

A Scientific Ocean Drilling Coordination Office
for the US Community
SODCO Year 2 Annual Program Plan

for the time period
1 February 2026–31 January 2027

Cooperative Agreement OCE-2444315

Amount proposed Year 2: **\$7,215,368**

Respectfully submitted to:
National Science Foundation

Mitchell Malone, Ph.D.
Director
College Station, TX

2 December 2025

Contents

- 1. Executive summary 4
 - 1.1. Annual Program Plan overview..... 4
 - 1.2. Year 2 scope of work..... 4
 - 1.3. Year 2 budget development..... 5
 - 1.3.1. Year 2 budget assumptions..... 5
 - 1.3.2. Year 2 budget request..... 5
- 2. TAMU 5
 - 2.1. TAMU organizational structure..... 5
 - 2.2. TAMU personnel summary 5
 - 2.3. TAMU goals and deliverables..... 6
 - 2.3.1. Management and Administration..... 6
 - 2.3.2. Science support..... 6
 - 2.3.3. Technical support..... 7
 - 2.3.4. Engineering and operations support 7
 - 2.3.5. Technology Services support 7
 - 2.4. TAMU Year 2 budget..... 7
 - 2.4.1. Expense category definitions 8
 - 2.4.1.1. Salaries, wages, and fringe benefits..... 8
 - 2.4.1.1.1. Senior personnel 8
 - 2.4.1.1.2. Other personnel 8
 - 2.4.1.2. Equipment..... 8
 - 2.4.1.3. Travel..... 8
 - 2.4.1.3.1. Domestic 9
 - 2.4.1.3.2. Foreign 9
 - 2.4.1.4. Participant support 9
 - 2.4.1.5. Other direct costs..... 9
 - 2.4.1.5.1. Materials and supplies 9
 - 2.4.1.5.2. Freight and delivery services 9
 - 2.4.1.5.3. Business conferences..... 9
 - 2.4.1.5.4. Training and professional development 9

2.4.1.5.5. Insurance.....	10
2.4.1.5.6. Maintenance and repair	10
2.4.1.5.7. Contracted and other services	10
2.4.1.6. Indirect costs	10
3. LDEO	10
3.1. LDEO organizational structure	10
3.2. LDEO personnel summary	10
3.3. LDEO goals and deliverables	11
3.3.1. Management and Administration.....	11
3.3.2. Science and Communications Services	11
3.4. LDEO Year 2 budget	11
3.4.1. Expense category definitions	12
3.4.1.1. Salaries, wages, and fringe benefits.....	12
3.4.1.1.1. Senior personnel	12
3.4.1.1.2. Other personnel	12
3.4.1.2. Travel.....	12
3.4.1.2.1. Domestic	12
3.4.1.2.2. Foreign	13
3.4.1.3. Other direct costs.....	14
3.4.1.3.1 Participant support	14
3.4.1.3.2. Materials and supplies	15
3.4.1.3.3. Consultant services	15
3.4.1.3.4. Shipping.....	15
3.4.1.3.5. Communications	15
3.4.1.3.6. Business conferences	15
3.4.1.3.7. Insurance.....	15
3.4.1.3.8. Contracted and other services	15
3.4.1.4. Indirect costs.....	16

1. Executive summary

Texas A&M University Department of Scientific Ocean Drilling (TAMU SOD) and Lamont-Doherty Earth Observatory at Columbia University (LDEO) collaboratively form the Scientific Ocean Drilling Coordination Office (SODCO) to facilitate US scientific ocean drilling goals. TAMU's responsibilities include assisting principal investigators with creating drilling proposals; identifying suitable drilling platforms, coring, and logging tools; working with the scientific community to advance new technologies; and planning and implementing expeditions. LDEO's responsibilities include providing research community support services for successful planning and execution of expeditions, including pre-drilling activities; science planning; work force development, including training workshops and graduate fellowships; innovation grants; and a range of community engagement activities. To provide seamless services to the community with a collaborative dual institutional award, SODCO is led by an Executive Leadership team consisting of the SODCO Director (TAMU), SODCO Director of Science Services (LDEO), and SODCO Director of Science Operations (TAMU).

