

# Collaborative, Productive and Innovative Workspaces: Implications for Future Office Demand



BURNHAM-MOORES  
CENTER FOR REAL ESTATE  
UNIVERSITY OF SAN DIEGO

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Presenter: Norm G. Miller, PhD

University of San Diego

Burnham-Moores Center for Real Estate

[Contact: nmiller@sandiego.edu](mailto:nmiller@sandiego.edu)

You've heard it before.....

Telecommuting will kill  
the office market



# Reality

- More people are working at home.
- Full time it is about 3% of the total workforce
- And 13% for sales and office based professionals.
- As of 2009 it was 4.2% in San Diego of the total workforce and slowly increasing.
  - Source: Kate Lister and Tom Hamish “The State of Telework in the US” June 2011
- HR claims many benefits!

Now we hear about downsizing.....



Now we hear about downsizing.....



From *Corenet Global News* March 12, 2012

- In a survey of members

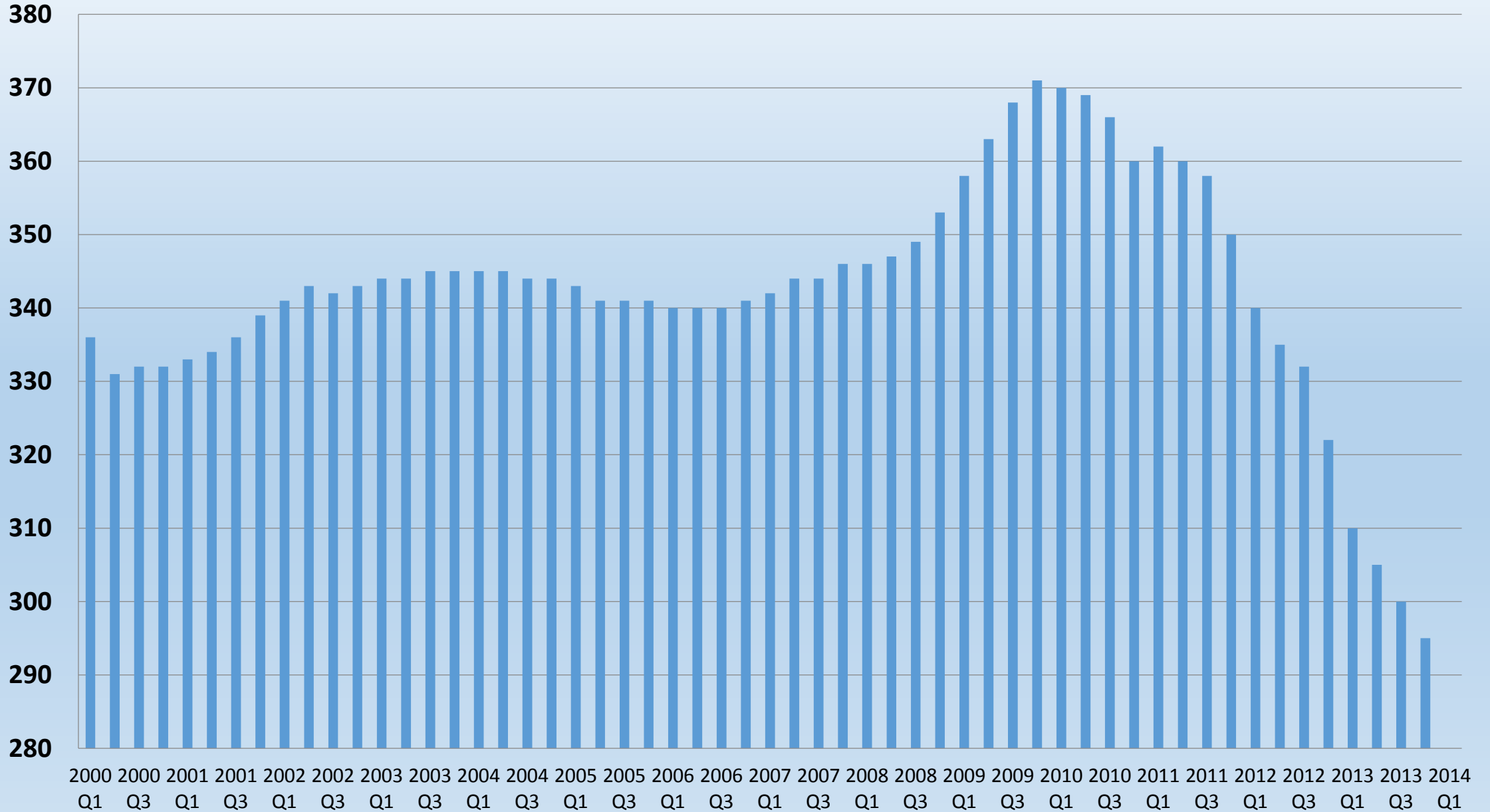
**40% stated that within five years,  
the average space per office  
worker would be 100 square feet  
or less**

A research journey.....



# US Space Per Worker Trend in Square Feet

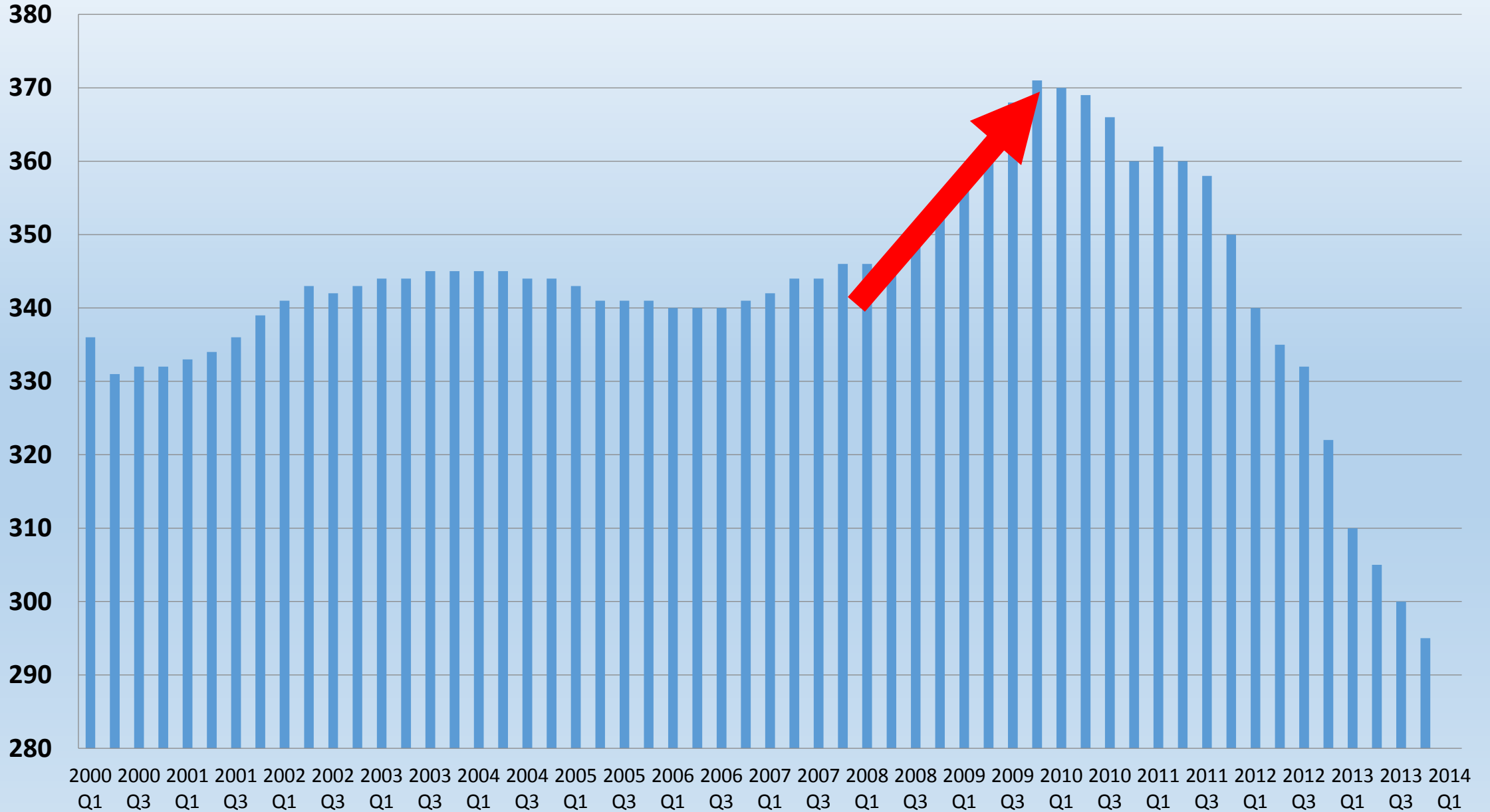
Based on Property Portfolio 54 (largest 54 markets) and CoStar data





