

2012

# Report from the Capitol Preservation Commission



David H. Hart, FAIA

**MOCA**

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Approved by the

Capitol Preservation Commission

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## Capitol Preservation Commission

This report is authored under the Capitol Preservation Commission who duties and Responsibilities are to preserve the Minnesota State Capitol as outlined below.

### Commission Members

The 2011 Legislation forming the Capitol Commission created a 22 member commission. Membership was defined in statute as consisting of the:

- Governor, Lt. Governor, Attorney General, and the Chief Justice of the Supreme Court;
- Senate Majority Leader, two additional members of the Senate Majority and two members of the Senate Minority;
- Speaker of the House, two additional members of the House Majority and two members of the House Minority;
- Commissioners of Administration and the Department of Public Safety;
- Historical Society Director and the Executive Secretary of the Capitol Area Architectural and Planning Board; and
- Appointment of four public members.

The current State Capitol Preservation Commission Members include:

- Governor Mark Dayton
- Lieutenant Governor Yvonne Prettner Solon
- Attorney General Lori Swanson
- Chief Justice Lorie Skjerven Gilda – Designee Justice Paul Anderson
- Senate Majority Leader David Senjem
- Speaker Kurt Zellers – Designee Representative Dean Urdahl
- Senator Carla Nelson
- Senator Ann Rest
- Senator Keith Langseth
- Representative Matt Dean
- Representative Mary Murphy
- Representative Larry Howes
- Representative Alice Hausman
- Commissioner Spencer Cronk, Department of Administration
- Commissioner Ramona Dohman, Department of Public Safety
- Historical Society Director and CEO, D. Stephen Elliott
- Executive Secretary Nancy Stark, Capitol Area Architectural and Planning Board
- Ted Lentz—Public Member
- James Dayton—Public Member
- Dana Badgerow—Public Member
- Larry Gleason – Public Member

## Duties and Responsibilities of the Commission

1. The commission shall develop a comprehensive, multiyear, predesign plan for the restoration of the Capitol building, review the plan periodically, and, as appropriate, amend and modify the plan. The pre-design plan shall:
  - Identify appropriate and required functions of the Capitol building
  - Identify and address space requirements for legislative, executive, and judicial branch functions
  - Identify and address the long-term maintenance and preservation requirements of the Capitol building

In developing the pre-design plan, the commission shall take into account:

- The comprehensive plan for the Minnesota State Capitol Area, as amended in 2010, ([www.caapb.state.mn.us](http://www.caapb.state.mn.us))
  - The rules governing zoning and design for the Capitol Area
  - Citizen access
  - Information technology needs
  - Energy efficiency
  - Security, educational programs including public and school tours
  - Any additional space needs for the efficient operation of state government
2. The Commission shall develop and implement a comprehensive financial plan to fund the preservation and restoration of the Capitol building.
  3. By January 15 of each year, the commission shall report to the chairs and ranking minority members of the legislative committees with jurisdiction over the commission regarding the activities and efforts of the commission in the preceding calendar year, including recommendations adopted by the commission, the comprehensive financial plan required under paragraph (a), clause (5), and any proposed draft legislation necessary to implement the recommendations of the commission.

## Executive Summary

This is the first annual Capitol Preservation Commission Report highlighting the actions and recommendations of the Commission for this past year. This report shall provide a high level review which will be supported by the accompanying preliminary master plan and the preliminary pre-development document as exhibits to this report.

The State Capitol Preservation Commission was established during the 2011 legislative session (1st Special Session Chapter 6, Article 4, Sec. 3). Specific duties of the State Capitol Preservation Commission include the following:

- The commission shall develop a comprehensive, multiyear, pre-design plan for the restoration of the Capitol building, review the plan periodically, and, as appropriate, amend and modify the plan.
- The commission shall develop and implement a comprehensive financial plan to fund the preservation and restoration of the Capitol building.

By January 15 of each year, the commission shall report to the chairs and ranking minority members of the legislative committees with jurisdiction over the commission regarding the activities and efforts of the commission in the preceding calendar year, including recommendations adopted by the commission, the comprehensive financial plan required under paragraph (a), clause (5), and any proposed draft legislation necessary to implement the recommendations of the commission.

