces launch of five games for Intel AppUpSM center

Top San Francisco Peninsula high-technology firms by real estate footprint

Alphabetical order:

1. Actuate
2. Acxiom Digital
3. Adchemy
4. Avid Technology
5. Capcom USA
6. Dreamworks SKG
7. EFI Solutions
8. Electronic Arts
9. Equinix
10. Exponent
11. Facebook
12. Informatica
13. Ion Torrent Systems
14. L-3 Communications
15. NetSuite
16. Oracle
17. Salesforce.com
18. Shutterfly
19. Silver Springs Networks
20. Sony
21. Trion World Networks
22. Tyco Electronics
23. Walmart.com
24. Webroot
25. YouTube (Google)



Seattle

Impact

Thousands of new high-tech industry jobs created in the Puget Sound region have boosted the office market over the past three quarters, most notably in the Seattle CBD. Struggling or once empty buildings at the start of the recession have experienced significant occupancy gains as a result of this rapid growth, avoiding serious financial hardships and default. Not only has this led to renewed optimism in the economy, but also within the office property market. As a result, landlords have begun raising rental rates and reducing concessions on the heels of large high-tech lease transactions.

Overview

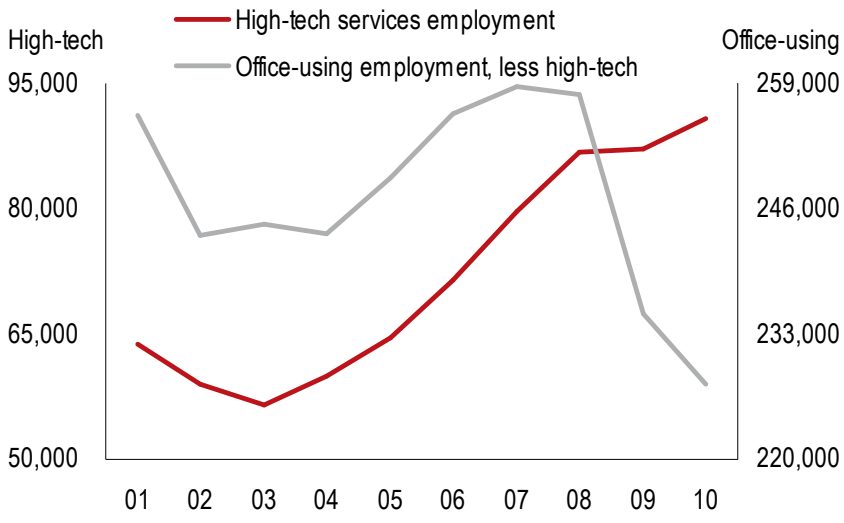
For many years, software development has been the major economic driver in Puget Sound thanks to Microsoft. Today, the software giant is still the largest real estate tenant in the area, occupying 15 million square feet of both owned and leased space. Exciting new advances and innovations in the industry have led to a surge among high-tech services, gaming, and retail companies like Amazon.com, Expedia, and Nintendo.

While the large tech companies historically set roots in suburban campus settings, the need and desire to be located in an urban market has taken precedence as companies vie for the best and brightest professionals in the industry. Coupled with lower rental rates as a result of the recession, many high-tech start-ups saw this as an opportunity to relocate to offices within the CBD, creating greater competition for traditional office users. Landlords have embraced this new demand and contributed to the growing competition among tenants by favoring high-tech companies that are cash rich, high credit, and rapidly expanding.

Outlook

Expansion within the high-tech industry is expected to significantly outpace overall employment growth for years to come. In the past three quarters alone, over 2.5 million square feet have been newly occupied by high-tech firms. Their increased office space needs and new desire for downtown locations is likely to ramp-up competition and escalate occupancy costs to more noticeable levels by 2012.

Seattle high-technology employment



Players: top high-tech firms

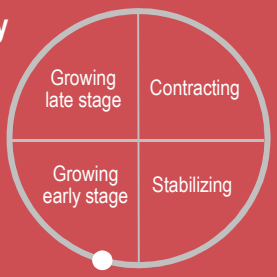
By real estate footprint

Microsoft
Amazon.com
Nintendo
Expedia
F5 Networks

Position

High-tech industry

Economic cycle clock



Office property

Market cycle clock

Scorecard

Economic		rank
High-tech jobs / annual growth	98,737 / 3.6%	4/6
Percent of total jobs	10.3%	3
Number of firms	3,927	8
Venture capital funding (past 4 quarters)	$507.8 M	10
Share of U.S. total	2.1%	
College education	44.8%	5
Diversity (non-white / foreign born)	27.3% / 19.0%	12/9

Office		
Cost (average asking rent)	$26.70	10
Annual growth	-1.3%	14
Supply (vacancy rate)	16.6%	9
Demand (net absorption sf / %) (past 4 quarters)	2,250,861 sf / 2.2%	4 2
High-tech concentration (high-tech services vs. office jobs)	28.5%	2

Seattle

Recent lease activity

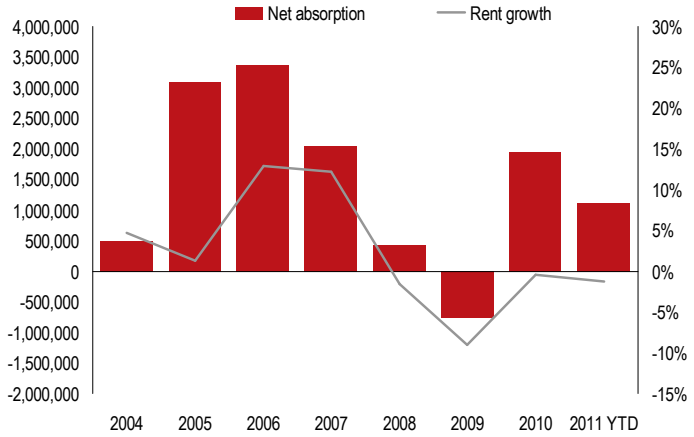
Isilon Systems
505 1st Avenue South
168,000 sf

Zillow
1301 2nd Avenue
66,000 sf

Expedia
10900 NE 4th Street
54,000 sf

Whitepages.com
1301 Fifth Avenue
21,000 sf

Net absorption vs. rent growth



Top headlines

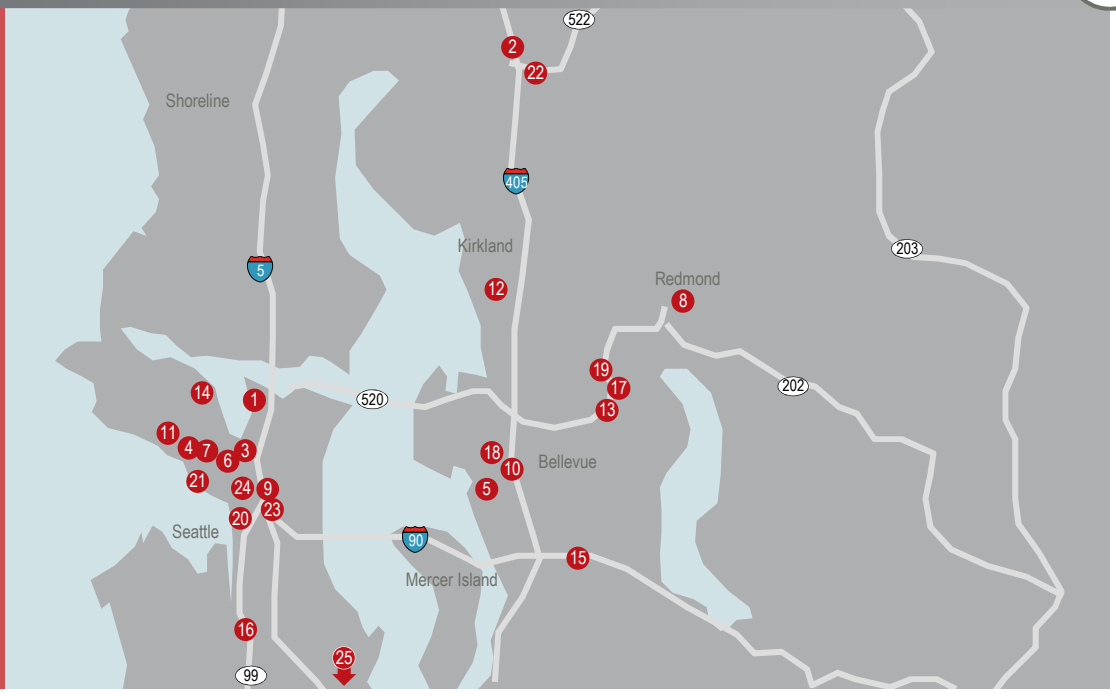
Seattle

- Tech companies fill new downtown office towers
- Flash-sale website Zulily to take over Sodo office building
- Google opening office in Bothell
- Amazon.com on a hiring spree, taking 460,000 square feet at 1918 8th Avenue

