

2021 Sustainability Report



**NORTHROP
GRUMMAN**

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Message From CEO

Northrop Grumman has always pioneered in the face of the toughest challenges on the planet. Now, that challenge is the planet, and specifically doing our part to secure a sustainable future. Environmental and societal changes globally mean that our responsibilities to defense and national security are ever evolving, and we are utilizing technology to adapt.

Our industry is at an inflection point. There is no question that climate change is a matter of national security, and its impact — severe weather, access to clean water, food insecurity, resource scarcity and population migration — all contribute to destabilization that cannot be ignored. Northrop Grumman stands at the forefront by providing technical and tactical solutions that help us understand, predict and address the dynamic implications that climate change presents to ourselves, our customers and our communities. From our Mission Extension Vehicles that make spacecraft reusable to our Tech for Conservation initiative that pairs our engineers with conservationists in need of technological solutions to unique challenges facing ecosystems, we're working to expand the boundaries of what it means to define possible as a global steward.

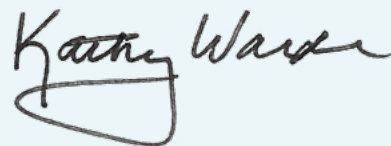
Reducing our carbon, water and waste footprints remain an important part of our strategy. We are announcing a new goal of achieving net zero greenhouse gas emissions by 2035 to do our part in limiting global temperature rise by 2050. In 2021, we expanded our on-site solar opportunities to 15 additional Northrop Grumman campuses, prepared for the fully electric transition of our fleet by investing in dedicated charging stations and drove water conservation measures in drought-prone states, like California, resulting in a 12 million-gallon reduction in water withdrawals. We'll be expanding on these efforts, and many more, throughout 2022 and beyond.

In addition to our focus on the natural environment, Northrop Grumman is also creating a safer, more equitable environment for everyone. This is core to our beliefs and Values. For more than 10 years, we've been recognized as a leader in diversity, equity and inclusion. We take our role in accelerating positive societal impact seriously. Solving the world's greatest problems requires equitable and inclusive environments, which we are seeing grow and thrive within our teams, every day. We are proud to have been named, once again, as one of DiversityInc's Top 50 Companies for Diversity, as well as a top company for veterans, people with disabilities, employee resource groups and executive diversity councils. We were also recognized as one of Equileap's top 25 companies for gender equality on the S&P 500 and as "Best of the Best" in Top Supplier Diversity Programs by U.S. Veterans Magazine.

A vision for a more sustainable future underpins our business strategy. We will continue to be transparent in how we work and report on our progress across areas of our business, including sustainability. Helping us to do that is Mike Witt, who was named to the role of Chief Sustainability Officer. Our entire team of dedicated, Values-driven leaders is helping us meet and exceed the standards of business that we set for ourselves.

While the stakes for the planet and our society have never been higher, we have the talent, technology, purpose and resources to face the challenge and to help create a more sustainable future.

Sincerely,



KATHY J. WARDEN

Chair, Chief Executive Officer and President



Our Company

Northrop Grumman is a technology company, focused on global security and human discovery. Our pioneering solutions equip our customers with capabilities they need to connect, advance and protect the U.S. and its allies. Driven by a shared purpose to solve our customers' toughest problems, our 88,000 employees define possible every day.

We have four operating sectors that comprise our business:

Aeronautics Systems is a leader in the design, development, production, integration, sustainment and modernization of aircraft systems for the U.S. Air Force, the U.S. Navy, other U.S. government agencies and international customers. These aircraft systems support four mission areas: strike; air dominance; battle management and control; and intelligence, surveillance and reconnaissance (ISR).

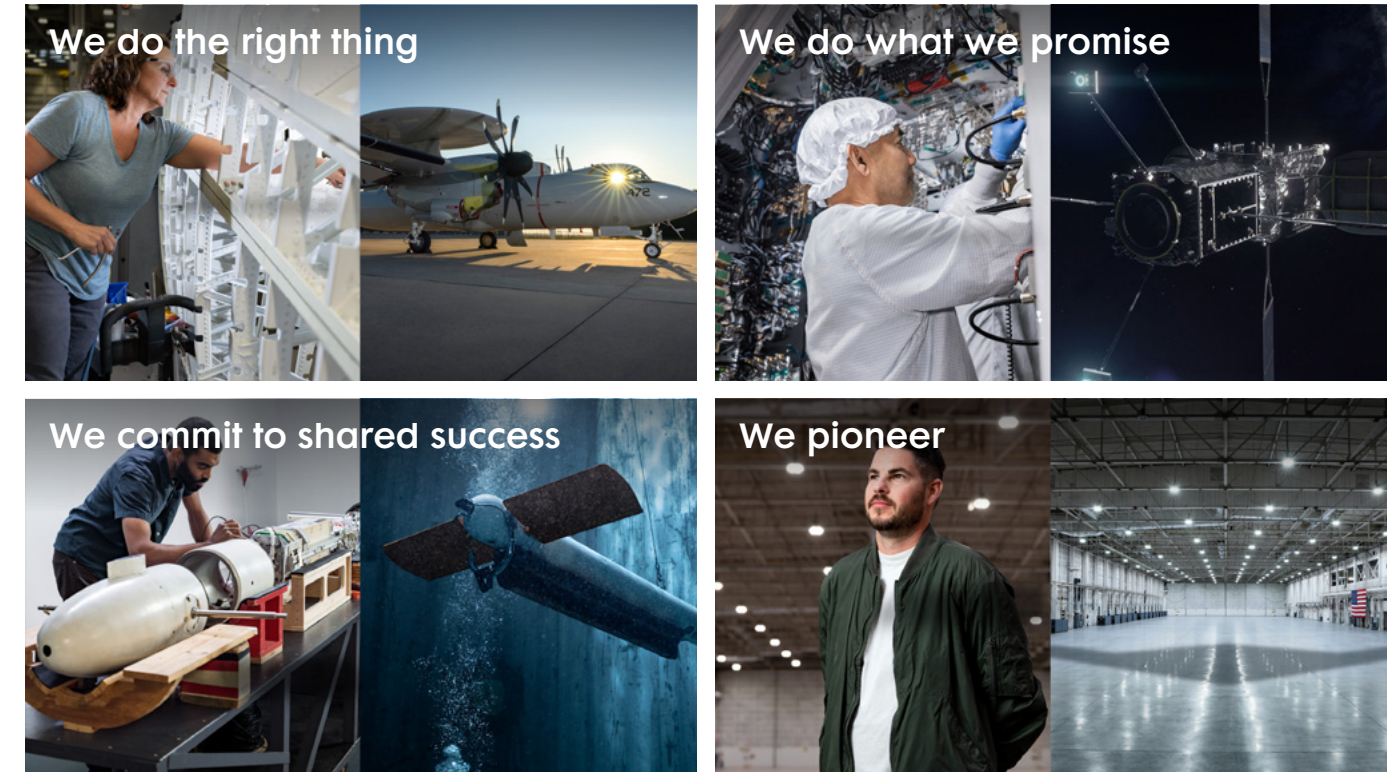
Defense Systems is a leader in the design, development, production, integration, sustainment and modernization of weapon and mission systems for U.S. military and civilian agency customers, and a broad range of international customers. Major products and services include integrated battle management systems, weapons systems and aircraft and mission system sustainment and modernization.

Mission Systems is a leader in advanced mission solutions and multifunction systems, primarily for the U.S. defense and intelligence community and international customers. Major products and services include cyber; command, control, communications and computers, intelligence, surveillance and reconnaissance (C4ISR) systems; radar, electro-optical/infrared (EO/IR) and acoustic sensors; electronic warfare systems; advanced communications and network systems; cyber solutions; intelligence processing systems; navigation; and maritime power, propulsion and payload launch systems.

Space Systems is a leader in delivering end-to-end mission solutions through the design, development, integration, production and operation of space systems, missile defense, launch and strategic missile systems for national security, civil government, commercial and international customers. Major products include satellites and payloads; ground systems; missile defense systems and interceptors; launch vehicles and related propulsion systems.

Our Values

We have a set of Values that are the bedrock of our culture and support our ability to deliver on our shared purpose. And while our purpose reflects what we do and why we exist, our Values reflect who we are and how we behave, reaffirm what is important to us and explicitly state what we should expect from our company and from one another. Our Values are what make our company special.



Our Values are what make our company special.



Non-Financial Performance Metrics

-  Diversity
-  Employee Experience
-  Safety
-  Environmental Sustainability
-  Quality
-  Customer Satisfaction

Sustainability at Northrop Grumman: Our Approach

At Northrop Grumman, we have delivered innovation and leadership to our customers and to the industry for decades and we believe it is our responsibility to provide that same level of sustained value to the people we engage and the planet we help protect.

This means recognizing and managing our company's environmental, social and governance (ESG) impacts responsibly while also harnessing our collective talents, ingenuity and passion to reach beyond our walls to help provide for a sustainable world. As we progress on our sustainability journey, our approach is informed by our various stakeholders — from our customers to our employees to our shareholders to our communities and beyond. Northrop Grumman is a company driven by Values, and our Values guide our approach to sustainability.

NON-FINANCIAL PERFORMANCE METRICS

Our commitment to sustainability and a culture of inclusiveness and integrity is so essential to our business that we incorporate non-financial performance metrics into our annual incentive compensation plan. These metrics — Diversity, Employee Experience, Safety, Environmental Sustainability, Quality, Customer Satisfaction — exhibit our commitment to achieving a high level of ESG performance. This report covers our performance against these metrics, as well as other important ESG metrics and goals that drive our company forward.

ABOUT THIS REPORT

This report follows the Global Reporting Initiative (GRI) Standards, a voluntary framework widely used to promote transparency in ESG reporting. Our GRI Index is available toward the end of this document, located in the [Appendix](#), along with our Sustainability Accounting Standards Board (SASB) Index and ESG Performance Data Matrix. Additionally, we are continuing to build upon our alignment with the recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) by publishing our first TCFD summary report; more details may be found in the [Protecting Our Environment section](#) of this report.

We use the word “material” throughout this report as is consistent with GRI terminology, which states material issues include those that “reflect the organization’s significant economic, environmental and social impacts; or substantively influence the assessments and decisions of stakeholders.” We do not use the term as defined by or in the context of the U.S. Securities and Exchange Commission (SEC) laws including those related to SEC reporting and disclosure obligations, or any other securities laws, or as the term is used in the context of financial statements and financial reporting.

Please visit our [website](#) to read our previous reports, view ESG-related policies, statements and disclosures, and to read the latest news about how our people are using technology as a guiding force for sustainable progress.

SUSTAINABILITY SUCCESS INDICATORS

NET ZERO

Northrop Grumman is committed to achieving net zero greenhouse gas (GHG) emissions in our operations by 2035

\$1.4 BILLION

in capital investment (CapEx)

\$35.7 BILLION

total sales in 2021

25%

female employees

35%

female leadership
(Vice President and above)

\$39.3 MILLION

social value generated from Northrop Grumman, the Northrop Grumman Foundation and our employees

\$1.1 BILLION

in R&D investments

41 MILLION

pounds of waste diverted from landfill

36%

employees of color

18%

people of color in leadership
(Vice President and above)

INDUSTRY RECOGNITIONS

One of DiversityInc's "**Top 50 Companies for Diversity**," as well as a top company for people with disabilities, LGBTQ+, Native American/Pacific Islander, employee resource groups, mentoring, executive diversity councils and ESG

MSCI ESG rating of **AA**

Included on the **Dow Jones Sustainability World Index** and North America Index and named "S&P Global Industry Mover" by S&P Global

Leadership score of **A-** on the 2021 CDP Climate Change disclosure

Achieved a **perfect score** on the CPA-Zicklin Index of Corporate Political Disclosure and Accountability

Achieved a **perfect score** on the Corporate Equality Index and designated as a "Best Place to Work for LGBTQ+ Equality"

Received the **James S. Cogswell Outstanding Industrial Security Achievement Award** at six of our facilities across the country

Designated as a "**High Performing Company**" by Willis Tower Watson for our high levels of employee engagement

Support of 14 **employee resource groups** (ERGs) with more than 25,000 total employee participants

Included on 3BL Media's list of **100 Best Corporate Citizens**

Pioneering Purpose

EXPANDING OUR VISION FOR A SUSTAINABLE WORLD

As we pioneer groundbreaking technologies, we remain committed to protecting natural resources and minimizing our environmental impacts to support a sustainable future. Our ability to proactively manage our footprint and recognize opportunities to improve performance helps ensure that our environmental sustainability strategy is bold, our environmental compliance programs remain effective and that both clearly reflect our company Values.

Protecting Our Environment

We recognize environmental stewardship as a key component of being a responsible corporate citizen. We incorporate environmental sustainability into our business process and operations and prioritize strong environmental management. In 2021, we adopted additional processes to help our employees remain safe amidst the pandemic, while continuing efforts to reduce our environmental footprint, and using our past performance to help shape future goals with sustainability at the forefront.

Non-Financial Performance Metrics



Environmental Sustainability: Reductions in absolute greenhouse gas emissions and potable water consumption, and improvement in solid waste diversion (i.e., waste diverted from landfill disposal)

RESPONDING TO THE EFFECTS OF CLIMATE CHANGE: NET ZERO BY 2035

Decarbonizing our future is a global challenge, and a critical step in mitigating the impacts of climate change on our planet. As a leader in the aerospace and defense industry, we support climate science and the need for society as a whole to limit global temperature rise to 1.5 degrees Celsius and drive global GHG emissions to net zero by 2050, as stated in the Intergovernmental Panel on Climate Change (IPCC) 2018 special report.

Over the past decade, we have taken meaningful action to reduce the carbon footprint of our operations, and we are prepared to do our part to support this global vision. As the next step in our journey to decarbonize, we are committed to achieving net zero GHG emissions in our operations by 2035. As a part of this commitment, we will continue to emphasize efficiency, invest in low and zero carbon energy solutions and incentivize operations-related emissions reductions through the company's non-financial metrics.

We recognize that focusing on GHGs emitted from our operations alone is not all that we can and need to do to support the goal of global net zero emissions, and we are currently in the process of finalizing a sustainability strategy that includes addressing the broader environmental impacts of our operations in the near- and long-term, as well as those of our value chain.

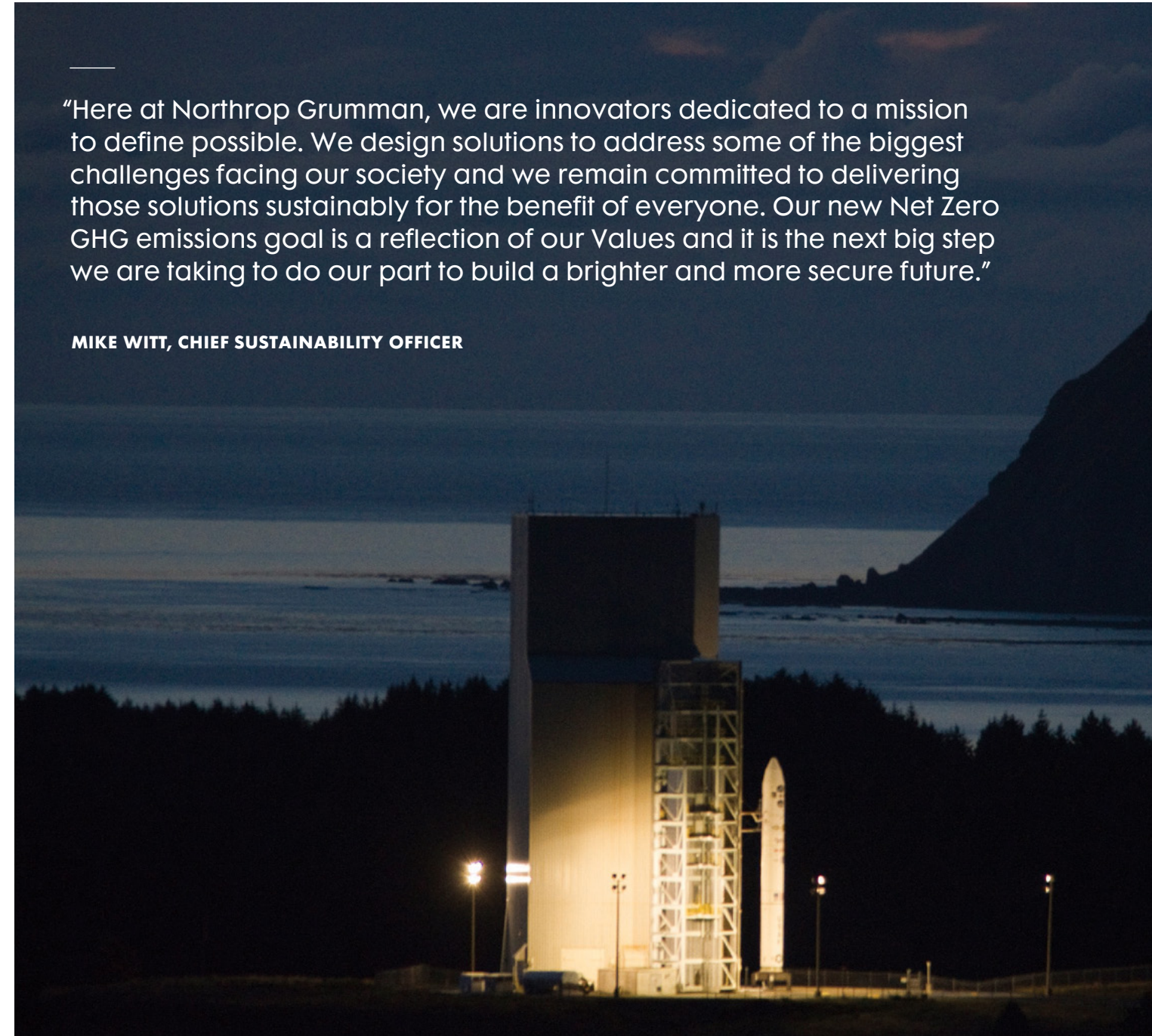
NET ZERO GHG EMISSIONS IN OUR OPERATIONS BY 2035

CLIMATE-RELATED RISK

We are committed to transparency regarding climate-related risk and our risk management processes. In 2021, we began taking additional steps according to the Task Force on Climate-related Financial Disclosures (TCFD) to better reflect the risks and opportunities for our company related to climate change. We will be publishing a summary report in early 2022.

“Here at Northrop Grumman, we are innovators dedicated to a mission to define possible. We design solutions to address some of the biggest challenges facing our society and we remain committed to delivering those solutions sustainably for the benefit of everyone. Our new Net Zero GHG emissions goal is a reflection of our Values and it is the next big step we are taking to do our part to build a brighter and more secure future.”

MIKE WITT, CHIEF SUSTAINABILITY OFFICER



GHG EMISSIONS PROGRESS

We are reporting GHG emissions performance in accordance with the company's goal to achieve net zero operations by 2035. As we undertake activities to meet this commitment, we remain focused on implementing projects that further reduce our emissions, support energy efficiency and improve operational performance.

Our GHG emissions performance over the past two years has fluctuated as a result of the COVID-19 pandemic and our efforts to protect the health of our employees. This year, we saw a 5.2% increase in emissions over 2020

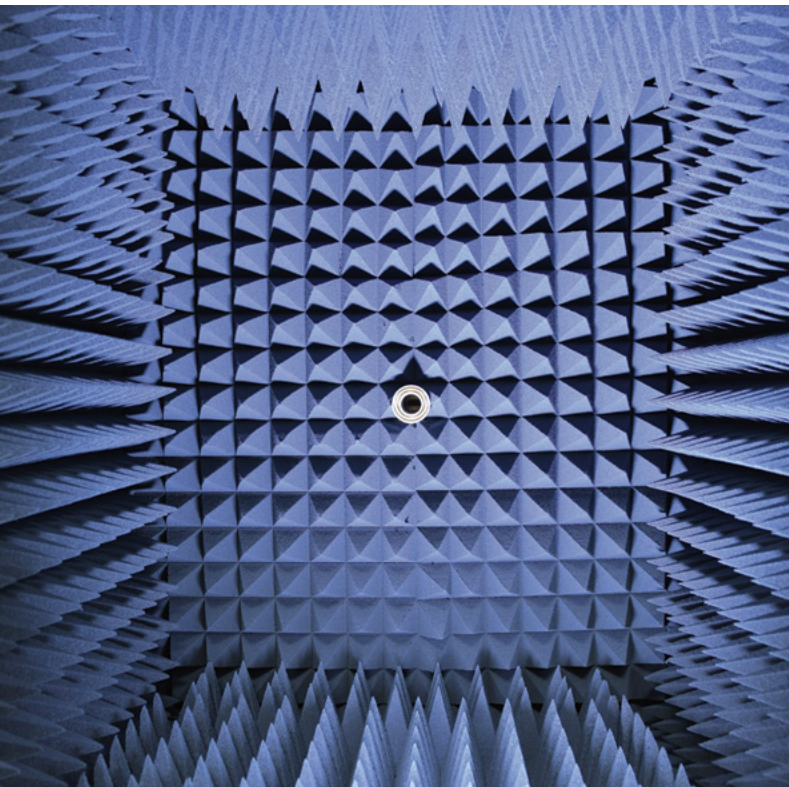
performance. Growth of our real estate and production operations as well as employees returning to onsite work after significant pandemic-driven reductions in 2020 also contributed to the increase in emissions in 2021.

Even with these challenges, we found ways to offset additional emissions increases, such as through lighting retrofits, improvements to data center hardware and a continued focus on building efficiencies. Despite the operational changes experienced this year, we realized a 3.4% decrease in total emissions over our 2019 performance and are positioned to achieve additional emissions reductions as we move through this new goal period.

ENERGY CONSERVATION

Energy conservation is a central tenet of our strategy to reduce climate impact and costs within our operations. We value the input of our stakeholders and have continued to engage an internal energy management committee where participants share best practices and learn about new technologies that can further drive efficiencies. Externally, we have continued our collaboration with the U.S. Environmental Protection Agency (EPA) under the ENERGY STAR Partner program; this includes working with EPA leaders to develop an energy management vision based on ENERGY STAR's guidelines for energy management to support implementation of efficiency measures at our sites.

In 2021 our electricity consumption remained constant compared to 2020 and natural gas usage increased by 12.9%, but we realized a less than 3% increase over 2019 performance for both measures. Similar to overall GHG performance, factors such as our return-to-onsite work initiative and implementation of COVID-19 related operating procedures drove this increase in energy use.



2021 GHG PERFORMANCE HIGHLIGHTS

7,110 MT CO₂e

Implemented 75 GHG and energy reduction projects, expected to reduce 7,110 MT of CO₂e annually

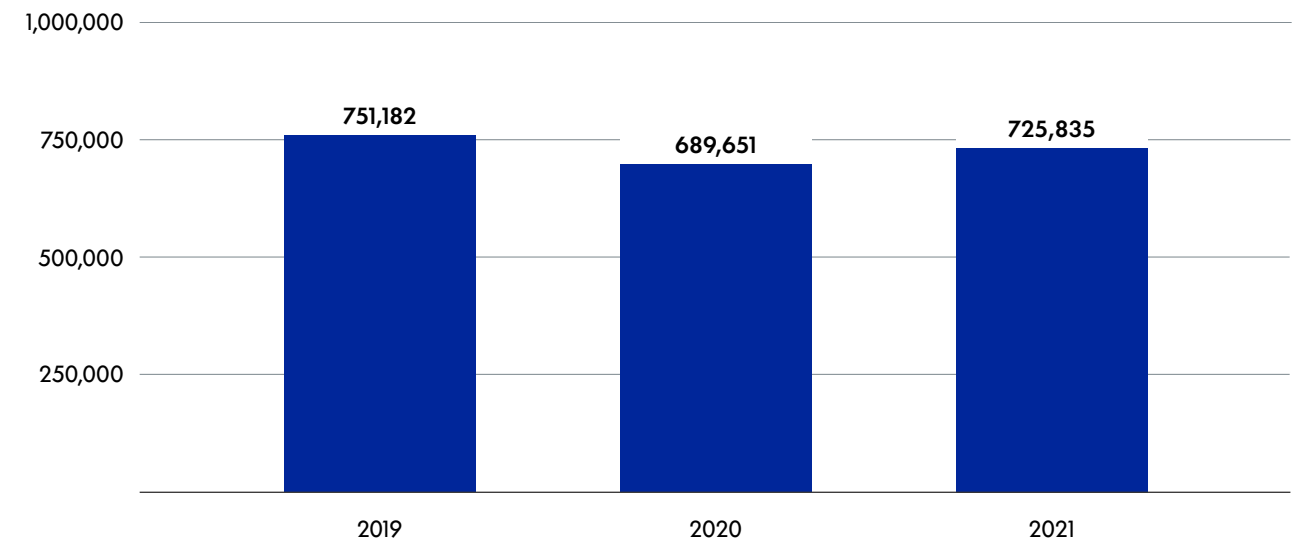
1,200 MT CO₂e

Invested in HVAC equipment upgrades, reducing 1,200 MT CO₂e annually

1,890 MT CO₂e

Completed 36 LED lighting upgrades, reducing 1,890 MT CO₂e annually

SCOPE 1 & SCOPE 2 (TOTAL MTCO₂e)



A detailed breakout of our Scope 1 and Scope 2 emissions as well as renewable energy use and generation are available in our [ESG Data Performance Matrix](#) and our [2021 CDP Climate Change](#) response.



HIGHLIGHT STORY

Harnessing Solar Power at Rolling Meadows, IL

We completed installation of our newest solar power-generating system at our Rolling Meadows, Illinois, site in 2021. The array is the largest onsite solar energy installation at a Northrop Grumman facility to date and joins the company's other solar power initiatives in Florida, California and Virginia. The new system generates 1.1-megawatt alternating current (AC) solar electricity and will reduce an estimated 870 metric tons of carbon dioxide emissions each year — enough to power nearly 100 homes for a year.

EXPANDING RENEWABLE ELECTRICITY OPPORTUNITIES

Investing in clean energy is an important aspect of our climate strategy. We continue to steadily build our portfolio of both onsite and offsite solar projects to support decarbonization. The development process has begun on the 62.5 megawatt solar facility in Orange County, Virginia that Dominion Energy is constructing as a part of our 15-year virtual power purchase agreement (VPPA), signed in 2020. In 2021, we also completed installation of a 1.1 megawatt onsite solar array at our facility in Rolling Meadows, Illinois, and explored onsite solar opportunities with 15 other Northrop Grumman campuses. As a result, we are moving forward with four renewable energy projects in 2022. With these new projects and our Virginia solar facility under construction, we expect our GHG emissions profile will shrink meaningfully in the next two years.