The Commission was organized in its inaugural meeting on October 14, 2011. Governor and Commission Chair Mark Dayton called the meeting to order. The Governor challenged the Commission to set aside political differences and work for the good of the people of Minnesota in regard to the restoration of the historic State Capitol which was designed by renowned architect Cass Gilbert. Governor Dayton stated, "The time is now. The Building has significant problems that must be addressed. It is our responsibility to do so as stewards. We can no longer put this off to future generations." He also informed the commission that if the findings identified over the next few months support the need for a complete restoration he would like to put a bond request forward to the legislature in the 2012 legislative session that would be used for the restoration of the Capitol.

From October to December 31, 2011 a team of consultants led by MOCA Systems (David H. Hart, FAIA, and former Architect of the Utah State Capitol) reviewed the existing documentation, studied the original Cass Gilbert plans, and investigated the current conditions of the Capitol. Additionally, they have worked closely with the Commission and its members utilizing subcommittee and individual interviews to identify and develop concepts that are appropriate for the Capitol.

## Findings of the Commission

- The Capitol, and particularly the stone exterior of the building, is deteriorating rapidly.
- The mechanical systems are nearing the end of their useful life and are difficult to control and maintain. The commons area of the building does not have a direct source of outside air in violation of code requirements. The plumbing systems are nearing their end of useful life and are at risk of leaking. Most readily accessed areas have been replaced but much of the system is not readily accessible.
- The Electrical Systems are inadequately sized for the modern day usage demand placed upon them by the use of computers, copiers and printers. The electrical service needs to be upgraded to 480 volts and all the electrical lines should be upgraded as well.
- Life-safety systems need to be improved. There is no smoke control system and only a limited sprinkler system. Exit stairwells are not code compliant. Modern physical security design and technology can in fact be leveraged to mitigate many security vulnerabilities. The Capitol needs to be a safer and more secure building for all who work in it and visit it.
- The Technology Systems, which include the communication systems and wiring for internet access, are haphazardly strung and below the current level of service now needed for the proper function of State Government.
- Today, most of the Capitol has inadequate or nonexistent accessibility. When the Capitol was designed over 100 years ago, access for people with disabilities was not considered. From parking, to easily managed paths to and into the building, to modern and code-compliant fire alarm horns and strobes, and accessible restroom and hearing rooms, this building needs modernization with respect to accessibility.
- Committee Rooms need to be better organized and meeting spaces should be identified in areas with a minimal number of structural columns which impede the public viewing of the proceedings.
- The Public struggles to find Legislators located in the Capitol. The physical layouts and relationships of Senate offices should be improved for ease of access by the public.
- Accommodations should be made for the school buses and school children who visit the Capitol as well as providing better accommodations for visitors to witness and participate in the sessions.
- Communications between the Senate and House Chambers is critical to the function of state government. Currently the building does not support these functions and movement between the bodies.
- Restoration of the Capitol should focus on a 100 year building life expectancy.

## Recommendations

It is clear that the building has reached a point that it can no longer continue to function through remodels or small restoration projects. The time has come to address the larger issues of Architectural Integrity, Building Function and Life Safety and Security. These three issues have been adopted by the commission as their guiding principles which will help them in addressing the needs of the building.

Given the current condition of the building, the Commission is recommending a complete replacement of the Mechanical and Electrical systems. This would also include the installation of new communications and technology systems at the same time. It has been determined that by using modern day de-coupled mechanical systems, which provide for 100 percent outside air, the system can be replaced within the footprint of the existing Capitol without having to expand either to the south or to the north. Internally, the new systems will take full advantage of the original vertical chases that Cass Gilbert designed. While there will need to be enlargement modifications made to the existing vertical systems, the original concept developed by Cass Gilbert will be maintained. New Mechanical equipment can be placed in the attic space, thereby eliminating existing equipment currently located on the roof.

It is recommended that the meeting space be improved to allow the public better physical and visual access. While investigating the spaces in the Capitol, it was discovered that in each of the four quadrants that there is a large column-free space which appear to have been intended for meeting space in Cass Gilbert's design (similar to Committee Room 123). These spaces exist primarily on the ground and first floors of the Capitol and would make adequate committee rooms for the future.

