

2011-12 Repair and Renovation Reserve

Recommended Project List

	Allocation
Administration	
New Revenue Building - Electrical System Upgrades	190,000
This project will make a number of repairs to the New Revenue building backup electrical power system. A recent electrical maintenance test for the downtown complex uncovered problems in the building, such as the computer center backup power is unreliable and has failed in the past during tests. Repair work will involve installation of flow switches and repairs to the existing backup systems and a small backup generator.	
Swannanoa Hazardous Waste Site Cleanup - Ph II	1,000,000
This project cleans hazardous waste at the Swannanoa site. Based upon testing and evaluation, the site will have to be fenced off and the soil capped with concrete to prevent further runoff of hazardous materials. Additional testing will also be required to determine the extent of contamination and additional remediation work.	
Downtown Complex-Main Switchboard Repairs	360,000
This project repairs a number of serious deficiencies that were noted during testing, including some defective main circuit breakers that have potential to interrupt power throughout affected DOA buildings. Since repairs will impact power to buildings, work must be performed on weekends.	
Archdale - Sprinkler System and Exit Sign Repairs	337,000
This project will correct Building and Life Safety Code violations that have been noted at Archdale Building by DOI and DOA as a part of the required annual building safety inspections. This project provides for the required repairs to these life safety systems.	
Old Chiller Plant - Equipment Upgrade	3,500,000
This project updates unreliable and failing equipment in Chiller Plant #1, which provides cooling to nine DOA Buildings and chilled water at night to charge the underground storage tank for cooling capacity required the following day. The updated equipment includes new chillers, pumps, piping, electrical, and controls. The current equipment often fails to automatically start and requires a service technician to manually start the chillers, reducing cooling capacity and impacting the guaranteed energy savings under the ongoing Performance Contract with PEPCO. Work also includes improvements to the underground chilled water storage tank to allow it to be tied directly to main loop and to relocate pumps and pump controllers to location above grade. In the present below grade location, these pumps and controllers continue to fail impacting the ability to use the required chilled water storage capacity. Work also includes installation of a new cooling tower for the new chillers. PEPCO project only replaced two of the three required cooling towers.	
Bath Building - Renovations on Floors 1-3 / Elevator Replacement	1,160,000
This project involves selective demolition and renovation on the second and third floors to improve space efficiency. Improvements to the elevators, electrical systems, mechanical systems, and fire alarm systems are needed to meet system codes.	
DOA Roof Repairs - Admin, Dobbs, New Education	337,000
This project will repair leaking roofs at the Administration, Dobbs, and New Education buildings. The project will also repair and waterproof leaking metal wall panels at Dobbs and New Education.	
Administration Building Major Renovation - Ph I	4,000,000
This project will renovate the Administration building. Renovation work will include abatement of friable spray-on asbestos, correcting life safety deficiencies, and creating ADA compliant spaces.	
Administration Building - Replace Fans in Air Handling Units	277,000
This project replaces the supply fans that have run continuously for forty-seven years. The fans have lost 30% of design cfm; and the bearings, shaft and impellers are in bad shape.	
Commissioning of Downtown Government Complex Controls	468,000
This project will address the controls for the Chiller Plant Number 1, New Education, New Revenue, Justice, Dobbs, Archdale, Agriculture Annex, Labor Buildings, and the Old Chiller plant. The sensors, control panels and differential pressure, humidity sensors, supply sensors, return sensors, and associated controls on these buildings have to be calibrated.	
Albemarle Bldg - Cooling Tower Replacement	422,000
This project will repair the cooling tower, which has deteriorated due to rust and leaking. Work requires new VFD, new electrical, and extra height capacity crane to reach roof.	
Main Chiller Plant Cooling Tower Motor	75,000
This project will be for a spare fan and motor for the cooling tower. It is a long lead time to purchase the items, and if one is lost, then cooling capacity is lost for half of the downtown government complex.	

