



Facilities Condition Assessment Program (FCAP)

October 29, 2013



Horne Creek Living
Historical Farm - Barn



UNCC – Energy
Production and
Infrastructure Center

A photograph of a sunset over a beach. The sun is low on the horizon, creating a bright glow and reflecting on the wet sand and water. Two people are walking on the beach to the left, their silhouettes visible against the bright light. The sky is dark blue with scattered clouds.

Eastern North Carolina



DENR - Fort Fisher Aquarium – Fire sprinkler pipes in the conservatory are corroding as a result of exposure to the salt air.



DPS – New Hanover Juvenile Detention Center - Security locks need to be replaced in multiple facilities.



DCR – USS Battleship - Steel hull plating shows excessive corrosion. Battleship is now leaking around hull plating rivets and recent hull surveys indicate hull thicknesses of less than 0.1 inches.



DPS – Pitt Juvenile Detention Center - Security doors need replacing at multiple facilities.



DPS – Dobbs Youth Development Center - The storm water drainage system needs replacement.



DPS – Hyde Correctional – Shower flooring needing replacement. Cracked or damaged shower flooring can cause damage to the finished spaces on the floor below (ie Dorms).



DPS – Hyde Correctional – Bathroom flooring worn and needs replacement.



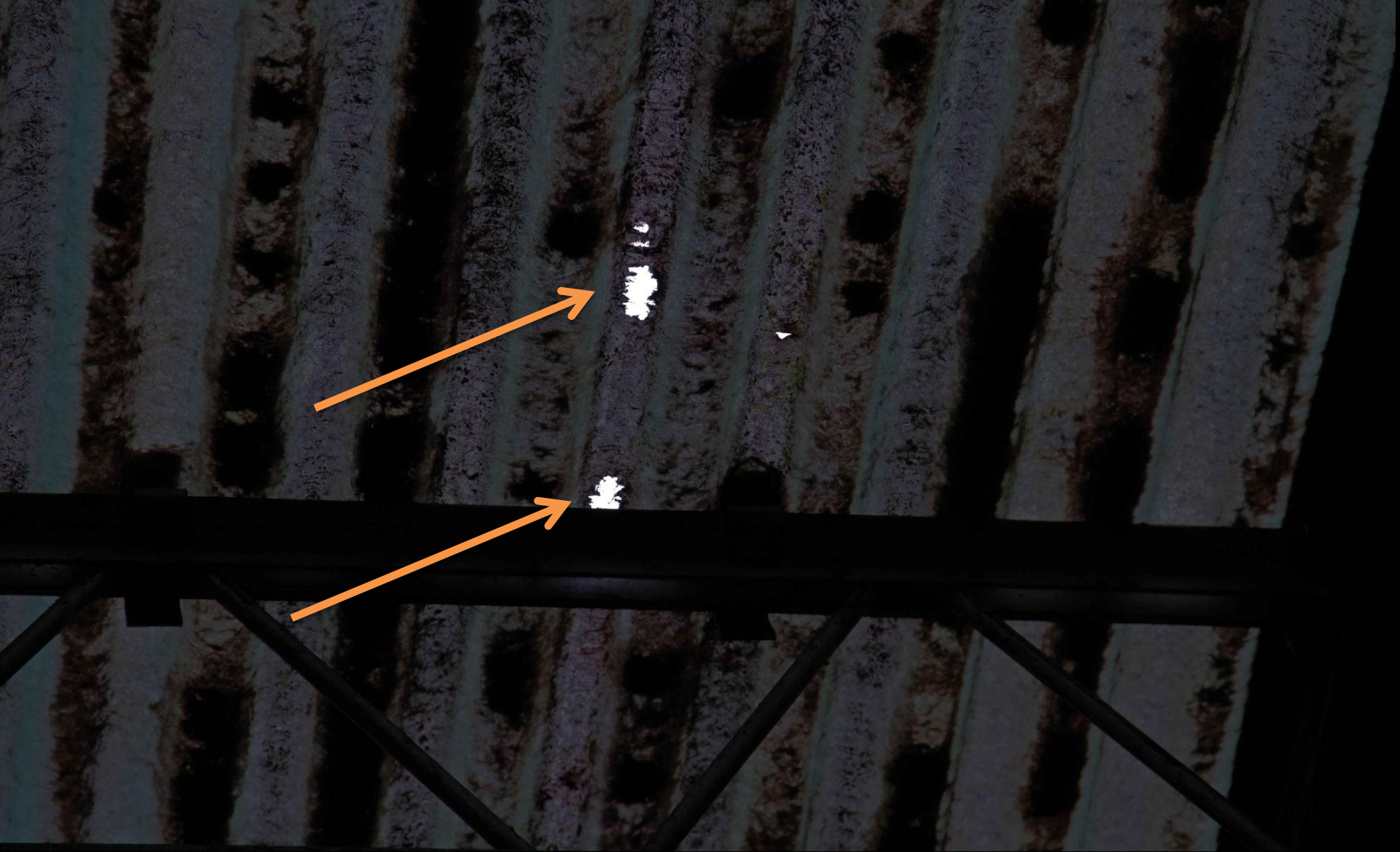
DPS – Pitt Juvenile Justice Center Asphalt deterioration - Without repair, the freeze/thaw cycle will create further and more rapid deterioration.



