



# 4 Capitol Square Complex Buildings

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VIRGINIA STATE CAPITOL MASTER PLAN



## Existing Buildings Analysis

### Existing Space Plans

The Program Needs Summary Report (revised July 2004), prepared as part of the master plan process, includes existing space plans for 25 buildings in the master plan scope.

The consultant team documented existing space occupied by various state agencies in the Capitol Square complex based on lease plans provided by DGS and a Master Space Assignment (MSA) list used by the Bureau of Facilities Management for lease cost calculations. The lease plans and areas are constantly changing due to alterations in agency structure or relocations. The consultant team updated the floor plans and areas for each agency to accurately represent changes in the areas and agency configurations. Discrepancies noted in the MSA lease areas and lease plans were corrected as much as possible following consultation with DGS. The building plans, agency areas, and locations included in the building evaluations represent information made available to the consultant team as of November 2003.

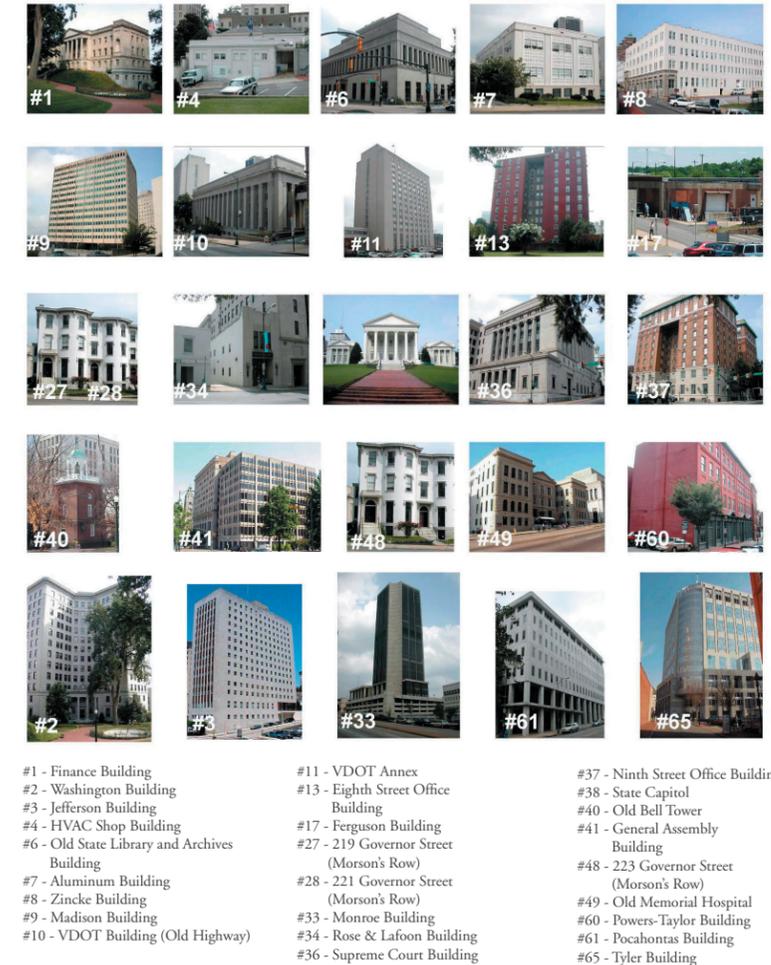


Fig. 4-2 Photographic index of Capitol Square complex buildings included in the master plan

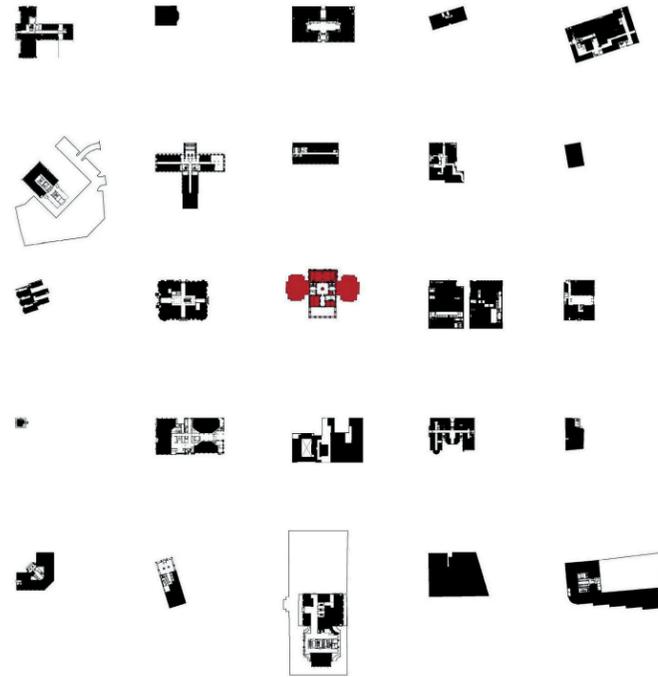


Fig. 4-3 Figure - ground index of Capitol Square complex buildings shown at the same scale

Table 4-1 Capitol Square building condition surveys completed

S. No.	ID	Building Name	Address	No. of Floors	Evaluation Category
1	7	Aluminum Building	Governor St.	3	3
2	8	Zincke Building	203 Governor St.	4	3
3	10	VDOT Building	1221 East Broad Street	5	-
4	11	VDOT Annex	1401 East Broad St.	16	-
5	17	Ferguson Building	109 North Old 14th St.	1	3
6	27	219 Governor Street	Morson's Row	4	2
7	28	221 Governor Street	Morson's Row	4	2
8	33	James Monroe Building	101-111 North 14th St.	30	3
9	34	Rose & Lafoon Building	109 North 8th St.	3	3
10	36	Supreme Court Bldg.	8th and East Franklin St.	8	3
11	41	General Assembly Bldg.	9th and East Broad St.	12	2
12	48	223 Governor Street	Morson's Row	4	2
13	49	Memorial Hospital	Governor and Broad St.	5	-
14	60	Powers-Taylor Bldg.	9-15 South 13th St.	4	1

Table 4-2 Capitol Square buildings excluded from building condition surveys

S. No.	ID	Building Name	Address	No. of Fls.	Ev. Category	Remarks
1	1	Finance Building	Capitol Square	6	1	To be renovated
2	2	Washington Building	12th and Bank St.	13	1	To be renovated
3	3	Jefferson Building	Governor and Bank St.	15	1	To be renovated
4	4	HVAC Shop Bldg.	Governor St.	3	1	To be demolished
5	6	Old State Library	11th and Broad St.	14	1	Under renovation
6	9	Madison Building	109 Governor St.	16	1	Under renovation
7	13	8th Street Office Bldg.	805 East Broad Street	12	2	To be demolished
8	37	9th Street Office Bldg.	202 North Ninth Street	13	2	To be demolished
9	40	Old Bell Tower	Capitol Square	3	-	
10	61	Pocahontas Building	900 East Main St.	15	1	Recently renovated
11	65	Tyler Building	1300 East Main St.	NA	1	New building

### Buildings in Scope

There are 25 Capitol Square complex buildings in the scope. The following five buildings in the complex were excluded from the scope: the State Capitol, Governor's Mansion, Old City Hall, Old Virginia State Library and Archives Building, and the VRS (Virginia Retirement Services) Building.