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	Allocation
History Museum Fire Alarm Renovation - Replace Head End Equipment	140,000
This project will replace the obsolete fire alarm panel, all smoke detectors, all notification devices; and the shunt trip and smoke evacuation control circuits will be then reconnected and tested.	
New Revenue Fire Alarm Renovation - Replace Head End Equipment	233,000
This project will replace the obsolete fire alarm panel, all smoke detectors, all notification devices; and the shunt trip and smoke evacuation control circuits will then reconnected and tested. A voice notification system will be added that allows specific messages to be distributed over the speaker system.	
NC Museum of Natural Sciences Escalator Modification	42,000
This project is to upgrade the six escalators with a skirt deflection system. Skirt deflection is a brush type attachment that is 3-4 inches off each step unit on the left and right side. This added safety feature has been developed within the last ten years as a result of the increasing number of injuries on escalators. This safety feature brushes the foot or leg so you step away from the actual mechanism. Individuals with rubber soled shoes have been standing on this 1/4" gap between the skirt and the step and the rubber of the shoe gets hot and the pulls the shoe rubber when continuing on, thereby causing a life safety hazard.	
Labor Building -- Replace AHU and Controls	600,000
This project replaces the air handling unit in Labor Building. The coils are fouled and the controls are not functioning properly.	
Replacement Steam Convertors and Condensate Stations - Admin, Dobbs, Archdale	304,000
This project will address issues with convertors and condensate stations at several buildings. The convertors are not maintaining proper temperature set point, pumps and steam valves are leaking, and VFD controllers are damaged. Condensate pumps are leaking and controls are failing. Projects will replace all these components.	
SBI Cooling Towers Replacement	358,000
This project is to replace two cooling towers and two water heaters. The towers are leaking; the hot and cold decks are leaking due to corrosion. The water heaters themselves are also rusted and leaking.	
New Revenue Building Space Renovations	20,000
This project will build an energy efficient wall to surround large scanners. Scanners must be operated at temperature of +/- 70 degrees. They currently occupy 700 square feet adjacent to open space of 2400 square feet. Enclosing and controlling the 700 square foot area with lower than normal temperatures for operation of the scanners keeps them running efficiently, minimizes unnecessary cooling of a larger area, and allows employees occupying the adjacent space to work in a more comfortable environment.	
Old Revenue Building Building - ADA and Security Renovations	325,000
This project will create a new ADA accessible entrance from Morgan Street; and will provide security renovations to include card access and elevator floor lockouts. Handicapped visitors currently must enter through a Hillsborough Street entrance and maneuver through a confusing layout to the main lobby.	
Old Revenue Building - Server Rooms Suppression System	95,000
This project will provide a new type of fire suppression system for the server rooms. The current system is a wet system that will damage records stored in the servers if the system was to activate or malfunction.	
New Education Building - Replace HW Package	75,000
This project replaces the Hot Water package in the New Education Building due to leaking and failing pumps. Complete failure of these pumps will affect heat in the New Education Building.	
Archdale Building New Low Voltage Panel Boards and Wiring	101,000
This project will replace the old I-line panels and install new additional panels and wiring in the Archdale building. Currently, there is no existing capacity for Facilities to provide new circuits.	
Old Revenue Loading Dock	229,000
This project is to provide a new loading dock with access from Hillsborough Street. At present, there is no loading dock and shipping/receiving at building is difficult. Work will also include demolition of the luncheonette building and replace it with a parking lot.	
Administration Total	14,648,000

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	Allocation
Office of State Budget & Management	
OSBM Reserve	2,489,342
This recommendation creates a contingency reserve for emergency projects approved by OSBM.	
Office of State Budget & Management Total	2,489,342
Department of Public Safety	
National Guard - Greensboro Readiness Center Renovation	1,330,000
This project renovates and expands the readiness center. It will renovate existing facility space, provide additional space, as well as parking, security, anti-terrorism/force protection improvements. This project will modernize the facility & provide assigned units authorized facilities in order to meet critical local, state & federal missions. These funds would provide a match for \$4,031,000 of federal funds. Note: (These funds will be held in a reserve until the General Assembly approves its release notwithstanding G.S. 143C-4-3, which prohibits use of R&R funds for expansion of an existing building's square footage.)	
JJDP - Buncombe Detention Center Renovation	300,000
This project encompasses the overall repair to the Buncombe Detention Center, including the replacement of doors to sleeping rooms, floor tile, security screen, radiant units, and a central HVAC System. The project scope also includes an electric back gate for the facility, enclosure of the courtyard area, renovation to accommodate additional storage and house the laundry service.	
JJDP - Dillon Fire Alarm and Water Pressure	450,000
This project will increase water pressure to a minimum of 60 psi for the sprinkler system and plumbing fixtures; and also make repairs to the fire alarm systems.	
JJDP - Youth Development Center -- Security Cameras and Surveillance System	900,000
This project installs security camera equipment at the youth detention centers. The project scope includes digital video recorders, cameras, and monitors. In addition, the project funds the purchase of software that allows viewing and archival of videos.	
JJDP - Youth Development Center -- Safety and Security Projects	200,000
This project addresses safety and security concerns at the youth detention centers such as suicide prevention; staff protection; fence repairs, and vandalism repairs	
JJDP - Dobbs HVAC and Mechanical Upgrades	250,000
This project will provide a chiller to cool the administration building and academic school buildings and auditorium; and an AC condensing unit for the cafeteria.	
Correction - Kitchen Hood Suppression Systems Upgrade	875,000
This project upgrades kitchen hood systems statewide to meet code requirements. Each system requires new hoods, exhaust fans, supply fans, structural support, fire suppression systems, fuel shut-offs, fire alarm systems tie-in, fire suppression systems, and electrical interlocks.	
Correction - Replacement and Upgrade of Obsolete Electronic Systems	1,175,000
This project replaces obsolete electronic door controls along with perimeter security detection and surveillance systems statewide.	
Correction - Fire and Life Safety Projects	1,500,000
This project replaces fire alarm systems at various Corrections facilities as identified in annual Department of Insurance and Department of Corrections inspections. In addition, work would include replacing defective egress lighting and exit signs as needed, installing generators at various sites, and upgrading electrical services at various sites.	
Correction - Central Prison -- Elevators	1,757,000
This project repairs the elevators at Central Prison. The elevators at Central Prison are over 25 years old, do not meet present codes, and are in need of overhaul. These elevators are used to transport inmates and failure presents serious security issues.	
Correction - Roof Repair and Replacement Projects	2,000,000
This project repairs and replaces existing roofs and exterior sealant on facilities statewide.	

