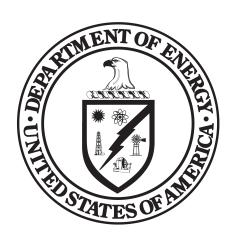
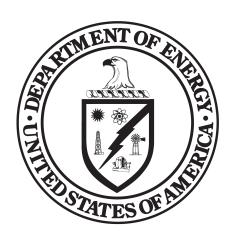
Department of Energy FY 2022 Congressional Budget Request



Laboratory Tables Preliminary

Department of Energy FY 2022 Congressional Budget Request



Laboratory Tables Preliminary

The numbers depicted in this document represent the <u>gross</u> level of DOE <u>budget authority</u> for the years displayed. The figures include discretionary and supplemental funding. They do not consider revenues/receipts, use of prior year balances, deferrals, rescissions, or other adjustments appropriated as offsets to the DOE appropriations by the Congress.

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DEPARTMENT OF ENERGY Laboratory Table Summary Report

FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Ames Laboratory	48,849	57,676	50,765
Ames Site Office	678	664	713
Argonne National Laboratory	885,444	795,643	766,242
Argonne Site Office	4,699	4,497	5,685
Bay Area Site Office	5,834	6,027	5,983
Bettis Atomic Power Laboratory	393,247	364,997	418,072
Brookhaven National Laboratory	591,708	570,432	607,707
Brookhaven Site Office	4,575	4,444	4,932
Carlsbad Area Office	15,842	18,669	19,718
Chicago Operations Office	285,480	428,213	449,317
Consolidated Business Center	46,928	48,248	50,489
Consolidated Service Center - Illinois	22,621	25,439	25,879
Consolidated Service Center - Tennessee	22,621	31,299	32,310
East Tennessee Technology Park (K25)	232,348	168,961	137,000
Energy Technology Engineering Center	18,200	12,000	21,340
Fermi National Accelerator Laboratory	584,956	595,506	630,885
Fermi Site Office	3,070	3,452	3,408
Fernald Environmental Management Project	1,100	1,100	1,076
Fernald Site	13,791	11,902	12,497
Golden Field Office	737,077	598,315	1,682,768
Grand Junction Office	40,437	40,101	52,606
Hanford Site	991,180	1,016,279	1,021,176
Idaho National Laboratory	1,751,799	1,896,372	2,065,247
Idaho Operations Office	257,630	347,824	404,447
Kansas City National Security Complex (KCNSC)	1,028,707	1,185,503	1,280,289
Kansas City Site Office	7,597	7,286	7,707
Knolls Atomic Power Laboratory	733,031	654,727	758,240
Lawrence Berkeley National Laboratory	898,077	910,897	922,108
Lawrence Livermore National Laboratory	1,925,232	2,253,302	2,233,140
Lexington Office	200	200	200
Livermore Site Office	18,364	17,056	18,841
Los Alamos National Laboratory	2,622,102	3,622,853	3,835,884
Los Alamos Site Office	17,587	17,261	19,215
Miamisburg Site	5	5	5
Moab Site	45,000	47,833	85,000
Mound Site	15,297	12,738	10,149
National Energy Technology Lab	752,511	690,499	829,670
National Renewable Energy Laboratory	473,697	441,797	548,868
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DEPARTMENT OF ENERGY Laboratory Table Summary Report

FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Naval Reactors Laboratory Field Office	20,240	20,680	22,232
Naval Research Laboratory	4,600	10,100	2,600
Nevada Field Office	105,053	108,882	112,523
Nevada National Security Site	536,442	741,765	666,096
Nevada Operations Office	4,741	5,065	5,142
NNSA Albuquerque Complex	1,023,171	1,083,218	863,998
NNSA Production Office (NPO)	47,308	47,205	31,766
Oak Ridge Institute for Science & Education	34,338	20,645	18,358
Oak Ridge National Laboratory	2,073,027	2,077,355	1,974,823
Oak Ridge National Laboratory Site Office	5,934	4,757	6,382
Oak Ridge Office	80,105	59,683	17,943
Oak Ridge Reservation	101,100	112,471	73,725
Oak Ridge Reservation (Off-Site)	5,900	5,900	5,096
Office of River Protection	1,644,484	1,668,205	1,564,668
Office of Scientific & Technical Information	11,952	13,672	14,297
Pacific Northwest National Laboratory	640,904	680,022	744,638
Pacific Northwest Site Office	5,186	5,066	5,599
Paducah Gaseous Diffusion Plant	328,678	330,242	289,914
Pantex Plant	829,118	978,670	1,015,688
Pinellas Site	4,333	4,535	3,664
Portsmouth Gaseous Diffusion Plant	498,627	597,989	596,403
Princeton Plasma Physics Laboratory	101,072	82,833	98,590
Princeton Site Office	1,910	1,991	2,036
Richland Operations Office	53,394	60,448	67,815
Rocky Flats Site	31,968	28,675	33,578
Sandia National Laboratories	2,542,348	2,838,408	2,910,783
Savannah River National Laboratory	2,768	1,914	11,181
Savannah River Operations Office	274,603	254,249	257,350
Savannah River Site	2,349,418	2,555,060	2,859,946
Savannah River Site Office	500	500	500
Separations Process Research Unit	15,300	15,000	15,000
SLAC National Accelerator Laboratory	406,716	432,234	436,116
Southeastern Power Administration Office	77,301	96,647	95,623
Southwestern Power Administration Office	134,863	157,194	36,833
Thomas Jefferson National Accelerator Facility	139,945	135,200	178,093
Thomas Jefferson Site Office	2,148	1,812	2,253
University of Rochester	0	0	75,000
Washington Headquarters	5,789,806	6,522,684	7,972,446

DEPARTMENT OF ENERGY Laboratory Table Summary Report

FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Waste Isolation Pilot Plant	399,497	417,891	437,704
Weldon Spring Site Office	3,193	4,092	5,131
West Valley Demonstration Project	79,611	92,411	92,418
Western Area Power Administration Office	1,110,844	1,095,939	1,218,926
Y-12 National Security Complex	1,881,081	2,123,514	2,109,417
Y-12 Site Office	75,020	47,900	15,520
Grants	970,395	695,909	744,135
Undesignated LPI	419,907	527,124	2,068,033
Total DOE by Lab, Plant, and Installation	40,366,371	43,675,773	48,799,560

DEPARTMENT OF ENERGY Laboratory Table Ames Laboratory FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Ames Laboratory			
Research - Basic Energy Sciences	17,578	16,782	16,782
Basic Energy Sciences	17,578	16,782	16,782
Research - Biological & Environmental Research	1,250	1,250	0
Biological and Environmental Research	1,250	1,250	0
Research - Fusion Energy Sciences	0	275	225
Fusion Energy Sciences	0	275	225
Research - High Energy Physics	0	1,618	1,600
High Energy Physics	0	1,618	1,600
Workforce Development for Teachers & Scientists	709	0	0
21-SC-73, Ames Infrastructure Modernization	0	150	2,000
Construction - Science Laboratories Infrastructure	0	150	2,000
Science Laboratories Infrastructure	0	150	2,000
Safeguards and Security - SC	1,231	1,231	2,474
Science Programs	20,768	21,306	23,081
Vehicle Technologies	300	300	300
Hydrogen and Fuel Cells Technologies	830	9,100	1,093
Sustainable Transportation	1,130	9,400	1,393
Advanced Manufacturing	25,000	25,397	25,000
Energy Efficiency	25,000	25,397	25,000
Energy Efficiency and Renewable Energy Programs	26,130	34,797	26,393
Transformer Resilience and Advanced Components	50	0	0
Electricity Programs	50	0	0
Advanced Energy & Hydrogen Systems	952	730	651
CCUS & Power Systems	952	730	651
Cross Cutting Research	921	806	600
Advanced Coal Energy Systems & CCUS	921	806	600
Fossil Energy and Carbon Management Programs	1,873	1,536	1,251
Crosscutting Technology Development	28	37	0
Nuclear Energy Enabling Technologies	28	37	0
Nuclear Energy Programs	28	37	0
Office of Technology Transitions	0	0	40
Total Ames Laboratory	48,849	57,676	50,765

Laboratory Table
Ames Site Office FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022	
	Enacted	Enacted	Request Detail	
Ames Site Office				
Program Direction - SC	678	664	713	
Science Programs	678	664	713	
Total Ames Site Office	678	664	713	

DEPARTMENT OF ENERGY
Laboratory Table
Argonne National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Argonne National Laboratory			
Tritium and Domestic Uranium Enrichment	30	18	40
Production Modernization	30	18	40
Assessment Science	1,500	3,750	1,964
Advanced Simulation and Computing	0	100	0
Academic Programs	0	848	0
Stockpile Research, Technology, and Engineering	1,500	4,698	1,964
Weapons Activities Programs	1,530	4,716	2,004
Domestic Radiological Security	640	194	166
International Radiological Security	1,019	1,962	1,853
Nuclear Smuggling Detection and Deterrence	456	204	204
Global Material Security	2,115	2,360	2,223
Conversion (formerly HEU Reactor Conversion)	28,994	18,460	19,050
Nuclear Material Removal	1,500	1,800	950
Material Disposition	0	20	200
Laboratory and Partnership Support	2,912	2,340	0
Material Management and Minimization	33,406	22,620	20,200
Nonproliferation & Arms Control	10,581	9,554	10,001
National Technical Nuclear Forensics (NTNF) R&D	0	875	0
Proliferation Detection R&D	2,611	3,090	3,265
Nuclear Detonation Detection	100	0	0
Nonproliferation Fuels Development	4,800	4,400	0
Nonproliferation Stewardship Program	0	375	375
National Technical Nuclear Forensics R&D	0	0	985
Defense Nuclear Nonproliferation R&D	7,511	7,865	4,625
Emergency Operations	225	59	241
Counterterrorism and Counterproliferation	2,891	2,942	3,341
Nuclear Counterterrorism & Incident Response	3,116	3,001	3,582
Defense Nuclear Nonproliferation Programs	56,729	46,275	40,631
Program Direction - National Nuclear Security Administration	512	489	499
Federal Salaries and Expenses Programs	512	489	499
Research - Advanced Scientific Computing Research	160,042	161,432	161,104
Advanced Scientific Computing Research	160,042	161,432	161,104
Research - Basic Energy Sciences	239,274	223,706	230,598
18-SC-10, Advanced Photon Source Upgrade (APS-U), ANL	170,000	160,000	101,000
Construction - Basic Energy Sciences	170,000	160,000	101,000
Basic Energy Sciences	409,274	383,706	331,598
Research - Biological & Environmental Research	42,832	33,868	33,920
Biological and Environmental Research	42,832	33,868	33,920
Research - Fusion Energy Sciences	181	389	200
Fusion Energy Sciences	181	389	200
Research - High Energy Physics	13,913	16,795	13,918
High Energy Physics	13,913	16,795	13,918
Operations and Maintenance - Nuclear Physics	33,680	30,552	33,766
Nuclear Physics	33,680	30,552	33,766
Workforce Development for Teachers & Scientists	2,340	0	0
Facilities and Infrastructure (SLI)	10,800	0	0
20-SC-77, Argonne Utilities Upgrade, ANL (20-SC-79)	500	500	10,000
19-SC-72, Electrical Capacity and Distribution Capability, ANL	30,000	0	0

DEPARTMENT OF ENERGY
Laboratory Table
Argonne National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Construction - Science Laboratories Infrastructure	30,500	500	10,000
Science Laboratories Infrastructure	41,300	500	10,000
Safeguards and Security - SC	10,019	10,469	17,625
Science Programs	713,581	637,711	602,131
Vehicle Technologies	39,700	45,640	47,500
Bioenergy Technologies	10,218	6,000	7,250
Hydrogen and Fuel Cells Technologies	6,539	7,412	11,802
Sustainable Transportation	56,457	59,052	66,552
Geothermal Technologies	25	0	0
Solar Energy Technologies	874	652	900
Water Power Technologies	727	1,000	0
Wind Energy Technologies	1,646	2,318	2,159
Renewable Energy	3,272	3,970	3,059
Building Technologies	2,327	2,282	1,897
Advanced Manufacturing	2,206	6,206	2,000
Energy Efficiency	4,533	8,488	3,897
Strategic Programs	1,650	800	1,500
Corporate Support	1,650	800	1,500
Energy Efficiency and Renewable Energy Programs	65,912	72,310	75,008
Transmission Reliability and Resilience	5,961	3,972	2,600
Resilient Distribution Systems	1,277	1,400	1,600
Transformer Resilience and Advanced Components	60	0	0
Grid Operations Technology	0	0	2,500
Transmission Permitting and Technical Assistance	125	250	1,000
Electricity Programs	7,422	5,622	7,700
Cybersecurity for Energy Delivery Systems	900	0	0
Infrastructure Security and Energy Restoration	5,000	2,500	0
Risk Management Technology and Tools	0	0	2,500
Response and Restoration	0	0	1,500
Information Sharing, Partnerships and Exercises	0	0	3,000
Cybersecurity, Energy Security, and Emergency Response Programs	5,900	2,500	7,000
Unconventional Fossil Energy Technologies from Petroleum-Oil Technologies	150	150	0
Fossil Energy and Carbon Management Programs	150	150	0
Advanced Reactor Technologies	7,666	7,105	8,000
Reactors Concepts RD&D	7,666	7,105	8,000
Materials Recovery and Waste Form Development (MRWFD)	1,278	1,060	1,495
Accident Tolerant Fuels	109	120	132
Triso Fuel and Graphite Qualification	550	0	550
Fuel Cycle Laboratory R&D	3,221	2,440	5,710
Used Nuclear Fuel Disposition R&D	1,548	1,500	1,500
Integrated Waste Management System	48	200	700
Fuel Cycle Research and Development FCRD	6,754	5,320	10,087
Crosscutting Technology Development	2,700	750	1,500
Joint Modeling and Simulation Program	5,675	5,355	5,100
Nuclear Science User Facilities	2,525	225	225
Transformational Challenge Reactor	1,800	1,100	0
Nuclear Energy Enabling Technologies	12,700	7,430	6,825
Regulatory Development	3,384	3,945	4,000
Advanced Reactors Safeguards	958	700	700
Advanced Reactors Demonstration Program	4,342	4,645	4,700

Laboratory Table
Argonne National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
International Nuclear Energy Cooperation	0	0	500
Program Direction - Nuclear Energy	290	185	0
Nuclear Energy Programs	31,752	24,685	30,112
Interim Storage	0	85	0
Nuclear Waste Programs	0	85	0
Office of International Affairs - IA	130	0	0
Strategic Partnership Projects	750	100	100
Departmental Administration Programs	880	100	100
Environment, Health, Safety & Security	945	945	945
Environment, Health, Safety, and Security	945	945	945
Other Defense Activites Programs	945	945	945
Office of Technology Transitions	55	55	112
Advanced Technology Vehicle Manufacturing Loan Program	76	0	0
Advanced Technology Vehicles Manufacturing Loan Programs	76	0	0
Total Argonne National Laboratory	885,444	795,643	766,242

Laboratory Table
Argonne Site Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Argonne Site Office			
Program Direction - SC	4,424	3,997	4,485
Science Programs	4,424	3,997	4,485
National Reactor Innovation Center	275	500	1,200
Advanced Reactors Demonstration Program	275	500	1,200
Nuclear Energy Programs	275	500	1,200
Total Argonne Site Office	4,699	4,497	5,685

Laboratory Table
Bay Area Site Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Bay Area Site Office			
Program Direction - SC	5,83-	4 6,027	5,983
Science Programs	5,83-	4 6,027	5,983
Total Bay Area Site Office	5,83	6,027	5,983

Laboratory Table
Bettis Atomic Power Laboratory FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Bettis Atomic Power Laboratory			
Naval Reactors Development	231,140	250,006	280,776
Columbia-Class Reactor Systems Development	23,881	15,028	11,689
S8G Prototype Refueling	3,245	2,888	0
Naval Reactors Operations and Infrastructure	117,287	82,713	113,367
14-D-901 Spent Fuel Handling Recapitalization Project, NRF	17,694	14,362	12,240
Construction - Naval Reactors	17,694	14,362	12,240
Naval Reactors Programs	393,247	364,997	418,072
Total Bettis Atomic Power Laboratory	393,247	364,997	418,072

DEPARTMENT OF ENERGY
Laboratory Table
Brookhaven National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Brookhaven National Laboratory			
Safety and Environmental Operations	427	464	477
Operating	427	464	477
Infrastructure and Operations	427	464	477
Weapons Activities Programs	427	464	477
International Nuclear Security	170	0	0
Domestic Radiological Security	0	401	342
International Radiological Security	100	100	94
Nuclear Smuggling Detection and Deterrence	1,191	1,125	1,125
Global Material Security	1,461	1,626	1,561
Conversion (formerly HEU Reactor Conversion)	494	350	250
Material Management and Minimization	494	350	250
Nonproliferation & Arms Control	2,747	3,266	3,556
National Technical Nuclear Forensics (NTNF) R&D	0	564	0
Proliferation Detection R&D	4,615	5,771	6,097
Nuclear Detonation Detection	250	0	0
National Technical Nuclear Forensics R&D	0	0	635
Defense Nuclear Nonproliferation R&D	4,865	5,771	6,732
Counterterrorism and Counterproliferation	2,692	2,624	3,022
Nuclear Counterterrorism & Incident Response	2,692	2,624	3,022
Defense Nuclear Nonproliferation Programs	12,259	14,201	15,121
Program Direction - National Nuclear Security Administration	6	6	6
Federal Salaries and Expenses Programs	6	6	6
Research - Advanced Scientific Computing Research	1,228	2,313	1,580
Advanced Scientific Computing Research	1,228	2,313	1,580
Research - Basic Energy Sciences	182,858	167,542	181,501
Basic Energy Sciences	182,858	167,542	181,501
Research - Biological & Environmental Research	20,462	17,353	16,188
Biological and Environmental Research	20,462	17,353	16,188
Research - Fusion Energy Sciences	0	2,409	2,409
Fusion Energy Sciences	0	2,409	2,409
Research - High Energy Physics	80,167	75,692	58,873
11-SC-40, Long Baseline Neutrino Facility/Deep Underground Neutrino Experiment	2,942	3,516	6,000
Construction - High Energy Physics	2,942	3,516	6,000
High Energy Physics	83,109	79,208	64,873
Operations and Maintenance - Nuclear Physics	225,544	220,175	205,853
20-SC-52, Electron Ion Collider, BNL	1,000	5,000	20,000
Construction - Nuclear Physics	1,000	5,000	20,000
Nuclear Physics	226,544	225,175	225,853
Research - Accelerator R&D and Production	0	0	5,367
Accelerator R&D and Production	0	0	5,367
Workforce Development for Teachers & Scientists	2,852	0	0
20-SC-71, Critical Utilities Rehabilitation Project, BNL	20,000	20,000	26,000
19-SC-71, Science User Support Center, BNL	20,000	20,000	38,000
Construction - Science Laboratories Infrastructure	40,000	40,000	64,000
Science Laboratories Infrastructure	40,000	40,000	64,000
Safeguards and Security - SC	14,013	14,233	20,202
Science Programs	571,066	548,233	581,973
Vehicle Technologies	2,500	2,900	4,000
venioe reciliologies	∠,500	2,900	4,000

DEPARTMENT OF ENERGY Laboratory Table Brookhaven National Laboratory FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Bioenergy Technologies	0	0	250
Hydrogen and Fuel Cells Technologies	1,206	1,000	2,369
Sustainable Transportation	3,706	3,900	6,619
Geothermal Technologies	0	50	0
Renewable Energy	0	50	0
Building Technologies	950	700	213
Energy Efficiency	950	700	213
Energy Efficiency and Renewable Energy Programs	4,656	4,650	6,832
Transmission Reliability and Resilience	370	900	900
Electricity Programs	370	900	900
Advanced Reactor Technologies	150	0	0
Reactors Concepts RD&D	150	0	0
Accident Tolerant Fuels	596	656	722
Fuel Cycle Laboratory R&D	472	300	702
Fuel Cycle Research and Development FCRD	1,068	956	1,424
Crosscutting Technology Development	1,006	17	0
Nuclear Science User Facilities	0	55	55
Nuclear Energy Enabling Technologies	1,006	72	55
Advanced Reactors Safeguards	370	345	345
Advanced Reactors Demonstration Program	370	345	345
Nuclear Energy Programs	2,594	1,373	1,824
Strategic Partnership Projects	0	275	275
Departmental Administration Programs	0	275	275
Environment, Health, Safety & Security	250	250	250
Environment, Health, Safety, and Security	250	250	250
Other Defense Activites Programs	250	250	250
Office of Technology Transitions	80	80	49
Total Brookhaven National Laboratory	591,708	570,432	607,707

Laboratory Table
Brookhaven Site Office FY 2022
(Dollars in Thousands)

	EV 0000	FV 0004	EV 0000
	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
	Enacted	Enacted	Request Detail
Brookhaven Site Office			
Program Direction - SC	4,575	4,444	4,932
Science Programs	4,575	4,444	4,932
Total Brookhaven Site Office	4,575	4,444	4,932

Laboratory Table
Carlsbad Area Office FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Carlsbad Area Office			
Counterterrorism and Counterproliferation	41	39	438
Nuclear Counterterrorism & Incident Response	41	39	438
Defense Nuclear Nonproliferation Programs	41	39	438
Program Direction - National Nuclear Security Administration	1	1	1
Federal Salaries and Expenses Programs	1	1	1
Program Direction - Defense Environmental Cleanup	9,108	11,823	12,473
Safeguards and Security - Defense Environmental Cleanup	6,692	6,806	6,806
Defense Environmental Cleanup Programs	15,800	18,629	19,279
Total Carlsbad Area Office	15,842	18,669	19,718

DEPARTMENT OF ENERGY Laboratory Table Chicago Operations Office FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Chicago Operations Office			
Academic Programs	0	2,000	2,000
Stockpile Research, Technology, and Engineering	0	2,000	2,000
Weapons Activities Programs	0	2,000	2,000
Program Direction - National Nuclear Security Administration	6	6	6
Federal Salaries and Expenses Programs	6	6	6
Research - Basic Energy Sciences	226,976	217,479	221,734
Basic Energy Sciences	226,976	217,479	221,734
Research - Biological & Environmental Research	2	23,772	0
Biological and Environmental Research	2	23,772	0
Research - Fusion Energy Sciences	7,799	41,878	50,287
Fusion Energy Sciences	7,799	41,878	50,287
Operations and Maintenance - Nuclear Physics	48,711	140,954	175,238
Nuclear Physics	48,711	140,954	175,238
PILT	1,650	1,650	0
Science Laboratories Infrastructure	1,650	1,650	0
Safeguards and Security - SC	50	0	0
Science Programs	285,188	425,733	447,259
Joint Modeling and Simulation Program	234	422	0
Nuclear Science User Facilities	2	2	2
Nuclear Energy Enabling Technologies	236	424	2
Nuclear Energy Programs	236	424	2
Environment, Health, Safety & Security	50	50	50
Environment, Health, Safety, and Security	50	50	50
Other Defense Activites Programs	50	50	50
Total Chicago Operations Office	285,480	428,213	449,317

Laboratory Table
Consolidated Business Center FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Consolidated Business Center			
Material Disposition	100	0	0
Material Management and Minimization	100	0	0
Defense Nuclear Nonproliferation Programs	100	0	0
Program Direction - National Nuclear Security Administration	2,300	1,859	1,218
Federal Salaries and Expenses Programs	2,300	1,859	1,218
Environment, Health, Safety & Security	259	259	259
Environment, Health, Safety, and Security	259	259	259
Other Defense Activites Programs	259	259	259
Closure Sites Administration	1,987	2,087	2,329
Program Direction - Defense Environmental Cleanup	32,282	34,043	34,686
Defense Environmental Cleanup Programs	34,269	36,130	37,015
Small Sites - NDEC	10,000	10,000	11,997
Non-Defense Environmental Cleanup Programs	10,000	10,000	11,997
Total Consolidated Business Center	46,928	48,248	50,489

DEPARTMENT OF ENERGY
Laboratory Table
Consolidated Service Center - Illinois FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Consolidated Service Center - Illinois			_
PILT	0	1,500	2,410
Science Laboratories Infrastructure	0	1,500	2,410
Safeguards and Security - SC	0	2,199	2,556
Program Direction - SC	22,621	21,740	20,913
Science Programs	22,621	25,439	25,879
Total Consolidated Service Center - Illinois	22,621	25,439	25,879

Laboratory Table
Consolidated Service Center - Tennessee FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Consolidated Service Center - Tennessee			
PILT	0	1,500	2,410
Oak Ridge Landlord	0	5,860	6,430
Science Laboratories Infrastructure	0	7,360	8,840
Safeguards and Security - SC	0	2,198	2,556
Program Direction - SC	22,621	21,741	20,914
Science Programs	22,621	31,299	32,310
Total Consolidated Service Center - Tennessee	22,621	31,299	32,310

DEPARTMENT OF ENERGY
Laboratory Table
East Tennessee Technology Park (K25) FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
East Tennessee Technology Park (K25)			
Safeguards and Security - Defense Environmental Cleanup	9,000	9,260	12,000
Defense Environmental Cleanup Programs	9,000	9,260	12,000
Small Sites - NDEC	10,000	0	0
Non-Defense Environmental Cleanup Programs	10,000	0	0
Oak Ridge Reservation (D&D Fund)	195,693	134,701	105,000
Pension and Community and Regulatory Support	17,655	25,000	20,000
Uranium Enrichment D&D Programs	213,348	159,701	125,000
Total East Tennessee Technology Park (K25)	232,348	168,961	137,000

Laboratory Table
Energy Technology Engineering Center FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Energy Technology Engineering Center			
Small Sites - NDEC	18,200	12,000	21,340
Non-Defense Environmental Cleanup Programs	18,200	12,000	21,340
Total Energy Technology Engineering Center	18,200	12,000	21,340

DEPARTMENT OF ENERGY
Laboratory Table
Fermi National Accelerator Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Fermi National Accelerator Laboratory			
Proliferation Detection R&D	500	750	792
Defense Nuclear Nonproliferation R&D	500	750	792
Defense Nuclear Nonproliferation Programs	500	750	792
Research - Advanced Scientific Computing Research	874	874	700
Advanced Scientific Computing Research	874	874	700
Research - Basic Energy Sciences	135	0	0
Basic Energy Sciences	135	0	0
Research - High Energy Physics	323,994	326,113	307,892
18-SC-42, Proton Improvement Plan II (PIP-II), FNAL	60,000	79,000	90,000
11-SC-40, Long Baseline Neutrino Facility/Deep Underground Neutrino Experiment	168,058	167,484	170,000
11-SC-41, Muon to Electron Conversion Experiment, FNAL	0	2,000	13,000
Construction - High Energy Physics	228,058	248,484	273,000
High Energy Physics	552,052	574,597	580,892
Operations and Maintenance - Nuclear Physics	500	0	0
Nuclear Physics	500	0	0
Workforce Development for Teachers & Scientists	463	0	0
Facilities and Infrastructure (SLI)	0	0	11,500
20-SC-80, Utilities Infrastructure Project, FNAL (20-SC-82)	500	500	13,300
17-SC-71, Integrated Engineering Research Center, FNAL	22,000	10,250	10,250
Construction - Science Laboratories Infrastructure	22,500	10,750	23,550
Science Laboratories Infrastructure	22,500	10,750	35,050
Safeguards and Security - SC	7,877	8,480	13,411
Science Programs	584,401	594,701	630,053
Office of Technology Transitions	55	55	40
Total Fermi National Accelerator Laboratory	584,956	595,506	630,885

Laboratory Table
Fermi Site Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Fermi Site Office			
Program Direction - SC	3,070	3,452	3,408
Science Programs	3,070	3,452	3,408
Total Fermi Site Office	3.070	3.452	3.408

Laboratory Table
Fernald Environmental Management Project FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Fernald Environmental Management Project			
Closure Sites Administration	1,100	1,100	1,076
Defense Environmental Cleanup Programs	1,100	1,100	1,076
Total Fernald Environmental Management Project	1,100	1,100	1,076

Laboratory Table Fernald Site FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Fernald Site			
Legacy Management Activities - Defense	13,791	11,902	12,497
Legacy Management	13,791	11,902	12,497
Other Defense Activites Programs	13,791	11,902	12,497
Total Fernald Site	13,791	11,902	12,497

DEPARTMENT OF ENERGY Laboratory Table Golden Field Office FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Golden Field Office			
Bioenergy Technologies	95,000	110,000	180,000
Hydrogen and Fuel Cells Technologies	68,859	60,691	73,922
Sustainable Transportation	163,859	170,691	253,922
Geothermal Technologies	47,800	64,240	130,710
Solar Energy Technologies	75,865	134,623	185,455
Water Power Technologies	65,550	53,050	59,150
Wind Energy Technologies	35,000	34,472	97,623
Renewable Energy	224,215	286,385	472,938
Building Technologies	37,000	19,223	52,600
Advanced Manufacturing	272,699	80,275	409,513
Weatherization Assistance Program	1,115	0	44,000
Training and Technical Assistance	450	2,075	3,950
Weatherization Readiness Fund	0	0	2,900
Weatherization	1,565	2,075	50,850
State Energy Program Grants	1,600	2,150	3,000
Local Government Clean Energy Workforce Program	0	0	2,800
Weatherization and Intergovernmental Programs	3,165	4,225	56,650
Federal Energy Management Program	11,623	13,000	400,000
Energy Efficiency	324,487	116,723	918,763
Program Direction - Energy Efficiency and Renewable Energy	24,516	24,516	37,145
Corporate Support	24,516	24,516	37,145
Energy Efficiency and Renewable Energy Programs	737,077	598,315	1,682,768
Total Golden Field Office	737,077	598,315	1,682,768

Laboratory Table
Grand Junction Office FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Grand Junction Office			
Legacy Management Activities - Defense	40,437	40,101	52,606
Legacy Management	40,437	40,101	52,606
Other Defense Activites Programs	40,437	40,101	52,606
Total Grand Junction Office	40,437	40,101	52,606

Laboratory Table
Hanford Site FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Hanford Site			
River Corridor and Other Cleanup Operations	236,102	232,479	196,000
Central Plateau Remediation	654,800	670,000	689,776
18-D-404 Modification of Waste Encapsulation and Storage Facility	11,000	15,000	8,000
22-D-401 L-888, 400 Area Fire Station	0	0	15,200
22-D-402 L-897, 200 Area Water Treatment Facility	0	0	12,800
Construction - Richland	11,000	15,000	36,000
Richland	901,902	917,479	921,776
Safeguards and Security - Defense Environmental Cleanup	86,778	96,300	96,300
Defense Environmental Cleanup Programs	988,680	1,013,779	1,018,076
Fast Flux Test Reactor Facility (WA)	2,500	2,500	3,100
Non-Defense Environmental Cleanup Programs	2,500	2,500	3,100
Total Hanford Site	991,180	1,016,279	1,021,176

DEPARTMENT OF ENERGY Laboratory Table Idaho National Laboratory FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Idaho National Laboratory			
Stockpile Sustainment	200	200	0
Stockpile Management	200	200	0
Tritium and Domestic Uranium Enrichment	2,114	1,905	3,467
Production Modernization	2,114	1,905	3,467
Engineering and Integrated Assessments	0	60	0
Stockpile Research, Technology, and Engineering	0	60	0
Safety and Environmental Operations	2,138	1,100	575
Operating	2,138	1,100	575
Infrastructure and Operations	2,138	1,100	575
Weapons Activities Programs	4,452	3,265	4,042
International Nuclear Security	3,668	3,485	3,529
Domestic Radiological Security	12,333	10,780	9,207
International Radiological Security	418	1,550	1,464
Nuclear Smuggling Detection and Deterrence	11	0	0
Global Material Security	16,430	15,815	14,200
Conversion (formerly HEU Reactor Conversion)	40,546	40,740	38,970
Nuclear Material Removal	4,250	8,710	9,550
Material Management and Minimization	44,796	49,450	48,520
Nonproliferation & Arms Control	3,682	2,136	2,757
National Technical Nuclear Forensics (NTNF) R&D	0	937	0
Proliferation Detection R&D	5,974	5,945	6,281
Nuclear Detonation Detection	100	0	0
Nonproliferation Fuels Development	5,400	8,340	0
Nonproliferation Stewardship Program	450	450	450
National Technical Nuclear Forensics R&D	0	0	1,054
Defense Nuclear Nonproliferation R&D	11,924	14,735	7,785
Counterterrorism and Counterproliferation	5,089	5,469	5,868
Nuclear Counterterrorism & Incident Response	5,089	5,469	5,868
Defense Nuclear Nonproliferation Programs	81,921	88,542	79,130
Naval Reactors Development	102,114	105,534	108,535
S8G Prototype Refueling	786	738	0
Naval Reactors Operations and Infrastructure	144,103	183,809	178,433
14-D-901 Spent Fuel Handling Recapitalization Project, NRF	213,044	310,587	332,366
Construction - Naval Reactors	213,044	310,587	332,366
Naval Reactors Programs	460,047	600,668	619,334
Program Direction - National Nuclear Security Administration	422	6	6
Federal Salaries and Expenses Programs	422	6	6
Research - Advanced Scientific Computing Research	70	70	0
Advanced Scientific Computing Research	70	70	0
Research - Basic Energy Sciences	3,723	570	570
Basic Energy Sciences	3,723	570	570
Research - Fusion Energy Sciences	2,500	1,646	3,550
Fusion Energy Sciences	2,500	1,646	3,550
Workforce Development for Teachers & Scientists	522	0	0
Science Programs	6,815	2,286	4,120
Vehicle Technologies	9,800	9,825	11,000
Bioenergy Technologies	16,371	16,000	11,250
Hydrogen and Fuel Cells Technologies	6,591	4,350	9,154

DEPARTMENT OF ENERGY Laboratory Table Idaho National Laboratory FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Sustainable Transportation	32,762	30,175	31,404
Geothermal Technologies	25	100	0
Solar Energy Technologies	0	1,151	1,589
Water Power Technologies	834	1,570	3,000
Wind Energy Technologies	1,166	1,534	1,520
Renewable Energy	2,025	4,355	6,109
Advanced Manufacturing	0	3,939	0
Federal Energy Management Program	181	442	600
Energy Efficiency	181	4,381	600
Energy Efficiency and Renewable Energy Programs	34,968	38,911	38,113
Transmission Reliability and Resilience	3,155	2,908	4,700
Resilient Distribution Systems	1,618	600	800
Cyber R&D	0	0	1,000
Transformer Resilience and Advanced Components	390	170	280
Grid Operations Technology	0	0	2,000
Electricity Programs	5,163	3,678	8,780
Cybersecurity for Energy Delivery Systems	3,000	22,000	0
Infrastructure Security and Energy Restoration	7,000	6,000	0
Risk Management Technology and Tools	0	0	30,000
Information Sharing, Partnerships and Exercises	0	0	3,000
Cybersecurity, Energy Security, and Emergency Response Programs	10,000	28,000	33,000
Carbon Capture	150	110	191
Advanced Energy & Hydrogen Systems	2,091	1,603	1,429
CCUS & Power Systems	2,241	1,713	1,620
Cross Cutting Research	733	641	477
Advanced Coal Energy Systems & CCUS	733	641	477
Fossil Energy and Carbon Management Programs	2,974	2,354	2,097
Advanced SMR R&D	920	3,542	2,412
Light Water Reactor Sustainability	18,542	16,928	20,000
Advanced Reactor Technologies	9,468	9,423	11,000
Versatile Advanced Test Reactor	61,206	0	0
Reactors Concepts RD&D	90,136	29,893	33,412
Mining, Conversion, and Transportation	900	450	0
Materials Recovery and Waste Form Development (MRWFD)	21,552	17,988	25,215
HALEU for R&D and Demonstration Reactors	0	0	2,535
Accident Tolerant Fuels	24,094	22,103	24,313
Triso Fuel and Graphite Qualification	20,431	18,950	23,000
Fuel Cycle Laboratory R&D	8,114	8,000	18,845
Used Nuclear Fuel Disposition R&D	1,075	1,075	1,075
Integrated Waste Management System	1,032	1,000	1,000
Fuel Cycle Research and Development FCRD	77,198	69,566	95,983
Crosscutting Technology Development	12,182	11,045	19,000
Joint Modeling and Simulation Program	11,823	9,690	9,300
Nuclear Science User Facilities	24,852	25,229	38,729
Transformational Challenge Reactor	347	700	0
Nuclear Energy Enabling Technologies	49,204	46,664	67,029
National Reactor Innovation Center	17,602	27,343	47,293
Demonstration 1	295	154	200
Demonstration 2	294	154	200
Risk Reduction for Future Demonstration	49	360	0