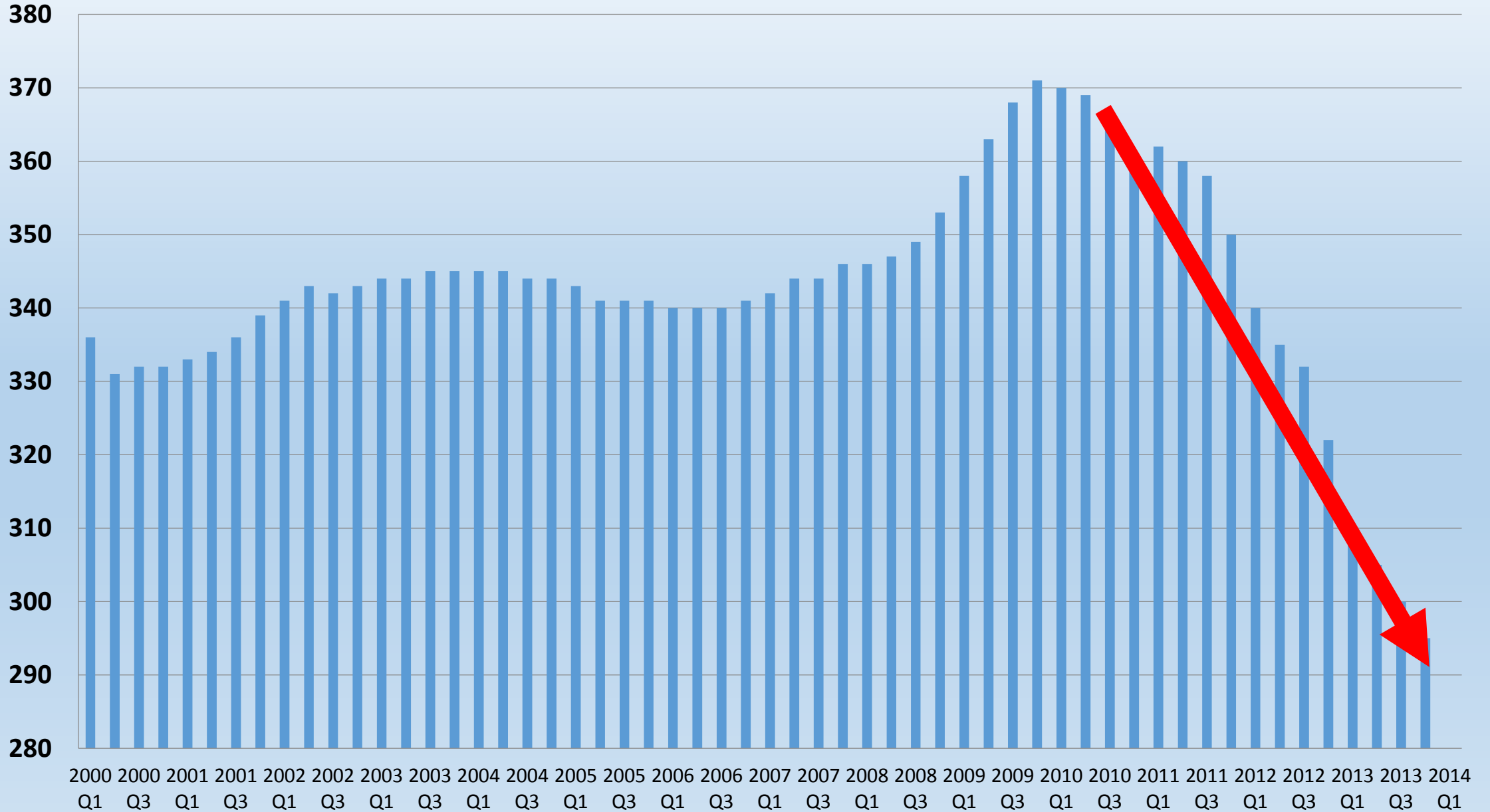
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# What if we only needed 80% of what we now use?

- We have more than 12 Billion Sq. Ft. of office space just in the US

The GSA (Government Services Administration) and others have been moving to totally new models for how they allocate space.

# New internal models.....

The logo for Procter & Gamble, featuring the letters "P&G" in a blue, serif font.

Allows most workers to work anywhere and has been moving to standardized non-dedicated space. Their office utilization rate has moved from 60% to over 90%.

The logo for Accenture, featuring the word "accenture" in a bold, black, lowercase sans-serif font.

*High performance. Delivered.*

The logo for HSBC, featuring the letters "HSBC" in a black, serif font, followed by a red hexagon with a white cross, and the tagline "The world's local bank" in a smaller, red, sans-serif font below.The logo for Coca-Cola, featuring the words "Coca-Cola" in a red, cursive script font.The logo for Cisco, featuring a stylized signal icon above the word "CISCO" in a bold, red, uppercase sans-serif font.The logo for Hewlett-Packard, featuring the lowercase letters "hp" in a white, italicized sans-serif font inside a blue circle, which is set against a blue rectangular background.

The logo for Procter & Gamble (P&G) in blue, italicized serif font.The logo for Accenture, featuring the word "accenture" in a lowercase, sans-serif font with a horizontal line above the 'e', and the tagline "High performance. Delivered." in a smaller font below it.

**Accenture has dramatically increased its utilization rate from 50% in the year 2000 into the mid 80% range today using over flow office space providers.**

The logo for HSBC, featuring the letters "HSBC" in a bold, sans-serif font, a red hexagon with a white cross inside, and the tagline "The world's local bank" in a smaller font below it.The logo for Coca-Cola in its iconic red script font.The logo for Cisco, featuring a stylized signal tower icon above the word "CISCO" in a bold, sans-serif font.The logo for Hewlett-Packard (HP), featuring the lowercase letters "hp" in a blue, italicized font inside a white circle, which is set against a blue background.

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**Re-designing space to increase productivity while using space more efficiently.**

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**Working on redesigning space to be more flexible and collaborative.**

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**CISCO is moving it's utilization rate from 45% to 85%.**





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**HP is targeting 120-150 sq. ft. and 85% utilization with standardized and highly shared space.**

Plus these.....



**Microsoft:** The Redmond campus includes around 50% non-dedicated workspace. Employees get small lockers for storing personal effects. Private rooms are available for telephone calls or conferencing as a group plus they use telcom HD video.



**CBRE** LA's "360" office is totally flexible and non-dedicated with different types of workspaces.

# Are these firms typical, or will there be a backlash against telework and less space?



***Time to come back to the office guys!***

Marissa Mayer, CEO Yahoo in early 2013  
then echoed by Best Buy

# More Evidence of Down Sizing

- Leased space sizes have been shrinking.



- As of the end 2013 the average was 180 sq ft per worker, well below the average space assumption in most office demand models, and 24% below figures 10 years ago.

# Is something different this cycle?

- The **cloud** for file storage (data server explosion)
- The Internet is **faster** and more reliable



# Is something different this cycle?

- When we went through a **recession** starting in late 2007 we felt pressure for greater productivity and cost cutting.
- Many firms have never rehired to the extent they were staffed in 2006.



# Is something different this cycle?

- Smart firms have moved to **productivity based management** instead of hours in the office
- The sustainability trend (LEED or greener buildings) has spurred better and **healthier** environments.



Digging for answers and connecting the different realities heard at CoreNet versus NAIOP.