Supplemental funding was provided to support Site Survey Databank (SSDB) services in a subaward to Scripps Institution of Oceanography, University of California, San Diego, and to maintain and support the Downhole Logging Database (Log DB) at LDEO. The supplemental funding increment for SSDB and Log DB covered the full five years of this award; thus, this Annual Program Plan (APP) does not include a budget request for these activities.

1.1. Annual Program Plan overview

The Year 2 APP to the National Science Foundation (NSF) defines the scope of work for Year 2 activities and deliverables that are specifically covered under NSF Cooperative Agreement OCE-2444315. The scope and budget justification of the activities described in the APP are derived from this scope and any NSF guidance.

The Year 2 APP includes discussion of organizational goals, responsibilities, and deliverables and the organizational structure for SODCO operations through TAMU SOD and LDEO of Columbia University. Section 1 provides the overall scope, assumptions, and directives used to construct the APP, as well as the summary budget request. Section 2 covers TAMU organizational structure, personnel summary, activities and tasks, Year 2 budget request by expense category, and detailed budget justification. Section 3 describes LDEO organizational structure, personnel summary, activities and tasks, Year 2 budget request by expense category, and detailed budget justification.

1.2. Year 2 scope of work

As science operator of SODCO, TAMU will provide assistance to the scientific ocean drilling community in planning and submitting drilling proposals, determining types and availability of drilling services, guiding development of new drilling technology, planning and execution of all aspects of NSF OCE-supported drilling activities, and IT support services. Technical support will finalize drawings and layouts for containerized laboratories offices that will be deployed at sea, outfit the containers, and prepare standard operating procedures and methodologies for the laboratory equipment. Given that at the time of this APP, new drilling proposals are not yet being accepted by NSF, we are assuming that Year 2 will not include any drilling activities.

LDEO will provide information and training for Principal Investigators (PIs) preparing drilling proposals; facilitating and planning community workshops and training courses; accepting proposals and coordinating reviews of community proposals for research and pre-drilling activities; developing a communications

strategy for SODCO; developing and maintaining a SODCO website as a community hub for resources, information, and opportunities in scientific ocean drilling; managing a graduate fellowship program to support students starting in FY26; and coordinating community engagement activities including scientific ocean drilling-related events planned in collaboration with the American Museum of Natural History (AMNH) (likely 2–4 events in FY26).

Deliverables include reporting, facilitating expedition planning, and providing guidance and assistance in planning scientific ocean drilling activities. These activities will be conducted in accordance with direction provided by NSF and guidance from the SODCO advisory board (SAB) as outlined in the approved APP.

1.3. Year 2 budget development

1.3.1. Year 2 budget assumptions

The total budget request of **\$7,215,368** includes costs to support SODCO facility activities.

1.3.2. Year 2 budget request

The Year 2 budget summary in Table 1.1 shows the overall budget request, showing TAMU direct and indirect costs, Total LDEO subaward, and Total Year 2 Budget request. Details for TAMU and LDEO budgets are shown in separate sections below.

Table 1.1. SODCO Year 2 budget request.

Summary categories	Cost
TAMU	\$2,672,658
Subaward: LDEO	\$3,131,637
Total direct cost	\$5,804,295
Modified total direct costs	\$2,613,098
Indirect costs @ 54% MTDC (\$2,613,098)	\$1,411,073
Grand total Year 2 budget request	\$7,215,368

2. TAMU

2.1. TAMU organizational structure

The organizational structure within TAMU consists of a subset of the SODCO executive leadership (SODCO Director, Director of Science Operations), Expedition Project Managers, Operations and Engineering Support, Technical Support, and Technology Services (IT). An embedded TAMU Sponsored Research Services (SRS) team dedicated to the award is overseen by a General Manager who reports to the Executive Director of TAMU SRS. This separate reporting chain ensures that the sponsored programs unit retains the independence to ensure regulatory compliance while working directly with TAMU SOD staff to efficiently implement the award.

