

STATE OF THE LAB:

2020 UPDATE FROM
Thom Mason

September 9, 2020



IMPACTING THE ECONOMY

\$3B Laboratory funding for FY20

\$1.3B

Est. salaries for LANL employees in FY20

\$440M

Est. FY20 contracts with NM businesses

>\$100M

Est. payment of NMGRT in 2020

24,169

Jobs LANL directly and indirectly creates in the state

1,250

Hires in FY19

41%

Current employees hired from NM

~75%

New hires in the past year who hailed from NM



LANL and Española-based Performance Maintenance Inc. (PMI) sign a 5-year subcontract for janitorial services and supplies. PMI recently won a DOE Small Business of the Year Award for its efforts.

COMMUNITY PRIORITY: Adding value

Almost 90% of employee giving stays with local orgs

- \$2.5M donated in the last employee giving campaign
- Triad matched \$.50 for regional charitable nonprofits

Recent Triad giving has been COVID-focused

- \$40K to regional community foundations
- \$5K to buy masks for rural health clinics
- \$10K in emergency grants to Pueblo Relief Fund
- \$60K to Food Depot (\$50K from employees, \$10K match)

Los Alamos Employees Scholarship Fund awarded \$743,000 in scholarships in 2020

Pojoaque Project sees \$350K investment from the state

- Will expand the project to nearby school systems



Above, students solve math equations as part of the 'Pojoaque Project.' Below, a LANL volunteer donates at a February blood drive.



COMMUNITY PRIORITY: Partnering for education

New pipeline programs address critical skills for a growing workforce

- Northern NM College: degree in radiation protection for a cohort of 40 students
- Santa Fe Community College: degree in engineering machining for students who will also intern at LANL
- Taos & Questa high schools: craft partnership that provides automatic interview with New Mexico Building & Construction Trades Council
- UNM-Los Alamos: bachelor's degree in mechanical engineering



Above, a billboard promotes a collaborative degree program. Below, an SFCC faculty member in the Machining and Tooling Lab.



COVID-19

COVID-safe policies have prevented LANL from being a significant vector for transmission

- Policies include wearing masks, distancing appropriately

55 total cases identified among LANL employees and subcontractors as of Sept. 4

We have adapted policies and tools to help remote workers

- More flexible hours during the week
- Remote ergo evaluations for home offices
- Giving people the right IT tools (hardware and software) to work efficiently while remote



ENVIRONMENTAL & SAFETY RESPONSIBILITIES

Even though we've implemented a maximum telework policy, we have conducted mission-essential activities and continuously maintained safety, security, and environmental compliance

As a learning org. we strive to avoid repeat events, develop sustainable fixes, and replicate best practices from lessons learned

Our environmental teams work with neighboring pueblos, counties, and other local entities

- Preserving biological and cultural resources
- Complying with state and federal requirements
- Preventing pollution

Our priority is to protect our employees, the public, and the environment



SAFETY

Four incidents in the last several months involved employees being exposed to contamination

- While equipment was adjusted near a glovebox
- As chemical analytics were performed on a legacy item
- After a glove was breached
- When a glove retaining ring came loose

Additional events stemmed from hoisting & rigging and from an electrical arc

- Arc occurred as workers restored a key at LANSCE
- Equipment sheared under an appropriate load
- Load hit a known obstruction during a lift