DEPARTMENT OF ENERGY Laboratory Table Idaho National Laboratory FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Regulatory Development	4,662	4,545	4,600
Advanced Reactors Safeguards	296	210	210
Advanced Reactors Demonstration Program	23,198	32,766	52,503
21-E-200, VTR Project	0	2,000	90,000
Other Project Costs - Versatile Test Reactor	0	42,435	53,180
Versatile Test Reactor Project	0	44,435	143,180
INL Facilities Operations and Maintenance	272,827	272,495	295,000
16-E-200 Sample Preparation Laboratory	25,450	26,000	41,850
Research Reactor Infrastructure	8,919	11,430	14,930
Infrastructure	307,196	309,925	351,780
Idaho Sitewide Safeguards & Security	149,111	145,850	148,800
International Nuclear Energy Cooperation	0	0	1,500
Program Direction - Nuclear Energy	2,039	1,294	1,576
Nuclear Energy Programs	698,082	680,393	895,763
Interim Storage	0	3,464	0
Nuclear Waste Programs	0	3,464	0
Office of International Affairs - IA	350	0	0
Departmental Administration Programs	350	0	0
Environment, Health, Safety & Security	150	150	150
Environment, Health, Safety, and Security	150	150	150
Other Defense Activites Programs	150	150	150
Office of Technology Transitions	155	155	129
Idaho Cleanup and Waste Disposition	430,000	430,000	358,925
22-D-403 Idaho Spent Nuclear Fuel Staging Facility	0	0	3,000
22-D-404 Additional ICDF Landfill Disposal Cell and Evaporation Ponds Project	0	0	5,000
Construction - Idaho	0	0	8,000
Idaho Community and Regulatory Support	3,500	3,500	2,658
Idaho National Laboratory (INL)	433,500	433,500	369,583
Defense Environmental Cleanup Programs	433,500	433,500	369,583
Small Sites - NDEC	12,800	11,000	11,000
Non-Defense Environmental Cleanup Programs	12,800	11,000	11,000
Total Idaho National Laboratory	1,751,799	1,896,372	2,065,247

DEPARTMENT OF ENERGY
Laboratory Table
Idaho Operations Office FY 2022
(Dollars in Thousands)

Request Detail 369 369
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Laboratory Table
Idaho Operations Office FY 2022
(Dollars in Thousands)

rations Office	257 630	347 824	404 447	
	Enacted	Enacted	Request Detail	
	FY 2020	FY 2021	FY 2022	

DEPARTMENT OF ENERGY
Laboratory Table
Kansas City National Security Complex (KCNSC) FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Kansas City National Security Complex (KCNSC)			
B61 Life Extension Program	252,228	275,000	290,000
W88 Alteration Program	150,357	109,310	61,491
W80-4 Life Extension Program	124,455	166,147	176,066
W80-4 Alteration-SLCM	0	0	200
W87-1 Modification Program	3,000	40,000	75,000
W93 Program	0	2,000	3,000
Stockpile Major Modernization	530,040	592,457	605,757
Stockpile Sustainment	112,008	130,650	146,781
Weapons Dismantlement and Disposition	630	712	100
Production Operations	85,487	85,849	91,013
Stockpile Management	728,165	809,668	843,651
Plutonium Modernization	7,446	8,968	7,133
Primary Capability Modernization	7,446	8,968	7,133
Non-Nuclear Capability Modernization	3,894	32,000	66,898
Production Modernization	11,340	40,968	74,031
Engineering and Integrated Assessments	4,375	10,393	10,998
Advanced Simulation and Computing	2,500	0	3,500
Weapons Technology and Manufacturing Maturation	15,150	27,417	26,761
Stockpile Research, Technology, and Engineering	22,025	37,810	41,259
Operations of Facilities	79,099	106,850	110,000
Safety and Environmental Operations	0	1,600	9,014
Maintenance and Repair of Facilities	24,247	28,000	30,000
Infrastructure and Safety	31,199	34,898	44,993
Capabilities Based Investments	18,046	14,050	13,500
Recapitalization	49,245	48,948	58,493
Operating	152,591	185,398	207,507
Infrastructure and Operations	152,591	185,398	207,507
STA Operations and Equipment	25,893	22,490	37,597
Secure Transportation Asset	25,893	22,490	37,597
Defense Nuclear Security (DNS)	12,946	17,560	22,004
Defense Nuclear Security	12,946	17,560	22,004
Information Technology and Cyber Security	26,576	26,817	8,406
Weapons Activities Programs	979,536	1,140,711	1,234,455
Material Disposition	2,705	3,125	3,500
Material Management and Minimization	2,705	3,125	3,500
Nonproliferation & Arms Control	2,365	2,628	2,838
Proliferation Detection R&D	115	1,050	1,109
Nonproliferation Stewardship Program	500	0	0
Defense Nuclear Nonproliferation R&D	615	1,050	1,109
Counterterrorism and Counterproliferation	43,366	37,869	38,267
Nuclear Counterterrorism & Incident Response	43,366	37,869	38,267
Defense Nuclear Nonproliferation Programs	49,051	44,672	45,714
Program Direction - National Nuclear Security Administration	110	110	110
Federal Salaries and Expenses Programs	110	110	110
Environment, Health, Safety & Security	10	10	10
Environment, Health, Safety, and Security	10	10	10
Other Defense Activites Programs	10	10	10
Total Kansas City National Security Complex (KCNSC)	1,028,707	1,185,503	1,280,289

Laboratory Table
Kansas City Site Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Kansas City Site Office			
Information Technology and Cyber Security	130	140	145
Weapons Activities Programs	130	140	145
Program Direction - National Nuclear Security Administration	7,467	7,146	7,562
Federal Salaries and Expenses Programs	7,467	7,146	7,562
Total Kansas City Site Office	7,597	7,286	7,707

DEPARTMENT OF ENERGY
Laboratory Table
Knolls Atomic Power Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Knolls Atomic Power Laboratory			
Naval Reactors Development	181,043	210,505	249,393
Columbia-Class Reactor Systems Development	51,619	49,672	43,311
S8G Prototype Refueling	165,969	131,374	126,000
Naval Reactors Operations and Infrastructure	282,538	254,125	288,717
22-D-532 Security Upgrades KL	0	0	5,100
22-D-531 KL Chemistry and Radiological Health Building	0	0	41,620
21-D-530 KL Steam and Condensate Upgrades	0	4,000	0
20-D-931, KL Fuel Development Laboratory	23,700	0	0
19-D-930 KS Overhead Piping	20,900	0	0
14-D-901 Spent Fuel Handling Recapitalization Project, NRF	7,262	5,051	4,099
Construction - Naval Reactors	51,862	9,051	50,819
Naval Reactors Programs	733,031	654,727	758,240
Total Knolls Atomic Power Laboratory	733,031	654,727	758,240

DEPARTMENT OF ENERGY
Laboratory Table
Lawrence Berkeley National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Lawrence Berkeley National Laboratory			
Weapons Technology and Manufacturing Maturation	350	0	0
Stockpile Research, Technology, and Engineering	350	0	0
Information Technology and Cyber Security	467	650	530
Weapons Activities Programs	817	650	530
Nonproliferation & Arms Control	325	836	957
National Technical Nuclear Forensics (NTNF) R&D	0	50	0
Proliferation Detection R&D	6,055	8,055	8,510
National Technical Nuclear Forensics R&D	0	0	56
Defense Nuclear Nonproliferation R&D	6,055	8,055	8,566
Counterterrorism and Counterproliferation	160	320	718
Nuclear Counterterrorism & Incident Response	160	320	718
Defense Nuclear Nonproliferation Programs	6,540	9,261	10,241
Research - Advanced Scientific Computing Research	215,822	238,816	220,112
Advanced Scientific Computing Research	215,822	238,816	220,112
Research - Basic Energy Sciences	170,004	147,285	153,500
18-SC-12, Advanced Light Source Upgrade (ALS-U), LBNL	60,000	62,000	75,100
Construction - Basic Energy Sciences	60,000	62,000	75,100
Basic Energy Sciences	230,004	209,285	228,600
Research - Biological & Environmental Research	171,201	166,693	170,232
Biological and Environmental Research	171,201	166,693	170,232
Research - Fusion Energy Sciences	1,525	1,200	1,352
Fusion Energy Sciences	1,525	1,200	1,352
Research - High Energy Physics	68,664	71,772	63,326
High Energy Physics	68,664	71,772	63,326
Operations and Maintenance - Nuclear Physics	22,228	23,069	26,048
Nuclear Physics	22,228	23,069	26,048
Research - Accelerator R&D and Production	0	0	1,282
Accelerator R&D and Production	0	0	1,282
Workforce Development for Teachers & Scientists	1,586	0	0
20-SC-72, Seismic and Safety Modernization, LBNL	10,000	5,000	27,500
20-SC-78, Linear Assets Modernization Project, LBNL (20-SC-80)	500	500	12,850
19-SC-74, Biological & Environmental Program Integration Center (BioEPIC), LBNL	15,000	20,000	35,000
Construction - Science Laboratories Infrastructure	25,500	25,500	75,350
Science Laboratories Infrastructure	25,500	25,500	75,350
Safeguards and Security - SC	7,175	7,675	12,590
Science Programs	743,705	744,010	798,892
Vehicle Technologies	13,500	16,970	20,000
Bioenergy Technologies	9,049	6,500	7,000
Hydrogen and Fuel Cells Technologies	6,636	6,844	11,299
Sustainable Transportation	29,185	30,314	38,299
Geothermal Technologies	4,130	1,950	0
Solar Energy Technologies	1,349	2,025	2,796
Wind Energy Technologies	1,674	1,515	4,239
Renewable Energy	7,153	5,490	7,035
Building Technologies	44,784	37,041	36,284
Advanced Manufacturing	9,868	7,656	3,600
Weatherization Assistance Program	0	24,800	0
Training and Technical Assistance	200	75	200

DEPARTMENT OF ENERGY
Laboratory Table
Lawrence Berkeley National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Weatherization Readiness Fund	0	0	100
Weatherization	200	24,875	300
State Energy Program Grants	875	475	1,000
Local Government Clean Energy Workforce Program	0	0	100
Weatherization and Intergovernmental Programs	1,075	25,350	1,400
Federal Energy Management Program	4,020	4,000	6,000
Energy Efficiency	59,747	74,047	47,284
Strategic Programs	2,050	1,300	3,500
Corporate Support	2,050	1,300	3,500
Energy Efficiency and Renewable Energy Programs	98,135	111,151	96,118
Transmission Reliability and Resilience	520	1,288	1,300
Resilient Distribution Systems	1,228	1,250	1,500
Energy Storage Research	122	0	0
Energy Storage	122	0	0
Transmission Permitting and Technical Assistance	325	0	1,000
Electricity Programs	2,195	2,538	3,800
Carbon Capture	635	465	808
Carbon Storage	2,677	2,115	3,132
CCUS & Power Systems	3,312	2,580	3,940
Cross Cutting Research	1,982	1,734	1,292
Advanced Coal Energy Systems & CCUS	1,982	1,734	1,292
Unconventional Fossil Energy Technologies from Petroleum-Oil Technologies	1,672	1,672	0
Natural Gas Technologies Research	1,338	0	0
Fossil Energy and Carbon Management Programs	8,304	5,986	5,232
Materials Recovery and Waste Form Development (MRWFD)	40	33	47
Used Nuclear Fuel Disposition R&D	3,483	3,500	3,500
Fuel Cycle Research and Development FCRD	3,523	3,533	3,547
Crosscutting Technology Development	53	55	0
Joint Modeling and Simulation Program	200	200	200
Nuclear Energy Enabling Technologies	253	255	200
Nuclear Energy Programs	3,776	3,788	3,747
Strategic Partnership Projects	3,500	3,308	3,308
Departmental Administration Programs	3,500	3,308	3,308
Environment, Health, Safety & Security	0	0	50
Environment, Health, Safety, and Security	0	0	50
Other Defense Activites Programs	0	0	50
Office of Technology Transitions	105	105	190
Small Sites - NDEC	31,000	30,100	0
Non-Defense Environmental Cleanup Programs	31,000	30,100	0
Total Lawrence Berkeley National Laboratory	898,077	910,897	922,108

DEPARTMENT OF ENERGY
Laboratory Table
Lawrence Livermore National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Lawrence Livermore National Laboratory			
B61 Life Extension Program	2,200	695	695
W80-4 Life Extension Program	176,637	173,304	194,517
W80-4 Alteration-SLCM	0	0	2,000
W87-1 Modification Program	44,000	200,000	225,000
W93 Program	0	4,000	3,000
Stockpile Major Modernization	222,837	377,999	425,212
Stockpile Sustainment	88,554	83,839	105,672
Weapons Dismantlement and Disposition	3,900	1,472	500
Production Operations	5,955	5,819	5,476
Stockpile Management	321,246	469,129	536,860
Plutonium Modernization	36,755	51,361	68,580
High Explosives & Energetics	8,068	14,000	16,000
Primary Capability Modernization	44,823	65,361	84,580
Secondary Capability Modernization	3,905	4,300	9,900
Tritium and Domestic Uranium Enrichment	37	38	40
Non-Nuclear Capability Modernization	0	850	0
Production Modernization	48,765	70,549	94,520
Assessment Science	147,695	208,339	210,551
Engineering and Integrated Assessments	71,103	90,719	87,641
Inertial Confinement Fusion	335,876	349,000	324,500
Advanced Simulation and Computing	290,442	300,172	255,729
Weapons Technology and Manufacturing Maturation	35,885	35,710	36,577
Academic Programs	2,000	1,000	1,462
Stockpile Research, Technology, and Engineering	883,001	984,940	916,460
Operations of Facilities	75,625	80,205	80,000
Safety and Environmental Operations	35,588	16,532	33,644
Maintenance and Repair of Facilities	14,770	35,483	34,000
Infrastructure and Safety	59,903	100,970	93,040
Capabilities Based Investments	17,662	33,030	26,000
Recapitalization	77,565	134,000	119,040
Operating	203,548	266,220	266,684
18-D-620, Exascale Computing Facility Modernization Project, LLNL	50,000	29,200	0
Programmatic	50,000	29,200	0
22-D-514 Digital Infrastructure Capability Expansion, LLNL	0	0	8,000
15-D-612, Emergency Operations Center, LLNL	5,000	27,000	0
Mission Enabling	5,000	27,000	8,000
I&O - Construction	55,000	56,200	8,000
Infrastructure and Operations	258,548	322,420	274,684
Defense Nuclear Security (DNS)	67,135	69,430	71,302
Defense Nuclear Security	67,135	69,430	71,302
Information Technology and Cyber Security	29,679	30,687	19,089
Weapons Activities Programs	1,608,374	1,947,155	1,912,915
International Nuclear Security	8,830	7,279	7,371
Domestic Radiological Security	0	470	401
International Radiological Security	4,716	4,991	4,714
Nuclear Smuggling Detection and Deterrence	4,090	3,856	3,856
Global Material Security	17,636	16,596	16,342
Conversion (formerly HEU Reactor Conversion)	0	500	0

DEPARTMENT OF ENERGY
Laboratory Table
Lawrence Livermore National Laboratory FY 2022
(Dollars in Thousands)

Material Dispensition Enanted Enanted Request Death Material Management and Minimization 10 0 0 10 Mosprolaration & Arma Control 24,180 2,646 2,838 National Tachnicular Generation (SINTR) RAD 40,122 2,947 3,116 Proliferation Detection RAD 40,222 22,477 2,208 Nuclear Detection Detection 9,279 2,247 2,208 Nuclear Detection Pactor 4,50 0 0 1,208 Nuclear Detection National Technicular Detection 2,20 0 0 1,20 Nuclear Control Machine Technicular Seguence 2,20 6 0 1,20 Emergency Operations 2,20 7 0 0.0 1,20 Constitute Training and Counterprofession Frequence 2,20 7 0 0.0 Degran Direction - National Nuclear Security Administration 2,30 7 2 15,00 Pergann Direction - National Nuclear Sequence 2,20 7 2 15,00 1,00 1,00 1,00 <th></th> <th>FY 2020</th> <th>FY 2021</th> <th>FY 2022</th>		FY 2020	FY 2021	FY 2022
Material Manegament and Minimitation 100 100 100 Morpolatienton A Arma Control 24,186 26,486 20,808 Nacional Tacemical Nuclear Detentions (NTNY) RAD 40,122 24,447 31,146 Proliferation Detection RAD 40,122 22,742 32,038 Norpoliteration Stewardshirly Program 4,490 50,000 12,700 Notice Detections Machieur Proventiers RAD 60 0 60,015 Elemency Operations 26,24 89 68,388 Region Counterferrorism and Counterprolleration 61,565 69,449 68,388 Nuclear Counterferrorism A fundent Regione 22,70 67,000 70,488 Program Disection - National Nuclear Receipt Administration 2,50 70 15,000 Program Disection - National Nuclear Receipt Administration 2,50 70 2,50 Program Disection - National Nuclear Receipt Administration 2,50 70 2,50 Receipt And State and Expenses Programs 2,40 2,00 3,00 Research - Receipt Selences 2,40 2,00 3,00 <tr< th=""><th></th><th>Enacted</th><th>Enacted</th><th>Request Detail</th></tr<>		Enacted	Enacted	Request Detail
Noting National Technical Nuclear Processis (NTNF) RAD	Material Disposition	100	0	100
National Tachnical Nuclear Forensica (NTNF) R&D 40 11,643 9.0 Proliferation Detection R&D 49,73 22,472 23,083 Norproliferation Stewardship Program 4,460 6,500 12,770 Notional Total Nuclear Forensica R&D 0 0 0 10,500 Defense Nuclear Norproliferation R&D 62,852 59,189 80,115 Emergency Operations 15,852 65,940 69,848 Nuclear Counterferentian and Counterproliferation 15,852 65,940 70,483 Nuclear Counterferentian in Acident Response 157,044 181,432 10,889 Program Direction - National Nuclear Security Administration 2,890 762 1,580 Pederia Sulatine and Expanses Programs 2,590 762 1,580 Pederia Sulatine and Expanses Programs 2,590 762 1,580 Pederia Sulatine and Expanses Programs 2,594 2,041 2,001 Research - Busic Energy Sciences 2,472 2,524 3,480 Research - Busic Energy Sciences 2,594 2,001 2,001	Material Management and Minimization	100	500	100
Publication Detection RDD	Nonproliferation & Arms Control	24,180	26,466	26,859
Nuclear Detension Detection 9,279 22,742 23,083 Numprolibration Silewardship Program 4,460 6,560 12,770 National Technical Nuclear Fernerical R&D 62,825 93,189 80,115 Emeragency Operations 62,42 68,948 80,815 Countenterroriam and Counterproliferation 51,652 66,948 68,848 Nuclear Counterferroriam in Incident Response 92,776 67,038 68,848 Nuclear Counterferroriam in Incident Response 19,704 181,828 17,838 Program Direction - National Nuclear Security Administration 2,950 762 1,838 Program Direction - National Nuclear Security 2,940 762 1,838 Research - Advanced Scientific Computing Research 2,472 5,254 3,400 Advanced Scientific Computing Research 2,472 5,254 3,400 Research - Seals Energy Sciences 2,948 2,091 2,091 Research - Seals Energy Sciences 3,945 2,279 2,242 Research - Seals Energy Sciences 3,062 2,755 8,410	National Technical Nuclear Forensics (NTNF) R&D	0	11,643	0
Nonproliferation Stewardship Program 4,450 6,950 12,770 National Technical Nuclear Forensica R&D 0 0 13,098 Defenses Nuclear Nonproliferation 6,265 9,198 0,815 Emergency Operations 6,24 88 63,36 Countertemoriers and Counterproliferation 15,52 66,348 70,483 Nuclear Counterferories & Incident Response 52,72 67,038 70,483 Defense Nuclear Nonproliferation Programs 15,04 111,432 153,899 Program Direction National Nuclear Society Administration 2,95 762 1,889 Federal Salaries and Expenses Programs 2,949 2,95 1,890 Research - Advanced Scientific Computing Research 2,472 2,244 3,490 Research - Selostical Responses 2,948 2,091 2,091 Research - Selostical Research 33,625 2,005 2,727 Research - Selostical & Environmental Research 33,625 2,005 2,727 Biological and Environmental Research 30,625 2,005 2,727	Proliferation Detection R&D	49,123	29,497	31,164
National Technical Nuclear Forestics R&D 0 0 13.088 Delense Nuclear Norportleation R&D 62.85 59,199 69,115 Emeregency Operations 62.4 69,349 69,848 Nuclear Counterterorism and Counterprofileration 51,652 67,038 70,483 Nuclear Counterterorism & Incident Response 52,766 67,038 138,898 Program Direction - National Nuclear Security Administration 2,950 762 1,890 Program Direction - National Nuclear Security Administration 2,940 75,254 3,480 Research - Racial Salaries and Expenses Programs 2,940 2,472 5,254 3,480 Advanced Scientific Computing Research 2,472 5,254 3,480 Advanced Scientific Computing Research 3,942 2,901 2,001 Research - Biolise Energy Sciences 2,948 2,091 2,001 Research - Biolise Energy Sciences 3,962 2,905 2,727 Research - Biolise Energy Sciences 3,062 3,775 8,410 Fusion Energy Sciences 3,062 3,775 8,	Nuclear Detonation Detection	9,279	22,742	23,083
Defense Nuclear Nonproliferation RAD	Nonproliferation Stewardship Program	4,450	6,950	12,770
Emergency Operations	National Technical Nuclear Forensics R&D	0	0	13,098
Countenterorism and Counterproliferation 51,652 66,948 80,848 Nuclear Countenterrorism & Incident Response 52,276 67,038 70,843 Defense Nuclear Monpolleration Programs 15,764 1813,432 193,898 Program Direction - National Nuclear Security Administration 2,950 762 1,580 Federal Salaries and Expenses Programs 2,943 62,943 3,490 Advanced Scientific Computing Research 2,472 5,254 3,490 Advanced Scientific Computing Research 2,448 2,091 2,091 Research - Salogler Environmental Research 33,625 28,005 22,297 Biological and Environmental Research 33,625 28,005 22,297 Biological and Environmental Research 33,625 28,005 22,729 Research - High Energy Physics 8,002 9,765 8,410 Fusion Energy Sciences 8,002 9,765 8,410 Research - High Energy Physics 3,750 3,665 2,271 Operations and Maintenance - Nuclear Physics 1,47 1,607 1,809	Defense Nuclear Nonproliferation R&D	62,852	59,189	80,115
Nuclear Counterterorism & Incident Response 52,276 67,038 70,488 Delonse Nuclear Nonprolifeation Programs 157,044 181,432 193,898 Program Direction - National Nuclear Security Administration 2,960 762 1,580 Federal Salaries and Expenses Programs 2,950 752 1,580 Research - Advanced Scientific Computing Research 2,472 5,254 3,490 Advanced Scientific Computing Research 2,948 2,091 2,091 Basic Energy Sciences 2,948 2,091 2,091 Basic Energy Sciences 3,365 28,095 27,277 Research - Fusion Energy Sciences 8,062 9,765 8,410 Research - Fusion Energy Sciences 8,062 9,765 8,410 Research - Fusion Energy Sciences 3,760 3,666 2,271 Research - Fusion Energy Sciences 3,760 3,666 2,271 Research - Fusion Energy Sciences 3,700 3,666 2,271 Research - Fusion Energy Sciences 3,700 1,607 1,609 Research - Fusion Energy	Emergency Operations	624	89	635
Defense Nuclear Norproliferation Programs 157,044 181,325 193,898 Program Direction - National Nuclear Security Administration 2,980 762 1,580 Federal Salarias and Expenses Programs 2,980 762 1,580 Research - Advanced Scientific Computing Research 2,472 5,254 3,490 Advanced Scientific Computing Research 2,472 5,254 3,490 Research - Siological & Environmental Research 33,625 2,808 27,237 Research - Flusion Energy Sciences 8,062 9,765 8,410 Pusion Energy Sciences 3,750 3,665 2,227 High Energy Physics 3,750 3,665 2,227 High Energy Physics 1,470 1,607 1,809 Accelerator R&D and Production 0 0 0 Muclear Physics 3,780 4,416 4,61 </td <td>Counterterrorism and Counterproliferation</td> <td>51,652</td> <td>66,949</td> <td>69,848</td>	Counterterrorism and Counterproliferation	51,652	66,949	69,848
Program Direction - National Nuclear Security Administration 2,950 762 1,580 Foderla Sklatirés and Expenses Programs 2,950 762 1,580 Research - Avances Scientific Computing Research 2,472 5,254 3,490 Advanced Scientific Computing Research 2,948 2,091 2,091 Research - Basic Energy Sciences 2,948 2,091 2,091 Research - Biological & Environmental Research 33,625 28,095 27,297 Biological and Environmental Research 33,625 28,095 27,297 Research - Fusion Energy Sciences 8,062 9,765 8,410 Research - Fusion Energy Sciences 1,062 1,070 1,090 Activa	Nuclear Counterterrorism & Incident Response	52,276	67,038	70,483
Federal Salaries and Expenses Programs 2,950 762 1,580 Research - Advanced Scientific Computing Research 2,472 5,254 3,400 Advanced Scientific Computing Research 2,948 2,091 2,091 Research - Basic Energy Sciences 2,948 2,091 2,091 Basic Energy Sciences 2,948 2,095 2,727 Biological and Environmental Research 33,625 28,095 27,727 Research - Fusion Energy Sciences 8,062 9,765 8,410 Research - High Energy Physics 3,750 3,665 2,271 Research - High Energy Physics 3,750 3,665 2,271 High Energy Physics 3,750 3,665 2,271 Operations and Maintenance - Nuclear Physics 1,470 1,607 1,809 Nuclear Physics 1,470 1,607 1,809 Research - Accelerator R&D and Production 0 0 2,528 Accelerator R&D and Production 0 0 2,528 Vericiar Exercy Technologies 3,31 1,01 6,02 <td>Defense Nuclear Nonproliferation Programs</td> <td>157,044</td> <td>181,432</td> <td>193,899</td>	Defense Nuclear Nonproliferation Programs	157,044	181,432	193,899
Research - Advanced Scientific Computing Research 2,472 5,254 3,490 Advanced Scientific Computing Research 2,748 2,094 2,091 Research - Basic Energy Sciences 2,948 2,091 2,091 Research - Biological & Environmental Research 33,625 28,095 27,297 Biological and Environmental Research 3,625 28,095 27,297 Research - Fusion Energy Sciences 8,062 9,765 8,410 Fusion Energy Sciences 8,062 9,765 8,410 Research - High Energy Physics 3,750 3,665 2,277 Operations and Maintenance - Nuclear Physics 1,470 1,607 1,809 Nuclear Physics 1,470 1,607 1,809 Accelerator RAD and Production 0 0 0 258 Accelerator RAD and Production 0 0 0 258 Accelerator RAD and Production 0 0 0 0 Science Programs 52,758 5,447 45,626 Worldorce Development for Teachers & Scientists	Program Direction - National Nuclear Security Administration	2,950	762	1,580
Advanced Scientific Computing Research 2,472 5,254 3,490 Research - Basic Energy Sciences 2,948 2,091 2,091 Basic Energy Sciences 2,948 2,091 2,091 Research - Biological & Environmental Research 33,625 28,095 27,297 Biological and Environmental Research 3,625 28,095 8,410 Peasearch - Fusion Energy Sciences 8,662 9,765 8,410 Pusion Energy Sciences 8,662 9,765 8,410 Pesaerch - High Energy Physics 3,750 3,665 2,271 High Energy Physics 3,750 3,665 2,271 Operations and Maintenance - Nuclear Physics 1,470 1,607 1,809 Research - Accelerator RAD and Production 0 0 2,68 Accelerator RAD and Production 0 0 0 2,68 Accelerator RAD and Production 0 0 0 0 2,68 Science Programs 52,758 50,477 45,626 4,62 4,66 4,62 4,66	Federal Salaries and Expenses Programs	2,950	762	1,580
Research - Basic Energy Sciences 2,948 2,091 2,091 Basic Energy Sciences 2,948 2,091 2,091 Research - Biological & Environmental Research 33,625 28,095 27,272 Biological and Environmental Research 33,625 28,095 27,272 Research - Fusion Energy Sciences 8,062 9,765 8,410 Fusion Energy Sciences 3,060 3,665 2,271 Research - High Energy Physics 3,750 3,665 2,271 High Energy Physics 3,750 3,665 2,271 Nuclear Physics 1,470 1,607 1,809 Nuclear Physics 1,470 1,607 1,809 Nuclear Physics 1,470 1,607 1,809 Research - Accelerator R&D and Production 0 0 258 Accelerator R&D and Production 0 0 258 Accelerator Exercity Carrier 3,30 4,416 4,416 Science Programs 5,278 5,047 4,562 Vehicle Technologies 3,41	Research - Advanced Scientific Computing Research	2,472	5,254	3,490
Basic Energy Sciences 2,948 2,091 2,098 Research - Biological & Environmental Research 33,625 28,095 27,297 Biological and Environmental Research 33,625 28,095 27,297 Research - Fusion Energy Sciences 8,662 9,765 8,410 Fusion Energy Sciences 8,062 9,765 8,410 Research - High Energy Physics 3,750 3,665 2,271 High Energy Physics 3,750 3,665 2,271 Operations and Maintenance - Nuclear Physics 1,470 1,607 1,809 Nuclear Physics 1,470 1,607 1,809 Research - Accelerator & Dand Production 0 0 258 Accelerator & Ex Dand Production 0 0 0 258 Accelerator & Ex Dand Production 0 0 0 258 Vehicle Technologies 3,30 4,416 4,562 Vehicle Technologies 3,30 4,416 4,162 Bioenergy Technologies 3,31 1,00 5,00	Advanced Scientific Computing Research	2,472	5,254	3,490
Research - Biological & Environmental Research 33,625 28,095 27,297 Biological and Environmental Research 33,625 28,095 27,297 Research - Fusion Energy Sciences 8,062 9,765 8,410 Fusion Energy Sciences 8,062 9,765 8,410 Research - High Energy Physics 3,750 3,665 2,271 High Energy Physics 3,750 3,665 2,271 Operations and Maintenace - Nuclear Physics 1,470 1,607 1,809 Nuclear Physics 1,470 1,607 1,809 Research - Accelerator R&D and Production 0 0 258 Moclear Physics 3,141 0 0 258 Morkforce Development for Teachers & Scientists 431 0 0 258 Vehicle Technologies 3,800 4,416 4,416 Bioenergy Technologies 3,801 4,416 4,416 Bioenergy Technologies 3,431 1,091 6,004 Sustainable Transportation 7,91 6,25 1,270 <td>Research - Basic Energy Sciences</td> <td>2,948</td> <td>2,091</td> <td>2,091</td>	Research - Basic Energy Sciences	2,948	2,091	2,091
Biological and Environmental Research 33,625 28,095 27,297 Research - Fusion Energy Sciences 8,062 9,765 8,410 Fusion Energy Sciences 3,050 3,665 2,271 Research - High Energy Physics 3,750 3,665 2,271 High Energy Physics 1,470 1,607 1,809 Nuclear Physics 1,470 1,607 1,809 Research - Accelerator R&D and Production 0 0 258 Accelerator R&D and Production 0 0 0 258 Koeiterant Perduction 3,80 4,416 4,416 6,004 6,004 6,004 6,004 6,004 <t< td=""><td>Basic Energy Sciences</td><td>2,948</td><td>2,091</td><td>2,091</td></t<>	Basic Energy Sciences	2,948	2,091	2,091
Research - Fusion Energy Sciences 8.062 9,765 8.410 Fusion Energy Sciences 8.062 9,765 8.410 Research - High Energy Physics 3,750 3,665 2,271 High Energy Physics 3,750 3,665 2,271 Operations and Maintenance - Nuclear Physics 1,470 1,607 1,808 Nuclear Physics 1,470 1,607 1,809 Research - Accelerator R&D and Production 0 0 0 258 Science Programs 52,758 50,477 45,626 416 Science Programs 1,910	Research - Biological & Environmental Research	33,625	28,095	27,297
Fusion Energy Sciences 8,062 9,765 8,410 Research - High Energy Physics 3,750 3,665 2,271 High Energy Physics 3,750 3,665 2,271 Operations and Maintenance - Nuclear Physics 1,470 1,607 1,809 Nuclear Physics 0 0 0 258 Accelerator R&D and Production 0 0 0 756 662 Science Programs 5,2758 5,0477 45,626	Biological and Environmental Research	33,625	28,095	27,297
Research - High Energy Physics 3,750 3,665 2,271 High Energy Physics 3,750 3,665 2,271 Operations and Maintenance - Nuclear Physics 1,470 1,607 1,808 Nuclear Physics 1,470 1,607 1,809 Research - Accelerator R&D and Production 0 0 258 Accelerator R&D and Production 0 0 0 258 Mordrore Development for Teachers & Scientists 431 0 1 0 </td <td>Research - Fusion Energy Sciences</td> <td>8,062</td> <td>9,765</td> <td>8,410</td>	Research - Fusion Energy Sciences	8,062	9,765	8,410
High Energy Physics 3,750 3,665 2,271 Operations and Maintenance - Nuclear Physics 1,470 1,607 1,809 Nuclear Physics 1,470 1,607 1,809 Research - Accelerator R&D and Production 0 0 258 Accelerator R&D and Production 0 0 0 0 Workforce Development for Teachers & Scientists 431 0	Fusion Energy Sciences	8,062	9,765	8,410
Operations and Maintenance - Nuclear Physics 1,470 1,607 1,808 Nuclear Physics 1,470 1,607 1,809 Research - Accelerator R&D and Production 0 0 0 258 Accelerator R&D and Production 0 0 0 258 Workforce Development for Teachers & Scientists 431 0 0 0 Science Programs 52,758 50,477 45,628 Vehicle Technologies 3,800 4,416 4,416 Bioenergy Technologies 700 750 750 Hydrogen and Fuel Cells Technologies 3,431 1,091 6,094 Sustainable Transportation 7,931 6,257 11,269 Sustainable Transportation 7,931 6,257 11,269 Wind Energy Technologies 2,52 350 0 Solar Energy Technologies 1,327 1,040 961 Renewable Energy 2,401 2,657 2,710 Building Technologies 5,202 7,716 6,000 Energy	Research - High Energy Physics	3,750	3,665	2,271
Nuclear Physics 1,470 1,607 1,809 Research - Accelerator R&D and Production 0 0 258 Accelerator R&D and Production 0 0 258 Workforce Development for Teachers & Scientists 431 0 0 Science Programs 52,758 50,477 45,626 Vehicle Technologies 3,300 4,416 4,416 Bioenergy Technologies 700 750 750 Hydrogen and Fuel Cells Technologies 3,431 1,091 6,094 Sustainable Transportation 7,931 6,257 11,260 Geothermal Technologies 25 350 0 Sustainable Energy Technologies 1,049 1,267 1,748 Wind Energy Technologies 1,049 1,267 2,710 Building Technologies 0 1,287 2,710 Building Technologies 0 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 1,5	High Energy Physics	3,750	3,665	2,271
Research - Accelerator R&D and Production 0 0 258 Accelerator R&D and Production 0 0 258 Workforce Development for Teachers & Scientists 431 0 0 Science Programs 52,758 50,477 45,626 Vehicle Technologies 700 750 750 Bioenergy Technologies 700 750 750 Hydrogen and Fuel Cells Technologies 3,431 1,091 6,094 Sustainable Transportation 7,931 6,257 11,260 Geothermal Technologies 25 350 0 Solar Energy Technologies 1,049 1,267 1,749 Wind Energy Technologies 1,049 1,267 2,710 Building Technologies 0 1,265 2,711 Building Technologies 0 128 1,784 Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 <td>Operations and Maintenance - Nuclear Physics</td> <td>1,470</td> <td>1,607</td> <td>1,809</td>	Operations and Maintenance - Nuclear Physics	1,470	1,607	1,809
Accelerator R&D and Production 0 288 Workforce Development for Teachers & Scientists 431 0 0 Science Programs 52,758 50,477 45,626 Vehicle Technologies 3,800 4,416 44,166 Bioenergy Technologies 700 750 750 Hydrogen and Fuel Cells Technologies 3,431 1,091 6,025 Sustainable Transportation 7,931 6,257 11,260 Geothermal Technologies 2,5 350 0.76 Solar Energy Technologies 1,049 1,627 1,749 Wind Energy Technologies 1,049 1,267 1,749 Renewable Energy 1,040 1,627 1,749 Building Technologies 1,049 1,626 1,749 Building Technologies 5,200 7,716 6,000 Energy Efficiency 5,200 7,716 6,000 Energy Efficiency and Renewable Energy Programs 15,532 16,758 2,014 Transmission Reliability and Resilience 5,028 6,339	Nuclear Physics	1,470	1,607	1,809
Workforce Development for Teachers & Scientists 431 0 0 Science Programs 52,758 50,477 45,626 Vehicle Technologies 3,800 4,416 4,416 Bioenergy Technologies 700 750 750 Hydrogen and Fuel Cells Technologies 3,431 1,091 6,094 Sustainable Transportation 7,931 6,257 11,260 Geothermal Technologies 25 350 0 Solar Energy Technologies 1,049 1,267 1,748 Wind Energy Technologies 1,327 1,040 961 Renewable Energy 2,401 2,657 2,710 Building Technologies 2,401 2,657 2,710 Benergy Efficiency 5,200 7,716 6,000 Energy Efficiency 5,200 7,716 6,000 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 3,30 <td>Research - Accelerator R&D and Production</td> <td>0</td> <td>0</td> <td>258</td>	Research - Accelerator R&D and Production	0	0	258
Science Programs 52,758 50,477 45,626 Vehicle Technologies 3,800 4,416 4,416 Bioenergy Technologies 700 750 750 Hydrogen and Fuel Cells Technologies 3,431 1,091 6,094 Sustainable Transportation 7,931 6,257 11,260 Geothermal Technologies 25 350 0 Solar Energy Technologies 1,049 1,267 1,749 Wind Energy Technologies 1,327 1,040 961 Renewable Energy 2,401 2,657 2,710 Building Technologies 0 128 178 Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700<	Accelerator R&D and Production	0	0	258
Vehicle Technologies 3,800 4,416 4,416 Bioenergy Technologies 700 750 750 Hydrogen and Fuel Cells Technologies 3,431 1,091 6,094 Sustainable Transportation 7,931 6,257 11,260 Geothermal Technologies 25 350 0 Solar Energy Technologies 1,049 1,267 1,749 Wind Energy Technologies 1,327 1,040 961 Renewable Energy 2,401 2,657 2,710 Building Technologies 0 128 178 Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 <td>Workforce Development for Teachers & Scientists</td> <td>431</td> <td>0</td> <td>0</td>	Workforce Development for Teachers & Scientists	431	0	0
Bioenergy Technologies 700 750 750 Hydrogen and Fuel Cells Technologies 3,431 1,091 6,094 Sustainable Transportation 7,931 6,257 11,260 Geothermal Technologies 25 350 0 Solar Energy Technologies 1,049 1,267 1,749 Wind Energy Technologies 1,327 1,040 961 Renewable Energy 2,401 2,657 2,710 Building Technologies 0 128 178 Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600	Science Programs	52,758	50,477	45,626
Hydrogen and Fuel Cells Technologies 3,431 1,091 6,094 Sustainable Transportation 7,931 6,257 11,260 Geothermal Technologies 25 350 0 Solar Energy Technologies 1,049 1,267 1,749 Wind Energy Technologies 1,327 1,040 961 Renewable Energy 2,401 2,657 2,710 Building Technologies 0 128 178 Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration	Vehicle Technologies	3,800	4,416	4,416
Sustainable Transportation 7,931 6,257 11,260 Geothermal Technologies 25 350 0 Solar Energy Technologies 1,049 1,267 1,749 Wind Energy Technologies 1,327 1,040 961 Renewable Energy 2,401 2,657 2,710 Building Technologies 0 128 178 Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Bioenergy Technologies	700	750	750
Geothermal Technologies 25 350 0 Solar Energy Technologies 1,049 1,267 1,749 Wind Energy Technologies 1,327 1,040 961 Renewable Energy 2,401 2,657 2,710 Building Technologies 0 128 178 Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Hydrogen and Fuel Cells Technologies	3,431	1,091	6,094
Solar Energy Technologies 1,049 1,267 1,749 Wind Energy Technologies 1,327 1,040 961 Renewable Energy 2,401 2,657 2,710 Building Technologies 0 128 178 Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Sustainable Transportation	7,931	6,257	11,260
Wind Energy Technologies 1,327 1,040 961 Renewable Energy 2,401 2,657 2,710 Building Technologies 0 128 178 Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Geothermal Technologies	25	350	0
Renewable Energy 2,401 2,657 2,710 Building Technologies 0 128 178 Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Solar Energy Technologies	1,049	1,267	1,749
Building Technologies 0 128 178 Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Wind Energy Technologies	1,327	1,040	961
Advanced Manufacturing 5,200 7,716 6,000 Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Renewable Energy	2,401	2,657	2,710
Energy Efficiency 5,200 7,844 6,178 Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Building Technologies	0	128	178
Energy Efficiency and Renewable Energy Programs 15,532 16,758 20,148 Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Advanced Manufacturing	5,200	7,716	6,000
Transmission Reliability and Resilience 5,028 6,339 2,400 Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Energy Efficiency	5,200	7,844	6,178
Resilient Distribution Systems 839 1,275 1,300 Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Energy Efficiency and Renewable Energy Programs	15,532	16,758	20,148
Grid Operations Technology 0 0 5,000 Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Transmission Reliability and Resilience	5,028	6,339	2,400
Electricity Programs 5,867 7,614 8,700 Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Resilient Distribution Systems	839	1,275	1,300
Cybersecurity for Energy Delivery Systems 2,600 0 0 Infrastructure Security and Energy Restoration 4,000 3,300 0	Grid Operations Technology	0	0	5,000
Infrastructure Security and Energy Restoration 4,000 3,300 0	Electricity Programs	5,867	7,614	8,700
	Cybersecurity for Energy Delivery Systems	2,600	0	0
Risk Management Technology and Tools 0 2,000	Infrastructure Security and Energy Restoration	4,000	3,300	0
	Risk Management Technology and Tools	0	0	2,000