By replacing the Mechanical and Electrical systems and then moving the committee rooms to spaces that support the function, the remaining space is free to be used for office space by the executive, legislative and judicial branches. During the three months that this analysis has been moving forward there has not been enough time to adequately allow for a collaborative discussion and resolution on how to best reconfigure the office spaces to accommodate the needs of the three branches of government. This discussion will take time. The good news is that it is not critical at this time to resolve. The space is flexible and can be used for any of the three purposes. These discussions can and should take place while the Mechanical and Electrical work is progressing over the next two years.

## Schedule

- Sequence "A" – complete design and construction documents for the entire project and prepare mechanical spaces in the attic areas between July 2012 and December 2013. Begin construction phase for exterior stone repairs and window replacement in June 2013.
- Sequence "B" – closing of the east wing to install the vertical mechanical and electrical systems following the session in May of 2013 to December of 2015. This would allow the building to

remain open to the legislature and Governor but would be closed to some Executive and Legislative functions and to the judicial functions.

- Sequence “C” – closing of the North and West wings in July of 2014 and would remain closed until December of 2015. This would allow the installation of the vertical mechanical and electrical systems as well as to build-out the space.
- Sequence “D” – public space would be cleaned and repainted following the installation of life safety items such as fire sprinklers and smoke detectors. This work would begin as soon as the majority of the heavy construction work and dust is complete so as not to interfere with the decorative painting. This would be scheduled to be completed towards the end of 2016.

## **Budget**

The cost of the restoration has been developed by both benchmarking other Capitols that have gone through similar restorations, and by having a team of estimators study, in detail, the concepts and proposed solutions for the restoration. Additionally, experts for stone, bronze light fixtures, and wood windows were consulted and their findings were incorporated into the estimate. The restoration of the Minnesota State Capitol is estimated to cost approximately \$241M. Included in this number is the swing space needed for the Capitol occupants to use during the restoration. The Swing space is estimated to be \$20M. The benchmark cost per square foot was \$600, not including swing space, furniture, fixtures, and equipment costs. At \$241M, the restoration of the Minnesota State Capitol is estimated to cost \$625 per square foot.



## **Inaugural Meeting – October 14, 2011**

The first meeting of the Capitol Preservation Commission was held on October 14, 2011 in the Governor's Reception Room. Following some brief introductions of the Commission Members the commission reviewed and discussed the legislation that was passed creating the commission. (See duties and responsibilities under the Capitol Preservation Commission at the front of the report.)

### **Organization of the Commission**

The Governor challenged the commission to move forward with the restoration of the Capitol. He encouraged the Commission members to put aside differences and to do what is best for the people of the State of Minnesota and the Capitol.

The commission discussed and agreed openly that their efforts should focus on the Capitol and not on expansions or other future developments on Capitol grounds.

Mr. David Hart, FAIA former Architect of the Utah State Capitol and Executive Director of the Utah Capitol Preservation Board, was introduced to the Commission. Mr. Hart discussed the importance of their role and the decisions that they were about to make. These discussions emphasized the importance of avoiding politics and to focus on the restoration of the symbol or icon that represents the State of Minnesota.

The steps that the State of Utah's Capitol Preservation Board took in the planning, and the decision making processes used were discussed in detail. It was proposed that Minnesota consider a similar process where a master plan and a set of design guidelines would be created to assist in all aspects of the future direction of the building.

The Governor asked if there was sufficient time to do the planning and to provide a comprehensive budget before the start of the legislature. It was decided that while it is a very short time frame, a preliminary master plan and a comprehensive budget based upon that master plan will be developed.

The Commission asked Mr. Hart to assist them in both the work of the commission and to guide them through their organization process. It was suggested that the Commission create three subcommittees:

1. Budget and Commission Operations Subcommittee
2. Preservation and Maintenance Subcommittee
3. Space Planning Subcommittee

It was explained how each should be used and how they were used in Salt Lake City for the Utah State Capitol.

