DRAFT
FINDING OF NO SIGNIFICANT IMPACT (FONSI)
UNIVERSITY OF NEW HAMPSHIRE OCEAN MAPPING CENTER OF EXCELLENCE AND INNOVATION CENTER
DURHAM, NEW HAMPSHIRE

Document ID: EAXX-006-48-2CS-1733942760

Pursuant to provisions of the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States [U.S.] Code [USC] 4321, et seq.); the National Oceanic and Atmospheric Administration (NOAA) Administrative Order 216-6A and its accompanying Companion Manual; and the National Institute of Standards and Technology (NIST) Suborder 7301.14, *National Environmental Policy Act*, NOAA prepared the attached Draft Environmental Assessment (EA) to assess the potential environmental consequences associated with the Proposed Action to construct and operate a joint Ocean Mapping Center of Excellence (CoE) and Innovation Center at the University of New Hampshire (UNH) in Durham, New Hampshire.

Purpose and Need

Since 1999, NOAA and UNH have collaborated under a cooperative agreement that enables NOAA to operate the Joint Hydrographic Center (JHC) and Center for Coastal and Ocean Mapping (CCOM) on the UNH campus. These centers are intended to function as a national CoE in hydrographic, ocean, and coastal mapping sciences, serving NOAA through research, training, and the development of state-of-the-art ocean mapping technologies and tools. The JHC/CCOM was established under Congressional direction, supports U.S. legislative initiatives, and has become internationally recognized for innovations in hydrography. The research programs at these centers have influenced hydrographic software and provided technical support for international mapping systems, while fostering a robust ocean mapping curriculum at UNH. NOAA and UNH aim to transition existing research and technological advancements in ocean mapping into practical applications, including applied training and technical support for professionals in the field.

The purpose of the Proposed Action is to construct and operate a new CoE and Innovation Center at UNH to grow hydrographic and ocean mapping capabilities. The proposed CoE and Innovation Center would expand upon UNH's existing hydrographic and ocean mapping capabilities developed in collaboration with NOAA. It would create a dedicated space to serve as a hub for government, private sector, and non-governmental partners, fostering enhanced collaboration and communication across research initiatives while facilitating the transition of research into operational activities. The Proposed Action would strengthen hydrographic capabilities by providing applied training and technical support and enabling the development of standardized approaches across government and industry. The Proposed Action is needed to meet the rising demand for ocean mapping capabilities and to support the transition from research to operation, while maintaining standardized practices, approaches, and systems. Additionally, the Proposed Action is needed to support the expansion of the JHC/CCOM and provide the necessary space and resources for new technology development, applied training, and support for ocean mapping operators based at UNH.

Description of Proposed Action and Alternatives

The Proposed Action involves construction and operation of a new Ocean Mapping CoE, using NOAA grant funding, and Innovation Center, using NIST grant funding, on the UNH Durham campus. Following an evaluation of potential alternatives, NOAA determined that construction of the joint CoE and Innovation Center at "The Edge" redevelopment area best meets the purpose of and need for the Proposed Action (herein referred to as the "Preferred Alternative"). In addition to the Preferred Alternative, the No Action Alternative is also being considered.

Preferred Alternative. The Preferred Alternative includes construction and operation of the joint CoE and Innovation Center at "The Edge" redevelopment area. UNH envisions The Edge as a multi-phased, mixed-use development designed to foster collaboration between federal, business, and industry partners alongside UNH faculty, staff, and students. The Edge would integrate research, commercial, retail, and residential spaces while leveraging existing infrastructure and minimizing disruption to current campus activities. The CoE and Innovation Center would act as a key component of the development project, allowing UNH to address growing demand for national ocean mapping and promote the co-location of government, industry, and private partners. The Preferred Alternative would be constructed on a 7.9-acre site between West Edge Drive and Mast Road, southwest of an existing U.S. Department of Agriculture Forest Service building. Approximately 5 acres of the Project Site are forested, and the remainder is occupied by impervious surfaces, including a parking lot, footpath, and driveways. The CoE and Innovation Center would be an approximately 70,400 square foot (SF) facility, with 44,000 SF of high bay space for research, equipment storage, and assembly areas. The remaining approximately 26,400 SF would be built as a training wing with offices, labs, and classrooms, and dedicated space for industry co-location and the JHC/CCOM and other related programs.