Top Seattle high-technology firms by real estate footprint

Alphabetical order:

1. Adobe
2. Allied Telesis
3. Amazon.com
4. Big Fish Games
5. Bungie.com
6. Cisco
7. Classmates Online
8. Concur Technologies
9. Corbis
10. Expedia
11. F5 Networks
12. Google
13. Honeywell International
14. Impinj
15. Intellectual Ventures
16. Isilon Systems
17. Microsoft
18. Motricity
19. Nintendo
20. Razorfish
21. RealNetworks
22. Vertafore
23. WatchGuard Technologies
24. Zillow
25. Zones



Silicon Valley

Impact

Home to the world's biggest and best high-tech companies, the Valley has changed the way consumers and businesses go about their daily lives. Demand for faster, smaller, and more connected technology has generated a girth of consumer demand. Bringing back memories of the dot-com boom, the Valley is experiencing a resurgence of growth among the high-tech industry as hiring trends signal expansion and venture capital funding has led to the growth of a fresh crop of start-ups. As a result, leasing activity has surged creating a sense of heightened competition among tenants in hot submarkets such as Sunnyvale, Mountain View, and Palo Alto.

Overview

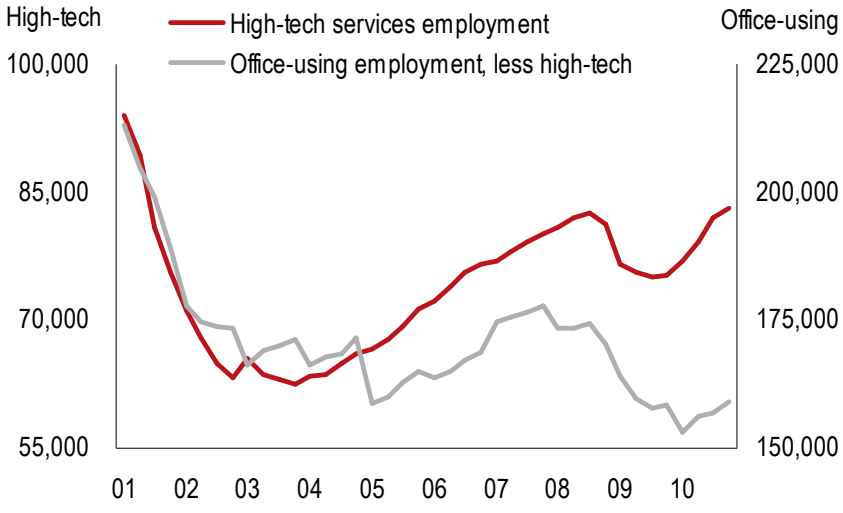
With the exception of small clusters of legal and financial firms in Palo Alto, Silicon Valley's most dominant industry is high-tech. Google, which occupies 85 percent of the Mountain View submarket, continues to aggressively expand in the area and Apple recently unveiled plans for a new, three million square foot campus in Cupertino. As two of the most dominant high-tech companies in the industry, desire to be located in the area continues to maintain its appeal.

Robust headcount projections are spurring demand for office space, causing tightening conditions and increased competition for high-profile locations. Groupon, Zynga, and Box.net have rapidly expanded over the past six months, and many are expected to follow suit. After years of attractive pricing due to an abundance of supply, the market has suddenly shifted in landlords' favor. Since the beginning of the year, asking rents have consistently increased as vacancies declined throughout the market.

Outlook

Renewed energy in the high-tech industry has helped push the local economic recovery forward as established firms continue to grow and technological innovations have sparked the inception of new companies. With tenant demand expected to maintain its strength in the market, deal volume will continue on its upward trajectory resulting in decreased vacancy and increased rental rates. With vacancy expected to tighten significantly in the coming months, the market may begin to experience a demand for new developments.

Silicon Valley high-technology employment



Players: top high-tech firms

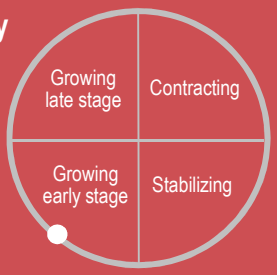
By real estate footprint

Cisco
Google
Apple
Intel
Hewlett-Packard

Position

High-tech industry

Economic cycle clock



Office property

Market cycle clock

Scorecard

Economic		rank
High-tech jobs / annual growth	188,996 / 5.0%	1/4
Percent of total jobs	24.5%	1
Number of firms	3,984	7
Venture capital funding (past 4 quarters)	$3,607 M	1
Share of U.S. total	14.6%	
College education	43.9%	6
Diversity (non-white / foreign born)	45.0% / 36.0%	3/2
Office		
Cost (average asking rent)	$31.44	5
Annual growth	-1.5%	16
Supply (vacancy rate)	23.2%	18
Demand (net absorption sf / %) (past 4 quarters)	914,029 sf / 1.6%	10 8
High-tech concentration (high-tech services vs. office jobs)	34.4%	1

Silicon Valley

Recent lease activity

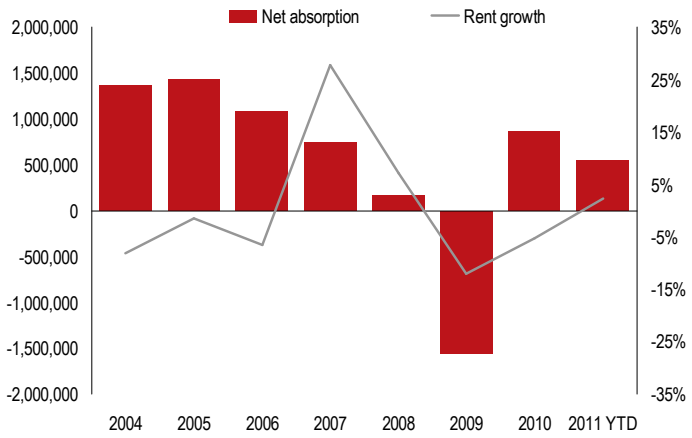
Microsoft
1020 Enterprise Way
237,000 sf

