TED MOUDIS ASSOCIATES

# Project X: A Chicago Story

COMPARISON OF COST: NOW AND 10 YEARS AGO

TMA

# How we work has changed. How we design office space has changed.

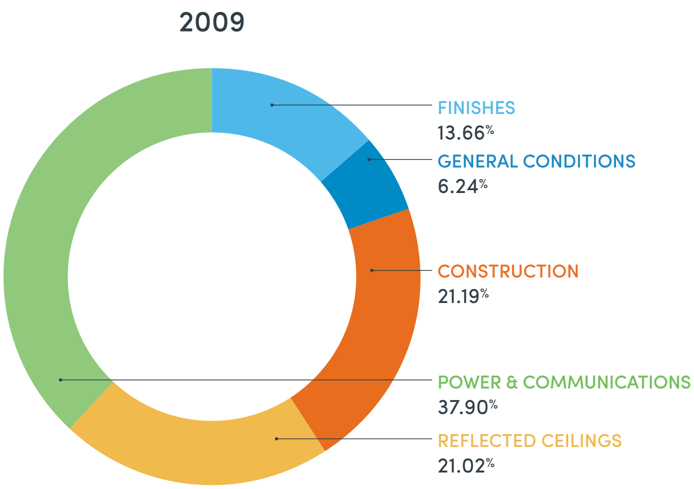
# How we understand pricing needs to change.

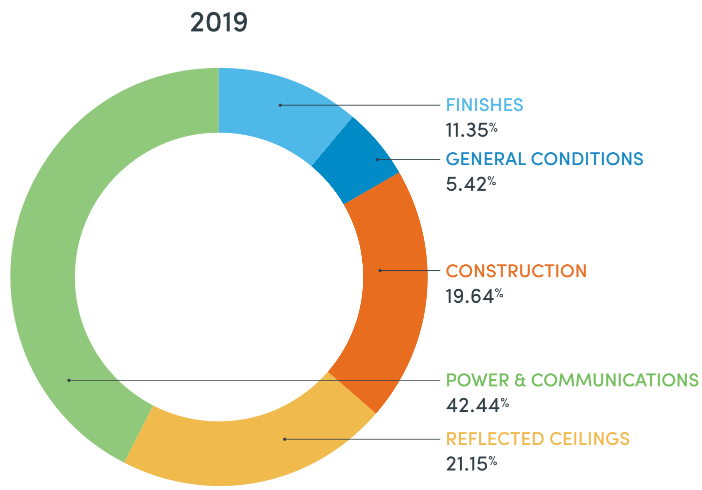
The tenants that last built out their space in 2009 are currently in renewals. The way we work is different; building a space for $100/SF is no longer an appropriate expectation.

# What Led Us to Think About This?

## What's Changed from 2009 to 2019?

We have recently gone through a series of projects that had to be value-engineered starting in the programming phase. Before we started the design and construction process, the client was unable to afford to build their space. Why was that? Were our expectations wrong? What needs had changed?




The distribution of how we spend money has remained relatively similar. For the high level, what has changed is the volume of scope and units of infrastructure required to support the increased headcount on the floor. These increases change the displacement of money within each high level category. The following pages will dissect each of the four primary categories, along with furniture, to illustrate the distribution of dollars.

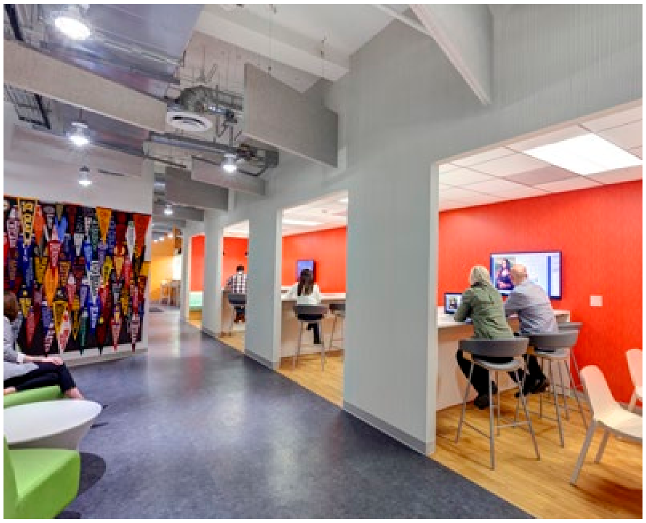
* Pricing is based upon work being completed in 2019 within the Central Business District of Chicago. General conditions are an average blend of recently completed projects of similar scope.

## How We Used to Think

Cost per Square Foot was king: If we assume 175 square feet per person on a floor plate, the 2009 standard build-out would yield 145 people on the floor. This includes private offices and workstations with an average ratio of 20% private offices to 80% workstations. Today, not only is the workstation size physically reduced (netting a higher quantity of workstations), the requirement for private offices is reducing. Today's build-out also assumes that some staff may either share desks or utilize free-addressing strategies for space utilization which would then increase other support needs.

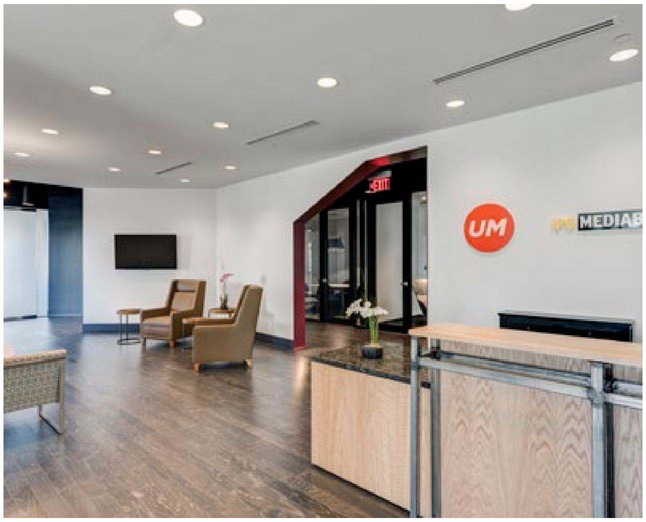
## A New Way of Thinking

Work styles have changed. Work spaces have changed. Work needs have changed. There are more staff that fit onto a floor plate (the same floor plate now yields a seat capacity of 200), therefore there are inherently more units of electrical, data, and HVAC required on the floor than previously needed. Also, with this newer way of working, A/V requirements have increased exponentially. The expectation to build-out a modest office space (carpet, paint, luxury vinyl tile in the café, some exposed ceilings in the open office area) for $100/SF is no longer a realistic prospect. The target cost for construction should be $130/SF (using the same modest materials) due to the increase in head count capacity, AV, code required energy controls, among other items.



## However...

If we think in terms of cost per head count, the cost actually decreases. In the 2009 pricing model (where the cost/SF is $100/SF for construction), the cost per head count is $17,250. In the 2019 pricing model (where the cost/SF is $130/SF for construction), the cost per head count is $16,250. However, in 2009, in order to fit 200 people on the floor, additional square footage would have to be leased, thus increasing the amount of money directed towards rent.



# 2009 vs. 2019

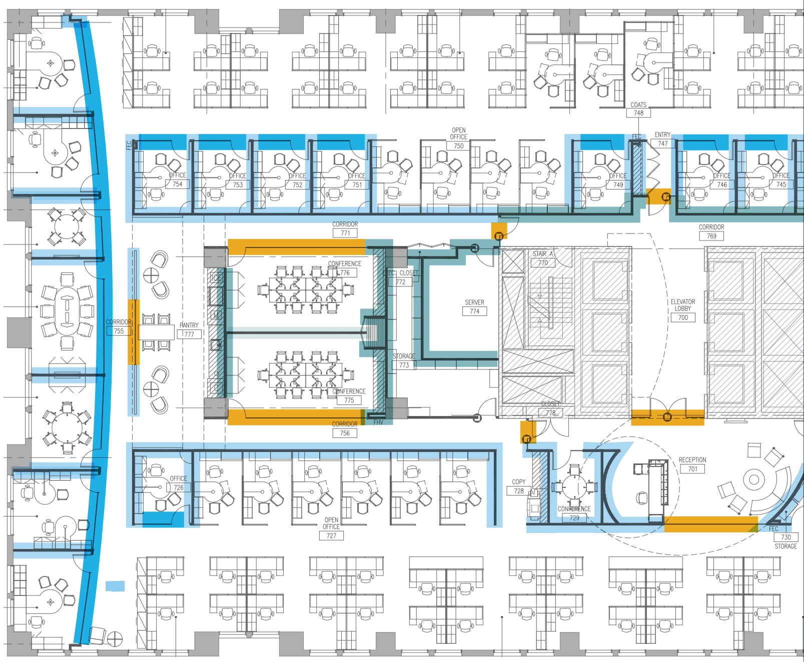
## Construction Compared

2019 still requires private rooms, but the usage has changed.

