



+



# DESIGNING AND NEGOTIATING WORKPLACES FOR THE FUTURE WORKFORCE

American Council of Consulting Engineers  
February 15, 2017



**Melissa Jancourt**  
HGA Architects and Engineers Inc.

**FOCUS**

- Workplace Strategies + Research
- Predesign Advisor
- Well-being
- Strategic Facilities Planning

**EXPERIENCE**

- 25 years
- Local and national workplace environments
- Municipal Planning
- Corporate Headquarters
- Higher Education Environments
- CoreNet Board Member: Midwest



**Steve Strom**  
Cresa Partners

**FOCUS**

- Real Estate Advisor
- Tenant Representation
- Planning and Relocations
- Lease Negotiations

**EXPERIENCE**

- 20+ years
- Local and national workplace environments
- Corporate representation



**David Paeper, AIA**  
HGA Architects and Engineers Inc.

**FOCUS**

- Workplace Strategies
- Predesign Advisor
- Strategic Facilities Planning
- Master Planning

**EXPERIENCE**

- 30+ years
- Local and national workplace environments
- Corporate headquarters
- Higher education learning environments

## PANEL DISCUSSION

- The News
  - Profile of the engineering profession
  - Generations, human capital and well-being
- Smart Buildings, Smart Devices, Data Sources
- Mobility and choice
- Future lens
- Real Estate Update and Implications

# The engineering workforce - today

## Today

- 50%+ are over 45
- 13% are women
- 1/3 of those holding engineering degrees were born outside the US
- 51% current engineers consist of mechanical, industrial, civil and electrical
- College enrolments are failing to keep pace with retirements



# The engineering workforce - growth

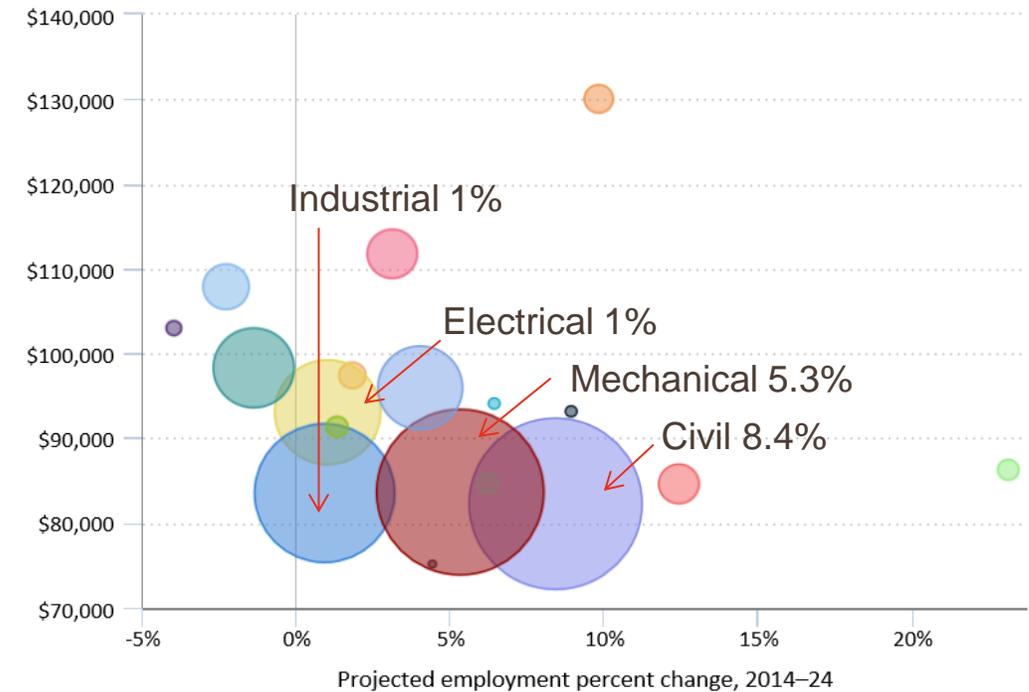
## Median annual wages in 2015 and projected 2014–24 employment change for engineering occupations

Bubble size represents projected 2024 employment

- Aerospace engineers
  - Biomedical engineers
  - Civil engineers
  - Electrical engineers
  - Environmental engineers
  - Industrial engineers
  - Materials engineers
  - Mining & geological engineers
  - Petroleum engineers
- Agricultural engineers
  - Chemical engineers
  - Computer hardware engineers
  - Electronics engineers, except computer
  - Health & safety engineers, except mining
  - Marine engineers and naval architects
  - Mechanical engineers
  - Nuclear engineers
  - Engineers, all other

