

Montpelier – State House Pandemic Mitigation Project

Presented by:

Jennifer M. V. Fitch, P. E., Commissioner
Joe Aja, Director, Design and Construction
Sherilyn Lafley, Project Manager
Department of Buildings and General Services

Shawn Brennan, AIA
Freeman French Freeman, Inc.



Montpelier – State House Pandemic Mitigation Project

Overview

Project Status: Approved funding for planning and design in March of 2022.

Project Scope: Evaluate the State House in relation to the needs of the General Assembly and their staff to identify and provide options for utilizing existing space and/or a possible expansion.

Project Challenges: Funding limitations, historic building, and property limitations.

Act 83 was approved by the Governor on March 16, 2022.

Sec. 56. FISCAL YEAR 2022; STATE HOUSE EXPANSION; REQUEST FOR PROPOSAL; SERGEANT AT ARMS; DEPARTMENT OF BUILDINGS AND GENERAL SERVICES; GENERAL FUND CARRYFORWARD

(a) On or before May 1, 2022, the Department of Buildings and General Services, in collaboration with the Sergeant at Arms, shall develop and issue a request for proposal (RFP) for programming, schematic design, and the initial phase of design development documents for an expansion of the State House, including the infrastructure needs for any future phases of expansion.

(b) Upon approval and funding from the General Assembly, it is the intent of the General Assembly that the Sergeant at Arms and the Department of Buildings and General Services will extend the RFP for architectural and engineering services to finalize design development and construction and bid documents.



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Project Challenges: Funding limitations, historic building, and property limitations.

Current Project Funding: \$1,650,000

- \$1,500,000 – ARPA
- \$150,000 – FY 24 Capital Bill

Act 180. Signed by Governor on June 7, 2022

Sec. 13. 2021 Acts and Resolves No. 50, Sec. 17b.

FY 2022 AND FY 2023; AMERICAN RESCUE PLAN ACT;
STATE AND LOCAL FISCAL RECOVERY FUND; CAPITAL
PROJECTS; AUTHORIZATIONS

(7) The Department of Buildings and General Services is authorized to begin design and construction for the expansion of the State House in Montpelier.

Act 69. Signed by Governor on June 14, 2023

Sec. 18. Acts and Resolves No.

FY 2024 AND 2025; CAPITAL PROJECTS; FY 2024
APPROPRIATIONS ACT; INTENT; AUTHORIZATIONS

(c)(5) Montpelier, State House expansion, design documents:
\$150,000.00



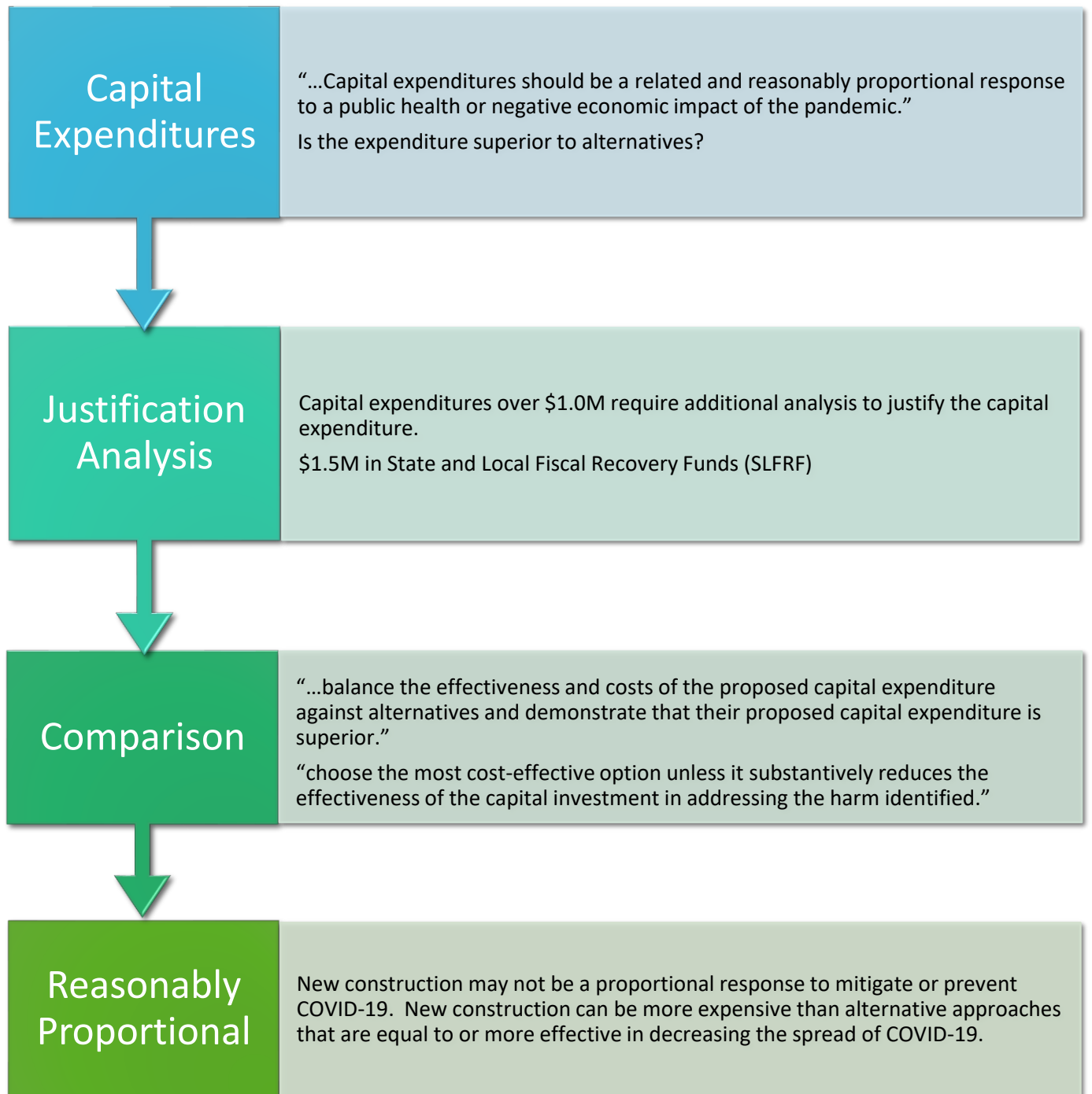
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Overview

American Rescue Plan Act of 2021 (ARPA)
Funding Restrictions

Final Rule –

Federal Register / Vol. 87, No. 18. / Thursday, January
27, 2022 / Rules and Regulations



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Overview

American Rescue Plan Act of 2021 (ARPA) Funding Restrictions

BGS was directed to assume American Rescue Plan Act of 2021 (ARPA) funding as the primary source for the State House Pandemic Mitigation Project.

