

Exceptional service in the national interest



SANDIA NATIONAL LABORATORIES

James S. Peery, Laboratories Director October 26, 2020



Sandia National Laboratories is a multimission laboratory managed and operated by National Technology and Engineering Solutions of Sandia LLC, a wholly owned subsidiary of Honeywell International Inc. for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.

SAND 2020-11429 PE



Activity locations

- Waste Isolation
 Pilot Plant,
 Carlsbad, New Mexico
- Kauai, Hawaii
- Tonopah, Nevada
- Barrow, Alaska
- Pantex Plant, Amarillo, Texas

Main sites

- Albuquerque, New Mexico
- Livermore, California



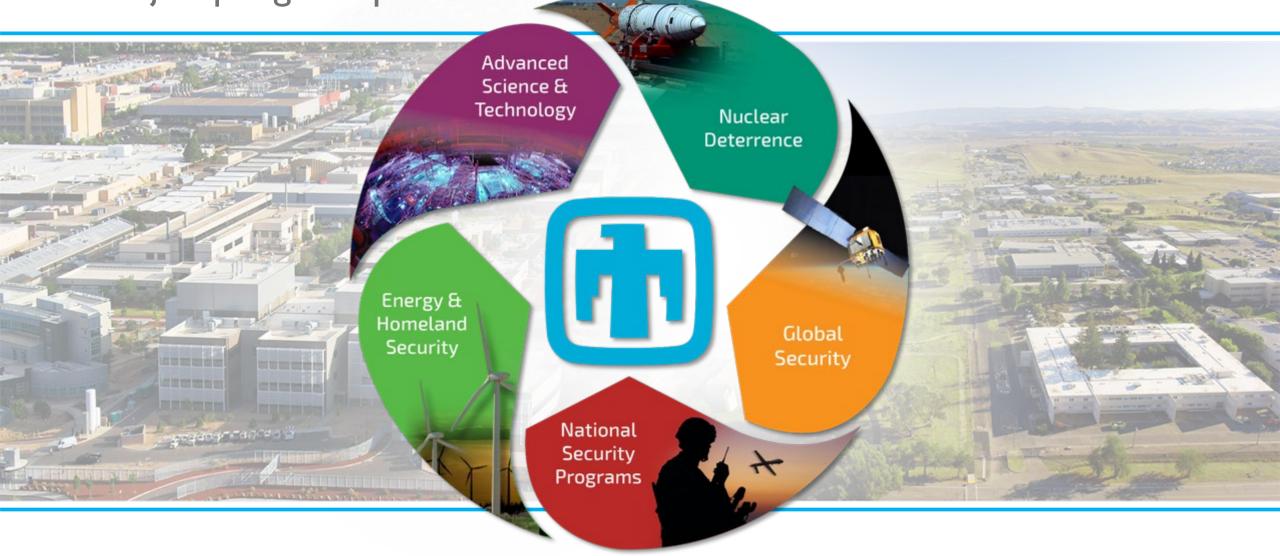




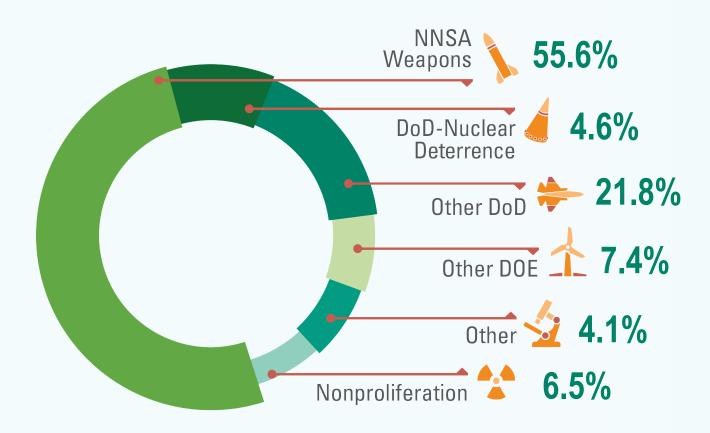
The Laboratories have evolved to meet national challenges



Sandia is a multimission national security laboratory with five major program portfolios



Sandia's budget covers a broad range of government and other work





OTHER

Department of Homeland Security
Other federal agencies | Nonfederal entities
CRADAs, licenses, royalties | Inter-entity work



DoD

Air Force | Army | Navy
Defense Threat Reduction Agency
Ballistic Missile Defense Organization
Office of the Secretary of Defense
Defense Advanced Research Projects Agency
Intelligence Community