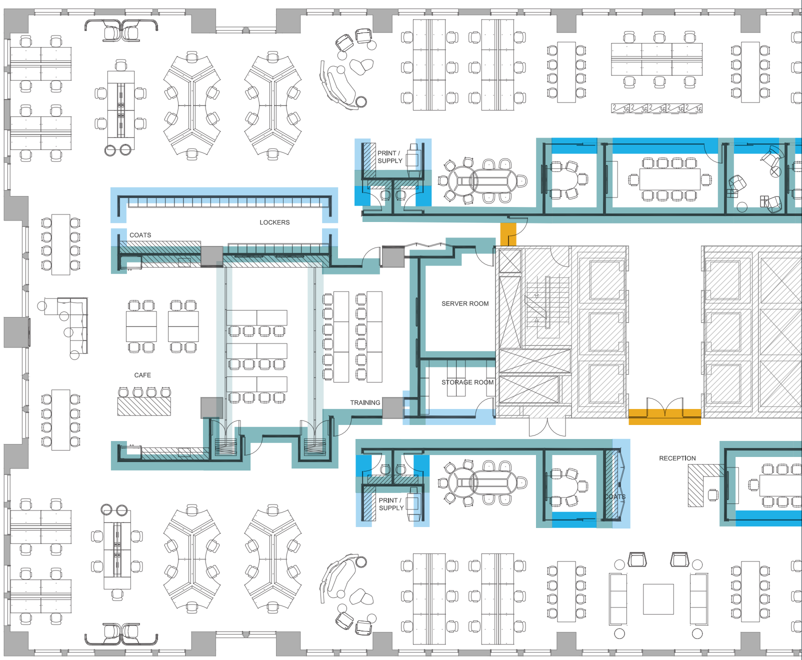
KEY FINDINGS:

- Reduction in private offices, doors, frames, and hardware.
- Increased emphasis on acoustics equals increased drywall numbers for conference rooms.
- Increased versatility produces the need for movable partitions.
- Additional plumbing requirements for support spaces and wellness areas.

### 2009

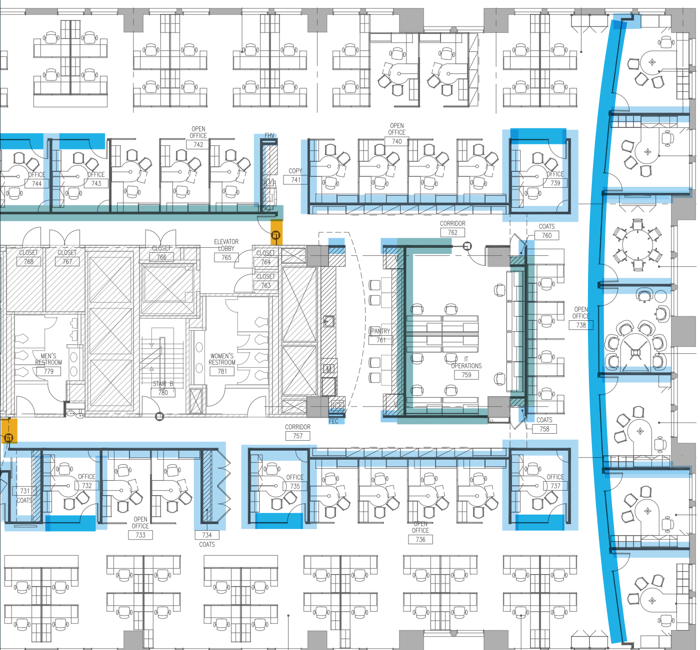


### 2019



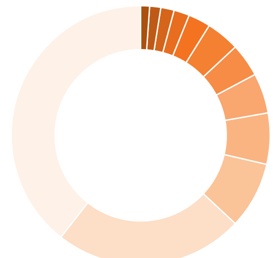

KEY

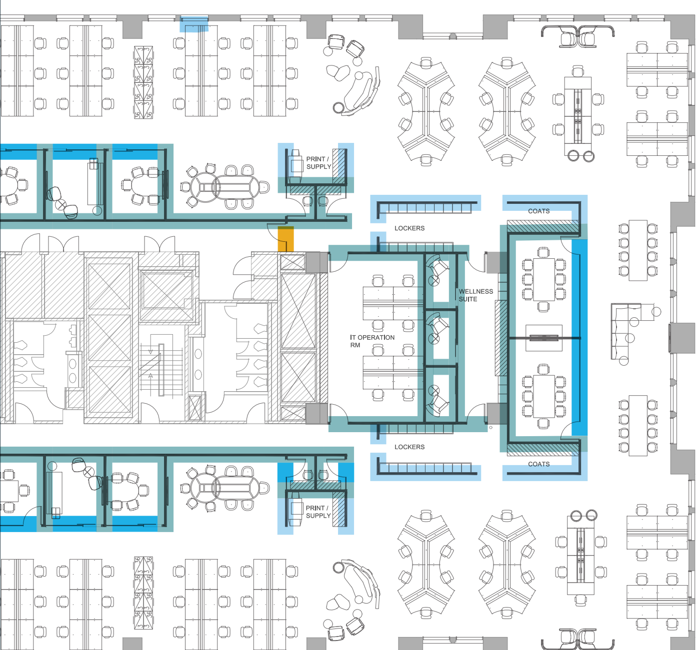
- Pre-Manufacture Wall Fronts, Clear Anodized Aluminum Frame with $^{3}/_{8}$" Glass
- Gypsum Board to 6" Above Finished Ceiling, $2^{1}/_{2}$" Stud, (1) Layer $^{5}/_{8}$" Gypsum Board Each Side with Full Sound Batt Insulation
- Gypsum Board Deck-Deck, $2^{1}/_{2}$" Stud, (1) Layer $^{5}/_{8}$" Gypsum Board Each Side, Full Sound Batt Insulation
- $^{1}/_{2}$" Glass to Finished Ceilings with Typical Gypsum Wall to Deck Above Finished Ceiling
- Modern Fold, Manual Wall



## 2009 COST:
## $513,000

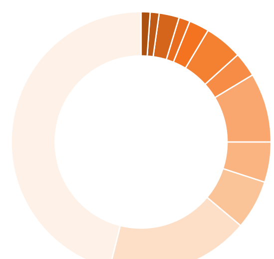
| | |
|---|---|
| Appliances | 1.25% |
| Final Cleaning | 1.46% |
| Misc. Metals | 1.46% |
| Premium Time | 1.95% |
| Permit Allowance | 2.92% |
| Plumbing | 4.09% |
| Rough Carpentry | 4.17% |
| Folding Partitions | 5.03% |
| Cleaning & Rubbish Removal | 6.37% |
| Doors, Frames & Hardware | 8.27% |
| Glass & Glazing | 23.61% |
| Drywall | 39.42% |





## 2019 COST:
## $632,800

| | |
|---|---|
| Appliances | 1.25% |
| Final Cleaning | 1.19% |
| Misc. Metals | 2.37% |
| Premium Time | 1.58% |
| Permit Allowance | 2.36% |
| Plumbing | 4.82% |
| Rough Carpentry | 3.05% |
| Folding Partitions | 8.41% |
| Cleaning & Rubbish Removal | 5.17% |
| Doors, Frames & Hardware | 6.16% |
| Glass & Glazing | 17.53% |
| Drywall | 46.11% |



## Reflected Ceiling Compared

Lighting has become more energy efficient, however energy code requirements have increased.