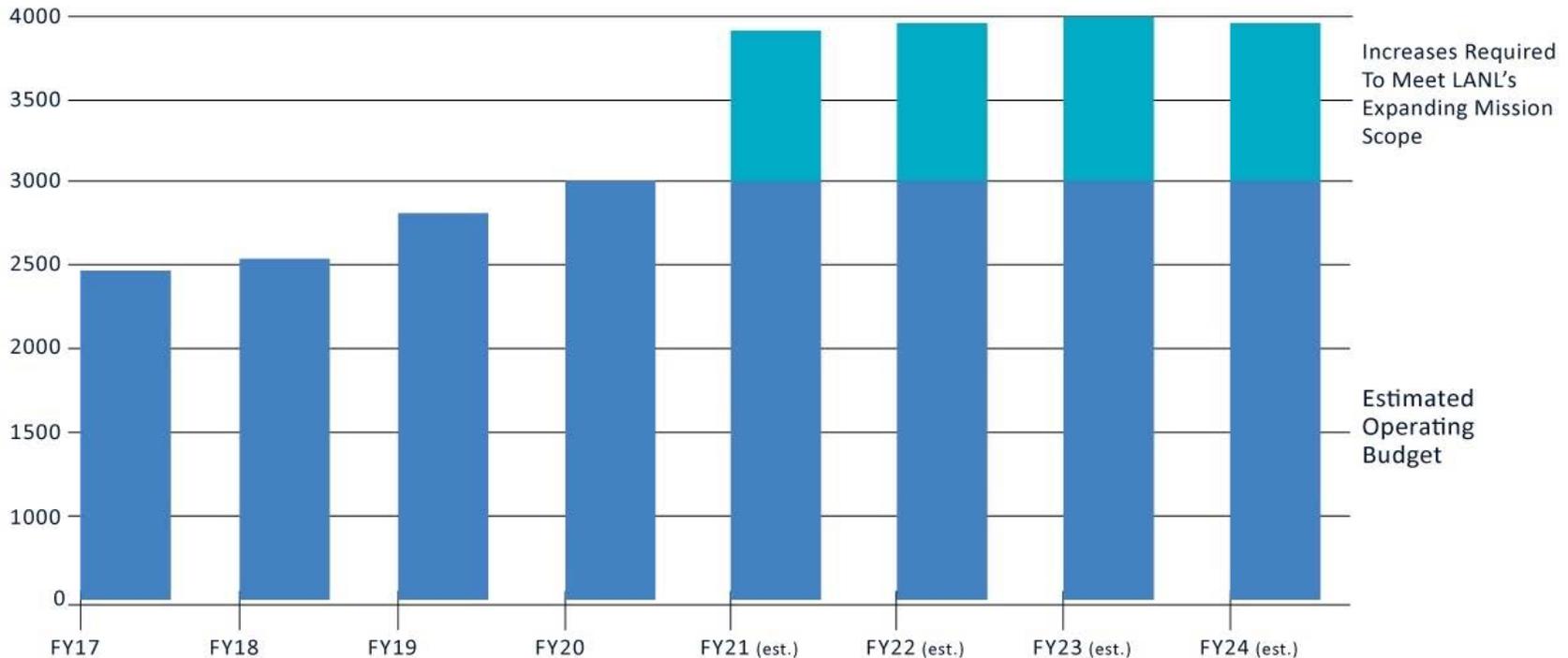


Above, a glovebox glove that was breached at PF-4. Below, a rigging component that unexpectedly sheared under a load.



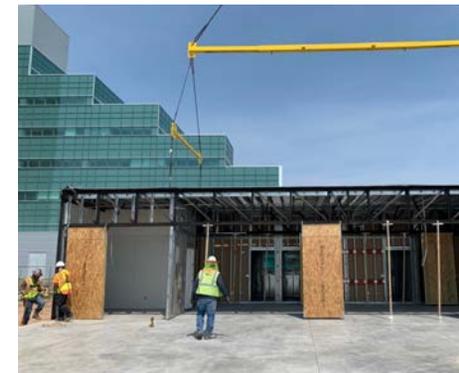
PREPARING FOR CONTINUED GROWTH

FY17-FY24 (est.) in Millions



INFRASTRUCTURE

- LANL's campus has an immediate problem due to facility conditions and a lack of space
- Many projects are done or are nearing completion—others are in the planning or design stage
 - Three cell towers
 - Modular office buildings
 - Sensitive compartmented information facility
 - Two parking garages
 - Enclosure to conduct safer experiments at DARHT
- We are reconfiguring some facilities to create more collaborative and teleworking spaces
- More craft is still needed for construction projects



TELEWORKING EXPERIENCE

COVID-19 created a new capability as LANL shifted over 10,000 employees to telework

- Teleworking employees are effectively executing work
- Most will likely be remote until a vaccine/treatment

This experience is showing that teleworking can benefit our mission and our people

LANL is considering long-term teleworking options to help address acute space problems

- Some facilities will be refurbished as teleworking hubs
- Planning to lease offsite space for ~500 employees



65%

Percentage of the LANL workforce that telecommutes

4x

Quadrupled VPN capacity, tripled phone connectivity

~1k

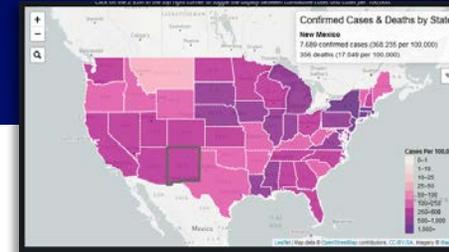
IT service calls per day at peak



EXCELLENCE IN COVID SCIENCE

LANL plays a leadership role in COVID innovation

- **Investments:** Made \$18M in internal and external investments to understand and respond to the virus
- **DOE's National Virtual Biotechnology Lab:** Leading COVID-19 testing team
- **Modeling/forecasting:** Our COVID-19 model used by CDC and state of NM; data for all states on open website; our modelers work closely with DOH to project disease transmission and plan for school reopenings
- **Testing:** Tested ~5,000 employees onsite; supporting FDA and CDC with alternative tests and protocols
- **Manufacturing:** Testbed for improving ventilator performance and understanding



SANTA FE NEW MEXICAN

“A collaboration designed to beat COVID-19”

By Thom Mason, Jason Mitchell and David K. Sraese Aug 29, 2020

f t i s

As COVID-19 began to spread throughout the United States, New Mexico's public health agencies, national laboratories and health care organizations were already strategizing ways to effectively stem the spread when it reached our state.

These collaborators — along with every New Mexican who followed their guidance by wearing face masks, practicing social distancing and minimizing outings — have helped New Mexico's cases remain low when neighboring states have experienced significant outbreaks. These efforts illustrate just how important working together is during a crisis.

One such example is the partnership between the New Mexico state government, Los Alamos National Laboratory and Presbyterian Healthcare Services to understand disease spread within the state, develop accurate disease forecasts, estimate demand on the health care system and allocate resources accordingly.

LANL researchers developing coronavirus vaccine design

The coronavirus continues to spread throughout the world as researchers and scientists fight to create a vaccine.



QUESTIONS