

The Future Of The Office Sector

In This Issue

- ◆ *The Future Of Work*
- ◆ *The Future Of Office Space*
- ◆ *Placing Your Bets For 2020 And Beyond*
- ◆ *Closing Comments*

Friends & Colleagues:

If you don't change direction, you will inevitably end up where you are going. However, at the end of the day, facts do not change...people change. Today one of the most remarkable changes is occurring within the office sector. It is not only transforming workplace environments, it is reinventing the way office buildings are developed, how office space is configured and how the traditional office is giving way to a new, collaborative workplace setting. This inevitable change is underway and accelerating. From Apple's 2.8 million-square-foot campus, to Microsoft's 125-building, state-of-the-art smart grid campus to Twitter's new Mid-Market digs in San Francisco, the shift away from traditional office space to workforce identity-based designs is growing rapidly. **Between 2013 and 2020, the office sector will struggle between "the-way-it-has-always-been" landlords and "the-way-it-needs-to-be" tenants.**

This hockey stick acceleration of "required" not "needed" change will occur when the aging, decision-making Baby Boomers (both as tenants and landlords) retire, get out of the way or recognize that tomorrow will be nothing like today. As Yogi Berra said, "The future ain't what it used to be." **The Great Generational Transfer of Power and Office Space utilization is underway.** The in-power Boomers will give way to the connective channel of expectations of the Millennials. From fixed space to collaborative space, from working in the office to working remotely and from 9-5 to 24/7 work schedules, this generational transfer is having a major impact on office space design and demand.

The new digital workforce natives view office space as a connective platform, not as a physical location. The massive deleveraging and restructuring of Corporate America emanating from the 07 – 09 recession, combined with the Great Generational Transfer of Power, according to Dr. Norman Miller of the University of San Diego and other research by CEL & Associates, Inc., **may have created 20% or more "excess space" from the existing U.S. office space inventory.**

While the future is truly unfolding daily before our eyes, this edition of *Strategic Advantage* will examine the future of office space. It will be important to remember that everyone needs to think about the future...it will come soon. It is clear from the evidence that **some of the greatest opportunities, frustrating challenges and unforeseen surprises will occur in the office sector.** However, as Albert Einstein stated, "The distinction between the past, present and future is only a stubbornly persistent illusion."

The Great Generational Transfer				
Generation	View Of Work	View Of Work Environment	View Of Office Space	Square Feet Per Worker
Baby Boomers 81 million (1946 - 1964)	"About to retire...not about to change."	"I want the trappings of success."	Dedicated office with title-based amenities.	350 Square Feet
Gen Xers 61 million (1965 - 1976)	"Flexible hours for more personal TO."	"I want more money, portable skills and to work on my own."	Cube space with external amenities.	250 Square Feet
Millennials 85 million (1977 - 1996)	"Meaningful hours...no schedule."	"I want teamwork, personal growth and opportunities."	Collaborative space with internal amenities.	<150 Square Feet

Source: CEL & Associates, Inc.