Construction would begin with site preparation, including tree clearing and demolition of the existing parking lot. Subsequently, geothermal wells, if included in final design, and utility trenches would be installed to support the CoE and Innovation Center, followed by grading and excavation of the site and the installation of building foundations. The next phases would include erection of the steel structural framework, interior construction, and parking lot paving. Construction of the high-bay space would be prioritized, followed by interior spaces, like offices and training rooms. Landscaping would occur after all construction activities are finished. Construction activities would be conducted in accordance with the applicable requirements of the U.S. Environmental Protection Agency National Pollutant Discharge Elimination System (NPDES) and Section 438 of the Energy Independence and Security Act (EISA) to manage stormwater discharges, minimize pollution during construction, and restore the pre-development hydrology of the Project Site. Construction would also incorporate low-carbon and energy efficient materials and strategies, where feasible. UNH anticipates that construction would be completed in 18 months.

Following construction of the Preferred Alternative, the facility would be occupied by UNH and NOAA personnel and students, and potential governmental, industry, and non-governmental organization (NGO) partners. The CoE would host between 35 to 55 personnel and up to 30 UNH students in the ocean mapping curriculum. The Innovation Center's occupancy would vary with industrial partnerships. It is expected that a maximum of 121 personnel, including support staff, students, and external partners, would need to access the facility at any given time. Activities at the CoE and Innovation Center would include ocean mapping training, uncrewed surface vehicle work, and light manufacturing, conducted during regular working hours (between 6 a.m. and 6 p.m.). The CoE and Innovation Center would have an anticipated lifespan of 50 to 100 years.

No Action Alternative. Under the No Action Alternative, UNH would not undertake activities to construct or operate a new CoE or Innovation Center using federal grant funding, hindering NOAA's and UNH's ability to advance its existing hydrographic and ocean mapping programs in collaboration with external partners. While the No Action Alternative would not meet the Proposed Action's purpose and need, it is analyzed in the EA to provide a comparative baseline for the Preferred Alternative.

Summary of Environmental Impacts

The EA evaluates the existing conditions and potential environmental consequences of implementing the Proposed Action with regard to land use, air quality, water resources and hydrological processes, socioeconomics and protection of children, cultural resources, flora and fauna, farmland and soils, noise, transportation, utilities and solid waste, visual resources, and hazardous materials. NOAA has concluded

that the Proposed Action would not affect geological resources or recreational resources; thus, these resources were eliminated from detailed analysis in the EA. Environmental impacts are summarized below.

Land Use: The Preferred Alternative would change the land use of the parcel owned by UNH from parking and undeveloped forested areas to a developed parcel used for institutional research. This would involve the conversion of 5 acres of forest/open space to developed land. However, this loss would be small, relative to the overall size of forested land located on UNH-owned property surrounding the Project Site. The Proposed Action would be consistent with current zoning, and would involve creation of new office and light industrial facilities to advance research and application capabilities on the campus of an educational institution intended to pursue such activities.

Air Quality: Construction activities would result in exhaust emissions from construction equipment used for site preparation, building construction, and equipment installation. Site preparation and grading activities would generate particulate matter. Fugitive volatile organic compounds would be emitted during parking lot paving and architectural coating application. Fuel combustion in construction employee commute vehicles would contribute to the short-term increase of construction-related emissions. Operational emissions would be limited to occasional fuel combustion in the single emergency generator that would be installed at the site and fuel combustion in new employee commute vehicles. Implementation of best management practices (BMPs), such as using stabilization measures on areas of bare soil and maintaining construction equipment to reduce emissions, would be anticipated to reduce potential impacts on air quality. Emissions would remain localized and below *de minimis* thresholds for General Conformity under the O_3 National Ambient Air Quality Standards, meaning a Conformity Determination is not required. The New Hampshire Department of Environmental Services (NHDES) has issued a Title V Operating permit to UNH, which is valid through August 31, 2029, covering emissions sources like boilers and emergency generators and requiring compliance with reporting, certification, and monitoring provisions. UNH would coordinate with NHDES for any additional necessary air quality permit modifications related to the emergency generator, ensuring compliance with federal standards.