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	Allocation
Correction - Mechanical Systems Renovations and Replacement	1,600,000
This project renovates and replaces mechanical systems statewide. The age and condition of these systems requires increased maintenance and increases the potential for frequent outages that could require the evacuation of the inmate population, posing an increased threat to the safety and security of the public.	
Correction - Water/Wastewater Improvements	775,000
This project provides for the addition of automated solids removal for sanitary sewer projects statewide. These wastewater projects are located at various units throughout the State and are necessary to maintain adequate service and compliance with local, State and Federal requirements.	
Correction - DART Cherry Renovations	150,000
This project will address renovations at the 1930 O'Berry Administration building. In the 1990s, the building was gutted and partially renovated and the remainder of the building was left as a gutted shell for storage. This project will correct water infiltration through exterior walls and windows; and renovations to provide offices, storage, and work areas for staff; and climate controlled storage for supplies and records.	
Correction - Statewide Asbestos and Hazardous Materials Abatement	75,000
This project abates asbestos-containing materials and other hazardous materials at various prison units identified by inspection reports, engineering studies, or emergency situations.	
Correction - Underground Storage Tank Removal and Remediation	75,000
This project removes or permanently closes inactive or leaking Underground Petroleum Storage Tanks (UST's) and remediates any contaminated soil or groundwater.	
Highway Patrol - Renovate and Update Current Vehicle Paint Booths	220,000
This project updates existing Vehicle Paint Booths to meet the certification standards set forth by the EPA and the North Carolina Division of Air Quality. The current vehicle painting facilities are outdated, improperly ventilated, and create the potential to cause harm to the surrounding environment or employees.	
Emergency Management - Badin Warehouse Repairs	171,000
This project corrects life safety electrical issues at the Badin Warehouse, such as grounding violations, replace emergency power system, provide a fire alarm system, provide egress lighting and provide site lighting.	
Highway Patrol - SHP Training Academy-Bldg 10 Renovations - J.T. Armstrong Building	1,196,000
This project includes demolition of interior partitions and finishes, doors; updates the existing mechanical system and electrical system. A new design will include space for a larger training area to meet current ADA requirements, upgraded handicap restrooms, showers, and lockers area; minor exterior repairs to the roof and masonry walls; and abatement of: asbestos floor tiles, asbestos insulation, and lead paint.	
Emergency Management - Badin Warehouse FCAP ADA Hardware and Sprinkler System	74,000
This project corrects life safety issues found in the FCAP report, which include installing ADA/Emergency panic door devices and providing an automatic fire sprinkler system.	
Highway Patrol - Troop H Headquarters Renovations	149,000
This project renovates the Highway Patrol Troop H Headquarters Building in Monroe, which has undergone little maintenance in the past 16 years. The planned repairs include replacing the electronic door locking system, painting, garage renovation, additional security fencing, lighting upgrades, HVAC maintenance, and carpet replacement.	
National Guard - Fire Alarm Systems Installations - Ph II	272,000
This project is to install fire and alarm systems that are equipped to transmit remotely to an off-premises location at nine readiness centers across the state.	
Emergency Management - Badin Warehouse FCAP Access, Dock and Exhaust Repairs	90,000
This project will renovate access to the warehouse, repair the loading dock, provides better drainage, and upgrade the HVAC system.	
National Guard - Morehead City Readiness Center Reroof	233,000
This project replaces the currently leaking roof at the Morehead City readiness center. The roof was replaced in 1992 with asphalt bitumen. There is current leakage over the administration, hallways, offices, and training areas. Water is entering facility and damaging both facility and contents.	

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	Allocation
National Guard - Lincolnton - Motor Vehicle Storage Building Reroof/Minor Renovations	119,000
This project replaces the roof at the 1949 Lincolnton motor vehicle storage building. The reroof is needed to repair large leaks causing damage to building contents and the rotting of wood construction members. The renovations are to address non-ADA compliant restrooms.	
Emergency Management - Badin Warehouse FCAP Facility Repairs	143,000
This project includes replacement of entry door system, renovate offices, install door awning, repairs walls, and address maintenance issues.	
National Guard - Asheboro Motor Vehicle Storage Building Reroof	119,000
This project reroofs the 1949 Asheboro motor vehicle storage building. The existing roof is allowing free-flowing water to enter the building. A portion of the metal support system will be replaced due to corrosion.	
Highway Patrol - Renovate and Repair Lincolnton Highway Patrol Office	113,000
This project will replace the roof to eliminate the existing leaks, paint interior of building, and install electrical outlets in building.	
Highway Patrol - Renovate and Repair Laurinburg Highway Patrol Office	44,000
This project replaces damaged exterior fascia boards, replaces damaged windows, repairs door and locking hardware, and repaints exterior and interior.	
Emergency Management - Badin Warehouse FCAP Long Term Access and Hard Parking	191,000
This project provides hard surfaces for a currently unpaved lot for both parking and for storage. It will also provide better access to the facility.	
Highway Patrol - Update Fuel Dispensers at Highway Patrol facilities	205,000
This project updates the thirty year old Gas Boy fuel dispensers at sixty-four fuel facilities across the state. The current dispensers are outdated, obsolete and maintenance costs run extremely high due to the shortage of parts to maintain the equipment.	
Department of Public Safety Total	16,751,000