The Future Of Work

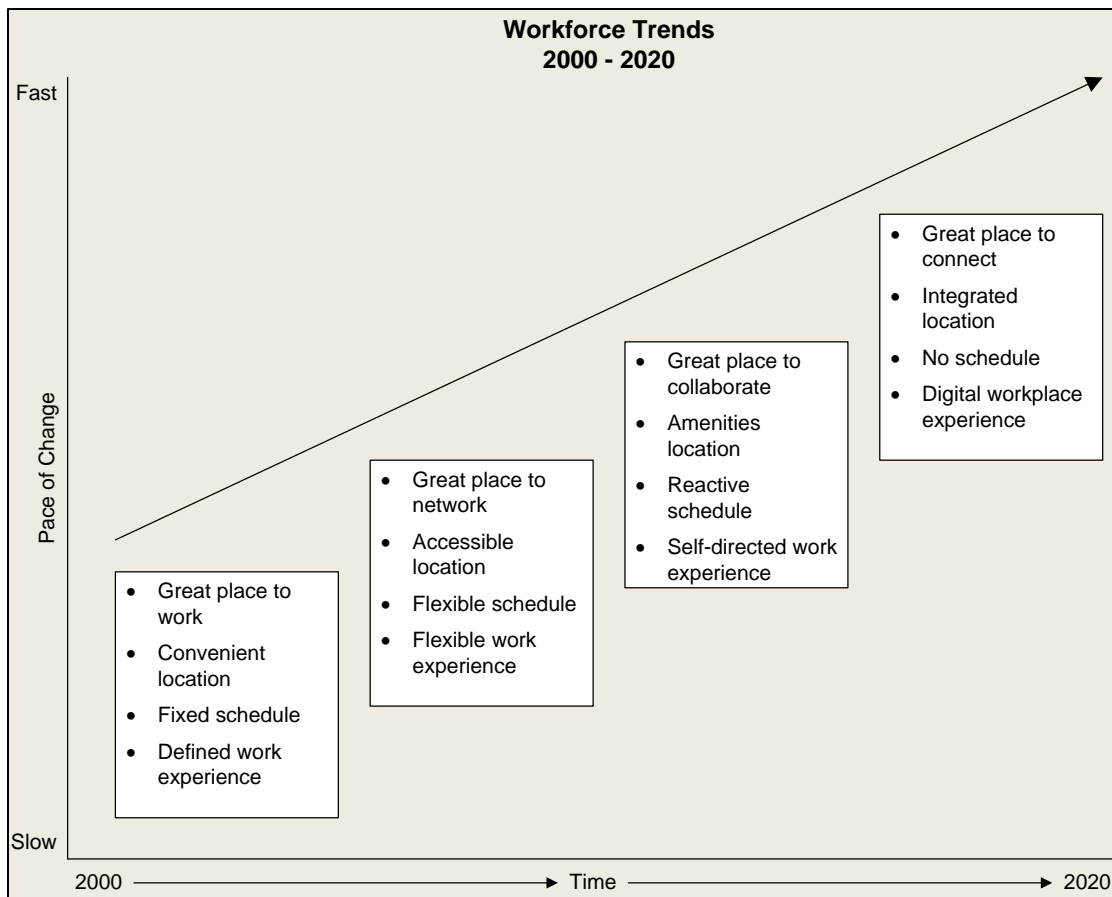
It is no secret that companies across the U.S. are restructuring, shrinking, consolidating and re-engineering their business practices. Non-core functions, such as IT, accounting, human resources, marketing and legal are being outsourced. A significant percentage of outsourced jobs have been to lower cost locations (off-shoring), Independent Contractors (now nearly 8% of the U.S. workforce) and to lower cost providers. The need for centralized corporate facilities has given way to an increasing web of off-site employees, just-in-time suppliers/vendors and customers.

Because of the volatile and ever-changing nature of customers, corporations are placing talent closer to their customers and away from the central office. Travel budgets are being reduced and/or tightly controlled, and the use of linking technologies (Skype, GoToMeeting, etc.) requires a laptop, not an office, to connect. **The new office of the future is an iPad or Tablet, not a cubicle.** However, the future of work requires collaboration, transparency and new business practices that support the diverse needs of tomorrow's company.

The fixed office is giving way to a workplace environment that encourages and is conducive to open communications and collaborative technologies. Today Baby Boomers make up 37% of the workforce, while the Millennials comprise 25%. **By 2020, 46% of the U.S. workforce will be Millennials...**and it is these Millennial Generation employees who are changing the nature of work and workplace environments. By 2025, nearly 50% of the Baby Boomers will be out of the workforce.

Not surprisingly, 70% of today's college students believe it is *unnecessary* to be in the office on a regular basis. Nearly 30% of today's college students feel it is their "right" rather than a "privilege" to work remotely. **Tomorrow's office workers want job and location flexibility.** Millennial workers grew up with the Internet, cell phones, texting, Facebook, YouTube and Skype and are now setting the workplace behavioral trends that are becoming a tsunami in the use and design of office space.

However, the best indicator of how the workplace environment is changing is the recognition that unoccupied rentable space has become a tenant priority. Did you know that **the average individual workspace is occupied only 55% of the time in a normal work day, or less than 18% of a total "leased space day."** Between 2013 and 2018, the average white collar worker will spend only 30% of his or her time working out of a central office. The Millennial Generation workers embrace workplace autonomy and flexibility but value some of the traditional aspects of an "office environment." However, one fact remains...too much office space goes unused in a typical workday.



