Carollo Engineers Work In Our Communities

Carollo Engineers is an environmental engineering firm that specializes in the planning, design, and construction of water and wastewater facilities. Our 1000-person staff includes civil, structural, electrical, mechanical, environmental, and instrumentation control engineers working alongside scientists, planners, architects, and CAD designers. We work with cities, utilities, and special districts of all sizes. We work to make our communities better places to live. Our goal is to work collaboratively with our clients to protect and enhance our public water supplies and the precious resources of our lakes, streams, rivers, and oceans. We strive to be the BEST water consulting firm in the United States.

Carollo Community Benefit Strategy

Focus on STEM Education in Under-resourced San Francisco Communities

Carollo is known for solving complex and challenging issues about water – all in a day’s work for the specially trained engineers, project managers, and scientists who make it happen. Carollo’s workforce is highly educated, and places a strong emphasis on learning. Which is why Carollo is supporting STEM (Science, Technology, Engineering, and Math) education as the focus of the company’s community benefits strategy.

Through its Carollo Cares program, Carollo encourages scientific inquiry and thought at every educational level, from elementary to middle through high school years. As a part of the San Francisco Public Utilities Commission (SFPUC) Community Benefits program and partnership, Carollo has invested nearly $250,000 over the past two years in the Southeast area of San Francisco (District 10) where Carollo is engaged in the Sewage System Improvement Program (SSIP).

Here is how the money and volunteer hours have been invested in support of Carollo’s community benefits strategy. Supporting the California Academy of Sciences Family Night helps engage children with their families at an early age, and helps spark the joy of learning about the natural world. As students begin middle school, they gain the maturity to consider what their futures might hold. The opportunity to explore career fields helps them understand the prospect of work as well as connect their classroom studies to solutions they can apply to real experiences. As they are exposed to new ideas, industries, and individuals who resonate, they can become excited.

See Carollo Community Benefit Strategy, Page 3

Workforce Development

CityWorks Internship Program

Carollo has served as a lead partner with the SFPUC CityWorks SSIP Summer Internship program since it began over three years ago. This internship selects highly qualified high school students from San Francisco’s southeast neighborhoods for eight weeks of paid work at the San Francisco Public Utilities Commission or private engineering firm partners, including Carollo. The program is striving to increase diversity in engineering, program management, communications, and related fields.

Each summer, two CityWorks interns have worked on real projects alongside Carollo professionals. They join teams in our San Francisco and Walnut Creek offices four days a week, and then connect with all of the CityWorks interns on Fridays for special.

Inspired to volunteer with young learners?

Carollo’s Community Benefits coordinator, Pavitra Prabhakar, can match you with a project that lasts anywhere from a few hours online to weekly mentorships for a summer or school semester. Please let us know your availability and interests and we will connect you to an engaging project that needs your help! The only thing required is your enthusiasm!

Contact pprabhakar@carollo.com.
The innovative Willie Brown, Jr. Middle School in San Francisco’s Bayview neighborhood was built in 2015 to focus on STEM (Science, Technology, Engineering, and Math.) Since its founding, Carollo has been helping the school achieve an impressive series of firsts for a San Francisco public school. Carollo provide a significant financial contribution of $80,000 supported the curriculum development and materials for a state-of-the-art engineering course as well as putting the finishing touches on the school’s Makers’ Space. These investments enable students to have the tools and technology to begin their robotics education. In the course, students learn about gears and gear ratios, explore systems of mechanical movements, and work with Carollo-supplied robotics kits. The class has advanced to using their skills to design practical robotic machines, including a freight elevator. The hands-on Makers’ Space is a special workshop where students are encouraged to experiment, explore, and create.

Carollo’s has also provided pivotal sponsorship of the SPARK program, which offers sixth and seventh graders the chance to work one-on-one on a shared project with some of San Francisco’s top science and technology professionals. The program is a powerful way for students to make a human connection to their futures, and to see role models firsthand. SPARK’s mission is to help these youth build confidence, skills, and career awareness – which motivates them to succeed in their education and later in their professions. SPARK’s work at Willie Brown is immersive – in the past year every seventh grader has had the chance to participate in the one-on-one mentorships, the largest cadre SPARK has engaged at any school.

In the past year, every seventh grader at Willie Brown, Jr. Middle School has had the chance to participate in one-on-one mentorships.