Old City Hall is currently leased by DGS to the Historic Richmond Foundation. The Old Virginia State Library and Archives Building is currently being renovated to house the legislature and state agencies so that State Capitol renovation and construction can proceed. DGS does not own the VRS Building. The Governor's Mansion has undergone renovations recently, and the Capitol building renovation is currently underway.

### Building Evaluation Categories

Building evaluation categories were formulated to narrow the focus of analysis to those buildings needing modification in the next 10 years. The Capitol Square complex buildings were categorized based on their recent renovations and/or their assessment to have at least a 10-year period without further renovations.

The building categories are:

Category 1 – buildings with a 10-year life

These buildings were excluded by DGS from the survey process.

Category 2 – buildings that require major renovation or replacement

Category 3 – buildings that may require reconfiguration or renovation



Fig. 4-4 A preliminary list of buildings identified for building evaluation surveys

The consultant team worked with DGS to formulate a building evaluation survey, which ultimately focused on the mechanical, electrical, plumbing, and fire protection systems (MEP). The surveys were completed by DGS.

None of the buildings in Category 1 were surveyed by DGS unless they had unusual operating problems. Also, buildings in Category 2 that were clearly candidates for demolition were not surveyed. All buildings in Category 3 were surveyed. Three Virginia Department of Transportation (VDOT) buildings—the main Department of Transportation Building, the Department of Transportation Annex, and Memorial Hospital—were not included in the survey process.

## Building Evaluations

Building evaluations included results of the MEP survey data as well as the compilation of building information available from DGS. The consultant team also conducted separate architectural evaluations. The Building and Site Condition Assessment Report, July 2004, includes detailed findings of these studies. Following are some of the highlights of this report.

### Building Age

Table 4 shows approximate building age of 27 Capitol Square buildings. The average age is 87 years, indicating higher maintenance and operations costs in the future.

Table 4-3 Average Capitol Square Building Age

ID	Building	Year of Construction	Approximate Building Age (yrs)
1	Finance Building	1894	110
2	Washington Building	1924	80
3	Jefferson Building	1956	48
4	HVAC Shop Building	1894	110
6	Old State Library and Archives Building	1940	64
7	Aluminum Building	1939	65
8	Zincke Building	1926	78
9	Madison Building	1966	38
10	VDOT Building	1939	65
11	VDOT Annex	1961	43
13	Eighth Street Office Building	1912	92
14	Consolidated Laboratory	1967	37
17	Ferguson Building	1968	36
27	219 Governor Street	1848	156
28	221 Governor Street	1848	156
33	Monroe Building	1980	24
34	Rose & Lafoon Building	NA	NA
36	Supreme Court Building	1919	85
37	Ninth Street Office Building	1910	94
38	State Capitol	1788	216
40	Old Bell Tower	1824	180
41	General Assembly (West Wing)	1930	74
	General Assembly (East Wing)	1964	40
48	223 Governor Street	1848	156
49	Memorial Hospital Building	1903	101
60	Powers-Taylor Building	1880	124
61	Pocahontas Building	1913	91
65	Tyler Building	1993	11



### Number of Agencies per Building

The 25 Capitol Square buildings contain 40 different agencies. Ten buildings have a single tenant. High-rise towers like the Monroe and the Ninth Street Office buildings contain 11 or more agencies. The Supreme Court and Pocahontas buildings house six to ten different agencies.

### Building Areas and Floor Plate Area

The average mean floor-plate area of buildings in the master plan scope is 8,674 NASF, which is very low considering there are a number of high-rise buildings in the complex (average 9 floors).

### High Space Utilization Ratio per Staff

The Program Needs Summary Report (described in Chapter 2 of this report) uses 250 net assignable square feet (NASF) per full-time equivalent (FTE) staff as a standard for projecting space needs for the next 5 and 10 years for the existing Capitol Square buildings and the 210-NASF/FTE standard for new buildings. However, the existing space utilization indicates a higher space efficiency ratio for most of the Capitol Square buildings. This higher ratio suggests that if these agencies continue to grow in staff and space requirements in their current locations, there will be a greater future space need than was projected using the 250 NASF/FTE standard.

### ADA Compliance costs

The old building age also means a lack of comparatively recent ADA accessibility measures. The ADA study compiled by DGS in 2000 proposes a number of ADA improvements, grouped into priority and total improvement costs. The total cost of ADA improvements ranges from \$7,710 (221 Governor Street) to \$967,614 (General Assembly Building).

