Dear Fellow Angelenos,

Los Angeles is a city on the move. A city preparing to host its third Olympic games and its first Paralympics. A city rapidly expanding its transit system. A city revitalizing an L.A. River that was once the living, breathing heart of our region. A city working every day to bring our homeless neighbors indoors. A city driving forward the third-largest metropolitan economy in the world and seeking to extend the blessings of that prosperity to families and residents, regardless of their zip code.

At the center of each and every one of these projects — and many more — is our Bureau of Engineering and its 1,000 employees, all of them determined to make Los Angeles a more sustainable, resilient place to live. These women and men — our city’s engineering corps — are not only designing the blueprints of L.A.’s infrastructure; they’re crafting and constructing L.A.’s future, and building the literal foundation for our growth and dynamism.

This Strategic Plan lays out how the Bureau of Engineering will keep delivering for the people of Los Angeles. This department will play central roles in projects like the Sixth Street Viaduct and the new Civic Center downtown; in programs like Complete Streets and Safe Sidewalks; and in services like NavigateLA, connecting the expertise of the public and private sectors together in pursuit of making ours the best-run big city in America.

Every neighborhood and community across L.A. benefits from what the Bureau of Engineering accomplishes on a daily basis. Because of what this team does, our city is safer, more equitable, and hopeful. I look forward to working with City Engineer Gary Lee Moore as we envision and realize a stronger tomorrow for all of our residents.

Eric M. Garcetti
Mayor
Dear Angelenos,

I am proud to present the Bureau of Engineering’s Strategic Plan, which outlines the goals, strategies, and actions we will take over the next three years to transform Los Angeles into the world’s most livable and resilient city.

Engineering’s work is guided by our values of equity, creativity, quality, transparency, and responsiveness. Each and every day, those values shape the way we work with one another and with you, the people who live and work in our city.

Over the coming three years, Engineering will continue to provide the strong foundation our City needs, by designing, planning, and constructing infrastructure, buildings, and facilities that serve as examples to other cities around the globe and meet the highest standards of excellence.

At the same time, we will build on our gender equity accomplishments in our organization, and we will continue to focus on increased diversity.

Today, thanks to new funding sources, Los Angeles has an unprecedented opportunity to move forward with purpose and deliver region-shaping projects and programs.

Engineering is acting as the lead agency to develop “Bridge” housing for our most vulnerable residents, as our city joins together to answer the call to find immediate solutions to the crisis of homelessness.

These needs and challenges require innovative and sustainable practices and strong partnerships, both among City departments and with the communities we serve.

We believe this Strategic Plan will help guide us through the changes and challenges ahead. The Plan was developed by Engineering staff, who collaborated to define our vision, mission, and values, and came together to shape the specific actions required to deliver innovative, sustainable, high-quality services and projects.

This is our plan, and we hope you recognize it as your plan, too. I look forward to working with Mayor Garcetti, the Board of Public Works, and Engineering’s leadership and staff to implement our Strategic Plan.

Gary Lee Moore
City Engineer
# Contents

1. Introduction ................................................. 1

2. Vision, Mission, And Values .............................. 7

3. Engineering Programs and Services.................... 11

4. Current Work Highlights .................................. 25

5. Goals, Strategies, and Actions .......................... 33

6. Implementing the Plan and Measuring Success .... 45

Acknowledgements .............................................. 48
“With teamwork, Engineering can achieve our vision, mission, and goals from concept to completion.”
Introduction

The City of Los Angeles Bureau of Engineering (Engineering) is the City’s lead agency for the planning, design, and construction management of public buildings, infrastructure, and open space projects. This important work improves the daily lives of all Angelenos.

Engineering’s infrastructure projects include City facilities, recreational and cultural facilities, sidewalk repairs, bridges, bulkheads, streets, transit projects, and police and fire facilities. Engineering also manages the construction and design of stormwater and wastewater system projects. Open space projects include the development of parks, landslide repairs, and the restoration of wetlands. In addition, Engineering is a leader in the revitalization of the Los Angeles River and the lead agency in the design of homelessness “Bridge” housing throughout the City. Engineering also manages permitting for construction in the public right-of-way, as well as the City’s state-of-the-art online mapping system, NavigateLA.

Engineering’s projects are nationally-recognized in the areas of environmental sustainability, design, and construction management. Project development includes extensive community engagement and fully supports the City’s goals of creating a prosperous, livable, and resilient city for all residents and businesses.
The Opportunity at Hand

As Los Angeles continues to tackle the challenges that come with growth, the City will rely heavily on Engineering to deliver its commitments to Angelenos. In the years to come, Engineering must maintain its reputation of reliability and quality by continuing to exceed expectations, while evolving to support new world-class solutions and increase engagement with its clients and the public.

Engineering is anticipating many opportunities that will result in an increased demand for services, challenging Engineering to change and grow. These opportunities include:

• **A Growing Team:** Like Los Angeles, Engineering is growing. Engineering is involved in an increasing number of projects, and many new staff members are joining the team to support this work. This growth must be complemented by tools and processes to ensure staff is well-trained, aware of best practices and resources, and positioned for success. The team must be empowered to succeed while upholding Engineering’s standards for quality.

