



THE CAPITOL SQUARE PROJECT

Net Square Feet Gained: 94,851 Individuals Employed: 3,990

The Wyoming State Capitol is the seat of two of Wyoming's three branches of government. Over the past four years, it has had the first comprehensive restoration in its 130-year history.

The Capitol was built in 1888 and expanded in 1890 and 1917. Over the decades, elevators; heating, ventilation, and air conditioning (HVAC); plumbing; and other systems were added, but many systems had begun to fail. The last major work done in the Capitol, from 1974-1980, concealed the character of the historic rooms in the building and did not address infrastructure issues.

In 2014, the Legislature authorized the Capitol Square Project. The project was driven by three goals: to add or update life safety systems, to replace failing building systems, and to increase public access in the Capitol. In order to meet these goals, the project involved four construction components: the rehabilitation and restoration of the Capitol; replacement, relocation, and expansion of the central utility plant; the remodel and expansion of the tunnel that connects the Capitol to the Herschler Building; and the rehabilitation and expansion of the Herschler Building.

TOP: An aerial view of the project.

MAPS



GARDEN LEVEL



MAPS



SECOND FLOOR



MAPS

THIRD FLOOR





LEFT: The removal of suspended ceilings uncovered archways.

RIGHT: The garden level was excavated in order to install piping and ductwork underneath the floor.





ELECTED OFFICIALS

As you stand in this office, notice how historic details have been restored and modern efficiencies installed.

For the first time in recent history, all five statewide elected officials have their offices in the same building. In these offices, you can see the historic fireplaces that were originally used to heat the Capitol. These fireplaces were built into angled walls that housed chimneys. Although they are no longer functional, the fireplaces have been retained for their historic and decorative value, and the chimneys are now used as vertical chases for building infrastructure.

The metal windows in these rooms, and throughout the Capitol, have been replaced with energy efficient wood-framed windows designed to match the historic windows. Handblown lights modeled after the original fixtures have been combined with LED bulbs and motion activated triggers to provide energy efficient lighting.

TOP: A painter restores the decorative paint. BOTTOM: The ceiling heights before the renovation covered the top portions of windows.





MEETING ROOMS

On the west end of the first floor, two large meeting rooms allow for increased public participation in policymaking.

One of the primary goals of the project was to create larger meeting spaces throughout the Capitol Complex. These two rooms seat approximately 50 audience members each and will be available to the elected officials and Attorney General to host events when not in use by the Legislature. Before the project, most public meeting rooms in the Capitol accommodated fewer than 20 members of the public.

TOP: Meeting rooms have been enlarged to accommodate more people.

BOTTOM: Before the project, the public meeting rooms were so crowded that it was difficult to enter and exit meetings.





INFRASTRUCTURE CORES

The Capitol's infrastructure was outdated, insufficient, and failing.

Before this project, there was only one public restroom for women, one for men, and one unisex restroom in the Capitol. The east elevator was no longer operable, and neither elevator was large enough to fit an ambulance gurney. After decades of modifications and changes, a series of outdated pipe, wire, and ductwork ran above suspended ceiling tiles throughout the Capitol. Many of the building's mechanical, electrical, and plumbing systems were failing.

As part of the rehabilitation of the Capitol, new systems have been organized in four vertical chases from the garden level through the attic, and the outdated piping, wiring, and ductwork above the ceiling tiles have been removed. The new systems



TOP: Workers install new infrastructure in the Capitol.

BOTTOM: A cracked, rusted pipe found in the Capitol before the restoration.



are efficiently organized and will be easier to maintain over time. New mechanical rooms have been located adjacent to the vertical chases on the garden level of the building to most effectively manage these building systems. These infrastructure cores are located on every floor of the building and also include public restrooms and new elevators. There are now six public women's restrooms and six public men's restrooms in the building.

TOP LEFT: New mechanical, electrical, and plumbing systems are organized in four vertical chases from the garden level through the attic.

TOP RIGHT: The new elevator shaft is installed in the building infrastructure core in the west wing.

BOTTOM RIGHT: The east wing of the garden level was excavated to place piping and ductwork under the floor.