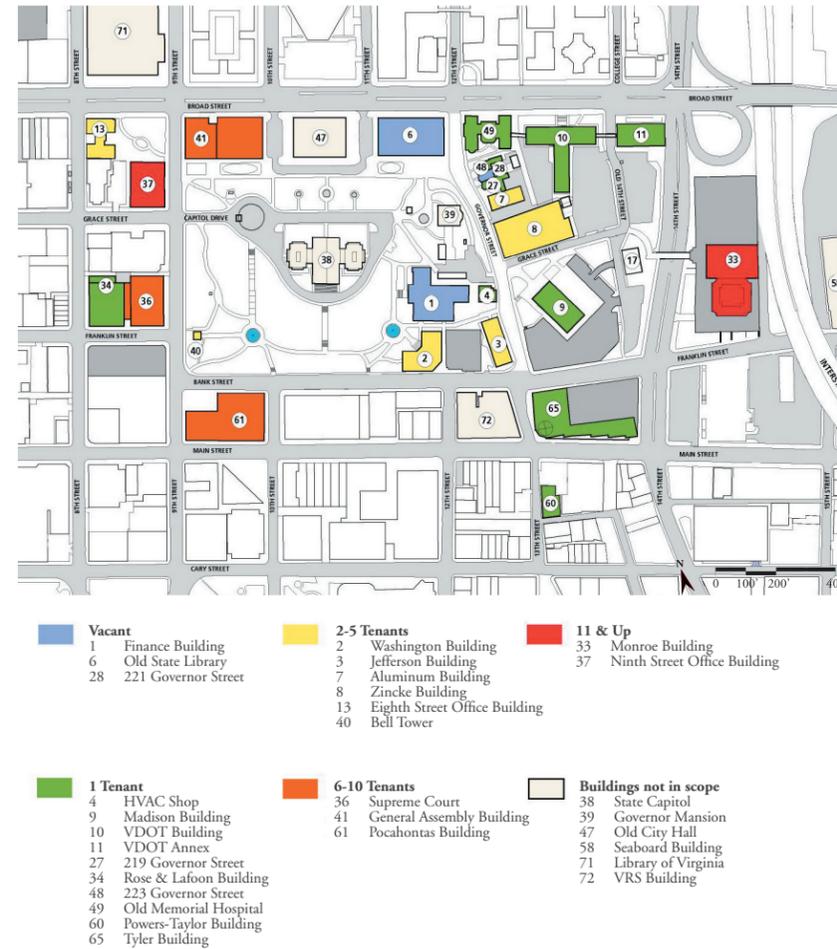


Fig. 4-5 Number of agencies per building

Table 4-4 Building areas and floor plate area

ID#	Building	Floors	GSF	NASF	NASF/Floor
1	Finance Building	6	69,660	53,362	8,894
2	Washington Building	13	122,980	102,108	7,854
3	Jefferson Building	15	142,610	83,907	5,594
4	HVAC Shop Building	3	6,845	5,311	1,770
6	Old State Library and Archives Building	14	258,873	220,862	15,776
7	Aluminum Building	3	19,500	15,121	5,040
8	Zincke Building	4	79,014	72,158	18,040
9	Madison Building	16	237,208	151,840	9,490
10	VDOT Building	5	84,000	52,263	10,453
11	VDOT Annex	16	180,800	129,096	8,069
13	Eighth Street Office Building	12	126,933	86,690	7,224
27	219 Governor Street	4	9,159	6,160	1,540
28	221 Governor Street	4	8,329	6,519	1,630
33	Monroe Building	30	992,180	417,616	13,921
34	Rose & Lafoon Building	3	6,426	4,367	1,456
36	Supreme Court Building	8	255,540	160,070	20,009
37	Ninth Street Office Building	13	183,167	124,496	9,577
40	Old Bell Tower	3	1,200	1,010	337
41	General Assembly Building	12	400,000	239,343	19,945
47	Old City Hall	6	123,350	80,000	13,333
48	223 Governor Street	4	8,208	5,977	1,494
49	Memorial Hospital	5	65,900	33,633	6,727
58	Seaboard Building	2	16,270	13,736	6,868
60	Powers-Taylor Building	4	32,065	25,018	6,255
61	Pocahontas Building	15	NA	233,436	15,562

GSF - Gross Square Feet  
NASF - Net Assignable Square Feet



Table 4-5 Space Efficiency ratio per Building

ID	Building	Existing Building Average Space/Staff Ratio
1	Finance Building	NA
2	Washington Building	330
3	Jefferson Building	468
4	HVAC Shop Building	NA
6	Old State Library and Archives Building	NA
7	Aluminum Building	359
8	Zincke Building	201
9	Madison Building	NA
10	VDOT Building	152
11	VDOT Annex	166
13	Eighth Street Office Building	447
17	Ferguson Building	NA
27	219 Governor's Street (Morson's Row )	NA
28	221 Governor's Street (Morson's Row )	NA
33	Monroe Building	303
34	Rose & Lafoon Building	NA
36	Supreme Court Building	786
37	Ninth Street Office Building	454
40	Old Bell Tower	340
41	General Assembly Building	479
48	223 Governor's Street (Morson'a Row)	707
49	Memorial Hospital Building	265
60	Powers-Taylor Building	141
61	Pocahontas Building	540
65	Tyler Building	NA

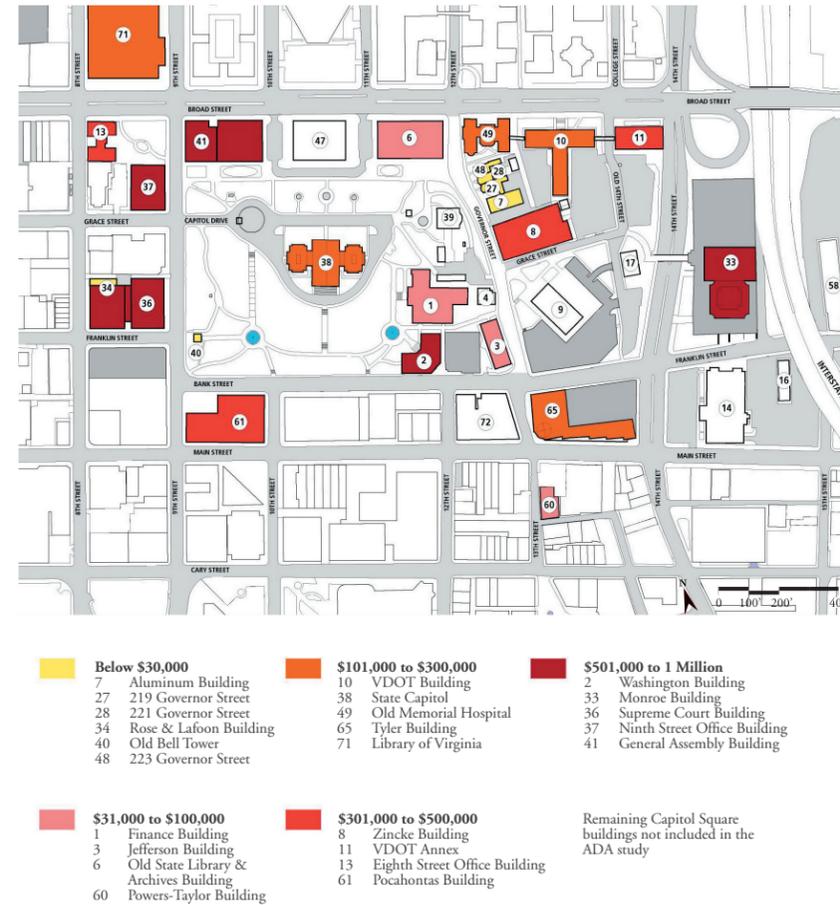


Fig. 4-6 ADA compliance costs

Table 4-6 ADA Costs (Source: 2000 DGS Study)

