

#### THE BOEING COMPANY 2015 CORPORATE CITIZENSHIP REPORT

Build Better Communities Worldwide



- WILLIAM BOEING



In 1919, William "Bill" Boeing and company pilot Eddie Hubbard flew the Model C-700 biplane carrying 60 letters from Vancouver, British Columbia, to Seattle, marking the first international airmail flight and the beginning of a more efficient process for connecting distant cities and people. Once airmail service was commercialized, it sparked in Bill Boeing an idea to generate an additional source of revenue on the airmail planes: flying passengers.

Cover photo: Apollo 8, the orbit on Christmas Eve, Dec. 24, 1968. That evening, the astronauts Commander Frank Borman, Command Module Pilot Jim Lovell, and Lunar Module Pilot William Anders – held a live broadcast from lunar orbit, in which they showed pictures of the Earth and moon as seen from their spacecraft. Said Lovell, "The vast loneliness is awe-inspiring and it makes you realize just what you have back there on Earth." (NASA photo)

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#### LEADERSHIP MESSAGE



#### In this, our centennial year, we honor the generations of talented Boeing employees who built the world's largest aerospace company – and helped shape the course of history.

As we reflect upon a century of human achievement and innovation, we're reminded that our company is more than a collection of products and services. From the very beginning, our founders recognized we're part of something larger and more important — vibrant communities around the world that give all of us opportunities to thrive.

Today, we apply our passion for discovery and ingenuity to strengthen our global communities. We do this by investing in innovative organizations and programs that deliver results and help people succeed by fostering a culture of professional growth inside and outside of work, and advocating for issues that affect our communities and our planet.

Together, our partners, employees and community leaders have been pivotal in promoting diversity of thought, sparking imagination and driving a sense of excellence and utmost integrity in all that we do. And we believe the best is yet to come.

Our efforts are yielding lasting results around the globe, and we're energized about the opportunity to take on even bigger challenges in our second century — we hope you'll join us.

Left to right: Timothy J. Keating Senior Vice President, Government Operations

Lianne E. Stein Vice President, Global Corporate Citizenship

Dennis A. Muilenburg Chairman, President and Chief Executive Officer

"From the very beginning, our employees' relentless pursuit of innovation has helped transform global economies, unite the world through more efficient air travel, defend freedom and pioneer the outer reaches of space. This passion - and an enduring commitment to build something better throughout our next 100 years — extends to our local and global communities where we partner with likeminded organizations to drive positive, lasting change in the places we call home."

#### - DENNIS MUILENBURG, CHAIRMAN, PRESIDENT AND CHIEF EXECUTIVE OFFICER

Leadership

Environment

Jobs

#### THE BOEING COMPANY

At Boeing, we aspire to be the strongest, best and best-integrated aerospace-based company in the world and a global industrial champion — for today and tomorrow.

# \$96.1B No. 1

Boeing's total revenue in U.S. dollars in 2015

160K+

Boeing employees across the United States and in more than 65 countries



consecutive years Boeing has been named a top global innovator among aerospace and defense companies

21.5K

Boeing suppliers and partners around the world

exporter in the United States –

a position the company has held for more than a decade

150

countries where Boeing has customers

15.6K+

active patents currently held by Boeing around the world

research and development centers, plus 17 consortia and 72 joint research centers established by Boeing around the world

#### **CORPORATE CITIZENSHIP**

We create powerful change through strategic investments, employee engagement and purposeful advocacy efforts that enable people to build better communities worldwide.

# \$190M

invested by Boeing to help build better communities worldwide as well as thousands of volunteer hours

Employee	\$39 million
Charitable	\$76 million
Business	\$75 million

183

Humanitarian Delivery Flights, in partnership with more than 50 airline customers, have been flown since 1992; in 2015 nearly 28,000 pounds of relief supplies were delivered to global communities in need



community partners worldwide engage with Boeing annually through our charitable and employee dollars



of Boeing's charitable contributions were devoted toward education programs and organizations in 2015

21K+

Military service veterans are employed by Boeing — 15.4 percent of our workforce many still serving in the National Guard and Reserve



### 100

This year's edition of our Corporate Citizenship Report celebrates our passion for innovation, commitment to community partnerships, integrity, and an open and inclusive culture, reflecting the values Bill Boeing instilled in our company 100 years ago.

In 1916, Bill Boeing entered the new aviation industry from the now famous "Red Barn" on the banks of the Duwamish River in Seattle. The dreams, imagination and persistence of the thousands of men and women who have worked at Boeing during our first 100 years have built a proud legacy that now launches us into our next century of discovery, innovation and new frontiers.





Left: In 1916, Bill Boeing hired Beijingborn Wong Tsoo as the company's first aeronautical engineer. A rising talent in engineering from the Massachusetts Institute of Technology, Wong's knowledge of aeronautical science helped solve complex design hurdles in the Model C seaplane, resulting in a more controllable aircraft, and ultimately led to a U.S. Navy order for 50 of the Model C Trainers, becoming Boeing's first financial success.

Right: Boeing's first community grant went to the University of Washington in 1917 to build a wind tunnel. It was a strategic investment in engineering education that allowed the school to launch new courses in aeronautics and provide unprecedented educational resources.

In 1916, Bill Boeing personally hired the company's first female employee. Within two years, seamstresses, female drafters and bookkeepers would make up a quarter of the company's workforce. One of those women, Helen Holcombe, was a pioneer for female engineers when she joined the Boeing drafting department in 1922. These women laid the fabric of The Boeing Company's diversity and cleared the way for others to follow.





Left: "Rosie the Riveter" not only made a great impact on the nation, but on Boeing as well. In 1944, more than 40 percent of our employees were women. A testament to the success of women in the workforce was the fact that most Rosies chose to stay after the war and continued opening many new frontiers for women.

Right: "The idea of an employee organization, conceived for doing good within the community, shows that Boeing employees fully recognize their duties as citizens. ... It will also build stronger youths and better morale for our servicemen. In turn, it will help build a stronger community, for a city is no stronger than are its social groups." William M. Allen, president of Boeing Airplane Company, 1951. The Boeing Employee's Good Neighbor Fund is known today as the Employees Community Fund of The Boeing Company (ECF).



February 14, 1945, the 1,000th Boeing Wichita-built B-29 received special attention from the men and women who built it. In a spontaneous gesture of pride and employee giving, the plane was covered with a \$10,562 "coat of money" as it moved along the assembly line. The money was donated to the Infantile Paralysis Fund to help eradicate the national polio epidemic.



When disasters occur around the world, many times Boeing products and people are there to help. Since the 1960s, the CH-47 Chinook is the helicopter of choice for humanitarian relief operations in missions such as transportation of critical supplies and mass evacuation of refugees.





Left: A donation from the Boeing Employee's Good Neighbor Fund in 1970 helped start Seattle's Medic One – the first paramedic service in the country. In concert with the Seattle Fire Department and a University of Washington cardiologist, the innovative service brought advanced life support systems into the homes of victims, greatly improving chances of survival.

Right: In 2016, we celebrate our company's centennial with a global exhibit called Above and Beyond, to help inspire our next century's innovators.

#### EDUCATION

## Inspiring and Preparing Young Students

500 +

Boeing employees mentored more than 7,500 students in *FIRST®* teams in 2015, encouraging an interest and excitement for engineering and science

# 800

school leaders in underserved school districts across the United States received leadership development support through New Leaders in 2015

85K

teachers and students at 1,000+ schools in China engaged in engineering through the Soaring With Your Dream program

Students and families launch air-powered soda bottle rockets with mentorship from Boeing engineers during Huntsville's annual Rocket Day at the U.S. Space & Rocket Center as part of National Engineers Week. Working toward a future when all students will have access to learning, can develop their skills, do what they dream and build something better. "Boeing's commitment and partnership has helped us build a strategy for continued growth — this level of high-impact collaboration from a corporate philanthropy is really rare. In 2015 we were able to train more than 125 parents and educators to reach nearly 1,000 students and families in-person and online."

- TARA CHKLOVSKI, FOUNDER AND CEO, IRIDESCENT

Environment

Boeing volunteer Bryan Murphy helps students understand basic engineering concepts inspired by the work of Boeing engineers. Design challenges using simple, low-cost materials can be found online in Boeing's education resources.



"The Boeing Company really stepped up to support educators in their efforts to not only educate, but also inspire students ... thanks to the expertise of Boeing employees, we developed inspirational curriculum for the 21st century student."

- TOM JENKINS, EDUCATOR AND TEACHING CHANNEL'S SCIENCE TEACHER LAUREATE

Leadership



Before Bill Boeing became a businessman or an aviator, he was a student of engineering at Yale University. He was known to have a bent for "all things mechanical," and for him, science and adventure were inextricably linked.

Today, Boeing employees share that same passion. As part of our centennial celebration, Boeing engineers teamed up with several leading educational partners to co-create K–12 learning resources that inspire and engage students, families and teachers to prepare the next generation of innovators with the critical skills and experiences they need to realize their future goals.

More than 100 Boeing engineers volunteered to develop resources alongside two Boeing nonprofit partners: <u>Iridescent</u> and <u>Teaching Channel</u>. These partnerships have resulted in science lesson plans for grade school teachers that incorporate engineering design thinking and a collection of more than 20 original, open-ended, design challenges. Each design challenge uses simple materials such as cardboard, rubber bands, straws and string and presents a few fundamental science or engineering concepts that teach the basics behind things such as moving a robotic arm, building a helicopter or engineering a jetliner.

The design challenges were piloted in seven U.S. locations during five-week after school programs delivered in partnership with local schools and education nonprofits. Families and teachers work alongside their students and Boeing engineers trained to facilitate their learning to solve a different design challenge each week.

The engineers who worked to test and teach the design challenges felt as much excitement and inspiration from the program as did the students.

Jobs

All of the instruction, resources and videos are free and available online to students, teachers and families everywhere on boeing.com/education.

#### Learning by doing around the world

Education is fundamental to developing and sustaining healthy, productive and innovative societies and economies. That is why more than 53 percent of Boeing's charitable investment dollars are devoted to education programs around the world.