• **New Funding Streams:** New funding streams for stormwater, parks, and streets, as well as citywide initiatives such as Safe Sidewalks LA, Vision Zero, and the 2028 Olympics, will bring more opportunities for Engineering. Engineering must adapt to meet these needs, including adding staff to support increasing demands.

• **Change in Leadership:** Engineering has a diverse team, some of whom have over 30 years of experience and others who are in their first 30 days. The institutional knowledge amassed by some of Engineering’s longest-standing employees is impressive. There has been significant turnover in long-time staff over the past decade and many employees are nearing retirement, including members of the leadership team. This reality presents challenges, but also opportunities. Engineering must proactively plan for retirements and staffing changes, promote diversity and creativity, and ensure the next generation of leadership is equipped with the institutional knowledge to advance Engineering’s mission.

• **New Technologies:** New technologies are expanding the ability to design and manage projects more efficiently, collaborate more effectively, provide services to more people in more ways, and share information with the public over more platforms. Engineering needs to continue to expand its technological capabilities to remain the service provider of choice and better meet the needs of all Angelenos.
Who Works for Engineering?

Engineering has approximately 1,000 employees in 35 civil service classifications. As shown in the chart below, there are many job types at Engineering. The current staff is 34% female and 66% male, and almost a third of the organization has less than five years of service. Nearly a third (32%) have been in their current position for five years or less.

Generations of Engineers

Engineering has a multi-generational workforce. As shown in the chart on the next page, there is a large group of employees approaching retirement. As these long-time employees leave Engineering, leadership roles will be passed to new generations rising through the organization. Engineering must continue to evolve to provide a workplace that changes with generational needs and styles. This can be done through encouraging innovation and creativity, enhancing communication within and across working groups, increasing transparency of decision making, and strengthening community outreach efforts.
Employees by Years of Service

- Fewer than 5 years: 32%
- 5-9 years: 5%
- 10-14 years: 17%
- 15-19 years: 17%
- 20-24 years: 3%
- 25-29 years: 13%
- 30 years or more: 13%
“Working for Engineering to build a greater future for Los Angeles is inspiring.”
Vision, Mission, And Values

Engineering’s vision, mission, and values look forward while reflecting the department’s current focus. The following bullets describe these key elements of the Strategic Plan:

• The Vision connects the people of Los Angeles to the role Engineering plays in their lives.

• The Mission articulates the purpose of Engineering.

• The Values explain how and why Engineering and its staff do business.

These were developed using feedback from Engineering employees, a staff Working Group, and the Executive Team and Management Team. The vision, mission, and values will guide Engineering’s work for the next three years and beyond.
VISION
To lead the transformation of Los Angeles into the world’s most livable and resilient city.

MISSION
To serve all Angelenos by delivering innovative, sustainable, high-quality services and projects.
VALUES

EQUITY
We are fair and honest, support inclusivity, create access to opportunity, and treat all employees and customers with respect.

CREATIVITY
We initiate original and imaginative ideas to support world-class solutions for Los Angeles.

QUALITY
We work together to efficiently deliver professional services at a level that exceeds the expectations of our clients and the public.

TRANSPARENCY
We operate with integrity and are accessible to the public and our clients, taking responsibility for our work.

RESPONSIVENESS
We engage with our internal and external clients, building lasting partnerships and providing excellent customer service.
“Engineering provides a strong foundation for our city.”
Engineering Programs and Services

Engineering is one of five Bureaus within the Department of Public Works. The Board of Public Works, a five-member body appointed by the Mayor of Los Angeles, oversees the department and its Bureaus. Engineering consists of approximately 1,000 employees working under the leadership of the Executive Division in seven program areas, which are comprised of 32 separate, interconnected divisions.

Engineering programs and the associated divisions and district offices that operate within those programs include:

- Clean Water Infrastructure
- Development Services and Permits
- Mobility and Engineering Services
- Public Buildings and Open Spaces
- Administrative Services
- Sidewalks and Complete Streets
- Civic Center Development

Engineering also provides a wide range of technical services to the City of Los Angeles through six major divisions: Environmental Management Group, Geotechnical Engineering Division, Real Estate Division, Structural Engineering Division, Survey Division, and Land Development and GIS Division.
Clean Water Infrastructure

The Clean Water Infrastructure program plans, designs, rehabilitates, repairs, and constructs water reclamation plants, stormwater drainage systems, and sewers. Its divisions include:

- Environmental Engineering Division
- Project Award & Control Division
- Proposition O Clean Water Division
- Survey Division
- Wastewater Conveyance Construction Division
- Wastewater Conveyance Engineering Division
Development Services and Permits

The Development Services and Permits program provides public right-of-way permits and pre-development and engineering services to private developers for work within the public right-of-way. The program includes the following divisions and districts:

