ROUNDTABLE ON CORPORATE CAMPUS PLANNING & DESIGN

HOSTED BY
GOOGLE

BY GAIL GREET HANNAH

On November 1-2, 2016 Landscape Forms convened a select group of design professionals and commentators at the Google Mountain View, CA campus for a moderated discussion on corporate campus planning and design. Landscape architects, planners and designers from the Silicon Valley/Bay area and representatives from Stanford University and the University of California, Berkeley were joined by a San Francisco-based urbanist, the editor of Landscape Architecture Magazine, and Google technical specialists in workplace, sustainability and transportation.

The purpose of the meeting was to learn how leading design practitioners, thought leaders, and a major corporate influencer are addressing critical issues related to the corporate campus in a time of transformative change. While a lot is written about the startling reinvention of interior workplaces to promote innovation in the new economy (expanses without walls, workers without desks, teams around tables…) much less is written about the outdoor spaces that play a complementary role in the transformation of the corporate environment. This roundtable focused the outdoor corporate campus: siting, planning and the relationship between campus and community; providing access to nature for employee health and wellbeing; promoting collaboration and connectivity; and transportation - getting to work and moving around once you're there. The roundtable was hosted by Google and moderated by Mary Davidge, Google's Director of Real Estate and Workplace Services.

Where We Were

More than a decade ago Landscape Forms sponsored a series of roundtables on planning and designing the built environment that included discussions of the corporate campus (*Creating the Built Environment*, Landscape Forms, 2004.) Design professionals in architecture, landscape architecture and interior design participated in events held in 15 cities across the US. They shared knowledge and insights on the then current state of the corporate campus and some predictions for the future. At the time the isolated, self-contained suburban campus was losing its luster. Some forward-looking companies were moving back into cities, contributing to downtown revitalization while saving employees hours of daily driving. The sharing of corporate amenities with the community was becoming more common, corporate/public partnerships for mass transportation were being formed, and a general re-thinking of campus organization was underway, from design around the automobile to design modeled on the historic university campus where infrastructure defined places for people. Design professionals predicted the continuation of these trends.

Where We Are Now

They were right. But a lot has happened in the corporate world since then, including exponential growth in the tech sector that has made Silicon Valley the locus for innovation

and continuous change. Landscape Forms was pleased to hold this event on a campus that is a laboratory for evolving campus practice. A frequently cited model for leading-edge practices in workplace design, Google is now re-envisioning its Mountain View outdoor campus facilities. Here the company has taken a group of sprawling low-profile structures built and occupied by a variety of tech start-ups over the past decade or so and is working to create an interconnected walkable, bikeable campus with an ecological agenda and a coherent identity. While the Google initiative is unique, the issues it addresses are similar to those experienced elsewhere. As a thought leader and social influencer, what Google does on its campus has the potential to influence innovation in other places and industries.

"As landscape architects we lead with the environment - topography, water, ecology and so on. We don't start with what the campus is and then fit in the other stuff. When a campus is designed from its environment, there is some hope. It will be a better process, wherever it leads."

Brian Jencek, HOK

Landscape architecture has always led with the environment. Now customer pressure, employee expectations and the pursuit of energy savings are driving businesses to plan and operate more sustainably. Companies are investing in buildings and site plans that meet green building standards such as LEED that are good for the environment, corporate image and the bottom line. And other key factors are driving corporate approaches to environment. The benefits to human health and wellbeing of access to green space have been documented. In the corporate arena, outdoor campus space is now understood as a contributor to achieving business objectives. Strategies for growing public transportation and reducing auto use are high on corporate and municipal agendas.

The Google Approach

"Habitat guidelines have helped us envision what the campus can become over time and we are working with biophilia criteria to achieve our goals to reduce stress, improve cognitive performance, increase creativity, and provide a positive emotional experience through heightened awareness of nature. This is a long-term vision. We're putting the puzzle pieces together."