GARDEN LEVEL

In the west garden level, an exposed stone wall marks the edge of the 1890 expansion, while a brick wall shows the 1917 expansion.

Most of the work in the garden level happened below grade and is no longer visible. New building systems have been installed under the floor, the foundation has been reinforced with underpinning, and historic features have been restored.

TOP: A drill rig used a threaded screw-like rod with an end bit to drill through the soil to install micropiles to stabilize the building.

BOTTOM: A worker solders part of the new plumbing system in the garden level.



UNDERPINNING

Underpinning of the foundation strengthened and stabilized the building and supports the large mechanical systems that now run underneath the garden level. The underpinning process utilized micropiles, which are deep foundation elements constructed using high-strength, smalldiameter threaded steel bars. A specialized piece of machinery drilled rods through the soil. Grout was pumped into the hole to encase the rod and create the final micropile of between 8 to 12 inches in diameter, which was drilled down 30 to 40 feet. The micropiles stabilize the ground and improve the load-bearing capacity of the building.

GARDEN LEVEL ENTRANCES

The four entrances to the garden level have been opened to their historic dimensions, which are twice as large as the previous entrances and provide a more welcoming experience for individuals entering the building. The corridor that leads from the center of the north side of the garden level to the Capitol Extension has been widened by about four feet to its historic width. Vault doors throughout the garden level were retained and restored for their historic value.

TOP: The garden level before renovation. MIDDLE: The historic dimensions restored to

the garden level entrances. BOTTOM: Paintings were discovered under layers of old paint on garden level vault doors.









LIFE AND SAFETY

Before the renovation, the Capitol had few life safety systems, and many parts of the building were not compliant with the Americans with Disabilities Act (ADA).

The Capitol had very little smoke detection and no smoke evacuation or fire suppression systems. Fire and smoke could spread quickly throughout the building because there were no reliable partitions to separate one space from another. In a fire, occupants would have had less than five minutes to evacuate the building safely. Exit signs were not installed throughout the building, and no emergency power source was provided for the lighting systems. Interior escape routes were difficult, and the exterior fire escapes were slippery in the winter, making a quick evacuation dangerous. TOP: The exterior fire escapes on the north side of the building were removed to improve safety.

BOTTOM: Internal staircases have been extended to the garden level to improve egress in an emergency.







In order to remedy these crucial life safety issues, automatic sprinklers and fire suppression systems have been installed throughout the building. An emergency generator for lights has been added, and a massive fan system has been installed to quickly clear smoke from the building.

Most importantly, egress paths have been shortened and are marked with exit signs. The internal staircases on the north side of the House and Senate Chambers that connect the third-floor galleries to the Chambers have been extended to the garden level, providing a second means of egress in an emergency. Extending these staircases allowed for the removal of the unsafe and unattractive exterior fire escapes on the north side of the building.



TOP RIGHT: Automatic sprinklers have been added throughout the building.

BOTTOM: A worker installs the new smoke detection system in the ceiling of the Historic Supreme Court Chamber.





CAPITOL EXTENSION

The Capitol Extension connects the Capitol and Herschler Building underground and adds approximately 47,000 square feet.

The expanded structure extends under the Herschler Building almost to 26th Street. It will accommodate many public needs and functions, and includes meeting rooms, a student learning center, a media center, and other public spaces.

The roof of the existing structure had significant deterioration; replacing it created the opportunity to light the space with skylights and provide views of the Capitol dome above.

TOP: Skylights have been added to the Capitol Extension.

BOTTOM: The Capitol Extension in 2015, before the restoration project.





In the Capitol Extension, there are a total of six public meeting rooms, four that seat 75 and two that seat 100. Informal seating areas provide a space for constituents to meet with policymakers. Informal discussions are important to the political process and provide a significant opportunity for public interaction with elected leaders. The statues of Esther Hobart Morris and Chief Washakie have been relocated to the Capitol Extension to provide them with a prominent role in the interpretive plan. All tours will now enter the Capitol from 26th Street through the Capitol Extension.

TOP: In the Capitol Extension, there are a total of six public meeting rooms.

BOTTOM: A new skylight provides a view of the Capitol dome above.