OTHER DOE

Science

Energy Efficiency and Renewable Energy Nuclear Energy Environmental Management Electricity Delivery and Energy Reliability Other DOE



NONPROLIFERATION

NNSA/NA20 | State Department

Sandia helps the New Mexico economy in significant ways

• We attract professionals to the state;

procure goods and services from New Mexico sources;

• help small businesses succeed

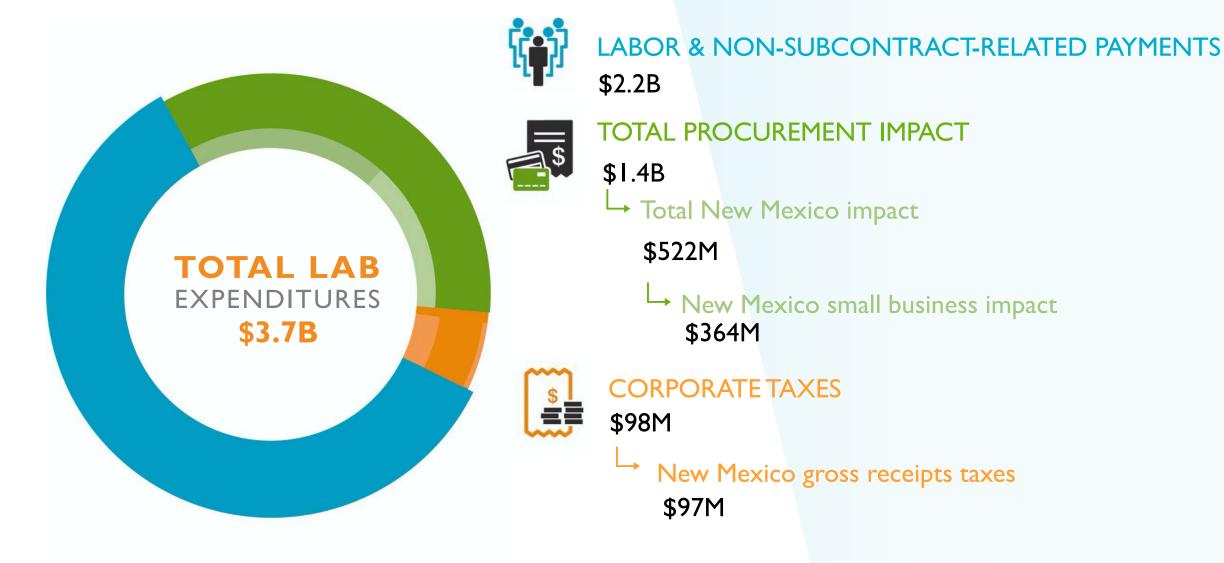
transfer technology to the private sector;

partner with New Mexico universities;

have considerable payroll and pension distributions



In FY19 the Labs' spending was nearly \$3.7 billion



Small business contracting is a priority



MOVCD

SMALL BUSINESS*	\$3 4 814
DISADVANTAGED	\$203M
WOMAN-OWNED	\$152M
VETERAN-OWNED	\$144M
SERVICE-DISABLED	
VETERAN-OWNED	\$107M
HUBZONE	\$72M

CMALL DISCINIECC*



SMALL BUSINESS*	\$140M
DISADVANTAGED	\$107M
WOMAN-OWNED	\$102M
VETERAN-OWNED	\$54M
HUBZONE	\$47M
SERVICE-DISABLED	
VETERAN-OWNED	\$30M





NEW MEXICO SMALL BUSINESS
SUBCONTRACTING PAYMENTS ARE:

46% OF TOTAL SMALL-BUSINESS SUBCONTRACTING PAYMENTS

OF TOTAL NEW MEXICO SUBCONTRACTING PAYMENTS

*Small Businesses not categorized as Small Disadvantaged Business, Women-Owned Small Business, HUBZone Small Business, Veteran-Owned Small Business or Service-Disabled Veteran-Owned Small Business.

Sandia programs promote small-business success

Sandia is committed to awarding 60% of total subcontracting dollars to small businesses by 2022

We host monthly virtual C3 Office Hours where our Small Business Program Advocates are available for one-on-one collaborations

Three companies were chosen as the first protégés in our Mentor-Protégé Program designed to enhance small business development and ability to compete for federal and industry opportunities.