11% Projected expansion

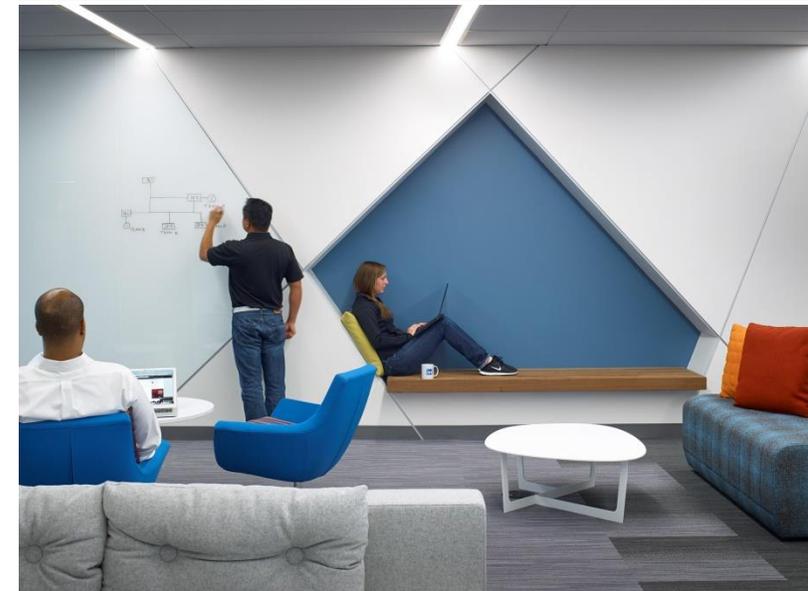
Median annual wage, 2015



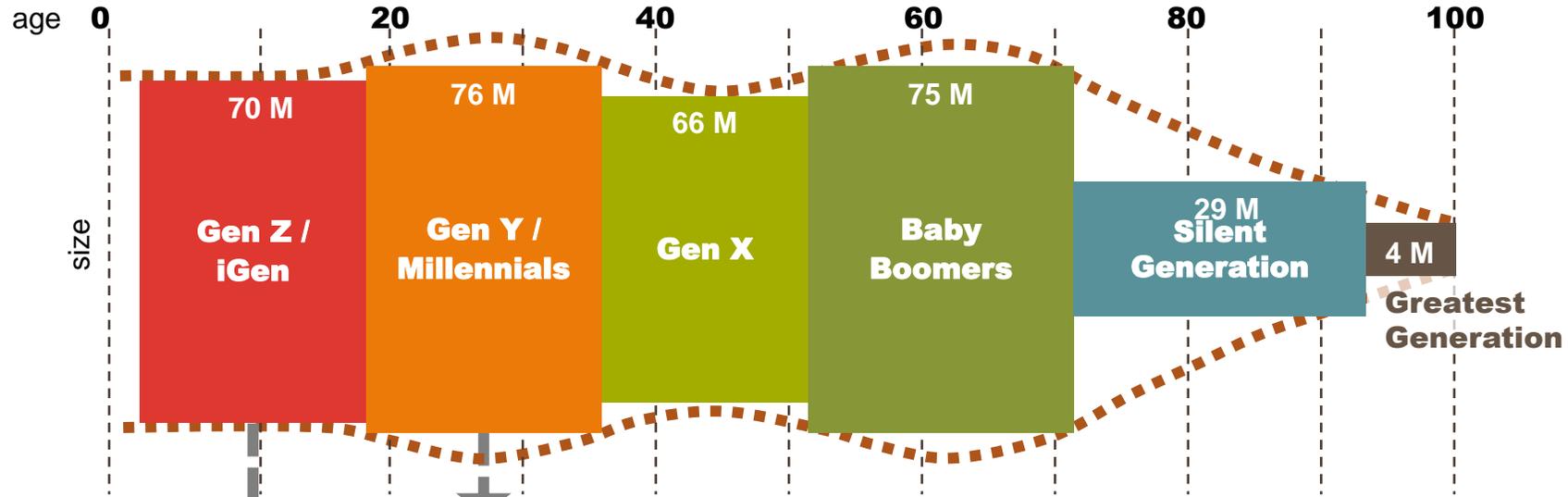
# The engineering workforce - considerations

## Tomorrow's Workforce

- Expect more diversity and competition
- Optimizing human capital and employee experience becomes critical
- New technologies, opportunities and skill sets
  - Push for measurement and strategies to support well-being
  - Increased demand for
    - Specialized skill sets
    - Creativity and innovation
    - Soft skills



# Generations in the Workplace



- Largest generation -- 31% are minorities
- Technology Natives -- Information is universally available
- Mobile + socially networked --- collaborative / team-based
- Freedom and choice
- Optimistic, ultra-communicators, constant innovators
- Hard working but demanding
- Global generation; volunteerism
- Customization and personalization

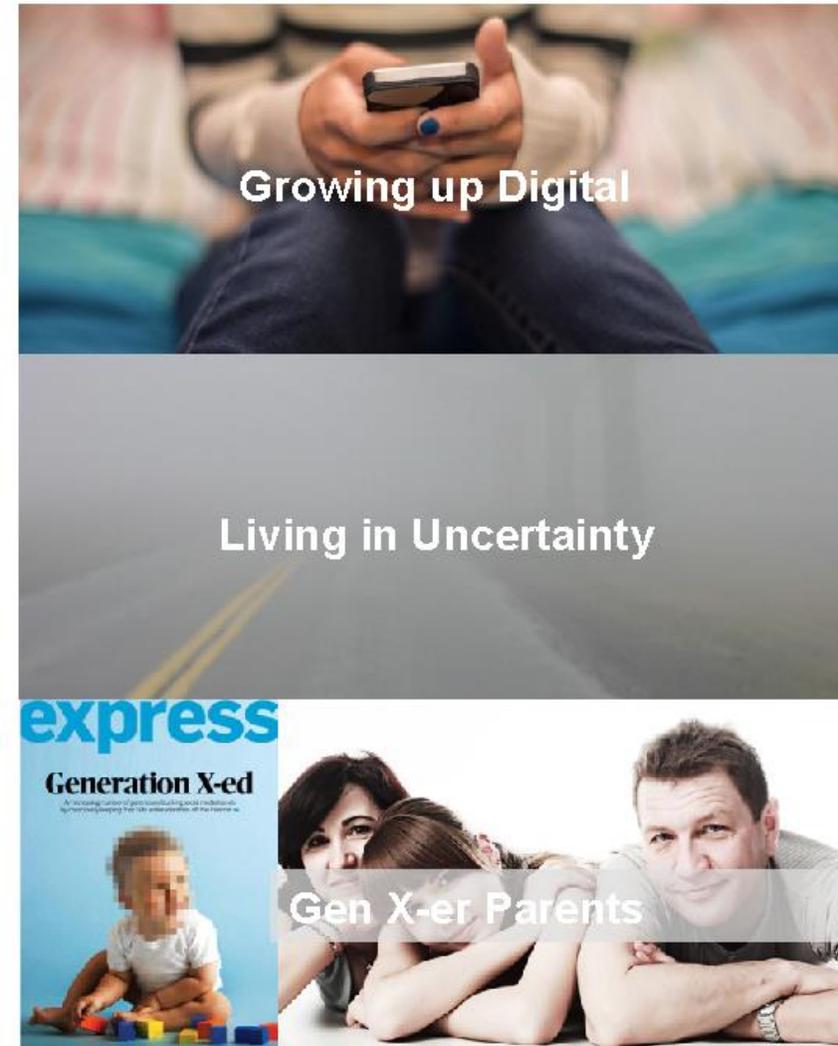
- Increasingly influential
  - **Smartphone Natives**
  - Diverse – 50% belonging to a minority race or ethnicity
  - Label agnostic – identity not tied to fashion
  - Concerned about money
  - Massively connected – but wary of how they’re linked in
  - Entrepreneurial – 70% self employed as teenagers
- Source: Goldman Sachs