**KEY FINDINGS:**

- 2009 utilized fluorescent lighting and acoustical ceiling tiles; lighting controls were an upgrade.
- 2019 celebrates exposed ceilings.
- More recent energy codes require more sophisticated lighting controls.
- Higher volume of occupants leads to increased HVAC requirements.

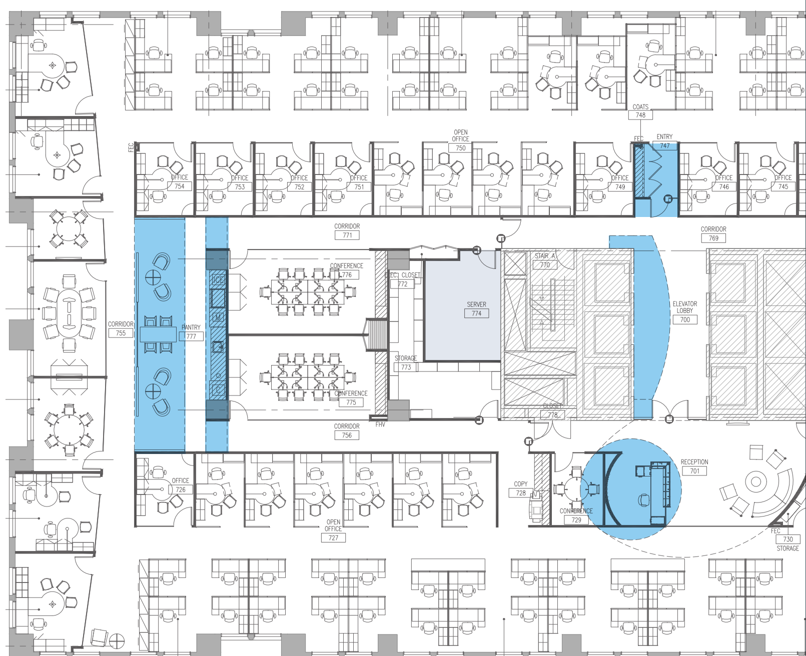
### KEY

Acoustical Ceiling Tile / Grid

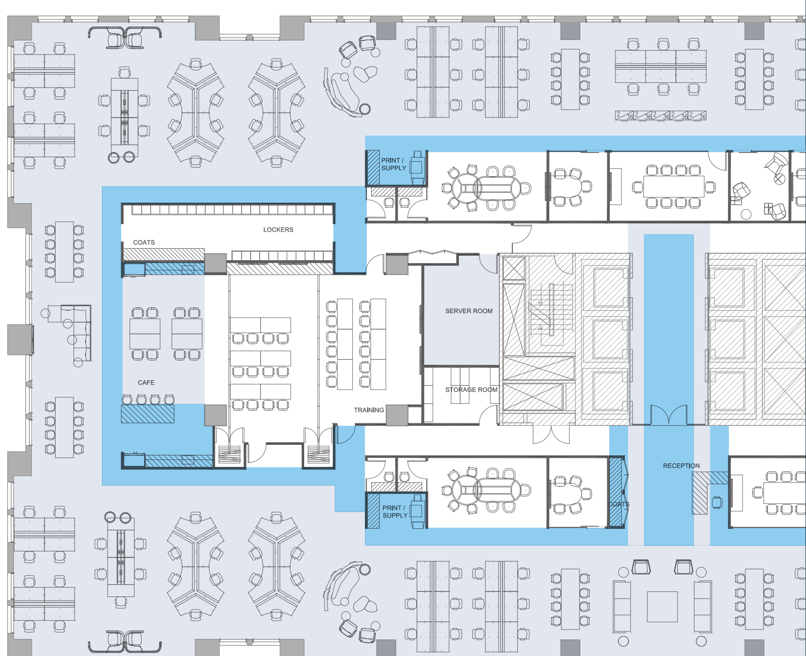
Dry Wall Ceiling

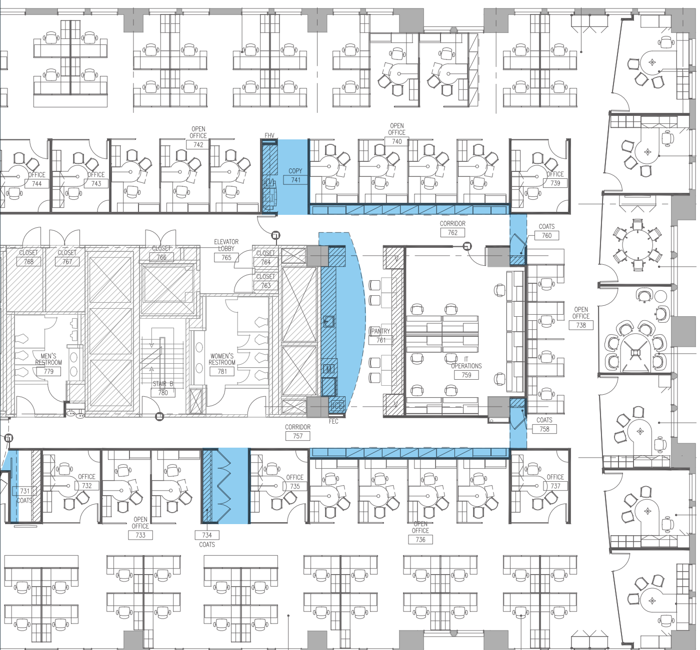
Exposed Ceiling with 1” Sonaspray

### 2009



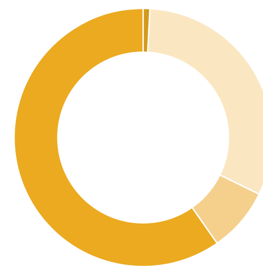
### 2019

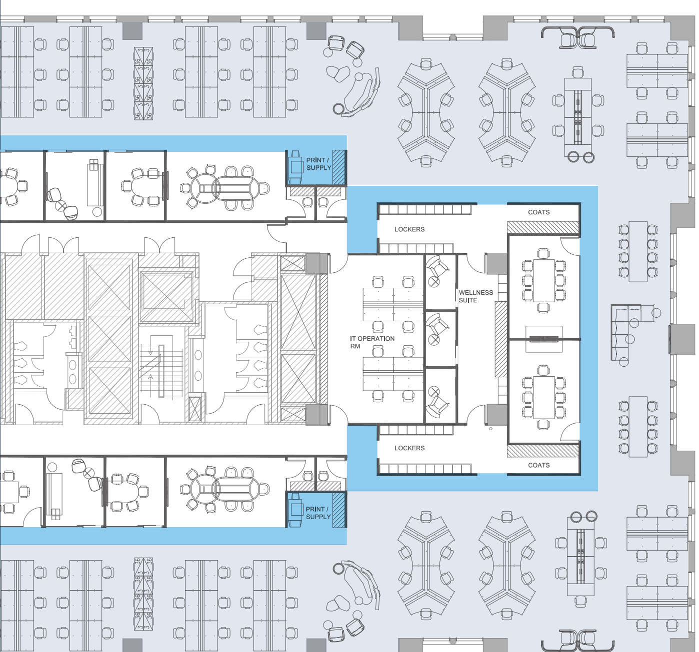




## 2009 COST:
## $508,900

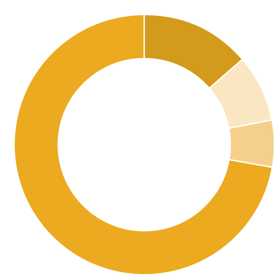
| | |
|---|---|
| Fireproofing | 0.98% |
| HVAC | 59.70% |
| Fire Protection | 8.04% |
| Acoustical Ceilings | 31.28% |