Telenav
920-950 DeGuigne Drive
175,000 sf

Box.net
4440 El Camino Real
96,000 sf

Groupon
3101 Park Boulevard
40,000 sf

Net absorption vs. rent growth



Top headlines

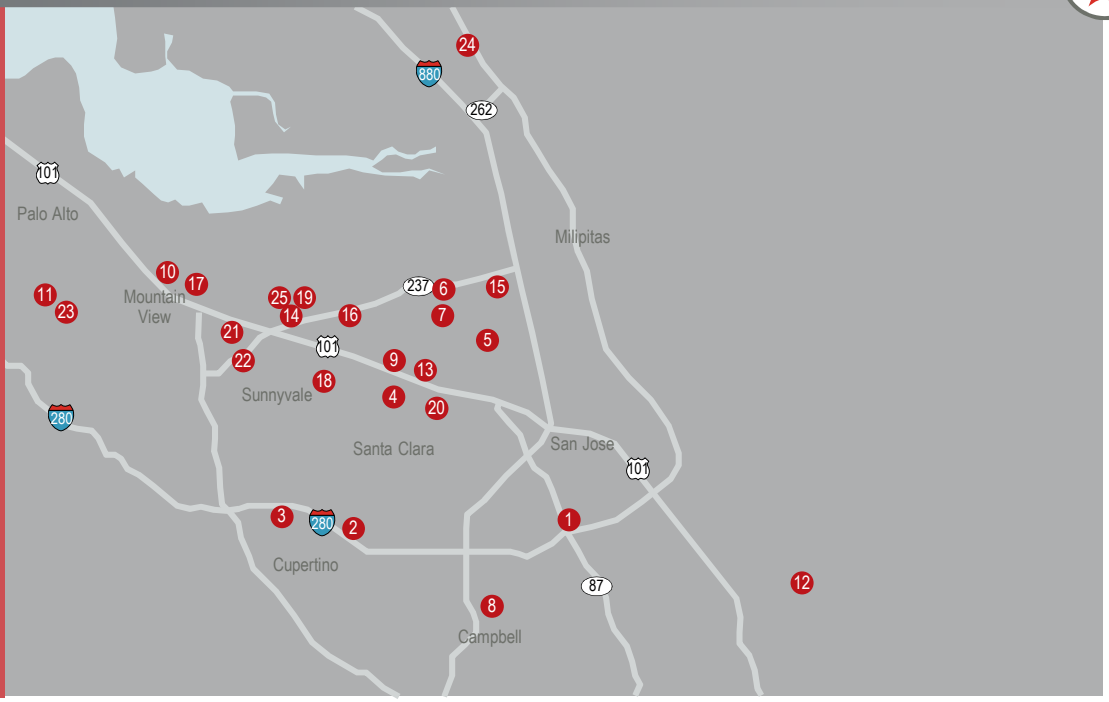
Silicon Valley

- Apple planning massive 'spaceship' campus that can house 12,000 employees
- Google+ challenges Facebook, estimated to have 10 million users within first month of launch
- The rise of tablet computers: Tablets expected to outpace laptop sales as early as next year
- Silicon Valley and San Francisco ranked the top two most social media savvy cities by NetProspex

Top Silicon Valley high-technology firms by real estate footprint

Alphabetical order:

1. Adobe
2. Agilent Technologies
3. Apple
4. Applied Materials
5. Broadcom
6. Brocade
7. Cisco
8. eBay
9. EMC
10. Google
11. Hewlett-Packard
12. Hitachi GST
13. Intel
14. Juniper Networks
15. KLA Tencor
16. Marvell Semiconductor
17. Microsoft
18. National Semiconductor
19. NetApp
20. nVidia Corporation
21. Symantec
22. Synopsys
23. VMware
24. Western Digital
25. Yahoo!



Baltimore

Impact

High-tech tenants serving the federal government are relocating to submarkets in Baltimore as a result of the opening of the Defense Information Systems Agency's (DISA) headquarters at Fort Meade. Office space near Fort Meade continues to be at premium as high-tech based tenants in National Business Park sign deals at rates almost 30 percent higher than the market average.

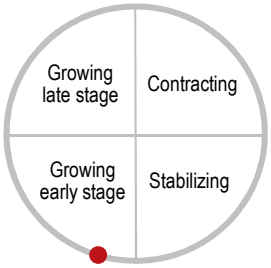
Overview

Base Realignment and Closure (BRAC), a reallocation of military personnel, and the resulting influx of government workers and contractors to Fort Meade and Aberdeen Proving Grounds have dominated high-tech trends in the Baltimore region. Local officials that expected a surge of development associated with BRAC now anticipate steady growth through the coming years as contractors gradually relocate to facilities adjacent to their clients.

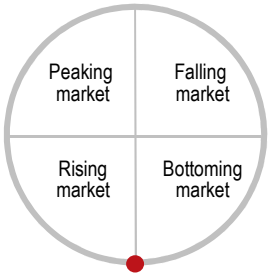
Outlook

The establishment of the DISA will provide almost limitless growth potential, leading some to predict that the area surrounding Fort Meade will become a hub for cyber security contractors and high-tech firms developing such products and services, driving demand for office space.

High-tech industry
Economic cycle clock



Office property
Market cycle clock



Players: top high-tech firms
By real estate footprint

Computer Sciences Corporation
SAIC
Micros Systems

Scorecard

Economic		rank
High-tech jobs / annual growth	30,760 / 9.0%	15/2
Percent of total jobs	3.3%	13
Number of firms	2,398	12
Venture capital funding (past 4 quarters)	$221.1 M	14
Share of U.S. total	0.9%	
College education	34.2%	13
Diversity (non-white / foreign born)	37.8% / 8.1%	6/16
Office		
Cost (average asking rent)	$22.40	14
Annual growth	1.1%	7
Supply (vacancy rate)	15.5%	5
Demand (net absorption sf / %) (past 4 quarters)	2,011,461 sf / 2.9%	5 1
High-tech concentration (high-tech services vs. office jobs)	11.1%	11

Recent lease activity

Computer Sciences Corp
6721 Columbia Gateway Drive
83,000 sf

eBay
9690 Deereco Road
55,000 sf

Zenimax
101 Schilling Circle
36,000 sf

Infoblox
900 Bestgate Road
15,000 sf

Chicago

Impact

While small high-tech companies weathered the economic storm and emerged relatively unscathed, large and well-established firms felt the impact of the recession more deeply, and cut office space accordingly. Though the sector is experiencing overall growth in Chicago, it has not yet reached a large enough critical mass to impact office market conditions in a metro containing 235 million square feet of space.

Overview

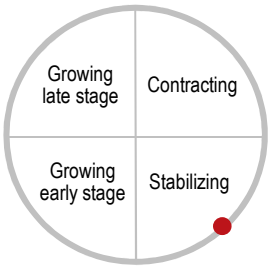
The high-tech industry encompasses a broad range of companies from large household names to start-ups. On the heels of the success of Groupon, a new wave of creative companies is beginning to make an imprint on the market and bring a great deal of attention to the Chicago high-tech scene. New social media, digital marketing, and application/web development companies continue to pop up and grow throughout the area, most notably in the CBD.

Outlook

The influx of venture capital will draw more entrepreneurs to Chicago who can leverage a relatively low cost real estate market with ample talent. Additionally, the announced acquisition of Motorola Mobility by Google could bolster start-up activity and lend to the creation of a mobile high-tech cluster.

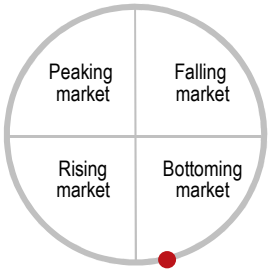
High-tech Industry

Economic cycle clock



Office property

Market cycle clock



Players: top high-tech firms

By real estate footprint

Motorola Mobility
Tellabs
Groupon

Scorecard

Economic		rank
High-tech jobs / annual growth	86,438 / -1.7%	5/16
Percent of total jobs	2.9%	16
Number of firms	8,343	1
Venture capital funding (past 4 quarters)	$862.1 M	7
Share of U.S. total	3.5%	
College education	34.6%	12
Diversity (non-white / foreign born)	37.0% / 19.1%	7/8
Office		
Cost (average asking rent)	$26.81	9
Annual growth	-0.9%	13
Supply (vacancy rate)	19.9%	14
Demand (net absorption sf / %) (past 4 quarters)	-240,899 sf / -0.1%	17 17
High-tech concentration (high-tech services vs. office jobs)	6.3%	15

Recent lease activity

Groupon
600 West Chicago Avenue
220,000 sf

Paylocity
Commerce Point II
71,000 sf

ST Microelectronics
Woodfield Financial Center
27,000 sf

Intuit
95 W Algonquin
25,000 sf

Los Angeles

Impact

The entertainment industry has increasingly become more intertwined with high-tech, resulting in significant growth among high-tech companies within the market. Santa Monica, a key location for high-tech firms serving the entertainment and media business, has experienced the sharpest year-over-year vacancy decline in Los Angeles as a result of recent leasing activity by these firms.

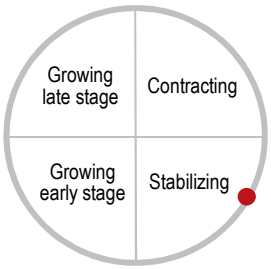
Overview

Although the overall office market continues to stabilize in the eye of a recovering economy, glimmers of optimism have emerged in small areas as high-tech start-ups generate demand. Additionally, Silicon Valley giants looking to capitalize on the synergy between media, entertainment, and high-tech are expanding their presence in Southern California. As a result, many large blocks of space have been rapidly absorbed in recent months. With the majority of "creative" office space located in Santa Monica, landlords are experiencing an increase in competition among tenants and have responded by raising rental rates.