- Central District
- Harbor District
- Valley District
- West Los Angeles District
- Land Development & GIS Division
- Systems Division
- Landside Access Modernization Program Division for Los Angeles World Airport
- Permit Case Management Division
Mobility and Engineering Services

The Mobility and Engineering Services Program provides design and construction of street improvements and citywide transportation improvements, streetscapes, grade separations, and retaining walls. The program’s divisions include the following:

- Environmental Management Group
- Geotechnical Engineering Division
- Metro Transit Division
- Real Estate Division
- Sixth Street Viaduct Division
- Street Improvement and Stormwater Division
- Structural Engineering Division
Public Buildings and Open Spaces

The Public Buildings and Open Spaces Program provides design and construction services for new and existing public buildings, public plazas, parks, bridges, and the Los Angeles River. Its divisions include:

- Architectural Division
- Homeless Facilities and Special Projects
- Bridge Improvement Division
- Construction Management Division
- Convention Center Division
- LARiverWorks
- Streetcar Division
Administrative Services

Administrative Services provides support in payroll, purchasing, budgeting, Board reports, personnel, safety, and emergency preparedness to all of Engineering. The program also assists with activities that are required to maintain operations within the organization.
Sidewalks and Complete Streets

The Sidewalks and Complete Streets Program administers and manages the City’s Sidewalk Repair Program and the Complete Streets Program, which takes a holistic approach to street reconstruction and Vision Zero project delivery.
The Civic Center Development Program is responsible for the design and implementation of the Civic Center Master Plan, which will establish standards for pedestrian realm design, public right-of-way, public open space, and building frontage and materials, as well as plans for mobility circulation and parking.
Technical Support Services

Survey

The Survey Division provides surveys for engineering and architectural design work throughout the City of Los Angeles. The division’s mission is to provide timely and accurate data to Engineering, its clients, and the public, and to provide current and historical survey documents.

Structural Engineering

The Structural Engineering Division provides structural design and construction support services to Engineering capital improvement projects. The division is responsible for the inspection of 584 bridges and 35 tunnels and serves as a first responder for assessments after a significant seismic event. The division also approves structural aspects of various permits that impact the public right-of-way.
Technical Support Services

Geotechnical Engineering

The Geotechnical Engineering Division provides geotechnical and engineering geology investigations, environmental site assessments, and contamination remediation for City projects. The division also provides program management for hillside and street stabilization projects and emergency response to storm damage and landslides.

Land Development and GIS

The Land Development and GIS Division maintains the maps of the City, including sewer, storm drainage, street centerline, substructure, land ownership, and cadastral records. They develop, maintain, and update web-based applications such as NavigateLA, multiple permitting applications, as well as web services used by MyLA311 and My Neighborhood. In addition, the division recommends public right-of-way and infrastructure improvements necessary for such discretionary actions as new tract and parcel maps and other planning actions. The division also prepares reports to council regarding the vacation of public right-of-way, street name changes, nuisance alley closures, and other right-of-way actions.
Environmental Management

The Environmental Management Group serves Engineering and other City departments by facilitating the environmental reporting and compliance process mandated by the California Environmental Quality Act and other State measures. The division is dedicated to being an environmental steward, ensuring equitable public involvement and providing high-level defensible environmental documentation.

Real Estate

The Real Estate Division provides right-of-way acquisition project management and processes dedications, vacations, and quitclaims. The division has a Caltrans prequalification, making it the only real property division in the City that can certify federally funded right-of-way projects.
Technical Support Services

Permitting

Engineering manages permitting services for construction work in the public right-of-way. This service to the public is provided through fee-supported permits. Examples of actions that require permits include adding, relocating, or removing streets, curbs and gutters, bridges, underground utilities, street lights, sewers, storm drains, and traffic signs. Engineering is expected to issue over 20,000 permits in 2019.

Most of these services require coordination with other City departments. Currently, Engineering is piloting a new customer online application along with an electronic plan submittal and review system, where project documents can be submitted, routed to the appropriate departments, reviewed, and returned, saving the applicant and the City a tremendous amount of time and enhancing collaboration.
“We have the capability to deliver any and all types of projects.”
Engineering leads the planning, design, and construction of public infrastructure, buildings, and park projects. Projects vary widely and include programs, projects, and services for internal and external customers. From the iconic Sixth Street Viaduct project to the day-to-day permitting of work in the public right-of-way across Los Angeles, Engineering is key to making the city thrive. This chapter highlights examples of current projects and services.
Sixth Street Viaduct

Through an unprecedented collaboration of residents, elected officials, business leaders, schools, labor unions, cyclists, neighborhood activists, artists, and many more, the stunning “Ribbon of Light” promises to be an iconic and vital connection between the growing Arts District and the historic neighborhood of Boyle Heights. The new 3,500-foot-long viaduct will have 10 sets of lit arches, new bike lanes and expanded pedestrian paths, and a 12-acre park below.
Taylor Yard G2 River Park

This vital 42-acre parcel will help to connect over 100 acres of open space along the LA River in the center of Los Angeles. To ensure the project best suits the needs of Angelenos, Engineering is working closely with stakeholders. The project will be implemented with a phased approach.