## 2019 COST:
## $681,300

| | |
|---|---|
| Fireproofing | 13.87% |
| HVAC | 72.04% |
| Fire Protection | 6.00% |
| Acoustical Ceilings | 8.09% |



# Power & Communications Compared

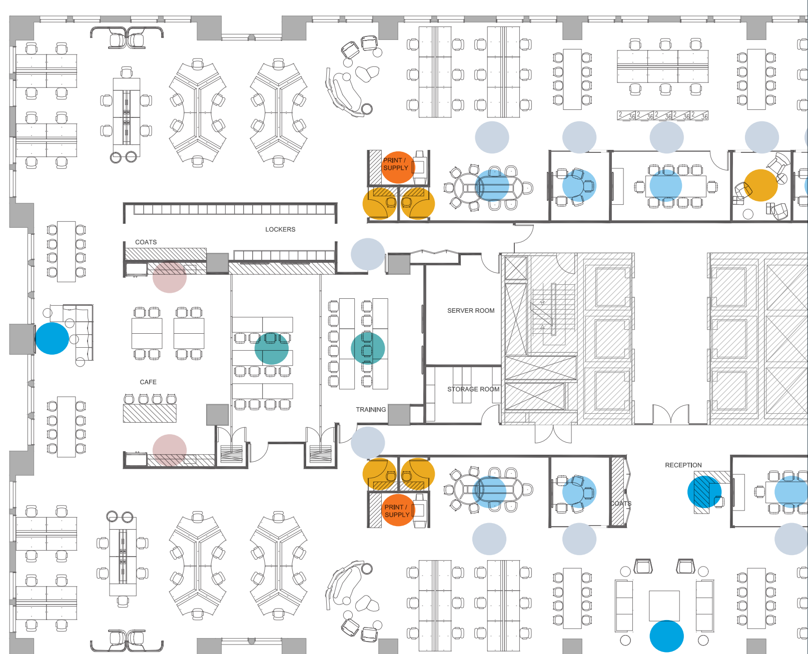
While individual power requirements at the desk may have decreased, individual desking locations increased.

### KEY FINDINGS:

- Electrical and low voltage requirements increased.
- Audio-visual costs increased exponentially.
- Increased mobility leads to increased organization (i.e., room schedulers).

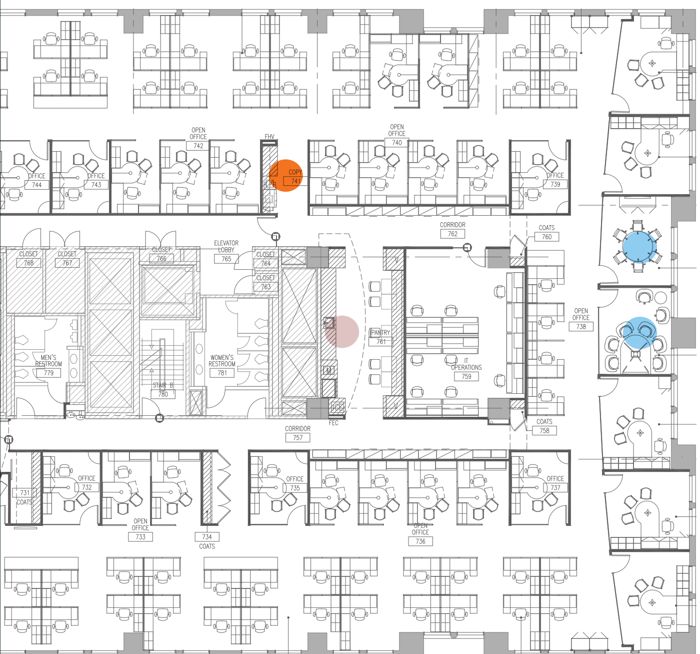
## 2009

## 2019



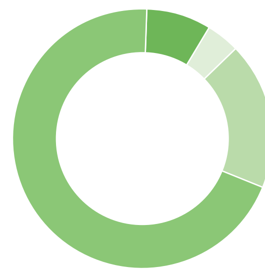

### KEY

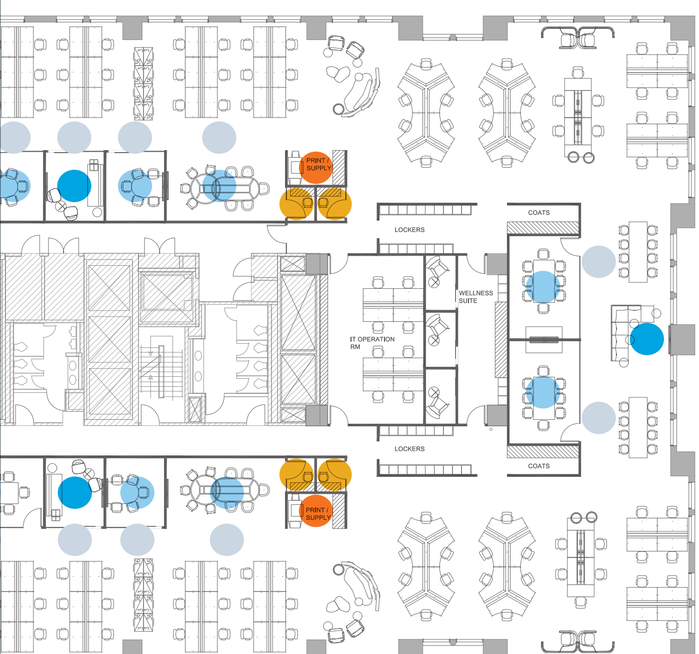
- Typical Workstation / Private Office Power + Data
- Wall Mounted TV with Table Top Connectivity (2019 has increased power requirements)
- Wall Mounted TV with Connectivity
- Enhanced Presentation Capabilities
- Room Scheduler
- Pantry Equipment
- Copier / Printer Equipment
- Additional Voice / Data



## 2009 COST:
## $917,500

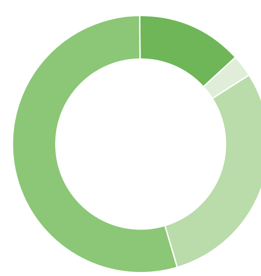
| | |
|---|---|
| Communications | 8.20% |
| Electrical | 69.50% |
| AV Systems | 18.29% |
| Security | 4.01% |






## 2019 COST:
## $1,367,100

| | |
|---|---|
| Communications | 13.28% |
| Electrical | 54.66% |
| AV Systems | 29.19% |
| Security | 2.87% |



## Finishes Compared

In comparing 2009 to 2019, the design and usage of materials remains relatively similar with the following exceptions.

### KEY EXCEPTIONS:

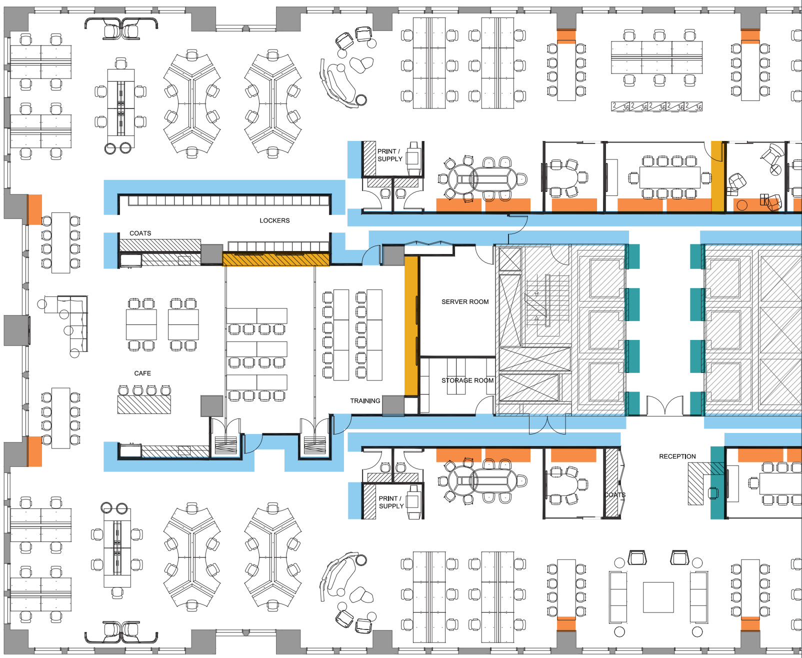
- More acoustical treatments are implemented.
- More communication-based treatments (whiteboards) are used.
- Millwork has increased, but is proportionate to staff increase.