DRIVING TOWARD ZERO EMISSION VEHICLES

Nearly 24% of global carbon emissions from fuel combustion are attributed to the transportation sector, and road vehicles like cars, trucks and buses account for nearly three-quarters of those emissions according to the International Energy Agency.* At Northrop Grumman, we strive to equip our employees with the resources they need to support carbon reduction. Our Electric Vehicle (EV) Workplace Charging Program has become an increasingly important service that we provide for employees, especially as we continue to see demand for electric vehicles rise. In 2021, 529 new drivers enrolled in this program, which is a 32% increase in enrollment since 2020. Three additional sites began

* Tracking Transport 2020." IEA, May 2020, <https://www.iea.org/reports/tracking-transport-2020>.

providing EV charging for employees in 2021, adding a total of 64 new charging connections across the enterprise to accommodate employee demand for this service.

We also know that business and regulatory considerations are pushing our vehicle fleets toward electrification, and we are taking meaningful strides to plan for that shift. Last summer, we brought on a Fellow from Environmental Defense Fund who supported this effort by conducting a study on the opportunities and challenges associated with electrifying our fleet, particularly focusing on market drivers, infrastructure planning and acquisition models. We have already begun preparing for the zero-emission vehicle transition of our fleet by investing in dedicated fleet charging stations. This includes the purchase of our first level 3 charging station that is designed to rapidly charge any EV up to and including a Class 8 tractor. For more information on steps we are taking to reduce our upstream transportation emissions, please see the [Transportation and Logistics section](#).

ENVIRONMENTAL & EFFICIENCY PROGRAM

To advance efficiency and environmental conservation across Northrop Grumman, we employ a centralized investment mechanism to allocate additional, targeted capital funding. Through our environmental and efficiency (E&E) allocated capital, we solicit project ideas from across the company and fund impactful projects that drive efficiency and performance to our goals. In 2021, the E&E allocation totaled \$1 million and was distributed across six projects focused on driving water conservation in water-stressed regions, like California, reducing 12 million gallons of water withdrawals annually. We will continue to grow this investment in 2022 to incentivize and encourage innovations and operational efficiencies that support environmental sustainability.



ENVIRONMENTAL MANAGEMENT

Sound environmental management and a commitment to environmental sustainability are critical components of our company culture. At Northrop Grumman, our environmental, health and safety (EHS) policy and associated procedures help to maintain compliance and reduce EHS risk while driving for continual improvement. At the same time, our subject matter experts execute environmental programs that lessen our environmental risks to help ensure that we remain compliant with applicable laws, regulations and company-established directives.

Navigating the complex and evolving nature of environmental management requires both a stalwart foundation as well as the flexibility to adapt to emerging issues.



At Northrop Grumman, we take a multi-pronged approach to responsible management of our environmental impacts.

Program Execution

We position our EHS professionals at all levels of the company to manage and support our environmental programs. These professionals are responsible for executing site-level compliance activities, implementing key projects, conducting compliance reviews, maintaining EHS management systems, tracking our performance against established goals and targets and engaging with internal and external stakeholders. The work these individuals perform and facilitate is critical to the implementation and success of our environmental programs at Northrop Grumman.

Compliance Assurance

We conduct site-level EHS compliance reviews to help evaluate how key fundamentals of our environmental programs are being successfully integrated into day-to-day operations. In 2021, we largely resumed in-person reviews, although some were completed with a hybrid in-person/virtual approach to accommodate the ongoing challenges presented by the COVID-19 pandemic. In total, we conducted reviews at 30 of our sites, which account for roughly 36% of the sites included in this program.

EHS Management Systems

We maintain an internal EHS Management System (EHSMS) requirement, which is a pillar of our compliance program. We base our EHSMS on International Organization for Standardization (ISO) 14001, and we require the implementation and maintenance of a management system for our sites that actively manages complex or specific EHS risk. In addition, currently 22 of our sites hold an external environmental certification, such as ISO 14001. These sites account for approximately 24% of our global footprint.

Stakeholder Engagement

We implement training and educational campaigns to help ensure employees are aware of and understand job-specific requirements and company environmental priorities. We also engage with external stakeholders including regulatory agencies, industry organizations, peers and our local communities. Interacting with these stakeholders allows us to share insights on industry-wide issues, benchmark our performance and gather feedback to inform our environmental priorities.

It is the policy of Northrop Grumman to conduct operations in a manner that is environmentally responsible and is focused on protecting the health and safety of employees, contractors, visitors and surrounding community.



Environmental Sustainability

Operating our business sustainably is both a global imperative and central to our Values. We have taken significant steps over the last decade to markedly reduce the environmental impacts of our operations, focusing heavily on GHG emissions, water usage and waste streams.

We worked diligently toward our environmental goals in 2021 and improved employee awareness of our environmental priorities. We continued to report our environmental progress, and to hold ourselves accountable through our non-financial performance metrics for the environment. In 2021, we focused on setting our next-generation goals and achieving long-term cost savings through consistent investment in our sites. As we prepare for the next phase of our journey, we will maintain our commitment to transparency on our foundational environmental metrics.

RESOURCE EFFICIENCY

Water

We recognize the importance of water for our operations and within our communities, so we remain committed to using this critical resource efficiently. Within our facilities, we remain focused on minimizing water withdrawal through the implementation of efficiency projects and consistent tracking of our consumption patterns. Our sites withdraw water primarily from municipal and groundwater supplies, with some surface water consumption from rivers and rainwater capture systems. We mainly use our water withdrawals to support building evaporative cooling and humidification and manufacturing processes, as well as traditional domestic water uses. Our operations do not use seawater or produced water sources, and any wastewater discharges from our operations flow through onsite wastewater treatment plants or directly to municipal sanitary sewers; all adhere to local regulatory and/or permit requirements for quality.

Although we have seen a marginal net increase in water consumption across the enterprise over the past two years, we realized a 7.7% increase in consumption over 2020. This change is largely due to real estate and operational growth, as well as more activity in production operations with water intensive processes. In addition, the benefits of our water conservation efforts this year were offset by an increase in consumption patterns associated with leaks, system inefficiencies and employees returning to onsite work following COVID-19 related onsite reductions experienced in 2020.

2021 HIGHLIGHTS

6.4M GALLONS

Improved water monitoring and the installation of submeters at three of our sites reduced 6.4 million gallons annually

41M GALLONS

Implemented 28 water conservation projects across the company, conserving over 41 million gallons annually

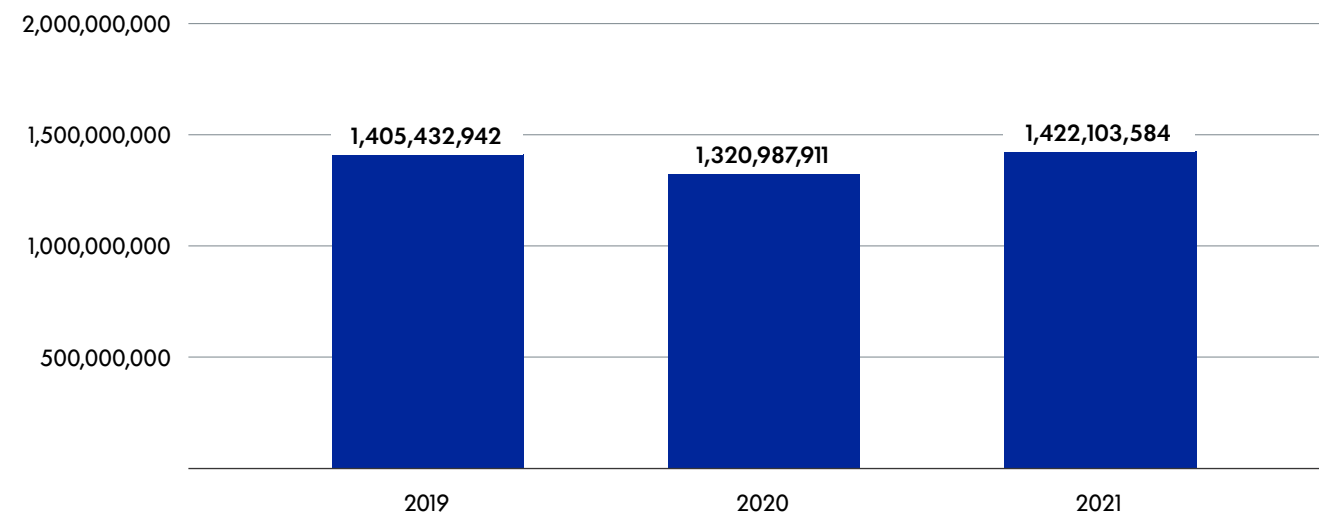
18M GALLONS

Converted a complete chiller system with 14 hydraulic units into a single pass cooling system at our site in Radford, Virginia, conserving 18 million gallons of water and saving \$140,000 in operational costs annually

5.6M GALLONS

Completed upgrades to an industrial wastewater process at our site in Baltimore, Maryland, estimated to conserve 5.6 million gallons of potable water annually

TOTAL WATER WITHDRAWALS (IN GALLONS)



2021 HIGHLIGHTS

829,557 LBS

Implemented 28 solid waste projects across the company, estimated to divert 829,557 pounds from landfill annually

25,000 LBS

Implemented an aluminum powder recovery program at a site in West Virginia, estimated to divert 25,000 pounds of waste from landfill annually

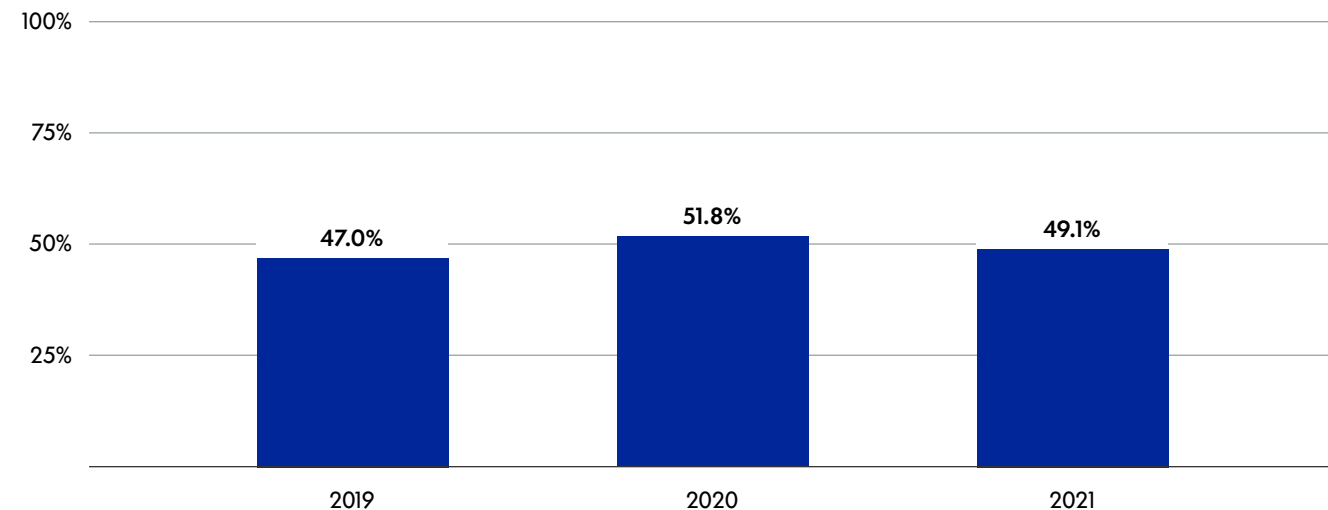
62,000 LBS

Implemented composting programs at four new sites, estimated to divert 62,000 pounds from landfill annually

160,000 LBS

Introduced a waste oil recycling program at our site in Sunnyvale, California, that will reduce waste by 160,000 pounds annually

SOLID WASTE DIVERSION FROM LANDFILL



Waste

Northrop Grumman understands that decreasing waste and increasing efficiency are key to a sustainable business. As a foundation, we ensure the solid and hazardous waste generated within our operations is responsibly managed from point of generation to final disposition and done so in compliance with all applicable legal requirements. We exercise additional due diligence with our hazardous waste streams by maintaining a list of approved treatment, storage and disposal facilities for our approved waste haulers to use.

We realized long-term sustained waste diversion for the company by implementing various waste initiatives. In 2021, our waste diversion efforts focused on implementing projects related to source reduction, material recovery, recycling, composting, material reuse and donations. This year, we completed several successful projects and saw progress at many of our sites. We achieved a 49.1% diversion rate of waste to landfill, which is a slight decrease compared to last year. An increase in our manufacturing program activity and an increase in the number of employees returning to onsite work following the pandemic-induced reductions of 2020 have been the primary drivers impacting waste generation in some of our key operations.

Our waste diversion efforts focus on projects related to source reduction, material recovery, recycling, composting, material reuse and donations.



HIGHLIGHT STORY

Using Simple Changes to Reduce Waste

Northrop Grumman's supply chain and operations team at our Allegany Ballistics Laboratory (ABL) facility in Rocket Center, West Virginia, began evaluating areas with high material costs to reduce onsite consumable material expenses. The previous composite resin process was consuming approximately 7,000, two-gallon steel paint cans annually for mixing composite resin used to produce composite rocket motor cases. We tasked a team of site engineers with identifying alternatives to reduce this annual cost of \$200,000.

The team came up with the idea of using a reusable stainless steel container — an 8-quart pot from a restaurant — and successfully implemented it in production operations. The process change was added in April 2021. It is a cost-savings measure, and will reduce 4.5 tons of solid waste from going to landfills annually. This project is a great example how a single team can make a meaningful impact.



Environmental Remediation at Our Legacy Sites

Northrop Grumman is committed to addressing its environmental remediation obligations safely and effectively, in close coordination with federal, state and local regulators and stakeholders, and in accordance with scientifically sound and technologically proven approaches. We dedicate most of our remedial efforts to legacy sites where manufacturing operations have long since ceased. We deploy innovative technologies as alternatives to traditional resource-intensive remediation practices to reduce environmental disturbances, lower energy use and accelerate remedial efforts, returning property to beneficial use. In 2021, we remained committed to meeting our annual planned remediation obligations and were able to close out some key projects.

Bethpage, New York: Former U.S. Navy/Grumman Facilities

We have been engaged in extensive remediation activities related to historic operations at the former U.S. Navy and Grumman facilities in Bethpage, New York. Among other environmental efforts, Northrop Grumman has reached an agreement with the State of New York, for the company, in partnership with the State, to take additional measures to implement the Bethpage amended groundwater remedy, make payments to benefit water districts and other public water supply and restoration projects, and resolve claims for natural resource damages. The additional measures will complement the work that we understand the Navy has agreed to undertake, and further benefit the citizens of Bethpage and surrounding communities and the local water districts. The agreement builds on the company's long-standing partnership with the State and exhaustive work over the past 25 years to understand and remediate contamination. We look forward to the State obtaining final court approval of the agreement and proceeding with the work.

Among the numerous environmental activities we have undertaken, we have used electric heated in-situ thermal remediation there, effectively avoiding many of the waste streams that would have been generated with a more traditional process. This remediation technology is an "in-ground" application, which means the treatment was performed without emitting contaminants into the atmosphere.

It also allowed volumes of soil to be left in place, avoiding the need to transfer soil to an offsite treatment and landfill facility and lessening community disruption. The in-situ thermal remediation technology is effectively treating groundwater, exceeding the State of New York's clean-up objectives. Furthermore, we reinjected the groundwater from this treatment process into the soil, avoiding an additional waste stream. For additional updates on the activities at Bethpage, please visit our [Community Spotlight: Bethpage webpage](#).

Eastern Ohio: Former Waste Disposal Site

Northrop Grumman is addressing waste and soil contamination at Zeidrich, a 45-acre legacy site in Eastern Ohio. Historical operations included decades of industrial waste disposal containing polychlorinated biphenyls, mercury, volatile organic compounds and other contaminants. In 2021, Northrop Grumman excavated and removed approximately 40,000 tons of waste materials and soil materials from the site. We performed the work in coordination with federal, state and local government regulatory authorities and the local community. Our work focused on protecting adjacent wetlands and other ecological features. Upon completion of restoration efforts in early 2022, the site will be positioned for unrestricted use in the future.

Southwestern Nebraska: Former Capacitor Manufacturing Site

Northrop Grumman received the state of Nebraska's approval to permanently shut off and decommission the water treatment plant at the site after 25 years of operation. The water treatment plant addressed groundwater contamination spanning 1.5 miles, treating 80 million gallons of groundwater annually. Additional remediation technologies supplemented groundwater treatment such as soil vapor extraction and in-situ bioremediation and chemical oxidation injections that significantly reduced groundwater contamination concentrations over time. Northrop Grumman performed the decommissioning work in coordination with state and local government authorities and the local community. The aquifer has been restored to the extent that no further remediation is required.

Pioneering Innovation



DRIVING THE INTERSECTION OF SUSTAINABILITY & TECHNOLOGY

At Northrop Grumman, we develop emerging technologies that “Define Possible.” We take on some of the greatest challenges and continuously improve our systems to deliver the highest quality products and capabilities to our customers.





Product Strategy & Innovation

Our teams pioneer new technologies and areas of research that will connect, advance and protect humanity. Our engineers incorporate some of the newest technologies with proven best practices to deliver industry-leading technologies and innovative solutions. Adapted trainings enable our engineers to assess the impact of decisions on the overall systems during every stage of the development process.

Experience and dedication to continuous improvement helps us develop our best practices and efficiently design and deliver the solutions for our customers. Our processes emphasize our stakeholder needs, mission objectives, operating environment and technological capabilities.

As we push the boundaries of possible, our teams continually find innovative ways to support progress. From observations to decision support, Northrop Grumman develops and operates systems and services to deliver environmental intelligence through science, sensors, and enterprise services. From weather and climate monitoring, to improving energy efficiency through the use of unmanned air vehicles, to partnering with universities and organizations to develop the energy solutions of tomorrow, we are doing our part to create the technology for a sustainable future.

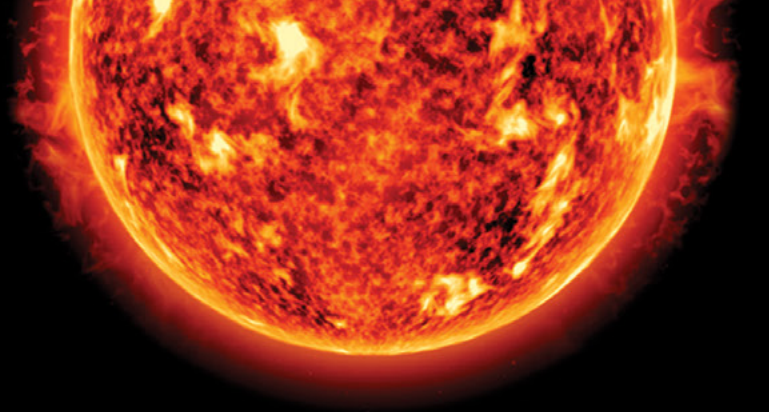
PROGRAM QUALITY & ENGINEERING

An enduring commitment to quality is reflected in our culture and systems. Our Quality Management Policy requires our sites to implement a Quality Management System (QMS) consistent with either ISO 9001 or the aerospace industry-specific AS9100 standards, as appropriate. Leadership and quality professionals curate quality management policies, report on metrics and share best practices on a quarterly basis.

We highlight the achievements of employees who demonstrate a dedication to quality during our annual Quality Month celebration in October. Despite the continued challenges of the COVID-19 pandemic, we hosted a safe and successful Quality Symposium in 2021 with the theme, "Unshakable Focus on Quality." The event highlighted exemplary quality leaders and quality in the age of digital transformation.

Our customers need our products to work, every time.

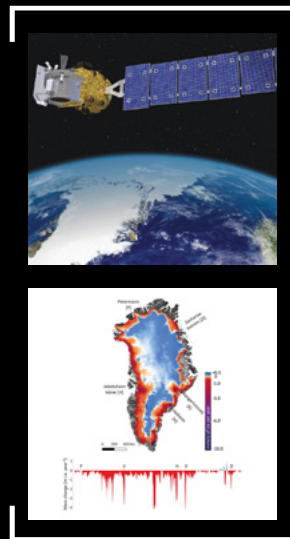
Seven Decades of Studying Earth & Its Star



For over 60 years, Northrop Grumman has built spacecraft that contribute to our understanding of the natural world, from catastrophic weather events to pollution to the impacts of climate change. The missions listed here showcase our technological innovation in space, as well as the information that these spacecraft provide that is essential to understanding more about our world and its place in the solar system.

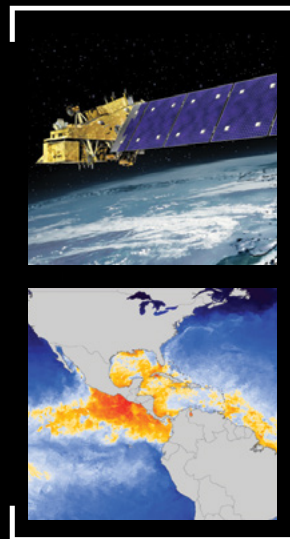
Understanding Climate Change

ICESAT-2 measures the height of the polar ice in order to estimate the total volume of ice — a key indicator of climate change. OCO-2 monitors atmospheric carbon dioxide, the leading human-produced greenhouse gas.



Monitoring the Weather

Coriolis measures ocean surface wind speed and direction. JPSS 2, 3, and 4 will provide global environmental data for weather prediction models and scientific data for climate monitoring.



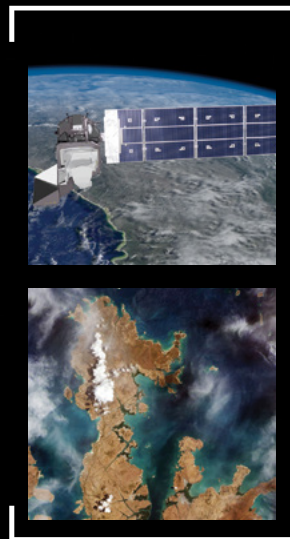
Researching the Oceans

Aqua focuses on the Earth's water cycle, including interrelated processes in the atmosphere, oceans, and land. OrbView-2 provided data on the global ocean bio-optic properties.



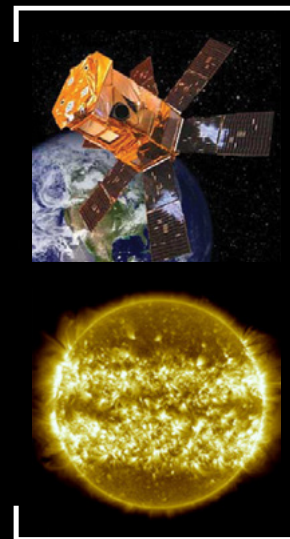
Evaluating Land Changes

Landsat 4, 5, 8, and 9 and EO-1 collect multispectral and hyperspectral imagery to measure changes on the global land surface and identify human and natural causes of change.



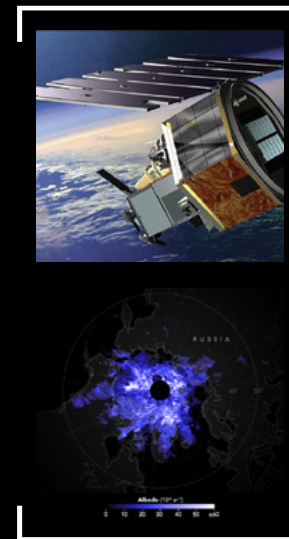
Studying Our Sun

SORCE measured the total radiation from the sun to evaluate its effects on climate change. ICON explores the ionosphere to understand the physical connection between our world and the sun.



Investigating Atmospheric Dynamics

Aura, a follow-on to the successful UARS mission, measures global sources of trace atmospheric constituents. AIM observes noctilucent clouds which are very sensitive to atmospheric conditions.



Spacecraft Missions

1950s
Explorer 6

1970s
ISEE 3

1980s
SMM
Landsat 4
Landsat 5

1990s
POGS
ISES
UARS
TOPEX
OrbView-1
METEOR
TOMS-EP
Orbview-2
FORMOSAT 1
KOMPSAT 1
ACRIMSAT

2000s
EO-1
RHESI
Aqua
Coriolis
SORCE
Aura
FORMOSAT 3
THEMIS
AIM
C/NOFS
IBEX
OCO-2

2010s
Landsat 8
ICESat 2
ICON

2020s
Landsat-9
JPSS



CUSTOMER SATISFACTION & QUALITY METRICS

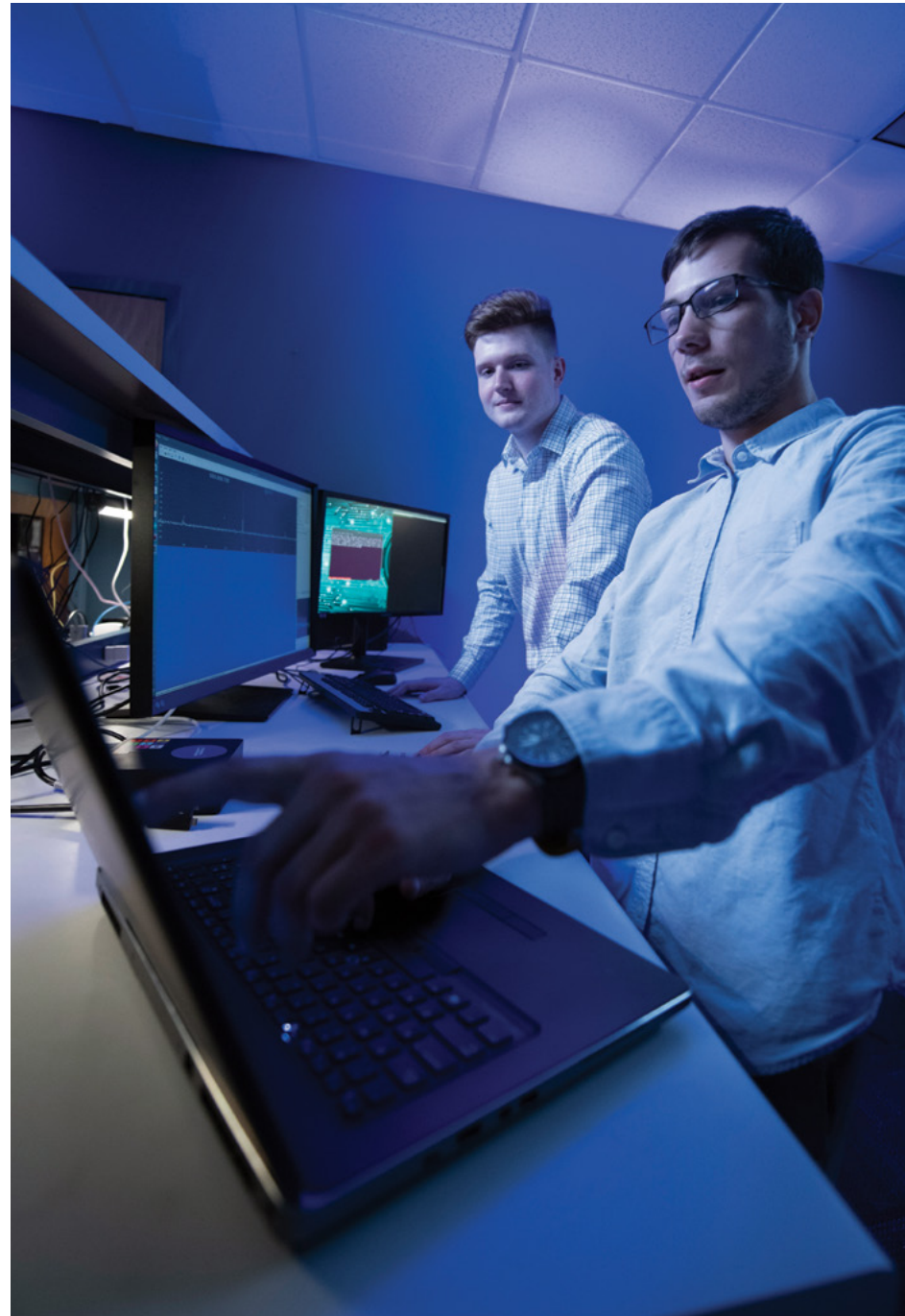
We are continuously analyzing ways to perform for our customers and move forward together. Customer satisfaction is crucial to our continued success, and we hold ourselves accountable for quality performance excellence. Our programs, quality and engineering (PQE) team oversees our performance in these key areas and implements strategic initiatives to support our programs.