# Generation Z

LIMITLESS ACCESS

GENERATION X PARENTS

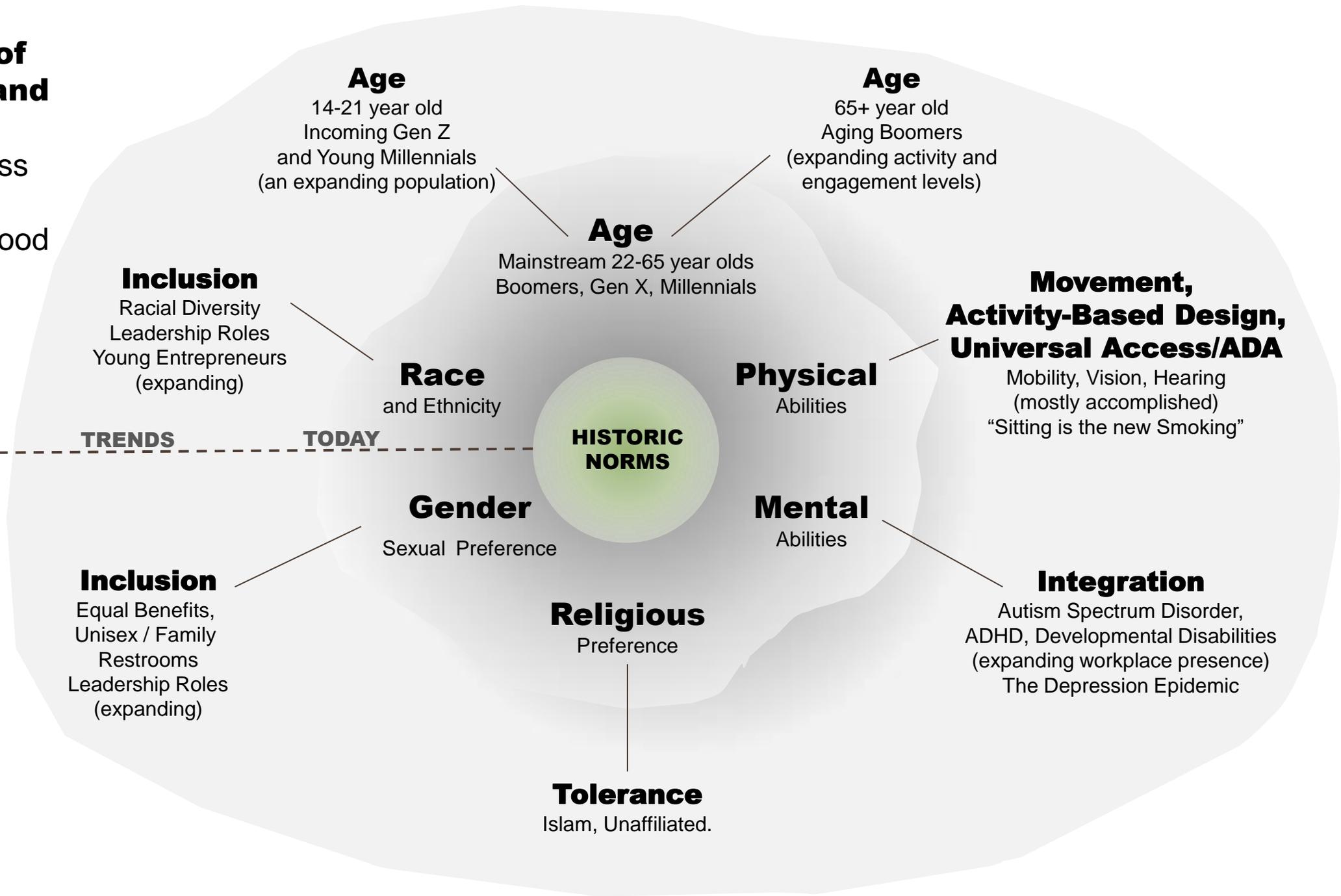
LIVING WITH UNCERTAINTY

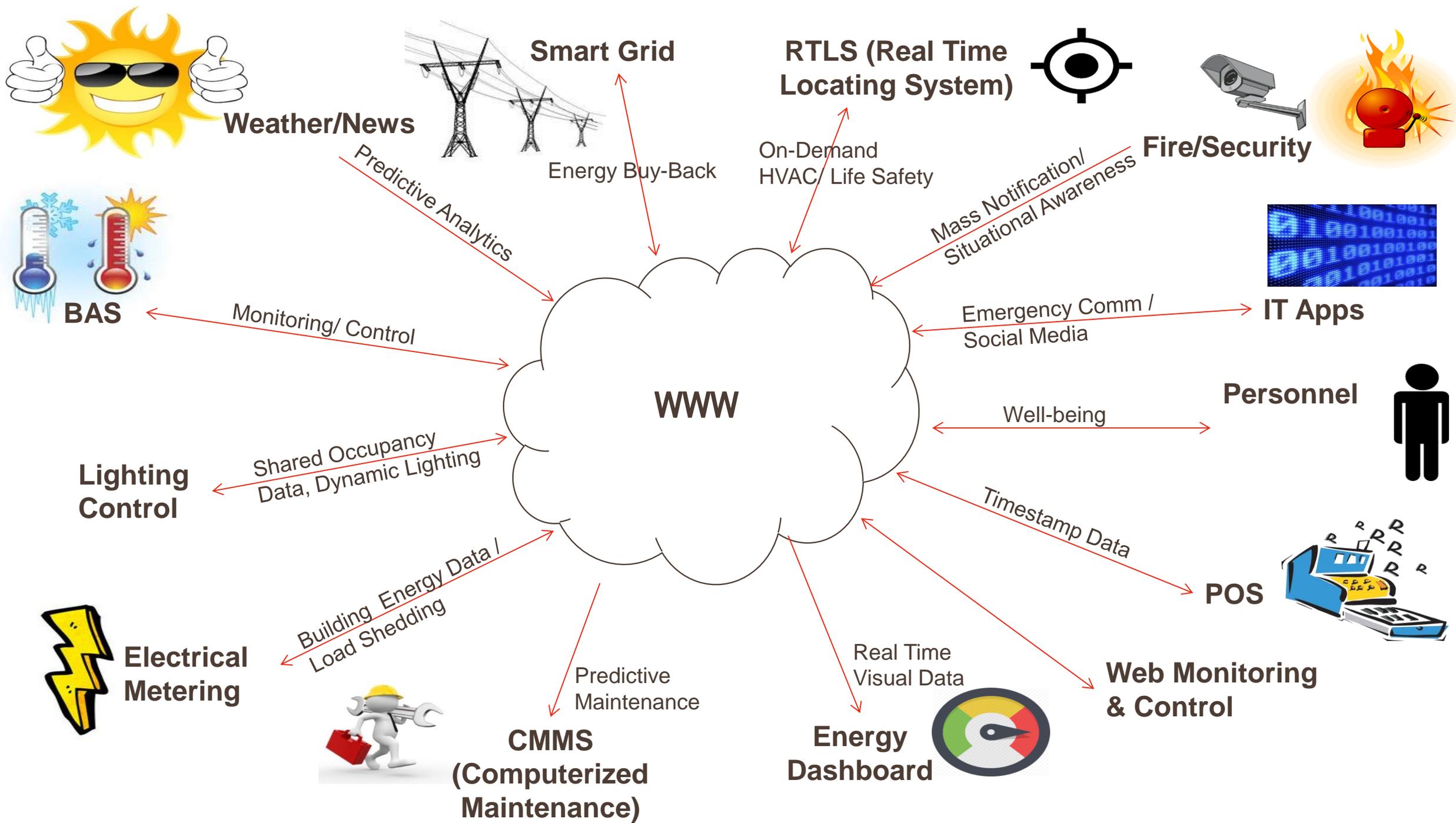


\*Courtesy of Altitude