Sandia offers **Small Business Forums** and other programs to prepare small companies to do business with the Labs

Sandia hosted over 129 companies (198 individuals) in FY20

A Construction Materials for Minor Modifications opportunity was awarded to **Hacienda Home Centers Inc.** - a New Mexico small-disadvantaged, HUBZone, minority veteran owned company that has been in business 45 years

Technology-based economic development helps New Mexico companies start up and grow

New Mexico Small Business Assistance (NMSBA)

- 8,778 new jobs created and retained; all 33 New Mexico counties supported
- \$67.2M in technical assistance to 3,051 New Mexico small businesses
- 2019: \$2.4M in assistance provided by Sandia alone, 192 small businesses in 21 counties

Entrepreneurial Separation to Transfer Technology (ESTT)

162 Sandia entrepreneurs have left the Labs
 113 companies started or expanded
 2020: 2 Sandians currently out on ESTT

Technology Readiness Gross Receipts (TRGR) Tax Credit Act

- In March 2020 the governor signed House Bill 255, TRGR, into law
- \$4.5M for a 3-year pilot program will let businesses use NM national laboratory resources to mature their technologies toward commercialization
- Up to \$150K in assistance to an NM business that has licensed a technology from an NM national laboratory or that is a participant in a Cooperative Research and Development Agreement with an NM national laboratory

Sandia Science & Technology Park (SS&TP)

- 47 companies and organizations employing 2,321 people
- \$396M of investment
- \$95K average annual salary, \$6.4B wages and salaries generated
- 2020: 6 new companies and 2 expansions

Center for Collaboration and Commercialization (C3)/Entrepreneur Exploration (EEx)

- 88 entrepreneur events, 4,064 participants including both Sandians and community members
- C3 location at the University of New Mexico Lobo Rainforest Building fosters collaboration with UNM and AFRL
- FY2019: EEx held 20 entrepreneur events with a total of 745 participants

NTESS executed 31 new Cooperative Research and Development Agreements in FY20

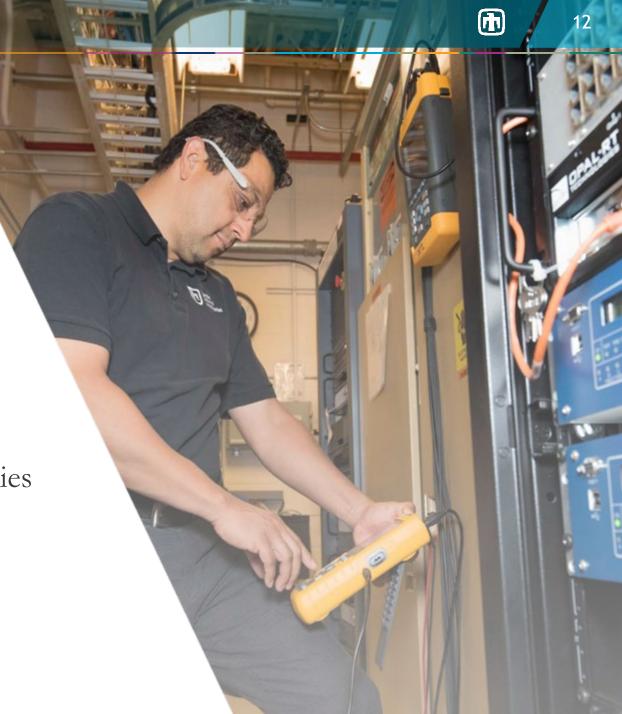
 CRADA portfolio continues to increase in number and scope

• NTESS has about 160 active CRADAs

 The 2020 agreements include small businesses, education institutions, local businesses, and large international companies

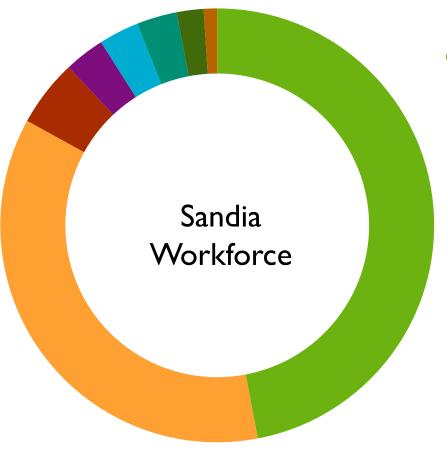
 NTESS executed several COVID related CRADAs with Abcam & Honeywell

• Additional **strategic CRADAs** were signed with PNM, Intel, the University of Puerto Rico, and the German Aerospace Center



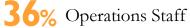


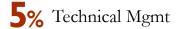
Sandia's workforce totals about 14,500

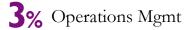


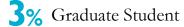
In the past five years, **about 30%** of hires (excluding students) — or about **1,600** professionals — relocated to New Mexico