Boeing's engagement and investments in public education are focused on preparing and inspiring students to gain fundamental 21st century skills — the ability to think critically, solve problems, collaborate well, be creative and communicate effectively. Building these critical skills and abilities through science learning programs that build students' confidence — so they start to see themselves in fields related to science, technology, engineering and math (STEM) in the future.

Soaring With Your Dream is Boeing's largest education program in China. Launched in 2009, the program has reached 85,000 students in 1,200 schools in Beijing, Hebei, Xi'an, Tibet and Sichuan. With a focus on preparing science teachers and inspiring students' enthusiasm for aviation, the program includes key instructional courses for science and technology teachers. It also offers students a class on aviation knowledge, a flying model contest, an airplane livery design contest and recognition events that inspire students' creativity.

In the United Kingdom, Boeing launched the <u>Partners in Flight</u> program, a collaboration with the American Air Museum at Imperial War Museum (IWM) Duxford, which was a base used by the U.S. Army Air Force in World War II. The program complements existing learning activities offered at the IWM and is designed to spark an interest in STEM careers and inspire students' creative problem-solving and critical-thinking skills through science and math concepts. Boeing engineer Tony Castilleja helped develop a design challenge that teaches students how to create an air-powered spinning machine inspired by the Boeing CST-100 Starliner.

> Video: Engineer an Air Powered Spinning Machine

"For many of these students, it might be the very first time they meet an engineer. We might be defining this science for the very first time, and when we see them do the 'real world' challenge and say, 'Wow, that's exciting. I could do that!' we've started something that will last a lifetime."

#### - TONY CASTILLEJA, BOEING ENGINEER, NETWORK & SPACE SYSTEMS

Boeing's Soaring With Your Dream corporate citizenship program has been recognized as a premier activity in China. For seven years, the program has been inspiring young people to learn about the wonders of flight and to pursue their dreams in aviation.









Leadership

Students gather around a model B-29 Superfortress that they helped assemble as part of the Partners in Flight program — a collaboration between Boeing and the American Air Museum at Imperial War Museum Duxford, in England.

"This exciting new programme will show how the science and technology of the past can be used as an educational tool for the future to inspire potential scientists, engineers and mathematicians."

- SUE CHIPPINGTON, HEAD OF THE DEPARTMENT FOR LEARNING AT IWM DUXFORD, UNITED KINGDOM

Students build an air-powered spinning machine, one of more than 20 Boeinginspired open-ended design challenges on Iridescent's Curiosity Machine, intended to foster science and engineering learning through family engagement. The Boeing B-29 Superfortress, one of the most iconic aircraft of World War II, forms the center point for the program. Students participate in various STEM challenges, including navigating and calculating routes, measuring optimum air pressure for sustainable human life, and balancing fuel and payload.

Partners in Flight encourages children to enjoy STEM-related activities at an early age and supports primary school teachers to incorporate new ways of teaching science and engineering through hands-on classroom lessons.

Since 2008 Boeing and its employees have supported <u>FIRST</u><sup>®</sup> (For Inspiration and Recognition of Science and Technology), a national program that engages students in an exciting mentor-based experience that builds technology skills, inspires innovation and fosters abilities such as selfconfidence, communication and leadership.

Introducing K–12 students to careers in science and technology is a large part of *FIRST* participation, and it is also the reason so many mentors choose to support the organization.

More than 500 Boeing engineers across the United States mentored more than 7,500 students on *FIRST* Robotics Competition (FRC) and *FIRST* Tech Challenge teams in 2015.

*"FIRST* is such a great program; it provides students hands-on experience that they really can't get anywhere else," said Boeing mentor and engineer Erica Christiansen. "The experience helps a lot of the students figure out where they want to go with their career by allowing them to try different types of engineering. Between software, mechanical and electrical, it's a great experience for them."

In 2015 one rookie team mentored by Boeing employees made their way into local history books. The team, known as "SistamatiK," from Rosati-Kain High School, became the first-ever St. Louis area all-girls high school robotics team to compete in the St. Louis regional.

#### Education

People



"I'm proud of the fact that I go to an all-girls school. And being able to say that I am on the first all-girls team in the region for FRC is probably just the greatest thing because I am able to say that girls in STEM are going to be a stronger presence now," said Rachel Porter, Rosati-Kain High School sophomore.

#### A strong foundation

Learning begins at birth, and our investments in early learning are intended to ensure that every child has access to quality early care and education. Boeing supports efforts to improve the preparation of early caregivers and drive public awareness about the importance of early education, understanding that children who participate in high-quality early learning programs have stronger skills throughout their lives and are better able to contribute to their local economies. The <u>Ounce of Prevention</u> Fund in Chicago, Illinois, has been active for more than 30 years, working to increase access to quality early childhood education for children living in poverty. Its services empower caregivers by providing coaching and information to help parents create safe, stimulating home environments, model positive and language-rich relationships, and ensure families are connected to medical, dental, mental health and social supports.

Boeing supports the Ounce in its efforts to establish a first of its kind longitudinal early childhood data system in Illinois. The data produced from this project will prove critical in identifying and addressing current service gaps to ensure that more at-risk children and families experience high-quality birth-to-five services. Boeing has supported nearly 1,500 *FIRST* teams with grants and employee mentors since 2008. In 2015 alone, more than 500 Boeing employees mentored more than 7,500 students across the United States.

"People think of girls as wearing skirts and playing with Barbies, but we still like getting down and dirty and building a robot."

- CASSIE KIGHTLINGER, STUDENT AND *FIRST* ROBOTICS TEAM MEMBER

In Chicago, the Ounce of Prevention is developing solutions to provide children and families with early childhood learning and development skills that can empower them to create a brighter future.

"It's so important that every single student that goes through the school system today comes out with some degree of technical and engineering knowledge because our world is so complicated. There's really no excuse why people can't think that that can be part of what they know and what they own as knowledge."

#### - SANDRA GUTIERREZ, NATIONAL DIRECTOR, ABRIENDO PUERTAS/OPENING DOORS



We strengthen our support for the Ounce, and many other community organizations that Boeing supports, by engaging our Boeing executives to serve on the board of directors to guide the organization's strategic growth and impact.

#### In California, Abriendo Puertas/Opening Doors

is an evidence-based parent leadership program designed by and for Latino parents with children ages 0 to 5. Its goal is to increase the number of Latino children in the United States who enter school ready to learn and succeed by building the capacity and confidence of parents to be strong advocates for their children. Boeing support focuses on the Early Math Project, designed to help parents understand how to turn simple daily activities into early math lessons that introduce children to concepts such as sequence, shapes, size, order, numbers and counting.

#### Lead by example

Improving and transforming public education requires strong leadership. Boeing partners with <u>New Leaders</u>, a national organization based in New York that is improving student performance by focusing on the leadership development of teachers, principals and principal supervisors. In the 2014–15 school year, New Leaders trained almost 800 educators serving students from lowincome, urban communities. Since its inception, New Leaders has prepared 2,500 school and teacher leaders who reach more than 450,000 students annually in 15 high-need districts serving low-income communities across the country.

Students in schools led by New Leader principals consistently achieve at higher levels than their peers, have higher graduation rates and are making progress in closing student achievement gaps.

Environment

The MIND Research Institute, a national organization based in California, is shifting the current paradigm of math instruction from "teach by telling" to an approach where students "learn by doing." Boeing's investments in MIND enhance teacher professional development and ensure children in under-resourced districts with low math achievement have access to MIND's visual, gamebased learning program. Spatial-Temporal (ST) Math, supported by Boeing, helps teachers make connections between ST Math and their classroom instruction. The impact is demonstrated by the teachers who received the training and support, who when surveyed agreed that the training gave them specific strategies to promote classroom math discussions and helped them feel better prepared to ask questions that advance student thinking. MIND is currently expanding this training and support nationally based on district demand.

Boeing works toward a future in which all students have access to high-guality, real-world learning opportunities so that they can develop their skills, do what they dream and build something better. To that end, we support learning that helps students become adaptable — to both acquire knowledge throughout their lives and apply it successfully. This reflects the founding principles of Boeing, which started with a dream made possible by the persistence and innovative thinking of pioneering individuals. Every day, our employees continue this legacy by applying their knowledge, skills and creative problem solving to make the impossible take flight, and we share these capabilities with the next generation through our engagements in community.

Principal Felipe Jackson at Gilmor Elementary in Baltimore with a student. Jackson completed the New Leaders' Aspiring Principals program in 2010.

"Boeing's generous support of MIND Research Institute's instructional consulting helps teachers provide deeper mathematical learning experiences in their classrooms. Every single teacher that Boeing and MIND impacts creates a ripple effect, with hundreds of students benefiting from more effective, engaging math lessons."

#### - MATTHEW PETERSON, PH.D., CEO AND CO-FOUNDER, MIND RESEARCH INSTITUTE

The Boeing-sponsored Above and Beyond exhibit, traveling to major cities around the world, features interactive exhibits that can inspire students and families to explore the power of innovation to make dreams take flight.

Video: Above and Beyond

Jobs

Military and Veterans





15

People

#### **ENVIRONMENT**

### Investing in Environmental Innovation

The birthplace of the B-17 is now home to a replenished waterway bed. Boeing met the challenge of removing contamination and constructing a wildlife habitat on the Lower Duwamish Waterway in Seattle, cleaning up a 1-mile (1.6-kilometer) stretch of the waterway next to the company's former Plant 2 site.

## 54

Boeing locations across five countries have been ISO 14001 Certified

# 170K+

native plants have been installed through Boeing's Lower Duwamish Waterway restoration project, providing refuge and food sources for fish and wildlife

# 6.5M+

acres of land worldwide are being preserved with the help of Boeing and its environmental partner organizations As a committed, responsible environmental leader, Boeing partners with communities around the world in programs that work toward environmental protection, preservation and education.

"Forests provide vital resources, such as food and water, and fuel the economy in communities like Berau. Boeing's partnership with The Nature Conservancy not only helps to preserve the health of forests and wetlands around the world, it also strengthens the communities that depend on these resources."