DEPARTMENT OF ENERGY
Laboratory Table
Lawrence Livermore National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Information Sharing, Partnerships and Exercises	0	0	3,000
Cybersecurity, Energy Security, and Emergency Response Programs	6,600	3,300	5,000
Carbon Capture	983	720	1,251
Carbon Storage	2,532	2,000	2,962
CCUS & Power Systems	3,515	2,720	4,213
Cross Cutting Research	350	306	228
Advanced Coal Energy Systems & CCUS	350	306	228
Unconventional Fossil Energy Technologies from Petroleum-Oil Technologies	1,000	1,000	0
Natural Gas Technologies Research	22	500	0
Fossil Energy and Carbon Management Programs	4,887	4,526	4,441
Light Water Reactor Sustainability	359	306	10
Reactors Concepts RD&D	359	306	10
Accident Tolerant Fuels	314	345	380
Used Nuclear Fuel Disposition R&D	553	550	550
Fuel Cycle Research and Development FCRD	867	895	930
Crosscutting Technology Development	162	208	0
Nuclear Energy Enabling Technologies	162	208	0
Nuclear Energy Programs	1,388	1,409	940
Environment, Health, Safety & Security	3,050	3,050	3,050
Environment, Health, Safety, and Security	3,050	3,050	3,050
Other Defense Activites Programs	3,050	3,050	3,050
Office of Technology Transitions	55	55	35
Lawrence Livermore National Laboratory (LLNL)	1,727	1,764	1,806
LLNL Excess Facilities D&D	65,000	35,000	35,000
NNSA Sites and Nevada Off-Sites	66,727	36,764	36,806
Defense Environmental Cleanup Programs	66,727	36,764	36,806
Total Lawrence Livermore National Laboratory	1,925,232	2,253,302	2,233,140

Laboratory Table
Lexington Office FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Lexington Office			
Environment, Health, Safety & Security	200	200	200
Environment, Health, Safety, and Security	200	200	200
Other Defense Activites Programs	200	200	200
Total Lexington Office	200	200	200

Laboratory Table
Livermore Site Office FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Livermore Site Office			
Safety and Environmental Operations	150	0	0
Operating	150	0	0
Infrastructure and Operations	150	0	0
Weapons Activities Programs	150	0	0
Program Direction - National Nuclear Security Administration	18,164	17,006	18,791
Federal Salaries and Expenses Programs	18,164	17,006	18,791
Advanced Reactor Technologies	50	50	50
Reactors Concepts RD&D	50	50	50
Nuclear Energy Programs	50	50	50
Total Livermore Site Office	18,364	17,056	18,841

DEPARTMENT OF ENERGY
Laboratory Table
Los Alamos National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Los Alamos National Laboratory			
B61 Life Extension Program	73,000	59,500	52,300
W88 Alteration Program	32,330	31,319	26,058
W80-4 Life Extension Program	24,721	67,893	33,257
W80-4 Alteration-SLCM	0	0	70
W87-1 Modification Program	3,250	15,000	17,500
W93 Program	0	18,000	28,000
Stockpile Major Modernization	133,301	191,712	157,185
Stockpile Sustainment	153,202	176,497	214,561
Weapons Dismantlement and Disposition	7,600	1,472	500
Production Operations	47,235	45,883	46,228
Stockpile Management	341,338	415,564	418,474
Los Alamos Plutonium Operations	286,975	580,599	639,400
21-D-512, Plutonium Pit Production Project, LANL	20,000	220,000	350,000
Los Alamos Plutonium Modernization	306,975	800,599	989,400
Plutonium Modernization	306,975	800,599	989,400
High Explosives & Energetics	0	10,800	12,800
Primary Capability Modernization	306,975	811,399	1,002,200
Secondary Capability Modernization	7,598	6,764	9,925
Tritium and Domestic Uranium Enrichment	230	38	40
Production Modernization	314,803	818,201	1,012,165
Assessment Science	198,202	275,529	254,252
Engineering and Integrated Assessments	78,719	99,973	99,983
Inertial Confinement Fusion	18,781	20,000	18,062
Advanced Simulation and Computing	221,300	218,792	193,413
Weapons Technology and Manufacturing Maturation	49,802	65,298	68,347
Stockpile Research, Technology, and Engineering	566,804	679,592	634,057
Operations of Facilities	241,042	303,380	287,000
Safety and Environmental Operations	17,065	17,784	16,474
Maintenance and Repair of Facilities	82,914	150,000	150,000
Infrastructure and Safety	89,993	123,581	63,622
Capabilities Based Investments	12,692	17,110	16,000
Recapitalization	102,685	140,691	79,622
Operating	443,706	611,855	533,096
15-D-302, TA-55 Reinvestment Project - Phase 3, LANL	0	29,500	27,000
07-D-220-04, Transuranic Liquid Waste Facility, LANL	0	36,187	0
04-D-125, Chemistry and Metallurgy Research Replacement Project, LANL	168,444	167,127	138,123
Chemistry and Metallurgy Research Replacement (CMRR)	168,444	167,127	138,123
Programmatic	168,444	232,814	165,123
I&O - Construction	168,444	232,814	165,123
Infrastructure and Operations	612,150	844,669	698,219
Defense Nuclear Security (DNS)	112,430	117,360	156,660
Defense Nuclear Security	112,430	117,360	156,660
Information Technology and Cyber Security	19,643	20,190	18,506
Weapons Activities Programs	1,967,168	2,895,576	2,938,081
International Nuclear Security	4,594	3,121	3,161
Domestic Radiological Security	23,935	84,522	72,187
International Radiological Security	1,370	1,665	1,573
Nuclear Smuggling Detection and Deterrence	10,525	9,578	9,578

DEPARTMENT OF ENERGY
Laboratory Table
Los Alamos National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Global Material Security	40,424	98,886	86,499
Conversion (formerly HEU Reactor Conversion)	800	450	880
Nuclear Material Removal	170	300	200
Material Disposition	61,700	68,475	86,640
Laboratory and Partnership Support	1,610	1,325	0
Material Management and Minimization	64,280	70,550	87,720
Nonproliferation & Arms Control	21,486	23,164	57,664
National Technical Nuclear Forensics (NTNF) R&D	0	10,565	0
Proliferation Detection R&D	50,186	35,689	37,705
Nuclear Detonation Detection	68,993	88,660	89,988
Nonproliferation Stewardship Program	450	450	2,410
National Technical Nuclear Forensics R&D	0	0	11,886
Defense Nuclear Nonproliferation R&D	119,629	124,799	141,989
Counterterrorism and Counterproliferation	53,638	66,145	69,044
Nuclear Counterterrorism & Incident Response	53,638	66,145	69,044
Defense Nuclear Nonproliferation Programs	299,457	394,109	442,916
Research - Advanced Scientific Computing Research	2,930	4,096	1,469
Advanced Scientific Computing Research	2,930	4,096	1,469
Research - Basic Energy Sciences	27,422	20,646	21,470
Basic Energy Sciences	27,422	20,646	21,470
Research - Biological & Environmental Research	36,735	32,230	32,247
Biological and Environmental Research	36,735	32,230	32,247
Research - Fusion Energy Sciences	3,910	1,700	650
Fusion Energy Sciences	3,910	1,700	650
Research - High Energy Physics	2,040	3,177	1,650
High Energy Physics	2,040	3,177	1,650
Operations and Maintenance - Nuclear Physics	12,972	8,259	10,178
Nuclear Physics	12,972	8,259	10,178
Research - Accelerator R&D and Production	0	0	50
Accelerator R&D and Production	0	0	50
Workforce Development for Teachers & Scientists	669	0	0
Safeguards and Security - SC	0	248	0
Science Programs	86,678	70,356	67,714
Vehicle Technologies	600	0	0
Bioenergy Technologies	7,422	5,000	5,000
Hydrogen and Fuel Cells Technologies	6,954	4,940	12,063
Sustainable Transportation	14,976	9,940	17,063
Geothermal Technologies	25	250	0
Wind Energy Technologies	353	365	365
Renewable Energy	378	615	365
Energy Efficiency and Renewable Energy Programs	15,354	10,555	17,428
Transmission Reliability and Resilience	4,294	3,082	2,000
Resilient Distribution Systems	544	900	980
Grid Operations Technology	0	0	2,500
Electricity Programs	4,838	3,982	5,480
Infrastructure Security and Energy Restoration	2,500	0	0
Information Sharing, Partnerships and Exercises	0	0	1,000
Cybersecurity, Energy Security, and Emergency Response Programs	2,500	0	1,000
Carbon Capture	1,725	1,264	2,197
Carbon Storage	3,537	2,794	4,138

DEPARTMENT OF ENERGY
Laboratory Table
Los Alamos National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Advanced Energy & Hydrogen Systems	167	128	114
CCUS & Power Systems	5,429	4,186	6,449
Cross Cutting Research	350	306	228
Advanced Coal Energy Systems & CCUS	350	306	228
Unconventional Fossil Energy Technologies from Petroleum-Oil Technologies	1,279	1,279	0
Natural Gas Technologies Research	894	0	0
Fossil Energy and Carbon Management Programs	7,952	5,771	6,677
Advanced Reactor Technologies	5,718	3,251	5,000
Reactors Concepts RD&D	5,718	3,251	5,000
HALEU for R&D and Demonstration Reactors	0	0	2,000
Accident Tolerant Fuels	3,845	4,230	4,653
Fuel Cycle Laboratory R&D	2,065	2,000	4,680
Used Nuclear Fuel Disposition R&D	3,396	3,400	3,400
Fuel Cycle Research and Development FCRD	9,306	9,630	14,733
Joint Modeling and Simulation Program	2,128	2,963	2,700
Nuclear Science User Facilities	0	10	10
Nuclear Energy Enabling Technologies	2,128	2,973	2,710
National Reactor Innovation Center	473	0	0
Advanced Reactors Safeguards	380	500	500
Advanced Reactors Demonstration Program	853	500	500
Nuclear Energy Programs	18,005	16,354	22,943
Environment, Health, Safety & Security	95	95	95
Environment, Health, Safety, and Security	95	95	95
Other Defense Activites Programs	95	95	95
Office of Technology Transitions	55	55	50
Los Alamos National Laboratory (LANL)	220,000	226,000	275,119
Los Alamos Excess Facilities D&D	0	0	58,381
NNSA Sites and Nevada Off-Sites	220,000	226,000	333,500
Defense Environmental Cleanup Programs	220,000	226,000	333,500
Total Los Alamos National Laboratory	2,622,102	3,622,853	3,835,884

Laboratory Table
Los Alamos Site Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Los Alamos Site Office			_
Information Technology and Cyber Security	53	63	60
Weapons Activities Programs	53	63	60
Program Direction - National Nuclear Security Administration	17,534	17,198	19,155
Federal Salaries and Expenses Programs	17,534	17,198	19,155
Total Los Alamos Site Office	17,587	17,261	19,215

Laboratory Table
Miamisburg Site FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Miamisburg Site			
Environment, Health, Safety & Security	5	5	5
Environment, Health, Safety, and Security	5	5	5
Other Defense Activites Programs	5	5	5
Total Miamisburg Site	5	5	5

Laboratory Table Moab Site FY 2022 (Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Moab Site			
Small Sites - NDEC	45,000	47,833	85,000
Non-Defense Environmental Cleanup Programs	45,000	47,833	85,000
Total Moab Site	45,000	47.833	85.000

Laboratory Table Mound Site FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Mound Site			
Legacy Management Activities - Defense	15,297	12,738	10,149
Legacy Management	15,297	12,738	10,149
Other Defense Activites Programs	15,297	12,738	10,149
Total Mound Site	15,297	12,738	10,149

DEPARTMENT OF ENERGY Laboratory Table National Energy Technology Lab FY 2022 (Dollars in Thousands)

Image: Precision Precision		EV 2020	2020 57/ 2024	FY 2022
National Energy Technology Lab Seri Line Estension Program 5,100 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 6,000 1,000 <t< th=""><th></th><th></th><th></th><th></th></t<>				
BS ILUE Estension Program 2,508 0,700 WTG Alzeriation Program 2,218 3,528 6,921 W80 Alzeriation Program 2,218 3,528 6,921 W80 Alzeriation Program 0 0 0 1,000 W80-1 Alzeriation Program 2,178 5,807 2,800 W80-2 Program 0 0 5,800 3,800 Stockpile Malph Modernization 20,250 5,500 6,000 Stockpile Substitution 2,000 5,000 6,000 Stockpile Malph Modernization 3,143 42,113 30,321 Los Alamon Plutonium Modernization 3,343 42,113 30,321 Los Alamon Plutonium Modernization 2,322 4,000 4,000 Hubb Estelphicies & Elementes 0 0 0 1,000 Primary Capability Modernization 4,711 1,000 3,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000	National Energy Technology Lab	Elidotod	Lindolod	rioquoti Dotaii
WBS Alteration Program 2,528 0 0.60 WBS Alteration Program 2,188 3,526 6,926 WBS Alteration Program 2,108 1,000 1,000 WBS Alteration SLCM 0 0 0 0 WBS Program 2,00 0 3,000 Stockple Sutteration 2,005 25,033 3,031 Stockple Statement 3,178 11,785 0 Production Operations 2,005 5,535 0 Stockple Statement 3,178 42,113 3,021 Los Alamos Plutonium Operations 2,00 2,000 2,000 Los Alamos Plutonium Obernation 2,322 4,00 2,000 Plutonium Modernization 2,322 4,00 5,000 Plutonium Modernization 2,322 4,00 5,000 Plutonium Modernization 2,322 4,00 5,000 Secondary Capability Modernization 4,71 1,00 1,00 Prisancy Capability Modernization 5,518 7,130 1,156		5,130	5,700	5,000
W804 Life Extension Program 2,218 3,556 6,821 W804 Life Extension Program 1,000 0 0 1,000 W805 Life Extension Program 2,178 5,500 2,000 W805 Program 0 0 0 3,000 Stockpilo Modernization 20,200 25,033 30,221 Stockpilo Sustainment 9,700 5,000 5,000 Stockpilo Sustainment 9,700 5,000 2,000 Stockpilo Sustainment 9,700 2,000 2,000 Stockpilo Sustainment 9,700 2,000 2,000 Stockpilo Modernization 0 2,000 2,000 Los Alamos Plutonium Operations 0 2,000 2,000 Los Alamos Plutonium Modernization 0 0 0 0 Huto Exploite Sa Entengate 0	-			
Wild - Life Elemenion Program 8.196 10,000 Wild - Alternation SLCM 0 0 1,000 Wild - Alternation SLCM 2,786 2,800 2,800 Wild From Modification Programs 2,025 2,533 3,0321 Stockpile Marger Marker Marker 2,025 5,033 3,0321 Stockpile Marger Marker 2,056 5,325 0 Production Operations 1,068 3,225 0 Los Alamose Plutonium Operations 0 2,000 2,000 Los Alamose Plutonium Modernization 2,322 4,000 4,000 Plutonium Modernization 2,322 4,000 6,000 Plutonium Modernization 2,222 4,000 6,000 Production Modernization 2,222 4,000 1,000 Scondary Capability Modernization 2,222 1,405 1,000 Non-Nuclear Capability Modernization 3,23 1,455 1,600 Non-Nuclear Capability Modernization 3,23 3,73 1,155 2,000 Scondary Capability Modernizati	-	2,218	3,526	6,921
W80-4 Alteration SLCM 0 1.00 <td>-</td> <td>8,196</td> <td>10,000</td> <td></td>	-	8,196	10,000	
W93 Program 0 0 3,000 Stockpile Major Modernization 20,255 25,033 30,202 Stockpile Management 9,768 5,125 0 Stockpile Management 31,483 42,113 30,211 Los Alamos Plutonium Operations 0 2,000 2,000 Los Alamos Plutonium Modernization 2,322 4,000 4,000 High Explosives & Energetics 0 0 1,800 Pitriamy Capability Modernization 2,322 4,000 6,600 Primary Capability Modernization 2,122 4,000 6,600 Primary Capability Modernization 4,71 1,000 1,000 Tritium and Demestic Uranium Enrichment 2,222 4,000 6,600 Production Modernization 5,18 7,130 1,156 Engineering and Integrated Assessments 1,20 2,213 3,656 Engineering and Integrated Assessments 1,20 2,213 3,656 Engineering and Integrated Assessments 1,20 2,213 3,656 Recapabil	W80-4 Alteration-SLCM	0	0	1,000
Stockpile Major Modernization 20,500 25,003 30,321 Stockpile Sustainment 2,065 5,325 0 Production Operations 2,066 5,325 0 Stockpile Management 31,433 42,131 30,321 Los Alarmos Plutonium Modernization 0 2,000 2,000 Plutonium Modernization 2,322 4,000 4,000 High Explositives & Energetics 0 0 0 6,000 Primany Capability Modernization 2,322 4,000 1,000 Secondary Qiapability Modernization 471 1,000 1,000 Production Modernization 471 1,000 1,000 Secondary Qiapability Modernization 471 1,000 1,000 Secondary Qiapability Modernization 471 1,000 1,000 Secondary Qiapability Modernization 471 1,000 1,500 Non-Nuclear Capability Modernization 471 1,000 1,500 Non-Nuclear Capability Modernization 471 1,000 1,600	W87-1 Modification Program	2,178	5,807	2,800
Stockpile Sutsimment 9,176 11,765 0 Production Operations 2,065 5,325 0 Stockpile Management 31,493 42,113 0,322 Lox Alamos Plutonium Operations 0 2,000 2,000 Plutonium Modernization 2,322 4,000 4,000 Plutonium Modernization 2,322 4,000 5,000 Primary Capability Modernization 2,322 4,000 1,000 Secondary Capability Modernization 2,725 1,455 4,604 Non-Nuclear Capability Modernization 2,725 1,455 4,604 Non-Nuclear Capability Modernization 2,725 1,455 4,604 Weapons Education Enrichment 3,203 2,213 3,656 Engineering and Integrated Assessments 1,269 2,213 3,656 Engineering and Integrated Assessments 3,000 0 0 Engineering and Integrated Assessments 3,000 0 0 Capabilities Based Investments 3,000 0 0 Recapitalization </td <td>W93 Program</td> <td>0</td> <td>0</td> <td>3,600</td>	W93 Program	0	0	3,600
Production Operations 2,000 (b) Management 31,493 42,113 30,221 Los Alarmos Plutonium Operations 0 2,000 2,000 Los Alarmos Plutonium Modernization 0 2,000 2,000 Plutonium Modernization 2,322 4,000 4,000 Pling Explosives & Energetics 0 4,000 5,000 Production Yeapability Modernization 4,711 1,000 1,000 Secondary Capability Modernization 7,712 1,455 4,884 Non-Nuclear Capability Modernization 5,713 1,155 4,884 Non-Nuclear Capability Modernization 5,713 1,156 4,884 Non-Nuclear Capability Modernization 5,713 1,156 4,884 Non-Nuclear Capability Modernization 5,723 1,157 2,202 Production Modernization Modernization 5,733 3,056 4,000 1,157 2,202 3,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,00	Stockpile Major Modernization	20,250	25,033	30,321
Stockpile Management 31,483 42,113 30,321 Les Alamos Plutonium Operations 0 2,000 2,000 Les Alamos Plutonium Mederization 2,322 4,000 4,000 Pilutonium Modernization 2,322 4,000 1,600 Primary Capability Modernization 4,71 1,000 1,600 Secondary Capability Modernization 4,71 1,000 1,000 Tritum and Domestic Utanium Enrichment 2,725 1,455 4,864 Non-Nuclear Capability Modernization 5,518 7,130 11,864 Mon-Nuclear Capability Modernization 5,518 7,130 11,864 Engineering and Integrated Assessments 1,269 2,213 3,656 Engineering and Integrated Assessments 1,269 2,213 3,656 Engineering and Integrated Assessments 3,000	Stockpile Sustainment	9,178	11,755	0
Los Alamos Plutonium Operations 0 2,000 2,000 Los Alamos Plutonium Medernization 0 2,000 2,000 Plutonium Modernization 2,322 4,000 6,000 High Explosives & Energetics 2,322 4,000 5,600 Secondary Capability Modernization 471 1,000 1,000 Trittum and Domestic Uranium Enrichment 2,725 1,455 4,680 Non-Nuclear Capability Modernization 5,18 7,135 4,680 Production Modernization 5,18 7,135 4,680 Engineering and Integrated Assessments 1,298 2,213 3,656 Weapons Technology and Manufacturing Maturation 2,024 1,157 2,603 Stockplie Research, Technology, and Egineering 3,293 3,0 6 Capabilities Based Investments 3,00 0 0 Recapitalization 300 0 0 Operating 300 0 0 0 Infrastructure and Operations 301 0 0 0	Production Operations	2,065	5,325	0
Los Alamos Plutonium Modernization 2,000 2,000 Plutonium Modernization 2,322 4,000 4,000 High Explosives & Energetics 0 0 0 1,600 Primary Capability Modernization 2,322 4,000 1,500 Secondary Capability Modernization 471 1,000 1,300 Tritium and Domestic Uranium Enrichment 2,725 1,155 4,804 Non-Nucleor Capability Modernization 5,518 7,130 11,804 Production Modernization 5,181 7,130 1,186 Engineering and Integrated Assessments 1,269 2,131 3,585 Weapons Technology and Manufacturing Maturation 2,024 1,157 2,262 Stockple Research, Technology, and Engineering 3,233 3,370 6,259 Capabilities Based Investments 300 0 0 Recapitalization 300 0 0 Operating 40,604 5,2613 4,816 Infrastructure and Operations 5,615 5,2613 4,816 <t< td=""><td>Stockpile Management</td><td>31,493</td><td>42,113</td><td>30,321</td></t<>	Stockpile Management	31,493	42,113	30,321
Plutonium Modernization 2,322 4,000 4,000 High Explosives & Energetics 0 0 1,600 Primary Capability Modernization 2,322 4,000 1,500 Secondary Capability Modernization 471 1,000 1,300 Tritum and Domestic Unraium Enrichment 2,725 1,455 4,864 Non-Nuclear Capability Modernization 5,518 7,130 11,584 Production Modernization 5,518 7,130 11,584 Engineering and Integrated Assessments 1,269 2,213 3,656 Weapons Technology and Manufacturing Maturation 2,024 3,177 2,603 Stockpile Research, Technology, and Engineering 3,233 3,370 6,259 Capabilities Based Investments 300 0 0 0 Recapitalization 300 0	Los Alamos Plutonium Operations	0	2,000	2,000
High Explosives & Energetics 0 0 0.00 Primary Capability Modernization 3.22 4,000 5,600 Secondary Capability Modernization 471 1,000 1,300 Tritium and Domestic Uranium Entrichment 2,725 14,655 4,664 Non-Nuclear Capability Modernization 5,518 7,370 11,866 Production Modernization 5,188 2,713 3,666 Engineering and Integrated Assessments 1,289 2,213 3,666 Weapons Technology and Manufacturing Maturation 2,024 1,157 6,628 Stockple Research, Technology, and Engineering 3,233 3,370 6,259 Capabilities Based Investments 300 0 0 0 Recapitalization 300 0 </td <td>Los Alamos Plutonium Modernization</td> <td>0</td> <td>2,000</td> <td>2,000</td>	Los Alamos Plutonium Modernization	0	2,000	2,000
Primary Capability Modernization 2,322 4,000 5,000 Secondary Capability Modernization 471 1,000 1,300 Tritium and Domestic Uranium Enrichment 2,725 1,455 4,808 Non-Nuclear Capability Modernization 0 675 0 Production Moderinzation 5,518 7,130 11,584 Engineering and Integrated Assessments 1,209 2,213 3,656 Weapons Technology and Manufacturing Maturation 2,004 1,157 2,602 Stockpile Research, Technology, and Engineering 300 0 0 0 Stockpile Research, Technology and Manufacturing Maturation 300 0 0 0 Recapitalization 300 0 0 0 0 0 Recapitalization 300 0	Plutonium Modernization	2,322	4,000	4,000
Secondary Capability Modernization 471 1,000 1,308 Tritum and Domestic Uranium Enrichment 2,725 1,455 4,884 Non-Nuclear Capability Modernization 6,75 0 Production Modernization 5,518 7,130 11,884 Engineering and Integrated Assessments 1,269 2,213 3,656 Weapons Technology and Manufacturing Maturation 2,024 1,157 2,603 Stockpile Research, Technology, and Engineering 3,03 0 0 0 Capabilities Based Investments 300 0 0 0 Recapitalization 300 0 0 0 Operating 300 0 0 0 Infrastructure and Operations 300 0 0 0 Weapons Activities Programs 40,604 52,613 48,164 Infrastructure and Operations 300 763 773 Global Material Security 30 763 773 Material Management and Nuclear Security 56 6 6	High Explosives & Energetics	0	0	1,600
Tritium and Domestic Uranium Enrichment 2,725 1,485 4,684 Non-Nuclear Capability Modernization 0 675 0 Production Modernization 5,518 7,130 11,584 Engineering and Integrated Assessments 1,269 2,213 3,6565 Weapons Technology and Manufacturing Maturation 2,024 1,157 2,603 Slockpile Research, Technology, and Engineering 3,293 3,370 6,259 Capabilities Based Investments 300 0 0 0 Recapitalization 300 0 0 0 Operating 300 0 0 0 Infrastructure and Operations 40,604 52,613 48,164 International Nuclear Security 0 763 773 Global Material Security 750 650 750 Material Disposition 750 650 750 Material Management and Minimization 750 650 750 Nonproliferation & Arms Centrol 13 113 113	Primary Capability Modernization	2,322	4,000	5,600
Non-Nuclear Capability Modemization 0 675 0 Production Moderinzation 5,518 7,130 11,884 Engineering and Integrated Assessments 1,269 2,213 3,656 Weapons Technology and Manufacturing Maturation 2,024 1,157 2,603 Stockpile Research, Technology, and Engineering 3,293 3,370 6,259 Capabilities Based Investments 300 0 0 0 Recapitalization 300 0 0 0 Operating 300 0 0 0 Operating 300 0 0 0 Infrastructure and Operations 300 0 0 0 Weapons Activities Programs 40,604 52,613 48,164 International Nuclear Security 0 763 773 Material Disposition 750 650 750 Material Management and Minimization 750 650 750 Nonproliferation & Arms Control 50 56 660	Secondary Capability Modernization	471	1,000	1,300
Production Modernization 5,518 7,130 11,584 Engineering and Integrated Assessments 1,269 2,213 3,656 Weapons Technology and Manufacturing Maturation 2,024 1,157 2,603 Stockpile Research, Technology, and Engineering 3,293 3,370 6,259 Capabilities Based Investments 300 0 0 Recapitalization 300 0 0 Operating 300 0 0 Infrastructure and Operations 40,804 5,613 48,164 Weapons Activities Programs 40,804 5,613 48,164 International Nuclear Security 0 763 773 Global Material Security 0 763 773 Material Disposition 750 650 750 Material Management and Minimization 50 56 60 Defense Nuclear Nonproliferation Programs 80 1,469 1,588 Program Direction - National Nuclear Security Administration 113 113 113 Federal Salaries and	Tritium and Domestic Uranium Enrichment	2,725	1,455	4,684
Engineering and Integrated Assessments 1,268 2,213 3,686 Weapons Technology and Manufacturing Maturation 2,024 1,157 2,603 Stockpile Research, Technology, and Engineering 3,293 3,370 6,258 Capabilities Based Investments 300 0 0 0 Recapitalization 300 0 0 0 Operating 300 0 0 0 Infrastructure and Operations 300 0 0 0 Weapons Activities Programs 40,600 5,613 48,164 International Nuclear Security 0 763 773 Global Material Security 750 650 750 Material Disposition 750 650 750 Material Management and Minimization 750 650 750 Defense Nuclear Nonproliferation Programs 800 1,469 1,588 Program Direction - National Nuclear Security Administration 113 113 113 Federal Salaries and Expenses Programs 125 230<	Non-Nuclear Capability Modernization	0	675	0
Weapons Technology and Manufacturing Maturation 2,024 1,157 2,608 Stockpile Research, Technology, and Engineering 3,293 3,370 6,259 Capabilities Based Investments 300 0 0 Recapitalization 300 0 0 Operating 300 0 0 Infrastructure and Operations 300 0 0 Weapons Activities Programs 40,604 52,613 48,164 International Nuclear Security 0 763 773 Global Material Security 0 763 773 Material Management and Minimization 750 650 750 Material Management and Minimization 750 650 750 Nonproliferation & Arms Control 50 56 60 Defense Nuclear Nonproliferation Programs 80 1,48 1,18 Federal Salaries and Expenses Programs 113 113 113 113 Vehicle Technologies 185,10 17,06 34,778 Bosenergy Technologies	Production Modernization	5,518	7,130	11,584
Stockpile Research, Technology, and Engineering 3,293 3,370 6,259 Capabilities Based Investments 300 0 0 Recapitalization 300 0 0 Operating 300 0 0 Infrastructure and Operations 300 0 0 Weapons Activities Programs 40,604 52,613 48,164 International Nuclear Security 0 763 773 Global Material Security 0 763 773 Material Disposition 750 650 750 Material Management and Minimization 750 650 750 Material Nanagement and Minimization 750 650 750 Melensa Nuclear Nonproliferation Programs 800 1,469 1,583 Program Direction - National Nuclear Security Administration 113 113 113 113 Federal Salaries and Expenses Programs 113 113 113 113 113 113 113 113 113 113 113 113	Engineering and Integrated Assessments	1,269	2,213	3,656
Capabilities Based Investments 300 0 0 Recapitalization 300 0 0 Operating 300 0 0 Infrastructure and Operations 300 0 0 Weapons Activities Programs 40,604 52,613 48,164 International Nuclear Security 0 763 773 Global Material Security 0 763 773 Material Disposition 750 650 750 Material Management and Minimization 750 650 750 Nonproliferation & Arms Control 50 56 750 Defense Nuclear Nonproliferation Programs 800 1,469 1,583 Program Direction - National Nuclear Security Administration 113 113 113 113 Federal Salaries and Expenses Programs 113	Weapons Technology and Manufacturing Maturation	2,024	1,157	2,603
Recapitalization 300 0 0 Operating 300 0 0 Infrastructure and Operations 300 0 0 Weapons Activities Programs 40,604 52,613 48,164 International Nuclear Security 0 763 773 Global Material Security 0 763 773 Material Disposition 750 650 750 Material Management and Minimization 750 650 750 Nonproliferation & Arms Control 50 56 60 Defense Nuclear Nonproliferation Programs 800 1,469 1,583 Program Direction - National Nuclear Security Administration 113 113 113 Federal Salaries and Expenses Programs 185,100 170,560 347,784 Bioenergy Technologies 505 230 400 Hydrogen and Fuel Cells Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 1	Stockpile Research, Technology, and Engineering	3,293	3,370	6,259
Operating 300 0 0 Infrastructure and Operations 300 0 0 Weapons Activities Programs 40,604 52,613 48,164 International Nuclear Security 0 763 773 Global Material Security 0 763 773 Material Disposition 750 650 750 Material Management and Minimization 50 650 750 Nonproliferation & Arms Control 50 56 60 Defense Nuclear Nonproliferation Programs 80 1,489 1,583 Program Direction - National Nuclear Security Administration 113 114 114 114 114<	Capabilities Based Investments	300	0	0
Infrastructure and Operations 300 0 0 Weapons Activities Programs 40,604 52,613 48,164 International Nuclear Security 0 763 773 Global Material Security 0 763 773 Material Disposition 750 650 750 Material Management and Minimization 750 650 750 Nonproliferation & Arms Control 50 56 650 750 Defense Nuclear Nonproliferation Programs 800 1,469 1,583 Program Direction - National Nuclear Security Administration 113 114 114 114 114 1	Recapitalization	300	0	0
Weapons Activities Programs 40,604 52,613 48,164 International Nuclear Security 0 763 773 Global Material Security 0 763 773 Material Disposition 750 650 750 Material Management and Minimization 750 650 750 Nonproliferation A Arms Control 50 56 60 Defense Nuclear Nonproliferation Programs 800 1,669 1,583 Program Direction - National Nuclear Security Administration 113 113 113 Federal Salaries and Expenses Programs 113 113 113 Vehicle Technologies 185,100 170,560 347,784 Bioenergy Technologies 505 230 400 Hydrogen and Fuel Cells Technologies 24 4,000 187 Sustainable Transportation 185,629 174,790 348,371 Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 53,500 14,295 4,790 Energy Efficiency	Operating	300	0	0
International Nuclear Security 0 763 773 Global Material Security 0 763 773 Material Disposition 750 650 750 Material Management and Minimization 750 650 750 Nonproliferation & Arms Control 50 56 60 Defense Nuclear Nonproliferation Programs 800 1,469 1,583 Program Direction - National Nuclear Security Administration 113 113 113 113 Federal Salaries and Expenses Programs 113 113 113 113 Vehicle Technologies 185,100 170,560 347,784 Bioenergy Technologies 24 4,000 187 Sustainable Transportation 185,629 174,790 348,371 Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790	Infrastructure and Operations	300	0	0
Global Material Security 0 763 773 Material Disposition 750 650 750 Material Management and Minimization 750 650 750 Nonproliferation & Arms Control 50 56 60 Defense Nuclear Nonproliferation Programs 800 1,469 1,583 Program Direction - National Nuclear Security Administration 113 114 114 114 114 114	Weapons Activities Programs	40,604	52,613	48,164
Material Disposition 750 650 750 Material Management and Minimization 750 650 750 Nonproliferation & Arms Control 50 56 60 Defense Nuclear Nonproliferation Programs 800 1,469 1,583 Program Direction - National Nuclear Security Administration 113 114 113 123 123 123	International Nuclear Security	0	763	773
Material Management and Minimization 750 650 750 Nonproliferation & Arms Control 50 56 60 Defense Nuclear Nonproliferation Programs 800 1,469 1,583 Program Direction - National Nuclear Security Administration 113 113 113 Federal Salaries and Expenses Programs 113 113 113 Vehicle Technologies 185,100 170,560 347,784 Bioenergy Technologies 24 4,000 187 Sustainable Transportation 185,629 174,790 348,371 Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 10,928 Strategic Programs 10,928 12,428 16,558	Global Material Security	0	763	773
Nonproliferation & Arms Control 50 56 60 Defense Nuclear Nonproliferation Programs 800 1,469 1,583 Program Direction - National Nuclear Security Administration 113 113 113 Federal Salaries and Expenses Programs 113 113 113 Vehicle Technologies 185,100 170,560 347,784 Bioenergy Technologies 505 230 400 Hydrogen and Fuel Cells Technologies 185,629 174,790 348,371 Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 0 Corporate Support 10,928 12,428 16,558	Material Disposition	750	650	750
Defense Nuclear Nonproliferation Programs 800 1,469 1,583 Program Direction - National Nuclear Security Administration 113 113 113 Federal Salaries and Expenses Programs 113 113 113 Vehicle Technologies 185,100 170,560 347,784 Bioenergy Technologies 505 230 400 Hydrogen and Fuel Cells Technologies 24 4,000 187 Sustainable Transportation 185,629 174,790 348,371 Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Material Management and Minimization	750	650	750
Program Direction - National Nuclear Security Administration 113 113 113 Federal Salaries and Expenses Programs 113 113 113 Vehicle Technologies 185,100 170,560 347,784 Bioenergy Technologies 505 230 400 Hydrogen and Fuel Cells Technologies 24 4,000 187 Sustainable Transportation 185,629 174,790 348,371 Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Nonproliferation & Arms Control	50	56	60
Federal Salaries and Expenses Programs 113 113 113 Vehicle Technologies 185,100 170,560 347,784 Bioenergy Technologies 505 230 400 Hydrogen and Fuel Cells Technologies 24 4,000 187 Sustainable Transportation 185,629 174,790 348,371 Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Defense Nuclear Nonproliferation Programs	800	1,469	1,583
Vehicle Technologies 185,100 170,560 347,784 Bioenergy Technologies 505 230 400 Hydrogen and Fuel Cells Technologies 24 4,000 187 Sustainable Transportation 185,629 174,790 348,371 Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Program Direction - National Nuclear Security Administration	113	113	113
Bioenergy Technologies 505 230 400 Hydrogen and Fuel Cells Technologies 24 4,000 187 Sustainable Transportation 185,629 174,790 348,371 Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Federal Salaries and Expenses Programs	113	113	113
Hydrogen and Fuel Cells Technologies 24 4,000 187 Sustainable Transportation 185,629 174,790 348,371 Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Vehicle Technologies	185,100	170,560	347,784
Sustainable Transportation 185,629 174,790 348,371 Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Bioenergy Technologies	505	230	400
Geothermal Technologies 30,000 30,553 20,000 Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Hydrogen and Fuel Cells Technologies	24	4,000	187
Renewable Energy 30,000 30,553 20,000 Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Sustainable Transportation	185,629	174,790	348,371
Building Technologies 53,500 14,295 4,790 Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Geothermal Technologies	30,000	30,553	20,000
Energy Efficiency 53,500 14,295 4,790 Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Renewable Energy	30,000	30,553	20,000
Program Direction - Energy Efficiency and Renewable Energy 10,928 10,928 16,558 Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Building Technologies	53,500	14,295	4,790
Strategic Programs 0 1,500 0 Corporate Support 10,928 12,428 16,558	Energy Efficiency	53,500	14,295	4,790
Corporate Support 10,928 12,428 16,558	Program Direction - Energy Efficiency and Renewable Energy	10,928	10,928	16,558
	Strategic Programs	0	1,500	0
Energy Efficiency and Renewable Energy Programs 280,057 232,066 389,719	Corporate Support		12,428	16,558
	Energy Efficiency and Renewable Energy Programs	280,057	232,066	389,719