2.2. TAMU personnel summary

The personnel summary table below presents an accounting of the cumulative estimated effort. The table reflects actual senior personnel and departmental staffing as of 30 November 2025 plus projected staffing for Year 2. Staffing levels may change annually due to unanticipated changes in budget or scope of work.

The table does not show student workers or the dedicated SRS, IT, and Human Resource positions that are supported through indirect cost returns.

Table 2.1. Year 2 TAMU personnel summary.

Senior personnel	Position titles	Personnel (#)
Mitch Malone	SODCO Director (PI)	0.25
	Administrative Coordinator	0.5
	Publications	1.25
Leah LeVay	Director of Science Operations (Senior Personnel)	1
	Expedition Project Managers	2
	Operations and Engineering Supervisor	1
	Engineers	4
	Technical Support Supervisor	1
	Senior Technician	1
	Chemistry Technician	1
	Electronics Instrumentation Specialist	1
	Mobilization Specialist	0.75
	Software Applications Developer	1
	IT Systems Engineer	1
	Total Year 2 personnel	16.75

2.3. TAMU goals and deliverables

2.3.1. Management and Administration

Management and Administration goals, which are provided by the TAMU members of the SODCO executive leadership team and SRS, include planning; coordinating with other related entities; and overseeing, directing, reviewing, and reporting activities. Management and Administration will provide the following services:

- Develop and ensure implementation of the APPs.
- Provide content for and submit quarterly and annual reporting deliverables, including financial reports.
- Ensure compliance with university, state, and US Federal statutes and rules governing research.
- Manage payroll, travel, procurement, invoicing, cash management, financial reporting, equipment inventory, third tier subrecipient approvals, and risk management services.
- Support the management and supervision of TAMU SOD staff to ensure adherence to TAMU's policies and procedures for maintaining a well-trained and productive workforce and safe work environment.

2.3.2. Science support

Science support goals include supporting the US science community with preparations for planning expedition proposals; obtaining clearance for drilling and other ship operations; staffing expedition science parties; providing scientific leadership within SODCO including oversight, research direction, and advice on potential developments for the shipboard laboratories; participating in and advising during the planning of expedition proposals; advising expedition scientists on fulfilling their core curation and publication requirements; and acting as liaison to advisory and other panels and task forces as appropriate.

2.3.3. Technical support

Technical support goals include completing acquisition of and furnishing seven mobile laboratories and offices (containers) for shipboard operations; testing mobile shipboard analytical facilities and developing standard laboratory procedures; acquiring supplies and materials for expedition use, and training and assisting scientists in making their shipboard measurements during expeditions.

Technical support goals also include providing and overseeing expedition logistics including shipping, installing, and testing container laboratories aboard the drilling platform; staffing shipboard laboratory facilities for an expedition; arranging delivery of collected cores and samples to the GCR for shore-based measurement, description, and sampling; and shipping samples to expedition scientists and cores to the appropriate repository if the GCR is not the archive facility.

2.3.4. Engineering and operations support

Engineering and operations support goals include determining the type, availability, and capability of drilling platforms and services, planning and budgeting expeditions, and overseeing the drilling, coring, and logging operations; working with PIs to identify appropriate drilling platforms and provide guidance on operations for drilling proposals; providing engineering expertise and support to the community, assisting the community with developing scientific ocean drilling innovations, and providing calibrated downhole temperature/pressure probes on expeditions, as required.

2.3.5. Technology Services support

TAMU Technology Services oversees and maintains IT infrastructure; develops and maintains instrument-specific software for data acquisition and dissemination; and manages databases.

Technology Services goals include managing data supporting SODCO activities, managing expedition data, overseeing the networking and equipment of the sea-going IT container, providing data access until data are migrated to archival repository, and supporting IT services.