ARPA funding requires that the recipient make permanent any risk mitigation measures that were used to meet increased health and safety standards during the pandemic before investing in new construction or renovation.

In the case of the State House, ARPA funding for an expansion project would become available only after evaluating all building space controlled by the Legislature for possible use.

During the pandemic, in addition to mitigation measures such as masking and remote participation via Zoom, the following spaces were adopted for committee use:

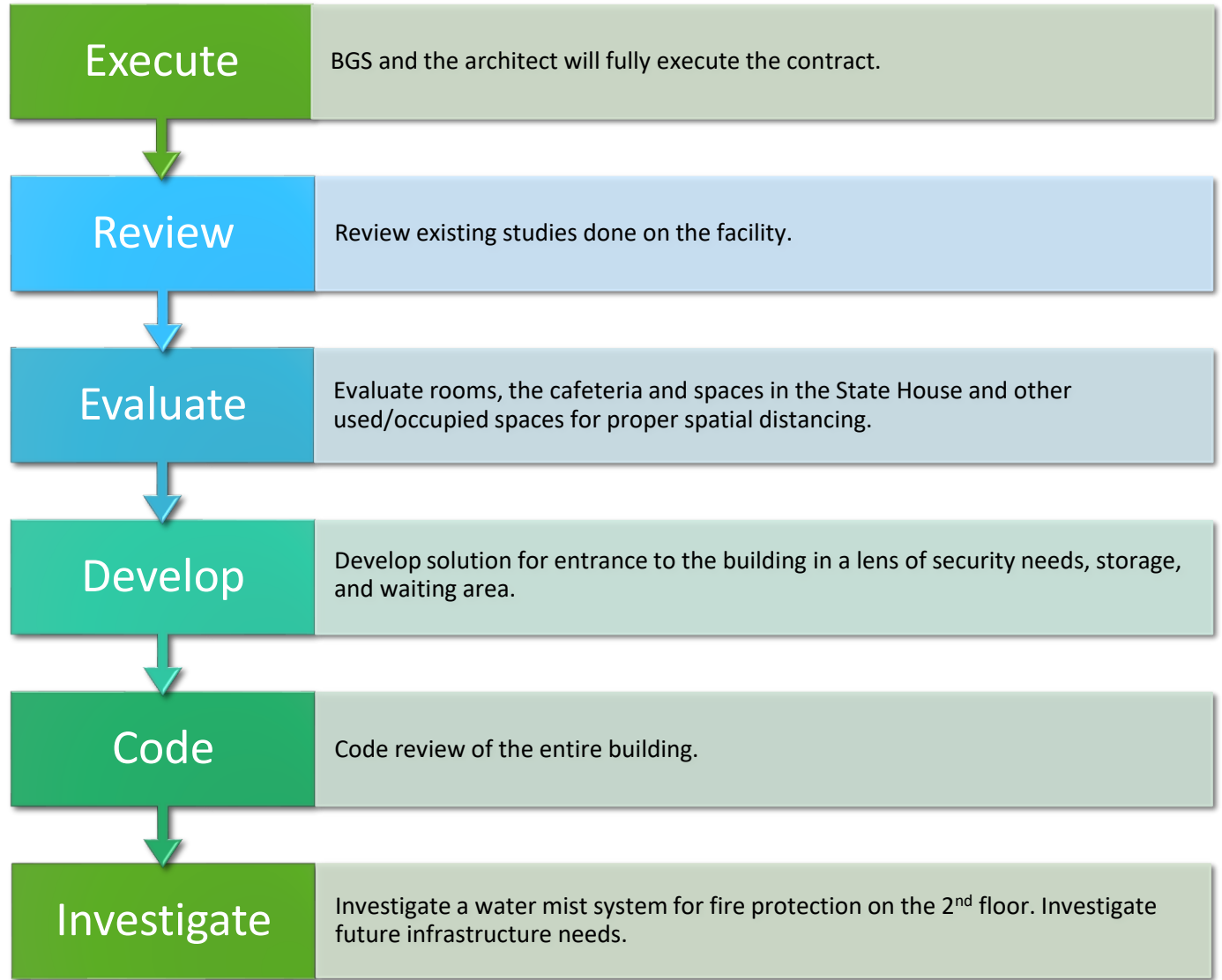
- 2 and 4 Aiken Avenue – Entire building
- 133 State Street – Rooms 015 and 022
- 109 State Street – Rooms B07, B015, 264, 267, 268, and 270