Laboratory Table
National Energy Technology Lab FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Transformer Resilience and Advanced Components	106	0	
Program Direction - Electricity	3,249	3,422	3,56
Electricity Programs	3,355	3,422	3,560
Cybersecurity for Energy Delivery Systems	50,900	60,000	(
Infrastructure Security and Energy Restoration	5,250	5,500	
Risk Management Technology and Tools	0	0	60,00
Response and Restoration	0	0	2,50
Information Sharing, Partnerships and Exercises	0	0	4,00
Program Direction - CESER	2,802	2,000	2,00
Cybersecurity, Energy Security, and Emergency Response Programs	58,952	67,500	68,50
Carbon Capture	11,687	8,562	14,88
Carbon Utilization	0	4,365	7,21
Carbon Storage	19,632	15,509	22,96
STEP Supercritical CO2	16,000	14,500	
Transformational Coal Pilots	20,000	10,000	
Mineral Sustainability	0	7,357	6,24
Carbon Dioxide Removal	0	1,000	1,57
NETL Coal Research and Development - Fossil Energy	61,000	0	
Advanced Energy & Hydrogen Systems	27,383	20,994	18,71
CCUS & Power Systems	155,702	82,287	71,59
Cross Cutting Research	21,407	18,731	13,95
Advanced Coal Energy Systems & CCUS	21,407	18,731	13,95
Program Direction - Fossil Energy	27,780	27,780	29,40
Unconventional Fossil Energy Technologies from Petroleum-Oil Technologies	38,489	38,489	
Natural Gas Technologies Research	22,106	25,000	39,00
NETL Research and Operations - Fossil Energy	50,000	83,000	83,00
NETL Infrastructure - Fossil Energy	50,000	55,000	78,00
Fossil Energy and Carbon Management Programs	365,484	330,287	314,95
Light Water Reactor Sustainability	0	117	8
Reactors Concepts RD&D	0	117	8
Crosscutting Technology Development	82	209	
Nuclear Energy Enabling Technologies	82	209	
Nuclear Energy Programs	82	326	8
Office of International Affairs - IA	250	0	
Strategic Partnership Projects	150	150	15
Departmental Administration Programs	400	150	15
Legacy Management Activities - Defense	2,464	2,403	2,40
Legacy Management	2,464	2,403	2,40
Other Defense Activites Programs	2,464	2,403	2,40
Office of Technology Transitions	0	0	14
Loan Guarantee Program	200	150	30
Title XVII Loan Guarantee Programs	200	150	30
Fotal National Energy Technology Lab	752,511	690,499	829,67

DEPARTMENT OF ENERGY
Laboratory Table
National Renewable Energy Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
National Renewable Energy Laboratory			
Research - Basic Energy Sciences	12,109	5,742	5,742
Basic Energy Sciences	12,109	5,742	5,742
Research - Biological & Environmental Research	3,848	3,877	3,500
Biological and Environmental Research	3,848	3,877	3,500
Workforce Development for Teachers & Scientists	2,095	0	0
Science Programs	18,052	9,619	9,242
Vehicle Technologies	20,200	34,550	36,500
Bioenergy Technologies	50,577	40,000	42,500
Hydrogen and Fuel Cells Technologies	17,555	15,236	25,318
Sustainable Transportation	88,332	89,786	104,318
Geothermal Technologies	1,800	1,416	2,250
Solar Energy Technologies	122,416	80,534	111,187
Water Power Technologies	15,838	18,606	26,570
Wind Energy Technologies	30,000	36,164	46,032
Renewable Energy	170,054	136,720	186,039
Building Technologies	31,437	33,120	25,475
Advanced Manufacturing	4,000	10,707	11,000
Weatherization Assistance Program	0	1,000	C
Training and Technical Assistance	850	1,800	1,900
Weatherization Readiness Fund	0	0	500
Weatherization	850	2,800	2,400
State Energy Program Grants	1,475	475	1,000
Local Government Clean Energy Workforce Program	0	0	100
Weatherization and Intergovernmental Programs	2,325	3,275	3,500
Federal Energy Management Program	6,739	9,000	13,330
Energy Efficiency	44,501	56,102	53,305
Strategic Programs	6,150	5,500	6,785
Facilities and Infrastructure - NREL	130,000	130,000	167,000
Total Facilities and Infrastructure	130,000	130,000	167,000
Corporate Support	136,150	135,500	173,785
Energy Efficiency and Renewable Energy Programs	439,037	418,108	517,447
Transmission Reliability and Resilience	4,069	5,319	2,500
Resilient Distribution Systems	4,625	3,500	4,300
Energy Storage Research	250	0	0
Energy Storage	250	0	0
Cyber R&D	0	0	500
Transformer Resilience and Advanced Components	300	400	1,000
Grid Operations Technology	0	0	7,000
Transmission Permitting and Technical Assistance	655	225	1,000
Electricity Programs	9,899	9,444	16,300
Infrastructure Security and Energy Restoration	4,000	0	0
Cybersecurity, Energy Security, and Emergency Response Programs	4,000	0	0
Carbon Utilization	0	2,250	3,717
CCUS & Power Systems	0	2,250	3,717
Cross Cutting Research	350	306	228
Advanced Coal Energy Systems & CCUS	350	306	228
Fossil Energy and Carbon Management Programs	350	2,556	3,945
Materials Recovery and Waste Form Development (MRWFD)	98	2,330	3,343
waterials necovery and waste runn development (wikwrd)	98	U	U

DEPARTMENT OF ENERGY
Laboratory Table
National Renewable Energy Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Accident Tolerant Fuels	74	0	0
Fuel Cycle Research and Development FCRD	172	0	0
Crosscutting Technology Development	124	142	0
Nuclear Energy Enabling Technologies	124	142	0
International Nuclear Energy Cooperation	0	0	100
Program Direction - Nuclear Energy	100	0	0
Nuclear Energy Programs	396	142	100
Strategic Partnership Projects	500	500	500
Departmental Administration Programs	500	500	500
Office of Technology Transitions	1,378	1,378	1,284
Loan Guarantee Program	35	0	0
Title XVII Loan Guarantee Programs	35	0	0
Administrative Expenses - Tribal Energy Loan Guarantee Program	50	50	50
Tribal Energy Loan Guarantee Programs	50	50	50
Total National Renewable Energy Laboratory	473,697	441,797	548,868

Laboratory Table
Naval Reactors Laboratory Field Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Naval Reactors Laboratory Field Office			
Program Direction - Naval Reactors	20,240	20,680	22,232
Naval Reactors Programs	20,240	20,680	22,232
Total Naval Reactors Laboratory Field Office	20,240	20,680	22,232

Laboratory Table
Naval Research Laboratory FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Naval Research Laboratory			
Assessment Science	4,600	4,100	2,600
Inertial Confinement Fusion	0	6,000	0
Stockpile Research, Technology, and Engineering	4,600	10,100	2,600
Weapons Activities Programs	4,600	10,100	2,600
Total Naval Research Laboratory	4,600	10,100	2,600

Laboratory Table
Nevada Field Office FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Nevada Field Office			
Defense Nuclear Security (DNS)	80,527	85,620	90,111
Defense Nuclear Security	80,527	85,620	90,111
Information Technology and Cyber Security	1,266	1,349	1,294
Weapons Activities Programs	81,793	86,969	91,405
Program Direction - National Nuclear Security Administration	17,836	17,363	17,037
Federal Salaries and Expenses Programs	17,836	17,363	17,037
National Reactor Innovation Center	250	0	0
Advanced Reactors Demonstration Program	250	0	0
Program Direction - Nuclear Energy	1,731	1,914	1,370
Nuclear Energy Programs	1,981	1,914	1,370
Environment, Health, Safety & Security	15	15	15
Environment, Health, Safety, and Security	15	15	15
Other Defense Activites Programs	15	15	15
Program Direction - Defense Environmental Cleanup	3,428	2,621	2,696
Defense Environmental Cleanup Programs	3,428	2,621	2,696
Total Nevada Field Office	105,053	108,882	112,523

DEPARTMENT OF ENERGY
Laboratory Table
Nevada National Security Site FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Nevada National Security Site			
B61 Life Extension Program	500	0	0
Stockpile Major Modernization	500	0	0
Stockpile Sustainment	300	1,896	616
Weapons Dismantlement and Disposition	0	48	0
Production Operations	0	57	0
Stockpile Management	800	2,001	616
Plutonium Modernization	8,858	13,600	13,200
High Explosives & Energetics	2,242	900	2,220
Primary Capability Modernization	11,100	14,500	15,420
Tritium and Domestic Uranium Enrichment	75	153	0
Production Modernization	11,175	14,653	15,420
Assessment Science	88,225	111,646	102,793
Engineering and Integrated Assessments	18,218	7,600	7,554
Inertial Confinement Fusion	0	4,000	4,400
Weapons Technology and Manufacturing Maturation	0	950	1,000
Stockpile Research, Technology, and Engineering	106,443	124,196	115,747
Operations of Facilities	102,000	102,555	103,000
Safety and Environmental Operations	4,654	4,044	5,719
Maintenance and Repair of Facilities	50,050	58,000	61,000
Infrastructure and Safety	46,602	42,990	45,450
Capabilities Based Investments	7,960	11,820	11,000
Recapitalization	54,562	54,810	56,450
Operating	211,266	219,409	226,169
17-D-640, U1a Complex Enhancements Project, NNSS	35,000	152,600	130,000
Programmatic	35,000	152,600	130,000
19-D-670, 138kV Power Transmission System Replacement, NNSS	6,000	59,000	0
Mission Enabling	6,000	59,000	0
I&O - Construction	41,000	211,600	130,000
Infrastructure and Operations	252,266	431,009	356,169
Information Technology and Cyber Security	7,856	6,297	28,571
Weapons Activities Programs	378,540	578,156	516,523
International Radiological Security	611	880	831
Global Material Security	611	880	831
Nuclear Material Removal	218	0	3,000
Material Management and Minimization	218	0	3,000
Nonproliferation & Arms Control	262	308	315
National Technical Nuclear Forensics (NTNF) R&D	0	120	0
Proliferation Detection R&D	27,702	14,985	15,832
Nuclear Detonation Detection	593	20,139	20,441
Nonproliferation Stewardship Program	11,000	8,000	13,850
National Technical Nuclear Forensics R&D	0	0	135
Defense Nuclear Nonproliferation R&D	39,295	43,124	50,258
Emergency Operations	21,424	24,329	0
Counterterrorism and Counterproliferation	39,671	38,751	39,149
Nuclear Counterterrorism & Incident Response	61,095	63,080	39,149
Defense Nuclear Nonproliferation Programs	101,481	107,512	93,553
Program Direction - National Nuclear Security Administration	400	400	400
Federal Salaries and Expenses Programs	400	400	400
. Jaar Salarios and Exponess i Togramo	400	400	700

DEPARTMENT OF ENERGY
Laboratory Table
Nevada National Security Site FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Office of Technology Transitions	25	25	25
Nevada Test Site	55,996	55,672	55,595
NNSA Sites and Nevada Off-Sites	55,996	55,672	55,595
Defense Environmental Cleanup Programs	55,996	55,672	55,595
Total Nevada National Security Site	536,442	741,765	666,096

Laboratory Table
Nevada Operations Office FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Nevada Operations Office			
Nevada Test Site	4,741	5,065	5,142
NNSA Sites and Nevada Off-Sites	4,741	5,065	5,142
Defense Environmental Cleanup Programs	4,741	5,065	5,142
Total Nevada Operations Office	4,741	5,065	5,142

DEPARTMENT OF ENERGY
Laboratory Table
NNSA Albuquerque Complex FY 2022
(Dollars in Thousands)

Enacted Enacted Request Detail		FY 2020	FY 2021	FY 2022
Best Life Extension Program 106.005 135.110 112.313 WYRS Albertinston Program 3.686 0 0 W80 Albertinston Program 27.965 43.722 27.188 W80 LA Receives Program 22.467 35.610 5.75.13 W80 LA Receives Program 50 0 4.00 10.00 W83 Program 50 3.44.30 10.00 10.00 10.00 3.03 7.240 Stockpie Magne Modernization 181.13 25.741 22.268 3.241 4.282 Waspors Demanterement and Disposition 0 3.756 4.22.28 14.426 Stockpie Management 22.3677 327.26 22.48 14.426 Stockpie Management 22.3677 327.26 3.911 3.00 1.00 4.00 <th></th> <th></th> <th></th> <th></th>				
W788 Aberetion Program 27,965 43,722 27,186 W80 A Life Extension Program 42,447 58,10 57,818 W80 A Life Extension Program 42,447 58,10 57,818 W89 A Heardican SLCM 50 4,480 10,00 W87 - Hoodication Program 50 43,430 10,00 W87 - Hoodication Canada 161,153 257,410 24,220 Stockpile Many Muderization 161,163 257,410 24,220 Wespons Diamenterment and Disposition 3,588 47,304 24,228 Wespons Diamenterment and Disposition 3,788 22,248 16,428 Stockpile Management 223,677 32,728 241,818 La Alamos Plutonium Derations 23,607 36,911 24,818 Li Derica, Plutonium Modernization 7,237 38,711 22,828 Primary Capability Modernization 7,237 38,711 22,832 Primary Capability Modernization 25,50 0 0 Timur and Domestic Uranium Erichiment 18,50 155,282 142,433 <td>NNSA Albuquerque Complex</td> <td></td> <td></td> <td></td>	NNSA Albuquerque Complex			
W88 Alleration Program 27,886 43,722 27,180 W80 Life Extinsion Program 42,447 58,810 57,513 W80 Life Extinsion Program 40 0 0 2,686 W87 Holdification Program 50 43,430 70,000 W39 Program 0 8,337 72,000 Stocipile Major Modernization 181,183 257,418 248,834 Stocipile Major Modernization 0 0 15 0 Production Operations 3,796 22,248 124,808 Description Management 223,677 327,268 124,808 Los Alamos Plutonium Operations 3,00 18,903 9,113 21-D-512, Putronium Pit Production Project, LANI. 0 4,00 0 6 Los Alamos Plutonium Modernization 7,237 38,711 28,368 Primatico Modernization 7,237 38,711 28,368 Primatico Informatical Projection Project, LANI. 10 15 6 14,469 Secondary Capability Modernization 12,32 38,	B61 Life Extension Program	106,405	135,119	112,313
W804-Life Eutersion Program 42,447 35,810 57,513 W807-1 Modification Program 50 34,600 10,000 W85-1 Modification Program 50 8,337 7,240 W50-Splogram 10 8,337 7,240 Stockpile Sustainment 38,689 47,336 42,823 Weapon Diamatellement and Disposition 37,96 22,167 327,268 274,189 Production Operations 37,96 22,367 327,268 274,189 Los Alamos Plutonium Operations 0 18,993 9,113 210-542 Plutonium Pik Production Project LANL 0 6,000 0 Los Alamos Plutonium Modernization 7,237 38,711 23,2682 Plymany Capability Modernization 7,237 38,711 23,2682 Plymany Capability Modernization 7,237 38,711 23,2682 Primary Capability Modernization 165,000 155,528 142,433 Primary Capability Modernization 20 15,528 142,233 Production Modernization 20 15,528 <td>W76-2 Modification Program</td> <td>3,866</td> <td>0</td> <td>0</td>	W76-2 Modification Program	3,866	0	0
W80-4 Alterealion-SLCM 0 2,880 W87-1 Modification Program 500 34,430 0,000 W30-5 Program 0 3,837 7,240 Stockpile Major Modernization 1811,183 227,418 216,934 Stockpile Sustainment 3,736 22,248 42,828 Weepons Dimanifement and Disposition 0 3,756 22,248 14,426 Production Operations 2,376 32,228 274,88 Sockpile Management 22,367 3,833 9,113 Los Alamos Plutonium Operations 2,037 3,833 9,113 2-10-512, Plutonium Pite Production Project, LANL 0 6,000 0 Los Alamos Plutonium Mederization 7,237 38,711 22,982 Hydro Explosives & Energetics 0 0 0 Los Alamos Plutonium Mederization 7,237 38,711 22,982 Hydro Explosives & Energetics 0 0 0 Hydrospectic Security (Specially) Modernization 7,237 38,711 22,932 Security (Specially)	W88 Alteration Program	27,965	43,722	27,188
W80-4 Alterealion-SLCM 0 2,880 W87-1 Modification Program 500 34,430 0,000 W30-5 Program 0 3,837 7,240 Stockpile Major Modernization 1811,183 227,418 216,934 Stockpile Sustainment 3,736 22,248 42,828 Weepons Dimanifement and Disposition 0 3,756 22,248 14,426 Production Operations 2,376 32,228 274,88 Sockpile Management 22,367 3,833 9,113 Los Alamos Plutonium Operations 2,037 3,833 9,113 2-10-512, Plutonium Pite Production Project, LANL 0 6,000 0 Los Alamos Plutonium Mederization 7,237 38,711 22,982 Hydro Explosives & Energetics 0 0 0 Los Alamos Plutonium Mederization 7,237 38,711 22,982 Hydro Explosives & Energetics 0 0 0 Hydrospectic Security (Specially) Modernization 7,237 38,711 22,932 Security (Specially)	W80-4 Life Extension Program	42,447	35,810	57,513
WBT-1 Modification Program 500 3.433 10.000 WBD Program 0 8.337 7.240 Stockpile Major Modernization 18.11,831 225.418 2.68,83 Stockpile Substainment 38.689 47,004 42,828 Weapons Distancement and Disposition 0 3.756 22,248 14,426 Stockpile Management 23.677 327,255 274,189 Los Alamos Plutonium Operations 0 18.03 9,113 21.0-512 Plutonium Modernization 0 6,000 0 Los Alamos Plutonium Modernization 7,237 38,711 228,682 High Explosives & Energielics 0 0 0 5,634 High Explosives & Energielics 0 0 0 0 0 0 Friency Cipalishily Modernization 7,237 38,711 28,326 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	2,680
W8S Program 0 8,337 7,240 Stockejle Major Modernization 181,183 257,418 216,934 Stockejle Statismment 3,808 4,743 42,828 Weapon Dismantlement and Disposition 0 315 0 Production Operations 3,766 22,248 14,426 Stockpile Management 23,977 327,458 24,181 Los Alamos Plutonium Production Porject, LANL 0 1,809 9,113 24 - 5-12 Ly Informium Pit Production Project, LANL 0 24,931 9,113 24 - 5-12 Ly Informium Modernization 7,237 38,711 22,962 High Explorates & Emergetics 0 7,337 9,871 22,932 Secondary Capability Modernization 17,237 38,711 22,932 2,828 Production Modernization 15,509 15,536 17,178 4,843 Production Modernization 15,509 15,536 17,178 4,943 Production Modernization 15,000 11,100 31,000 1,000 Instruction Moder		500	34,430	
Stockpile Major Modernization 181,83 257,418 216,834 Stockpile Sustainment 38,698 47,304 42,828 Weappons Disnanatement and Disposition 3,786 22,248 14,428 Stockpile Management 223,677 327,285 274,189 Los Alarona Plutonium Operations 0 6,000 0 Los Alarona Plutonium Modernization 2,337 38,711 23,982 Plutonium Modernization 7,237 38,711 23,982 High Explosives & Energetics 0 0 6 Primary Capability Modernization 7,237 38,711 23,982 Secondary Capability Modernization 7,237 38,711 23,982 Primary Capability Modernization 172,787 38,711 23,982 Recondary Capability Modernization 182,833 5,619 3,000 Primary Capability Modernization 182,834 5,619 3,000 Primary Capability Modernization 182,932 5,619 3,000 Intributio Confinement Evilon 182,932 5,619 3,000 <td>-</td> <td>0</td> <td></td> <td></td>	-	0		
Stockpile Sustainment 38,888 47,004 42,828 Weepons Dismantement and Disposition 3,76 32,248 14,426 Production Operations 3,76 22,248 14,426 Stockpile Management 223,677 327,285 274,181 Los Alamos Plutonium Pid Production Project, LANL 0 6,000 9,113 211-3-12 Plutonium Modernization 7,237 38,711 23,868 Plutonium Modernization 7,237 38,711 29,326 Primary Capability Modernization 7,237 38,711 29,326 Scoondary Capability Modernization 5 0 0 Scoondary Capability Modernization 7,237 38,711 29,326 Scoondary Capability Modernization 6 0 0 Tritism and Domestic Urainim Enrichment 185,00 0 0 Tritism and Domestic Urainim Enrichment 185,00 19,637 171,759 Assessment Science 8,378 5,619 3,019 Indicate Confinement Fusion 12,804 111,000 31,000	-	181.183		
Weapons Dismantlement and Disposition 0 315 0 Production Operations 3,798 22,248 14,428 Slock-plot Management 223,677 323,725 224,148 Los Alamos Plutonium Operations 0 0 0 Los Alamos Plutonium Modernization 0 0 0 Plutonium Modernization 7,237 38,711 23,682 High Explosives & Energetics 7,237 38,711 23,682 Plutonium Modernization 7,237 38,711 23,682 Primary Capability Modernization 7,237 38,711 23,682 Primary Capability Modernization 1,550 0 0 Tritium and Domestic Uranium Entichment 165,000 16,000 3,000 Production Modernization 127,277 194,637 171,759 Assessment Science 68,378 5,619 3,000 Ingritium Confidenterial Fusion 12,813 11,100 1,000 Weapons Technology and Manufacturing Muturation 20,30 19,11 4,917 Ascade				
Production Operations 3,796 22,248 14,426 Stockpile Management 223,677 327,255 274,189 Los Alamos Plutonium Pit Production 20 18,933 9,113 21-D-512, Plutonium Pit Production Project, LANL 0 6,000 0 Los Alamos Plutonium Modernization 7,237 38,711 23,836 High Explosives & Energetics 0 0 6,03 Primary Capability Modernization 7,237 38,711 29,326 Secondary Capability Modernization 7,237 38,711 29,326 Secondary Capability Modernization 165,000 0 0 Tritium and Domestic Uranium Enrichment 165,000 155,926 114,243 Production Modernization 185,000 155,926 114,243 Production Modernization 185,000 155,926 114,243 Production Modernization 185,000 115,933 113,000 3,000 Engineering and Integrated Assessments 46,756 15,000 1,000 9,117 4,917 Academic Programs <td>·</td> <td></td> <td></td> <td></td>	·			
Stockpile Management 223,677 327,285 274,189 Los Alamos Plutonium Operations 0 18,993 9,113 21-0-512, Plutonium PR Production Project, LANL 0 6,000 0 Los Alamos Plutonium Modernization 7,237 38,711 23,892 High Explosives & Energetics 0 0 5,834 Primary Capability Modernization 7,237 38,711 29,396 Secondary, Capability Modernization 550 0 0 Tritium and Domestic Uranium Enrichment 16500 15,526 142,433 Production Modernization 172,787 194,637 171,759 Assessment Science 68,378 5,619 30,00 Engineering and Integrated Assessments 46,756 15,816 9,916 Inertial Confinement Fusion 128,043 113,000 31,000 Wespons Technology and Manufacturing Maturation 20,530 19,117 4,917 Academic Programs 44,492 39,04 21,828 Stockpile Research, Technology, and Engineering 44,492 39,04				
Los Alamos Piktonium Operations 0 18,933 9,113 21-0-512, Piktonium Pit Production Project, LANL 0 6,000 0 Los Alamos Piktonium Modernization 0 24,933 9,113 Piktonium Modernization 7,237 38,711 23,932 High Explosives & Energetica 0 0 5,634 Primany Capability Modernization 550 0 0 Secondary Capability Modernization 550 0 0 Tritium and Domestic Utanium Enrichment 165,000 155,926 142,433 Production Modernization 172,787 194,637 171,1759 Assessment Science 68,378 5,619 3,000 Engineering and Integrated Assessments 46,756 15,816 9,916 Inertial Confinement Fusion 28,043 113,000 31,000 Waapon's Technology and Manufacturing Maturation 20,530 19,117 4,917 Academic Programs 84,492 98,044 21,726 Stockpile Research, Technology, and Engineering 2,303 341 21,7				
21-D-512, Putonium Pit Production Project, LANL 0 6,000 0 Los Alamos Plutonium Modernization 0 24,933 9,113 Pilatonium Modernization 7,237 38,711 23,692 High Explosives & Energetics 0 0 0,534 Primary Capability Modernization 72,377 38,711 29,326 Secondary Gapability Modernization 550 0 0 Tritium and Domestic Uranium Enrichment 165,000 155,926 124,243 Production Modernization 172,787 194,637 171,759 Assessment Science 68,378 5,619 3,000 Engineering and Integrated Assessments 46,756 15,816 9,916 Inertial Confinement Fusion 128,043 113,000 31,000 Weapons Technology and Manufacturing Maturation 20,503 19,117 4,917 Academic Programs 84,492 98,064 92,183 Slockpile Research, Technology, and Engineering 348,199 25,616 141,016 Infrastructure and Safety 2,303 341				
Los Alamos Plutonium Modernization 0 24,993 9,113 Plutonium Modernization 7,237 38,711 23,692 High Explosives & Energetics 0 0 5,634 Primary Capability Modernization 7,237 38,711 29,326 Secondary Capability Modernization 550 0 0 Tritium and Domestic Unanim Enrichment 165,000 155,526 142,433 Production Modernization 172,787 194,637 171,759 Assessment Science 68,378 5,619 3,000 Engineering and Integrated Assessments 46,756 15,616 9,916 Inertial Confirement Fusion 128,043 19,107 4,917 Academic Programs 84,492 98,064 32,133 Stockpile Research, Technology, and Engineering 34,199 251,616 141,016 Infrastructure and Salety 2,303 341 21,726 Recapitalization 2,303 341 21,726 Operating 2,303 341 21,726 15-D-302, TA-55 R				
Plutonium Modernization 7,237 38,711 23,692 High Explosives & Energetics 0 0 5,634 Primary Capability Modernization 72,37 38,711 29,326 Secondary Capability Modernization 550 0 0 Tritum and Domestic Uranium Enrichment 165,000 155,926 142,433 Production Modernization 172,787 194,637 171,759 Assessment Science 68,378 5,619 30,000 Engineering and Integrated Assessments 46,756 15,816 9,916 Inertial Confinement Fusion 128,043 113,000 31,000 Weapons Technology and Manufacturing Maturation 20,533 19,117 4,917 Academic Programs 84,492 80,064 92,183 Stockpille Research, Technology, and Engineering 348,199 251,616 141,106 Infrastructure and Safety 2,303 341 21,726 Operating 2,303 341 21,726 Recapitalization 50 50 0 06-				
High Explosives & Energetics 0 5.834 Primary Capability Modernization 7.237 38,711 29,326 Secondary Capability Modernization 550 0 0 Tritium and Domestic Uranium Enrichment 185,000 155,926 142,433 Production Modernization 172,787 194,637 171,759 Assessment Science 68,378 5,619 3,000 Engineering and Integrated Assessments 47,756 15,816 9,916 Inertial Confinement Fusion 128,043 113,000 31,000 Weapons Technology and Manufacturing Maturation 20,530 19,117 4,917 Academic Programs 84,492 98,064 92,183 Stock-pile Research, Technology, and Engineering 34,199 25,166 141,016 Infrastructure and Safety 2,303 341 21,726 Operating 2,303 341 21,726 Operating 2,303 341 21,726 Operating 2,303 341 21,726 Operating 6,00				
Primary Capability Modernization 7,237 38,711 29,328 Secondary Capability Modernization 550 0 0 Tritium and Domestic Uranium Enrichment 165,000 155,926 142,433 Production Modernization 127,278 194,637 171,759 Assessment Science 68,378 5,619 3,000 Engineering and Integrated Assessments 46,756 15,816 9,916 Inertial Confinement Fusion 128,043 113,000 310,000 Weapons Technology and Manufacturing Maturation 20,530 19,117 4,917 Academic Programs 44,492 98,064 92,183 Stockpile Research, Technology, and Engineering 348,199 251,616 141,016 Infrastructure and Safety 2,303 341 21,726 Operating 2,3				
Secondary Capability Modernization 550 0 0 Tritium and Domestic Uranium Enrichment 165,000 155,926 142,433 Production Modernization 172,787 194,637 171,759 Assessment Science 68,378 5,619 3,000 Engineering and Integrated Assessments 46,756 15,816 9,916 Inertial Confinement Fusion 128,043 113,000 31,000 Weapons Technology and Manufacturing Maturation 20,530 19,117 4,917 Academic Programs 84,822 98,064 92,183 Stockpile Research, Technology, and Engineering 348,199 251,616 141,016 Infrastructure and Safety 2,303 341 21,726 Recapitalization 2,303 341 21,726 Operating 2,303 341 21,726 15-D-302, TA-55 Reinvestment Project - Phase 3, LANL 0 500 0 07-D-220-04, Transuranic Liquid Waste Facility, LANL 0 500 0 06-D-141, Uranium Processing Facility, Y-12 0 16,00				
Tritium and Domestic Uranium Enrichment 165,000 155,926 142,431 Production Modernization 172,787 194,637 171,759 Assessment Science 68,378 5,619 3,000 Engineering and Integrated Assessments 16,766 15,816 9,916 Inertial Confinement Fusion 120,043 113,000 31,000 Weapons Technology and Manufacturing Maturation 20,530 19,117 4,917 Academic Programs 84,492 98,064 92,183 Stockplie Research, Technology, and Engineering 348,199 251,616 141,016 Infrastructure and Safety 2,303 341 21,726 Recapitalization 2,303 341 21,726 Operating 2,303 341 21,726 15-D-302, TA-55 Reinvestment Project - Phase 3, LANL 0 500 0 07-D-220-04, Transuranic Liquid Waste Facility, LANL 0 500 0 06-D-141, Uranium Processing Facility, Y-12 0 16,000 0 0 Abenistry and Metallurgy Research Replacement Project, LANL 0 <td></td> <td></td> <td></td> <td></td>				
Production Modernization 172,787 194,637 171,789 Assessment Science 68,378 5,619 3,000 Engineering and Integrated Assessments 16,6756 15,816 9,916 Inertial Confinement Fusion 128,043 113,000 31,000 Weapons Technology and Manufacturing Maturation 20,530 19,117 4,917 Academic Programs 84,492 98,064 92,183 Stockpile Research, Technology, and Engineering 348,199 251,616 141,016 Infrastructure and Safety 2,303 341 21,726 Operating 2,303 341 21,726 Operating 2,303 341 21,726 15 D-302, TA-55 Reinvestment Project - Phase 3, LANL 0 500 0 07-D-220-04, Transuranic Liquid Waste Facility, LANL 0 500 0 07-D-220-04, Transuranic Liquid Waste Facility, LANL 0 300 0 0 Gb-D-141, Uranium Processing Facility, Y-12 0 300 0 0 Chemistry and Metallurgy Research Replacement Project, LANL 0				
Assessment Science 68,378 5,619 3,000 Engineering and Integrated Assessments 46,756 15,816 9,916 Inertial Confinement Fusion 128,043 113,000 31,000 Weapons Technology and Manufacturing Maturation 20,530 19,117 4,917 Academic Programs 84,492 89,064 92,183 Stockpile Research, Technology, and Engineering 348,199 251,616 141,016 Infrastructure and Safety 2,303 341 21,726 Recapitalization 2,303 341 21,726 Operating 0 50 0 Ob-1-141, Uranium Processing Facility, V+12 0 16,00 0			,	
Engineering and Integrated Assessments 46,756 15,816 9,916 Inertial Confinement Fusion 128,043 113,000 31,000 Weapons Technology and Manufacturing Maturation 20,530 19,117 4,917 Academic Programs 84,492 98,064 92,183 Stockpile Research, Technology, and Engineering 348,199 251,616 141,016 Infrastructure and Safety 2,303 341 21,726 Recapitalization 2,303 341 21,726 Operating 2,303 341 21,726 15-D-302, TA-55 Reinvestment Project - Phase 3, LANL 0 500 0 07-D-220-04, Transuranic Liquid Waste Facility, LANL 0 500 0 06-D-141, Uranium Processing Facility, Y-12 0 16,000 0 04-D-125, Chemistry and Metallurgy Research Replacement (CMRR) 0 300 0 Programmatic 0 17,300 0 0 INForstructure and Operations 2,303 17,641 21,726 STA Operations and Equipment 88,432 1				
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Secure Transportation Asset 88,432 121,606 87,375 Defense Nuclear Security (DNS) 7,767 7,150 9,137 Defense Nuclear Security 7,767 7,150 9,137 Weapons Activities Programs 843,165 919,935 705,202 International Nuclear Security 2,600 2,375 2,405 Domestic Radiological Security 17,294 7,105 6,069 International Radiological Security 5,321 7,806 7,372 Nuclear Smuggling Detection and Deterrence 78,540 79,185 79,185	·			
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Defense Nuclear Security 7,767 7,150 9,137 Weapons Activities Programs 843,165 919,935 705,202 International Nuclear Security 2,600 2,375 2,405 Domestic Radiological Security 17,294 7,105 6,069 International Radiological Security 5,321 7,806 7,372 Nuclear Smuggling Detection and Deterrence 78,540 79,185 79,185	Secure Transportation Asset	88,432	121,606	87,375
Weapons Activities Programs 843,165 919,935 705,202 International Nuclear Security 2,600 2,375 2,405 Domestic Radiological Security 17,294 7,105 6,069 International Radiological Security 5,321 7,806 7,372 Nuclear Smuggling Detection and Deterrence 78,540 79,185 79,185	Defense Nuclear Security (DNS)	7,767	7,150	9,137
International Nuclear Security 2,600 2,375 2,405 Domestic Radiological Security 17,294 7,105 6,069 International Radiological Security 5,321 7,806 7,372 Nuclear Smuggling Detection and Deterrence 78,540 79,185 79,185	Defense Nuclear Security	7,767	7,150	9,137
Domestic Radiological Security 17,294 7,105 6,069 International Radiological Security 5,321 7,806 7,372 Nuclear Smuggling Detection and Deterrence 78,540 79,185 79,185	Weapons Activities Programs	843,165	919,935	705,202
International Radiological Security5,3217,8067,372Nuclear Smuggling Detection and Deterrence78,54079,18579,185	International Nuclear Security	2,600	2,375	2,405
Nuclear Smuggling Detection and Deterrence 78,540 79,185 79,185	Domestic Radiological Security	17,294	7,105	6,069
	International Radiological Security	5,321	7,806	7,372
Global Material Security 103,755 96,471 95,031	Nuclear Smuggling Detection and Deterrence	78,540	79,185	79,185
	Global Material Security	103,755	96,471	95,031