- BRIAN MCPEEK, CHIEF CONSERVATION OFFICER, THE NATURE CONSERVANCY

**Employee volunteers** clear invasive plants and trash from the Duwamish Waterway in Seattle as part of annual Earth Day and Boeing Global Month of Service projects.



"Boeing has chosen to step up and lean in to the restoration of the lower Duwamish here. And it didn't need to make that choice. Reflecting good business sense and good environmental stewardship, Boeing decided not only not to avoid it, but to embrace it and get it done."

- WILL STELLE, **REGIONAL ADMINISTRATOR. NOAA FISHERIES** 



Boeing can trace its 100-year history back to the banks of the Lower Duwamish Waterway. In 1936, the company purchased an additional 28 acres along the waterway and constructed an assembly building to accommodate the government's growing need for military aircraft. By the end of World War II, this site had provided thousands of Washington men and women with jobs that produced nearly 7,000 aircraft.

Over the next 60 years, the buildings on the Duwamish waterway became obsolete, and an effort was made to restore the natural habitat of the area. To clear the way for the area's cleanup and habitat restoration, the aging facilities were demolished. More than 85 percent of the materials removed were either recycled or reused, including steel and wood beams, copper wiring and concrete. In addition, 170,000 native plants were

installed that now occupy five acres along the water's edge. These wetland plants and grasses, along with piles of woody debris that are anchored in place along the shoreline, provide refuge and food sources for fish and wildlife.

Boeing works with businesses, tribes, government agencies and the local community to implement protective cleanup solutions under the direction of the U.S. Environmental Protection Agency and the Washington State Department of Ecology. Boeing employees have also been deeply involved in the progress, volunteering their time for shoreline cleanup and planting activities as well as education and awareness programs with local schools and neighborhoods.

In 2015 the National Oceanic and Atmospheric Administration honored Boeing with an Excellence in Restoration Award for the Lower Duwamish restoration project. Other environmental programs in Washington state that were recognized with a Governor's Award include

- ➤ Developing and teaching an energy curriculum to 650 Everett, Washington, middle school students in partnership with the nonprofit Washington Green Schools.
- ✗ Powering the company's Renton, Washington, site with 100 percent renewable energy.
- ➤ Making energy infrastructure investments to reduce energy use, including the company's largest single lighting retrofit of more than 5,100 fixtures in Auburn, Washington.
- ➤ Hosting energy managers from Puget Soundarea school districts to share best practices and lessons learned on energy management and sustainability.
- ★ Receiving the ENERGY STAR Partners of the Year award for the past four consecutive years.

These practices are typical throughout Boeing's facilities around the world. To date, 54 Boeing locations have been ISO 14001 certified in the United States, United Kingdom, Malaysia, China and Australia.

#### **Biofuel development on six continents**

Since the beginning of the Jet Age, Boeing has continually improved the efficiency of our products. Our airplanes today are 70 percent more fuel efficient and have a 90 percent smaller noise footprint than our first jets. To make further progress, more than 75 percent of Boeing's commercial research and development funding supports greater efficiency and environmental performance in our products, services and facilities.

Operating in a world concerned about climate change and  $CO_2$  emissions, Boeing is the aviation industry's leader in working with partners globally

Education

The 10-acre (4 hectares) solar system at the Boeing 787 Final Assembly building in North Charleston, South Carolina, continues to be one of the largest thin-film solar installations in the United States.

"We care deeply about the environment. Across Boeing's global enterprise we are continually looking for ways to optimize innovative energy generation and conservation strategies. From reducing our water intake to using cleaner chemicals, we are committed to building a better planet while we grow our business."

- ROB PASTERICK, PRESIDENT, BOEING SHARED SERVICES GROUP

Employees from Boeing and All Nippon Airways (ANA) team up for a Global Month of Service project in Japan.









Waste bark and wood chips are piled at a plywood plant near Kamloops, British Columbia. Boeing is working with two Canadian airlines, the University of British Columbia and other stakeholders to turn forest-industry waste into sustainable aviation biofuel. (Nexterra Systems Corp. photo)

"There's no question that The Boeing Company is truly the world leader in developing aviation biofuels. We're proud to partner with Boeing and Port of Seattle to explore how to make the infrastructure work so that Alaska Airlines and all other carriers flying out of Sea-Tac Airport have the option of using a sustainable biofuel as soon as possible."

- JOE SPRAGUE, SENIOR VICE PRESIDENT OF COMMUNICATIONS AND EXTERNAL RELATIONS, ALASKA AIRLINES

Alaska Airlines 737-800 is fueled with a blend of petroleum jet fuel and sustainable aviation biofuel. to advance sustainably produced aviation biofuel. This renewable fuel reduces life-cycle  $CO_2$  emissions by 50 to 80 percent compared with conventional petroleum fuel, according to the U.S. Department of Energy.

Boeing and aviation industry partners are pursuing biofuel development that meets strict, third-party sustainability criteria. Working with a wide range of biofuel source materials, or feedstocks, to create regional biofuel supplies, Boeing is committed to projects that meet standards established by the <u>Roundtable on Sustainable Biomaterials</u> (RSB) to evaluate the viability and production of potential local fuel sources around the world. These sustainability principles reduce greenhouse gas emissions by at least 50 percent; do not harm local food security; and account for issues of conservation; soil, water and air; and technology inputs and waste management.

As an example, Boeing, RSB, South African Airways, SkyNRG and Sunchem Holdings are working together to develop an aviation biofuel supply chain in South Africa using an energy-rich tobacco plant called Solaris. This collaboration, called "Project Solaris," has earned the RSB certification for the production of this nicotine-free, GMO-free hybrid plant, which yields significant amounts of oil that can be used to make renewable jet fuel. In addition to supporting South African Airways' environmental goals and the South African government's public health objectives, Boeing's work with RSB and smallholder farms to produce the crop helps farm communities become stronger. The project has brought economic and rural development to South Africa's Limpopo province in addition to supporting the longer-term goals of aviation biofuel development for the nation's major airports.

In 2015, Boeing, working closely with our airline customers, governments, research institutions and others, had active biofuel projects around the globe. In each region or country, potential

Education



feedstocks are identified, often leveraging regional "waste" products — such as corn stalks and leaves in the Midwestern United States, sawdust from the forest-products industry in Canada, and waste cooking oil, often called "gutter oil," in China — to make jet fuel. Another biofuel project, in the United Arab Emirates, will use salt-tolerant halophyte plants that can be irrigated with seawater from fish and shrimp farms.

Taking another step toward making sustainable aviation biofuel available to airlines on a routine basis, Boeing is working with Alaska Airlines and the Port of Seattle to power all flights by all airlines at Seattle-Tacoma International Airport with a blend of sustainable aviation biofuel and conventional petroleum. Working together, Boeing, the airline and Port are assessing available biofuel types, fuel producers and other factors to integrate biofuel into operations at the 13th busiest U.S. airport, which served more than 42 million domestic and international passengers in 2015.

#### Engaging students around the world

Boeing is also partnering with schools, local nonprofits and research centers to build awareness and responsible environment habits among schoolaged children.

In Italy, Boeing and Umbra Cuscinetti (a Boeing Commercial Airplanes supplier) provide an environmental education program called <u>Svitati per</u> <u>I'Ambiente</u> (Crazy for the Environment) to more than 150,000 primary school students. Teachers are given materials, teaching plans and a website with games and learning tools that make environmental education fun and engaging to bring young students closer to the issues of environmental In South Africa, through a collaboration called Project Solaris, farmers with small plots of land will grow and market a nicotine-free, energyrich tobacco plant that can be used to make jet fuel, bringing economic development to rural communities in a sustainable way. (Sunchem SA photo)

"The partnership with Boeing has allowed us to work with communities in South Africa and Brazil making their agriculture more sustainable and connecting them to global commercial [biofuel] markets."

- ROLF HOGAN, EXECUTIVE DIRECTOR, ROUNDTABLE ON SUSTAINABLE BIOMATERIALS

Environment

Forest Park Forever's Nature Works program in St. Louis is engaging students, teachers and community partners in educational programs and conservation job development initiatives for youth.

"Just as Nature Works is transforming Forest Park's natural areas in positive ways, the Boeingsupported program is transforming the lives of young students, who are learning about conservation, sustainability and future opportunities in green jobs."

#### - LESLEY S. HOFFARTH, P.E., PRESIDENT AND EXECUTIVE DIRECTOR, FOREST PARK FOREVER



footprints, sustainability and technological innovation. The program has received patronage of the Ministry of Environment and Protection of Land and Sea and the Umbria region, UNESCO and the support of Italy's Ministry of Education, University and Research.

#### Boeing supports the Stephanie Alexander

Kitchen Garden program in more than 800 Australian schools with a primary curriculum that directly affects an average of 100,000 students participating in the program each year. The program is built around giving children a deeper understanding of the skills and health benefits of growing, harvesting, preparing and sharing fresh, seasonal produce. By setting good examples and engaging children's curiosity, it is providing positive experiences that will form the basis of lifelong healthy habits. In 2015, the Online Kitchen Garden Classroom membership service launched. The service gives approximately 10,000 early years learning centers, 2,000 secondary schools and another 6,200 primary schools access to the programs.

For several years, Boeing has supported the Climate Change Classroom program designed by Korea Green Foundation to teach students about global warming and climate change. The program also shows them how to live a more eco-conscious life. It focuses on environmentally friendly habits in the classroom, at home and in the outdoors, creating awareness and advocating behavior change.

The Forest Park Forever's Nature Works is a "green workforce" development program aimed at reaching traditionally underserved high

school students in St. Louis Public Schools. It is introducing students to environmental job opportunities by linking classroom curriculum with outdoor education and work activities in the nearby green space of Forest Park. More than 350 youth participated in 1,000 hours of educational programming and job development at schools and in Forest Park, which includes restoration of 11.3 acres of wildlife corridor. The training brings lifelong conservation awareness, interest, knowledge and job skills. It also increases community awareness of how to implement an effective, reciprocal conservation education and workforce development program that benefits the local environment while also creating economic and educational opportunities for those who may not otherwise have access to such options.