# The Future of Workplace and Community

From Awareness to Inclusion to The Greater Good

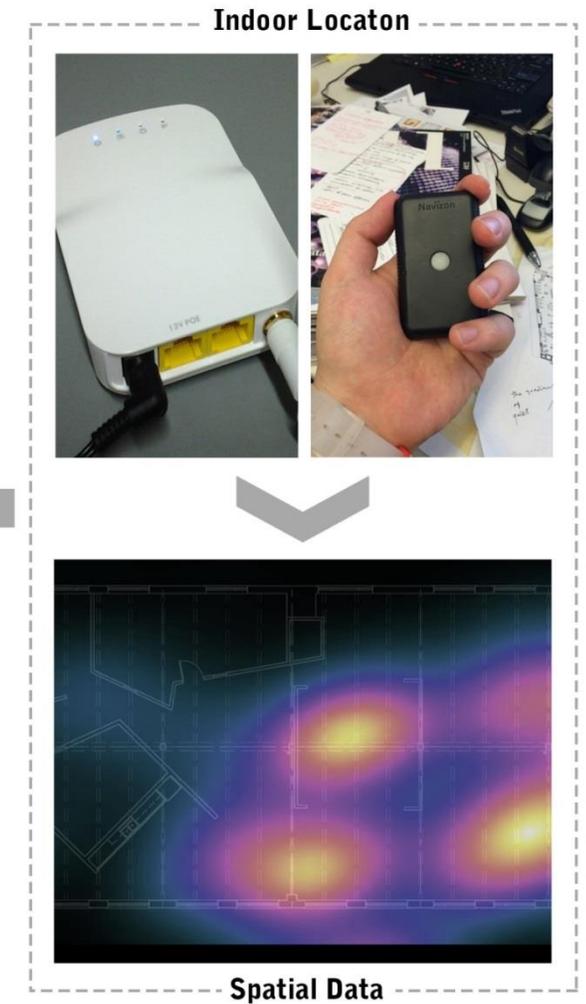
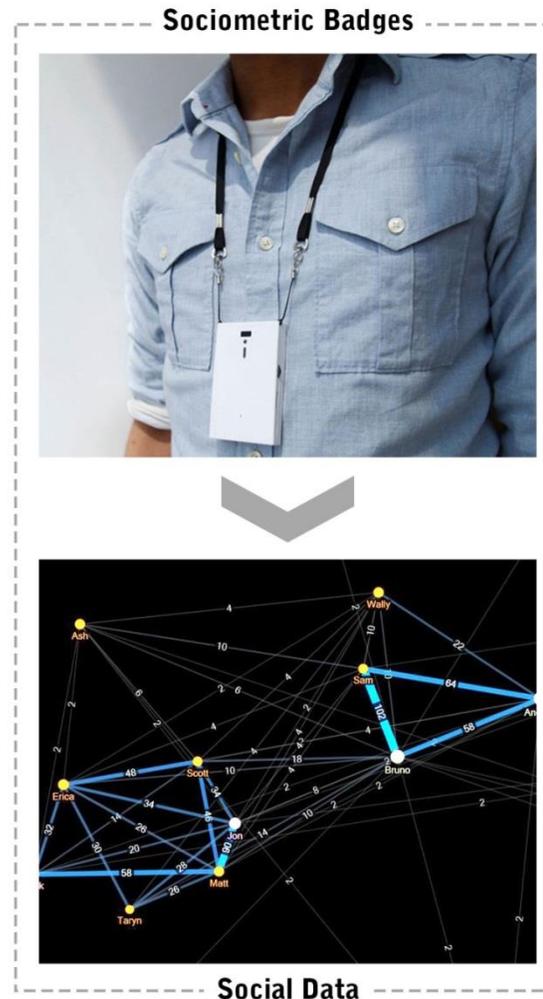




