

State Notes

TOPICS OF LEGISLATIVE INTEREST

Summer 2017



State Capitol Restoration/Infrastructure Upgrade Project **By Bill Bowerman, Associate Director**

Introduction

The State of Michigan is commencing the first comprehensive infrastructure upgrade to the 138-year-old State Capitol Building since the major Capitol restoration project that took place from 1987 through 1992. This article provides background regarding the condition and evolution of the State Capitol Building over time and an overview of the scope and cost of the pending restoration/infrastructure upgrade project. The final section provides a summary of project costs that would be financed through the State Building Authority (SBA).

The Capitol Building Over Time

The construction of the State Capitol Building was authorized by Public Act 67 of 1871. The cost of the building was set at not more than \$1.2 million. Due to modifications by the State Building Commission, in consultation with the architect, the overall price increased to \$1.4 million. Construction took place from 1872 through 1878, with a building dedication ceremony on January 1, 1879. Over the years, the State Capitol Building experienced long periods of neglect and decline. Remodeling to accommodate the need for additional office space also took a toll on the building. Doors were replaced and historic furniture was removed. The fourth floor openings to the rotunda were closed off. Etched glass ceiling tiles in the Senate and House chambers were removed in the 1950s and 1960s. By the 1960s, multiple fire officials, and several State leaders, including a Michigan Governor, declared the building unsafe. A proposal to demolish and replace the State Capitol Building was seriously considered. Due to the cost of replacing the Capitol Building, budget issues, and a growing movement to protect and restore historic landmark structures, the State Capitol Building survived. From 1969 to 1972, due to the demand for more office space by legislators, the Capitol Building was structurally challenged by extensive "overflooring" (the placement of steel girders across bearing walls halfway up to create two floors). By the early 1970s, there were approximately 50,000 square feet of overfloors in the State Capitol Building. While this resulted in structural stress on the building, it did provide much needed additional office space, which ultimately also helped to avert the movement to replace the Capitol Building. Accommodations for more office space also included a temporary exterior addition for the House Appropriations Committee.

In the 1980s, a decision was made to restore the State Capitol Building. Particular attention was devoted to maintaining the Capitol Building as a fully functioning, efficient seat of



government, while at the same time respecting and preserving the building's historical significance. The SBA bonded for \$61.5 million for costs of the State Capitol Restoration Project. As part of the project, the Capitol's overfloors were removed, restoring the building to its original historic design. The sandstone exterior and the iron and sheet metal dome were repaired and restored. A new copper roof was installed, and 398 custom windows were reproduced. Closed-up arches were reopened, drop ceilings removed, and skylights were restored. Decorative artwork (covering approximately nine acres) throughout the Capitol Building was meticulously analyzed to bring it back to its initial condition. Historic portraits, original furnishings, and chandeliers were conserved. Custom historically appropriate lighting fixtures, carpets, and draperies were installed. The building's original materials were preserved whenever possible, although, restoration of architectural features was adjusted to suit modern needs. To that end, some of the Capitol's systems were upgraded, including the installation of 380 miles of cables. Flooring was raised to run computer wiring, and space was left for future computer technology. The Capitol's mechanical, electrical, communications, and life-safety systems were brought up to the standards of a historic building with the goal of meeting the building codes at that time. Michigan's approach to renovation earned several state and national awards for architectural design, engineering, and preservation. At the conclusion of the restoration in 1992, the Michigan State Capitol was named a National Historic Landmark.

The master plan for the Capitol Building included a strategy to keep the building in good repair. However, budget constraints that began in 2001 had a negative impact on maintaining the Capitol. While the 1992 restoration was extensive, problematic water infiltration and dramatic humidity fluctuations continued to adversely affect the building. Several attempts to fix roof leaks were made in the years following the restoration. The roof leaks were not resolved, however, until the entire roofing system was replaced/repaired in 2013.