Cultural Resources

Mountain Gateway Museum Log Cabin -- Roof Replacement	35,000
This project replaces cedar shake roofs on two historical log cabins at the Mountain Gateway Museum that are used in the interpretation of the area's history. Both existing cabin roofs are showing significant signs of rot. Project scope includes removal and disposal of the existing roofs, supply of new roof materials, and installation of the new roofs.	
Outer Banks History Center Building & HVAC Repairs	67,000
This project consists of the repairs and replacement of specific components of the exterior envelope including siding/trim replacement on the south side of the structure and replacement of the failing thermal envelope system below the elevated concrete slab of the archives stacks room. Also included in the scope of the project is replacement of the HVAC heat pump units and controls that condition the office and gallery areas of the Outer Banks History Center.	
Historic Site Statewide Building Repairs	472,600
This project encompasses nine individual projects to address repairs and renovations for statewide Historic Site buildings and visitors centers. Specifically, repair of the Alamance Battleground Visitor Center 2,300 sq. ft. roof canopy, interior plaster wall & ceiling repairs at Historic Halifax Eagle Tavern & Owens House, renovation of the 2,100 sq. ft. radio shop building at the NC Museum of Transportation to include plumbing, electrical, and mechanical systems, installation of a perimeter drainage system for the Historic Halifax Sally-Billy & Owens Houses to remove standing water from underneath the two historic houses, completion of phase II of the Bandon Kitchen Restoration at Historic Edenton, renovation of plumbing, electrical, and mechanical systems at the 5,000 sq. ft. Polk Memorial Visitor Center, replacement of 4,400 sq. ft. of carpet at Historic Halifax Visitor Center, installation of window U/V protection at Bath, House in the Horseshoe, Polk, Halifax & Bennett Place Visitor Centers in order to protect original artifacts, a minor roof repair at Historic Edenton Chowan County Courthouse.	

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Maritime Museum -- Building and Dock Repairs	211,000
This project includes exterior and interior building repairs for NC Maritime Museum and replacement of 6 timber pilings used to support the NC Maritime Museum's Watercraft Center Boat Hoist and Dock. Building repairs include repair of rotten exterior wall sheathing and replacement of rotten shingle siding, roof repairs, exterior trim repairs and painting, exterior lighting repairs, renovation of public restroom with ADA Improvements, installation of LED exit signs, and watercraft center electrical improvements including ground-fault protection breaker, hoist and planer electrical rewiring. Pilings supporting the watercraft center's hoist and dock have been in place 20+ years and are experiencing deterioration due to marine organisms.	
State Underwater Archaeology -- Septic System Connection	71,000
This project connects the State Underwater Archaeology Office and Lab Facilities to the Kure Beach sewer system, which has been installed along US 421 Highway. The work includes the design and construction of 600 linear feet of 4" Sewer line, a septic tank and pump, a grinder, and the disconnect of the system from septic field.	
NC Transportation Museum Powerhouse Renovation	2,160,000
This project renovates the NC Transportation Museum's Powerhouse Building to its original condition in order to house the future mechanical system for the planned 90,000 square foot Backshop Building. The work includes roof repair, masonry repairs, doors, windows, etc.	
Roanoke River Lighthouse Renovation-Phase II	454,000
This project consists of the completion of the restoration of the 1886 3-story Roanoke River Lighthouse (total 2,000 sf) to its original 1886 condition. The scope of Phase II will include restoration of the interior spaces of the lighthouse, installation of new electrical and lighting systems, new HVAC system, new fire alarm/smoke detection systems, hazardous material testing and abatement and lighthouse lens and lens pedestal base restoration. Also included are fabrication of exhibit panels and installation of lighthouse accessories which will be used to interpret the history of the lighthouse and demonstrate the living conditions of lighthouse keepers and their families.	
Cultural Resources Total	3,470,600
Justice	
SBI Training Center Building 9 Renovation	1,480,000
This project will provide workable and usable space to ensure compliance to fire codes, ADA, and health and safety standards. The building was constructed in 1954 and has not had an interior renovation and is in bad condition with a significant presence of mold and asbestos. This building houses the training staff for the SBI and includes classrooms.	
Justice Total	1,480,000
Environment and Natural Resources	
NC Zoological Park -- Fire Alarm Repairs	234,000
This project brings the fire suppression system, including the sprinkler system, at the NC Zoological Park into compliance with the NC State Fire Marshal. This project also provides for an annual maintenance contract, including a required annual inspection of the fire alarm and sprinkler system.	
Parks & Rec - Roof Replacements- 29 Projects in 12 Parks	453,000
This project will address roof repairs for twenty-nine structures at 12 different State Parks throughout the State. The Division has over 1,200 buildings throughout the system and are need of constant repair. The impact is extensive damage to building structures that will lead to more costly repairs in the future if not repaired. The ages of structures vary, but the average age is over 30 years. Typical repairs include replacing shingles, sheathing, and other damaged roof components as necessary to maintain the integrity of each structure.	
NC Zoological Park- Roof Repairs	401,000
This project replaces roofs that are in very poor condition and have numerous deficiencies including many leaks, wet insulation, skylight, gutter and roof deck deterioration. There are nine small roofs on various structures throughout the North American Section and one roof in the African Section of the NC Zoological Park. This project is to re-roof all nine roofs in one project to obtain overall competitive pricing due to bundling of the projects into one larger scope work.	