The 42-acre Taylor Yard G2 River Park Project is the “Crown Jewel” of Los Angeles River revitalization.
Rehabilitation of the North Outfall Sewer and Major Sewers in Los Angeles

The City of Los Angeles operates and maintains more than 6,700 miles of sewers ranging in diameter from 6 to 150 inches with some pipes dating back to the late 1870s. The North Outfall Sewer (NOS) was constructed beginning in the 1920s and became the backbone of the City’s wastewater collection system. The NOS was constructed of un-reinforced concrete with clay tile liners or brick. Rehabilitation of this system began in the 1990s. Engineering continues to use proven rehabilitation methods while also identifying new processes and materials that will allow these sewers to be renewed while maintaining sewer service, minimizing disruptions to the community during construction, and being cost effective.

Los Angeles is investing $50 to $75 million annually on major sewer rehabilitation projects.
Los Angeles Street Civic Building

Development of the Los Angeles Street Civic Building is the first phase of the Civic Center Master Plan. This new municipal building will be constructed on the site of the Police Department’s former headquarters, Parker Center. Using a public-private partnership delivery method, which involves hiring an outside team to design, build, finance, operate, and maintain, the site, the Civic Building will be the new home for several City departments.

The deconstruction of Parker Center is in progress, and planning for the new Los Angeles Street Civic Building is underway.
Safe Sidewalks LA

Engineering leads the City’s $1.4 billion, 30-year Safe Sidewalks LA (SSLA) program, demonstrating its commitment to providing safe, accessible sidewalks and pedestrian rights-of-way for all Angelenos. Launched in 2016, the SSLA program is the largest of its kind in the nation, covering over 460 square miles and 9,000 miles of sidewalks. Leveraging the City’s MyLA311, people can make requests in the following three areas:

- **Access Request**: Addresses a request made by and for those with mobility disabilities
- **Rebate Program**: Offers a voluntary, time-limited program for property owners to share in the cost of sidewalk repairs
- **Report a Sidewalk Program**: Allows people to report sidewalk and other pedestrian right-of-way problems
Terminal Island Water Reclamation Plant (TIWRP)
Advanced Water Purification Facility (AWPF)

Engineering performed design and construction management of the $50 million TIWRP AWPF Expansion project to provide safe recycled water for use in the Harbor area. The project doubled the capacity to produce 12 million gallons per day of recycled water, which is used at the Dominguez Gap Barrier to protect freshwater aquifers from seawater intrusion, at the Harbor Golf Course for irrigation, as cooling water and in other industrial applications, and for future applications such as replenishing Machado Lake. The production of purified recycled water at TIWRP reduces Los Angeles’ need to purchase potable water, thereby increasing local water supply reliability.
“The Bureau of Engineering is the best place to work in the City.”
Central to the Strategic Plan are four goals that explain how Engineering will focus its efforts to achieve the vision and mission. The goals are supported by strategies and actions Engineering will take to achieve the goals.
Strategic Plan Goals

Goals for this Strategic Plan were developed through collaboration between the Strategic Plan Working Group and the Management Team. Throughout the development of the plan, Engineering gathered feedback from staff surveys and partner departments to help shape the goals and strategies. The four goals of the Strategic Plan are the following:

• **A Diverse and Skilled Team** to ensure all employees in Engineering have the tools and resources to grow professionally and succeed.

• **Innovative and Sustainable Practices** to adopt standards and embrace creativity to meet the growing demands of the city.

• **A Transparent and Responsive Organization** to better serve our clients and residents of Los Angeles with improved communication and processes.

• **Efficient and Effective Services** to maximize the utility of public resources.

### How to Read the Plan

**Goals**

Key elements needed to achieve the vision

**Strategies**

Areas of focus toward achieving a goal

**Strategy Description**

The intent of the strategy

**Actions**

Specific actions for Engineering to implement this strategy

<table>
<thead>
<tr>
<th>Goal I: A Diverse and Skilled Team</th>
<th>Initiation Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy A: Enhance the Engineering Academy</strong></td>
<td>2019</td>
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<tr>
<td>Invest in people and ensure they have the training and skills to succeed.</td>
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<tr>
<td>1 Develop a list of job training requirements and opportunities by job description. The list will include training needed to ensure eligibility for promotional opportunities.</td>
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<tr>
<td>2 Create a database of all internal and external training currently available.</td>
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<tr>
<td>3 Develop a training module within the Engineering Academy that focuses on resiliency and sustainability practices.</td>
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<tr>
<td>4 Develop new training programs through the use of technologies such as video and online training.</td>
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<tr>
<td>5 Develop a shared knowledge library of best practice materials, innovative ideas, current standard manuals and references, and a historical bank of digitized older manuals and reference guides.</td>
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<tr>
<td>6 Expand Engineering’s partnership with LMU or other universities to offer additional Graduate Certificate courses at the Public Works Building.</td>
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</tbody>
</table>
A Diverse and Skilled Team

To ensure that Engineering continues to lead City departments in developing quality projects and services, staff must be provided resources to help them grow, learn, and succeed.