The Commission decided to create a Budget Subcommittee and a Preservation and Planning Subcommittee to begin with. The Governor challenged the Subcommittee to meet immediately under Mr. Hart's Leadership.

## **Second Commission Meeting – November 1, 2011**

Following some opening remarks by Governor Dayton, the work which the Preservation Subcommittee accomplished was presented. This included a review of the original Architect's (Cass Gilbert) plans for the Capitol as well as the current space plans. There was an obvious difference in that the use of the Capitol had spilled over into some areas that were originally meant to be accessed by the public. The other observation was that the basement had been turned into a collection of small, haphazardly organized spaces that provide some general office space to state employees. It was also clear that this pattern of creating small cramped spaces had spread from the basement level to every level within the Capitol. It was clear to all members of the Commission that the original organization pattern which Cass Gilbert had designed had been abandoned in order to create the needed offices to house the Capitol occupants at the loss of both public access and clarity.

### **Guiding Principles**

Representative Dean Urdahl, designee for Speaker Kurt Zellers, presented the recommendations of the Preservation subcommittee. Representative Urdahl introduced the concept of Guiding Principles to the Commission. He stressed that these principles will dictate how decisions will be made and how the Commission will measure future actions. They will be critical to the Commission's ability to stay focused on what is important as they will be making many significant decisions. The recommendations which he presented from the Preservation Subcommittee were:

1. Architectural Integrity
  - a. Implies that the restoration of the Capitol architecture is the most important aspect of the restoration.
  - b. Not everything must be absolutely returned to the 1905 plan.
  - c. The building must work for the next 100 years.
  - d. When considering new space in the Capitol, it should be done with great care and respect to how Cass Gilbert would have done it in 1905.
  - e. It is critical to preserve the integrity of the building and its great architecture.

## 2. Building Function

- a. The building must work to improve and support the function of Government.
- b. Some in the group felt strongly that by solving some of the functional issues with the building, it would also solve issues within State Government.
- c. Understanding the government function and process of work in the Capitol will help to identify how it should be laid out going forward.

## 3. Life Safety and Security

- a. The public and those who work and visit the Capitol deserve to have a building that is safe:
  - i. Safe from security threats
  - ii. Safe from fire
  - iii. Safe from deterioration of systems
- b. It must provide for accessibility of all Minnesotans and other visitors.
- c. It should be upgraded to current life safety codes.

Representative Urdahl asked the Commission to support these three guiding principles that will provide direction for the restoration of the Capitol throughout the planning, design and construction process. The commission voted to adopt the recommendation of the Subcommittee and agreed to hold themselves accountable for enforcing the guiding principles.

### **Past and Current Renovation Work**

Wayne Waslaski, with the Minnesota Department of Administration, led a discussion on past and present work that has or will be taking place on or within the Capitol. This was requested by the Commission during their first meeting to better understand the ongoing situation for which they are currently responsible.

### **Cost Benchmarking**

The Commission participated in a discussion regarding cost estimate benchmarking from other Capitols including; Kansas, Michigan, Ohio, Texas, Utah, Virginia, and Wisconsin. When compared to that of Minnesota, the study produced the following findings:

State Capitol	Renovated Square Footage	Escalated to 2015	Adjusted Program	Adjusted \$/SF
Kansas Capitol	300,000 SF	\$205 million	\$187 million	\$624/SF
Michigan Capitol	225,000 SF	\$94 million	\$94million	\$416/SF
Ohio Capitol	273,000 SF	\$184million	\$184million	\$674/SF
Texas Capitol	360,000 SF	\$318 million	\$223million	\$620/SF
Utah Capitol	310,000 SF	\$265 million	\$152million	\$492/SF
Virginia Capitol	117,000 SF	\$105 million	\$98 million	\$736/SF
Wisconsin Capitol	240,000 SF	\$203 million	\$203 million	\$848/SF
<b>AVERAGE</b>	<b>260,725 SF</b>	<b>\$196million</b>	<b>\$163million</b>	<b>\$600/SF</b>
<b>Minnesota Capitol*</b>	<b>387,000 SF</b>	<b>\$337million</b>	<b>\$198million</b>	<b>\$523/SF</b>

The benchmarking exercise indicates that a Capitol Restoration project located in Minnesota of similar size and complexity would tend to be approximately \$200,000,000. This does not include swing space, or other owner related costs and it is only an estimate of the Capitol's construction costs.