DEPARTMENT OF ENERGY
Laboratory Table
NNSA Albuquerque Complex FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Conversion (formerly HEU Reactor Conversion)	0	0	500
Nuclear Material Removal	6,000	2,025	1,000
Laboratory and Partnership Support	1,267	0	0
Material Management and Minimization	7,267	2,025	1,500
National Technical Nuclear Forensics (NTNF) R&D	0	496	0
Proliferation Detection R&D	27,381	17,500	18,489
Nuclear Detonation Detection	19,757	6,105	6,196
Nonproliferation Stewardship Program	0	14,601	14,601
National Technical Nuclear Forensics R&D	0	0	558
Defense Nuclear Nonproliferation R&D	47,138	38,206	39,844
99-D-143, Mixed Oxide Fuel Fabrication Facility, SRS	400	0	0
18-D-150, Surplus Plutonium Disposition Project, SRS	0	600	305
Nonproliferation Construction	400	600	305
Defense Nuclear Nonproliferation Programs	158,560	137,798	136,680
Program Direction - National Nuclear Security Administration	8,200	7,136	3,596
Federal Salaries and Expenses Programs	8,200	7,136	3,596
Strategic Partnership Projects	7,078	8,918	8,918
Departmental Administration Programs	7,078	8,918	8,918
Environment, Health, Safety & Security	1,000	1,000	1,000
Environment, Health, Safety, and Security	1,000	1,000	1,000
Enterprise Assessments	150	150	150
Office of Enterprise Assessments	150	150	150
Other Defense Activites Programs	1,150	1,150	1,150
Program Direction - Defense Environmental Cleanup	5,018	8,281	8,452
Defense Environmental Cleanup Programs	5,018	8,281	8,452
Total NNSA Albuquerque Complex	1,023,171	1,083,218	863,998

DEPARTMENT OF ENERGY
Laboratory Table
NNSA Production Office (NPO) FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
NNSA Production Office (NPO)			
Tritium and Domestic Uranium Enrichment	275	0	0
Production Modernization	275	0	0
Weapons Activities Programs	275	0	0
Conversion (formerly HEU Reactor Conversion)	500	0	0
Material Disposition	22,135	22,425	5,000
Material Management and Minimization	22,635	22,425	5,000
Defense Nuclear Nonproliferation Programs	22,635	22,425	5,000
Program Direction - National Nuclear Security Administration	24,398	24,780	26,766
Federal Salaries and Expenses Programs	24,398	24,780	26,766
Total NNSA Production Office (NPO)	47,308	47,205	31,766

DEPARTMENT OF ENERGY
Laboratory Table
Oak Ridge Institute for Science & Education FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Oak Ridge Institute for Science & Education			
Assessment Science	100	0	0
Stockpile Research, Technology, and Engineering	100	0	0
Weapons Activities Programs	100	0	0
Counterterrorism and Counterproliferation	3,126	2,300	2,698
Nuclear Counterterrorism & Incident Response	3,126	2,300	2,698
Defense Nuclear Nonproliferation Programs	3,126	2,300	2,698
Research - Advanced Scientific Computing Research	0	500	0
Advanced Scientific Computing Research	0	500	0
Research - Basic Energy Sciences	0	28	0
Basic Energy Sciences	0	28	0
Research - Biological & Environmental Research	3,549	778	1,838
Biological and Environmental Research	3,549	778	1,838
Research - High Energy Physics	0	170	0
High Energy Physics	0	170	0
Operations and Maintenance - Nuclear Physics	697	0	239
Nuclear Physics	697	0	239
Workforce Development for Teachers & Scientists	12,653	0	0
Safeguards and Security - SC	1,894	2,425	3,861
Science Programs	18,793	3,901	5,938
Vehicle Technologies	0	350	600
Bioenergy Technologies	351	600	850
Hydrogen and Fuel Cells Technologies	873	1,000	1,136
Sustainable Transportation	1,224	1,950	2,586
Geothermal Technologies	600	630	0
Renewable Energy	600	630	0
Building Technologies	650	2,300	1,100
Advanced Manufacturing	5,495	6,375	2,250
Training and Technical Assistance	450	100	700
Weatherization	450	100	700
State Energy Program Grants	450	965	900
Weatherization and Intergovernmental Programs	900	1,065	1,600
Federal Energy Management Program	325	599	665
Energy Efficiency	7,370	10,339	5,615
Energy Efficiency and Renewable Energy Programs	9,194	12,919	8,201
Infrastructure Security and Energy Restoration	1,600	0	0
Cybersecurity, Energy Security, and Emergency Response Programs	1,600	0	0
Environment, Health, Safety & Security	1,305	1,305	1,255
Environment, Health, Safety, and Security	1,305	1,305	1,255
Other Defense Activites Programs	1,305	1,305	1,255
Office of Technology Transitions	220	220	266
Total Oak Ridge Institute for Science & Education	34,338	20,645	18,358

DEPARTMENT OF ENERGY Laboratory Table Oak Ridge National Laboratory FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Oak Ridge National Laboratory			
Tritium and Domestic Uranium Enrichment	40,855	0	34,415
Production Modernization	40,855	0	34,415
Advanced Simulation and Computing	608	0	831
Stockpile Research, Technology, and Engineering	608	0	831
Safety and Environmental Operations	10,403	9,662	11,226
Operating	10,403	9,662	11,226
Infrastructure and Operations	10,403	9,662	11,226
Weapons Activities Programs	51,866	9,662	46,472
International Nuclear Security	12,427	10,254	10,384
Domestic Radiological Security	4,577	5,936	5,070
International Radiological Security	6,091	7,453	7,039
Nuclear Smuggling Detection and Deterrence	10,373	14,118	14,118
Global Material Security	33,468	37,761	36,611
Conversion (formerly HEU Reactor Conversion)	700	1,375	2,300
Nuclear Material Removal	5,350	6,452	7,300
Material Disposition	4,500	2,647	4,300
Laboratory and Partnership Support	1,415	2,595	0
Material Management and Minimization	11,965	13,069	13,900
Nonproliferation & Arms Control	19,895	21,594	21,889
National Technical Nuclear Forensics (NTNF) R&D	0	3,673	0
Proliferation Detection R&D	28,241	31,661	33,450
Nuclear Detonation Detection	1,290	433	439
Nonproliferation Fuels Development	4,800	7,000	0
Nonproliferation Stewardship Program	4,450	13,819	19,809
National Technical Nuclear Forensics R&D	0	0	4,133
Defense Nuclear Nonproliferation R&D	38,781	52,913	57,831
Counterterrorism and Counterproliferation	5,746	7,769	8,167
Nuclear Counterterrorism & Incident Response	5,746	7,769	8,167
Defense Nuclear Nonproliferation Programs	109,855	136,779	138,398
Program Direction - National Nuclear Security Administration	1,220	120	120
Federal Salaries and Expenses Programs	1,220	120	120
Research - Advanced Scientific Computing Research	235,031	251,854	247,946
17-SC-20, SC Exascale Computing Project (ECP)	188,735	168,945	129,000
Advanced Scientific Computing Research	423,766	420,799	376,946
Research - Basic Energy Sciences	374,486	350,012	337,923
19-SC-14, Second Target Station (STS), ORNL	0	29,000	32,000
18-SC-11, Spallation Neutron Source Proton Power Upgrade (PPU), ORNL	80,000	52,000	17,000
Construction - Basic Energy Sciences	80,000	81,000	49,000
Basic Energy Sciences	454,486	431,012	386,923
Research - Biological & Environmental Research	92,633	86,641	85,557
Biological and Environmental Research	92,633	86,641	85,557
Research - Fusion Energy Sciences	31,362	27,947	35,682
14-SC-60, U.S. Contributions to ITER (U.S. ITER)	242,000	242,000	221,000
Construction - Fusion Energy Sciences	242,000	242,000	221,000
Fusion Energy Sciences	273,362	269,947	256,682
Research - High Energy Physics	697	1,253	990
High Energy Physics	697	1,253	990
Operations and Maintenance - Nuclear Physics	13,605	15,436	17,757

Laboratory Table
Oak Ridge National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
Nuclear Physics	Enacted 13,605	Enacted 15,436	Request Detail 17,757
20-SC-51, U.S. Stable Isotope Production and Research Center, ORNL	12,000	12,000	0
Construction - Isotope R&D and Production	12,000	12,000	0
Isotope R&D and Production	12,000	12,000	0
Research - Accelerator R&D and Production	12,000	12,000	57
Accelerator R&D and Production	0	0	57
Oak Ridge Nuclear Operations	26,000	26,000	20,000
22-SC-71, Critical Infrastructure Modernization Project (CIMP), ORNL	20,000	20,000	1,000
			0
20-SC-74, Craft Resources Support Facility, ORNL (19-SC-74) 19-SC-73, Translational Research Capability, ORNL	15,000 25,000	25,000 22,000	21,500
Construction - Science Laboratories Infrastructure	40,000	47,000	22,500
Science Laboratories Infrastructure			
	66,000	73,000	42,500
Safeguards and Security - SC Science Programs	29,973	30,166	35,947 1,203,359
•	1,366,522	1,340,254	
Vehicle Technologies	29,500	33,970	34,000
Bioenergy Technologies	13,381	9,500	9,250
Hydrogen and Fuel Cells Technologies	3,160	3,584	8,423
Sustainable Transportation	46,041	47,054	51,673
Geothermal Technologies	1,025	0	0
Solar Energy Technologies	0	867	1,197
Water Power Technologies	6,985	8,258	6,165
Wind Energy Technologies	1,306	1,954	1,718
Renewable Energy	9,316	11,079	9,080
Building Technologies	27,568	18,848	18,853
Advanced Manufacturing	36,028	40,329	44,000
Weatherization Assistance Program	0	825	2,000
Training and Technical Assistance	1,550	400	1,350
Weatherization Readiness Fund	0	0	500
Weatherization	1,550	1,225	3,850
State Energy Program Grants	0	49	100
Weatherization and Intergovernmental Programs	1,550	1,274	3,950
Federal Energy Management Program	6,052	4,000	6,060
Energy Efficiency	71,198	64,451	72,863
Energy Efficiency and Renewable Energy Programs	126,555	122,584	133,616
Transmission Reliability and Resilience	16,393	8,894	3,000
Resilient Distribution Systems	13,051	14,000	4,600
Energy Storage Research	2,399	3,200	3,000
Energy Storage	2,399	3,200	3,000
Transformer Resilience and Advanced Components	4,965	6,000	7,000
Grid Operations Technology	0	0	9,000
Electricity Programs	36,808	32,094	26,600
Cybersecurity for Energy Delivery Systems	1,300	10,000	0
Infrastructure Security and Energy Restoration	5,500	6,000	0
Risk Management Technology and Tools	0	0	17,000
Cybersecurity, Energy Security, and Emergency Response Programs	6,800	16,000	17,000
Carbon Capture	1,884	1,380	2,399
Carbon Storage	570	450	666
Mineral Sustainability	0	10,325	8,767
Carbon Dioxide Removal	0	900	1,418
Advanced Energy & Hydrogen Systems	1,145	878	783

DEPARTMENT OF ENERGY Laboratory Table Oak Ridge National Laboratory FY 2022 (Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
CCUS & Power Systems	3,599	13,933	14,033
Cross Cutting Research	898	786	585
Advanced Coal Energy Systems & CCUS	898	786	585
Natural Gas Technologies Research	0	250	0
Fossil Energy and Carbon Management Programs	4,497	14,969	14,618
Advanced SMR R&D	746	0	0
Light Water Reactor Sustainability	4,919	4,941	5,358
Advanced Reactor Technologies	5,016	2,945	5,000
Reactors Concepts RD&D	10,681	7,886	10,358
Materials Recovery and Waste Form Development (MRWFD)	1,135	942	1,328
HALEU for R&D and Demonstration Reactors	0	0	2,000
Accident Tolerant Fuels	6,097	6,707	7,378
Triso Fuel and Graphite Qualification	1,719	1,200	3,000
Fuel Cycle Laboratory R&D	1,489	1,500	3,510
Used Nuclear Fuel Disposition R&D	8,248	8,250	8,250
Integrated Waste Management System	3,782	4,000	4,000
Fuel Cycle Research and Development FCRD	22,470	22,599	29,466
Crosscutting Technology Development	900	850	2,000
Joint Modeling and Simulation Program	4,210	5,100	4,900
Nuclear Science User Facilities	433	100	100
Transformational Challenge Reactor	18,205	21,960	0
Nuclear Energy Enabling Technologies	23,748	28,010	7,000
National Reactor Innovation Center	115	500	1,516
Regulatory Development	1,685	2,020	2,000
Advanced Reactors Safeguards	670	575	575
Advanced Reactors Demonstration Program	2,470	3,095	4,091
Oak Ridge Nuclear Infrastructure	19,957	19,926	0
Infrastructure	19,957	19,926	0
International Nuclear Energy Cooperation	0	0	500
Program Direction - Nuclear Energy	266	120	0
Nuclear Energy Programs	79,592	81,636	51,415
Interim Storage	0	808	0
Nuclear Waste Programs	0	808	0
Strategic Partnership Projects	20,222	12,227	12,227
Departmental Administration Programs	20,222	12,227	12,227
Environment, Health, Safety & Security	1,035	1,035	1,035
Environment, Health, Safety, and Security	1,035	1,035	1,035
Other Defense Activites Programs	1,035	1,035	1,035
Office of Technology Transitions	55	55	40
OR Nuclear Facility D&D	213,000	254,132	274,923
U233 Disposition Program	55,000	55,000	55,000
Oak Ridge (OR)	268,000	309,132	329,923
Defense Environmental Cleanup Programs	268,000	309,132	329,923
otal Oak Ridge National Laboratory	2,073,027	2,077,355	1,974,823

Laboratory Table
Oak Ridge National Laboratory Site Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Oak Ridge National Laboratory Site Office			
Program Direction - SC	5,934	4,757	6,382
Science Programs	5,934	4,757	6,382
Total Oak Ridge National Laboratory Site Office	5,934	4,757	6,382

DEPARTMENT OF ENERGY Laboratory Table Oak Ridge Office FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Oak Ridge Office			
PILT	2,890	0	0
Oak Ridge Landlord	5,610	0	0
Facilities and Infrastructure (SLI)	7,272	0	0
Science Laboratories Infrastructure	15,772	0	0
Safeguards and Security - SC	4,558	0	0
Science Programs	20,330	0	0
Civil Nuclear Enrichment	40,000	40,000	0
Fuel Cycle Research and Development FCRD	40,000	40,000	0
Program Direction - Nuclear Energy	1,832	1,862	0
Nuclear Energy Programs	41,832	41,862	0
Environment, Health, Safety & Security	2,795	2,795	2,795
Environment, Health, Safety, and Security	2,795	2,795	2,795
Other Defense Activites Programs	2,795	2,795	2,795
Program Direction - Defense Environmental Cleanup	15,148	15,026	15,148
Defense Environmental Cleanup Programs	15,148	15,026	15,148
Total Oak Ridge Office	80,105	59,683	17,943

Laboratory Table
Oak Ridge Reservation FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Oak Ridge Reservation			
OR Cleanup Disposition	101,100	112,471	73,725
Oak Ridge (OR)	101,100	112,471	73,725
Defense Environmental Cleanup Programs	101,100	112,471	73,725
Total Oak Ridge Reservation	101,100	112,471	73,725

Laboratory Table
Oak Ridge Reservation (Off-Site) FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Oak Ridge Reservation (Off-Site)			
OR Community and Regulatory Support	5,900	5,900	5,096
Oak Ridge (OR)	5,900	5,900	5,096
Defense Environmental Cleanup Programs	5,900	5,900	5,096
Total Oak Ridge Reservation (Off-Site)	5,900	5,900	5,096

Laboratory Table
Office of River Protection FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Office of River Protection			
Waste Treatment Immobilization Plant Commissioning	15,000	50,000	50,000
Rad Liquid Tank Waste Stabilization and Disposition	775,000	784,000	817,642
18-D-16 Waste treatment and immobilization plant - LBL/Direct Feed LAW	776,000	786,000	586,000
01-D-16D High-Level Waste Facility	25,000	25,000	60,000
01-D-16E Pretreatment Facility	15,000	0	20,000
Construction - Office of River Protection	816,000	811,000	666,000
ORP Low-Level Waste Offsite Disposal	10,000	0	7,000
Office of River Protection (ORP)	1,616,000	1,645,000	1,540,642
Program Direction - Defense Environmental Cleanup	28,484	23,205	24,026
Defense Environmental Cleanup Programs	1,644,484	1,668,205	1,564,668
Total Office of River Protection	1,644,484	1,668,205	1,564,668

DEPARTMENT OF ENERGY
Laboratory Table
Office of Scientific & Technical Information FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Office of Scientific & Technical Information			
Assessment Science	220	220	220
Advanced Simulation and Computing	0	681	0
Stockpile Research, Technology, and Engineering	220	901	220
Information Technology and Cyber Security	219	519	228
Weapons Activities Programs	439	1,420	448
Nuclear Detonation Detection	41	70	71
Defense Nuclear Nonproliferation R&D	41	70	71
Defense Nuclear Nonproliferation Programs	41	70	71
Research - Advanced Scientific Computing Research	157	0	0
Advanced Scientific Computing Research	157	0	0
Research - Basic Energy Sciences	0	161	0
Basic Energy Sciences	0	161	0
Research - Biological & Environmental Research	185	285	159
Biological and Environmental Research	185	285	159
Research - High Energy Physics	189	0	0
High Energy Physics	189	0	0
Operations and Maintenance - Nuclear Physics	285	0	455
Nuclear Physics	285	0	455
Facilities and Infrastructure (SLI)	200	200	200
Science Laboratories Infrastructure	200	200	200
Safeguards and Security - SC	759	759	2,045
Program Direction - SC	9,397	10,477	10,619
Science Programs	11,172	11,882	13,478
Environment, Health, Safety & Security	300	300	300
Environment, Health, Safety, and Security	300	300	300
Other Defense Activites Programs	300	300	300
Total Office of Scientific & Technical Information	11,952	13,672	14,297

Laboratory Table
Pacific Northwest National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Pacific Northwest National Laboratory			
Production Operations	125	0	0
Stockpile Management	125	0	0
Secondary Capability Modernization	756	1,935	1,650
Tritium and Domestic Uranium Enrichment	54,279	56,786	56,750
Production Modernization	55,035	58,721	58,400
Assessment Science	10	0	0
Engineering and Integrated Assessments	35	0	0
Weapons Technology and Manufacturing Maturation	35	0	900
Stockpile Research, Technology, and Engineering	80	0	900
Safety and Environmental Operations	3,325	7,571	5,674
Infrastructure and Safety	689	0	0
Capabilities Based Investments	100	0	0
Recapitalization	789	0	0
Operating	4,114	7,571	5,674
Infrastructure and Operations	4,114	7,571	5,674
Weapons Activities Programs	59,354	66,292	64,974
International Nuclear Security	4,064	12,292	12,448
Domestic Radiological Security	26,463	30,211	25,802
International Radiological Security	35,200	42,502	40,141
Nuclear Smuggling Detection and Deterrence	43,837	54,941	54,941
Global Material Security	109,564	139,946	133,332
Conversion (formerly HEU Reactor Conversion)	21,900	22,950	22,500
Nuclear Material Removal	0	150	350
Material Disposition	100	2,900	4,200
Laboratory and Partnership Support	0	462	0
Material Management and Minimization	22,000	26,462	27,050
Nonproliferation & Arms Control	21,326	20,181	20,567
National Technical Nuclear Forensics (NTNF) R&D	0	4,746	0
Proliferation Detection R&D	29,356	23,637	24,972
Nuclear Detonation Detection	6,622	19,165	19,453
Nonproliferation Stewardship Program	450	450	2,409
National Technical Nuclear Forensics R&D	0	0	5,340
Defense Nuclear Nonproliferation R&D	36,428	43,252	52,174
18-D-150, Surplus Plutonium Disposition Project, SRS	3,921	1,282	2,700
Nonproliferation Construction	3,921	1,282	2,700
Emergency Operations	1,453	254	1,400
Counterterrorism and Counterproliferation	3,469	3,346	3,745
Nuclear Counterterrorism & Incident Response	4,922	3,600	5,145
Defense Nuclear Nonproliferation Programs	198,161	239,469	240,968
Program Direction - National Nuclear Security Administration	1,255	1,382	1,525
Federal Salaries and Expenses Programs	1,255	1,382	1,525
Research - Advanced Scientific Computing Research	4,360	4,635	600
Advanced Scientific Computing Research	4,360	4,635	600
Research - Basic Energy Sciences	33,838	23,694	23,694
Basic Energy Sciences	33,838	23,694	23,694
Research - Biological & Environmental Research	132,882	113,325	138,894
Biological and Environmental Research	132,882	113,325	138,894
Research - Fusion Energy Sciences	650	723	1,678

Laboratory Table
Pacific Northwest National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Fusion Energy Sciences	650	723	1,678
Research - High Energy Physics	1,855	1,995	1,300
High Energy Physics	1,855	1,995	1,300
Operations and Maintenance - Nuclear Physics	830	0	0
Nuclear Physics	830	0	0
Workforce Development for Teachers & Scientists	1,589	0	0
Facilities and Infrastructure (SLI)	0	0	1,600
18-SC-71, Energy Sciences Capability, PNNL	23,000	23,000	0
Construction - Science Laboratories Infrastructure	23,000	23,000	0
Science Laboratories Infrastructure	23,000	23,000	1,600
Safeguards and Security - SC	12,759	13,512	19,093
Science Programs	211,763	180,884	186,859
Vehicle Technologies	13,300	16,314	20,000
Bioenergy Technologies	17,350	12,000	12,800
Hydrogen and Fuel Cells Technologies	5,940	6,855	8,603
Sustainable Transportation	36,590	35,169	41,403
Geothermal Technologies	725	700	0
Solar Energy Technologies	316	0	0
Water Power Technologies	12,411	14,186	15,450
Wind Energy Technologies	6,430	6,107	8,447
Renewable Energy	19,882	20,993	23,897
Building Technologies	30,172	23,406	35,247
Advanced Manufacturing	30,172	1,779	300
State Energy Program Grants	0	0	50
	0	0	50
Weatherization and Intergovernmental Programs	4,839		6,270
Federal Energy Management Program	,	4,157	
Energy Efficiency Strategic Programs	35,311 50	29,342 350	41,867 2,500
	50	350	
Corporate Support	91,833		2,500 109,667
Energy Efficiency and Renewable Energy Programs		85,854	4,000
Transmission Reliability and Resilience	10,873	9,520	
Resilient Distribution Systems	10,530 23,462	15,838	12,200
Energy Storage Research		17,700	16,870 47,000
20-OE-100 Grid Storage Launchpad	1,000	23,000	· ·
Construction - Energy Storage	1,000	23,000	47,000
Energy Storage	24,462	40,700	63,870
Cyber R&D	0	0	2,500
Transformer Resilience and Advanced Components	62	0	0
Grid Operations Technology	0	0	8,000
Transmission Permitting and Technical Assistance	507	140	1,000
Electricity Programs	46,433	66,198	91,570
Cybersecurity for Energy Delivery Systems	3,300	1,000	0
Infrastructure Security and Energy Restoration	3,500	10,000	0
Risk Management Technology and Tools	0	0	11,000
Information Sharing, Partnerships and Exercises	0	0	3,000
Cybersecurity, Energy Security, and Emergency Response Programs	6,800	11,000	14,000
Carbon Capture	3,598	2,636	4,582
Carbon Storage	2,406	1,901	2,815
Advanced Energy & Hydrogen Systems	334	256	228
CCUS & Power Systems	6,338	4,793	7,625

DEPARTMENT OF ENERGY
Laboratory Table
Pacific Northwest National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Cross Cutting Research	521	456	340
Advanced Coal Energy Systems & CCUS	521	456	340
Unconventional Fossil Energy Technologies from Petroleum-Oil Technologies	500	500	0
Natural Gas Technologies Research	699	1,000	0
Fossil Energy and Carbon Management Programs	8,058	6,749	7,965
Advanced Reactor Technologies	1,160	730	1,470
Reactors Concepts RD&D	1,160	730	1,470
Mining, Conversion, and Transportation	0	450	0
Materials Recovery and Waste Form Development (MRWFD)	700	581	819
Accident Tolerant Fuels	77	85	94
Fuel Cycle Laboratory R&D	1,053	1,000	2,340
Used Nuclear Fuel Disposition R&D	7,869	7,825	7,825
Integrated Waste Management System	1,768	3,500	9,500
Fuel Cycle Research and Development FCRD	11,467	13,441	20,578
Crosscutting Technology Development	225	194	480
Nuclear Science User Facilities	162	10	10
Nuclear Energy Enabling Technologies	387	204	490
National Reactor Innovation Center	910	850	1,600
Regulatory Development	250	100	232
Advanced Reactors Safeguards	385	260	260
Advanced Reactors Demonstration Program	1,545	1,210	2,092
International Nuclear Energy Cooperation	0	0	200
Program Direction - Nuclear Energy	158	195	200
Nuclear Energy Programs	14,717	15,780	25,030
Interim Storage	0	4,334	0
Nuclear Waste Programs	0	4,334	0
Office of International Affairs - IA	450	0	0
Departmental Administration Programs	450	0	0
Environment, Health, Safety & Security	1,905	1,905	1,905
Environment, Health, Safety, and Security	1,905	1,905	1,905
Other Defense Activites Programs	1,905	1,905	1,905
Office of Technology Transitions	175	175	175
Total Pacific Northwest National Laboratory	640,904	680,022	744,638

Laboratory Table
Pacific Northwest Site Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Pacific Northwest Site Office			
Program Direction - SC	5,186	5,066	5,599
Science Programs	5,186	5,066	5,599
Total Pacific Northwest Site Office	5,186	5,066	5,599

DEPARTMENT OF ENERGY
Laboratory Table
Paducah Gaseous Diffusion Plant FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Paducah Gaseous Diffusion Plant			
Program Direction - Defense Environmental Cleanup	14,339	14,357	14,611
Safeguards and Security - Defense Environmental Cleanup	15,789	16,206	16,206
Defense Environmental Cleanup Programs	30,128	30,563	30,817
Gaseous Diffusion Plants	56,456	57,580	57,363
Non-Defense Environmental Cleanup Programs	56,456	57,580	57,363
Paducah Gaseous Diffusion Plant (D&D Fund)	240,000	240,000	198,995
Pension and Community and Regulatory Support	2,094	2,099	2,739
Uranium Enrichment D&D Programs	242,094	242,099	201,734
Total Paducah Gaseous Diffusion Plant	328,678	330,242	289,914