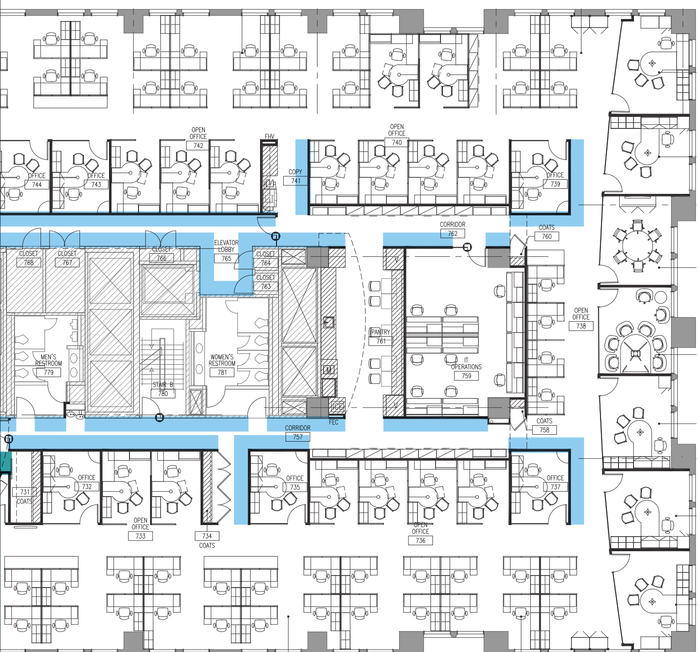
### 2009

### KEY

- Paint
- Vinyl Wall Covering ($20/yard)
- Wood Veneer Wall Covering
- 4' X 8' Back Painted Glass (magnetic)
- Fabric Wrapped Panels (Nova Wall $40/yard)

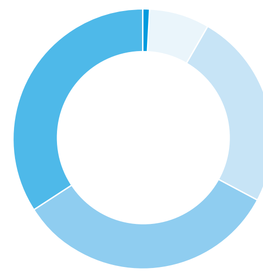
### 2019

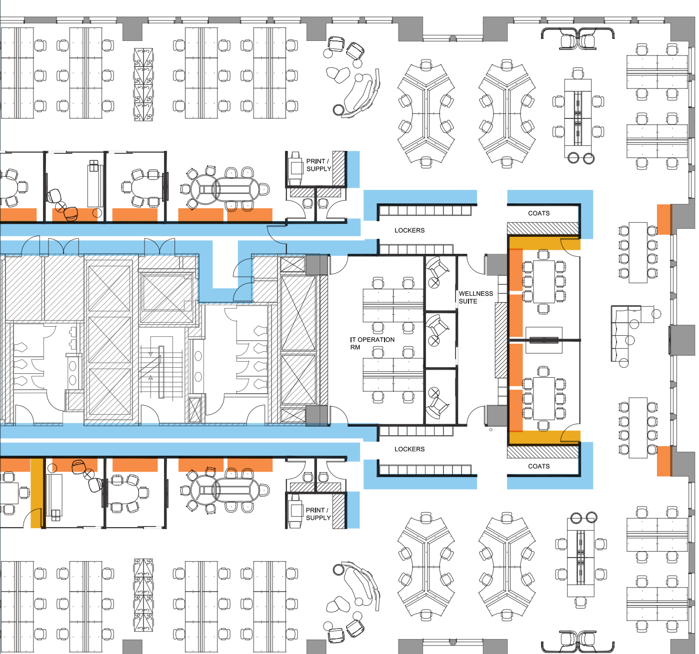




## 2009 COST: $330,600

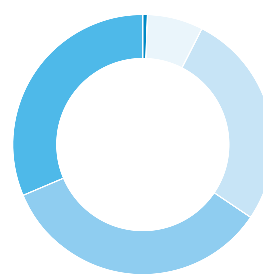
| | |
|---|---|
| Ceramic Tile | 0.97% |
| Carpet + Resilient | 33.94% |
| Millwork | 33.27% |
| Painting + Wallcovering | 24.26% |
| Floor Prep Allowance | 7.56% |






## 2019 COST: $365,700

| | |
|---|---|
| Ceramic Tile | 0.79% |
| Carpet + Resilient | 31.34% |
| Millwork | 34.18% |
| Painting + Wallcovering | 26.85% |
| Floor Prep Allowance | 6.84% |



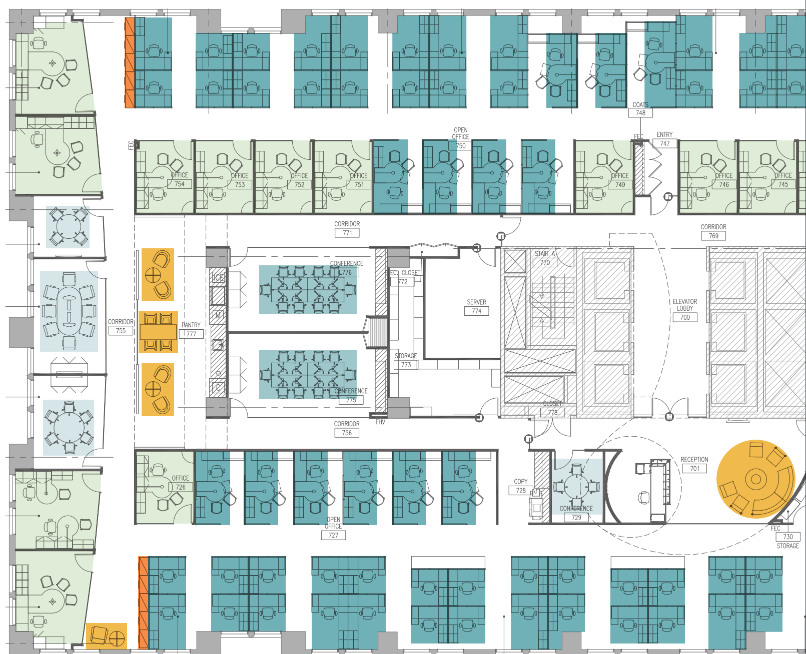
## Furniture Compared

There is a large shift from private use furniture to shared furniture as the fences around each individual work space have been blurred.

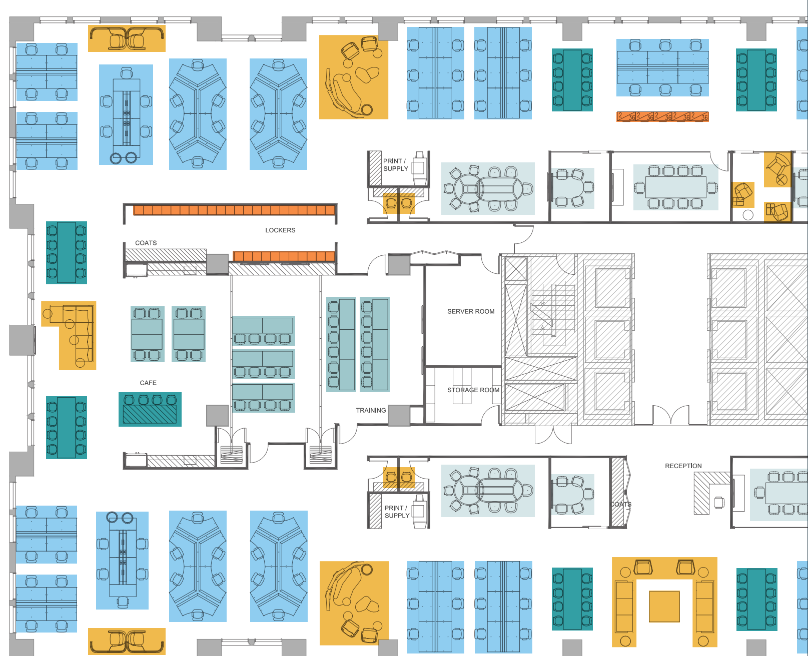
**KEY FINDINGS:**

- 2019 significantly reduces the private office wood furniture, guest seating and executive task chair.
- Paper storage diminishes, but personal lockers increase.
- A variety of workstation styles and adjustability is provided.
- Ancillary seating and tables increase.
- With more ancillary comes longer lead times.