#### **Employees get involved**

We understand that taking care of the environment is crucial to aerospace and technology leadership. For decades employees have taken that responsibility into their communities through volunteer activities that clean up, restore, plant and recycle year round. In 2015 more than 30 volunteer-based Green Teams across the enterprise looked for ways to improve recycling and awareness throughout our offices and factories. And thousands of employee volunteers participate each year in Earth Day, World Environment Day and Boeing's Global Month of Service, which included more than 200 environmental events across 15 countries last calendar year.

Working in collaboration across our company and with external stakeholders, Boeing continues to innovate and improve our products and facilities as well as support the preservation and protection of our world's environment. The Stephanie Alexander Kitchen Garden Classroom community is teaching children about gardens as a natural, sustainable resource. The program also increases their scientific knowledge and is helping Australian students build lifelong, healthy eating habits.

"I am enthusiastic about Svitati per l'Ambiente because children are our future citizens of the world. We should educate them from an early age to behave responsibly, respect others and the environment."

#### - PATRIZIA PALMIERI, FIAMENGA PRIMARY SCHOOL, FOLIGNO, PERUGIA PROVINCE, ITALY

Students in Italy participate in Svitati per l'Ambiente (Crazy for the Environment), a program that guides their learning through a global tour of good environmental habits.





Jobs

#### **MILITARY AND VETERANS**

### Recognizing the Value of Military Service

### CAREER MANAGEMENT F

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spent with veteran-owned businesses in 2015

# 800 +

military- and veteran-related organizations and events supported by Boeing and its employees in 2015

veterans hired and trained since 2011

7K+

Boeing's Traci Fuller (left) and our HR Diversity team works with active and former military service members to discuss resources, opportunities and challenges facing our military as they transition to the civilian sector. Recognizing their unique value, because of their military experience, Boeing creates opportunities and invests in partnerships that develop new pathways for service members and veterans, their families and communities.

"We value the unique experience of veterans and believe their contributions help Boeing solve critical issues that impact our business. The values of integrity and teamwork they bring from their military experience are a strong complement to the amazing things we do."

- LEO BROOKS, VICE PRESIDENT, GOVERNMENT OPERATIONS, BOEING DEFENSE, SPACE & SECURITY

Service members attend the 2015 Logistics Industry Forum hosted by Hire America's Heroes at Joint Base Lewis-McChord in Washington state. Boeing participates in several military and veteran job fairs and recruiting events throughout the country.

"After leaving the military, I knew I wanted to work for a company that takes care of its veterans, but also builds products that have the capability to impact people's everyday life ... there was no question Boeing was the perfect fit for me."

- EDWIN GALAN, BOEING COMMERCIAL AIRPLANES, USMC RETIRED



Boeing has always been deeply supportive of the military and veterans, valuing their service and experience as well as providing world-class products. Even before there was a company, William E. Boeing and his close friend, Navy Lieutenant George Conrad Westervelt, shared a passion for aviation and worked together to build their first airplane. And the first military contract for Boeing was an order for 50 Model C seaplanes for the U.S. Navy in 1918, the company's second year.

Boeing recognizes and invests in the unique value that current and former service members bring to their civilian careers and communities. Whether in peacetime or in war, at home or abroad, they have served their country with pride and honor. Some answered the call many years ago, others more recently, and some still serve in the Reserves or National Guard. Throughout their career, service members face many challenging situations — including transition to civilian life.

Supporting military members and veterans goes beyond delivering products, capabilities and services. It means strengthening military families, engaging with the military community and creating connection points for veterans and reservists throughout our company. In 2015 alone Boeing supported nearly 200 programs and events related to honoring, hiring or strengthening current and former military service members.

#### **Unique experience enhances Boeing**

Boeing employs more than 21,000 veterans, many of whom remain active in supporting each other through the Boeing Employees Veterans Association (BEVA). Eleven BEVA chapters around the company provide a connecting point for veteran

Education

and non-veteran employees to come together through activities, networking and recognition events year-round to ensure that veterans' dedication and service are never forgotten.

Boeing veterans say they draw on their military service, experiences and training in their Boeing jobs.

After serving 22 years with the Marine Corps, Vernon Wright marked his third year at Boeing in August. He retired from the Corps as a gunnery sergeant, thus the nickname "Gunny" Wright. His tours of duty included supporting Operation Enduring Freedom in Afghanistan in 2011 as a communications logistical chief.

Wright said he started thinking about a job with Boeing as he neared retirement from the Marine Corps.

"I knew about Boeing's support for our military," he said, "and thought how honorable it would be to continue to serve my military brethren by supporting them through Boeing's defense and security programs."

#### Joining together

Community by community, using our expertise in systems integration, Boeing is working to ensure that veterans are able to access the services and information they need to move forward into a bright and prosperous future.

Data shows that less than 50 percent of military veterans and their families understand their benefits and many others are unaware of available resources or are overwhelmed by finding the best fit for their needs. This is a national issue that <u>Illinois</u> <u>Joining Forces</u> (IJF) is addressing on a daily basis. At its annual summit in Chicago in 2015, Boeing Chairman, President and CEO Dennis Muilenburg, as well as leaders from the City of Chicago, Office of the Chairman of the Joint Chiefs of Staff, the U.S. Department of Veterans Affairs, and the Illinois Departments of Military and Veterans Affairs, Vernon Wright credits a large part of his personal and professional growth to his military experience. Wright spent 22 years in the U.S. Marine Corps before coming to Boeing, where he works as a computer security specialist.

"I frequently get asked what I did before I joined Boeing, and I proudly say I served in our military for more than 20 years. The response I generally get is, 'Thank you for your service.' My response usually is, 'Well, thank you, but I'm not done serving yet.""

- VERNON WRIGHT, BOEING DEFENSE, SPACE & SECURITY, USMC RETIRED

In 1974, Renee Nadeau joined the Women's Army Corps (WAC), which was soon integrated with male Army units. She joined Boeing in 1986, serves as a member of the Boeing St. Louis Veterans Task Force and volunteers with the USO.









Ironworkers Local 416, in a joint initiative with the Los Angeles County Federation of Labor, led by United Way of Greater Los Angeles, are expanding apprenticeship opportunities to post-9/11 veterans. On completion of a two-week preapprenticeship program, these veterans can pursue careers as industry Ironworkers.

"The Boeing Employees Veterans Association (BEVA) helps employees connect and bond over common military experiences, supports veterans transitioning into the civilian workforce at Boeing and provides an outlet for professional development, networking and community service."

#### - DARRYL FARROW, DIRECTOR, BOEING GLOBAL WORKFORCE INCLUSION

Members of the Boeing Employees Veterans Association at the Long Beach and Seal Beach sites in California share information from 12 veterans' employment community partners supported by Boeing and the Employees Community Fund of Boeing California. addressed more than 200 participants to identify the best opportunity to coordinate resources, ranging from healthcare and housing to education and employment, to provide one comprehensive point of entry for veterans and their families through a network of IJF-vetted member organizations.

Boeing is supporting IJF's "No Wrong Door" program, which assists in identifying needed resources faster by coordinating complex service delivery to address gaps and overlaps in the services and support provided by many military community serving organizations. The program offers a public-private network of veteran- and military-serving organizations that provide in-person and online help to service members, veterans and their families as they navigate the "sea of goodwill."

Boeing and United Way of Greater Los Angeles are building cross-sector capacity needed to combat veteran unemployment in Los Angeles County. The mobilization of private, public and labor sectors to collaborate and build a solid infrastructure to increase veteran hiring has helped secure permanent employment in a variety of industries, including banking, entertainment, energy efficiency, construction and property management for 3,100 veterans since 2012. It is expected to reach 5,700 veterans by 2016.

#### **Supporting transitions**

Another way Boeing supports hiring initiatives for veterans is our participation in programs such as the <u>Orange County Stand Down</u> and Veterans Resource Expo in Tustin, California. The event was designed to help veterans who are homeless, displaced, disabled or otherwise in transition to become integrated into our community by providing them a continuum of opportunities at the event. Approximately 500 homeless and in-transition veterans received services through the event, with 250 veterans staying overnight in the provided emergency shelter. An additional 1,000 veterans who are unemployed, underemployed or looking



for a next move up also attended and were given access to more than 70 nonprofit service providers and more than 80 companies, including Boeing's Global Staffing team and several employee volunteers who assisted at the event.

In the Puget Sound region of Washington state, <u>RallyPoint/6</u> manages a comprehensive center that offers a coordinated network of public and private partners near Joint Base Lewis-McChord. With more than 657,000 veterans living in Washington state and 13,000 service members worldwide projected to transition into the state, the center's staff is focused on helping them answer the question, "What's my next step?", by providing connections to targeted resources, helping veterans develop action plans and setting goals and priorities essential to their reintegration into the community.

#### **Continuing to serve**

For three years, Boeing has worked with The Mission Continues (TMC). Our support for TMC's service platoons and the fellows program across the United States is focused on encouraging veterans to discover new ways to serve their country by taking on new missions in their communities. TMC's fellowship program harnesses veterans' strengths, skills and compassion and empowers them to volunteer with nonprofit organizations on a daily basis. Selected veterans volunteer part-time for six months at the community organization of their choice. In return, fellows receive a living stipend, complete a leadership development curriculum and develop new skills and networks. The fellowship program is ideal for veterans who look to start a new career, gain practical work experience while attending school or seek a new way to serve at home.

Boeing supports <u>United</u> <u>Service Organization</u> (USO) locations throughout the nation. In Metropolitan Washington-Baltimore (USO-Metro) area, Boeing-sponsored mobile units bring programs, support and events to those who don't have access to a traditional location.

"Boeing's unwavering support of USO-Metro has empowered us to provide valuable services to hundreds of thousands of service members, their families, the wounded, ill and injured and their caregivers. For 75 years, the USO has been at the forefront of tending to the needs of our nation's military, and thanks to Boeing we will continue in our mission to serve those who serve."