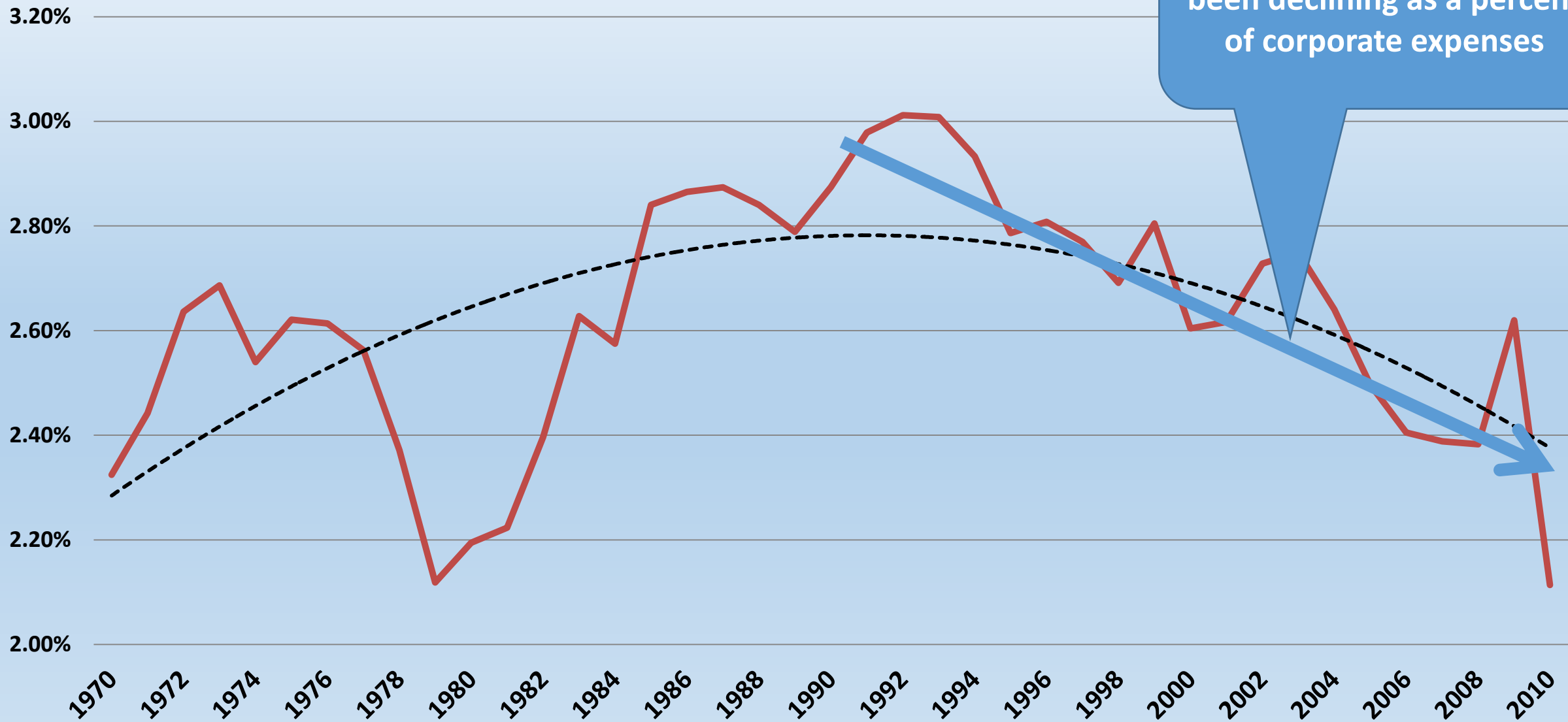




- Theory 1: Maybe the real costs to occupy are not that high and therefore the downsizing claims are mostly rhetoric and goals?

# U.S. Corporate Rent as Percent of Total Operation Expenses with Trend Line

Source: CRSP Data



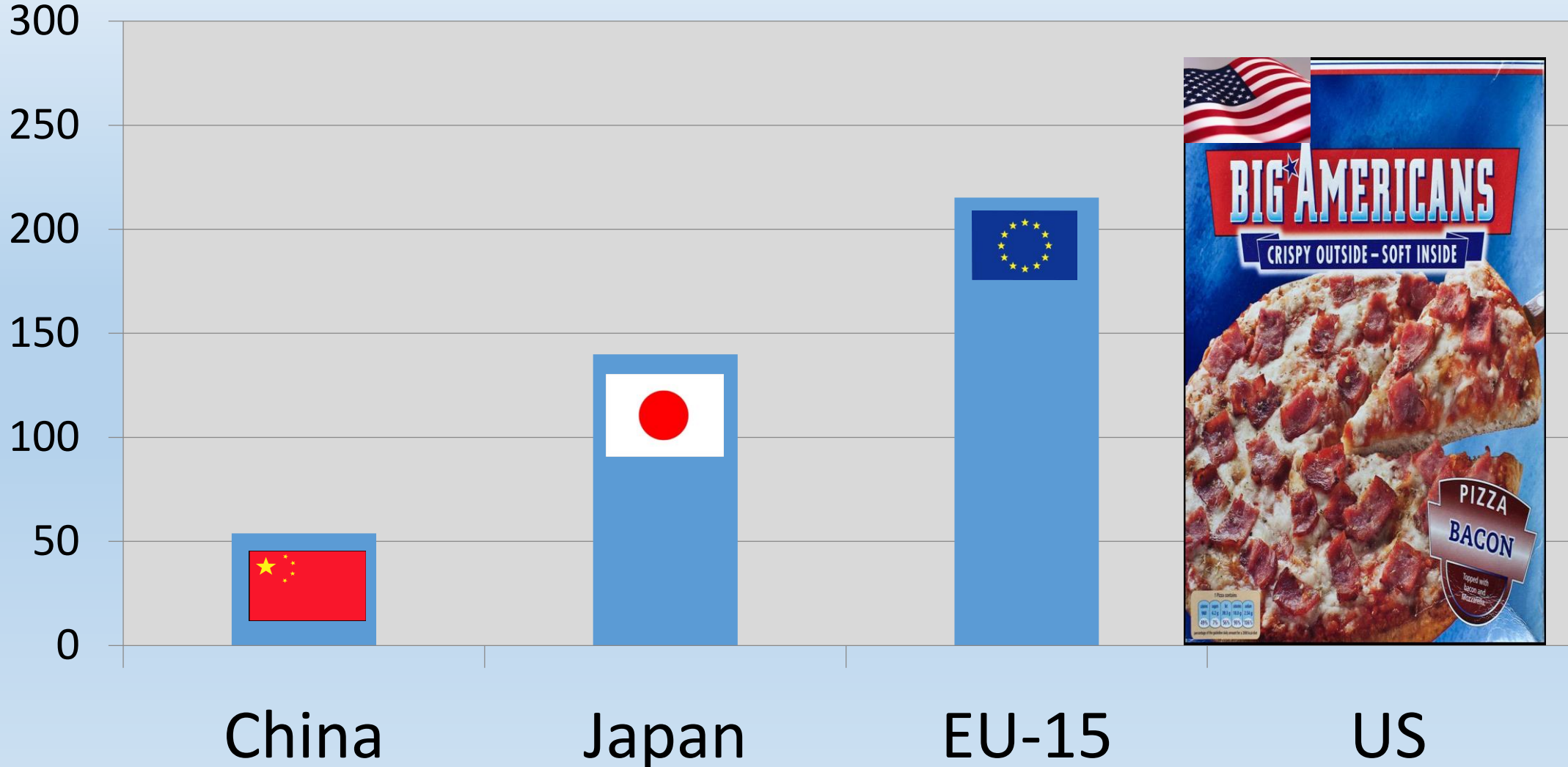
Note also that labor costs matter so much more than rent!



# Theory 2: It's Cultural!

# Is it simply culture?

**Building Space per Person Commercial Square Feet**  
**Source: World Business Council for Sustainable Development**



Theory 3: We don't need as much space to keep our stuff!

We don't need a place to keep as much stuff in the office as before..



# Theory 4: Reality will get in the way. No one ever has exactly the right amount of space.

1. Leases run 3, 5 even 10 years so what is the chance you can keep the right amount of space on hand?
2. The greater the turnover of staff (churn) the harder it will be to match space needs with actual space.
3. The longer it takes to fill positions the harder it will be to match space needs.
4. The greater the levels of management hierarchy with uniquely sized offices the more **space friction** and the harder it will be to match space needs with the actual workforce. (The antithesis of standardization)
5. Firms that are growing or shrinking will find they have too little or too much space.



At USD-BMC with CBRE we have surveyed tenants for several years. I also did a survey of CORENET Global Members and asked them what they really wanted?

# What do tenants say they want?

- Less **noise** and the ability to control interruptions.



# What do tenants say they want?

- Cleaner **air** and control over **temperature**.



# What do tenants say they want?

- Configurations with more **collaborative space**.



# What do tenants say they want?

- More natural **light** (Note: a LEED requirement)
  - Suggesting buildings of no more than 40 foot widths or else they must bring light in with skylights or solar tubes.
- More natural ventilation (operable windows)
- What if you can't provide natural light?



# What if you can't provide natural light and views?

- There are firms that can simulate the effects of natural light and nature within offices



The screenshot shows a web browser window with two tabs: 'High Altitude - Cirrus - Ce...' and 'igHome - iGoogle Alterna...'. The address bar displays the URL 'www.skyfactory.com/library/ceilings/High%20Altitude%20-%20Cirrus/'. The browser's bookmark bar includes 'Collateral Analytics', 'iGoogle', 'Scoop.it!', 'Scoop.it!', 'Authorize scoopit\_p...', 'Imported From IE', 'igHome - iGoogle A...', and 'Other bookmark...'. The website header features the 'Sky Factory' logo with the tagline 'The vastness of the sky...inside' and a navigation menu with links for 'HOME', 'PRODUCTS', 'PORTFOLIO', 'SKYMOBILE', 'RESOURCES', 'ABOUT US', and 'CONTACT US'. A Facebook 'Like' button shows 2 likes. The main content area is titled 'Ceiling Image Library' and includes a breadcrumb trail: 'Image Library > Ceiling Applications > High Altitude - Cirrus'. A search section titled 'TWO WAYS TO SEARCH' has dropdown menus for 'Categories' and 'Sizes', and a 'New Images' section. A text block explains that all library images can be customized by artists and provides contact information for a Sky Designer. A link 'Go to Wall Image Library' is also present.

High Altitude - Cirrus - Ce x igHome - iGoogle Alterna x

www.skyfactory.com/library/ceilings/High%20Altitude%20-%20Cirrus/

Collateral Analytics iGoogle Scoop.it! Scoop.it! Authorize scoopit\_p... Imported From IE igHome - iGoogle A... Other bookmark...