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	Allocation
Museum of Natural Science- Skylight repair	200,000
This project will address several leaks in different areas of the skylights on the 4th floor. Facility Services has attempted to repair the skylights and have been unsuccessful. The leaks have the potential of damaging valuable exhibits. There is currently have a project to repair the Acro Dome; the design and study completed by Sutton-Kennerly and Associates. The same fix for the dome can be applied to the skylights on the 4th floor.	
Marine Fisheries - Main Building and Maintenance Building Crack Repairs	227,000
This project reduces the overload of electrical circuits, addresses condensation issues in the HVAC system, renovates the Communications Center, and repurposes existing space into a break and conference room at the Division of Marine Fisheries Building.	
Admin: OITS - Remove and Replace Voice/Data Cabling In Archdale	410,000
This project will remove existing telephone and data cabling from the building and replace it with wiring meeting current fire and electrical codes. The requirements for removing "abandoned cables" became part of the National Electrical Code because of the inherited problem of new cabling being installed on top of old cabling. The reason for this requirement is because of the accumulation of cables with PVC jackets that are abandoned in buildings and never used again. This accumulation of flammable PVC is a fire hazard. The Office of Information Technology Services has informed DENR that the Archdale building is non compliant and has to be brought up to standards before any further work can be done to accomodate the additional staff being brought in out of rental space.	
Aquariums -- Graveyard of the Atlantic Exhibit Life Support Systems Replacement	279,000
This project replaces the Life Support System for the NC Aquariums' showcase exhibit, Graveyard of the Atlantic. The existing system is failing due to age and has patched fiberglass repairs that need immediate attention. The existing assembly will be replaced with 3 new energy efficient pumps, (25 hp and two 7.5 hp shaft intricate) along with large diameter piping (24inch) for the life support systems to include valving.	
Museum Natural Science - Research Lab Boiler Replacement	35,000
This project installs a four-phase boiler at the Research Laboratory, as the existing two-phase boiler has inadequate phases and struggles to generate adequate hot water temperatures to maintain critical conditions in the research collection ranges.	
Parks & Rec - Fort Macon State Park Bathhouse Renovations (Phase I)	700,000
This project includes the complete renovation of the existing bathhouse. Work includes replacement of existing roof, siding, and other deteriorating building components (structural and non-structural); renovate and update interior portions of upper changing area/restrooms with individual shower stalls, hot water, lockers, etc. A detailed structural analysis should be performed on the existing structural supports and metal fasteners to include recommendations for replacement or repairs. Wind power could be considered for energy generation for consumption during the season and sell back during off season. Work should include minor updates to lower bathrooms as necessary.	
Aquariums: Roanoke - Replace Electrical Panel and Fire Alarm	175,000
This project is to replace old and deficient electrical panel boxes, as well as, a consistently failing fire alarm panel for the building notification system. All dated boxes and panels will be replaced and rewired to existing codes.	
Zoo - Desert Pavilion Energy Upgrades	318,000
This project will address the Desert Pavilion, which has the third largest energy consumption facility at the NC Zoological Park. The request is to fund several modifications to the existing Mechanical Systems to reduce the energy costs by 25%-40%. The project would install a refrigerant heat pipe system to AHU-1 to reduce energy usage by 25% during dehumidification cycles; reduce the total outside air demand in the Dome by converting to demand controlled ventilation. This project will also add an efficient dedicated outside air system to AHU-1 to reduce or eliminate the amount of dehumidification of the Dome. Upgrades to the control systems and the addition of variable speed drives to five exhaust fans, the cooling tower fans, cooling tower pump, the primary heating hot water pump and the primary chilled water pump will also be completed.	
Parks & Rec - Falls Lake (Sandling & Rolling View) Buildings Repair	75,000
This project will repair four shower houses, three bathhouses, entrance station, and two well houses which need siding replaced or painting. Continued neglect to the maintenance needs of these facilities will cause increased repair costs.	

