

IV. The Capitol in Use



he Wisconsin capitol was shaped by the efforts of a handful of men who advocated constantly for the best materials, finest artists, and first-class workmanship. To them, it was more than a building; it was as if the capitol was a monument to their own efforts. These men who were so devoted to the capitol disappeared from the scene fairly quickly, however. George Post had died in 1913. His sons moved on to serve other clients of their New York firm. Custody of the building reverted to the Bureau of Engineering as of July 1, 1917, and the Capitol Commission ceased to exist. His health failing, Lew Porter retired to his home on Lake Monona shortly afterward. Less than a year after the last carpet was laid, he was dead at age 55. In his last months, he must have looked with satisfaction across the lake at the imposing sight of the great dome he helped put into place. With his passing, the capitol was left in the care of its occupants.



Lew F. Porter (1862-1918)
(Photo courtesy of Martha Kilgour)

Crowded Conditions

Senator McGillivray's prediction that state government would never be large enough to fill a large building quickly proved to be inaccurate. Even as the capitol rose around them, La Follette and his successors were reshaping state government and increasing the scope of its powers. More regulatory agencies were created; existing agencies were given expanded duties. As the state government's only office building, the capitol was greatly affected by these changes.

Even before the capitol was finished, the changes made to state government by the Progressives caused the Capitol Commission to modify some room layouts in the private areas of the capitol. In 1911, for example, the legislature created a Highway Commission, for the first time giving a state agency the duty of overseeing state roadways. The Capitol Commission scrambled to find a place for this new agency and accommodate its need to store blueprints. The creation of an income tax in 1913 caused the Tax Commission to substantially increase its staff and request additional space. In 1913, the Revisor of Statutes office, which had been created since the capitol was begun, asked for four rooms in the north wing, as near to the law library as possible. The enormous size of the building allowed these requests to be accommodated, but by the time the capitol was completed, space was no longer abundant. The fourth floor of each wing had been designed as attic space, but by 1917 only the fourth floor of the west



The Assembly Chamber could get quite cluttered during the legislative session, as shown in this 1913 photo. (State Historical Society #WHi (X3) 39859)

wing was unoccupied by state government. Despite the election of Stalwart Emmanuel Phillip as governor in 1914, the new agencies of government created by the Progressives survived and continued to grow. As the 1920s progressed, conditions in the capitol became increasingly crowded.

During this period, with space at a premium, a strange biennial dance began that would continue into the 1950s. The legislature at this time typically met only for about half of each odd-numbered year, adjourning for the balance of its two-year life span. With adjournment, the agencies of state government would expand into the legislature's space like a man loosening his belt after a big meal. The agencies eagerly awaited adjournment, and the scramble for the vacated committee and caucus rooms could be downright comic. Conversely, the impending return of the legislature at the end of each even-numbered year was viewed with great dismay as the agencies had to return to their assigned space. The legislature, for its part, resented this encroachment. In 1927, the assembly adopted a resolution directing the superintendent of public property to prohibit the use of its rooms during the interval between sessions. The practice of using legislative space during interim periods continued despite the assembly's action. At a future time, the legislature would be more assertive about its right to capitol space. For the time being, the lack of room for state government was the primary concern.

By the end of the 1920s, crowded conditions in the capitol were no longer a laughing matter. In December 1928, as agencies were forced to vacate

legislative rooms in anticipation of the 1929 session, the Madison *Capital Times* ran a series of reports about unhealthy, crowded conditions for government workers in the capitol. “Capitol Girl Checks Railroads in Bathroom” was the headline of an article about an employee of the Railroad Commission who had to set up her workspace in a women’s bathroom on the fourth floor of the north wing. The Board of Normal School Regents, it said, had expanded into a corner of the GAR Memorial Hall, working “amid relics of the Civil war while portraits of dignified soldiers of the days of ’61 look down upon the confusion.” Subsequent articles documented other instances of capitol overcrowding. On the fourth floor of the south wing, 18 employees of



A 1928 series of articles in “The Capital Times” exposed crowded conditions in the capitol. (LRB clippings collection)

the Markets Department crowded into a single room. On the second floor of the South Wing, 11 employees of the Tax Commission would soon have to vacate their quarters when the senate reclaimed its space. They were to be crammed into the northeast entry pavilion, which would be blocked off until the adjournment of the legislature.

Changing Uses

The *Capital Times* recommended the construction of a state office building near the capitol to house some of the executive agencies. The idea had already been around for a few years, and in 1929, the legislature finally approved it, authorizing the construction of the building and the relocation of state agencies, but not the constitutional officers. The State Office Building on Wilson Street was completed in 1931. Some agencies, such as the Highway Commission, which had moved to rented quarters previously, moved into the new building. Others, such as the Industrial Commission, vacated their capitol quarters in moving to Wilson Street. Still others were split, with some divisions moving to the State Office Building and others remaining in the capitol.

With the completion of the State Office Building, the idea of the capitol as a home for all of state government was dead. The State Office Building would



The State Office Building in Madison as it appeared after the first phase of construction in the early 1930s. (1933 Wisconsin Blue Book)

be enlarged twice, in 1942 and again in 1959, in response to growth in state government. After each enlargement of the Wilson Street facility, agencies packed up and left the cramped capitol. Spaces vacated by relocated agencies were occupied by the overcrowded agencies remaining. After the central portion of the State Office Building was completed in 1942, the Banking Department, Conservation Commission, Board of Health, Department of Motor Vehicles, Public Service Commission, and Department of Taxation left the capitol forever. When the third and final wing of the State Office Building was finished in 1959, the Department of Public Welfare left the

capitol. By this point, the Department of Agriculture and the Insurance Department were the only holdovers of the large executive agencies left in the capitol. With the construction of the Hill Farms State Office Building on Madison's west side in 1964, these agencies also departed.

These continuing dislocations had an impact on the condition of the capitol's interior. Within a couple of decades of the capitol's completion, few of the private office areas of the capitol were used for their intended purpose. Spaces no longer fit comfortably. Tastes and fashions changed, and some of the elements that the architects had viewed as integral to the building's overall design were no longer considered functional. In essence, it was a clash between the capitol as a work of public art and the capitol as an office building. Time and again, pragmatism won out.

This pragmatism was probably first demonstrated in painting. Little effort was made to preserve the decorative scheme in most private areas of the capitol. When a wall needed paint, it was painted. The stencil work along the ceilings and woodwork was, at best, mimicked inaccurately; in most cases it was just painted over. The original color choices were also ignored, replaced by the color preference of the occupant or the maintenance staff. Eventually, most capitol workers would forget that there ever had been a unified decorative scheme for the interior rooms. Institutional green became the standard color for

interior walls. As the original carpeting wore out, it too was replaced with less expensive material.

The shifting use of capitol space caused some major remodeling efforts during these years. Interior walls were knocked down or added to make work space better fit its current use. In the process, interior woodwork was damaged or discarded. Marble and granite were damaged or carpeted over. In one notorious instance, carpet nails were driven directly into a marble floor, leaving an unpleasant surprise for restoration workers decades later. Where walls were taken out or added, original decorative plaster molding was destroyed or covered over. The common post-World War II convention of acoustical ceilings was also introduced during this period, covering the original vaulted ceilings of George Post's design.



Damage caused by driving carpet nails directly into a marble floor. (Kathleen Sitter, LRB)

Probably no single element of the original capitol design suffered more from the passage of time than the office furniture designed by George B. Post & Sons. Most of it simply disappeared. By the 1950s, the oak desks, chairs, and tables came to be considered somewhat old-fashioned by some capitol workers who preferred new metal office furniture. Many of the original pieces were sold as surplus or put in storage. A 1958 Legislative Council committee on capitol maintenance recommended in its report that a number of old rolltop desks in legislative caucus rooms be sold at auction so the rooms could be refurnished in modern fashion. The \$587.52 realized from the sale was used to purchase 10 steel file cabinets and three steel tables. Some people still liked the old furniture. In fact, the senate long had a custom that retiring senators could purchase favorite items for a nominal fee. Some of the original capitol furniture also left with the state agencies relocated to state office buildings throughout Madison.

At times, the capitol suffered from good intentions. This was particularly true of the artwork commissioned for the public areas of the building. All of the murals suffered from exposure to light, smoke, and, in some cases, human contact. Efforts to clean and restore them sometimes proved even more



Portions of Kenyon Cox's mosaics were repaired with an inferior adhesive, marring their appearance. (Kathleen Sitter, LRB)

destructive. The supreme court murals by Albert Herter were particularly badly damaged by poorly chosen restoration methods. These murals were extensively painted over by restorers misinterpreting the original intent of the artist. The murals in the Governor's Conference Room by Hugo Ballin were also damaged by overpainting and cleaning. Portions of Kenyon Cox's rotunda mosaics were reglued using a cement that, on close inspection, looked nothing

like the adhesives originally used. Other artwork was treated more gently. The assembly chamber mural by Edwin Blashfield, for example, was varnished to protect it from grime. It worked, but it also eventually gave the work a yellowish hue quite different from its original appearance.

The capitol's exterior stonework suffered, more than anything, from the effects of air pollution. Smoke from coal fires gradually stained the White Bethel granite of the capitol's exterior. By the time the building was finished in 1917, the builders noticed that the newly laid portions of the building were much whiter than the older ones. Attempts to clean the exterior were ineffective, as were attempts to reduce pollution in the city by ordinance. With time, the whole building became a uniform shade of gray. In 1965, the exterior granite was given a bath of hot water and an acid compound. The passage of time would show that the acid bath, in addition to removing grime, had also damaged the finish of the stone, causing it to darken even faster in subsequent years.

Despite these few well-intentioned, but ultimately damaging, efforts at conservation, it would be a mistake to describe the capitol as a neglected building during this period. In addition to conservation efforts geared toward specific works of art, routine maintenance was ongoing under the Bureau of Engineering, and, after 1959, the Department of Administration (DOA). Although some of these efforts were at odds with the concept of historic preservation, capitol staff did the best they could with the resources provided, based on prevailing knowledge. Offenses against the capitol's artistic scheme were almost always a result of the competing roles of the building as a monument and office building.