## 2009



## 2019

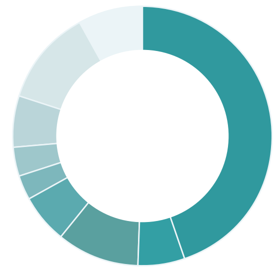


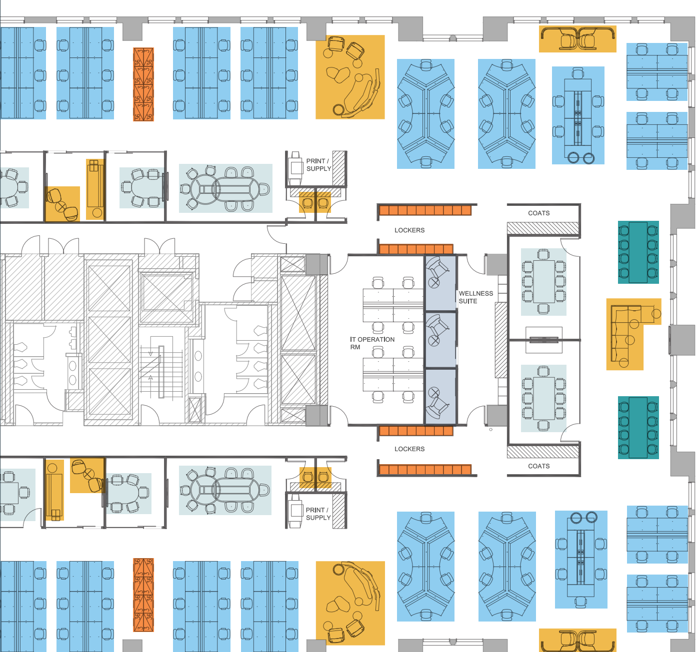

### KEY

- Workstation with 50" - 70" High Panels
- Workstation with Sit / Stand: Benching / 120° / Community Table
- Private Office with Wood Materials
- Standing Height Table & Stools
- Training Tables & Chairs
- Fixed Table & Chairs
- Lounge / Powered Pods / Individual Work Areas
- Wellness Suite Furniture
- Files / Lockers

## 2009 COST:
## $807,298

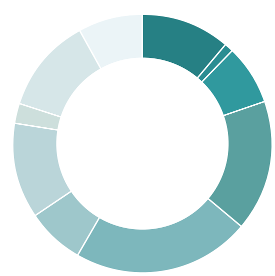
| | |
|---|---|
| Adjustable Height Bench | 0.00% |
| Benching | 0.00% |
| Workstations | 44.83% |
| Private Offices | 5.84% |
| Task Chairs | 10.22% |
| Guest Chairs | 6.14% |
| Ancillary | 3.18% |
| Files | 3.65% |
| Conference Rooms | 6.14% |
| Training Rooms | 0.00% |
| Freight / Installation | 12.00% |
| Tax | 8.00% |



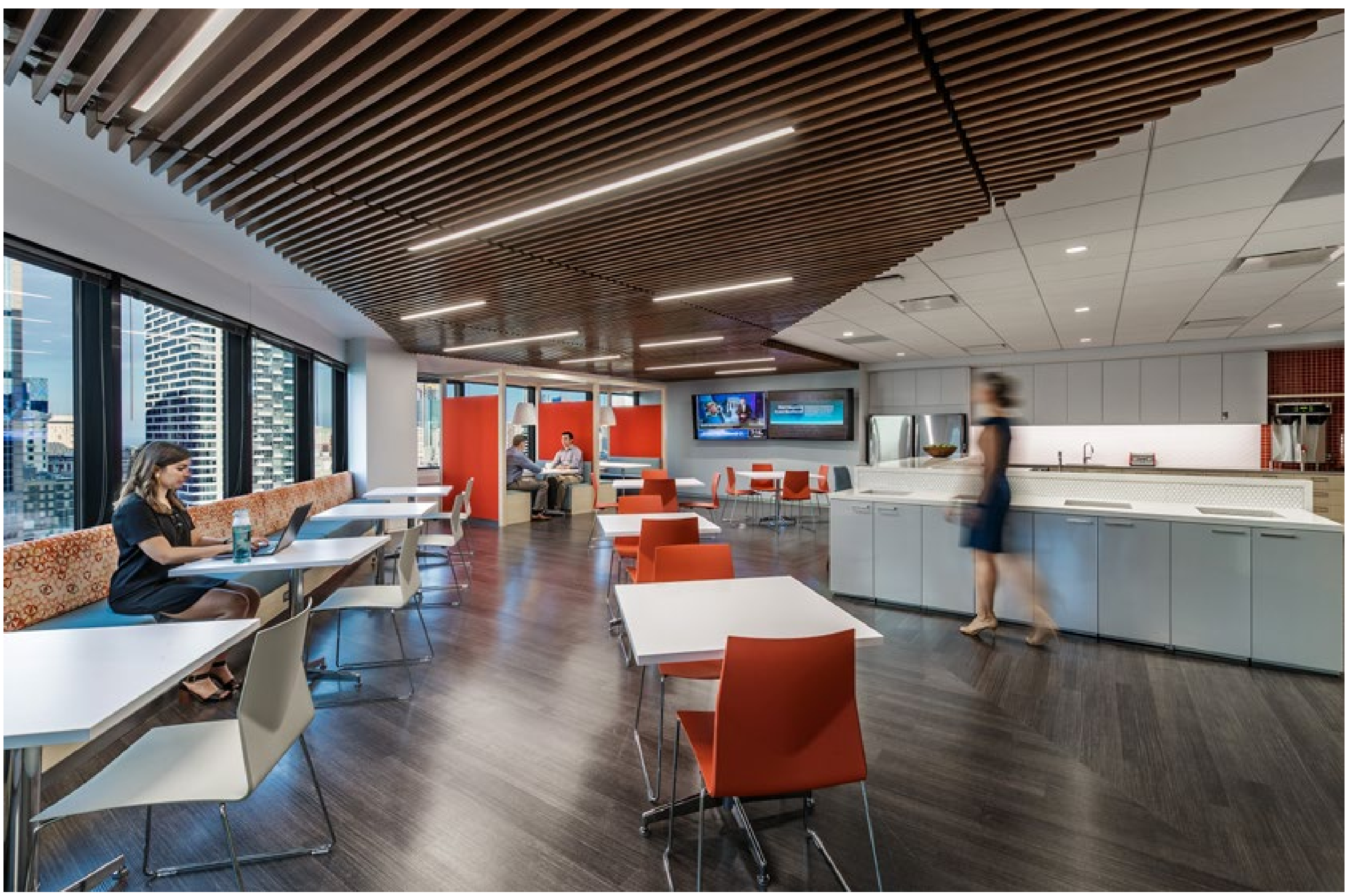



## 2019 COST:
## $656,373

| | |
|---|---|
| Adjustable Height Bench | 11.16% |
| Benching | 1.25% |
| Workstations | 7.39% |
| Private Offices | 0.00% |
| Task Chairs | 16.41% |
| Guest Chairs | 0.00% |
| Ancillary | 22.24% |
| Files | 7.22% |
| Conference Rooms | 12.03% |
| Training Rooms | 2.30% |
| Freight / Installation | 12.00% |
| Tax | 8.00% |




19
24



# In Conclusion

## The Long-Term Savings Plan

In 2009 an additional 10,000-12,000 square feet of space would be required to support the additional 55 people (to reach a headcount of 200 staff). Depending on rent rates the lease savings range from $2,000,000 to over $3,000,0000.