AUDITORIUM, VISITOR CENTER, & STUDENT LEARNING CENTER

These rooms will be constructed in the Capitol Extension.

A 300 seat auditorium, a TV studio, a student learning center, and a visitor center have been built and will be finished later this year. These amenities were added to plan for future needs but were given lower priority. Also on the north end of the extension are conference rooms and a catering kitchen that can be reserved for public use, and a media center for use by news organizations.

The Student Learning Center will serve as a classroom for Wyoming students who travel to the Capitol. Wyoming history is taught to all fourth-grade classes, and this room will be designed around tours and lesson plans provided as part of their introduction to government. This classroom will also provide resources for middle school and high school students to learn about Wyoming state government and civics.

TOP: Rendering of the auditorium.

BOTTOM: The statues of Esther Hobart Morris and Chief Washakie have been relocated to the Capitol Extension near the Student Learning Center and Visitor Center.





CENTRAL UTILITY PLANT

The central utility plant has been relocated and expanded to 26,000 square feet.

The central utility plant (CUP) supplies mechanical and electrical service to five State buildings: the Capitol, Herschler Building, Barrett Building, Supreme Court Building, and Hathaway Building. Combining a renovated CUP with the



Capitol Square Project allows for economies of scale in construction costs, while also addressing critical replacement of failing equipment and piping. The systems in the CUP had reached the end of their existing life cycles and required extraordinary maintenance to keep operational. The new location expands the plant footprint by approximately 15,000 square feet to approximately 26,000 square feet.

Two outdoor components of the CUP have also been moved. An above-ground cooling tower on the northeast side of the Capitol created noise and mist on the Capitol grounds; that moisture degraded the nearby stone on the Capitol. The above-ground generator, transformer, and associated switchgear posed a security risk and detracted from the appearance of the Capitol grounds. These components have been relocated to the new CUP and the Herschler Building.

TOP: The CUP being built. BOTTOM: New 500-ton centrifugal chillers.



HERSCHLER BUILDING

The Herschler Building has been radically transformed and expanded by 56,000 square feet.

The Herschler Building has been remodeled and expanded to house functions that have been displaced from the Capitol and to provide offices for State employees. The exterior of the Herschler Building has been replaced to address major maintenance issues, including water infiltration, corrosion, wall gaps, and rotting window blocks. This provided the opportunity to create a building that better relates to the scale of the Capitol and is more complementary to the Capitol.

Replacing the exterior also provided the opportunity to enlarge the footprint of the building over existing foundations. This provides the additional space and proximity to the Capitol needed for elected officials' TOP AND BOTTOM: Replacing the deteriorating exterior provided an opportunity to enlarge the footprint by 15 feet over existing slab foundations that used to hold planting beds.









staff, legislative committee chairmen, and legislative session staff.

Offices that overlook the Capitol have replaced the imposing, windowless southfacing walls. The atrium on the north side of the building has been removed to improve building efficiency and security and to restore views to the Capitol. New entries on the north and south sides of the center of each wing provide more efficient access into the building and to elevators and restrooms. The new configuration will reduce pedestrian traffic through unrelated agency space and will increase the square footage that can be used to house employees.

TOP: The atrium is demolished.

MIDDLE: Before the project inside of the Herschler Building.

BOTTOM: The new exterior design allows more daylight into the building interior.



GOVERNOR'S OFFICE

Removing the dropped ceiling revealed the historic column capitals and expanded the ceremonial conference room.

The Governor's Office is located on the east wing of the Capitol on the first floor and the garden level. The Office is connected by an internal staircase. This change brings all the Governor's staff together in the Capitol. A new ceremonial conference room, located on the south side of the Governor's Office, provides a space for events such as bill signings. This room is located in the same space that originally housed the State Library in 1890.

Portraits of previous Wyoming Governors are installed outside the ceremonial conference room in the east wing. TOP: Historic finishes have been restored in the room, including coffered ceilings. BOTTOM: The room before the restoration.







The removal of the suspended ceiling tiles revealed column capitals, coffered ceilings, crown moldings, picture rail, and decorative paint. The invasive work necessary to upgrade mechanical, electrical, and plumbing systems revealed these treasures and allowed the restoration of these historic features.