Source: CEL & Associates, Inc.

Next-generation workers want mobility (79%), and nearly all (96%) want an environmentally friendly or aware workplace. What percentage of today's over 12 billion square feet of office space is LEED or Energy Star certified? (Less than 5%.) **Workers of the future want non-traditional office settings (i.e., coffee shops, hotel lounges and by-the-hour meeting locations).** Working collaboratively in non-traditional settings within a now-24/7 work week will be challenging for owners of just-the-opposite office buildings.

According to a survey by Deloitte, of 1,400 CFOs, **46% of respondents replied that telecommuting is second only to compensation as the best way to attract talent. By 2016, 43% of the U.S. workforce (63 million or so) is expected to telecommute.** Between 1997 – 2010, there was a 35% increase in the number of people working from home (13.4 million people now work at least one day per week from home). Approximately 20% of American Express workers are considered "Club Employees." The desire for more work flexibility means working "beyond normal office hours" and "in non-traditional office settings" using "collaborative/linking technologies."

Forty percent of college students in a recent Cisco study "would accept a lower-paying job" if the employer offered "more flexibility with device choice, social media and mobility." Next-generation employees (25%) have said "the absence of remote access would influence their job decisions." When the Baby Boomers were starting their careers, they would "work anywhere for anything at any time needed." **Nearly 25% of today's college students feel that their productivity would increase if they were allowed to work from home or remotely.** Tomorrow's workers expect to work remotely (seatback screens on airplanes, mobile devices, car Internet screens, PDAs, iPads and yes, even Google Glasses). The next-generation workers value family, relationships and home life differently than previous generations.

What all these changes mean to office space is clear. The redistribution of work away from the traditional corporate setting will mean less demand for office space. The emergence of the mobile

and contingent workforce means less need for office space dedicated to non-core functions. The challenge to recruit, motivate and engage the new, un-tethered workforce will mean a group need for “magnet” and “collaborative” office space facilities. Owners of office buildings cannot assume that the work practices in a collocated workplace will work in the new world of office space utilization.

