



Santa Ana State Building (520)

605 W Santa Ana Boulevard, Santa Ana, CA 92701

Facility Condition Assessment

September 2015

Prepared for the State of California Department of General Services



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EXECUTIVE SUMMARY

BACKGROUND

This Facility Condition Assessment (FCA), prepared by EMG Corporation (EMG) in collaboration with the Department of General Services (DGS) Real Estate Services Division (RESA) and the consulting team of Hellmuth, Obata & Kassabaum, Inc. (HOK), is a component of a comprehensive long-range strategic asset management plan for DGS's portfolio of general-purpose office buildings. The goal is to determine the best course of action to address DGS's general-purpose office buildings' infrastructure deficiencies and space needs with a focus on controlling long-term costs.

The DGS portfolio comprises nearly 17 million gross square feet (GSF) of state-owned office facilities statewide, contained within 54 general-purpose state-owned office building sites. The FCA inventories and evaluates each of the DGS general purpose office buildings to benchmark current condition and establish a replacement value. This FCA assesses the infrastructure conditions for the Santa Ana State Building (520).

The assessment methodology identifies infrastructure systems and components requiring immediate repair or replacement based on their useful life expectancy. In addition, the FCA projects the capital funding needs over a ten-year lifecycle horizon period of 2015 to 2024. The assessments evaluate envelope, structure, plumbing, heating, air conditioning, energy and lighting controls, electrical, data/communications, elevators, fire protection and suppression, security, and utility capacity and systems. The replacement value is determined by multiplying the existing building square footage (SF) by the cost per SF to construct a new, similar building on a similar site.

OBJECTIVE

The objective of the FCA is to identify the capital reserves for infrastructure lifecycle repair/replacement needs over the ten-year lifecycle. The FCA projections will become the basis for the Facility Condition Index (FCI). The FCI is the ratio of immediate repair costs or capital reserve needs to the current replacement value of the existing building. The FCI is a key performance indicator that is used to objectively quantify and evaluate the current condition of a building and can be used to compare the relative condition of the subject building with other buildings within the same portfolio and as a trending matrix for infrastructure "health" over time.

The Santa Ana State Building (520) FCI ratio will be incorporated as a comparative factor in the overall DGS portfolio analysis, enabling DGS to accurately rank and prioritize building repair/replacement needs in the long-range strategic plan.

SCOPE OF ASSESSMENT

The EMG evaluation team, comprised of engineers and architects, visited the Santa Ana State Building (520) on March 5 to March 6, 2015. The evaluation team reviewed available engineering studies and construction documents to familiarize themselves with the physical conditions. The evaluation team conducted a walk-through of the building to observe building systems and components, identify physical deficiencies, and formulate recommendations to remedy any deficiencies.

SURVEY FINDINGS

One of the major goals of the FCA is to calculate the FCI, which gives an indication of a building’s overall condition. Two FCI ratios are calculated and presented – Current Year and Ten-Year. The Current Year FCI is the ratio of Immediate Repair Costs to the building’s Current Replacement Value. Similarly, the Ten-Year FCI is the ratio of anticipated Capital Reserve Needs over the next ten years to the Current Replacement Value.

The values are based on a scale from 0-100 percent. A lower FCI ratio indicates that the building’s infrastructure is in “Good” condition. Based on industry standards, a “Good” condition building will have an FCI ratio at or below five percent. A “Fair” condition building will have an FCI ratio between five and ten percent. A “Poor” condition building will have an FCI ratio between 10 and 65 percent. A building with an FCI ratio exceeding 65 percent is considered “Very Poor” and is a candidate for replacement or divestment.

The table below represents summary-level findings for the FCA. The deficiencies identified in this assessment can be combined with potential new construction requirements to develop an overall strategy that can serve as the basis for a portfolio-wide capital improvement funding strategy. Key findings from the assessment include:

Key Finding	Metric
Current Replacement Value	\$60,842,641
Immediate Repair Costs (12 months)	\$4,213,421
1-5 Year Capital Needs	\$9,619,071
6-10 Year Capital Needs	\$1,510,095
Total 10-Year Capital Reserve Needs	\$15,342,587

$$FCI = \frac{\text{Immediate Repair Costs or Ten-Year Capital Reserve Needs}}{\text{Current Replacement Value of Building}}$$