Expanding Legislature

Many of the alterations made in the private areas of the building reflected the significantly modified use of the space. The capitol was designed to house the agencies of state government. With the construction of state office buildings, the capitol became increasingly a legislative office building. The seeds for this transformation can be seen in changes in the way the legislature operated beginning in the 1950s. Up until that time, the legislature was in adjournment for long periods, during which most members had no duties in Madison. Few members had staff assistants, or needed any. During session, they were assisted by a common stenographic pool and conducted business at their desks in the legislative chambers or in committee or caucus rooms. Beginning in the late 1940s, however, the final adjournment date of the legislature moved later into the year. The 1959 regular session of the legislature continued into the even-numbered year of the biennium for the first time. The 1961 Legislature did not formally adjourn until the last day of its two-year term. At around the same time that the legislature began to devote the full two-year term to legislative business, it began to hire staff and research assistants who initially pooled their efforts to serve several legislators. The increasing importance of doing business by telephone made members desire a place where they could be reached at a specific number. When the Departments of Insurance and Agriculture moved to the Hill Farms State Office Building in 1964, the vacated space was made into legislative offices shared by two to six legislators with shared telephone lines.

As the years passed, the number of legislative staff grew, and space requirements increased as well. Initially, space was found by removing smaller agencies, such as the Department of Veterans Affairs. Eventually, the need for more space put the legislature in conflict with state constitutional officers, all of whom retained their capitol offices. The first of these officers removed was the state superintendent of public instruction. Several of the Department of Public Instruction's subunits had been moved out already, and in 1967, the whole department, including the superintendent, was relocated. For the first time, a constitutional officer was removed from the capitol to meet legislative space needs. A February 1967 Department of Administration report addressing legislative requirements advocated removing all officers except the governor, including the supreme court, in order to meet those needs.

Following the removal of the state superintendent of public instruction, the other constitutional officers could no longer consider their continued presence in the capitol a given. A large portion of the attorney general's staff left for rented quarters in 1968. The secretary of state's office was moved out amid much rancor in 1977. After a similar struggle, the state treasurer yielded to the inevitable in 1981. The vacated space was converted to use for legislators and their staffs, giving the legislative branch the lion's share of space in the capitol.

V. A Growing Appreciation

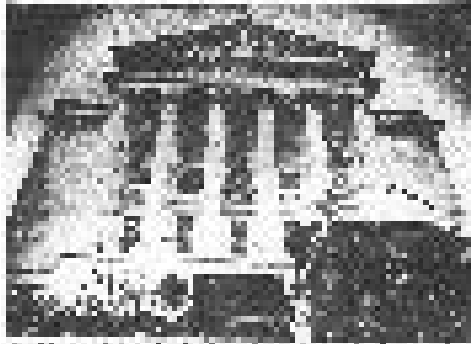


On July 7, 1965, the Wisconsin Capitol finally received its long delayed dedication ceremony. Amid band music, color guards, and speakers representing the three branches of state government, Governor Warren Knowles dedicated the capitol “to a continuation of Wisconsin’s heritage of good government”, and called it “a living monument to the people who built our social order in Wisconsin”. Although the *Christian Science Monitor* and the *New York Times* ran wry items about the tardiness of the ceremony, the dedication of the building 48 years after its completion marked a significant change in the public’s attitude toward the capitol. Increasingly after 1965, the capitol was viewed with more reverence and less hard practicality. The capitol came to be seen as something special, and worthy of protection.

This new protective spirit manifested itself in 1967 through public opposition to a remodeling plan for the Governor’s Conference Room. Dorothy Knowles, wife of the

governor and an interior decorator by profession, proposed painting over the dark cherry wood walls and ceiling of the room. The plan to radically alter the appearance of one of the capitol’s best known and most ornate spaces raised the concerns of the capitol architect and the legislature. Critics in the legislature questioned whether one individual should have the authority to redecorate a public building.

The growing awareness that the capitol was something more than just an office building caused some to suggest a mechanism for the public interest to be represented in decisions affecting it. The legislature’s solution was to create the State Capitol and Executive Residence Board (SCERB), responsible for setting standards for design, composition, and appropriateness of repairs, replacements, and additions to the state capitol and executive residence. Although SCERB’s first official action was to approve the controversial painting of the Governor’s Conference Room, an important threshold had been crossed: the capitol was unique, and any alterations or improvements to the building should be carefully considered.



State Capitol Finally Dedicated

The capitol was not dedicated until 1965, after 48 years of hard use. (LRB clippings collection)



The Governor's Conference Room as it appeared before (above), and after (below) the controversial 1967 redecoration. (State Historical Society #WHi (X3) 51217 and 51220)



In practice, however, SCERB was not typically consulted with regard to piecemeal renovations in the private areas of the capitol. These became more and more common during the late 1960s and the 1970s, even as appreciation of the capitol as a symbol of the state grew. This situation was driven by two factors: technology and the conversion of spaces designed for executive agencies into legislative office space. Advances in technology not anticipated in the design of the capitol caused remodelers to do things they ordinarily would not have done. Complaints about lighting in the capitol were chronic from the very beginning. In the 1920s, efforts to provide more light led occupants to replace or augment many of the original light fixtures with others out of harmony with the building's design. After World War II, this often meant the installation of florescent lights and drop ceilings, which were favored

for better acoustics and maintenance access. Air conditioning was another technology that overtook Post's design. As early as 1958, a Legislative Council committee studied the possibility of air conditioning the capitol but rejected the idea because of the high cost involved. The occupants of the capitol did not wait for a grand plan, however. In the 1970s, window air conditioning units began to appear on the capitol's exterior. In some places, free standing air conditioning units were installed to cool specific areas of the capitol. In the 1980s, personal computer technology began to change the needs of office occupants. Additional wiring and telephone lines were in some cases stapled to the original woodwork. The capitol's electrical system, which had been upgraded in the early 1960s, began to reach its limits.

Converting executive agency space into legislative offices also wrought havoc with the original design of the capitol. Post's large common work areas were not appropriate for legislative offices. These areas were converted into small office spaces commonly referred to as "rabbit warrens" or "bull pens" by legislators and staff. These cubicles were created by putting up prefabricated walls within the original space to offer some measure of privacy. New lighting



Cramped quarters and florescent lighting were the norm in the capitol by the 1980s. (East Wing Architects LLC)

and decorative schemes were devised to accommodate the new spaces, altering the character of the original design. Original woodwork, paint, and plaster inevitably suffered from these remodelings. As the 1970s progressed, increases in legislative staff caused these areas to become congested, and concerns about the capitol and its users again came to the surface.

Guidelines for Capitol Remodeling – 1980

In November 1979, the State Building Commission authorized DOA to hire a consultant to prepare guidelines for capitol renovation projects. After a year of study, DOA issued *State Capitol Restoration Guidelines* in November 1980. This report provided, for the first time, a comprehensive accounting of changes made to the capitol over the years and described what remedial action was necessary. The report argued that a decision had to be made as to whether the capitol was to house the maximum number of people possible or was to be restored to its original glory. The report, which concluded that both goals could not be achieved, came down firmly in favor of a restoration in keeping with Post's vision. It condemned the use of certain temporary space enhancing devices as "tacky": the subdivision of hearing rooms; use of movable partitions, acoustical metal ceiling pans, and florescent light fixtures; subdivision of large interior areas into small work stations; and the hodge-podge of office furniture that inevitably followed subdivision.



Acoustical ceilings were installed in many areas of the capitol without regard to the architectural integrity of the building. (East Wing Architects LLC)

The central recommendation of the 1980 report, setting a strict limit on the number of people working in the capitol, was met with skepticism, especially from legislators, who feared it was part of a larger plan to move the legislature itself out of the capitol. One legislator accused the authors of the report of trying to turn the capitol into a “museum”. Another recommendation was taken more to heart, at least with regard to future modifications to the capitol’s interior: past renovations had made serious mistakes that harmed the architectural integrity of the building and should be rectified. The report offered a comprehensive list of practices to be avoided: floor coverings different from the original; temporary partitions; acoustical ceilings; window air conditioners; hardware different from the original design; florescent lighting; wall clocks not designed for the capitol; exposed wiring and telephone boxes; ad hoc selection of draperies, carpeting, and furniture; and use of paint or wallpaper out of harmony with the original. The *Guidelines* were never formally adopted by the legislature, but the report’s conclusions gave future renovators pause. From that point forward, capitol projects would be sensitive to the past while considering the needs of the future.

The Capitol Master Plan - 1987

The *Capitol Restoration Guidelines* issued in 1980 focused attention on restoring the architectural integrity of the capitol. The guidelines put such concerns solidly in the minds of the building’s occupants and the people. They did not, however, result in an immediate effort to correct decades of neglect. Fitful renovation efforts were made largely on an ad hoc basis throughout the 1980s. What separated them from the much-criticized renovations of earlier decades was a real appreciation for the vision of George Post and the public-spirited individuals who had built the capitol. A case in point was the minor controversy over the replacement of the original cherry wood windows with energy-efficient aluminum windows designed to look like the wooden ones. If the idea had come up in 1960, there is little doubt that the bottom line would have won out. But by 1982, much of the



*Original cherrywood windows were nearly replaced by energy-efficient aluminum windows in 1982.
(Kathleen Sitter, LRB)*



The effort to replace modern door-knobs with replicas of the original design in 1982 stirred controversy, but demonstrated a commitment to the vision of the capitol's architects.
(Kathleen Sitter, LRB)

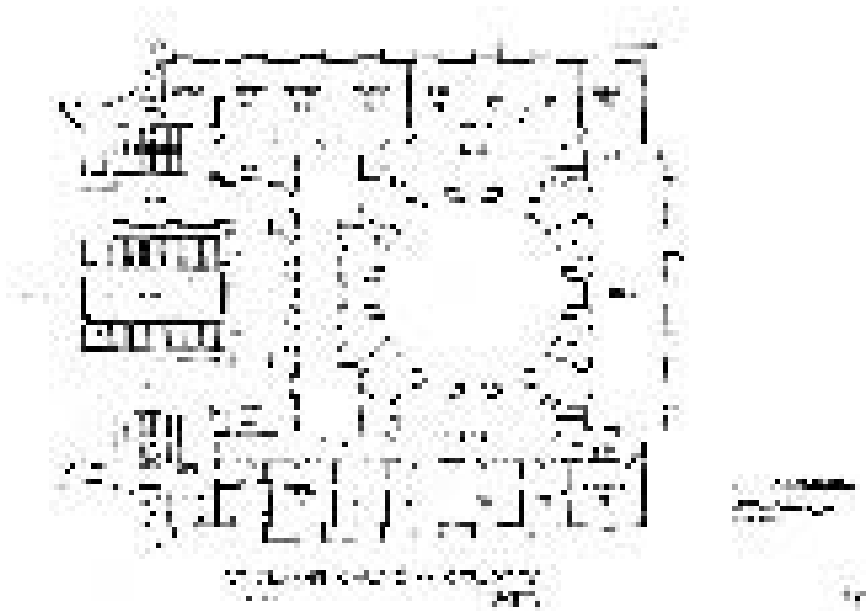
controversy was not over the cost, but over the incongruity of placing aluminum windows on a 70 year-old landmark beaux-arts building. The State Building Commission approved over \$1 million to restore the original windows. Later that year, a renovation of the governor's suite of rooms on the first floor of the east wing was carried out with a similar regard for the original appearance of the building. Also in 1982, DOA endured considerable criticism for purchasing 150 replica doorknobs designed to match those originally used throughout the building.