DEPARTMENT OF ENERGY Laboratory Table Pantex Plant FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Pantex Plant			
B61 Life Extension Program	55,552	54,500	67,445
W88 Alteration Program	34,660	53,918	59,776
W80-4 Life Extension Program	35,410	41,500	51,603
W80-4 Alteration-SLCM	0	0	100
W87-1 Modification Program	500	12,000	12,000
W93 Program	0	500	1,000
Stockpile Major Modernization	126,122	162,418	191,924
Stockpile Sustainment	128,130	107,926	130,486
Weapons Dismantlement and Disposition	27,553	35,000	31,370
Production Operations	116,066	120,093	121,227
Stockpile Management	397,871	425,437	475,007
High Explosives & Energetics	3,047	20,828	16,500
Primary Capability Modernization	3,047	20,828	16,500
Production Modernization	3,047	20,828	16,500
Engineering and Integrated Assessments	4,284	8,029	10,919
Weapons Technology and Manufacturing Maturation	4,757	5,173	5,746
Stockpile Research, Technology, and Engineering	9,041	13,202	16,665
Operations of Facilities	76,793	75,190	77,000
Safety and Environmental Operations	18,241	14,454	27,49
Maintenance and Repair of Facilities	83,600	117,000	112,000
Infrastructure and Safety	58,194	62,972	70,57
Capabilities Based Investments	17,103	9,080	6,000
Recapitalization	75,297	72,052	76,57
Operating	253,931	278,696	293,07
21-D-510, HE Synthesis, Formulation, and Production Facility, PX	0	28,000	44,500
15-D-301, HE Science & Engineering Facility, PX	5,880	43,000	(
Programmatic	5,880	71,000	44,50
I&O - Construction	5,880	71,000	44,500
Infrastructure and Operations	259,811	349,696	337,575
STA Operations and Equipment	7,431	7,006	8,10
Secure Transportation Asset	7,431	7,006	8,10
Defense Nuclear Security (DNS)	138,847	143,250	147,12
Defense Nuclear Security	138,847	143,250	147,12
Information Technology and Cyber Security	7,203	10,259	7,696
Weapons Activities Programs	823,251	969,678	1,008,673
Material Disposition	2,968	6,000	3,800
Material Management and Minimization	2,968	6,000	3,800
Nonproliferation & Arms Control	359	376	400
Counterterrorism and Counterproliferation	2,530	2,606	2,805
Nuclear Counterterrorism & Incident Response	2,530	2,606	2,805
Defense Nuclear Nonproliferation Programs	5,857	8,982	7,005
Environment, Health, Safety & Security	10	10	10
Environment, Health, Safety, and Security	10	10	10
Other Defense Activites Programs	10	10	10
Total Pantex Plant	829,118	978,670	1,015,688

Laboratory Table
Pinellas Site FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Pinellas Site	2	2.140104	. toquaat Botan
Legacy Management Activities - Defense	4,333	4,535	3,664
Legacy Management	4,333	4,535	3,664
Other Defense Activites Programs	4,333	4,535	3,664
Total Pinellas Site	4,333	4,535	3,664

Laboratory Table
Portsmouth Gaseous Diffusion Plant FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Portsmouth Gaseous Diffusion Plant			
Secondary Capability Modernization	0	15,000	20,000
Tritium and Domestic Uranium Enrichment	0	69,125	25,567
Production Modernization	0	84,125	45,567
Weapons Activities Programs	0	84,125	45,567
Legacy Management Activities - Defense	5,200	5,000	4,200
Legacy Management	5,200	5,000	4,200
Other Defense Activites Programs	5,200	5,000	4,200
Safeguards and Security - Defense Environmental Cleanup	16,490	16,690	16,690
Defense Environmental Cleanup Programs	16,490	16,690	16,690
Gaseous Diffusion Plants	56,629	57,974	58,840
Non-Defense Environmental Cleanup Programs	56,629	57,974	58,840
Portsmouth Gaseous Diffusion Plant (D&D Fund)	367,193	367,193	397,311
20-U-401 On-site Waste Disposal Facility	10,000	16,500	65,235
15-U-408 On-Site Waste Disposal Facility, Portsmouth	41,102	46,639	5,000
Construction - Uranium D&D Fund	51,102	63,139	70,235
Pension and Community and Regulatory Support	2,013	3,868	3,560
Uranium Enrichment D&D Programs	420,308	434,200	471,106
Total Portsmouth Gaseous Diffusion Plant	498,627	597,989	596,403

DEPARTMENT OF ENERGY
Laboratory Table
Princeton Plasma Physics Laboratory FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Princeton Plasma Physics Laboratory			
Proliferation Detection R&D	300	760	803
Defense Nuclear Nonproliferation R&D	300	760	803
Defense Nuclear Nonproliferation Programs	300	760	803
Research - Advanced Scientific Computing Research	335	400	0
Advanced Scientific Computing Research	335	400	0
Research - Fusion Energy Sciences	83,350	65,015	76,006
Fusion Energy Sciences	83,350	65,015	76,006
Workforce Development for Teachers & Scientists	729	0	0
21-SC-71, Princeton Plasma Innovation Center, PPPL	0	150	7,750
21-SC-72, Critical Infrastructure Recovery & Renewal, PPPL	0	150	2,000
20-SC-76, Tritium System Demolition and Disposal, PPPL (20-SC-78)	13,000	13,000	6,400
Construction - Science Laboratories Infrastructure	13,000	13,300	16,150
Science Laboratories Infrastructure	13,000	13,300	16,150
Safeguards and Security - SC	3,358	3,358	5,586
Science Programs	100,772	82,073	97,742
Office of Technology Transitions	0	0	45
Total Princeton Plasma Physics Laboratory	101,072	82,833	98,590

Laboratory Table
Princeton Site Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Princeton Site Office			
Program Direction - SC	1,910	1,991	2,036
Science Programs	1,910	1,991	2,036
Total Princeton Site Office	1,910	1,991	2,036

DEPARTMENT OF ENERGY Laboratory Table Richland Operations Office FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Richland Operations Office			
Safety and Environmental Operations	25	0	0
Operating	25	0	0
Infrastructure and Operations	25	0	0
Weapons Activities Programs	25	0	0
Counterterrorism and Counterproliferation	1,818	2,002	2,401
Nuclear Counterterrorism & Incident Response	1,818	2,002	2,401
Defense Nuclear Nonproliferation Programs	1,818	2,002	2,401
Program Direction - National Nuclear Security Administration	6	6	6
Federal Salaries and Expenses Programs	6	6	6
Infrastructure Security and Energy Restoration	3,000	6,525	0
Response and Restoration	0	0	16,000
Cybersecurity, Energy Security, and Emergency Response Programs	3,000	6,525	16,000
Strategic Partnership Projects	100	100	100
Departmental Administration Programs	100	100	100
Environment, Health, Safety & Security	1,000	1,000	1,000
Environment, Health, Safety, and Security	1,000	1,000	1,000
Other Defense Activites Programs	1,000	1,000	1,000
Richland Community and Regulatory Support	10,121	8,621	5,121
Richland	10,121	8,621	5,121
Program Direction - Defense Environmental Cleanup	37,324	42,194	43,187
Defense Environmental Cleanup Programs	47,445	50,815	48,308
Total Richland Operations Office	53,394	60,448	67,815

Laboratory Table
Rocky Flats Site FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Rocky Flats Site			
Legacy Management Activities - Defense	30,068	26,875	32,996
Legacy Management	30,068	26,875	32,996
Other Defense Activites Programs	30,068	26,875	32,996
Closure Sites Administration	1,900	1,800	582
Defense Environmental Cleanup Programs	1,900	1,800	582
Total Rocky Flats Site	31,968	28,675	33,578

DEPARTMENT OF ENERGY
Laboratory Table
Sandia National Laboratories FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Sandia National Laboratories			
B61 Life Extension Program	231,270	173,500	112,362
W88 Alteration Program	44,971	11,425	15,933
W80-4 Life Extension Program	422,389	487,150	493,520
W80-4 Alteration-SLCM	0	0	3,500
W87-1 Modification Program	52,950	185,000	225,000
W93 Program	0	18,000	22,000
Stockpile Major Modernization	751,580	875,075	872,315
Stockpile Sustainment	326,450	334,628	409,106
Weapons Dismantlement and Disposition	3,600	1,473	500
Production Operations	136,254	136,979	136,796
Stockpile Management	1,217,884	1,348,155	1,418,717
High Explosives & Energetics	411	12,000	13,000
Primary Capability Modernization	411	12,000	13,000
Tritium and Domestic Uranium Enrichment	448	118	495
Non-Nuclear Capability Modernization	7,138	41,500	56,618
Production Modernization	7,997	53,618	70,113
Assessment Science	66,918	64,545	60,173
Engineering and Integrated Assessments	81,637	88,245	88,847
Inertial Confinement Fusion	65,957	66,900	61,300
Advanced Simulation and Computing	182,836	168,896	172,685
Weapons Technology and Manufacturing Maturation	76,872	116,332	121,499
Stockpile Research, Technology, and Engineering	474,220	504,918	504,504
Operations of Facilities	130,000	125,380	126,000
Safety and Environmental Operations	9,961	6,476	8,967
Maintenance and Repair of Facilities	19,050	19,000	24,000
Infrastructure and Safety	40,872	66,350	54,900
Capabilities Based Investments	10,482	18,060	16,500
Recapitalization	51,354	84,410	71,400
Operating	210,365	235,266	230,367
22-D-513, Power Sources Capability, SNL	0	0	13,000
Programmatic	0	0	13,000
15-D-611, Emergency Operations Center, SNL	4,000	36,000	0
Mission Enabling	4,000	36,000	0
I&O - Construction	4,000	36,000	13,000
Infrastructure and Operations	214,365	271,266	243,367
STA Operations and Equipment	63,244	73,898	80,627
Secure Transportation Asset	63,244	73,898	80,627
Defense Nuclear Security (DNS)	67,088	70,490	74,386
Defense Nuclear Security	67,088	70,490	74,386
Information Technology and Cyber Security	30,004	34,836	27,812
Weapons Activities Programs	2,074,802	2,357,181	2,419,526
International Nuclear Security	12,127	11,589	11,736
Domestic Radiological Security	18,287	16,752	14,307
International Radiological Security	14,647	18,235	17,222
Nuclear Smuggling Detection and Deterrence	8,149	9,175	9,175
Global Material Security	53,210	55,751	52,440
Conversion (formerly HEU Reactor Conversion)	660	750	700
Material Disposition	2,320	0	350
	2,520	Ü	230

DEPARTMENT OF ENERGY
Laboratory Table
Sandia National Laboratories FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Material Management and Minimization	2,980	750	1,050
Nonproliferation & Arms Control	9,643	11,980	12,200
National Technical Nuclear Forensics (NTNF) R&D	0	1,634	0
Proliferation Detection R&D	40,840	31,064	32,819
Nuclear Detonation Detection	84,307	105,091	106,665
Nonproliferation Stewardship Program	450	450	450
National Technical Nuclear Forensics R&D	0	0	1,838
Defense Nuclear Nonproliferation R&D	125,597	136,605	141,772
Counterterrorism and Counterproliferation	54,681	61,082	63,980
Nuclear Counterterrorism & Incident Response	54,681	61,082	63,980
Defense Nuclear Nonproliferation Programs	246,111	267,802	271,442
Program Direction - National Nuclear Security Administration	16,718	16,646	17,369
Federal Salaries and Expenses Programs	16,718	16,646	17,369
Research - Advanced Scientific Computing Research	14,920	18,509	14,862
Advanced Scientific Computing Research	14,920	18,509	14,862
Research - Basic Energy Sciences	26,900	24,264	24,390
Basic Energy Sciences	26,900	24,264	24,390
Research - Biological & Environmental Research	12,350	15,928	16,535
Biological and Environmental Research	12,350	15,928	16,535
Research - Fusion Energy Sciences	0	2,100	3,100
Fusion Energy Sciences	0	2,100	3,100
Research - High Energy Physics	0	50	500
High Energy Physics	0	50	500
Workforce Development for Teachers & Scientists	235	0	0
Science Programs	54,405	60,851	59,387
Vehicle Technologies	13,000	10,556	9,000
Bioenergy Technologies	7,113	5,500	6,500
Hydrogen and Fuel Cells Technologies	9,135	10,986	10,298
Sustainable Transportation	29,248	27,042	25,798
Geothermal Technologies	2,981	650	0
Solar Energy Technologies	6,179	5,347	7,382
Water Power Technologies	7,779	8,796	8,269
Wind Energy Technologies	8,769	10,097	11,498
Renewable Energy	25,708	24,890	27,149
Building Technologies	1,100	618	168
Advanced Manufacturing	0	2,075	0
Energy Efficiency	1,100	2,693	168
Strategic Programs	300	250	0
Corporate Support	300	250	0
Energy Efficiency and Renewable Energy Programs	56,356	54,875	53,115
Transmission Reliability and Resilience	2,679	2,111	1,500
Resilient Distribution Systems	5,610	1,507	1,800
Energy Storage Research	26,165	29,610	27,600
Energy Storage	26,165	29,610	27,600
Transformer Resilience and Advanced Components	200	300	1,000
Grid Operations Technology	0	0	3,000
Transmission Permitting and Technical Assistance	529	0	1,000
Electricity Programs	35,184	33,528	35,900
Cybersecurity for Energy Delivery Systems	1,800	1,000	0
Infrastructure Security and Energy Restoration	11,150	0	0

DEPARTMENT OF ENERGY
Laboratory Table
Sandia National Laboratories FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
5.14	Enacted	Enacted	Request Detail
Risk Management Technology and Tools	0	0	2,500
Information Sharing, Partnerships and Exercises	0	0	4,000
Cybersecurity, Energy Security, and Emergency Response Programs	12,950	1,000	6,500
Carbon Storage	1,010	798	1,182
CCUS & Power Systems	1,010	798	1,182
Cross Cutting Research	1,378	1,206	898
Advanced Coal Energy Systems & CCUS	1,378	1,206	898
Unconventional Fossil Energy Technologies from Petroleum-Oil Technologies	1,800	1,800	0
Natural Gas Technologies Research	502	0	0
Fossil Energy and Carbon Management Programs	4,690	3,804	2,080
STEP R&D	4,764	4,311	0
Advanced SMR R&D	431	0	0
Light Water Reactor Sustainability	2,213	1,625	2,629
Advanced Reactor Technologies	300	0	0
Reactors Concepts RD&D	2,944	1,625	2,629
Accident Tolerant Fuels	124	136	150
Fuel Cycle Laboratory R&D	802	800	1,872
Used Nuclear Fuel Disposition R&D	19,567	19,600	19,600
Integrated Waste Management System	5,139	4,000	11,200
Fuel Cycle Research and Development FCRD	25,632	24,536	32,822
Crosscutting Technology Development	1,707	1,494	2,500
Joint Modeling and Simulation Program	250	200	200
Nuclear Science User Facilities	22	10	10
Nuclear Energy Enabling Technologies	1,979	1,704	2,710
Regulatory Development	100	300	300
Advanced Reactors Safeguards	1,661	1,025	1,025
Advanced Reactors Demonstration Program	1,761	1,325	1,325
Program Direction - Nuclear Energy	15	0	0
Nuclear Energy Programs	37,095	33,501	39,486
Interim Storage	0	2,975	0
Nuclear Waste Programs	0	2,975	0
Environment, Health, Safety & Security	1,210	1,210	1,210
Environment, Health, Safety, and Security	1,210	1,210	1,210
Other Defense Activites Programs	1,210	1,210	1,210
Office of Technology Transitions	175	175	192
Sandia National Laboratory (SNL)	2,652	4,860	4,576
NNSA Sites and Nevada Off-Sites	2,652	4,860	4,576
Defense Environmental Cleanup Programs	2,652	4,860	4,576
Total Sandia National Laboratories	2,542,348	2,838,408	2,910,783

Laboratory Table
Savannah River National Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Savannah River National Laboratory			
Research - Basic Energy Sciences	410	0	0
Basic Energy Sciences	410	0	0
Research - Biological & Environmental Research	115	150	0
Biological and Environmental Research	115	150	0
Research - Fusion Energy Sciences	400	75	150
Fusion Energy Sciences	400	75	150
Workforce Development for Teachers & Scientists	73	0	0
Science Programs	998	225	150
Vehicle Technologies	0	390	400
Hydrogen and Fuel Cells Technologies	1,628	1,065	2,791
Sustainable Transportation	1,628	1,455	3,191
Energy Efficiency and Renewable Energy Programs	1,628	1,455	3,191
Resilient Distribution Systems	142	0	0
Electricity Programs	142	0	0
HALEU for R&D and Demonstration Reactors	0	0	7,800
Fuel Cycle Research and Development FCRD	0	0	7,800
Nuclear Energy Programs	0	0	7,800
Interim Storage	0	234	0
Nuclear Waste Programs	0	234	0
Office of Technology Transitions	0	0	40
Total Savannah River National Laboratory	2,768	1,914	11,181

DEPARTMENT OF ENERGY
Laboratory Table
Savannah River Operations Office FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Savannah River Operations Office			
Infrastructure and Safety	0	0	1,750
Recapitalization	0	0	1,750
Operating	0	0	1,750
18-D-650, Tritium Finishing Facility, SRS	27,000	9,000	27,000
Programmatic	27,000	9,000	27,000
I&O - Construction	27,000	9,000	27,000
Infrastructure and Operations	27,000	9,000	28,750
Information Technology and Cyber Security	249	363	382
Weapons Activities Programs	27,249	9,363	29,132
Conversion (formerly HEU Reactor Conversion)	0	934	0
Nuclear Material Removal	350	350	150
Material Disposition	3,764	2,500	3,324
Material Management and Minimization	4,114	3,784	3,474
18-D-150, Surplus Plutonium Disposition Project, SRS	72	81	0
Nonproliferation Construction	72	81	0
Defense Nuclear Nonproliferation Programs	4,186	3,865	3,474
Program Direction - National Nuclear Security Administration	8,188	8,710	10,349
Federal Salaries and Expenses Programs	8,188	8,710	10,349
Infrastructure Security and Energy Restoration	5,000	0	0
Cybersecurity, Energy Security, and Emergency Response Programs	5,000	0	0
Used Nuclear Fuel Disposition R&D	310	300	300
Integrated Waste Management System	50	500	500
Fuel Cycle Research and Development FCRD	360	800	800
Nuclear Energy Programs	360	800	800
Strategic Partnership Projects	6,700	6,700	0
Departmental Administration Programs	6,700	6,700	0
SR Community and Regulatory Support	11,249	11,549	5,805
Savannah River Sites	11,249	11,549	5,805
Program Direction - Defense Environmental Cleanup	37,519	42,051	43,346
Safeguards and Security - Defense Environmental Cleanup	174,152	171,211	164,444
Defense Environmental Cleanup Programs	222,920	224,811	213,595
Total Savannah River Operations Office	274,603	254,249	257,350

Laboratory Table
Savannah River Site FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Savannah River Site			•
B61 Life Extension Program	3,000	7,000	17,200
W80-4 Life Extension Program	2,728	2,700	3,416
W80-4 Alteration-SLCM	0	0	50
W87-1 Modification Program	500	2,000	3,000
W93 Program	0	500	500
Stockpile Major Modernization	6,228	12,200	24,166
Stockpile Sustainment	46,988	43,832	46,503
Weapons Dismantlement and Disposition	650	808	500
Production Operations	28,193	24,736	24,789
Stockpile Management	82,059	81,576	95,958
Savannah River Plutonium Operations	410,458	198,875	126,080
21-D-511, Savannah River Plutonium Processing Facility, SRS	0	241,896	475,000
Savannah River Plutonium Modernization	410,458	440,771	601,080
Plutonium Modernization	410,458	440,771	601,080
Primary Capability Modernization	410,458	440,771	601,080
Tritium and Domestic Uranium Enrichment	58,984	90,104	130,320
Production Modernization	469,442	530,875	731,400
Assessment Science	1,800	0	1,000
Engineering and Integrated Assessments	3,500	2,500	2,810
Weapons Technology and Manufacturing Maturation	6,286	6,883	7,804
Stockpile Research, Technology, and Engineering	11,586	9,383	11,614
Operations of Facilities	98,000	92,380	94,000
Safety and Environmental Operations	11,254	10,973	13,139
Maintenance and Repair of Facilities	31,000	40,000	43,000
Infrastructure and Safety	17,277	16,634	25,623
Capabilities Based Investments	320	4,200	2,900
Recapitalization	17,597	20,834	28,523
Operating	157,851	164,187	178,662
Infrastructure and Operations	157,851	164,187	178,662
Defense Nuclear Security (DNS)	7,688	8,520	9,064
Defense Nuclear Security	7,688	8,520	9,064
Information Technology and Cyber Security	6,026	7,036	7,071
Weapons Activities Programs	734,652	801,577	1,033,769
International Nuclear Security	108	25	1,035,765
Nuclear Smuggling Detection and Deterrence	0	11	11
Global Material Security	108	36	36
Conversion (formerly HEU Reactor Conversion)	3,600	6,125	4,600
Nuclear Material Removal	9,540	15,223	14,200
Material Disposition	66,030	42,922	55,050
Laboratory and Partnership Support	1,075	1,295	00,000
Material Management and Minimization	80,245	65,565	73,850
Nonproliferation & Arms Control	5,931	7,797	8,211
	0,931		0,211
National Technical Nuclear Forensics (NTNF) R&D Proliferation Detection R&D	6,163	1,729 11,207	
		11,207	11,840 0
Nuclear Detonation Detection	646		
Nonproliferation Stewardship Program	0	575	575
National Technical Nuclear Forensics R&D	0	0	1,943
Defense Nuclear Nonproliferation R&D	6,809	11,782	14,358

Laboratory Table
Savannah River Site FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
18-D-150, Surplus Plutonium Disposition Project, SRS	74,000	143,364	150,254
Nonproliferation Construction	74,000	143,364	150,254
Counterterrorism and Counterproliferation	3,140	3,090	3,488
Nuclear Counterterrorism & Incident Response	3,140	3,090	3,488
Defense Nuclear Nonproliferation Programs	170,233	233,363	250,197
Environment, Health, Safety & Security	10	10	10
Environment, Health, Safety, and Security	10	10	10
Other Defense Activites Programs	10	10	10
Savannah River Risk Management Operations	506,366	500,000	452,724
18-D-402 Emergency Operations Center Replacement, SR	6,792	6,500	8,999
19-D-701 SR Security Systems Replacement	4,525	1,000	5,000
20-D-402 Advanced Manufacturing Collaborative Facility (AMC)	25,000	25,000	0
Construction - Savannah River Sites	36,317	32,500	13,999
Savannah River Legacy Pensions	0	0	130,882
Radioactive Liquid Tank Waste Stabilization	820,106	910,832	890,865
20-D-401 Saltstone Disposal Unit #10, 11, 12	500	562	19,500
18-D-402 Saltstone disposal unit #8/9	20,000	65,500	68,000
17-D-402 Saltstone Disposal Unit #7	40,034	10,716	0
05-D-405 Salt Waste Processing Facility, SRS	21,200	0	0
Construction - Radioactive Liquid Tank Waste	81,734	76,778	87,500
Savannah River Sites	1,444,523	1,520,110	1,575,970
Defense Environmental Cleanup Programs	1,444,523	1,520,110	1,575,970
Total Savannah River Site	2,349,418	2,555,060	2,859,946

Laboratory Table
Savannah River Site Office FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Savannah River Site Office			
Environment, Health, Safety & Security	500	500	500
Environment, Health, Safety, and Security	500	500	500
Other Defense Activites Programs	500	500	500
Total Savannah River Site Office	500	500	500

DEPARTMENT OF ENERGY
Laboratory Table
Separations Process Research Unit FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Separations Process Research Unit			
Separations Processing Research Unit	15,300	15,000	15,000
NNSA Sites and Nevada Off-Sites	15,300	15,000	15,000
Defense Environmental Cleanup Programs	15,300	15,000	15,000
Total Separations Process Research Unit	15,300	15,000	15,000

DEPARTMENT OF ENERGY
Laboratory Table
SLAC National Accelerator Laboratory FY 2022
(Dollars in Thousands)

SIAC National Accelerator Laboratory Emanded Respect Details ASSESSMEND Sciences 120 0 0 Invarial Confinement Flaith 120 0 0 Stockpile Research, Technology, and Engineering 120 110 110 Wissippare Activities Programs 120 100 150 Polleterson Delection RED 120 100 100 Nutration Technical Nutries Programs 110 0 100 Nutries Nutries Nutries Notice Programs 1161 100 100 National Technical Nutries Programs 1161 100 60 Defense Nutries Monorelleation Programs 1161 107 450 Research - Advanced Scientific Computing Research 1170 670 450 Research - Advanced Scientific Computing Research 1170 670 450 Research - Advanced Scientific Computing Research 1170 670 450 Research - State Energy Sciences 221,45 215,45 225,178 21-SC CL, Cymorodula Repair and Maintenance Sciency 500 30,00 <t< th=""><th></th><th>FY 2020</th><th>FY 2021</th><th>FY 2022</th></t<>		FY 2020	FY 2021	FY 2022
Assessmenter Science 1.00 0 0 1.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		Enacted	Enacted	Request Detail
Recental Confinement Fusion 10 180	SLAC National Accelerator Laboratory			
Stockpoine Research	Assessment Science	120	0	0
Wespons Activities Programs 120 180 180 National Technical Nuclear Forentics (NTNF) R&D 0 729 0 Positiestical Decedition 1.000 1.000 0 Nuclear Detocation Detaction 416 0 0 Defense Nuclear Nonproliferation R&D 1.615 1.007 1.884 Defense Nuclear Nonproliferation R&D 1.615 1.070 4.50 Defense Nuclear Nonproliferation R&D 1.615 1.007 4.50 Advanced Scientific Computing Research 1.170 670 4.50 Advanced Scientific Computing Research 1.170 670 4.50 Association Lance Content Light Source HEAPI Sciences 231,945 215,455 225,178 21 SC-10, Cryomodule Repair and Maintenance Facility, SLAC 0 5,000 52,000 5,000 1 SS-10, Linea Coherent Light Source HEAPI, Stence Programs 8,000 8,000 7,100 1 SS-10, Linea Coherent Light Source HEAPI, Stence Programs 2,000 8,000 7,100 1 SS-10 Linea Coherent Light Source HEAPI, Stence Programs 2,200 8,000	Inertial Confinement Fusion	0	180	180
National Technical Nuclear Forensics (NTNF) R&D 1,000 1,007 1,004 1,000 1,007 1,004 1,000 1,	Stockpile Research, Technology, and Engineering	120	180	180
Proliferation Detection R&D	Weapons Activities Programs	120	180	180
Nuclear Detonation Detection 415 0 0 National Technical Nuclear Forensics R&D 1,615 1,007 1,834 Defense Nuclear Norproliferation PRSD 1,615 1,736 1,834 Defense Nuclear Norproliferation Programs 1,615 1,736 1,845 Research - Advanced Scientific Computing Research 1,170 670 450 Advanced Scientific Computing Research 1,170 670 450 Research - Basic Energy Sciences 233,945 215,851 225,951 21-SC-10, Unina Coherent Light Source-II-High Energy (LCLS-II)-HEL, SLAC 50,000 33,000 28,000 13-SC-10, Linac Coherent Light Source-II, CLLS-II), SLAC 50 33,000 28,100 Construction - Basic Energy Sciences 50,000 33,000 89,100 Basic Energy Sciences 52,707 4,100 3,100 Belogical at Environmental Research 5,270 4,100 3,100 Belogical Energy Sciences 6,800 3,495 5,945 2-S-S-CR, Halder in Extrence Contilitions (MEC) Petawatt Upgrade, SLAC 15,000 15,000 <tr< td=""><td>National Technical Nuclear Forensics (NTNF) R&D</td><td>0</td><td>729</td><td>0</td></tr<>	National Technical Nuclear Forensics (NTNF) R&D	0	729	0
National Technical Nuclear Forensics R&D 0 820 Defense Nuclear Nonproliferation R&D 1,615 1,007 1,884 Research - Advanced Scientific Computing Research 1,170 670 450 Advanced Scientific Computing Research 1,170 670 450 Advanced Scientific Computing Research 1,170 670 450 Research - Seasic Energy Sciences 231,945 215,455 225,778 21-SC-10, Cryomodulis Repair and Maintenance Facilty, SLAC 0 1,000 1,000 1.8-SC-13, Linear Coherrent Light Source-II High Energy (LCLS-II)-BLAC 5,000 33,000 28,100 Construction - Basic Energy Sciences 281,945 301,455 304,278 Research - Biological & Environmental Research 5,270 4,100 3,100 Biological and Environmental Research 5,270 4,100 3,100 Biological and Environmental Research 5,270 4,100 3,100 Biological and Environmental Research 5,270 4,100 3,100 Biological Sciences 6,800 15,000 5,000	Proliferation Detection R&D	1,200	1,007	1,064
Defense Nuclear Nonproliferation R&D	Nuclear Detonation Detection	415	0	0
Delenses Nuclear Nonproliferation Programs 1,615 1,736 1,884 Research - Advanced Scientific Computing Research 1,170 670 450 Advanced Scientific Computing Research 1,170 670 450 Research - Basic Energy Sciences 231,945 215,465 225,178 21-SC-10, Cryomodule Repair and Maintenance Facility, SLAC 0 10,000 50,000 18-SC-13, Linac Coherent Light Source-II (LCLS-III), SLAC 0 30,000 28,100 Construction - Basic Energy Sciences 50,000 86,000 79,100 Basic Energy Sciences 281,945 301,455 304,278 Research - Biological & Environmental Research 5,270 4,100 3,100 Biological and Environmental Research 5,270 4,100 3,100 Research - Fusion Energy Sciences 15,000 5,000 5,000 Construction - Fusion Energy Sciences 15,000 15,000 5,000 Research - Fusion Energy Sciences 15,000 15,000 5,000 Construction - Fusion Energy Sciences 21,000 20,000 5,000	National Technical Nuclear Forensics R&D	0	0	820
Research - Advanced Scientific Computing Research 1,170 670 450 Advanced Scientific Computing Research 1,170 670 450 Research - Seaic Energy Sciences 231,945 215,455 225,178 21 - SC-10, Cryomodule Repair and Maintenance Facilty, SLAC 50,000 50,000 50,000 13 - SC-10, Linac Coherrent Light Sourcell (LCLS-II), SLAC 50,000 33,000 28,100 13 - SC-10, Linac Coherrent Light Sourcell (LCLS-II), SLAC 50,000 86,000 79,100 Basic Energy Sciences 281,945 301,455 304,278 Research Soligical and Environmental Research 5,270 4,100 3,100 Research Flusion Energy Sciences 6,800 5,455 5,945 2-0 - SC-11, Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC 15,000 15,000 5,000 Construction - Fusion Energy Sciences 15,000 2,045 10,945 Fusion Energy Sciences 21,800 2,445 10,945 Research - High Energy Physics 66,899 81,678 75,715 High Energy Physics 66,899 81,678	Defense Nuclear Nonproliferation R&D	1,615	1,007	1,884
Advanced Scientific Computing Research 1,170 670 450 Research - Basic Energy Sciences 231,945 215,551 225,178 21-SC-10, Cymorodule Regian and Maintenance Facilty, SLAC 0 1,000 1,000 18-SC-10, Linac Coherent Light Source-III-High Energy (LCLS-II-HE), SLAC 50,000 52,000 28,000 18-SC-10, Linac Coherent Light Source-III-Light Source-I	Defense Nuclear Nonproliferation Programs	1,615	1,736	1,884
Research - Basic Energy Sciences 231,945 215,65 225,178 21-SC-10, Cryomodulo Repair and Maintenance Facilty, SLAC 0 1,000 50,000 11-SC-11, Linac Coherent Light Source-II (LCLS-III), SLAC 0 33,000 28,000 Construction - Basic Energy Sciences 281,945 301,455 304,278 Basic Energy Sciences 281,945 301,455 304,278 Research - Biological & Environmental Research 5,270 4,100 3,100 Biological and Environmental Research 5,270 4,100 3,100 Research - Biological & Environmental Research 5,270 4,100 3,100 Research - Biological & Environmental Research 5,270 4,100 3,100 Research - Biological & Environmental Research 5,270 4,100 3,100 Research - Biological & Environmental Research 5,270 4,100 3,100 Research - Biological & Environmental Research 5,270 4,100 3,100 Research - Biological & Environmental Research 5,270 4,100 5,100 Construction - Fusion Environmental Research 5,270 <td>Research - Advanced Scientific Computing Research</td> <td>1,170</td> <td>670</td> <td>450</td>	Research - Advanced Scientific Computing Research	1,170	670	450
21-SC-10, Cryomodule Repair and Maintenance Facilty, SLAC 0 1,000 18-SC-13, Linac Coherent Light Source-II (LCLS-III-BE, SLAC 50,000 52,000 50,000 13-SC-10, Linac Coherent Light Source-II (LCLS-III), SLAC 0 33,000 28,100 Construction - Basic Energy Sciences 50,000 86,000 79,100 Basic Energy Sciences 28,1945 301,455 304,278 Research - Biological & Environmental Research 5,270 4,100 3,100 Biological and Environmental Research 5,270 4,100 3,100 Research - Flusion Energy Sciences 6,800 5,495 5,945 20-SC-61, Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC 15,000 15,000 5,000 Construction - Fusion Energy Sciences 21,800 20,495 10,945 Research - High Energy Physics 66,589 81,678 75,715 Up and Energy Sciences 1,336 1,66 1,341 Nuclear Physics 1,336 1,166 1,341 Note Energy Physics 1,336 1,166 1,341 Nuclear Phys	Advanced Scientific Computing Research	1,170	670	450
18-SC-13, Linac Coherent Light Source-III, CLCS-III), SLAC 50,000 52,000 28,000 13-SC-10, Linac Coherent Light Source-III (CLCS-III), SLAC 0 33,000 78,100 Construction - Basic Energy Sciences 50,000 86,000 78,100 Basic Energy Sciences 281,945 301,455 304,278 Research - Biological & Environmental Research 5,270 4,100 3,100 Research - Fusion Energy Sciences 6,800 5,495 5,945 20-SC-61, Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC 15,000 15,000 5,000 Fusion Energy Sciences 15,000 15,000 5,000 Fusion Energy Sciences 66,589 81,678 75,715 Research - High Energy Physics 66,589 81,678 75,715 High Energy Physics 13,336 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 0 Accelerator R&D and Production 0 0 1,320 Workforce Development for Teachers & Sci	Research - Basic Energy Sciences	231,945	215,455	225,178
13-SC-10, Linac Coherent Light Source-III (CLS-III), SLAC 0 33,000 28,100 Construction - Basic Energy Sciences 50,000 86,000 79,100 Basic Energy Sciences 281,945 301,455 304,278 Research - Biological & Environmental Research 5,270 4,100 3,100 Biological and Environmental Research 5,270 4,100 3,100 Research - Steion Energy Sciences 6,800 5,495 5,945 20-SC-51, Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC 15,000 15,000 5,000 Construction - Fusion Energy Sciences 21,800 20,495 10,945 Research - High Energy Physics 66,589 81,678 75,715 Operations and Maintenance - Nuclear Physics 1,336 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 0 1,320 Accelerator R&D and Production 0 0 1,320 Workdore Development for Teachers & Scientists 817 0 0	21-SC-10, Cryomodule Repair and Maintenance Facilty, SLAC	0	1,000	1,000
Construction - Basic Energy Sciences 50,000 86,000 79,100 Basic Energy Sciences 281,945 301,455 304,278 Research - Biological & Environmental Research 5,270 4,100 3,100 Biological and Environmental Research 5,270 4,100 3,100 Research - Fusion Energy Sciences 6,800 5,495 5,945 20-SC-61, Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC 15,000 15,000 5,000 Fusion Energy Sciences 66,589 81,678 75,715 High Energy Physics 66,589 81,678 75,715 High Energy Physics 13,33 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Nuclear Physics 1,336 1,160 1,320 World Core Development for Teachers & Scientists 817 0 0 <td>18-SC-13, Linac Coherent Light Source-II-High Energy (LCLS-II-HE), SLAC</td> <td>50,000</td> <td>52,000</td> <td>50,000</td>	18-SC-13, Linac Coherent Light Source-II-High Energy (LCLS-II-HE), SLAC	50,000	52,000	50,000
Basic Energy Sciences 281,945 301,455 304,278 Research - Biological & Environmental Research 5,270 4,100 3,100 Biological and Environmental Research 5,270 4,100 3,100 Research - Fusion Energy Sciences 6,000 5,495 5,945 20-SC-61, Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC 15,000 15,000 5,000 Construction - Fusion Energy Sciences 15,000 15,000 5,000 Fusion Energy Sciences 15,000 15,000 5,000 Fusion Energy Sciences 15,000 15,000 5,000 Fusion Energy Sciences 66,589 81,678 75,715 High Energy Physics 66,589 81,678 75,715 Operations and Maintenance - Nuclear Physics 1,336 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Workforce Devolepment for Teacher's Scientists 81 0 0 0 Workforce Devolepment for Teacher's SLAC (19-SC-75) 11,000 11,000 12,000 Science Laboratories Infra	13-SC-10, Linac Coherent Light Source-II (LCLS-II), SLAC	0	33,000	28,100
Research - Biological & Environmental Research 5,270 4,100 3,100 Biological and Environmental Research 5,270 4,100 3,100 Research - Fusion Energy Sciences 6,800 5,495 5,945 20-SC-61, Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC 15,000 15,000 5,000 Construction - Fusion Energy Sciences 15,000 20,955 10,945 Research - High Energy Sciences 21,800 20,495 10,945 Research - High Energy Physics 66,589 81,678 75,715 High Energy Physics 66,589 81,678 75,715 Operations and Maintenance - Nuclear Physics 1,336 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 1,320 Accelerator R&D and Production 0 0 1,320 Workforce Development for Teachers & Scientists 817 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 12,000 20-SC-75, Ch	Construction - Basic Energy Sciences	50,000	86,000	79,100
Biological and Environmental Research 5,270 4,100 3,100 Research - Fusion Energy Sciences 6,800 5,495 5,945 20-SC-61, Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC 15,000 15,000 5,000 Pusion Energy Sciences 15,000 20,495 10,945 Research - High Energy Physics 66,589 81,678 75,715 High Energy Physics 66,589 81,678 75,715 Operations and Maintenance - Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 1,320 Accelerator R&D and Production 0 0 1,320 Accelerator R&D and Production 0 0 1,320 Workforce Development for Teachers & Scientists 817 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 12,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 50 50 10,000 Construction - Science Laboratories Infrastructure 11,500 11,500 12,000 <td>Basic Energy Sciences</td> <td>281,945</td> <td>301,455</td> <td>304,278</td>	Basic Energy Sciences	281,945	301,455	304,278
Research - Fusion Energy Sciences 6,800 5,495 5,945 20-SC-61, Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC 15,000 15,000 5,000 Construction - Fusion Energy Sciences 15,000 20,495 10,945 Fusion Energy Sciences 21,800 20,495 10,945 Research - High Energy Physics 66,589 81,678 75,715 High Energy Physics 66,589 81,678 75,715 Operations and Maintenance - Nuclear Physics 1,336 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 0 1,320 Accelerator R&D and Production 0 0 0 1,320 Accelerator R&D and Production 0 0 0 0 1,320 Voriforce Development for Teachers & Scientists 817 0 0 0 1 20 2-Sc-79, Chrical Ulitities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 500 10,000 Construction - Science La	Research - Biological & Environmental Research	5,270	4,100	3,100
20-SC-61, Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC 15,000 15,000 5,000 Construction - Fusion Energy Sciences 15,000 15,000 5,000 Fusion Energy Sciences 21,800 20,495 10,945 Research - High Energy Physics 66,589 81,678 75,715 High Energy Physics 66,589 81,678 75,715 Operations and Maintenance - Nuclear Physics 1,336 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 1,320 Accelerator R&D and Production 0 0 1,320 Workforce Development for Teachers & Scientists 817 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 11,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 10,000 Construction - Science Laboratories Infrastructure 11,500 11,500 22,000 Science Programs 394,755 424,978 427,508	Biological and Environmental Research	5,270	4,100	3,100
Construction - Fusion Energy Sciences 15,000 5,000 Fusion Energy Sciences 21,800 20,495 10,945 Research - High Energy Physics 66,589 81,678 75,715 High Energy Physics 66,589 81,678 75,715 Operations and Maintenance - Nuclear Physics 1,336 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 0 1,320 Accelerator R&D and Production 0 0 0 1,320 Workforce Development for Teachers & Scientists 817 0 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 12,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 500 10,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Science Programs 394,755 424,978 427,508	Research - Fusion Energy Sciences	6,800	5,495	5,945
Fusion Energy Sciences 21,800 20,495 10,945 Research - High Energy Physics 66,589 81,678 75,715 High Energy Physics 66,589 81,678 75,715 Operations and Maintenance - Nuclear Physics 1,336 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 0 1,320 Accelerator R&D and Production 0 0 0 1,320 Workforce Development for Teachers & Scientists 817 0 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 12,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 50 50 10,000 Construction - Science Laboratories Infrastructure Revitalization, SLAC (20-SC-81) 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Science Programs 394,755 424,9	20-SC-61, Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC	15,000	15,000	5,000
Research - High Energy Physics 66,589 81,678 75,715 High Energy Physics 66,589 81,678 75,715 Operations and Maintenance - Nuclear Physics 1,336 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 0 Accelerator R&D and Production 0 0 0 Workforce Development for Teachers & Scientists 817 0 0 Workforce Development for Teachers & Scientists 817 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 12,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 10,000 Construction - Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Safeguards and Security - SC 4,328 3,914 3,559 Science Programs 394,755 424,978 427,508 Vehicle Technologies	Construction - Fusion Energy Sciences	15,000	15,000	5,000
High Energy Physics 66,589 81,678 75,715 Operations and Maintenance - Nuclear Physics 1,336 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 0 1,320 Accelerator R&D and Production 0 0 0 1,320 Workforce Development for Teachers & Scientists 817 0 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 11,000 10,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 10,000 Construction - Science Laboratories Infrastructure 11,500 11,500 22,000 Safeguards and Security - SC 4,328 3,914 8,359 Science Programs 394,755 424,978 427,508 Science Programs 5,200 4,050 6,000 Bioenergy Technologies 5,200 4,050 6,000 Bioenergy Technologies 61 0 0 <td< td=""><td>Fusion Energy Sciences</td><td>21,800</td><td>20,495</td><td>10,945</td></td<>	Fusion Energy Sciences	21,800	20,495	10,945
Operations and Maintenance - Nuclear Physics 1,336 1,166 1,341 Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 1,320 Accelerator R&D and Production 0 0 1,320 Workforce Development for Teachers & Scientists 817 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 12,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 10,000 Construction - Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Science Programs 394,755 424,978 427,508 Vehicle Technologies 5,200 4,050 6,000 Bioenergy Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0	Research - High Energy Physics	66,589	81,678	75,715
Nuclear Physics 1,336 1,166 1,341 Research - Accelerator R&D and Production 0 0 1,320 Accelerator R&D and Production 0 0 1,320 Workforce Development for Teachers & Scientists 817 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 110,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 10,000 Construction - Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Science Programs 394,755 424,978 427,508 Science Programs 394,755 424,978 427,508 Vehicle Technologies 5,200 4,050 6,000 Bioenergy Technologies 6 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 640 0 0 </td <td>High Energy Physics</td> <td>66,589</td> <td>81,678</td> <td>75,715</td>	High Energy Physics	66,589	81,678	75,715
Research - Accelerator R&D and Production 0 0 1,320 Accelerator R&D and Production 0 0 1,320 Workforce Development for Teachers & Scientists 817 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 10,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 10,000 Construction - Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Science Programs 394,755 424,978 427,508 Vehicle Technologies 5,200 4,050 6,000 Bionergy Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 567 640 0 Building Technologies 567 640 <t< td=""><td>Operations and Maintenance - Nuclear Physics</td><td>1,336</td><td>1,166</td><td>1,341</td></t<>	Operations and Maintenance - Nuclear Physics	1,336	1,166	1,341
Accelerator R&D and Production 0 0 1,320 Workforce Development for Teachers & Scientists 817 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 12,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 10,000 Construction - Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Safeguards and Security - SC 4,328 3,914 8,359 Science Programs 394,755 424,978 427,508 Vehicle Technologies 5,200 4,050 6,000 Bioenergy Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 567 640 0 Building Technologies 567 640 0<	Nuclear Physics	1,336	1,166	1,341
Workforce Development for Teachers & Scientists 817 0 0 20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 12,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 10,000 Construction - Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Safeguards and Security - SC 4,328 3,914 8,359 Science Programs 394,755 424,978 427,508 Vehicle Technologies 5,200 4,050 6,000 Bioenergy Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344	Research - Accelerator R&D and Production	0	0	1,320
20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75) 11,000 11,000 12,000 20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 10,000 Construction - Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Safeguards and Security - SC 4,328 3,914 8,359 Science Programs 394,755 424,978 427,508 Vehicle Technologies 5,200 4,050 6,000 Bioenergy Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200 <	Accelerator R&D and Production	0	0	1,320
20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81) 500 500 10,000 Construction - Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Safeguards and Security - SC 4,328 3,914 8,359 Science Programs 394,755 424,978 427,508 Vehicle Technologies 5,200 4,050 6,000 Bioenergy Technologies 0 125 200 Hydrogen and Fuel Cells Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	Workforce Development for Teachers & Scientists	817	0	0
Construction - Science Laboratories Infrastructure 11,500 11,500 22,000 Science Laboratories Infrastructure 11,500 11,500 22,000 Safeguards and Security - SC 4,328 3,914 8,359 Science Programs 394,755 424,978 427,508 Vehicle Technologies 5,200 4,050 6,000 Bioenergy Technologies 0 125 200 Hydrogen and Fuel Cells Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	20-SC-75, Large Scale Collaboration Center, SLAC (19-SC-75)	11,000	11,000	12,000
Science Laboratories Infrastructure 11,500 11,500 22,000 Safeguards and Security - SC 4,328 3,914 8,359 Science Programs 394,755 424,978 427,508 Vehicle Technologies 5,200 4,050 6,000 Bioenergy Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	20-SC-79, Critical Utilities Infrastructure Revitalization, SLAC (20-SC-81)	500	500	10,000
Safeguards and Security - SC 4,328 3,914 8,359 Science Programs 394,755 424,978 427,508 Vehicle Technologies 5,200 4,050 6,000 Bioenergy Technologies 0 125 200 Hydrogen and Fuel Cells Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	Construction - Science Laboratories Infrastructure	11,500	11,500	22,000
Science Programs 394,755 424,978 427,508 Vehicle Technologies 5,200 4,050 6,000 Bioenergy Technologies 0 125 200 Hydrogen and Fuel Cells Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	Science Laboratories Infrastructure	11,500	11,500	22,000
Vehicle Technologies 5,200 4,050 6,000 Bioenergy Technologies 0 125 200 Hydrogen and Fuel Cells Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	Safeguards and Security - SC	4,328	3,914	8,359
Bioenergy Technologies 0 125 200 Hydrogen and Fuel Cells Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	Science Programs	394,755	424,978	427,508
Hydrogen and Fuel Cells Technologies 61 0 144 Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	Vehicle Technologies	5,200	4,050	6,000
Sustainable Transportation 5,261 4,175 6,344 Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	Bioenergy Technologies	0	125	200
Solar Energy Technologies 1,998 0 0 Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	Hydrogen and Fuel Cells Technologies	61	0	144
Renewable Energy 1,998 0 0 Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	Sustainable Transportation	5,261	4,175	6,344
Building Technologies 567 640 0 Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	Solar Energy Technologies	1,998	0	0
Energy Efficiency 567 640 0 Energy Efficiency and Renewable Energy Programs 7,826 4,815 6,344 Transmission Reliability and Resilience 0 200 200	Renewable Energy	1,998	0	0
Energy Efficiency and Renewable Energy Programs7,8264,8156,344Transmission Reliability and Resilience0200200	Building Technologies	567	640	0
Transmission Reliability and Resilience 0 200 200	Energy Efficiency	567	640	0
•	Energy Efficiency and Renewable Energy Programs	7,826	4,815	6,344
Resilient Distribution Systems 250 25 0	Transmission Reliability and Resilience	0	200	200
	Resilient Distribution Systems	250	25	0