As new opportunities create the need for an expanded organization, Engineering staff will require new resources and structures, including tools and training. To grow the next generation of leaders, Engineering must attract and retain the best talent by becoming an employer of choice. Staff will be supported and given opportunities to expand their expertise by working across Engineering and by growing and learning in a continuously evolving field.

### Goal I: A Diverse and Skilled Team

<table>
<thead>
<tr>
<th>Strategy A: Enhance the Engineering Academy</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tr>
<td>6. Expand Engineering’s partnership with LMU or other universities to offer additional Graduate Certificate courses with an emphasis on sustainability.</td>
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<tr>
<td>Goal I: A Diverse and Skilled Team</td>
<td>Initiation Year</td>
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<tr>
<td><strong>Strategy B: Foster Employee Growth</strong>&lt;br&gt;Develop, support, and retain an exceptionally qualified workforce</td>
<td>2019</td>
<td>2020</td>
<td>2021</td>
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<tr>
<td>7 Update onboarding materials to ensure that new staff have the necessary tools and knowledge, such as an overview of the Strategic Plan, to be effective.</td>
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<td></td>
<td>2020</td>
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<tr>
<td>8 Improve the performance review process to ensure that employees have continuous feedback through quarterly reviews, set specific training goals, and clarify supervisor and manager leadership expectations by updating the Employee Performance Appraisal System. Provide more informal opportunities for management-level reviews to ensure that employee privacy is protected when anonymous feedback is appropriate.</td>
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<td>9 Expand opportunities for staff to attend outside seminars and training sessions, including those that are part of professional associations, by informing employees about such training and promoting attendance through division meetings.</td>
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<td>2021</td>
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<td>10 Improve the training and conference/seminar approval process to make it easier to request training that is in line with an employee’s goals and to enhance transparency of decisions.</td>
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<tr>
<td>11 Establish a committee to explore opportunities for leadership tracks that provide growth opportunities for all employees.</td>
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<tr>
<td><strong>Strategy C: Attract and Retain Talent</strong>&lt;br&gt;Embrace diversity and inclusion to attract fresh ideas, perspectives, and energy, and support existing staff to make Engineering a great place to work</td>
<td>2019</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>12 Create opportunities for collaboration within teams, divisions, and across all of Engineering by establishing a staff-level committee or task force to organize team-building exercises and plan informal gatherings both inside and outside the workplace.</td>
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<tr>
<td>13 Create a new program to recognize and celebrate employees for their efforts in taking on new responsibilities and their success on projects and services.</td>
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<tr>
<td>14 Conduct an annual survey of all employees, as well as a 6-month survey of new employees, to explore job satisfaction, identify improvement recommendations, and review the onboarding process.</td>
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<td>2021</td>
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<tr>
<td>15 Expand student worker, intern, and on-campus recruitment programs to attract new employees to Engineering and to increase the number of qualified candidates from groups underrepresented in Engineering.</td>
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<tr>
<td>16 Explore options for flexible work schedules and wellness program enhancements.</td>
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</table>


Employee growth and development is critical to Engineering’s success. To ensure that it continues to be an employer of choice, Engineering will enhance a comprehensive training program: the Engineering Academy. The Academy will provide staff the opportunity to learn new skills, stay current with professional best practices, and facilitate continued growth while establishing a culture that prioritizes its staff.

A cross-divisional task force will begin its work by taking the following steps:

• Identify existing training opportunities at Engineering
• Determine training requirements for each job classification and for promotional opportunities
• Research outside training programs that can supplement internal training offerings
• Develop a consolidated list of training requirements and opportunities
• Identify an Engineering Academy manager
• Host training materials and opportunities in an Engineering Academy digital platform that is available to all staff
II. Innovative and Sustainable Practices

The challenges of growth, climate change, and public health require innovative and sustainable approaches.

As Engineering moves forward, expanding our innovative and sustainable practices is crucial to meet the needs of a rapidly growing city. Engineering will take a two-pronged approach for creating a more innovative and sustainable bureau:

• Updating practices and standards based on sustainability best practices and guidelines in the industry
• Using the creativity in Engineering to innovate by providing opportunities to develop original solutions