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	Allocation
Marine Fisheries – Cedar Island Bulkhead, Dock, and Ramp Renovation	322,000
This project stabilizes the waterfront and replaces the existing deteriorated dock. The shoreline stabilization includes composite sheet piling bulkhead, mooring pilings, and a replacement boat ramp within the existing inland basin to accommodate the Marine Fisheries Division research vessels.	
Museum Natural Sci - HVAC Duct Cleaning and Auxiliary Heat	225,000
This project will continue the HVAC retrocommissioning and repair project. Portions of this project were halted when it was determined the HVAC ducts had to be cleaned. There were not enough funds in the original R&R project to complete the duct cleaning. Also, auxiliary heating is needed in the living collections area of the Museum. This request is for \$200,000 for duct cleaning and \$25,000 for auxiliary heating. Health of the staff and visitors, safety of collections and exhibits, and proper maintenance of the building and its system requires an adequately functioning HVAC system. ARRA funds are currently being used to upgrade controls and other equipment for the HVAC system.	
Marine Fisheries - Elevator Modernization	172,000
This project is to retrofit a 39 year old Southern Elevator installed back in 1972 when the existing administration building was originally constructed. Replacement parts are becoming increasingly more difficult to locate due to the age of equipment. This causes long delays in making repairs and presents life safety issues. Safety standards have changed since installed and this modernization will bring the elevator up to present code and will be more efficient to operate.	
Environment and Natural Resources Total	4,226,000
Agriculture and Consumer Services	
Eaddy Building – Roof Replacement	572,000
This project replaces the 33,000 square foot roof of the Eaddy Building, which has experienced major leaks since its construction in 1994. The Eaddy Building houses three laboratories that contain expensive scientific equipment that is very susceptible to water damage. Approximately \$84,500 has been spent on roof repairs since 2004. These roof repairs have been very costly and have proven only a short term solution to an aging roof.	
Research Stations - Roofing and Structural Repairs	312,000
This project addresses structural and roofing repairs at multiple research stations located in the following counties: Haywood, Lenoir, Sampson, Columbus, Edgecombe, Ashe, and Bertie. These repairs are needed due to excessive leaks.	
Standards - Replace Sample Vault-Motor Fuels Lab	203,000
This project renovates the NCDACS Plant Industry Division's NC Seed Laboratory, housed in the Old Health Building. This project would complement the current plans for a new HVAC system in the laboratory.	
Forestry - NCFS District 13 Office & Shop Renovation-Phase I	377,000
This project will provide a full renovation to extend the life of the building. The office siding and exterior appurtenances are at the end of their useful life. The office is not ADA compliant. The shop had modest structural failure on one masonry wall, the roof has numerous leaks, and the plumbing, electrical and mechanical systems are at the end of their useful life. The facility has been held together with minor repairs over its life, but is long overdue for a life extending overhaul. This project is to be divided into two phases with work on both buildings. The first phase will focus on the shop with some improvements at the office. Both phases will be designed under the initial design contract. Estimated cost of both phases is \$753,900. Scope: Rebuild ADA access components for code compliance. Replace wood siding with cementitious siding (Firewise). Replace shop roof. Replace HVAC systems with new energy efficient systems. Upgrade electrical and lighting to current loads and electrical code. Remove all unnecessary and antiquated building systems. Repair structural failure to shop wall. Replace worn flooring.	
Veterinary - Northwestern Lab-Eikin Improvements	82,000
This project will complete repairs of replacing chiller fan/coil units, repair, resurface and seal necropsy floor (safety hazard for pooling water), floor tiles in offices (buckled tiles).	

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Food & Drug - Steam HW Heat Exchanger & Hot Water Pump-Constable	179,000
<p>This project is to replace the constant air volume boxes, replace the steam-HW heat exchanger and hot water pump, and replace the old, outdated telephone system. The constant air volume boxes (approximately 12) are in need of replacement due to age and condition, are clogged, and dampers do not work properly. These are the original boxes installed in 1977. The boxes allow for air flow and also reheat the air. As for the pump that controls the hot water to the constant air volume boxes, it is the original from 1977. The steam-HW heat exchanger and hot water pump are no longer reliable and are in need of replacement. The telephone system is over 18+ years old, is constantly breaking down, and parts are hard to locate. This represents a security and safety issue for the Constable Lab and the Ballentine Building (which currently share the same telephone system). Under this request, each building would have its own unique telephone system without relying on equipment in the other building.</p>	
Old Health Building Renovation	1,741,000
<p>This project renovates the NCDACS Plant Industry Division's NC Seed Laboratory, housed in the Old Health Building. This project would complement the current plans for a new HVAC system in the laboratory.</p>	
Forestry - Tuttle Public Restroom Renovation	132,000
<p>This project will renovate the public restroom, and will include roofing, plumbing, siding and electrical work. Due to heavy use, the 'wet wall' of each restroom requires replacement and has incurred some rot along the sill. This is typical of other similar structures that have undergone full renovation. The exterior doors and frames have extensive rot and have become safety hazards. This facility is an ideal candidate for a full renovation that can extend its useful life for another thirty years, mitigating maintenance through that time.</p>	
Forestry - NCFS District 1 HVAC Replacements	68,000
<p>This project replaces the boiler system, repairs ductwork insulation, cleans ductwork, and replaces the refrigeration system.</p>	
Pest Control - Ballentine Building and Annex Improvements	102,000
<p>This project will replace parts of the duct work, hot water coils, chiller compressors, condensing unit fans, rusted-out heat exchangers, rusted-out HVAC units, and an old fire alarm panel at the Ballentine Building and the Annex Building.</p>	
Plant Industry - Inspection Station Improvements - Crossnore	112,058
<p>This project will make critical repairs to the Crossnore Plant Protection Office and Shop; such as removing and replacing/repairing damaged roofing, gutters, damaged siding, windows, along with repairs to an adjacent storage barn located on the property. When this facility was originally constructed, there were no provisions for an HVAC system. Due to the high humidity at this location, a properly sized HVAC system would allow for a better work environment and lessen damage and maintenance costs caused by moisture damage, as well as lessen the potential for ongoing mold problems.</p>	
Agriculture and Consumer Services Total	
	3,880,058
Health and Human Services	
O'Berry Neuro-Medical Treatment Center - New Heating Plant - Construction Funds	3,471,000
<p>This project provides a new heating plant for the Eastern Region Psychiatric Hospital to replace Cherry Hospital. The new heating plant will provide for a new low temperature plant to be built on the O'Berry campus and also include changing out heat exchangers in each building in order to accommodate the new water temperature. This new heating plant must be completed prior to the closing of Cherry Hospital.</p>	
R. J. Blackley ADATC - JUH / Blackley Steam Plant	1,850,000
<p>This project will provide a small metal building large enough to house three efficient fire tube steam boilers. The steam plant will replace an older unit this is unreliable and extremely inefficient and contains numerous steam leaks in the plant and the steam and condensate piping system.</p>	
Central Regional Hospital - Cooling in MDF Room - Additional Funding	178,000
<p>This project will provide conditioned air to the MDF room which houses equipment that supports all data and communications services for the entire hospital. Loss of the use of the MDF would eliminate all pagers, data, and telephones which would cripple operations and put the hospital at risk of liability. This project consists of building a small mechanical room to house a new DX air handler with an air cooled condensing unit.</p>	