Our corporate leadership reviews customer satisfaction and quality metrics on a monthly basis to ensure we remain mission driven. We supply additional oversight and resources to programs that do not meet performance expectations. We also provide teams with guidance on developing and executing a “return to green” plan, corporate engagement with partners and suppliers, and regular meetings between corporate executives and program leaders.

We are proud to report that we exceeded our quality and customer satisfaction targets in 2021.

Non-Financial Performance Metrics

-  **Customer Satisfaction:** Customer feedback, including customer-generated performance scores, award fees and verbal and written feedback
-  **Quality:** Program-specific objectives, including defect rates, process quality, supplier quality, planning quality or other appropriate criteria for program type and phase



HIGHLIGHT STORY

Recognizing World Class Innovation

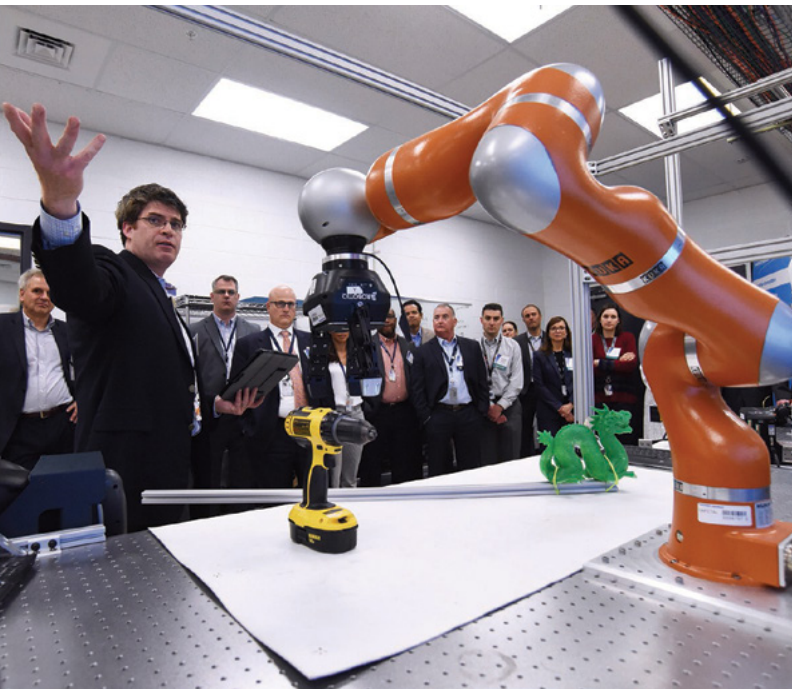
Each year Northrop Grumman recognizes standout teams through the Excellence Awards and the Simon Ramo Awards for Systems Engineering Excellence, the company’s highest honors. In 2021, we recognized fourteen teams for their extraordinary performance and contributions to the company. Harnessing the power of tools like digital engineering, artificial intelligence (AI), and Agile frameworks, these diverse teams are demonstrating extraordinary innovation. See more information on two of our award-winning teams below:

Systems Engineering Excellence Award: Dogfish Program

The Dogfish team pioneered the development of a suite of processing algorithms and an open architecture with first time on-orbit demonstrations of capability that support Northrop Grumman leadership in systems engineering and artificial intelligence/machine learning technology. The developing technology is setting the foundation for our processing building block approach and incorporating more open architecture standards, working in collaboration with government and industry to reduce development cost and increase speed to delivery for on-board space processing applications.

Excellence Award: Mosquito Team

To design and manufacture a prototype of the United Kingdom’s first uncrewed fighter aircraft, the joint United States and United Kingdom Mosquito Team incorporated digital engineering, scaled Agile framework and model-based systems engineering. In Phase 2 of the program, the interdisciplinary team will be working to rapidly mature the design and manufacture a working technology demonstrator.



HIGHLIGHT STORY

Cultivating Intellectual Property

Northrop Grumman is an industry leader in developing and deploying critical intellectual property. In 2021 we adopted a Patent Ambassador program. Patent Ambassadors motivate and assist employees with the development and submission of their ideas into our invention disclosure tool. Through this tool, invention authors receive credit and recognition for their invention disclosures, as well as other qualitative benefits and monetary rewards. Through this added incentive, we encourage growth and development of our employees as we foster an innovative culture and spirit across Northrop Grumman.

PRODUCT SAFETY

Northrop Grumman helps protect our customers by providing safe, reliable and quality systems. Our processes include our QMS, corporate systems engineering policy and individual program system safety plans.

We address a variety of potential hazard sources — including hardware, software, environmental and organizational — through individualized system safety plans for each program. These safety systems also apply to our partners and suppliers to help ensure safety performance throughout our value chain.

Our team of experienced safety engineers oversees these programs and applies industry best practices to identify, analyze and manage risk. The engineers track safety risks, provide oversight when they conduct hazard analyses on programs, ensure compliance with applicable standards and work closely with customer and regulatory safety personnel to communicate and address any residual risks.

Assessing Airworthiness

Airworthiness continues to be an integral aspect of product safety for the air systems' hardware and software, produced, procured, managed and sustained by our teams. In 2021, Northrop Grumman published the CO-AWI00 "Airworthiness Enterprise Governing Procedure" that empowered an airworthiness lead department to oversee cross-department compliance to military/civil airworthiness regulations.

We are embracing the digital transformation of airworthiness, evolving to a model-based approach and a digital certification database that is integrated into a common enterprise-wide platform. This helps us to stay aligned with customers' expectations for modern and agile airworthiness compliance. Northrop Grumman is

also leading industry airworthiness training and education standardization with the development of standards through the Aerospace Industries Association. In 2021, no new military or civilian airworthiness directives, bulletins or similar had an impact on production deliveries.

USHERING IN A DIGITAL TRANSFORMATION

As the defense industry undergoes a digital transformation, Northrop Grumman is looking to lead the way, designing, testing and deploying our systems faster to meet the evolving needs and expectations of our customers. Our Corporate Operations Council (COC), made up of vice presidents representing each business unit, provides governance strategies to initiate change across the company. In 2021, our COC continued to focus on the digital transformation of our processes across all departments, working closely with a newly established Digital Transformation Office (DTO). The DTO is responsible for accelerating adoption of digital integrated capabilities and culture in all aspects of how we do business. Our success as a partner in digital transformation builds on our expertise in digital engineering, Development Security and Operations (DevSecOps), artificial intelligence/machine learning, advanced manufacturing open architecture woven with Lean-Agile methodologies.

At Northrop Grumman, Lean and Six Sigma are foundational pillars for sustainable performance and continuous improvement. Our Lean-Agile Centers of Excellence continue to build upon the progress made previously in adopting Agile system development techniques and mindsets. Our continued focus on Agile systems is reducing bureaucracy and enabling continuous improvement in quality throughout our business. Our Lean-Agile framework supports \$20 billion in our business pipeline and we have invested over 90,000 hours in training

5,300 people during 2021. Our efforts supported our domestic and international portfolios, and we held our first international Lean-Agile Practitioners' Summit.

We continue to train and communicate with employees about digital transformation and Agile system development, increasing adoption and awareness across our departments. Northrop Grumman is continuing to embed Agile into our culture with long-term Agile career paths and a digital Agile ecosystem.



HIGHLIGHT STORY

Defining Possible: James Webb Space Telescope

With the launch of NASA's James Webb Space Telescope (Webb) on Dec. 25, 2021, Northrop Grumman is making the once unimaginable a reality. NASA's flagship observatory will usher in a new era of scientific discovery and will help advance humanity's quest to answer compelling questions such as, "How did the universe begin?" or "When were the first stars and galaxies created?" or "How do planets form?" and "Are we alone?" Webb is a one-of-a-kind scientific instrument incorporating innovative design, advanced technology and groundbreaking engineering.

One hundred times more powerful than its predecessor, the Hubble Telescope, Webb will expand our understanding of the universe, rewrite textbooks and inspire future generations of engineers and scientists. As the prime industry lead on Webb, Northrop Grumman employees used their talent, ingenuity, drive and commitment to undertake this remarkable feat. Building Webb was an international endeavor spanning more than 20 years, 14 countries, 29 U.S. states and over 300 companies, universities and organizations. Thousands of engineers, scientists and technicians from around the world dedicated millions of hours to develop, design, build and launch Webb into space.

The flagship observatory traveled one million miles away from Earth and is positioned to peer back over 13.5 billion years to study how the first galaxies formed after the Big Bang. It will examine unexplored planets that orbit distant stars. In developing the most powerful and complex space observatory ever built, our engineers pushed the limits of technology and developed ten new inventions for the telescope, including revolutionary optics, detectors and thermal control systems that will also help improve life on Earth and support future astronomical endeavors.

Although the telescope has left the Northrop Grumman facility and the earth itself, we eagerly await the discoveries it will make over the coming years. Webb's road to launch has been a poignant moment for our mission to define possible.





INNOVATING RESEARCH & DEVELOPMENT

Northrop Grumman innovation transforms the impossible into reality. Through the integration of emerging technologies into our already proven systems and services, we're ensuring continued success of the most complex missions our nation and its allies will face going forward. We strategically invest in Research and Development (R&D) to create cutting edge technologies. The current company-sponsored R&D investment is \$1.1 billion annually. Our workforce culture encourages exploration and experimentation.

Our R&D portfolio empowers Northrop Grumman technologists and researchers to deploy innovations within and across each of our business departments. Northrop Grumman's company-wide approach to R&D management has fostered a culture driven by data to lead decision making across our technology investments. It also allows our departments to gain new insights into the nature, direction and technology of our R&D portfolio.

The Northrop Grumman Corporate Technology Council, and our department-level technology, strategy and functional offices, work together to identify and support enterprise campaigns and investment focus areas that define success for our customers' most critical missions.

Responsible Artificial Intelligence (AI)

AI is fundamentally changing the way we work and the way our solutions perform. AI presents us with an opportunity to harness advanced technologies to enhance performance for next-generation mission solutions. With that opportunity comes the responsibility to develop our AI products and systems ethically and securely. In 2021, we worked with government and trade organizations as well

as industry and academic partners to build policies for implementing responsible AI and to refine our approach to AI development, testing and operations. This is to help us continue to meet the highest ethical standards and expectations set by our values and our customers.

Looking to the future, operationalizing AI in a responsible way is of utmost importance. We recognize the unique opportunity that AI presents to enable our products and systems to perform at unprecedented levels, and continually adapt to the fast-evolving environment around them. As we continue to push the boundaries of AI development and integrate it into our business, our top priority will continue to be delivering this technology to our customers in a safe, effective and ethical way.

For more information, please visit our [AI Ethics website](#).

University Research Systems

We build and foster new relationships with our university partners to help prepare for the future. These strategic partnerships shape the curricula, critical skills, credentials and research applications that our nation's workforce and our industry need to increase our technological capacity. In 2021, we had research partnerships with more than 30 global universities. As Northrop Grumman grows, we seek to cultivate potential pipelines for talent and create opportunities for our teams to work closely and exchange ideas with both students and academic professionals.

In 2021, we continued to grow our university research programs and enhanced our ability to capture, track and assess data. Our teams that coordinate university research work closely with the recruiting team also to maximize relationships for talent acquisition. As our research interest continues to grow, we expect that universities will remain an integral avenue of R&D.



HIGHLIGHT STORY

Northrop Grumman Invests in Virginia Tech's Innovation Campus

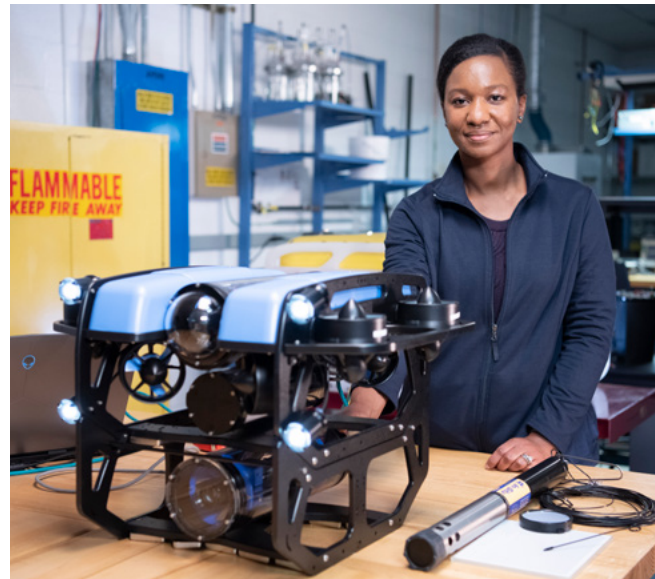
In 2021, Northrop Grumman made a \$12.5 million donation to help establish a new Center of Quantum Architecture and Software Development at Virginia Tech. The Center will advance teaching, research and talent development to support quantum science and engineering. Northrop Grumman's funding will also support programs to engage K-12 students, with a focus on underrepresented groups, to help shape a more inclusive talent pipeline in the high-tech sector.

With this investment, we were one of the first anchor partners in Virginia Tech's Innovation Campus, an ongoing effort to build a diverse generation of engineers, scientists and technologists to drive critical research.

TECHNOLOGY FOR CONSERVATION

Technology for Conservation (T4C) pairs Northrop Grumman engineers with conservation partners to tackle some of the toughest challenges facing ecosystems and wildlife. T4C teams provide guided access to innovative technologies that conservationists need in harsh or remote conditions. These partners gain access to advanced systems suitable for their needs, while our employees get the opportunity to work in an incubator setting to hone and develop their skills in a way that makes a positive impact on the environment and in their communities.

To learn more, please see the [T4C page](#) on our website.



Oyster Monitoring Challenge

T4C teams have successfully deployed, tested and integrated the components of the system for remotely monitoring reef health to support oyster restoration in the Chesapeake Bay. The team's intent is to hand the system over to the conservation partner in 2022.

Partner: Chesapeake Bay Foundation



Turtle Tech

A T4C team is developing sensor data technology that can detect, identify and track sea turtles along the Florida coastline. Turtle Tech aims to field this system in 2022, with self-sustaining support from university partners that can operate, maintain and enhance it.

Partner: Brevard Zoo



Freshwater Co-Benefits Explorer

Software engineering interns developed an online tool to monitor freshwater contributions in rivers and tributaries and analyze the impact of protected areas on water quality. The tool will help stakeholders make informed decisions about land use and protection.

Partner: Conservation International

Leveraging T4C

Northrop Grumman also supports other organizations that leverage technology and innovation for solving conservation issues and provide resources to teach these concepts in the classroom.

Mentoring Student Buoy Builds

In a program sponsored by Northrop Grumman and mentored by T4C team members, James Madison University sophomores are creating self-sustaining buoy platform prototypes with a sensor suite and data acquisition system capable of monitoring oyster reefs and tracking sea turtles. For many of these students, the project is an introduction into engineering principles, design and working with a "customer."

EarthEcho Teaching Resource

T4C teams worked with EarthEcho to develop online STEM coursework and learning resources for middle school teachers to use in their virtual classrooms.

AI Tool for Extinction Prevention

Northrop Grumman is supporting Conservation X Labs by deploying their Sentinel System Artificial Intelligence platform to camera traps in Gorongosa National Park (Mozambique) and Odzala-Kokoua National Park (Democratic Republic of the Congo) for real-time detection of rare, vulnerable or invasive species or poachers.

Pioneering Performance

OPTIMIZING OPERATIONS

The processes, systems and practices that underlie our business operations and sustainability mindset are built on the Values that guide us every day. We ensure that our corporate governance, performance and compliance measures meet or exceed what is required. We apply these standards to our overall ESG strategy and extend them to additional vital areas of operations, from supply chain to resilience to data protection, in ways that reflect our dedication to excellence.

Company Performance

We assess the performance of our company using a comprehensive set of measures important to our shareholders, customers and employees. We consider both financial and non-financial metrics in tracking our progress. Our financial performance metrics include measures of operating margin dollars and rate, net income growth and cash from operations. Since 2010, we have incorporated non-financial performance metrics into our annual incentive compensation program, exhibiting our continued commitment to our environmental, social and governance (ESG) priorities. In 2021, we achieved a score of 130% on our Company Performance Factor. Overall, we met or exceeded our financial and non-financial goals. Comparatively, our scores were 143% in 2020 and 167% in 2019.

Governance

Maintaining the highest standards of corporate governance, ethics, integrity, equity and compliance is core to our culture and our performance. We provide our employees and business partners with the tools and opportunities to speak up, and we empower them to act with integrity in compliance with all ethical and legal responsibilities.

BOARD OF DIRECTORS

The members of Northrop Grumman's Board of Directors (BoD) come from diverse backgrounds, with a wide range of skills and experiences that enhances the overall effectiveness of our board and promotes the interests of our shareholders. As of Dec. 31, 2021, the BoD was composed of 13 directors, 12 of whom are independent.

To help ensure that it operates effectively, adapting to the needs of our company and our changing environment, the BoD conducts annual assessments at each of the full board, committee and individual levels. We believe this is very much a best practice. The lead independent director or the chair of the board's Governance Committee meets with each non-employee director individually to discuss the results of their individual assessment. We require our directors to have a significant financial interest in Northrop Grumman through stock ownership to further align their interests with those of the company's shareholders.

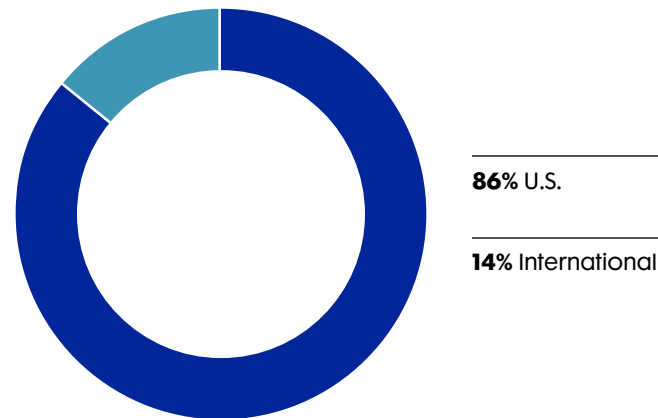
The board regularly holds its meetings at company locations other than our corporate headquarters. These visits provide the directors with a first-hand view of different elements of our business and an opportunity to interact with local management and employees at various levels.

In 2021, the board held ten meetings both in person and virtually, including a meeting focused on reviewing long-term strategy.

RISK OVERSIGHT

The BoD oversees our enterprise risk management and each of our board committees assists in this role, providing its expertise. The board also receives reports on our Enterprise Risk Management Council, which seeks to ensure we have identified and understand the more significant risks facing our business, and that we have effective mitigation measures in place to address them.

2021 REVENUE BREAKDOWN



ANNUAL SALES

\$35.7 BILLION

EMPLOYEES

88,000

SQUARE FEET OF FLOOR SPACE

51 MILLION

BOARD OF DIRECTORS DIVERSITY*

31%

women on the board

23%

people of color on the board

7.7

years of average tenure on the board

* As of Dec. 31, 2021





ESG OVERSIGHT

Our BoD provides strong leadership and oversight for our ESG practices, with regular input from management. For example, the Board's Policy Committee oversees the company's environmental program, including net-zero, water and waste plans; receives updates from the Chief Sustainability Officer; and oversees climate change risks, TCFD evaluations and our annual sustainability report. The Policy Committee also oversees our commitment to human rights and health and safety programs. The Audit and Risk Committee assists the Board in its overall financial and enterprise risk management responsibility, including review of the company's financial risks, as well as risks pertaining to anti-corruption, nuclear, natural, and environmental matters and the company compliance program. The Compensation Committee oversees the Diversity, Equity and Inclusion (DE&I) program, approves DE&I goals and non-financial metrics in compensation, and oversees our approach to human capital risk and talent management. The Compensation Committee receives regular updates from the chief human resources officer and vice president of global corporate responsibility. The Governance Committee oversees our corporate governance; the make-up and effectiveness of our BoD, with a focus on diversity and succession planning; and engagement with our shareholders, including on shareholder proposals.

The full board receives detailed reports from its committees and management, meets with employees across our business and carefully considers the full range of issues that fall within our sustainability program.

To enhance accountability for ESG performance, our corporate non-financial performance metrics influence the annual incentive compensation for Northrop Grumman's senior leaders. Please see the performance criteria listed in the [Company Performance](#) section.

For more information regarding the BoD and the roles and responsibilities of its standing committees, please see our [2022 Proxy Statement](#) and our committee charters on the [Northrop Grumman website](#).

ANNUAL HIGHLIGHTS

- All board committees comprised entirely of independent directors
- Annual election of all directors
- A lead independent director with significant and clearly defined responsibilities
- Majority voting for directors in uncontested elections with a director resignation policy if a director fails to receive a majority of votes cast "for" their election
- Proxy access bylaw provision, providing for eligible shareholders to include their own director nominees in Northrop Grumman's Proxy materials
- Annual board, committee and director self-evaluations
- Ability of shareholders to act by written consent
- Ability of shareholders to call a special meeting
- Ability of shareholders to communicate and meet directly with our management and directors
- Annual advisory vote on executive compensation
- Recoupment policy for incentive compensation
- Stock ownership guidelines for directors and executive officers
- Policy prohibiting hedging, pledging and other specified derivative transactions involving Northrop Grumman stock by directors, executive officers and those receiving performance-based compensation



Compliance

Our strong compliance program, founded in our Values and reaching across our enterprise, enhances our performance and helps to enable our long-term success. Located within the company's law department and reporting directly to the General Counsel, the Northrop Grumman Chief Compliance Officer and his team promote and facilitate a company culture of high integrity and ethics and compliance with all applicable laws, helping us to achieve our strategic goals. The team works closely with functional and operational teams across the company to identify, assess, manage and mitigate compliance and ethics risks and ensures internal controls are effective. Our Chief Compliance Officer chairs the company's Compliance Council, which includes senior representatives from Internal Audit, Human Resources, Finance, the Sustainability Office, Security, Quality, Digital Transformation, Ethics and Global Corporate Responsibility, and all four of our operating sectors.

Among other things, the Compliance Council:

- Provides leadership and guidance on effective and agile internal policies, procedures and processes, helping ensure they are accessible globally to our employee base
- Meets regularly to identify and assess compliance risks, and to evaluate the continued effectiveness of the company's system of policies and procedures, as well as the compliance program itself
- Monitors changes in the regulatory environment and supports effective implementation of new or revised compliance plans to address evolving legal requirements in the U.S. and globally
- Promotes a speak-up and psychologically safe culture (in collaboration with Ethics, Human Resources and other functions) enhancing performance and helping enable employees to report issues without fear of retaliation

- Addresses the potential impact of the pandemic recovery and hybrid working environment on company culture
- Helps to ensure that compliance is well integrated into the company's operations
- Regularly evaluates and adapts the company's compliance program to reflect the changing nature of our business, our long-term objectives, our customers' evolving requirements, our shareholders' interests and the global environment

Integrity and compliance are the responsibility of every employee at Northrop Grumman and we depend on each of our employees to reflect our Values and culture, and to do the right thing, for themselves, their colleagues, our customers and our shareholders. Our internal teams oversee comprehensive policies and procedures, provide resources for clearer guidance and hold employees accountable. These efforts are cross-functional, drawing upon the diverse expertise of subject matter experts to

anticipate and mitigate risks. Our compliance team is dedicated to continuous improvement, working to improve effectiveness and efficiency.

Additionally, we are diligent in assessing third parties such as sales representatives, partners, consultants, suppliers and teammates. We expect our partners to share our commitment to doing business with the highest levels of ethics and integrity, and complying with applicable laws and regulations. As articulated in our [standards of business conduct for suppliers and other trading partners](#), we also require our partners and suppliers to share our commitment to human rights.

2021 HIGHLIGHTS

- Facilitating the global review and translation of company policies and procedures to ensure they are appropriate and enforceable where the company conducts business
- Developing educational awareness modules specific to Northrop Grumman's critical compliance risks complementing the annual ethics training
- Working with Human Resources and Ethics to enhance our global onboarding practices during the pandemic and considering remote working practices
- Substantiating and documenting the company's global compliance with anti-human trafficking laws and regulations
- Updating the annual compliance assessment process for company leaders
- Supporting the launch of the AI ethics working group in conjunction with Northrop Grumman's AI Campaign as well enterprise-wide Digital Transformation initiatives

Ethics & Responsible Business Practices

At Northrop Grumman, ethics factor into our daily work beyond compliance considerations. Doing the right thing is the first of our company Values and central to our overall culture. We count on each employee and business partner around the world to lead with honesty and integrity; doing so together helps us create a work environment where everyone is empowered to speak up, and to perform at the highest standards. This is fundamental to achieving our goals, complying with requirements and consistently delivering excellence to our customers.



Our Ethics team develops and implements our strategy and initiatives to drive an ethical culture throughout our company. We provide our employees with guidelines and resources to both understand and do what is right, make ethical decisions, and support compliance with company policies, procedures and legal requirements. Our ethics are reflected in our Values, the [Standards of Business Conduct](#) and leadership behaviors. These are available in several languages to make them more accessible for our global population. Please see our [Ethics and Business Conduct webpage](#) for more information on our policies and practices.

We maintain full-time ethics directors and advisors at the business unit level to assist in implementing our program and initiatives. In 2021, we realigned our ethics investigators to the business unit level to better manage emerging trends and provide timely and proactive support where it is needed. In addition, we established a Compliance and Ethics Investigations Change Control team to enhance consistency in our ethics investigation processes.