<table>
<thead>
<tr>
<th>Goal II: Innovative and Sustainable Practices</th>
<th>Initiation Year</th>
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<tbody>
<tr>
<td><strong>Strategy D: Increase Resiliency and Sustainability Practices</strong>&lt;br&gt;Integrate sustainable practices in each division to promote the needs of today without compromising the resources of tomorrow</td>
<td>2019</td>
</tr>
<tr>
<td>17 Incorporate sustainability and resiliency values by requiring completion of Envision and LEED checklists for all Engineering projects. Develop a net-zero carbon framework for all Engineering projects.</td>
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<tr>
<td>18 Create a sustainability and resiliency tracking and reporting system through the modification of UPRS or another electronic web-based tool.</td>
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<tr>
<td>19 Analyze engineering practices, project delivery, and design standards to identify revisions needed to enhance sustainability and resiliency.</td>
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<tr>
<td>20 Create a sustainability and resiliency scorecard for all Engineering projects.</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Strategy E: Identify Opportunities to Innovate</strong>&lt;br&gt;Value creative thinking, innovative solutions, and employee input</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Define a 3D Design Implementation Framework. Develop a Virtual Reality Program.</td>
<td>●</td>
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<tr>
<td>22 Celebrate innovative projects and programs through print, electronic, and social media, including publication of an annual Innovation Report.</td>
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<td>●</td>
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</tr>
<tr>
<td>23 Develop goals, strategies, and actions to prepare Los Angeles for the 2028 Olympics.</td>
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<td>●</td>
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<tr>
<td>24 Build 1500 transitional housing beds.</td>
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</tbody>
</table>
Strategic Plan Spotlight

Design in 3D

The architectural and engineering industry is being transformed with building information modeling (BIM), which is a collaborative digital process for design. BIM is a consistent and integrated system of computer models and a three-dimensional (3D) presentation rather than separate sets of two-dimensional (2D) drawings. The outcome is development of consistent and coordinated drawings, which produces efficiencies throughout a project’s life cycle.

Migrating from 2D to 3D technology will result in more efficient and accurate design, producing higher quality construction drawings with fewer errors. The feasibility study of new design alternatives and testing potential scenarios will also become much easier. The 3D technology helps to communicate project concepts and impacts more effectively to our diverse audience of communities and project stakeholders.

BIM and 3D technology enhances productivity, polishes our engineers’ and architects’ skills, and provides the following advantages:

• Collects data and produces accurate project representations

• Enables architects and engineers to spot potential conflicts early in the design process using clash detection and virtual or mixed reality

• Supports early and rapid project visualization to enable stakeholders to better understand proposed alternatives

• Manages the constant change and iterations to optimize the intended design objectives

• Provides intelligent and information-rich modeling for operations and maintenance of facilities

Engineering will increase the number of design projects done with 3D technology by 50% in the next three years.

Adopting this design technology improves the quality of our work and will allow our engineers and architects to take a more holistic approach, enabling Engineering to remain competitive in an increasingly volatile construction environment.
III. A Transparent and Responsive Organization

Engineering strives to provide its clients with excellent customer service.

Engineering has identified actions to better reflect the excellence of its staff and to help residents understand how Engineering is working for them. Engineering will focus on improving processes to enhance customer service and improve communications with the public using a variety of strategies. Improvements to communication and customer service will also benefit Engineering’s department and agency clients.

<table>
<thead>
<tr>
<th>Goal III: A Transparent and Responsive Organization</th>
<th>Initiation Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy F: Enhance Customer Service</strong></td>
<td>2019 2020 2021</td>
</tr>
<tr>
<td>Treat customers and clients with care, consideration, and respect, providing friendly and reliable professional service</td>
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<tr>
<td>25 Create civic engagement policies and provide customer service training to staff for engagement with the public, key stakeholders, and the media. Develop a proactive outreach campaign.</td>
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<tr>
<td>26 Update Engineering’s website to make it more user-friendly and to provide clear, easily accessible, and current information on projects and programs. This would include streamlining the permitting and request processes to serve clients and partners more effectively.</td>
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<tr>
<td>27 Expand the use of social media, educational videos, commercials, and print media to promote Engineering’s work.</td>
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<tr>
<td>28 Conduct a biannual survey of customers, internal City clients, and other partner agencies to identify customer satisfaction, areas of improvement, and opportunities for enhanced engagement.</td>
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<tr>
<td>29 Upgrade Engineering’s point-of-sale transaction system to enhance and streamline the customer payment process.</td>
<td></td>
</tr>
<tr>
<td>30 Provide real-time accessibility to projects for clients and the public using improved project management tools.</td>
<td></td>
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<tr>
<td><strong>Strategy G: Improve Communications</strong></td>
<td>2019 2020 2021</td>
</tr>
<tr>
<td>Create a stimulating and rewarding environment that fosters collaboration</td>
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</tr>
<tr>
<td>31 Establish and publish a timeline for hardware replacement, workstation upgrades, and software upgrades to increase transparency.</td>
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<tr>
<td>32 Create an Engineering “news feed” to provide regular information updates on Engineering news, major projects, policy changes, equipment and software upgrades, staff vacancies, and successes. Hold events to celebrate and highlight major project or program successes.</td>
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<tr>
<td>33 Create a program for divisions to share or present programs or projects to other divisions within Engineering.</td>
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</tbody>
</table>
Strategic Plan Spotlight

Real-Time Project Accessibility

Angelenos interact with the work of Engineering on a daily basis. However, real-time information is not always readily available to the public. Increasing the accessibility of Engineering’s work to its clients and the public will improve its reputation of reliability and will also improve feedback. Key opportunities to improve transparency between Engineering and the community include:

• Leverage social media to engage the public more broadly about initiatives being led or constructed by Engineering.