Each Wednesday, sixth and seventh grade students eagerly board chartered buses to go to Bay Area organizations where science, technology, engineering and math are applied to products, apps, ideas, and services - organizations including the San Francisco Public Utilities Commission, MWH, Google, Salesforce, Autodesk, Facebook, and Adobe. Students are paired with a mentor for a semester, and together they tackle a specific project of the student’s choice, such as building an ergonomically friendly trackpad, or learning to code, or exploring dark matter in space. The pairs present the results in a “Share Your Spark” science fair to their teachers, families, and classmates back at the school. The one-to-one relationships forged between students and mentors are a powerful testament to the impact a person can have on another’s life, and the results have been overwhelmingly positive for the students and their mentors. Wrote one student to her mentor, “You have been so nice and amazing with helping me. I felt we were so close you were family.” Mentors were equally enthusiastic about their students.

Said another mentor of her student, “He goes out of his way to tell me that he appreciates these sessions…I’m appreciative of his really great behavior and I’m excited for the next session.”

When it became clear that a weekly commute from the Bayview neighborhood to Carollo’s headquarters in Walnut Creek was not feasible for mentorship, Carollo teamed up with engineering firms MWH, AECOM, and the SFPUC to fully underwrite the first year of the mentorship program for students to engage with nearby STEM-focused workplaces. This financial commitment laid the groundwork for the robust participation of over 100 student-mentor pairs who participate each semester in the program now managed by SPARK.

Wrote one student to her mentor, “Thank you so much for the chance to experience what a cool workplace is like. Our project is so awesome.” With Carollo’s dedicated support, the awesomeness will continue.
about their future prospects, and can appreciate the steps required to get there. Introducing these students to careers in science is only the first step; Carollo is also helping provide the curriculum, tools, and guidance that middle schoolers need to help them succeed through scholarships, mentorship, internships, and stewardship. At the high school level, students have the opportunity to delve deeper through internship placements and scholarships. The goal of Carollo’s strategy is to develop an active pipeline for students to grow into successful engineers. Carollo’s community benefit strategy recognizes that students need support at every stage of their academic life – and Carollo is committed to making it happen. Corporate Business Development Coordinator Lisa Browning is involved as an enthusiastic volunteer, reading scholarship applications for the Maisin Scholarship program which supports youth in their pursuit of higher education. She sees the impact of Carollo’s investment firsthand, and she believes in the result. “The Maisin Scholarship program has a profound effect on individual lives. And these individuals are the ones who shape and lead their families, communities, and organizations.”

Carollo’s dedication makes sense at a number of levels. It allows us to connect with students, families, and educators in some of the most under-resourced communities we serve. It also gives our employees opportunities to volunteer in person and online, whether sharing our water-related work directly with interns, guiding students in one-to-one mentorships, or evaluating scholarship applications to select the next generation of scholars. We know our future workforce will benefit from a strengthened talent pool who understands what we do. Raising a highly trained group of engineers and project managers from our own community is an ideal – and a very likely outcome. Lou Carella, EVP of Community Benefits, put it simply, “Carollo and our dedicated employee volunteers are especially grateful to partner with SFPUC to raise awareness and educate the young citizens of San Francisco about water-related issues.”

Results By The Numbers

<table>
<thead>
<tr>
<th>Program</th>
<th>Financial Contribution</th>
<th>Volunteer Hours / Contribution Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willie Brown, Jr. Middle School Makers’ Space</td>
<td>$80,000</td>
<td></td>
</tr>
<tr>
<td>Willie Brown, Jr. Middle School SPARK Intern Program</td>
<td>$5,000</td>
<td></td>
</tr>
<tr>
<td>SSIP Youth Internship Program (3 years)</td>
<td>$30,000</td>
<td>583 Hours / $102,025</td>
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<tr>
<td>Maisin Scholarship</td>
<td>$12,000</td>
<td>44 Hours / $7,700</td>
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<tr>
<td>Cal Academy Night for Bayview Elementary Schools</td>
<td>$7,242</td>
<td>12 Hours / $2,100</td>
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<tr>
<td>Total: $246,067</td>
<td>$132,242</td>
<td>639 Hours / $111,825</td>
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</tbody>
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Original Commitment: $231,200

CityWorks Internship Program

Continued from Page 1

workforce development training from the nonprofit partner Young Community Developers (YCD). YCD serves San Francisco’s southeast neighborhood, offering comprehensive preparation and training techniques to encourage workforce readiness and remove barriers to employment. Carollo’s CityWorks interns for 2017, Karl and Kenneth, are both San Francisco natives. Karl has completed his freshman year at Bucknell University in Lewisburg, Pennsylvania, where he is majoring in economics. Kenneth is a rising sophomore studying engineering at UC Santa Cruz.