DEPARTMENT OF ENERGY
Laboratory Table
SLAC National Accelerator Laboratory FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Energy Storage Research	928	0	0
Energy Storage	928	0	0
Electricity Programs	1,178	225	200
Unconventional Fossil Energy Technologies from Petroleum-Oil Technologies	252	252	0
Natural Gas Technologies Research	934	0	0
Fossil Energy and Carbon Management Programs	1,186	252	0
Crosscutting Technology Development	36	48	0
Nuclear Energy Enabling Technologies	36	48	0
Nuclear Energy Programs	36	48	0
Total SLAC National Accelerator Laboratory	406,716	432,234	436,116

DEPARTMENT OF ENERGY
Laboratory Table
Southeastern Power Administration Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Southeastern Power Administration Office			
Purchase Power and Wheeling - SEPA	70,704	85,401	88,339
Program Direction - SEPA	6,597	11,246	7,284
Southeastern Power Administration Programs	77,301	96,647	95,623
Total Southeastern Power Administration Office	77,301	96,647	95,623

DEPARTMENT OF ENERGY
Laboratory Table
Southwestern Power Administration Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Southwestern Power Administration Office			
Resilient Distribution Systems	3,000	0	0
Electricity Programs	3,000	0	0
Operation And Maintenance - SWPA	13,639	13,292	0
Construction - SWPA	15,067	13,267	0
Purchase Power And Wheeling - SWPA	68,000	95,000	0
Program Direction - SWPA	35,157	35,635	36,833
Subtotal, SWPA	131,863	157,194	36,833
Southwestern Power Administration Programs	131,863	157,194	36,833
Total Southwestern Power Administration Office	134,863	157,194	36,833

DEPARTMENT OF ENERGY
Laboratory Table
Thomas Jefferson National Accelerator Facility FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Thomas Jefferson National Accelerator Facility			
Research - Advanced Scientific Computing Research	382	360	0
Advanced Scientific Computing Research	382	360	0
Research - Biological & Environmental Research	242	0	0
Biological and Environmental Research	242	0	0
Research - High Energy Physics	750	420	0
High Energy Physics	750	420	0
Operations and Maintenance - Nuclear Physics	133,267	129,353	157,984
Nuclear Physics	133,267	129,353	157,984
Research - Accelerator R&D and Production	0	0	350
Accelerator R&D and Production	0	0	350
Workforce Development for Teachers & Scientists	237	0	0
Facilities and Infrastructure (SLI)	0	0	3,900
22-SC-72, Infrastructure Improvements (TJII), TJNAF	0	0	1,000
20-SC-73, CEBAF Renovation and Expansion, TJNAF (19-SC-73)	2,000	2,000	10,000
Construction - Science Laboratories Infrastructure	2,000	2,000	11,000
Science Laboratories Infrastructure	2,000	2,000	14,900
Safeguards and Security - SC	3,037	3,037	4,819
Science Programs	139,915	135,170	178,053
Office of Technology Transitions	30	30	40
Total Thomas Jefferson National Accelerator Facility	139,945	135,200	178,093

DEPARTMENT OF ENERGY
Laboratory Table
Thomas Jefferson Site Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Thomas Jefferson Site Office			
Program Direction - SC	2,148	1,812	2,253
Science Programs	2,148	1,812	2,253
Total Thomas Jefferson Site Office	2,148	1,812	2,253

Laboratory Table
University of Rochester FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
University of Rochester			
Inertial Confinement Fusion	0	0	75,000
Stockpile Research, Technology, and Engineering	0	0	75,000
Weapons Activities Programs	0	0	75,000
Total University of Rochester	0	0	75,000

DEPARTMENT OF ENERGY Laboratory Table Washington Headquarters FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Washington Headquarters			
B61 Life Extension Program	8,019	10,196	13,349
W76-2 Modification Program	3,606	0	0
W88 Alteration Program	3,077	3,212	6,946
W80-4 Life Extension Program	9,090	12,504	16,365
W80-4 Alteration-SLCM	0	0	300
W87-1 Modification Program	1,133	6,763	20,731
W93 Program	0	663	2,160
Stockpile Major Modernization	24,925	33,338	59,851
Stockpile Sustainment	13,192	21,125	40,283
Weapons Dismantlement and Disposition	2,067	1,275	1,530
Production Operations	14,079	13,198	22,758
Stockpile Management	54,263	68,936	124,422
Los Alamos Plutonium Operations	0	9,007	9,906
21-D-512, Plutonium Pit Production Project, LANL	1,156	0	0
Los Alamos Plutonium Modernization	1,156	9,007	9,906
Savannah River Plutonium Operations	0	1,125	1,920
Savannah River Plutonium Modernization	0	1,125	1,920
Plutonium Modernization	17,754	11,267	13,432
High Explosives & Energetics	0	8,842	1,031
Primary Capability Modernization	17,754	20,109	14,463
Secondary Capability Modernization	31,259	65,510	54,374
Uranium Reserve - NA	0	75,000	0
		169,776	
Tritium and Domestic Uranium Enrichment	96,448		79,066
Non-Nuclear Capability Modernization	2,873	32,112	21,047
Production Modernization	148,334	287,507	168,950
Assessment Science	17,066	95,646	53,025
Engineering and Integrated Assessments	11,752	4,317	6,727
Inertial Confinement Fusion	7,851	15,920	14,558
Advanced Simulation and Computing	69,663	43,373	120,354
Weapons Technology and Manufacturing Maturation	4,053	3,724	5,800
Stockpile Research, Technology, and Engineering	110,385	162,980	200,464
Operations of Facilities	4,234	26,870	34,000
Safety and Environmental Operations	3,888	56,411	7,551
Maintenance and Repair of Facilities	51,669	100,517	99,000
Infrastructure and Safety	27,676	48,176	32,520
Capabilities Based Investments	15,898	14,597	26,466
Planning for Programmatic Construction (Pre-CD-1)	0	10,000	0
Recapitalization	43,574	72,773	58,986
Operating	103,365	256,571	199,537
22-D-513, Power Sources Capability, SNL	0	0	827
21-D-510, HE Synthesis, Formulation, and Production Facility, PX	0	3,000	0
18-D-650, Tritium Finishing Facility, SRS	0	18,000	0
17-D-640, U1a Complex Enhancements Project, NNSS	0	8,000	5,000
15-D-301, HE Science & Engineering Facility, PX	74,120	0	0
04-D-125, Chemistry and Metallurgy Research Replacement Project, LANL	0	2,000	0
Chemistry and Metallurgy Research Replacement (CMRR)	0	2,000	0
Programmatic	74,120	31,000	5,827
I&O - Construction	74,120	31,000	5,827

DEPARTMENT OF ENERGY Laboratory Table Washington Headquarters FY 2022 (Dollars in Thousands)

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	FY 2020	FY 2021	FY 2022
Infrastructure and Occasions	Enacted	Enacted	Request Detail
Infrastructure and Operations	177,485	287,571	205,364
Program Direction - STA - Federal Support	107,660	123,684	117,060
Secure Transportation Asset	107,660	123,684	117,060
Defense Nuclear Security (DNS)	88,107	69,878	63,749
Defense Nuclear Security	88,107	69,878	63,749
Information Technology and Cyber Security	163,426	216,768	279,044
Legacy Contractor Pensions (WA)	91,200	101,668	78,656
Weapons Activities Programs	940,860	1,318,992	1,237,709
International Nuclear Security	6,442	25,020	25,336
Domestic Radiological Security	28,981	23,332	19,927
International Radiological Security	9,044	2,456	2,319
Nuclear Smuggling Detection and Deterrence	1,828	2,797	2,797
Global Material Security	46,295	53,605	50,379
Conversion (formerly HEU Reactor Conversion)	7	15,016	6,500
Nuclear Material Removal	1,023	1,640	1,000
Material Disposition	8,669	21,644	15,792
Laboratory and Partnership Support	35,971	51,613	0
Material Management and Minimization	45,670	89,913	23,292
Nonproliferation & Arms Control	12,199	12,252	10,787
National Technical Nuclear Forensics (NTNF) R&D	0	1,288	0
Proliferation Detection R&D	11,220	32,047	33,857
Nuclear Detonation Detection	3,544	4,595	4,664
Nonproliferation Fuels Development	0	260	0
Nonproliferation Stewardship Program	0	13,480	13,480
National Technical Nuclear Forensics R&D	0	0	1,449
Defense Nuclear Nonproliferation R&D	14,764	50,382	53,450
99-D-143, Mixed Oxide Fuel Fabrication Facility, SRS	219,600	0	0
18-D-150, Surplus Plutonium Disposition Project, SRS	1,007	3,262	2,741
Nonproliferation Construction	220,607	3,262	2,741
Emergency Operations	11,819	11,269	12,321
Counterterrorism and Counterproliferation	60,019	33,940	34,736
Nuclear Counterterrorism & Incident Response	71,838	45,209	47,057
Legacy Contractor Pensions (DNN)	13,700	14,348	38,800
Defense Nuclear Nonproliferation Programs	425,073	270,259	226,506
Naval Reactors Development	1,908	1,955	1,980
Naval Reactors Operations and Infrastructure	9,663	9,953	13,500
Program Direction - Naval Reactors	30,260	31,020	33,347
Naval Reactors Programs	41,831	42,928	48,827
Program Direction - National Nuclear Security Administration	306,893	321,955	337,785
Federal Salaries and Expenses Programs	306,893	321,955	337,785
Research - Advanced Scientific Computing Research	108,321	88,623	114,657
Advanced Scientific Computing Research	108,321	88,623	114,657
Research - Basic Energy Sciences	125,115	439,674	156,830
Basic Energy Sciences	125,115	439,674	156,830
Research - Biological & Environmental Research	30,112	6,170	99,121
Biological and Environmental Research	30,112	6,170	99,121
Research - Fusion Energy Sciences	143,174	124,899	168,532
Fusion Energy Sciences	143,174	124,899	168,532
Research - High Energy Physics	94,790	68,224	100,907
High Energy Physics	94,790	68,224	100,907
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Laboratory Table
Washington Headquarters FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Operations and Maintenance - Nuclear Physics	79,483	67,784	28,313
20-SC-51, U.S. Stable Isotope Production and Research Center, (SIPRC)	0	0	12,000
Construction - Nuclear Physics	0	0	12,000
Nuclear Physics	79,483	67,784	40,313
Research - Isotope R&D and Production	0	0	78,000
Isotope R&D and Production	0	0	78,000
Research - Accelerator R&D and Production	0	0	7,774
Accelerator R&D and Production	0	0	7,774
Facilities and Infrastructure (SLI)	38,578	29,590	0
Science Laboratories Infrastructure	38,578	29,590	0
Safeguards and Security - SC	11,669	17,096	18,876
Program Direction - SC	97,902	105,832	113,763
Science Programs	729,144	947,892	898,773
Vehicle Technologies	59,500	49,209	53,500
Bioenergy Technologies	31,463	42,795	56,000
Hydrogen and Fuel Cells Technologies	10,578	11,846	12,804
Sustainable Transportation	101,541	103,850	122,304
Geothermal Technologies	20,839	5,111	10,800
Solar Energy Technologies	69,954	53,534	74,320
Water Power Technologies	37,876	44,534	77,956
Wind Energy Technologies	16,329	14,434	30,308
Renewable Energy	144,998	117,613	193,384
Building Technologies	54,945	137,399	205,195
Advanced Manufacturing	34,204	203,546	46,837
Weatherization Assistance Program	6,765	0	22,000
Training and Technical Assistance	0	550	1,900
Weatherization Readiness Fund	0	0	17,000
Weatherization	6,765	550	40,900
State Energy Program Grants	2,100	2,386	300,450
Local Government Clean Energy Workforce Program	0	0	22,000
Weatherization and Intergovernmental Programs	8,865	2,936	363,350
Federal Energy Management Program	6,221	4,802	5,225
Energy Efficiency	104,235	348,683	620,607
Program Direction - Energy Efficiency and Renewable Energy	129,556	129,556	196,297
Strategic Programs	4,300	4,800	29,300
Corporate Support	133,856	134,356	225,597
Energy Efficiency and Renewable Energy Programs	484,630	704,502	1,161,892
Transmission Reliability and Resilience	1,700	1,750	3,000
Resilient Distribution Systems	481	1,700	700
Energy Storage Research	2	500	500
Energy Storage	2	500	500
Transformer Resilience and Advanced Components	644	318	400
Grid Operations Technology	0	0	750
DCEI Energy Mission Assurance	0	500	0
Transmission Permitting and Technical Assistance	2,422	2,085	1,750
Program Direction - Electricity	14,751	14,578	16,440
Electricity Programs	19,999	21,431	23,540
Cybersecurity for Energy Delivery Systems	10,700	2,000	0
Infrastructure Security and Energy Restoration	11,500	8,175	0
Risk Management Technology and Tools	0	0	10,000

DEPARTMENT OF ENERGY Laboratory Table Washington Headquarters FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Response and Restoration	0	0	5,000
Information Sharing, Partnerships and Exercises	0	0	4,000
Program Direction - CESER	8,698	10,000	14,000
Cybersecurity, Energy Security, and Emergency Response Programs	30,898	20,175	33,000
Carbon Capture	97,138	71,163	123,690
Carbon Utilization	0	16,385	27,071
Carbon Storage	67,636	53,433	79,134
Mineral Sustainability	0	35,318	29,987
Carbon Dioxide Removal	0	38,100	60,008
Advanced Energy & Hydrogen Systems	87,927	67,411	60,084
CCUS & Power Systems	252,701	281,810	379,974
Cross Cutting Research	27,111	23,722	17,670
Advanced Coal Energy Systems & CCUS	27,111	23,722	17,670
Program Direction - Fossil Energy	31,353	31,353	34,520
Special Recruitment Programs	700	700	700
Import Export Authorization	2,367	2,367	2,880
Unconventional Fossil Energy Technologies from Petroleum-Oil Technologies	858	858	0
Natural Gas Technologies Research	24,505	30,250	91,000
Fossil Energy and Carbon Management Programs	339,595	371,060	526,744
Integrated University Program	22	9	9
STEP R&D	236	689	0
Advanced SMR R&D	4,067	2,157	1,707
Light Water Reactor Sustainability	16,381	1,820	2,000
Advanced Reactor Technologies	19,058	1,879	3,700
Versatile Advanced Test Reactor	447	0	0
Reactors Concepts RD&D	39,953	5,856	7,407
Mining, Conversion, and Transportation	1,100	1,100	2,000
Materials Recovery and Waste Form Development (MRWFD)	1,151	1,038	1,362
HALEU for R&D and Demonstration Reactors	0	0	1,140
Accident Tolerant Fuels	9,120	15,153	15,286
Triso Fuel and Graphite Qualification	1,562	7,938	7,450
Fuel Cycle Laboratory R&D	1,118	2,260	5,288
Used Nuclear Fuel Disposition R&D	3,043	3,000	3,000
Integrated Waste Management System	11,050	2,800	8,100
Fuel Cycle Research and Development FCRD	28,144	33,289	43,626
Crosscutting Technology Development	2,469	12,731	21,300
Joint Modeling and Simulation Program	4,938	3,015	4,600
Nuclear Science User Facilities	1,424	3,500	2,000
Transformational Challenge Reactor	1,244	5,889	0
Nuclear Energy Enabling Technologies	10,075	25,135	27,900
National Reactor Innovation Center	195	587	3,171
Demonstration 1	79,405	79,846	108,500
Demonstration 2	79,406	79,846	136,450
Risk Reduction for Future Demonstration	29,951	1,552	0
Regulatory Development	3,477	725	1,648
Advanced Reactors Safeguards	230	385	385
Advanced Reactors Demonstration Program	192,664	162,941	250,154
Other Project Costs - Versatile Test Reactor	0	65	210
Versatile Test Reactor Project	0	65	210
INL Facilities Operations and Maintenance	638	894	900

Laboratory Table
Washington Headquarters FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Oak Ridge Nuclear Infrastructure	43	74	0
Research Reactor Infrastructure	39	20	20
Infrastructure	720	988	920
Idaho Sitewide Safeguards & Security	347	50	100
International Nuclear Energy Cooperation	0	0	200
Program Direction - Nuclear Energy	42,145	39,015	46,570
Nuclear Energy Programs	314,306	268,037	377,096
Interim Storage	0	7,540	0
Oversight Activities Nuclear Waste Disposal	0	7,500	7,500
Nuclear Waste Programs	0	15,040	7,500
Office Of The Secretary	5,119	5,582	5,582
Congressional & Intergovernmental Affairs	4,395	5,000	6,000
Office of the Chief Financial Officer	52,000	53,590	56,591
Economic Impact & Diversity	8,669	8,727	17,860
Chief Information Officer	140,200	140,200	139,008
Office of International Affairs - IA	23,578	25,800	29,475
Other Departmental Administration	138,182	141,662	193,617
Strategic Partnership Projects	0	6,722	13,422
Departmental Administration Programs	372,143	387,283	461,555
Program Direction - Environment, Health, Safety and Security	71,000	72,000	73,588
Environment, Health, Safety & Security	120,320	117,801	116,213
Environment, Health, Safety, and Security	191,320	189,801	189,801
Program Direction - Office of Enterprise Assessments	54,711	54,635	56,049
Enterprise Assessments	23,918	24,285	27,185
Office of Enterprise Assessments	78,629	78,920	83,234
Specialized Security Activities	273,409	283,500	283,500
Legacy Management Activities - Defense	47,246	55,413	305,084
Legacy Management	47,246	55,413	305,084
Office of Hearings and Appeals	4,852	4,262	4,356
Other Defense Activites Programs	595,456	611,896	865,975
Office of Technology Transitions	5,312	8,871	14,573
Indian Energy Policy & Programs	17,000	17,000	116,477
Program Direction - Indian Energy Program	5,000	5,000	5,523
Indian Energy Policy and Programs (IEPP)	22,000	22,000	122,000
ARPA-E Projects	390,000	392,000	463,000
Program Direction - ARPA-E	35,000	35,000	37,000
Advanced Research Projects Agency - Energy Programs	425,000	427,000	500,000
ARPA-C Projects	0	0	180,000
Program Direction - ARPA-C	0	0	20,000
Advanced Research Projects Agency - Climate Programs	0	0	200,000
Energy Information Administration (EIA)	126,800	126,800	126,800
Loan Guarantee Program	31,765	31,850	31,700
Title XVII Loan Guarantee Programs	31,765	31,850	31,700
Administrative Expenses - Tribal Energy Loan Guarantee Program	1,950	1,950	1,950
Tribal Energy Loan Guarantee Programs	1,950	1,950	1,950
Advanced Technology Vehicle Manufacturing Loan Program	4,924	5,000	5,000
Advanced Technology Vehicles Manufacturing Loan Programs	4,924	5,000	5,000
Program Direction - Defense Environmental Cleanup	90,583	85,595	84,542
Program Support - Defense Environmental Cleanup	12,979	12,979	62,979
Technology Development and Deployment	25,000	30,000	25,000
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DEPARTMENT OF ENERGY Laboratory Table Washington Headquarters FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Defense Environmental Cleanup Programs	128,562	128,574	172,521
Management and Storage of Elemental Mercury	1,200	2,100	2,100
Non-Defense Environmental Cleanup Programs	1,200	2,100	2,100
Uranium Enrichment D&D Fund-U Th Reimbursements	5,250	5,000	33,500
Uranium Enrichment D&D Programs	5,250	5,000	33,500
Program Direction - OCED	0	0	13,500
Office of Clean Energy Demonstration (OCED) Programs	0	0	13,500
Program Direction - Office of Inspector General	54,215	57,739	78,000
Inspector General Programs	54,215	57,739	78,000
Just and Reasonable Rates, Terms, and Conditions	176,468	182,261	213,353
Safe, Reliable, Secure, & Efficient Infrastructure	132,286	142,757	160,169
Mission Support through Organizational Excellence	73,246	79,332	90,378
Federal Energy Regulatory Commission Programs	382,000	404,350	463,900
Total Washington Headquarters	5,789,806	6,522,684	7,972,446

Laboratory Table
Waste Isolation Pilot Plant FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Waste Isolation Pilot Plant			
Material Disposition	2,240	4,240	6,880
Material Management and Minimization	2,240	4,240	6,880
Nonproliferation & Arms Control	350	391	400
Defense Nuclear Nonproliferation Programs	2,590	4,631	7,280
Waste Isolation Pilot Plant (WIPP)	294,353	313,260	350,424
21-D-401 Hoisting Capability Project	0	10,000	0
15-D-411 Safety Significant Confinement Ventilation System, WIPP	58,054	35,000	55,000
15-D-412 Exhaust Shaft, WIPP	44,500	55,000	25,000
Construction - Waste Isolation Pilot Plant	102,554	100,000	80,000
Total Waste Isolation Pilot Plant	396,907	413,260	430,424
Defense Environmental Cleanup Programs	396,907	413,260	430,424
Total Waste Isolation Pilot Plant	399,497	417,891	437,704

DEPARTMENT OF ENERGY Laboratory Table Weldon Spring Site Office FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Weldon Spring Site Office			
Legacy Management Activities - Defense	3,193	4,092	5,131
Legacy Management	3,193	4,092	5,131
Other Defense Activites Programs	3,193	4,092	5,131
Total Weldon Spring Site Office	3,193	4,092	5,131

Laboratory Table
West Valley Demonstration Project FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
West Valley Demonstration Project			
Safeguards and Security - Defense Environmental Cleanup	4,196	4,298	4,298
Defense Environmental Cleanup Programs	4,196	4,298	4,298
West Valley Demonstration Project - NDEC	75,215	88,113	88,120
Community and Regulatory Support	200	0	0
Non-Defense Environmental Cleanup Programs	75,415	88,113	88,120
Total West Valley Demonstration Project	79,611	92,411	92,418

DEPARTMENT OF ENERGY
Laboratory Table
Western Area Power Administration Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Western Area Power Administration Office			
Transmission Reliability and Resilience	30	0	0
Electricity Programs	30	0	0
Infrastructure Security and Energy Restoration	1,000	0	0
Cybersecurity, Energy Security, and Emergency Response Programs	1,000	0	0
System Operation And Maintenance - CROM	72,176	77,874	81,983
Construction And Rehabilitation - CROM	45,887	26,251	35,185
Purchase Power And Wheeling - CROM	515,769	485,890	589,677
Program Direction - CROM	250,091	253,575	267,246
Construction, Rehabilitation, Operation, and Maintenance (CROM) - WP	883,923	843,590	974,091
Western Area Power Administration Programs	883,923	843,590	974,091
Falcon And Amistad Operation And Maintenance	5,647	7,302	7,545
Falcon & Amistad Operating & Maintenance Programs	5,647	7,302	7,545
Program Direction - Colorado River Basins Fund	67,112	70,316	74,581
Equipment, Contracts and Related Expenses - Colorado River Basins Fund	153,132	174,731	162,709
Colorado River Basins Fund	220,244	245,047	237,290
Colorado River Basins Power Marketing Fund (CRBPMF) Programs	220,244	245,047	237,290
Total Western Area Power Administration Office	1,110,844	1,095,939	1,218,926

DEPARTMENT OF ENERGY
Laboratory Table
Y-12 National Security Complex FY 2022
(Dollars in Thousands)