Although aesthetics and architecture played their part, the decision to dispense with piecemeal renovations and develop a grand plan was driven by practical concerns that had been looming for decades: air conditioning and office space. Interest in air conditioning the capitol had been evident since the 1950s. The seeming

extravagance of such a move, as well as the complications of air conditioning a large building not designed for it, placed the idea on the back burner. By 1985, however, air conditioning was seen by the public as less of a luxury and more of a necessity. The capitol was by that time the only state office building not air conditioned. Repeated renovation and subdivision of the private areas of the building had choked off Post's air circulation system. The building could be a very unpleasant place to work, especially after several consecutive days of hot weather.

At about the same time, the capitol's space wars reached an uneasy impasse. No one was left in the building but the titans of state government: the legislature, the supreme court, the governor, and the attorney general. Of the smaller agencies, only the politically untouchable Grand Army of the Republic Museum clung to its space on the fourth floor of the north wing. The steady growth of legislator's personal staff, caucus staff, and the three legislative service agencies resulted in increasingly tight quarters. The supreme court, governor, and attorney general had also seen an increase in staff without any additional space in the capitol. With the air conditioning issue mandating a major renovation of the capitol, the time had arrived to plan how the building's space could best be used.

A committee of legislators began work in 1985 on the document that would become the Capitol Master Plan. Using consultants, they tried to determine the best way to proceed with capitol renovation while accomplishing their



A proposed layout from the 1987 Capitol Master Plan. (LRB State Documents Collection)

goals with regard to space, air-conditioning, architectural preservation, and art conservation. After more than a year of study, the Capitol Master Plan was approved by the Joint Committee on Legislative Organization on June 4, 1987. The Master Plan advocated an end to the “hop-scotch” renovations of the 1980s and the closing off of large portions of the capitol on a rotating basis for a single, large-scale renovation.

The bulk of the Master Plan dealt with space allocation. Under the plan, each member of the legislature would be assigned a two-room office suite. This would alleviate the long-time complaint of legislators having to share rooms with their aides and with each other. The extra space for legislators was found by locating the supreme court’s law library and the Grand Army Museum out of the capitol and moving legislative service agencies into the space they vacated. The space vacated by the service agencies (first and second floor north, and first floor south) would be converted into legislative office suites. Generally speaking, the Master Plan assigned space in the north and west wings to the assembly and in the south wing to the senate. The east wing would be shared by the governor, the attorney general, the supreme court, and the legislative service agencies. Under the Master Plan, one half of each wing would undergo a period of comprehensive renovation during which the occupants of the space would be moved out of the capitol. The plan, if followed, promised to end the capitol space crunch for the foreseeable future.



*Public events in the rotunda necessitated the addition of electrical outlets.
(Kathleen Sitter, LRB)*

In addition to calling for full air-conditioning of the building, the Master Plan addressed a number of serious infrastructure deficiencies that had been apparent to capitol workers for years. Problems with the electrical system were noted, which included power “sags and surges”, voltage spikes, and high and low frequency noise. The Master Plan questioned the capacity of the whole electrical system to meet modern needs, especially with the addition of air-conditioning. The lack of standard electrical outlets in the rotunda, which hosted 60 to 70 public events per year, was cited as a particular problem. Ironically, given the fate of the previous capitol in 1904, the Master Plan found the capitol’s fire protection system lacking. The building had only one fire alarm triggering lever, located at the rotunda information desk. Each floor of each wing did have a fire hose, which, if activated, would still sound the alarm. According to the plan, this system depended on watchmen regularly patrolling all areas of the building during unoccupied hours. Since this was no longer done, the plan suggested several possible modifications. Among these were fire alarm pull stations at all exits; smoke or heat detectors; and smoke and flame barriers at strategic points in the building. A final infrastructure problem identified was the lack of handicapped access to the building: only one handicapped entrance existed, and only one handicapped parking space was available. The plan recommended that this number be expanded substantially.



Decorative painting in the public areas of the capitol was one of the concerns addressed by the Capitol Master Plan. (Kathleen Sitter, LRB)

The Master Plan also addressed the state of artwork in the capitol. It expressed particular concern with the state of the decorative painting in the public areas of the building. Unlike the decorative schemes in the private areas of the capitol, the decorative painting in the public areas generally survived. A conservator's report, however, had noted varying conditions of deterioration and recommended that these early signs of decay receive immediate and ongoing attention. A regular program of maintenance for decorative painting was recommended. The plan called for some maintenance staff to receive training in the care of the capitol's artwork, as well as regular dusting and vacuuming of wall murals. The plan did not recommend any major restoration or conservation of artwork.

A number of day-to-day concerns also merited mention. The plan recognized the growing role of information in the work of the legislature and recommended the creation of a media center to serve the press and members of the legislature by providing information to the public via videotape, audiotape, and photography. The plan was critical of the original lighting scheme of the capitol, but recognized the need to eliminate the florescent light fixtures that had become common in the capitol despite being out of harmony with the original design. The plan recommended the design of incandescent light fixtures compatible with the capitol's architecture that, while being energy efficient, would provide enough light and reduce glare on video display terminals. It also briefly discussed the issue of office furnishings, which had been dealt with on the same ad hoc



Restoration of the Assembly Chamber mural in 1988 (left). Further work was done on the decorative painting in the chamber when the west wing was closed in 1995 (below). (East Wing Architects LLC)

basis as capitol renovation during the 1980s. No major scheme of restoration regarding furniture was recommended by the Master Plan.

A Pilot Project - 1988

Despite, or perhaps because of, the Master Plan's comprehensiveness, it was not implemented immediately. With the difficult decisions of who would go where still looming, no action was taken during the rest of 1987. Instead, in January 1988,

SCERB approved a smaller pilot project: a comprehensive renovation of the Assembly Chamber in the building's west wing. This project, which began following the legislature's March 1988 floor period, incorporated many of the things that would need to be a part of the general capitol renovation project. The first of these was dislocation: the assembly was forced to meet in a hearing room while its chambers were being renovated. Art conservation was another: the great mural by Edwin Blashfield was restored. The varnish which had been applied to the mural in the 1970s to protect it, had yellowed, giving the mural a dingy appearance. This coating was painstakingly removed with cotton swabs. The walls were probed to find the original color and decorative scheme for





The restored Assembly Chamber. (Kathleen Sitter, LRB)

the chamber. Workers restored these to conform with the original vision for the room. What had become a very dark room was made a very bright one when the intended scheme was followed. Some improvements were also a part of the project. A non-static carpet was installed to insure that only verbal shocks were administered in the chamber. Conduit was laid under the floor to make the chamber ready for computer automation equipment if the assembly should decide to install it in the future. A new voting machine was installed. The whole project was completed and the chamber ready for occupancy by the time the 1989 Legislature convened in January 1989.

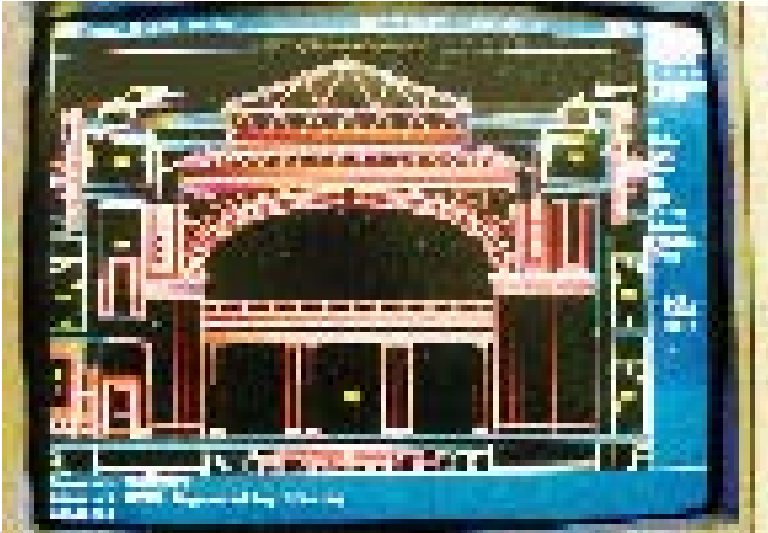
With the successful completion of this small pilot project, the difficult decisions of who would leave the capitol

could no longer be deferred. The supreme court was very reluctant to be separated from its library. The legislature briefly considered moving the court out along with the library, but shrank from the political battle that this would precipitate. Ultimately, the project departed from the Master Plan in two important respects. First, it was decided that minimum disruption would occur if an entire wing were closed off at once, instead of half a wing, as the plan proposed. Secondly, the legislature decided to move its own service agencies, (the Legislative Reference Bureau, the Legislative Fiscal Bureau, and the Legislative Council) out of the Capitol, leaving the supreme court and its library in the east wing for the time being. The Grand Army Museum was coaxed out of its quarters with the promise of more floor space in a prominent location on the Capitol Square. The departure of these tenants essentially emptied the north wing, and freed it up to be the first to be renovated. In January 1990, it was sealed off and the work began.

Research

The idea of restoring the capitol to its original appearance and maintaining fidelity to the intent of the architect while accommodating modern uses of the building was an ambitious one. In the face of the many small remodeling projects done haphazardly through the decades, it was often far from apparent what the original architects had intended. There was also the danger that in trying to make the building a satisfactory modern workspace, the errors of past decades might be compounded. The first task of the project, then, was to document the building as it appeared when renovation started and, at the same time, try to reconstruct how it appeared when first completed. In comparing the two, it would become possible to find the best way to balance architectural fidelity with modern needs.