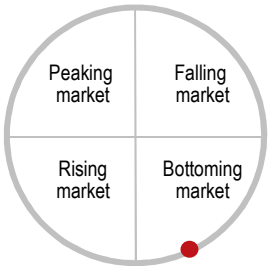
Outlook

The interplay between entertainment and high-tech will likely form new niche markets in Los Angeles and sustain overall market health. Submarkets with high-tech clusters are expected to outperform over the next 12 months.

High-tech industry
Economic cycle clock



Office property
Market cycle clock



Players: top high-tech firms

By real estate footprint

Electronic Arts
Activision
Google

Scorecard

Economic		rank
High-tech jobs / annual growth	100,510 / -1.9%	3/17
Percent of total jobs	3.0%	15
Number of firms	5,433	3
Venture capital funding (past 4 quarters)	$953.1 M	6
Share of U.S. total	3.8%	
College education	28.4%	16
Diversity (non-white / foreign born)	46.8% / 34.5%	2/3

Office		
Cost (average asking rent)	$31.40	6
Annual growth	-1.4%	15
Supply (vacancy rate)	18.4%	12
Demand (net absorption sf / %) (past 4 quarters)	-862,590 sf / -0.5%	18 18
High-tech concentration (high-tech services vs. office jobs)	5.2%	18

Recent lease activity

Google
340 Main Street
68,000 sf

Riot Games
2450 Broadway Street
47,000 sf

OTX Corporation
10567 Jefferson Boulevard
33,000 sf

Sony
4499 Glencoe Avenue
22,000 sf

Philadelphia

Impact

Rooted with strong ties to the life sciences industry, the high-tech industry is sizable, but simply not large enough or growing to make an impact in Philadelphia as seen in surrounding areas. While innovation and collaboration are key components driving growth in other segments of the technology industry, mobile, web, cloud, and software have not yet taken a firm hold in the office market.

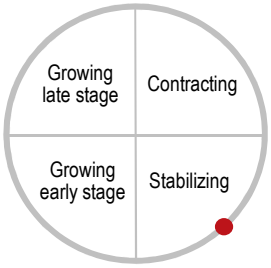
Overview

Located between more prominent high-tech hubs in Washington, DC and New York City, Philadelphia maintains its stronghold within the pharmaceutical and biotech industries. Having only marginally participated in the dot-com boom of the late 1990s, the real estate market was left relatively unscathed when tech went bust. Today, Philadelphia has yet to capture a piece of the growth mechanism that is taking hold in other major office markets across the country.

Outlook

While growth among high-tech firms in Philadelphia has not yet made headlines, other initiatives to drive growth in the broader technology industry could provide the catalyst needed for Philadelphia to enter high-tech in a bigger way, giving way to a new source of demand within the real estate market.

High-tech industry
Economic cycle clock



Office property
Market cycle clock

Players: top high-tech firms

By real estate footprint

Siemens

SunGard Data Systems

Analytical Graphics

Scorecard

Economic		rank
High-tech jobs / annual growth	34,321 / -2.3%	13/18
Percent of total jobs	5.4%	9
Number of firms	2,257	14
Venture capital funding (past 4 quarters)	$376.0 M	11
Share of U.S. total	1.5%	
College education	44.9%	4
Diversity (non-white / foreign born)	13.1% / 8.1%	16/16
Office		
Cost (average asking rent)	$24.16	13
Annual growth	1.0%	8
Supply (vacancy rate)	16.4%	8
Demand (net absorption sf / %) (past 4 quarters)	1,163,092 sf / 0.8%	9 14
High-tech concentration (high-tech services vs. office jobs)	12.8%	7

Recent lease activity

JandB Software
510 E Township Line Road
31,000 sf

USA Technologies
100 Deerfield Lane
17,000 sf

Avanceon
180 Sheree Boulevard
17,000 sf

Beyond.com
1060 1st Avenue
16,000 sf

Pittsburgh

Impact

When steel giants disappeared from the landscape, high-tech became one of the market's strongest industries. Economic and real estate fundamentals are stronger than in many other areas around the country because of the success of the high-tech industry.

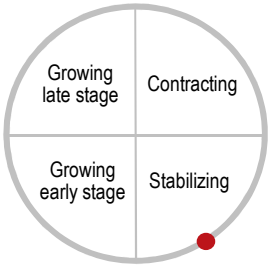
Overview

The region's prominent education institutions all contribute to the growth of the high-tech cluster. Modcloth, a company that got its start in a Carnegie Mellon dorm room is one such example of the talent in the area and the evolution from start-up to rapidly expanding firm. Additionally, the Keystone Innovation Zone acts as an incubator to foster the growth of new ventures by assisting in the acquisition of office space and helping businesses to grow. Established companies such as Google and IBM have also opened locations in the market as real estate costs are lower than much of the country, and competition for talent not as fierce.

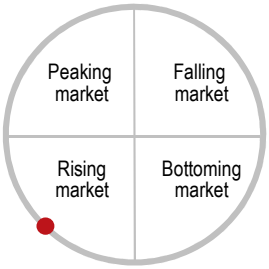
Outlook

Pittsburgh is on track to remain one of the best performing office markets in the country as a result of diversified leasing activity and demand augmented by the high-tech industry. With a variety of attractive amenities drawing and retaining talent, high-tech companies will continue to follow.

High-tech industry
Economic cycle clock



Office property
Market cycle clock



Players: top high-tech firms
By real estate footprint

Black Box Corporation

ANSYS

Ariba

Scorecard

Economic		rank
High-tech jobs / annual growth	24,176 / 0.2%	17/11
Percent of total jobs	2.6%	17
Number of firms	1,395	17
Venture capital funding (past 4 quarters)	$154.9 M	15
Share of U.S. total	0.6%	
College education	27.7%	18
Diversity (non-white / foreign born)	10.0% / 3.0%	18/18
Office		
Cost (average asking rent)	$20.11	17
Annual growth	2.1%	4
Supply (vacancy rate)	10.9%	2
Demand (net absorption sf / %) (past 4 quarters)	1,233,345 sf / 1.8%	6 4
High-tech concentration (high-tech services vs. office jobs)	5.8%	16

Recent lease activity

Smith Micro Software
5800 Corporate Drive
56,000 sf

NationalLink
500 Corporate Center Drive
23,000 sf

SmartOps Corporation
1250 Waterfront Plaza
20,000 sf

Electronics for Imaging
40 24th Street
18,000 sf

Portland

Impact

The office market is recovering from blows dealt by the recession, but high-tech industry growth is translating into increased leasing activity and positive net absorption. Several high-tech companies have announced plans to expand or invest in existing operations, which will lead to hiring and ultimately boost demand for office space.

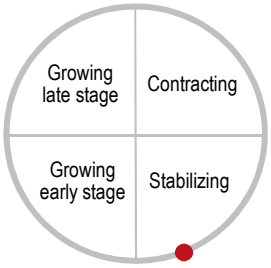
Overview

Portland's main high-tech cluster is located in Washington County, west of Portland proper, stretching from Beaverton to Hillsboro. Established high-tech giants, including Intel, fuel much of the start-up and entrepreneurship activity in the market, and attract venture capital funding. However, the market lacks a homegrown tech giant like many of its West Coast neighbors, which limits the area from attracting other companies and talent, ultimately limiting expansion within the office market.

Outlook

The presence of big-name, high-tech firms will foster start-up activity, resulting in sustained industry growth and a greater impact within the commercial real estate industry.