Technology Services will provide the following deliverables in Year 2:

- Operate and maintain computer and network systems and maintain IT infrastructure, including wide area network components, personal computers, and network instrumentation hosts.
- Explore options for at-sea networks and connectivity.
- Provide help desk services and support IT needs of visiting scientists.
- Monitor and protect network and server resources to ensure safe, reliable operation and security for data and IT resources.

2.4. TAMU Year 2 budget

The budget summary in this section describes the overall Year 2 budget requests to provide a framework for interpreting fiscal data in quarterly reports delivered to NSF by TAMU SOD. The LDEO budget detail and justification is provided separately and follows below.

Table 2.2 provides the cumulative total for each major expense category in the Year 2 budget.

Table 2.2. Year 2 TAMU expense category summary.

Expense category	Cost
Salaries and fringes	\$2,190,946
Equipment	\$38,000
Travel	
Domestic	\$69,216
Foreign	\$33,784
Participant support costs	\$21,560
Other direct costs	
Materials and supplies	\$83,400
Other	
Shipping and freight	\$15,150
Business conferences	\$6,063
Training	\$26,727
Insurance	\$12,600
Maintenance and repair	\$147,875
Other	\$27,337
Total direct costs	\$2,672,658
Modified total direct costs	\$2,613,098
Indirect costs@54% MTDC	\$1,411,073
Total TAMU Year 2 budget request	\$4,083,731

2.4.1. Expense category definitions

2.4.1.1. Salaries, wages, and fringe benefits

All salaries and fringe benefits are based on current rates with a 3% increase applied, in accordance with TAMU procedures.

2.4.1.1.1. Senior personnel

Mitchell Malone, Director and PI, will be responsible for overall project coordination and supervision of project personnel for SODCO.

Leah LeVay, Director of Science Operations, will oversee day-to-day activities of the operations, engineering, science, and technical team.

2.4.1.1.2. Other personnel

Other personnel costs include positions required to fulfill the tasks and activities of SODCO (Table 2.1).

2.4.1.2. Equipment

Funds are budgeted for two fume hoods to be installed in the chemistry and microbiology containers and a -86°C freezer for the microbiology container. These pieces of equipment were originally budgeted in Year 1, but these costs were reprioritized toward acquisition of the containers and shifted to Year 2.

2.4.1.3. Travel

Travel costs are based on recently calculated transportation, federal per diem and lodging rates, and other associated costs. An average cost for domestic and international travel was calculated based on known or common destinations.

2.4.1.3.1. Domestic

Travel to training courses, to professional conferences to communicate activities of the SODCO and to present research results, and to meetings of the SODCO Advisory Board are budgeted for Year 2. In addition, costs for travel to conduct interviews for the organization in Year 2 are included, budgeted at one search with three domestic candidates. Travel is budgeted for vendor visits, including vessel visits and a trip to the container building site for acceptance testing, and attending trade shows to communicate with potential vessel and drilling/coring vendors. Costs are estimated at \$2,163 per domestic trip based on the current published government per diem rates for Year 2.

2.4.1.3.2. Foreign

Travel is included for the leadership team to attend the international Scientific Drilling Forum and International Research Ship Operators meeting. Additionally, we anticipate attending workshops or international science meetings (e.g., EGU or Goldschmidt) as representatives of SODCO or for presenting research results and communicating SODCO activities. Costs are estimated at \$4,223 per international trip based on the current published government per diem rates for Year 2.

2.4.1.4. Participant support

The two summer interns will receive housing on the TAMU campus, a stipend, travel to College Station and to a domestic conference, as well as abstract and registration fees for a professional conference.

2.4.1.5. Other direct costs

2.4.1.5.1. Materials and supplies

Printer expendables and small hardware for continued operation and maintenance of IT resources; software purchases and upgrades, electronic media, and other computer supplies; safety gear; supplies required for downhole tools (e.g. APCT-3, SET, and SETP); supplies for department vehicles and forklift; outfitting of containers not supplied by vendor, and general purpose supplies.