- Year 1 capital investment is increased.
- Cost per person is decreased.
- Larger savings are seen over the life of the lease.
- Continue to look at long term investment in staff and space.

### 2009 PROGRAM

| | | | |
|---|---|---|---|
| **Staff** | | | |
| P.O. Lg | 9 | 200 | 1,800 |
| P.O. Sm | 14 | 120 | 1,680 |
| W.S. Lg | 28 | 88 | 2,464 |
| W.S. Sm | 94 | 36 | 3,384 |
| | **145** | | **14,365** |
| **Conference Space** | | | |
| 4 Person Conference | 2 | 120 | 240 |
| 6 Person Conference | 3 | 200 | 600 |
| 8 Person Conference | 1 | 225 | 225 |
| Phone Rooms | 0 | 48 | 0 |
| Training | 2 | 375 | 750 |
| Reception | 1 | 400 | 400 |
| | | | **3,411** |
| **Other Support** | | | |
| Cafe | 2 | 400 | 800 |
| IT Operations Room | 1 | 500 | 500 |
| File Room | 1 | 275 | 275 |
| Storage Room | 1 | 30 | 30 |
| Server Room | 1 | 225 | 225 |
| Copy Room | 2 | 100 | 200 |
| Open Area Files | 21 | 9 | 189 |
| Lockers | 0 | .5 | 0 |
| Coats | 4 | 40 | 160 |
| Wellness Room | 1 | 100 | 100 |
| Toilets | 2 | 200 | 400 |
| Elevator Lobby | 1 | 1,000 | 1,000 |
| | | | **5,974** |
| | | | **23,750** |
| | **Floor USF** | | **25,000** |
| | **USF / Person** | | **172** |

### 2019 PROGRAM

| | | | |
|---|---|---|---|
| **Staff** | | | |
| P.O. Lg | 0 | 200 | 0 |
| P.O. Sm | 0 | 120 | 0 |
| W.S. Lg | 0 | 88 | 0 |
| W.S. Sm | 200 | 36 | 7,200 |
| | **200** | | **11,088** |
| **Conference Space** | | | |
| 4 Person Conference | 4 | 120 | 480 |
| 6 Person Conference | 6 | 200 | 1,200 |
| 8 Person Conference | 4 | 225 | 900 |
| Phone Rooms | 8 | 48 | 384 |
| Training | 2 | 375 | 750 |
| Reception | 1 | 400 | 400 |
| | | | **6,336** |
| **Other Support** | | | |
| Cafe | 1 | 600 | 600 |
| IT Operations Room | 1 | 500 | 500 |
| File Room | 1 | 275 | 275 |
| Storage Room | 1 | 30 | 30 |
| Server Room | 1 | 225 | 225 |
| Copy Room | 2 | 100 | 200 |
| Open Area Files | 21 | 9 | 189 |
| Lockers | 200 | .5 | 100 |
| Coats | 4 | 40 | 160 |
| Wellness Room | 2 | 100 | 200 |
| Toilets | 2 | 200 | 400 |
| Elevator Lobby | 1 | 1,000 | 1,000 |
| | | | **5,974** |
| | | | **23,397** |
| | **Floor USF** | | **25,000** |
| | **USF / Person** | | **125** |

# About Ted Moudis Associates

**Ted Moudis Associates designs workplaces that provide sustainable environments and flexible workplace solutions built for longevity, productivity, and enjoyment. We believe that a built space should not only reflect but also enhance an organization's culture and values.**

Businesses today face an unprecedented mix of social, economic, environmental, and technological challenges. Our diverse staff of multi-disciplinary experts in the fields of architecture and interior design, workplace strategy, change management, brand integration, and furniture coordination help our clients to meet these challenges.

Founded in 1990 by Senior Principal Ted Moudis, AIA, and headquartered in New York with an office in Chicago and an alliance in London, we are a recognized Top 30 Design Giants firm by *Interior Design* Magazine.

## Our Expertise

### ARCHITECTURE & INTERIOR DESIGN

We believe in the power of space. Your workplace is a key driver for your organization's success and continued growth. Our architecture and interior design experts partner with you to design the perfect solution that provides maximum productivity, flexibility, and innovation for your unique business.

### WORKPLACE STRATEGY

The design of your workplace is an opportunity to implement new strategies that reflect your changing business environment and set the stage for how your people will work in the future. We equip your employees with spaces and technology that enhance overall performance, while at the same time driving efficiency.

### CHANGE MANAGEMENT

We understand that workplace performance is only as good as the drive of your people. We focus on workplace and workstyle adoption to support your people through the transition to ensure they are utilizing the workplace to its full potential and to reduce the natural dip in productivity that occurs with all change initiatives.

### BRAND DESIGN

For workplace clients, brand integration into the built environment is a key factor in designing the perfect experience. Partnering with you, we deliver impactful graphics, technology solutions, and branded environments that are seamlessly incorporated into the architectural services we provide.

### FURNITURE COORDINATION

The purchase, scheduling, production, delivery, and installation of furniture is one of the most complex aspects of any project. Our in-house experts provide a turnkey furniture solution. We analyze your furniture inventory and requirements and develop purchasing strategies, budgets, and schedules based upon projected quantities and furniture styles.

## Office Locations

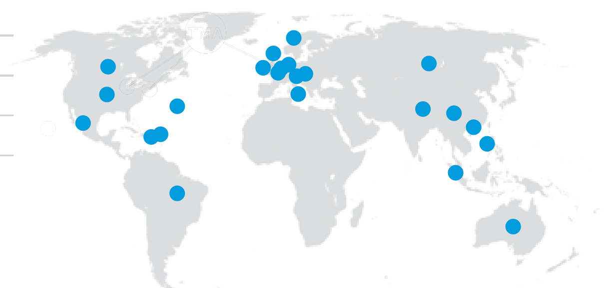
| New York | Chicago | London |
|---|---|---|
| | | Alliance with MCM Architecture |

## Global Range of Work

We have completed design work internationally with local associated architects in:

**23 COUNTRIES**

| | | | |
|---|---|---|---|
| | Brazil | Hong Kong | Russia |
| | Canada | Ireland | Singapore |
| | China | Italy | United Kingdom |
| Australia | Czechia | Malaysia | Virgin Islands |
| Austria | England | Mexico | |
| Belgium | France | Netherlands | |
| Bermuda | Germany | Philippines | |