**Sky Factory**  
*The vastness of the sky...inside*

HOME PRODUCTS PORTFOLIO SKYMOBILE RESOURCES ABOUT US CONTACT US Like 2

Image Library > Ceiling Applications > High Altitude - Cirrus

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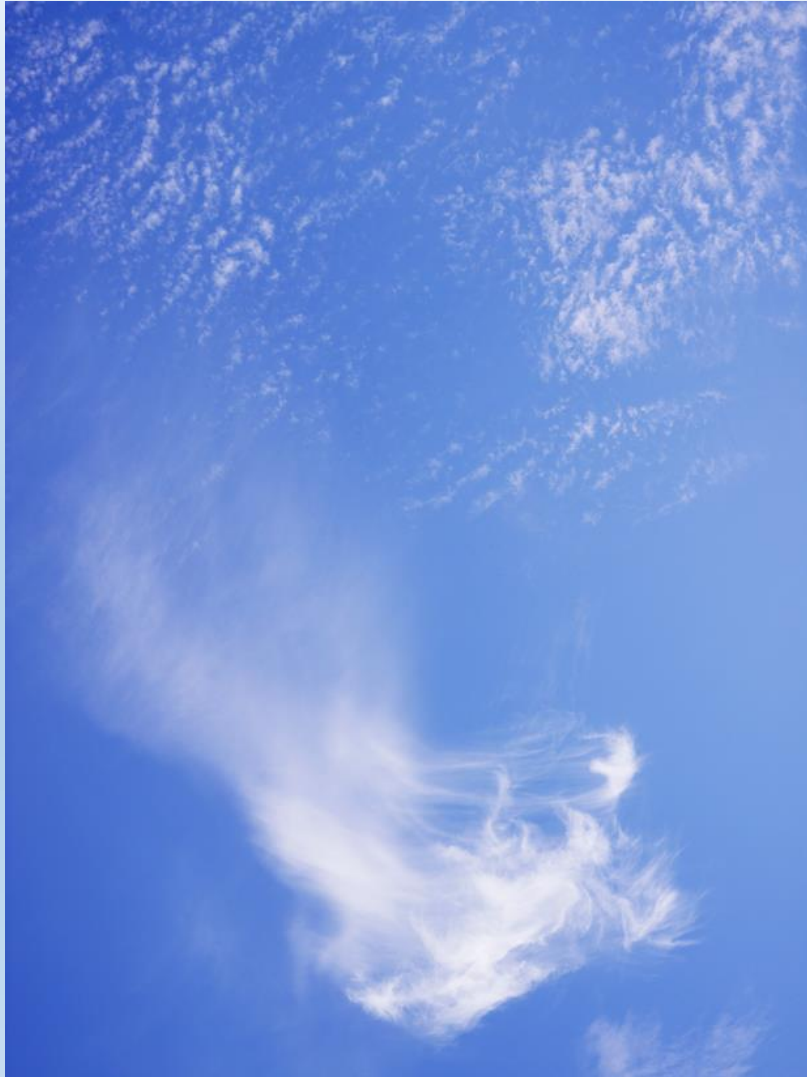
TWO WAYS TO SEARCH

Categories Sizes

New Images

All library images can be customized by our artists. If you do not see your image in the size and configuration you need, choose an image you like and contact a Sky Designer. We will adapt your preferred image to accommodate your SkyCeiling configuration. This is a free service. Need a sky or tree you don't see anywhere? We have thousands more images in our offline library.

Here are some simulated skies and these can be dynamic





Or add trees or customize your window environment





We are seeing more of this..



And this..



And this.....



# Productivity seems to go up for most workers when placed in open work environments. Why?

- First, some people **work longer** hours, even if they were in glassed wall space before.
- Second, some people **reduce personal time**, shopping, posting on social media, playing games.
- Surveys suggest some people **hate** open offices for reasons above and more.





# Pixar Front Entrance With Lots Of Natural Light





# Pixar Private Offices: One Example





# Pixar: Chance Encounters



# Gensler, Baltimore





# Google: Flexible Space





# Google, London HQ





# Adidas New HQ, Berlin





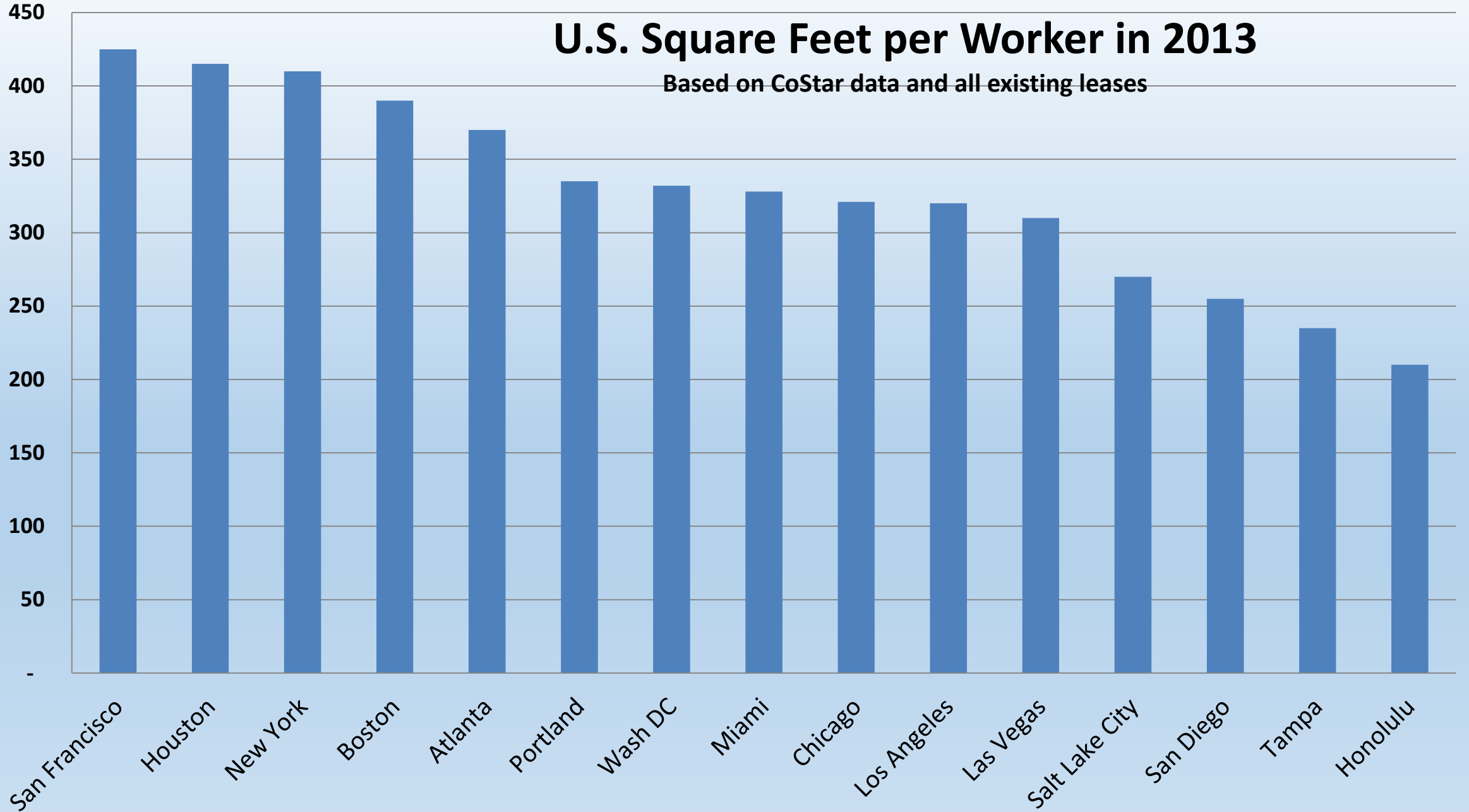
# Hughes Marino, San Diego



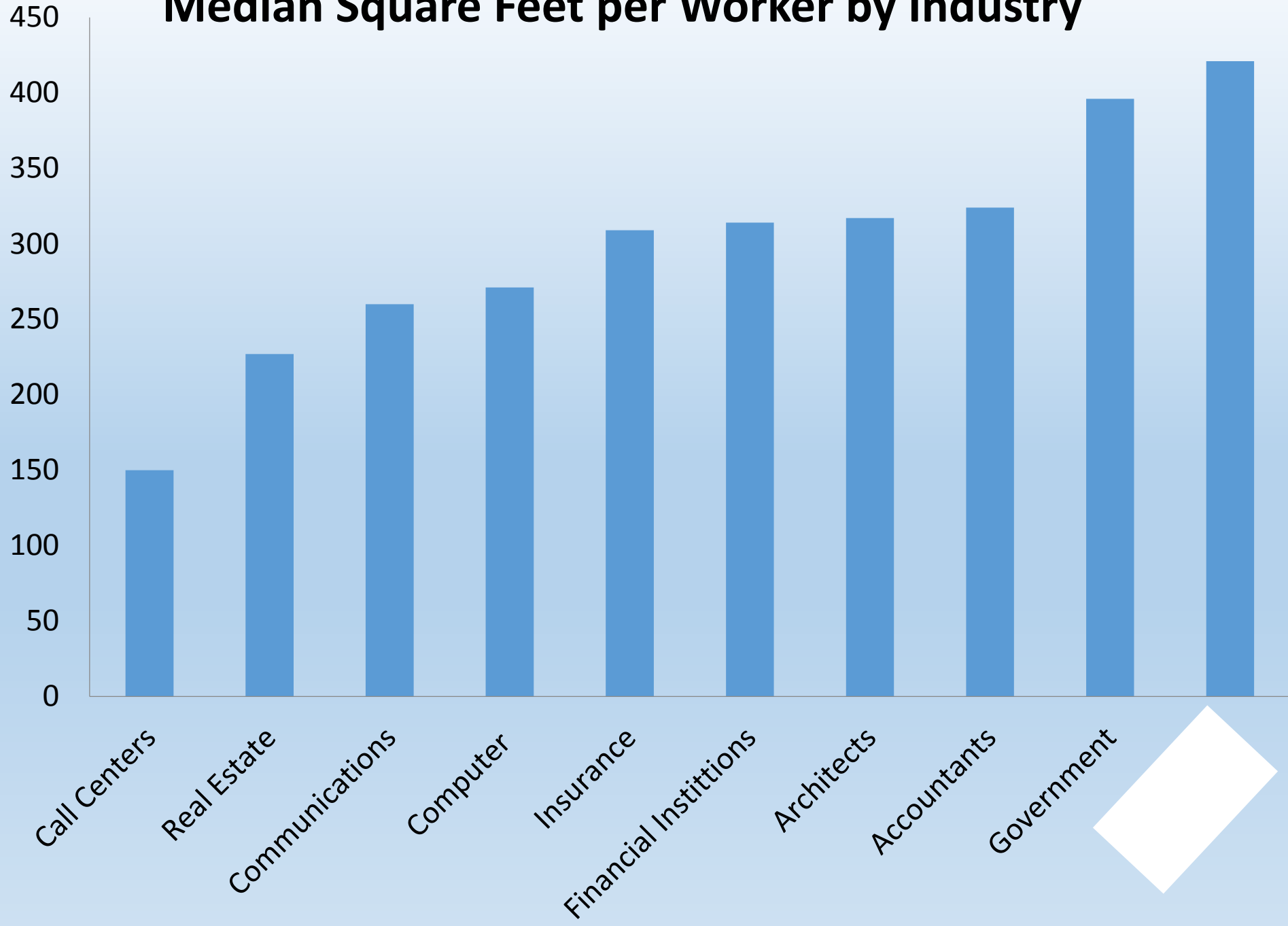
Keep in mind that all markets are local and industry mix matters