Carollo’s San Francisco Project Manager Pavitra Prabhakar has played a lead role in facilitating their internship experience. She established an essential curriculum for interns. She has taught them how to scale and measure distance on construction drawings, walked them through the demolition plan for a treatment plant, and then took them to the plant for a site visit, “Which really gives them another perspective.” The interns meet many of the Carollo staff including a special one-on-one meeting with Carollo’s CEO, B Narayanan. “They were particularly impressed that someone so busy took the time to meet with them,” Prabhakar said. Carollo’s CityWorks interns made a presentation about their summer experience to the SFPUC Commissioners in a Southeast Corridor neighborhood community meeting, where participants affirmed, “they did a great job.”

“Both had taken college courses, so they had a sense of the complexity of what we do. They were very enthusiastic, showed up ready to work, and asked really good questions,” she said. “I treated them like employees and they rose to the challenge.” She added, “They said this summer had changed their lives, and they were very happy to have spent their time at Carollo.”

This internship is truly a Carollo team effort. Carollo employees have collectively provided 583 hours of volunteer service (for six interns over three summers) to support the program along with $30,000 of financial contributions to cover the stipends for the interns (each intern received a $5000 stipend).
Carollo has added a new component to their community benefits strategy over this past year. In partnership with the San Francisco Education Fund, Carollo has sponsored its first four-year scholarship for one outstanding Bayview neighborhood student interested in engineering. The program offers financial support for further study, along with academic and career counseling and professional development to encourage and help the scholarship recipient throughout college matriculation. Carollo participates in the Maisin Scholarship Program in two ways: the corporation makes a charitable contribution to sponsor one recipient to go to college, and Carollo employees volunteer their time to help select qualified candidates for all 75 Maisin scholarships. Carollo provided $12,000 for its first scholarship which the student will use over the course of four years.

In its inaugural year, Carollo's financial sponsorship will enable Maisin Scholar Luiz Lozaro to major in engineering at San Francisco State University. Luiz lives with his family in the Bayview district, and is described as a "wonderful, intelligent, and passionate" young man. He received his award along with his fellow Maisin Scholars at a moving ceremony in San Francisco's War Memorial Building in May.

Carollo’s project manager in the San Francisco office, Pavitra Prabhakar, along with other Carollo staff members volunteered to review scholarship application, and donated 44 hours of their time to this project. Pavitra was also invited to speak to the entire class of 75 Maisin Scholars about her experience of being an engineer as a female and person of color. She emphasized that opportunities truly were available to all based on merit and consistency. She cited teamwork and hard work as the two factors that were essential to her success, and encouraged them to learn from colleagues at all levels in the organization, from janitor to CEO. With the support of the Maisin Scholarship, she may have been speaking to some future Carollo engineers.

San Francisco families were treated to dinner and very special night out under the stars -- and under the sea -- at the California Academy of Sciences. The Academy, located in San Francisco's Golden Gate Park, is a combination planetarium, aquarium, and natural history museum under one ecologically sensitive roof. Carollo sponsored picnic suppers for all of the participants in Family Night, when the California Academy invited families from four Bayview elementary schools (Carver, Drew, Malcom X and Bret Harte) to spend an evening exploring the wonders of science and nature. The Academy provides charter bus transportation as well as free admission for the evening; because many families are coming straight from school and work, Carollo's brown bag dinner service means they are revitalized and ready to go when they arrive in Golden Gate Park.

Nearly 900 family members of all ages were eager to make the most of their Friday evening adventure, seeing as many of the exhibits as they could manage in one visit. Some gravitated towards the jellyfish in the aquarium, while others made their way to see the flock of penguins waddle and wiggle. They marveled at the butterflies and birds soaring overhead in the four-story high rainforest exhibit, counted the sharks and skates gliding underfoot in the mangrove lagoon, and snapped a selfie in front of the rare albino alligator named Claude. Docents were on hand to interpret and explain the exhibits, and a scientifically fascinating time was truly had by all. The opportunity to share a meal and an immersive evening gazing up and peering down at the natural world made many families very star struck indeed.