### 60 Day Plan

The Commission next approved a recommendation for how to proceed forward with the development of a preliminary master plan, preliminary predesign and a rough order of magnitude cost estimate for the restoration of the Capitol. The recommendation was as follows:

- Preliminary Comprehensive Pre-Design Plan
  - Functional diagrams for Legislature, Governor and Judiciary
  - Functional Mechanical, Electrical, & Plumbing diagrams
  - Master Plan/Pre-design High Level Planning document with step by step milestone identification
  - High Level Schedule with identification of Milestone dates and goals
  - High Level, Rough Order of Magnitude (ROM), systems and Renovation Estimate
- Capitol Preservation Commission's Annual Report to Legislature Approved by Commission

## Third Commission Meeting – December 8, 2011

### Mechanical and Electrical Systems

In the first meeting, the Commission instructed Mr. Hart that the goal was to keep the work within the footprint of the Capitol building proper and not to expand for new space or to go beyond the footprint of the building. Mr. Hart introduced Kevin Marshall, a principal with WOLD Architects and Engineers, who walked the Commission through the options surrounding the design of new Mechanical and Electrical Systems that have been developed to achieve the Commission goals based upon the guiding principles. The following is a summary of that presentation:

- Two System Approaches:
  - **Mixed Air System** – a traditional approach of re-circulating building air mixed with a portion of fresh air. Requires standard size ductwork and equipment.
    - **Advantages**
      - Chilled water piping routed to centralized All new systems work within the building footprint
      - Reasonably efficient to operate
      - Systems capable of air side free cooling
      - Cleans up roof of existing mechanical equipment
    - **Challenges**
      - Maintaining effective mechanical service areas
      - Integrating horizontal/vertical distribution into the design
      - Integration of the exterior duct enclosures
      - Smoke management system approach
  - **De-coupled Cooling Systems** – new, more efficient approach delivers a high concentration of fresh air for ventilation. Less air is circulated, requiring smaller equipment and ductwork. Devices located in each room provide temperature control.
    - **Advantages**
      - Smaller equipment and ductwork is easier to integrate into design
      - All new systems work within the building footprint
      - Central unit heat recovery/better energy performer
      - Most outside air intakes located on the roof
      - Smaller outside air connections
      - Cleans up roof of existing mechanical equipment
    - **Challenges**
      - Integration chilled beams into ceiling or wall design
      - Integration of the exterior duct enclosures
      - Integrating horizontal/vertical distribution into the building
      - Smoke Management Systems approach.

The recommendation from WOLD was to continue with the investigation of the de-coupled cooling systems, due to the advantages. Mr. Marshall indicated that he expected the final design to be a combination of the two systems, depending on the use of the spaces served.

## Collective Findings

MOCA presented the findings from the diagramming process that several members of the Commission took part in over the previous month. The following findings were presented to the Commission:

1. Committee Rooms and Conference Committee Rooms
  - a. There is a majority that feel additional rooms that are well organized would serve the public and legislature better.
  - b. The building columns impose limitations on these spaces.  
*In the Restoration, spaces should be identified that limit the number and location of columns.*
2. The Capitol's configuration limits collaboration with members and constituents
  - a. Having Senators spread throughout the Capitol makes it hard on constituents and first time visitors to easily find Senators.
  - b. Collaboration between Senators is planned, rather than naturally occurring due to physical locations.  
*Restoration should consider improving the physical relationships.*
3. The Capitol is the People's House
  - a. School Buses and the process of loading and unloading create problems for both security and tours, and staging and movement.
  - b. Visitors expect to see government in action in the Capitol and see the Capitol as the focal point of the legislative session.  
*The restoration should accommodate school buses as well as providing better accommodations for visitors to witness the session.*
4. Acoustics and Technology is lacking
  - a. Acoustics within the Committee rooms and some Conference Committee rooms need to be improved for the Public to better participate.
  - b. Technology for Presentation needs to be provided as a standard for the Committee Rooms.
  - c. Communications systems (wifi) should be provided  
*Restoration should improve on acoustics and technology.*
5. 100 year Focus – the Capitol will benefit Minnesota for many years to come
  - a. "...it is about doing what is right for the people of Minnesota for the next 100 years."