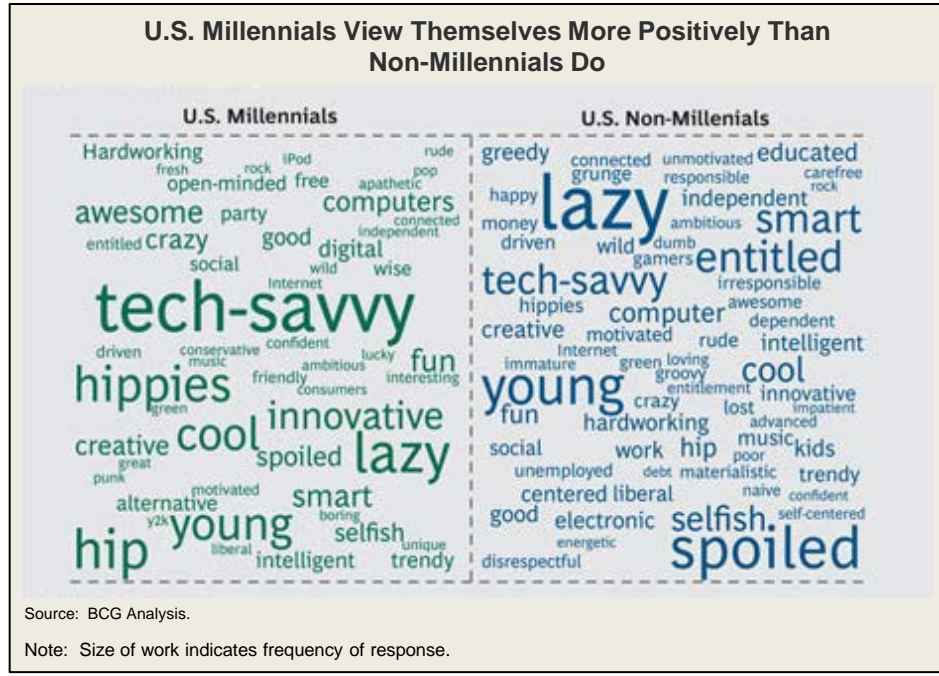
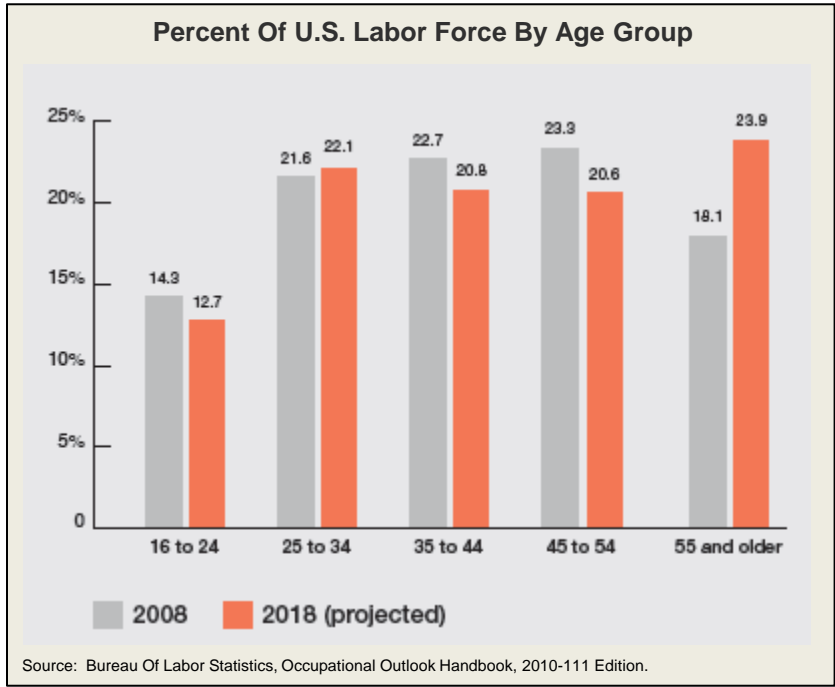
The Future Of Office Space

The emergence of alternate workplaces (non-assigned), telecommuting and mobile work stations will mean less demand for traditional office space. The emergence of “free addresses” or “non-territorial offices” has been

the norm for road warriors, consultants, acquisition specialists, advisors, capital markets experts and investment bankers. Hotelling, huddle rooms, bump-out rooms, bench space and club spaces are becoming the norm. **If actual space utilization is “at best” 50% during normal business hours, why lease so much more space that is vacant half the time?** A recent survey by the International Facility Management Association (IFMA) of 950 companies nationwide, found 60% of respondents had some “unassigned” work spaces in their offices. **GlaxoSmithKline has stated that it saved nearly \$10 million a year in occupancy costs at its Research Triangle Park in North Carolina simply by shifting to unassigned seating.** GSA’s Chief Asset Officer, Gavin Bloch, has spoken about the agency’s mandate to “increase teleworking among employees and dramatically increase density across the 370 million square feet currently occupied by 1.1 million Federal workers.

In the office of tomorrow, employees will likely work in neighborhoods. GlaxoSmithKline found email traffic dropped by more than 50%, while decision-making accelerated by 25% when workers were able to meet informally.

PricewaterhouseCoopers has a desk reservation system. CBRE is moving to an unassigned workplace environment called CBRE Workplace 360. While post-cubicle offices began to show up around a decade or so ago, the current reconfiguration of office space is creating a boom for office furniture suppliers. In 2013, analysts believe sales of office furniture will be among the best in nearly a decade (\$21.5 billion up 4% from 2013 totals). As one office furniture salesman stated,



“We used to sell furniture and now we are selling interiors.” Herman Miller, who invented the cubicle in the 1960s, continues to update the “Action Office” to replace the vacant cubicle. According to research conducted by Herman Miller, **cubicles are used (occupied) a little more than a third of the workday, and individual offices can sit empty 80% of the time.**