The first step in the documentation process was a detailed measurement of the capitol. Using modern technology – a computer-aided drafting system – the physical attributes of the building were compared with the original drawings, still retained by DOA. This indicated how the building had changed in the decades since construction. And, since there was no guarantee that the building had been constructed in exact conformity to the original drawings, it served as a check on their accuracy as well. This process also helped to identify original walls in the often-remodeled private areas of the building. It would offer not only an example of what materials and methods were used in constructing the interior walls, but might also harbor clues as to the original color and decorative painting



A computerized drafting system assisted in renovation efforts. (East Wing Architects LLC)

scheme in that area. Once the floor plan of a wing using the new measurements was complete, a ceiling plan was created using new measurements of features such as molding and decorative plaster. When both the floor and ceiling plans were completed, the two could be put together to create a three-dimensional view of the whole wing.

The three-dimensional layout provided the basis for the next phase of the project: a comprehensive survey of the area as it appeared at the start of the renovation project. This involved identifying and tagging every item associated with the wing. Every brass grill was identified and its location noted. Different types of doors were recorded, along with the types of doorknobs and escutcheons. A survey was also made of the floor marble. The type and location of each segment of stone was recorded. Where Post's plans indicated that there should be marble on the floor but none was apparent, carpeting or tile was pulled up to reveal the stone. Wood trim was also documented. Its quality and composition would help determine if it was original. In addition to noting and identifying these pre renovation features, each was photographed. Every room was photographed from at least two angles to record its condition prior to renovation.

An additional preliminary step was to identify the original color and decoration of walls. To do this, workers conducted paint probes of walls determined to be original. This involved painstakingly removing many layers of paint that had been added over the years. With few exceptions, the original color had been painted over along with the decorative flourishes. When the original layer was revealed, it offered a clue as to how the room had looked when the capitol was new.



Paint probes involved removing layers of paint to reveal original color and design. (Gerylyn Schneider (above), Kathleen Sitter, LRB)



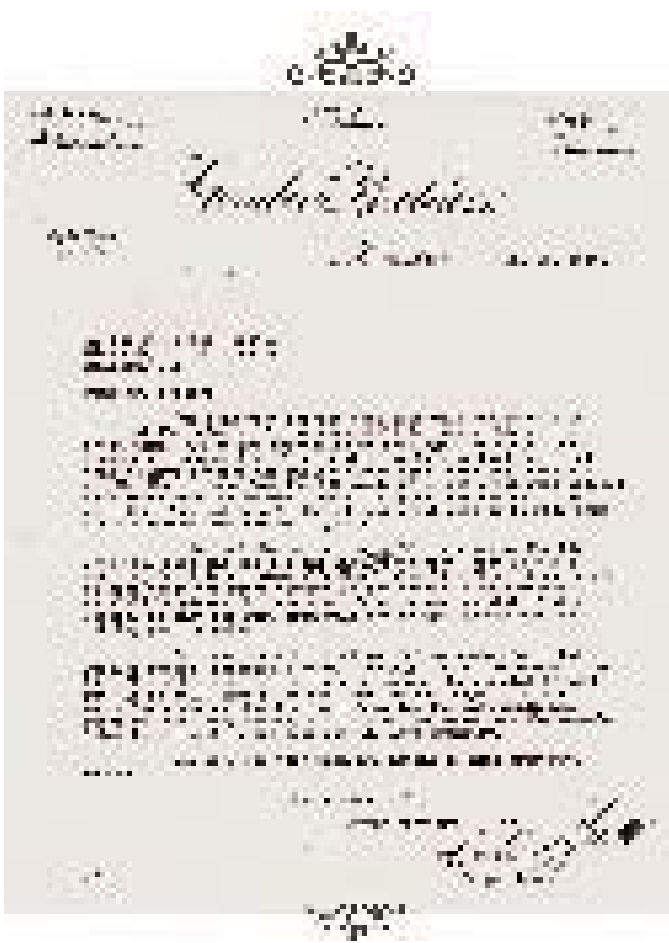
*Paint probes uncover the decorative schemes for the capitol through the decades.
(Gerilyn Schneider)*

Researchers for the renovation project spent many hours at the State Historical Society tracking down details about hardware pieces, woodwork, decorative painting, and other aspects of the capitol's original appearance. Of primary importance in this undertaking were the records of the Capitol Commission. These records generally fall into three categories. The minutes of the commission recorded its official proceedings, such as the letting of contracts, decisions about design, and the settling of disputes with contractors. Contracts spelled out exactly what work a contractor was to perform and what his compensation was. Correspondence revealed communications with architects, artists and contractors. Taken together, this collection of documents managed to answer most of the questions researchers had about how the building looked originally. For example, the minutes of the commission might indicate that Gimbel Brothers in Milwaukee had signed a contract to supply carpeting for a certain room or rooms at a certain price. By consulting the commission's copy of the contract, the amount and type of carpet to be supplied could be ascertained. Correspondence with Gimbel Brothers might reveal even more detail about the carpeting in the rooms in question, such as color or pattern. Correspondence might also reflect any changes in the order subsequent to the original contact.

Contemporary architectural journals and trade magazines offered another source of information about the capitol as it originally appeared. Post was well respected and the construction of a monumental building designed by him attracted attention in the architectural community. Articles dealing with

specific aspects of the building revealed what was being done, sometimes with commentary on the architect's intent. General articles also gave an insight into contemporary building practices. Even advertisements proved helpful. Contractors working on a major project such as the Wisconsin Capitol would boast of that fact in their ads and describe the work being done.

The New-York Historical Society contained a variety of materials left by George Post that provided important information. This material, including Post's drawings of the capitol, developmental sketches, photographs, job books, and ledgers, offered researchers a look at the other side of the Capitol Commission's give-and-take with its chosen architect.



Letters from contractors and suppliers, such as the one above, provided useful information during the capitol renovation project. (State Historical Society)

Researchers also sought photographs documenting the building's history, particularly photographs of the capitol's interior. These proved to be elusive. The State Historical Society of Wisconsin's visual materials collection contained many views of the capitol's exterior, but very few of its interior. There were a few surprises. A series of photos taken by the secretary of state's office showed



This photo, taken around 1912, helped determine the original appearance of the secretary of state's office. (State Historical Society #WHi (X3) 46943)

the evolution of that official's capitol space over a period of years. They were useful in documenting the type of furniture used; the light fixtures in the office, and, although black and white, the patterns of the decorative painting. Researchers also solicited photographs from the relatives of those who worked in the capitol in its early years, but were able to find few interior views from that period.

Once the historical research was completed, the areas of the wing being researched were divided into three categories: areas for restoration, areas for preservation, and areas for renovation. Areas for restoration were places that needed to have elements added subsequent to original construction removed. These might include false ceilings, modern light fixtures, doors, walls, or partitions out of harmony with the original construction. Such areas were also to have original decorative schemes, paint, and woodwork restored to their appearance when the capitol was completed.

Areas for preservation were places where original elements needed to be stabilized. Typically, the public areas of the building where the appearance was fundamentally unchanged from the original design, but where the years had taken

their toll, fell into this category. A few private areas of the building where the original paint and plaster survived also were marked for preservation.

Areas for renovation included those places that would be made into new spaces meeting modern needs. These spaces would not be restored to the original design, but would be similar to it in style and use of materials. Renovation would be particularly needed in the private areas of the building. The layout of the original design was for the most part set up to accommodate the various agencies of the government to be housed in the capitol. Since most agencies had moved out of the capitol and the use of their space had changed over the years, no attempt would be made to recreate the original layout unless it matched the modern use of the space. Most private areas of the capitol would become legislative office suites. The new walls built in accordance with the new layout would be constructed of materials faithful to Post's original design and painted, decorated, and furnished in conformity with the original color and decorative scheme.

The historical research and analysis phase of the project, conducted before any work was done on each wing, gave architects the information they needed to make decisions about what work was to be done in each wing and enabled them to form concrete plans to present to contractors who wanted to bid on the project.

VI. The Grand Project



In undertaking a major renovation of the capitol building, planners were, in a sense, recreating the work of Lew Porter and the Capitol Commission in building the capitol. They faced many of the same challenges and found similar solutions. The most prominent example of this is the decision to undertake the work in phases instead of doing it as one massive project. Those working on the project reached that conclusion for many of the same reasons that the initial Capitol Commission did. The dislocation of state government that would be involved in closing the capitol entirely was a paramount consideration. Closing each wing in its turn kept disruption down to an acceptable level. The shortage of skilled workers was another reason to proceed wing by wing. In 1907, it was simply a matter of hiring the large number of craftsmen needed in certain trades that caused problems. In the 1990s, there was the additional problem that many of the skills that would be needed were no longer common. Plastering is a skill not as commonly needed in buildings today as it was in the early 1900s. Likewise, decorative painting is not a part of most new buildings and certainly not at the level of quality and detail found in the original design of the Wisconsin capitol. The project, then, would have to call on a very limited labor pool in these highly specialized areas.

It was important that the existing features of the public hallways and chambers of the capitol be protected from the day-to-day rough and tumble of



Areas of the capitol under renovation were closed to the public (left). Temporary plywood walls were erected to protect exposed surfaces (below). (Kathleen Sitter, LRB)

construction work. The first step taken in each wing, therefore, was to encase all exposed marble and granite surfaces with plywood in order to prevent damage. The plywood barriers, keeping the public out of wings being renovated, were one major piece of evidence to capitol visitors that something unusual was going on.



During the capitol renovation project, SCERB retained its preeminent role in deciding what actions should be taken regarding the capitol. The balancing act between the capitol as a landmark symbol of democracy and its role as an office building necessitated some modifications. The public areas of the building for the most part fell under the jurisdiction of SCERB. Modifications of other parts of the building also had to be negotiated with the parties that occupied them. The major showpiece rooms such as the Senate and Assembly Chambers, involved decisions that could only be made by those bodies. The State Building Commission, which oversees state building projects that incur debt, also had to approve each phase of the renovation as new revenue from the sale of bonds was needed.

The private areas of the building were controlled largely by those who occupied the space. As called for in the Master Plan, this made the assembly responsible for the north and west wings, and the senate responsible for the south. The multiple tenants of the east wing were involved in reaching decisions about the renovation of the space they occupied. Decisions regarding the overall renovation, however, were made based on broader considerations. The original paint schemes of Post's designs would be restored, irrespective of individual tastes or contemporary fashions. Likewise, furniture, carpeting, and lighting

decisions would be made with architectural integrity taking a preeminent role and the desires of the tenants a decidedly secondary one.