# U.S. Square Feet per Worker in 2013

Based on CoStar data and all existing leases



# Median Square Feet per Worker by Industry

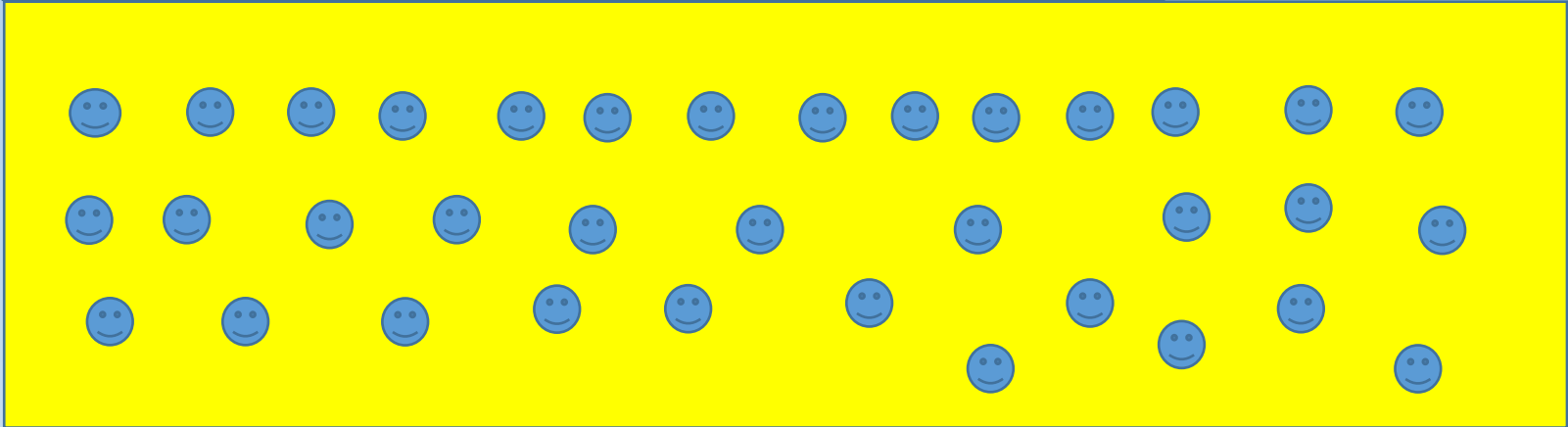
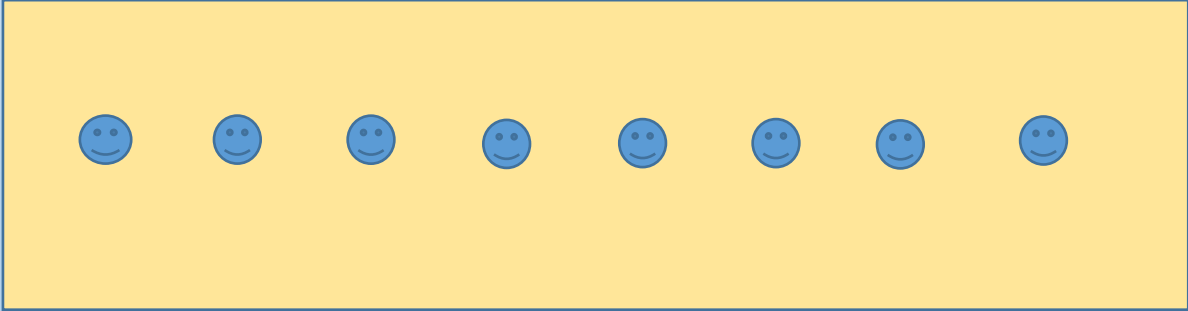
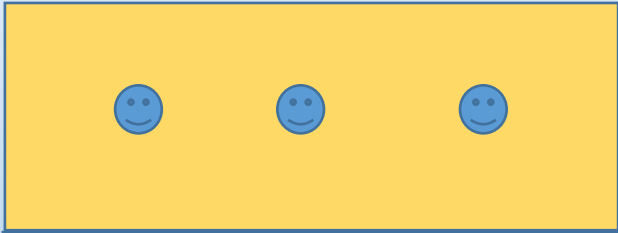


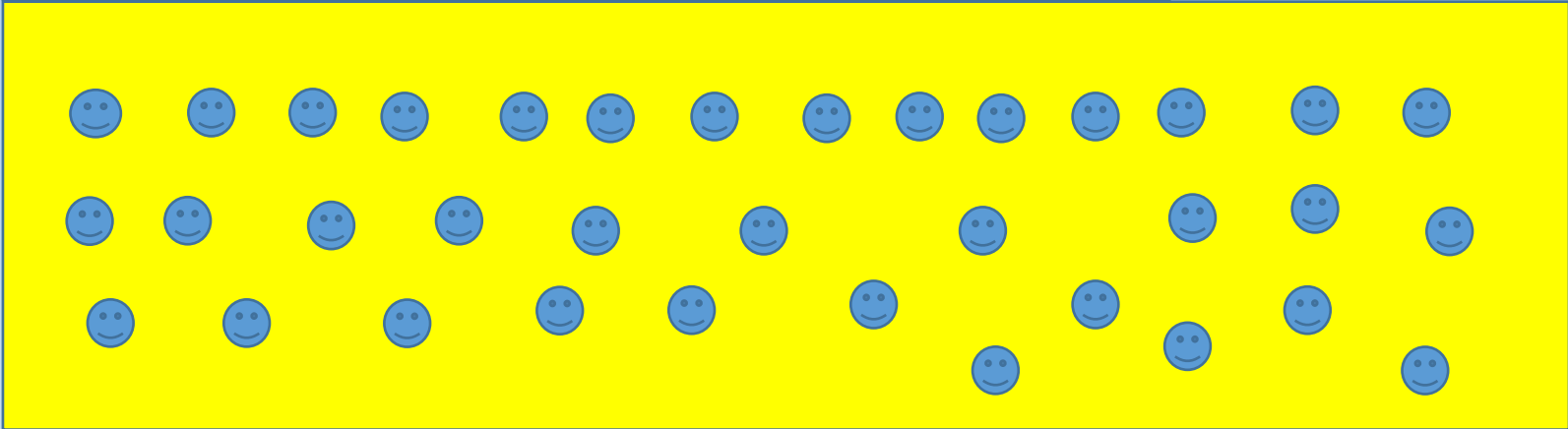
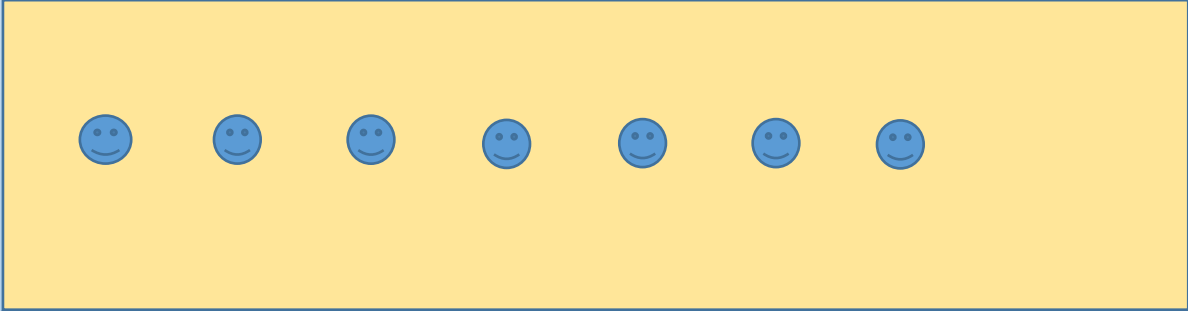
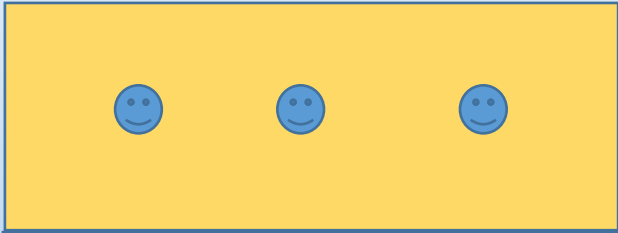
## Recall theory 4