DHHS – Cherry Grounds
Building – Brick and
mortar deterioration



DHHS – Cherry Garage – Cracked walls and foundation settling.



DHHS – Cherry Warehouse – Metal roof decking is totally rusting through. Metal is so thin, walking on it to repair causes additional penetrations.



DPS – Dobbs Youth Development Center – Rusting lintels above windows causing structural problems. Typical across the state.



DHHS – Caswell Center – Gutter rusted through which causes roof water to pond against the building.



MUSEUM OF HISTORY

April 20
NEW WING 2012
NORTH CAROLINA
MUSEUM OF NATURAL SCIENCES
Downtown Raleigh
naturalsciences.org

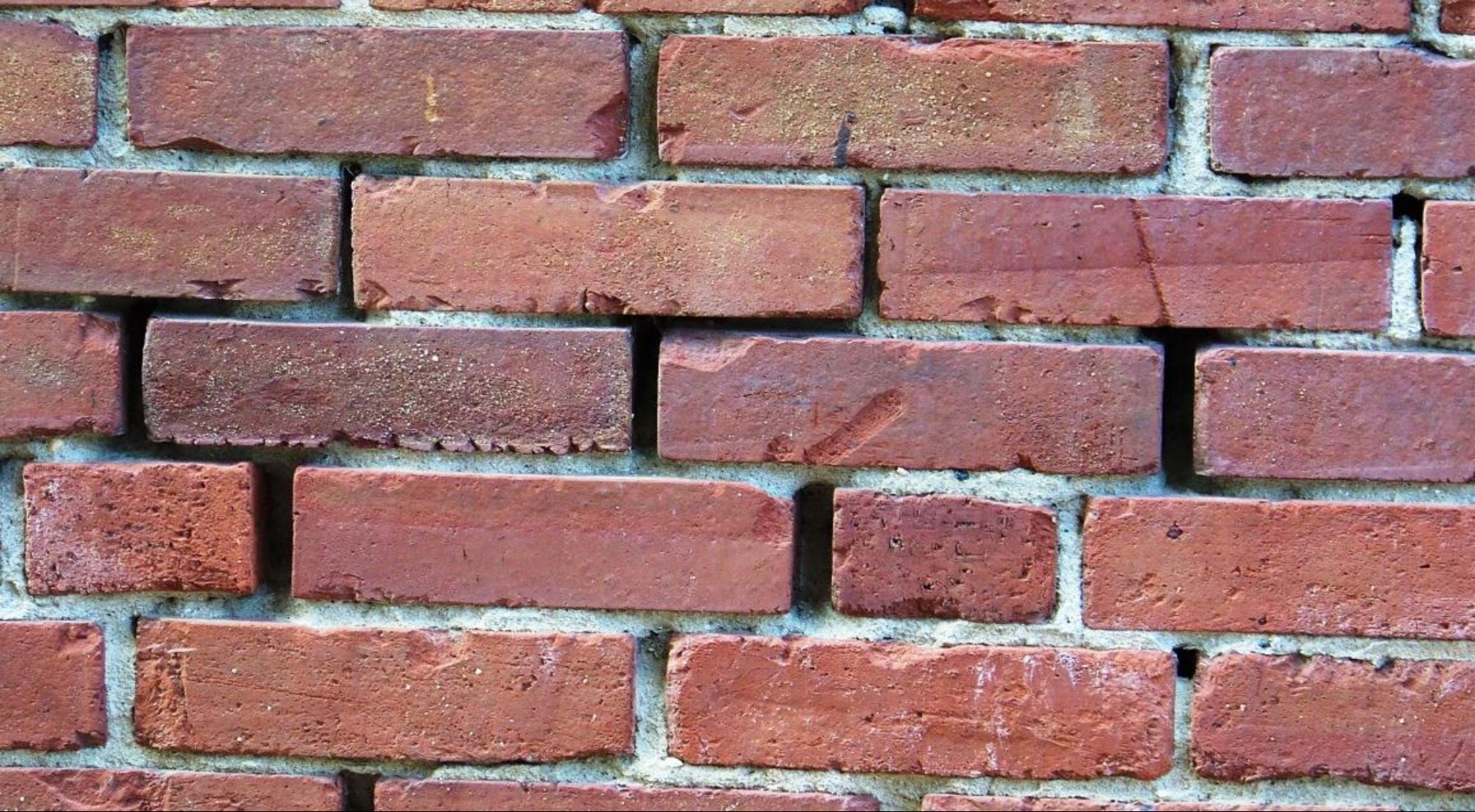
Central North Carolina



DOA – Caswell Square - Building needs to be demolished as roof is collapsing and it is a hazard.



DHHS – Dix McBryde – EPDM roofing membrane failure.



NCSU – Page Hall - Mortar loss in older masonry construction is a common route for rain water to enter a building. Moisture penetrating the building envelope will compromise structural integrity if left unchecked.



NCSU – Riddick Hall - Lateral movement of brick veneer. The weakened brick construction may cause moisture infiltration through the masonry.



NCSU – Harris Hall - Water trapped beneath the roof membrane is visible in the infrared image at left and outlined in spray paint at the right. Moisture penetrating the building envelope can reduce the efficiency of the thermal insulation, and compromise structural integrity.



DPS – C.A. Dillion School - Numerous windows need replacement through-out the campus.



DPS – NCNG – Clinton Armory – Water infiltration through windows.



DPS – NCNG – Beulaville – Water infiltration due to rotting siding and window trim.



DENR – Zoo Education Center – Roof leaks causing damage to the interior.



NCCU – Turner School of Law – Rusted stair nosing and deteriorated concrete steps. Safety hazard.



DOA – Administration – Sprayed on asbestos fireproofing releasing from structure and HVAC piping in poor condition.



DOA – Shore – Corroded piping and equipment past useful life.



DOA – Shore Bldg – Cooling tower past is useful life. Rusted and broken supports.



DOA – Cooper – HVAC equipment in poor condition. Installed in 1940's.



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PSU – Wellons Hall – Boiler is 50+ years old and is inefficient.