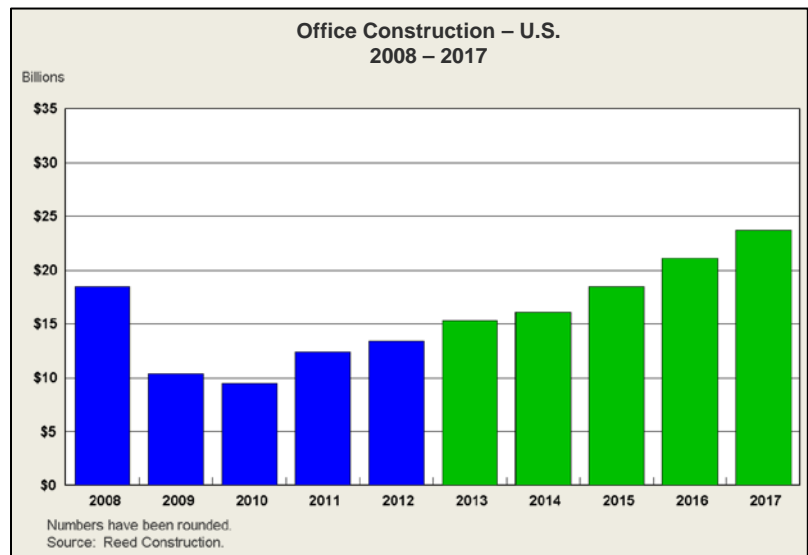
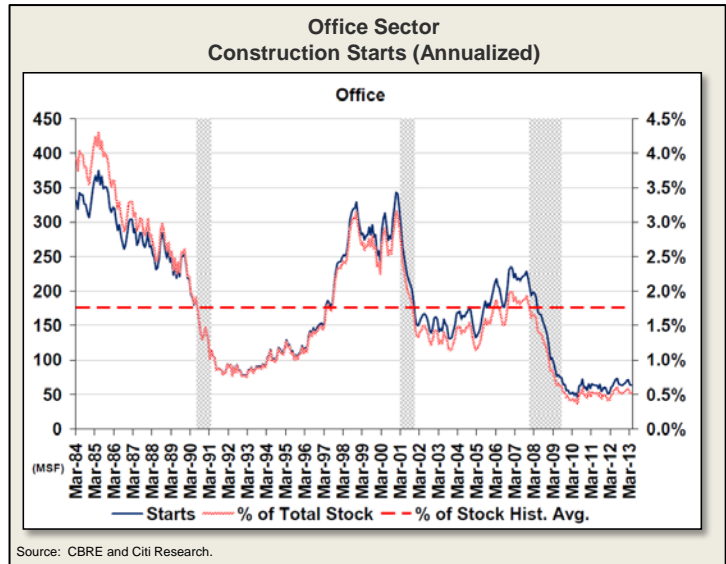
Tech companies are leading the way to the office of the future. Plantronics, NextSpace, and WeWork are creating co-working environments. There are now 90,000 co-workers nationwide. These workers are employed by larger firms who do not dedicate office space for a task or function that may not be “forever.” **Tenants using**

75,000 square feet or more (occupiers of nearly 28% of office space) have been the eager adapters of non-dedicated space. According to Property Portfolio Research, the “average size of space leased has declined 21% during the past 10 years.”

Of the home-based workers, more (59.5%) are now working in the private sector. The majority of smaller tenants (less than 5,000 square feet) still prefer dedicated offices as they outsource non-core functions. The recession of 07-09 not only motivated office tenants to improve work processes and become more efficient...it also caused many to question the use of space and the need for additional space. **Currently office space vacancy in the U.S. is around 17%, and this percentage is not expected to get below 13% until 2019-2020.** Blame it on technology, the recession, improved business practices, workplace re-engineering or the Millennials...one fact remains clear...**the U.S. has an abundant supply of excess office space.**

San Francisco, at and near the epicenter of new office space design, used to average four workers per 1,000 square feet. By 2008, that number had dropped to five per 1,000 square feet. Today **that ratio is approaching seven workers per 1,000 square feet.** Consequently parking becomes a problem unless the area has a well-designed and efficient mass transit system.