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Overview

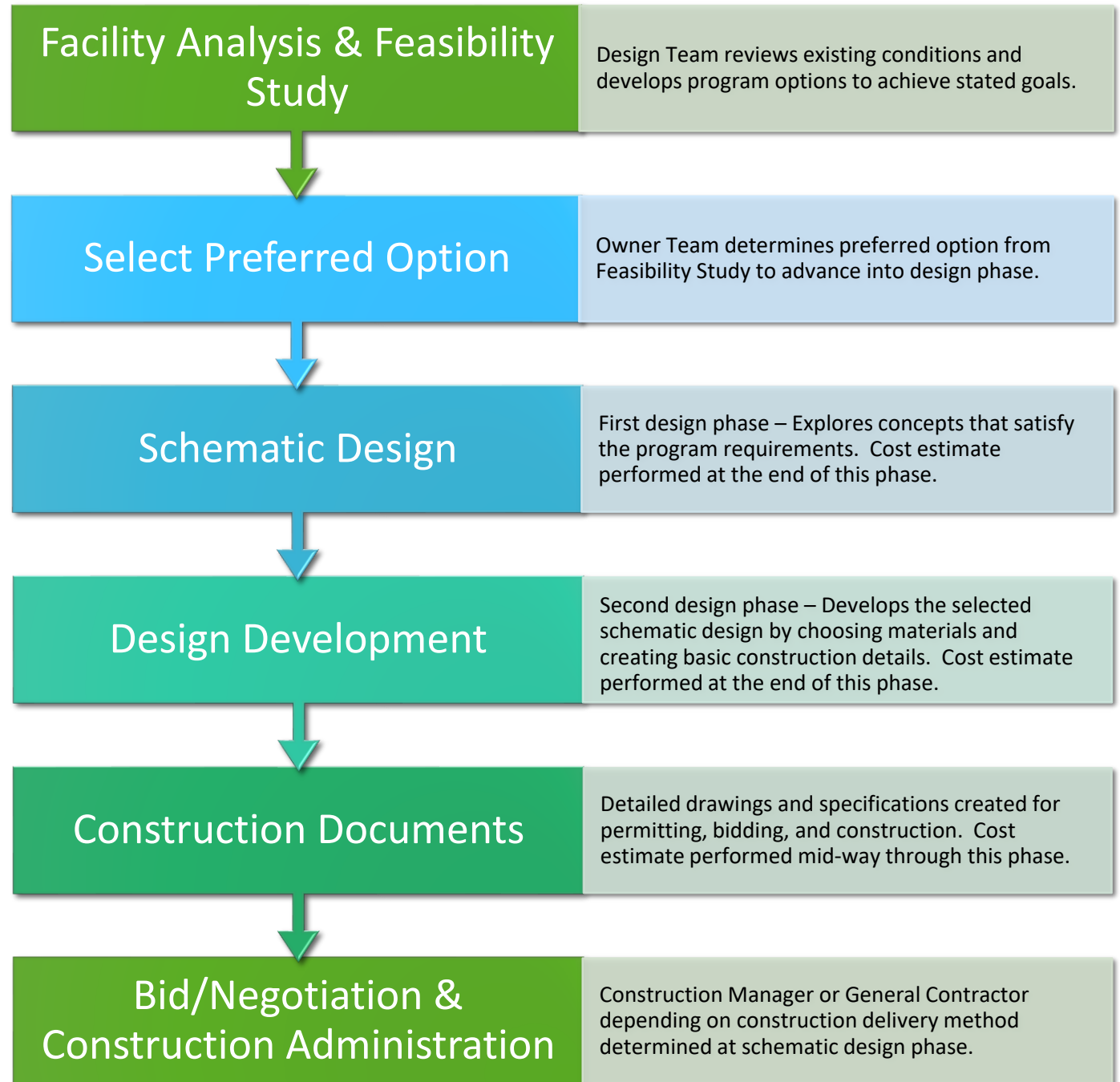
Summary of Work to Date



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Overview

Project Phases



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Summary of Previous Studies

Space Assessment –
January 15, 2020

- Determined that spaces within the State House are overcrowded.
- Shifting select programs to other buildings would alleviate some crowding and add program space.
- Possible solutions:
 - Adding capacity to 1 Baldwin.
 - Building a new office building.
 - Co-locating Senate committees or functions through scheduling.
 - Reconfiguring areas to provide additional flexibility.
- Historic spaces or those tailored to serve a specific purpose would be best left as-is.
- Lack of accessible single-use restrooms and lactation rooms impacts visitors.
- An updated HVAC system would benefit both the legislative and historic functions of the State House.



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Summary of Previous Studies

Legislative Space & Health & Safety Study –
August 19, 2020

- Recommendations for legislative space needs in light of COVID-19 best practices.
- Examined how State House, buildings in the Capitol Complex, and buildings in vicinity of Montpelier may meet needs of legislature for 2021 legislative session and mitigate need for remote sessions in future.
- Short-term finding:
 - Using multiple state-owned / leased spaces around greater Montpelier meets requirements of House and Senate; no spectators and limited press.
 - Utilizing available space could accommodate committee meetings; spaces scattered in at least 5 buildings.
- Longer-term finding:
 - Many legislative support staff can work remotely.
 - Requires using buildings such as 133 State Street; existing spaces in other buildings can be reconfigured into committee rooms.



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Summary of Previous Studies

Medium- and Long-Term Legislative Space Assessment

April 15, 2021

- Impacts of Covid-19 pandemic on space needs.
- Medium-term recommendations:
 - Have only legislators and staff return to State House; provide public access through technology.
 - Use larger spaces available in surrounding buildings.
- Long-term recommendation is to provide adequate space for current needs and future growth. Create a master plan to co-locate staff in buildings either connected to or immediately adjacent to State House.
 - Addition creates more public spaces, larger committee & hearing rooms, office space. Controlled public access while maintaining historical integrity of State House.
 - Significant upgrades to mechanical and electrical systems.
 - Long-term technology improvements.
 - Improvements in physical security requirements and policies.



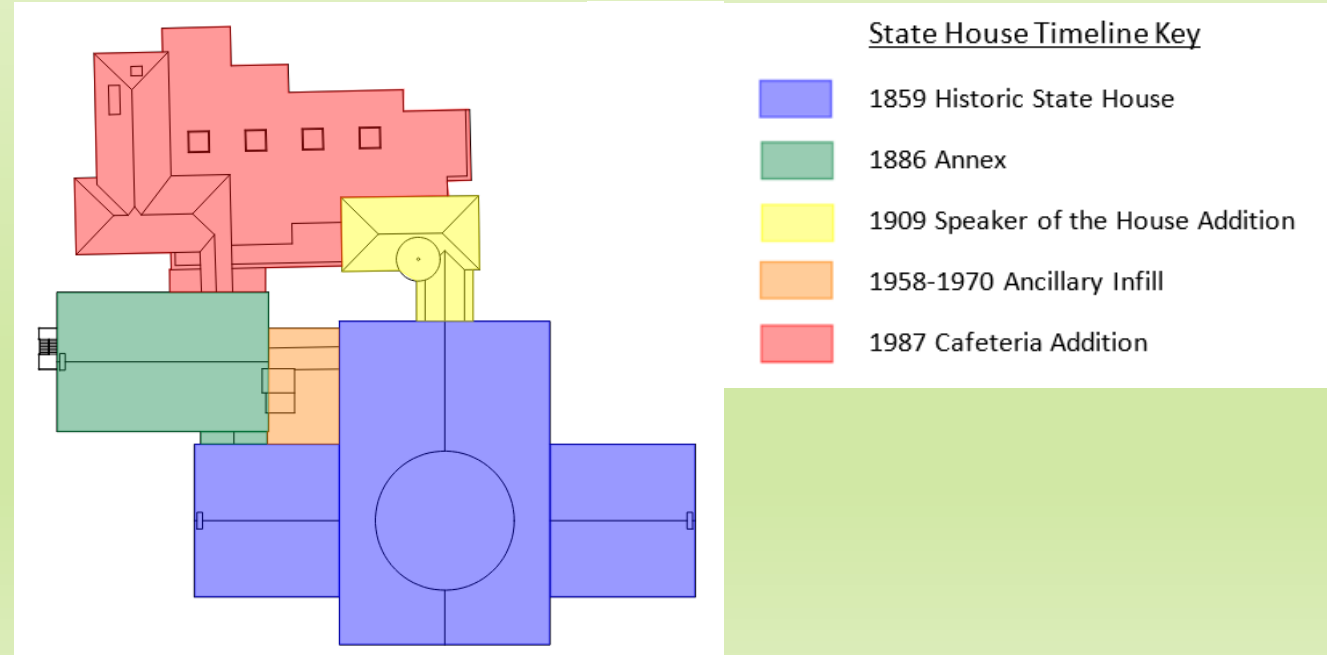
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The State House

Construction History and Associated Limitations

The five primary structures of the State House in order of historical importance:

1. Historic State House – Most historically sensitive.
2. Annex – Historically significant; future changes a possibility due to previous renovations.
3. Speaker of the House Addition – Historically significant; limited opportunity for program change due to unique size/shape.
4. Cafeteria addition – Little historical significance; internal changes possible.
5. Ancillary Infill – Little historical significance.