2.4.1.5.2. Freight and delivery services

Postage, express mail, and freight, including general postage and express mail/courier services for regular correspondence, scientific reports, and small packages, as well as shipping new SODCO containers from the vendor to TAMU.

2.4.1.5.3. Business conferences

Catering, supply, and incidental costs associated with hosting one SODCO Advisory Board (SAB), one SODCO Safety and Environmental Panel (SSEP), and one SODCO Engineering and Technology Advisory Committee meeting (SETAC). The cost per meeting is based on recent meetings, adjusted upward by a small amount to allow for current cost increases.

2.4.1.5.4. Training and professional development

Registration for professional courses, meetings, and online training courses.

2.4.1.5.5. Insurance

Costs for vehicle and container insurance are based on current costs and recent price increases.

2.4.1.5.6. Maintenance and repair

Equipment service agreements and non-contracted maintenance and repair of equipment for forklifts, pallet jacks, overhead cranes, loading dock equipment, routine maintenance of downhole tools (e.g., APCT-3), office equipment, vehicles, and IT computer hardware and software, including software subscriptions, volume licensing agreements, and concurrent usage software agreements. Costs to upgrade the IODP microbiology van were originally budgeted in Year 1 but were reprioritized toward purchase of the new containers and was shifted into Year 2.

2.4.1.5.7. Contracted and other services

Contract and other services, including calibration and certification services, crane lifting services, back-up services, IT expert assistance services.

2.4.1.6. Indirect costs

Based on TAMU's current negotiated F&A rate agreement, which is 54% MTDC from 1 September 2025 through 31 August 2026.

3. LDEO

3.1. LDEO organizational structure

The organizational structure within LDEO consists of the Director of Science Services, Science and Science Communications Officers, an administrative team, and two advisory members. The administrative team is led by a Business Manager who works on multiple large programs and reports to the LDEO Division Director. The Science and Education advisors offer specialized expertise, providing input on SODCO to the Director of Science Services.

3.2. LDEO personnel summary

We propose an LDEO-led SODCO management and staffing structure totaling approximately 4.8 FTEs, designed to draw upon the extensive expertise already established at LDEO, through previous experience with the U.S. Science Support Program. This structure ensures sufficient staffing to meet all operational needs of the U.S. scientific ocean drilling community, including the following:

- A leadership and coordination component to oversee program planning and execution;
- An administrative unit responsible for processing travel, salary, procurement, and financial transactions; and
- A science and communications function that engages the U.S. research community and, when appropriate, wider stakeholder and public audiences.

Table 3.1. Year 2 LDEO personnel summary.

Department/senior personnel	Position titles	Personnel (#)
Angela Slagle	Director of Science Services/PI	1
David Goldberg	Senior Advisor	0.08
Sharon Cooper	Education Advisor	0.08
TBN	Science Officer	1
Mike Kaplan	Student Intern Program Manager	0.08
Rose Nagele	Science Communication Officer	1
Josehanny Ortiz	Program Manager	0.25
James Spencer	Logistics Coordinator	1
Judy Otero	Assistant Business Manager	0.25

3.3. LDEO goals and deliverables

3.3.1. Management and Administration

Management and Administration responsibilities—carried out by the LDEO members of the SODCO executive leadership team—emphasize strategic planning, coordination with partner entities, and the oversight, evaluation, and documentation of program activities:

- Developing, maintaining, and implementing the APPs.
- Preparing and submitting all quarterly and annual reporting requirements, including financial documentation to TAMU.
- Ensuring that all activities comply with institutional, state, and federal regulations governing sponsored research.
- Administering operational functions such as payroll, travel, purchasing, invoicing, cash management, financial reconciliations, and risk-management processes.
- Supporting the supervision and professional development of LDEO SODCO staff to maintain a skilled, compliant, and effectively managed workforce.