ID	Building	Priority 1.	Total	Main Tenant	Remarks
1	Finance Building	\$650	\$95,927	Vacant	
2	Washington Building	\$13,894	\$701,906	Agriculture	
3	Jefferson Building	\$848	\$84,948	Mental health	
4	HVAC Shop Building	NA	NA	NA	
6	Old State Library	\$6,274	\$84.34	Library	
7	Aluminum Building	\$2,040	\$14,940	Parks & Rec.	
8	Zincke Building	\$380	\$336,810	DGS	
9	Madison Building	NA	NA		
10	VDOT Building	\$150	\$169,581	VDOT	
11	VDOT Annex	\$422	\$351,118	VDOT	
13	Eighth St. Office Bldg.	\$5,042	\$361,500	Multi tenant	
14	Consolidated Lab.	\$2,448	\$111,689	Agriculture	Demolished
17	Ferguson Building	NA	NA	NA	
27	219 Governors Street	\$40	\$14,780	Vacant	
28	221 Governors Street	\$150	\$7,710	Vacant	
33	Monroe Building	\$448	\$997,232	Multiple tenant	
34	Rose & Lafoon Bldg.	\$5,440	\$5,440	Clerk of Courts	
36	Supreme Court Bldg.	\$1,284	\$622,241	Courts offices	
37	Ninth Street Office	\$20,700	\$523,018	Multiple agencies	
38	State Capital	\$11,890	\$199,988	Legislature	Not in scope
40	Old Bell Tower	\$150	\$150	Visitor Center	
41	General Assembly Bldg.	\$6,792	\$967,614	Senate and House	
48	223 Governors Street	\$395	\$27,965	Comm. For the Arts	
49	Memorial Hospital	\$1,450	\$138,155	VDOT	
57	Main St. Station	\$384	\$334,779	Health & Labor	Not in scope
58	Seaboard Building	\$2,832	\$35,082	Vacant	Not in scope
60	Powers-Taylor Bldg.	\$7,664	\$80,969	Labor & Ind.	
61	Pocahontas Building	\$192	\$320,037	Lottery, Attorney G.	
65	Tyler Building	\$564	\$298,738	State Corporation	
71	Library of Virginia	\$1,500	\$108,585	Library	Not in scope



## Architectural Evaluations

As part of the master plan process, sub-consultant Hanbury Evans Wright and Vlattas + company (HEWV) conducted external facade condition and architectural evaluations, included in the Building and Site Condition Assessment Report, April 2004. These evaluations were also used in the analysis of each building's susceptibility to change—i.e., renovation, demolition, relocation, etc.—discussed later in this chapter.

## MEP Survey

The evaluation of the mechanical, electrical, plumbing, and fire protection systems (MEP) was based upon field building survey data provided by DGS, supplemented by discussions with DGS staff members on specific issues.

Buildings included in the mechanical MEP survey are:

- Monroe Building
- General Assembly Building (East)
- General Assembly Building (West)
- 219 Governor Street
- 221 Governor Street
- 223 Governor Street
- Aluminum Building
- Zincke Building
- Supreme Court Building
- Rose & Lafoon Building
- Powers-Taylor Building

In many cases, these buildings have been continuously occupied for extended periods of time. MEP systems serving these buildings have been repaired or partially upgraded as dictated by the nature of the problem. Understandably, the extent of the repairs or

upgrades has also been limited by the need to avoid interruption of staff occupying the building, or the lack of transition space to house occupants, while repairs or upgrades are made.

The long-term effect of these competing needs is that the MEP systems for many buildings operate well beyond their normal reliable life span. With the decrease in reliability due to age, increased maintenance costs and degradation of occupant comfort and safety occur. The design of MEP systems serving many of these buildings pre-dates advances in energy-efficient design, indoor air quality, and life safety considerations.

The Building and Site Condition Assessment Report, July 2004, contains a detailed summary of MEP survey findings, including recommendations for upgrades or replacement and the approximate estimated costs. For HVAC, the estimated current replacement costs include only the HVAC subcontractor's costs and do not include renovation costs for architectural, structural, electrical, and plumbing work necessary to install the replacement HVAC system. In addition, these costs do not include a general contractor's mark-up for overhead and profit.

Recommendations assume MEP renovation and upgrade alternatives. However, they do not take into account the cost benefits of renovation versus the construction of new buildings. Space program options discussed in Chapter 5 provide a cost benefit evaluation.

## MEP Survey Summary

The survey findings indicate a variety of MEP systems problems that would need major overhaul. While it is difficult and subjective to define the life spans of systems, the following basis was applied to estimate priorities for MEP renovation. The level and quality of maintenance also significantly affect these estimates of life span.

1–25 years – reliable lifespan

25–35 years – reduced reliability due to difficulty of obtaining repair parts, and wear on major equipment and controls

35–45 years – beyond reliable operating life, with increased probability of major breakdowns and frequent minor breakdowns.

Table 4-7 provides a comparison of 11 buildings, most of which are in Category 3 (buildings which may require reconfiguration and renovation).

## Ranking of Buildings for MEP Renovations

Based on the surveys and the approximate costs required to upgrade building systems, it is evident that many buildings that fall in the high- and moderate-priority susceptible-to-change categories (described in the following section) would incur major costs in upgrading their MEP systems. These renovations or upgrades may involve significant changes and disturbances to the existing building agency configuration. The costs involved also need to be evaluated relative to the cost of constructing a new building.



Based on the estimates of the building equipment life spans, 11 of the Capitol Square buildings that were evaluated can be prioritized as follows. (Please note that surveys were not conducted for the Eighth and Ninth Street Office buildings and, therefore, they are not part of the following building renovation priority rankings.)

**High Priority for MEP Renovation**

- General Assembly Building (East and West)
- Aluminum Building
- Supreme Court Building

**Moderate Priority for MEP Renovation**

- Zincke Building
- Monroe Building
- 219 Governor Street
- 221 Governor Street
- 223 Governor Street

**Low Priority for MEP Renovation**

- Powers-Taylor Building
- Rose and Lafoon Building

**Table 4-7 Summary of Category 3 buildings for renovations**

Building	Building Age (yrs)	Number of Agencies	NASF Space / FTE staff ratio	ADA Compliance Costs (\$)	Approximate Age of Equipment (yrs)
Monroe Building	24	11+	303	997,232	1–25
General Assembly (East)	40	6–10	479	967,614	35–45
General Assembly (West)	74	6–10	479		35–45
219 Governor Street	156	1	NA	14,780	Varied
221 Governor Street	156	1	NA	7,710	Varied
223 Governor Street	156	1	707	27,965	Varied
Aluminium Building	65	2	359	14,940	35–45
Zincke Building	78	2	205	336,810	Varied
Supreme Court Building	85	6–10	786	622,241	Varied
Rose & Lafoon	54	1	NA	5,440	Varied
Powers - Taylor	124	1	141	80,969	1–25



## Buildings Susceptible to Change

Based on the MEP surveys as well as agency and space-use evaluations, a list was made of all the Capitol Square complex buildings (25 in the master plan scope) that are susceptible to change—i.e., candidates for renovation, demolition, relocation, etc. Fig. 4-7 identifies groups of Capitol Square buildings based on high, moderate, and low priorities for change. Buildings in each group are further classified based on the number of agencies (main tenant, multiple tenant, and vacant) that they currently house. The number of agencies in each building and their future space needs are important criteria for any decision regarding the building’s renovation or demolition. In addition, an alternative location would need to be planned first for any building undergoing renovation or demolition.