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Code Studies –
Structural Analysis

Cafeteria Addition Structural Analysis

- State House 1989 Cafeteria Addition documents indicate it cannot accommodate a future floor.
- A vertical addition would require extensive augmentation of vertical framing, bracing, and foundations or a “flyover” type structure.
- Renovations to upper level (including roof insulation upgrades) require analysis to determine if lateral stability system needs improvement.
- Without major alteration to framing or change of use, it is probable that structure will not need to be brought up to current code.



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Code Studies –
Access & Accessibility

Access & Accessibility

- Several public doors are not ADA compliant.
- There is currently no entry with sheltered queueing space for health screening.
- The building currently is lacking half of plumbing fixtures required by code.
- Only level one and mezzanine restrooms are ADA compliant.
- Only one all-gender public restroom.
- Some doors and ramps are not ADA compliant.



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Code Studies –
Health and Safety

Life Safety Code

- Building egress
 - Narrow exit corridors.
 - Insufficient exit doors.
 - Inadequate stairway enclosures.
 - Do not lead to public way.
 - Non-ADA compliant.
- Fire protection systems
 - Lack of fire sprinkler system in much of Historic State House.
 - Compromise solution of robust smoke detection does not help people with limited mobility who require evacuation assistance.
- Fire-rated and smoke-rated construction
 - Exceed area limitations without separations and/or sprinklers.
 - Open grand stairways are unprotected vertical openings.
 - Any addition will require separation and/or sprinklers.

Ventilation

- Ventilation system in progress is adequate for health and safety; however, dispersal limitations due to building structure affect comfort level.



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Committee Rooms – Occupant Count and Floor Area Assumptions

Occupant counts

- Eleven Small committee rooms (capacity 10-12)
 - 5-7 committee members
 - Others = 1 legislative staff, 1 legal counsel, 3 public
- Thirteen Large committee rooms (capacity 18-19)
 - 11-12 committee members
 - Others = 2 leg staff, 1 legal counsel, and 4 public

Floor Area per Occupant

- Currently = 12 to 15 SF/person.
 - Senate Transportation 11.5 SF/person
- Future pandemic operation = 30 SF/person.
 - Based on 6 FT social distancing from CDC guidelines.
- Future normal operation = 20 SF/person.
 - Based on analogous occupant load factor from building code.



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Health and Safety –
Committee Rooms, continued

		Rooms Required	SF per person	Total SF
Small (cap. 12)	Existing	11	12	1584
	Future Pandemic	11	30	3960
	Future Normal	11	20	2640

Large (cap. 19)	Existing	13	12	2964
	Future Pandemic	13	30	7410
	Future Normal	13	20	4940

Combined	Existing	24	12	4548
	Future Pandemic	24	30	11370
	Future Normal	24	20	7580

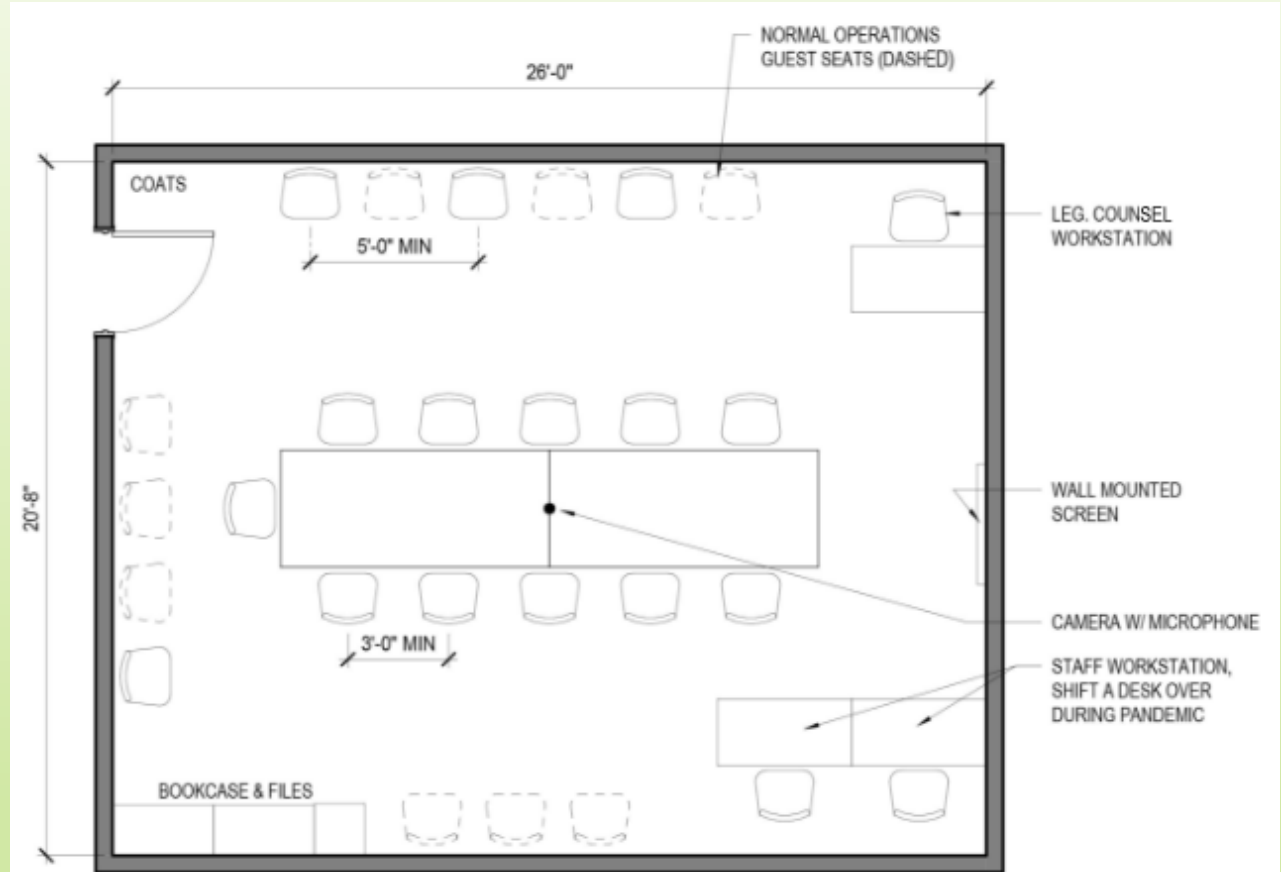


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Health and Safety –
Committee Rooms, continued

Sample Diagram for 11-Member Large Committee Room = 540 SF

- 7 occupants in addition to committee members: Legislative staff, legislative counsel, testifiers, witnesses, media, etc.