OUR "SPEAK-UP CULTURE"

We are dedicated to ensuring our employees feel safe to speak up, share ideas and challenge how things are done without fear of retaliation. Employees may raise concerns and ask questions through their managers, members of our Human Resources or Law departments, business conduct advisors or the global OpenLine reporting system. We encourage employees to seek guidance on ethics questions and report possible violations of our Standards of Business Conduct, the law or company policy.

ETHICS TRAINING

Our annual ethics training reinforces the company's commitment to ethics and keeps employees informed and updated on our high ethical standards and obligations. Our program begins with ethics onboarding for new employees and requires annual ethics refresher training for all full and part-time employees.

- Ethics training for new employees covers key topics including our standards of business conduct, time and labor charging, business courtesies, conflicts of interest and the revolving door policy. All new hires must complete this training.
- In 2021, we launched an online, interactive ethics refresher training course that connects our company Values to key topics. The course covers our Standards of Business Conduct, social media, time-charging consistency, quality, insider threats, conflicts of interest and ethical decision-making. Printed training materials are made available to manufacturing and production employees who do not have access to a work computer and the training has been translated into Dutch, French, German, Italian and Arabic.

All employees must certify at the completion of the training that they are familiar with and will abide by the Northrop Grumman Standards of Business Conduct. In addition, each year we require our U.S. employees and many of our international employees to certify that they do not have any new or undisclosed conflicts of interest.

More than 99% of our full and part-time employees completed ethics training in 2021.

BUSINESS CONDUCT ADVISORS

Northrop Grumman has more than 130 business conduct advisors (BCAs) located at major company sites around the globe. BCAs are full-time employees nominated and selected for this additional assignment by their leadership and the corporate ethics office because they are well respected and demonstrate high ethical standards. They are key stakeholders in promoting ethics awareness to management and employees, coaching colleagues through ethical dilemmas, raising concerns and potential risks to their departments or the corporate ethics office and responding to questions and concerns from employees.

In 2021, we evaluated the location requirements for BCAs to ensure all employees, including our growing virtual workforce, have proper resources. We also hosted a two-day global virtual workshop for the BCA community with content that included "Living Our Values in Customer Engagement," "Culture, Risk and Compliance: Trends and Predictions" and "Civility and Respect in the Workplace" as well as briefings from key stakeholders and Ethics partners. Through monthly BCA meetings and the BCA Share Center, we provide updates on ethics initiatives, trends and additional resources to support their role and responsibilities.

Northrop Grumman is also active in the Ethics and Compliance community outside our company, to promote ethics and integrity throughout the global defense industry and beyond. Please see the list of partnership organizations in the [Appendix](#).

NORTHROP GRUMMAN OPENLINE

The OpenLine is a toll-free, third-party phone number available 24/7, where Northrop Grumman employees, business partners, suppliers and other stakeholders can seek guidance on ethics questions and report any concerns or potential violations of law, regulation or company policy without fear of retaliation. OpenLine numbers are available for all employees to speak to a representative in their native language. Web-based reporting is also available to employees in locations where it does not conflict with local laws.

To efficiently address and resolve OpenLine contacts, we first categorize them as either inquiries, business conduct allegations or employee relations concerns.

- We assign inquiries to subject matter experts. These questions typically call for a response based on Northrop Grumman’s policy or procedures. Most inquiries relate to business courtesies and conflicts of interest.
- Ethics investigators handle most business conduct allegations, such as matters relating to suspected fraud, waste and abuse. The most serious allegations may be referred to the law department for investigation. Employee relations investigators typically address reported cases of employee misconduct and employment practices.

Approximately 40% of contacts including allegations of wrongdoing were substantiated, in whole or in part. This compares with 34% in 2020. A total of 492 actions were taken as a result. The percentage of substantiated allegations, at least in part, was lower than the NAVEX 2021 Ethics & Compliance Hotline Benchmark Report figure (42%), which includes over 3,000 companies. Employees or other parties who contact us through the OpenLine typically share their name, but they have the option of remaining anonymous, entirely at their discretion. In 2021, anonymous contacts were at 41%. In comparison, the NAVEX report average for anonymous contacts was 58%.

We analyze OpenLine metrics quarterly to identify trends and areas of potential concern and we share findings with the Corporate Ethics Committee, which consists of members of the Executive Leadership Team, and also with other senior leaders, external auditors and the Audit and Risk Committee of our BoD. We provide department and site leadership with quarterly OpenLine metrics and address trends through leadership actions, including targeted communications and additional training.



2021 ALLEGATIONS & INQUIRIES



1,024 Employee Relations Allegations

587 Business Conduct Allegations

577 OpenLine Inquiries

2021 ACTIONS TAKEN AS A RESULT OF INVESTIGATIONS SUBSTANTIATED IN WHOLE OR IN PART

Coaching or Counseling	172
Terminations	130
Memo of Expectations	90
Written Warning	88
Verbal Warning	8
Suspension & Demotion	4
TOTAL	492

ETHICS COMMUNICATIONS

Throughout the year, we use a variety of engagement channels to highlight the importance of ethics and integrity in the workplace. Here's what was included in 2021:

Q1

- Annual message from CEO Kathy Warden affirming Northrop Grumman's position on ethics
- Q1 Ethics newsletter, "Conquering the Fear of a Difficult Conversation" encouraging our speak-up culture

Q2

- Q2 Ethics newsletter, "Cat Got Your Tongue?" with tips for finding the courage to speak up
- Deployed our annual training for employees to further connect our company Values to key ethics and compliance topics

Q3

- Q3 Ethics newsletter, "Work What You Charge, Charge What You Work" covering accurate timekeeping
- Ethics Awareness Month content, which highlighted the importance of ethics and integrity in the workplace
- Shared Ethics Pledge with employees, which offered an opportunity to voluntarily reaffirm a commitment to our ethical culture and company Values

Q4

- Q4 Ethics newsletter, "Unshakable Focus on Quality," supporting the annual training on quality
- Leadership messaging on business courtesies during the holiday season.

ANTI-CORRUPTION COMPLIANCE

We have long maintained a best-in-class global anti-corruption compliance program. It is essential to our success as a trusted supplier for our customers, a reliable performer for our shareholders and an employer of choice for our workforce. We require all of our employees and those with whom we do business to maintain the highest ethical standards in full compliance with all applicable anti-corruption laws. We have zero tolerance for bribes, kickbacks or any other illegal business practices. We require our employees to ask questions and raise any concerns they may have regarding ethics and compliance issues. Please see our [Anti-Corruption Compliance webpage](#) for details on the various elements of our program.

PRODUCT SALES

We also have robust procedures to ensure we do not conduct business in countries or with customers who are not properly approved by the U.S. government, or, even if permissible, where the risk — to human rights or, more broadly, the reputation of the company — is too significant, and cannot adequately be mitigated. We focus on doing business that aligns with our company Values and applicable laws. We incorporate our ESG responsibilities and customer support into decision-making, including the products we design, develop, manufacture and sustain. Northrop Grumman does not manufacture or sell cluster munitions, anti-personnel mines or chemical or biological weapons.

POLITICAL INVOLVEMENT

Northrop Grumman engages in the democratic process in a variety of ways. The company's chief strategy and development officer manages political activities, including lobbying, and reports directly to the chief executive officer. Our BoD Policy Committee also reviews and oversees the company's political activities.

Political activities are conducted in accordance with all applicable laws, our company Values and ethical standards. Policies, approval procedures and required disclosures for involvement in political activities are clearly stated and available to employees.

We are proud to have been recognized by the Center for Political Accountability (CPA) and the Zicklin Center for Business Ethics Research for our transparency, policies and strong disclosure practices related to political expenditures. Based on voluntarily disclosed information, the Zicklin Index measures electoral spending transparency and we among the largest corporations in the U.S.

Additional information about the company's political activity practices as well as links to publicly available disclosure reports can be found on our [Political Contributions webpage](#).

Northrop Grumman was one of 14 companies to receive a 100% score in the CPA-Zicklin Index in 2021, and the only aerospace and defense company.

HUMAN RIGHTS

Northrop Grumman is committed to maintaining a strong culture with a deep respect for individuals and human rights. To that end, we have a robust and wide-reaching [Human Rights Policy](#), as well as other company policies, practices and procedures to reflect and implement our commitment. Much of our Policy is focused on how we treat individuals, especially with respect to their human rights. Our policies address discrimination, harassment and retaliation; they also cover freedom of association, fair working conditions, ethical procurement practices, health and safety and the protection of the environment. Our Policy also addresses how we do business, including how we develop and provide our goods and services, and how we work with our supply chain.

We have established a Human Rights Working Group to help ensure our Human Rights Policy is being implemented effectively and achieving our objectives. The general counsel or her designee leads the working group, which consists of senior representatives from Global Corporate Responsibility, Human Resources, Legal, Global Supply Chain, Investor Relations, Contracts, Environmental, Health and Safety (EHS), Global Business Office, Government Relations, Communications and each of our four operational sectors.

Our Board of Directors provides comprehensive oversight of both our policy and our practices. The Policy Committee, in particular, oversees our human rights program, including reviewing and making recommendations for enhancements, as appropriate. The Policy Committee receives reports from the chair of the Human Rights Working Group, our vice president of global corporate responsibility and our general counsel on how we are implementing our [Human Rights Policy](#), as well as any areas of concern or suggestions for improvement.

LABOR RELATIONS

Across our enterprise, we are committed to strong management practices for our employees. Currently, collective bargaining agreements cover approximately 4.4% of Northrop Grumman employees in the U.S. At our facilities, employees are free to exercise their rights of freedom of association and collective bargaining, and we work to maintain positive relationships with the third-party organizations who represent our employees. We engage in constructive negotiations on labor topics that include wages, schedules and hours, job progression, training and education, health and safety, non-discrimination and benefits, including employee assistance resources. These negotiations help our company reach collective agreements that benefit our employees.

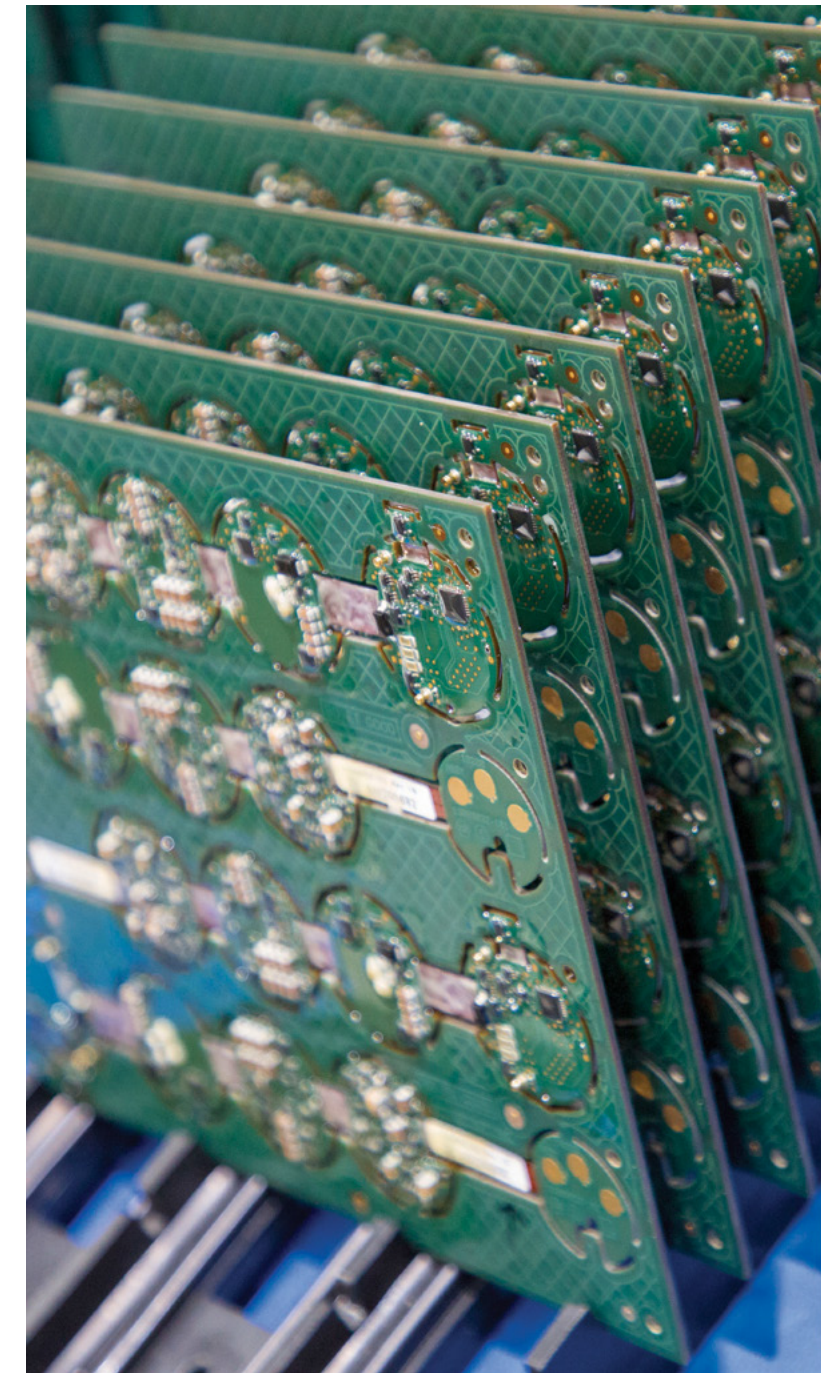
ANTI-HUMAN TRAFFICKING & FORCED LABOR

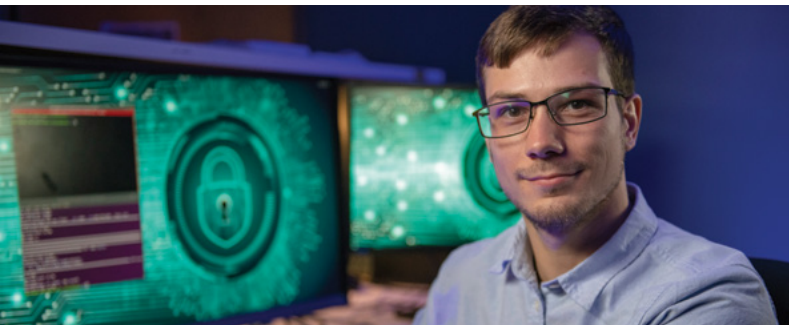
We have zero tolerance for human trafficking or forced labor and are committed to eradicating both from our supply chain. With a detailed Supplier Code of Conduct, we require our suppliers to comply with all applicable local laws in the country or countries in which they operate, our ethical standards and our contractual terms and conditions, which explicitly prohibit trafficking of persons and the use of forced labor. We require our suppliers to incorporate such contractual terms and conditions into their

lower tier subcontracts, continuing to prohibit trafficking in persons and the use of forced labor. More broadly, we provide our employees and suppliers with targeted training and awareness regarding the global problem of human trafficking and forced labor through online training modules, communication campaigns, newsletters, posters at applicable work sites and postings on Northrop Grumman websites. Both our [Anti-Human Trafficking and Slavery Statement](#) and [Anti-Trafficking Supplier Letter and Training](#) are publicly available on our [Anti-Human Trafficking Compliance webpage](#).

RESPONSIBLE SOURCING OF MINERALS/CONFLICT MINERALS

We are committed to the responsible sourcing of minerals in our supply chain and routinely take steps to ensure that suppliers comply with applicable laws and regulations regarding conflict minerals (i.e., tin, tantalum, tungsten and gold). As required, we report any known or potential use of conflict minerals to the U.S. Securities and Exchange Commission. We also regularly review our process for opportunities to improve our conflict minerals due diligence and oversight practices. Please see our [Conflict Minerals Statement](#) as well as our [2021 Conflict Minerals Supplier Communication](#), both available online.





HIGHLIGHT STORY

Awards for Industrial Security Achievement

Six Northrop Grumman facilities received the prestigious James S. Cogswell Outstanding Industrial Security Achievement Award from the Defense Counterintelligence and Security Agency (DCSA). Out of nearly 13,000 cleared facilities eligible for recognition, the company was recognized for excellence at facilities in Chandler, Arizona; El Segundo, Northridge and Sunnyvale, California; Melbourne, Florida, and Ocean Springs, Mississippi.

Selection criteria for the annual award includes establishing and sustaining security programs that exceed industry standards and providing leadership to other cleared facilities while establishing best practices to maintain the highest security standards. Facilities are nominated by a DCSA industrial security representative and are required to have at least two consecutive superior industrial security review ratings to be considered. This award highlights our long-standing dedication to providing security excellence for our customers.

Business Continuity & Operational Resilience

Business practices at Northrop Grumman extend from standards to systems and programs that allow us to pivot quickly and address challenges. This was critical in 2021, as we responded to the ongoing COVID-19 pandemic, as well as natural disasters and supply chain disruptions. We require each sector of our business to have an effective security program in place that considers relevant risks and vulnerabilities, including emergency response, crisis management, IT disaster recovery and business recovery and resumption. Our company-wide security compliance framework is an industry best practice that we share with suppliers and industry peers. We work to protect and secure our personnel, resources and information and, as required, that of our customers and suppliers, while complying with customer, federal, state, local and risk management requirements. We maintain program readiness by ensuring our staff members have expertise in a variety of customer requirements.

Our security programs and emergency response planning help protect our people, information, assets and brand, as well as continuity of mission.

Global Supply Chain

The success of our supply chain is integral to our team's efforts to define possible, and we understand that our diverse supplier base is key to our continued growth and leadership in supply chain management. The high-quality raw materials, products and services they provide help us to deliver the most cutting-edge solutions to our customers, and generate shared value.

SUPPLIER RESPONSIBILITY

We manage our broad-based supply chain with a focus on performance, risk management and transparency. Northrop Grumman suppliers act in compliance with all applicable laws, regulations and contract terms, including adherence to our [standards of business conduct for suppliers and other trading partners](#). We expect our suppliers to uphold our commitment to operating as responsible stewards of the environment. Our enterprise terms and conditions include a provision that suppliers and other trading partners comply with our standards of business conduct as a condition of doing business. These standards apply to our suppliers at all tiers, as well as those who work for them, and encompass a variety of topics including ethics and integrity, labor and employment practices, diversity and inclusion, human rights protection and sustainability. If a violation of these standards occurs, we reserve the right to terminate our contract.

We support our suppliers in many ways, which includes providing supplier-specific training materials and resources through our online Supplier Portal. This portal helps us better engage and collaborate with our suppliers, facilitating long-term, mutually beneficial relationships. We regularly communicate and engage with our suppliers regarding

social responsibility and regulatory compliance in areas including, but not limited to: equal employment opportunity, affirmative action, cybersecurity, conflict minerals, counterfeit parts, anti-human trafficking, harassment and discrimination and international trade.

For more information about our work to prevent human trafficking and forced labor within the global supply chain, please see the [Human Rights section](#) of this report.



SUPPLIER PERFORMANCE

To help ensure our suppliers are responsible, capable and eligible for contract award, we evaluate supplier performance across several major categories including management, technical, schedule, cost, proposal, mission assurance, security and cybersecurity, supply chain management and customer satisfaction. Our processes require that suppliers comply with applicable industry standards, are not excluded from U.S. government-approved subcontracting and uphold our [standards of business conduct for suppliers and other trading partners](#). We monitor and assess our current and potential suppliers across a variety of risk and resilience factors that measure their overall capability and capacity to meet current and expected supply chain demands, with additional focus on those suppliers most critical to our core business requirements.

Critical supplier criteria include:

- Criticality of program
- Past performance
- Dollar value and total spending
- Open purchase order value and volume
- Sole-source or single-source
- Multiple programs
- Affordability
- Risk/financial health
- Investments, business agreements and small business categories
- Unique technology and strategic partnering

Our supplier rating and evaluation processes help us to identify superior supplier performance to help drive future sourcing decisions and to address potential supplier performance issues. Evaluations can occur at several points including initial onboarding, annually through certification reviews, triennially with full scope reassessments or whenever a business experiences significant changes. These audits help us to manage product supply chain risks and enable the development of corrective action plans as required.

SUPPLY CHAIN RISK MANAGEMENT

In support of the Enterprise Risk Management Council, the global supply chain risk management team maintains a formal process for identifying, assessing and managing risks that have the potential to disrupt our supply chain. Risks are assessed broadly across 20 characteristics categorized as financial, operational or business. The team uses a data-driven approach to evaluate both the likelihood and impact of each risk. Risk assessments that exceed pre-defined prioritization levels trigger the development and execution of enterprise-level risk mitigation strategies. Each risk is regularly monitored to determine changes in assessment levels. This enterprise approach incorporates insights from a diverse set of stakeholders and data from many different sources, further enabling collaboration across our sectors to ensure that risks are identified and managed at the appropriate level.

CONTINUED SUPPLY CHAIN DISRUPTIONS DUE TO COVID-19

As the effects of the pandemic continue to ripple through our world, we are monitoring and assessing the impact on our employees, communities, businesses and supply chain, and we remain committed to meeting our customer commitments for products, services and solutions. When it comes to our global supply chain specifically, COVID-19 has continued to affect various aspects. We have prioritized proactively engaging with our suppliers to gain a better understanding of the ongoing challenges they are facing and potential solutions. We have also continued to develop and evolve strategies to provide them with crisis assistance, with a particular focus on small and more vulnerable businesses.

In 2021, we continued to support our critical and small businesses with accelerated payments, and provided personalized outreach to vulnerable suppliers through our supplier-targeted [COVID-19 resources](#). Through these initiatives, we've been able to provide greater support to our suppliers and their communities. In total, we accelerated payments to over 330 small and vulnerable suppliers, positively impacting localities across 42 states. On average, we accelerated \$45 million of payments each week, bringing our total to more than \$3.5 billion in payments since the program began in 2020.

For details on how we provided support to our suppliers during the initial COVID-19 outbreak, please see our [2020 Sustainability Report](#).

HIGHLIGHT STORY

Mitigated Supply Chain Disruptions & Equipment Shortages

In 2021, we faced several disruptions, including unprecedented small parcel carrier challenges, labor availability due to COVID-19 surges, increased fuel surcharges, global air constraints, shipping container delays and crowding at the ports.

Our Transportation Leadership team and third-party logistics provider, Ryder Logistics, established a framework to monitor industry trends and mitigate transportation challenges, which consists of five strategic pillars: partnership, infrastructure, forecasting, agility and communication. Supply chain disruptions were mitigated by identifying critical programs, considering safety stock adjustments, accelerating deliveries to meet financial targets and contractual schedules and working closely with logistics service providers. We further supported risk mitigation in supply chain security and compliance through data analysis and visualization to drive global supply chain efficiencies. Through government agency partner data, we were able to identify import trends, evaluate supply chain cost saving opportunities and leverage this information to mitigate risks.



TRANSPORTATION & LOGISTICS

Moving materials, products and people requires energy, and we are pursuing opportunities to improve efficiency and reduce our GHG emissions associated with transportation and logistics. Northrop Grumman has been a registered EPA SmartWay Transport Partner since 2008, and we have since integrated sustainability requirements into our transportation contracts, consolidated domestic shipments and, where feasible, switched from air freight carriers to ocean freight to help lower CO2 emissions.

SmartWay Carrier Partners account for more than 99% of our freight transportation requirements. These initiatives have increased shipment efficiency, decreased fuel usage and reduced our Scope 3 GHG emissions.

In 2022, we will be migrating our reporting structure and methodology from a CO2 per ton mile to a volumetric formula to provide a more precise method of reporting our emissions data. As our program matures, we continue to look for additional opportunities to reduce emissions, such as circular transportation, electric vehicle availability within our fleet and gathering additional Tier 2 and 3 supplier data.

SUPPLIER DIVERSITY

Leveraging our influence as a global organization, we collaborate with a variety of suppliers, including local companies, to support our business objectives. Our Global Supplier Diversity Program (GSDP) focuses on expanding relationships with small and diverse suppliers to add value to our customers through a diverse supply chain. These include businesses owned by minorities, women, veterans, service-disabled veterans, people with disabilities, the

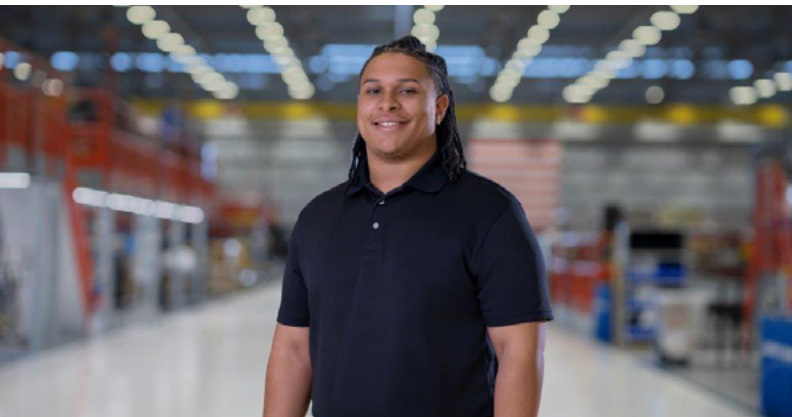
LGBTQ+ community and businesses located in historically underutilized business zones (HUBZone small businesses). The GSDP also partners with historically Black colleges and universities, Hispanic-serving institutions and tribal colleges and universities.

Through mentoring programs and sponsoring academic, customer and industry activities, the GSDP supports small and diverse business growth and development. For more information, please see the [GSDP webpage](#).

In 2021, we supported the “[In this Together](#)” from the National Minority Supplier Development Council (NMSDC), providing donations to their rebuilding fund and the NMSDC business consortium fund. These funds invest in the recovery and growth of minority businesses.

We also created the Enterprise Strategic Sourcing Council, which has representation of strategic sourcing and supplier diversity leaders from each department, to increase subcontracting opportunities for small and minority businesses. Our efforts focus on:

- Leveraging current supplier relationships for training, subcontracting and mentoring through the Mentor-Protégé Program
- Looking at sourcing decisions to explore using nonprofit organizations for training opportunities
- Exploring different ways to engage small and minority business through leveraging resources such as our ERGs to help identify supplier candidates



HIGHLIGHT STORY

Tuck Diversity Business Programs

Through our partnership with the diversity business programs at Dartmouth College's Tuck Executive Education, we help companies in their overall development and business-expansion endeavors. The Tuck Diversity Business Programs include one-week intensive sessions that focus on topics such as infrastructure development, strategic thinking and goal setting, and provides businesses with the tools to strategically grow their relationships. Since our partnership began in 2001, we've sent more than 100 companies through the program for training and development. We're proud to say that most of those suppliers continue to support Northrop Grumman today.

In 2021, we increased our sponsorship from four businesses in 2020 to 10. We have been able to deepen our relationships with our suppliers, as well as expand partnership opportunities, thanks to their participation in this program.