The average square feet per employee has declined dramatically. **From over 320 – 340 square feet per employee to 185 square feet per employee today, it is expected to head to around 100 square feet per employee by 2020.** Interestingly, based on anecdotal evidence, Baby Boomers (who are in positions of leadership and power) tend to average 350 square feet per person. Gen Ys who are in mid-management positions tend to occupy around 250 square feet per person, while the Millennials tend to need less than 150 square feet per person.



Growing Industry Sectors

- Industries Serving Seniors
- Software Development
- Healthcare
- Life Sciences/Biotech
- Technology
- Government/Government Related
- Defense/Security
- Communications
- Trade/Logistics
- Data Centers
- Research & Development
- Full Service Grocery
- Personnel Management
- Consulting
- Electronic Media
- Wireless Technology
- Nanotechnology
- Cloud Technology
- Advanced Robotics
- Energy Storage
- Food Distribution Logistics
- Waste Management
- Emerging Technologies
- Colleges/Universities/Education
- Accounting
- Science
- Green Industries/Clean Tech
- Pharmaceutical
- F.I.R.E.
- Entertainment
- Energy & Alternative Energy
- Internet-Based Entities
- Food Service/Agricultural
- Computer Programming
- Nonprofits
- Medical Devices
- Network Security
- 3D Printing
- Next-Gen Genomics
- Advanced Materials

Source: CEL & Associates, Inc.

Will all office buildings be able to convert to the office space of the future? The answer is “No.” I expect that **the number of build-to-suit opportunities for consolidating companies will accelerate.** Newer buildings will need some refurbishing. However, plain vanilla, multi-tenant office buildings in the suburbs will struggle. **The U.S. does not need more office space, it needs a new kind of office space.** Landlords must shift from renting space to featuring productive space. However, downsizing is here to stay. **The U.S. may have a 10-year or more supply of “excess” office space, and demand for office space will grow at a much slower pace through 2030.**

Mid-Size Tenants Want...

- ✓ Right-To-Be-Wrong Space
- ✓ Adaptable / Flexible Space Design
- ✓ Proximity To Clients, Referral Sources & Transit Centers
- ✓ Greater Workplace / Space Efficiencies
- ✓ Proximity To Skilled Contingent Workforce
- ✓ Greater Assistance / Services From Building Manager
- ✓ Proximity To Vendors & Amenities

Source: CEL & Associates, Inc.

Large Tenants Want...

- ✓ Corporate Campus / Build-To-Suit / Building Branding
- ✓ 24/7 City Locations
- ✓ Green / Environmental Buildings & Practices
- ✓ Proximity To Knowledge-Worker Talent
- ✓ Protective Environment
- ✓ Built-In / Adjacent Amenities
- ✓ Proximity To Major Airport

Source: CEL & Associates, Inc.

Major Office Shifts Are Underway

From...

- ❑ Managing Four Walls
- ❑ Dedicated Offices
- ❑ Locked Doors
- ❑ Work From Offices
- ❑ Face-To-Face Meetings
- ❑ Fixed Walls
- ❑ Attached Workforce
- ❑ Controlling Boomers
- ❑ Office Buildings
- ❑ Old Technologies
- ❑ 9:00 to 5:00 Office Day

To...

- ❑ Managing Inside The Four Walls
- ❑ Unassigned Work Space
- ❑ Collaborative Space Designs
- ❑ Work Remotely
- ❑ Virtual, Skype, GoToMeeting
- ❑ Movable Walls
- ❑ Untethered Workers
- ❑ Collaborative Millennials
- ❑ Workplace Environments
- ❑ New Technologies
- ❑ 24/7 Workplace

Placing Your Bets For 2020 And Beyond

If you want to “be in the game,” owners of and investors in office buildings must focus on the 12 criteria listed in the chart below. Locations near: colleges and universities (i.e., near an educated workforce); creative class cities and business friendly states; areas where around one-third of the workforce is 25-44 years of age; and markets where only 10% of residents are 65 years and older. Per capita incomes should be \$45,000 – \$55,000 and the percent of households earning over \$100,000 annually must be 25% - 30%.

Winning Criteria For 2020 Office Building Investing

Presence Of:

1. Excellent colleges and universities.
2. Excellent healthcare facilities.
3. Full-service airport.
4. Only 10% of the residents are age 65 or older.
5. Perceived economic freedom.
6. An embraced mass transit system.
7. Job creators and creative class enterprises.