Water Resources and Hydrological Processes: Although the Preferred Alternative does not involve direct impacts to streams, stormwater runoff from construction could affect the nearby College Brook, which is listed as impaired by the NHDES for aquatic life integrity, mercury, and *Escherichia coli* (*E. coli*). UNH would obtain an NHDES Alteration of Terrain permit, ensuring on-site stormwater treatment before off-site discharge, as well as a NPDES Construction General Permit (CGP). The project would also comply with UNH's existing Municipal Separate Storm Sewer System permit, and Section 438 of the EISA, incorporating low-impact development features like bioswales, catch basins, and rain gardens for stormwater infiltration and management. In accordance with the CGP, UNH's contractor would develop a site-specific Stormwater Pollution Prevention Plan (SWPPP) that would detail erosion and sediment controls to minimize runoff impacts. Adherence to total maximum daily load requirements and proper stormwater management would prevent discharges that could contribute to *E. coli* or mercury contamination, and protect the water quality of College Brook.

The Preferred Alternative would avoid filling wetlands and construction activities would not result in direct discharge to wetlands. Indirect impacts to wetlands from increased erosion and sedimentation during construction would be temporary and minimized through adherence to the SWPPP. UNH would comply with all applicable local, state, and federal regulations regarding wetlands. The Preferred Alternative would not take place within a floodplain; the CoE and Innovation Center would not encroach on the floodplain along College Brook.

Construction and operation of the Preferred Alternative would not involve groundwater withdrawals, impact existing wells, or intentionally release materials into groundwater resources. Drilling associated with the potential installation of the geothermal heat pumps may intersect groundwater depending on the system

configuration that is selected, but any system would be a closed-loop system. No releases to groundwater would occur, nor would groundwater enter the geothermal heat pump system if installed. Any groundwater that is encountered would be captured, treated, and released to the stormwater management system. The CoE and Innovation Center would not significantly increase potable water demand or deplete aquifer resources. Potential impacts to groundwater may occur during construction from the accidental spill of petroleum products or other liquids during construction, but the implementation of BMPs, such as carrying out routine equipment inspections, maintaining spill-containment materials on-site, and adhering to other site-specific hazardous and toxic materials and waste plans, would minimize the potential for impacts to groundwater.

The Project Site is located within New Hampshire's designated coastal zone. NOAA has completed a federal consistency determination in accordance with Subpart C of the Coastal Zone Management Act and has determined that the Proposed Action would be consistent to the maximum extent practicable with the enforceable policies of the New Hampshire Coastal Program.

Socioeconomics and Protection of Children: Construction of the Preferred Alternative would provide temporary economic benefits to local contractors. Long-term operations may create up to 121 support staff positions, including student research roles, offering minor, beneficial socioeconomic impacts in the area. Community and emergency services would remain unaffected during construction and operation. The Preferred Alternative would not disproportionately affect children, as construction sites would be secured and monitored to prevent unauthorized or accidental access, and air quality controls would be instituted.

Cultural Resources:

In 2016, the New Hampshire Department of Historic Resources (NHDHR) identified the UNH Historic District, which includes the full campus property, as eligible for listing in the National Register of Historic Places (NRHP). The UNH Historic District includes the West Edge, but individual buildings within the West Edge were not previously evaluated for their contributing status. NOAA conducted an architectural history Resource Evaluation to evaluate the eligibility of architectural resources within the West Edge for the NRHP. This survey identified four resources within the Area of Potential Effects (APE), three of which were evaluated for their contributing status to the UNH Historic District, and one which was evaluated for individual NRHP-eligibility. Following consultation with the NHDHR, two of the buildings were determined to be contributing resources to the UNH Historic District, and the building evaluated for its individual eligibility was determined to be eligible for listing in the NRHP. The primary way in which the Proposed Action could affect architectural resources is by altering the viewshed, as the proposed CoE and Innovation Center would introduce a new visual element into the APE. There would be no physical impacts to any contributing resources to the UNH Historic District, and through coordination with the NHDHR, the integrity of historic properties would not be diminished. Therefore, the Preferred Alternative would not result in adverse effects under the National Historic Preservation Act (NHPA), and would not result in significant impacts to architectural resources.