SUPPLY CHAIN SECURITY

Security of our supply chain is important to protecting the personnel, resources and information of our company, customers and suppliers. Through effective policies and procedures, we aim to lessen the burden on small businesses and give them the resources to align with our security expectations.

We collaborate with government and industry partners to develop and drive common strategies and standards that reduce risks associated with counterfeit material, cyber attacks and global trade security. Our company-wide approach identifies and assesses risks across the business with a consistent strategy. Additionally, our program's digital transformation activities will present opportunities to further develop our approach to supply chain security, particular with low-tier suppliers.

SUPPLY CHAIN CYBERSECURITY MODEL

Our supply chain cybersecurity maturity model aligns with the National Institute of Standards and Technology Special Publication 800-161, Supply Chain Management Practices for Federal Information Systems and Organizations. This maturity model includes targeted improvements in the areas of risk definition, governance, impact levels, support process, supplier information security, supplier management and incident response.

Northrop Grumman actively participates in the Aerospace Industries Association Supplier Management Council Cybersecurity working group and the Defense Industrial Base Sector Coordinating Council Supply Chain Cyber Task Force aligned with the National Defense Information Sharing and Analysis Center. By participating in these groups, we share best practices and provide suppliers with additional resources to keep their operations secure.

In 2021, we continued to make advancements in supplier cybersecurity by providing more focused training on ransomware, implementing dual-factor authentication for supplier payments and updating our cyber resources webpages to encourage continued learning. We maintain a public cybersecurity resources website to assist our suppliers in implementing effective information security measures; please refer to our [Cybersecurity Resources for Suppliers webpage](#) for additional information.

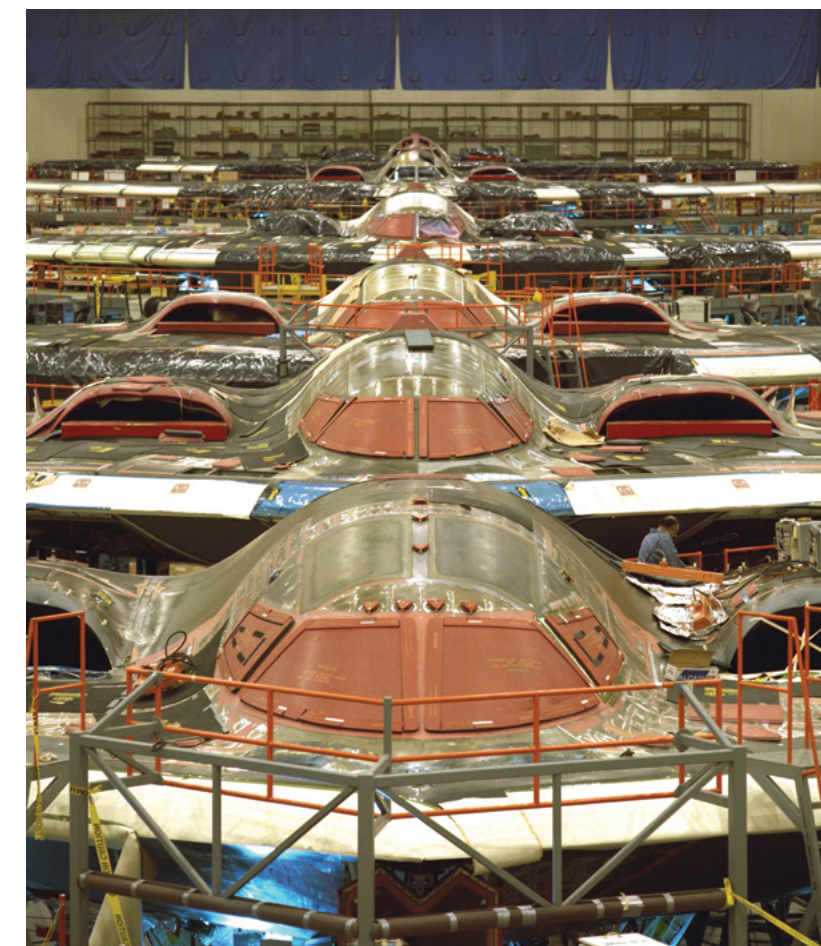
MATERIAL AUTHENTICITY/ COUNTERFEIT PARTS

We design our procedures and procurement strategies to help detect and prevent counterfeit material from entering our supply chain. Our suppliers are contractually required to maintain full compliance with our counterfeit parts prevention processes. Across our company, we provide material authenticity training that offers guidance on prevention, detection and mitigation practices to keep counterfeit parts from entering our supply chain. This training is delivered to our supply chain, quality, engineering, program management and receiving organizations. Additionally, our Counterfeit Material Detection and Avoidance program requires Northrop Grumman to source materials from suppliers confirmed to have appropriate counterfeit prevention processes. If an approved supplier is not available, we apply additional quality control measures in an effort to validate the authenticity of parts received.

GLOBAL TRADE SECURITY

As a company with global operations and a dedication to security, we are committed to complying with global trade security standards. We appreciate the essential role our international business partners play in global trade security and encourage integration of enhanced security measures in our supply chain. Northrop Grumman also

encourages our international partners to participate in U.S. Customs and Border Protection's Customs Trade Partnership Against Terrorism (CTPAT) or a relevant Authorized Economic Operator (AEO) program. Participation allows for a secure supply chain while minimizing potential disruptions, improving import process predictability and reliability and fostering a high level of trust with the U.S. government and a strong partnership with U.S. Customs and Border Protection (CBP). For more information, please see our [Global Trade Security \(CTPAT\) webpage](#).



Cybersecurity & Data Protection

We believe in using the best of technology to protect the best of technology. This means leveraging technological advances to protect our systems and data as both our business and technology continue to evolve. Cybersecurity plays an integral role in our work, protecting our networks, systems, and intellectual property, as well as company, customer, partner and employee data wherever it resides.

CYBERSECURITY

With vigilance and dedication, we are working hard to defend our products and computing environments from cyber threats. We have supplied our employees with a range of tools to secure our information, including training, information-sharing and assessments. To help ensure effective oversight, the BoD Audit and Risk Committee receives reports on information security and cybersecurity from the vice president and chief information security officer at least four times a year. Key elements of our information security systems include:

- **Information Sharing and Collaboration:** We collaborate with government, customer, industry and supplier partners to gather and develop best practices and address cyber threats and enhance the overall security of these partners. Northrop Grumman has taken a leading role in the greater defense industrial base community. We actively participate in the National Defense Information Sharing and Analysis Center as well as other government-industry partnerships that share cyber threat information, best practices, awareness and even product enhancements for improved cybersecurity.

- **Technology Investment:** We protect our computing environments and products from cyber threats through multi-layered defenses. We have invested in cloud storage and computing power, and we leverage data analytics to detect anomalies and hunt for known threats, which provides greater return for us to reinvest in our cybersecurity.
- **Insider Threat:** To help safeguard against the potential theft and misuse of intellectual property and other sensitive information, we maintain an insider threat program designed to identify, assess and, as necessary, address potential risks. Our program evaluates potential risks consistent with industry leading practices, customer requirements and privacy considerations.
- **Third-Party Risk Assessments:** Before hosting sensitive data in a computing environment managed by a third party, we conduct an information security assessment and implement contractual provisions that mandate security protections.
- **Training and Awareness:** We train our employees to identify, avoid and mitigate cyber threats as they are the first line of defense in information security. Employees participate annually in a mandatory training that includes spear phishing exercises, while new employees receive cybersecurity training that includes company expectations and first-line-of-defense methods.
- **Supplier Engagement:** We collaborate with our suppliers to help them build resiliency throughout our supply chain. Northrop Grumman provides training opportunities and informative cyber updates to tens of thousands of our suppliers to help their systems meet our security standards. This program is designed to protect our information while also giving small suppliers an opportunity to build more mature systems using best practices they may not have access to otherwise.

DATA PRIVACY

We implement leading data protection standards for our stakeholders. We have undertaken a comprehensive approach to data privacy in order to understand and remain in compliance with global, federal, state and local laws applicable to our business operations. Our corporate privacy office manages our global commitment to respect the personal information of our employees, customers and other stakeholders. Our website notifies users of the cookies we track, which meets global best practices and also

provides a more personalized and faster user experience when they visit our website. Our privacy professionals monitor emerging global privacy standards to help ensure our practices remain aligned with evolving requirements.

We regularly look to enhance our privacy governance framework through training and awareness initiatives, effective privacy notices, audits and self-assessments, access controls, international and third-party supplier risk assessments, compliant cross-border transfers of data and other risk mitigation measures.



Pioneering People

EMBRACING OUR SUSTAINABILITY PROMISE

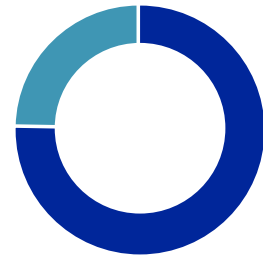
Our people are our most valuable resource. The collective talents, capabilities and strengths of Northrop Grumman's employees allow us to discover what's possible as we boldly expand technical boundaries. To increase success, the company seeks to provide the tools necessary for personal and professional development.

People & Culture

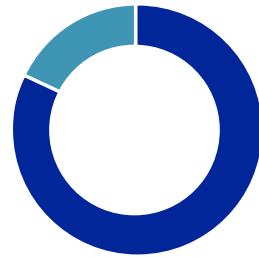
Northrop Grumman's diverse workforce fosters creativity and innovation in an inclusive, engaging environment. We grow because employees find new ways to bring their experiences with them to their roles each day, learn from each other, and apply what they discover to create exciting innovations.



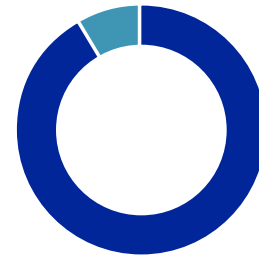
TOTAL POPULATION*



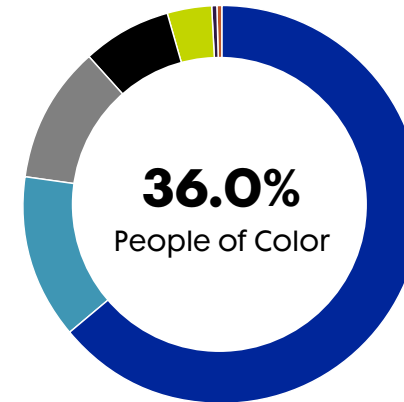
24.5%
Female



17.8%
Total Vets



8.5%
People With Disabilities



36.0%
People of Color

- **64.0%** White
- **13.3%** Hispanic/Latino
- **11.1%** Asian
- **7.4%** Black/African American
- **3.5%** Two or More Races
- **0.4%** American Indian/Native American or Alaska Native
- **0.4%** Native Hawaiian/Other Pacific Islander

LEADERSHIP — TOTAL MANAGEMENT POPULATION*

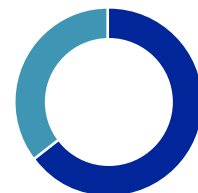


26.6%
Female



27.7%
People of Color

LEADERSHIP — VICE PRESIDENT & ABOVE POPULATION*

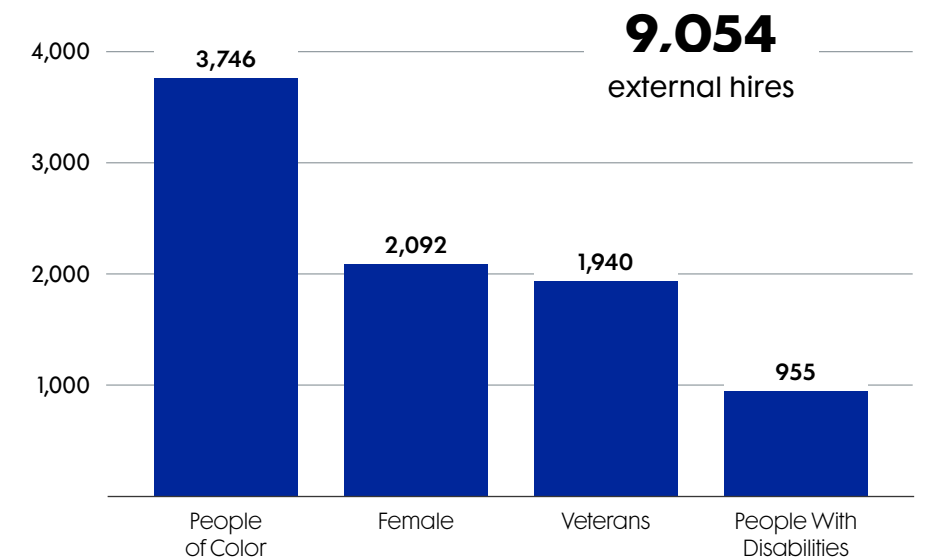


35.4%
Female



17.7%
People of Color

2021 HIRES*



* All demographic data reflects U.S. population only



Diversity, Equity & Inclusion

We have a long and proud record of advancing DE&I throughout our operations and communities. In 2021, we continued to demonstrate our commitment to strengthening DE&I by supporting social justice and unity around the world. We also focused on diversity amongst our employees from all walks of life, with emphasis on growing equity among our women, people of color, LGBTQ+ employees, veterans and employees with disabilities.

The Enterprise DE&I Leadership Council (EDEILC) sets our DE&I strategy and serves as the governing body over DE&I actions, including developing our company-wide strategic direction, policies and initiatives. It also partners with the Global Diversity Equity and Inclusion Leadership Committee staffed by company leaders from around the world, along with a DE&I Working Group based in the United Kingdom.

Each of our business sector headquarters has a dedicated DE&I expert and a sector-focused Diversity Council comprised of executive leadership, human resources vice presidents and working groups. Each Diversity Council works in coordination with the EDEILC and serves as a link between our DE&I organization and our employees, managing priority topics from a corporate and sector level.

Northrop Grumman has implemented formal diversity plans since 2009 to ensure long-term preparations are in place to support our critical DE&I function. The plan also helps us set priorities for the organization and demonstrate accountability, including with the company's non-financial performance metric for diversity. The Compensation Committee of the Board of Directors reviews the company's progress in workforce diversity at least semi-annually. In 2021, we completed year two of our current five-year diversity plan with growth in most areas. The rate of women in all leadership roles remained steady from 2020 to 2021 at 26.6 percent. The rate of people of color in leadership roles increased from 26.6 percent in 2020 to 27.7 percent in 2021.

Non-Financial Performance Metrics



Diversity: Representation of women and people of color in all management level positions

KEY 2021 DE&I EVENTS:

Northrop Grumman puts diversity and inclusion into action by offering employees programming and engagement opportunities on a wide range of culturally relevant topics. In 2021, we offered 126 individual events to support the nine heritage months recognized by the company and 224 trainings, engagements and briefings to support inclusion initiatives.

February

- Heritage Month — Black History
- Black Engineer of the Year Award (BEYA) Conference
- Small Acts of Inclusion Webinar: Social Justice Progress & Updates

April

- Heritage Month — Celebrate Diversity
- National Society of Black Engineer (NSBE) Conference
- Small Acts of Inclusion Webinar: Raising Kids to be Inclusive

June

- Heritage Month — LGBTQ+ Pride
- Small Acts of Inclusion Webinar: Inclusion in a Multi-Generational Workforce
- June 19 — Juneteenth Celebrations
- Launched DE&I Toolkit

August

- Small Acts of Inclusion Webinar: Becoming an Inclusive Leader
- VERITAS & NGFAMILY Annual Summits

October

- Heritage Month — National Disability Employment Awareness
- Out & Equal Workplace & Adelante Annual Summits
- Great Minds in STEM Conference
- Society of Women Engineers (SWE) Conference

December

- Small Acts of Inclusion Webinar: Native American Inclusion; Living in Two Worlds

January

- Enterprise Diversity, Equity & Inclusion Leadership Council Meeting
- Northrop Grumman Awarded Human Right's Campaign's Best Places to Work for LGBTQ+ Equality Award

March

- Heritage Month — Women
- International Women's Day Celebrations
- Standing in Solidarity (APPN)

May

- Heritage Month — Military Appreciation
- Heritage Month — Asian American Nation Hawaiian/Pacific Islander (AAPI)
- Northrop Grumman Named to DiversityInc Top 50

July

- Disability:IN Annual Conference
- VOICE ERG & ConnectING Annual Summits
- Enterprise DE&I Leadership Council & ERG Collaboration event

September

- Heritage Month — Hispanic Heritage
- Launched DE&I Required Training
- 2021 NOD Leading Disability Employer Award

November

- Heritage Month — Native American
- APPN & Gen2Gen Annual Summits
- Society of Asian Scientists and Engineering (SASE) Conference
- Society of Hispanic Professional Engineers (SHPE) Conference

DE&I PRIORITIES

To promote DE&I, we use the following:

- **Diversity Councils:** At the enterprise level and within each sector, councils and their working teams lead our strategy from the top and foster a culture of understanding and commitment to DE&I around the world.
- **Employee Resource Groups:** These groups foster a sense of belonging, familial support and community to provide opportunities to take action for a diverse, inclusive workplace aligned with Northrop Grumman Values and goals.
- **Sustained Support of Social Justice and Unity:** Through CEO meetings with all levels of leadership and employees, we stand with and demonstrate support for all communities, including our Black, Asian, Veteran and LGBTQ+ employees, and employees with disabilities. More than 100 listening sessions were held to provide employees with a safe space to speak and to raise awareness about available resources. We also work with external partners such as the OneTen initiative.
- **Communications and Education:** Through our first-ever required DE&I Training as well as an optional monthly training sent via email, and regular communications with a multitude of best-practice resources, we reinforce the value proposition of DE&I. These trainings and communications drive awareness, strengthen engagement and build skills to enhance leadership and further enlighten employees.

- **Company-Wide Initiatives:** We continuously develop and execute vital best-practice programs that connect leaders and employees with solutions and next steps to face today's challenges and opportunities. We incorporate the use of preferred pronouns in discussions and signature blocks and have updated our Transgender Inclusion Toolkit for teams and individuals.
- **Achievement Conferences:** We recruit prospective employees to build our diverse pipeline and expand leadership reach for thousands of attendees through formal remarks and participation in interactive workshops. We offer employees guidance in the nomination process and recognize their incredible contributions and performance through achievement awards.
- **External Partnerships:** We advance new ideas with our global partners to support DE&I in the local community and workplace, as well as distinguish our work as an award-winning organization. We measure ourselves against other companies to ensure continuous improvement.
- **Promote Inclusion:** Our DE&I organization continued the Small Acts of Inclusion program, which promotes simple actions that any employee or team can take to enhance inclusion for all employees. Over 4,000 employees participated in 50+ company and local Small Acts of Inclusion events during 2021.

COMMUNICATION & EDUCATION

Our DE&I organization produces a wide array of communications to drive awareness, manages a robust education curriculum and partners with our Communications and Human Resources teams to provide information to employees across the company. Our best-practice performance is integral to our culture and success as an organization.

In 2021, we began to require DE&I training for all current and newly hired Northrop Grumman employees. The EDEILC introduced the training curriculum with the intention of

meeting employees where they are in their DE&I journey and providing a solid foundation for future progress. We encourage managers to have ongoing conversations about topics included in the training, such as unconscious bias, micro-inequities and how DE&I relates to our company Values.

Importantly, we also launched a Global DE&I Toolkit in 2021 that consists of targeted micro-learning topics, sent directly to employee mailboxes each month. The toolkits focused on relevant topics while also providing access to thousands of additional quick-read resources and year-round educational opportunities.



ERGS

Our ERGs are a key part of our DE&I strategy. The organizations play an important role in fostering inclusion, engagement and belonging, and promoting retention of talent at Northrop Grumman. More than 25,000 employees continue to volunteer their time to learn, develop and have meaningful conversations with their colleagues.

In 2021, our resource groups hosted 13 ERG summits open to all employees to participate, regardless of membership in a specific ERG. The ERG summits provide our people with another opportunity to connect and learn from guest speakers and colleagues about a variety of DE&I and ERG-specific topics.

To learn more about our ERGs, please see our [website](#).

Northrop Grumman ranked #4 on DiversityInc's Top Companies for ERGs.

NORTHROP GRUMMAN ERGS



AATG
AFRICAN-AMERICAN
TASK GROUP



ADELANTE



APPN
ASIAN PACIFIC
PROFESSIONAL
NETWORK



greenNG



NAC
NATIVE AMERICAN
CAUCUS



NG FAMILY



NG REACH
RACE, ETHNICITY AND CULTURAL HERITAGE



NGWIN
NORTHROP GRUMMAN
WOMEN'S
INTERNATIONAL
NETWORK



PrIDA
PRIDE IN DIVERSITY
ALLIANCE



VERITAS
VETERANS, EMPLOYEES
AND RESERVISTS INSPIRED
TO ACT AND SERVE

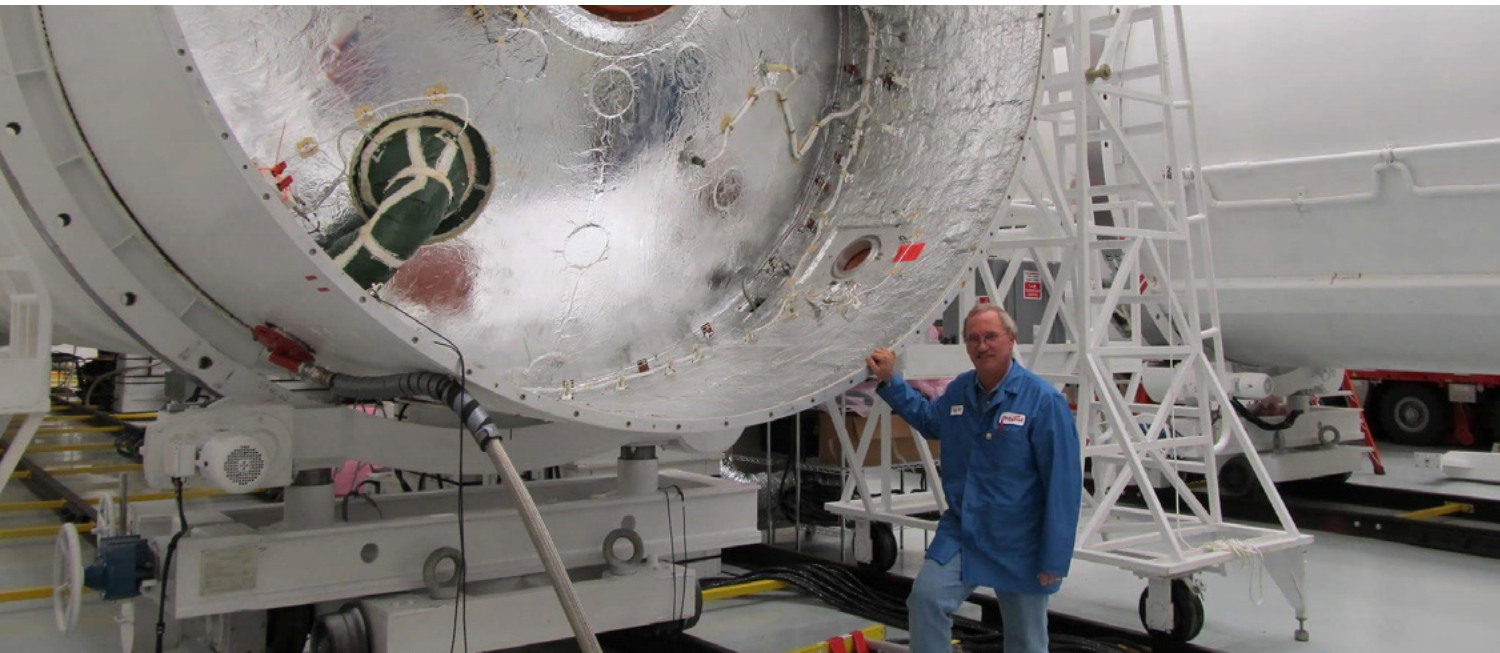


HIGHLIGHT STORY

Empowering Our Employees

Northrop Grumman prioritizes helping our people to be successful and productive. Through our ERGs, workplace accommodations and the broader DE&I program, we seek to empower every employee to be his or her best. Consider Danny Sanchez, an engineer at the company, who began his career here as a summer intern. Following his internship, Danny credits the company's commitment to inclusivity as one of the primary reasons he knew Northrop Grumman would be a great place to work. "There are so many reasons, but if I had to choose one that's the top to me, a minority, disabled engineer, then that reason is the inclusivity. From the top to bottom, Northrop Grumman places an emphasis on its people," he says. "I had other job offers in my senior year, but Northrop Grumman was my golden ticket."

Danny entered the company through the Pathways program, a Northrop Grumman initiative that allows early-career professionals to move through three, one-year rotations within different areas of the company. "This program was a big draw to me as I didn't really know what to expect when I joined the workforce, given my disability," shares Danny, who has a progressive neurological disease called Friedreich's Ataxia and uses a mobility scooter to get around. Danny is now in his last rotation, where he oversees the production of specialized microelectronics for radar programs, which he plans to make his career focus. In addition to finding his home here as a manufacturing engineer, Danny volunteers with **The VOICE: Allies for Disability and Inclusion** employee resource group where he now serves as its enterprise co-chairperson and champion for equity and inclusion in the workplace.



HIGHLIGHT STORY

Making Success Accessible for the Deaf & Hard of Hearing

The pandemic has impacted us all in more ways than we could have imagined, but for the Deaf and Hard of Hearing (DHOH) community, the masks we wear to help limit the spread of COVID-19 have created a new obstacle for communication. Employees like manufacturing technician Jeff Knedlhans, who is hard of hearing, explains that the masks his colleagues wear obstruct their voices making in-person conversations almost impossible and phone conversations much more difficult. Luckily, Jeff was able to communicate this need through workplace accommodations (WPA) and was outfitted with a ConnectClip. This small but mighty device attaches to Jeff or a colleagues lapel to help transmit sound directly to Jeff's hearing aid to help him hear more comfortably and do his job. Northrop Grumman's WPA team works hard to ensure solutions like the ConnectClip are available to support the needs of the DHOH community. In 2021, WPA also enhanced the availability of other services for DHOH employees such as American Sign Language (ASL) interpreting or Communication Action Realtime Translation (CART). This includes the deployment of a dedicated schedule of on-call CART writers and ASL interpreters to support employees' virtual meeting needs. WPA provided approximately 1,600 ASL interpreting hours and approximately 3,000 hours of CART to support Northrop Grumman employees in their meetings and events.

EQUAL OPPORTUNITY & ACCESS

Equity and access are two important elements of our inclusive culture. We reinforce equity through our Equal Employment Opportunity (EEO) compliance activities as a federal contractor, as well as through U.S. and global government reporting related to gender, race/ethnicity, disability status and veteran status. Our Equality and Equity Compliance team oversees equal opportunity efforts across our employment selection processes and develops affirmative action plans in the U.S. to help ensure our programs comply with EEO laws and regulations. We continue to develop a deeper commitment to equity and access through other aspects of our program.