DGS currently is undertaking planning, design, and renovation of a number of Capitol Square complex buildings. The Finance Building is planned to undergo extensive renovation and expansion. DGS has identified the Eighth Street Office Building for demolition. The HVAC Shop Building is slated for demolition to make room for the Finance Building addition.

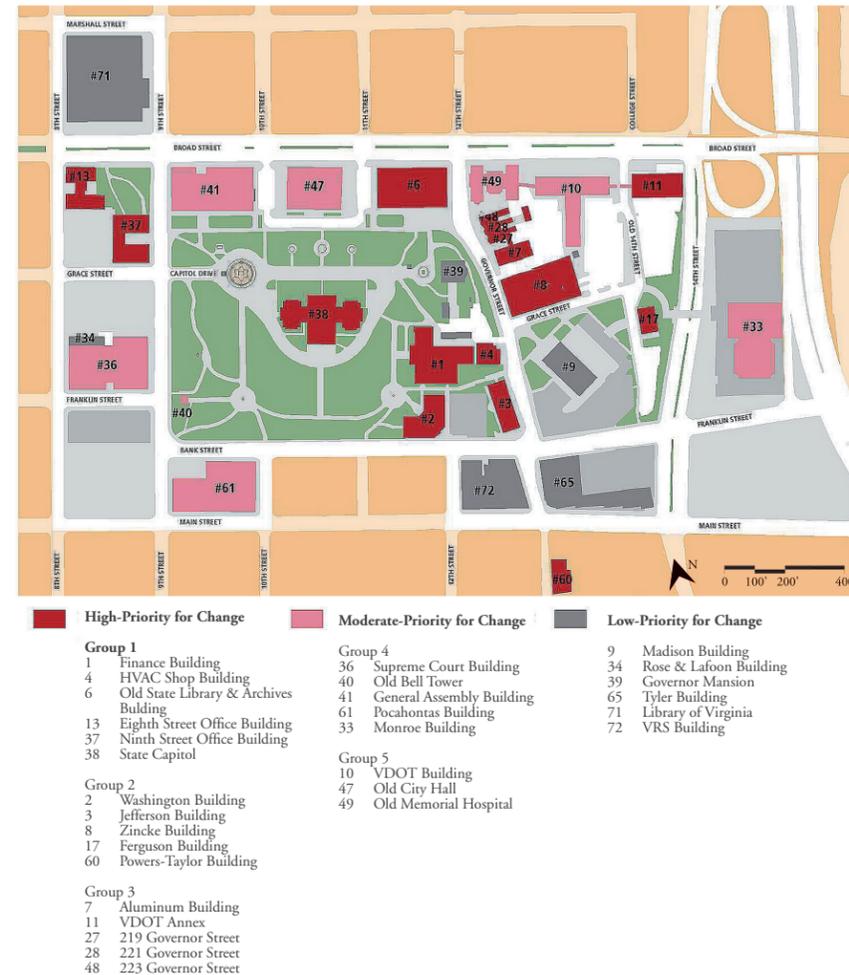


Fig. 4-7 Buildings Susceptibility to Change

### High-Priority for Change Buildings (requiring immediate attention)

High-priority buildings are those already identified by DGS for renovation or demolition (buildings in categories 2 and 3, described earlier in this chapter). Also in this group are buildings identified as high-priority for MEP renovation based on the systems’ age and estimated life spans.

The following buildings fall in the high-priority group. It is estimated that they would need renovation or replacement decision in the immediate future—i.e., the next five years.

#### Main Tenant

- Washington Building (Department of Agriculture)
- Jefferson Building (Department of Mental Health and Retardation)
- VDOT Annex
- Ferguson Building

#### Multiple Tenants

- Zincke Building (2 agencies)
- General Assembly Building (east and west)
- Aluminum Building

#### Vacant

- 219 Governor Street (currently vacant; 4,668 SF available)
- 221 Governor Street (currently vacant; 6,519 SF available)
- 223 Governor Street (2,443 SF vacant)



### Moderate-Priority for Change Buildings

Buildings in the moderate-priority group would need renovation in the next 10 years. Also included in this group are buildings where 50 percent or more of the agencies anticipate no change in future space need, and those buildings whose MEP systems can remain without a major renovation or upgrade in the next 5 years.

#### Main Tenant

- VDOT Building
- Old Memorial Hospital (VDOT)
- Powers-Taylor Building

#### Multiple Tenants

- Monroe Building (18 agencies)

#### 50 percent or more agencies with no change in future space need

- Supreme Court Building (5 out of 6 have no change)
- General Assembly Building (5 out of 8 have no change)
- Old Bell Tower (1 out of 2 have no change)
- Pocahontas Building (7 out of 9 have no change)
- Rose & Lafoon Building

### Low-Priority for Change Buildings

The low-priority group includes buildings and agencies that were excluded from the program needs summary and future space projections. This group also includes buildings whose MEP systems can remain without a major renovation or upgrade in the next 10 years.

- Tyler Building
- Madison Building (recently renovated)
- Governor's Mansion
- Library of Virginia
- VRS Building



Fig. 4-8 Aerial view of the existing Capitol Square Complex buildings



Fig. 4-9 Finance Building



Fig. 4-10 Washington Building

### Building Recommendations

Based on the building evaluations—the MEP surveys, architectural evaluation, space use and existing agency configuration, evaluation, and site needs assessment—the following is the list of all building projects recommended for the Capitol Square complex. Other factors involved in identifying existing buildings for demolition, renovation, or relocation include historic landmark status, high cost of building system upgrade and maintenance, number of agencies needing relocation temporarily, etc.

### Renovation

#### Finance Building

The Finance Building has been vacant since 1980. The 1993 master plan proposed using the Finance Building as a reception and meeting facility to support the Governor’s Mansion and the Capitol building. The 2003 VA Budget Bill directed DGS to investigate the Public Private Education and Infrastructure Approach (PPEA) for future consideration of the Finance and Washington building renovation projects. Currently, DGS is reviewing various proposals for the Finance Building renovation.