NOAA conducted a Phase 1A/1B archaeological survey at the Project Site, which found a high sensitivity for historic architectural occupation and identified the presence of one historic-age archaeological site within the APE. The site is associated with a historic farmstead dating back to the 1850s and various historic artifacts, primarily domestic materials, were encountered in the soils at this site, likely related to the property's nineteenth and twentieth-century occupations. Due to funding limitations, NOAA is unable to conduct further evaluations (i.e., a Phase II archaeological survey) to evaluate the integrity of the site and determine its eligibility for listing the NRHP. Therefore, NOAA would treat this site as a potentially eligible historic property and proceed directly to efforts to mitigate potential adverse effects. Mitigation may include project redesign, protecting the site in-place, conducting archaeological monitoring during deep drainage work, and using interpretive mitigation. NOAA will codify mitigation activities in a Memorandum of

Agreement (MOA) between NOAA, NIST, UNH, and NHDHR. By adhering to this MOA, the Preferred Alternative would not result in significant impacts to archaeological resources.

Flora and Fauna: The Preferred Alternative would require clearing of up to 5 acres of trees and shrubs for construction but includes plans to incorporate native, drought-tolerant vegetation, including pollinator-friendly plants and shade- and salt-resistant grasses. Contractors would be required to minimize the introduction or spread of invasive species through the use of BMPs such as cleaning all construction equipment before entering and leaving the Project Site, establishing designated cleaning stations, and properly disposing of invasive species. During construction, common wildlife species potentially present within the Project Site would be physically displaced, and construction noise and increased human activity may also disturb wildlife species. However, mobile wildlife species would likely relocate to areas of similar habitat nearby. In addition, impacts from disturbance, displacement, or inadvertent wildlife mortality from construction would occur at the individual level and would not inhibit the continued presence of common wildlife populations and species in Durham.

Potential suitable habitat for the northern long-eared bat (NLEB; *Myotis septentrionalis*), a federally endangered species; and the tricolored bat (*Perimyotis subflavus*), a federally proposed endangered species, is present in the forested area at the Project Site. The Project Site provides only marginal habitat for the federally proposed threatened monarch butterfly (*Danaus plexippus*), with no milkweed plants identified at the site and limited flowering plants present along the forest edge. UNH would adhere to tree clearing time-of-year restrictions between April 15 and October 31 to avoid the active season of the NLEB and tricolored bat. Construction of the CoE and Innovation Center would be phased to avoid the forested portion of the Project Site until November. Therefore, the Preferred Alternative *may affect but is not likely to adversely affect* all three species. Due to the proximity of the Project Site to major roads and the marginal availability of quality habitat for birds of conservation concern, including the bald eagle (*Haliaeetus leucocephalus*), red-headed woodpecker (*Melanerpes erythrocephalus*), and rusty blackbird (*Euphagus carolinus*), they are unlikely to use the Project Site for nesting. Since tree clearing would not begin until November, which is outside of the breeding season of these birds, it is not expected that any nesting individuals that may use the site would be present. If any birds are present, it is likely they would relocate to other suitable habitat. The U.S. Fish and Wildlife Service concurred with NOAA's determinations in a letter dated April 29, 2025.

Farmland and Soils: Construction of the Preferred Alternative would result in soil disturbance and removal in order to lay the foundation, pave the access road and parking lot, and add stormwater management features on-site. Construction activities would not disturb or impact any new areas of farmland of statewide or local importance where the Project Site intersects with the existing adjacent parking lot. However, construction in the forested part of the Project Site would disturb up to 5 acres of previously undisturbed prime farmland soils. Although some farmland soils would be precluded from future agricultural use, no soils currently used, or available for use, for agricultural purposes would be impacted. NOAA contacted the Natural Resources Conservation Service regarding potential impacts to farmland and received confirmation in a letter dated January 17, 2025, that the Project Site is exempt from the requirements of the Farmland Protection Policy Act. Given the Preferred Alternative's disturbance of more than 1 acre, UNH would obtain an NPDES CGP and develop a SWPPP to manage runoff and erosion through BMPs. These controls would be implemented before land disturbance and maintained throughout construction. Operation of the CoE and Innovation Center is not expected to involve any future ground disturbance or have additional impact on soils.

