UCAR COMPREHENSIVE CAMPUS PLAN

PROPOSAL // JANUARY 31, 2024

Gensler

CURE. INNOVATION CAMPUS // *NEW YORK, NY*

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Gensler

January 31, 2024

Mary Kaiser
Manager of Subcontracts/Procurement
University Corporation for Atmospheric Research
P.O. Box 3000
Boulder, Colorado 80307

Dear Ms. Kaiser,

Gensler is sincerely grateful for the opportunity to present a proposal for facility master planning services for UCAR/NCAR. Our team is ready to deliver the highest level of thought leadership in the industry to develop an innovative, integrated, implementable master plan that addresses the short- and long-term needs of the organization, in consideration of ever evolving changes. We are dedicated and committed to navigating this process together.

UCAR/NCAR's position as a non-profit, research and education institution, with a legacy that extends almost 75 years, is iconic. For Gensler, creating spaces that support UCAR, NCAR, and UCP requires us to integrate research with our knowledge of best practice from several of our practice areas—workplace, sciences, higher education, corporate campus, planning for sustainability, and change management. In the pages that follow, we have provided our custom approach to your master planning project.

At Gensler, we pride ourselves in employing design thinking as part of our process that puts the end user at the center of every design decision. We are energized by UCAR's interest in change management and communicating with employees during the development of the plan. During our project kick-off period we will tailor the communication management process unique to our engagement with UCAR that accomplishes UCAR's goals for internal engagement, and, as a team, meet weekly throughout the process to align tasks and responsibilities together.

As the Gensler team has come to know UCAR as an organization, we are reminded of why we do the work we do. UCAR is the type of client we get excited to work with because of the unique composition and mission, and the impact and change UCAR has on the world. We do our best work when working with clients who are one-of-a-kind because of the challenge those clients present us to solve.

Thank you again for this opportunity and please do not hesitate to reach out with any questions.

Sincerely,

Michelle Liebling
Principal in Charge
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Kelly Floyd
Design Strategist, Client Point of Contact
kelly_floyd@gensler.com

PEARL EAST INNOVATION CENTER // *BOULDER, CO*

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1.1

// FIRM QUALIFICATIONS

GENSLER OVERVIEW

Gensler is a global architecture, design, and planning firm with 53 locations and more than 6,500+ professionals networked across the world. Founded in 1965, we serve more than 3,500 active clients and work across the global economy. Our clients are remarkably diverse; large and small, private and public, for-profit and non-profit. We help them grow, sustain, and transform: whatever it takes to embrace their future.

DESIGN PHILOSOPHY
Our organizational philosophy centers on redefining what is possible through designs that are inspirational and performance driven. Our rigorous approach uncovers opportunities that create new futures for our clients that are aspirational and rooted in client's unique, long-term visions. Our commitment to sustainability and excellent delivery of our design solutions builds our client's confidence in the quality of our ideas and our ability to make them reality.

OUR TEAM
With over 50 offices worldwide, including more than 100 professionals in our Denver office, Gensler brings unparalleled resources to this project. Our team will be able to draw from a deep bench of experienced strategists, planners, and designers. Gensler can promise design excellence, quick turnaround, and personalized service. We are proud of our industry reputation for on-time delivery, quality control processes, and our ability to monitor costs and collaborate effectively.

CLIENTS COME FIRST IN EVERYTHING WE DO
We pride ourselves on our listening skills. Our process is interactive and client-centric because we know design solutions are more robust when a collaborative process where all stakeholders are engaged takes place. We are committed to being both your advisors and advocates from beginning to end and are invested in the success of your project. The journey of any design project is the best part, get ready to have some fun!

FACILITIES MASTER PLANNING
Gensler understands real estate portfolio's ebb and flow based on growth, consolidation, regulatory changes, or reorganization, among many other factors. Our comprehensive real estate and facilities services help public and private sector organizations develop portfolios that support optimum client service delivery and changing business directions. We take a balanced, multi-disciplinary approach to our projects, including analysis of service delivery needs, finances, work process and changing technology needs. We believe the most productive real estate portfolios limit overhead costs while optimally supporting the mission and goals of an organization's leadership, staff and community.

Our collective team has completed master plans, facility assessments, interviews and strategy services for over 200 corporate, government and higher education organizations across our southwest region. Our core team will bring more than twenty years of strategic real estate and facilities planning experience, and we find our past clients are always willing to share their knowledge, research and insights with us and, by extension, with you.

OUR CAPABILITIES

Full Services. Client Driven.

When looking at a full campus revitalization project such as this, it's important that you find a partner who can not only bring the full breadth of services that you expect to need, but who can also flex and adapt to any additional needs that may arise, now or in the future. When you need a solution, we are here to help.

As a full-service, customer-driven firm, we offer a number of related services that can be provided separately or combined. Whether looking at UCAR's needs in the immediate future, or down the road 10 or 20 years, we have the capabilities to service you wherever you are, and to help you get wherever you want to go.

STRATEGY SERVICES: user and space utilization research, program development, design prototyping and guidelines, real estate and portfolio strategy, portfolio optimization and management, space and occupancy planning, as-built surveys and analysis, organizational and process assessment, strategic communication and change management

MASTER PLANNING SERVICES: feasibility studies, site evaluation, transportation studies, master planning, urban design, economic/market analysis

INTERIOR DESIGN SERVICES: pre-lease coordination, programming, design standards/guidelines development, interior architectural design, FF&E selection, art consultation, tenant development, retail prototype design, retail roll-out/ implementation

ARCHITECTURAL DESIGN SERVICES: feasibility/zoning studies, building analysis/ evaluation, ADA compliance analysis, building design consultation/peer review, architectural and façade renovation, new building design

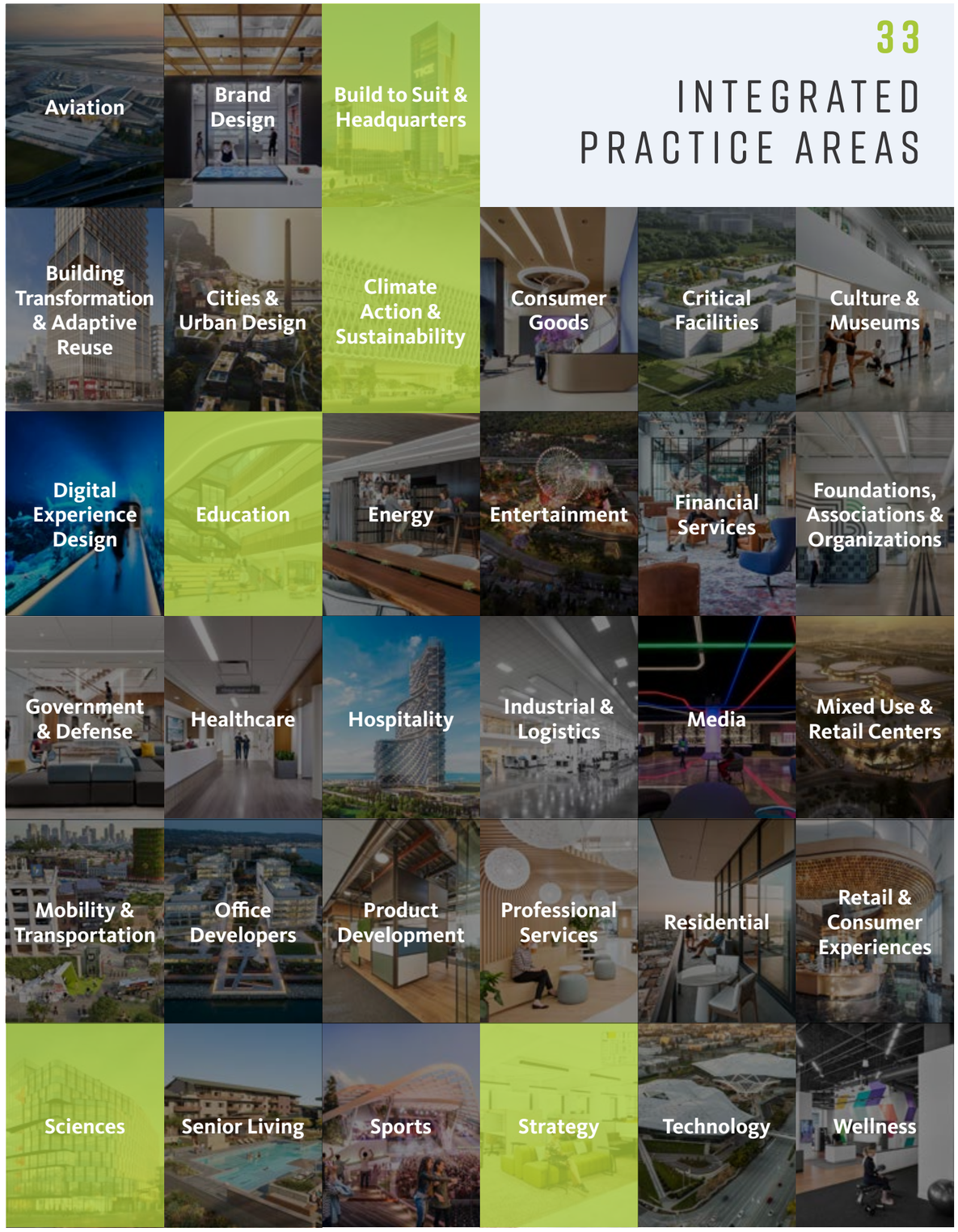
BRAND DESIGN SERVICES: strategic brand assessment and development, user experience research and design, naming and identity design, communications messaging and design, brand and identity guidelines and training, print and digital media design, packaging design, environmental graphics design, signage and wayfinding design, exhibit design, content and user strategy, video production and motion graphics

SUSTAINABILITY SERVICES: sustainability strategic visioning and consulting, performance optimization, third-party certification facilitation

DESIGNING EXPERIENTIAL SPACES FOR COMING TOGETHER

In the last two years we have seen a shift in the way people view the workplace. There is a greater desire for radical humanism, and spaces that enable coworkers to build community, new memories, and create a shared sense of belonging.

33 INTEGRATED PRACTICE AREAS



WE UNDERSTAND THE ELEMENTS OF A SUCCESSFUL CAMPUS

DEFINING MOMENT

An organization's campus is a powerful, living symbol of what a company stands for and what it aspires to become. The design of a campus can have a profound impact on your organization's future growth and success. Innovation cannot flourish in a space that prohibits or hinders it.

As business and technology have evolved, so have the spaces that surround them. You have the opportunity with a new facilities master plan to define your organization's space based on its current and future needs and create an environment that nurtures and supports its ongoing evolution and expansion. It is a chance to impact how employees work, to transform organizational culture, promote productivity, recruit and retain talent, and to make an important statement to funders and partners.

Companies with strong, established cultures outperform competitors whose vision and values are less clearly defined. Communication technology allows workers to connect and collaborate over geographic boundaries but your campus remains the crucial core of company culture—connecting employees, funders, partners and the community on a more meaningful level. Your campus sets the standard for what your organization is capable of achieving and functions as your window to the world.

RETURN ON YOUR INVESTMENT

More than just a real estate efficiency opportunity, a new facilities master plan is a strategic opportunity for an organization to drive important business goals and return on investment while providing an environment representative of the company itself. A new facility master plan is an undertaking and investment of time, focus and capital, and the end result must deliver a positive, measurable value—ultimately supporting how your employees work.

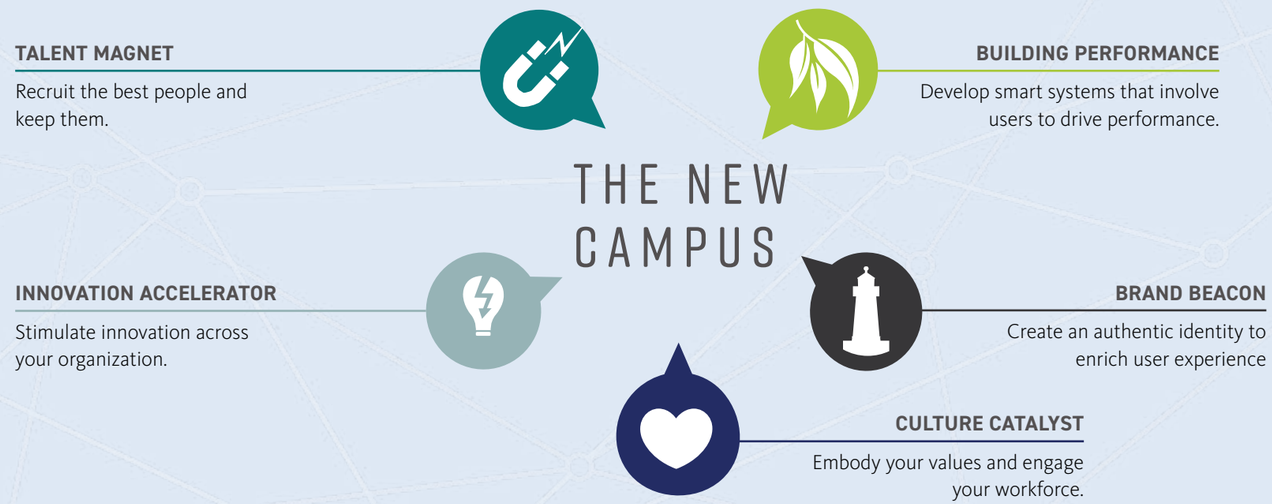
In terms of ROI, a facilities master plan project is expected to achieve, at minimum, the following:

- Lower real estate costs through space utilization and efficiencies
- Lower operating costs through adoption of smart and green technologies
- Improved employee morale and quality of work life as a result of an upgraded work environment

Once right-sized, your campus will deliver on ROI expectations and set the standard for organizational achievement to remind employees of what the company stands for and aspires to be.

The renewal of a campus is a powerful moment for an organization, and when designed properly, it acts as a catalyst—an agent for organizational transformation.

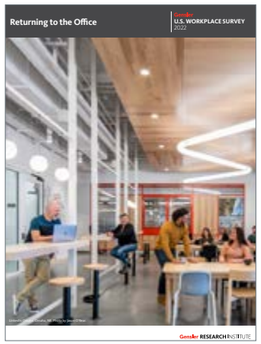
CREATING CAMPUS DNA



ADDED VALUE AND INNOVATION

RESEARCH-DRIVEN DESIGN

Clients who partner with Gensler receive more than just the industry's top design talent. They also benefit from the insights, lessons, and data that Gensler has amassed through our in-house research program, recently renamed the Gensler Research Institute. No other design firm is as ambitious or thorough as Gensler at uncovering what's really driving design and real estate decisions across the globe.



2022 US WORKPLACE SURVEY

Gensler double-downed on its workplace research as the pandemic began and as we continue to feel the effects of the pandemic today. Shifts in employee preferences for where and how they work continues to ebb and flow, influencing design and spatial needs in new and different ways.

2024 DESIGN FORECAST

With its scale, breadth, and reach into thousands of cities and over 80 countries in 2023, Gensler believes that the future of our cities and how we live, work, and play can be influenced by our actions, and, yes, our vision. Gensler's annual Design Forecast is a way for Gensler to share trends happening in the different industries and practice areas we work in.

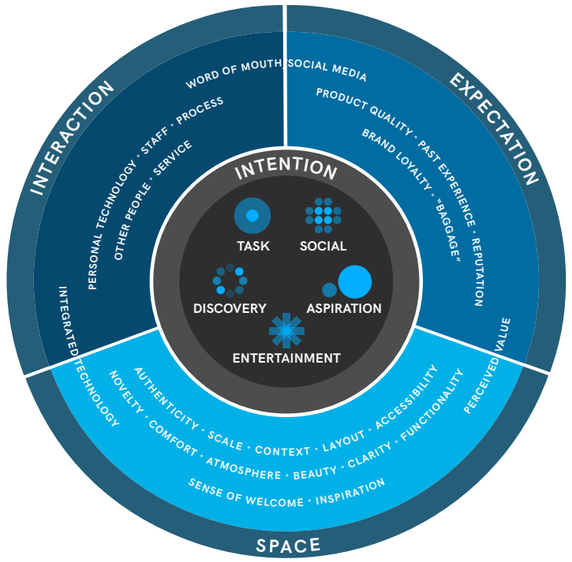
In order to share our research findings in the most valuable way, Gensler continues to publish our annual Research Catalogue covering projects ranging from health and wellness in the workplace to global brand strategy to the role of purpose in workplace design.

Our clients recognize the value this knowledge brings to every project knowing that together we are making the most informed strategy and design decisions possible. We bring this integrated design approach to every project that we work on.

EXPERIENCE DESIGN INDEX

Everybody's talking about experience. Defining it, that's another matter. The Gensler Experience Index identifies the key drivers of a great experience, quantifies the direct impact great design has on experience, and provides a holistic framework for understanding experience. The goal: to inspire the creation of great places that engage people's emotions and keep them coming back.

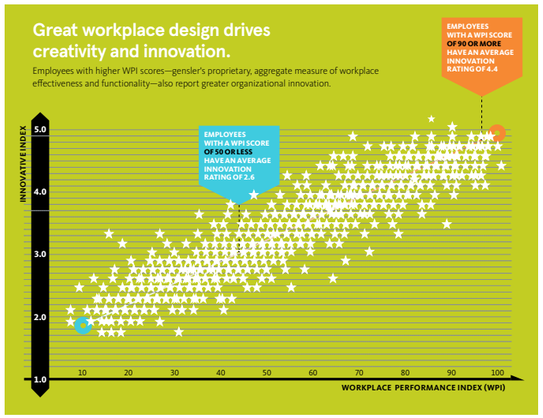
The Gensler Experience Index proves that design is among the critical factors that create an enhanced human experience. Our insights resulted in the development of a holistic framework for experience that incorporates intention, expectation, interaction, and space.



WORKPLACE PERFORMANCE INDEX

One of our most comprehensive, effective workplace design research tools is the Workplace Performance Index, or WPI. Gensler's WPI is a survey that diagnoses the unique dynamics and work processes of your organization from the viewpoint of the people doing the work. The WPI quickly surfaces how people are working, opportunities for change, and critical insights that ensure the right problems are being explored by the workplace strategy team—a jump-start that ensures projects ultimately reach better, more informed solutions.

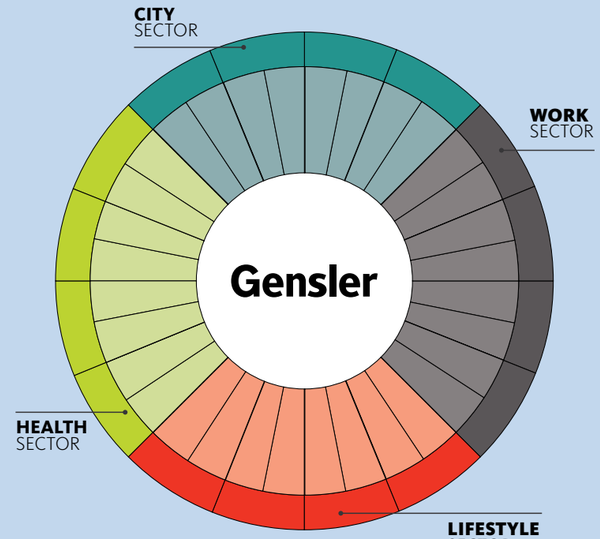
The WPI survey contains questions that can help you connect workplace design to key business drivers such as creativity, innovation, meaning, at-work relationships, and employee engagement. Armed with this information at the outset of a project, we gain deeper insights into what we can do to deliver a workplace strategy in line with each client, or business unit's, specific needs or requirements. By using a consistent set of core questions in our WPI survey, we have been able to amass a benchmark database that represents hundreds of companies and the responses of hundreds of thousands of employees across key industry sectors.



BRINGING A DIFFERENT PERSPECTIVE TO WORKPLACE DESIGN

With 33 specialized practice areas, and an array of in-house experts in architecture, interior design, graphic design, planning, and strategy, we are able to apply a cross-practice area approach that gives us the insight and expertise to plan for the balance of elements needed for workplace environments to be efficient, effective, and aesthetically pleasing.

When looking at UCAR's facilities, we will leverage our past experience, research, and benchmarking in workplace design for the sciences industry. But even beyond that, we will take a holistic look at your employees' experience, integrating insights from other practices to deliver the best possible results.



SUSTAINABILITY

Addressing climate change is the moral and business imperative of our time. Gensler is leading the industry toward net zero carbon and defining a roadmap for sustainable change in the building industry.

LEADERSHIP IN SUSTAINABILITY
Gensler is closely aligned with UCAR/NCAR's emphasis on long-term sustainability to create a more secure future for our planet. We are the first design and architecture firm in the world to make a bold, tangible commitment to this goal with our Gensler Cities Climate Challenge (GC3) which states that all Gensler projects will be net zero by 2030. We deliver evidence-based results and are committed to providing our clients with every possible opportunity to meet our shared carbon neutrality goals.

Additionally, in January of 2024, Gensler rolled out our Gensler Product Sustainability (GPS) Standards which guide the selection of low embodied carbon, low emitting, and high performing building materials. We understand our influence on the architectural materials market with the quantity of products specified by our firm every year. GPS standards are one way Gensler can help transform the market through our influence on building material development and design by partnering with vendors and educating vendors in the need to transform to low carbon or zero carbon products.

Gensler is here to help you navigate the new frontier of climate action and strategy, seizing opportunities for innovation, market leadership, and return on investment. UCAR/NCAR's sustainability goals aggressively target the impacts of the built environment on climate change:

- Building Energy Goals – Operate near zero carbon buildings by 2040.
- Transportation Goals – Phase in Zero Emissions Vehicles.
- Waste Goals – Near zero waste organization by 2040.
- Water Goals – Reduce water, sewer, and irrigation use 50% by 2040.
- Divestment Goals – Divest strategic reserves from all equities that engage in fossil fuel by 2030.

What else can we do? Through strategy and visioning sessions, we'll explore topics such as health and wellness, embodied carbon, and equity and regenerative design that will broaden our sustainable view and set additional goals to benefit the users, community, and the built environment.

To ensure Gensler meets the expectations for facility energy and water usage, and other potential areas of impact, Gensler will seamlessly integrate sustainability focused assessments and activities into our approach. Our sustainability team will work along side our strategist to influence final recommendations that meet all project goals. Here are the activities Gensler intends to engage in to fulfill UCAR/NCAR's needs.

FIFTH + TILLERY REPOSITIONING // *AUSTIN, TX*

CHANGE MANAGEMENT

Research shows that one of the strongest drivers of change is emotion. If employees believe in the change, they will be more likely to modify their behaviors to help make it a success.

Our approach to change management is seamlessly integrated within the strategy and planning of the project while understanding and valuing the voice of employees in the process. Our approach to change management involves clearly outlining the rationale and goals of the project, providing opportunities to give input and share ideas, employee engagements and communication to review and comment upon the plan as it is being developed, and a clear communications plan to share the strategy once it is finalized.

1. ASSESS
We will carefully analyze UCAR/NCAR to identify key stakeholders and the different perspectives involved. We also analyze the existing organizational culture, the scope of the intended changes, and assess readiness for change.

2. ADVISE
Drawing on knowledge gathered from the assessment, we create a communications and engagement plan for moving forward ensuring all stakeholder groups are addressed, messages are aligned, and overall project timing is coordinated. At this stage, we carefully consider the key influencers at all levels of the organization and involve them in the process as project team members, creating an informal change agent network.