#### Washington Building

The Washington Building, designed in 1924 by the Richmond firm Carneal and Johnston, is one of the oldest state high-rise (12-story) buildings intended to house state office functions in the Capitol Square complex. Its renovation is tied to the Finance Building renovation under PPEA. DGS also plans to renovate the Washington Building’s life safety systems. The primary agency in the Washington Building—the Department of Agriculture and Consumer Services—would be relocated to the Finance Building following its renovation. The Virginia General Assembly has approved a budget of \$15.8 million for the Washington Building renovation.

#### General Assembly Building (East and West)

The General Assembly Building would rank as the most urgent for MEP system renovation because its systems are approximately 45 years old. Many of the major components—such as pumps, chillers, electrical switchgear and temperature controls—are original to the building and are either in poor condition or require parts that are difficult to find. It is not expected that the General Assembly Building would operate with its current systems for another 10 years without major breakdowns requiring replacement of major components and/or partial upgrade of associated systems

#### Monroe Building

The Monroe Building is operating with systems that are approximately 25 years old. While a major breakdown could occur in these systems, it is not as likely as with the General Assembly Building. If the systems are not upgraded in the 10-year plan, they would reach 35 years of age before being renovated. With systems in this 25–35 year



Fig. 4-11 General Assembly Building (East and West )

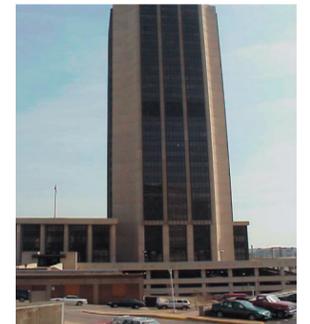


Fig. 4-12 Monroe Building



age range, it is safe to assume difficulty with finding replacement parts and breakdown of minor equipment, such as terminal boxes, fan bearings, pump seals, etc.

The Monroe Building currently houses 18 agencies with approximately 1,600 employees. Built in 1980, it was part of a two-tower complex that was never realized. Considering the number of people working at the Monroe Building, it would be advisable to renovate it within the 10-year plan if possible.

### Morson's Row Buildings

The Morson's Row townhouses are on the National Register of Historic Places and the Virginia Landmarks Register. Built in 1848 as rental properties, they are the only evidence of the historic neighborhood that once surrounded Capitol Square. The building areas are not suited for large offices. All three buildings—219, 221, and 223 Governor Street—need their HVAC systems replaced. The Morson's Row townhouses along with the Aluminum and Zincke buildings could be served very efficiently by a single hot water/chilled water plant.

### 219 Governor Street

The age of the MEP equipment is varied. The electrical systems need upgrades while the lighting, power, and fire alarm systems are approaching the end of their reliable life. The plumbing and domestic water systems also need replacement due to age.



Fig. 4-13 Morson's Row Buildings



### 221 Governor Street

Electrical and plumbing systems are in fair condition. Lighting, power and fire alarm systems in this building are approaching the end of their reliable life. The domestic water system also needs replacement due to age.

### 223 Governor Street

The Virginia Commission for the Arts is housed in this building. The electrical system has been renovated, although some parts still require replacement, such as electrical receptacles, and the lighting needs replacing. The plumbing and domestic water systems also need replacement due to age.



Fig. 4-14 VDOT Annex



Fig. 4-15 Powers-Taylor Building

### Department of Transportation (VDOT) Annex

The annex was built in 1961 for use by VDOT. This building is one of three entirely occupied by VDOT in the Capitol Square complex. Interviews with VDOT identified this building as requiring major renovation in the near future. VDOT is currently undertaking a comprehensive evaluation of this building.

### Powers-Taylor Building

The Powers-Taylor Building is served by packaged heating-cooling equipment, which could be replaced on a unit-by-unit basis when it becomes unreliable. Replacement of this type of equipment would be less time consuming and less expensive than larger central systems.



## Demolition

### Eighth Street Office Building

Originally constructed in 1912 as the Murphy Hotel, the 12-story Eighth Street Office Building was converted for office use. The building is 92 years old with a typical floor plate size of 6,690 NASF. The small floor plate area makes the building inefficient for space utilization. Smaller floor plate size also makes a single floor inadequate for an agency with high space requirements. Twelve floors of the building are currently occupied by five different agencies. The NASF per FTE staff ratio of this building is among the highest (447) compared to the 210- or 250-NASF/FTE standard.

Preliminary investigation of the building's HVAC, electrical, and plumbing systems indicates little remaining life span for its MEP equipment. The building shares hot water supply, fire pump, and sprinkler controls with the Ninth Street Office Building, described in the following section.

Dated mechanical equipment and increased maintenance costs have made it difficult for DGS to continue upgrading its building systems. The Eighth Street Office building is suitable for demolition due to its age and costs of renovation and reconstruction.



Fig. 4-16 Eighth Street Office Building

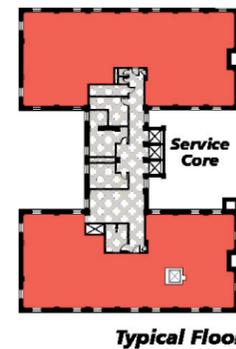


Fig. 4-17 Typical existing upper floor plan of the Eighth Street Office Building



Fig. 4-18 Ninth Street lobby entrance



Fig. 4-19 Historic lobby interior hall

### Ninth Street Office Building

The Ninth Street Office Building is the same age as the Eighth Street Office Building. However, it is in good condition compared to the Eighth Street Office Building. Directly facing Capitol Square, the top floors of this building provide excellent views of the Capitol Square from the building's Ninth Street side.

The typical floor plate of the building is 11,181 NASF with a U-shaped configuration. The 13-story building currently houses 23 agencies. The building layout is accessed by a single service core, dividing the building floor into smaller floor area. The NASF per FTE staff ratio is 385 compared to the 210- or 250-NASF/FTE standard.

No MEP survey was completed for this building. Preliminary investigation of the building's MEP systems indicates aging equipment. The HVAC system does not seem to comply with the current code requirements for ventilation air. The fire alarm system is also obsolete and near the end of its expected life span.



Considering the age of this building and further discussions with DGS staff about maintenance costs, the Ninth Street Office Building requires a high level of maintenance to keep its building systems running. Therefore, it may be more practical to demolish the building. Considering the Capitol Square location, the design of the new building must be sensitive to its context and of comparable quality to its predecessor.

The building's original 2-story Richmond Hotel lobby is in good condition and unique for the existing office building use. Fig. 4-20 shows an alternative that preserves the lobby and also increases the floor plate size to approximately 17,000 NASE. It would be useful to have a feasibility study of the building structure exploring such an option. DGS is also considering the Ninth Street Office Building under the PPEA.