Presence Of:

8. Professional sports team(s).
9. Population consisting of: 33% of residents are 25-44 year olds.
10. Workforce housing that is affordable and proximate to community amenities.
11. Safe, secure and quality elementary, middle and high school facilities.
12. Population consisting of: 50% of residents with bachelor degrees or higher.

Investing Criteria Score Card

11 - 12	Do It Now - No Partners
9 - 10	Do It With Partners
7 - 8	Do It For Fees & Promote
5 - 6	Do It For Fees
< 5	Refer It To A Competitor



The 16 cities on the chart “2020 Best Bets For Office Investment” are “Best Bid” cities for office building owners through 2020. But I like several Edge Cities, Growing Metros and Sleeper Cities. Opportunities are everywhere, but finding them requires a new way of underwriting, analysis and insights into the emerging behavioral patterns of office workers. However, it is important when analyzing an office market to use 150 – 175 square feet per employee as the emerging norm.

2020 Best Bets For Office Investment

- Austin, Texas
- Boulder, Colorado
- Portland, Oregon
- San Francisco, California
- Silicon Valley, California
- Dallas, Texas
- Manhattan, New York City
- Boston / Cambridge, Massachusetts
- Houston, Texas
- Seattle / Bellevue, Washington
- Raleigh, North Carolina
- Nashville, Tennessee
- Salt Lake City, Utah
- Denver, Colorado
- Chicago, Illinois
- Washington, D.C.

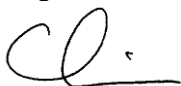
Also watch for Sleeper City opportunities such as Pittsburgh, Oklahoma City, San Diego, Santa Monica, Nashville, Minneapolis and Rockville, among others.

Closing Comments

Benjamin Franklin said, “When in doubt, don’t.” Goethe mirrored those sentiments decades earlier when he stated, “Doubt grows with knowledge.” In the office sector, there is no reason to doubt the inevitable. From a changing workforce to changing workplace environments and from changing patterns of how we work to changing patterns of where we work will have major impact on the office sector. While there will be many geo-centric, industry-centric and unique product-centric opportunities over the next 10 to 20 years, **owners and investors in office buildings must change their perspectives or be left to wonder what went wrong.** As Robert Louis Stevenson said, “Don’t judge each day by the harvest you reap but by the seeds that you plant.” Hopefully I have planted a few seeds to provoke thought, debate, review, discussion and a new way of examining the future of the office sector.

I would welcome comments, insights or ideas, please email them to newsletter@celassociates.com.

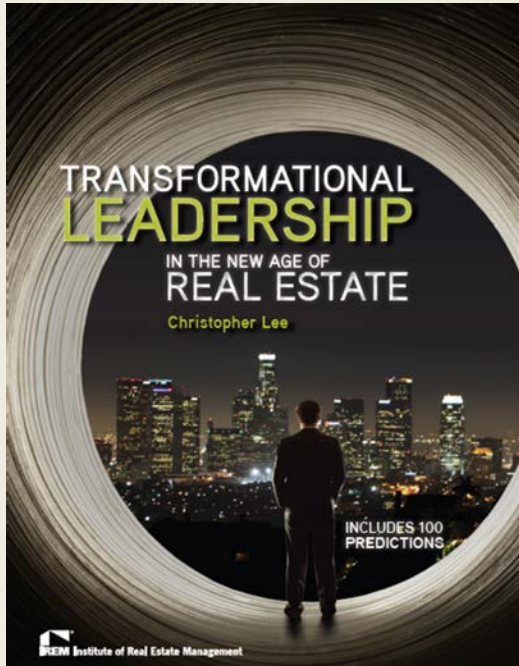
Regards,



Christopher Lee

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- Finding a long-term source of capital to facilitate growth.



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"The Times...They Are A' Changing" Eight Key Strategies for 2013

<http://www.celassociates.com/onlinenewsletter/EightKeyStrategjesfor2013-SA-K120712.pdf>

The Great Generational Divide

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Becoming A Customer-Centric Company

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