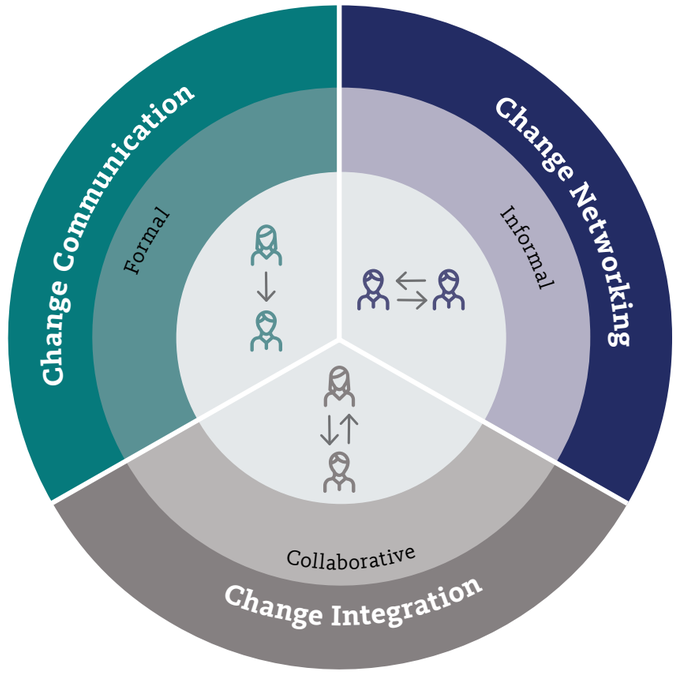
3. ACT
In this phase we begin to implement the change management plan, often working with a client's internal communications, human resources and/or business leadership teams to roll out the change program. Through various communications, networking and integration tools, we work to generate excitement, engagement and positive adoption of the change.

4. EMBED
In this phase we ensure that change management goals have taken root effectively. We recognize that change is not a single event, but rather an ongoing process. A focus might be to reinforce successful messages and, if necessary, try new tactics for areas that need further attention.

Throughout the project process, we recommend being transparent and clear about the larger goals of the project. There may be parts or pieces of the ultimate recommendation that may not satisfy every team member, but communicating how our recommendations ultimately support the organization's mission, we hope the community can adopt and buy-in to the final plan.

UCAR has already built-in opportunities for employee engagement throughout the project through the incorporation of Townhalls, President's Council meetings, and research and data collection efforts that initiate this type of employee engagement. In addition to these activities, we have added developing a project charter as a team as a documentation tool, and employee engagement focus groups to engage UCAR/NCAR employees early in the process to our base scope.

An additional change management activity we could engage in to communicate with UCAR/NCAR employees is the development of an Employee Communication Intranet Site dedicated to the project where information can be posted, and ideas shared. Employees can engage with presentations, status updates, calendar opportunities for engagement, etc. We have listed this scope as an additional alternative in our scope of services and fee worksheet.



CHANGE IS A HUMAN ISSUE. TO HELP LEAD ORGANIZATIONS THROUGH TRANSFORMATIONAL CHANGE, WE APPROACH IT FROM THE PERSPECTIVE OF THOSE WHOM IT IS IMPACTING.

To help employees feel engaged, involved, and invested in the change, there must be more than just top-down, one-way communication. Gensler's change management involves three core approaches that work together to speed the adoption of change.

A balanced approach to change management, incorporating top-down, bottom-up, and peer-to-peer communication helps ensure the change is perceived as an opportunity, not just a mandate.

Change Communication
Formal: one-way, top-down communication
Provides information about the change in a clear, cohesive way, providing a baseline understanding for everyone affected.

Change Networking
Informal: Two-way, peer-to-peer exchange
Leverages the social capital of the people directly affected as a catalyst for change, providing the tools and direction for positive perceptions to spread throughout the organization.

Change Integration
Collaborative: Two-way, top-down & bottom-up
Involves key stakeholders in the change management process in order to build ownership and relevance to the organizational changes that might be simultaneously be taking place.

ALL CHANGE IS NOT CREATED EQUAL AND EVERY WORKPLACE IS UNIQUE. WHILE EACH WORKFORCE WILL EXPERIENCE, REACT AND MANAGE CHANGE DIFFERENTLY, THERE ARE SOME WORKPLACE CHANGES THAT ORGANIZATIONS FREQUENTLY ENCOUNTER.

CONSULTANTS

Our project team consists of several consultants whom we've developed strong working relationships with over multiple projects and years.

IMEG
The FUTURE. Built Smarter.

PUTTING PEOPLE AT THE CENTER OF INNOVATION

With a history that dates back over 100 years, IMEG has grown under one uniting purpose: creating positive outcomes for people, communities, and our planet. As a people-centered, national engineering and design consulting company, we've intentionally localized our focus to serve carefully chosen regions and markets, allowing us to put relationships and communities first, without sacrificing expertise.

Our specialties include the built environment, building optimization, infrastructure, planning, and construction engineering-related services, but our secret to success is found in our deep bench of 2,400 team members across 80 locations. For us, people-centered engineering is about more than the people we serve — it's representative of the engaged employee culture we've worked hard to create. We believe in investing in our people and their professional futures through continuous training, community involvement, and the ability to develop a niche specialty.

After all, that's the whole reason we're drawn to creating positive outcomes for people, communities, and our planet: everyone wins. By utilizing a collaborative project approach that values our local relationships, national resources, and employee engagement, we're able to produce high-caliber work through high-quality processes driven by our ONE IMEG culture.

6
Sixth ranked firm in U.S. (BD+C)

80
Locations

104
Years of history

2,400
Employees

CUMMING
Building Value Through Expertise

Cumming Management Group, Inc. (Cumming Group) is a privately held corporation founded in California in 1996. Cumming Group is a leader in providing project consulting services to the A/E/C industry, including cost and project management, planning and scheduling, and construction dispute resolution. Cumming Group has grown to more than 2,000 team members within 50+ offices globally – including many of the brightest minds in the industry. Cumming Group is passionate about helping its clients execute largescale, complex projects on-time and within budget. Services are specifically tailored to each client's needs and add meaningful value at every step of a project's development. Drawing on deep expertise in the communities and sectors they serve, Cumming Group anticipates and solves problems, delivers solutions, and drives results.

Our strength and capabilities in providing project management services is evidenced by our ranking among the nation's top project and construction management firms. For the past 10 years, Cumming has consistently ranked in the top 50 on Engineering News-Record's listing of the Top 100 CM-for-Fee Firms in the country.

Additionally, Cumming's cost group is one of the largest providers of cost estimating and management services in the U.S., including a skilled team of in-house MEP cost specialists. Cumming works on more than 400 estimates each month, delivering unparalleled experience in this discipline. Core cost management services include budgeting, milestone cost estimating, value analysis, cost validation, peer review, and change order evaluation.

Cumming also provides scheduling services from strategic planning through contract completion and forensics. Each schedule contains project tasks, task interrelationships, milestones, and intermediate and final project deliverables. When it comes to evaluating project phasing, understanding the process and impacts of construction is as important as quantifying the elements of construction. Looking at the project from an owner's perspective is also crucial, and Cumming's team of schedulers are highly skilled and trained to successfully meet project goals.

Cumulatively, Cumming's project experience includes the completion of tens of thousands of assignments worth more than $100 billion in construction value.

OTONOMY BIOTECH RESEARCH CENTER // *SAN DIEGO, CA*

1.2

// RELEVANT EXPERIENCE

ADAMS COUNTY FACILITIES MASTER PLAN

Adams County, CO

In January of 2023, Gensler was hired by Adams County to develop a 20-year facility master plan that supports the County's projected headcount growth in response to a growing population and changing working modes with the introduction of hybrid working policies.

Through visioning sessions, surveys, and department leader and elected official interviews, the Gensler team identified several issues, opportunities, and pain points for the County.

- The County was growing in population but does not have the space to expand to meet the demand.
- The County workspaces were not designed for the current hybrid working policies, creating inefficiencies in space utilization.
- There is a gap between what employees have and what they say then need in the workplace.
- The County would like to exceed expectations to build stronger community relationships.

In response, Gensler developed a facility master plan rooted in six key areas of focus that address both short-term tactical needs and long-term strategic planning.

- Grow the real estate portfolio in a strategic way that is supportive of service delivery and operational goals.
- Implement modern workplace standards that can improve workforce innovation, service delivery, employee wellbeing, and adaptability to change.
- Add or relocate locations to to expand the County's presence and access to key services for residents.
- Integrate design interventions that can help provide a world-class customer experience including making client spaces more hospitable and providing a consistent brand experience.

36%
Estimated headcount growth over 20 years

427,613
Deficit in square-foot needs for 20-year growth projections

50
Reduction in net square-foot per employee

DETAILED INFORMATION

PROJECT SIZE
3,100,000 Sq Ft
47 Facilities
3,498 Employees

YEAR COMPLETED
Estimated February 2024

SERVICES PROVIDED
Benchmarking and Trend Research
Department Leader Interviews
Site Tours & Observation
Parking & Transportation Assessment
Facility Condition Assessments
Building & Department Personas
Demand Forecasting
Space Demand & Supply Analysis
Market Context Analysis
Financial Analysis
Real Estate & Portfolio Planning

KEY PERSONNEL
Kelly Floyd, Design Strategist
Lindsey Salazar, Design Strategist and Project Manager

CLIENT REFERENCE
Cyndi Stringham
Manager, Planning, Design & Construction
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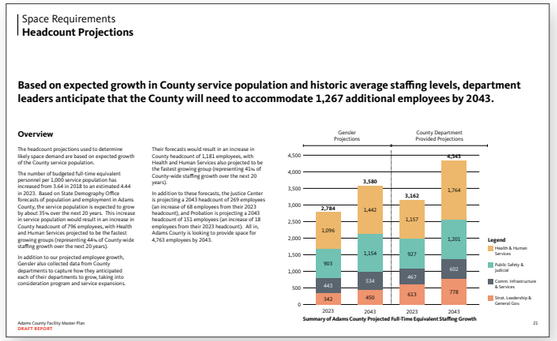
e: cstringham@adcogov.org

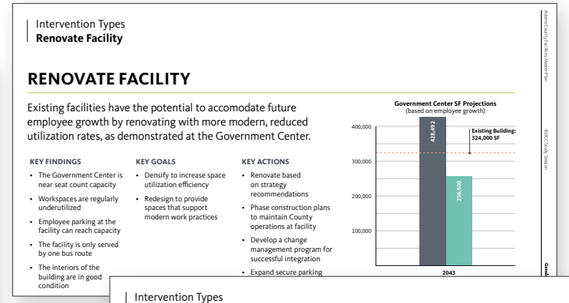
RELEVANCE TO UCAR
Facility master plan of similar scale
Practice area of expertise
Stakeholder engagement
Complex organizational structure
Multiple sites under one umbrella

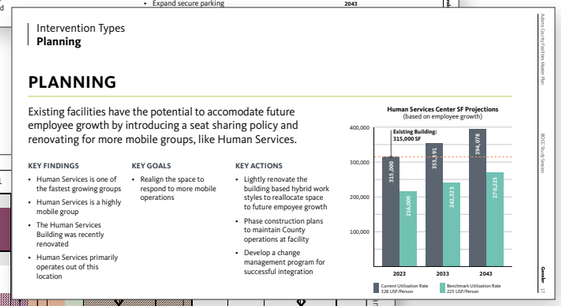
- Provide customers with equitable access to services.
- Define and implement safety and security standards across facilities to help provide a safe and comfortable workplace for County employees.

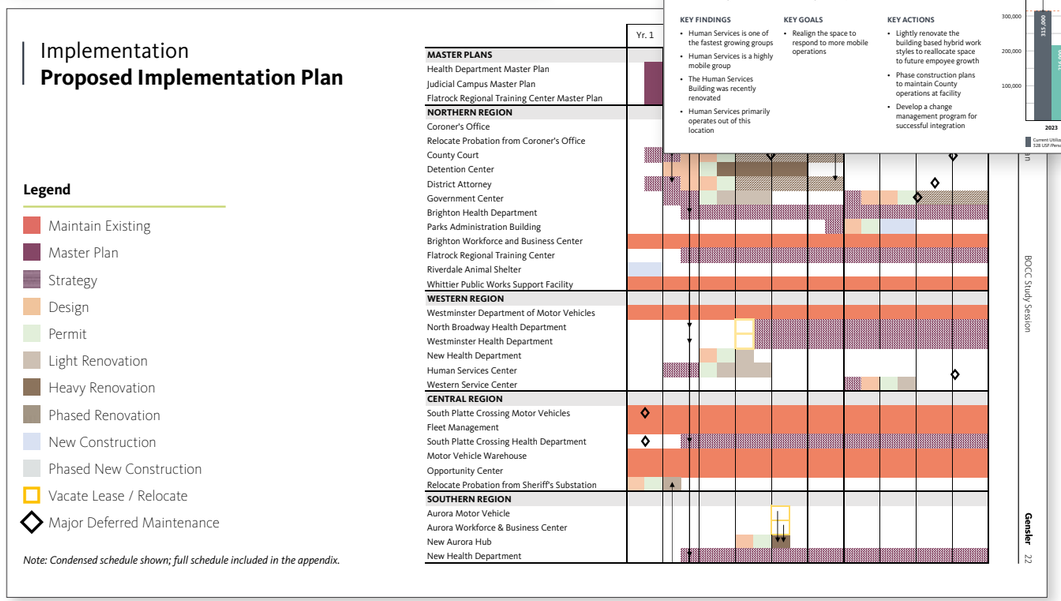
In addition to the needs identified, the County also had to consider the introduction of a new department in its planning that was previously a tri-county collaboration.

The final plan utilized densification strategies, colocation, new workplace strategies, mobility, and leasing versus owning as strategic planning choice.









01 Having Ample Space to Grow in the Future

02 Providing Supportive Workspaces

03 Being in the Right Locations for the Community

04 Providing High-Quality Service Delivery

05 Expanding Service Offerings

06 Investing in Safety and Security

NASA/JET PROPULSION LABORATORY (JPL) WORKPLACE STRATEGY AND 2040 CONCEPT MASTER PLAN

Pasadena, CA

NASA / JPL engaged Gensler for their campus master plan to meet several new requirements: the updated decadal science missions, Federal reductions in real property and O&M expenses, workplace and lab of the future guidelines, and the programming for new three new major buildings, the Flight Electronics Integration Facility, the Robotic Exploration Laboratory, and the Integrated Spacecraft Assembly Facility.

A major thrust of the plan was the consolidation of over 2 million square feet of space on 72 acres, of which only 40% was available for development and renewal given topography, fire, earthquake, and flooding risk.

Strategic Goal:
Create a pedestrian oriented campus that supports collaboration and innovation, improves operational efficiency, reduces schedule risk and mission costs, while increasing flexibility in support of future NASA mission needs.

Workplace Performance Index™ (WPI) Employee Surveys & Workplace Improvements
As part of the Concept Master Plan, Gensler developed Workplace and Lab of the Future Guidelines based on a series of WPI Employee Surveys which led to workplace and lab renewals, improvements in infrastructure, and greater campus organization to support better employee experiences.

DETAILED INFORMATION

PROJECT SIZE
72 acres

YEAR COMPLETED
2019

SERVICES PROVIDED
Culture Strategy
Design Guidelines
Employee Surveys
Master Planning
Organizational Strategy
Visioning & Stakeholder Outreach
Workplace Performance Index™
Workplace Strategy
Workplace & User Analysis

KEY PERSONNEL
Ryan Ihly

CLIENT REFERENCE
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p: 818.354.3293
e: louis.v.huertas@jpl.nasa.com

RELEVANCE TO UCAR
Facility master plan of similar scale
Practice area of expertise
Stakeholder engagement
Complex organizational structure
Multiple sites under one umbrella

2040 Conceptual Master Plan
Gensler researched and co-created with NASA / JPL's stakeholders and leadership the 2040 Concept Master Plan. The phased master plan had a guiding vision, with primary goals and key projects to successfully implement the master plan over twenty years. The guiding vision included:

- Improve workplace and campus spaces to create a collaborative and inspirational environment
- Improve flight production and operations to make material flows and processes more efficient
- Improve lab and technical spaces and develop flexibility to adapt to diverse science needs
- Improve campus resilience and align with NASA Sustainability Guidelines

13.4% reduction in gross building area
Based on proposed demolitions and new construction.

31.6% reduction in annual O&M costs
Based on proposed demolitions and new construction and O&M savings from O&M program improvements achieved between FY09 and FY20 and projected to FY40

$20.3 M in annual Mission Efficiency Savings
Lowers costs charged to missions and programs, improves efficiency and capacity, lowers mission risk.

In 2040, JPL Oak Grove has retired degraded facilities which offers more flexibility and opportunity for future development in low-risk locations at the core of the campus. Collocation of critical flight production functions lowers mission risk, enhances capability and capacity. Greater affordability is achieved through O&M cost reductions and Mission Efficiency savings.

New Builds
1. Integrated Spacecraft Assembly Facility (Major Renewal)
2. Robotics Exploration Laboratory

Other Key Projects
1. Flight Electronics Integration Facility (In Construction)
2. B301 Garage Conversion (Workplace Renewal)
3. Extraterrestrial Simulation Complex (Repurposed As-is)

Campus Improvements
1. Surveyor Square
2. Explorer Plaza
3. Outdoor Collaboration Green Space
4. Mariner Plaza
5. Outdoor Testing Area (expanded)

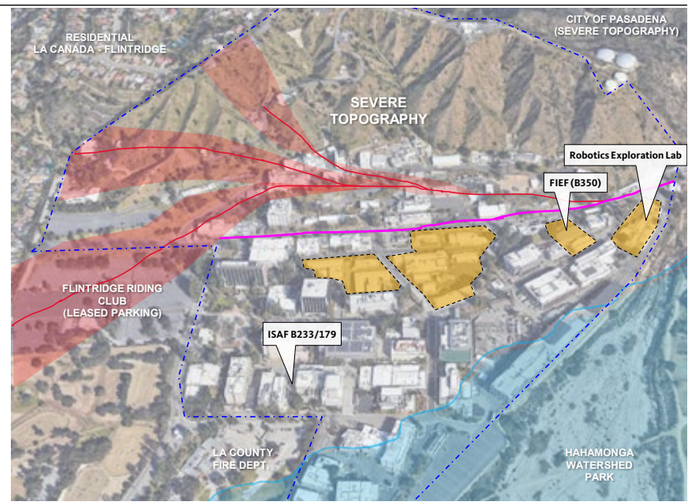
Wildfire, Earthquake & Landslide Risk

The Master Plan Concept prioritizes consolidation and renewal of facilities south of Explorer Road. As degraded facilities are demolished future consolidation opportunities in low risk, pedestrian-friendly development areas at the core of the campus, clear of wildfire and earthquake risk, become available.

-3% clear of wildfire and earthquake risk in 2040.

53,480 GSF less built area in mesa/fault zone. Based on proposed demolitions of degraded and inefficient facilities at Oak Grove.

Legend
- Sierra Madre Fault
- Soil Liquefaction Risk
- Explorer Road
- Future Development
- Property Line



UC DAVIS HEALTH MASTER PLAN

Sacramento, CA

University of California Davis Health (UCDH) turned to Gensler to develop a Master Plan and Office of the Future Strategy for its Administrative Spaces. Then the pandemic happened, triggering an even more consequential transformation.

UCDH turned to Gensler to help rigorously examine its existing administrative office spaces spanning 26 buildings totaling 900,000 square feet in the Sacramento area and rethink the program, stacking, master planning, and design of the existing workplace through a research-driven approach.

The effort required change management and strategy from the outset, in order to manage the coordination, cooperation, and buy in of a number of diverse programs and department leaders, as well as many other key institutional stakeholders. The team engaged with over 80 programs and over 2,000 employees, through department interviews, visioning sessions, a campus-wide survey, workshops, and space utilization studies.

The Gensler team was able to determine what was and wasn't working in UCDH's portfolio and created a robust, flexible master plan and design guidelines for their workplace. These guidelines were called the Administrative "Office of the Future" Master Plan, along with a detailed Change Management Playbook for the implementation of the Office of the Future.

The COVID-19 pandemic occurred just as the Master Plan was about to be implemented and, like many other organizations at that time, UCDH was forced to pivot and reimagine its "Office of the Future" once again. UCDH called on Gensler to coordinate with its facilities, IT, and HR teams to help to develop and launch a Hybrid and Remote Work program. The Gensler team surveyed employees and engaged with department leaders to understand which job functions and roles could transition into hybrid and remote work, and what protocols, work behaviors, spaces, and equipment were necessary.

DETAILED INFORMATION

PROJECT SIZE
900,000 Sq Ft
26 Buildings
2,000 Employees

YEAR COMPLETED
2022

SERVICES PROVIDED
Master Planning
Facilities Assessment
Real Estate Evaluation
Programming
Change Management
Design Guidelines
Benchmarking
Surveys
Hybrid/Remote Work Strategy

KEY PERSONNEL
Erin Cubbison, Strategy Director

CLIENT REFERENCE
Keith Kanda, Director (Interim), Facilities Planning
p: 916.734.6455
e: ktkanda@ucdavis.edu

RELEVANCE TO UCAR
Facility master plan of similar scale
Practice area of expertise
Stakeholder engagement
Complex organizational structure

Once all eligible departments were assessed, and a plan with new ways of working and space programming (seat-sharing ratios, etc.) established, the Gensler team implemented a change management plan, communicating the hybrid work policies in newsletters, FAQs, and online channels and informing and educating managers employees through change champion workshops and training sessions.

COUNTY OF SANTA CRUZ FACILITIES MASTER PLAN

County of Santa Cruz, CA

The County of Santa Cruz hired Gensler to develop a Long-Range Facilities Plan for the County's 1.4 million square feet of owned and leased space across 159 individual buildings.

The master plan was initiated n support of the County's mission of maximizing resources to improve the quality of life for County residents. Upon evaluation of the County's resources, it was determined additional square footage was needed to accommodate 20-year growth projections, however leased space could be reduced and services could move into existing County facilities.

By adopting a "hub and spoke" model, the County could consolidate operational government departments into central locations for efficient operations and communications, and distribute service-based departments to smaller satellite locations placed in communities where those client services are needed most.

DETAILED INFORMATION

PROJECT SIZE
1.4M Sq Ft
159 Facilities
2,496 Employees

YEAR COMPLETED
2021

SERVICES PROVIDED
Facilities Needs Assessment
Facilities Conditions Assessment
Existing Space Survey
Leadership Visioning
Benchmarking
Space Programming
Planning Scenarios
Cost Estimation
Workplace Strategy

KEY PERSONNEL
Kevin Rosenstein, Project Manager

CLIENT REFERENCE
Travis Cary, Director of Capital Projects
p: 831.454.2339
e: travis.cary@santacruzcounty.us

FINAL DELIVERABLES
County of Santa Cruz

RELEVANCE TO UCAR
Facility master plan of similar scale
Practice area of expertise
Stakeholder engagement
Complex organizational structure
Multiple sites under one umbrella

HUB
Locations that house the majority of a department's staff, often co-located with other departments, to support efficient operations and communications.

Examples: Assessor, County Clerk, County Counsel, etc.

SPOKE
Locations which accommodate a smaller team of a department, often introduced to support customer service goals.

Examples: Parks, Health and Human Services, Public Works, etc.


Option 1A


Option 1B


Option 2


Option 3A


Option 3B

8.9%
Headcount growth over 20 years

77,000
Additional square feet needs to accommodate 20-year growth projections

112,800
Reduction in leased square feet over 20 years

CONTRA COSTA COUNTY COMPREHENSIVE FACILITIES MASTER PLAN

Contra Costa County, CA

In 2022, Gensler delivered a facilities master plan for Contra Costa County that is intended to improve the delivery of services and utilization of facilities over a 20-year planning period.