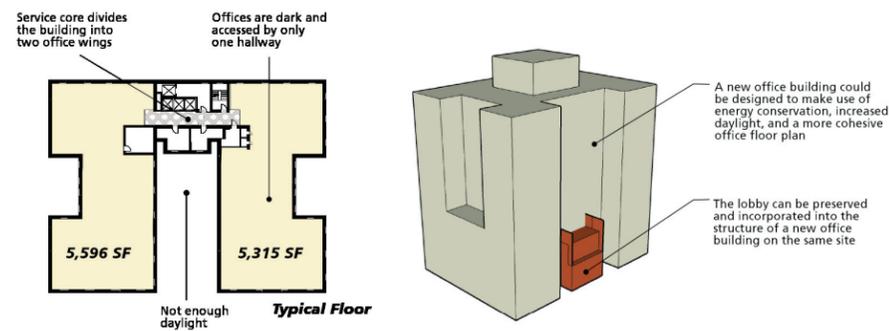


Fig. 4-20 New replacement office building alternative preserving the historic lobby

### Zincke Building

The Zincke Building is a multi-level structure with an area of 79,014 NASE. Located on a slope, the building has three main levels, with a mezzanine floor. The changing levels inside the building and the varied height of the structure necessitate a number of exit stairs and service cores. The multi-level layout also makes the building's internal office layout disorienting for navigation and inefficient for space utilization. The costs of making the building ADA accessible are also higher for a building of this size.

The MEP survey indicated that the Zincke Building needs general renovations in its HVAC, fire protection, and plumbing systems. The building's electrical system is in poor condition and its age unknown. The age of the MEP equipment is varied, with some parts having been replaced in 1990.



Fig. 4-21 Zincke Building

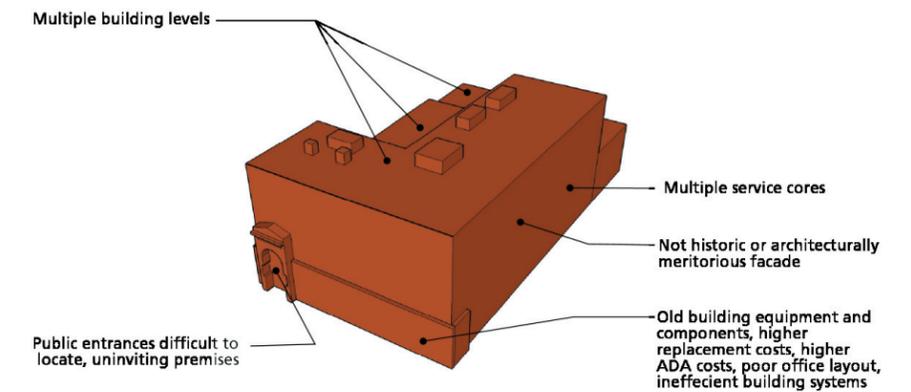


Fig. 4-22 Zincke Building

Due to high costs involved in architectural renovations, it is better to demolish the Zincke Building, which would be more cost effective than upgrading the building systems. The demolition of the Zincke and Ferguson buildings and the relocation of the Aluminum Building also would open up significant opportunity for construction of a new building(s) in this area.

### Ferguson Building

Identified for demolition in the 1993 master plan, the Ferguson Building should be removed to clear the area for a potential new building. Removal of the Ferguson Building also would enhance this area's appearance and accessibility to the rest of the Capitol Square complex. The building's area and function (DGS Shop) can easily be accommodated elsewhere.



### Department of Transportation (VDOT) Building extension

The 4-story VDOT main building (Department of Transportation Building) was constructed in 1939. The original building footprint had 228 feet of frontage on Broad Street and a depth of 170 feet. This original building was recently listed on the National Register of Historic Places as a significant and elegant expression of the “Stripped Classicism” style that was prevalent for government building in the 1940s.

A 2-story structure, with an area of approximately 2,100 NASF, extends the 170-foot arm of the historic 4-story building further south. This extension does not appear to be part of the historic building despite its matching base and similar limestone façade.

Demolition of this extension would not significantly affect VDOT’s internal functions, provided a new building is constructed to accommodate the agency’s growth and future space needs. The demolition of the extension also would enhance the integrity of the original VDOT building, while providing significant development potential for the area behind the three existing buildings along Broad Street



Fig. 4-23 Photo of the 1960 VDOT extension

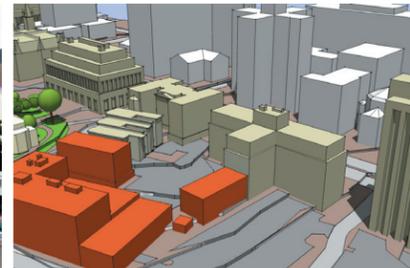


Fig. 4-24 3D Model view of the building



Fig. 4-25 Aluminum Building



Fig. 4-26 Aluminum Building (1965)



Fig. 4-27 Zincke, Aluminum and VDOT extension buildings



### Relocation

#### Aluminum Building

The Aluminum Building was constructed in 1915, the first all-aluminum building to be completed in the United States. It originally sat on the corner of Broad Street where the current Old Virginia State Library and Archives Building resides. The building was lifted out of place and moved to its present Governor Street location in 1938. One of a kind when constructed, the building is a rectangular 3-story structure clad in aluminum panels that are detailed to mimic stone pilasters with decorative capitals.

The Aluminum Building is currently occupied by Department of Conservation and Recreation and by DGS. The building footprint is small, with a 5,127 NASF floor plate area. The building also has a higher space utilization ratio and is not conducive to efficient office use and maintenance.

The relocation of the Aluminum Building provides a significant opportunity to create a pedestrian friendly area east of Capitol Square. The building, itself, should be con-

sidered for an alternative use (other than office). An alternative site for the building’s relocation needs to be further explored, preferably within the City of Richmond.



Fig. 4-28 3D model view of the existing structures shown in orange proposed for demolition/relocation

Table 4-8 Demolition/relocation buildings

Building	Age	NASF	NASF/GSF	Agencies	Typical Fl. SF	Floors	NASF / Staff*	ADA Costs**	MEP Costs***
Zincke Building	78	79,014	91.3%	2	12,716	4	205	\$336,810	\$2,550,000
Aluminum Building	89	15,121	78.3%	2	5,127	3	359	\$14,970	\$600,000
Eighth Street Office Building	92	86,509	68.2%	5	6,690	12	447	\$361,500	\$3,950,000
Ninth Street Office Building	94	125,352	66.8%	23	11,181	13	385	\$523,018	\$5,500,000

\* Ratio of space (NASF) to staff (FTE); \*\* DGS 2000 ADA Study; \*\*\* DGS building evaluations and HCYU report

### No-Change Buildings

#### Jefferson Building

The Jefferson Building was renovated during the early 1990s. The building was not evaluated by DGS for the purposes of this master plan. The Department of Mental Health and Retardation has occupied the Jefferson building since approximately 1995, following construction of the new Tyler Building in 1993.