30 SF PER PERSON = PANDEMIC
 11 COMMITTEE MEMBERS
 2 COMMITTEE STAFF
 1 LEGAL COUNSEL
 4 ADDITIONAL SEATS (TESTIMONY, ATTORNEY, MEDIA)
 18 OCCUPANTS
 18 X 30 SF = 540 SF

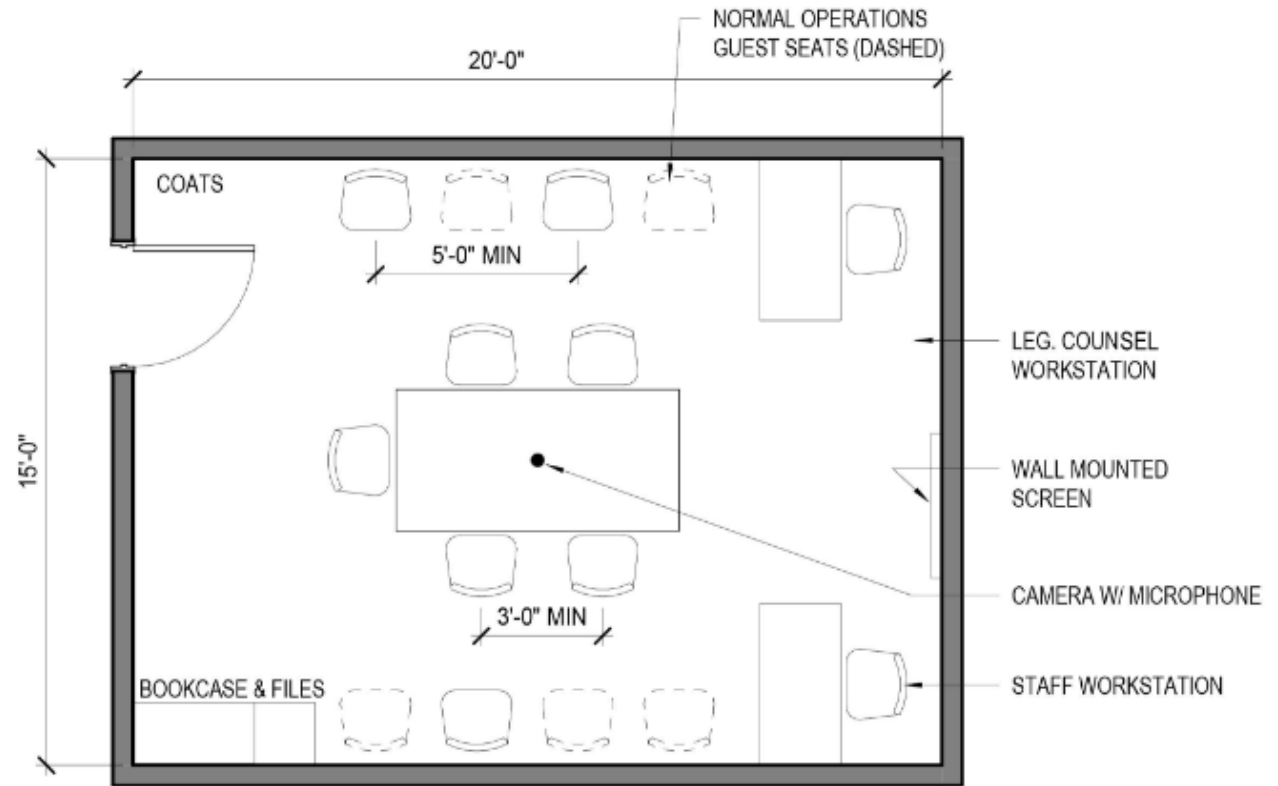
20 SF PER PERSON = NORMAL OPERATIONS
 11 COMMITTEE MEMBERS
 2 COMMITTEE STAFF
 1 LEGAL COUNSEL
 13 ADDITIONAL SEATS (TESTIMONY, ATTORNEY, MEDIA)
 27 OCCUPANTS
 27 X 20 SF = 540 SF

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Health and Safety –
Committee Rooms, continued

Sample Diagram for 5-Member Small Committee Room = 300 SF

- 5 occupants in addition to committee members = Legislative staff, legislative counsel, testifiers, witnesses, media, etc.



30 SF PER PERSON = PANDEMIC

5 COMMITTEE MEMBERS
1 COMMITTEE STAFF
1 LEGAL COUNSEL
3 ADDITIONAL SEATS (TESTIMONY, ATTORNEY, MEDIA)
10 OCCUPANTS
10 x 30 SF = 300 SF

20 SF PER PERSON = NORMAL OPERATIONS

5 COMMITTEE MEMBERS
1 COMMITTEE STAFF
1 LEGAL COUNSEL
8 ADDITIONAL SEATS (TESTIMONY, ATTORNEY, MEDIA)
15 OCCUPANTS
15 X 20 SF = 300 SF

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Health and Safety – Committee Rooms, continued