To develop recommendations for the final master plan, the Gensler team:

- Visited 55 facilities;
- Surveyed 2,177 employees;
- Interviewed 21 department leaders;
- Conducted 2 steering committee workshops; and,
- Presented at 3 Board of Supervisors meetings for feedback at various stages in the planning process.

The study revealed a dearth of services in the east and west parts of the county, even though a substantial portion of County clients live in those locations. To serve these clients it was recommended multi-service facilities be established in both parts of the county. These two new locations would not only make it easier for County customers to visit in person, it will reduce the often substantial drive time of County employees who live in these areas.

$3.6M
Reduction in annual leasing expenses

20
Reduction in County occupied addresses

10%
Increased opportunity for employee remote working

40
Reduction in net square-foot per employee

DETAILED INFORMATION

PROJECT SIZE
1.8 Million Sq Ft
110 Facilities
4,041 Employees

YEAR COMPLETED
2022

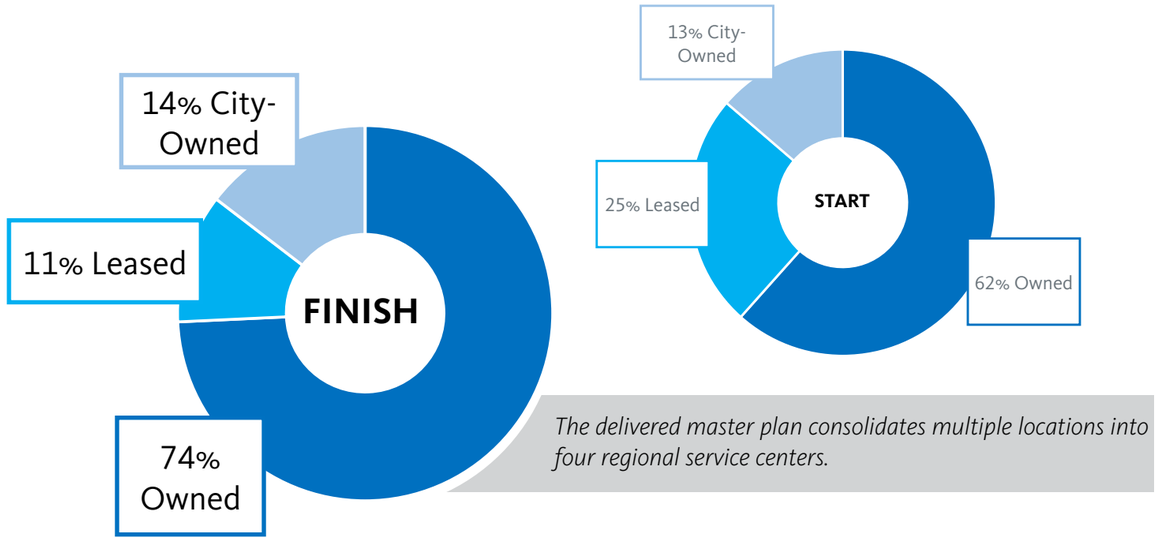
SERVICES PROVIDED
Workplace Strategy
Benchmarking
Stakeholder & Community Engagement
Space Programming
Parking Assessment
Real Estate & Portfolio Planning
Organizational Assessment
Demand Forecasting
Macro-Level Site Selection

KEY PERSONNEL
Kevin Rosenstein, Principal-in-Charge

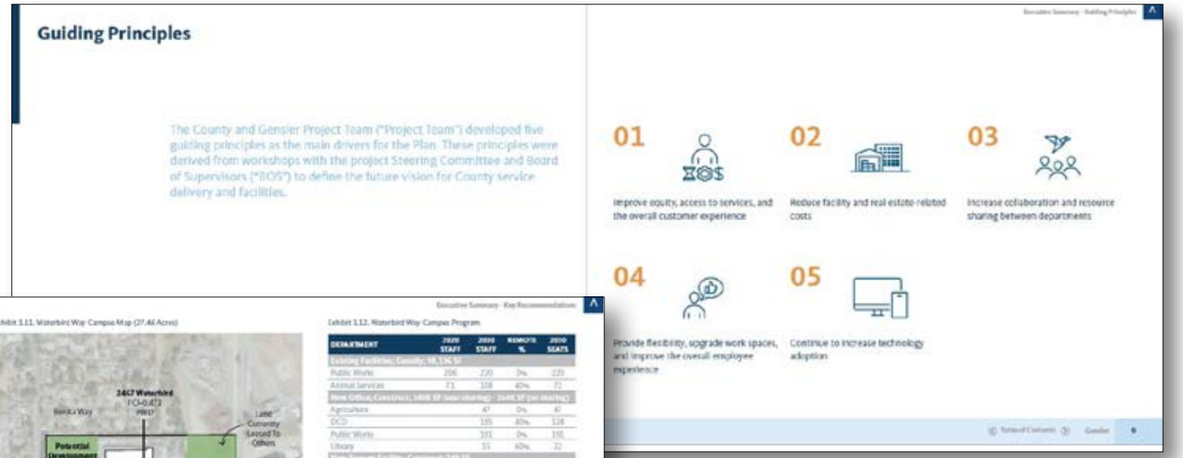
CLIENT REFERENCE
Eric Angstadt, Chief Assistant CAO
p: 510.335.1250
e: eric.angstadt@cao.cccounty.us

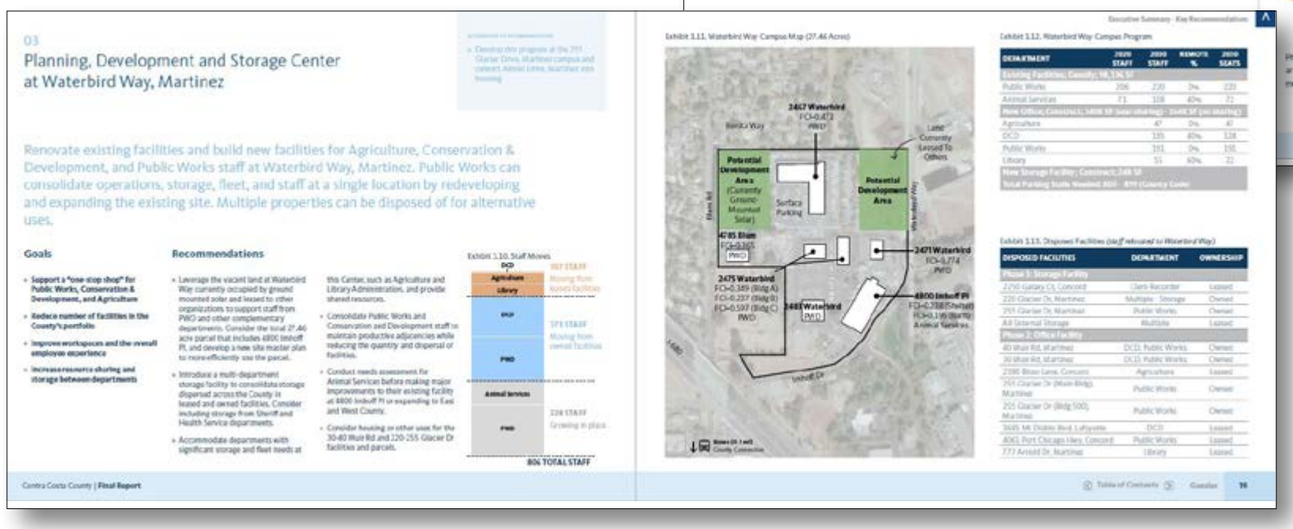
FINAL DELIVERABLES
Contra Costa County

RELEVANCE TO UCAR
- Facility master plan of similar scale
- Practice area of expertise
- Stakeholder engagement
- Complex organizational structure
- Multiple sites under one umbrella



The delivered master plan consolidates multiple locations into four regional service centers.





PEARL EAST BOULDER INNOVATION CAMPUS

Boulder, CO

Gensler is an integral partner in planning and designing the new Pearl East Innovation Building in Boulder. The three-story lab and office facility will be a new center for life science productivity and innovation.

The Gensler team worked with our clients at Beacon Partners to overhaul an existing parking lot in an evolving life science office campus in the heart of Boulder into a lush landscaped facility, with terraces that have views to the Flatirons, access to hiking and biking trails, and expanded wellness benefits within the new campus amenity building. Our team worked hand-in-hand with our developer client and civil partners at JVA to navigate, negotiate, and mitigate challenges to electrification within Boulder and Colorado building codes.

This project capitalizes on the dynamic growth of the life science and biotech industries in Boulder, with direct access to talent at the University of Colorado. Pearl East Innovation building is designed with the technical requirements and flexible infrastructure to accommodate most life science companies' operational requirements. The design will support an expected mix of 60% lab and 40% supporting office space and provide a state-of-the art environment for life science tenants with a floorplate size suited for lab use.

The Innovation Building will contain an internal loading dock and one level of below grade parking. It will also include bike parking (covered and uncovered), outdoor gathering space, among other amenities. The architecture of the new building will leverage the existing brick palette of the campus with a modern, contemporary design to foster a harmonious yet evolving campus aesthetic.

DETAILED INFORMATION

PROJECT SIZE
109,000 Sq Ft

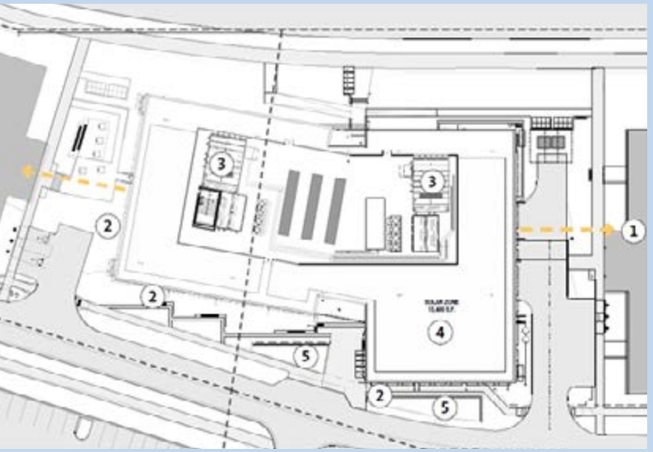
ESTIMATED YEAR OF COMPLETION
2026

SERVICES PROVIDED
Architectural Design
Sustainability Planning

KEY PERSONNEL
Jeff Hall, Project Architect

RELEVANCE TO UCAR
- Facility master plan of similar scale
- Practice area of expertise
- Stakeholder engagement
- Complex organizational structure
- Multiple sites under one umbrella
- Path to Net Zero

SUSTAINABILITY MEASURES



1. **Building Positioning:** The building is oriented E/W along its long axis. This orientation along with an optimal window to wall ratio (35%) allows for the maximum Southern sun exposure and will help lower the building's heating loads in the winter.
2. **Solar Shading Devices:** The building integrates solar shading devices with the East, South, and West fenestration to limit the heat gain during the summer months, while maintaining year-round daylighting and views from interior spaces.
3. **Electrification & High Efficiency Mechanical Systems**
4. **PV Solar Array:** The roof plan includes 41% solar area, which equates to 15,400 square-feet dedicated for PV arrays
5. **Rain Gardens:** There are 2 rain gardens south of the proposed building which clean storm water on site before entering into the storm drain.

MUTUAL OF OMAHA MIDTOWN CROSSING, RETAIL & HEADQUARTERS ANALYSIS

Omaha, NE

Gensler was hired by Mutual of Omaha to complete a multi-phase, multi-year real estate portfolio assessment and workplace strategy project. The multi-facility, multi-site campus required an additional analysis of a mixed-use development owned by the company and a financial analysis guiding the multi-year implementation plan through completion.

Faced with a set of interrelated questions: to renovate in place, or relocate, Gensler's Consulting team, comprised of workplace strategy, analytic and architectural expertise, supported Mutual of Omaha's Executive Leadership Team with a series of stepped advisory services.

Starting with the analysis of the viability of the client's existing 1,600,000 sq ft campus, Gensler analyzed the historic financial OpEx, CapEx and Deferred Maintenance Costs along with conducting a space audit of the entire facility. With data in hand, the team defined a Business Case for Change by examining the costs and benefits of a broad renovation vs. a new building.

In addition to the headquarters analysis, Gensler was specifically requested to evaluate strategies for improvement of an under-performing retail center owned by Mutual in the adjacent Midtown Crossing development. The project was developed nearly a decade ago and suffered from a number of shortcomings including planning and design challenges and misalignment with target user groups that gravitated to the western suburbs, downtown, and other in-favor neighborhoods in Omaha.

DETAILED INFORMATION

PROJECT SIZE
1,600,000 Sq Ft
Over 2,000 Employees

YEAR COMPLETED
2018

SERVICES PROVIDED
Market Analysis
Real Estate Strategy
Scenario Development
Master Planning
Phasing
Financial Analysis
Workplace Strategy
Experience Strategy
Change Management
Dynamic Programming
Facilitation

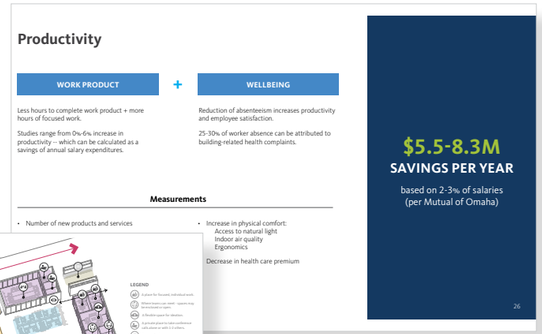
Key Personnel
Wes Leblanc, Strategy Director

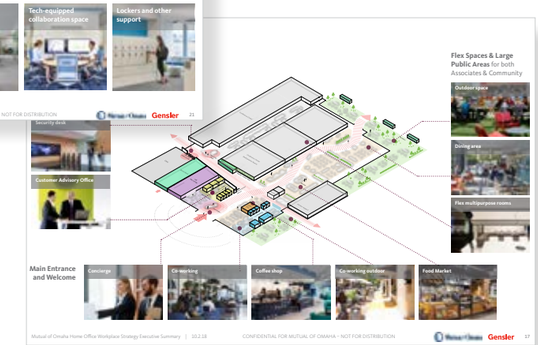
RELEVANCE TO UCAR
Facility master plan of similar scale
Practice area of expertise
Stakeholder engagement
Complex organizational structure
Multiple sites under one umbrella
Financial analysis

Gensler's research process included:

- Market analysis: a baseline market analysis reviewing characteristics of demand, performance, offerings and gaps in the regional market produce(s);
- User survey: an in-depth survey of roughly 2,000 participants, as an extension of the baseline market analysis, to understand perceptions of alternatives in the regional market context; and
- Stakeholder and operator interviews: interviews of asset management, broker, operating, and tenant stakeholders to identify strengths and gaps in current strategies for the properties

The result of the project process was a strategic plan with robust underpinnings in market data and stakeholder input. The plan identified near term, intermediate, and long term recommendations related to 1) Strategic Intent, 2) Management and Operations, and 3) Planning and Design. The strategy was used as a basis for reorganization of the operations team as well as targeting of new tenant typologies and related investment and/ or space reuse.





CHILDREN'S HOSPITAL COLORADO ENERGY MASTER PLAN

Aurora, CO

Since 2022, IMEG has facilitated the development and implementation of an energy master plan for Children's Hospital of Colorado, including their Anschutz campus. The plan outlines a path for achieving the requirements as set forth in SB23-016 and HB21-1286, as well as continuous facility optimization, in accordance with ISO 500001. The planning process began with an assessment of CHCO's building portfolio of over 3 million square feet at its 4 campuses and included master plans, capital programs, operational practices, design standards, utility sources, etc. Design guidelines were updated to align with current energy codes, state statutes and CHCO strategies and goals, and an assessment of energy sources and financially sustainable energy mix was conducted for the South Campus.

SIZE
3,000,000 sq ft

YEAR COMPLETED
Ongoing

SERVICES
Energy Planning, Implementation Support, and Monitoring and Analytics

PARKVIEW HEALTH ENERGY MANAGEMENT PLAN

Various Locations, IN

ROI

The following results were achieved on energy efficiency projects:

ANNUAL SAVINGS:
$1,185,050

UTILITY INCENTIVES:
$145,549

PAYBACK PERIOD:
1.15 Years

Building Performance Optimization

Since 2019, IMEG has facilitated the development and implementation of a strategic Energy Management Plan for Parkview Health covering healthcare organization's campuses in northern Indiana. Parkview's portfolio includes over 5 million square feet comprised of over 50 buildings, including their flagship PRMC campus of 1.7 million square feet. IMEG developed a living plan document that includes strategies, goals and a plan to identify, implement, measure and verify energy efficiency and continuous facility optimization in accordance with ISO 500001. The process includes evaluation of existing conditions, as well as facility operation and capital improvement programs. The planning process also includes estimates of cost, scheduling, and identification of external funding sources.

Implementation of the plan has included 49 projects at 26 facilities including commissioning of 14 projects across most hospital campuses, and retro-commissioning followed by monitoring-based commissioning at the following hospital campuses. Through 2023, these hospitals have seen a 16% EUI reduction at a simple payback of just over 1 year.

- Huntington Hospital and MOB
- LaGrange Hospital and MOB
- Randallia Hospital
- Regional Medical Center (13 buildings)
- Wabash Hospital and MOB

SIZE
Varies by building

YEAR COMPLETED
Ongoing

SERVICES
Energy Planning, Implementation Support, and Monitoring and Analytics

UNIVERSITY OF MICHIGAN CAMPUS DECARBONIZATION STRATEGIC ENERGY PLAN

Ann Arbor, MI

Aging DISTRICT Steam System to Be Replaced with Carbon-Free Heating Sources; GHG-Free by 2040

IMEG is working with the University of Michigan to develop a master plan that will replace the aging campus steam with carbon-free heating sources. In support of the University's Climate Commitment to eliminate direct, on-site Scope 1 GHG emissions by 2040, IMEG is providing MEP and, energy modeling and decarbonization consulting services.

The existing system currently supports six buildings and the piping extends approximately 900 feet from the Hoover Avenue heating plant to several buildings on the U-M Athletic Campus. The project goal is to find options extending the proposed system to 900,000-sf, reaching an additional 14 buildings.

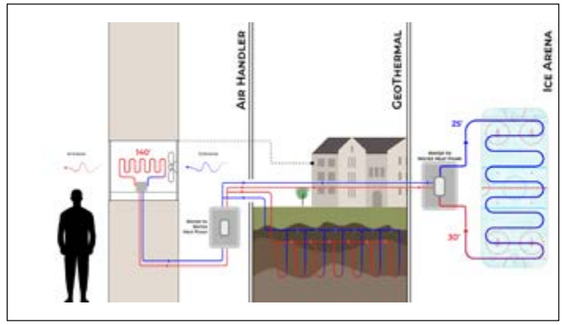
IMEG is currently field verifying all equipment for conversion to low temperature hot water, reducing heating load, completing a campus-wide energy model to life cycle, and carbon assessing five to seven options for implementation. All-electric options must be compatible with cold climate operation. The options being considered include looking at on-site vs. off-site renewable energy locations, integrating waste heat from hockey arena and data center, geothermal, air source heat pump, and hot water storage tanks.

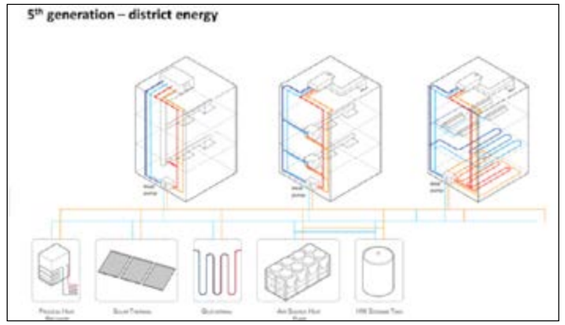
- Project involves decarbonization study and energy modeling of 20 buildings
- Carbon-free heating sources to replace aging campus steam system
- District system options include generation 5 geothermal systems, air source heat pump, and thermal energy storage options
- IMEG developed a phased implementation plan that spans from 2025 to carbon free by 2040
- Owner made commitment to eliminate GHG emissions
- All electric options to be cold-weather compatible
- Renewable energy options considered
- Assessed options and provided master plan to transition existing gas-fired central utility plant to all electric campus system

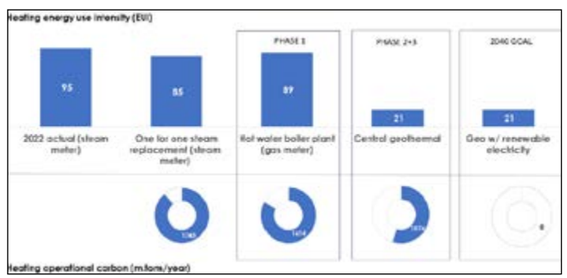
SIZE
900,000 sq ft

ESTIMATED YEAR OF COMPLETION
2028

SERVICES
Energy Modeling, Mechanical, Electrical







NATIONAL INSTITUTE OF STANDARDS & TECHNOLOGY

Boulder, CO

TYPE OF PROJECT
New Build

YEAR COMPLETED
2022

SCOPE OF PROGRAM
Cost Management

Program of Requirements Building A, B, and Parking Garage

Cumming's cost team was involved in the development of a Program of Requirements for two new research building and a parking garage at NIST in Boulder, CO. The National Institute of Standards and Technology (NIST) required development of a Program of Requirements (POR) for Research Building A with Parking Garage. The research building primarily houses laboratories and lab support space including office, conference, collaboration, and other office support spaces. The POR is used as the basis for the procurement of a Design-Build contract, the anticipated method of project delivery, and shall identify the quantity, functionality and quality of space, environmental requirements, infrastructure support services, and performance specifications required for a complete facilities.

Research Building A is a new 90,000-sq.-ft. advanced physical science research facility and new parking garage. This project included demolishing the existing buildings on the proposed site - Building 2 and Building 2A. The project also entailed site improvements and utility work; constructing the east quad, removing and reconfiguring roadways, constructing a pedestrian connection and entry court to Building 81, relocating electrical connection points, coordination with the existing underground utilities including the utility tunnel, and planting native landscaping. Additionally, this project included a second phase to construct a 280-space parking garage on the north side of Building A and the required road realignments for the access road and loading dock.

RELATED EXPERIENCE

Gensler has experience partnering with clients from a wide range of industries across the public and private sectors, including higher education, sciences, government, and research institutes.