- ELAINE ROGERS, PRESIDENT AND CEO, USO OF METROPOLITAN WASHINGTON-BALTIMORE

Boeing volunteers partnered with the National Park Service and a TMC service platoon to restore a park in Washington, D.C., one of several joint Boeing/TMC projects supported in 2015.

"As Boeing and the National Park Service celebrate their centennial this year, we are proud to partner with Boeing and The Mission Continues to connect our beloved veterans with the skills, training, volunteer opportunities, enjoyment and healing that can take place at America's treasured places."

#### - SUSAN NEWTON, SENIOR VICE PRESIDENT, GRANTS AND PROGRAMS, NATIONAL PARK FOUNDATION



One of the Boeing fellows in 2015 is Eric Nava, who served in the Marine Corps. Nava deployed three times to Iraq and once to Afghanistan during his eight years of military service. As an infantryman, Nava and his unit were continually tasked with high-tempo and often dangerous missions. After returning home from his final deployment in 2010. Nava faced a different kind of challenge getting used to "normal" life again. He came to realize that he could be of use to other veterans experiencing similar struggles. Nava's Mission Continues fellowship at the Corona Veterans Center is now empowering him to help veterans access the resources they need to lead healthy and successful lives. He is also doing community outreach, educating veterans on the benefits and opportunities available to them. In addition to his fellowship, Nava is working toward his master's degree in social work.

Building on TMC's successful work with veterans and nonprofits, Boeing introduced the group to the <u>National Parks Service</u> on a collaborative project to discover how to expand opportunities for veterans with National Parks around the country.

#### A greater understanding

More than 2 million men and women serve in America's all-volunteer military force, and another 3 million are their husbands, wives, sons and daughters. Boeing believes the stories — and the service — of these military families deserve special attention and underwrote a documentary that takes an in-depth look at how a new generation of military families has learned to cope with having loved ones deployed for multiple tours over many years.

"<u>The Homefront</u>," a two-hour documentary, aired on the Public Broadcasting System during the

Colleges and Universities

Education

Memorial Day holiday in the United States. It was filmed over 14 months, following several families through the difficulties of deployment, the joys of homecoming and the challenges of reintegrating as a family after many months apart. Viewers met a cross-section of America's military community: soldiers, sailors, Marines and airmen, some in the active duty force and some in the National Guard and Reserve, and, we hope, came away with a greater appreciation for the challenges faced by our military families.

Boeing's commitment to veterans also extends to veteran-owned small businesses, which has earned the company a Champions of Veterans Enterprise Award, given by the National Veteran Small Business Coalition. In 2015 Boeing spent \$403 million with veteran-owned businesses.

Relationships such as these strengthen our supply chain and differentiate us in the marketplace. But the real credit goes to these veteran owned businesses, whose quality and performance make us want to work with them.

As Boeing enters our second century, we will continue a legacy of commitment to our military veterans and their families. We are proud to support organizations and opportunities that recognize the specialized skills, diverse perspectives and character traits such as discipline, leadership and teamwork that they bring to communities. Boeing recognizes the sacrifices military families make in service to the United States and underwrote a Public Broadcasting System TV documentary that took an in-depth look at how families cope with deployment.

"As veterans, the JEMNI team understands how everything we do is critical to success, just like in the military; check and double check before mission. Working with the Boeing team and being a part of their success really gives this disabled veteran company a special sense of accomplishment, well beyond the factory floor."

#### - MARK ELLSON, CEO OF JEMNI, INC., A SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS

Boeing supplier Mark R. Ellson is CEO of JEMNI Inc., a leading packaging Service-Disabled Veteran-Owned Small Business (SDVOSB) solutions company. Ellson and JEMNI were recognized as Supplier of the Year by the U.S. Business Leadership Network in 2015.





Jobs

JOBS

### Creating Pathways to the Future

Boeing's investments in job training, mentoring and small business PT2 programs around the world helps prepare people for more than a paycheck — it helps build stronger families and communities around the world.

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wave.

\$5B+

awarded by Boeing in subcontracts to small and diverse businesses in 2015

# \$50B

paid by Boeing to more than 14,800 businesses in 2015

1.5M

supplier-related jobs supported by Boeing business across the United States Around the world, Boeing is helping people gain business and technical skills to pursue their dreams. "We're investing in growing a robust pipeline of talent through job training and skills development programs, giving individuals the capabilities they need to contribute, strengthen and grow our company today, tomorrow and beyond."

- NORMA CLAYTON, VICE PRESIDENT, BOEING LEARNING, TRAINING AND DEVELOPMENT

Environment

Boeing-supported aircraft maintenance training programs are helping address youth training and employment needs while helping prepare qualified technicians for the aviation industry.

"Generous support and partnership from The Boeing Company has allowed Seattle Goodwill to expand our Youth Aerospace program, which provides at-risk high school students a pathway to an exciting career in aerospace and a lifetime of economic opportunity."

#### - DARYL J. CAMPBELL, PRESIDENT AND CEO, <u>SEATTLE GOODWILL</u>



Among the two dozen employees that worked at Boeing in 1916 were seamstresses who hand-stitched canvas fabric to cover wooden wings for biplanes. Today the wings of the 787 are constructed from high-tech carbon-fiber composite. As industry has evolved, so have the types of jobs and training needed for the modern workforce.

A job gives a person more than a paycheck; it helps develop self-esteem, confidence, family security and responsibility, which in turn improves the health and viability of a community. To help prepare more people for successful careers, Boeing supports community programs that provide job training and develop financial and business skills. Our programs range from machinist training to food services, computer coding to farming practices, and around the world we are helping increase the capacity of individuals and communities to succeed.

#### Training programs across the globe

Recognizing that the needs and circumstances in each country and community vary greatly, our investments are tailored toward meeting local needs.

In Riyadh, Saudi Arabia, the Al-Nahda Philanthropic Society for Women provides a comprehensive workforce training opportunity for female high school graduates. The program is focused on training women in computer and computer support skills toward employment, but also includes English language training and skills such as financial planning and workforce readiness workshops to improve their overall chances for employment.

In Bangalore, India, Boeing is helping address the critical and growing need for skills development in the Indian aerospace sector. Partnering with the National Skill Development Corporation

Education

India (NSDC) and the Nettur Technical Training Foundation (NTTF), we are providing vocational training to underserved youth and industry for aerospace sector employment.

In Chicago, Illinois, an organization called <u>Women</u> <u>Employed</u> (WE) is leading efforts to implement bridge programs giving thousands of workers the skills and credentials they need to move from low-paid, low-opportunity jobs into high-demand careers that offer financial stability.

WE is working to improve the citywide "on ramp" into post-secondary education and training between City Colleges of Chicago (CCC) and community organizations. This work is aligning components of adult education around the city so that any low-skilled Chicagoan, no matter which organization she or he approaches for adult education, has the opportunity to improve his or her skills and to be able to obtain a credential leading to a family-supporting job - to transform the current patchwork of adult education programs into a true system. WE is working with 21 community-based organizations that deliver adult education programming to strengthen the ability of each organization to prepare clients for participation in CCC and other college-level bridge programs. In 2015 more than 1,400 adults transitioned from adult education to college level.

In the United Kingdom, Boeing has joined forces with U.K. youth charity <u>The Prince's Trust</u> and the University of Sheffield's <u>Advanced Manufacturing</u> <u>Research Centre</u> (AMRC) Training Centre through a new program designed to help develop advanced manufacturing skills in young people.

The program, Get Started with Product Design, is a five-day training course that combines the AMRC Training Centre's Manufacturing Camps with mentoring and life-skills support offered by The Prince's Trust. The intent is to give disadvantaged young people from the Sheffield Boeing is leveraging education programs at vocational and technical high schools in Turkey, in collaboration with Anadolu University, through teacher training in maintenance-specific subjects to help graduates become better prepared for careers and support the development of aviation in Turkey.

"Our partnership with Boeing is enabling us to work with the City Colleges of Chicago to dramatically improve outcomes for their students by creating innovative pathways to college credit, credentials and good jobs."

#### - ANNE LADKY, EXECUTIVE DIRECTOR, WOMEN EMPLOYED

Students participate in a graduation ceremony following the successful completion of their training program at the Nettur Technical Training Foundation in India. The Boeing-supported program is helping prepare underserved youth for jobs in the aerospace industry.





Environment

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Jobs
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The University of Sheffield's AMRC Training Centre is focused on training the next generation of manufacturing and engineering professionals. Since opening in 2014, it is now training more than 650 people age 16 and older for manufacturing jobs, with 250 new interns arriving annually. (AMRC photo)

"We're focused on preparing our young people to gain the skills they need to be successful in a manufacturing environment."

- PETE HOFFMAN, VICE PRESIDENT, INTELLECTUAL PROPERTY MANAGEMENT, BOEING, AND AMRC GROUP BOARD MEMBER

Get Started With Product Design is a program in the United Kingdom that trains young people on the tools and skills needed to gain jobs in the manufacturing industry. (AMRC photo) region an idea of what it takes to be an apprentice and an opportunity to learn about education paths and careers in engineering, technology and manufacturing.

The program is aimed at young people ages 16 to 25 who are not in employment, education or training and who are struggling with complex barriers that may include homelessness, poverty or issues with mental health. It provides hands-on experience on a range of design and manufacturing technologies and the chance to work as a team to design and make a product that could be used by airline passengers. They also see the latest additive manufacturing or 3-D printing processes and virtual reality technology in action.

Participants who complete the course then receive three months of professional support designed to help them move into employment, education or training, which could include returning to the AMRC Training Centre as an apprentice.

And in Washington state, Boeing is working with our partners to help develop people with the skills needed by aerospace companies. By sharpening existing academic partnerships and creating new ones, we are helping schools match their curriculum with the needs of employers. So far Boeing has formed partnerships with 29 high schools, skill centers, and community and technical colleges in specific skill areas to ensure new hires are career ready.