Also playing a major part in the capitol renovation project was the Department of Administration (DOA), custodian of the capitol since 1959. DOA's Division of Facilities Management, which governs state building projects generally, took the lead in the day-to-day governance of the project. DOA worked with SCERB and the tenants to make sure that the architects and contractors performed the work as the state desired.

Wing by Wing

Ironically, the north wing, the newest part of the capitol, was the first slated for renovation. The wing was closed for renovation in January 1990, and work was completed in December 1992. The principal occupants of the wing, the Legislative Reference Bureau, the Legislative Council, and the Grand Army Museum, were relocated to various offices on the Capitol Square and will not be returning to the capitol. A number of Assembly Representatives' offices were also temporarily relocated to rented space on the square.

The west wing was closed in February 1993 and reopened in July

1995. It contained not only the Assembly Chamber, but also offices of assembly leadership and many rank and file members. A former ballroom two blocks south of the capitol served as a temporary Assembly Chamber. Some leadership offices were located in the newly completed north wing, along with other dislocated members. The speaker, along with some other members, moved to the same building as the temporary chambers. Others remained in rented quarters on the square.

Following the completion of the west wing project in July



Scaffolding allowed conservation workers access to Kenyon Cox's mosaics. (Kathleen Sitter, LRB)

1995, all four wings of the capitol were briefly open. The south wing was next slated for renovation, but the senate, which occupied the wing, wished to avoid the disruption of a move during the legislative session. When the senate completed floor action in March 1996, it moved to the same temporary chamber that the assembly had vacated the previous July. Most senate offices, including leadership, moved into the same building as the temporary chamber. Many senators moved into rented spaces on the square vacated by the assembly representatives who had moved back into the completed west wing. Several remained in other wings of the capitol. The south wing project was completed in January 1999, and most senators then moved back into the capitol.

During the renovation of the south wing, a project to renovate the central rotunda of the capitol was completed. Unlike the four capitol wings, the rotunda is entirely a public space, and its function as an elaborately decorated public area would remain the same as when the capitol was built. The rotunda renovation involved the difficult task of restoring artwork that was hard to reach and taking steps to preserve it so that it would last for years to come. The project began in August 1997. The rotunda was closed off with plywood barriers and filled to the top with scaffolding so workers could reach all surfaces easily. In keeping with the rotunda's character as a public area and tourist attraction, DOA decided



A special observation area allowed the general public to view conservation efforts in the capitol rotunda. (East Wing Architects LLC)

to do something it had not done in any other phase of the renovation. A special observation area allowed the public to look in on the project, and video monitors showed visitors in the observation area the conservation work as it happened. A narrative posted in the area explained what was being done. For this phase of the capitol renovation, which was completed in October 1998, the public had a view of the action.

The capitol was again entirely open from January 1999 until the east wing project began the following July. The east wing was by far the most delicate politically because of the powerful tenants of that area who represented competing interests in the state's constitutional framework. The first two wings had affected primarily the assembly; various considerations regarding space and function could be handled entirely by assembly leadership. The south wing was similarly limited to the senate. In the east wing, however, the supreme court, governor and attorney general all had to be consulted. The construction of a new Justice Building on the capitol square settled some vexing space questions unique to the east wing. Eventually, some members of the attorney general's staff could move there, where the bulk of the Justice Department would be located. The supreme court's law library remained in the capitol for several months in 1999 while the project got underway, until it left its home of over 80 years forever in October 1999. The supreme court temporarily relocated to a building near the square and returned to the east wing in August 2001.

Just as it had in the original construction of the capitol, the phased construction of the renovation project served as an education for those planning and carrying out the work. For example, DOA began the initial north wing project using its own staff architects as designers. This seemed logical, since DOA oversees all state building projects and had been responsible for the capitol for 30 years. The magnitude and unique nature of the capitol renovation project, however, demonstrated that more resources were necessary. For the subsequent wings, renovations were designed by private architectural firms. While DOA retained its oversight powers, a staff of architects devoted entirely to capitol renovation permitted greater attention to detail, and, in particular, a higher level of historical research on the original appearance of the capitol. Some of the resulting differences between the wings are evident, particularly in the private areas of the building. These differences are most apparent in the style of light fixtures and furniture used in each wing.

Plaster

Plastering was an important component of the restoration project for two reasons. First of all, the wholesale remodeling of the private areas of the capitol required that many old walls be demolished and replaced with new ones to conform with the new layout. Creating these new walls in the manner called for in Post's design would require a great deal of plasterwork. Secondly, the

destruction over the years of the majority of the decorative plaster work in the private areas of the capitol would require a set of skills that was not commonly called for in new construction. The new interior walls were built exactly as the original ones were. Clay tiles of the type originally used in the construction of the capitol were no longer mass produced and had to be manufactured specially for the capitol project. Three coats of plaster were laid over the tile: a scratch coat, a brown coat, and finally a finish coat. The missing cornices in the private areas were even more of a challenge. These were made using specifications in Post's original design. The plasterers made their molds on the basis of these designs and made new cornices to completely restore the plasterwork of the private areas to its original appearance. In the public areas, the original plasterwork has generally survived, but in some places required extensive repair.

Wood

The woodwork in the private areas of the capitol also required a great deal of attention. The governing principle in the project was to save as much of the original wood as possible. This was a particular challenge because the change in the layout of the rooms in the private areas necessitated the removal of old wainscot and doorjambes and their replacement or recreation to fit the new configuration. In places where the original wood could stay in place, there were still problems. Much of the wood had been damaged in the natural course of using the office space. Some had been poorly refinished. In some cases, the woodwork had been abused, having been gouged, marred by nail holes or staples, or painted over. Frequently, the top board of the radiator boxes at each window had to be replaced because of water damage.

The vast majority of the wood was quarter-sawn white oak. Wood is quarter-sawn when it is cut from logs that have been cut into quarters

before being sawed into lumber. This insures that each board facing displays a smooth, even grain. In a few special areas, other woods, such as



The capitol's woodwork was restrained to match its original appearance. (Kathleen Sitter, LRB)



cherry, walnut, or mahogany, were used. The first step was to determine through probes what the original stain was. Once identified, the stain underwent chemical analysis so that it could be duplicated exactly. After the proper stain was decided upon, it was necessary to remove the wainscot, doors, and doorjamb, and strip them of their hardware and finishing. This was a complicated task as the typical capitol doorjamb contains 11 different pieces of wood. These pieces were stored after finishing to prevent damage by other construction work. The care taken with door wood and door hardware

resulted from difficulties workers experienced early in the project. When the workers refinishing the doors in the north wing began their work, they assumed that the door hardware was interchangeable. It was removed from the doors and stored in a central location without regard to its origin. When the refinishing was completed, workers were chagrined to find that the hardware pieces were specific to their doors, and they were left with the puzzle of matching the right escutcheon and doorknob to the right door. Learning from this experience, in subsequent wings the door



A mockup of proposed color and design (top) offers a contrast between the light stain originally used and the darker color introduced in subsequent years. (Kathleen Sitter, LRB). Doors were removed, stripped and restained (lower). (East Wing Architects LLC)

hardware was carefully labeled and stored so that it could be easily reunited with the right doors when the time came. All told, there were around 300 to 400 doors to be refinished in each wing. The doorjambs often had been planed or otherwise modified over the years, so they were resquared.

In many cases, new woodwork had to be created to fit a newly created wall or to replace badly damaged or missing woodwork. In order to match it with the surviving woodwork, original versions of the desired piece were supplied to the sawmill, and its saws were calibrated to produce an identical piece. As in the original construction, quarter-sawn white oak was used for the new interior woodwork. This process revealed surprising evidence of the capitol's phased, wing-by-wing construction: there are minute differences in the original woodwork of each wing, probably reflecting the work of different carpentry contractors. The inconsistency was faithfully maintained in the restoration. Despite all the care taken in restoring the capitol, one small difference between the old and new can be noticed in the woodwork. The original oak wood was taken from virgin old growth forests and displays a much broader grain than the new oak. The average visitor to the capitol will not see the difference, but it is detectable to the trained eye.

The cherry wood windows of the capitol, which were spared destruction by the growing historical awareness of the 1980s, still needed attention. Although all of the windows were serviceable, they were stripped, refinished, repainted, and reglazed where necessary.

Modern Features

Air-conditioning the capitol provided challenges that are not present in typical office buildings. Cool air from central air conditioning units is usually carried through ductwork running above the ceiling. The elimination of drop ceilings in the renovation precluded that option. The placing of ductwork required some innovation in places. In most areas, a dead space above the corridors in the private areas of the building provided a good place for the air-conditioning ducts to run and provide cool air to offices on either side through grates in the office walls. In other places, soffits were installed in a way that would permit the ducts to run but would minimize the departure from architectural integrity. No air-conditioning was placed in the rotunda area, which is cooled by air flowing in from the four wings. In the ornate Governor's Conference Room, there was no place that conservators could run ductwork, so cool air is pumped in through the non-working fireplace.

The electrical system of the capitol had reached the end of its useful life and was replaced entirely. The complete renovation of the building offered an opportunity to make comprehensive changes that would meet future needs. The concrete floors were taken out and an electrical raceway was laid, including additional capacity for telephone lines, computers, and video technology. Once



By the 1980s, the capitol's basement had become a choked maze of pipes and wires (above). The basement floor was lowered several feet, and conduit and ductwork laid beneath (below). (Department of Administration, Division of Facilities Development)



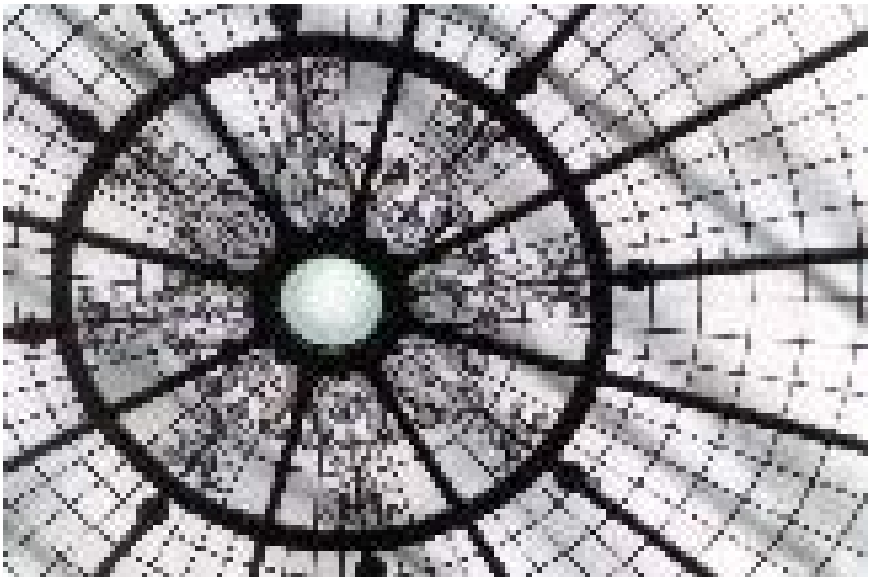
the grid was laid, the concrete floors were repoured. In keeping with the Master Plan, electrical outlets were added unobtrusively in the rotunda and in the nearby passageways.