3.3.2. Science and Communications Services

Science services goals include supporting the U.S. science community by providing information and training for PIs preparing drilling proposals; facilitating and planning community workshops and training courses; accepting proposals and coordinating reviews of community proposals for research and pre-drilling activities; acting as liaison to advisory and other panels and task forces as appropriate; developing a communications strategy for SODCO; developing and maintaining a SODCO website as a community hub for resources, information, and opportunities in scientific ocean drilling; managing a graduate fellowship program; supporting summer undergraduate interns involved in the LDEO summer internship program; and coordinating community engagement activities including SODCO representation at national conferences and events planned in collaboration with the AMNH.

3.4. LDEO Year 2 budget

Table 3.2. Year 2 LDEO expense category summary.

Expense category	Cost
Salaries and fringes	\$634,133
Travel	\$218,821
Participant support costs	\$396,753
Materials and supplies	\$19,467

Expense category	Cost
Consultant/professional services	\$77,710
Other direct costs	
Shipping	\$15,450
Communication	\$47,876
Business conferences	\$134,971
Insurance	\$12,067
Subawards	
Panel Chairs	\$206,024
SODCO graduate student fellowships	\$216,000
American Museum of Natural History	\$50,136
Pre-drilling activities	\$330,000
Innovation grants	\$360,000
Total direct costs	\$2,719,408
Modified total direct costs	\$1,585,496
Indirect costs	\$412,229
Total LDEO Year 2 budget request	\$3,131,637

3.4.1. Expense category definitions

3.4.1.1. Salaries, wages, and fringe benefits

Salaries with fringe benefits are calculated based on actual and estimated (for new position) salaries with an anticipated cost of living adjustment of 3%/year (per Columbia University guidelines). Fringe benefits are estimated based on annual guidance from the Finance office of Columbia University and are budgeted at the rates provided for Year 2. Actual fringe benefit costs will be charged to the project.

3.4.1.1.1. Senior personnel

Angela Slagle, Director of Science Services, will oversee day-to-day activities of the LDEO SODCO team on science services, science communications, logistics, and subaward administration, working closely with other members of the SODCO leadership team.

David Goldberg, Senior Advisor, will counsel the Director of Science Services on science activities that promote the scientific impact of scientific ocean drilling and promote connections to relevant geoscience expertise at LDEO (e.g., geophysical database teams) and other national science programs.

Sharon Cooper, Education Advisor, will provide input on implementing undergraduate-focused programs and enhancing community engagement in scientific ocean drilling.

3.4.1.1.2. Other personnel

Other personnel costs include positions required to fulfill the tasks and activities of SODCO (Table 3.2).

3.4.1.2. Travel

3.4.1.2.1. Domestic

Travel funds are based on historical experience travel and are listed below. Staff travel includes funds for travel to SODCO Advisory Board meetings, trainings and workshops, and other meetings and conferences as appropriate. Total Year 2 request is \$196,217.

Table 3.3. Domestic travel for LDEO SODCO staff.

Staff	People (#)	Trips (#)	Total trips	Air/Ground	Per diem	Misc.	Total Year 2
SODCO - Director of Science Services (domestic travel)	1	7	7	\$689.07	\$1,131.63	\$103.00	\$13,465.90
SODCO - Science Officer (domestic travel)	1	5	5	\$689.07	\$1,131.63	\$103.00	\$9,618.50
Science Communication Manager (domestic travel)	1	8	8	\$689.07	\$1,131.63	\$103.00	\$15,389.60
Total costs							\$38,474.00

Outreach travel is included for scientific ocean drilling community participants at education conferences.

Table 3.4. Domestic travel for LDEO SODCO outreach.

Education Outreach	People (#)	Trips (#)	Total trips	Air/Ground	Per diem	Misc.	Total Year 2
Education conferences (domestic)	2	2	4	\$689.07	\$1,131.63	\$103.00	\$7,694.80

SODCO Advisory Group travel includes funds for US board, committee, and panel members to attend SAB, SETAC, and SSEP meetings, and for the chairs of those advisory groups to attend other domestic meetings as appropriate.