High-tech industry
Economic cycle clock



Office property
Market cycle clock

Players: top high-tech firms
By real estate footprint

Intel

TriQuint Semiconductor

Epson

Scorecard

Economic		rank
High-tech jobs / annual growth	52,415 / 0.8%	7/10
Percent of total jobs	6.4%	7
Number of firms	2,514	10
Venture capital funding (past 4 quarters)	$136.1 M	16
Share of U.S. total	0.5%	
College education	32.9%	15
Diversity (non-white / foreign born)	13.1% / 12.0%	16/14
Office		
Cost (average asking rent)	$20.53	16
Annual growth	-0.7%	12
Supply (vacancy rate)	12.5%	3
Demand (net absorption sf / %) (past 4 quarters)	816,346 sf / 1.4%	11 10
High-tech concentration (high-tech services vs. office jobs)	9.4%	12

Recent lease activity

Hewlett Packard
1115 SE 164th Avenue
143,000 sf

RadiSys Corporation
5435 NE Dawson Creek Drive
46,000 sf

Lionbridge Technologies
1115 SE 164th Avenue
35,000 sf

eBay
1400 SW 5th Avenue
28,000 sf

Raleigh-Durham

Impact

Emerging from its well-established biotechnology and life sciences industries, Raleigh-Durham's high-tech industry is growing into a powerful force, driving economic expansion and moving the real estate market.

Overview

Research Triangle Park, located between Duke University, the University of North Carolina, and North Carolina State University, is the premier high-tech submarket. The submarket is home to many prominent high-tech companies, including Cisco Systems and IBM, as well as burgeoning gaming companies. While venture capital funding has been lacking in the area, new high-tech accelerators have been established to seed and launch new ventures which subsequently translates into office demand and absorption.

Outlook

Raleigh-Durham is making a strong push to become a top high-tech market. With local initiatives backing the expansion of the industry, the office market will continue to expand with the expanding industry.

Players: top high-tech firms

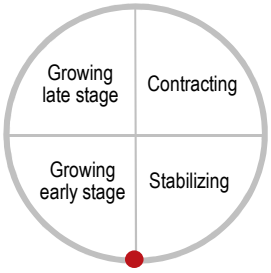
By real estate footprint

Cisco
TEKELEC
NetApp RTP

Scorecard

Economic		rank
High-tech jobs / annual growth Percent of total jobs	46,528 / 1.0% 7.7%	10/9 5
Number of firms	2,337	13
Venture capital funding (past 4 quarters) Share of U.S. total	$331.3 M 1.3%	13
College education	39.9%	10
Diversity (non-white / foreign born)	31.0% / 10.7%	9/15
Office		
Cost (average asking rent) Annual growth	$20.06 -0.3%	18 11
Supply (vacancy rate)	17.0%	10
Demand (net absorption sf / %) (past 4 quarters)	804,266 sf / 1.9%	12 3
High-tech concentration (high-tech services vs. office jobs)	13.2%	6

High-tech industry
Economic cycle clock



Office property
Market cycle clock

Recent lease activity

Parata Systems
2600 Meridian Parkway
66,000 sf

RadarFind
1500 W Perimeter Park Drive
17,000 sf

Art.com
5580 Centerview Drive
17,000 sf

Liquida Technologies
419 Davis Drive
16,000 sf

South Florida

Impact

Acting as an economic buffer since the start of the recession, high-tech companies have helped to diversify the housing-dependant industry base.

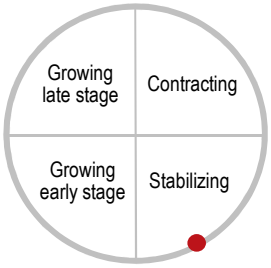
Overview

Still a small segment of the local economy, this is a growing South Florida industry base. While many high-tech companies (Microsoft, HP, and Oracle) have Latin American headquarters here, the area has also served as an incubator for companies such as IBM and Citrix. A cluster of mobile technology companies have recently formed in Broward County. RIM, Motorola Mobility (recently purchased by Google), and General Dynamics C-4 are recent arrivals that continue to attract tech firms to the area. While high-tech user expansions and start-ups have helped stabilize the Palm Beach County market, occupancy issues tied to the 1.7 million square feet former IBM campus continue to bloat vacancy.

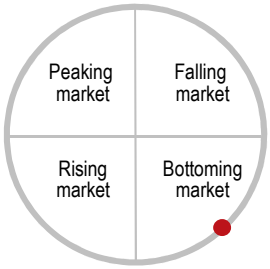
Outlook

Growth in the high-tech sector is expected to continue steadily. With ongoing initiatives and organizations focused on attracting and retaining high-tech companies, look for an increased migration of talent to new and innovative companies, leading to greater demand for office space.

High-tech industry
Economic cycle clock



Office property
Market cycle clock



Players: top high-tech firms
By real estate footprint

Citrix Systems
Amadeus
North America
Peer 1 Hosting

Scorecard

Economic		rank
High-tech jobs / annual growth	36,012 / 1.5%	12/8
Percent of total jobs	2.0%	18
Number of firms	4,784	5
Venture capital funding (past 4 quarters)	$111.2 M	17
Share of U.S. total	0.5%	
College education	28.2%	17
Diversity (non-white / foreign born)	29.1% / 36.5%	10/1
Office		
Cost (average asking rent)	$28.87	7
Annual growth	-1.7%	17
Supply (vacancy rate)	21.8%	17
Demand (net absorption sf / %) (past 4 quarters)	701,276 sf / 0.9%	13 13
High-tech concentration (high-tech services vs. office jobs)	5.4%	17

Recent lease activity

LexisNexis
Park Central North
62,000 sf

3cInteractive
Boca Colonnade II
25,000 sf

eNeighborhoods
999 Yamato Road
18,000 sf

Ultimate Software
1830 Main Street
8,000 sf

Washington, DC

Impact

Technology demand has stemmed from the U.S. federal government's defense and intelligence programs and the region's broad network of government contractors. Recently, companies such as Google and Facebook have emerged primarily for lobbying and government sales functions. DC's attractive and ever-expanding consumer base has led to a handful of social media and coupon sites emerging in recent years, which has generated new tenant demand in the region.

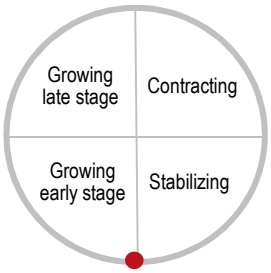
Overview

High-tech companies in the region have traditionally been drawn to the Dulles Toll Road in Northern Virginia, where large blocks of space and attractive infrastructure have attracted large users, including Microsoft, Google, and IBM. However, many start-up companies are electing to house operations in transit-oriented, high amenity locations such as Rosslyn-Ballston Corridor and Downtown DC which have a greater proximity to a younger workforce.

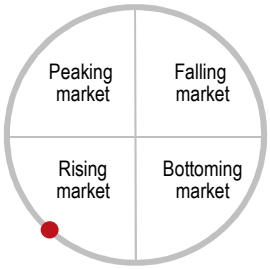
Outlook

Since most high-tech companies in the region rely on federal funding, government spending is critical to future growth. Given the importance of programs centered around cyber-security and other advanced defense and intelligence functions, it's unlikely that DC's core high-tech companies will face any spending cuts. In fact, a gradual shift of the dollars from traditional government contractors to the emerging high-tech realm will likely build demand among a more technologically advanced set of tenants in the market.

High-tech industry
Economic cycle clock



Office property
Market cycle clock



Players: top high-tech firms
By real estate footprint

SAIC, Inc.
Computer Sciences Corporation
IBM

Scorecard

Economic		rank
High-tech jobs / annual growth	22,902 / 4.8%	18/5
Percent of total jobs	5.1%	11
Number of firms	2,116	15
Venture capital funding (past 4 quarters)	$70.7 M	18
Share of U.S. total	0.3%	
College education	47.1%	3
Diversity (non-white / foreign born)	64.2% / 12.5%	1/12
Office		
Cost (average asking rent)	$35.39	4
Annual growth	3.4%	9
Supply (vacancy rate)	14.3%	4
Demand (net absorption sf / %) (past 4 quarters)	5,430,841 sf / 1.7%	1 6
High-tech concentration (high-tech services vs. office jobs)	12.2%	9