• Use current technology to provide geolocation-specific, real-time updates and information on existing and future projects to Engineering’s clients and the public.
Efficient and Effective Services

Engineering will improve its current reputation as an efficient and effective partner in the City by working smarter and doing more with existing resources.

The increased demand for services challenges Engineering to work more efficiently. To address this challenge, Engineering has identified opportunities to provide employees with resources and a work environment to enhance productivity. Engineering also will improve processes to streamline the delivery of projects while reducing costs. Additionally, Engineering continues to plan for organizational needs and for career development to ensure critical knowledge is shared.

<table>
<thead>
<tr>
<th>Goal IV: Efficient and Effective Services</th>
<th>Initiation Year</th>
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</thead>
<tbody>
<tr>
<td><strong>Strategy H: Reduce Project Delivery Costs by 10%</strong>&lt;br&gt;Optimize project delivery capabilities and capacity to meet current and future needs using a combination of existing and new tools to increase efficiencies and reduce costs</td>
<td>2019</td>
</tr>
<tr>
<td>34 Create a new project close-out process using the existing UPRS field to capture and share lessons learned and improve existing practices and programs. Information captured through this process should become part of the Engineering Academy.</td>
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<tr>
<td>35 Update and standardize internal quality assurance/quality control processes to support project review and improve consistency of high-quality design standards.</td>
<td>●</td>
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<tr>
<td>36 Improve and update the current project management database.</td>
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<tr>
<td>37 Update the Uniform Project Reporting System (UPRS).</td>
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</tr>
<tr>
<td>38 Identify opportunities to enhance productivity and reduce inefficiencies.</td>
<td>●</td>
</tr>
<tr>
<td>39 Expand the use of alternative delivery methods.</td>
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<tr>
<td>40 Establish digital documentation protocol, including public records request.</td>
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**Strategy I: Enhance Productivity**<br>Provide staff with the resources needed to effectively complete their work

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<tr>
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<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tbody>
<tr>
<td>41 Improve video and teleconferencing capabilities in conference rooms and at workspaces to conduct virtual meetings that help to reduce travel time. Include hardware improvements such as speakers and microphones as well as networked computer stations with wall-mounted monitors.</td>
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<td>●</td>
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<tr>
<td>42 Enhance mobile technology hardware and software to allow capabilities including, but not limited to, viewing existing and proposed infrastructure and facilities in the field in 3D.</td>
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<td>●</td>
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<tr>
<td>43 Develop a Smart City Data Integration Framework.</td>
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<td>●</td>
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</table>
Strategic Plan Spotlight
Reduce Project Delivery Costs by 10%

Engineering has a history of producing high-quality projects. With the increase in demand for Engineering’s services, the organization must increase efficiency. To meet the need, Engineering has set a performance metric to reduce existing costs by 10% over the three years of the Strategic Plan. The actions required to meet this target are the following:

• Create a cross-divisional task force.
• Review existing processes and procedures to identify conflicts, inefficiencies, duplication of efforts, or bottlenecks.
• Identify new technologies that can help to increase productivity and efficiency of project delivery.
• Revise policies and procedures with a goal of streamlining and removing barriers.
• Move from paper-based systems to digital-documentation systems.
• Monitor and report progress over time.

Implementing this strategy will provide Engineering staff with the tools to do their work effectively, in a way that efficiently delivers projects to clients and the public.
“I enjoyed working alongside other dedicated employees and looking at achievable goals we can implement within the next 3 years.”
Implementing the Plan and Measuring Success

Implementation of the Strategic Plan focuses on how the actions will be accomplished, when they will be completed, who is responsible, and how success will be measured. Implementation will be led by a combination of senior leadership and volunteers.

Beyond the actions and performance indicators, Engineering will establish annual performance measures to track the programs and policies that are updated or created as a part of Strategic Plan implementation.
Getting it Done

Advancing the strategies and actions in the Strategic Plan will require the combined and sustained efforts of both Engineering’s senior leadership and staff volunteers. The Management Team will identify Strategy Leaders for each of the 10 strategies. The Strategy Leaders will be responsible for convening staff interested in working on the actions and monitoring progress within their strategy.

Executive Team
- Oversee Strategic Plan implementation

Management Team
- Identify Strategy Leaders
- Ensure progress on each strategy
- Report to the Executive Team

Strategy Leaders
- Convene staff interested in working on the actions
- Oversee work on each action
- Monitor progress within the strategy

Strategic Plan Working Group
- Assist the Strategy Leaders in advancing and implementing the actions
Moving Forward

These actions will guide Engineering in realizing the goals laid out in this Strategic Plan. Working together to implement the plan’s actions over the next three years, Engineering will deliver innovative, sustainable, and high-quality services to make Los Angeles a more livable and resilient city.

At the end of 2021, we will look back and see:

• A more diverse team that brings varying expertise and perspectives to the table.

• A team equipped with the tools and resources necessary to produce high-quality work in an efficient manner that serves our clients and the public.