- b. All decisions from office location and occupancy to materials and equipment should be considered to be 100 year decisions.

*The restoration focus should be as a 100 year restoration.*

**Comparative Analysis of Space Utilization in other Capitols**

During the functional diagramming activity, it became clear that a better understanding was needed of what other Capitols have done internally following their restoration. MOCA presented information on a comparative analysis of Capitols that had gone through a major restoration and how they were organized. These Capitols included: California, Idaho, Kansas, Michigan, Oklahoma, South Carolina, Texas, Utah, Virginia, Washington, West Virginia, and Wisconsin. The findings are as follows:

	<b>Average of 13 Comparison Capitols</b>	<b>Minnesota Capitol</b>
<b>Total Senators</b>	38	67
Senators Located in the Capitol:	46% Have All (Average Size of 37)	55% of the Senate (37 Members)
	31% Have Leadership Only (Average Size of 38)	
	23% Have No Senators (Average Size of 47)	
<b>Total House Members</b>	102	134
House Members Located in the Capitol:	54% Have All (Average Size of 103)	0% of the House (134 Members)
	31% Have Leadership Only (Average Size of 96)	
	15% Have No Senators (Average Size of 112)	
<b>Committee Rooms</b>	10	5 CR, 2 CCR, 1 Swing

	<b>Of the 13 Comparison Capitols</b>	<b>Minnesota Capitol</b>
Governor	100% are Located in the Capitol	Yes
Lt. Governor	100% are Located in the Capitol	Yes
Supreme Court	15% are Located in the Capitol	Yes (Monthly)
Attorney General	31% are Located in the Capitol	Yes
Secretary of State	38% are Located in the Capitol	No
Auditor	23% are Located in the Capitol	No
Treasurer	31% are Located in the Capitol	N/A
Tours and History	85% are Located in the Capitol	Yes
Educational Classroom	31% are Located in the Capitol	No
Gift Store	85% are Located in the Capitol	No

## General Reduction of Square Footage due to Renovation

With an understanding of what other Capitols had done and how they had organized, the Commission turned its attention to the Minnesota Capitol. The Commission understood from the discussion that there was going to be space reductions due to several changes that were going to be taking place. These included:

- Mechanical & Electrical
- Restrooms
- Exit Stairways
- Returned Public Space
- Possible additions or expansions to existing Committee and Committee Conference Rooms

The following chart represents, in the “Current” column, the current useable square footage or space that is occupied on each of the associated floors. It does not include public space or other building support spaces such as janitorial closets. The “Future” column represents the approximate usable square footage that will be available for occupancy following the changes identified above.

Floors	Current	Future	Percent change
Basement	105,946 SF	92,043 SF	-13%
Ground	37,811 SF	28,114 SF	- 26%
First	24,908 SF	28,566 SF	14%
Second	19,562 SF	12,036 SF	-38%
Third	20,324 SF	13,515 SF	- 34%
<b>Totals</b>	<b>208,551 SF</b>	<b>174,272 SF</b>	<b>- 16%</b>

A General Reduction of Square Footage is due to:

1. Stairs (Required – Code)
2. Restrooms (Required –Code)
3. Mechanical, Electrical and Plumbing (Required by Code, Life Safety)
4. Meeting Space (Flexibility)

## Space Planning Scenarios

With this information the Commission was challenged to think about what scenarios would be possible within the Minnesota State Capitol. There was excellent open communication as members of the Commission shared their thoughts and insight on how the Capitol should be organized post restoration. The Scenarios that were recommended for further analysis included:



1. All Senators Housed in Capitol
2. Constitutional Offices Housed in Capitol
3. People's House, State Government at work
4. Senate Majority with Attorney General in Capitol
5. Increased Public Accommodations
6. Governor and Attorney General out of Capitol
7. Senate Majority and Governor in Capitol, Attorney General out of Capitol
8. Public Meeting, All Committee Rooms and Senate Committee Chairman in Capitol