#### Pocahontas and Tyler Buildings

Both these buildings are of comparatively recent construction. Barring some unexpected MEP system problems or change in agency structures, no major investment is expected in these buildings for the next 10 years.

#### Madison Building

The Madison Building was recently renovated for the Department of Health relocation. The building, therefore, would not require any major building-related investment in the near future.

### New Construction

DGS currently is constructing the new Finance Building addition, and is seeking approval of funding for the new Broad Street building.

#### Finance Building Addition

A new addition to the Finance Building of 40,000 NASF is included under Phase I (2003-2007) of the master plan. A budget of \$26.3 million was approved for the renovation and new addition.

#### New Broad Street Building

A new Broad Street building is currently being planned to replace the Eighth Street and Ninth Street office buildings. The new building according to the latest estimates available will have approximately a 466,000-NASF area with a 4-level underground parking deck.



Fig. 4-29 Proposed Finance Building addition as viewed from Governor Street



### Other New Construction Opportunities

The proposed demolition in Phase II (2008-2013) of the Zincke, Ferguson, and VDOT building extension and the relocation of the Aluminum Building would provide opportunities for new building construction in the northeast quadrant of the Capitol Square complex as well as significant site improvements.

Based on the Program Needs Summary Report, revised July 2004 (see Chapter 1), a new space need of between 868,525 NASF (using the 210-NASF/FTE standard) and 1.02 million NASF (using the 250-NASF/FTE standard) was identified in the Capitol Square complex over the next 10 years.

This space need is based on an internal growth of the existing Capitol Square agencies, as well as other moderate- and high-priority agencies moving to the Capitol Square complex. The proposed new Broad Street building (replacing the Eight Street and Ninth Street office buildings) and the Finance Building addition in Phase I provide for approximately 500,000 NASF of new space.

Three or four new buildings totaling an area of approximately 502,000 NASF would accommodate this new space need. Figure 4-30 shows one such maximum new space and renovation scenario and summarizes all the master plan building recommendations.

Various space program options ranging from minimum new construction to a maximum were explored in the space program options phase of the master plan. These options further explore and refine possible area alternatives for new buildings.

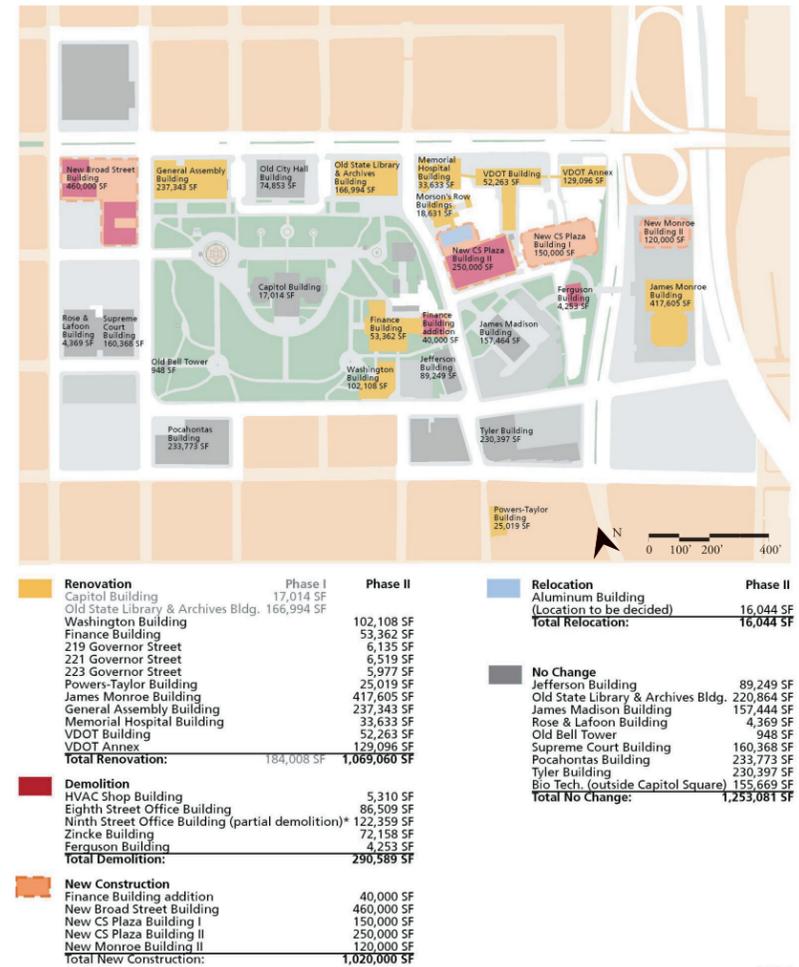


Fig. 4-30 Summary of building recommendations



## Phasing

Based on the building evaluations (MEP surveys, architectural evaluation, space use, and existing agency configurations), the master plan recommends a two-phase renovation, demolition, and relocation strategy for existing Capitol Square complex buildings. Phase I includes short-term priority projects over the next 5 years, as well as some of the projects currently underway by DGS. Phase II includes long-term (10-year) building priorities.

### Phase I (2003-2007) Building Projects

Phase I consists of immediate and short-term actions currently being implemented by DGS, with the exception of the renovation of the General Assembly Building (East and West). Also included in Phase I are projects slated for completion in 2007, before the 400th anniversary of the Jamestown Landing.

#### Renovation

- Finance Building
- Washington Building
- General Assembly Building (East and West Wings)

#### Demolition

- HVAC Shop Building
- Eighth Street Office Building
- Ninth Street Office Building

#### New Construction

- Finance Building addition (40,000 NASF)
- New Broad Street building (460,000 NASF)

### Phase II (2008-2013) Building Projects

#### Renovation

- Monroe Building
- Morson's Row buildings
- VDOT Annex
- Powers-Taylor Building

#### Demolition

- Zincke Building
- Department of Transportation Building extension
- Ferguson Building

#### Relocation

- Aluminum Building

#### New Construction

- Capitol Square Building I
- Capitol Square Building II
- Monroe Tower Link Building
- Madison Building addition



VIRGINIA STATE CAPITOL MASTER PLAN