Recent lease activity

Computer Sciences Corp
8613 Lee Highway
83,000 sf

Opnet Technologies
7255 Woodmont Avenue
61,000 sf

LivingSocial
918 F Street, NW
28,000 sf

MicroStrategy Incorporated
1850 Towers Crescent Plaza
24,000 sf

Appendix

Local market employment trends

Detailed employment by market

Complete market rankings

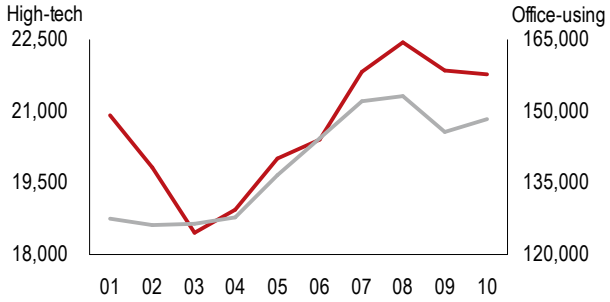
Sources and contacts

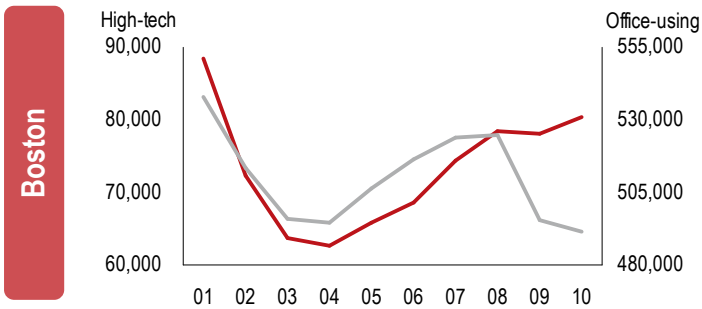
Local market employment trends

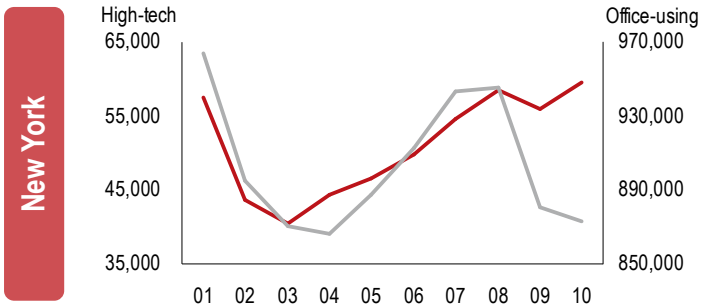
The following charts detail employment trends for the established high-tech markets in this report. High-tech services employment growth is outpacing traditional office-using employment growth in most markets.

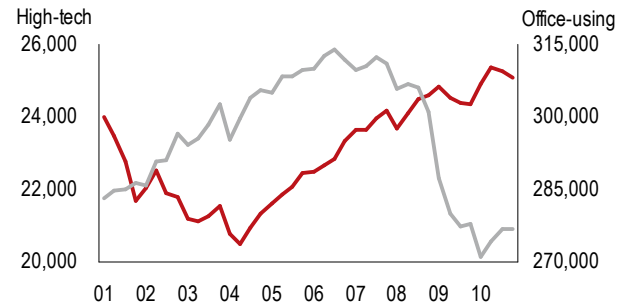
High-tech services employment

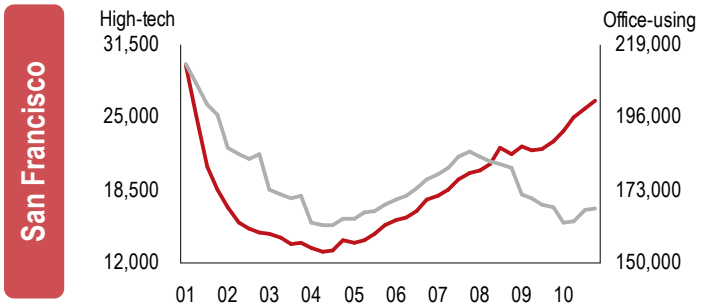
Office-using employment, less high-tech

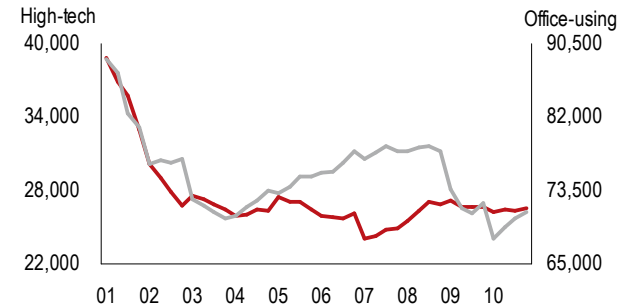


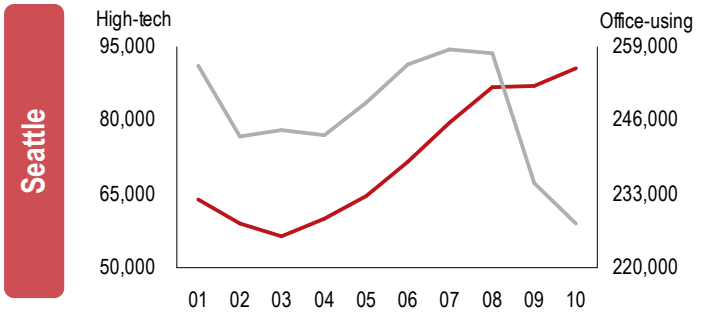


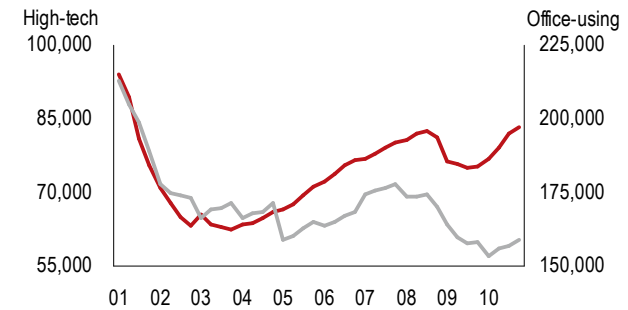










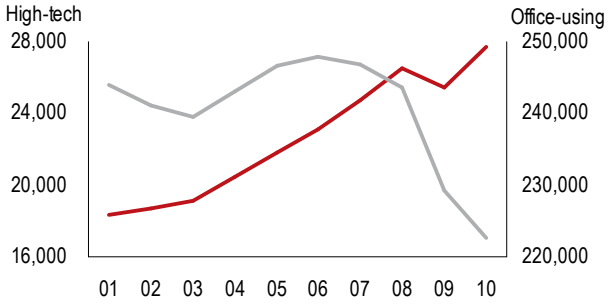


Local market employment trends

The following charts detail employment trends for the emerging high-tech markets in this report. High-tech services employment growth is outpacing traditional office-using employment growth in most markets.