"The Pierce County Skills Center (PCSC) is

preparing students for high-wage, high-demand careers," said Michelle Ledbetter, director of the Pierce County Skills Center in Washington state. "These are viable, well-paying jobs, with great opportunities for professional development and advancement."

A recent graduate of the program and 777/777X new-hire mechanic, Oleksandr Shevchuk is excited



about his future. "Making it to Boeing wasn't easy," Shevchuk said. "But as the saying goes, hard work pays off, and I'm real excited to be here."

During a high school career day and tour of the Sno-Isle TECH Skills Center in Everett, Washington, Shevchuk caught the aerospace bug. When he graduated from high school, he competed in the Washington State SkillsUSA Aircraft Mechanic Competition — and won — finishing in the top 10 nationally.

This all from someone who spoke almost no English when he immigrated to America in 2008. He now speaks, reads and writes in Russian, Ukrainian and English, and he is pursuing an Airframe and Powerplant license.

#### Support for small business

Boeing also works to support small business suppliers to help them develop greater capacity.

Victory Solutions, a company based in Huntsville, Alabama, has been mentored by Boeing since 2012. The firm's workforce has grown by 22 employees, a 34 percent increase, over the past three years. It also has a new human resources standard operating procedure manual, and it won a \$50 million contract from NASA in which Boeing's mentorship played a key role, according to a letter from the Small Business Administration.

In 2015 the U.S. Small Business Administration presented Boeing its Dwight D. Eisenhower award, a prize given to large companies that demonstrate active engagement and mentorship to their small business suppliers. Boeing won in the manufacturing category. The Pierce County Skills Center in Washington teaches students the use of hand tools and industrial machines as they apply to aerospace and manufacturing.

"These job programs are training people in the skills necessary in today's workforce, not just for Boeing but throughout the aerospace industry."

- WALT ODISHO, VICE PRESIDENT, MANUFACTURING AND SAFETY, BOEING COMMERCIAL AIRPLANES

Environment

Kitsap Applied Technology, a 27-year Boeing supplier partner located west of Seattle, is a nonprofit organization that gives developmentally disabled adults, some of them U.S. military service veterans, the opportunity to build skills through real work. KAT sorts Boeing surplus parts and material for reuse and resale.

"We appreciate that Boeing is attentive to serving an important community need in such an innovative way. Our trainees receive a wage, learn job skills and are able to get back into the workforce."

- MARK JONES, DIRECTOR, KITSAP APPLIED TECHNOLOGY



The administration called out several attributes of Boeing's supplier management program that led to the prize. Among them:

- ➤ Boeing awarded more than 20 percent of its subcontracts to small businesses, \$1.7 billion in total.
- ★ Boeing works with the Small Business Administration in its Small Business Innovation and Research program to identify small businesses that help the company reach its research-and-development needs.
- ➤ Many of the small businesses Boeing works with are owned by veterans, women and minorities and are located in historically underutilized business zones.

Near Seattle, Washington, making order out of chaos is the job of a specialized supplier that results in jobs, job training, revenue and palletloads of goodwill. Kitsap Applied Technology (KAT), a 27-year Boeing supplier, sorts loads of surplus shop and office supplies for Boeing that can be reused or resold for revenue.

KAT is a nonprofit organization that gives developmentally disabled adults, some of them U.S. military service veterans, the opportunity to build skills through real work. Each week they sort through large tub skids loaded with a jumble of small parts and tools and combine similar items to make up lots that can be sold online or at auction. Sorting also pulls out items like office supplies that KAT donates to local service agencies or distributes to local schoolchildren.

Education

In 2015 Boeing paid nearly \$50 billion to more than 14,800 businesses, supporting an additional 1.5 million supplier-related jobs across the United States.

#### Learning together

For those who come to work at Boeing, our support for learning and advancement continues. Most of our senior leaders were promoted from within our workforce. Developing our people is as important to us as delivering quality products and services to our customers. Whether it's taking on a new assignment or volunteering our skills in communities around the world, we never stop learning.

We have invested more than \$1 billion since 1998 in our employees' college tuition, books and fees through our industry-leading tuition assistance program — the <u>Learning Together Program</u>. Full-time and part-time team members have the opportunity to participate, regardless of what stage they are at in their career, after just one year of company service. Our people can pursue degree programs, professional certificates and individual courses in strategic fields of study at more than 270 colleges and universities.

No matter where you start or where you are, Boeing encourages people to explore new skills and possibilities. The job programs we support through community engagement as well as our business are helping provide tools and opportunities for people to soar higher and pursue their dreams. Diane Green has taken advantage of Boeing's Learning Together program to grow her capabilities and help advance her career, finishing a bachelor's degree in business management at DePaul University and earning two professional certifications.

"Through our tuition assistance program, I finished my bachelor's degree and earned certifications in project management and HR management. My personal desire to grow and develop, combined with this great benefit, has led to multiple career paths for me at Boeing."

- DIANE GREEN, BOEING HUMAN RESOURCES GENERALIST

Continuous training and leadership development resources are available to all Boeing employees whether they're seeking additional job skills, management training, college degrees or professional certifications.





Environment

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Jobs
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#### COLLEGES AND UNIVERSITIES

## Engaging Future Innovators

NASA's Space Launch System (SLS) provides a critical heavy-lift capability, powering people and cargo beyond our moon and into deep space. Boeing is the prime contractor for the design, development, test and production of the launch vehicle cryogenic stages, as well as development of the avionics suite. 1917

was the year Boeing began partnering with higher education institutions

Space Launch System

# 1,700+

internships provided annually by Boeing to U.S. and international university students

## 25+

Boeing-sponsored competitions for university students and teams from around the world to "learn by doing" as they create solutions for design and engineering challenges We believe that our global partnerships with higher education institutions are critical for preparing today's students with tomorrow's skills and for advancing innovation. "Since our first collaboration a century ago, the University of Washington has been proud to partner with Boeing as we tackle challenges and educate the next generation of leaders and innovators. Together, we are creating a boundless future in which our students and world will take flight."

- ANA MARI CAUCE, PRESIDENT, UNIVERSITY OF WASHINGTON

Students from Raisbeck Aviation High School visited Boeing's new Seattle Delivery Center. Many of the students said they hope to one day be part of the Boeing workforce. (Matthew B. Thompson photo)

"Knowing that Mr. Mullenburg started as an intern gave me hope coming into a well-known company that the door is always open for building a career. It's pretty inspiring that [interns] can look up to him and can see ourselves in that spot sometime because he has been in our shoes. I look forward to working and leading more projects that can make a difference in the company."

#### - MORGAN ARLINE, BOEING ENGINEERING CAREER FOUNDATION PROGRAM



In 1917 The Boeing Company made its very first community grant. It was given to the University of Washington in Seattle. The original project plan stated, "To give a greater impetus to aeroplane construction and the science of aerodynamics, a wind tunnel for making accurate and scientific tests on construction features and models of aeroplanes is urgently needed at the <u>University of</u> <u>Washington</u>.... In connection with the wind tunnel installation a graduate course of aeronautical engineering would be given at the University."

So began a 100-year partnership between Boeing and colleges and universities around the world, which fosters world-class relationships and offers market leading entry-level career programs. Additionally, these programs give students unique opportunities to work alongside thinkers, dreamers, designers and builders across the company. Last year, more than 1,700 college and university students participated in <u>Boeing's internship</u> <u>programs</u>. In a survey by Vault that focused on technology and engineering companies, more than 5,800 interns reviewed 102 different internship programs and rated their internship experiences in five areas: quality of life, compensation and benefits, interview process, career development and full-time employment prospects. Boeing was named the number one employer of choice among engineering interns who took this survey.

Morgan Arline began her Boeing career in 2013 as an intern working on a project to move flight simulation software to a new computing environment. She's now working full-time in the Engineering Career Foundation Program, a twoyear engineering rotation that gives participants exposure to the product life cycle across Boeing.

"Coming to Boeing gave me the meaningful experience I was looking for. You can actually work on a product that touches so many people," Arline said.

Having interns work on meaningful projects is at the heart of Boeing's engineering internship program.

For Arline, a Tuskegee University graduate, a long and fruitful career at Boeing is her goal. She finds motivation knowing a former Boeing engineering intern is now leading the company: Boeing Chairman, President and CEO Dennis Muilenburg.

#### **Partners in innovation**

Recently, a small experimental airplane took to the skies above Sywell Aerodrome near Northampton, United Kingdom, for an important test flight. But unlike other airplanes, this single-seat airplane was powered by a hybrid-electric engine propulsion system that uses a combination of traditional fuel and electricity.

The project, led by the University of Cambridge and sponsored by Boeing Research & Technology, connects Boeing's ongoing studies of possible future large hybrid-electric aircraft with smaller general aviation aircraft experimentation, said Marty Bradley, Boeing's principal investigator for the program.

"It's really exciting to see an airplane in the sky using some of the technology that could one day be a vital part of aviation and improve our industry's environmental performance," said Bradley, who provided guidance to the Cambridge team.

The project forms part of Boeing's ongoing engagement with colleges and universities around the world, including six academic partners in the United Kingdom.

In Seattle last year, Boeing and the University of Washington (UW) celebrated the new Boeing Advanced Research Center (BARC). The 4,300-square-foot collaborative research lab space will facilitate joint research, initially in the Boeing engineer and UW graduate student Lance McCann with UW Ph.D. candidate Parker Owan and UW Master of Science student Alexis Ehrlich work in the Boeing Advanced Research Center at the UW in Seattle.

"We get to have some of the most significant airplane manufacturing and design issues come through this lab. It supports an exciting new trend in education where students learn by doing, along with close interaction with industry."

