

Radioactive and Hazardous Materials Committee Presentation

Dr. Charles F. McMillan

Director, Los Alamos National Laboratory



The Los Alamos mission is to solve national security challenges through scientific excellence

GOALS

Deliver national nuclear security and broader global security solutions and

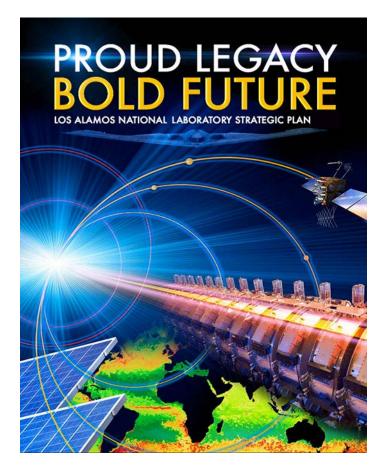
Foster excellence in science and engineering disciplines essential for national security missions

by

Attracting, inspiring and developing world-class talent to ensure a vital future workforce

and

Enabling mission delivery through next-generation facilities, infrastructure, and operational excellence





NNSA recently posted a draft Request for Proposal (RFP), formally beginning the contract competition process

- The process is being managed by NNSA for DOE and is expected to culminate in October 2018
- The Laboratory will remain strong through the transition
- The work the Laboratory does on behalf of the nation transcends the contract changeover
- The EM contract competition (8% of the current Laboratory budget) continues to move forward





We remain committed to executing our national security mission safely and securely while NNSA carries out their process



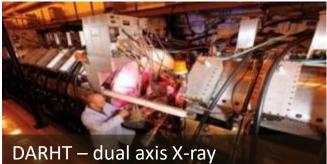
Los Alamos is essential to ensuring the U.S. nuclear deterrent

- Los Alamos helps ensure the safety, security, and effectiveness of the nation's deterrent
- Los Alamos is the design agency for four of seven weapons systems in the nation's arsenal





Supercomputing



Non-nuclear testing, modeling, simulation, and other tools and capabilities provide assurance

We use science to annually certify to the Secretary of Energy, Secretary of Defense, and the President that the stockpile will perform as intended



Los Alamos' Global Security program brings nuclear weapons technical expertise to bear on understanding observations from around the world

- Micheler Ochineles Contraction Assessment of foreign nuclear weapon programs
- Mini-satellites supporting DoD mission
- Next generation of radio communications

- 50 years of International Safeguards
- luclear Nonproliferation **Development of monitoring techniques** for nuclear testing
 - Next generation of satellite detectors for nuclear explosions

Stockpile Stewardship

Intelligence, Defense and Counterterrorism Nuclear Counterproliferation **Emerging Threats** Nuclear Nonproliferation and Security



Los Alamos is recognized for its technical excellence – we solve mission challenges by bringing together multi-disciplinary scientific teams

- Science Pillars provide a framework for our mission support capabilities
- We collaborate extensively with other DOE laboratories and industry to perform R&D for most DOE Science and Energy Offices as well as for many other federal agencies
- We contribute to the nation's energy security solutions in a broad range of areas: nuclear, fossil, wind, and alternative energy solutions





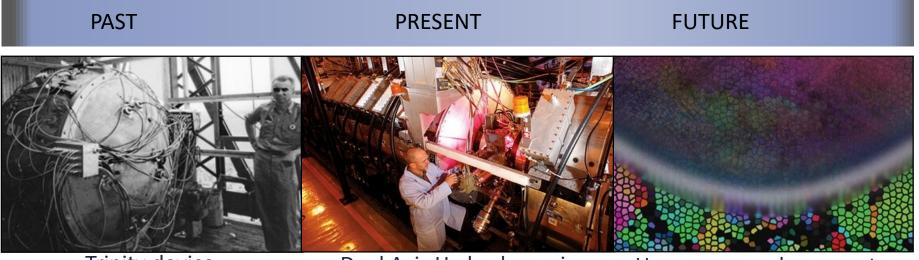
| | LANL Rates | | Industry Standard | |
|------|------------|------|-------------------|------|
| | TRC | DART | TRC | DART |
| CY14 | 1.27 | 0.36 | 2.32 | 1.15 |
| CY15 | 1.21 | 0.38 | 2.08 | 0.99 |
| CY16 | 1.25 | 0.30 | 1.96 | 0.92 |

- Each Calendar Year TRC/DART represents an average of the 3 year years prior.
- Industry Standard rate includes NAICS Codes for R&D, Fac/Sup/Ser, and ENV.
- LANL Rates do not include subcontractors.



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Los Alamos has a proud history of scientific excellence that continues to shape the future



Trinity device before testing Dual Axis Hydrodynamic Radiography Test Facility How an exascale computer might model a shock wave

- The Seaborg Medal
- The Edward Teller Medal
- The Nobel Prize in Physics

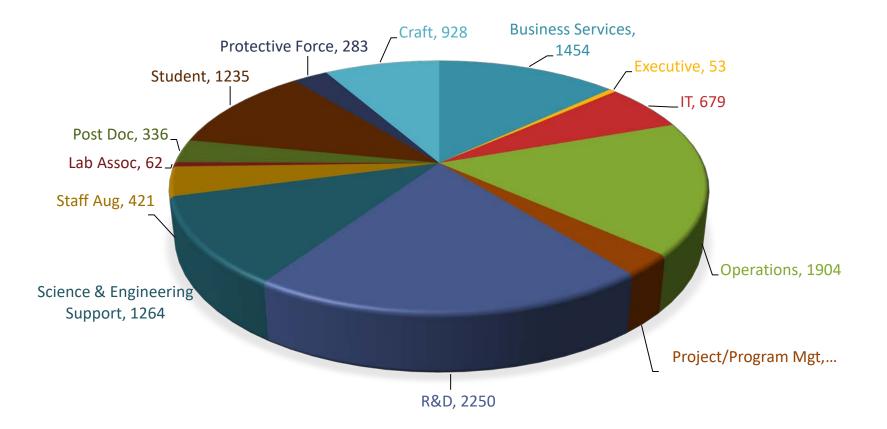
- 131 R&D 100 Awards
- 35 E.O. Lawrence Awards