State Capitol Commission

In recognition of the need to preserve and safeguard the Capitol Building, two significant pieces of legislation were enacted. Public Act 240 of 2013 established the Michigan State Capitol Historic Site, which consists of the State Capitol Building and its grounds (bounded by Ottawa Street, Allegan Street, Capitol Avenue, and Walnut Street). The Act also created the Michigan State Capitol Commission and provided for the Michigan State Capitol Historic Site to be under the exclusive control of the Commission, except as otherwise provided in the Act. Responsibilities of the Commission include operating and managing the Historic Site; maintaining and restoring the Capitol Building; maintaining and improving the grounds of the site; establishing, maintaining, and operating parking facilities in the State Capitol area; and making recommendations to the Governor, the Senate, and the House regarding funding for the Michigan State Capitol Historic Site. The Commission consists of the Secretary of the Senate, the Clerk of the House of Representatives, two individuals appointed jointly by the Secretary of the Senate and the Clerk of the House, and two appointed by the Governor. In addition, the Act created the Michigan State Capitol Historic Site Fund, which is specifically dedicated for the costs of operating, maintaining, and restoring the State Capitol Building and grounds.

The other piece of legislation was Public Act 272 of 2014. It provided a revenue source to protect and maintain the State Capitol by annually earmarking \$3.0 million from the tax on cigarettes to the Michigan State Capitol Historic Site Fund. The allocation from the cigarette



tax began in fiscal year (FY) 2014-15 and is annually adjusted by the cumulative annual percentage change in the United States Consumer Price Index. Since FY 2014-15, the State Capitol Historic Site has received funding from the Capitol Historic Site Fund for restoration renewal and maintenance, and State General Fund appropriations for general operations. In FY 2016-17, the State Capitol Historic Site received a total of \$7,390,400 (\$3,121,200 from the Capitol Historic Site Fund and \$4,269,200 from the State General Fund).

In order to effectively fulfill its statutory responsibilities, the Commission contracted for a thorough review and analysis of the building, infrastructure, and mechanical systems. The result, Existing Conditions Assessment & Engineering Systems Recommendations For: Michigan State Capitol, was submitted to the Commission on May 12, 2016, by Loring Consulting Engineers. The report stated that the building's mechanical, electrical, plumbing, and fire prevention (MEP/FP) systems are in greater need of upgrades than originally assumed, and there is the potential for multiple system failures. Temperature and humidity variations have resulted in the deterioration of decorative paint and cracked plaster, and also negatively affect the overall structure of the building, as well as historic finishes and furnishings. Additional issues were found with the placement of electrical control systems, rusted pipes, and ventilation intake systems.

The Commission's Plan

The results of the building analyses raised concerns with the Commission. Funding from a dedicated revenue source (under Public Act 272 of 2014) enabled the Commission to complete critical repairs that were necessary to protect the Capitol Building. The Commission believes that the larger costs stemming from outdated mechanical systems would need to be handled through a major capital outlay plan with bonding to finance the cost. Over the last three years, the Commission has focused on immediate needs, including repointing the exterior sandstone and repairing and repainting the Capitol's iron and metal sheet dome. Table 1 lists some of the projects completed over the last three years.

Table 1

| Recent Capital Outlay Projects | |
|---|---------------------|
| Project | Amount |
| Exterior Restoration | \$6,507,006 |
| East Step Repair Project..... | 847,652 |
| Chilled Water Head End Equipment Replacement..... | 1,460,700 |
| Roof Improvement & North Step Landing | 1,200,000 |
| North and South Roof Improvement..... | 281,212 |
| Ground Floor Ceilings..... | 893,515 |
| Ground Floor North and South Restrooms..... | 1,580,273 |
| East Sidewalk Infrastructure & Security | 988,496 |
| Ground Floor Corridor Flooring | 694,204 |
| Total..... | \$14,453,058 |



The Commission also has used its appropriations to prepare for a major capital outlay project that will replace and repair the Capitol Building's aging infrastructure (mechanical, electrical, plumbing, and fire protection systems). The Commission has spent \$2.9 million for planning and design costs in anticipation of the proposed Capitol Restoration/Infrastructure Upgrade Project since FY 2015-16. Costs have included the May 12, 2016, Loring analysis cited above, assessments of interior decorative paintings, the rotunda glass floor, failing plaster ceilings, mechanical systems, lighting, the south vault and vestibule, and plans for a proposed Capitol Learning and Visitor Center (which is not part of the project as currently before the Legislature).