• A work environment that fosters and supports employee growth, ensuring Engineering is always connected with the most current industry practices.

• A communicative and transparent team that builds relationships with its clients and the communities we serve.

• A place where creativity is encouraged and where innovation flourishes.

Most importantly, we will accomplish our goals in a way that reflects how the Strategic Plan was developed, working together as a team committed to the betterment of Engineering as a whole for the benefit of staff, clients, and Angelenos.
Acknowledgements

Eric Garcetti, Mayor
Barbara Romero, Deputy Mayor
Kevin James, Board of Public Works President
Jessica Caloza, Board of Public Works Commissioner
Gary Lee Moore, City Engineer
Deborah Weintraub, Chief Deputy City Engineer
Kenneth Redd, Deputy City Engineer
Ted Allen, Deputy City Engineer
Alfred Mata, Deputy City Engineer
Julie Sauter, Deputy City Engineer
Mahmood Karimzadeh, Deputy City Engineer

Special thanks to Reza Shahmirkazi, Strategic Plan Manager, and Evann Gonzales, Strategic Plan Engineering Associate

Organizational Assessment Interviewees

Mayor’s Office
Board of Public Works
Bureau of Contract Administration
LA Sanitation
Office of the City Administrative Officer
City Council
Department of City Planning
Department of Recreation and Parks
Department of Transportation

Management Team

Alisa Blake, Systems Division
Allan Kawaguchi, Homeless Facilities and Special Projects Division
Bert Moklebust, Permit Case Management Division
Bob Nielsen, Survey Division
Bradley Jenson, Wastewater Conveyance Engineering Division
Crystal Lee, Harbor District
Chris Johnson, Proposition O Clean Water Division

Management Team (Continued)

Edick Ohanian, Project Award & Control Division
Edmond Yew, Land Development & GIS Division
Gene Edwards, Complete Streets Division
Jose Fuentes, Construction Management Division
Julie Allen, Sixth Street Viaduct Division
Lawrence Hsu, Metro Transit Division
Maria Martin, Environmental Management Group
Mati Laan, Landside Access Modernization Program Division
Michael Patonai, West Los Angeles District
Michael Sarullo, Environmental Engineering Division
Neil Drucker (Acting), Architectural Division
Ryan Toles, Wastewater Conveyance Construction Division
Patrick Schmidt, Geotechnical Engineering Division
Ramzy Sawaya, Central District
Reza Bagherzadeh, Los Angeles Street Civic Building Division
Robert Kadomatsu, Administration Division
Robert Vega, Sidewalk Division
Shirley Lau, Bridge Improvement Division
Steven Chen, Street Improvement & Stormwater Division
Sunny Patel, Structural Engineering Division
Uriel Jimenez, Real Estate Division
Wesley Tanijiri, Valley District

Nelson\Nygaard Consulting Associates

Jennifer Wieland, Principal-in-Charge
Rogelio Pardo, Lead Planner
Strategic Plan Working Group

Alice Kim, Sidewalks
Alice Nguyen, Wastewater Conveyance Engineering
Alisa Blake, Systems
Amalia Merino, LARiverworks
Amanda Rogers, Administrative Services
Armenia Aguilar, Land Development & GIS
Benjamin Moore, Geotechnical Engineering
Carlos Chaidez, Valley District
Chris Adams, Environmental Management Group
Chris Tsangaris, Systems
Christina Mills, Administrative Services
Curtis Tran, Metro Transit
Esmeralda Salguero, Real Estate
Evann Gonzales, Wastewater Conveyance Engineering
Gevork Mkrtchyan, Wastewater Conveyance Construction
Ibrahim Hafeez, Environmental Engineering Division
Jeannie Park, Street Improvement & Stormwater
Jessica Martinez, Survey
Jonathan Carroll, Project Award & Control
Jose Beristain, Geotechnical Engineering
Justin Ramirez, Construction Management
Justin Zhang, Street Improvement & Stormwater
Karan Patel, Construction Management
Karen Keal, Sixth Street Viaduct
Katie Doherty, Prop O Clean Water
Lorena Matos, Architectural
Magdi Solimon, Survey
Maria Diaz, Land Development & GIS
Mariet Ohanian, Construction Management
Mary Marcus, Valley District
Mary Nemick, Director of Communications
Michael Soto, Land Development & GIS
Mina Faltas, Environmental Engineering Division
Nadir Shah, Street Improvement & Stormwater
Natalie Moore, Sixth Street Viaduct
Neil Drucker, Architectural
Noel Mondragon, Wastewater Conveyance Engineering
Norman Mundy, Environmental Management Group
Omar Braish, Metro Transit
Piyounik Hakopian, Complete Streets
Ramnik Mungra, Complete Streets
Reza Shahmirzadi, Streetcar Division
Richard Louie, Wastewater Conveyance Construction
Roshanak Varjavand, Structural Engineering
Stephen Chao, Wastewater Conveyance Construction
Yesenia Diaz, Geotechnical Engineering
Zixuan Chen, Central District
Zohra Akhter, Architectural