Mary Davidge, Google

Google has adopted an approach to its Mountain View campus based on biophilia, the theory that humans have an innate tendency to seek connection with nature and other forms of life. Biophilic design seeks to reconnect people with the natural environment in an effort to enhance cognitive, emotional, psychological and physiological function. Working with consultants, some of whom were at the roundtable, the company is adapting criteria originally defined for interior environments and developing implementation strategies applicable to its corporate sites. Initiatives at Google's Mountain View campus include the creation of native and resilient habitats, restoration of an ecologically significant retention basin, design of a new water retention basin, reintroduction of oak trees, and implementation of a mass transportation system for employees that reduces emissions and highway congestion with 200 Google buses that transport 7,500+ employees and take an estimated 6,500 cars off the road daily. Transport around campus is facilitated by 1500 bicycles, painted in the Google rainbow of colors and parked at multiple campus locations. Bikes can be picked up at one location and dropped off at another and are free for use by any Google employee, anywhere on campus. Undulating walkways with color-coded bike lanes weave through the site. Former parking lots are planted with trees, grasses and flowering shrubs. Raised plant beds house community gardens tended by employees. Food trucks parked alongside picnic tables serve up a range of dishes from corn dogs to curries. Software engineers play volleyball on a sand court.

The main entrance at Mountain View with comfortable places to sit and a Google employee on the go.

Google bikes await arrivals at a campus bus stop.

Roundtable guests set out on a guided walking tour of the campus.

A meandering walk through groves of native trees and dappled shade.

A recently approved building project will add a large-footprint structure to the campus. When asked why Google is choosing a building type that consumes existing outdoor space, Mary Davidge defended the plan. “We believe that we need some of the large footprints,” she said. “The new building profile is a series of tables at various heights punctuated by courtyards and views to the outdoors.” Jacinta McCann of AECOM observed, “Google has so much open space because it got rid of a lot of parking lots. It was not planned as part of the original vision. Newer campus development is based on different assumptions. We are seeing campus development in proximity to public parks – a real blurring of borders with campuses being developed adjacent to open spaces that they don’t own but everyone enjoys.” Google’s experience in dense urban locations confirms this trend. “At our San Francisco facility there’s a view of the Bay and in New York we’re near the High Line,” Mary Davidge explained. “We do surveys to get employee feedback and we find those are big pluses for people. They really want to be near those kinds of spaces.”

Campus and Community

“We are right on the cusp of the disintegration of the corporate campus. Apple and a few others are building them now, but most companies are starting to evolve toward a richer place that has less to do with a single user identity. The corporate campus as a place identity will become less and less important.”

Kevin Conger, CMG

Conger declared that many large firms would prefer to be in major cities like San Francisco if they could find a way to fit. “And that place would become their identity. If Google stays here you will bring other identities to you, making this a rich place which will become a larger identity than just the campus.” Communities have been less optimistic. Jacinta McCann observed that older communities often feel challenged by density and newer planning models. “Specific plans for areas like public transportation can do good things but community interests and developer goals are not always aligned,” she said. “It’s a matter of trust. We have to work more aggressively with communities to align community sentiment, infrastructure changes and innovation in business so we can move forward faster.” Conger underlined the importance of community buy-in. “We need to engage the community and bring it along,” he advised. “There is often resistance from the first generation in a community. We need to line up the next generation. It’s important for everyone to get good deals to yield good long-term results.”

“This is a political problem, not a design problem,” Louise Mozingo of UC Berkeley said. “Unless there’s a larger platform on which to coordinate, it won’t solve for any individual campus. Are Google and other companies ready to take the leap and work with communities? It seems to me it’s time.” Allison Arieff of SPUR noted that part of the problem is the disconnect between expectations and execution. “Companies and governments are working in incompatible time frames,” she said. “It’s the pace of change in tech versus the inability to make responsive change happen quickly. But the problems in campus design are the same as in housing and highway congestion. There’s a lot of work to be done to get all entities to find a good way to proceed.”

“How does a campus leverage other investments being made in infrastructure? We’re working from the city-side in, trying to find where those programs are that already intend to restore streams or leverage funding for habitat restoration. The question is how do you identify some of those big million to billion dollar projects that can start to align with how you want to build your campus.”

