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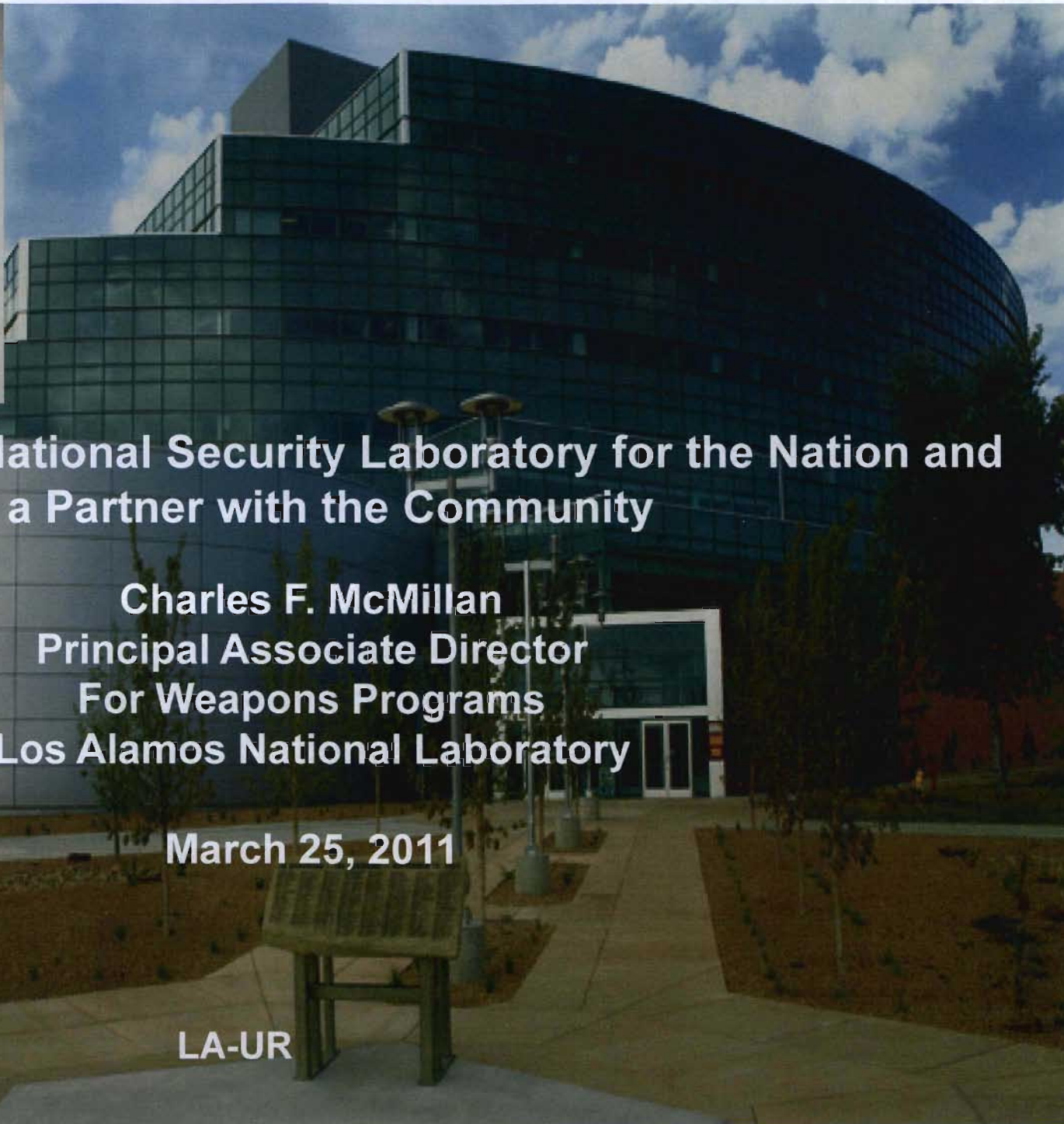
Title: Los Alamos-A National Security Laboratory for the Nation  
and a Partner with the Community