Noise: Construction activities associated with the Preferred Alternative would result in a temporary increase in noise levels within the vicinity of the Project Site, related to use of construction equipment. Noise impacts would be greatest at the Project Site and would decrease with distance. Buildings located along West Edge Drive and Mast Road would be the closest receptors to the Project Site. The nearest sensitive receptors

are approximately 0.02 mile from the Project Site. The 18-month construction period would generate the most noise during the site preparation and construction phases of the Proposed Action (i.e., installation of foundation, construction of the facility, and pavement of driveway and parking areas). To minimize noise impacts, contractors would implement BMPs, such as turning off equipment when not in use, limiting idling, and using properly maintained intake and exhaust mufflers. Additionally, UNH may contact nearby sensitive receptors prior to beginning construction to inform them of upcoming activities. These measures, along with adherence to the Town of Durham's Noise Ordinance would minimize short-term impacts on surrounding commercial and residential areas to the extent practicable.

Transportation: The Preferred Alternative would involve constructing a driveway entrance off Mast Road to provide direct access to the CoE and Innovation Center. Additionally, construction would include a dedicated tractor-trailer turnaround area to ensure trucks can maneuver on-site without blocking traffic or causing congestion along Mast Road. During construction, there would be a temporary increase in traffic from workers' vehicles and construction equipment, but this increase would not exceed the capacity of surrounding roadways. Once operational, the addition of personnel at the new CoE and Innovation Center would lead to a slight increase in traffic but would not significantly impact traffic flow or exceed roadway capacity. Additionally, personnel are expected to utilize a range of transportation methods and access the facility on varying schedules. Any increase in demand for bus service would not overwhelm the existing transit system or cause delays or disruptions in service. Pedestrian paths on the east and south sides of the Project Site would be either maintained or reconstructed, and the Preferred Alternative would not significantly increase foot traffic along the sidewalks to cause overcrowding or obstruction. During construction, there may be loss of access to the pedestrian path that runs from the USDA Forest Service building to the West Edge parking lots. However, this disruption would be temporary and alternate routes would be available for pedestrians. The conversion of 2.9 acres of parking at Parking Lot S would result in the loss of parking spaces used by students and UNH's Transportation Services. While UNH does not currently have an established plan to compensate for the loss of student parking, the construction of the CoE and Innovation Center would include 35 parking spaces to accommodate the support staff and visitors at the new facility. Therefore, the loss of parking spaces is not expected to result in an insufficient number of available spaces or overcrowding of existing lots.

Utilities and Solid Waste: Construction of the Preferred Alternative would increase overall utility usage at the Project Site to support the CoE and Innovation Center, requiring new connections to existing electrical, natural gas, network, sanitary sewer, and water utilities along Mast Road. Temporary utility service disruptions may occur during construction but would be minimized by ensuring that existing utilities remain operational until the new utilities are ready to be connected. Advanced notice would also be provided to users with anticipated disruptions. Once operational, the CoE and Innovation Center would increase utility demand but not to a degree that would burden providers or disrupt services, ensuring long-term compatibility with existing infrastructure. Construction activities would generate solid wastes like removed soils, rocks, concrete, wood, asphalt, glass, and plastics. Any materials considered unsuitable for reuse would be removed and disposed of at authorized landfills, in compliance with applicable solid waste regulations. Portable restrooms would be provided at the construction site, and contractors would be responsible for managing and removing sanitary waste from the Project Site.

Visual Resources: The Preferred Alternative would permanently alter the viewshed in the region of influence (ROI) by developing forested land, demolishing a portion of an existing parking lot, and constructing a new, 41-foot tall facility. During site preparation, tree-clearing, and demolition, views of activities would be most prominent for personnel working in facilities at West Edge and people traveling along Mast Road and Main Street. The clearing of up to 5 acres of forest would affect the visual aesthetic of the surrounding are by removing natural features and replacing them with a new, modern structure. The CoE and Innovation Center would be a new built feature in a lightly developed landscape, visible from

nearby roadways and facilities. However, its design would meet UNH design standards and would provide a flagship visual anchor for the anticipated The Edge redevelopment area. Introducing visually appealing research facilities would also enhance the area's overall appearance and promote future development within the West Edge.