We are committed to equitable pay for all employees, including for women and people of color. In support of this goal, we benchmark our pay through external salary surveys, use a performance-based incentive system and make further adjustments to promote internal equity.

As part of our efforts to enhance the inclusion and contributions of all employees, Northrop Grumman provides accommodation services to manage accommodation and adjustment requests from employees, applicants and visitors. Accommodation requests are a diverse reflection of employees' needs and include, but are not limited to, changes to accessibility and the physical environment, deployment of job equipment, modifications of job duties and schedules and accommodations unique to the COVID-19 pandemic.

In 2021, we integrated the legacy accommodation request process to our employee services portal. The integration of this process into the employee services portal increased visibility and access of the Workplace Accommodations process to employees. Employees can now request accommodations side-by-side with HR and IT services, enhancing the employee experience.

1,877 individual accommodation requestors contacted us in 2021 — nearly double the volume of requestors in 2020.

Employee Health & Safety

People are our most valuable resource, and we work diligently to protect the health, safety and well-being of our employees, customers, visitors and contractors.

HEALTH & SAFETY

Creating a safe workplace protects our employees. At Northrop Grumman, we focus on training, risk and hazard identification, abatement and prevention. Everyone has a responsibility to identify workplace hazards, and we empower employees to report these hazards without fear of retaliation.

We provide occupational health and safety training tailored to employees' job duties, either in person or through an online training system. Supervisors are responsible for ensuring their employees have completed all assigned trainings. When a job task contains a significant element of risk, we may conduct Job Hazard Analysis (JHA) reviews. Additionally, employees can report safety and health concerns confidentially using the OpenLine reporting system. Employees use JHA reviews, hazard identification resources and prior training to help them make these decisions. Working with our environmental, health and safety (EHS) specialists, employees review JHAs prior to undertaking tasks and receive answers to questions regarding personal protective equipment and steps needed to minimize hazards. We expect our employees to safely perform tasks and empower them to stop any job they deem hazardous to human health and safety or the environment.

Our EHS organization verifies compliance with legal requirements and the effectiveness of our hazard risk assessment program through periodic self-inspections and audits. The EHS team investigates the root cause of findings, identifies potential preventive actions and recommends actions to prevent future safety incidents. We work with internal and external industrial hygienists and other EHS partners to investigate and reduce or eliminate workplace hazards and potential exposures. When removal of risks through engineering and process design changes is not possible, we identify the hazard and enact other measures to protect employee health and safety. At select locations, medical personnel are on site to treat injuries and illnesses if and when they occur.

Our Safety Committee is a diverse representation of safety operations from each sector that meets monthly to develop and manage safety initiatives. The Safety Committee advises the EHS Leadership Committee and corporate and sector management on various matters of health and safety, including corporate and sector policies, procedures and best practices. In 2021, as part of an effort to proactively prevent employee injuries, the committee helped implement a near miss/good catch program that encourages employees to report events to EHS and management for evaluation and correction. By implementing the near miss/good catch program and collecting data, we aim to reduce overall injuries as employees become more diligent and proactive in reporting safety concerns.

We review data on our safety incidents and other related events regularly to identify and address injury trends by type and by location and to take necessary action to mitigate safety concerns.



Ergo Exercises

Release your gripping muscles

- Find most tender spot on the inside of elbow
- Pin with thumb
- Move hand around until tenderness decreases
- Repeat with tender spot on outside of elbow

HIGHLIGHT STORY

Stretch & Flex Program: A Success Story

We've all seen those safety-related posters on break room walls — and we may or may not have taken more than a glance at them. Health program materials sadly often have that “check the box” feel; someone hangs the poster and that is that. Well, that is not what the EHS team had in mind when they decided to refresh the Stretch and Flex program at Northrop Grumman's site in El Segundo, California. Their vision involved something more engaging, tailored and modern. The team began reinvigorating the program as a way to tackle injury rates for tasks that had limited possibility of engineering control and based its design on employee feedback that workers missed their regular onsite stretching sessions.

Working with an ergonomics consultant, the team identified operations with the highest injury rates and complaints of discomfort. The team observed employees at work and interviewed them about the physical requirements of their jobs. Based on the data collected and observations concerning posture, repetition, force and duration, “counter-postures” — stretches and strengthening/stabilizing exercises — were developed that would help counteract and support the muscles and joints in the tasks employees were performing. Next, the team created posters of each movement, using employees as models, and placed them strategically in work areas. Badge backers were also created with general stretching exercises. Since reestablishing the program, the site has seen an increase in employee engagement and participation in Stretch and Flex activities as well as a general increase in employee satisfaction. As this program continues, the EHS team hopes to see a decrease in the injuries and discomfort employees experience on the job.

RESPONDING TO COVID-19

Since the onset of the global pandemic in late 2019, we have taken and continue to take robust actions to protect the health, safety and well-being of our employees, customers, visitors and contractors. As we navigate the ongoing pandemic, Northrop Grumman continues to evolve our response and implement appropriate guidance and measures. We formed an Enterprise Business Resumption Team to mature certain of our protocols.

The company continues to monitor closely the ever-changing situation and to evolve our response implementing appropriate guidance measures that are consistent with the latest data and guidance from the Centers for Disease Control and Prevention, as well as other health organizations, government authorities and our customers, among others.

Our goals have been, and continue to be, to lessen the potential adverse health and economic impacts of the pandemic, to continue to perform for our stakeholders, and to position the company for long-term success.


We recognize that the COVID-19 pandemic provides an opportunity for us to enhance long-term resilience in our supply chain, workforce and overall business operations. Though we will encounter challenges as we learn the most effective ways to respond, the processes that we build today should allow us to respond more quickly and effectively tomorrow.

We continue to see the impacts of the pandemic on the overall well-being of our employees. For more information on how we support our employees, please see the [Well-Being section](#) of this report.

HEALTH & SAFETY PERFORMANCE SUMMARY

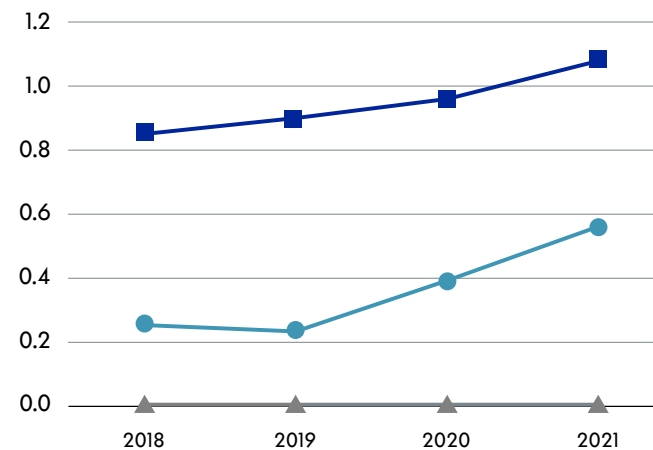
We evaluate the effectiveness of our health and safety programs externally, through benchmarking with industry peers and the U.S. Bureau of Labor Statistics. Internally, we determine program effectiveness by conducting trend analyses of our past performance. Our 2021 rates reflect the impact of COVID-19 on the number of cases and lost workdays. U.S. Occupational Safety and Health Administration requires that we count illnesses contracted in the workplace, as well as the days away.

Non-Financial Performance Metrics

 **Safety:** Total case rate, defined as the number of OSHA recordable injuries as well as lost work day rate associated with those injuries



TOTAL CASE RATE & DAYS AWAY CASE RATE



TOTAL CASE RATE

2018: 0.85
2019: 0.90
2020: 0.96
2021: 1.08

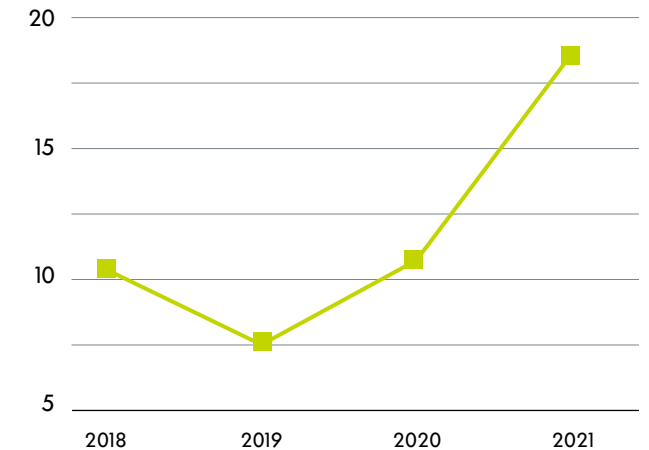
DAYS AWAY CASE RATE

2018: 0.25
2019: 0.23
2020: 0.39
2021: 0.56

FATALITIES

2018: 0
2019: 0
2020: 0
2021: 0

LOST WORK DAY RATE



LOST WORK DAY RATE

2018: 10.34
2019: 7.46
2020: 10.70
2021: 18.61

Employee & Family Well-Being

Northrop Grumman recognizes the importance of supporting the whole well-being experience of our employees and their families. We designed the [My Well-Being program](#) to help employees and their families improve their physical, emotional, social and financial health. Our strategy focuses on increasing awareness around the program, communicating events to employees and using data analytics to promote, execute and evaluate the program in meeting various needs. We recently grew our Wellness Committees into a Well-Being Champion Network, which enhances our program by implementing worksite policies, reducing the risk of chronic diseases, and increasing employee well-being.

In 2021, we integrated the My Well-Being program with our annual roll-out of employee benefits and our employee-facing [Total Rewards Gateway](#), which increased visibility of program services to all employees and their families. We also expanded our program resources to include all four dimensions of well-being: emotional, physical, financial and social. Each of these pillars plays an important role in our employees' overall health and well-being. Other 2021 initiatives included:

Social Well-Being →

- Offered team and non-step challenges, such as the Feeling Grateful Challenge, through ENGAGE.
- Aligning our volunteerism and outreach initiatives with the strategic pillars of the Corporate Citizenship program: K-12 STEM education, support to our military and veterans, health and human services and the environment.
- Supported the more than 25,000 Northrop Grumman employees who are engaged in one of 14 [ERGs](#) that provide benefits for the member, our leaders and the company.

Physical Well-Being →

- Hosted 5,751 attendees at the 2021 Virtual Well-Being EXPO where attendees could watch videos, chat live with benefits representative and providers, attend seminars and explore Northrop Grumman's benefits and well-being resources.
- Over 30,500 people completed their health incentive milestone by completing their annual physical and setting health goals through ENGAGE, a personalized, digital well-being assistant.
- Hosted 69 onsite flu clinics.

Emotional Well-Being →

- Provided over 24,000 services through the NGCare Employee Assistance Program (EAP) including counseling, work-life support, financial and legal cases and website views.
- Hosted 100+ NGCare webinars attended by more than 10,000 employees, covering a variety of tailored topics in partnership with ERG leaders.
- Provided in house clinical support for mandatory and formal EAP referrals, over 100 grief and loss sessions and several transgender inclusion meetings.
- Expanded our Mental Health First Aid at Work program to certify an additional 50 leaders to better identify and approach mental and emotional health issues.

Financial Well-Being →

- Presented 258 financial preparedness workshops.
- Offered 22 Ask Fidelity Retirement Sessions.
- 5,141 completed the Financial Wellness Check-Up.

SUPPORT FOR WORKING PARENTS & CAREGIVERS

Working parents and caregivers have been especially challenged to provide reliable care and support during the COVID-19 pandemic, and many have tutoring and educational concerns. NGCare provided a variety of innovative family care solutions to support families with integrating their work and family lives.

- **Child/Elder Back-Up Care:** 4,656 registered employees provided a temporary option for employees to trade a back-up care day for tutoring hours at a nominal cost
- **Finding Quality Care:** 4,980 employees searched for elder companions, sitters, nannies
- **College Planning and Special Needs Parenting Support:** 4,180 participants

This year, NGCare partnered with ERGs to provide "real time" strategic support to help affinity groups across the workforce find a sense of community during challenging times.

- **Self-Care in the Face of Trauma:** Response to acts of violence against Asian American, Native American and Pacific Islander and other diverse communities
- **Mental Health 101:** Foundational session requested by our ERGs in support of Black and African Americans and People with Disabilities
- **Elevating LGBTQ+ Inclusion:** Held several sessions designed to promote mental health awareness within the LGBTQ+ community
- **Supporting Parents and Caregivers During the Pandemic:** Specialized sessions for parents of school-aged children, adoptive parents and those growing their families by adoption, and caregivers for the elderly and people with disabilities
- **Coming Together Sessions:** Three support sessions for veterans and military families to gather as a community and discuss responses to the events in Afghanistan

HIGHLIGHT STORY

Changing the Way We Think & Talk About Mental Health

Since the start of the pandemic in March 2020, four in 10 adults say they have experienced symptoms of anxiety or depressive disorders, according to research from the Kaiser Family Foundation.

During 2021, the NGCare program expanded its mission providing holistic solutions to employees and family members. Shifting the culture to normalize conversations and communications about mental health in the workplace was critical to achieving this mission.

The highlight of the awareness campaign was a “Real Talk about Mental Health Panel” facilitated by Vice President Sandra Evers-Manly, featuring leaders across the enterprise who shared their inspirational stories related to mental health. As a result of the positive feedback around the first panel, NGCare hosted a second panel session to continue the conversation with two sector presidents and our vice president of security. These interactive and candid conversations, attended by more than 1,200 employees, demonstrated our executive team’s commitment to encourage dialogue about mental health in the workplace. Their main message was to encourage employees and families to seek the confidential support provided by the company at no cost to them. The series will continue in 2022 with the goal of eliminating the stigma around mental health.



“At Northrop Grumman, we take a holistic approach to well-being, which means we talk openly about mental health. Our leadership team encourages employees to seek confidential support provided by NGCare, and to take care of themselves and each other. Executives and employees at all levels are sharing their own very personal stories to stop the stigma about mental health, which has strengthened our sense of community across the Company. We are committed to ensure that employees at Northrop Grumman realize no one is alone.”

Talent Management

Our focus on employee well-being and growth starts with each person’s first day with Northrop Grumman. We approach talent management with the “whole employee” experience in mind, from recruitment to retirement. The employee experience continuum focuses on key career milestones and helps us align our employee development, engagement and retention efforts. We strive to address the specific needs of our employees throughout every step of their careers.

TALENT PIPELINE DEVELOPMENT

The COVID-19 pandemic continues to have wide-ranging impacts on changing worker expectations and the entire talent pipeline. We continue to monitor key trends and information to help prepare for the future. By applying an agile framework to our talent strategy, we embrace revitalization as we grow, offer a value proposition that better aligns with candidates’ desires, and diversify our talent pipeline.

Through continuous academic engagement with students of all ages, we provide the next generation of Northrop Grumman employees with the skills they need to succeed in their careers. Our efforts focus on engineering and technology-based programs and initiatives that excite, engage and educate students.

We work closely with colleges and universities to attract a diverse, highly skilled cohort of candidates prepared for the future of work. Through our partnership with Greater Washington Partnership and Capital Collaborative of Leaders in Academia and Business (CoLAB), the Digital Credentials program provides digital skills to more than 1,200 undergraduate students across 20 universities each year. Now entering its third year, the Digital Credentials program helps academic institutions develop stronger curricula that prepare students and make them more attractive candidates when entering the workforce.

We continue to invest and engage with trusted partners to grow and support a diverse talent pipeline. In 2021 we joined OneTen, a coalition of companies representing a wide range of industries that seek to advance racial justice and close the opportunity gap for Black talent in the U.S. OneTen, with its partner companies, aims to train, hire and promote one million Black individuals over the next 10 years into family-sustaining careers with opportunities for advancement.

In 2021, we continued to increase our support to enable the enrollment and success of a diverse STEM pipeline at two-year and four-year universities. Our funding to diversity-focused efforts, including programs, activities and clubs increased by 43% over 2020. For additional partnerships, please see our list of Partnerships and Professional Associations in the [Appendix](#).

Approximately 65% of eligible interns convert to full-time employees every year

95% of our interns said they would recommend Northrop Grumman to others

INTERNSHIPS

Our summer internship program is integral to building our talent pipeline and helping to develop the next generation of Northrop Grumman employees. In addition to charting a potential career path, the summer program provides hands-on experience with the opportunity to learn more about our company culture and build a professional network.

In 2021, we continued the hybrid virtual/in-person model established the previous year in response to COVID-19, hosting nearly 2,000 interns.

HIRING MILITARY VETERANS

With approximately 200,000 service members transitioning out of the U.S. military each year, veterans remain an important source of talent for Northrop Grumman. Military veterans contribute a great deal to our success as a company, and we are proud that almost 18% of our total workforce self-identify as veterans. Examples of our efforts to work with and recruit veterans are described below.

- Operation IMPACT is our unique, award-winning program focused on helping wounded service members in their transition to civilian careers.
- Our NG6 Partnership, in conjunction with Los Angeles County, assists homeless veterans in identifying employment opportunities and provides funding for housing.
- Our partnership with Embry-Riddle Aeronautical University provides education and training as a primary hiring partner in their Aviation Maintenance Program. Embry-Riddle currently enrolls more than 16,000 active-duty service members, reservists and veterans through its online Worldwide Campus programs.
- The Department of Defense (DoD) SkillBridge program provides transitioning service members with civilian work experience during their final six months in service. In partnership with the Office of the Secretary of Defense, Northrop Grumman offers internships to SkillBridge participants. Since solidifying our partnership in 2020, the company has hosted more than 160 interns and hired more than 145 interns as full-time employees.

2021 VETERAN HIRING HIGHLIGHTS

1,873

veterans hired, representing 23.4% of external hires

84

veterans hired through Operation IMPACT

34

homeless veterans hired as a result of the NG6 Partnership Program

HIGHLIGHT STORY

Digital Transformation of Talent Management

In 2021, Northrop Grumman completed a global transition to a new human capital management system, Workday. Workday consolidates capabilities of several legacy systems transforming the way we recruit, onboard and manage the performance of our people. As an integrated people platform, Workday streamlines our business processes and provides real-time data allowing our teams to spend less time on transactional tasks and more time on operating strategically. Workday enables us to efficiently manage candidates and requisitions and gives our incoming employees a personalized onboarding experience. Our employees can highlight their skills, manage their career interests and goals, and request and view feedback on their performance all in one place.

TALENT ACQUISITION

We remain committed to a diverse and inclusive workforce that reflects the communities within which we live and work. Our director of diversity hiring is a dedicated role responsible for driving an inclusive hiring approach across the organization. We are committed to creating more opportunities for underrepresented talent, with specific focus on our managerial and mid- to high-level technical positions, and to identifying and adopting alternate talent strategies that create more agile hiring processes.

We continue to examine our hiring processes from end to end to identify potential barriers and incorporate best practices to attract and retain the best qualified skills. We have invested in tools, resources, and training to:

- Incorporate a skills-driven talent strategy
- Shape our recruitment marketing efforts to attract diverse talent pools
- Identify and counteract unconscious bias when sourcing, interviewing and hiring
- Expand our network to reach a wider range of candidates by promoting our jobs on diversity job boards
- Ensure a consistent interview structure that reflects our [Values](#) and leadership behaviors
- Reimagine our internal partnerships with ERGs

In response to the ongoing pandemic, we have formalized a hybrid talent attraction process that takes advantage of both virtual and in-person engagement with candidates. We continue to monitor the evolving hiring environment, while applying agile recruiting methods to ensure employees and candidates have an exceptional experience.

Other 2021 talent acquisition highlights include:

- We attended, sponsored and hired at 15 diversity conferences, including Black Engineer of the Year, National Society of Black Engineers, Disability:IN, Grace Hopper Celebration, Great Minds in STEM, Society of Asian Scientists, Society of Hispanic Engineers, Society of Women Engineers, oSTEM, Out 4 Undergrad, Women of Color STEM, American Indian Science and Engineering and Women in Technology International.
- We hosted our fourth annual HBCU Invitational in partnership with our African American Task Group ERG. Since 2018, we have hired 123 new graduates from the Invitational.
- We continued our participation in the iReturn program in partnership with the Society of Women Engineers. This program helps experienced professionals, both men and women, return to the workforce after a career break of two years or more, by providing a 12-week “returnship” to prepare for a full-time career at Northrop Grumman. Since 2017, we have hired 89 participants into the iReturn program, converting 80 to full-time employment with 82% retention.

- At the start of 2021, we launched a Contingent Workforce Solution (CWS) program in partnership with a third party to manage the end-to-end process for hiring contingent workers across the company. Currently, we have approximately 1,500 active contingent workers. In its first year of implementation, the new process resulted in a savings of \$10.4 million. Additional CWS program benefits include contingent worker population visibility and compliance, co-employment mitigation, supplier management and performance metrics.
- Through our work with the Business Roundtable Workforce Partnership Initiative, we work with peer companies to identify new ways to recruit skilled candidates without requiring them to have specific degrees or credentials.

ONBOARDING

In 2021, we continued using a hybrid approach of in-person and virtual processes to onboard new employees. This included providing our new hire training in a mostly virtual environment. We also laid the foundation for an improved candidate engagement experience. Our new pre-hire onboarding portal, powered by Workday, guides candidates through their tasks so they will be ready for their first day.



Employee Development

Our employee development programs strengthen the skill sets that support both our current and future business needs, encourage knowledge transfer and support career growth and progression. We encourage employees to pursue diverse job experiences that expand knowledge of our products and customers. Additionally, our leaders also provide feedback and opportunities to foster employee development.

TRAINING INITIATIVES

We support our employees in developing their career pathways to benefit themselves and Northrop Grumman as a whole. Across the company, we leverage learning technology platforms to enable our people to access curated content that is relevant to them to develop new skill sets and support their career growth.

Vice President Mentoring

For the fifth year in a row, we offered structured mentoring for high-potential talent, representing our commitment to developing current and future leaders. Company leaders engaged in monthly mentoring sessions focused on accelerating growth and mobility through position-based development and skill-building. Of the 240 employees who participated in 2021, 68% were of diverse backgrounds (women or people of color), demonstrating Northrop Grumman's commitment to developing and promoting diverse talent.

Manager Development

We focus on accelerating learning and development of our leaders by providing a combination of experiences, exposure and education. Our Leading For Impact Program offers development paths for all new and experienced managers seeking to refresh or build their leadership capabilities. Nearly 4,000 leaders have honed their skills leveraging various learning modalities, including virtual instructor-led, web-based training and micro-courses to support our managers.

In 2021, 111 people completed the Leadership Program, 51 completed our Women in Leadership Program, 50 completed the Executive Leadership Program, 135 completed Affinity Forum.

Professional & Technical Development

We work with subject matter experts across the company to provide relevant and timely employee development paths in critical skill areas. With input from over 80 subject matter experts, we created development paths in several new areas during 2021, including model-based systems engineering, advanced networking and cyber.

Since 2020, more than 51,000 employees have benefited from My Learning Experience, our primary point of access for all professional and career development. This platform implements machine learning to recommend related resources and create a personalized training experience for each employee. All learning materials are accessible from this single location with integrated social interaction and the ability to connect with subject matter experts across the company. In 2021, more than 2 million hours of user activity resulted in more than 1.5 million content completions.

Executive & Leadership Development

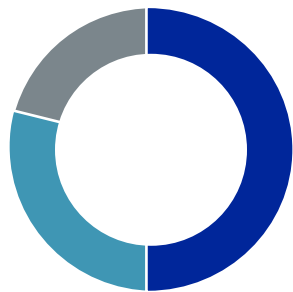
We hold regular talent review discussions to ensure line of sight to talent at various levels of the organization. Succession plans are refreshed and reviewed to ensure a robust, diverse pipeline of talent and business continuity with a tight linkage to development. We focus on accelerating learning and growth of our leaders by providing a combination of experiences, exposure and education. We offer leadership development cohort programs such as the Executive Leadership Program, Leadership Cohort Program, Women in Leadership and Affinity Forum. Within these programs, participants engage in strategic dialogue with senior leaders, external thought leaders and peers.

EDUCATION ASSISTANCE

We encourage employees to continue their education to enhance skills and knowledge as they progress in their careers. Northrop Grumman's Education Assistance benefits are available to employees who want to pursue a college degree or professional or technical certification that directly aligns with our present and future skills requirements. We also partner with a third-party firm to negotiate discounted tuition rates for our employees at several academic institutions. Northrop Grumman covers up to \$10,000 per year for education at any accredited institution with manager approval.

In 2021, Northrop Grumman invested \$40.4 million in education assistance for 7,171 employees.

EDUCATION ASSISTANCE PROVIDED TO EMPLOYEES



50% Graduate Degree

29% Non-Degrees

21% Undergraduate Degrees

EMPLOYEE ENGAGEMENT

Our annual employee survey gives Northrop Grumman employees the opportunity to provide feedback, contributing to our ongoing efforts to make our company an even better place to work. We solicit feedback on topics including company leadership, work environment, operational efficiency, ethics, engagement, inclusion and career development. Performance is compared to the Global High Performance (GHP) Norm and Aerospace & Defense (A&D) Norm from the survey provider, Willis Towers Watson.

In 2021, we exceeded industry norms in all categories, and once again secured our designation as a High Performing Company. Only 6% of companies earn the designation of a High Performing Company, which is based on financial performance and employee experience. This best-in-class designation showcases our strong culture, where employees feel engaged, included and fulfilled professionally. Survey results also show that manager effectiveness, career development opportunities, work-life balance and support for diversity are areas of strength for Northrop Grumman.

Non-Financial Performance Metrics



Employee Experience: Perform at the GHP Norm and above the A&D Norm



82% of Northrop Grumman employees completed the annual employee survey, performing in the top 6% of companies and exceeding industry norms and earning us the designation of a High Performing Company by Willis Towers Watson.



Corporate Citizenship

Corporate citizenship at Northrop Grumman starts with people — the people we employ today and in the future, as well as community members, customers and stakeholders. Together with our employees, we strive to improve the lives of people and make stronger communities possible. Mentoring a student, helping a service member transition to a new career, providing a meal to someone in need, cleaning up our parks and waterways — giving back is at the heart of what we do.