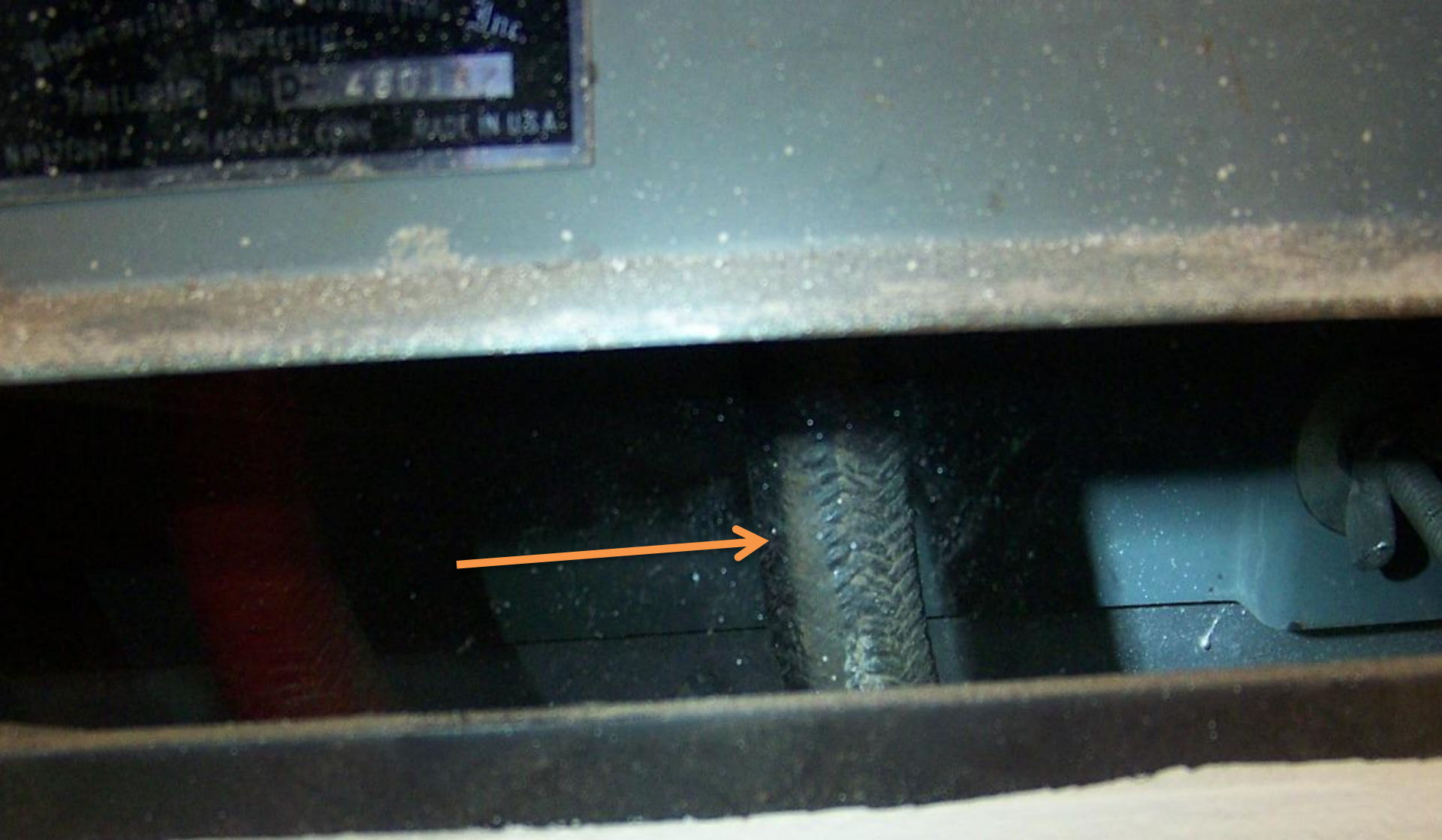
UNC-CH – Morehead Chemistry – Original ventilation system is filthy and deficient.



UNC-CH – MacNider Hall – HVAC system is deficient and poor shape.



NCSU - Condensate leak between Carmichael Complex and Talley on Cates Avenue. Steam and condensate leaks cost thousands of dollars in lost energy.



NCSU – Nelson Hall - 50+ year old Type RH wire - the rubber insulation is dry and brittle and could become a potential safety hazard.



NCSU – Carmichael Gym - Arc fault damage from failed 42 year old 1200 amp breaker – led to 2nd and 3rd degree burns to shop supervisor.



DOA – Administration – Main Control Center and Control Panel are obsolete and parts are no longer available. All controls are broken in set in manual position. Very inefficient.



Western North Carolina



DPS - Stonewall Jackson Youth Development Center - Academic, Vocational, & the Gym Buildings boilers are in need of replacement.



WCU – Steam plant equipment past useful life. Boilers are 60+ years old and can reliably operate at 75% of rated capacity. Recent winters have pushed steam plant to its maximum output.



DPS – Avery Mitchell – Caulking failure. Common issue across the state in multiple buildings.



UNCC – Atkins - Hot water closed loop for heating showing signs of deterioration and massive scaling .



UNCC – Atkins – Hot water pumps and tank past life expectancy causing leaks and scaling .



UNCC – Barnard - EPDM/Ballast has exceeded life expectancy. Frequent and random leaks. Gravel pulled back to show deterioration.



UNCC – Burson – Old pneumatic HVAC controls. Full of oil and water (typical across the state). Temperature cannot be regulated.



DOT Shed Roof
Deterioration



DOT Facility
Fused
Electrical
Panel



ASU – Health Services – Emergency generator out of service.