Hazardous Materials: One residence was previously located in the forested portion of the Project Site that contained oil tanks and asbestos-containing building materials. Prior to the property transfer to UNH, the residence was abated and removed from the site. There is currently no record or evidence of contamination at the Project Site from hazardous and toxic materials and waste (HTMW). No HTMW removal is anticipated for the Preferred Alternative. UNH plans to prioritize locally sources, non-toxic materials during construction. Operation of construction equipment would create the potential for discharge, spills, and contamination from products such as diesel fuel, gasoline, oil, antifreeze, and lubricants, and multiple minor releases could have potential effects to the environment. However, UNH would follow the procedures outlined in its Hazardous Waste Management Plan (HWMP) and Integrated Contingency Plan (ICP) to minimize the potential for contamination. All hazardous materials or waste discovered, generated, or used during construction would be handled, containerized, and disposed of in accordance with applicable local, state, and federal regulations. Operation of the Preferred Alternative is not expected to result in the generation of hazardous waste. While routine maintenance and use of the backup generator could create the potential for discharge, spills, and contamination, any potential releases would be handled in accordance with UNH's HWMP, ICP, and applicable local, state, and federal regulations. In addition, if a diesel or gasoline generator is installed, appropriate precautions would be taken during the use of the generator to minimize the potential for any accidental releases, such as installing the generator away from storm drains, using a secondary containment system or double-walled storage tank for fuel, and ensuring that fuel tanks are properly secured.

Reasonably Foreseeable Effects of Other Actions: NOAA identified and reviewed reasonably foreseeable actions that are planned to occur within the Proposed Action's ROI and analyzed the reasonably foreseeable effects of these actions in conjunction with the potential effects of the Proposed Action. These projects are a mix of transportation, infrastructure, and development projects that were selected given their location within 2 miles from the Project Site and proposed implementation within the next five years. Implementation of the Preferred Alternative when taken into consideration with reasonably foreseeable actions could lead to impacts to land use, air quality, water resources and hydrological processes, socioeconomics and protection of children, cultural resources, flora and fauna, farmland and soils, noise, transportation, utilities and solid waste, visual resources, and hazardous materials. These impacts would be minimized to the extent practicable through implementation of BMPs and adherence to regulatory guidelines under the Proposed Action. No significant adverse impacts would occur.

Best Management Practices and Mitigation Measures

NOAA would comply with all federal and state laws and regulations, including consultation and permitting requirements. With implementation of these measures and other BMPs mentioned in the EA, the Proposed Action would be anticipated to have no significant impacts. However, adverse effects to the potentially NRHP-eligible archaeological site would require mitigation. Mitigation measures to resolve any adverse effects would be codified in an MOA between NOAA, NIST, UNH, and NHDHR.

Public Review

NOAA published a Notice of Availability (NOA) of the Draft EA and Draft FONSI in the *Portsmouth Herald* on July 21 and 22, 2025. These documents were available for public review and comment through August 20, 2025.

The Draft EA and Draft FONSI are available online at https://www.noaa.gov/administration/environmental-assessment-public-notices and printed copies are available at the Durham Public Library.

Agency and Tribal Consultation

NOAA coordinated with federal, state, and local agencies with jurisdiction by law or special expertise over the Proposed Action to inform the range of issues to be addressed in the EA. While there are no federally recognized Tribes in the state of New Hampshire, NOAA contacted a local Tribe, the Cowasuck Band of Pennacook-Abenaki People, with whom UNH has an existing relationship. Agencies and the local Tribe were provided with the opportunity to comment on the Draft EA following its publication on July 21, 2025. Responses have been considered and incorporated in the EA, as appropriate. Records of correspondence are included in **Appendix A** and **Appendix B** of the EA.

Findings

Finding of No Significant Impact. After review of the EA prepared in accordance with the requirements of NEPA, and which is hereby incorporated by reference, I have determined that the proposed CoE and Innovation Center project will not have a significant impact on the quality of the human or natural environment with implementation of the BMPs identified. Accordingly, an Environmental Impact Statement is not required. This decision has been made after taking into account all submitted information and considering a full range of practical alternatives that meet project requirements and are within the legal authority of NOAA. The signing of this FONSI completes the environmental impact analysis process.

_____ _____

Deirdre Reynolds Jones Date
Chief Administrative Officer
National Oceanic & Atmospheric Administration

_____ _____

Joseph Barger Date
NEPA Coordinator
National Institute of Standards & Technology

_____ _____

Andrew J. Wright Date
Chief Facilities Management Officer
National Institute of Standards & Technology

Attachment: Draft Environmental Assessment for University of New Hampshire Ocean Mapping Center of Excellence and Innovation Center