TOP: Walls and floors were removed to build vertical chases that allow piping and ductwork to run from the garden level to the attic.

BOTTOM LEFT AND RIGHT: Coffered ceilings and historic column capitals were discovered on the first floor.





LEGISLATIVE CHAMBERS

The original 1917 paint schemes in the Legislative Chambers have been recreated.

The current House and Senate Chambers were built in 1917. For that expansion, the east and west facades from 1890 were taken down, moved, and reassembled. Three windows on the east facade were filled in when the House Chamber was expanded in the 1970s but are now restored.

Each Chamber includes four murals painted by artist Allen Tupper True. Completed the same year as the current Chambers, the murals depict subjects that are woven throughout Wyoming's history and culture.

TOP: The historic windows being uncovered. BOTTOM: Before the project, the east windows in the House Chamber were filled in.





TERRITORIAL COUNCIL CHAMBER

This room provides a view down Capitol Avenue to the Cheyenne Depot.

The 1888 Territorial Council was originally located in this room. Most recently it was occupied by the Joint Appropriations Committee. This room will now house the Legislative Service Office and the legislative research library and will be open to the public year-round.

TOP: Historic lighting and decorative paint have been restored.

BOTTOM: The Joint Appropriations Committee used this room before the restoration.





HISTORIC SUPREME COURT CHAMBER/TERRITORIAL HOUSE CHAMBER

No room in the Capitol has been more radically transformed by this project than the Historic Supreme Court Chamber.

The Wyoming State Capitol is one of 20 state Capitols designated as a National Historic Landmark. That designation is largely due to the events that transpired in this Chamber in 1889. As Wyoming was seeking Statehood, the Constitutional Convention was held in this room. A large part of the Convention focused on women's suffrage, a right Wyoming women had held since 1869. It was in this Chamber that representatives enshrined women's suffrage within the Wyoming State Constitution, becoming the first state to do so and making this one of the most historically significant chambers in the country.

TOP: A historical paint investigation uncovered the original 1888 trompe l'oeil decorative painting.

BOTTOM: The public balcony is restored to the Chamber.







The 1888 Territorial House Chamber was occupied by the Wyoming Supreme Court from 1890 to 1937. The original configuration of the room with a two-story ceiling and second-floor gallery was lost in the 1974-1980 Capitol renovation when the Chamber was divided into two distinct floors. Most recently it served as the Legislative Service Office's main office on the second floor and legislative library on the third floor.

The Chamber has been returned to its original size by eliminating a partition wall and reclaiming the two-story volume and public balcony. Original features included extensive decorative painting and a stained glass lay light and chandelier, which had been moved in the 1970s but have now been restored to their original location. This magnificent and historic Chamber is now the largest meeting room in the Capitol and will seat approximately 75 members of the public.

TOP LEFT: During the 1974-1980 renovation, the Chamber was divided into two distinct floors. This picture shows the top floor, which was used most recently as the legislative library.

TOP RIGHT: A welder restores the balcony.

BOTTOM: The historic stained glass lay light and chandelier have been restored.





THIRD FLOOR

Corridors have been expanded to their original width, creating sightlines from one end of the building to the other.

The third-floor galleries and corridors have been restored to their historic configuration. Galleries in the House and Senate Chambers allow the public to observe the legislative process. The gallery in the Historic Supreme Court Chamber has been reclaimed and will provide seating for public meetings.

There were originally 15 skylights washing the third floor in daylight. The Chamber skylights were reopened in 2009, and nine other skylights have now been reinstalled above the rotunda, the monumental staircases, and the gallery lobbies. The relocated elevators will include access to the upper level of the third floor, eliminating the need for the lift that existed outside of the House Gallery Lobby. This change will allow the public to access the upper level of the third floor from either the east or the west elevator without using a separate lift.

TOP: The restored skylights flood the third floor corridor with natural light. BOTTOM: Before the restoration.



THE ROTUNDA

The Capitol's central rotunda features four new sculptures and restored decorative paint.