### **Budget and Schedule Development**

To conclude the meeting, the Commission received an update on the budget process which proposed the following:

- Determine rough order magnitude costs from both existing work on Capitol and other similar projects on other Capitols.
- Compute general space costs
  - Mechanical/Electrical costs
  - Repair and Renovation costs
- Provide Contingency of 10% for unknown conditions
- Escalate to mid-point of construction
- Finalize a budget

## Conclusions and Recommendation

The Minnesota Capitol has reached a tipping point. There is such significant deterioration of stone, risk of leaking piping, lack of ventilation in some areas, and disorganization of offices that it is time now to act to preserve this national architectural treasure or face the consequences of large annual expenses born by the taxpayer to address these problems without fixing or solving the root cause. The replacement of the mechanical and electrical systems will have the benefit of reducing operating costs through improved energy efficiency and simplified maintenance.

The Master Plan that has been developed by MOCA is focused on addressing these root problems. It provides a suggested roadmap to solving the fundamental issues behind the problems, within an appropriate time period and within a reasonable budget. The plan has also been developed around keeping the Executive, Legislative and Judicial branches in the Capitol for as long as possible before relocation is required. The general plan is as follows:

- First resolve the mechanical ventilation, electrical service and distribution issues. This work will occur following the bond approval in July 2012, with preparation of new mechanical equipment spaces in the attic space of the Capitol. This will be followed with the closing of the East wing, and relocating those occupants in July 2013 to install the mechanical and electrical vertical segments, which will connect to the basement and district services. The North and West wings will be closed July of 2014 following the relocation of all occupants from the building so that the vertical segments can be installed in those wings.
- The exterior stone work and window replacement will begin in 2013. It will include stone repairs required to address conditions that have been identified as having a significant potential to develop into life safety issues in the near future and water management issues. Repairs will also be completed to help reduce the development of marble and façade deterioration. (Note: The Department of Administration is proceeding with drum window replacement and west plaza and stair repairs as part of current asset preservation projects for the Capitol Building. Construction on these projects is scheduled to start in the summer of 2012.) The flat roof will be replaced in 2014. All combined, this work will provide a complete and comprehensive approach to repair and preservation of the building envelope. The final step will be to develop and implement a long term monitoring and maintenance program to help achieve the Commission's goal to preserve the building for the next 100 years.
- The interior public spaces will be recaptured and restored beginning in 2015 following the completion of the dust generating construction activities.

There are many concerns about the use of the Capitol over the next 50 to 100 years. Questions have been raised regarding the purpose of the building, the expectations of the public when coming to the Capitol as well as who should occupy the Capitol going forward. These are weighty issues that should not be rushed. Yet the physical body of the Capitol needs attention and it should not be held up because

of the short term use. The Capitol was originally designed to house all of State Government. Over the last 100 years that has changed dramatically. It will continue to change in the future and with future generations. Therefore the key is to move forward with the critical elements of the work, such as stone restoration and mechanical ventilation while creating a flexible office space that can be adapted to the decided current uses as well as to the unknown future functions that will be decided.

The Master Plan and pre-design plan has carefully addressed these issues through a proposed sequencing plan of the construction work that will accommodate:

1. The critical physical needs (stone, roof, ventilation, electrical, life-safety, security, accessibility) to be corrected and restored
2. The building to be occupied for as long as possible while not incurring additional cost or time impacts
3. The ability of the Capitol Preservation Commission over the next two years (2012 to 2014) to study the issue of who occupies the Capitol and come to a collaborative conclusion that is acceptable to all stakeholders.