Los Alamos National Laboratory helps solve some of the world's most difficult problems



Our people are our strongest asset

LOS ALAMOS WORKFORCE – 11,171





LANL External Hires are on track with our five-year plan

- From September 1, 2016 to August 31, 2017 Los Alamos National Laboratory hired 970 external Regular and Term employees:
 - 343 of the 970 hires were born in New Mexico.
 - 218 have a degree from a New Mexico Educational Institution
 - In 2016, Los Alamos processed 31,000 applications but hired only 1,011 employees



The Laboratory continues to strive to attract the best and brightest talent of our nation

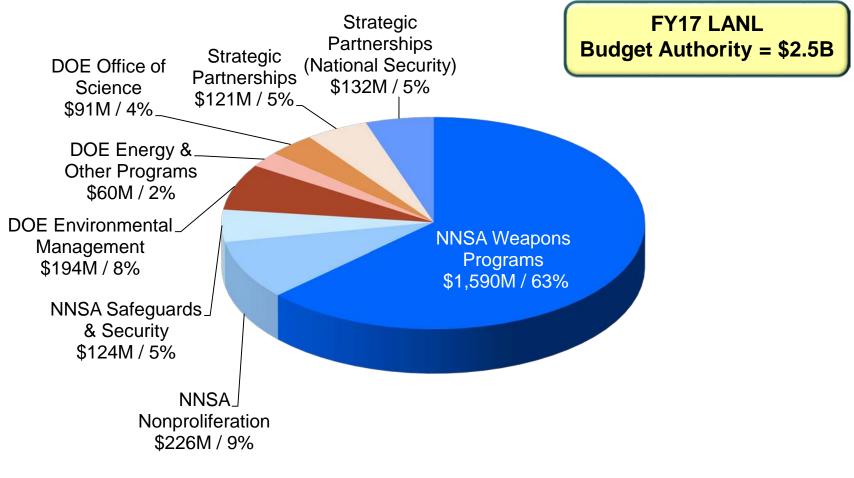
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Los Alamos was recognized as one of the top employers in the nation by four minority magazines, including Latino Leaders

Recognition from readers of four different magazines targeted to diverse and talented minority groups underscores our commitment to making the Laboratory an employer of choice



The Laboratory's programmatic funding portfolio is solidly supported





Our parent companies demonstrate continuing commitment to the Laboratory and our communities

- Los Alamos National Security, LLC is continuing its \$2.5 million Community Commitment Plan in 2017
 - LANS has provided a total of \$35 million in community support since 2006
- This year, we are awarding 111 students from seven Northern New Mexico counties 117 scholarships through the Los Alamos Employees' Scholarship Fund (LAESF)
 - The LAESF has provided (including the LANS match) more than \$5.6 million for scholarships since 2007



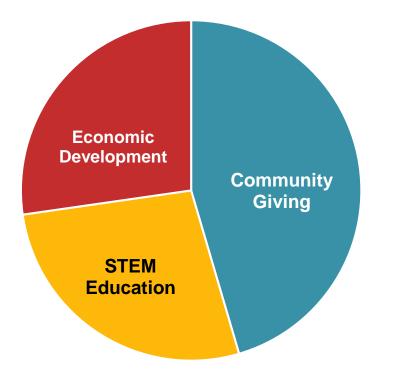




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We are active and caring neighbors in a close-knit regional community

Los Alamos National Laboratory Community Commitment Plan (\$2.5 million)



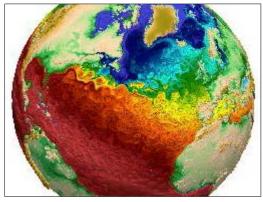
- Our partner in economic development, the Regional Development Corp., has assisted more than 700 New Mexico companies and entrepreneurs
- Through our partners for community giving—United Way agencies—our employees and parent company generate more than \$3 million in regional support
- Through the Los Alamos National Laboratory Foundation, more than 1,000 students have received more than \$4.5 million in assistance through the Los Alamos Employees Scholarship Fund



From the Manhattan Project to Mars: Celebrating a proud past, and anticipating a bold future

- Multidisciplinary science at Los Alamos has maintained our status as an essential component of national and global security
- The diversity of our programs and capabilities makes Los Alamos an accessible resource for global security, environmental challenges, and new and emerging threats of all kinds
- We look forward to our next 70 years as the nation's premier nationalsecurity science laboratory
- The Laboratory enjoys strong support for its national security mission and will continue to be a benefit to the state of New Mexico

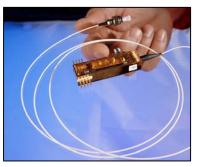




Understanding global climate impacts is a national security pursuit



Emerging technologies create new and difficult national security challenges



Quantum encryption can help secure the nation's cyber infrastructure