# Work Site Current Research

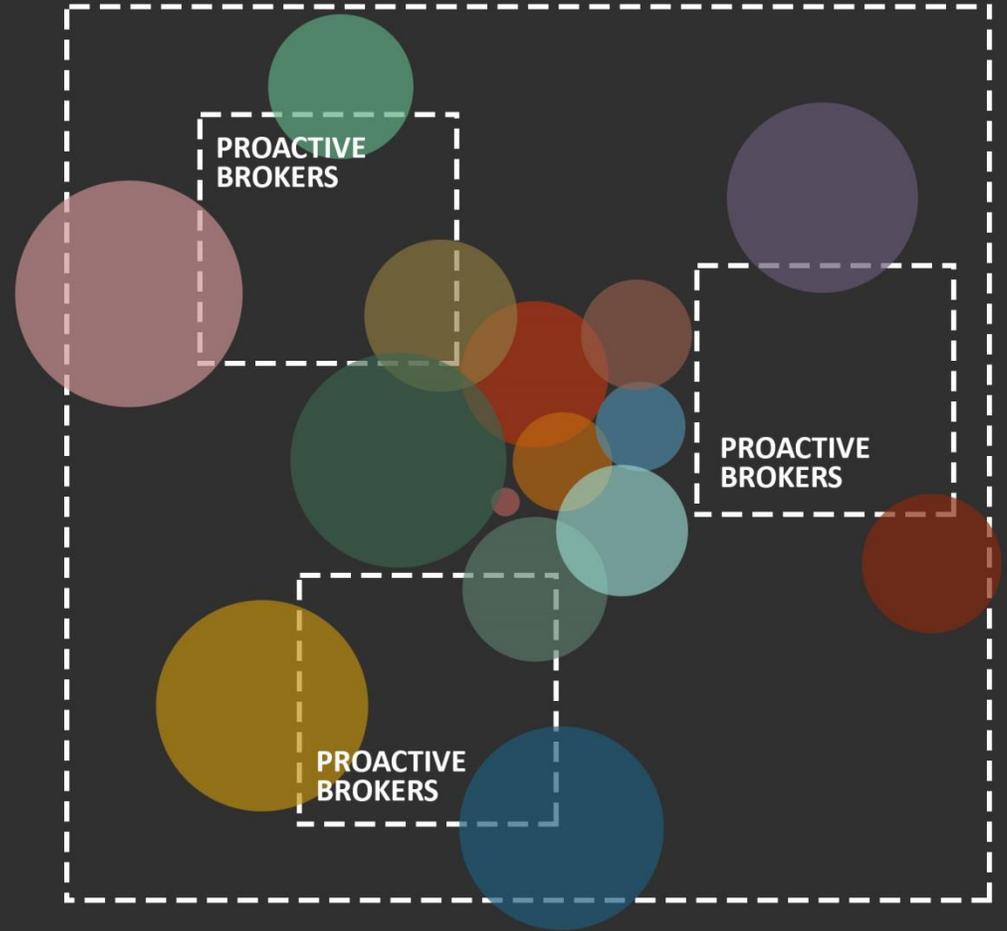
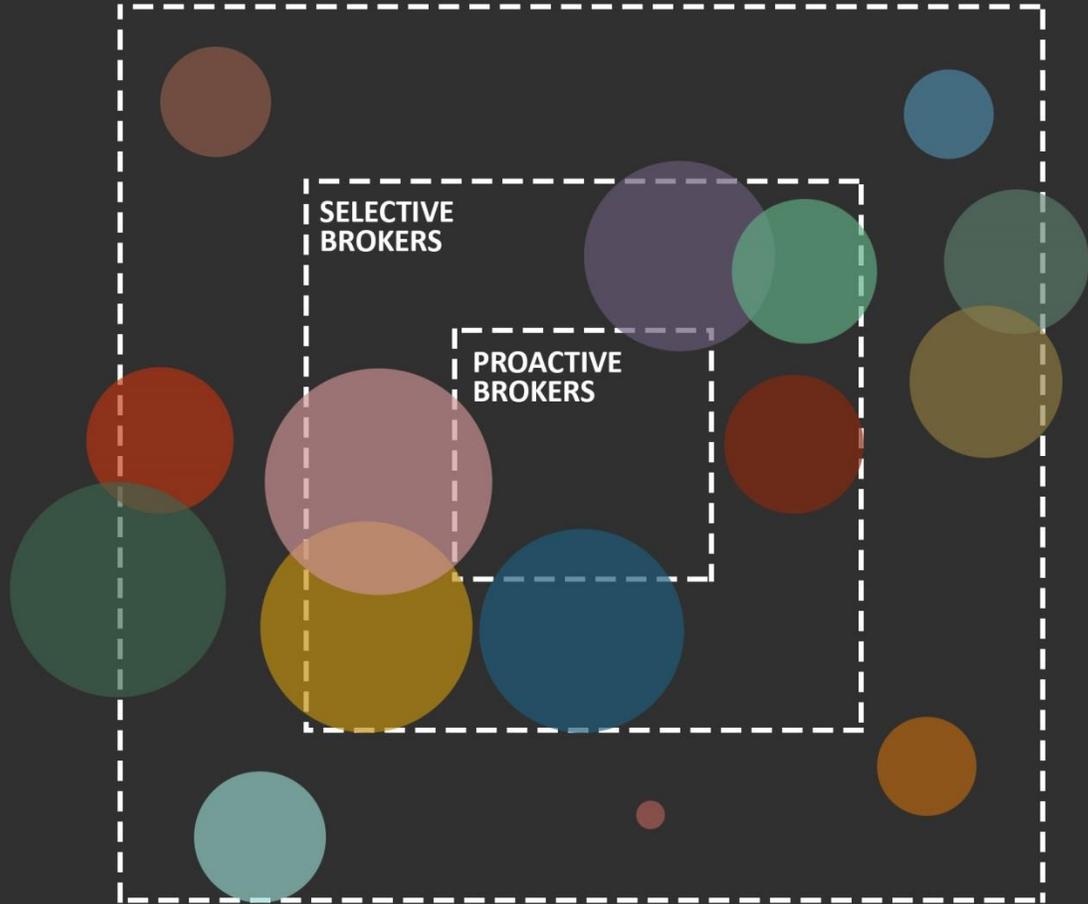
## People Space Analytics

- ▶ Understand utilization, behaviors and social networks to test and inform strategies



$$\text{COLLABORATION} = f(\text{INTERACTION} \times \text{BETWEENNESS}, \text{DEGREE})$$





# What remains consistent?

- ▶ We are not all the same
- ▶ We do different things
- ▶ Happy, healthy employees = productive, creative employees

What makes us happy?