## **Sequencing**

The proposed sequencing that enables this approach is as follows:

- *Sequence A – Retain Consultants provide Attic mechanical and electrical*
  - The first sequence will focus on the installation of a new structural slab in the attic space above the third floor, repairs to the exterior stone and replacement of windows. Design Documents will be prepared by March 2013 to allow this work to be bid, awarded and for construction to begin as soon as the 2013 legislative session is completed to fully utilize the 2013 construction season.
  - This sequence will also include retaining of the professional consultants for the entire project.
- *Sequence B – Restoration of the East Wing, Close and relocate occupants*
  - The second sequence “B” will be focused on installation of equipment in the attic, power and district energy services, and the vertical main runs for both Mechanical and Electrical services for the project through the east wing only. This sequence will allow the Legislative session to occur in 2014. The building will be closed following the session.
  - This sequence will include retaining of the Mechanical and Electrical subcontractors for the entire project. Retaining the Mechanical and Electrical subcontractors for the entire project will help ensure consistency and quality and mitigate the risk inherent in phased projects of a piecemeal system that does not function properly.

- Sequence C - *Restoration of the North and West Wings, Close entire building*
  - The third Sequence C will follow immediately behind that of B. It will first provide mechanical equipment, power and district energy services, and the mechanical and electrical vertical main lines similar to that of Sequence B.
  - It will include the interior layout for meeting rooms and office space for both Sequence B and C. In this way the decision as to which offices and how many meeting rooms will not need to be finalized until the middle part of the 2013, thereby allowing the Capitol Preservation Commission ample time to listen to and address concerns prior to making the final decision.
  - The interior layout will also provide space for the installation of all the remaining mechanical and electrical horizontal equipment.
  
- Sequence D – *Restoration of the Public Spaces*
  - The fourth sequence D is focused on the restoring the public spaces. This work will include the installation of proper ventilation in the public corridors which does not currently exist.
  - It will include the installation of smoke and fire protection elements that will be nested in and around the decoratively painted ceilings and walls.
  - With the mechanical and electrical work completed the decorative restoration work will be performed. This will include:
    - Decorative Painting of the Ceilings and walls
    - Restoration and Replication of the historic bronze light fixtures
    - Plaster Ceiling Restoration
    - Marble and Stone Cleaning
    - Woodwork Restoration for Doors and other wood materials.
  - Once complete, the owner will install the new historically replicated furniture and new artwork.

The restoration of the Capitol is estimated to cost approximately **\$241,000,000**. The construction work will be spread across five years of construction with the first two years and last year accomplished while most of the occupants are in the building (note the east wing occupants will be vacated mid 2013). The work of all phases is anticipated to be complete in late 2016 for a grand reopening of the building in January of 2017 prior to the Legislative Session of 2017.

## **Bonding**

Historically, major capital budget bills have been passed in ***even-numbered*** years. Given the Capitol restoration will require total funding in the amount of **\$241 million**, the Preservation Commission requested one-time and phased funding options for the consideration. As such, the following options are presented for consideration:

1. **Single Appropriation** – FY2012 total bond to be \$241,000,000 which would include all sequences from A to D.
2. **Bonding Year** - FY2012 and FY 2014 are the typical bonding years. Based on the proposed sequencing of the project, funding to could appropriated as follows:
  - a. FY2012 total bond to be \$146,000,000
    - i. Sequence A - \$40,000,000
    - ii. Sequence B - Restoration of the East Wing, Close and relocate occupants - \$106,000,000
  - b. FY 2014 total bond to be \$95,000,000:
    - i. Sequence C - Restoration of the North and West Wings, Close entire building - \$48,000,000
    - ii. Sequence D - Restoration of the Public Spaces - \$47,000,000
3. **Annual Appropriations** - An alternative would be for the Legislature to appropriate funding in three consecutive legislative sessions as follows:
  - a. FY2012 total bond would be for \$40,000,000
    - i. Sequence A - Retain a portions of the Consultants services provide the Structural Slab installation for Attic mechanical and electrical
  - b. FY2013 total bond recommendation would be for \$106,000,000
    - i. Sequence B - Retain the remaining professional fees and Restoration of the East Wing, Close and relocate occupants.
    - ii. Sequence C - Preparation of the Restoration of the North and West Wings
  - c. FY2014 final bond for \$95,000,000
    - i. Sequence C - Restoration of the North and West Wings, Close entire building
    - ii. Sequence D - Restoration of the Public Spaces

All of these options provide for the proper sequencing of the work to occur and allow for the timely completion of the project.