State Capitol Restoration/Infrastructure Upgrade Project

The Commission is proposing to address remaining structural issues, mechanical upgrades, and energy efficiency improvements (including a geothermal system) through a single comprehensive \$70.0 million capital outlay project. On April 10, 2017, the Commission approved the restoration/infrastructure upgrade project, contingent upon funding from the Legislature. The Legislature approved the project for construction in Public Act 107 of 2017. The estimated duration of the project is 24 to 30 months, with a start date in July 2017. The project will result in parking relocation for 18 to 24 months, commencing July 31, 2017. The project envisions continuous use of the Capitol during construction, with work in the Senate and House chambers and public areas to occur during holiday and summer breaks, and during nights and weekends. The project is designed to address outdated mechanical, electrical, plumbing, fire suppression, and sewage systems; decorative paint and historic furnishings; rusted and leaking pipes; lack of humidity control; relocation of equipment; and energy efficiency.

Table 2 below delineates costs of the project. It does not include proposed variations related to preserving greenspace in the current parking lot or the construction of a Capitol Learning and Visitor Center.

Table 2

| State Capitol Restoration/Infrastructure Upgrade Project | |
|---|-------------|
| <u>Civil Site Work</u> : Demolition and removal of existing West Parking Lot, removal of parking lot landscaping, new parking lot and landscaping, sidewalks, curbs, striping, relocation of security booth, and relocation of existing utilities | \$4,807,538 |
| <u>Structural</u> : Iron, stone, cement, brick work, vaults, and mechanical system supports. | 4,596,601 |
| <u>Architecture</u> : North and South Stair replacement, renovation of North Annex, waterproofing, plaster, decorative paint repair and wood | 15,497,338 |
| <u>Mechanical</u> : Geothermal heating/cooling system, heat pumps, fan coil units, air handling units, water system, piping, sprinklers, sanitary system, boilers, building automation system/controls | 24,033,331 |



| Table 2 continued: State Capitol Restoration/Infrastructure Upgrade Project | |
|--|---------------------|
| <u>Electrical</u> : Electrical panels and switch gear, back-up generator, centralize electrical distribution, IT and communications modifications | 9,454,485 |
| <u>Interior Lighting</u> : Retrofitting fixtures and control panels..... | 3,830,966 |
| <u>Life Safety</u> : Fire suppression system, building safety annunciation system, sprinkler head replacement, fire control panel, headend software systems..... | 2,141,346 |
| <u>Contingencies</u> : Unexpected structural issues, hazardous material abatement, bids submitted with higher-than- anticipated costs, and other unanticipated costs | 5,147,795 |
| <u>Equipment/Temporary Relocations/Parking/Furniture Moving</u> | <u>500,000</u> |
| Total Cost | \$70,009,400 |
| Source: Capitol Infrastructure Upgrade, Project Cost Summary, Christman, July 10, 2017. | |

Additional information on the history of the State Capitol, recent projects, and the \$70.0 million Capitol Restoration/Infrastructure Upgrade Project can be found at the following website:

<http://capitol.michigan.gov/Restoration>

SBA Bonding/Fiscal Impact

The State Building Authority is the mechanism the State uses to fund its share of costs for State agency, university, and community college capital outlay projects. Bonds are issued by the SBA. To enable the SBA to bond to finance the State's share of a project's costs, the property is conveyed to the SBA and leased back to the State. Pursuant to the SBA Act (MCL 830.411-830.425), the conveyance and lease are subject to prior approval by the State Administrative Board, the Attorney General, the Legislature, and the governing body of the institution of higher education (if applicable). While the SBA holds title to the property, the State, through annual appropriations in the General Government budget, pays rent to the SBA to fund annual debt service costs of SBA bonds. After the bonds are paid off, the property is transferred back to the State (in the case of State agency projects) or the institution (in the case of university and community college projects). Pursuant to Section 8(15) of the SBA Act, the SBA may not at any one time have obligations outstanding in a principal amount totaling more than \$2.7 billion. Interest and costs of borrowing are not included in this limit. The total cost of the Capitol restoration project is \$70.0 million. The annual State General Fund cost will be approximately \$4.6 million to \$6.0 million until the bonds are paid off (approximately 17 years).

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Sources

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