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Intended for: Regional Coalition Meeting



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# **Los Alamos-A National Security Laboratory for the Nation and a Partner with the Community**

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Principal Associate Director  
For Weapons Programs  
Los Alamos National Laboratory**

**March 25, 2011**

**LA-UR**





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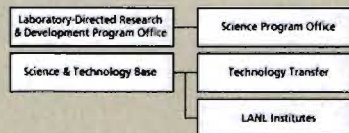
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ADCLS Biology	ADE Accelerator Operations & Technology	ADEPS Materials Physics & Applications	ADIT Departmental Computing Services	ADTSC Computer & Computational Sciences
Chemistry	Applied Engineering & Technology	Materials Science & Technology	Network Infrastructure and Engineering	High Performance Computing
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ADPSM Integrated Program Management	ADW Computational Physics
Nuclear Component Operations	Theoretical Design
Manufacturing Engineering and Technology	Weapons Experiments
Nuclear Process Infrastructure	Weapons Systems Engineering

  
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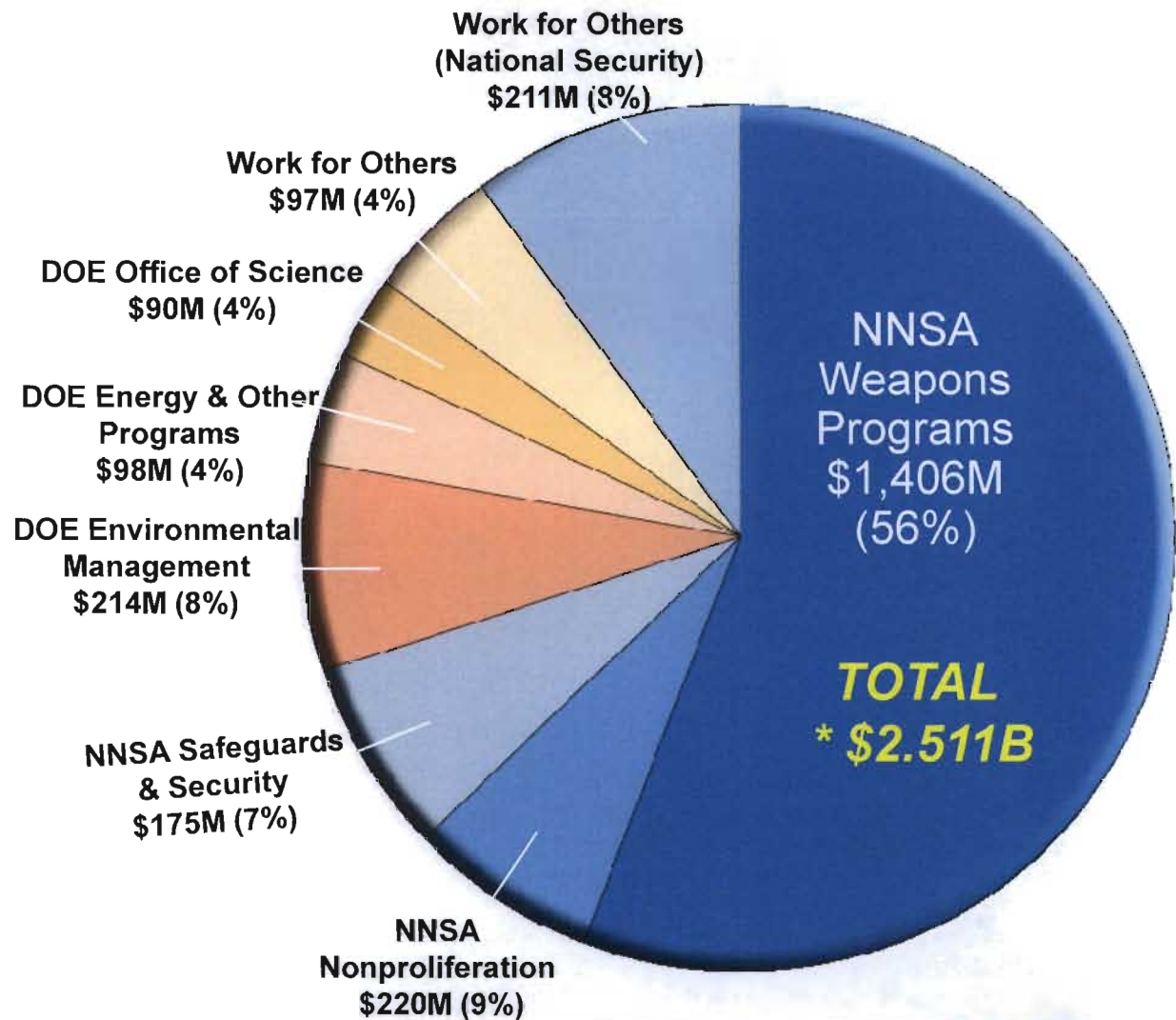
PADGS Decision Applications
International & Applied Technology
International, Space, & Response
Nuclear Nonproliferation