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Recommended Project List

	Allocation
Longleaf Neuro-Medical Treatment Center - Replace 400 Ton Chiller	273,000
The project will provide a new 400 ton chiller to replace the current non-functioning unit. The new 400 ton unit will also provide backup for the 500 ton main chiller. Currently there is no backup for the main chiller and if the main chiller failed, the entire facility will have to be evacuated.	
Cherry Hospital - Boiler Installation at Royster	145,000
This project installs an exterior low temperature (180-200 degree) boiler to serve the Royster Building. Installation of the new boiler will allow Royster Building to be removed from the existing system which is supplied by the existing steam plant at Cherry Hospital that will be shut down once the new Cherry Hospital is completed.	
John Umstead Campus - Steam, Condensate and Hot Water Repairs	184,000
This project replaces existing equipment that is obsolete and leaking, resulting in energy loss as well as mold and mildew problems in numerous buildings. This project will replace one hot water converter and tank, two condensate return units, and 600 feet of condensate return lines including asbestos removal.	
Eastern Region VR -- Building B Roof Replacement	414,000
This project will remove and replace the existing roof on Building B with a new modified bitumen built up roof. The existing roof has reached the end of its expected service life and is leaking.	
J. Iverson Riddle Developmental Center -- Campus Roofing	396,000
This project replaces the deteriorated roofs on the Chapel, Cedar, Willow Bubbles, and four houses on Enola Road. The roofs on these buildings are in poor condition and have begun to leak.	
Caswell Development Center -- Reroof Central Hospital, Central Warehouse & Hardy Building	742,000
This project will replace flat roofs on Central Hospital, Central Warehouse, & Hardy Building with modified bitumen. The current flat roofs are covered with EPDM which has deteriorated and attempts to repair are extremely temporary and fail often.	
Broughton Hospital -- Jones Building Roof Replacement	187,000
This project will remove and replace the existing membrane roof and insulation, where damaged, with new insulation and .030 TPO material. The existing roof is beyond its service life expectancy and has begun to leak. Water damaged insulation will be replaced where necessary.	
Black Mountain Neuro-Medical Center -- Additional Fire Suppression System	2,876,000
This project will provide funding for installation of a fully automatic fire suppression system at Black Mountain Neuro-Medical Center. The facility is only partially sprinklered, and current building codes require that a fully automatic suppression system be installed throughout the entire facility.	
Julian F. Keith ADATC -- Roof Replacement - Dorms 3,4, & 5	117,000
The project replaces the existing roof membrane that is in poor condition and nearing the end of its expected service life. This project will also increase the thickness of the roof insulation resulting in improved energy efficiency.	
Murdoch Developmental Center -- Butner Office Complex ADA and Life Safety Upgrades	125,000
This project replaces the existing floor and ceiling tile which is comprised of asbestos containing material. New vinyl composite tile, carpeting and vinyl base along with a new lay-in ceiling will be installed.	
R. J. Blackley ADATC - Aiken Building Electrical Upgrades	141,000
This project will upgrade the existing electrical system for Aiken Building which is necessary due to the addition of new computer equipment loads. The project will include providing a new step down transformer from 480V to 208V, two new distribution panels, disconnect switches, and conduit and feeders as required.	
Black Mountain Neuro-Medical Center - Campus Water & Sewer Upgrades	185,000
This project replaces the current water supply system by tapping into the existing fire hydrant loop and connecting to the existing domestic water service that feeds the campus. This will allow the water supply to be connected to a more reliable incoming water service. The sewer upgrades will replace 70 year old terra cotta piping	