Bry Sarte, Sherwood Design Engineers

As they locate in cities and regional centers some corporations are actively seeking ways to work with municipalities and other public entities to develop and leverage shared infrastructure. Sarte said he has seen this play out in New Orleans and Baton Rouge where institutions have aligned with public investment to build more ecologically rich public spaces. In some cases companies are taking on expenses related to infrastructure. Louise Mozingo warned of long-term imbalance of equity and access. "Google can afford to take on maintenance, but where does it leave the rest of public infrastructure?" she asked. Geoff di Girolamo pointed out that internal factions within cities sometimes end up limiting the adoption of wider solutions. "We all inherit the weaknesses of how cities work," he said. "And in some cities BIDs have taken over administrative direction of projects, often doing what cities could never do. As a result regional collaboration is ignored, even though it is critical."

If You Build It, Will They Come?

Many corporations now invite public access on their campuses. For example, Google is breaking ground later this year on a new building on their Mountain View campus that will be open to the public. Members of the community can enjoy the grounds, food trucks, and eventually new product displays, fitness facilities and retail opportunities for local vendors. Zachary Pozner from Stanford asked, "What does public access mean to you? How many people actually come here?" Mary Davidge replied that thousands visit and that many more visitors with an interest in ecology will come when the retention basin is completed and the new building is in place. "But," she said, "there are a lot of people in the community who feel that this is not part of their world and we want to encourage them to come." Data on park usage shows that to attract people you need to make them feel welcome. This is often achieved through programming. Gavin McMillan quipped that open space is like swimming pools. "Everybody thinks they use the pool but they don't. They sit around watching it. It's the same for open space. Everyone wants it but actual participation in it is incredibly low. There's a difference between choice and usage. We're now relying more on programming."

Allison Arieff proposed that an important aspect of public access to outdoor spaces is its encouragement of multi-generational use. "Tech culture is youth oriented. You don't see old people or babies around these places. We hear a lot about serendipitous encounters and creativity but if you're only having them with your own team you're not thinking in a very creative way. We need to find ways to mix it up a bit."

Data is Driving

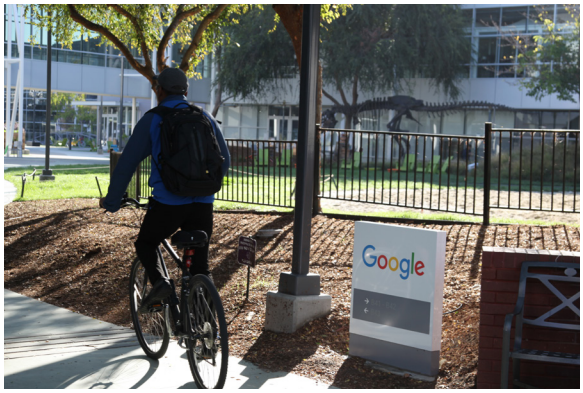
"We are now measuring the performance of landscapes. Our goal is to change the way projects are designed. Start with a set of expectations and metrics. I'm not sure we can get to a measure of rational payback without a process like this."

Jacinta McCann, AECOM

The group reported growing corporate and public sector demand for data to measure results and justify investment in outdoor space. Jacinta McCann referred the group to the LAF (Landscape Architecture Foundation) Landscape Performance Series, which now includes over 100 case studies documenting measurable results on criteria including health and wellbeing, carbon and climate, resilience, biodiversity, water management and social equity. She said AECOM is also using its own tool called PPRS (Past Performance Rating System) that sets out all the criteria upon which data systems can be based. Mary Davidge reported that there is data to support biophilia-based design and although Google is interested in both the qualitative and intuitive, "Now that we are working on biophilia elements, we really want to know which of them are most useful."

The availability of data is asymmetrical. There is ample data on the benefits of access to outdoor/green spaces for health and wellness, much of it from the healthcare sector. Brad McKee noted Walter Reed Hospital's half-mile long Green Walk project, designed to give people access to nature. "The military [client], of all exacting institutions, is bringing in this softer value. They can measure cortisol and blood pressure but it's going to

Roundtable participants deep in concentration and conversation. Moderator Mary Davidge keeps the discussion flowing.



Pedestrian pathways, bicycles and native plant species are all part of Google's sustainable landscape.

take time to create the metrics." Brian Jencek reported that the National Parks Service is using Fitbit in an attempt to gather data on physiological reactions to stress and stress relief. Geoff di Girolamo pushed back. "There's a huge press to create data for our projects. But what we do is often intuitive," he said. "There's an element of what we do as landscape architects that is a bit whimsical and more intangible. Data tends to flatten out vision."