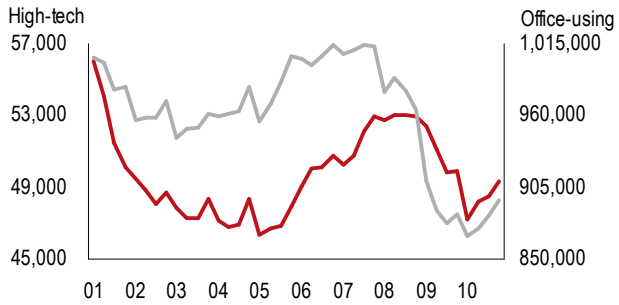
High-tech services employment

Office-using employment, less high-tech



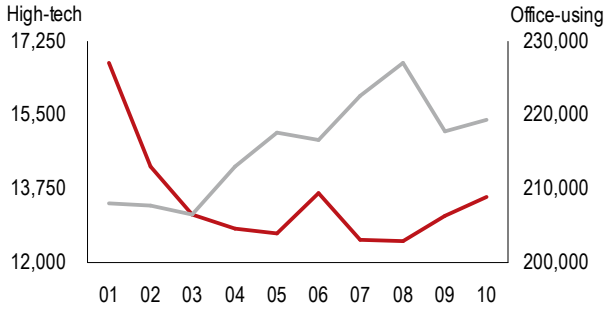
Baltimore

Chicago

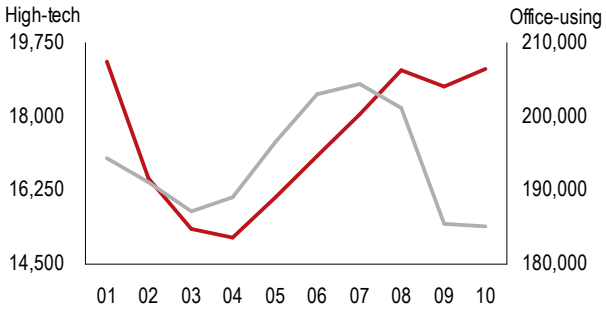


Los Angeles

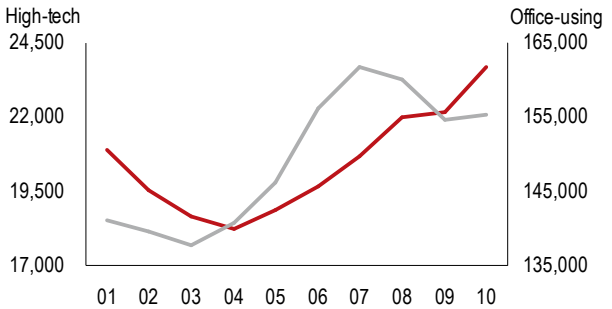
Philadelphia



Pittsburgh

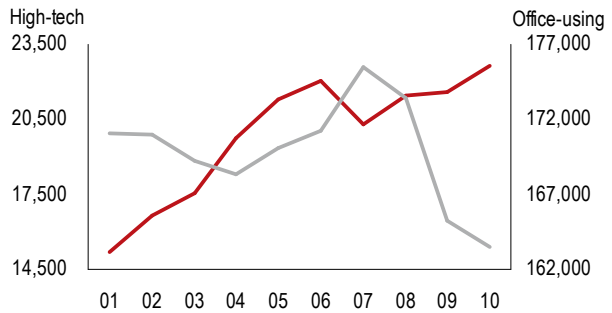


Portland



Raleigh-Durham

South Florida



Washington, DC

Detailed employment by market

Number of jobs as of 2010

	High-tech manufacturing			*High-tech services*							*Total high-tech*
	Computer & electronic products	Electrical equipment	Subtotal	Comp. sys. design & related svcs.	Data, hosting & related svcs.	Electronic shopping	Electronic auctions	Other information services	Software publishers	Subtotal	All sectors
Austin	**23,134**	**821**	**23,955**	**13,865**	**1,606**	**654**	**0**	**907**	**4,732**	**21,764**	**45,719**
% of total high-tech jobs	*50.6%*	*1.8%*	*52.4%*	*30.3%*	*3.5%*	*1.4%*	*0.0%*	*2.0%*	*10.4%*	*47.6%*	***100.0%***
Baltimore	**3,049**	**0**	**3,049**	**23,413**	**2,961**	**83**	**0**	**564**	**690**	**27,711**	**30,760**
% of total high-tech jobs	*9.9%*	*0.0%*	*9.9%*	*76.1%*	*9.6%*	*0.3%*	*0.0%*	*1.8%*	*2.2%*	*90.1%*	***100%***
Boston	**47,903**	**978**	**48,881**	**46,121**	**5,547**	**702**	**0**	**6,268**	**21,664**	**80,302**	**129,183**
% of total high-tech jobs	*37.1%*	*0.8%*	*37.8%*	*35.7%*	*4.3%*	*0.5%*	*0.0%*	*4.9%*	*16.8%*	*62.2%*	***100.0%***
Chicago	**23,279**	**5,959**	**29,238**	**42,144**	**6,598**	**1,891**	**21**	**4,020**	**2,526**	**57,200**	**86,438**
% of total high-tech jobs	*26.9%*	*6.9%*	*33.8%*	*48.8%*	*7.6%*	*2.2%*	*0.0%*	*4.7%*	*2.9%*	*66.2%*	***100%***
Denver	**13,271**	**252**	**13,523**	**27,951**	**5,261**	**1,469**	**6**	**1,793**	**9,175**	**45,655**	**59,178**
% of total high-tech jobs	*22.4%*	*0.4%*	*22.9%*	*47.2%*	*8.9%*	*2.5%*	*0.0%*	*3.0%*	*15.5%*	*77.1%*	***100.0%***
Los Angeles	**48,799**	**2,411**	**51,210**	**27,040**	**4,390**	**4,329**	**417**	**7,797**	**5,327**	**49,300**	**100,510**
% of total high-tech jobs	*48.6%*	*2.4%*	*51.0%*	*26.9%*	*4.4%*	*4.3%*	*0.4%*	*7.8%*	*5.3%*	*49.0%*	***100%***
New York	**379**	**0**	**379**	**39,831**	**3,922**	**247**	**86**	**13,884**	**1,567**	**59,537**	**59,916**
% of total high-tech jobs	*0.6%*	*0.0%*	*0.6%*	*66.5%*	*6.5%*	*0.4%*	*0.1%*	*23.2%*	*2.6%*	*99.4%*	***100.0%***
Philadelphia	**6,874**	**0**	**6,874**	**21,110**	**3,005**	**515**	**0**	**615**	**2,202**	**27,447**	**34,321**
% of total high-tech jobs	*20.0%*	*0.0%*	*20.0%*	*61.5%*	*8.8%*	*1.5%*	*0.0%*	*1.8%*	*6.4%*	*80.0%*	***100%***
Pittsburgh	**8,082**	**2,526**	**10,608**	**8,748**	**1,116**	**1,213**	**7**	**1,424**	**1,060**	**13,568**	**24,176**
% of total high-tech jobs	*33.4%*	*10.4%*	*43.9%*	*36.2%*	*4.6%*	*5.0%*	*0.0%*	*5.9%*	*4.4%*	*56.1%*	***100.0%***
Portland	**33,100**	**197**	**33,297**	**8,175**	**3,431**	**434**	**9**	**631**	**6,438**	**19,118**	**52,415**
% of total high-tech jobs	*63.1%*	*0.4%*	*63.5%*	*15.6%*	*6.5%*	*0.8%*	*0.0%*	*1.2%*	*12.3%*	*36.5%*	***100%***
Raleigh-Durham	**21,150**	**1,675**	**22,825**	**14,351**	**1,460**	**347**	**0**	**1,042**	**6,503**	**23,703**	**46,528**
% of total high-tech jobs	*45.5%*	*3.6%*	*49.1%*	*30.8%*	*3.1%*	*0.7%*	*0.0%*	*2.2%*	*14.0%*	*50.9%*	***100.0%***
San Diego	**25,221**	**499**	**25,720**	**17,029**	**880**	**1,215**	**52**	**1,738**	**4,164**	**25,078**	**50,798**
% of total high-tech jobs	*49.6%*	*1.0%*	*50.6%*	*33.5%*	*1.7%*	*2.4%*	*0.1%*	*3.4%*	*8.2%*	*49.4%*	***100%***
San Francisco	**1,207**	**0**	**1,207**	**18,904**	**585**	**748**	**0**	**3,831**	**2,461**	**26,529**	**27,736**
% of total high-tech jobs	*4.4%*	*0.0%*	*4.4%*	*68.2%*	*2.1%*	*2.7%*	*0.0%*	*13.8%*	*8.9%*	*95.6%*	***100.0%***
San Francisco Peninsula	**6,614**	**244**	**6,858**	**13,231**	**1,543**	**663**	**71**	**1,689**	**9,307**	**26,504**	**33,362**
% of total high-tech jobs	*19.8%*	*0.7%*	*20.6%*	*39.7%*	*4.6%*	*2.0%*	*0.2%*	*5.1%*	*27.9%*	*79.4%*	***100%***
Seattle	**7,776**	**229**	**8,005**	**25,328**	**2,921**	**7,812**	**59**	**5,122**	**49,490**	**90,732**	**98,737**
% of total high-tech jobs	*7.9%*	*0.2%*	*8.1%*	*25.7%*	*3.0%*	*7.9%*	*0.1%*	*5.2%*	*50.1%*	*91.9%*	***100.0%***
Silicon Valley	**105,183**	**600**	**105,783**	**47,772**	**4,586**	**766**	**0**	**17,916**	**12,173**	**83,213**	**188,996**
% of total high-tech jobs	*55.7%*	*0.3%*	*56.0%*	*25.3%*	*2.4%*	*0.4%*	*0.0%*	*9.5%*	*6.4%*	*44.0%*	***100%***
South Florida	**8,522**	**716**	**9,238**	**17,117**	**3,094**	**1,802**	**100**	**2,230**	**2,431**	**26,774**	**36,012**
% of total high-tech jobs	*23.7%*	*2.0%*	*25.7%*	*47.5%*	*8.6%*	*5.0%*	*0.3%*	*6.2%*	*6.8%*	*74.3%*	***100.0%***
Washington, DC	**138**	**121**	**259**	**18,614**	**678**	**56**	**0**	**2,901**	**394**	**22,643**	**22,902**
% of total high-tech jobs	*0.6%*	*0.5%*	*1.1%*	*81.3%*	*3.0%*	*0.2%*	*0.0%*	*12.7%*	*1.7%*	*98.9%*	***100%***
United States*	**1,129,300**	**140,000**	**1,269,300**	**1,505,000**	**240,700**	**108,000**		**161,000**	**266,000**	**2,280,700**	**3,550,000**
% of total high-tech jobs	*31.8%*	*3.9%*	*35.8%*	*42.4%*	*6.8%*	*3.0%*		*4.5%*	*7.5%*	*64.2%*	***100%***