The basement utility area, which had become a choked maze of pipes and conduit through haphazard renovations over many decades, were rehabilitated by making the floor several feet lower and laying conduit and ductwork under the floor.

Handicapped access was significantly improved by the renovation project. Each wing was fitted with ramps and automatic doors to provide handicapped employees and visitors improved access to the building.

Stone and Metal

Most of the original ornamental metal work, grill work, and door hardware still survived when the capitol restoration project began. The surviving pieces were labeled as to their origin and stored during the renovation. Some pieces had been lost over the years, making the manufacture of some new pieces necessary. In these instances, original designs of the hardware pieces offered guidance as to their form. They were analyzed to make sure that the proper metal content was



Detail of the glasswork in the ceiling of the Assembly Chamber. (Kathleen Sitter, LRB)



Safety and aesthetics were served by modifications to the railing in the assembly gallery. (Kathleen Sitter, LRB)

achieved in the replicas. In the Senate Parlor, this was done to duplicate a new section of iron grillwork needed to accommodate an air conditioning opening. The new grillwork is indistinguishable from the original.

In some cases, circumstances required the design and manufacture of new metalwork. The railings around the handicapped entrances are one example. Although Post's original design obviously did not call for handicapped entrances, railings were designed to be in conformity with the general spirit of Post's vision. A more prominent example is the new work along the front of the spectator galleries in each of the legislative chambers. The original railings were



Scaffolding surrounded the capitol's exterior to permit sponge-jetting of the White Bethel granite. (Kathleen Sitter, LRB)

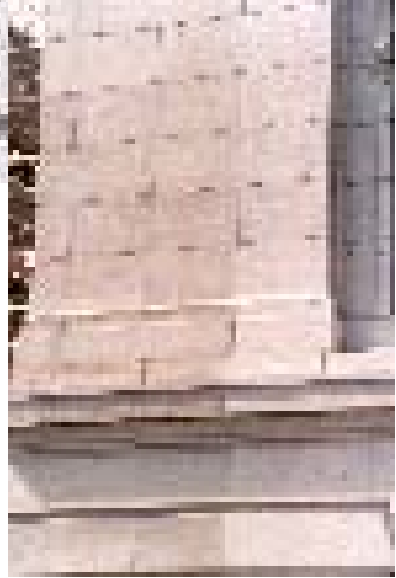
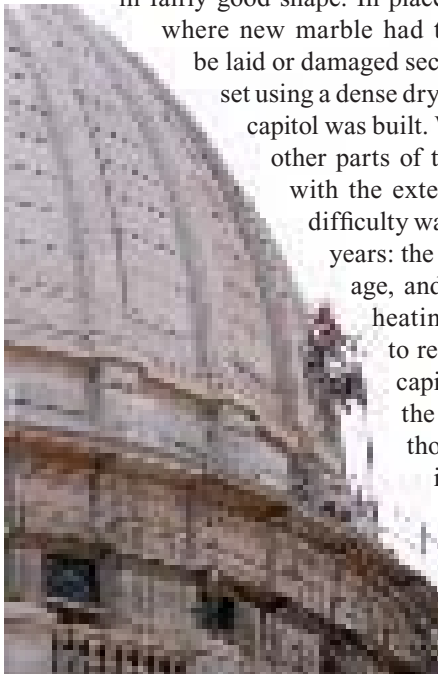


Exterior granite before and after sponge-jetting. (Kathleen Sitter, LRB)

much too short to ensure the safety of spectators and eventually were in violation of safety codes. Sometime along the way, a glaringly utilitarian upper rail had been added along the top of the original. During the renovation, architects designed a higher ornamental railing more in keeping with the design of the original railing and of the same metal content.

Most of the interior stonework was in fairly good shape. In places where new marble had to

be laid or damaged sections had to be replaced, new stone was set using a dense dry mortar, the same method used when the capitol was built. Whenever possible, stone salvaged from other parts of the capitol interior was used. Problems with the exterior granite were also addressed. The difficulty was the same that had been faced in earlier years: the White Bethel granite became gray with age, and even after coal ceased to be used for heating, the stone seemed to defy attempts to restore its whiteness. The “acid bath” the capitol had received in 1965 had accelerated the darkening and served as a caution to those who would attempt to clean the stone in the future. Conservators decided upon a sponge-jetting process, in which particles of sponge were hurled at the surface at high speeds. The sponge fragments were chosen specially to clean stone the strength and color of

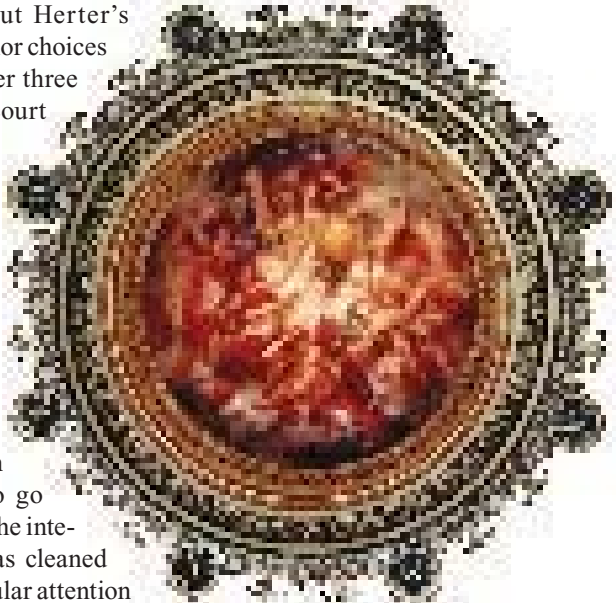


White Bethel granite. It removed the grime without taking off any of the stone itself or damaging it. Every inch of the exterior had to be treated directly by sponge-jetting, which required the construction of scaffolding around the exterior of the capitol. This work was done in 2000 and 2001 independently of the interior work. The resulting restoration of the exterior walls to their original whiteness was particularly dramatic while the process was still underway and untreated gray portions of the walls remained for comparison.

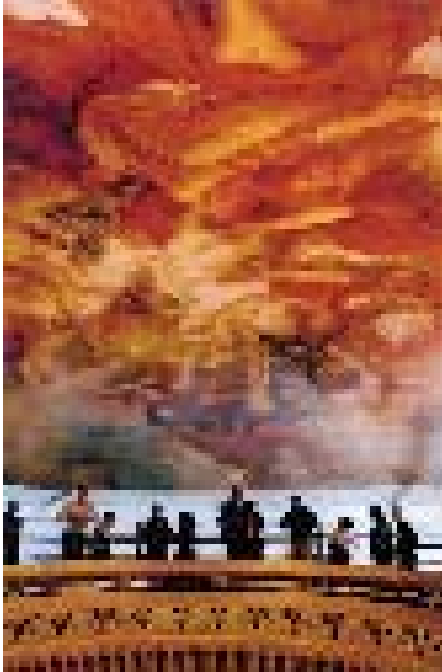
Artwork

Most of the artwork in the capitol required some restoration by the 1990s. As often as not, it was excessive attention, rather than neglect, that had caused the most damage. Some of the murals, for example, bore little resemblance to the way they had looked originally. Herter's murals in the Supreme Court Room had been particularly abused. Large portions of the murals had been painted over and the colors had been changed. In one case, an ill-chosen cleaning solution had completely erased a portion of the original. Herter's original old fresco effect was lost. The delicacy of the paint Herter had used had made the murals particularly susceptible to damage in cleaning and restoration. Fortunately, almost half the mural depicting the Roman trial had survived virtually intact. This enabled restoration workers to draw certain conclusions about Herter's original techniques and color choices and apply them to the other three heavily altered supreme court murals.

Edwin Blashfield's mural in the dome oculus was in better shape but still required some attention. The most noticeable problem was grime and graffiti along the edges of the mural; this was a remnant of the period early in the capitol's history when tourists were allowed to go unsupervised to the top of the interior dome. The mural was cleaned and retouched, with particular attention to the areas that had been damaged by tourists.)



Edwin Blashfield's oculus mural. (Richard G.B. Hanson II)



Edwin Blashfield's oculus mural had been damaged by tourists who were permitted unsupervised access to the dome during the capitol's early years. (Richard G.B. Hanson II)

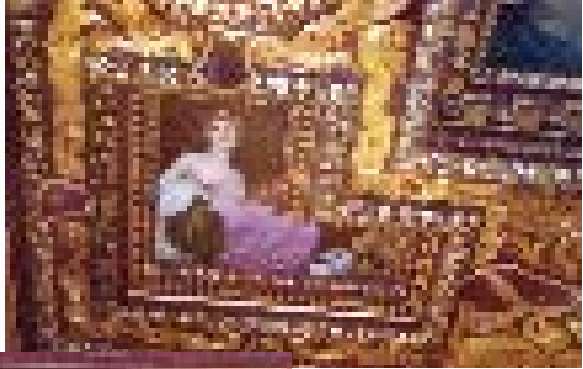
Kenyon Cox's senate murals were in fairly good shape. A cleaning and varnishing in the 1960s had left some residue of grime encased by the varnish. Conservators removed the varnish and cleaned the mural to restore it to its original appearance.

Like the supreme court murals, Hugo Ballin's colorful murals in the Governor's Conference Room had also suffered from too much attention from preservationists over the years. The paintings had become much darker over time, possibly because the stereotype of the smoke-filled room was quite accurate during the hundreds of meetings the room had seen. The murals had been varnished, sealing in decades of grime. When the murals were repainted at the same time the walls were painted white, the dark tone was mistakenly replicated. The restoration of the murals, which will be completed at a later date, will involve bringing forward the brilliant colors of Ballin's original work.

The transportation murals of Charles Yardley Turner in the North Hearing Room were cleaned, and varnish was removed. Located high on the walls of a room that saw much less use than the other ceremonial rooms of the capitol, these works had been spared any previous attempts at "restoration" beyond the varnishing.