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ADBS Acquisition Services	ADESHO Environmental Protection	ADNHHO CMR Facility Operations	ADPMSS CMRR	ADSS Emergency Operations	ADEP Business & Project Services Division
Central Training	Industrial Hygiene and Safety	Engineering Services	Construction Management	Safeguards	Corrective Actions
Human Resources	ISMS/Worker Safety Office	Environmental & Waste Management Facility Operations	Cost & Schedule	Security	Engineering & Technology
Information Resource Management	Occupational Medicine	Fire Protection Division	FIRP Projects		Regulatory Management
	Quality Assurance	Institutional Facilities & Central Services Operations	Infrastructure Planning		TA-21 Closure
	Radiation Protection	LANSCCE Facility Operations	Maintenance & Site Services		TA-54 Closure
		Operations Support	Program Projects		Waste Disposition
		Safety Basis			
		Science & Technology Facility Operations			
		TA-21 Facility Operations			
		TA-55 Facility Operations			
		Utilities & Infrastructure Facility Operations			
		Weapons Facility Operations			



## The Obama administration has supported increases to the Lab's budget to address critical national security challenges

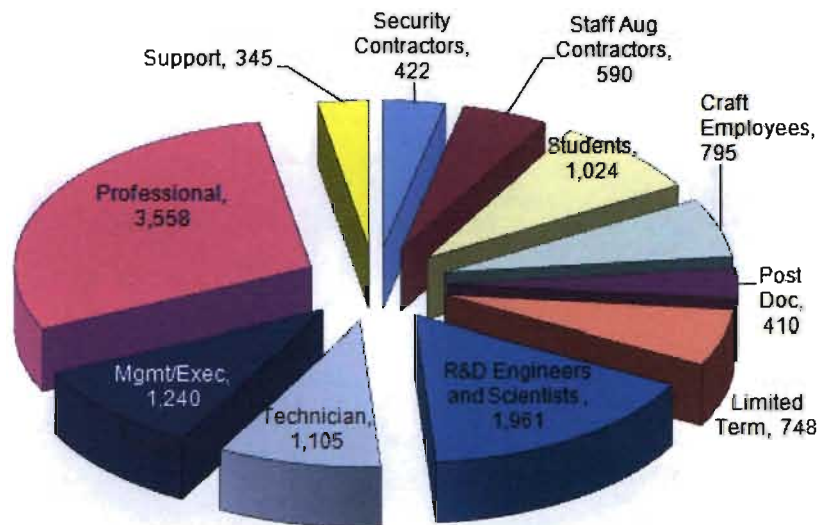
**\*The Laboratory's  
FY11 annual budget  
is approximately  
\$2.5 billion.**