#### - PER REINHALL, UW PROFESSOR, CHAIR OF UW MECHANICAL ENGINEERING DEPARTMENT

As part of a project led by the University of Cambridge and sponsored by Boeing Research & Technology, a small experimental airplane powered by a hybrid-electric engine propulsion system completed flight tests in the United Kingdom. (Nick Saffell, University of Cambridge photo)





### Carneg Mellon Iniver

 Boeing Chief Information Officer Ted Colbert (left) and Carnegie Mellon University Provost Farnam Jahanian shake hands after signing a threeyear agreement for the university to lead Boeingdirected research projects in the areas of machine learning, language technologies and data analytics. (Carnegie Mellon University photo)

"Researchers from Carnegie Mellon and Boeing have enjoyed a collaborative relationship for more than 30 years, and we're proud of the fact that hundreds of our graduates are working at Boeing."

- SUBRA SURESH, PRESIDENT, CARNEGIE MELLON UNIVERSITY

Boeing and the Indian Institute of Technology Bombay hosted an innovation summit in New Delhi, India, bringing together business, government, academia and research institutions as well as 300 students, to explore ideas and technologies that are redefining the future of Indian aerospace. areas of advanced assembly and manufacturing technologies. Engineers from Boeing Research & Technology, the company's advanced R&D organization, and Boeing Commercial Airplanes are leading projects and working alongside a team of university graduate students and faculty.

"Having Boeing engineers in the same physical space working with students and faculty is very exciting," said Per Reinhall, UW professor, chair of the UW's mechanical engineering department and director of the new research center.

The Boeing-Carnegie Mellon Aerospace Data Analytics Lab is a new collaboration that will seek ways to use artificial intelligence and big data to capitalize on the enormous amount of data generated in the design, construction and operation of modern aircraft. Headquartered in Pennsylvania, the project has targeted the mining and integration of massive data to produce insights and solutions for predictive and proactive diagnostics, life cycle optimization and real-time intelligence.

"This new agreement will extend our long relationship with Boeing even farther, leveraging the distinctive intellectual strengths of Carnegie Mellon to benefit everyone who steps onto an airplane," said Subra Suresh, president of Carnegie Mellon University.

Wherever possible, Boeing integrates multiple assets and strategies in support of a school or a community. In Turkey, for example, these various elements are visible through several collaborations. Boeing and Istanbul Technical University are working on advanced cabin air-filtration systems. In tandem with Turkish Airlines, Boeing and the university also have established a master's degree course in air transport management to support the growth of the country's aerospace sector. Additionally, Boeing provides competitive scholarships to Istanbul Technical students, alongside faculty grants for the university's academic staff to help develop aeronautical engineering curriculum.



In India, Boeing collaborated with the Indian Institute of Technology Bombay to organize a daylong summit that brought together more than 300 leaders from India's business, government, academia and research institutions to explore ideas and technologies that are redefining the future of Indian aerospace. As part of <u>Boeing's Talent</u> <u>Pipeline Development</u> organization's initiative, nearly 100 students representing nine schools from across India attended the summit and emphasized a theme heard on the country's talent potential and importance of developing the next generation of leaders.

"It was validating to hear that the projects we work on are relevant and important," said Preksha Gupta, an undergraduate student at the Indian Institute of Technology Kanpur. "This event introduced us to people we never would have met and ideas we hadn't thought possible."

#### **College competitions**

Beyond internships and research projects, in 2015 Boeing funded more than 25 college-level engineering-type case competitions for students across a variety majors to work in teams to address challenges, design, build, test and prototype their solutions.

One of these, the Boeing Patent Challenge, co-sponsored by Washington University's Skandalaris Center for Interdisciplinary Innovation and Entrepreneurship, located in St. Louis, Missouri, is part of Boeing's efforts to maximize the value of its extensive patent and technology portfolio.

The challenge — find new ways to apply one or more of the company's 15,600-plus active patents to an industry or company outside of the aerospace and defense industries. Boeing has partnered with Engineers Without Borders-USA (EWB-USA) since 2008, supporting university and professional chapters that develop engineering solutions to critical community problems. The EWB-USA Oregon State University (OSU) Chapter's Lela Community Water Project in Kenya built wells and rainwater catchment systems so that 60 percent of the population is now within 500 meters of a water source. (OSU photo)

"The experiences I've had and the dedicated people I've met through Engineers Without Borders-USA have altered how I see the world. My career goals have shifted towards how I can use engineering to better people's lives. I'm pursuing an International Degree in Chemical Engineering, and hope to work abroad in the future."

- CHRIS HINKLE, EWB-USA OREGON STATE UNIVERSITY CHAPTER MEMBER

Members of the U.S. Naval Academy with their 2015 Capstone award for a solution to power forward operating bases with improved energy storage.

"Generating power, distributing power and managing demand-side resources are all relevant for the Navy, which makes the orbital power station project particularly pertinent.... The project is great, but it's the education that really matters."

#### - CMDR. JOHN STEVENS, U.S. NAVAL ACADEMY TEAM LEAD, BOEING 2015 SERVICE ACADEMY CAPSTONE **COMPETITION**



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Throughout the competition, company employees

and volunteers in the St. Louis area mentored 146

students participating on 30 teams. Each team

created a business plan built around the patents

they selected. The winning team, Spectraserve,

technology, commonly used for satellites and

aircraft, to develop a product that could help

doctors reduce cost, risk and complications

ability to save lives," a team member said.

associated with cancer diagnostics by visualizing

previously unseen cancer biomarkers in real time.

Another annual competition is Boeing's Service

Navy and Air Force Academies. The U.S. Naval

Academy won the 2015 trophy with its idea to

power forward operating bases with improved

Academy Capstone challenge between the Army,

"We ultimately chose this patent because it had the

hopes to use Boeing's aerial hyperspectral imaging

efficiency and better energy storage by beaming energy down from powerplants in low Earth orbit. Experiential learning is key to these contests.

Another unique competition is Boeing's innovative, award-winning program called Aerospace Partners for the Advancement of Collaborative Engineering (or AerosPACE). Modeled after NASA's systems engineering workflow, the AerosPACE process focuses on conceptual, preliminary and detailed design as well as prototyping and design for manufacturing.

Engineering students at eight U.S. universities got a taste of what it's like to work as an engineer in aviation as the teams tackled a daunting challenge: to learn, over 28 weeks, enough about aerodynamics, manufacturing and collaboration so that they can design, build and fly an aircraft.



Using innovative computer design tools to address issues of vehicle stability and control, the students explore ways to collaborate through social media and experiment with 3-D printers to build parts for an unmanned aerial system or "drone" aircraft.

The students, mentored by Boeing employees, have learned that teams can outperform groups of individuals working in isolation. As Larissa Cannon of Brigham Young University put it, "To see something I worked on in [computer-aided design] become real and know that I had the freedom to design that and to work with others to do that, it was a very rewarding experience!"

#### Supporting a path to the future

For many young people, finding a path to get into college or endure to graduation can be an overwhelming hurdle to overcome. To assist in forging their path, Boeing supported 67 different U.S. and international outreach and retention program opportunities for students in 2015.

In Washington state, a Boeing investment of \$25 million — combined with an equal amount contributed by Microsoft and matched by the state — will enable nearly 14,000 students to earn technology degrees within the decade. So far, scholarships have been awarded to 5,500 low- and middle-income students, nearly 60 percent of whom are the first members of their families to attend college.

Established five years ago, the scholarship provides financial assistance, creates research opportunities and matches recipients with mentors in business and technology. That includes Boeing Engineering leaders who mentor the students pursuing both undergraduate and advanced degrees through the Opportunity Scholarship program. This year's AerosPACE project challenge was to design, build and fly a small, agile unmanned aircraft capable of performing first-responder functions. Students in Team BEAR (Backcountry Emergency Aerial Responder) celebrate their initial flight.

"AerosPACE was created around the concept of 'epic challenges' to prepare students for tackling real-world engineering problems. Each team includes students at different universities — often, hundreds of miles apart — so collaboration via social media and other information technology is essential."

#### - DR. MIKE RICHEY, BOEING ASSOCIATE TECHNICAL FELLOW

At a Boeing business case competition, students from Howard University and Morgan State University worked in cross-functional teams to develop ideas to meet the challenge. Jeffrey Bals, project manager for the Boeing Collaboration Center, shows students the company's product portfolio at the Washington, D.C., area office in Long Bridge, Virginia. (Jennifer Terrill photo)





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Jobs
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PEOPLE

### Dedication to People, Culture and Leadership

Boeing volunteers in partnership with Chicago Cares built a much-needed baseball field at South Central Community Services in the Chatham neighborhood of Chicago. Using 8 tons of limestone screening and 23 tons of infield mix, 34 Boeing volunteers spent a Saturdar refurbishing the rundown site into a viable baseball field for local children. 500 +

nonprofit organizations have Boeing executives serving on their boards

# \$260M

is invested by Boeing for employee learning and tuition reimbursement programs annually

# 20K

employees train at the Boeing Leadership Center each year

We are committed to core values that define who we are and how we operate and that ensure our strength as a leading global company. "I love the *FIRST*" programs and working with the kids. Their energy and curiosity are infectious. The students appreciate my knowledge and experience, and I've learned a lot about leadership, service and communicating effectively."

- CONRAD BALL, PROGRAM MANAGER, TECHNICAL WORKFORCE DEVELOPMENT, BOEING ENTERPRISE ENGINEERING

Environment

Employees in St. Louis pause during one of the weekly leadership walks held at the site during their "Boeing on the Move" physical activity challenge. (Bruce Becker photo)

"Participating in 'Boeing on the Move' kick-started my focus on adopting healthy lifestyle habits. It changed my life. I surrounded myself with supportive friends and family, and I am now helping others take steps to get healthier, too."

#### - AMY HOLLIS, BOEING FLIGHT TEST ENGINEERING STAFF ANALYST LEAD, SEATTLE, WASHINGTON



Our people have been the heart, soul and engine of The Boeing Company since it was founded 100 years ago. Throughout our history employees have shown pride and innovation in their work as well as their communities and a compassion for helping others.

From the start, Boeing's diverse workforce was uncommon for the era. Our first aeronautical engineer was Beijing-born, Wong Tsoo, hired in 1916. By 1918, one quarter of Boeing's workforce was female. And when Helen Holcombe joined the Boeing drafting department in 1922, she become a pioneer for female engineers.