Table 3.5. Domestic travel for the LDEO SODCO advisory groups.

Advisory groups	People (#)	Trips (#)	Total trips	Air/Ground	Per diem	Misc.	Total Year 2
SODCO Advisory Board (domestic travel)	15	2	30	\$689.07	\$1,131.63	\$103.00	\$57,711.00
SODCO Engineering & Technology Advisory Committee (domestic travel)	10	2	20	\$689.07	\$1,131.63	\$103.00	\$38,474.00
SODCO Safety & Environmental Panel (domestic travel)	8	2	16	\$689.07	\$1,131.63	\$103.00	\$30,779.20
SODCO Advisory Board, Panel, and Advisory Committee Chairs (domestic travel)	3	4	12	\$689.07	\$1,131.63	\$103.00	\$23,084.40
Total costs							\$150,048.60

3.4.1.2.2. Foreign

Travel funds are based on historical experience travel and are listed below. Foreign staff travel includes funds for travel to the international Scientific Ocean Drilling Forum meeting. Total Year 2 request for foreign travel is \$22,604.

Table 3.6. Foreign travel for LDEO SODCO staff.

Staff	People (#)	Trips (#)	Total trips	Air/Ground	Per diem	Misc.	Total Year 2
SODCO - Director of Science Services (foreign travel)	1	1	1	\$1,451.89	\$2,109.44	\$206.00	\$3,767.33
SODCO - Science Officer (foreign travel)	1	1	1	\$1,451.89	\$2,109.44	\$206.00	\$3,767.33
Science Communication Manager (foreign travel)	1	1	1	\$1,451.89	\$2,109.44	\$206.00	\$3,767.33
Total costs							\$11,301.99

SODCO Advisory Group travel includes funds for the chairs of those advisory groups to attend the international Forum.

Table 3.7. Foreign travel for the LDEO SODCO Advisory Group.

Advisory groups	People (#)	Trips (#)	Total trips	Air/Ground	Per diem	Misc.	Total Year 2
Panel Chair travel (foreign travel, Forum)	3	1	3	\$1,451.88	\$2,109.44	\$206.00	\$11,301.96

3.4.1.3. Other direct costs

3.4.1.3.1 Participant support

Yearly travel and per diem are as follows for workshop participants. Funds are budgeted based on an estimate of six US trainings/workshops. A minimum of 68 total participants are estimated; however, more could be included if full travel support is not required by all participants. Funds are also included for supplementary workshop participation in three foreign workshops. This is for full or partial support of individuals who would like to attend a workshop that may not be sponsored by SODCO. Workshop support includes travel and per diem costs. Four summer interns are supported. They will participate in the activities of the Lamont Summer Intern Program, as well as perform scientific ocean drilling-related research. Total Year 2 amount requested for participant support is \$396,753. Workshop travel (domestic): \$299,870.90, Workshop travel (foreign): \$46,350, Summer intern support costs: \$50,531.80.

Table 3.8. LDEO SODCO participant support travel.

Workshop travel	People (#)	Trips (#)	Total trips	Air/Ground	Misc.	Per diem	Total Year 2
US training workshops	25	2	50	\$689.07	\$103.00	\$1,414.53	\$110,330.00
Other US workshops	30	3	90	\$689.07	\$103.00	\$1,131.63	\$173,133.00
Supplementary workshop participation (individual awards - foreign)	3	0	3	\$0	\$0	\$0	\$46,350.00
Other US meetings/Pre-drilling activities	10	1	10	\$689.07	\$103.00	\$848.72	\$16,407.90
Total costs							\$346,220.90

Supplementary workshop participation capped at \$15,000/workshop regardless of number of applicants/awardees; estimate supporting three requests at \$15K/request.

Table 3.9. LDEO SODCO participant support costs.