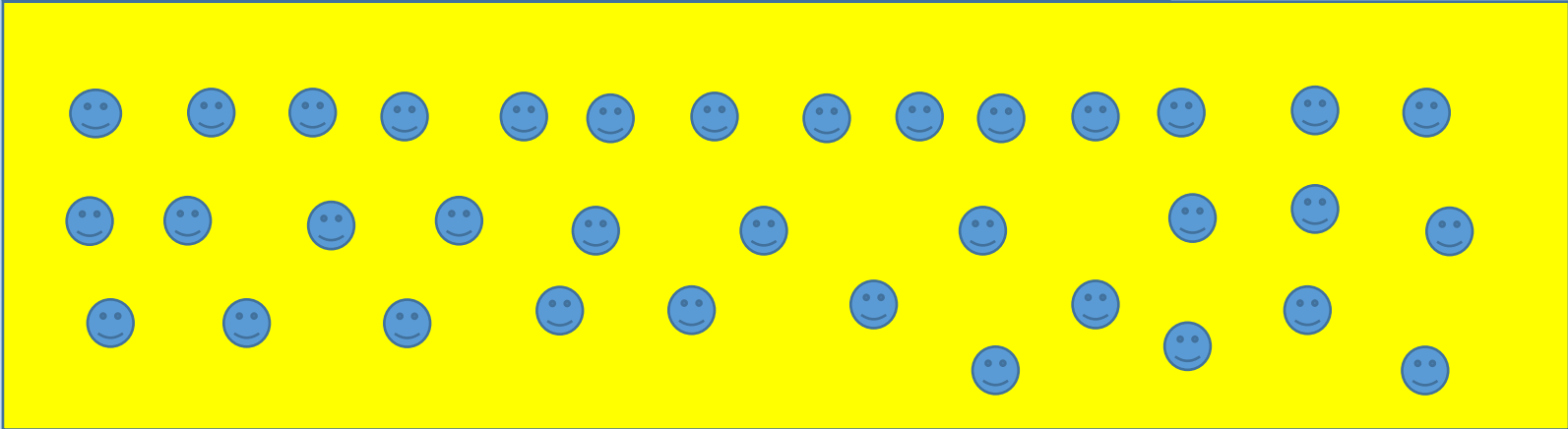
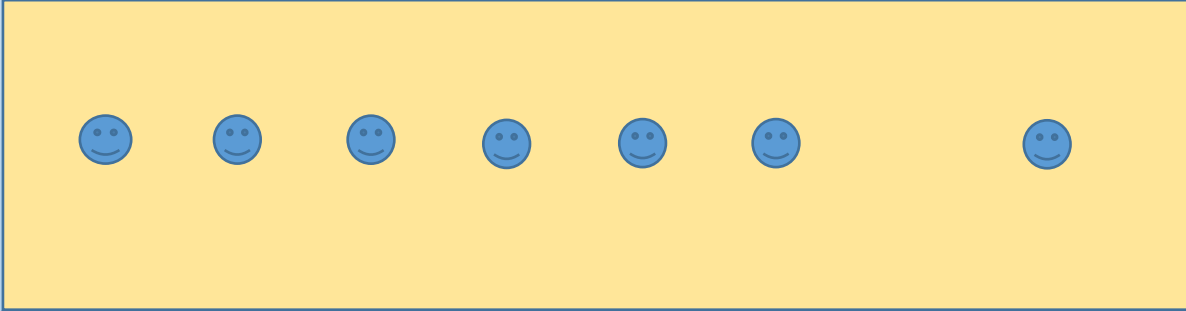
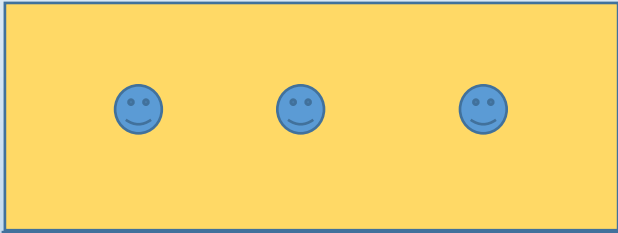
- Lease terms
- Churn
- Time to fill slots
- Space friction and
- Dedicated versus non-dedicated space

Space friction reduces utilization rates and increases space per worker figures.