Reuse of existing rooms at 30 square feet per person

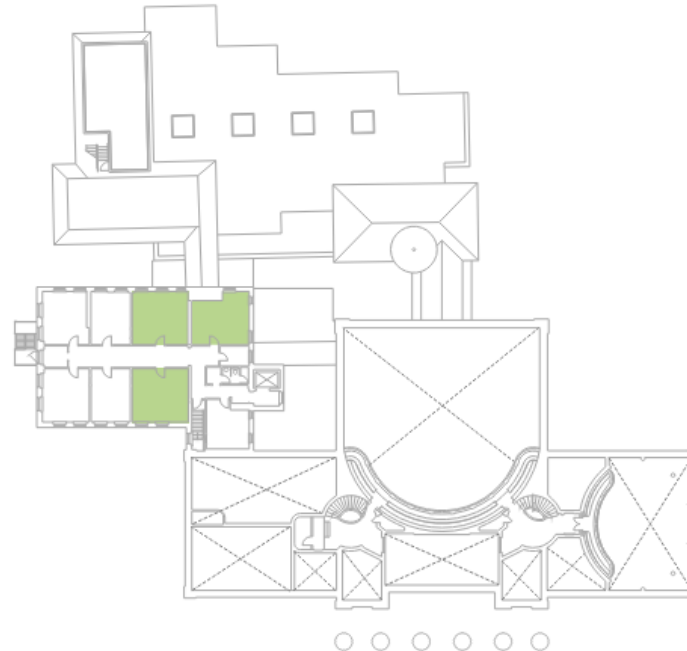
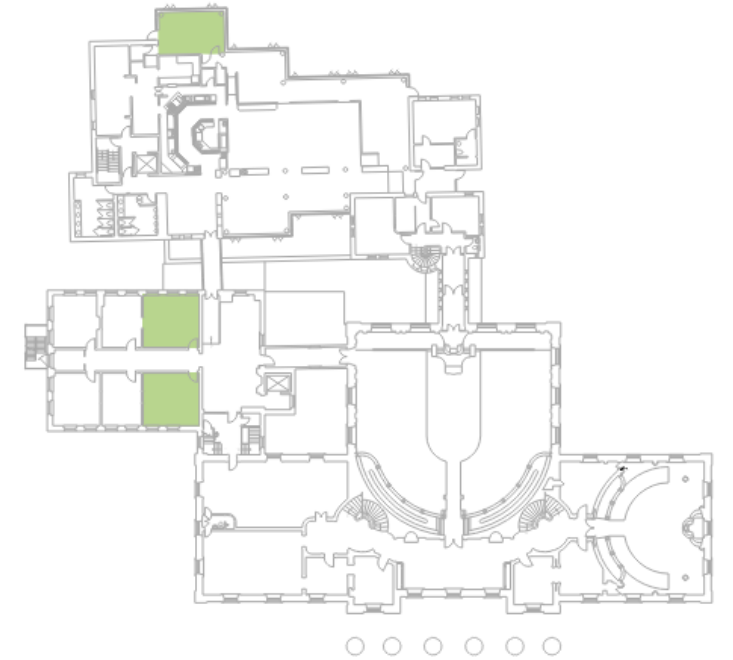
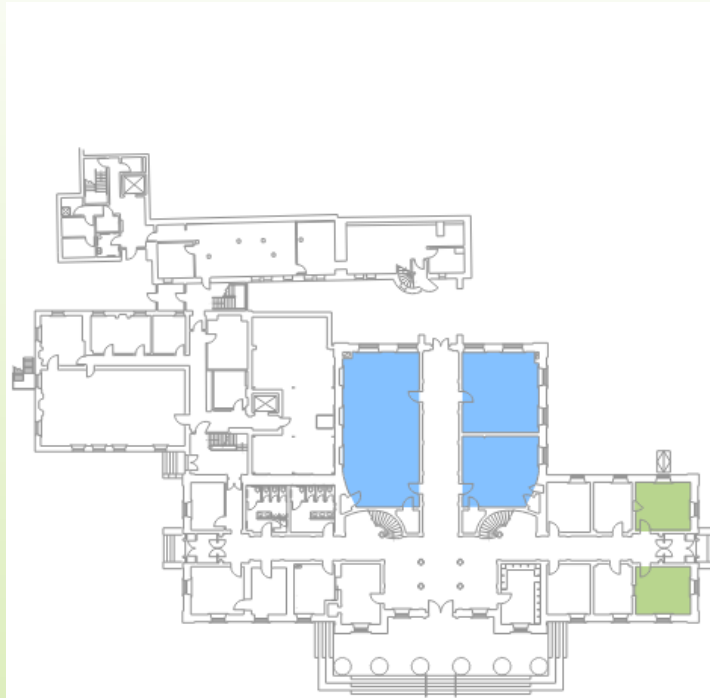
Room counts:

Large Needed = 13



Large Available = 4

Small Needed = 11

Small Available = 8



SPACE USE KEY - MINIMUM 30 SF / PERSON

-  LARGE COMMITTEE ROOM - MEMBERS, SUPPORT & PUBLIC - UP TO 19 PEOPLE TOTAL
-  SMALL COMMITTEE ROOM - MEMBERS, SUPPORT & PUBLIC - UP TO 12 PEOPLE TOTAL

NOTE: CURRENT LEGISLATIVE COMMITTEES REQUIRE 11 SMALL & 13 LARGE ROOMS.

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Health and Safety – Committee Rooms, continued

Reuse of existing rooms at 20 square feet per person

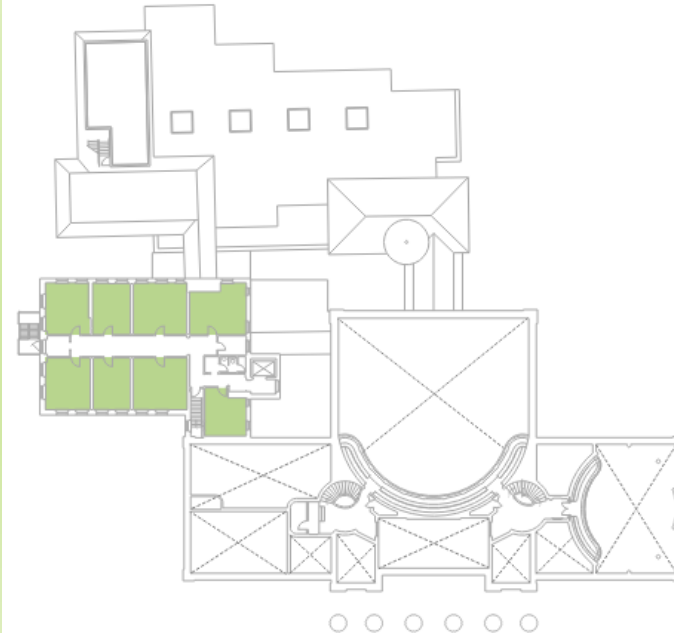
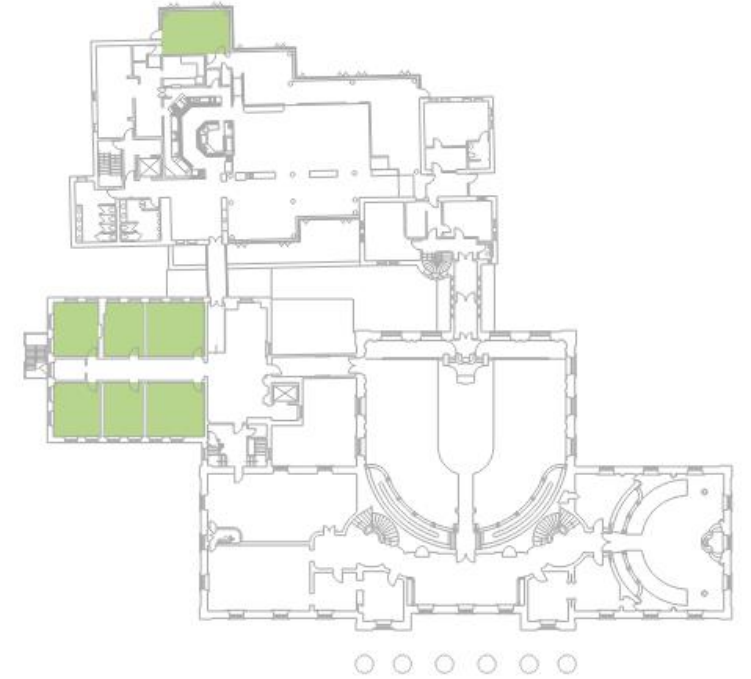
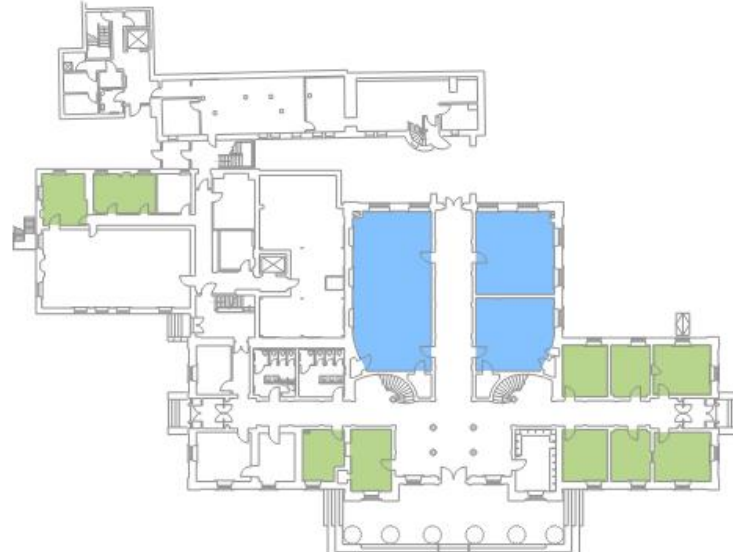
Room counts:

Large Needed = 13



Large Available = 4

Small Needed = 11

Small Available = 25



SPACE USE KEY - MINIMUM 20 SF / PERSON

-  LARGE COMMITTEE ROOM - MEMBERS, SUPPORT & PUBLIC - UP TO 19 PEOPLE TOTAL
-  SMALL COMMITTEE ROOM - MEMBERS, SUPPORT & PUBLIC - UP TO 12 PEOPLE TOTAL

NOTE: CURRENT LEGISLATIVE COMMITTEES REQUIRE 11 SMALL & 13 LARGE ROOMS.

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Findings and Recommendations – Four programmatic scenarios

Four programmatic scenarios were developed based on the information shown on previous slides.

These scenarios were developed to determine “order of magnitude” opinion of probable cost and do not represent actual designs. Design options will be developed in subsequent project phases.

These scenarios:

- Provide for new accessible entry with adequate queueing space for health screening at location preferred by Legislature.
- Use 30 SF/person for pandemic operation.
- Use 20 SF/person during normal operations to increase comfort level as desired by legislators.
- Size room based on 30 SF/person; using same room with reduction in SF/person allows greater occupant count.
- Show differing resolutions to cafeteria crowding.
- Assumes MEP/FP will be adjusted to account for each scenario.



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Findings and Recommendations –

Scenario 1

Scenario 1A

Scenario 1

Opinion of Probable Cost: \$11.6M

Timeline: 1 year (non-consecutive)

- New entry at northwest corner and infill lobby
- New egress stair at northeast corner for Senate Chamber
- New egress site path from east
- New egress stairs and elevator at northwest corner
- Sprinklers in all new areas and mist system in Chambers
- Restrooms added throughout building
- Doorways widened
- Committee rooms where they fit, backfill others with program
- Cafeteria and servery not used for meetings

Scenario 1A

Opinion of Probable Cost: \$1.1M Timeline: 9 months (non-consecutive)

- New entry at northwest corner and infill lobby only



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Findings and Recommendations – Scenario 1 – Pros and Cons

Scenario 1 Pros

1. Secure entrance and screening
2. Address life safety & accessibility
3. Least amount of work/ least cost of full options
4. All 11 small committees onsite
5. Hearing rooms remain
6. Legislative Lounge remains
7. Legislative Counsel stays on mezzanine level
8. Cafeteria stays open during much of construction
9. Pro Tem has anteroom for security and staff support
10. Additional restrooms
11. Additional touchdown workstations and small meeting rooms

Scenario 1 Cons

1. Large committee rooms offsite
2. Committee rooms dispersed
3. Legislative support functions dispersed
4. Cafeteria keeps small servery



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Findings and Recommendations – Scenario 2

Scenario 2

Opinion of Probable Cost: \$27.8M

Timeline: 2.5 years (non-consecutive)

- New entry at northwest corner and infill lobby
- New egress stair at northeast corner for Senate Chamber
- New egress site path from east
- New egress stairs and elevator at northwest corner
- Sprinklers in all new areas and mist system in Chambers
- Restrooms added throughout building
- Doorways widened
- Annex reno for small committees
- 1-story addition over cafeteria for large committees
- New egress path & stair from east
- Infill area of existing north stair and elevator



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Findings and Recommendations – Scenario 2 – Pros and Cons

Scenario 2 Pros

1. Secure entrance and screening
2. Address life safety & accessibility
3. All 11 small committees onsite
4. 5 of 13 large committee rooms onsite
5. Hearing rooms remain
6. Legislative Lounge remains
7. Legislative Counsel stays on mezzanine level
9. Pro Tem has anteroom for security and staff support
10. Additional restrooms
11. Additional touchdown workstations and small meeting rooms
12. Infirmary included

Scenario 2 Cons

1. 8 large committee rooms offsite
2. Legislative support functions dispersed
3. Cost of new kitchen, servery, and cafeteria
4. Cost of upgrading cafeteria addition structure
5. Cafeteria closed during upgrades
6. Ledge removal required for new elevator and stairs



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Findings and Recommendations – Scenario 3

Scenario 3

Opinion of Probable Cost: \$38.1M

Timeline: 3 years (non-consecutive)

- New entry at northwest corner and infill lobby
- New egress stair at northeast corner for Senate Chamber
- New egress site path from east
- New egress stairs and elevator at northwest corner
- Sprinklers in all new areas and mist system in Chambers
- Restrooms added throughout building
- Doorways widened
- Annex reno for small committees
- 2-story addition over cafeteria for large committees
- New egress path & stair from east
- Infill area of existing north stair and elevator
- Small committee rooms level 3
- New egress site path from east