**Electronic shopping and electronic auctions are a combined data category at the national level*

Complete market rankings

Economic

Total high-tech jobs

1. Silicon Valley (188,996)
2. Boston (129,183)
3. Los Angeles (100,510)
4. Seattle (98,737)
5. Chicago (86,438)
6. New York (59,916)
7. Denver (59,718)
8. Portland (52,415)
9. San Diego (50,798)
10. Raleigh-Durham (46,528)
11. Austin (45,719)
12. South Florida (36,012)
13. Philadelphia (34,321)
14. SF Peninsula (33,362)
15. Baltimore (30,760)
16. San Francisco (27,236)
17. Pittsburgh (24,176)
18. Washington, DC (22,902)

Ann. HT svcs. growth

1. San Francisco (16.1%)
2. Silicon Valley (10.6%)
3. Baltimore (9.0%)
4. Raleigh-Durham (6.8%)
5. New York (6.4%)
6. Washington, DC (4.8%)
7. Seattle (4.2%)
8. South Florida (4.2%)
9. Pittsburgh (3.6%)
10. San Diego (3.0%)
11. Boston (2.9%)
12. Portland (2.1%)
13. Chicago (0.4%)
14. Austin (-0.4%)
15. SF Peninsula (-0.8%)
16. Denver (-0.9%)
17. Los Angeles (-1.1%)
18. Philadelphia (-2.7%)

HT svcs. % of office emp.

1. Silicon Valley (34.4%)
2. Seattle (28.5%)
3. SF Peninsula (27.2%)
4. Boston (14.0%)
5. San Francisco (13.7%)
6. Raleigh-Durham (13.2%)
7. Austin (12.8%)
8. Philadelphia (12.8%)
9. Washington, DC (12.2%)
10. Denver (12.1%)
11. Baltimore (11.1%)
12. Portland (9.4%)
13. San Diego (8.3%)
14. New York (6.4%)
15. Chicago (6.3%)
16. Pittsburgh (5.8%)
17. South Florida (5.4%)
18. Los Angeles (5.2%)

Venture capital

1. Silicon Valley ($3,607 M)
2. Boston ($2,710 M)
3. San Francisco ($2,044 M)
4. New York ($1,589 M)
5. SF Peninsula ($1,418 M)
6. Los Angeles ($953 M)
7. Chicago ($862 M)
8. San Diego ($756 M)
9. Denver ($617 M)
10. Seattle ($507 M)
11. Philadelphia ($376 M)
12. Austin ($348 M)
13. Raleigh-Durham ($331 M)
14. Baltimore ($221 M)
15. Pittsburgh ($155 M)
16. Portland ($136 M)
17. South Florida ($111 M)
18. Washington, DC ($70 M)

College education

1. New York (57.7%)
2. San Francisco (51.1%)
3. Washington, DC (47.1%)
4. Philadelphia (44.9%)
5. Seattle (44.8%)
6. Silicon Valley (43.9%)
7. SF Peninsula (43.8%)
8. Boston (43.7%)
9. Austin (40.4%)
10. Raleigh-Durham (39.9%)
11. Denver (39.2%)
12. Chicago (34.6%)
13. Baltimore (34.2%)
14. San Diego (34.0%)
15. Portland (32.9%)
16. Los Angeles (28.4%)
17. South Florida (28.2%)
18. Pittsburgh (27.7%)

Office

Average asking rent

1. New York ($53.49)
2. San Francisco ($40.06)
3. SF Peninsula ($39.00)
4. Washington, DC ($35.39)
5. Silicon Valley ($31.44)
6. Los Angeles ($31.40)
7. South Florida ($28.87)
8. Boston ($28.42)
9. Chicago ($26.81)
10. Seattle ($26.70)
11. Austin ($26.34)
12. San Diego ($25.80)
13. Philadelphia ($24.16)
14. Baltimore ($22.40)
15. Denver ($21.82)
16. Portland ($20.53)
17. Pittsburgh ($20.11)
18. Raleigh-Durham ($20.06)

Annual rent growth

1. San Francisco (18.5%)
2. SF Peninsula (4.9%)
3. New York (2.4%)
4. Pittsburgh (2.1%)
5. Austin (1.6%)
6. Denver (1.3%)
7. Baltimore (1.1%)
8. Philadelphia (1.0%)
9. Washington, DC (0.3%)
10. Boston (0.1%)
11. Raleigh-Durham (-0.3%)
12. Portland (-0.7%)
13. Chicago (-0.9%)
14. Seattle (-1.3%)
15. Los Angeles (-1.4%)
16. Silicon Valley (-1.5%)
17. South Florida (-1.7%)
18. San Diego (-3.2%)

Vacancy rate

1. New York (10.8%)
2. Pittsburgh (10.9%)
3. Portland (12.5%)
4. Washington, DC (14.3%)
5. Baltimore (15.5%)
6. Denver (16.0%)
7. San Francisco (16.2%)
8. Philadelphia (16.4%)
9. Seattle (16.6%)
10. Raleigh-Durham (17.0%)
11. San Diego (17.6%)
12. Los Angeles (18.4%)
13. SF Peninsula (19.2%)
14. Boston (19.9%)
15. Chicago (19.9%)
16. Austin (21.3%)
17. South Florida (21.8%)
18. Silicon Valley (23.2%)

Ann. vacancy change

1. Raleigh-Durham (-310 bps)
2. New York (-170 bps)
3. Boston (-150 bps)
4. Portland (-140 bps)
5. Pittsburgh (-140 bps)
6. Washington, DC (-130 bps)
7. San Francisco (-130 bps)
8. Seattle (-110 bps)
9. Philadelphia (-100 bps)
10. SF Peninsula (-90 bps)
11. San Diego (-80 bps)
12. South Florida (-70 bps)
13. Denver (-60 bps)
14. Chicago (0 bps)
15. Baltimore (0 bps)
16. Austin (+10 bps)
17. Los Angeles (+40 bps)
18. Silicon Valley (+110 bps)

12-mo. net absorption

1. Washington, DC (5.4 msf)
2. New York (4.6 msf)
3. Boston (2.7 msf)
4. Seattle (2.3 msf)
5. Baltimore (2.0 msf)
6. Pittsburgh (1.2 msf)
7. San Francisco (1.2 msf)
8. Denver (1.2 msf)
9. Philadelphia (1.2 msf)
10. Silicon Valley (0.9 msf)
11. Portland (0.8 msf)
12. Raleigh-Durham (0.8 msf)
13. South Florida (0.7 msf)
14. San Diego (0.4 msf)
15. SF Peninsula (0.4 msf)
16. Austin (0.4 msf)
17. Chicago (-0.2 msf)
18. Los Angeles (-0.8 msf)

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Real value in a changing world

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Sources used in this report:

Employment data
National: Bureau of Labor Statistics, current employment statistics
Non-California Markets: Bureau of Labor Statistics, quarterly census of employment and wages
California Markets: California Economic Development Department, quarterly census of employment and wages

Demographic
United States Census Bureau

IPO
Renaissance Capital

Venture capital
PriceWaterhouseCoopers MoneyTree

Real estate
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