Summer Interns Support Costs (4 participants)	Per intern	Total
Stipend	\$7,210.00	\$28,840.00
Subsistence (lodging)	\$3,105.45	\$12,421.80
Student Intern Travel/Misc (Food, transportation to/from Lamont campus, Lamont Shuttle, Orientation costs, Supplies, Shipping)	\$2,317.50	\$9,270.00
Total costs	\$12,265.00	\$50,531.80

3.4.1.3.2. Materials and supplies

Funding is requested for IT supplies, software, printer supplies, photo/video equipment, and two MacBooks (MacBook or equivalents are requested to purchase SODCO staff laptop or desktop computers as needed). IT supplies include webcams, RAM, cables, hubs, and adapters. Photo and video supplies include camera, replacement lenses, batteries, memory cards, GoPro accessories and cords. Workshop materials and supplies are also requested. Total Year 2 amount requested for supplies is \$19,467.

3.4.1.3.3. Consultant services

Yearly services required include video development; publications; web design and maintenance consultant; science communication projects, and Expedition Outreach Officers. Total Year 2 amount requested for consultant services is \$77,710.30.

3.4.1.3.4. Shipping

Total Year 2 amount requested for shipping is \$15,450.

3.4.1.3.5. Communications

Yearly services required include printing services; advertisements (workshops etc.); SAB meeting support; web review/DNS registration; SurveyMonkey application portal; Adobe Creative Cloud. Total Year 2 amount requested for communication is \$47,876.18.

3.4.1.3.6. Business conferences

Yearly services include booth rental for AGU (American Geophysical Union) and GSA (Geological Society of America) and registration (AGU, GSA, NSTA [National Science Teaching Association], SACNAS [Advancing Chicanos/Hispanics & Native Americans in Science], NMEA [National Marine Educators Association]); AGU Town Hall Meeting (e.g. venue rental, catering); NSTA workshop (presentation fee); SAB (SODCO Advisory Board) meetings (host catering expenses); workshop expenses (e.g. venue expense, catering, advertising, etc.); and SAB meeting support. Total Year 2 amount requested for business conferences is \$134,971.02.

3.4.1.3.7. Insurance

Total Year 2 amount requested for computer insurance is \$12,067.48.

3.4.1.3.8. Contracted and other services

Salary support is included for the chairs of the SAB, SSEP, and SETAC. SODCO Fellows will also receive funds through subawards starting in Year 2. The AMNH will collaborate with the SODCO at LDEO and TAMU to develop and offer four+ programs annually to connect scientific ocean drilling researchers with Family and General Public audiences. Subawards for pre-drilling activities are budgeted to support up to six major

projects per year as well as support for up to six innovation grants per year. Total yearly amount requested for subawards in Year 2 is \$1,162,159.90. Note that modified Total Direct Cost includes the first \$25,000 of each subaward.

Table 3.10. LDEO SODCO subawards.

Staff	People	Award/Month	Award/Month	Total Year 2
SODCO Advisory Board Chair	1	4	\$14,000.00	56,000.00
SODCO Safety & Environment Panel Chair	1	1	\$14,000.00	\$14,000.00
SODCO Engineering & Technology Advisory Committee Chair	1	1	\$14,000.00	\$14,000.00
Ad hoc Comm. co-chair support	1	2	\$14,000.00	\$28,000.00
Fellowships	6	6	\$36,000.00	\$216,000.00
Avg. fringe of 34.3% & avg. ICR of 49.65%				\$94,024.00
AMNH	1	1	\$50,135.90	\$50,135.90
Pre-drilling activities	6	6	\$55,000.00	\$330,000.00
Innovation grants	6	6	\$60,000.00	\$360,000.00
Total costs				\$1,162,159.90

3.4.1.4. Indirect costs

Sponsored Projects Administration certifies that the Primary Place of Performance for the proposed research will occur off-campus at various research locations and that the appropriate F&A rate is 26.0%.

Graduate Student Tuition Remission, Permanent Equipment, and Subawards in excess of \$25,000 are not subject to indirect cost. Total Indirect Costs is \$2,003,333.