The diversity of thought, ideas and perspectives among our employees has also helped define how Boeing engages with communities.

Seventy years ago, when our factories were operating around the clock to build much needed aircraft for the war effort, another great national need was on the minds of employees. When the opportunity came to present our 1,000th B-29 to the Army Air Force in February 1945, the occasion sparked a spontaneous gesture of pride and generosity in the men and women who built the aircraft at our Wichita, Kansas site. They combined the upcoming commemorative ceremony with their own donations to help eradicate the national polio epidemic. As the plane moved along the assembly line, it began to receive a "coat of money" from workers. By the time it was received for the presentation, those coins and dollars totaled \$10.562, which was directed to the Infantile Paralysis Fund.

Education

Jobs

The desire of employees to make a difference and help others is still a fundamental value in Boeing's culture. It is part of our daily lives, business practices, ethics and leadership training. And is also present in the diverse tools and opportunities we offer employees and their families so they can learn, grow, stay healthy and give back to communities in their own way.

#### Responding to communities in need

Employees no longer tape monetary donations to our aircraft, but for 23 years Boeing has collaborated with airline customers and nonprofits around the world to make the delivery of their new aircraft extra special by filling the cargo compartments with much needed relief, education or medical supplies.

Last year Boeing was able to include employees in our Humanitarian Delivery Flight program by combining our annual Boeing on the Move health and wellness challenge with rewards that employees could direct to "Pack a Plane" for humanitarian relief. During the program employees were able to count their steps on pedometers and track progress. Those who reached their goals were rewarded with well-earned gift cards of \$50 to \$100, but many hundreds of employees found the ability to give that gift away even more rewarding.

In October 2015, the employee-supported delivery took place onboard a new Ethiopian Airlines 777 freighter. The nonprofit partner was <u>Seattle Alliance</u> <u>Outreach</u> (SAO), a charity that helps treat kidney dialysis patients and trains doctors in Ethiopia. All told, Boeing employees donated more than \$100,000 dollars — money that SAO carefully spent to stock a new kidney dialysis clinic in Addis Ababa, Ethiopia.

"For patients, these boxes (and contents) are a shot at life. It's that dramatic." said Richard Solazzi, president of Seattle Alliance Outreach. Seattle Alliance Outreach board members with cargo pallets filled with medical supplies headed to their charity's clinic in Ethiopia. Many of the items were paid for by donations from Boeing employees. (Tim Stake photo)

> Video: Employees pack a plane with humanitarian relief

"I think it was a real great option this year. I don't need a gift card to motivate me. What was a better motivator was knowing that whatever I was doing was helping somebody."

- MICHAEL VILLANUEVA, RENTON EMPLOYEE PARTICIPANT IN "PACK A PLANE" DONATION PROGRAM

First class of Ethiopian dialysis nurses receiving training in chronic peritoneal dialysis (PD). These Ethiopian nurses are part of the team that is for the very first time bringing chronic PD to their country. (Seattle Alliance Outreach photo)





Environment





In Southern California, an ECF grant helped support the National Search Dog Foundation, which rescues and trains dogs, and partners them with firefighters and other first responders to help during disasters.

#### "The ECF allows Boeing teammates to help those in need more effectively than we could on our own. Through ECF, we are able to support our local community beyond simply volunteering time, and we are able to combine our charitable contributions for greater impact."

– DOREEN BURRELL, LIAISON ENGINEER, ECF BOARD PRESIDENT, BOEING SOUTH CAROLINA

Boeing retiree Bill Lee volunteered with the American Red Cross to help set up emergency shelters and deliver food to those affected by devastating wildfires in Washington state. In addition to employee giving, Boeing retirees often remain active in our communities and stay connected through groups called "Bluebills." Boeing retirees and their spouses who don't work for paychecks anymore — except the kind of payoff that rewards with a warm glow of satisfaction work on projects that are making our communities better places to live.

In summer 2015, eastern and central Washington state experienced the largest outbreak of wildfires in state history. Tragically, the fires claimed the lives of three firefighters, destroyed homes and structures, and scorched hundreds of thousands of acres. Boeing retiree Bill Lee was one of the volunteers who helped set up emergency shelters and deliver food to those affected by the wildfires. Boeing's support included a donation plus employee funds that were gift-matched by the company and additional volunteers with Red Cross disaster teams dispatched to the region. An Employees Community Fund (ECF) grant in 2011 had gone toward a Red Cross communication trailer that served as an invaluable tool that was used to relay information on evacuations and power outages for the area.

#### **Pooling resources**

We are strongest when we work together. Boeing's ECF, originally named the Boeing Employees Good Neighbor Fund, has been an ongoing employee organization since 1951, offering members the opportunity to pool their tax deductible contributions and distribute them locally through employee advisory boards. Boeing pays all administrative costs, so every employee dollar goes toward helping their local community. ECF is one of the largest employee owned and managed funds of its kind in the world.

In the Seattle area, the ECF team recognized that homelessness for young people has been a growing crisis. Those who work with homeless youths say the pathway out and off of the streets

Education



is clear: turn around young lives while they are still young — especially by helping provide job skills. To help address this need, the ECF in that area was able to award a grant to <u>FareStart</u>, a regional nonprofit organization that provides culinary job training to homeless and disadvantaged people, including youths.

"The more opportunities youth have to get skills and support early on, the better their chances are of avoiding life patterns that can lead to chronic homelessness," said Megan Karch, CEO of FareStart. "We're thrilled to have the support of Boeing employees for this transformative project."

In Southern California an ECF grant to the <u>National</u> <u>Search Dog Foundation</u> partners rescue dogs with firefighters and other first responders to locate survivors buried in the wreckage of disasters. Once partnered with their handlers, the new canine-firefighter search teams begin an intensive year of training leading up to FEMA certification and begin deployment to serve their communities and the world when called. The ECF in Southern California funded six partnerships with firefighters in Los Angeles, Orange County and Montebello, California.

#### Mentoring and service

Donations are always appreciated, but sometimes giving your time is even more valuable. Chris Miller is an engineer who spends his days coordinating the development of enhanced avionics suites for the F-15 program in St. Louis. But equally important to Miller is the time he spends with students, sharing his love for aviation on a much smaller scale. Miller has created his own mobile flight simulator that he takes to St. Louis area schools where science, technology, engineering Chris Miller, Boeing F-15 Tactical Aircraft Mission Systems engineer, stands in front of his mobile flight simulator at a St. Louisarea school. The Boeing engineer shares his passion for flight with hundreds of students each year.

Video: Mobile flight simulator for local students

"I've never even been on an airplane, so this gives me a chance to experience what being on a plane is like ... I would love to have a career in this."

- THERESA PRATER, ELEMENTARY SCHOOL STUDENT, FERGUSON, MISSOURI

Environment

Boeing employees fuel our ability to bring positive change to communities worldwide. We provide the tools and support for our employees to make valuable contributions to their communities while experiencing opportunities for personal growth.

"I chose to participate in Global Month of Service because it is gratifying to be a part of something that has an immense impact on the health and well-being of our communities."

- AMANDA JANKOWIAK, MESA, ARIZONA, EMPLOYEE



and math education is needed. In doing so, he opens the world of flight to students who otherwise might not get the chance to experience it. "There are no limits," Miller says. "I think they see the technology here, and they get behind the controls — and take control of it ... they can believe in themselves."

For hundreds of Boeing employees, mentoring has become a favorite way to share their skills and experience year-round. In 2015 more than 500 employees guided more than 7,500 students in <u>FIRST</u><sup>®</sup> robotic competitions. Spending time with young people to coach them in engineering and technology brings the added practices of leadership, teamwork, creativity and perseverance to their lives. And each year during <u>National</u> <u>Engineers Week</u>, hundreds of employees visit local schools to demonstrate the science and fun of engineering and how it plays a role in all our lives. Lending professional guidance across the enterprise, our employees have opportunities to assist military veterans with job search and interview skills, or help first-generation college hopefuls with applications and expectations. Additionally, they help guide our college interns who are learning to navigate their career paths. Boeing offers multiple volunteer opportunities and affinity groups for employees to share their passion and experience with eager listeners.

We also join together annually to celebrate and lend our time and energy to celebrate Earth Day, World Environment Day and Global Month of Service. Boeing organizes opportunities for employees and their families and friends around the world to participate in community outreach activities, education events and service projects that help improve local communities.

Education

While the opportunity to strengthen communities is a key reason to get involved in Global Month of Service, Toby Evans, a business and planning analyst in Mesa, Arizona, highlights the added benefits of professional development when serving as a project lead.

Amanda Banik, enterprise Global Month of Service project manager and fleet manager with Boeing Capital Corporation in Renton, Washington, said there are plenty of reasons to get involved, but what she enjoys most is seeing thousands of people around the world unite as "One Boeing" for a common purpose.

"I think one of the great things about Global Month of Service is the ability to work together across businesses, functions and geographic locations to do something meaningful," Banik said.

Boeing has a diverse workforce of more than 160,000 employees around the globe. As we enter our second century, we will continue to strive to be a responsible partner, neighbor and citizen to the diverse communities and customers we serve; promote the health and well-being of Boeing people, their families and our communities; and work to protect the environment that we all share. During Earth Day and World Environment Day in 2015, Boeing employees participated in 178 events in 15 countries.

"This is my first year as a Boeing Global Month of Service Arizona volunteer project lead, and it's tremendously rewarding. The volunteer events are also a great opportunity to interact with Boeing leaders and colleagues as we all work together to give back to our communities."

#### - TOBY EVANS, MESA, ARIZONA, EMPLOYEE

In the United Arab Emirates, Boeing employees and volunteers partnered with Action Care to host 55 orphans during an evening filled with games, drama, art activities, food and gifts during Global Month of Service 2015.





Environment

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Jobs
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Image: We completed firm configuration for the first 777X, the largest, most efficient twin-engine jet in the world, with 12 percent lower fuel consumption and 10 percent lower operating costs than the competition.

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777.8

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celebrate not only our first century of innovation but also the people and moments that

inspire us to "build something better.

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