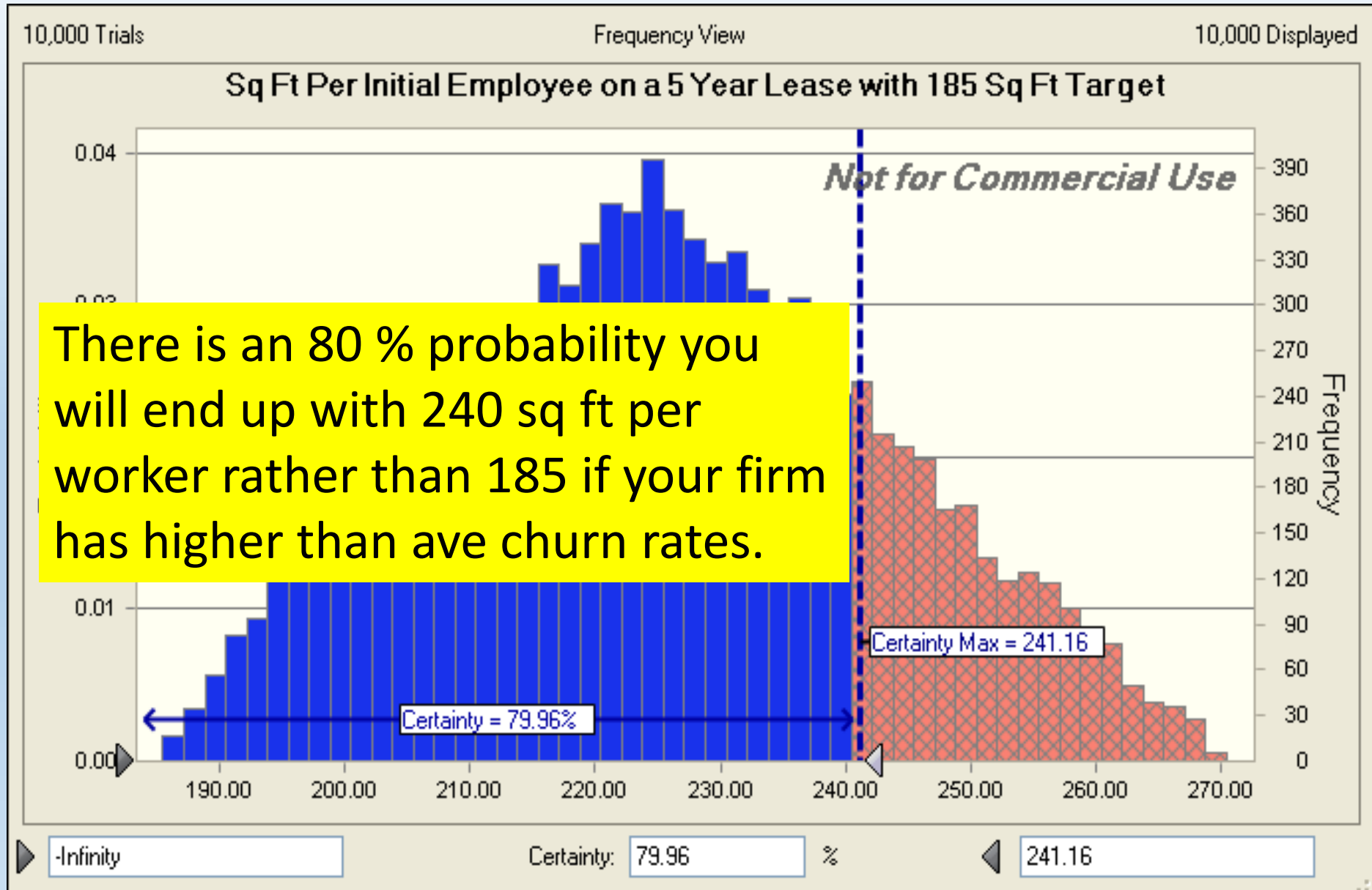




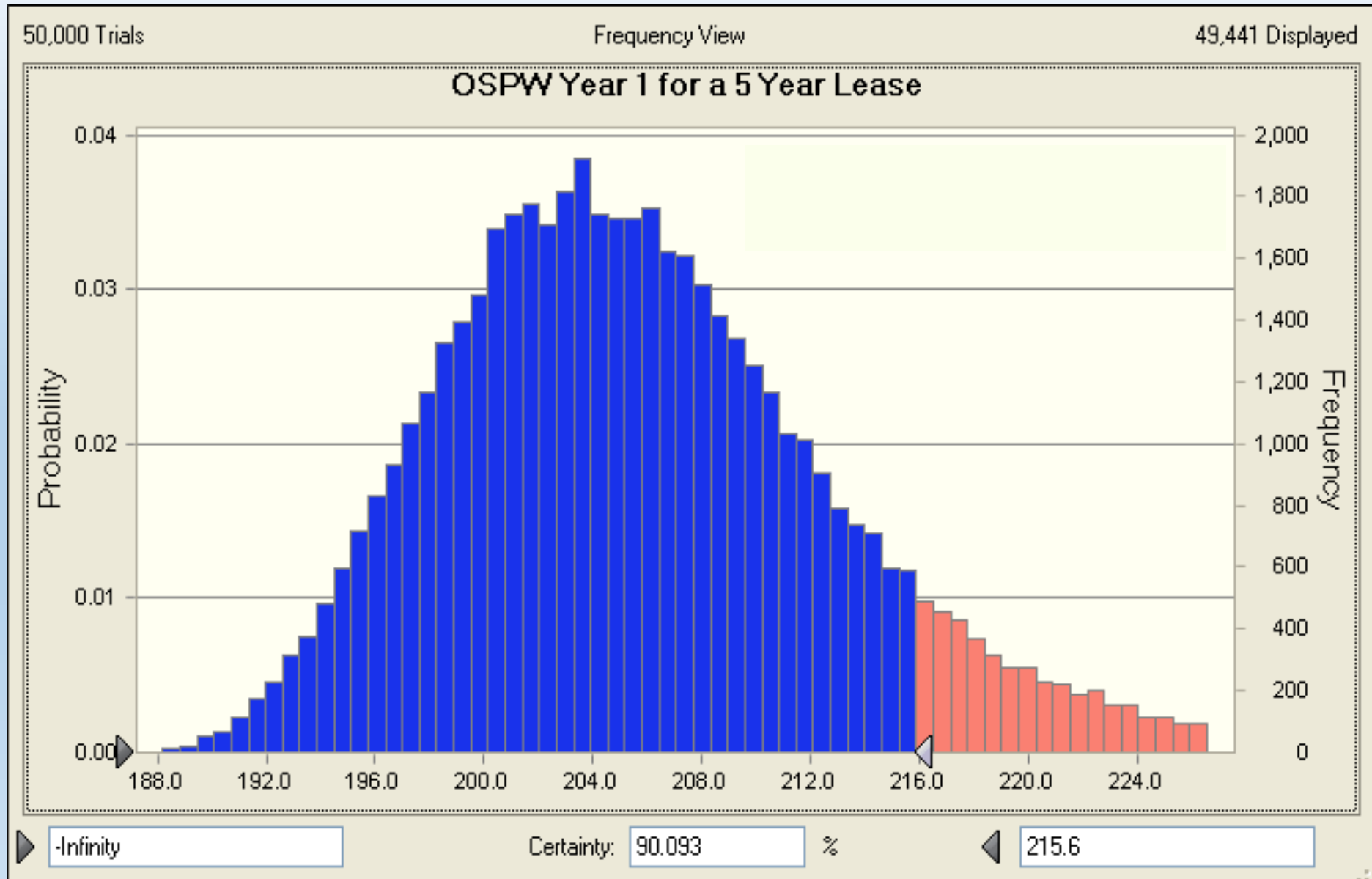


# A Simulation Model

# Churn rates matter especially if there is space friction



# Growth Rates from -10% to +20% With a Target of 150 Sq Ft/Worker and No Private Space, All Standardized Space



Most of the model factors match up with market reality in predicting more space than space planner goals by about 20% to 25% except for the lease term.

# The lease term and expected growth of the firm did not pan out...

- Real estate perspective: Lease more when rental rates are good and tie up the space.
- HR and CFO perspective: Lease as little as possible and if we grow and need more space we will ask for a new lease on a larger space.



Moving to reality:

Trends often take longer than predicted

Downsizing takes time and cultural shifts.

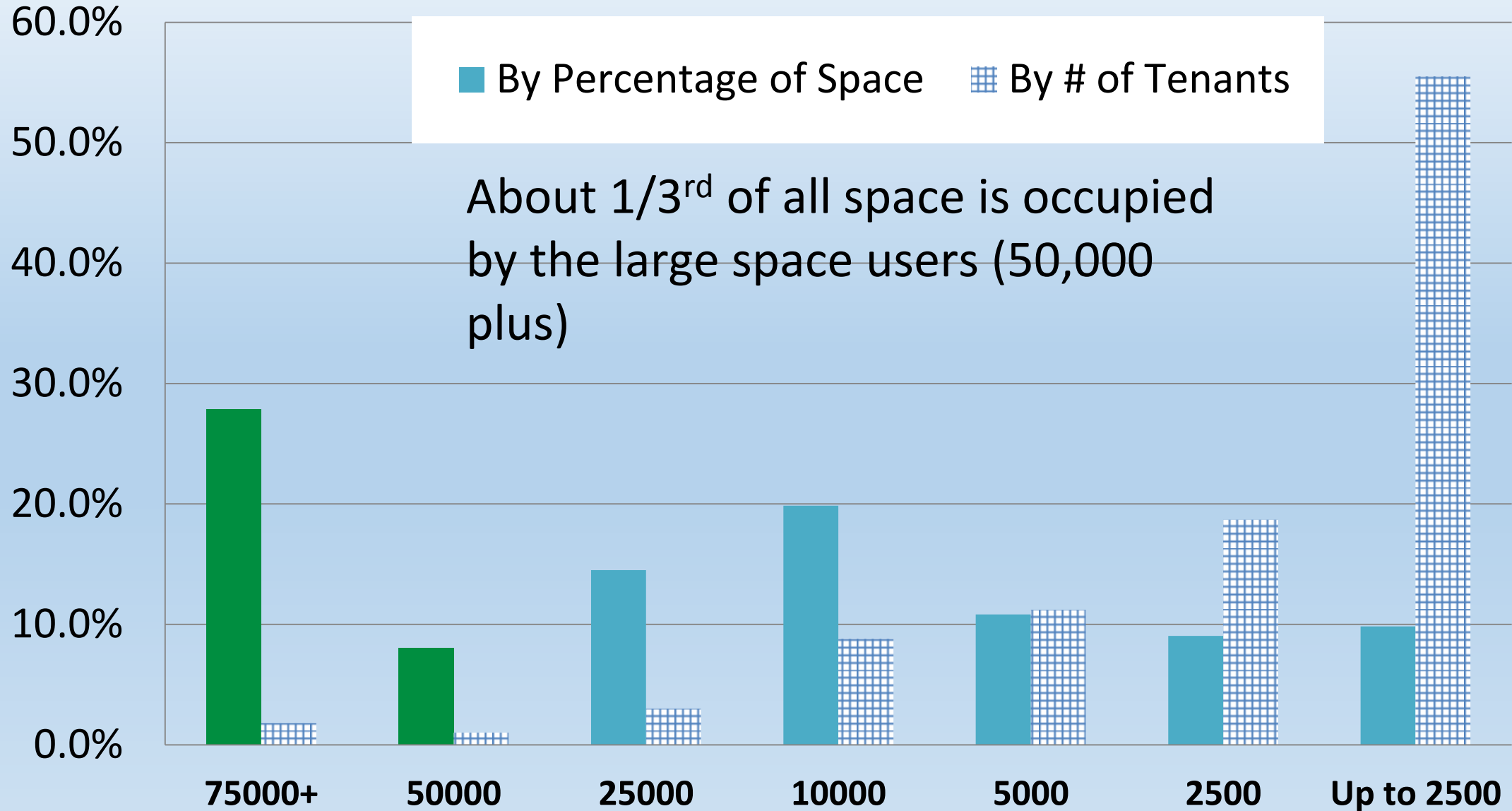
- Lawyers giving up law books and files takes time.
- Professors giving up book cases and dedicated space?
- Space planning never quite works out as planned.
- But then we have a new Federal mandate to reduce real estate costs.

# Those firms working hardest at downsizing are the largest firms and the GSA

- THE GSA moved 6000 employees into space once used for 2000 at their Headquarters in Wash DC, moving from 375 sq ft per worker to 125 sq ft after the remodeling of space. Utilization rate is now 80%.
- What percent of the total market do they represent?