One of the thorniest problems faced in the whole 11-year renovation of the capitol was the deterioration of Kenyon Cox's glass mosaic work in the rotunda. In the course of removing decades of grime from the glass pieces, conservators found that some sections of the mosaics were detaching from the concave surface of the pendentives. The combination of this with the original tarnishing of the aluminum-based gilt left conservators with a problem. Would it be better to inject a nonreversible adhesive behind the glass pieces in order to keep them secure on the wall or to take the thousands of glass pieces down and reassemble the mosaics using some other form of adhesive? Eventually, it was decided that injecting adhesive would be the least invasive and least risky option for preserving this unique feature of the capitol. The deterioration of the gilt was left untreated, a testimony to the failure of the original method.

A restored Hugo Ballin mural in the Governor's Conference Room (right). White paint was removed and the walls restrained to their original dark appearance. (Kathleen Sitter, LRB)



Another artistic endeavor was the refinishing of the three special wood-paneled rooms in the capitol: the Senate Parlor, paneled in mahogany; the Assembly Parlor, paneled in French walnut; and the Governor's Conference room, with walls of cherry wood. The original color was verified by examining stain under the wall sconces or other wall mountings. The walls were then stripped and the original stain color

applied. The stained and subsequently repainted walls of the Governor's Conference room offered additional challenges. The elaborately carved walls and ceilings of the room made it very difficult to remove the paint. In more intricate spots, a dental pick and artists brush were used to reach every crevice. The feeling that the room as originally built was too dark, which led to the 1967 repainting, persisted. Eventually, a shade of stain satisfactory to all parties was applied.

Restoration workers attempted to restore the decorative scheme of the building. Original decorations revealed through paint probes were duplicated by tracing and cutting the patterns onto mylar strips. Paint chips were provided to the paint manufacturer to duplicate the exact color of the original work.

The original decorative scheme was duplicated by tracing the pattern on plastic, and using the lines to create a stencil. (Gerilyn Schneider)

Draperies and Carpets

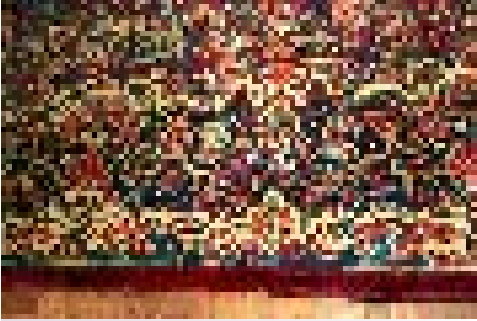
Considerable effort even went into making draperies in keeping with those originally found in the capitol. Some fabric from the original capitol draperies was found stored in the basement of the capitol; this was used to make draperies of the right color and material for the private office areas of the building. Exact replicas of the original draperies were made for the Assembly Parlor, Assembly Chamber, and the Senate Parlor. Draperies were also made for certain areas that didn't



have them originally. The west wing ordered draperies only for the second floor, where the Assembly Chamber and assembly leadership offices are located. The south and east wings were completely outfitted with new draperies.

Since the completion of the capitol no particular attention had been paid to replacing worn carpeting with something of a similar color, design, or quality. Some detective work was involved in determining what kind of carpet should be installed to restore the original look. Scraps of original

Antique velvet from Italy and trim from France were used to create new draperies based on the original. (Kathleen Sitter, LRB)



Persian rugs in the Governor's Conference Room closely match the originals. (Kathleen Sitter, LRB)

capitol carpeting had been stored in the capitol basement. Old black and white photos indicated what patterns of carpeting went with specific areas of the capitol; the fragments themselves revealed the proper colors.

Analysis and historic documents indicated that the original carpeting was 100% wool. In most areas of the capitol, the new carpeting is 80% wool, woven in patterns to match the original. In private office areas, where frequent access to the floor beneath

the carpet is necessary, carpet tiles were used. In larger public areas, such as the legislative chambers and hearing rooms, broadloom carpeting was laid.

In the Supreme Court Hearing Room, the only place in the capitol that retained its original carpeting, the old carpet finally gave way to a new carpet designed to duplicate the old, which was too worn to continue in service. Particularly worn were the two spots where opposing counsels had stood to argue their cases before the highest court in the state during eight decades.

Furniture

The interior decoration of the capitol's private areas required designers to balance the historic integrity of the building with the needs of the tenants. It should come as no surprise that this balancing act would be of greatest difficulty where the capitol's function as a modern office building collided most directly with its role as a symbol and landmark. This would be most keenly noticed in the one aspect of the building that every capitol worker would come

This sofa in the Senate Parlor was built based on historic drawings, and features leather from Scotland and mahogany feet. (Kathleen Sitter, LRB)





into contact with every day: the office furniture. It was in this area that the difference between the four wings is most noticeable. Less than a third of the furniture pieces that George B. Post & Sons designed for the capitol remained. Initially, in the north and west wings, furniture was specifically designed for the spaces incorporating certain modern amenities, but paying homage to the building's architecture. Original Post pieces surviving in these wings were restored by being dismantled, cleaned, refinished, and reassembled. In the south wing, similar steps were taken with the



A Renaissance Revival bookcase from Wisconsin's previous capitol has a home in the east wing (top). New oak furniture was designed to conform with the capitol's architectural theme, while meeting modern ergonomic standards (above). The governor's original mahogany rolltop desk was restored and returned to the governor's office (right). (Kathleen Sitter, LRB)





A new mahogany lecturn was designed for the Senate Parlor incorporating Renaissance details. The crest is hand-carved. (Kathleen Sitter, LRB)

A curved oak credenza was designed for placement in one of the circular pavilion rooms. (Kathleen Sitter, LRB)



An oak writing desk designed in the 1920s to compliment original capitol furniture was restored, and stands outside the Senate Chamber. (Kathleen Sitter, LRB)

surviving furniture, but the senate decided that new pieces would be made not merely in the spirit of the capitol, but exactly conforming to Post's designs and made of the same materials (in most instances, oak). Minor modifications for ergonomic concerns were permitted, and drawer rollers were installed in new pieces. Similarly, the east wing tenants also desired to furnish their wing entirely with pieces of Post's design. This required a number of special measures. First, furniture experts attempted to identify all the original pieces that were still in the possession of the state. This involved examining old furniture in agencies that were once located in the capitol to determine which, if any, were of the original Post design. Once documented, the legislature enacted legislation permitting DOA to repossess original capitol furniture and reimburse the agencies for it. The recovered pieces were restored to their original appearance and new pieces were created to fill in the balance needed to furnish the capitol. Even after the extraordinary efforts to relocate original capitol furniture, the three "legislative" wings have only 10-15% original furniture; the rest was built as part of the restoration project. In the east wing, probably because of the greater stability of its occupancy over the years, as much as 30% of the furniture is original. When it was constructed, the capitol contained around 3,500 pieces of furniture designed for the building. Following the completion of the renovation, 5,500-6,000 pieces of furniture, including about 1,000 of the original 3,500, were in the capitol.

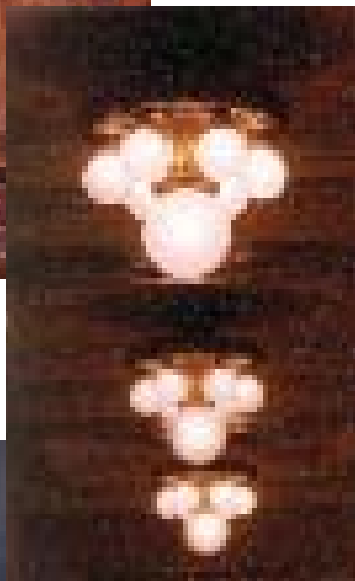
Lighting

The changes made in lighting over the years significantly changed the appearance of the private areas of the building. Institutional florescent light fixtures of the type common in modern office buildings were completely out of



character with the capitol's design and were removed. Therefore, it was necessary to supply the private areas of the capitol with sufficient light through incandescent ceiling lamps and wall sconces. Where these could not be duplicated from original designs, they were designed to provide sufficient light while being visually compatible with the restoration of the

Compact florescent light fixtures combine traditional design with modern technology. (Kathleen Sitter, LRB)



*Most capitol light fixtures are solid brass or bronze. They were disassembled and cleaned as part of the capitol restoration project. Original wall sconces use incandescent light, the prevailing technology of the time.
(Kathleen Sitter, LRB)*

original decorative scheme. Here, technology overtook the project and caused one of the significant differences between renovated wings of the capitol: by the time the south and east wings were renovated, technology enabled the use of florescent lights within traditional looking light fixtures, solving the decades-long conflict between sufficient lighting and traditional design.

In public hallways, some ornamental brass light fixtures had been damaged or removed. These were replaced by taking molds from the surviving originals and making patterns from the molds. The originals were analyzed to determine their metal content so that the necessary number of new “old” fixtures could be made to restore the hallways’ original appearance.

Artifacts

At times, the capitol renovation project took on the aspect of an archeological dig because of the thorough going-over the building received. Some artifacts were uncovered that had not seen the light of day in decades. Much of this was “construction trash”, materials discarded by workers into empty space as the capitol was built. The items were worthless then, and even today have little monetary value, but give us an insight into the people who built the building. It probably should not unduly concern capitol visitors that the most commonly found items were whiskey bottles.

Some of the items uncovered during the renovation project were related to the previous capitols that had occupied the same site. A cistern that had at some point supplied drinking water to the old capitol was uncovered. A blue and white tile pattern is presumed to be from the boiler room of the previous capitol. Slate tiles found are from the old rotunda. In one place, charred wood offered a stark reminder of the 1904 fire.



*Artifacts uncovered during the renovation project.
(Kathleen Sitter, LRB)*

The most surprising and personal artifact found was a note left under one of the door escutcheon plates by a worker in the west wing. It read: "This plate was put on by Fred Kinneson, Jan. 12, 1909. Finder please send postal." Although Mr. Kinneson had passed away long before his note was discovered, a grandson living in Madison was located. He was photographed with the note, after which it was returned to its hiding place, to be rediscovered by workers on some future capitol project.

In keeping with the forward-looking spirit of Fred Kinneson, the renovators left something in their work for posterity: a time capsule was placed in each wing, containing items that will tell future users of the capitol something about the people who once worked in the building and the times in which they lived.