---

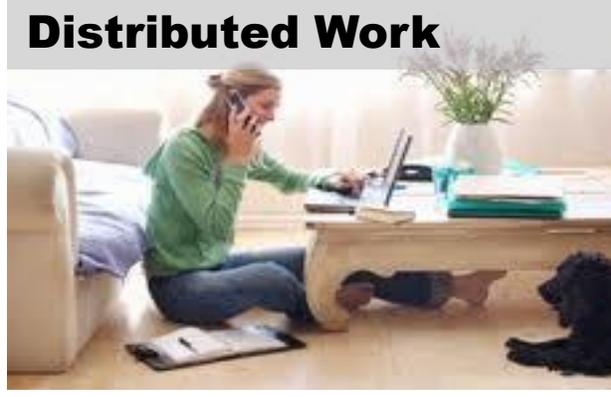
# Give them what they need

## Choice and control

We all want to feel

- ▶ Safe: Cared for
  - ▶ Comfortable: Basic needs met
  - ▶ Healthy: Our physical vitality supported
  - ▶ Socially Connected: Personally connected
  - ▶ Emotionally Connected: Part of something good
  - ▶ Fulfilled: I have influence
-

macro mobility



micro mobility

well-being



health & safety

coming together



working together

# Safe



# Comfortable



# Healthy



# Socially Connected



# Emotionally Connected



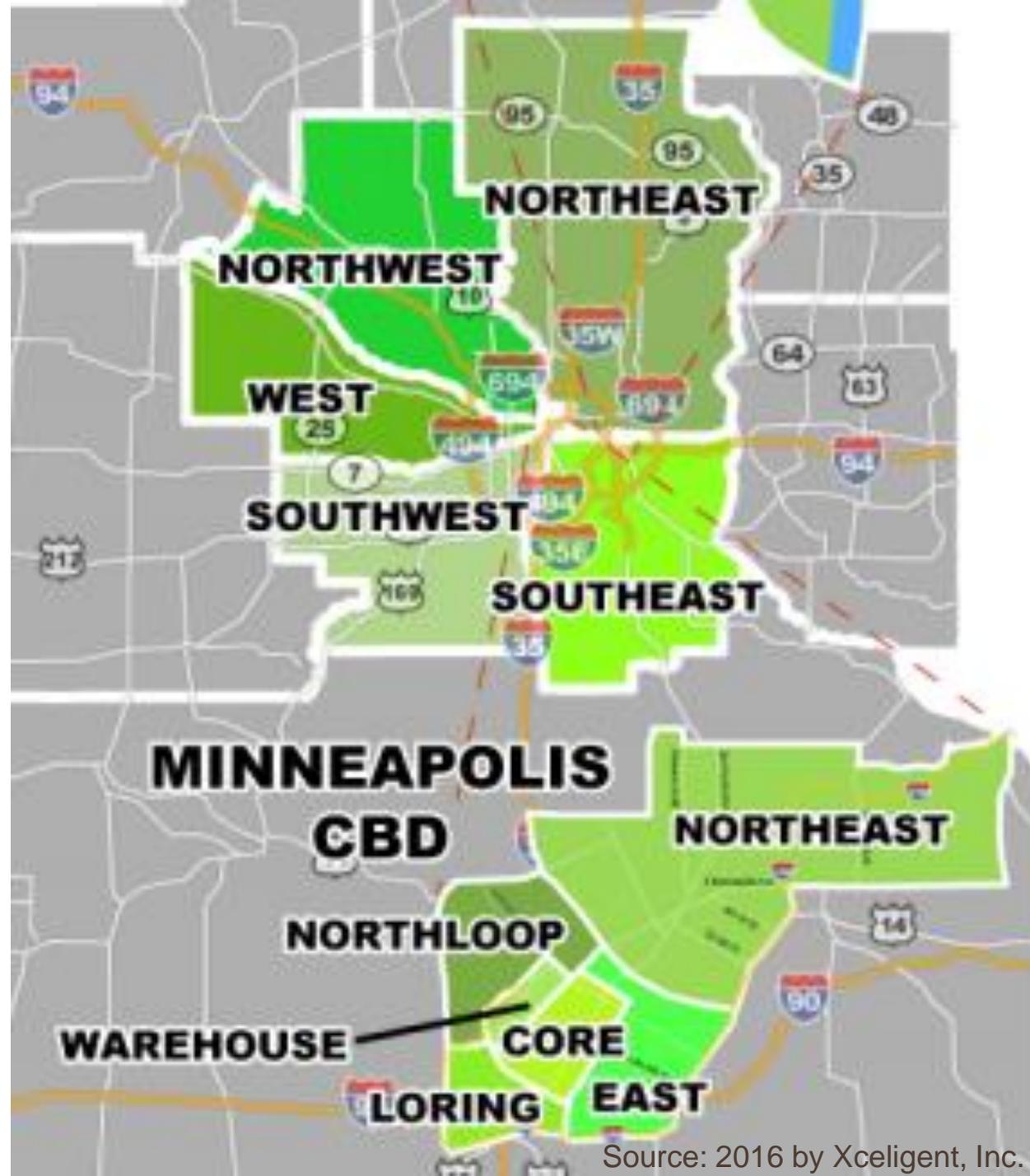
# Fulfilled



# Market Update

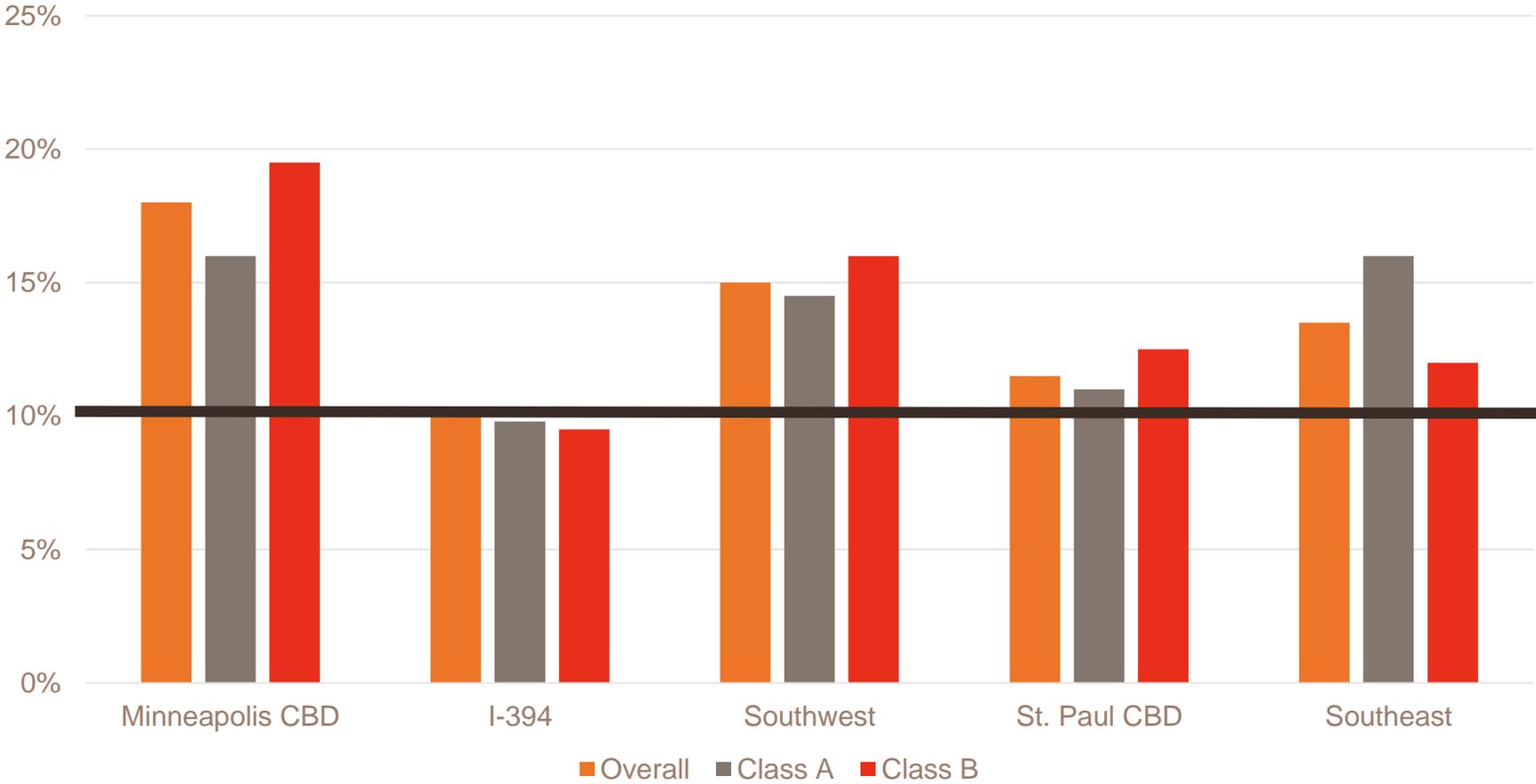
# Office Trends

- ▶ What's Hot | I-394 and the North Loop
- ▶ Bifurcation of Markets
- ▶ Talent | Attraction and Recruitment
- ▶ Amenities | Walk Scores Win
- ▶ Rising Construction Costs
- ▶ Record Property Tax Increases