Current Year FCI

$$\text{Current FCI} = \frac{\$4,213,421}{\$60,842,641}$$

Ten-Year FCI

$$\text{Ten-Year FCI} = \frac{\$15,342,587}{\$60,842,641}$$

Current Year FCI	Ten-Year FCI
6.93 % = <i>Fair Condition</i>	25.22 % = <i>Poor Condition</i>

The major issues contributing to the Immediate Repair Costs and the Current Year FCI ratio are summarized below:

- Fire suppression sprinkler system piping replacement where required and not previously replaced.
- The HVAC system variable air volume terminals are recommended for replacement.
- Replacing the HVAC pneumatic control system with a direct digital control system is recommended.

Further detail on the specific costs that make up the Immediate Repair Costs can be found in the cost tables in the appendices.

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INTRODUCTION

BUILDING BACKGROUND

Designed by William Blurock & Partners of Corona Del Mar, California, and completed in 1976, the Santa Ana Building (520) is located within the Santa Ana Civic Center complex at 605 W. Santa Ana Boulevard in Santa Ana. The building was financed and constructed by the Orange County Civic Center Authority, a Joint Powers Authority formed by the City of Santa Ana, the County of Orange, and the Department of General Services. Full title to the Santa Ana State Building transferred to the State in December 2001. A non-state owned central plant provides heating and cooling to the building.

The eight-story plus penthouse concrete structure is the only multi-tenant, state-owned facility in Orange County. Primary tenants are the Department of Industrial Relations, Board of Equalization, the Department of Health Care Services and the Employment Development Department. Onsite parking consists of 20 covered spaces on the ground level.

The gross area is 130,010 SF with 103,750 net usable SF. The ratio of net usable to gross area is 79.7 percent. The occupancy numbers 209.

BUILDING DESCRIPTION

The building has a concrete foundation. The building's structural systems consist primarily of steel superstructures with lightweight leveling concrete-topped metal floor decks. The roof structure is flat and covered with a built-up roof membrane, which is overlaid with a pea gravel ballast.

The exterior walls are finished with pre-cast concrete paneling.

The building's interior walls are comprised of painted gypsum wallboards. The floor finishes are a combination of ceramic tiles, commercial carpet tiles, terrazzo finished flooring, and vinyl composition tiles. The interior ceilings are finished with acoustic ceiling tiles and painted gypsum ceiling boards.

The facility is served by three overhead traction passenger elevators.

Domestic hot water is supplied to the restrooms, breakroom areas, showers, and a tenant commercial kitchen via heat exchangers from the central hydronic system and storage tanks.

Heating and cooling are provided by a central system contracted through the county.

Fire/life safety systems include fire sprinklers on the first floor, fire hydrants located throughout the site surrounding, and smoke detectors, a full complement of fire alarms devices, handheld fire extinguishers, and wet standpipes. The building has a 125KW emergency diesel generator.

Landscaping consists of trees, shrubs, and minor green lawn areas. Landscaped areas are irrigated by an in-ground overhead spray sprinkler system. The parking areas include 20 surface asphalt parking lot spaces and a concrete constructed parking garage located adjacent to the facility. The sidewalks throughout the property are constructed of cast-in-place concrete, with cast-in-place concrete steps at locations of grade changes.

Project Statistics

Item	Description
Project Name	Santa Ana State Building
Building ID	520
Property Type	Administration
Year Built	1976
Number of Stories	8
Occupied	Yes
Land Area (acres)	0.46
Gross Square Feet (GSF)	130,010

FACILITY CONDITION ASSESSMENT

The goal of the FCA is to gather the data necessary to understand the existing building's condition, identify strategies to meet the building's lifecycle needs, and create the foundation for a long-range strategic plan.

COMPONENTS OF THE FCA

Current conditions analysis

The current condition analysis identifies the existing building's immediate requirements, including deferred maintenance, recommended discretionary improvements, and code non-compliance issues.

Anticipated building reserve analysis

The anticipated building reserve analysis projects the ongoing degradation of the building's components and costs associated with the reserve or replacement of these components as they reach the end of their useful lives.

Funding needs analysis

The funding needs analysis results in a summary report of deferred maintenance and systems reserve funding needs.