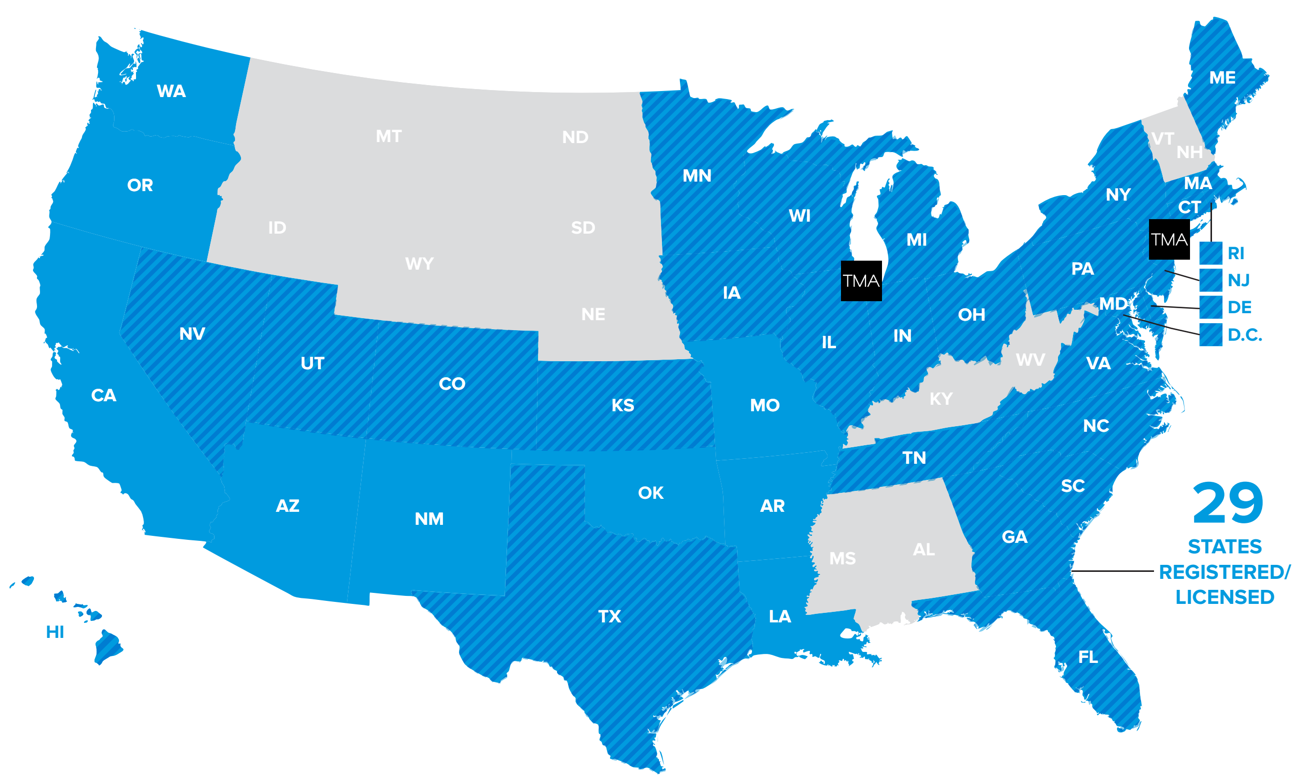


## National Range of Work

We have completed design work throughout the U.S. and we are Registered/Licensed in multiple states (*):

**38 STATES**

| | | | | | |
|---|---|---|---|---|---|
| | Colorado* | Indiana* | Michigan* | North Carolina* | Tennessee* |
| | Delaware* | Iowa* | Minnesota* | Ohio* | Texas* |
| | District of Columbia* | Kansas* | Missouri | Oklahoma | Utah* |
| Arizona | Florida* | Louisiana | Nevada* | Oregon | Virginia* |
| Arkansas | Georgia* | Maine* | New Jersey* | Pennsylvania* | Washington |
| California | Hawaii* | Maryland* | New Mexico | Rhode Island* | Wisconsin* |
| Connecticut* | Illinois* | Massachusetts* | New York* | South Carolina* | |



# Thank You

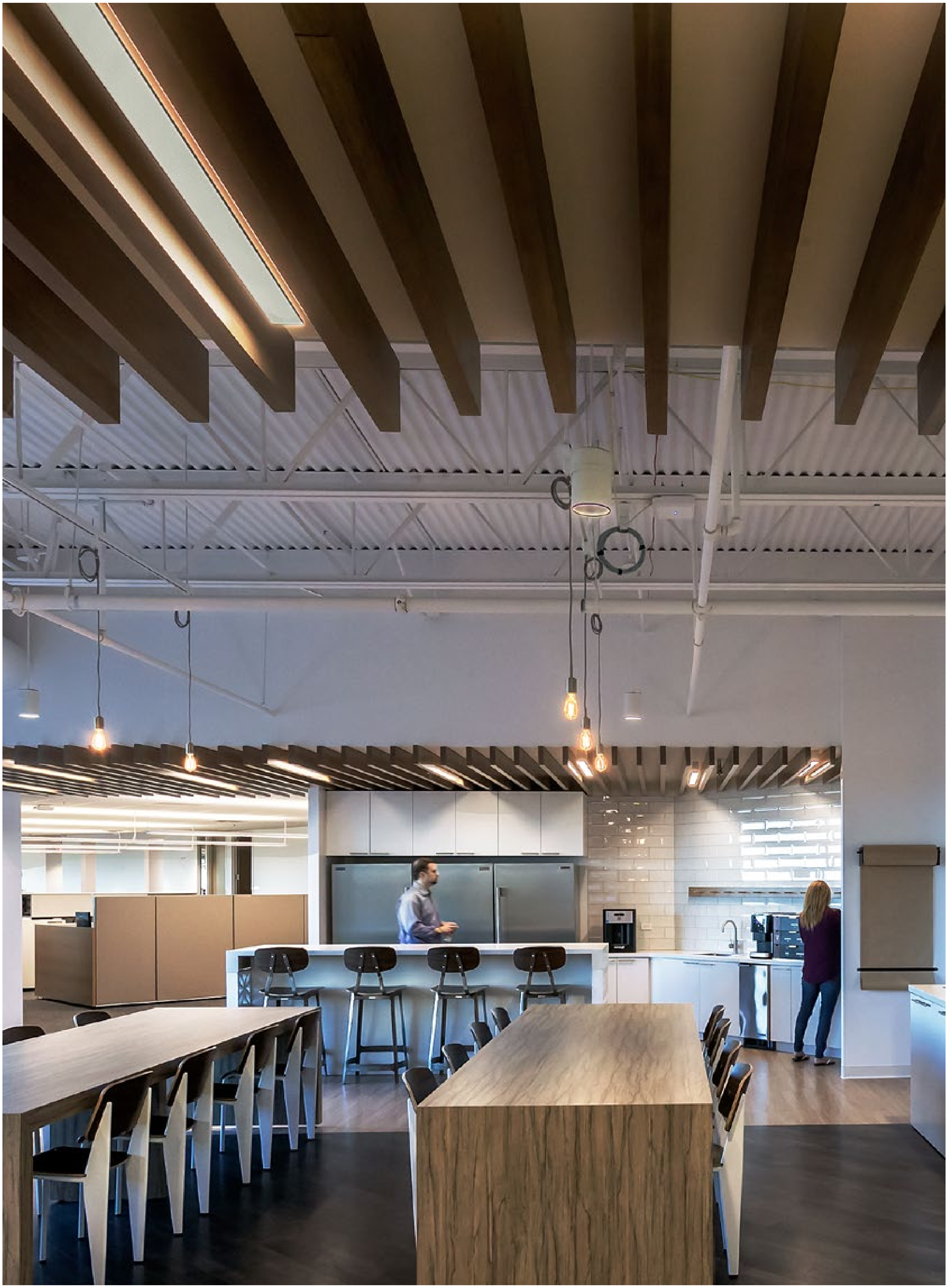
## For supporting all budgeting efforts

We would like to thank Executive Construction for their assistance in the construction budgeting process.  ECI, established 1974, is a Chicago-based general contractor whose past 3-year average revenue held at $255,000,000.  With a focus on corporate interiors, new construction and mission critical build-outs, 90% of their business is from repeat clients.

EXECUTIVE CONSTRUCTION INC

We would like to thank Haworth Inc. for their assistance in the furniture budgeting process. Haworth manufactures furniture for the adaptable workspace, including movable walls, systems furniture, seating, storage, wood case goods and social spaces. Founded in 1948 by G. W. Haworth, Haworth is a privately held, family-owned corporation headquartered in Holland, Michigan, United States.

HAWORTH®




VALUES
· INTEGRITY ·
· LIFELONG LEARNING ·
· LEADERSHIP ·
· DIVERSITY AND INCLUSION ·

TED MOUDIS
ASSOCIATES
DESIGN | PLANNING | STRATEGY

**NEW YORK**
79 Madison Avenue
New York, NY 10016
Tel. 212-308-4000

**CHICAGO**
La Salle Wacker
221 North LaSalle St.
Chicago, IL 60601
Tel. 312-924-5000

**LONDON**
MCM Architecture
71 Hopton St.
London SE1 9LR
United Kingdom
Tel. 020-7902-0900
www.mcm-uk.com

**tedmoudis.com**

**FOLLOW US!**