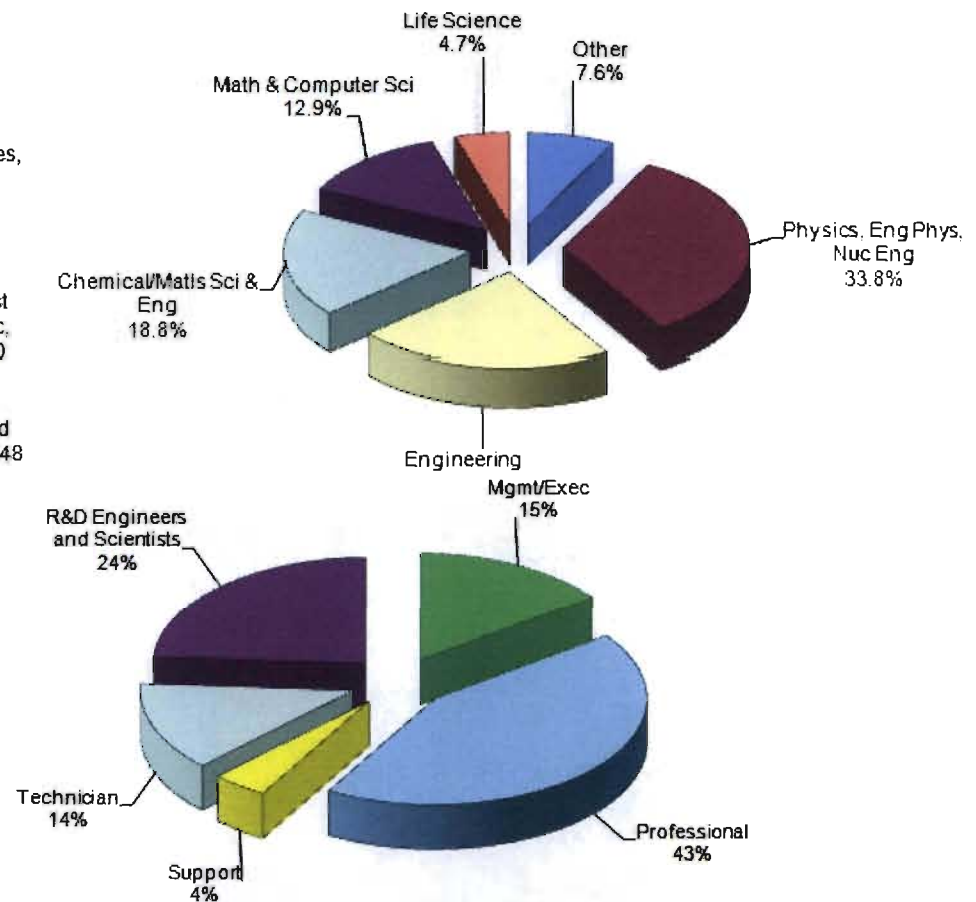


# The most important resource of the laboratory is our staff

12,182 Employees as of 12/31/2010



R&D Technical Staff Disciplines



# LANL's unique science and engineering infrastructure support a spectrum of laboratory missions



Metropolis Center for Modeling & Simulation



High Explosive laboratories



Los Alamos Neutron Science Center



Plutonium Processing Facility



Chemistry and Metallurgy Building



Dual Axis Radiographic Hydrotest Facility



SIGMA Building

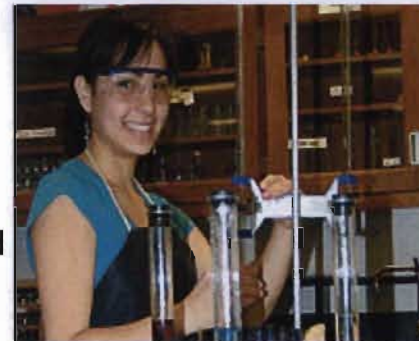


Chemistry & Metallurgy Research Replacement (RLUOB)