CALCULATION OF FUNDING NEEDS

Calculating probable funding needs involves identifying and quantifying the building's infrastructure systems or components that require immediate or future action over their lifecycle horizon. Funding needs are segregated into two categories, Immediate Repair Costs and Capital Reserve Needs. A Replacement Value is calculated and a Remaining Useful Life Estimate is determined as well as Opinions of Probable Cost in order to establish the FCI. The terms are defined as follows:

Immediate Repair Costs

Immediate Repair Costs are Opinions of Probable Cost that require immediate action as a result of: (1) material existing or potentially unsafe conditions, (2) material building or fire code violations, or (3) conditions that, if left un-remedied, have the potential to result in, or contribute to, critical element or system failure within **one year** that will likely result in a significant escalation of its remedial cost. Immediate Repair Costs are items which require action within year one.

Capital Reserve Needs

Capital Reserve Needs are recurring probable expenditures, which are not considered operation or maintenance expenses, that should be budgeted annually. In general, Capital Reserve Needs are reasonably predictable both in terms of frequency and cost. However, Capital Reserve Needs may also include components or systems that have an indeterminable life but nonetheless have a potential liability for failure within a ten-year period. The Capital Reserve Needs presented in the FCA represent average industry costs as of 2015, without inflation. The Ten-Year Expenditure Forecast table in Appendix G includes inflation by assuming a five percent annual inflation rate on Total Capital Needs by year.

Current Replacement Value

Current Replacement Value is determined by multiplying the existing building's SF by the Cost per SF to construct a new, similar building on a similar site. Current Replacement Value is not an appraised or market value for the purposes of a property sale. To estimate the cost per SF, EMG referenced Marshall & Swift's *Marshall Valuation Service*. This building cost data index is an industry standard, adjusted annually, and relied upon by the insurance industry, as well as other agencies and organizations. Cost per SF is calculated by adjusting Marshall & Swift's unit cost for a Government Office Building to account for factors related to building systems, class of construction, and location to reflect the estimated cost of construction at the subject building site.

Remaining Useful Life

Remaining Useful Life (RUL) estimate is based upon site observations, research, and judgment, along with reference to Expected Useful Life (EUL) tables from various industry sources. A sample copy of the EUL table is included in the appendices. EMG estimates when a system or component will likely need replacement based on a visual review of the current condition and the RUL estimate. Exposure to the elements, quality of installation, extent of use, and quality and amount of preventive maintenance exercised are factors that impact the effective age of a system or component. As a result, a system or component might have an effective age that is greater or less than its actual chronological age. The RUL of a system or component equals the EUL less its effective age.

Opinions of Probable Cost

Opinions of Probable Cost are estimates for individual repair or replacement and are a key consideration of this engagement. These estimates may be based on invoice or bid documents provided by the owner or building manager, cost estimates developed by construction resources (such as R.S. Means), or EMG's experience with similar properties, city cost indexes, and projections of economic conditions. Where quantities cannot be derived from building plans, lump sum costs or allowances are utilized.

Opinions of Probable Cost should only be construed as preliminary, order-of-magnitude budgets. Actual costs will likely vary from EMG's estimates depending on type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work (if applicable), quality of contractor, market conditions, and whether competitive pricing is solicited. ASTM E2018-08¹ recognizes that certain Opinions of Probable Cost cannot be developed within the scope of an FCA without further study. Instances where a visual inspection is not possible and further study is recommended, EMG provides a cost estimate of the additional study in the FCA.

Facility Condition Index

The FCI gives an indication of a building's overall state of condition. The values are based on a 0-100 percent scale. The Current Year FCI is the ratio of Immediate Repair Costs to Current Replacement Value. The Ten-Year FCI is the ratio of Capital Reserve Needs (2015 – 2024) to Current Replacement Value. The Ten-Year FCI is calculated using uninflated 2015 dollars because the year of project implementation is likely unknown or subject to change. Since both the repair/replacement costs and Current Replacement Value will increase at the same inflation rate, the impacts of inflation do not significantly affect the FCI ratio.

¹ ASTM 2018-08 is the national guideline for preparing a Facility Condition Assessment published by the American Society for the Testing of Materials.