ASU – Octagon
retaining wall bowing
and leaning –
structural stability
concern.

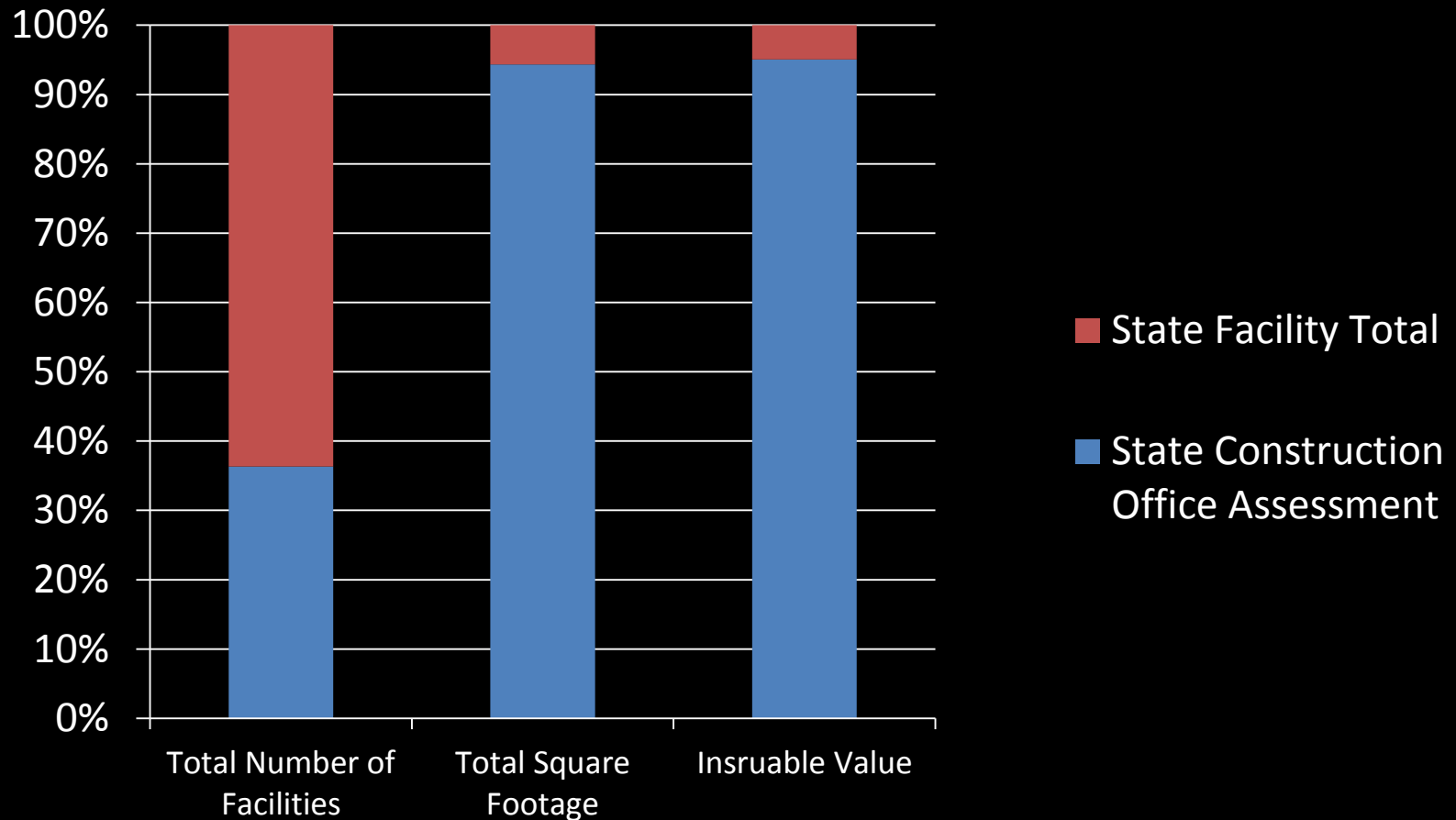


ASU – Raley parking lot – Being unable correct storm drainage piping causes total failure.



DHHS – Black Mtn. Neuro-Medical Treatment – Moldy ducts.

FCAP Assessments of State Facilities





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