Lawrence Livermore National Laboratory

CALIFORNIA ECONOMIC IMPACT SUMMARY



Lawrence Livermore National Laboratory (LLNL) has earned the reputation as the national laboratory of choice for science and technology solutions to the most pressing national and global security challenges. LLNL works with other national laboratories to coordinate and integrate programmatic efforts to provide the best scientific and technical capabilities for public investments.

As a national security laboratory, LLNL's funding largely comes from the National Nuclear Security Administration (NNSA) Office of Defense Programs for national security activities. Support for this work also comes from the NNSA Office of Defense Nuclear Nonproliferation, the Department of Homeland Security, various Department of Defense sponsors, and other federal agencies.

LLNL is managed by Lawrence Livermore National Security (LLNS), LLC, a limited liability corporation with a management team that includes Bechtel National, University of California,

Babcock and Wilcox, Washington Division of URS Corporation, and Battelle.

LLNL's mission is to ensure the safety and security of the nation through applied science and technology in three key areas:

Nuclear Security — ensure the safety, security and reliability of the U.S. nuclear deterrent and work to prevent nuclear proliferation and nuclear terrorism.

International and Domestic Security — develop capabilities to counter terrorism and other emerging 21st-century threats and technologies to enhance U.S. military effectiveness and better protect the warfighter.

Energy and Environmental Security — advance science to better understand climate change and its impacts and develop technologies supportive of a carbon-free energy future.

LLNL WORKFORCE

LLNL is staffed by more than 6600 employees serving in an array of scientific, technical and specialized fields. This constitutes a more than \$700 million payroll base in Alameda, San Joaquin and Contra Costa counties, and surrounding areas.

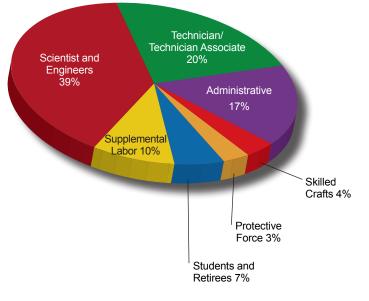
In addition, the Laboratory also annually hosts hundreds of students, postdoctoral candidates, facility users and visiting scientists who work with LLNL personnel to achieve technical innovations and scientific breakthroughs that make possible solutions to critical problems of national and global importance.

A breakdown of LLNL workforce categories is depicted below.

DOING BUSINESS WITH LLNL

The LLNL **Industrial Partnerships Office** (IPO) is the conduit through which the Laboratory connects industry partners and entrepreneurs with Laboratory-developed technologies. In addition to technology licenses, work for others agreements and Cooperative Research and Development Agreements (CRADAs), the Laboratory offers several unique partnering arrangements. For example, IPO has an "entrepreneurs in readiness" program in which entrepreneurs searching for new opportunities are matched with LLNL technologies ready for commercialization.

LLNL currently has active commercial licenses with more than 100 companies in the United States and internationally, as well as dozens of active CRADAs. Licensing and royalty income in recent years has topped \$8 million annually, which has





LLNL-developed laser peening of metals—dramatically increases the fatigue life of jet engine turbine blades

Data as of 9/30/2011

High tech optics at the National Ignition Facility—advanced the state of the art in the precision optics industry

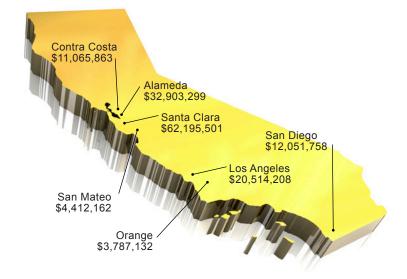


represented as much as \$400 million in annual sales of products in the private sector based on LLNL technologies. LLNL licensed technologies have enabled the launch of numerous new businesses that are helping drive economic growth locally, regionally and beyond. To learn more go to https://ipo.llnl.gov/

LLNL's **Procurement Department** is a key organization responsible for purchasing high-quality supplies and services required by the Laboratory in a cost-effective and timely manner, allowing for effective competition and quality while meeting socioeconomic compliance requirements and applicable Department of Energy (DOE) regulations identified in the Prime Contract with DOE.

In fiscal year 2011, LLNL awarded more than \$573 million in procurements to a diverse group of large and small businesses, both in California and across the nation, for a broad range of products and services that support the Laboratory's overall mission. Procurement awards in California in fiscal year 2011 exceeded \$255 million. More information can be found at https://supplychain.llnl.gov/

TOP CA PROCUREMENTS BY COUNTY (FY 11)

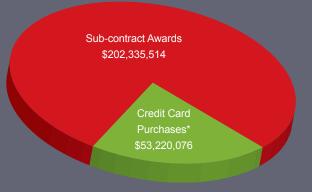


LLNL PROCUREMENTS AWARDS

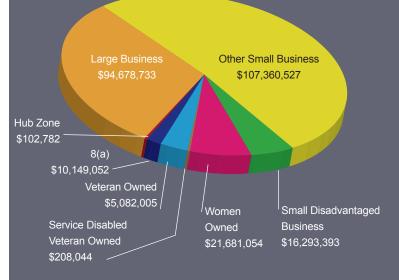
Гotal Procurement Awards (FY 11)



CA Procurement Awards (FY 11)



CA Procurements by Socioeconomic Category (FY 11)



* LLNS is authorized to use procurement credit cards as a cost-effective mechanism for timely acquisition of low cost goods and services.

All CA small business procurement awards, including sub-categories, totaled \$160,876,857.



LVOC 30-year conceptual rendering of future campus

OUTREACH AND COLLABORATION

LLNL's impact is also measured by its close relationships with surrounding communities. This includes elected officials, community leaders, neighbors, educators, and business and community organizations. These relationships are supported by regular dialogue, civic involvement and volunteerism, Laboratory site tours, science education activities in the Discovery Center and other area venues, and partnerships with community colleges and universities.

LLNS, LLC gives back to the community through its annual \$100,000 Community Gift Program supporting organizations primarily involved in science, math education and cultural arts. LLNL employees also support the community through the annual employee donation campaign, Helping Others More Effectively, or HOME. Last year, LLNL raised \$3.4 million dollars

through HOME, which was distributed to regional non-profit and support agencies throughout the Bay Area.

Collaboration also includes active engagement with industry and academia in support of both Livermore Laboratory and partner research needs. A recent initiative is the Livermore Valley Open Campus (LVOC), a joint collaboration between Livermore Laboratory and Sandia Laboratories/California. The LVOC is being developed as an open, unclassified research and development space on the east side of the two laboratory sites, and modeled after research and development campuses found at major industrial research parks and other DOE laboratories.

The motivation for the LVOC stems from current and future national security challenges that require increased partnerships with the private sector to better understand threats and deploy solutions in areas such as energy and environmental security, economic security, cyber security, high performance computing and non-proliferation.

For more information go to https://www.llnl.gov/lvoc/lvoc.html

LLNL researchers apply world-class high performance computing capabilities to solve important national problems

To learn more about LLNL go to www.llnl.gov, or contact the Public Affairs Office at 925-422-4599.



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