SCOPE OF ASSESSMENT

The evaluation team conducted a walk-through survey of Santa Ana State Building (520) on March 5 to March 6, 2015. The survey included analysis and observation of the building's interior and exterior, including the roofs. The evaluation team interviewed the building maintenance staff to inquire about the subject property's previous repairs and replacements and their costs, level of preventive maintenance exercised, pending repairs and improvements, and frequency of repairs and replacements. Opinions were developed based on the site evaluation, interviews with relevant maintenance providers and facilities managers, and previous experience with comparable properties. The evaluation team questioned those knowledgeable of the subject property's physical condition and operation (or knowledgeable of similar systems) to gain comparative information to use in evaluation of the subject property. In addition, the building staff provided documents and information to the evaluation team that were relevant to the subject property's physical improvements, extent, and type of use and assisted the team in identifying potential discrepancies between reported information and observed conditions.

The evaluation team made a visual assessment for compliance with the American with Disabilities Act (ADA) Accessibility Guidelines and the California Title 24 disabled access requirements. Items determined to be out of compliance are included in the repair/replacement costs. The assessments did not include detailed measurements to determine compliance under the regulations.

The data collected in the FCA are the basis of the projected ten-year Capital Reserve Needs. The goals of the FCA are:

- Benchmark current building condition with recommended corrections for deficiencies to establish the Immediate Repair Costs.
- Estimate life expectancy of various building systems and components to establish the Capital Reserve Needs for infrastructure lifecycle repair/replacement for the ten-year assessment period from 2015 to 2024.
- Provide estimates for corrections for Immediate Repairs Costs and projections for Capital Reserve Needs for lifecycle component replacement within the ten-year projection timeframe.
- Serve as a guide for future replacement, repairs, and improvements and assist DGS in prioritizing its capital budget and expenditures across its real estate portfolio.

PRIORITY RANKING

The recorded existing conditions, identified problems and deficiencies, documented corrective action, and quantities of recommended repairs and/or replacements are documented during the assessment process. Data are collected and entered directly into the assessment and capital planning database using tablet computers. Based on the discussions with the client and industry standards, a Priority Ranking is calculated for each cost observation. The Priority Ranking calculation is a function of four key categories.

PRIORITY RANKING CATEGORIES

Building Mission Ranking

A building can be ranked on a scale of one to ten based on conversations with the client regarding the importance of each building to the overall mission of the building. The properties reviewed during this assessment are all general-purpose office buildings and for the purposes of this study are all ranked the same for Building Mission.

Remaining Useful Life Ranking

The EUL projection of the component is calibrated against the RUL as estimated by the field assessor. This ratio is then utilized as a factor in the priority ranking. An RUL of zero years is given the highest priority and always results in ranking the component as Priority 1.

Asset Component Category

Each material or system (asset) evaluated is assigned a unique Unifomat code. The Unifomat designation is then associated with a ranking based on the overall importance to the operation of the building. An asset that is related to the building envelope, e.g. roof, window, or exterior siding, is assigned a higher ranking than a component such a flooring, carpeting, or other finish material.

Functional Asset Categories

The cost associated with each asset or component evaluated is assigned to a category to include: Code Compliance, Facility Operations, Environmental Factors, Facility Functionality, and Integrity of the Facility. The Asset Categories are given a ranking based on their relative importance. For example, Code Compliance is ranked higher than Maintenance.

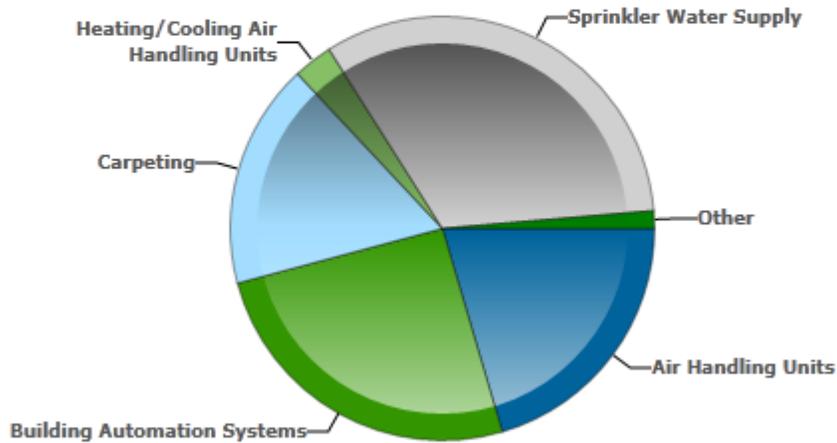
PRIORITY RATIO

The four categories above are assigned a numerical value and the values are multiplied together for each cost observation. The resulting number is then assigned a priority by the capital planning software with the lower range assigned Priority 1 and the higher range of numbers assigned among Priority 2, Priority 3, and Priority 4. Priority 5 is reserved for code issues that were permitted by the code at the time of construction but would be required only if a major renovation or code compliance project were to be undertaken.