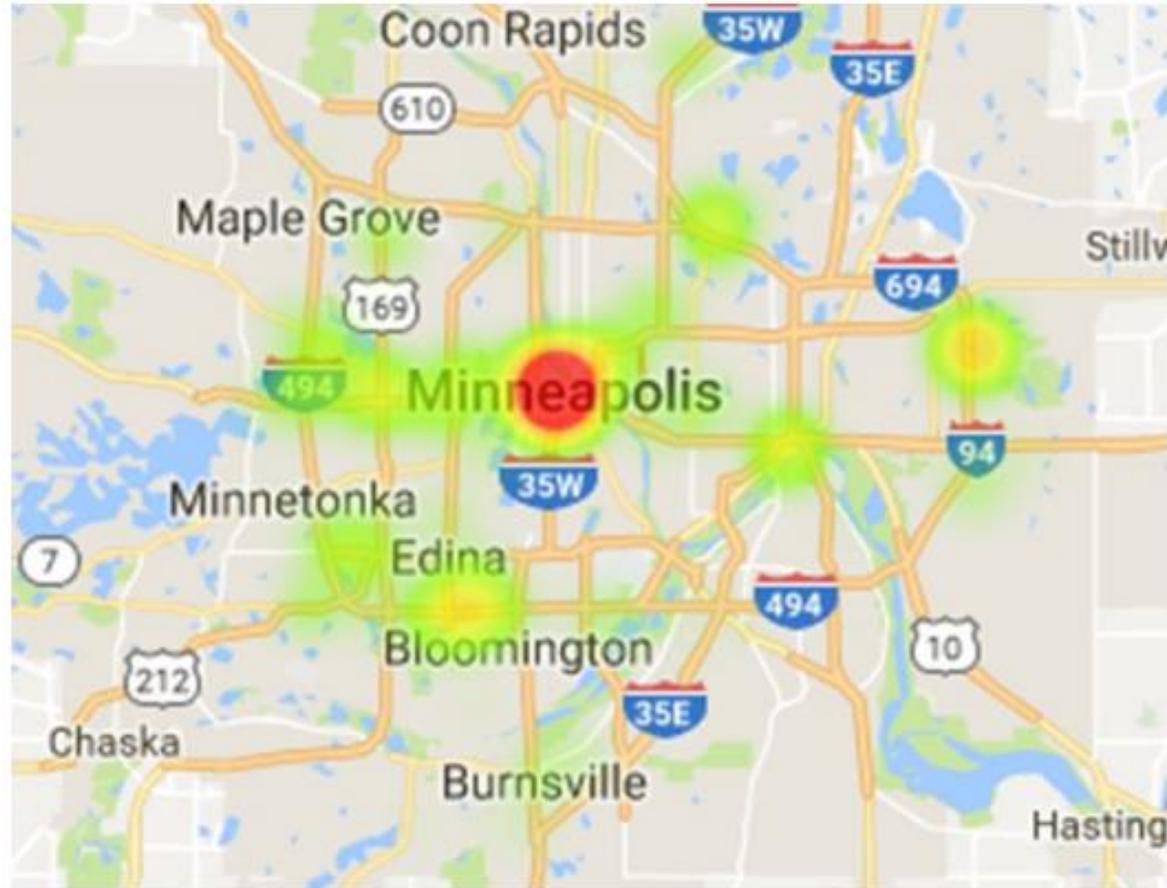


# Office Vacancy

## Metro Vacancy by Submarket



# Office Leasing



Source: 2016 by Xceligent, Inc.

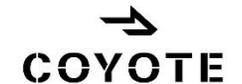
# Migration to Downtown Minneapolis

- ▶ Be The Match (240,000 SF)
- ▶ Select Comfort (211,000 SF)
- ▶ ECMC (125,000 SF)
- ▶ Code42 (65,000 SF)
- ▶ Arctic Cat Inc. (55,000 SF)

**1,223,881 SF = 26 Companies**



ECMC



VÄRDE



C.H. ROBINSON  
WORLDWIDE, INC.

# Corporate Consolidations/Rightsizing

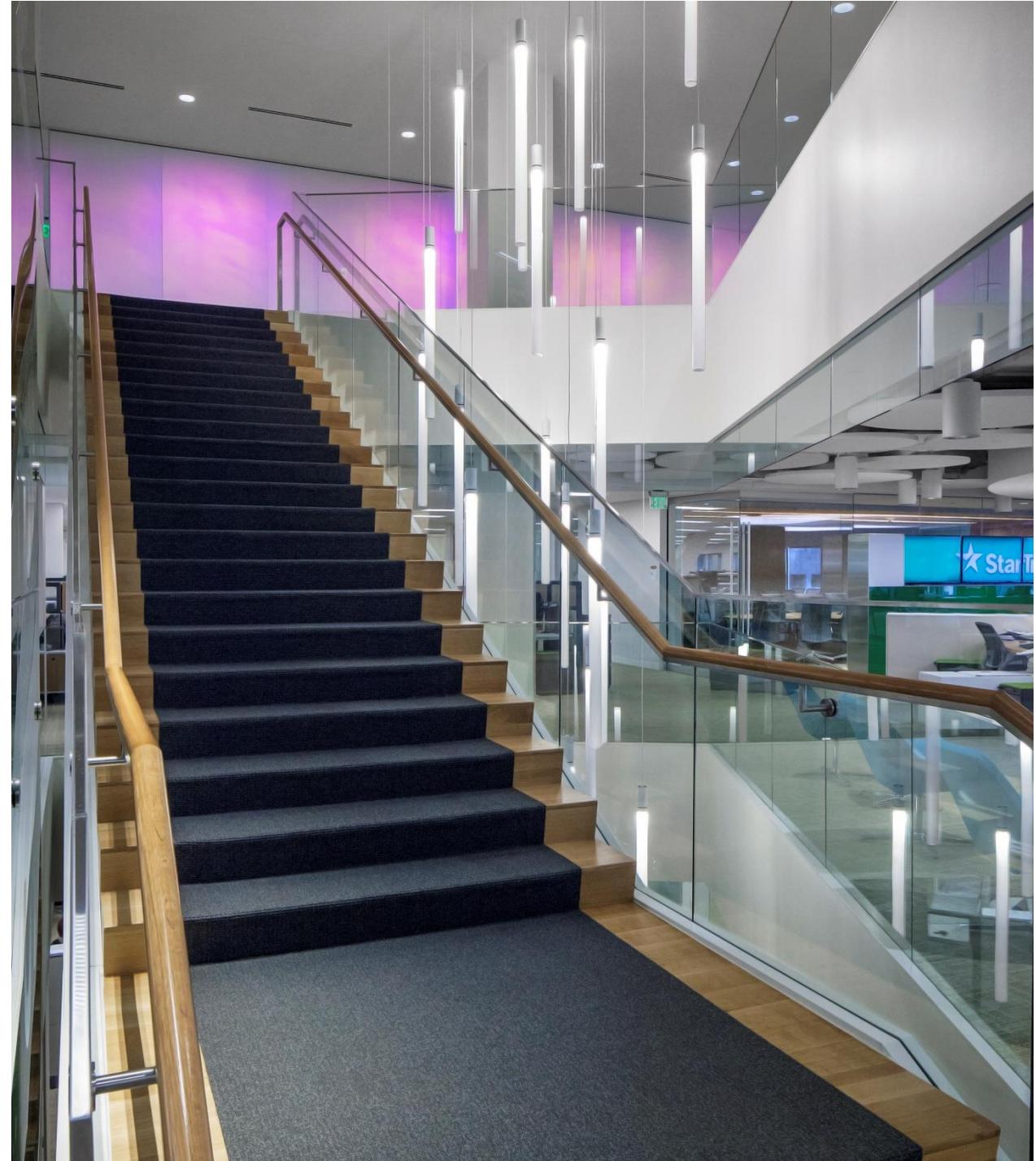
- ▶ Wells Fargo (-970,000 SF)
- ▶ TCF Bank (-220,000 SF)
- ▶ Xcel Energy (-146,000 SF)
- ▶ Capella Education (-64,131 SF)
- ▶ Mithun (-60,000 SF)

**-1,642,131 SF = 12 Companies**



# Five Trends to Watch in 2017

- ▶ Urbanization to Continue
- ▶ Significant Corporate RE Investment
- ▶ Adaptive Reuse Projects
- ▶ Rising Occupancy Costs
- ▶ Infrastructure Investment



# QUESTIONS

---