VII. The Legacy, 2001 and Beyond



As the project began slowly, gathering momentum throughout the 1980s before expanding to a grand renovation, so it will end slowly. Even after the opening of the east wing, some aspects of capitol renovation will trickle on for a few years. Work on the capitol grounds will make it easier for pedestrians to use them and more amenable to events, such as the weekly Dane County Farmer's Market. This will also involve restoration of the original bronze light standards and decorative urns on the grounds. A major reworking of the capitol's elevator cars will be done in the near future to make them more reminiscent of the original steel cage elevators removed in the 1960s. Another ongoing project is designing signage to direct the handicapped to needed services that will be in harmony with the capitol design.

The grand renovation benefited from the efforts of many people. As in 1906, the commitment of the people of Wisconsin was the most essential element. The renovation project was labor intensive and required high skilled workers. This, combined with the enormity and long duration of the project, accounted for a final cost expected to be in the neighborhood of \$140 million, dwarfing the \$7.2 million construction cost realized in 1906-1917.

The capitol renovation project benefited from an unusual period of political continuity in Wisconsin. Governor Tommy G. Thompson, who served until the final year of the renovation, was committed to its steady progress. Secretary of the Department of Administration, James Klauser, also served continuously through most of the work. Senate President Fred Risser, a legislator since 1957 and longtime member and officer of both the State Building Commission and the State Capitol and Executive Residence Board, took a special interest in the capitol, as only one who has worked in the building for 44 years could. Their efforts, along with those of every architect, contractor, and worker who put extra pride into the capitol project because of what it represented, renewed the work of those who built the capitol in the early years of the 20th century.

In preserving the capitol, the commitment to future generations made when the capitol was built is renewed. Our forefathers saw a large, beautiful capitol as an enduring legacy; so do we. This was underscored when the capitol was designated a National Historic Landmark in January 2001. The restoration ensures that decades from now, people will continue to make the journey to Madison, to remind themselves of their common heritage. In a hundred years, schoolchildren will still get their first lesson in citizenship under the great dome. They will still look up with wonder, and think of a moment in time.



Acknowledgements

The Legislative Reference Bureau consulted many individuals in researching and writing this article. Without exception, all of those involved in the project gave generously of their time and knowledge. Individuals consulted included Dan Stephans, Mike Stark, and Claire Franz of the Wisconsin Department of Administration; Jim Schumacher and Steve Young of J.P. Cullen & Sons, Inc.; Diane Al Shihabi of Historic Restoration, Inc.; Charlie Quagliana, Anne Biebel, and Gerilyn Schneider of Isthmus Architects; and Roxanne Nelson of the Wisconsin Supreme Court. The Legislative Reference Bureau assumes all responsibility for the accuracy of the information presented.

Capitol Visitor's Guide

Hours: Building open daily 6 a.m. - 8 p.m. (summer) and 8 a.m. - 6 p.m. (winter).

Information Desk: Located in the rotunda, ground floor.

Tours: Daily Monday - Saturday at 9, 10, and 11 a.m., 1, 2, and 3 p.m.; Sundays at 1, 2, 3, and 4 p.m. between Memorial Day and Labor Day. Tours start at the Information Desk in the rotunda and last 45 to 55 minutes. Reservations are required for groups of 10 or more. Call (608) 266-0382 7:30 a.m. - 5 p.m. Monday - Friday.

Observation Deck: 6th Floor, accessible from 4th floor via NW or W stairways. Open daily from Memorial Day to Labor Day. There is a small museum devoted to the Capitol at the entrance to the observation deck.

Souvenirs: Available at the Information Desk, include Capitol Guidebooks, Activity Books, postcards, miniatures, posters, and tour videos.

Capitol Police: Room B4 North.

Handicapped Entrances: At Martin Luther King Jr. Blvd., East Washington Avenue, Wisconsin Avenue, and West Washington Avenue.

Parking: Parking on the Capitol square is restricted. Several public ramps are located within two blocks of the Capitol.

Food: Vending machines, North wing basement.

Senate Chamber: South wing, 2nd floor; visitors gallery, 3rd floor.

Assembly Chamber: West wing, 2nd floor; visitors gallery, 3rd floor.

Supreme Court Hearing Room: East wing, 2nd floor.

Governor's Office and Conference Room: East wing, 1st floor.

Lieutenant Governor's Office: East wing, 1st floor.

Attorney General's Office: East wing, 1st floor.

Legislative Offices: To find a specific office, check one of the Capitol Directories located in the rotunda and on the ground floor of each wing.

Hearings: Information about the time and location of public hearings is posted at the entrance to each legislative chamber.

Hearing Rooms: North Hearing Room, North wing, 2nd floor.

Grand Army of the Republic Hall, Room 417 North.

Joint Committee on Finance, Room 412 East.

Senate Hearing Room, Room 411 South.

Additional hearing rooms are located on the 2nd and 3rd floors of the Capitol.

Capitol Facts & Figures

Construction Chronology:

West wing: 1906 - 1909

East wing: 1908 - 1910

Central portion: 1910 - 1913

South wing: 1909 - 1913

North wing: 1914 - 1917

First meeting of legislature in building: 1909

Dedication: July 8, 1965

Statistics:

Height of each wing: 61 feet

Height of observation deck: 92 feet

Height of dome mural: 184 feet, 3 inches

Height of dome (to top of statue): 284 feet, 9 inches

Length of building from N to S & E to W: 483 feet, 9 inches

Floor space: 448,297 square feet

Volume: 8,369,665 cubic feet

Original cost: \$7,203,826.35 (including grounds, furnishings, and power plant)

SPECIAL ARTICLES IN PRIOR BLUE BOOKS, 1960 TO 1999

For 1919 to 1933 *Blue Books*: see 1954 *Blue Book*, pp. 177-182.

For 1935 to 1962 *Blue Books*: see 1964 *Blue Book*, pp. 227-232.

Commerce and Culture

The Indians of Wisconsin, by William H. Hodge, 1975 *Blue Book*, pp. 95-192.

The Population Resource of Wisconsin, by M.G. Toepel and H. Rupert Theobald, 1964 *Blue Book*, pp. 70-90.

Wisconsin Business and Industry, by James J. Brzycki, Paul E. Hassett, Joyce Munz Hach, Kenneth S. Kinney, and Robert H. Milbourne, 1987-1988 *Blue Book*, pp. 99-165.

Wisconsin Writers, by John O. [Jack] Stark, 1977 *Blue Book*, pp. 95-185.

Education

Conservation Education in Wisconsin, by Ingvald O. Hembre, 1964 *Blue Book*, pp. 212-225.

Education for Employment: 70 Years of Vocational, Technical and Adult Education in Wisconsin, by Kathleen A. Paris, 1981-1982 *Blue Book*, pp. 95-212.

The Wisconsin Idea: The University's Service to the State, by Jack Stark, 1995-1996 *Blue Book*, pp. 100-179.

The Wisconsin Idea for the 21st Century, by Alan B. Knox and Joe Corry, 1995-1996 *Blue Book*, pp. 180-192.

Environment

The Climate of Wisconsin, by Marvin W. Burley, 1964 *Blue Book*, pp. 143-148.

Exploring Wisconsin's Waterways, by Margaret Beattie Bogue, 1989-1990 *Blue Book*, pp. 100-297.

The Forest Resource of Wisconsin, by Louis A. Haertle, 1964 *Blue Book*, pp. 113-129.

The Landscape Resources of Wisconsin, by Philip H. Lewis, Jr., 1964 *Blue Book*, pp. 130-142.

The Mineral Resources of Wisconsin, by George F. Hanson, 1964 *Blue Book*, pp. 199-211.

The Natural Resources of Wisconsin, 1964 *Blue Book*, pp. 69-225.

The Physical Geography of Wisconsin, by Robert F. Black, 1964 *Blue Book*, pp. 171-177.

Protecting Wisconsin's Environment, by Selma Parker, 1973 *Blue Book*, pp. 97-161.

The Soils of Wisconsin, by Marvin T. Beatty, Ingvald O. Hembre, Francis D. Hole, Leonard R. Massie, and Arthur E. Peterson, 1964 *Blue Book*, pp. 149-170.

The Water Resources of Wisconsin, by C.L.R. Holt, Jr., Ken B. Young, and William H. Cartwright, 1964 *Blue Book*, pp. 178-198.

The Wildlife Resource of Wisconsin, by Ruth L. Hine, 1964 *Blue Book*, pp. 91-112.

Wisconsin's Troubled Waters, by Selma Parker, 1973 *Blue Book*, pp. 102-136.

Government

The Budget – State Fiscal Policy Document, by Dale Cattanach and Terry A. Rhodes, 1970 *Blue Book*, pp. 261-272.

The Changing World of Wisconsin Local Government, by Susan C. Paddock, 1997-1998 *Blue Book*, pp. 99-172.

Equal Representation: A Study of Legislative and Congressional Apportionment in Wisconsin, by H. Rupert Theobald, 1970 *Blue Book*, pp. 70-260.

In the People's Service: Wisconsin State Government and the Services It Provides for the People of Wisconsin, by H. Rupert Theobald, 1966 *Blue Book*, pp. 71-296.

The Legislative Process in Wisconsin, by Richard L. Roe, Pamela J. Kahler, Robin N. Kite, and Robert P. Nelson, 1993-1994 *Blue Book*, pp. 99-194.

Local Government in Wisconsin, by James R. Donoghue, 1979-1980 *Blue Book*, pp. 95-218.

Rules and Rulings: Parliamentary Procedure from the Wisconsin Perspective, by H. Rupert Theobald, 1985-1986 *Blue Book*, pp. 99-215.

Wisconsin's Military Establishment: Its Organization and Operation, 1962 *Blue Book*, pp. 69-265.

History

Capitals and Capitols in Early Wisconsin, by Stanley H. Cravens, 1983-1984 *Blue Book*, pp. 99-167.

A History of the Property Tax and Property Tax Relief in Wisconsin, by Jack Stark, 1991-1992 *Blue Book*, pp. 100-165.

Ten Events That Shaped Wisconsin's History, by Norman K. Risjord, 1999-2000 *Blue Book*, pp. 100-146.

Two Wisconsin Firsts, 1962 *Blue Book*, pp. 267-270.

Wisconsin at 150 Years, by Michael J. Keane and Daniel F. Ritsche, 1997-1998 *Blue Book*, color supplement.

Wisconsin Celebrates 150 Years of Statehood: A Photographic Review, 1999-2000 *Blue Book*, color supplement.

Wisconsin's Former Governors, 1848-1959, by M.G. Toepel, 1960 *Blue Book*, pp. 67-206.