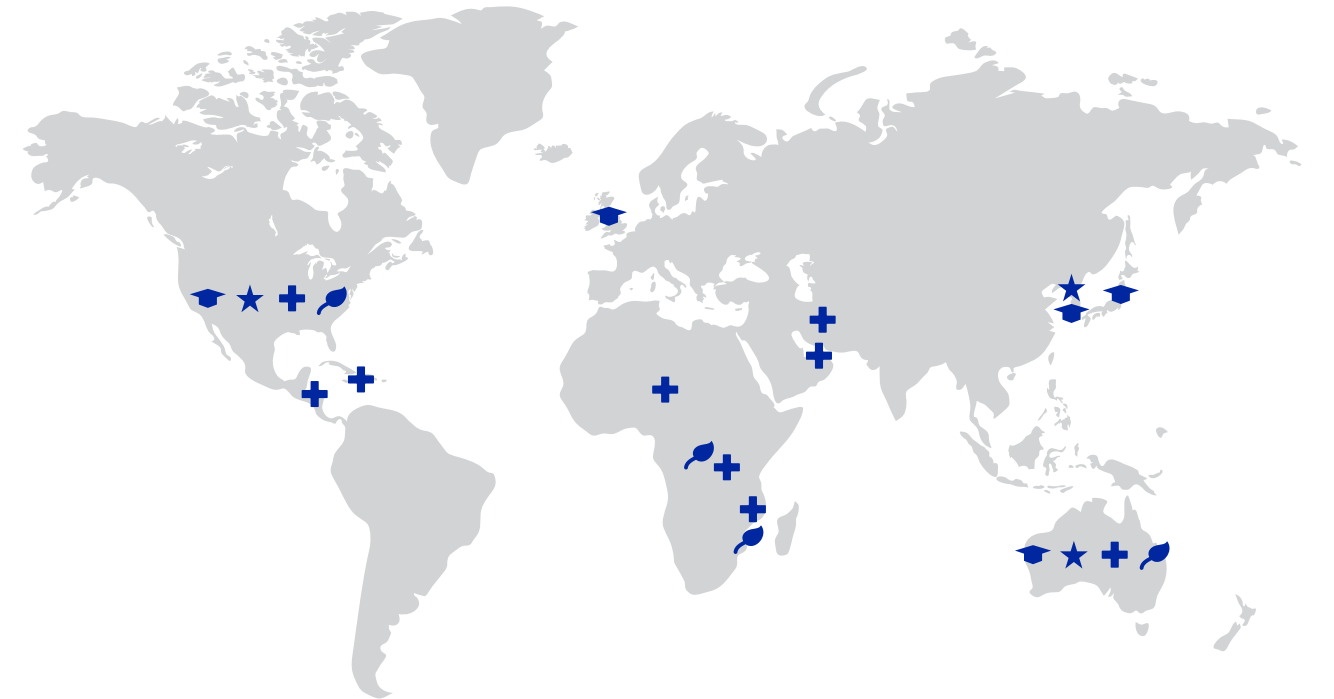
CORPORATE CITIZENSHIP STRATEGY

Our corporate citizenship strategy is set at the corporate level and executed locally by team members who provide regional oversight. A network of volunteer ambassadors supports this framework and serves as a point of contact at sites where corporate citizenship staff are not located. After thoughtful review and analysis of our group-wide strategy, we refreshed our priorities to create a greater impact and alignment with evolving community and business needs. These priorities aim to:

- Develop a diverse workforce through strategic science, technology, engineering and math (STEM) education programs and initiatives that align to the company's future talent needs
- Drive employee attraction and retention through strategic and impactful volunteerism, skills development and philanthropy that underscore our commitment to diversity, equity and inclusion
- Enhance Northrop Grumman's position as an employer and business of choice through key partnerships in our communities
- Address local stakeholder issues in communities that align with the company's business strategies and support diversity, equity and inclusion

Corporate citizenship team members deploy the strategy and collaborate with nonprofit organizations to identify critical community issues. In partnership with local Northrop Grumman leaders and ambassadors, the team develops objectives, reviews philanthropic opportunities and implements community-specific plans that align with our priorities and focus areas. Every year, the team evaluates and analyzes the impact of grants and assesses performance against our goals. This process helps to determine continuation or refinement of the partnership. In 2021, we contributed to organizations in over 70 Northrop Grumman communities.

COMMUNITY SUPPORT AROUND THE WORLD



- 🎓 Education
- ★ Military and Veterans
- ⊕ Health and Human Services
- 🌿 Environment

CHARITABLE GIVING

We work with dynamic partners to support the diverse needs of the communities in which we live and work through contributions from the company, the Northrop Grumman Foundation and our employees. Our core areas of giving include programs and partnerships that focus on STEM education, military and veterans, health and human services, and the environment.

\$39.3 million in social value generated by Northrop Grumman

EDUCATION

Northrop Grumman designs and manufactures some of the world's most advanced technologies. To maintain excellence in innovation, it is imperative that we help develop students' interest and abilities in STEM. Our education strategy places top priority on workforce readiness for students who are underserved in STEM globally and provides educators with workforce-relevant professional development to advance their competence in teaching and engaging students in STEM subjects. We maintain strong partnerships with organizations and institutions focused on engineering and technology-based initiatives designed to excite, engage and educate students from middle school through the university level. In 2021, Northrop Grumman and the Northrop Grumman Foundation contributed \$25,135,649 to education programs of which \$20,364,695 was dedicated to STEM-related programs.

To demonstrate our commitment to this priority, we established an education equity goal to dedicate 50% of our education funding to resources or programs that support social justice through diversity, equity and inclusion. In 2021, Northrop Grumman and the Northrop Grumman Foundation contributed \$13,642,262 toward this goal (54%).

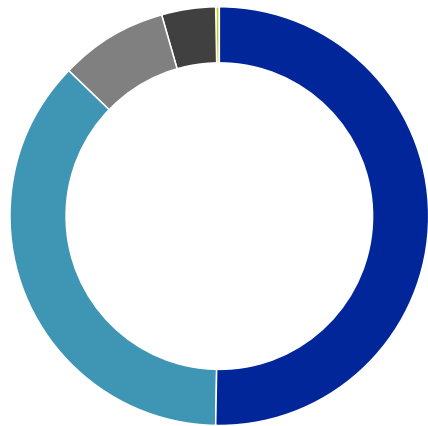
Focus populations include

- Minorities who are underrepresented in STEM: Black, Hispanic and Indigenous Peoples
- Females
- People with disabilities
- LGBTQ+
- Low income
- Homeless individuals/families

Currently, we have a 2030 goal that aligns with United Nations Sustainability Development Goal #4. By 2030, we aim to help increase math and science proficiency for 350,000 students by providing teachers with professional development.

The criteria used to evaluate our partnerships that contribute to this goal include intensive training focused on at least one of the following: pedagogy, STEM, Next Generation Science Standards and Common Core Standards. We give special consideration to programs that require classroom application and post-training implementation. In 2021, we provided professional development to 324 new teachers and reached 81,000 total students. Since 2015, we have increased the math and science proficiency of 354,980 students.

SOCIAL VALUE GENERATED*



\$19,825,034 Company Giving*

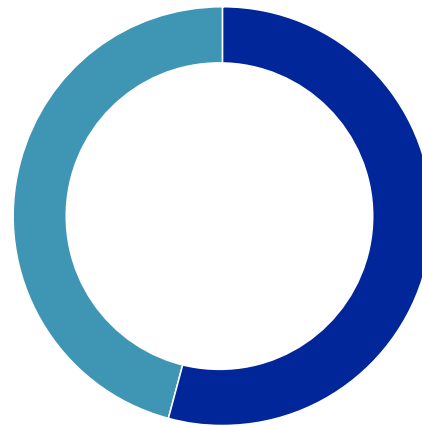
\$14,449,192 Foundation

\$3,349,519 Employees

\$1,607,144 Employee Volunteerism

\$59,891 In-Kind/Non-Cash

TOTAL EDUCATION FUNDING



\$13,642,262 Funding to Support Education Equity Goal

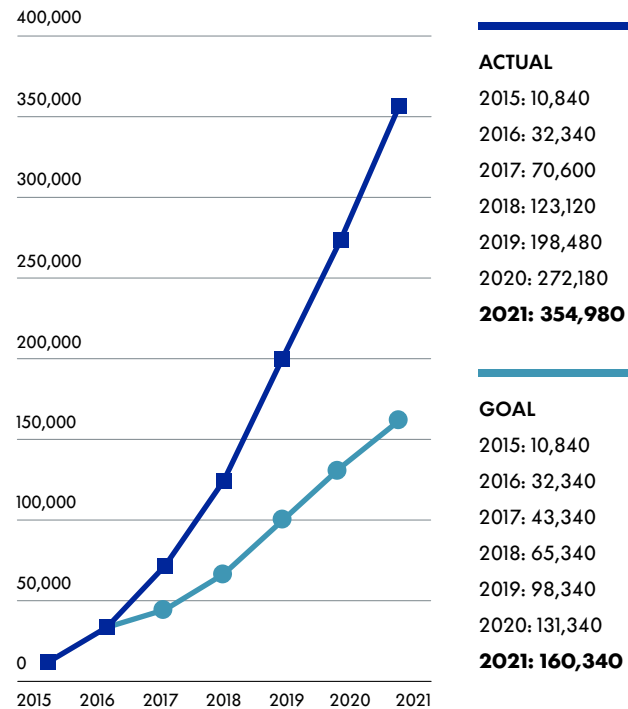
\$11,493,387 Other



* In addition, Northrop Grumman donated \$15,000,000 to the Northrop Grumman Foundation.

Over the past two years, many teacher professional development programs shifted to a virtual environment, allowing us to increase the number of teachers we are able to support. A few examples include Space Academy for Educators, Real World Science, Code.org and Northrop Grumman Foundation Teachers Academy. As a result, we met and exceeded our goal nine years early.

CUMULATIVE NUMBER OF STUDENTS IMPACTED



HIGH SCHOOL INVOLVEMENT PARTNERSHIP (HIP) MENTORSHIP PROGRAM

Northrop Grumman’s HIP mentoring program helps inspire and prepare high school students to pursue STEM pathways to fill the future workforce need for diverse, innovative leaders. Over the past 50 years, more than 5,000 high school students have participated in the program at one of 20 Northrop Grumman sites.

With a focus on underserved students, high school juniors and seniors engage with employees who provide business environment exposure and hands-on experience in real-world environments. After students complete their senior year in the program, they have the opportunity to apply for paid summer internships. During the 2020-2021 school year, 289 students participated in HIP, 63 of which were eligible for summer internships. In turn, we hired eight participants as summer interns, with four receiving and accepting offers to continue their internships in 2022. Limitations presented by the COVID-19 pandemic likely influenced the overall number of HIP seniors hired as interns in 2021. Our goal for 2022 is to on-board a minimum of 25 percent of the HIP seniors.

We collaborate with our Talent Acquisition team to ensure the students we invite to participate in HIP are highly qualified to fill future college internship opportunities. In some cases, by the time a student graduates from college, they may have accrued up to six years of experience with Northrop Grumman through HIP and internships, making them ideal candidates for full-time employment.



HIGHLIGHT STORY

HIP Student Builds a Career at Northrop Grumman

Roy Lara had an interest in STEM as early as middle school, but he had no idea how he could realistically translate his interest into a career. Then he learned his Palmdale, California high school participated in the HIP program. In 2017, Roy began HIP, an experience that led to an internship supporting assembly line optimization for the F-35. Today he is a B-2 avionics intern working on displays, radar and antennas.



“Never in my wildest dreams did I ever think I’d be an engineer, but starting out in HIP helped me choose a major and gave me a lot of insight into things like how important it is to have a mentor, how to network and how to develop soft skills — things you don’t necessarily learn in school but are so important for personal and professional growth.”

Roy will graduate in 2022 with a degree in electrical engineering from Cal State Northridge. By then, he will have accrued five years’ experience at Northrop Grumman through HIP and college internships. Roy’s journey with the company is a testament to the intention and success of HIP, and we are proud that he has accepted an offer to work with us full-time after he graduates.



STEM EDUCATION

STEM education is critical to meeting the future demands of our company and our world. Many of our corporate citizenship initiatives focus on using our areas of expertise to enhance STEM education around the globe. For more information on our STEM initiatives, please see our [corporate citizenship website](#).

Building tomorrow's cybersecurity workforce is not only a national priority, but also a global one. For 10 years, the Northrop Grumman Foundation has been the presenting

sponsor of CyberPatriot, the U.S. Air Force Association's National Youth Cyber Education Program. CyberPatriot offers cyber education to students in grades pre-K through 12th grade. Their signature program is the National Youth Cyber Defense Competition, in which middle and high school students compete in teams to protect and defend the network of a fictitious company. Over the years, the program has expanded to other countries, including CyberCenturion in the UK and CyberTaipan in Australia. Due to the success of the 2020 pilot program in Japan, CyberSakura officially launched with 25 teams in 2021.

In 2021, we worked with select partners to produce free science-based learning modules for students and resources for their teachers. The content focused on developing critical STEM skills and introducing students virtually to a wide array of Northrop Grumman engineers, technologists and scientists. Materials include articles and information about STEM professionals, STEM career pathways and product highlights. We collaborated with Scholastic on its magazine for students featuring the James Webb Space Telescope and on complementary resources for teachers, which will be available in Spanish, Arabic, Korean and Japanese. These learning modules help teachers demonstrate to students the relevance of what they learn in the classroom to STEM professions and the skills required to be successful in those careers.

In South Korea, we sponsor Future Aerospace Leaders Club of Nation (FALCON) to encourage youth to explore aerospace, science and engineering fields, and experience first-hand what a career in aerospace may entail. Every year, 20 students between the ages of 11 through 13 participate in experimental courses, career camps and aerospace competitions.

DIVERSITY IN STEM INITIATIVES

At Northrop Grumman, we value diversity of thought and experience. In 2021, we dedicated 50% of our education funding to resources or programs that support social justice through diversity, equity and inclusion.

In 2020, Space Camp was suspended because of the pandemic but reopened in 2021 with travel restrictions, causing us to shift from providing scholarships to educators and students from around the world to students in the U.S.

With our new education equity goal in mind, we sponsored two programs during the year, both supporting those underrepresented in STEM and low-income students. The first camp supported 80 scholarships for underrepresented minorities in STEM and/or those who required financial support to attend camp. The second camp targeted one of the poorest communities in the state of Alabama, also known as the Black Belt. We sponsored 50 Space Camp scholarships to middle school students from the Selma Alabama School District and an additional 20 to 100 Black Men of Greater Huntsville, an organization that mentors at-risk youth.

The American Indian Science and Engineering Society (AISES) focuses on substantially increasing the representation of Indigenous peoples of North America and the Pacific Islands in STEM studies and careers. The Northrop Grumman Foundation provided a grant to assist with the development of the online AISES Learning Center, which will offer culturally relevant lesson plans and educational resources to help indigenous students succeed. In addition, we contributed to the AISES Energy Challenge, an energy-focused science and engineering fair for Native youth.

Employees from Northrop Grumman's Propulsion Systems and Controls site in Elkton, Maryland, collaborated with the American Institute of Aeronautics and Astronautics to present Introduce a Girl to Engineering Day. This virtual event for eighth-grade students began with an introduction to rockets and engineering and followed up with virtual games like engineering Pictionary. During speed mentoring, students met with and asked questions to multiple woman engineers. The event concluded by teaching the students how to make glue from household items and describing the important role adhesives have in rocket manufacturing.

MILITARY & VETERANS

We take great pride in supporting our veterans, military and their families. Through volunteerism, employee giving and charitable giving, we contribute to programs focused on employment, homelessness, appreciation, and services for the wounded, ill and injured.

Each December on Wreaths Across America Day, wreath laying ceremonies take place at over 2,500 cemeteries to remember and honor our fallen U.S. veterans. In partnership with our military and veteran-focused employee resource group, VERITAS, and Wreaths Across America we hold an annual fundraiser to help commemorate this special day. Since 2018, Northrop Grumman employees have shown respect for fallen veterans by volunteering at events and donating wreaths. In 2021, employees donated 6,300 wreaths, totaling almost 17,000 wreaths over the past four years.

In 2021, we recognized that the Afghanistan withdrawal affected many of our service members and veterans. We funded initiatives by the United Service Organizations (USO) to support deployed service members in Afghanistan. Our support to Headstrong Project helped veterans experiencing painful emotions as a result of the withdrawal. Our grant will help provide free, confidential and easy-to-access mental health treatment for active duty service members, members of the National Guard and Reserve, veterans and their families.

Creating career pathways for transitioning service members and veterans is another priority for our military and veterans outreach strategy. We work with NPower to support no-cost workforce development programs for veterans in Maryland and Texas to become successful IT professionals through training, certifications, job placement and career growth. The program blends 16 weeks of half-day classroom curriculum, seven weeks of paid internships and over 120 hours of professional skills development.

In Australia, we support Soldier On, a fully integrated and holistic veteran support service. Northrop Grumman Australia has worked closely with the Soldier On Pathways Program to provide employment and career advice to veterans and their family members. We also support the Soldier On Women's Vet Connect, a program that specifically addresses the needs of female veterans transitioning into civilian life.

HEALTH & HUMAN SERVICES

Through our health and human services support, we focus on addressing critical local needs and disasters that affect our communities. We are dedicated to alleviating hunger in our communities, and in 2021 we committed to providing 5 million meals to people in need by 2030.

To meet our goal, Northrop Grumman and our employees will collectively donate 500,000 meals a year to organizations and programs that support hunger relief. Donations include contributions from the company, employee fundraisers, food drives and ECHO workplace giving. We created the Northrop Grumman Hunger Action Month Campaign in September to engage employees in achieving our goal. Throughout the year, employees volunteered over 2,200 hours at 30 hunger-related events and hosted 30 canned food drives. Through these initiatives, in 2021, we exceeded our annual goal by donating 2,414,800 meals.

We support disaster relief and provide humanitarian support around the world during moments of crisis. Northrop Grumman proactively contributes annually to American Red Cross and AmeriCares to support their response whenever and wherever a disaster occurs. Our employees eagerly participate in disaster relief campaigns throughout the year; with over 1,000 employees pledging to donate blood through the America Red Cross SleevesUp campaign.

We provided funding to United Way of SE Louisiana in response to Hurricane Ida, which devastated areas where our employees work and live. In addition, when an earthquake ravaged Haiti, we supported the Salvation Army and Hope For Haiti, which focused on housing and medical services for those displaced from their homes.

In the aftermath of the Afghanistan crisis, Northrop Grumman provided grants to nonprofit organizations protecting Afghans in danger. We also contributed to resettlement and placement efforts allowing refugees to achieve self-sufficiency, with resources for housing, food, education, medical care and employment.

Northrop Grumman also supports the National Pulse Memorial and Museum project to commemorate those lost in the Pulse nightclub tragedy in Orlando, Florida, in 2016. Part of this project includes the development of a temporary digital mural and a permanent mosaic tile display in the Pulse Museum. In celebration of Pride month, employees participated in their OUTLOVE HATE campaign and uploaded photos for the exhibit to show their support of the LGBTQ+ community.

The Los Angeles Brotherhood Crusade-Black United Fund focuses on supporting low-income youth to identify social justice issues in their community and become catalysts for change. They begin by learning about the historical context, current landscape and future trends of social justice issues. As they progress through the program, they become peer educators and community organizers rallying support to ignite movements that facilitate policy and systems changes.

**2,414,800 meals donated
to support hunger relief**





ENVIRONMENT

We encourage employees to reinforce our company's commitment to the environment by volunteering to support activities at work and in the local communities. Our environmentally-focused philanthropic partnerships with local organizations help promote conservation and inspire the next generation of environmental stewards.

In Utah, we support the Foundation for the Provo-Jordan River Parkway. In addition to contributing to cleanup efforts, Northrop Grumman provided funding to develop trail signage to educate the public about the historic and environmental value of the Wasatch Front's only river. Through work with the Trails and Open Space Coalition, employees volunteer to remove trash from important watershed areas throughout the year. In San Diego, employees volunteered with the San Diego Coastkeeper to develop and launch a field-based environmental science literacy program for high school students.

In Virginia, we continued our twenty-year partnership with the Fairfax County Park Foundation. Supported by our donations, the Meaningful Watershed Environmental Education Program engages fourth and seventh grade students in hands-on educational field trips, training them to become good stewards of natural resources. When the COVID-19 pandemic shuttered schools and parks, our contributions helped them develop short videos for teachers to use in place of hands-on experiences. In 2021, Northrop Grumman received the Distinguished Private Sector Service Award from the Virginia Recreation and Parks Society in recognition of our support of initiatives that teach students meaningful steps they can take to protect local groundwater and help preserve Fairfax County's natural resources.



MAKING A DIFFERENCE THROUGH VOLUNTEERING

Volunteers are critical to the success of our partnerships and we value the significant contributions they make. Throughout the year, employees logged 56,312 volunteer hours valued at \$1,607,144*. Those employees who logged 40 or more hours within a calendar year received a \$400 Community Service Grant for the nonprofit or school where they volunteered.

* Based on Independent Sector's estimate of \$28.54 as the average value of hourly volunteer time.

In addition, we updated our volunteer recognition program, formerly known as Excellence in Volunteerism Awards. The new program, Difference Maker Awards, celebrates employees' commitment to making a difference through volunteerism. Awards are given in three categories, with the top winner in each awarded a \$10,000 charitable grant for their qualifying nonprofit or accredited public school and two runners-up in each category receive a similarly qualifying \$5,000 charitable grant. Thousands of employees voted to select the winners.

Appendix

DEFINING OUR SUSTAINABILITY STANDARDS



Selected Awards & Recognitions for 2021

- 100% rating for the eighth consecutive year on the Human Rights Campaign's Corporate Equality Index "Best Place to Work for LGBTQ+ Equality"
- 2021 Best of the Best Top Employers and Top LGBTQ+ Friendly Companies by Professional Woman's Magazine
- 2021 Best of the Best Top Employers and Top LGBTQ+ Friendly Companies lists by Black Employment & Entrepreneur Journal
- 2021 Best of the Best Top Supplier Diversity Programs and Top Veteran-Friendly Company by U.S. Veterans Magazine
- 2021 Gold HIRE Vets Medallion Award from the U.S. Department of Labor
- 3BL Media's 100 Best Corporate Citizens
- AA rating from MSCI for ESG management
- American Heart Association Workplace Health Achievement Index Silver Level Recognition
- Best in Enterprise Resilience recognition by Everbridge
- Career Communications Group- Top 10 industry supporter for engineering programs at HBCUs
- Disability Equality Index "Best Place to Work for Disability Inclusion". Highest ranking for 7th year in a row
- Disaster Recovery Institute International's Response and Recovery of the Year Award
- DiversityInc's Top 50 Companies for Diversity (#21). Specific lists: Top Company for People with Disabilities (#10), Native American/Pacific Islander (#2), LGBTQ+ (#21), ERGs (#4), Mentoring (#12), Executive Diversity Councils (#17), and ESG
- Equileap's Top 25 for gender equality
- James S. Cogswell Award for Outstanding Industrial Security Achievement granted by the Defense Counterintelligence and Security Agency to six Northrop Grumman facilities
- Leadership score of A- in CDP's climate change questionnaire for the 10th consecutive year.
- Military Friendly® (Gold) and Military Friendly Spouse awards from Victory Media
- National Organization on Disability Leading Disability Employer
- One of Top 50 Best of the Best Corporations for Inclusion by National LGBT Chamber of Commerce and National Business Inclusion Consortium
- One of Top 50 Employers by CAREERS & the disABLED Magazine
- Only A&D company to receive a 100% Score on the CPA-Zicklin Index for Corporate Political Contributions
- S&P Global Dow Jones Sustainability Indices. Named to the DJSI World Index and North America Index.



Organizations & University Partnerships

Northrop Grumman maintains affiliations with a variety of organizations and universities that inform and enhance our performance. In addition, our list of trade association memberships is available on our [trade associations webpage](#).

ORGANIZATIONS

- Advancing Minorities Interest in Engineering (AMIE)
- Aerospace Industries Association
- American Association of Exporters and Importers
- Asian Business Association
- Association for Supply Chain Management
- Association of Corporate Citizenship Professionals
- Black Business Association
- Black Engineer of the Year
- Boston College Center for Corporate Citizenship
- Boston College Center for Work & Family Workforce Roundtable
- Brookings Institution
- Business Round Table
- Capital Collaborative of Leaders in Academia and Business (CoLAB)
- CAPS Research
- Center for a New American Security
- Center for Strategic and Budgetary Assessments
- Center for Strategic and International Studies
- Corporate Eco Forum

- Defense Industry Initiative on Business Ethics and Conduct
- Disability:IN
- Diversity Best Practices
- Ethics and Compliance Initiative
- Gartner Advisory Group
- Great Minds in STEM
- Greater Washington Partnership
- HUBZone Contractors National Council
- Human Rights Campaign
- Industrial Security Awareness Council
- Institute for Supply Management
- Institute of Business Ethics
- International Aerospace Environmental Group
- International Forum on Business Ethical Conduct
- Latin Business Association
- National Association of Manufacturers
- National Association of Women Business Owners
- National Center for American Indian Enterprise Development
- National Defense Industrial Association
- National LGBT Chamber of Commerce
- National Minority Supplier Development Council
- National Science Teaching Association
- National Society of Black Engineers
- National Veteran Small Business Coalition
- OneTen
- Out & Equal Workplace Summit
- Responsible Minerals Initiative (formerly Conflict-Free Sourcing Initiative)

- Society of Asian Scientists and Engineers
- Society of Hispanic Professional Engineers
- Society of Women Engineers
- The Conference Board
- Virginia Chamber of Commerce

Universities

- Arizona State University
- Bowie State University
- California Institute of Technology
- California Polytechnic State University, San Luis Obispo
- California State Polytechnic University, Pomona
- California State University, Long Beach
- California State University, Northridge
- Carnegie Mellon University
- Embry-Riddle University
- Florida A&M University
- Florida Institute of Technology
- George Mason University
- Georgia Institute of Technology
- Howard University
- James Madison University
- Massachusetts Institute of Technology
- Morgan State University
- North Carolina A&T State University
- Prairie View A&M University
- Purdue University
- Rochester Institute of Technology

- San Diego State University
- Stanford University
- Tuskegee University
- University of Alabama, Huntsville
- University of Arizona
- University of California, Irvine
- University of California, Los Angeles
- University of California, San Diego
- University of California, Santa Barbara
- University of Central Florida
- University of Colorado, Boulder
- University of Colorado, Colorado Springs
- University of Florida
- University of Illinois, Chicago
- University of Illinois, Urbana-Champaign
- University of Maryland, Baltimore County
- University of Maryland, College Park
- University of Michigan
- University of Oklahoma
- University of Puerto Rico, Mayaguez
- University of South Florida
- University of Southampton
- University of Southern California
- University of Utah
- University of Virginia
- Utah State University
- Virginia Polytechnic Institute and State University
- Weber State University
- West Virginia University

Materiality

In 2020, we conducted a comprehensive refresh of our material* ESG topics with a third party. We gathered and analyzed input by engaging with a diverse set of internal and external stakeholders, including company leadership, trade associations, university partners, nonprofits and suppliers. Our executive leadership reviewed and validated the results to ensure we had a complete list of topics that aligned with our business and reflected the feedback from our stakeholders. For a full description of our materiality assessment process, please see our [2020 Sustainability Report](#).