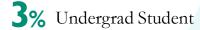






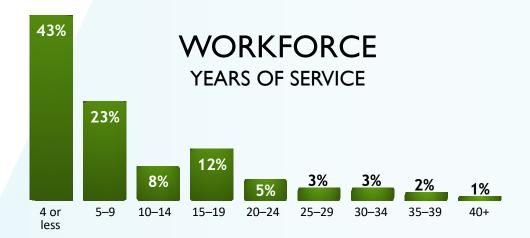


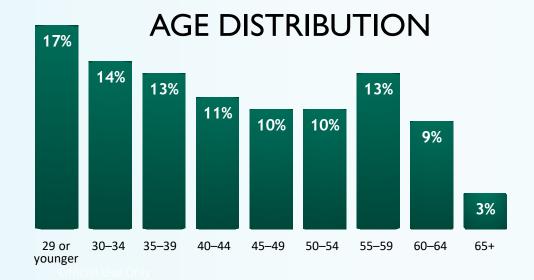




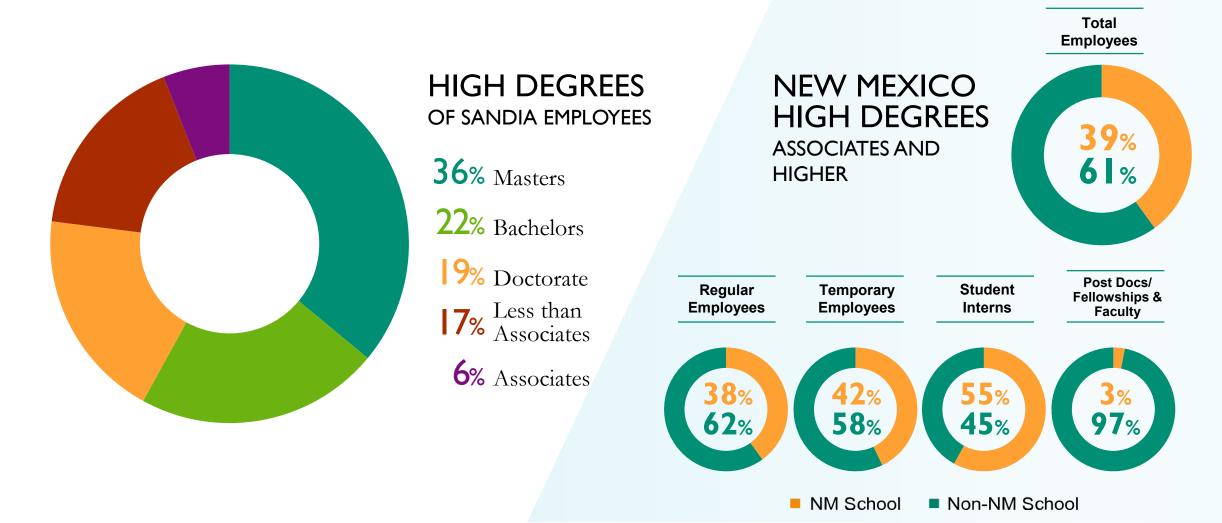








77% of our employees hold a bachelor's degree or higher; 39% of those who hold an associate's degree or higher have a high degree from a New Mexico school



Sandia's collaborations with New Mexico universities advance research, talent pipeline

* Data as of 9/18/20 ** Since FY19

0	8,414	Total NM Degrees*
	5,410	Total NM Alumni* 13,016 Total Sandia Employees
t Pipelin	1,782	Business Employees* 3791 Total Sandia Business
Expanded Talent Pipeline	530	Technologists* 1910 Total Sandia Technologists
Expand	135	FY20 Student Hires* 549 Total Sandia Student Hires
	98	FY20 Inexperienced Regular & LTE Hires* 309 Total Inexperienced Hires Conversion Included

	\$7.7M	FY20 Joint R&D 175 Collaborations
cions	\$2.7M	FY20 LDRD Research 64 Collaborations
abora	612	Co-authored Publications 2015-2020 YTD*
Coll	74	Sandians on University Advisory Boards
search	59	Sandians as Affiliated Faculty
Strengthened Research Collaborations	17	Joint Disclosures**
gthen	14	Joint Patent Applications**
Stren	3	Joint Patents**
	2	Joint Copyrights**