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Recommended Project List

Governor Morehead School - Lineberry Auditorium Renovations	Allocation 385,000
This project will renovate the interior of the GMS auditorium in the Lineberry Building. The renovations will include: New stage curtains, flooring, stage lighting, integrated sound/lighting/recording system, new chair lift, wall mirrors for the dance room, sound reflectors over the stage, acoustical wall panels, 350 new seats (removal of old seats), asbestos floor tile abatement, painting, plaster repair, new flooring, and control booth constructions	
Broughton Hospital -- DOI & DHSR Life Safety Compliance Corrections	248,000
This project provides for compliance corrections as identified by both the Department of Insurance and the Division of Health Service Regulation. The compliance corrections consist of sprinkler systems for most building attics, fire and smoke alarms for numerous areas, exit stairwell corrections, and a large number of miscellaneous items. Because the work must coordinated among the many buildings on campus, the design must be performed for the entire campus to ensure that adequate water supplies are available, that the central fire alarm panel is adequate for the entire hospital, etc. Once the design is complete, then construction may be performed on a building-by-building basis.	
Wright School -- Safety and Security Upgrades	109,000
This project addresses several safety and security issues on Wright School's building and grounds as identified by the Division's HIPAA Gap Assessment team and by Advocacy Services. The project scope includes a security system, exterior motion detector lights, and an exterior camera surveillance system.	
Murdoch Developmental Center -- Ridgeway Roof Replacement	215,000
This project replaces the main sloped shingle roof on the Ridgeway Cottage (patient cottage)	
Dorothea Dix Campus -- Campus wide Roofing	495,000
This project repairs the roofing, flashing, and related waterproofing systems and subsystems. The project scope includes work at McBryde North and South, Plumbing Shop/Garage, Anderson, Royster, Dobbin, Broughton, Kirby, Grounds Maintenance, Laundry Distribution, and 17 residential style buildings.	
Julian F. Keith ADATC -- Dormitory 1 & 2 Roof Replacement	111,000
This project replaces the roofing and insulation for the Dormitory 1 & 2 Building.	
Dorothea Dix Campus -- Ashby ADA & Life Safety Upgrades	345,000
This project provides ADA and Life Safety Code upgrades for the Ashby Building to include: elevator installation; ADA bathroom improvements; ADA parking spaces and sidewalks; asbestos floor tile abatement; carpet; and, a card access system.	
Governor Morehead School - Campus Roofing Upgrades (Crockett-Peele)	95,000
This project repairs the roofing, flashing, and related waterproofing systems and subsystems. The project is necessary to protect the building form deterioration and to provide a suitable environment for the building occupants.	
Cherry Hospital - Conference Center HVAC & FA Upgrades	187,000
This project replaces the original 1969 model HVAC system, and also provides a new fire alarm system. The boiler in this building failed early in 2010 and the original HVAC system is tied into the campus hot water system that will be shut down after the construction of the new Eastern Regional Hospital.	
J. Iverson Riddle Developmental Center -- Campus Roofing (Covered Workshop & Workshop Add)	236,000
This project replaces the approximately twenty-nine year old roofs on both the sheltered workshop and the existing workshop addition. Both are in poor condition and need replacement due to numerous leaks.	
Caswell Developmental Center - Reroof Alpha, Beta & Gamma Buildings	383,000
This project replaces flat roofs on Alpha, Beta, and Gamma buildings with modified bitument. The flat roofs are covered with EPDM which has deteriorated and attempts to repair are temporary and often fail.	
Walter B. Jones ADATC - Kitchen & Dining Upgrades - Additional Funding	70,000
This project upgrades the kitchen by replacing existing equipment to accommodate the current needs of the facility. This includes new ceilings, upgrading the toilet room to ADA standards, painting, new air handler and boiler, fire alarm system, generator and new grease Interceptor.	

2011-12 Repair and Renovation Reserve

Recommended Project List

	Allocation
Caswell Developmental Center - Connect Central Hospital to Chiller Plant	266,000
This project involves the removal of the existing early 1970s chiller at Central Hospital and will connect the building to campus chilled water loop for improved efficiency and reliability. Controls will also be upgraded in the chiller plant for improved efficiency and to condition the space to prevent mold.	
Longleaf Neuro-Medical Treatment Center - Domestic Cold Water Piping Replacement	291,000
This project replaces the existing domestic cold water distribution system from the outlet of the existing building domestic water pressure pump up to the branch piping where the pipe connects to the plumbing risers that service the Scott building.	
Central Regional Hospital - Canopies at Dock and Staff Entrances	350,000
This project supplies canopies to two entrances and the receiving dock at Central Regional Hospital. Excessive amounts of ice build up on ledges above walkways that ice melter cannot melt.	
J. Iverson Riddle Developmental Center - HVAC Equipment Upgrades at Workshops	235,000
This project replaces outdated and malfunctioning HVAC packaged units at Adaptive Equipment Workshop, Dogwood Workshop, and Workshop Addition.	
Health and Human Services Total	15,305,000
GRAND TOTAL	62,250,000