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Findings and Recommendations – Scenario 3 – Pros and Cons

Scenario 3 Pros

1. Secure entrance and screening
2. Address life safety & accessibility
3. All 11 small committees onsite
4. All 13 large committees onsite
5. Hearing rooms remain
6. Legislative Lounge remains
7. Legislative Counsel stays on mezzanine level
9. Pro Tem has anteroom for security and staff support
10. Additional restrooms
11. Additional touchdown workstations and small meeting rooms
12. Infirmary included
13. Ethan Allen room at cafeteria converted back to dining

Scenario 3 Cons

1. Cost of 2-story addition above cafeteria
2. Cost of new kitchen, servery, and cafeteria
3. Cafeteria closed during upgrades
4. Ledge removal required for new elevator and stairs
5. Site work for east egress path



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Findings and Recommendations – Scenario 4

Scenario 4

Opinion of Probable Cost: \$23.7M

Timeline: 2 years (non-consecutive)

- New entry at northwest corner and infill lobby
- New egress stair at northeast corner for Senate Chamber
- New egress site path from east
- New egress stairs and elevator at northwest corner
- Sprinklers in all new areas and mist system in Chambers
- Restrooms added throughout building
- Doorways widened
- Annex reno for small committees
- 2.5-story addition to west
- New egress path & stair from east
- Infill area of existing north stair and elevator
- New egress site path from east



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Findings and Recommendations –
Scenario – Pros and Cons

Scenario 4 Pros

1. Secure entrance and screening
2. Address life safety & accessibility
3. All 11 small committees onsite
4. All 13 large committees onsite
5. Hearing rooms remain
6. Legislative Lounge remains
7. Legislative Counsel stays on mezzanine level
9. Cafeteria stays open during much of construction
10. Pro Tem has anteroom for security and staff support
11. Additional restrooms
12. Additional touchdown workstations and small meeting rooms
13. Infirmary included
14. Ethan Allen room at cafeteria converted back to dining
15. Space to reconfigure servery

Scenario 4 Cons

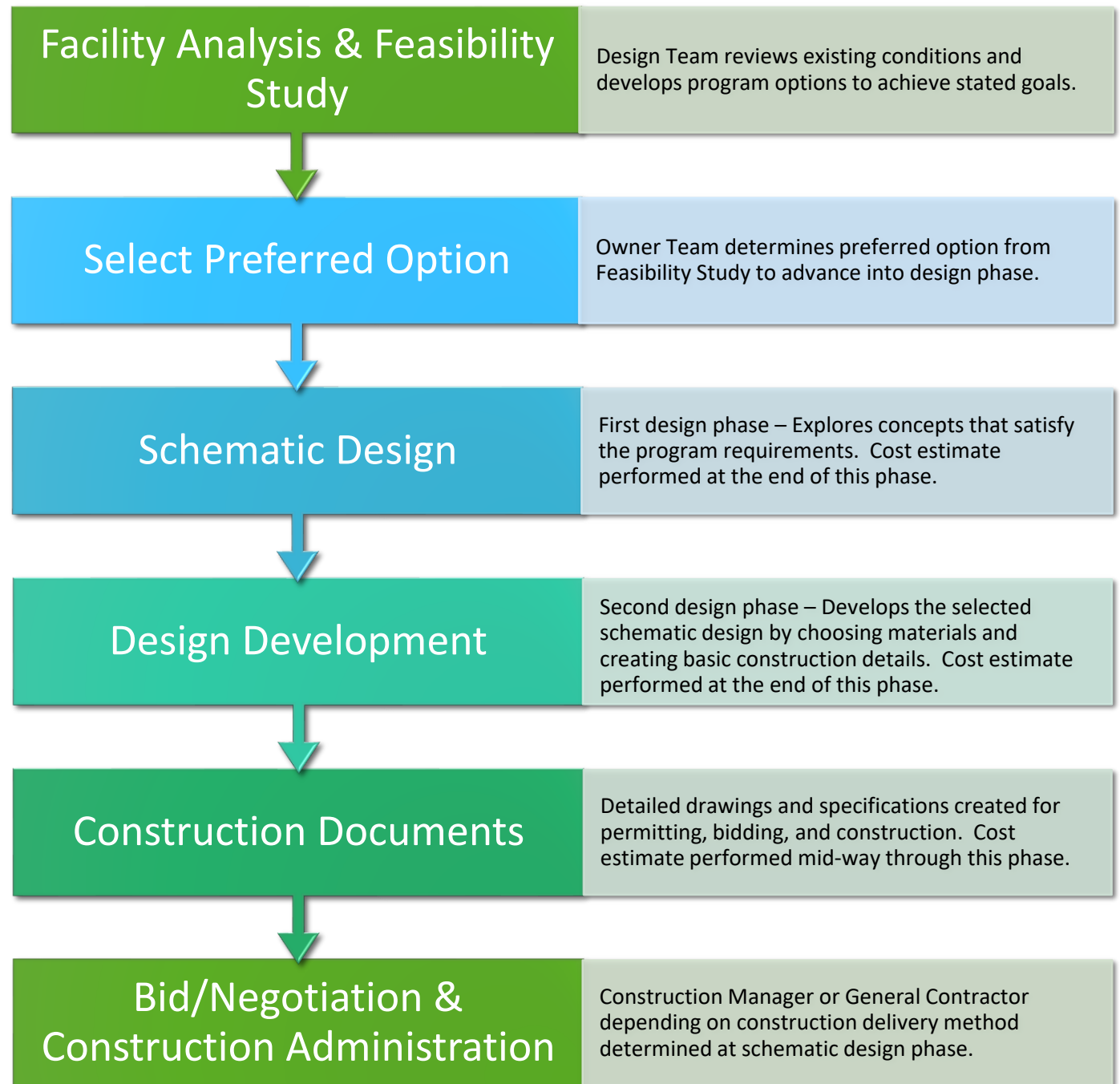
1. Cost of 2.5-story addition
2. New west addition closer to 1 Baldwin / visibility from State Street
3. Ledge removal required for new elevator and stairs



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Project Phases –

Programming through construction



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Next Phase –

Schematic Design

- Questions and direction

Direction required:

- September 15, 2023, to meet November reporting.
- Square foot per person: 30, 20, or 15?
 - Apply to House and Senate committee rooms?
 - Apply to the House and Senate Chambers?
- Structures of the State House to renovate?
 - Historic State House
 - Annex
 - Speaker Addition
 - Ancillary Infill
 - Cafeteria Addition
- Continued evaluation of the West Entrance?

Schematic Design Deliverables:

- Finalize the square footage for legislative committee.
- Develop conceptual floor plans based on the approved square footage.
- Revised project estimate.