Reinforced
Institutional
Partnerships with
Commitments

NMSU Classified Ready Employee Workforce September 2020

Sandia/UNM Nuclear Security Engineering Program September 2020

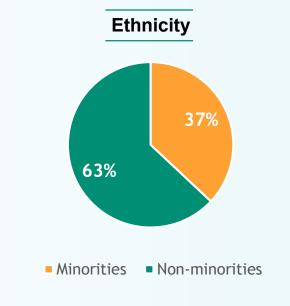
UNM Partnerships for Pandemic Response

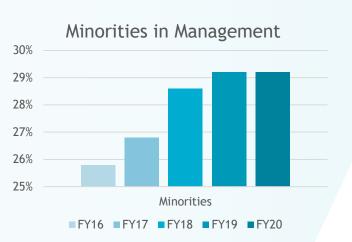
May and September 2020

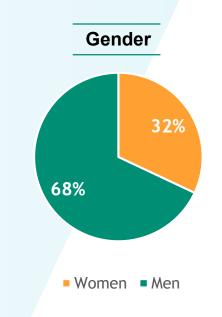
Diversity and inclusion are strategic advantages to Sandia

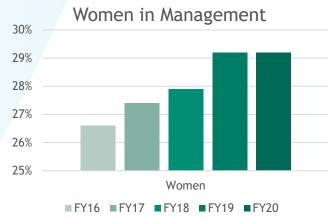
Demographic diversity

- Sandia's minority representation has increased from 33% in FY16 to 37% in FY20
- Representation of minorities and women in management also continue to increase at the Labs
- In FY20 we increased the representation of minorities in R&D jobs by more than 6%
- In 2020, Sandia has been listed as a Top 10 "Best Companies for Women" and #11 on "Best Companies Where CEO's Support Gender Diversity" on Fairygodboss the largest career community for women.

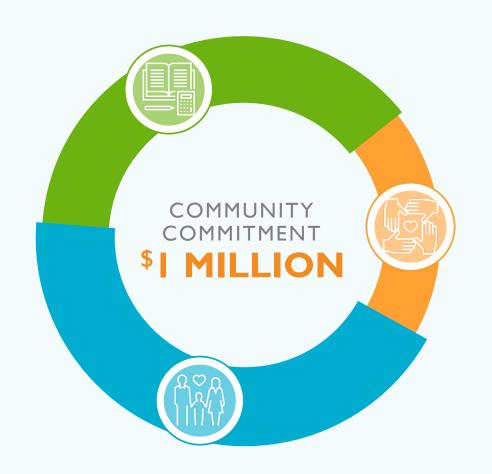








Community commitment plan averages \$1 million



40%

COMMUNITY LEADERSHIP

20%

FAMILY STABILITY

40%

Educational success

Inspiring students to graduate prepared to create their future

Community leadership

Supporting initiatives that promote economic and community development

Family stability

Helping families provide a more stable home environment for children

Community involvement is a part of our culture



United Way of Central NM

Providing children with SHOES, BOOKS, **SCHOOL SUPPLIES** & HOLIDAY GIFTS

Donated

1,056 UNITS OF BLOOD



Partnering with Habitat for Humanity for more than

high school students via SANDIANS Mentor 2.0

matched with

SANDIA



Family **MATH NIGHTS**

Family SCIENCE A **NIGHTS**



New Mexico **ELECTRIC CAR CHALLENGE**

STEM

Career exploration







We work in schools to inspire the next generation

Engage

- Family Science Nights
- Family Math Nights
- Classroom presenters, judges, tutors
- CSI Dognapping

Exploration

- HM Tech/Dream Catchers/Manos
- NM Electric Car Challenge
- DOE Science Bowls

Experience

 STAR High School Fellowships



- We conducted **COVID-19 testing for thousands** of Sandians and NNSA workers, reducing the burden on local medical laboratories
- We trained several New Mexico Tribal First Responders on the appropriate use of PPE and disinfection techniques
- The state-funded New Mexico Small Business Assistance program (NMSBA) paired Sandia with a Santa Fe craft distillery to produce **Elbow Bump hand** sanitizer
- NMSBA also brought Sandia scientists and small businesses together to research materials to create N95-like respirators, providing New Mexico medical professionals with a local source of PPE
- A \$25,000 challenge to raise money to help Native American communities hit by COVID-19 raised \$250,000 from Sandians



Sandia provides exceptional service in the national interest — we bring the same dedication to New Mexico

• Sandia continues to be an important contributor to the New Mexico economy

We strive to further the state's
 entrepreneurial spirit through innovation
 and economic development

Partnerships with New Mexico
 universities are critical to Sandia's success

As New Mexicans, Sandia and its
 employees give generously and
 volunteer to ensure the communities in
 which we live and work remain vibrant
 and thrive