ADAMS COUNTY // *BRIGHTON, CO*


TARRANT COUNTY COLLEGE // *FORT WORTH, TX*


CONFIDENTIAL BIOTECH CLIENT // *REDWOOD CITY, CA*


HOUSTON ADVANCED RESEARCH CENTER // *THE WOODLANDS, TX*

SELECT GOVERNMENT MASTER PLANNING WORK

City and County of Denver
Denver Human Services Castro Building Workplace Strategy and Master Plan
Wellington E. Webb Building Master Plan
Denver Human Services Welcome Center Study and Renovation
Public Works Facility Study
Clerk and Recorder Space Study
Elections Space Study

County of Los Angeles
Department of Public Social Services Strategic Facilities Plan
Civic Center Facilities Master Plan
Antelope Valley Facilities Master Plan

Weld County, CO Facilities Master Plan

Napa County, CA Facilities Master Plan

Yavapai County, AZ Facilities Master Plan

U.S. GENERAL SERVICE ADMINISTRATION
Return to Workplace Playbook and Toolkit

Department of Homeland Security
DHS Field Efficiencies, Seattle, San Diego, and Philadelphia
DHS Law Enforcement Campus Workplace Engagement Planning
DHS Mission Support Facility Programming Calculator Tool
DHS Real Estate Organizational Diagnostic
DHS NCR Portfolio Efficiency Study

SELECT HIGHER EDUCATION MASTER PLANNING WORK

Columbia College Chicago Campus Plan, Chicago, IL

Moorpark College Facilities Master Plan, Moorpark, CA

California Institute of the Arts Facilities Master Plan, Santa Clarita, CA

Mira Costa College Facilities Master Plan, Oceanside, CA

Tarrant County College Northwest Campus Master Planning, Fort Worth, TX

Lamar University 10-Year Campus Master Plan, Beaumont, TX

Western Kentucky University Campus Plan, Bowling Green, KY

Adelphi University Long Term Campus and Facilities Plan, Roslyn Heights, NY

Antelope Valley College Facilities Master Plan, Lancaster, CA

Merced College Capital Outlay Planning, Merced, CA

Chaffey College Capital Outlay Planning, Rancho Cucamonga, CA

San Diego State University Mission Valley Campus Master Plan, San Diego, CA

Imperial Valley College Master Plan, Imperial, CA

University of Washington College of Engineering Assessment & Facilities Master Plan, Seattle, WA

SELECT SCIENCE PLANNING & PROGRAMMING WORK

Sierra Space Campus Master Plan, Cape Canaveral, FL

NASA / Jet Propulsion Lab (JPL) Flight Electronics Integration Facility Lab Planning, Pasadena, CA

Northrop Grumman Exterior Campus Master Plan, Redondo Beach, CA

San Diego State University Lab Plan and Criteria Design Support with Grant Support, San Diego, CA

BioMarin Campus Amenities Master Plans at Two Campuses, San Rafael and Novato, CA

The Engine at MIT 10X Incubator Programming and Lab Planning, Cambridge, MA

Texas A&M University Health & Technology Innovation Building Programming and Lab Planning, College Station, TX

Biola University Lim Center for Science, Technology, & Health Lab Planning, La Mirada, CA

Idaho State University College of Pharmacy Renovation Lab Planning, Pocatello, ID

Confidential Client Campus Master Plan, San Diego, CA

Confidential Client Life Science Campus Master Plan, Dallas, TX

Confidential BioTech Client Workplace Strategy, Master Planning, and Lab Planning, Redwood City and San Diego, CA

SELECT RESEARCH INSTITUTES PLANNING & PROGRAMMING WORK

Buck Institute for Research on Aging Programming and Lab Planning, Novato, CA

Moffitt Cancer Center Core Laboratory Lab Planning, Tampa, FL

LabCentral Expansion Lab Planning, Cambridge, MA

Houston Advanced Research Center Headquarters Programming, Lab Planning, and Workplace Strategy, The Woodlands, TX

The Beacon Institute for Rivers & Estuaries Center Master Planning and Organizational Strategy, Beacon, NY

Core. Innovation Campus Workplace Strategy, Test Fits, and Lab Planning, New York, NY

Otonomy BioTech Research Center Lab Planning, San Diego, CA

City of Hope Beckman Research Institute Programming, Test Fits, and Lab Planning, Monrovia, CA

Conservation International Programming and Test Fits, Seattle, WA

Cato Institute Programming, Washington, D.C.

Virginia Tech Research Center Programming, Arlington, VA

WILLOWBROOK MLK WELLNESS COMMUNITY // *LOS ANGELES, CA*

1.3

// PROJECT TEAM

YOUR TEAM

Gensler has facilitated the master planning process for multiple public and private clients in Colorado and throughout the United States since its inception in 1965. We have hand selected a team that is experienced in working with similar-sized, complex, science-based organizations that will bring a thoughtful perspective and knowledge from a variety of sectors.

The core team will be UCAR's day-to-day contacts responsible for collaborating directly with the CCPSC, implementing employee engagement activities, developing options and recommendations, and presenting information at all levels of the organization. Kelly Floyd will act as your communication point-of-contact working directly with the UCAR Project Lead to ensure the project is completed on time and to the highest level of quality. Kelly is trained in PMP techniques and tools, acting as a project manager and strategist on high-impact campus planning projects for various types of organizations over the last 15 years. Our core team will be supported behind-the-scenes by a team of advisors who are experts in the practice areas they lead, collectively bringing over 80 years of experience to the project.

We have invited IMEG and Cumming to join us as consultants to complete the base scope presented in section 1.8 and have a team of consultants whom we've developed strong working relationships with over multiple projects and years "on-call" as needed for unique and specific scopes UCAR may wish to incorporate into the project process.

CORE TEAM

RYAN IHLY
PROJECT DIRECTOR / PRINCIPAL IN CHARGE

MICHELLE LIEBLING
PRINCIPAL IN CHARGE

KELLY FLOYD
WORKPLACE & FACILITY MASTER PLAN STRATEGIST
CLIENT POINT OF CONTACT

DARSHAN SHAH
SCIENCE & HIGHER EDUCATION STRATEGIST

JEFF HALL
SUSTAINABILITY STRATEGIST

LINDSAY SALAZAR
MASTER PLAN STRATEGIST

WES LEBLANC
FINANCIAL ANALYSIS

LUCAS STOVER
COST ESTIMATOR CUMMING

KEN URBANEK
MECHANICAL ENGINEER IMEG

ADVISORY TEAM

KEVIN ROSENSTEIN
CHANGE MANAGEMENT/ WORKPLACE STRATEGY

DANIELLE BREAUX
GOVERNMENT AFFAIRS

RYLEY POBLETE
SCIENCES

ERIN CUBBISON
HIGHER EDUCATION

ON-CALL SUPPORT TEAM

SARAH STRAUCH
ADA | MARX OKUBO

CODY GRATNY
CIVIL | JVA, INC.

AJ UNANDER
STRUCTURAL | MCNAMARA SILVA

KEN GRAVEN
SECURITY | SALTER

CORE TEAM

MICHELLE LIEBLING

NCIDQ, IIDA, LEED AP

Principal in Charge // Gensler

Michelle brings unparalleled expertise in designing thoughtful and innovative work spaces in a wide range of project types including professional service, tech, hospitality, creative office, financial service, and product design.

Michelle is driven by a passion for helping clients engage their most valuable asset — their end users — through the creation of award-winning spaces that support and enrich their mission and the community. Michelle leads project teams that include clients, architects, interior designers, consulting engineers and contractors to develop and construct projects that set the standard for the design profession.

BACKGROUND

28 Years of Experience
Bachelor of Science, Interior Architecture, University of Missouri-Columbia
NCIDQ Licensing Qualification
LEED Accredited Professional
IIDA Rocky Mountain Chapter Member
CoreNet Global Member

SELECTED EXPERIENCE

Tri-State Consolidation Study, Westminster, CO
Prologis Workplace Strategy, Denver, Co
Aurora Municipal Campus Space Study, Aurora, CO
Castro Building Workplace Strategy
Department of Human Services, Denver, CO
Wellington Webb Municipal Office Building Workplace Strategy, Denver, CO
City and County of Denver Workplace Strategy, Denver, CO
Alliance for Sustainable Colorado, Denver, CO
Community College of Denver, Denver, CO
Metropolitan State University, Backfill 51 Project, Denver, CO
Newmont, Workplace Guidelines & Real Estate Strategy, Denver, CO
Western Union Headquarters, Denver, CO
Woodward Workplace Guidelines
Auraria Campus, Denver, CO
Medtronic Innovation Campus, Lafayette, CO
Terumo BCT, Lakewood, CO
GSA Building 41 Workplace of the Future, Denver, CO
Physician Health Partners Workplace Strategy Denver, CO
GSA Building 53 Renovation, Denver, CO
Colorado Bar Association, Denver, CO
Junior Achievement Free Enterprise Center, Greenwood Village, CO
Jewish Colorado, Denver, CO
Downtown Denver Partnership, Denver, CO

RYAN IHLY

AIA, LEED AP, NCARB

Project Director // Gensler

Ryan has more than 20 years of experience in architectural design, planning and management, and working on projects from concept and programming through construction administration.

Ryan has worked on a broad range of typologies with a specific focus on core and shell and interiors for creative clients. He brings a solid reputation of collaboration and flexible thinking to clients and design teams. His past experience managing nationally recognized cultural projects demonstrates his ability to lead complex and demanding projects while balancing programs, budgets, and schedules.

BACKGROUND

22 Years of Experience
Master of Real Estate Development, University of Southern California
Bachelor of Fine Arts, Rhode Island School of Design
Bachelor of Architecture, Rhode Island School of Design
Licensed Architect, California (C28720)
NCARB (Certificate #70691)
LEED Accredited Professional
American Institute of Architects, Member

SELECTED EXPERIENCE

JPL NASA, Pasadena, CA
Interim Master Plan
Workplace Prototype Study
Flight Electronics Integration Facility Building
Momentum Innovative Disability Services, Chatsworth, CA
Relativity Space Headquarters, Long Beach, CA
Aerojet Rocketdyne Social Hub, Los Angeles, CA
St. Luke's, Pasadena, CA
101 S. Marengo Life Science Test Fits and Basis Design, Pasadena, CA
Carl Zeiss Meditec, Ontario, CA
8777 Washington Creative Campus, Culver City, CA
Ovation Hollywood & Highland, Los Angeles, CA
San Vicente Medical Office Building, Los Angeles, CA
VENNAT Concept Feasibility Study, Los Angeles, CA
Phoenix City Master Plan, Suzhou, China*
DST Innovis Corporate Campus, El Dorado HIlls, CA*
Montecito Picture Company Carpinteria Bluffs Mixed Use Campus, Carpinteria, CA*
University of Virginia Performing Arts Center & McIntire School of Music Planning, Charlottesville, VA*
New Jersey Performing Arts Center ArtsBridge Planning, Newark, NJ*
Old Dominion University Fine and Performing Arts School & Governor's School Planning, Norfolk, VA*

*Experience prior to Gensler

CORE TEAM

KELLY FLOYD

Associate AIA, LEED Green Associate

Lead Workplace Strategist // Gensler

Kelly brings more than 18 years of user experience design projects with a focus on storytelling, behavioral change, strategic planning, and development of team culture.

Kelly utilizes the user-centric design process to lead large-scale, innovative projects. Her extensive work experience spans across several industries. She is energized by combining audience research, risk taking, cultural norms, and cultural change to find new ways to define the built environment and create place.

BACKGROUND

19 Years of Experience
Master of Fine Arts, Museum Exhibition Planning and Design,
University of the Arts
Master of Arts, Journalism, Ball State University
Bachelor of General Studies, Marketing, Ball State University
License type: state & number (if applicable)
LEED Green Associate Member
American Institute of Architects, Associate Member

SELECTED EXPERIENCE

Woodward Future Workplace Strategy,
Fort Collins, CO
Adams County Facility Master Plan, Brighton, CO
Weld County Facilities Master Plan, Greeley, CO
Republic Services Workplace Strategy, Phoenix, AZ
Sierra Space Campus Master Plan, Cape Canaveral, FL
Asurion Workplace Strategy, Nashville, TN
Google Bay View Team Space Assessment, Mountain View, CA
Confidential Technology Firm Space Assessment,
Mountain View, CA
Tri-State Generation & Transmission Association
Consolidation Study, Westminster, CO
370 Interlocken Program and Master Plan, Broomfield, CO
CBRE Chicago Suburban Consolidation, Oak Brook, IL
United Stationers Headquarters Relocation Study,Deerfield, IL
Northwestern University, Medill
Chicago, IL
San Francisco, CA
Northwestern Medicine Lake Forest Hospital, Lake Forest, IL
Denver Zoo Facility Master Plan, Denver, CO*

*Experience prior to Gensler

DARSHAN SHAH

AIA

Lead Lab & Research Space Strategist // Gensler

As a design strategist, Darshan brings together business transformation, communication strategy, and placemaking for his clients.

With an architecture and engineering background, Darshan brings the double-punch of creative thinking and technical analysis to any design scenario. He is excited by complex problems and excels at stitching together a variety of intricacies to develop innovative solutions. Darshan exercises his graphic communication skills to craft enticing design narratives. He strives to help teams of designers and clients collaborate to uncover innovative and realizable solutions.

BACKGROUND

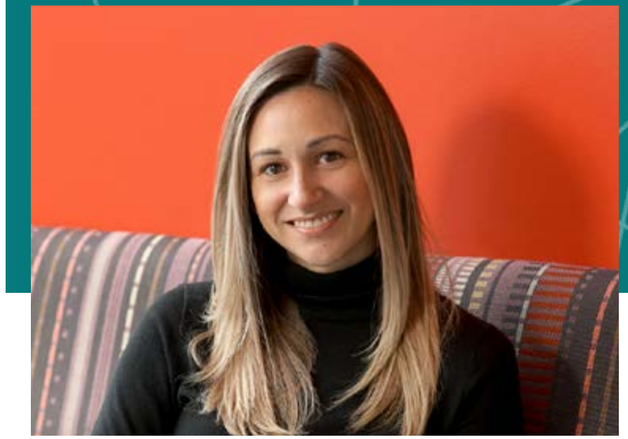
10 Years of Experience
Master of Architecture, University of Illinois at Chicago
Bachelor of Science, Biological Engineering, University of Florida
Licensed Architect, Florida
American Institute of Architects, Member

SELECTED EXPERIENCE

BioMarin, Novato, CA
Amenity Experience Master Planning
Future Lab and Workplace Strategy
SeaGen, Bothell, WA
Lab Occupancy and Shadowing Study
Change Strategy and Playbook
Google
Bay View Team Space Assessment,
Mountain View, CA
Future of Workplace, Mountain View, CA
Hills Plaza Master Plan & Concept, San Francisco, CA
Synopsys Workplace Strategy and Change
Management, Sunnyvale, CA
Ultragenyx Pharmaceutical Inc., Novato, CA
Return to Work Strategy
Global Real Estate Master Plan Strategy
Confidential Lab Workplace, Redwood City, CA
Confidential Campus Analysis, Houston, TX
Roche Diagnostics, Tucson, AZ
McKesson Future of Work Strategy, Irving TX
UC Berkeley Gateway, Berkeley, CA
California State University, Monterey Bay,
Monterey, CA*
Classroom and Lab Utilization Study
New Science Building Programming
Virginia Tech Fralin Biomedical Research Institute
Programming, Blacksburg, VA*

*Experience prior to Gensler

CORE TEAM



LINDSEY SALAZAR

NCIDQ, IIDA

Design Strategist // Gensler

Lindsey enables change through creativity and design as a strategist. Her extensive background in design provides a holistic approach to her work, with a heightened focus on bringing new ideas and solutions to the built environment.

She collaborates with her teams to make the biggest impact by solving complex challenges with people-first solutions. Lindsey brings a passion to master planning by delivering viable solutions to long-term needs, advocating for community, and advancing design excellence. Her approach results in solutions that are purpose-driven, data-informed, and resilient.

BACKGROUND

13 Years of Experience
Bachelor of Fine Arts in Interior Design, The Illinois Institute of Art
Bachelor of Science in Mechanical Engineering, Rose-Hulman Institute of Technology
NCIDQ Licensing Qualification
IIDA Rocky Mountain Chapter Member

SELECTED EXPERIENCE

Woodward Workplace Strategy, Fort Collins, CO
San Luis Obispo County 1144 Site Assessment, San Luis Obispo, CA
Adams County Facility Master Plan, Brighton, CO
General Services Administration (GSA) Building 53, Denver, CO
City of Aurora Municipal Campus Space Study, Aurora, CO
City & County of Denver, Denver, CO
- Castro Building Department of Human Services Workplace Strategy
- Webb Building Code Analysis Study
- Clerk & Recorder/Elections Program

Google Bay View Team Space Assessment, Mountain View, CA
SCL Health Headquarters Mobility and Workplace Analysis, Broomfield, CO
Northrop Grumman, Colorado Springs, CO
Junior Achievement HQ, Colorado Springs, CO
Beacon Capital Consulting, Denver, CO
Kaplan Kirsch & Rockwell Consulting, Denver, CO
Colorado Department of Health Care Policy and Financing, Denver, CO*
Northwestern University, University Relations, Evanston, IL*
University of Colorado Denver, North Classroom, Denver, CO*
Arrow, Electronics Headquarters, Centennial, CO
General Dynamics Information Technology
- Aurora, CO
- St. Louis, MO

Microsoft, Fort Collins, CO
Vail Resorts HQ, Broomfield, CO
Verizon, Salt Lake City, UT

*Experience prior to Gensler

JEFF HALL

LEED AP BD+C, RA

Sustainability Strategist // Gensler

As the Denver Office Sustainability Director, Jeff leads our project teams and clients to minimize our impact on the built environment.

Jeff anticipates how design has to evolve and respond to the overwhelming impacts of a rapidly changing climate. He empowers others to raise the level of sustainability awareness, which enhances our design approach to include a lens of sustainable design motivation.

BACKGROUND

24 Years of Experience
Master of Architecture, University of Colorado at Denver
Bachelor, Professional Studies in Architecture, Cum Laude, State University of New York at Buffalo
Licensed Architect, Colorado (401186)
Member, U.S. Green Building Council
AIA Committee on the Environment
LEED Accredited Professional

SELECTED EXPERIENCE

Pearl East, Boulder, CO
- Amenity Center
- Innovation Campus

GSA Building 53 Renovation, Lakewood, CO
Junior Achievement Free Enterprise Center, Greenwood, Village, CO
Cherry Creek West Development Master Plan,Denver, CO
DCP Campus Master Plan, Denver, CO
Louisville Commons Master Plan, Louisville, CO
Department of Homeland Security
- Design Competition, Orlando FL LEED Gold, Geothermal
- Omaha, NE LEED Gold, Geothermal

One Fillmore Place, Cherry Creek North, Denver, CO
16 Chestnut, Denver, CO, LEED Platinum
158 Fillmore, Denver, CO
6900 Layton, Denver, CO, LEED Gold
BP/Wamsutter, Wamsutter, WY
C&A Industries Headquarters, Omaha, NE
Carrara Place Exterior Renovation, Denver, CO
Colorado State Bank Building, Denver, CO
Crossroads, Denver, CO
Denver Corporate Center II Lobby Renovation, Denver, CO
Denver Place, Denver, CO
Logan Tower, Denver, CO
Terumo BCT, Lakewood, CO
Gunnison-Crested Butte Regional Airport, Gunnison, CO Net Zero

CORE TEAM

WES LEBLANC

Financial Analytics // Gensler

Wes is an economist who employs real estate analysis, financial due diligence, and market assessments to help stakeholders interpret data and make meaningful project decisions.

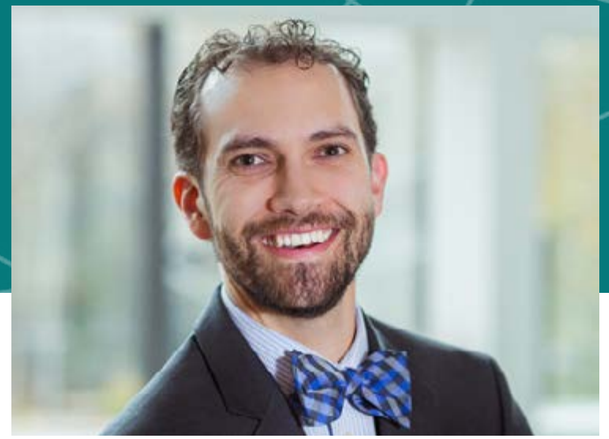
He leads the Gensler Analytics group – a quantitatively focused team of professionals. Wes specializes in large, complex multidisciplinary projects. He has worked domestically and internationally, for real estate occupiers, developers and landowners, as well as conglomerates with ancillary landholdings and investments. Since joining Gensler he has completed more than 100 projects across more than 20 offices and five continents.

BACKGROUND

24 Years of Experience
Bachelor in Business Administration and Economics, St. Edward's University, Summa Cum Laude
International Comparative Political and Economic Systems (ICPES) Georgetown University
International Economics, Trade, and Finance, London School of Economics (LSE), England

SELECTED EXPERIENCE

Columbia College Chicago Campus Plan, Chicago, IL
Asurion Workplace Strategy, Nashville, TN
Northwestern University Common Spaces Program, Chicago, IL
Western Kentucky University Campus Plan, Bowling Green, KY
Hennepin County Office Facilities Workplace Strategy, Minneapolis, MN
County of Santa Clara Reid-Hillview Site Analytics, San Jose, CA
Arthur M. Brazier Foundation Woodlawn Neighborhood Master Plan, Chicago, IL
West Quarters Corridor Master Planning, West Allis, WI
Oakville Green Development Life Sciences and Technology District, Oakville, Canada
Confidential Campus Analysis, Houston, TX
Advocate Aurora Health Real Estate Master Plan, Downers Grove, IL
Avon Lake Renewable Master Plan, Avon Lake, OH
Wichita State University Master Plan, Wichita, KS
Confidential Client
Strategic Campus Positioning, San Diego, CA
Program and Land Use Site Plan Studies, San Bruno, CA
Campus Amenity Study, Cambridge, MA
BlueCross BlueShield of Tennessee Workplace Strategy, Chattanooga, TN



KEN URBANEK

P.E., LEED AP, HBDP

Sustainability Consultant // IMEG

Ken is the Client Executive that leads IMEG's Denver Office where he is responsible for ensuring project success of all projects going through the Denver Office. Ken will lead IMEG's multi discipline team and be the main point of contact for IMEG.

Ken has a broad design and construction background that has been focused on high performance sustainable building design. His specific expertise includes, but is not limited to, multi-discipline project management, central utility plants, campus distribution systems, radiant cooling systems, chilled beams, under-floor air distribution, optimized variable air systems, variable refrigerant flow systems, smoke control systems, and black/grey water systems.

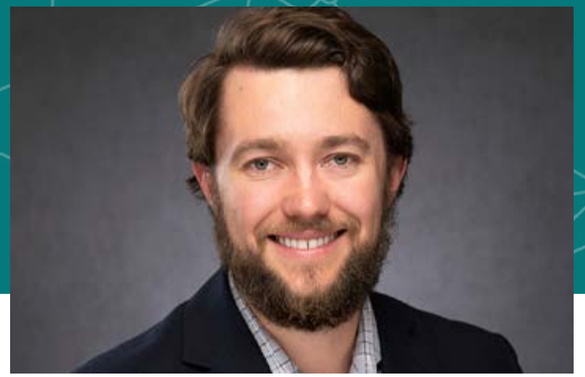
BACKGROUND

20 Years of Experience
Bachelor of Science, Architectural Engineering, University of Wyoming
Professional Engineer, Colorado (PE.0041803)
LEED Accredited Professional
High Performance Building Design Professional
ASHRAE
ASPE

SELECTED EXPERIENCE

Denver Water Campus Headquarters Redevelopment, Denver, CO - Pursuing Net Zero Energy and Water, LEED-NC, Platinum and WELL Building Certifications
Children's Hospital Colorado, Highlands Ranch, CO, South Campus Master Plan
Children's Hospital Colorado, Denver, CO, 8,600-sf Ophthalmology Clinic Renovation
Colorado State University, Fort Collins, CO, Generator Flue Extension at College Vet Tech Hospital, Including CFD
Denver Water, Denver, CO, 186,000-sf Operations Complex Redevelopment, LEED Platinum
Metropolitan State University of Denver, Denver, CO, Student Union Brewing Equipment Relocation
University of Denver, Denver, CO, Joy Burns Center Hot Water Heater Replacement
University of Wyoming, Laramie, WY, 118,000-sf High Altitude Performance Center Addition and Renovation
Xcel Energy - Denver, Littleton, CO, Generator Replacement at Utility Control Center
Xcel Energy - Denver, Denver, CO, Generator Replacement at Utility Distribution Center

CORE TEAM



LUCAS STOVER

Cost Estimator // Cumming

Lucas is a highly skilled cost management professional with a background in Civil Engineering

Since joining Cumming in 2015, he has successfully managed teams of various sizes on projects ranging from $50,000 to $2 billion. He has managed projects from conceptual design through construction and project closeout. He puts a strong focus on making sure all cost management deliverable are provided promptly and accurately.