OUR RESULTS

Our ESG materiality matrix highlights the topics that are important to both Northrop Grumman and our stakeholders. The assessment identified our most material topics to be:

- Ethics
- Product Safety & Quality
- Talent Management, Employee Well-Being & Engagement
- Cybersecurity & Data Privacy
- Diversity, Equity & Inclusion

The ESG topics identified within the matrix are viewed as material to the company. However, the prioritization may vary across different locations, operations or business sectors.

We reference these materiality results in shaping Northrop Grumman’s sustainability strategies, goals, initiatives, risk management and more. We track emerging ESG issues and update our sustainability strategies periodically to address the topics that are important to our business and our many stakeholders.

* We do not use the term “materiality” as defined by or in the context of the U.S. Securities and Exchange Commission (SEC) laws including those related to SEC reporting and disclosure obligations, or any other securities laws, or as the term is used in the context of financial statements and financial reporting.

Importance to External Stakeholders	VERY HIGH		<ul style="list-style-type: none"> ▲ Geopolitical Factors ■ Climate & GHG Emissions 	<ul style="list-style-type: none"> ▲ Ethics ● Product Safety & Quality ◆ Talent Management, Employee Well-Being & Engagement ▲ Cybersecurity & Data Privacy ◆ Diversity, Equity & Inclusion
	HIGH	<ul style="list-style-type: none"> ■ Resource Conservation ■ Product Environmental Impact 	<ul style="list-style-type: none"> ▲ Corporate Governance ◆ Human Rights ◆ Community & STEM Engagement 	<ul style="list-style-type: none"> ▲ Supply Chain ● Customer Satisfaction ▲ Regulatory Compliance & Policy Engagement ● Innovation & Digitization
	MODERATE		<ul style="list-style-type: none"> ■ Environmental Remediation ▲ Business Continuity 	
		MODERATE	HIGH	VERY HIGH
Business Impact				

- Environmental
- ◆ Social
- ▲ Governance
- Product

Stakeholder Engagement

Our key stakeholders include academia, community, customers, employees, government, industry partners, policymakers, professional associations, shareholders and suppliers. We engage extensively with stakeholder groups through various means to promote understanding and dialogue regarding management of these material ESG issues.

Annually, as part of our Sustainability Report preparation, we convene an External Review Panel to provide feedback on our ESG programs and transparency. This direct input is helpful as we continue to make improvements in our management and disclosure practices.

WHOM WE ENGAGE	HOW WE ENGAGE
Community	<ul style="list-style-type: none"> Review programs and initiatives in collaboration with community partners and senior leadership; develop community engagement plans that align with strategic priorities Network with leaders from organizations in our targeted areas, including military and veterans, STEM education and diversity-focused organizations, to understand key issues and needs
Customers	<ul style="list-style-type: none"> Work with customers on establishing program goals and priorities Partner with government and industry partners to develop and drive common strategies and standards that support program performance, foster innovation and reduce supply chain risk
Employees	<ul style="list-style-type: none"> Consult and collaborate with employees through a variety of ways, including our annual employee survey, Employee Resource Groups, Global and Sector Diversity and Inclusion Committees and all hands and small group forums Offer volunteer opportunities and programs in areas such as mentoring, STEM education, environmental conservation, military and veterans, matching gifts and payroll contributions to charities
Industry Partners	<ul style="list-style-type: none"> Represent the company on industry associations addressing security stakeholder topics such as critical technology protection, controlled unclassified information, insider threats and personnel security clearance Participate in industry meetings with various nonprofit and government organizations
Shareholders	<ul style="list-style-type: none"> Collaborate with investment leads and actively managed shareholders Meet with the governance leads of our largest shareholders
Suppliers	<ul style="list-style-type: none"> Host supplier outreach events and offer mentoring programs Sponsor academic, customer and industry activities that support small business growth and development

Environmental Data Accountability Methodology

We have continued to prioritize tracking and maintaining high-quality data about our key operational environmental metrics, including GHG emissions, water usage and solid waste diversion from landfills.

This year, we made a few adjustments to our reporting methodologies for our GHG and waste performance indicators moving into our next generation goals. For GHG emissions, we are now using a market-based accountability methodology for Scope 2 emissions to better reflect the actions we are taking to expand our use of renewable energy. In addition, we have modified our waste metric to include hazardous waste generation, so diversion from landfill will reflect our entire waste portfolio for the business as opposed to just non-hazardous waste.

Our environmental footprint data is tracked across the full portfolio of our facilities where we have operational control, which represents more than 99% of our global footprint. Reporting for our historical data has also been adjusted to align with our current business composition*, structure and revised methodologies. Our GHG inventory was developed in accordance with the GHG Protocol Corporate Standard and in alignment with the International Aerospace Environmental Group Greenhouse Gas Reporting Guidance, and includes CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃. We continue to engage third-party verifiers to validate our Scope 1 (direct), Scope 2 (indirect, location- and market-based) and Scope 3 (other indirect) Business Travel emissions to the ISO 14064-3 standard.

* As of 2021, historical environmental data presented is now inclusive of the Orbital ATK acquisition in 2018 as well as IT Services divestiture that occurred in 2021. Performance metrics presented in previous sustainability reports will differ.

Forward-Looking Statements

Statements in this report contain or may contain statements that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “will,” “expect,” “anticipate,” “commit,” “intend,” “may,” “could,” “should,” “plan,” “project,” “forecast,” “believe,” “estimate,” “outlook,” “trends,” “goals” and similar expressions generally identify these forward-looking statements. These forward-looking statements speak

only as of the date when made, and the Company undertakes no obligation to publicly update or revise any forward-looking statements after the date of this release, except as required by applicable law. Forward-looking statements are not guarantees of future performance and inherently involve a wide range of risks and uncertainties that are difficult to predict. A discussion of these risks and uncertainties is contained in the Company’s filings with the Securities and Exchange Commission.



GRI Standards Content Index

The GRI content index indicates the location of each disclosure within this report, externally on our website or other reports or provides the information directly in a statement.

We have also indicated how our reporting topic areas align with the United Nations Sustainable Development Goals (SDGs). The SDGs address global challenges and are designed to encourage active participation by corporations, governments and non-profit organizations to collaborate on finding solutions.

For more information see the [United Nations SDGs website](#).



Index	PR: 2021 Proxy Statement PCG: Principles of Corporate Governance
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General Disclosures

DISCLOSURE		LOCATION (OR DIRECT INFORMATION)	SDG REFERENCE
ORGANIZATIONAL PROFILE			
102-1	Name of the organization	Our Company	—
102-2	Activities, brands, products, and services	Our Company	—
102-3	Location of headquarters	Falls Church, Virginia, U.S.	—
102-4	Location of operations	See Northrop Grumman website, Contact Us	—
102-5	Ownership and legal form	Form 10-K , p. 1; NYSE: NOC	—
102-6	Markets served	Our Company	—
102-7	Scale of the organization	Our Company	—
102-8	Information on employees and other workers	People & Culture; Data matrix	—
102-9	Supply chain	Global Supply Chain	—
102-10	Significant changes to the organization and its supply chain	Effective January 30, 2021, the company completed a sale of its IT services business to Peraton, an affiliate of Veritas.	—

DISCLOSURE		LOCATION (OR DIRECT INFORMATION)	SDG REFERENCE
102-11	Precautionary principle or approach	Governance; Protecting Our Environment	—
102-12	External initiatives	Stakeholder Engagement	—
102-13	Memberships of associations	Partnerships & Professional Associations	—
STRATEGY			
102-14	Statement from senior decision-maker	Message From CEO	—
ETHICS AND INTEGRITY			
102-16	Values, principles, standards and norms of behaviors	Our Values; Ethics & Responsible Business Practices For information on the process of determining our new values, see Our Values in the 2020 report.	SDG 16
102-17	Mechanisms for advice and concerns about ethics	Ethics & Responsible Business Practices: Northrop Grumman OpenLine	SDG 16

DISCLOSURE		LOCATION (OR DIRECT INFORMATION)	SDG REFERENCE
GOVERNANCE			
102-18	Governance structure	Governance	SDG 16
102-19	Delegating authority	Governance; PCG Section 11.B	SDG 16
102-21	Consulting stakeholders on economic, environmental and social topics	Stakeholder Engagement; PCG Section IV.G	SDG 16
102-22	Composition of the highest governance body and its committees	Board of Directors; PR Proposal 1: Election of Directors	SDG 5, 16
102-23	Chair of the highest governance body	Board of Directors	SDG 16
102-24	Nominating and selecting the highest governance body	Board of Directors; PR Proposal 1: Election of Directors	SDG 5, 16
102-25	Conflicts of interest	Ethics & Responsible Business Practices; PCG Section III.E; VII	SDG 16
102-26	Role of the highest governance body in setting purpose, values and strategy	Board of Directors; PCG Section I, II; PR: Board Membership and External Relationships	-
102-28	Evaluating the highest governance body's performance	Governance; PCG Section VI.D	-
102-29	Identifying and managing economic, environmental and social impacts	Board of Directors: Sustainability Oversight	SDG 16
102-30	Effectiveness of risk management processes	Governance	-

DISCLOSURE		LOCATION (OR DIRECT INFORMATION)	SDG REFERENCE
102-31	Review of economic, environmental and social topics	Board of Directors	-
102-32	Highest governance body's role in sustainability reporting	PR 25	-
102-33	Communicating critical concerns	PCG Section IV.G	-
102-35	Remuneration policies	PR 29-32, 39-56	-
102-36	Process for determining remuneration	PCG Section V.A, B	-
102-37	Stakeholders' involvement in remuneration	PR 6, 38, 56	SDG 16
102-38	Annual total compensation ratio		
STAKEHOLDER ENGAGEMENT			
102-40	List of stakeholder groups	Stakeholder Engagement	-
102-41	Collective bargaining agreements	ESG Performance Data Matrix	SDG 8
102-42	Identifying and selecting stakeholders	Stakeholder Engagement	-
102-43	Approach to stakeholder engagement	Stakeholder Engagement	-
102-44	Key topics and concerns raised	Stakeholder Engagement	-
102-45	Entities included in the consolidated financial statements	Northrop Grumman Corporation	-

DISCLOSURE	LOCATION (OR DIRECT INFORMATION)	SDG REFERENCE	
102-46	Defining report content and topic boundaries	About This Report; Materiality	-
102-47	List of material topics	Materiality	-
102-48	Restatements of information	We made minor restatements in environmental data as a result of error corrections in alignment with the GHG Protocol Corporate Standard methodology. As of 2021, historical environmental data presented is now inclusive of the Orbital ATK acquisition in 2018 as well as IT Services divestiture that occurred in 2021.	-
102-49	Changes in reporting	About This Report	-
102-50	Reporting period	2021	-
102-51	Date of most recent report	July 2021 (reporting on 2020 data)	-
102-52	Reporting cycle	Annual	-
102-53	Contact point for questions regarding the report	See Northrop Grumman website, Contact Us .	-
102-54	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Core option.	-
102-55	GRI content index	GRI Standards Content Index	-
102-56	External assurance	We externally assure our Emissions and Water data. See our website .	-

Management Approach

DISCLOSURE	LOCATION (OR DIRECT INFORMATION)	SDG REFERENCE	
103-1, 2, 3	Ethics	Ethics & Responsible Business Practices	SDG 12
	Corporate governance	Governance	SDG 12
	Regulatory compliance and policy engagement	Ethics & Responsible Business Practices	SDG 12
	Cybersecurity and data privacy	Cybersecurity & Data Protection	SDG 9
	Business continuity	Business Continuity & Operational Resilience	SDG 12
	Human rights	Ethics & Responsible Business Practices	SDG 8
	Supply chain	Global Supply Chain	SDG 8
	Product safety and quality	Product Strategy & Innovation	SDG 9
	Customer satisfaction	Product Strategy & Innovation	SDG 12
	Innovation and digitalization	Product Strategy & Innovation	SDG 9
	Environmental remediation	Environmental Sustainability	SDG 6, 7, 13, 14, 15
	Talent management, employee well-being and engagement	People & Culture	SDG 8
	Diversity, equity and inclusion	Diversity, Equity & Inclusion	SDG 5, 10
	Health and safety	Employee Health & Safety	SDG 3, 8
	Resource conservation	Environmental Sustainability	SDG 6, 7, 13, 14, 15
Climate and GHG emissions	Environmental Sustainability	SDG 6, 7, 13, 14, 15	
Community and STEM engagement	Corporate Citizenship	SDG 1, 2, 3, 4, 5, 11, 17	

Topic-Specific Disclosures

DISCLOSURE		LOCATION (OR DIRECT INFORMATION)	SDG REFERENCE
ECONOMIC			
ECONOMIC PERFORMANCE			
201-1	Direct economic value generated and distributed	Financial Performance; Annual Report	SDG 2, 8, 9
PROCUREMENT PRACTICES			
204-1	Proportion of spending on local suppliers	Global Supply Chain	SDG 12
ANTI-CORRUPTION			
205-1	Operations assessed for risks related to corruption	Ethics & Responsible Business Practices	SDG 16
205-2	Communication and training about anti-corruption policies and procedures	Ethics & Responsible Business Practices	SDG 16
ENVIRONMENTAL			
ENERGY			
302-1	Energy consumption within the organization	Data Matrix	SDG 7, 12, 13
302-3	Energy intensity	Data Matrix	SDG 7, 12, 13
WATER			
303-1	Interactions with water as a shared resource	Environmental Sustainability	-
303-2	Management of water discharge-related impacts	Environmental Sustainability	-
303-3	Water withdrawal	Environmental Sustainability	SDG 6

DISCLOSURE		LOCATION (OR DIRECT INFORMATION)	SDG REFERENCE
EMISSIONS			
305-1	Direct (Scope 1) GHG emissions	Environmental Sustainability, Data Matrix 2021 CDP Response	SDG 12, 13
305-2	Energy indirect (Scope 2) GHG emissions	Environmental Sustainability, Data Matrix 2021 CDP Response	SDG 12, 13
305-3	Other indirect (Scope 3) GHG emissions	2021 CDP Response	SDG 12, 13
305-4	GHG emissions intensity	Data Matrix	SDG 12, 13
305-5	Reduction of GHG emissions	2021 CDP Response	SDG 12, 13
EFFLUENTS AND WASTE			
306-3	Waste generated	Environmental Sustainability, Data Matrix	SDG 12
ENVIRONMENTAL COMPLIANCE			
307-1	Non-compliance with environmental laws and regulations	Data Matrix	SDG 16
SOCIAL			
OCCUPATIONAL HEALTH AND SAFETY			
403-1	Occupational health and safety management system	Employee Health and Safety	-
403-2	Hazard identification, risk assessment and incident investigation	Employee Health and Safety	-

DISCLOSURE	LOCATION (OR DIRECT INFORMATION)	SDG REFERENCE
403-3	Occupational health services Employee & Family Well-Being; Northrop Grumman Total Rewards	-
403-4	Worker participation, consultation and communication on occupational health and safety Employee Health & Safety	-
403-5	Worker training on occupational health and safety Employee Health & Safety	-
403-6	Promotion of worker health Employee Health & Safety, Employee & Family Well-Being	-
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships Global Supply Chain: Supplier Responsibility Supplier Standards of Business Conduct	-
403-9	Types of injury and rates of injury, occupational diseases, lost days and absenteeism and number of work-related fatalities Data Matrix	SDG 8

DISCLOSURE	LOCATION (OR DIRECT INFORMATION)	SDG REFERENCE
TRAINING AND EDUCATION		
404-2	Programs for upgrading employee skills and transition assistance programs Talent Management	SDG 8
404-3	Percentage of employees receiving regular performance and career development reviews Talent Management	SDG 8
DIVERSITY AND EQUAL OPPORTUNITY		
405-1	Diversity of governance bodies and employees Governance; Data Matrix	SDG 5, 8
PUBLIC POLICY		
415-1	Political contributions Northrop Grumman Political Contributions	SDG 16

SASB Index

The table below identifies the Sustainability Accounting Standards Board (SASB) indicators for which we have publicly available information, relevant to the Aerospace & Defense Standard (Version 2018-10).

METRIC CODE	ACCOUNTING METRIC	LOCATION (OR DIRECT INFORMATION)
ORGANIZATIONAL PROFILE		
RT-AE-130a.1	(1) Total energy consumed (in gigajoules, GJ)	(1) 9,822,260 GJ
	(2) Percentage of grid electricity	(2) 53%
	(3) Percentage renewable	(3) 1%
HAZARDOUS WASTE MANAGEMENT		
RT-AE-150a.1	Amount of hazardous waste generated, percentage recycled	-
RT-AE-150a.2	Number and aggregate quantity of reportable spills, quantity recovered	0 reportable spills
DATA SECURITY		
RT-AE-230a.2	Description of approach to identifying and addressing data security risks in company operations and products	Cybersecurity and Data Protection
PRODUCT SAFETY		
RT-AE-250a.2	Number of counterfeit parts detected — While this quantitative metric is not reported, we provide a qualitative description of our management approach to protecting the integrity of our supply chain.	Global Supply Chain
RT-AE-250a.3	Number of Airworthiness Directives received; total units affected	0 Airworthiness Directive received 0 units affected

METRIC CODE	ACCOUNTING METRIC	LOCATION (OR DIRECT INFORMATION)
FUEL ECONOMY & EMISSIONS IN USE-PHASE		
RT-AE-410a.1	Revenue from alternative energy-related products	\$0
MATERIALS SOURCING		
RT-AE-440a.1	Description of the management of risks associated with the use of critical materials	Ethics & Responsible Business Practices Global Supply Chain
BUSINESS ETHICS		
RT-AE-510a.3	Discussion of processes to manage business ethics risks throughout the value chain	Ethics & Responsible Business Practices Global Supply Chain
Metric Code Accounting Metric QUANTITATIVE DATA		
RT-AE-000.B	Number of employees	88,000

ESG Performance Data Matrix

TOPIC	2019	2020	2021	GRI	SASB
COMPANY DATA*					
Sales (million USD)	33,841	36,799	35,667	102-7	-
Employees (as of December 31 of each calendar year)	90,000	97,000	88,000	102-7	RT-AE-000.B
Floor space (thousand square feet)	53,780	50,875	51,104	102-7	-
CORPORATE CITIZENSHIP/COMMUNITY					
Direct community investment through philanthropy (million USD)†	31.1	33.9	34.3	201-1	-
Company charitable grants – Education (Target 50%) (%)	55	50	60	201-1	-
Company charitable grants – Military and Veterans (Target 25%) (%)	17	13	13	201-1	-
Company charitable grants – Health and Human Services (Target 20%) (%)	8	20	13	201-1	-
Company charitable grants – Environment (Target 5%) (%)	4	3	3	201-1	-
Company in-kind and non-cash contributions (million USD)	0.3	5.0	0.1	201-1	-
Charitable donations as measured by Business for Societal Impact (Company and Foundation) (%)	9	26	13	201-1	-

* The 2019-2020 environmental data for GHG, energy, water and solid waste for Northrop Grumman global facilities has been re-stated to include facilities that were part of Northrop Grumman's Orbital ATK acquisition in 2018.

† Includes investments from Northrop Grumman and the Northrop Grumman Foundation; excludes donations from Northrop Grumman to the Northrop Grumman Foundation.

TOPIC	2019	2020	2021	GRI	SASB
Community investments as measured by Business for Societal Impact (Company and Foundation) (%)	91	74	87	201-1	-
Employee giving (million USD)‡	3.4	5.2	3.3		-
Employee volunteerism (hours)	63,187	55,893	56,312		-
Paid volunteerism (hours)	21	0	118		-
Middle school students impacted by qualifying educator professional development programs in the year	33,500	15,100	34,200		-
Cumulative middle school students impacted by qualifying educator professional development programs since 2015 (Target 350,000 students by 2030)§	198,480	272,180	354,980		-
ENVIRONMENT*					
Sites with ISO 14001 certification	26	23	22	103	-
Significant fines and penalties (shown in years paid) (\$)	30,500	0	0	307-1	-
Tons of Toxic Release Inventory	284	421	N/A		-

‡ Includes giving through ECHO, matched gifts and employee fundraising.

§ Calculation based on teacher maintaining active teaching status or in a school-based setting for three years post professional development experience.

TOPIC	2019	2020	2021	GRI	SASB
HAZARDOUS WASTE					
Hazardous waste generation (tons)	4,011	2,836	3,475	306-2	RTE-AE-150a.1
Hazardous waste (number of reportable spills)	0	0	0	306-2	RT-AE-150a.2
Hazardous waste recycled (%)	N/A	6.0	1.0		RT-AE-150a.1
NONHAZARDOUS SOLID WASTE					
Reuse (tons)	101	966	261	306-2	-
Recycling (tons)	19,078	20,975	19,377	306-2	-
Composting (tons)	652	1,365	880	306-2	-
Recovery (including energy recovery) (tons)	407	277	789	306-2	-
Landfill (tons)	21,934	21,379	20,498	306-2	-
Diversion rate (%)	47.0	51.8	49.1	306-2	-
ENERGY					
Energy consumption (GJ)	10,193,988	9,718,161	10,245,254	302-1	RT-AE-130a.1
Renewable energy consumption (GJ)	79,548	79,501	87,482		-
Percentage of energy that is renewable (%)	1	1	1	302-1	RT-AE-130a.1
Percentage of energy supplied from grid electricity (%)	52	56	53		RT-AE-130a.1

TOPIC	2019	2020	2021	GRI	SASB
Energy intensity (Joules/USD sales)	301,231.86	264,087.64	286,981.91	302-3	-
Electricity consumption (MWh)	1,485,704	1,502,611	1,503,053		-
Renewable electricity consumption (MWh)	22,097	22,084	24,301		-
Onsite renewable electricity generation (MWh)	1,240	1,227	1,289		-
Percentage of electricity that is renewable (%)	1	1	1		-
EMISSIONS					
Direct (Scope 1) greenhouse gas emissions (tonnes CO ₂ e)	272,950	231,719	259,321	305-1	-
Indirect (Scope 2) Market-based greenhouse gas emissions (tonnes CO ₂ e)	489,232	468,931	466,514	305-2	-
Carbon offsets (tonnes CO ₂ e)	11,000	11,000	N/A	305-5	-
Total GHG Emissions (Market-based includes carbon offsets) (tonnes CO ₂ e)	751,182	689,651	725,835	305-5	-
Greenhouse gas emission intensity (Scope 1 and Scope 2 – Market-based) (tonnes CO ₂ e/USD sales)	0.00002220	0.00001874	0.00002033	305-4	-
Reduction of greenhouse gas emissions (from 2019 – to show trending) (%)	N/A	-8.2%	-3.4%	305-5	-

TOPIC	2019	2020	2021	GRI	SASB
WATER					
Water withdrawal (potable) – Total (gallons)	1,405,432,942	1,320,987,911	1,422,103,584	303-3	-
Water withdrawal source (potable) – Surface water (gallons)	194,977,127	259,200,000	210,744,893	303-3	-
Water withdrawal source (potable) – Groundwater (gallons)	354,717,267	280,949,206	418,877,663	303-3	-
Water withdrawal source (potable) – Municipal Supply (gallons)	855,738,548	780,838,705	792,481,028	303-3	-
Water withdrawal (potable and nonpotable) – Total (gallons)	1,422,384,089	1,349,331,110	1,478,010,825	303-3	-
Water withdrawal source (nonpotable) – Municipal Reclaimed (gallons)	16,864,498	28,305,087	55,879,997	303-3	-
Water withdrawal source (nonpotable) – Rainwater (gallons)	86,648	38,112	27,244	303-3	-
ETHICS AND INTEGRITY					
OpenLine inquiries	863	565	577	102-17	-
OpenLine allegations	1,374	1,578	1,611	102-17	-

TOPIC	2019	2020	2021	GRI	SASB
GOVERNANCE					
Members on the Board of Directors	12	13	13	102-18, 102-22	-
Independent directors on Board	11	12	12	102-18, 102-22	-
Women/minority directors	6 (50%)	6 (46%)	6 (46%)	102-22, 405-1	-
HEALTH AND SAFETY					
Work-related fatalities	0	0	0	403-9	-
Total case rate (per 100 workers)	0.90	0.96	1.08	403-9, 403-10	-
Lost work day rate (per 100 workers)	7.46	10.70	18.61	403-9, 403-10	-
Days away case rate (per 100 workers)	0.23	0.39	0.56	403-9, 403-10	-
PRODUCTS					
Number of airworthiness directives received	1	1	0		RT-AE-250a.3
Number of airworthiness directives, units affected	100	0	0		RT-AE-250a.3
Revenue from alternative energy-related products (million USD)	100	0	0		RT-AE-410a.1
RESEARCH AND DEVELOPMENT AND INNOVATION					
Company-sponsored R&D expenses (million USD)	953	1,100	1,100	201-1	-

TOPIC	2019	2020	2021	GRI	SASB
SUPPLY CHAIN					
Percent of small business (%)	38.4	37.2	30.4	102-9	-
Percent of small disadvantaged business (SDB) (%)	3.7	4.7	4.2	102-9	-
Percent of women-owned small business (WOSB) (%)	7.5	7.5	6.4	102-9	-
Percent of HUBZone small business (%)	3.4	3.3	3.3	102-9	-
Percent of veteran-owned small business (VOSB)(%)	4.7	3.9	3.8	102-9	-
Percent of service-disabled veteran-owned small business (SDVOSB) (%)	2.0	1.9	2.2	102-9	-
TALENT MANAGEMENT, DIVERSITY, EQUITY AND INCLUSION*					
Part-time employees	1,373	1,388	1,390	102-8	-
Employee average age	44	43	44		-
U.S. employees covered by collective bargaining agreements (%)	5.8	4.4	4.4	102-41	-
Total population – male (%)	73.8	74.9	75.4	405-1	-
Total population – female (%)	26.2	25.1	24.5	405-1	-

* All demographic data reflects U.S. population only

TOPIC	2019	2020	2021	GRI	SASB
Total population – people of color (%)	37.3	35.3	36	405-1	-
Total population – veterans (%)	19.6	18.0	17.8	405-1	-
Total population – persons with disabilities (%)	8.1	8.3	8.5	405-1	-
Management population – male (%)	72.4	73.4	73.4	405-1	-
Management population – female (%)	27.6	26.6	26.6	405-1	-
Management population – people of color (%)	28.0	26.6	27.7	405-1	-
Vice president and above population – female (%)	32.6	32.0	35.4	405-1	-
Vice president and above population – people of color (%)	18.0	18.0	17.7	405-1	-
NEW HIRES (EXTERNAL)					
Veteran external hires (%)	22.5	21.5	21.4		-
Female external hires (%)	24.3	23.3	23.1		-
Persons with disabilities external hires (Target 7%) (%)	11.3	11.4	10.5		-
People of color external hires (%)	43.1	43.3	41.4		-



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Look for our upcoming reports.