Enacted Enacted Request Detail		FY 2020	FY 2021	FY 2022
B81 Like Entension Program 55.007 94.500 101.000 W88 Alkeniton Program 52.478 3.008 4.214 W89 Alker Entension Program 52.478 3.008 4.214 W89 Alker Entension Program 4.000 0.00 10.00 W87 H Modification Program 4.000 1.000 1.500 W87 H Modification Program 4.000 1.000 1.500 W87 H Modification Program 4.000 3.18,268 3.870 Stockpile Moder Moder mization 1.000 1.34,25 4.000 Weepons Dimmantement and Dispetition 1.000 10.479 10.670 Production Operations 1.04,709 10.756 10.520 Stockpile Management 28.00 3.00 3.01 11.70 Tritium and Domestic Uranum Enrichment 25.00 1.667 11.70 Production Operation 27.00 3.46 2.24 Tritium and Domestic Uranum Enrichment 25.00 1.667 11.70 Production Operation 27.00 3.46 2.24 <			Enacted	
MY80 Al Interfactor Program 58,08 48,00 2,844 W80 Al Attraction-SCM 0	Y-12 National Security Complex			
W880-4 Life Extension Program 52.478 3,308 43,143 W891-4 Alteration-SLCM 0 0 0 0 W897-1 Modification Program 4,000 4,000 1,000 W894 Program 120,363 138,266 24,865 Stockpile Mayin Modernization 120,363 38,705 43,666 Weapons Demantferent and Disposition 104,709 106,754 436,666 Weapons Demantferent and Disposition 104,709 300,180 414,611 Stockpile Management 280,000 382,498 300,088 Stockpile Management 280,000 382,498 300,088 Trition and Domester Unnium Enrichment 25,000 1,667 11,700 Production Modernization 37,488 7,539 7,717 Advanced Simulation and Computing 50 1,667 11,700 Vaspons Technicology and Managements 3,486 7,539 7,717 Advanced Simulation and Computing 10,544 10,676 Stockpile Research, Technology and Managements 13,581 16,28	B61 Life Extension Program	55,307	94,500	101,000
W89-4 Alteration-SLCM 0 0 0 W87-1 Modification Program 4,000 40,000 1,000 W39-Program 0 1,000 1,500 Sluckapile Major Modernization 120,333 133,296 248,587 Slockapile Statistimment 45,828 3,875 4,846,80 Production Operations 10,100 13,425 16,000 Production Operations 280,003 30,416 161,228 Slockapile Management 280,003 304,481 308,948 Slockapile Management 280,003 304,482 380,948 Slockapile Management 250,000 364,162 402,648 Secondary Capability Modernization 281,000 364,162 402,648 Secondary Capability Modernization 281,000 364,162 402,648 Engineering and Integrated Assessments 29,000 364,662 11,000 Production Modernization 31,000 10,000 10,000 Was possibly Modernization 31,000 10,000 10,000 Was possibly Mode	W88 Alteration Program	8,608	490	2,844
W87-I Modification Program 4,000 40,000 10,000 10,000 10,000 15,000 248,675 248,687 248,687 248,687 Stockplie Multiprofred (ministration) 12,033 33,705 424,686 Stockplie Sustainment 45,628 38,705 42,646 46,646 <td>W80-4 Life Extension Program</td> <td>52,478</td> <td>3,306</td> <td>43,143</td>	W80-4 Life Extension Program	52,478	3,306	43,143
W8S Program 0 1,000 1,000 Stockpile Major Modernization 120,333 138,266 248,687 Stockpile Statismment 45,622 3,075 4,54,687 Weapons Dismantlement and Disposition 10,000 13,425 16,000 Production Operations 10,000 30,345 16,000 Stockpile Management 280,930 300,180 414,461 Scoopal William State Internation 240,000 362,455 350,400 Stockpile Management 250,000 362,455 350,400 Scoopal State Internated Assessments 274,000 364,562 440,648 Engineering and Integrated Assessments 3,481 7,533 7,115 Advanced Statulation and Computing 500 0 500 Wespons Technology and Manufacturing Maturation 6,559 16,044 10,676 Wespons Technology and Manufacturing Maturation 8,350 10,1190 101,000 Safety and Environmental Operations 13,151 18,223 18,881 Operations of Facilities 93,207 101,190	W80-4 Alteration-SLCM	0	0	100
Slockpile Mojor Modernization 120,338 139,298 248,68 Slockpile Sustainment 45,628 33,706 43,646 Weapons Dismantlement and Disposition 10,000 108,725 100,0228 Stockpile Mangament 280,030 300,180 414,461 Stockpile Mangament 25,000 1,667 117,000 Secondary Capability Modernization 25,000 1,667 117,000 Production Modernization 25,000 1,667 117,000 Production Modernization 25,000 1,667 117,000 Production Modernization 5,000 0 500 Production Modernization 5,500 0 500 Assamption and Integrated Assessments 3,486 23,743 11,868 Commenting of Integrated Assessments 3,500 0 500 Stockpile Research, Technology and Manufacturing Maturation 5,500 0 500 Stockpile Research, Technology and Manufacturing Maturation 5,500 11,910 23,743 18,881 Ober Stockpill American and England Company	W87-1 Modification Program	4,000	40,000	100,000
Stockpile Sustainment 45,828 38,705 43,646 Weapons Diamantherment and Disposition 10,000 13,425 16,000 Production Operations 114,719 100,754 106,228 Stockpile Management 280,30 300,100 414,461 Sacondary Capabilly Modernization 249,006 36,452 402,648 Production Modernization 274,006 384,162 402,648 Engineering and Integrated Assessments 3,486 7,53 7,15 Advanced Simulation and Computing 5,588 16,204 10,676 Weapons Technology and Manufacturing Maturation 6,588 16,204 10,676 Operations of Facilities 33,207 101,190 103,000 Balley and Environmental Operations 13,881 16,233 25,396 Operations of Facilities 33,207 101,190 117,000 Infrastructure and Safety 22,948 76,805 54,469 Operations 4,869 10,942 10,900 Infrastructure and Safety 22,941 27,710 24,770<	W93 Program	0	1,000	1,500
Weapons Dismantement and Disposition 10,000 13,425 16,000 Production Operations 104,709 106,724 106,224 Scockpiel Management 280,303 300,180 414,461 Scockpiel Management 249,006 362,495 300,948 Titisum and Demesic Unintem Enrichment 250,000 1,667 11,700 Production Modernization 274,000 364,162 402,648 Engineering and Integrated Assessments 3,466 7,539 7,715 Advanced Simulation and Computing 600 0 00 Weapons Technology and Manufacturing Maturation 6,558 16,204 10,676 Stockpile Research, Technology, and Engineering 10,544 23,743 18,891 Operations of Facilities 33,207 101,190 105,000 Stockpile Research, Technology, and Engineering 13,815 118,023 28,366 Militriateructure and Safety 72,949 76,000 117,000 International Safety and Engineering 13,424 32,459 Poperations of Facilities 13,424	Stockpile Major Modernization	120,393	139,296	248,587
Production Operations 104,709 100,801 414,802 Stoccipite Management 280,930 300,10 4144,802 Secondanty Capabilis Medienziation 280,900 362,405 300,80 Tittum and Domestic Uranium Enrichment 25,000 16,657 11,700 Production Modernization 37,406 7,539 7,715 Advanced Simulation and Computing 500 0 500 Weapons Technology, and Manufacturing Maturation 6,558 16,00 10,00 Stotckpile Research, Technology, and Engineering 10,544 23,73 18,89 Operations of Facilities 38,207 101,199 103,000 Stotely and Environmental Operations 13,851 10,20 25,906 Maintenance and Repair of Facilities 89,700 110,109 117,000 Infrastructure and Saltery 72,949 76,805 54,480 Capabilities Based Investments 11,910 27,71 40,000 Recapitalization 34,444 324,509 60,000 Operating 77,000 843,405	Stockpile Sustainment	45,828	38,705	43,646
Stockpile Management 280,300 300,180 414,461 Secondary Capability Modernization 240,006 382,495 309,048 Tritium and Domestic Unatum Enrichment 250,000 1.667 11,700 Production Modernization 274,000 364,162 402,648 Engineering and Integrated Assessments 3,486 7,539 7,715 Advanced Simulation and Computing 500 0 500 Weapons Technology, and Engineering 10,544 23,733 18,891 Operations of Eachities 93,207 101,190 113,000 Stockpile Research, Technology, and Engineering 13,851 18,283 25,396 Maintenance and Repair of Facilities 98,700 119,000 117,000 Safety and Environmental Operations 13,851 18,283 25,396 Maintenance and Repair of Facilities 98,700 119,000 117,000 Infrastructure and Stefey 22,949 66,806 44,435 Capabilities Based Investments 11,917 27,170 24,770 Recapitalization 28,859 </td <td>Weapons Dismantlement and Disposition</td> <td>10,000</td> <td>13,425</td> <td>16,000</td>	Weapons Dismantlement and Disposition	10,000	13,425	16,000
Secondary Capability Modernization 249,008 362,495 390,948 Tritum and Domestic Urantum Enrichment 25,000 1,667 11,700 Production Modernization 274,006 384,162 402,648 Engineering and Integrated Assessments 3,488 7,539 7,715 Advanced Simulation and Computing 500 0 500 Weapons Technology and Manufacturing Maturation 6,558 16,204 10,676 Stockpile Research, Technology, and Engineering 10,544 23,743 18,891 Operations of Facilities 39,207 101,190 130,000 Safety and Environmental Operations 31,815 18,283 25,396 Marintaneace and Repair of Facilities 98,700 119,000 117,000 Infestivcture and Safety 72,949 76,805 54,433 Capabilities Based Investments 11,910 27,170 24,700 Poespatilization 48,859 103,375 79,163 Operating 290,611 32,000 109,405 167,902 19-6-80, Lithium Processing Facility, Y	Production Operations	104,709	108,754	106,228
Tritium and Domestic Uranium Enrichment 25,000 1,667 11,700 Production Modernization 274,006 36,462 402,648 Engineering and Integrated Assessments 3,486 7,575 Advanced Simulation and Computing 500 0 0 Weapons Technology and Manufacturing Maturation 5,558 16,204 10,676 Stockpile Research, Technology, and Engineering 10,544 23,743 18,881 Operations of Facilities 93,207 101,190 130,000 Safety and Environmental Operations 13,851 18,283 25,396 Maintenance and Repair of Facilities 98,700 119,000 117,000 Infrastructure and Safety 72,949 78,805 54,463 Operating 290,617 34,244 32,450 Departments 290,617 34,244 32,450 Operating 290,617 34,244 32,459 18 D-890, Lithium Processing Facility, Y-12 32,000 19,400 52,400 18 D-890, Lithium Processing Facility, Y-12 77,700 48,436	Stockpile Management	280,930	300,180	414,461
Production Modernization 274,006 364,162 402,648 Engineering and Integrated Assessments 3,486 7,539 7,715 Advanced Simulation and Computing 500 0 500 Weapons Technology and Manufacturing Maturation 6,558 16,204 10,676 Stockpile Research. Technology, and Engineering 10,644 23,743 18,881 Operations of Facilities 93,207 101,00 103,000 Safety and Environmental Operations 13,851 18,283 25,386 Maintenance and Repair of Facilities 98,700 119,000 117,000 Intrastructure and Safety 72,949 76,805 54,460 Capabilities Based Investments 11,910 27,170 24,700 Recapitalization 84,859 103,975 79,163 Operating 29,061 19,405 167,902 18-0-690, Libitum Processing Facility, Y-12 32,000 109,405 167,902 18-0-690, Libitum Processing Facility, Y-12 745,000 73,400 524,000 Informatination and Operations 1,	Secondary Capability Modernization	249,006	362,495	390,948
Engineering and Integrated Assessments 3,486 7,539 7,716 Advanced Simulation and Computing 500 0 500 Weapons Technology and Manufacturing Maturation 6,558 16,204 18,606 Stockpile Research, Technology, and Engineering 10,544 23,743 18,881 Operations of Facilities 93,207 101,190 103,000 Sately and Environmental Operations 13,851 18,283 25,996 Maintenance and Repair of Facilities 98,700 119,000 117,000 Infrastructure and Safety 72,949 76,805 54,460 Capabilities Based Investments 11,910 27,170 24,700 Recapitalization 84,859 105,245 79,163 Operating 290,617 342,448 324,559 18-D-690, Lithium Processing Facility, Y-12 32,000 109,405 167,902 0-E0-141, Uranium Processing Facility, Y-12 77,000 843,405 691,902 18-D-690, Lithium Processing Facility, Y-12 32,000 109,405 611,902 18-O-600-141, Uranium Process	Tritium and Domestic Uranium Enrichment	25,000	1,667	11,700
Advanced Simulation and Computing 500 6.558 16.204 10.676 Weapons Technology and Manufacturing Maturation 6.558 16,204 10.676 Stockpille Research, Technology, and Engineering 10,544 23,743 18,881 Operations of Facilities 33,207 101,190 103,000 Safety and Environmental Operations 31,851 18,283 25,396 Maintenance and Repair of Facilities 98,700 119,000 117,000 Infrastructure and Setely 72,949 76,805 54,463 Capabilities Based Investments 11,910 27,170 24,700 Recapitalization 84,859 103,975 79,163 Operating 290,617 342,448 324,559 18-0-690, Lithium Processing Facility, Y-12 75,000 734,000 524,000 Operating 777,000 843,405 691,902 Infrastructure and Operations 1,067,617 1,185,853 1,016,481 Defense Nuclear Security (DNS) 167,465 173,820 180,000 1,72-Dri O, West End Protected Area Red	Production Modernization	274,006	364,162	402,648
Weapons Technology and Manufacturing Maturation 6,558 16,204 10,678 Stockpile Research, Technology, and Engineering 10,544 23,733 18,891 Operations of Facilities 33,207 101,190 103,000 Safety and Environmental Operations 13,881 18,283 25,396 Maintenance and Repair of Facilities 98,700 119,000 117,000 Infrastructure and Safety 72,949 76,805 54,463 Capabilities Based Investments 11,910 27,170 24,700 Recapitalization 48,859 103,975 79,163 Operating 290,617 342,448 324,559 18-0-690, Lithium Processing Facility, Y-12 32,000 109,405 167,000 Programmatic 777,000 434,000 524,000 Programmatic 777,000 434,405 691,902 Infrastructure and Operations 1,667,617 1,185,863 1,016,461 Information Enchrology and Expertity 2,500 2,000 23,000 Information Enchrology and Expertity 2,500 <	Engineering and Integrated Assessments	3,486	7,539	7,715
Stockpile Research, Technology, and Engineering 10,544 23,743 18,891 Operations of Facilities 93,207 101,190 103,000 Safety and Environmental Operations 13,85 18,283 25,396 Maintenance and Repair of Facilities 98,700 119,000 117,000 Infrastructure and Safety 72,949 76,805 54,463 Capabilities Based Investments 11,910 27,770 24,700 Recapitalization 8,859 103,975 79,163 Operating 290,617 342,448 324,559 18-D-690, Lithium Processing Facility, Y-12 32,000 109,406 167,902 06-D-141, Uranium Processing Facility, Y-12 775,000 734,000 524,000 18-D-690, Lithium Processing Facility, Y-12 775,000 843,405 691,902 18-O-Construction 777,000 843,405 691,902 18-O-500, Lithium Processing Facility, Y-12 25,000 843,405 691,902 18-O-500, Lithium Processing Facility, Y-12 25,000 843,405 691,902 18-O-500, Lithium Proc	Advanced Simulation and Computing	500	0	500
Operations of Facilities 93,207 101,190 103,000 Safety and Environmental Operations 13,851 18,283 25,396 Maintenance and Repair of Facilities 98,700 119,000 117,000 Infrastructure and Safety 72,949 76,805 54,463 Capabilities Based Investments 11,1910 27,170 24,700 Reacpitalization 84,859 103,375 79,163 Operating 290,617 342,448 324,555 180-560, Lithium Processing Facility, Y-12 22,000 109,405 167,902 180-Construction 777,000 843,405 691,902 180-Construction 777,000 843,405 691,902 180-Construction 777,000 843,405 691,902 180-Construction 777,000 843,405 691,902 180-Construction 1167,465 1173,820 181,085 170-710, West End Protected Area Reduction Project, V-12 25,000 26,000 23,000 Defense Nuclear Security 7,204 2,90 2,00 2,00 <td>Weapons Technology and Manufacturing Maturation</td> <td>6,558</td> <td>16,204</td> <td>10,676</td>	Weapons Technology and Manufacturing Maturation	6,558	16,204	10,676
Safety and Environmental Operations 13,851 18,283 25,396 Maintenance and Repair of Facilities 98,700 119,000 117,000 Infrastructure and Safety 72,949 76,805 54,663 Capabilities Based Investments 11,910 27,170 24,700 Recapitalization 84,859 109,975 79,636 Operating 290,617 342,448 324,559 18-D-690, Lithium Processing Facility, Y-12 32,000 109,405 167,902 06-D-141, Uranium Processing Facility, Y-12 75,000 343,405 691,902 18O-Construction 777,000 483,405 691,902 18O-Construction 777,000 483,405 691,902 18D-fense Nuclear Security (DNS) 167,465 173,820 181,066 Defense Nuclear Security (DNS) 25,000 26,000 23,000 Defense Nuclear Security 25,000 26,000 23,000 Defense Nuclear Security 72,00 26,000 23,000 Defense Nuclear Security 182,65 199,820 20,402 <td>Stockpile Research, Technology, and Engineering</td> <td>10,544</td> <td>23,743</td> <td>18,891</td>	Stockpile Research, Technology, and Engineering	10,544	23,743	18,891
Maintenance and Repair of Facilities 98,700 119,000 117,000 Infrastructure and Safety 72,949 76,805 54,463 Capabilities Based Investments 11,910 27,770 24,700 Recapitalization 818,59 103,975 79,613 Operating 290,617 342,448 324,558 18-D-690, Lithium Processing Facility, Y-12 32,000 109,405 167,902 06-D-141, Uranium Processing Facility, Y-12 32,000 73,4000 524,000 Programmatic 777,000 843,405 691,902 IRO - Construction 777,000 843,405 691,902 Infrastructure and Operations 1,067,617 1,185,853 1,016,481 Defense Nuclear Security (DNS) 167,465 173,820 181,085 17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Defense Nuclear Security 72,00 26,000 23,000 Defense Nuclear Security 7,00 10,25 7,696 Weapons Activities Programs 18,32,765 2,084,	Operations of Facilities	93,207	101,190	103,000
Infrastructure and Safety 72,949 76,805 54,462 Capabilities Based Investments 11,910 27,170 24,700 Recapitalization 84,859 103,975 79,163 Operating 290,617 342,448 324,559 18-D-690, Lithium Processing Facility, Y-12 320,000 109,405 667,902 06-D-141, Uranium Processing Facility, Y-12 745,000 843,405 691,902 1RO-Construction 777,000 843,405 691,902 1RO-Construction 777,000 843,405 691,902 Infrastructure and Operations 1,067,617 1,185,853 1,016,461 Defense Nuclear Security (DNS) 167,465 173,820 861,902 17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Defense Nuclear Security 192,465 199,820 204,085 Information Technology and Cyber Security 2,90 2,00 2,00 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 3,0	Safety and Environmental Operations	13,851	18,283	25,396
Capabilities Based Investments 11,910 27,170 24,700 Recapitalization 84,859 103,975 79,163 Operating 290,617 342,448 324,559 18-D-690, Lithium Processing Facility, Y-12 32,000 109,405 167,002 06-D-141, Uranium Processing Facility, Y-12 745,000 734,000 524,000 Programmatic 777,000 843,405 691,902 I&O - Construction 777,000 843,405 691,902 Infrastructure and Operations 1,067,617 1,185,853 1,016,461 Defense Nuclear Security (DNS) 167,465 173,820 811,085 17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Construction - Defense Nuclear Security 192,465 199,820 204,085 Information Technology and Cyber Security 1,252 199,820 204,085 Information Nuclear Security 2,970 2,736 2,771 Demestic Radiological Security 1,492 5,29 4,752 Nuclear Smuggling Detection and Deterrence	Maintenance and Repair of Facilities	98,700	119,000	117,000
Recapitalization 84,859 103,975 79,165 Operating 290,617 342,448 324,559 18-D-690, Lithium Processing Facility, Y-12 32,000 109,405 167,902 06-D-141, Uranium Processing Facility, Y-12 745,000 734,000 524,000 Programmatic 777,000 843,405 691,902 IRO- Construction 777,000 843,405 691,902 Infrastructure and Operations 1,067,617 1,185,853 1,016,461 Defense Nuclear Security (DNS) 167,465 173,820 181,085 17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Construction - Defense Nuclear Security 25,000 26,000 23,000 Defense Nuclear Security 7,203 10,259 7,696 Information Technology and Cyber Security 7,203 10,259 2,776 Demestic Radiological Security 2,970 2,736 2,771 Demessic Radiological Security 14,492 5,29 4,524 International Radiological Security 17	Infrastructure and Safety	72,949	76,805	54,463
Operating 290,617 342,448 324,596 18-D-690, Lithium Processing Facility, Y-12 32,000 109,405 167,902 06-D-141, Uranium Processing Facility, Y-12 745,000 734,000 524,000 Programmatic 777,000 843,405 691,902 I&O - Construction 1706,617 1,185,853 1016,611 Infrastructure and Operations 167,465 173,820 181,085 17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Construction - Defense Nuclear Security 25,000 26,000 23,000 Defense Nuclear Security 192,465 199,820 204,085 Information Technology and Cyber Security 7,203 10,259 7,696 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 14,492 5,297 4,524 International Radiological Security 370 400 378 Nuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security <td< td=""><td>Capabilities Based Investments</td><td>11,910</td><td>27,170</td><td>24,700</td></td<>	Capabilities Based Investments	11,910	27,170	24,700
18-D-690, Lithium Processing Facility, Y-12 32,000 109,405 524,000 06-D-141, Uranium Processing Facility, Y-12 745,000 734,000 524,000 Programmatic 777,000 843,405 691,902 I&O - Construction 777,000 843,405 691,902 Infrastructure and Operations 1,067,617 1,185,853 1,016,461 Defense Nuclear Security (DNS) 167,465 173,820 26,000 23,000 17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Construction - Defense Nuclear Security 192,465 199,820 204,085 Information Technology and Cyber Security 7,203 10,259 7,696 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 14,492 5,297 4,524 International Radiological Security 14,492 5,297 4,524 International Radiological Security 17,832 8,431 7,683 Quitage Sunday 17,832 8,431 7,683	Recapitalization	84,859	103,975	79,163
O6-D-141, Uranium Processing Facility, Y-12 745,000 734,000 524,000 Programmatic 777,000 843,405 691,902 I&O - Construction 777,000 843,405 691,902 Infrastructure and Operations 1,067,617 1,185,853 1,016,461 Defense Nuclear Security (DNS) 167,465 173,820 180,005 17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Construction - Defense Nuclear Security 192,465 199,620 204,085 Information Technology and Cyber Security 7,203 10,259 7,696 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 2,970 2,736 2,771 Domestic Radiological Security 14,492 5,297 4,524 International Radiological Security 370 400 378 Nuclear Smuggling Detection and Deterrence 0 10 1 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conver	Operating	290,617	342,448	324,559
Programmatic 777,000 843,405 691,902 1&O - Construction 777,000 843,405 691,902 Infrastructure and Operations 1,067,617 1,185,853 1,016,461 Defense Nuclear Security (DNS) 167,465 173,820 181,085 17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Construction - Defense Nuclear Security 25,000 26,000 23,000 Defense Nuclear Security 192,465 199,820 204,085 Information Technology and Cyber Security 7,203 10,259 7,696 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 2,970 2,736 2,771 Domestic Radiological Security 370 4,00 378 International Radiological Security 11,492 5,297 4,524 International Rediological Security 17 2,350 4,410 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) <	18-D-690, Lithium Processing Facility, Y-12	32,000	109,405	167,902
I&O - Construction 777,000 843,405 691,902 Infrastructure and Operations 1,067,617 1,185,853 1,016,461 Defense Nuclear Security (DNS) 167,465 173,820 181,085 17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Construction - Defense Nuclear Security 25,000 26,000 23,000 Defense Nuclear Security 192,465 199,820 204,085 Information Technology and Cyber Security 7,203 10,259 7,696 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 2,970 2,736 2,771 Domestic Radiological Security 14,492 5,297 4,524 International Radiological Security 370 400 378 Wuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Material Disposition <t< td=""><td>06-D-141, Uranium Processing Facility, Y-12</td><td>745,000</td><td>734,000</td><td>524,000</td></t<>	06-D-141, Uranium Processing Facility, Y-12	745,000	734,000	524,000
Infrastructure and Operations 1,067,617 1,185,853 1,016,461 Defense Nuclear Security (DNS) 167,465 173,820 181,085 17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Construction - Defense Nuclear Security 192,465 199,820 204,085 Information Technology and Cyber Security 7,203 10,259 7,696 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 2,970 2,736 2,771 Domestic Radiological Security 14,492 5,297 4,524 International Radiological Security 370 400 378 Nuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security 17,832 8,43 7,683 Nuclear Material Removal 4,524 3,350 4,400 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 4,61	Programmatic	777,000	843,405	691,902
Defense Nuclear Security (DNS) 167,465 173,820 181,085 17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Construction - Defense Nuclear Security 25,000 26,000 23,000 Defense Nuclear Security 192,465 199,820 204,085 Information Technology and Cyber Security 7,203 10,259 7,696 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 2,970 2,736 2,771 Domestic Radiological Security 370 400 378 Nuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 4,524 3,350 4,400 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 4,619	I&O - Construction	777,000	843,405	691,902
17-D-710, West End Protected Area Reduction Project, Y-12 25,000 26,000 23,000 Construction - Defense Nuclear Security 25,000 26,000 23,000 Defense Nuclear Security 192,465 199,820 204,085 Information Technology and Cyber Security 7,203 10,259 7,696 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 2,970 2,736 2,771 Domestic Radiological Security 370 400 378 International Radiological Security 17,832 8,443 7,683 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 8,527 13,163 10,300 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 </td <td>Infrastructure and Operations</td> <td>1,067,617</td> <td>1,185,853</td> <td>1,016,461</td>	Infrastructure and Operations	1,067,617	1,185,853	1,016,461
Construction - Defense Nuclear Security 25,000 26,000 23,000 Defense Nuclear Security 192,465 199,820 204,085 Information Technology and Cyber Security 7,203 10,259 7,696 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 2,970 2,736 2,771 Domestic Radiological Security 14,492 5,297 4,524 International Radiological Security 370 400 378 Nuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 8,527 13,163 10,300 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015	Defense Nuclear Security (DNS)	167,465	173,820	181,085
Defense Nuclear Security 192,465 199,820 204,085 Information Technology and Cyber Security 7,203 10,259 7,696 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 2,970 2,736 2,771 Domestic Radiological Security 14,492 5,297 4,524 International Radiological Security 370 400 378 Nuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	17-D-710, West End Protected Area Reduction Project, Y-12	25,000	26,000	23,000
Information Technology and Cyber Security 7,203 10,259 7,696 Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 2,970 2,736 2,771 Domestic Radiological Security 14,492 5,297 4,524 International Radiological Security 370 400 378 Nuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 4,524 3,350 4,400 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	Construction - Defense Nuclear Security	25,000	26,000	23,000
Weapons Activities Programs 1,832,765 2,084,017 2,064,242 International Nuclear Security 2,970 2,736 2,771 Domestic Radiological Security 14,492 5,297 4,524 International Radiological Security 370 400 378 Nuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 4,524 3,350 4,400 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	Defense Nuclear Security	192,465	199,820	204,085
International Nuclear Security 2,970 2,736 2,771 Domestic Radiological Security 14,492 5,297 4,524 International Radiological Security 370 400 378 Nuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 4,524 3,350 4,400 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	Information Technology and Cyber Security	7,203	10,259	7,696
Domestic Radiological Security 14,492 5,297 4,524 International Radiological Security 370 400 378 Nuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 4,524 3,350 4,400 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	Weapons Activities Programs	1,832,765	2,084,017	2,064,242
International Radiological Security 370 400 378 Nuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 4,524 3,350 4,400 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	International Nuclear Security	2,970	2,736	2,771
Nuclear Smuggling Detection and Deterrence 0 10 10 Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 4,524 3,350 4,400 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	Domestic Radiological Security	14,492	5,297	4,524
Global Material Security 17,832 8,443 7,683 Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 4,524 3,350 4,400 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	International Radiological Security	370	400	378
Conversion (formerly HEU Reactor Conversion) 799 2,350 4,410 Nuclear Material Removal 4,524 3,350 4,400 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	Nuclear Smuggling Detection and Deterrence	0	10	10
Nuclear Material Removal 4,524 3,350 4,400 Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	Global Material Security	17,832	8,443	7,683
Material Disposition 8,527 13,163 10,300 Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	Conversion (formerly HEU Reactor Conversion)	799	2,350	4,410
Laboratory and Partnership Support 750 370 0 Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	Nuclear Material Removal	4,524	3,350	4,400
Material Management and Minimization 14,600 19,233 19,110 Nonproliferation & Arms Control 4,619 5,015 5,334	Material Disposition	8,527	13,163	10,300
Nonproliferation & Arms Control 4,619 5,015 5,334	Laboratory and Partnership Support	750	370	0
	Material Management and Minimization	14,600	19,233	19,110
National Technical Nuclear Forensics (NTNF) R&D 0 951 0	Nonproliferation & Arms Control	4,619	5,015	5,334
	National Technical Nuclear Forensics (NTNF) R&D	0	951	0

DEPARTMENT OF ENERGY
Laboratory Table
Y-12 National Security Complex FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Proliferation Detection R&D	7,46	4 1,285	1,358
Nuclear Detonation Detection	68	0 0	0
Nonproliferation Stewardship Program	30	0 300	6,150
National Technical Nuclear Forensics R&D		0 0	1,070
Defense Nuclear Nonproliferation R&D	8,44	4 1,585	8,578
Counterterrorism and Counterproliferation	2,82	1 4,270	4,470
Nuclear Counterterrorism & Incident Response	2,82	1 4,270	4,470
Defense Nuclear Nonproliferation Programs	48,31	6 39,497	45,175
Total Y-12 National Security Complex	1,881,08	1 2,123,514	2,109,417

Laboratory Table
Y-12 Site Office FY 2022
(Dollars in Thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request Detail
Y-12 Site Office			
Environment, Health, Safety & Security	20	20	20
Environment, Health, Safety, and Security	20	20	20
Other Defense Activites Programs	20	20	20
17-D-401 On-site Waste Disposal Facility	0	22,380	12,500
14-D-403 Outfall 200 Mercury Treatment Facility	70,000	20,500	0
Construction - Oak Ridge	70,000	42,880	12,500
OR Technology Development and Deployment	5,000	5,000	3,000
Oak Ridge (OR)	75,000	47,880	15,500
Defense Environmental Cleanup Programs	75,000	47,880	15,500
Total Y-12 Site Office	75,020	47,900	15,520

DEPARTMENT OF ENERGY Laboratory Table Grants FY 2022 (Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
Grants			
Research - Advanced Scientific Computing Research	17,464	18,097	18,691
Advanced Scientific Computing Research	17,464	18,097	18,691
Research - Basic Energy Sciences	136,088	500	500
Basic Energy Sciences	136,088	500	500
Research - Biological & Environmental Research	162,707	112,395	75,645
Biological and Environmental Research	162,707	112,395	75,645
Research - Fusion Energy Sciences	98,693	87,028	69,873
Fusion Energy Sciences	98,693	87,028	69,873
Research - High Energy Physics	95,362	112,670	108,056
High Energy Physics	95,362	112,670	108,056
Operations and Maintenance - Nuclear Physics	58,959	0	0
14-SC-50, Facility for Rare Isotope Beams, MSU	40,000	5,300	0
Construction - Nuclear Physics	40,000	5,300	0
Nuclear Physics	98,959	5,300	0
Research - Accelerator R&D and Production	0	0	2,600
Accelerator R&D and Production	0	0	2,600
Science Programs	609,273	335,990	275,365
Weatherization Assistance Program	297,120	283,375	322,000
Weatherization	297,120	283,375	322,000
State Energy Program Grants	56,000	56,000	56,000
Weatherization and Intergovernmental Programs	353,120	339,375	378,000
Energy Efficiency	353,120	339,375	378,000
Energy Efficiency and Renewable Energy Programs	353,120	339,375	378,000
Transmission Reliability and Resilience	1,918	1,937	8,900
Resilient Distribution Systems	1,806	8,005	20,220
Energy Storage Research	1,618	5,990	24,030
Energy Storage	1,618	5,990	24,030
Cyber R&D	0	0	21,000
Transformer Resilience and Advanced Components	223	312	12,820
Grid Operations Technology	0	0	750
Transmission Permitting and Technical Assistance	2,437	4,300	3,050
Electricity Programs	8,002	20,544	90,770
Total Grants	970,395	695,909	744,135

Laboratory Table
No LPI FY 2022
(Dollars in Thousands)

	FY 2020	FY 2021	FY 2022
	Enacted	Enacted	Request Detail
No LPI			
Research - Advanced Scientific Computing Research	25,687	49,552	125,339
Advanced Scientific Computing Research	25,687	49,552	125,339
Research - Basic Energy Sciences	40,822	0	392,928
Basic Energy Sciences	40,822	0	392,928
Research - Biological & Environmental Research	0	106,090	123,767
Biological and Environmental Research	0	106,090	123,767
Research - Fusion Energy Sciences	25,594	42,456	20,951
Fusion Energy Sciences	25,594	42,456	20,951
Research - High Energy Physics	61,240	28,708	45,002
High Energy Physics	61,240	28,708	45,002
Operations and Maintenance - Nuclear Physics	26,433	52,345	41,019
Nuclear Physics	26,433	52,345	41,019
Research - Accelerator R&D and Production	0	0	4,942
Accelerator R&D and Production	0	0	4,942
Workforce Development for Teachers & Scientists	0	29,000	35,000
Science Programs	179,776	308,151	788,948
21-EE-001, Energy Materials Processing at Scale (EMAPS)	0	0	8,000
Total Facilities and Infrastructure	0	0	8,000
Corporate Support	0	0	8,000
Energy Efficiency and Renewable Energy Programs	0	0	8,000
Transmission Reliability and Resilience	9	0	3,000
Resilient Distribution Systems	0	0	·
Energy Storage Research	55	0	,
Energy Storage	55	0	,
Grid Operations Technology	0	0	3,000
DCEI Energy Mission Assurance	0	500	3,000
	64	500	3,000
Electricity Programs			
Production Operations - Naval Petroleum & Oil Shale Reserve	12,000	11,000	11,650
Program Direction - Naval Petroleum & Oil Shale Reserve	2,000	2,006	2,000
Naval Petroleum & Oil Shale Reserves	14,000	13,006	13,650
Strategic Petroleum Reserve Management	26,765	0	28,47
Storage Facilities Development	168,235	188,000	168,529
SPR - Petroleum Account	10,000	1,000	7,350
Subtotal, Strategic Petroleum Reserve	205,000	189,000	204,350
Northeast Home Heating Oil Reserves	10,000	6,500	(
Northeast Home Heating Reserve	10,000	6,500	(
Economic Impact & Diversity	1,500	1,442	2,140
Chief Information Officer	0	0	93,250
Artificial Intelligence & Technology Office	2,500	2,500	1,500
Artificial Intelligence Technology Office	2,500	2,500	1,500
Office of International Affairs - IA	2,067	1,025	1,025
Departmental Administration Programs	6,067	4,967	97,915
Office of Technology Transitions	5,000	5,000	(
Title XVII Loan Guarantee Credit Subsidy	0	0	150,000
Title XVII Loan Guarantee Programs	0	0	150,000
Federal Contribution to the Uranium Enrichment D&D Fund	0	0	415,670
Defense Environmental Cleanup Programs	0	0	415,670
Clean Energy Demonstration Activities	0	0	386,500

Laboratory Table
No LPI FY 2022
(Dollars in Thousands)

Total No LPI	419,907	527,124	2,068,033
Office of Clean Energy Demonstration (OCED) Programs	0	0	386,500
	Enacted	Enacted	Request Detail
	FY 2020	FY 2021	FY 2022