BACKGROUND

9 Years of Experience

Bachelor of Science, Civil Engineering California Polytechnic State University, San Louis Obispo

SELECTED EXPERIENCE

Lawrence Berkeley National Lab, New Integrative Genomics Building Change Order Review, Berkeley, CA

Lawrence Berkeley Nat'l. Lab, New Integrative Genomics Bldg. with Wet/Dry Labs-Data Center-Offices, Berkeley, CA

National Institute of Standards and Technology, New Research Bldgs. A & B and Parking Garage Prog. of Requirements, Boulder, CO

Nusano, New Health Tech Manufacturing Facility, Salt Lake City, UT

SLAC National Accelerator Laboratory, New Photon Science Lab Building - Independent Estimates, Menlo Park, CA

City of Aurora, Metro Center Parcel B Mixed-Use Development Infrastructure Site Plan, Aurora, CO

City of Fort Collins, New North Transit Center Options, Fort Collins, CO

City of Fort Collins, New Water Quality Lab/Office Site Concepts Study, Fort Collins, CO

East Bay Municipal Utility District, Administration Bldgs. HVAC System Upgrade, Oakland, CA

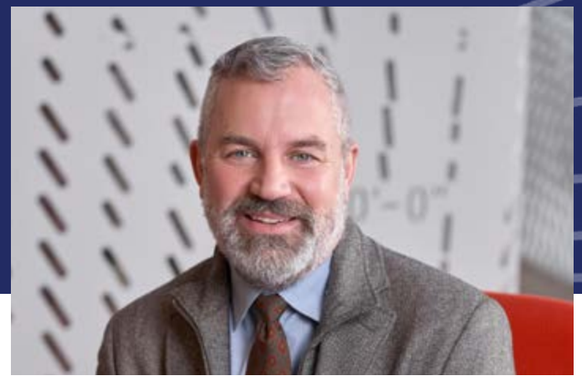
GSA Federal Building, New Ice Core/Freezer Storage Facility & Office/Support Reno, Lakewood, CO

State of Colorado, Capital Complex Buildings Renovations to Achieve LEED Certification, Denver, CO

The Point of the Mountain State Land Authority, Site Development, Lehi, UT

ASSEMBLY AT NORTH FIRST // *SAN JOSE, CA*

ADVISORY TEAM



KEVIN ROSENSTEIN

Certifications / Accreditations

Change Management & Workplace Strategy Advisor // Gensler

Kevin has extensive experience in organizational development and management training. Kevin is focused on helping clients adapt and work through changes in their organizational culture, practices, and business strategies. His work includes developing change management and communications programs to ensure successful transitions and organizing complex global strategy engagements.

BACKGROUND
33 Years of Experience
Master of Business Administration, Dartmouth College

SELECTED EXPERIENCE
JPL NASA Interim Master Plan, Pasadena, CA
Contra Costa County Master Plan, Martinez, CA
County of Santa Cruz LRFP and Master Plan, Santa Cruz, CA
SLO County Facilities Master Plan, San Louis Obispo, CA
Federal Energy Regulatory Commission Change Management, Washington, D.C.
City National Bank Change Management, Los Angeles, CA
Micron Headquarter Change Management, Boise, ID
Microsft Change Management, Various Locations
LA County Facilities Master Plan, Los Angeles, CA
LA County DPSS Strategic Master Space Plan, Los Angeles, CA
Lennar Commercial HQ Workplace Strategy, Aliso Viejo, CA

DANIELLE BREAUX

MBA

Government Affairs Advisor // Gensler

Danielle is passionate about uniting teams around common goals, gaining consensus among diverse stakeholders, and presenting complex concepts in understandable terms for any audience. With experience in both the public and private sectors, Danielle has an in-depth understanding of her client's perspective and a track record of aligning tactical execution of large-scale projects with rigorous timelines and budgets, applicable regulations, and larger organizational goals.

BACKGROUND
28 Years of Experience
Master of Business Administration, Louisiana State University

SELECTED EXPERIENCE
U.S. Department of Defense Real Estate Strategy, Multiple Projects
U.S. Patent & Trademark Real Estate Strategy Plan and Interiors Program, Alexandria, VA
U.S. General Services Administration
Leland Federal Building, Houston TX
Crystal City Portfolio, Arlington, VA
U.S. Department of Homeland Security Portfolio Study, Washington, D.C.*
U.S. Department of Homeland Security Headquarters Consolidation Campus Wide Program at St. Elizabeth's, Washington, D.C.*

*Experience prior to Gensler

RYLEY POBLETE

LEED AP

Sciences Advisor // Gensler

A highly motivated self-starter, Ryley has spent much of his early career focused on understanding the built environment. From structural and mechanical systems to policy regarding urban development, he has pushed himself to find solutions to endemic problems. He is always looking for opportunities to leverage his knowledge and background in urban systems —from infrastructure to demographics— to improve the built environment and challenge the status quo.

BACKGROUND
10 Years of Experience
Master of Architecture, Harvard University

SELECTED EXPERIENCE
St. Luke's, Pasadena, CA
101 S. Marengo Life Science Test Fits and Basis Design, Pasadena, CA
Takeda, San Diego, CA
Cal Tech Lab Planning, Pasadena, CA
CMZ Life Science Campus, Chilly-Mazarin, France
JLABS Johnson & Johnson Innovation
New York, NY
Shanghai, China
Houston, TX
Washington, D.C.

ERIN CUBBISON

LEED AP, RA

Higher Education Advisor // Gensler

As a Strategy Director, Erin leverages a variety of engagement and analytical tools to help her clients thoughtfully translate their culture into performance goals and measure design impact. Erin has a wealth of experience in measuring design performance, through stakeholder, employee, and community engagement; real estate analysis; development of workplace and real estate strategies; change management; and ethnographic research.

BACKGROUND
20 Years of Experience
Master of Architecture, University of California, Berkeley

SELECTED EXPERIENCE
UC Davis Health Master Plan, Sacramento, CA
UC Davis Workplace Strategy, Davis, CA
UC Berkeley Gateway, Berkeley, CA
Roche
Office Re-entry, Pleasanton, CA
Alternative Workplace Strategy, Pleasanton, CA
Theravance Biopharma, South San Francisco, CA
Chevron Conceptual Master Plan, San Ramon, CA
Nutanix Strategy and Change Management, San Jose, CA
University of Washington College of Engineering Assessment & Facilities Master Plan, Seattle, WA
Adelphi University Long Term Campus & Facilities Plan, Roslyn Heights, NY

CONFIDENTIAL CLIENT // *WALTHAM, MA*

1.4

// PROJECT PLAN

PROJECT PLAN

A successful master plan creates a compelling vision coupled with a thoughtful strategy to meet an organization's needs. Master plans provide organizations with roadmaps to create meaningful and memorable places. Gensler's approach to this project will draw upon our team's collective experience in facility master planning for science, higher education, and government clients. The end goal is to create an inspiring, agile, and efficient facilities master plan that recommends a real estate strategy in support of NCAR/UCAR's higher organizational vision.

OUR PLANNING PHILOSOPHY
Our team's planning and design philosophy is integral to, and complementary with, our client service philosophy. We take the time to know and understand our clients so that our planning recommendations are never off-the-shelf but rather client- and project-specific solutions that respond to the aspirations and needs of each individual client.

THE UCAR/NCAR OPPORTUNITY
As an organization, UCAR/NCAR presents a unique master planning opportunity. The diversity of departments and activities happening at UCAR/NCAR, combined with the space types needed to support these activities and departments, requires experience in planning for several industry types. A master planning strategy for UCAR/NCAR must incorporate design thinking for workplace, laboratory and research facilities, and training and education space. A final master plan must combine programming and future forward thinking for these industries along with campus mobility, parking and amenity needs.

Also, creating a master plan for a mature campuses like UCAR/NCAR has to be a collaborative process. Each stakeholder group has to identify and prioritize its needs, make projections for growth, and come to a consensus on future direction to ensure the master plan serves both present and future stakeholders. It is important, therefore, that stakeholder meetings foster key discussions around the current vision, goals, and core values of UCAR/NCAR's leadership team.

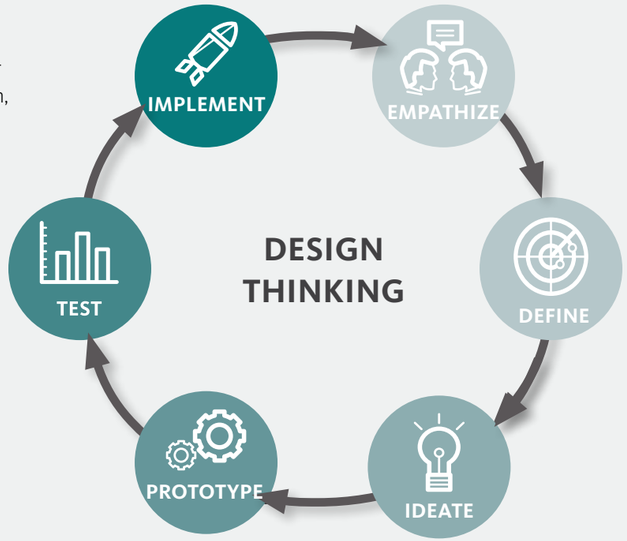
TEAM ORGANIZATION
We have organized ourselves as a team into two groups. A core team lead by Gensler's point-of-contact will be the day-to-day contact responsible for visioning, data gathering, and final recommendations. To support this core team, we have created a best-of-the-best team of advisors who bring to the table years of experience in change management, design for science and higher education spaces, sustainability planning, and government-supported-organizations. You can learn more about our team in proposal section 1.3.

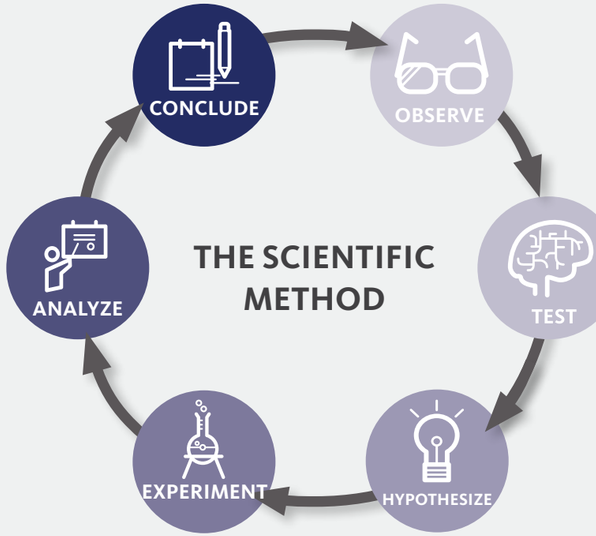
OUR EMPHASIS ON ENGAGEMENT
During any master planning effort there is an importance that needs to be placed on facilitating a collaborative, participatory process that maximizes the opportunity for the campus community to be involved. Our team is skilled at building consensus with a variety of interest groups on and beyond an organization's campus. We understand the importance of listening, effective communication, and responsive planning.

THE SCIENTIFIC METHOD & DESIGN THINKING

WE ARE ALL SCIENTISTS
For thousand's of years scientists, mathematicians, and thinkers have been using the scientific method to progress our knowledge. The scientific method emphasizes experimentation, discovery, and inductive reasoning. It starts by making observations, often through the use of experiments, and combine the results of those experiments with existing facts.

From these observations and experiments, hypotheses are formed about how the natural world works. Then those hypotheses are tested through additional experiments to see how accurate they are and if they can enter the realm of theory, law, and fact. If the observational data don't support a hypothesis, it is abandoned and what else may be supported is explored. Overall, new solutions are found seeking to understand what is already there.





Design thinking is the scientific method expanded to include observation and discovery of human behavior, the emotions behind those behaviors, and using that data to create solutions to complex business problems. Gensler strategist's are trained in design thinking methodology and utilize design thinking tools and techniques throughout a project's lifecycle.

Where the scientific method excels in understanding objective and quantitative data, design thinking offers a way to collect and understand subjective and qualitative data, such as stakeholder wants, needs, as well as personal histories and experiences. Instead of Petri dishes and pipettes in a lab, "in the field" ethnographic observational tools such as a one-on-one interviews, fly-on–the-wall observations, and diary studies are used. Once a small collection of hypotheses are validated based on a deep, inductive understanding of end users, we are ready to solve the right business problem.

PROJECT PLAN

APPROACH TO SERVICES

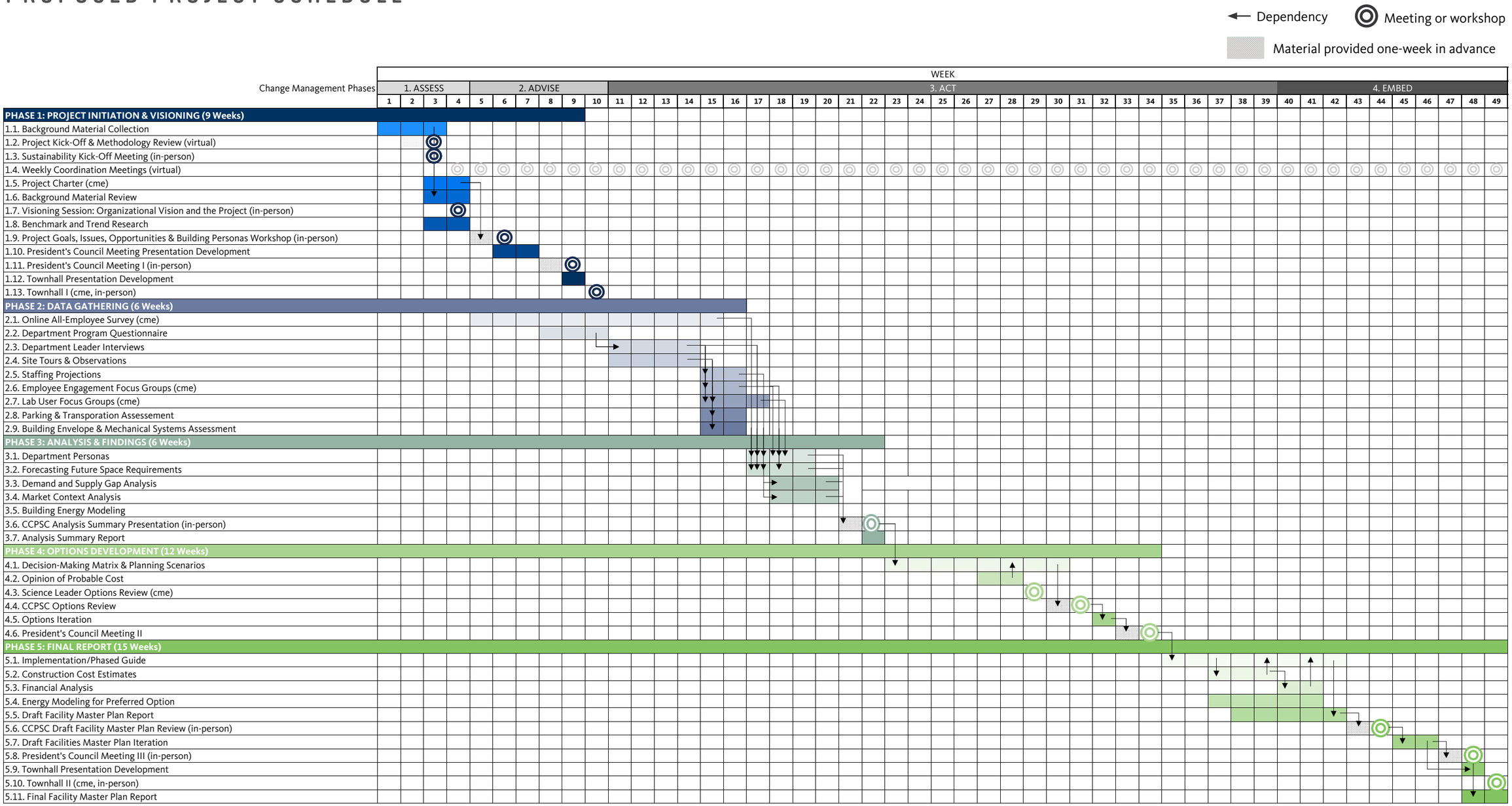
PARTNERING FOR SUCCESS
At Gensler, we treat every project as a design opportunity to address a unique set of challenges with creative responses. Our planning solutions evolve from a rigorous inquiry process into the specifics of location, culture, programmatic needs, and user functionality. Defining and prioritizing master plan options requires input from various stakeholders and informed decision-making from the core leadership team. The Comprehensive Campus Plan Steering Committee (CCPSC) must engage broadly while empowering key project leaders and communicating clearly with all stakeholders.

The participatory process paired with a clear decision-making hierarchy is key to keeping the master planning effort on track. Together, the CCPSC and the Gensler team must define the measures of success at the projects' outset and document them into the project charter. This critical first step will influence the rest of the process and will aid in every step of the way to ensure the resultant master plan not only aligns with UCAR/NCAR's larger strategic mission and vision but will help illustrate the overall story of need and how the identified projects satisfy those needs.

In proposal section 1.8 we provide detailed descriptions of each of the tasks outlined in the project plan diagram to the right and schedule on the following page. Our intent is to always be looking for moments of efficiency to finish the project ahead of schedule. One of our first activities with the UCAR Project Lead will be align the project schedule with the President's Council meeting schedule and condense the timeline as we are able to meet delivery expectations while providing materials in advance, as requested.

	9 WEEKS	6 WEEKS	6 WEEKS	12 WEEKS	15 WEEKS
	PHASE 1 PROJECT INITATION & VISION	**PHASE 2** DATA GATHERING	**PHASE 3** ANALYSIS & FINDINGS	**PHASE 4** OPTIONS DEVELOPMENT	**PHASE 5** FINAL REPORT
	THIS IS WHERE WE ARE			**THIS IS WHAT WE WANT TO BE DIFFERENT**	**THIS IS HOW WE GET THERE**
PROCESS, ACTIVITIES, & WORKFLOW	**PROJECT LOGISTICS** • Confirm data gathering methodology • Align project schedule to expectations • Kick-off project with CCPSC • Approve project plan **TEAM IMMERSION** • Review background materials, eg. existing floor plans and space programming documents, occupancy data, headcount data, HR policies, etc. • Review facility condition assessments • Present benchmark and trend research • Develop project goals and vision • Understand building personas (UCAR v. NCAR owned details)	**DATA GATHERING** • Release online all-employee survey • Provide department program questionnaire to department leaders • Conduct department leader interviews • Tour facilities and make space utilization observations • Project future staffing counts based on hiring trends and interviews • Employee engagement focus groups • Lab equipment utilization and process mapping • Lab user focus groups • Parking, ADA, transportation and site security assessments	**DATA ANALYSIS** • Develop department personas including current and future space use, headcount growth projections, adjacencies, space and equipment utilization, etc. • Forecast future space requirements • Analyze space demand and supply • Market demand analysis for alternative uses **SUSTAINABILITY STRATEGY** • Model each building for existing energy use	**OPTIONS DEVELOPMENT** • Develop decision-making criteria based on project goals and data gathering findings • Develop 3-5 options that solve project goals, present options for project implementation prioritization, and meet sustainability and financial goals • Present options to CCSPC and Science/Lab Department leaders for feedback • Iterate options for President's Council review **SUSTAINABILITY STRATEGY** • Define sustainability metrics for each facility • Analyze energy efficiencies for each option	**MASTER PLAN DEVELOPMENT** • Develop phased implementation plan • Gather final construction cost estimates, deferred maintenance costs, and occupancy costs • Complete financial analysis that includes costs with escalation, revenue estimates, and funding opportunities • Compile all information into draft report for review **SUSTAINABILITY STRATEGY** • Develop prefer option energy models for each facility • Compile recommendations and strategic sustainability interventions into final Sustainability ROADMAP
MEETING/ WORKSHOP **UCAR REQUESTED DELIVERABLE**	• Weekly Coordination Meetings • Project Kick-Off & Methodology Review Meeting • Project and Change Management Program Plans • Visioning Session: Organizational Vision & the Project • Project Goals, Issues, Opportunities, & Building Personas Workshop • President's Council Meeting I • Townhall I	• Weekly Coordination Meetings	• Weekly Coordination Meetings • Analysis Summary Presentation • Analysis Summary Report	• Weekly Coordination Meetings • CCPSC and Science/Lab Department Leader Options Review • President's Council Meeting II • Analysis Summary Report	• Weekly Coordination Meetings • Draft Facility Master Plan • CCPSC Review of Draft Facility Master Plan • President's Council Meeting III • Townhall II • Final Facility Master Plan Report

PROPOSED PROJECT SCHEDULE



HOUSTON ADVANCED RESEARCH CENTER // *THE WOODLANDS , TX*

1.5

// SUSTAINABLE DESIGN

SUSTAINABLE DESIGN

At Gensler, we believe that successful architecture blurs the boundaries between beautiful design and high performance. Every choice made presents an opportunity to enhance the performance of your buildings, your people, and your organization.

Our sustainability consulting capabilities will help you make well-informed decisions that consider key issues when assessing your portfolio optimization, workplace strategy, energy management programs, building locations, and, interior and building architecture.

PHASE 1: PROJECT INITIATION & VISIONING
At Gensler, we are always seeking ways to make our work a restorative process for communities, people, and the environment. It's not a question of whether we design sustainably—it's a matter of how it happens and to what extent. With every client, we include the discussion of sustainable objectives to set aggressive goals that will make a difference.

A Sustainability Kick-Off Meeting will be held to facilitate discussions through a broad lens of sustainable topics. The meeting is an opportunity for the consultant team to confirm our understanding of UCAR/NCAR's established goals and explore opportunities to define additional sustainable goals. At this time we like to introduce and prioritize certification and verification programs that could reinforce the project goals.

PHASE 2: DATA COLLECTION
Understanding existing conditions provides the sustainability strategists a starting point for future analysis and recommendations. A Building Envelope and Systems Assessment is a data collection tool that we use to evaluate the baseline performance of a building. This assessment involves reviewing existing drawings, gathering utility data and field observations to establish the building assemblies, mechanical systems, electrical capacity, and water usage.

PHASE 3: ANALYSIS & FINDINGS
Sustainability is an important lens to evaluate project performance. By benchmarking the building's current energy usage we can identify the different options and interventions that can be done to achieve your sustainability goals. An Existing Conditions Energy Model will be created and used to identify the relationship of the building envelope, building systems, and occupancy to the energy usage of each building. This data will set our baseline understanding for each location.

PHASE 4: OPTIONS DEVELOPMENT
Using state-of-the-art performance analytics, we deliver unprecedented insights that inform decision-making. Additionally, emphasizing accountability, transparency, and documentation, our global certification leaders deliver timely and cost-effective certifications for all facets of the built environment across rating systems and project types.

Utilizing Retrofit Options Energy Modeling, the Gensler team will evaluate the retrofit options to compare the options and baseline metric to illustrate improvements and alignment with established goals.

PHASE 5: FINAL FACILITIES MASTER PLAN
Gensler works to preserve our planet's resources and produce results that matter for our clients: reduced energy and operating costs, brand advantages, enhanced real estate and human performance, and overall higher quality of life. We collaborate closely with the clients and communities we serve to tailor every design to its local culture and context.

Sustainability is not a "one-size-fits-all" strategy; it is deeply grounded in the unique circumstances of people and place. As leading advocates for sustainable design since our founding, we have long been committed to working with our clients to create sustainable, economical, and responsible designs. The sustainable design approaches for which we have always advocated are now government and business standards.