On the third level of the rotunda are four niches that were originally intended to house sculptures but were never filled. At the start of the project, the decision was made to fill the niches. After an international search, the artist Delissalde was commissioned to create four bronze sculptures.

"The Four Sisters" represent key values and attributes of Wyoming and its citizens. The oldest sister, "Truth," leads the way, illuminating the path for Wyoming's pioneers. Next, "Justice" sets the course for Wyomingites to live freely and peacefully. "Courage" allows us to carry on, encouraging and supporting us through hard times. The youngest sister, "Hope," inspires us to continue striving for the future, building the Wyoming we aspire for.

ATTA ATTA ATTA ATTA ATTA

The decorative painting in the rotunda and many other spaces in the Capitol has been restored to match the painting from the original construction. Using patterns discovered during the project and historic photos, artisans recreated the painting. The most historic rooms and corridors were painted in a style called trompe l'oeil, which means to "fool the eye." This style of painting creates an illusion of a three-dimensional effect through the use of highlights and shadows in the painting process.

TOP LEFT: Artist Delissalde works in clay for the molds of the rotunda sculptures.

TOP RIGHT: An artist touches up the 1888 trompe l'oeil pattern in the rotunda.



JOINT APPROPRIATIONS COMMITTEE

The original 1888 vaulted ceiling and decorative paint have been restored in this meeting room.

The Joint Appropriations Committee has moved to the third floor. Relocation to this space provides two doors in and out of the committee room, allowing for safer egress. In addition, more members of the public can be accommodated in this room.

The mural in this room is titled *Wyoming*, *the Land*, *the People*, *Past and Present*. It was commissioned by the Legislature in 1980, and created by Powell, Wyoming artist Mike Kopriva.

TOP: Painters stenciled the original pattern on the raised ceiling height.

BOTTOM: A chandelier and stained glass were previously in this room before being returned to hang in the Historic Supreme Court Chamber.





CAPITOL DOME & EXTERIOR

Damaged elements of the Capitol's exterior have been replaced and the dome regilded.

Although it may look like stone from the ground, the upper portion of the Capitol exterior is made of metal. This material, most of which was original to the building, was failing and has been repaired or replaced.

The gold leaf dome of the Capitol is an icon in Wyoming. In fact, there are only ten states, including Wyoming, that have gold leaf domes. However, for the first 12 years of its existence, the dome was copper colored with no gilding. The gold was added in 1900, and the dome has been regilded five additional times before this project. For this project, gilding took six days and required about 7 ounces of gold.



TOP: The Capitol dome is clad in copper tiles covered with 24-karat gold leaf.

BOTTOM: Due to the extensive damage, the original pieces were removed and recreated from copper and later painted to match the rest of the entablature on the Capitol.



EXTERIOR STONE

Most of the original sandstone used to build the Capitol was mined at a quarry near Rawlins in the late 1880s. The current owner of the quarry, the Anschutz Corporation, allowed the State of Wyoming to harvest the stone for the restoration free of charge. Stone has been replaced in areas where it was loose, posed a life-safety hazard, or did not shed water properly. Cracks, spalls, and voids, along with blistering, delamination, and erosion were also addressed as part of the restoration.

PARK-LIKE PLAZA

Much of the concrete in the plaza between the Capitol and Herschler Building has been removed and replaced with grass to create a park-like setting. Drives on the north side of the Capitol have also been removed to increase security and the amount of green space in between the Capitol and Herschler Building. New sidewalks that replicate the historic walks create diagonal pathways for easier access to the Capitol and the new central entrances of each wing of the Herschler Building.



TOP: A stonemason carved decorative pieces to match the rest of the building.

BOTTOM: Much of the exterior stone was damaged and loose.



TOP LEFT: Miners pose in a sandstone quarry, owned at the time by the Kerr Marble and Stone Company, near Rawlins between 1890 and 1910. Photo courtesy of the Denver Public Library, Western History Collection.

TOP RIGHT: Stone for the restoration came from the original quarry.

MIDDLE RIGHT: A new decorative piece of stone is in the process of being carved.

BOTTOM: The upper portion of the Capitol exterior is made of metal and has been repaired or replaced.





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