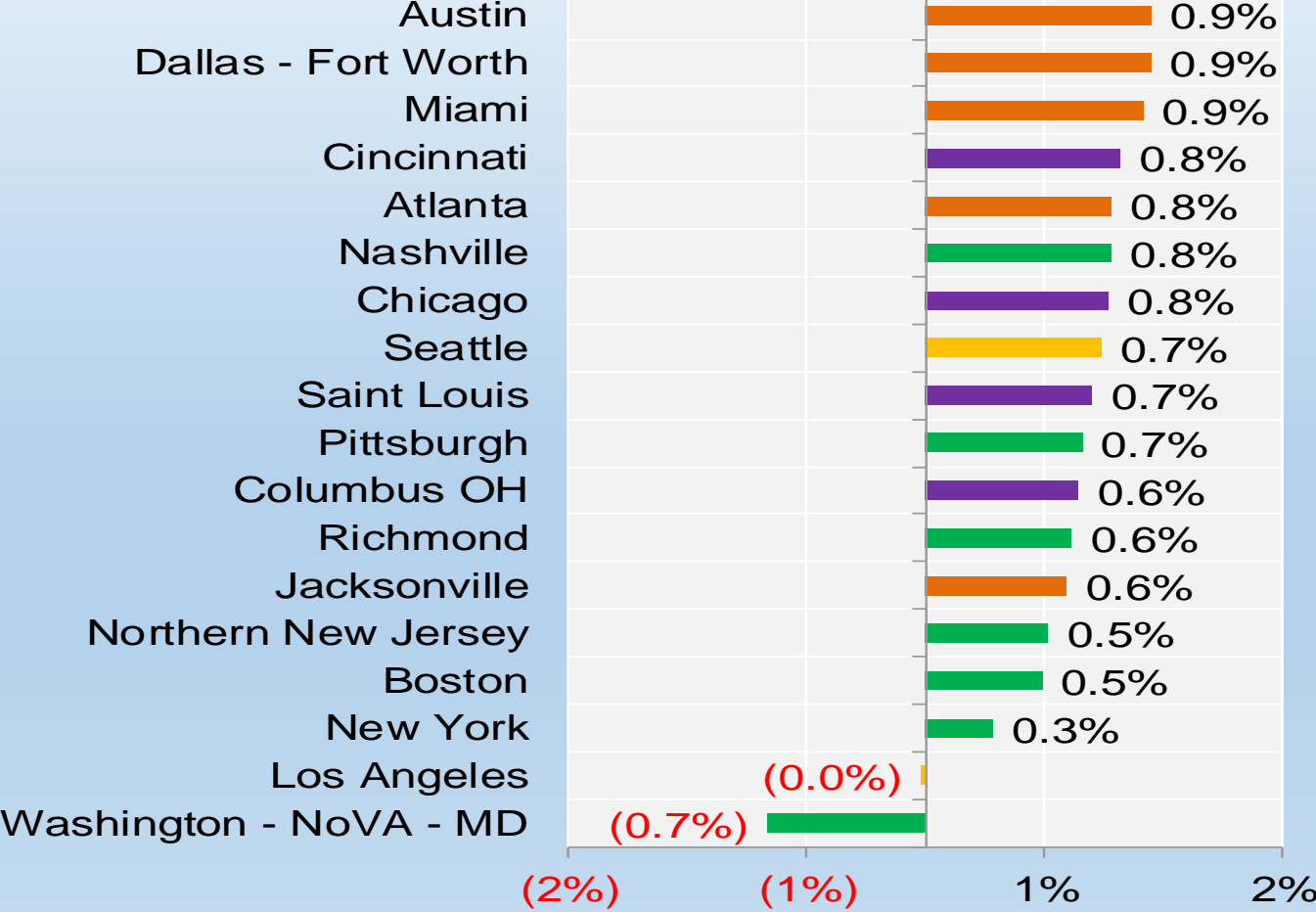
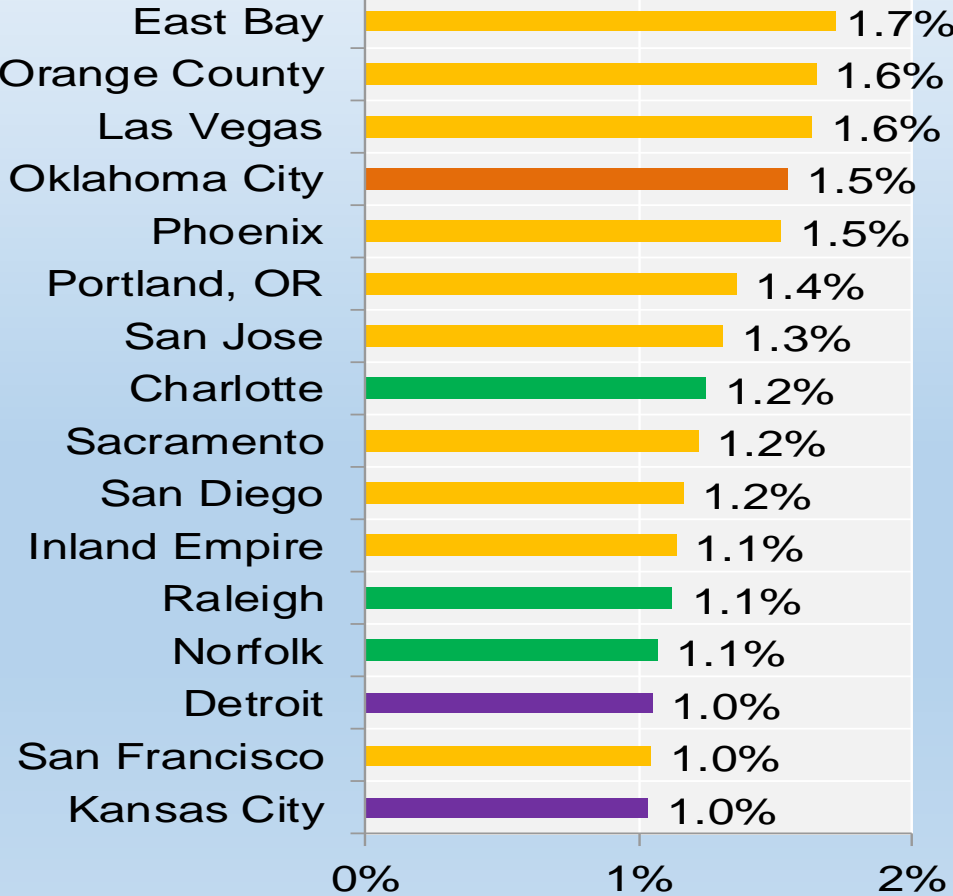
# Tenant Numbers By Space Size Range and Percentage of Market

Source: CoStar Data



Maybe the GSA downsizing is starting to have some impact?

# Year-Over-Year Change in Occupancy



■ East     
 ■ South     
 ■ Midwest     
 ■ West

Sources: CoStar Group, Inc; PPR

# Implications if we add office density

- Parking needs will not be 3 or 4 per 1000 sq ft but 5, 6, or 7 per 1,000 sq ft among the intense use firms (like call centers right now).



# Implications continued

- Nearly all of the existing older office space could be reconfigured
  - with better natural light,
  - more energy efficiency,
  - healthier ventilation and more sound control.
- Landlords are not selling space but **productivity**
- More productive space will command higher rents per square foot.



# Office Building Trends

- **Nice but obsolete**



# Office Building Trends: Recent – note the natural light

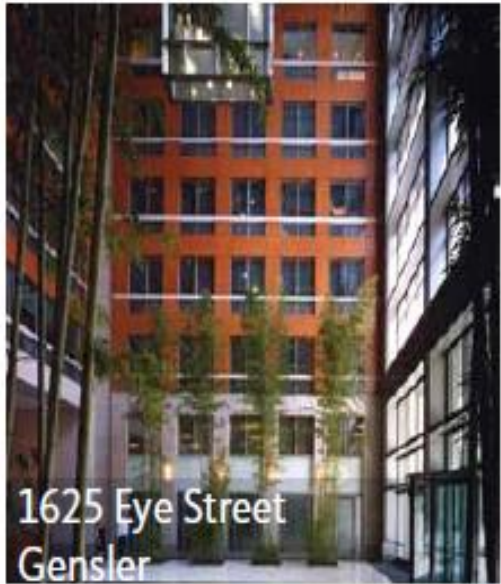




# Office Building Trends: Today



1999 K Street  
Helmut Jahn



1625 Eye Street  
Gensler



2200 Pennsylvania Avenue  
Pelli Clark Pelli



800 17th Street  
Gensler

Source: Gensler

# The Bullitt Center in Seattle by Miller Hull





# Pickard Chilton Office Design



# Conclusions

- Changes in the office market are **inevitable**.
- 180 sq ft per worker is closer to where we are soon headed compared to the 250 we used to use.
- If your portfolio is filled with large public tenants or GSA leases I'd use figures closer to 125 sq ft.
- Some office markets are being affected by downsizing, especially those with large public firms, but downsizing takes time and our culture resists change.

We all need to keep digging



To follow our collection of articles on this topic please go to this link:

- <http://www.scoop.it/t/collaborative-and-innovative-workspace#!>

Thanks

Contact: Nmiller@sandiego.edu



# Summarizing Trends and Factors Affecting Space per Worker

## Less Space per Worker

- Few files and books
- Shared space (non-dedicated)
  - Higher utilization rates
  - Use of over flow providers, i.e. Regus, HQ, Liquid Office Space
- Standardized Space
- More use of cubicles
- Tolerance for working anywhere
- Predictable workforce
- And on the other side

## More Space per Worker

- Collaborative Space
- Amenities
- Hierarchy of space types (space friction)
- Employee Churn
- Time to fill positions
- Uncertain growth rates or firm downsizing
- Management that wants to see you in the office (culture)