UCAR will find the final master plan report recommendations to incorporate needed interventions to meet the identified sustainability goals.

BURLINGAME POINT // *BURLINGAME, CA*

NEWMONT MINING HEADQUARTERS // *DENVER, CO*

1.6

// CHANGE MANAGEMENT

CHANGE MANAGEMENT

Based on our experience we know academics and scientists receive information best when it is well-researched and well-defended. Emotional appeals aren't enough. That requires us to be thorough, diligent, and use scientific methods in our data collection and analysis and airtight in our presentations. We anticipate a tight partnership with the CCPSC to ensure that the work withstands scrutiny.

Our change management plan will bring a series of employee engagement activities and employee communication at key milestones. As mentioned before, UCAR has already built-in opportunities for employee engagement that are highlighted below. In addition to these activities, we have added developing a project charter as a team as a documentation tool, and employee engagement focus groups to engage UCAR/NCAR employees in the process.

PHASE 1: PROJECT INITIATION & VISIONING

Once the goals and project plan are developed, Gensler will format decisions made into a Project Charter that sets expectations about the breadth and depth of the study, goals of the study, and other decision-making criteria to frame the project purpose through the design. This document ensures alignment and to reinforce roles and inputs in the process.

Gensler will present an overview of the project process, goals, key dates, opportunities for employee input, and answer any questions in collaboration with the UCAR project team at the first all-staff Townhall.

PHASE 2: DATA COLLECTION

The first of many opportunities for employees to provide input into the project will be through the WPIx survey released to all-employees for feedback. Employees are asked to provide feedback collaborative spaces, amenities, support spaces, and space requirements by business unit. The quantitative information gathered can be cross-sectioned by department, management level, tenure, and other demographic identifiers as a collective body of space-based knowledge and UCAR/NCAR's current culture.

Gensler will conduct Employee Engagement Focus Groups to better understand the quantitative data provided in the WPIx survey and to ask follow-up questions on possible pain points identified through the survey. These sessions will inform change management communication messaging associated with the rollout of solutions by identifying what people hold close to their heart to empathetically address through the options development process.

Gensler will also engage lab end users through Lab User Focus Groups to understand situations and utilization needs unique to the lab environments. Discussion will help us understand how lab users work with non-lab users, and the balance of lab-based, office-based, and working from home has changed a lab users working dynamic.

PHASE 4: OPTIONS DEVELOPMENT

Reflecting on input and learnings from the data-gathering phase, the proposed Science Leader Options Review provides an opportunity for Science department leadership to test the viability and relative level of effort required to achieve the different proposed solutions, prior to options presentation to the President's Council. This allows an opportunity for co-creation with those department representatives.

PHASE 5: FINAL FACILITIES MASTER PLAN

At the second Townhall, Gensler will present an overview of the facility master plan and highlight the moments and decisions UCAR/NCAR employees lead as part of the process. Along with the project team, Gensler will be available to answer employee questions.

PROJECT LIFECYCLE COMMUNICATION

Gensler will provide communication templates to communicate project progress to employees to the UCAR Project Lead. We recommend all-staff communication aligning to milestone dates agreed to during the Project Methodology discussion.

ADDITIONAL ALTERNATIVE: INTERNAL INTRANET PROJECT SITE

One option Gensler could provide in addition to the base change management plan listed, is the development of an Employee Communication Intranet Site dedicated to the project where information can be posted, and ideas shared. Employees can engage with presentations, status updates, calendar opportunities for engagement, etc. We have listed this scope as an additional alternative in our scope of services and fee worksheet.

CONFIDENTIAL TECH CLIENT // *BOISE, ID*

CONFIDENTIAL CLIENT // *CONFIDENTIAL LOCATION*

1.7

// INDUSTRY TRENDS

TRENDS IN SCIENCE

As the world looks to scientists to solve the world's most urgent problems, organizations are looking for new ways to improve the reproducibility of scientific outcomes and accelerate the adoption of impactful technologies. New modalities such as automation and cloud labs are helping, as are new types of interdisciplinary and collaborative partnerships. To enhance these efforts, the industry is looking to locate pilot manufacturing and testing facilities closer to researchers. At the same time, design that can help science organizations meet their sustainability goals in their facilities is top of mind.

Advances in AI, robotics, and other technologies require new collaboration spaces.
Technology such as AI, robotics, cloud labs, and quantum computing are helping scientists iterate faster, reproduce science more accurately, and rapidly process data. Collaborative-based work environments will become more valuable as the increasing complexity and volume of data require broader expertise and new ways of visualizing and processing data.

Scientific innovations will depend on multidisciplinary research.
As computing power increases through quantum technology, AI is required to help analyze and translate exponentially larger volume of data across scientific disciplines such as biology, chemistry, and engineering. Multidisciplinary approaches to scientific problems demand flexible spaces that support focus work, collaboration, and interaction among diverse disciplines.

Specialized, small-scale manufacturing can accelerate scientific innovation.
There is an increasing demand to locate pilot plant and bench-scale manufacturing closer to researchers to facilitate more effective collaboration. Instead of large warehouses focused on mass production, smaller-scale localized labs can target specific problems, which can rapidly iterate and prototype solutions, physically allowing scientists to troubleshoot and engage in-person with the target audience.

RESEARCH-DRIVEN DESIGN

Just as UCAR/NCAR scientists are driven by curiosity, so are we. We are inherently curious and are constantly looking for opportunities for innovation that drives the performance of Gensler projects. We invest in research to empower global professionals to seek answers to the pressing question facing our clients every day. Established in 2005, the Gensler Research Institute explores the intersection of design, business, and behavior in pursuit of solutions that improve the built environment and enhance the human experience.

The Gensler Research Institute is a global, collaborative network of researchers focused on generating new knowledge and developing a deeper understanding of the connection between design, business, and the human experience. Through a combination of global and local research grants, and external partnerships, we seek insights focused on solving the world's most pressing challenges. We collaborate with practitioners to unlock new solutions and strategies that will define the future of design.

It is through these partnerships and commitment to be the leaders in our field that we are able to present the latest design trend research and innovative thought leadership impacting design thinking for workplace, science, higher education, and sustainability.

The following pages share Gensler's latest design trend findings presented in our 2024 Design Forecast, our annual catalog of research findings we share globally to our clients, colleagues, and fellow design practitioners.

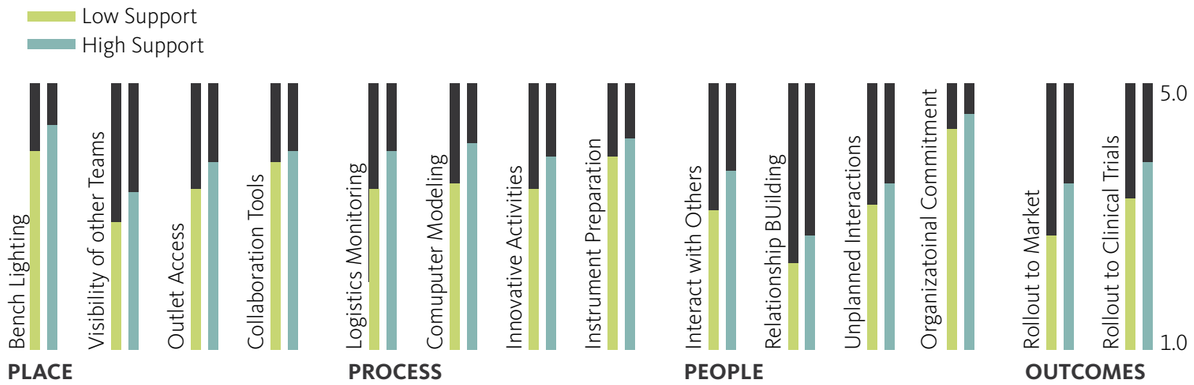
450+
Research grants awarded to date

1,500+
Gensler professionals involved in research

50
Research projects funded in 2023

Multifunctional benches have a positive impact on design, process, people, and business outcomes. The effectiveness rating of each of the variables below as reported by wet laboratory–based scientists indicating that their bench highly or poorly supports dry laboratory–based activities.

Source: Gensler U.S. Laboratory Research Scientist Survey 2023



"TO KEEP UP WITH THE ACCELERATING PACE OF SCIENTIFIC DISCOVERY, WE MUST FOSTER ENVIRONMENTS WHERE INNOVATORS FROM ALL DISCIPLINES CAN SEAMLESSLY COLLABORATE TO RAPIDLY TEST IDEAS AND MOVE SOLUTIONS TO THOSE IN NEED."

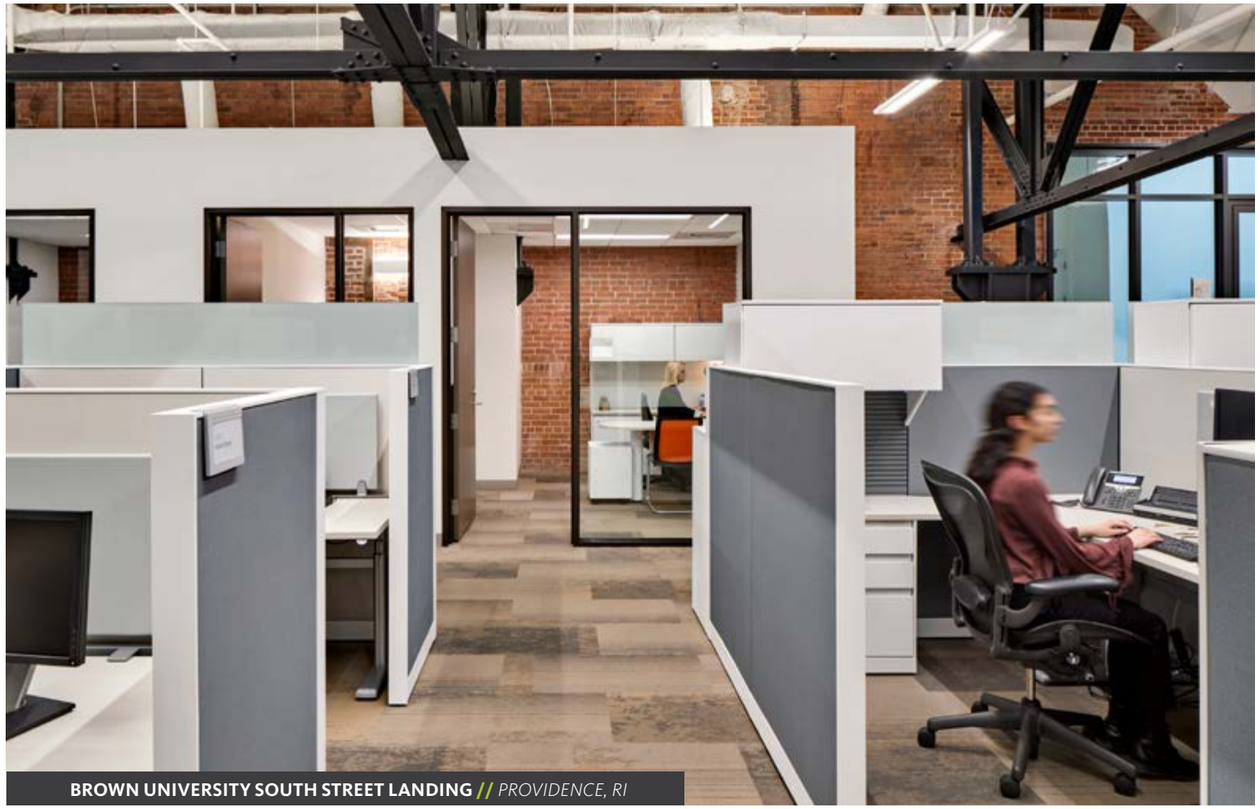
ERIK LUSTGARTEN, SCIENCES LEADER

WORKPLACE TRENDS

We deliver effective and timeless design solutions for institutional, public, and private clients alike. While there are differences in how people work across industries, one thing is clear: the workplace is changing.

The most successful workplace environments are compelling destinations that offer a variety of inclusive workspaces where workers can focus, connect, and collaborate. Workplaces and facilities that optimize sustainability and create meaningful and unique experiences that foster a sense of community, connection, and well-being will have a competitive advantage over those that don't. We must design spaces that are agile enough to endure future challenges and flexible enough to rapidly evolve with the changing demands of the workforce.

As we review the space needs for UCAR/NCAR's campus, we acknowledge the program has to be approached from three lenses: workplace, higher education working norms, and science supportive spaces. UCAR/NCAR's new hybrid working policies are designed for the individual UCAR/NCAR employee need. We find this to be the best way of approaching hybrid work policies today.



BROWN UNIVERSITY SOUTH STREET LANDING // *PROVIDENCE, RI*

MARYMOUNT UNIVERSITY BALLSTON CENTER // *ARLINGTON, VA*

WORKPLACE TRENDS

01

BUILDING RENOVATIONS AND REUSE ON CAMPUS HAVE BECOME A KEY DEVELOPMENT STRATEGY.

As institutions strive to stay relevant and reduce operating costs, they must focus on the highest and best use of their physical assets. Data-informed strategies can help organizations right-size their infrastructure, lower embodied carbon, and optimize campus space use, such as converting aging classroom buildings into student collaboration space or student housing, rather than new construction.

02

FOCUS SPACES AND DROP-IN DESKS HELP DEFINE THE HYBRID OFFICE.

Hybrid work arrangements mean firms are trading closed offices and assigned seating for focus spaces and drop-in desks — freeing up square footage for richer amenities and additional collaborative spaces with upgraded A/V technology that make the office a productive space for hybrid work and a cultural hub worth traveling for.

03

DEFINE FOR CULTURE AND INCLUSION WILL STIMULATE WORKPLACE COLLABORATION

Culture is key to attracting and retaining talent. The physical workplace is essential in defining and sharing an organization's culture. Offices should enable interaction and support connection and mentoring, while creating a sense of belonging for all employees. Creating human-centric workplaces that inspire purpose and demonstrate organizational values will help firms stand out to potential talent and clients alike.

JET PROPULSION LABORATORY FLIGHT ELECTRONICS INTEGRATION FACILITY // *PASADENA, CA*

1.8

// SCOPE OF SERVICES

SCOPE OF SERVICES

Every activity Gensler's strategists engage in as part of the design process requires our ability to perform convergent and divergent thinking. We go wide to gather as much information and as many ideas as possible, then narrow our thinking to find the right focus points to elevate. This process is also know as the "double diamond" approach.

Our approach to this project follows a conversational flow intended to uncover NCAR/UCAR's existing situation, what the organization would like to be different, and how this project supports the organization in getting there. This conversation aligns to the five phases UCAR has outlined as it's expected process.

Gensler has included a list of additional alternatives, activities that can be included in scope to enhance the process. The value add of each activity is described in detail. Gensler also understands that facility condition assessments are not included in scope, however, should the reports not provide the needed information to complete options development and cost estimating, additional tasks by our subconsultants may be required.

Sustainability Services

Change Management Services

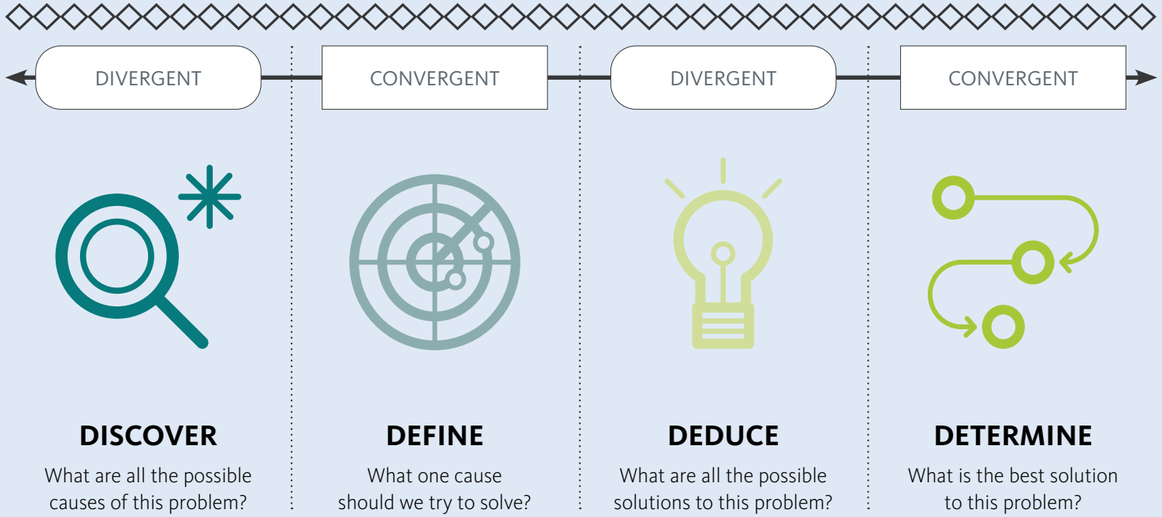
PHASE 1: PROJECT INITIATION & VISIONING
The first phase provides our team an opportunity to get to know one another, set the methodology to guide the project, and for UCAR/NCAR to share its organizational vision for the future with the project team.

1.1. BACKGROUND MATERIAL COLLECTION (UCAR/NCAR)
Working with UCAR's Project Lead, Gensler will provide a list of relevant background materials and critical data for review and use throughout the project. Materials could include department headcount projections, exhaust data to analyze space utilization (badge, WIFI or other), existing floor plans, existing remote work policies and occupancy data, technology use and infrastructure, facility condition assessments for all buildings, 2015 baseline energy and water use data, other department or strategic master plans, etc.

1.2. PROJECT KICK-OFF & METHODOLOGY REVIEW (virtual)
The Kick-off Meeting with the Project Lead is intended to confirm the project approach, schedule, methodology, communication protocols, review background materials collected for follow-up, and define any other logistical needs for the project.
Deliverable(s): 60-minute virtual meeting, meeting notes

1.3. SUSTAINABILITY KICK-OFF (in-person)
The Sustainability Kick-off is intended to validate Gensler's understanding of UCAR's definition of Net Zero and how the existing "Net Zero Strategies for a Sustainable Future" provided as Appendix A. Validation of intent will provide the Gensler team with the needed information to move forward with building evaluations to confirm existing conditions.
Deliverable(s): 60-minute in-person meeting, meeting notes

THE CREATIVE CYCLE OF CONVERGENT AND DIVERGENT THINKING



1.4. WEEKLY COORDINATION MEETINGS (virtual)
Gensler's lead strategists and project director will meet weekly with the UCAR Project Lead and other invited stakeholders to confirm coordination efforts, direct inquiries, and collaboratively manage the project process throughout the life of the project.
Deliverable(s): Weekly 30-minute virtual meetings, meeting notes

1.5. PROJECT CHARTER
Once the goals and project plan are developed, Gensler will format that information into a project charter that can be used to help set expectations about the breadth and depth of the study. This document will also be referred to throughout the process to ensure alignment and to reinforce roles and inputs in the process. The document will be reviewed at the Project Goals, Issues, Opportunities and Building Personas Workshop.
Deliverable(s): Project charter

1.5. BACKGROUND MATERIAL REVIEW
The Gensler team will review all materials requested and provided by UCAR to confirm questions to be asked, and activities to include in workshops, during the data gathering phase.

1.6. VISIONING SESSION: ORGANIZATIONAL VISION & THE PROJECT (in-person)
The Gensler team will facilitate a 90-minute visioning session with the CCPSC and other invited stakeholders to connect the long-term organizational vision with the project. The goal is to unpack how a new facility master plan supports UCAR/NCAR/UCP's long-term strategic plans as an organization.
Deliverable(s): 90-minute in-person workshop, workshop notes

1.7. BENCHMARKING AND TREND RESEARCH
The Gensler team will gather and develop content sharing recent, relevant design trend research and benchmarking data. This research will be presented to the CCPSC for awareness and included in the first President's Council presentation.

1.8. PROJECT GOALS, ISSUES, OPPORTUNITIES, & BUILDING PERSONAS WORKSHOP (in-person)
Following the Visioning Session, the consultant team will meet with the CCPSC and other invited stakeholders to share the benchmarking and trend data gathered, building construction assessment highlights, and draft project goals. Gensler will facilitate a discussion to understand the difference between UCAR titled properties and NCAR titled properties, what is possible for each, funding sources available, and how future funds will be requested.

SCOPE OF SERVICES

Gensler will then lead a discussion on current space issues, opportunities, and pain points with the CCPSC and other invited stakeholders. This provides the steering committee a candid opportunity to share space challenges, constraints to future space usage, and expectations for the future real estate portfolio with the consultant team in a safe environment, prior to department leader interviews.
Deliverable(s): 90-minute in-person workshop, workshop notes

1.9. PRESIDENT'S COUNCIL MEETING PRESENTATION DEVELOPMENT
In collaboration with the CCPSC, Gensler will develop a slide deck to present to the President's Council. Gensler will request feedback from the CCSPSC representatives and iterate the presentation, based on the feedback provided. Gensler will provide the materials to be presented at the President's Council meeting one (1) week before the meeting.
Deliverable(s): Presentation deck

1.10. PRESIDENT'S COUNCIL MEETING I (in-person)
Gensler will present the project plan, goals and objectives, benchmark and trend data, and SWOT analysis defining the expectations for project outcomes to the President's Council.
Deliverable(s): 60-minute in-person presentation, presentation notes

1.11. TOWNHALL PRESENTATION DEVELOPMENT
In collaboration with the CCPSC, Gensler will develop a 10 to 15-minute Townhall presentation. Gensler will request feedback from CCSPSC representatives and iterate the presentation, based on the feedback provided.
Deliverable(s): Presentation deck

1.12. TOWNHALL I (in-person)
Gensler will present an overview of the project process, goals, key dates, and opportunities for employee input at an all-staff Townhall.
Deliverable(s): 15-minute in-person presentation, presentation notes

PHASE 2: DATA GATHERING
During the data gathering phase, Gensler will collect all necessary quantitative and qualitative data that provides insight into needs, wants, opportunities, challenges, and organizational structure to guide master plan option development and recommendations.

2.1. ONLINE ALL-EMPLOYEE SURVEY
Gensler will provide UCAR with Gensler's proprietary WPIx survey set to develop an online all-employee survey. The survey provides quantitative data on work practices by department, management level, tenure, and other demographic identifiers; employee priorities; employee perspectives on collaborative space, amenities, support spaces; and space requirements by business unit. The WPIx survey is one of the foundational quantitative tools Gensler utilizes to understand and determine spatial needs for our clients.

Within the WPIx, Gensler will include our lab and research space assessment module. This module will enable a deeper understanding of how people work between lab and office spaces, including time spent in the lab, work modes, and the ability of the space to support the workflow. The lab module also allows benchmarking with Gensler's 2023 nationwide database of laboratory research scientists for benchmarking. Consisting of over 500 responses from laboratory research scientists, the WPIx Labs represents a wide range of lab-based organizations and their user experience ratings of their settings. UCAR employees that access lab and research space will have the opportunity to share their thoughts on the effectiveness of their current lab environments and associated office space to help the design team make recommendations for right sizing these spaces specific to the end users.