# LANL is committed to helping its neighbors

- LANS, LLC invests \$3M each year of its own mgmt fee in economic development, education, and community giving programs for northern New Mexico
- Economic Development - \$8.8 million return to the northern New Mexico economy from a \$2.3 million LANS economic development investment since 2006
- Education
  - LANL Math & Science Academy improving students' math scores in participating Espanola schools
  - LANS-funded institutional agreements with four northern New Mexico colleges are helping regional students graduate with degrees in Applied Technologies, Science, Systems Administration, and Renewable Energy.
- Community-giving programs
  - 2010 employee-giving campaign raised \$2.3 million, including LANS \$1 million match.
  - Los Alamos Employees' Scholarship Fund campaign raised record-breaking \$256,000, with LANS contributing an additional \$250,000.



# LANL is a responsible member of the community

- Environmental stewardship —shipped all high level waste from Area G, D&D of TA-21 under way
- DARHT experiments fully contained
- LANL spent \$25.4M on business services in Santa Fe county in FY 09
- LANS, LLC is investing \$3M per year in the region
- Economic Development (through Santa Fe-based Regional Development Corp.)
- Education (LANL Foundation, NNM Math & Science Academy, etc)
  - \$500K annually to Santa Fe Schools
- Community-giving programs 2009:
  - LANL employees \$112,640 to United Way of SF County in 2009, matched 76¢/dollar by LANS, LLC
  - LANL Employees' Scholarship Fund awarded \$76,000 to 13 Santa Fe students for 4 years
  - Twenty-six Santa Fe non-profits received \$90,000 from LANS, LLC





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# BACKUPS

## LANL's expertise in high explosives is being applied to the IED problem

- Intensive 3 day course to learn how to detect, identify, and characterize a wide variety of improvised explosive compounds
- Training began in 2009
- The program is funded by the Department of Defense
- 100s war fighters have been trained
- May 11-13 next training class





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# Recent Events – why Global Security S&T is essential



**Christmas Tree Bomber 2010**  
US Christmas tree “bomb” foiled by FBI  
Somali-born Mohamed Osman Mohamud arrested in Oregon after trying to blow up a Portland tree lighting ceremony with fake explosives.



## Christmas Day 2009

“Underwear Bomber” Umar Farouk Abdulmutallab was charged with the attempted murder of 289 passengers.  
The device was not detected by fielded equipment or procedures.



## Toner Cartridge Bombs 2010

Suspicious packages have shown up in the streets of San Francisco, Jewish Synagogues in Chicago, airplanes in Newark, New Jersey, and outside the federal courthouse in Portland, Maine.



## Times Square 2010

Faisal Shahzad, a naturalized U.S. citizen who recently spent five months in Pakistan, was arrested on charges that he attempted to blow up the crude fireworks-gasoline-and-propane bomb left in his SUV abandoned in Times Square.

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# Nuclear Nonproliferation Programs



Nonproliferation, Arms Control Policy, Monitoring and Verification, International Safeguards and Export Control



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# LANL has a long history of success in space



VELA

Science => Mission Design => Instrumentation  
=> Testing => Launch => Operations => Analysis

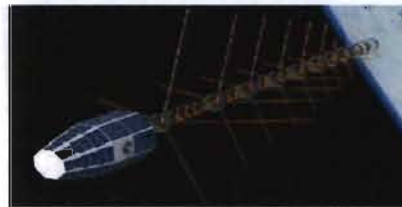
*50+ years of experience*



ALEXIS



DSP



FORTE

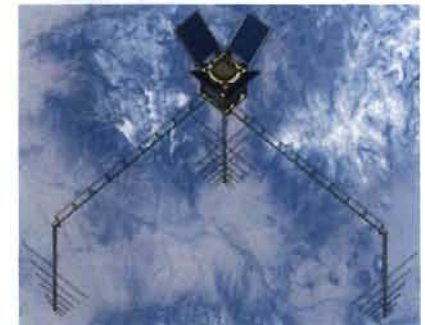


MTI



GPS

**~1400 sensors  
on  
~400 instruments  
on  
~60 satellites**



CFE