Louise Mozingo pointed out that there is a difference between access to open space and what you need to present to decision makers to justify productivity. "[Measures of] ecological performance, energy, water are more universal and can be effective tools for making decisions," she declared. "But if you do something innovative you're not going to have data." Allison Arieff recommended the book *Weapons of Math Destruction* by mathematician Cathy O'Neil, which questions an unchallenged reliance on data. "Intuition matters," Arieff said. "How we feel matters. We can't quantify everything. Some companies are starting to rely on quality of life measures. We shouldn't rely so much on data that we miss the obvious."

How We Use Outdoor Space

"The environmental psychology literature consistently shows a basic range of activity in public spaces: solitude, observing, one-on-one conversation, group social activity, walking, and active play. You have to decide the details and how many spaces of what kind. The variable that stays steady is to give people choice. That is a sturdy principle for both comfort and satisfaction, across many different environments."

Louise Mozingo, UC Berkeley

Many corporations recognize that outdoor campus spaces contribute to business objectives, from recruitment and retention to controlling healthcare costs, reducing energy costs, and building image and brand. Outdoor campus spaces provide connectivity — campus to community, building to building, person to person. They can help campuses remain flexible and adaptable over time. A variety of spaces with a variety of site elements offer a range of enriching experiences. At the Google Mountain View campus, settings include round dining height tables and chairs; small social vignettes with colorful casual chairs, lounges and low tables; pathways lined with trees, benches and lighting; rows of long tables with benches near food trucks; and the aforementioned walking and bike trails and sand volleyball court. Mary Davidge explained, "We want a variety of spaces outside where people can go and walk, be reflective, or have a meeting. Connectivity is one of the elements. We are starting to see a real connection between our interior and our outdoor environment."

James Haig Streeter of AECOM reported that outdoor spaces are increasingly being used as work environments. He said his group always takes pictures of its work after it's completed and many times they find someone working on a laptop. "That type of space gives us clues to what might be successful on the campus," he said. "People need different kinds of spaces during the course of the day or the week. There are times when they want a reflective space, when they want to exercise, when they want to congregate for an all-hands meeting."

What's Next

"The answer is to create a whole variety of space typologies. One may be urban, one more connected to nature. You can flip the question around and ask not only what do you want to give employees from their perspective, but how do you want to guide employees in key directions. It's a two-way process."

James Haig Streeter, AECOM

Interior workplaces are radically changing. New distributed work models allow people to work in many locations and settings, often in the course of a single day. And now technology enables people to work outdoors as well. Research supports the benefits of access to outdoor space for human physical and emotional health. But the dots between productive work and the outdoor environment have yet to be fully connected. Anecdotes and testimonials abound on the effectiveness of workplaces designed to stimulate innovation and competitive advantage. Major companies are making significant investments in interior architecture and office furniture elements that support collaboration and teamwork.

While hard data on the effects of workplace innovation on measures such as productivity have yet to be published, designers and corporations are acting. "In the absence of statistics," David Walker said, "I think the measure is how much interaction you have. On most campuses we have worked on, that was the goal of the project – to get people to move around, intermix, create opportunities for cross-fertilization within the company." There are data supporting the positive effects of workplace re-design and distributed work on efficient use of real estate and employee satisfaction (e.g. *The Metrics of Distributed Work,* Knoll and Ratekin Consulting, 2011.) Given the high cost of corporate real estate holdings, the question might be asked: are companies making the most efficient use of all the real estate they hold – interior and outdoors?

As evidence builds for the effectiveness of workplace design in achieving business goals, and as companies seek to make the most cost-effective use of real estate and strive to increase employee satisfaction essential to recruiting and retaining talent, Landscape Forms predicts robust growth in outdoor campus settings designed to accommodate work as well as respite and recreation. We envision future corporate campuses that include a variety of individual and group work settings designed with task-appropriate site elements and full access to technology. As metrics for assessing results become available, we expect to see greater corporate investment in outdoor settings that complement and amplify interior workplaces as an integral component of business workplace strategies.

Professional Participation

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