Gensler will provide the base survey to UCAR for review and feedback. Gensler will provide up to (2) revisions to the question set before releasing a test survey link to the CCPSC. Once testing is complete, Gensler will provide the Project Lead with communication templates and the survey link to send to all employees. The intent would be for the survey to be sent the week following the first Townhall. Once the survey is closed, Gensler will provide the CCPSC with the survey results for future use in other efforts.
Deliverable(s): WPIx Survey, up to (2) revisions to question set, all-employee communication template, and data report

2.2. DEPARTMENT PROGRAM QUESTIONNAIRE
Gensler will provide a space questionnaire to be answered by department representatives who are well versed in the quantitative aspects of their respective space and facilities and forecast future headcount growth.
Deliverable(s): Department program questionnaire and communication template

2.3. DEPARTMENT LEADER INTERVIEWS (in-person/virtual)
Once the questionnaires are completed and returned, Gensler will conduct up to (45) 60-minute interviews with key department leaders. The intent of the interviews is to review the completed survey forms, discuss high-level space needs, and adjacencies best suited for each department. Our intent is to conduct these interviews in-person, with a virtual option, as needed.
Deliverable(s): Up to (45) 60-minute interviews with department leaders

2.4. SITE TOURS & OBSERVATIONS (in-person)
Gensler will tour and spend time onsite observing how employees are using the thirteen facilities in scope. In preparation for the tours, Gensler will review facility floor plans along with the facility condition assessments for each building provided by UCAR. During the tours, Gensler will validate layout efficiencies, suitability for the current user, vacancies, overcrowding, workarounds, general occupancy patterns, and other relevant information.
During the site tours Gensler will conduct visual ADA and site security observations of exterior entrances, workspaces, labs, common areas, and public areas of the facilities in scope. Should a more in-depth assessment and written report be required for ADA compliance or Federal Security Level (FSL) site security needs, we have included scopes listed in the additional alternatives section.
Deliverable(s): 2-hour site walks of each building

2.5. STAFFING PROJECTIONS
Gensler will study past and current UCAR / NCAR / UCP staffing and employment trends and develop a report with five, ten, fifteen, and twenty-year projections. The report and related projections will build on inputs from tasks 2.2 and 2.3, and formulate the basis for the space demand and gap analysis activities in future project phases.

2.6 EMPLOYEE ENGAGEMENT FOCUS GROUPS (in-person)
Gensler will conduct up to three (3), ninety-minute employee engagement focus groups to identify space emotional drivers at UCAR/NCAR, manager and staff opinions on information desired by employees during the plan development process, and additional qualitative feedback topics identified during Department Leader interviews. These sessions will inform the change management associated with the roll-out of solutions, knowing what people hold close to their heart and how they prefer to be engaged in the process. Gensler will work with the UCAR Project Lead to determine the right cross-sections of employees to invite to each session.
Deliverable(s): Up to (3) 90-minute in-person focus groups

SCOPE OF SERVICES

2.7. LAB USER FOCUS GROUPS (in-person)
Gensler will conduct 2-3 focus groups with user groups, to understand lab utilization based on department leader interviews and results from the WPIx survey. Potentially combined with the science workflow mapping focus groups, these sessions will understand how people work within the lab environment. Questions will uncover any critical spaces/equipment, typical behaviors while in the lab (collaboration, experimentation, etc.), how lab users work with non-lab users, and the balance of lab-based, office-based, and working from home (or elsewhere). The focus groups will also explore the typical composition of research teams and how teams work with other institutions (universities, organizations, federal agencies, etc.).
Deliverable(s): Up to (3) 90-minute in-person focus groups

2.8. PARKING & TRANSPORTATION ASSESSMENT
To analyze future parking requirements, Gensler will utilize current parking codes, employee headcount, any fleet parking requirements, and visitor parking requirements (where warranted) to analyze and determine facility-specific parking needs. We will factor in any potential hybrid work policies that may reduce the need for onsite parking. Gensler will analyze current and future transportation impacts based on employee zip codes gathered through the all-employee online survey or provided by UCAR.

2.9. BUILDING ENVELOPE & MECHANICAL SYSTEMS ASSESSMENT
Gensler will review any detailed quantitative information on the existing mechanical systems, electric service limits, expansion capacity, and building envelope assembly for each building, Gensler will initiate a building envelope and systems assessment to validate the data provided as the first step in the energy modeling process.

PHASE 3: ANALYSIS & FINDINGS
Upon completion of the data collection efforts, the Gensler team will analyze and synthesize the collected information. Analysis and findings will be presented to the CCPSC for review, feedback, and awareness before our team moves into scenario/option planning.

3.1. DEPARTMENT PERSONAS
Based on the information gathered through the WPIx survey, department leader interviews, programming questionnaire, equipment utilization study, science workflow mapping, focus groups,and other data gathering efforts, Gensler will develop department personas that provides an overview of department specific information gathered informing recommendations.

3.2. FORECASTING FUTURE SPACE REQUIREMENTS
Gensler will conduct a statistical analysis of current and future space demand drivers. The analysis will identify what locations and adjacencies are likely to work best and what characteristics (location, spatial, quality level) are most relevant and important to consider for different functions.

3.3. DEMAND AND SUPPLY GAP ANALYSIS
Gensler will outline the gaps between the existing UCAR/NCAR supply of facilities and the demands for space dictated by department operations and growth. This analysis will be one of the key drivers in determining the future direction of the UCAR portfolio when developing master planning options.

3.4. MARKET CONTEXT ANALYSIS
Gensler will provide an analysis on market demand opportunities for occupancy/reuse of UCAR/NCAR spaces based on Boulder population and employment growth, and area real estate demand forecasts. The analysis will identify opportunities for possible reuse of space outside of UCAR/NCAR functions, including core commercial real estate categories of office, retail, hotel, and residential, as applicable.

3.5. EXISTING BUILDING ENERGY MODELING
The Gensler team will develop building energy models for each of the buildings in scope, excluding the buildings at the Field Marshall site and the airplane hangar at the RAF site, to provide baseline building performance data. The building performance studies inform the interrelation of occupancy, equipment, envelope, and building systems. This information will be the basis for high performance energy option generation in Phase 4.

3.6. CCPSC ANALYSIS SUMMARY PRESENTATION (in-person)
Gensler will present to the CCPSC our findings from the data gathering activities. The meeting will focus on the current supply of facilities, the demand for space based on our surveys and interviews, and the gap between supply and demand, expressed as facility needs. Input from the CCPSC during this meeting will help our team begin to formulate planning scenarios in the next phase.

Gensler will also facilitate a conversation with the CCPSC during this review to reconfirm the project goals, vision, and any additional wants or needs the CCPSC would like to accomplish within the final master plan based on the data analysis. Additional opportunities can present themselves and resolution of perceived challenges may come to light as part of the data gathering process. This meeting provides an opportunity to reconfirm focus of the final master plan.
Deliverable(s): 90-minute in-person presentation, presentation notes

3.7. ANALYSIS SUMMARY REPORT
Gensler will provide UCAR with a written report containing analysis and findings from the data gathering phase.
Deliverable(s): Analysis Summary Report

SCOPE OF SERVICES

PHASE 4: OPTIONS DEVELOPMENT
This phase sets the framework for UCAR's Facilities Master Plan by examining options for decision-making criteria, project sequencing priority setting,, and coordinating inputs into the decision-making process.

4.1. DECISION-MAKING MATRIX & PLANNING SCENARIOS
Gensler will develop an initial set of decision-making matrices to define program, renovation, and real estate priorities to evaluate planning scenarios. We will then collaborate with the CCPSC to evaluate this criteria and co-create a set of 3 to 5 planning scenarios based on the confirmed criteria. Each scenario could include existing building renovation priorities, program and vision priorities, and real estate objectives. The team will develop planning options to inform final scenarios.

4.2. OPINION OF PROBABLE COSTS
Gensler will provide high-level hard and soft costs per square foot for each scenario as an input into the options review process.

4.3. SCIENCE LEADER OPTIONS REVIEW (in-person)
Reflecting on input and learnings from the data-gathering phase, these (6) leadership workshops will test the viability and relative level of effort required to achieve different solutions. For example, we may understand the complexity of relocating a group and its equipment. Alternatively, we may test the appetite for shared resources and what operational models may need to be in place for their success. These sessions are critical in showing leaders that we've understood their challenges and have viable options for their future.
Deliverable(s): Up to (6) 60-minute in-person review of options, meeting notes

4.4. CCPSC OPTIONS REVIEW (in-person)
Gensler will review a draft of the options and options presentation with the CCPSC for feedback, prior to presenting to the President's Council. We will ask the CCPSC to collaborate on presentation flow, possible questions to anticipate from the President's Council, provide any additional internal information that may need to be included, provide feedback on content, etc.
Deliverable(s): 90-minute in-person review of options, meeting notes

4.5. OPTIONS ITERATION
Gensler will iterate the options and options presentation based on CCPSC feedback, prior to the second President's Council meeting.

4.6. PRESIDENT'S COUNCIL MEETING II (in-person)
Gensler will present the three to five (3-5) options to the President's Council. The expectation is the President's Council will inform and choose in collaboration with the CCPSC the final option to expand into the full facility master plan.
Deliverable(s): 60-minute in-person review of options, meeting notes

THE ENGINE AT MIT // *CAMBRIDGE, MA*

SCOPE OF SERVICES

PHASE 5: FINAL REPORT
Gensler will expand the chosen option by the CCPSC and President's Council into a full facility master plan.

5.1. IMPLEMENTATION/PHASED GUIDE
Included in the Final Master Plan will be a discussion of the activities associated with implementing the Master Plan, including an implementation timeline (summarizing activities and potential future expenditures), development priorities, guidelines for future space planning, and change management activities to consider.

5.2. CONSTRUCTION COST ESTIMATES
Once the final option is chosen, the consultant team will provide a more detailed estimate of construction costs for the preferred alternative for each capital project within the implementation/phased guide. This could include costs for site location, existing site conditions, quality level desired by owner, and programmed square footage. We would also look for special conditions that may affect cost, such as availability of skilled manpower in proposed construction locale, special security requirements, anticipated adverse weather conditions, cost escalation, specific codes, and standards compliance.

5.3. FINANCIAL ANALYSIS
Gensler will perform a financial analysis of the developing Facilities Master Plan. UCAR/NCAR costs and revenue opportunities will play a key factor in determining the best outcomes. The analysis will incorporate costs for owned and leased facilities, any required infrastructure costs to support consolidations/renovations, offsets to costs in the form of surplus property dispositions (if any), and a discussion of financing mechanisms to fund the Plan.

To establish the most accurate baseline financial data, Gensler will input current and forecasted UCAR/NCAR OPEX, CAPEX, and deferred maintenance values for owned and leased facilities. We will work with appropriate UCAR staff to identify these expenditures and the source of these funds and their restrictions. This information will be "matched' with findings from the other data collection activities to understand opportunities for optimizing financial performance.

5.4. ENERGY MODELING FOR PREFERRED OPTION
The Gensler team will iterate the building energy models to reflect the preferred option to inform sustainability-driven building system interventions with cost implications.

5.5. DRAFT FACILITIES MASTER PLAN REPORT
Gensler will collate all information into a Draft Facilities Master Plan Report ("Draft Report") for CCPSC's review. The report will address, among other items, the following:

- Contextual analysis and summary of outcomes from data gathering activities;
- Recommendations for the future of each facility in scope;
- A proposed implementation plan;
- Scope description for each project within the plan;
- Financial analysis that includes an estimate of probable costs for capital, occupancy, and deferred maintenance projects, and potential revenues from alternative tenancy;
- Sustainability ROADMAP to achieve UCAR/NCAR sustainability goals that includes narrative and representative details to meet or exceed the 2015 baseline requirements;
- Analysis of opportunities for funding, including Xcel Energy Design Assistance, Energy Efficient Buildings programs and equipment and retrofit rebate opportunities; Inflation Reduction Act IRA Building Energy efficiency Incentives and,
- Analysis of land use opportunities for relocation, as applicable.

Deliverable(s): Draft Facilities Master Plan report

5.6. CCPSC DRAFT FACILITIES MASTER PLAN REVIEW (in-person)
Gensler will meet with the CCPSC to review the draft facility master plan report, prior to presenting to the President's Council.
Deliverable(s): 60-minute in-person review, meeting notes

5.7. DRAFT FACILITIES MASTER PLAN ITERATION
Gensler will iterate the draft facilities master plan based on CCPSC feedback.

5.8. PRESIDENT'S COUNCIL MEETING III (in-person)
Gensler will present the draft facility master plan to the President's Council for feedback and approval.
Deliverable(s): 60-minute in-person review of draft facility master plan, meeting notes

5.9. TOWNHALL PRESENTATION DEVELOPMENT
In collaboration with the CCPSC, Gensler will develop a 10 to 15-minute Townhall presentation to present the facility master plan. Gensler will request feedback from CCSPSC representatives and iterate the presentation, based on the feedback provided.

5.10. TOWNHALL II (in-person)
Gensler will present an overview of the facility master plan at a second town hall for UCAR/NCAR/UCP staff awareness.
Deliverable(s): 15-minute in-person presentation, presentation notes

5.11. FINAL FACILITY MASTER PLAN REPORT
Gensler will revise the Draft Report to include all feedback and comments gathered at presentations and develop a Final Facilities Master Plan ("Final Report").
Deliverable(s): Final Facilities Master Plan report

SCOPE OF SERVICES

ON-CALL SERVICES
There are several scopes we feel may be needed should the provided Facility Conditions Assessments not provide the adequate level of information required and/or if the approved option requires interventions that change the function of a space or building. Both of these instances may trigger a specific scope to come online for accurate cost estimating and validation of Net Zero impacts. The addition of these scopes will be approved by the UCAR Project Lead, prior to activation.

4.X. STRUCTURAL ENGINEER INTEGRATION DURING OPTION DEVELOPMENT, AS NEEDED
Should any of the three to five options the CCPSC approves to be presented to the President's Council require structural modifications to a space or building, Gensler's partners at McNamara Salvia will join the team to inventory the effected building structures and evaluate options from a structural point of view. McNamara Salvia will review the available drawings, photos, and Facility Conditions Assessments to identify areas where it may be cost-prohibitive or cost-beneficial to modify the structure.

It is anticipated some structural modifications to support typical tenant improvement items such as upgraded mechanical systems, ground level or rooftop amenities, hanging partitions, etc. We will also assess the suitability of the existing structures for different uses or amenities from today, as we expect this could affect the structural Risk Category or Live Loading (Per ASCE 7). Finally, we will formulate options with the team related to UCAR's Net Zero Initiative and the effect on structure (such as rooftop solar, etc.)

5.X. DEFERRED MAINTENANCE COST ESTIMATING
Should the provided FCA's not provide cost estimating for deferred maintenance and end-of-life items that impact the financial analysis required by UCAR for presentation, Cumming will provide cost estimating services for deferred maintenance items identified in the FCAs and possible formal written reports provided by Gensler's on-call team.

ADDITIONAL ALTERNATIVES
The scopes listed as additional alternatives are opportunities to enhance or add value to the project, or provide foundational work to the future design processes required to activate the final facility master plan.

1.A. EMPLOYEE COMMUNICATION INTRANET SITE
Gensler will develop and design a branded intranet site for UCAR/NCAR employees dedicated to the project where information can be posted, and ideas shared. Employees can engage with presentations, status updates, calendar opportunities for engagement, etc. as the project progresses.

2.A. LAB EQUIPMENT UTILIZATION STUDY
Gensler will assist in assessing lab equipment utilization for key pieces of equipment. Gensler will work with the client to identify up to 30 pieces of equipment to assess utilization. Gensler will analyze existing equipment utilization data (log files or other existing data sources) to inform opportunities for asset optimization, including consolidation or improving utilization. The insights from this task will help inform the amount of equipment space needed to support various lab groups.

2.B. SCIENCE WORKFLOW MAPPING
Gensler will develop and facilitate up to six (6) 60-minute focus groups with individual departments to understand the workflows within the department and across the organizations. Team leads and team members will identify key hand offs, inputs and outputs, and any bottlenecks. This will inform opportunities to combine duplicate functions and alleviate any bottlenecks.
Deliverable(s): Up to (6) 60-minute in-person focus groups

2.C. AUDIOVISUAL ASSESSMENT AND RECOMMENDATIONS
Should UCAR feel an assessment of audiovisual systems is required to achieve Objective 4.1.1., inclusion of infrastructure to support "emerging technologies, and evolving hybrid and remote work environments", our partners at Salter are ready to join the team to assess and recommend options supportive of UCAR's desired outcomes for a facility master plan that include audiovisual planning for workplace space types and an initial review of the auditorium and conference center conditions.

2.D. TECHNOLOGY ASSESSMENT AND RECOMMENDATIONS
Gensler has completed facility master plans that include an analysis and integration of technology systems, and facility master plans that have not. We find the level of detail required for certain systems to achieve a client's goals are based on the individual client need. If UCAR feels an assessment of technology systems is required to achieve Objective 4.1.1., inclusion of infrastructure to support "emerging technologies, and evolving hybrid and remote work environments", our partners at Salter are ready to join the team to assess and recommend options supportive of UCAR's desired outcomes for a facility master plan that include technology planning for the following:

- Data Center space and utilization
- Telecommunications room size and adjacencies
- Structured cabling and pathways for interior and exterior
- Service providers and bandwidth
- Wi-Fi
- Infrastructure
- Power and cooling requirements
- Inventory of equipment
- Emergency Responder Radio Communications Systems

Recommendations will be at a high level to allow for similar system types to be used across many varying agencies and building types. The general standardization will be conducive to ease of use as the goal will be to have a consistent and similar user interface and experience seen across the entire UCAR organization.

2.E. COMPREHENSIVE OR FSL SECURITY ASSESSMENT AND RECOMMENDATIONS
Gensler has completed facility master plans that include an analysis and integration of security systems, beyond a visual observations, and facility master plans that have not. We find the level of detail required for certain systems to achieve a client's goals are based on the individual client need. If UCAR feels an assessment of security systems to meet a specified Federal Security Level (FSL) or beyond what visual observations during site walk throughs is required, our partners at Salter are ready to join the team to assess and recommend options supportive of UCAR's desired outcomes for a facility master plan that include security planning for the following:

- Access control system expansion or replacement of the existing system(s)
- IP-based video surveillance system (closed-circuit television) expansion or replacement of the existing system(s)
- Security and emergency intercom systems
- Controls, card readers, and intercoms for vehicle gates
- Area of Refuge (AOR) two-way communications system for elevator lobbies
- Emergency exit door monitoring
- Door prop alarms

Recommendations will provide the necessary information to be universal across the many departments and building types, and achieve specified parameters. The general standardization will be conducive to ease of use as the goal will be to have a consistent and similar user interface and experience seen across the entire UCAR organization.

2.F. RIGHT-OF-WAY ASSESSMENTS
JVA will review the existing site assessments contained in the provided FCA's and visit the site to assess right-of-way conditions in the field and review provided survey assessments as inputs to Phase 2 and 3.

SCOPE OF SERVICES

2.G. COMPREHENSIVE ADA ASSESSMENT
Marx|Okubo will perform a detailed accessibility review of the thirteen properties to assess formal compliance with the American with Disabilities Act (ADA), Architectural Barriers Act (ABA), and technical requirements included in ASTM E2018-15. The review will consist of measurements of site and building elements including, but not limited to, paths of travel, parking, common use areas and elements, signage placement, accessible routes, primary building entrances, doors (sizes, thresholds, hardware, etc.) kitchen and bathrooms, and control locations. The review will address the stated elements but will not be an exhaustive check of every feature. The findings will include an itemized list of barriers.

Ongoing as-needed consultation will be provided during the analysis phase to assist the team in addressing conditions and providing guidance on Universal Design practices that may be implemented.

5.A. VIBRATION ANALYSIS
McNamara Salvia is a market leader in evaluating structural vibrations and deploying cost-effective and creative solutions to meet required criteria. McNamara Salvia will deliver a research-based, practical vibration assessment to support any potential lab-relocation options. McNamara Salvia proposes to analyze portions of the structures for their current, estimated vibration criteria and determine mitigation opportunities. In-situ vibration testing of the existing spaces can also be performed as part of this effort.

5.B. STRUCTURAL LOAD CAPACITY ANALYSIS
If the original design criteria is unknown and the function of a building or space is to change as part of the approved option, McNamara Salvia can analyze specific areas for their loading capacity to ensure structural integrity as part of the final master plan deliverable. This analysis will include field-verifying dimensions of structural elements and performing calculations to determine their current capacity. Non-destructive testing (by others) may be required to determine material properties such as concrete or steel strength.

5.C. REVIEW OF EXISTING SITE UTILITIES IN SUPPORT OF SUSTAINABILITY INITIATIVES AND LAB RELOCATION
Should UCAR find an analysis of existing utilities that serve the site(s) valuable for future project planning, JVA will research as-built and City utility data, including utility main and water meter size information that impacts sanitary, water, and storm-water piping. JVA will utilize its knowledge of developments, to help inform the team of potential impacts in favor of, or in need of mitigation to achieve sustainability or lab relocation efforts as a part of future projects.

EXCLUSIONS
- Additional presentations beyond those listed (in-person or virtual).
- Site surveys, verification of building dimensions, or other dimensional data verification efforts.
- Determination of Federal Security Level.
- Design guidelines and standards.
- Detailed estimate efforts before or beyond the milestone efforts noted.
- Detailed quantity take off on studies provided.
- Reconciliation with a third-party estimator and/or General Contractor.
- Construction administration/post contract cost management.
- Sub-contractor bid leveling
- Detailed analysis of soft cost scope (equipment, FF&E, move management, etc.).

ASSUMPTIONS
- UCAR will provide necessary information on its Federal Security Level, if consideration is required.

VOLUME 2
PRICING VOLUME

UC BERKELEY GATEWAY // *BERKELEY, CA*

PRICING

We have provided all applicable pricing components, broken down by materials, NRE, recurring labor, lower-tiered subcontracts, maintenance, equipment, facilities, travel, freight, insurance, installation, etc., and prices for all proposed options described in the Technical Volume separately using Attachment 4 Price Proposal Form as outlined in the RFP.

Fees are based on our interpretation of the requested scope of services and level of detail assumed needed. Should level of detail be higher than assumed, fees can be reevaluated with additional information.

VOLUME 3
BUSINESS VOLUME

BUCK INSTITUTE FOR RESEARCH ON AGING // *NOVATO, CA*

BUCK INSTITUTE FOR RESEARCH ON AGING // *NOVATO, CA*

3.1

// STATEMENT OF QUALIFICATIONS

OUR STORY

58
Years Gensler has been in business

110+
Gensler employees in Denver

87%
of our clients are repeat clients

1.2B
Gensler designed 1.2 billion square feet of space in the last year

33
Specialized practice areas

At Gensler, we put the human experience at the center of everything we do. Our integrated, interdisciplinary teams include a panoramic range of design talent: architects and interior designers, as well as strategists, economists, technologists, planners, experience designers, analysts, researchers, and more—all working together to create thoughtful, original, and compelling solutions for today's complex and multifaceted projects.

FIRM HISTORY
In 1965, with two employees, founder Art Gensler launched a different kind of architectural practice. Adaptive, proactive, and client-centered, the firm treated professional service as a privilege. Teamwork, not individual accomplishment, would build the practice. Focused from the start on design's impact on human experience, we have transformed over five decades from an interior architecture practice to a full-service design firm. Our first expansion into non-US locations set the firm's pattern of building a global footprint incrementally—each new office embedded in local culture, each created to satisfy our clients' needs. Now we've established a worldwide network of talented people who are deeply involved in their communities.

ONE FIRM-FIRM
The seamless relationship between Gensler's 53 global offices and our "one firm-firm" approach enable us to move quickly and nimbly to meet each client's needs. We frequently include team members from different offices to offer our clients a curated mix of local knowledge, boots-on-the-ground presence, subject matter expertise, and global account relationship support.

GENSLER DENVER
Gensler's Denver office is among the largest design firms in Colorado. This year marks Gensler's 51st in Denver. With a multi-disciplinary staff of over 110 professionals including architects, graphic designers, interior designers, and other specialists. Our local team of designers collectively embrace a culture of innovation and delivers projects that go above and beyond client expectations.

During this time, we've helped local companies use design to strengthen and enhance their business goals. We have created brands and identities, designed workplaces, and converted outdated spaces into vibrant facilities, all while finding new ways to enhance the way people work, live, and play. We have been at the forefront of forward-thinking design focused on the user experience and most importantly, we love what we do!

Gensler does not have any expansion plans that directly affect the proposal or this project.

MOFFITT CANCER CENTER CORE LABORATORY // *TAMPA, FL*

CONFIDENTIAL BIOTECH CLIENT // *REDWOOD CITY, CA*

3.2

// FINANCIAL STATEMENT

FINANCIAL STATEMENT

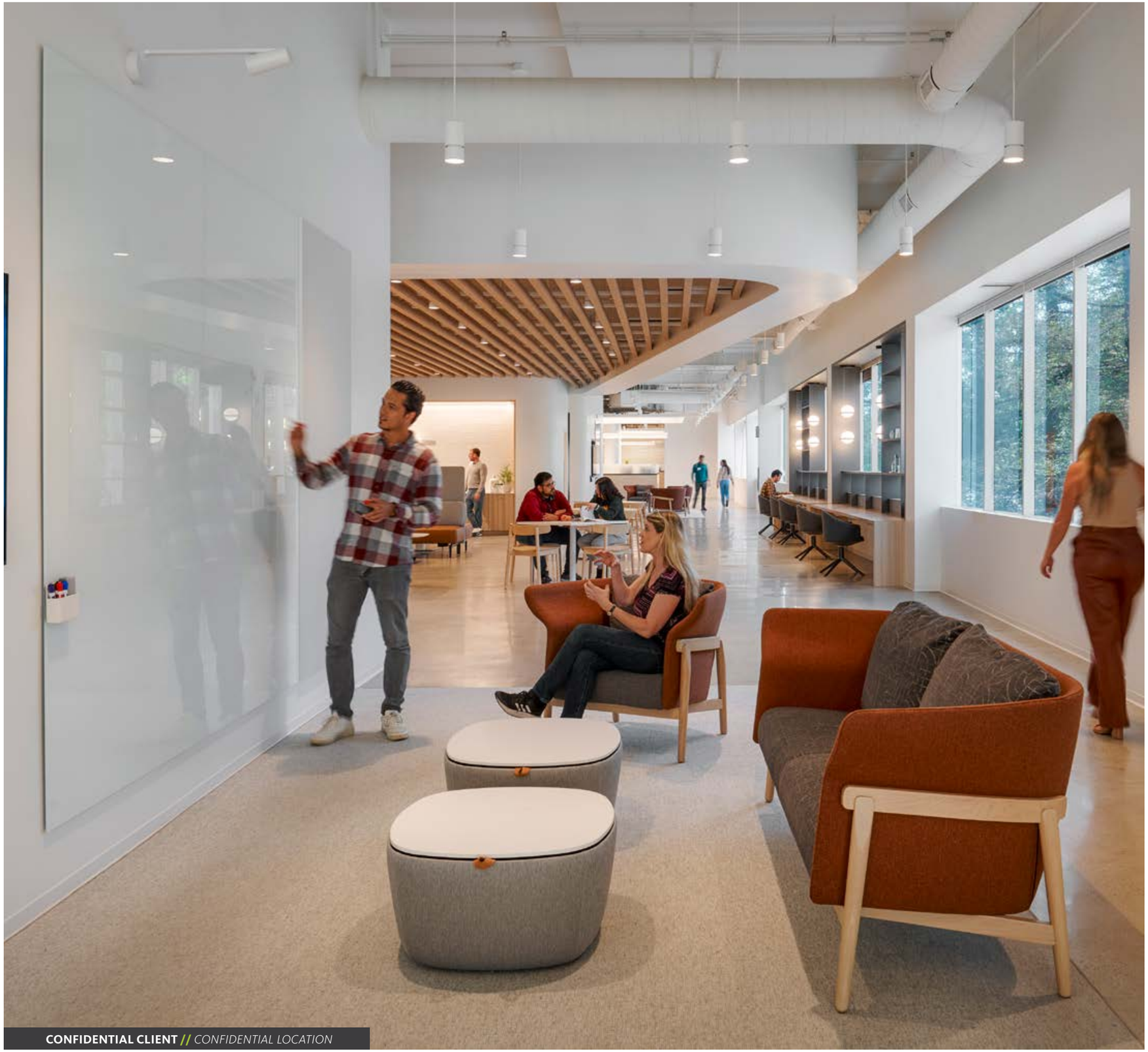
Gensler remains financially strong and debt-free as a result of sound management practices, solid business acumen, and a diverse portfolio of work. This allows us to deliver consistent service while also investing in our innovation platform by supporting research, talent development, and design technology. We're operating globally across 53 locations, with total revenues for the year exceeding $1 billion (USD) for the eighth year in a row.

Gensler is a privately held corporation; thus, detailed financial information is strictly confidential. Should you require additional information, we would be pleased to provide it upon project award. Our fiscal year runs from April 1 - March 31 annually, and you can also view our 2023 One-Firm Firm Annual Report.

Our firm operates free of both long-term and short-term debt, and we have maintained a relationship with the Bank of America for over thirty years. For specific banking information, please contact Bank of America, Commercial Account Inquiries at 206.585.4444 (phone) or 415.343.9301 (fax).

This page is interactive. Click on this image to view Gensler's 2023 Annual Report.

JABIL HEADQUARTERS // *ST. PETERSBURG, FL*



CONFIDENTIAL CLIENT // *CONFIDENTIAL LOCATION*

3.3

// MANAGEMENT PLAN

MANAGEMENT PLAN

We strive to create a culture that promotes diverse thinking so we can inject new ideas promoting design innovation. Our management style promotes learning from our extensive experience across industries to build consensus, create exceptional design, and improve people's everyday experiences.

As a firm, we constantly push boundaries to explore innovative and impactful solutions to the day-to-day challenges of our clients. Throughout our approach process for the this project, we will remain focused on creating a successful, sustainable, and memorable experience for the end users. Project management methodology, team-building, and communication must be integrated into the project approach and process to manage the project well.

Gensler will utilize basic tools and techniques found in the PMP Handbook to manage the project. Review of an issue and opportunities log, decision-making log, and workpoint planning will be part of the weekly project team coordination meetings. RACI charts, project goals, and project team working norms will be integrated into the project charter to guide project team etiquette and protocols. If UCAR/NCAR has access to TEAMs as a project management tool, Gensler will develop an external project TEAMs site to manage communication, schedule, deliverables, and feedback. If UCAR/NCAR prefers a different project management platform, our team is trained in Basecamp, Asana, Trello, and Smartsheet as additional options.

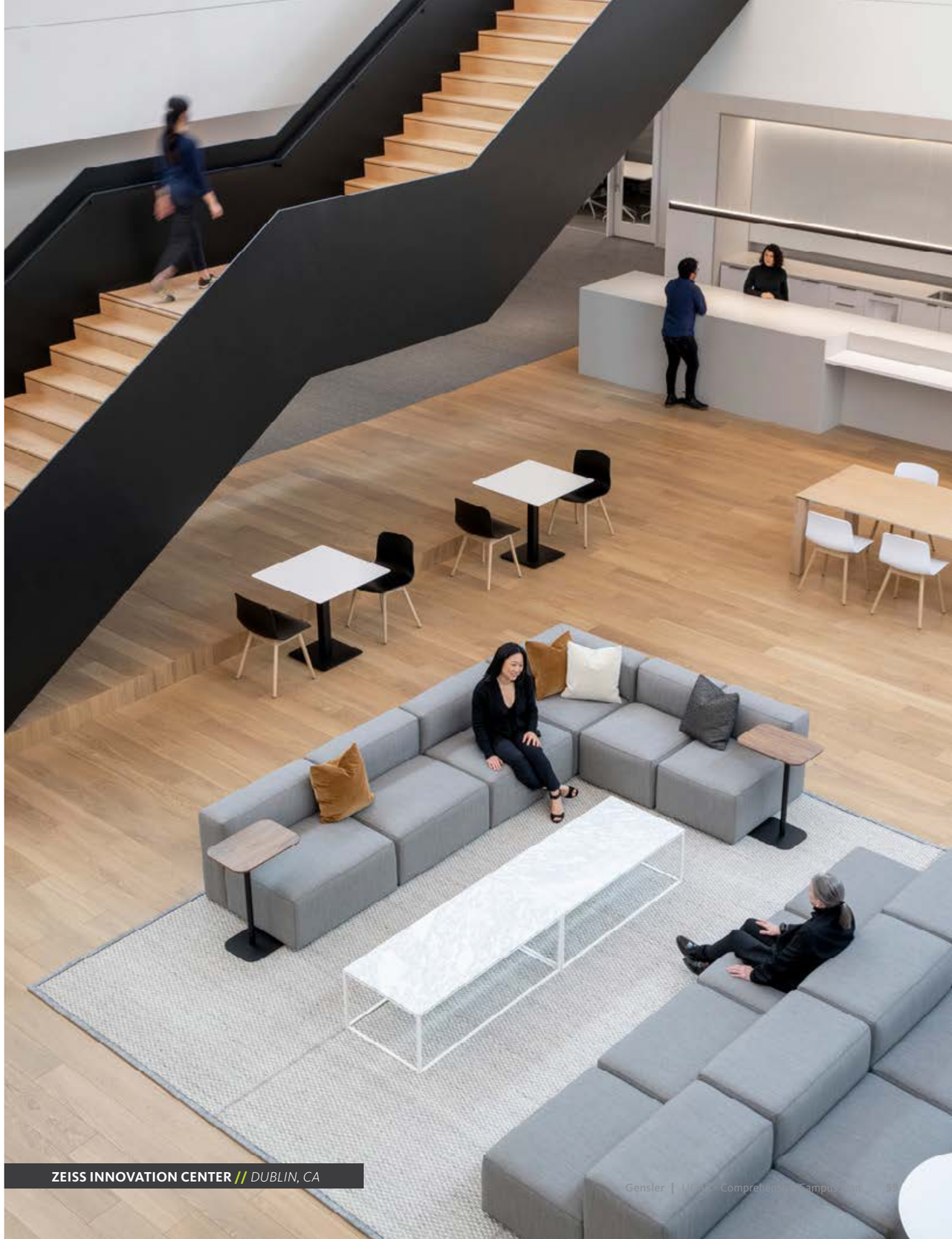
Gensler utilizes a single client point-of-contact protocol on all our projects. This person is responsible for being the communication liaison to the project team, ensuring a quick, agile, and flexible flow of information to and from the client and project team. Weekly Project Coordination meetings, communication protocols, and other types of communication templates will be used to manage communication among the project team. As requested, materials for presentations will be sent a week in advance for review.

Team-building is critical in establishing and maintaining a collaborative culture. Too often teams focus narrowly on destinations at the expense of the journey itself. Our focus will be to ensure proper alignment from day one and that a collaborative, solutions-oriented culture is created. Our team building starts with a success kick-off and visioning session to:

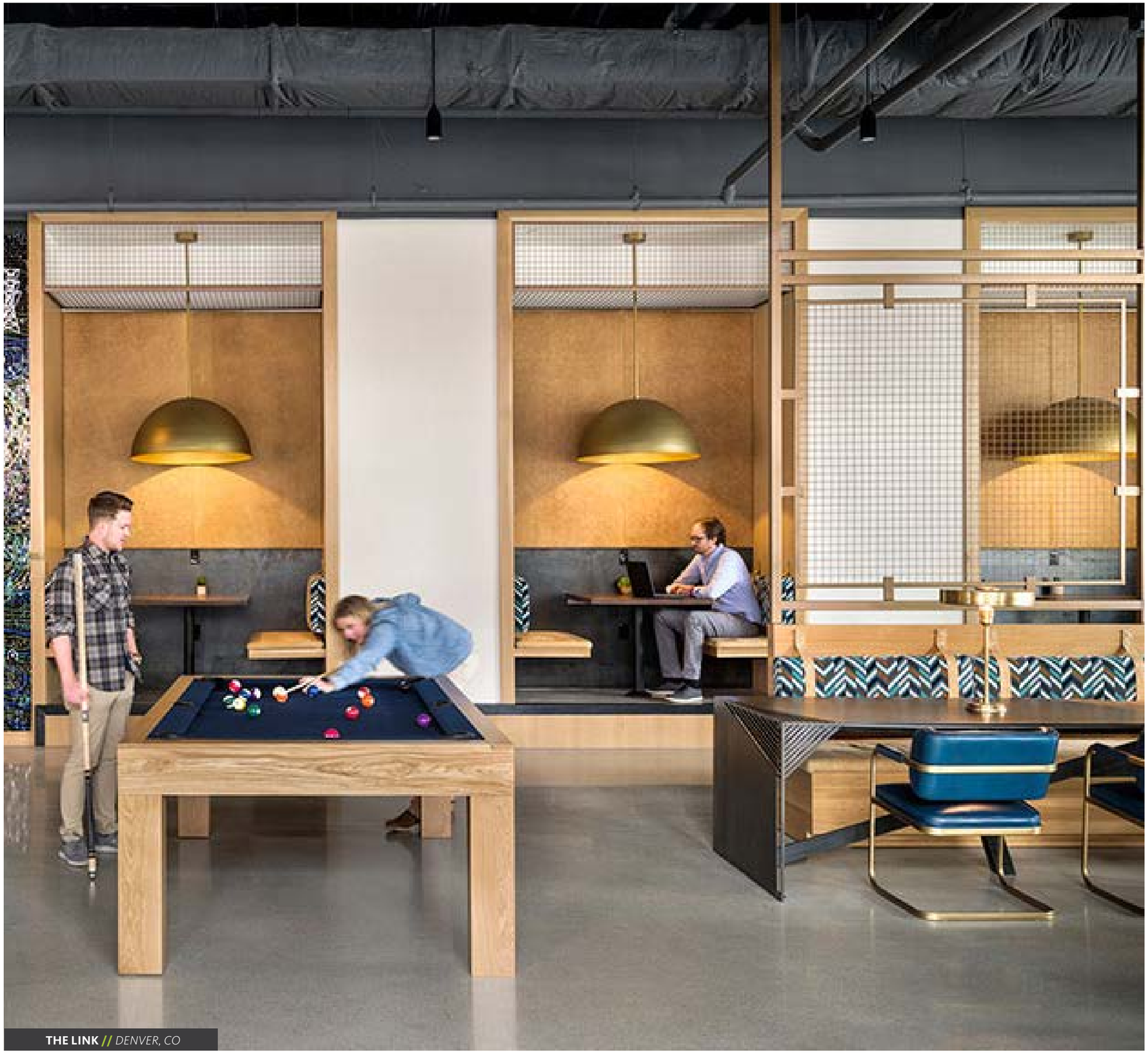
- Establish project goals.
- Plan monthly surveys on progress towards goals.
- Schedule team health check-ups to assure the team is functioning optimally.

This will make the journey more enjoyable for all parties, provide the best solutions, and set the team up for success.

If there are other means and methods of project management UCAR would like integrate throughout the project process, our team is open and willing to learn new ways of working to ensure success.



ZEISS INNOVATION CENTER // *DUBLIN, CA*



THE LINK // *DENVER, CO*

3.4

// INSURANCE REQUIREMENTS

INSURANCE

Gensler has reviewed the insurance requirements included in the sample agreement. We currently meet or exceed the limits noted in the RFP except for the Umbrella/Excess Liability limit of $5,000,000 per occurrence and annual aggregate. If selected, Gensler can meet this requirement.

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 3/1/2024 — 2/24/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER: Lockton Companies 444 W. 47th Street, Suite 900 Kansas City MO 64112-1906 (816) 960-9000 keasu@lockton.com	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED 1312773 GENSLER 500 SOUTH FIGUEROA STREET LOS ANGELES CA 90071 DENVER	INSURER A: Zurich American Insurance Company	16535
	INSURER B: Travelers Property Casualty Company of America	25674
	INSURER C: Lloyds of London	
	INSURER D: American Guarantee and Liab. Ins. Co.	26247
	INSURER E:	
	INSURER F:	

COVERAGES * CERTIFICATE NUMBER: 12661078 REVISION NUMBER: XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [X] PRO-JECT [ ] LOC OTHER:	N	N	GLO0081063	3/1/2023	3/1/2024	EACH OCCURRENCE	$ 2,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ 10,000
							PERSONAL & ADV INJURY	$ 1,000,000
							GENERAL AGGREGATE	$ 4,000,000
							PRODUCTS - COMP/OP AGG	$ 4,000,000
								$
D	AUTOMOBILE LIABILITY X ANY AUTO X OWNED AUTOS ONLY X HIRED AUTOS ONLY [ ] SCHEDULED AUTOS X NON-OWNED AUTOS ONLY	N	N	BAP3707221	3/1/2023	3/1/2024	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
							BODILY INJURY (Per person)	$ XXXXXXX
							BODILY INJURY (Per accident)	$ XXXXXXX
							PROPERTY DAMAGE (Per accident)	$ XXXXXXX
								$ XXXXXXX
B	X UMBRELLA LIAB [X] OCCUR X EXCESS LIAB [ ] CLAIMS-MADE DED [ ] RETENTION $	N	N	CUP-0T141080	3/1/2023	3/1/2024	EACH OCCURRENCE	$ 1,000,000
							AGGREGATE	$ 1,000,000
								$ XXXXXXX
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [N] N/A If yes, describe under DESCRIPTION OF OPERATIONS below		N	WC0081062	3/1/2023	3/1/2024	X PER STATUTE [ ] OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
C	PROFESSIONAL LIABILITY	N	N	LDUSA2200176	4/1/2023	4/1/2024	$3,000,000 PER CLAIM/$3,000,000 AGGREGATE	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER	CANCELLATION
12661078 GENSLER 1225 17TH STREET DENVER CO 80202	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE: Joseph M Arnello

ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACORD

UNIVERSITY OF CALIFORNIA, BERKELEY GATEWAY // *BERKELEY, CA*

3.5

// EXCEPTIONS TO TERMS & CONDITIONS

EXCEPTIONS TO TERMS & CONDITIONS

We have done a preliminary review of the proposed agreement. While there are a few revisions that Gensler would like to discuss, the agreement provides a very reasonable basis for negotiation. Some of the areas that we wish to discuss further include:

Article 19 Indemnification. We request the removal of the requirement to "defend" and the addition of a qualification that the indemnity applies to our "negligent acts" as, unlike with general liability insurance that covers goods and physical construction, an upfront defense requirement is not compliant with professional liability insurance that applies to professional design services, and that insurance only covers negligent professional acts.

Article 28 Warranty of Services. We request that the "warranty that services are performed will be free from defects in workmanship" be replaced with a requirement that the services be performed in accordance with the with the reasonable skill and care ordinarily provided by professionals practicing in the same discipline and locality under similar circumstances ("Standard of Care").

NASA / JET PROPULSION LAB (JPL) FLIGHT ELECTRONICS INTEGRATION FACILITY // *PASADENA, CA*

THE ENGINE AT MIT // *CAMBRIDGE, MA*

3.6

// ATTACHMENT 3: REPRESENTATIONS & CERTIFICATIONS

REPRESENTATIONS AND CERTIFICATIONS

UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH
3090 CENTER GREEN DRIVE
P.O. BOX 3000, BOULDER, CO. 80307-3000
Tel: (303) 497-1000 Fax: (303) 497-8501

Date: January 25, 2024

Organization Name: M. Arthur Gensler Jr. & Associates, Inc.

DUNS No.: 04-739-2741 Unique Entity Identifier: LRV8WMUBEJK1

Address: 1225 17th Street, Suite 1500, Denver, CO 80202

Phone: 303.595.8585

The undersigned makes the following representations or certifications on behalf of the above-named organization:

The following representations must be made when the resulting award is to be performed inside the United States, its territories or possessions, Puerto Rico, the Trust Territory of the Pacific Islands, or the District of Columbia.

BUSINESS SIZE AND CLASSIFICATION

As defined in FAR52.219-1 [https://acquisition.gov/content/part-52-solicitation-provisions-and-contract-clauses#i1057235] and Title 13 CFR [https://www.ecfr.gov/cgi-bin/ECFR?page=browse] unless indicated otherwise.

Check all boxes that apply.

- [X] Large business
- [ ] Small business
- [ ] Small disadvantaged business
- [ ] Women-owned small business
- [ ] HUBZone small business
- [ ] Veteran-owned small business
- [ ] Service-disabled veteran-owned small business

- [ ] Historically Black College and University

TAXPAYER IDENTIFICATION NUMBER

The information required in paragraphs A through D of this provision must be submitted to comply with debt collection requirements of 31U.S.C.7701(c)(3) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A and 6050M, and implementing regulations by the Internal Revenue Service.

A. Taxpayer Identification Number (TIN): 94-1663305.

B. TIN has been applied for on _____

C. TIN is not required because:

- [ ] I am an individual (social security number will be provided/stored in the supplier record in UProcure).
- [ ] Organization is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States
- [ ] Organization is an agency or instrumentality of a foreign government
- [ ] Organization is an agency or instrumentality of the U.S. Government

D. Type of organization:

- [ ] Sole proprietorship
- [ ] Partnership
- [X] For-profit corporation
- [ ] Non-profit organization
- [ ] U.S. government entity (federal, state, or local)
- [ ] Foreign government
- [ ] Foreign-owned
- [ ] University
- [ ] Other_____

EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION COMPLIANCE

Representations required per the implementing provisions of Executive Order 11246.
The undersigned represents that the organization has filed all required compliance reports and has developed and has on file, at each establishment, the affirmative action programs required by rules and regulations of the Secretary of Labor (41CFR parts 60-1 and 60-2).

If organization is not required to file compliance reports, please check this box ☐.

If organization is not required to develop affirmative action programs, please check this box ☐.

ACCOUNTING SYSTEM

If this is a cost-reimbursement award, the undersigned represents that its accounting system is adequate for determining costs applicable to the award.

BYRD ANTI-LOBBYING AMENDMENT (31 U.S.C. 1352)

A. As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into an award over $100,000, or a loan or loan guarantee over $150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the organization certifies to the best of its knowledge and belief, that:

   1. No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

   2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress, the organization shall complete and submit, OMB Standard Form-LLL, "Disclosure Form to Report Lobbying" according to its instructions; and

   3. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

B. STATEMENT FOR LOAN GUARANTEES AND LOAN INSURANCE: The undersigned states, to the best of his or her knowledge and belief, that:

   1. If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

   2. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

DEBARMENT SUSPENSION OR INELIGIBILITY FOR AWARD (EXECUTIVE ORDER 12549)

The undersigned certifies, to the best of its knowledge and belief, that the organization and/or any of its principals are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

In addition, the organization has not within a three-year period preceding this proposal, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection

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Attachment 3

with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of proposals; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property.

Undersigned also certifies by signature below that the organization is not presently indicted for, or otherwise criminally or civilly charged by a government entity with, commission of any of these offenses.

CERTIFICATION

By signing below the undersigned certifies that the representations and certifications herein are accurate, current, and complete, and that the organization will comply with the above applicable certifications. The undersigned further certifies that the organization will notify the UCAR Contracts Office of any changes affecting this document.

If undersigned is unable to affirm the representations and certifications herein, please provide an explanation below:

_____

_____

_____

_____

_____

Signature of Authorized Official — January 31, 2024 (Date)

Michelle Llebling
Name (Type or Print)

Principal in Charge, Managing Director
Title (Type or Print)

Abu Dhabi
Atlanta
Austin
Baltimore
Bangalore
Bangkok
Beijing
Berlin
Birmingham, UK
Bogotá
Boston
Charlotte
Chicago
Dallas
Denver
Detroit
Dubai
Houston
Hong Kong
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