The physical condition of building systems and related components are typically defined as being in one of four conditions: Good, Fair, Poor, or Very Poor, or a combination thereof. For the purposes of this report, the following definitions are used:

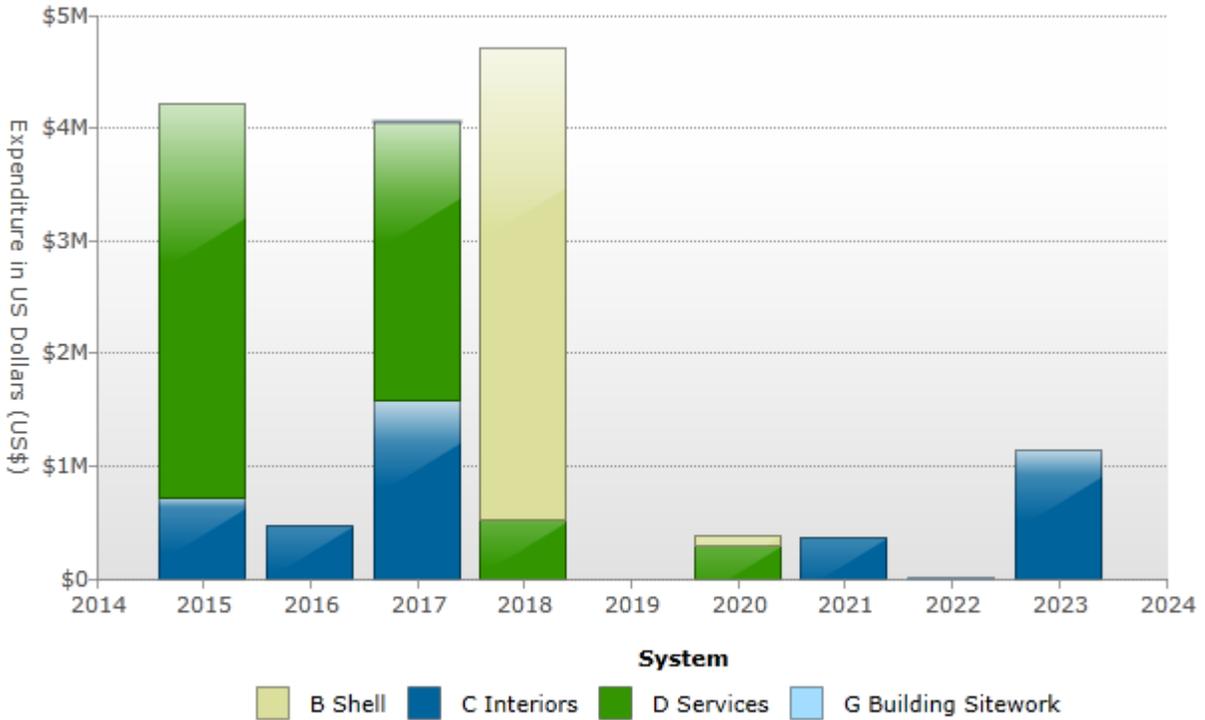
Condition	Definition
Good	In new or well-maintained condition, with no visual evidence of wear, soiling, or other deficiencies.
Fair	Subjected to wear and soiling but is still in a serviceable and functioning condition.
Poor	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
Very Poor	Subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal is now necessary.

Distribution of Immediate Needs by Building System



Level	Building System	Estimated Cost
C3025	Carpeting	\$724,059
D3041	Air Handling Units	\$861,367
D3043	Steam Distribution Systems	\$25,025
D3044	Hot Water Distribution	\$18,588
D3063	Heating/Cooling Air Handling Units	\$126,460
D3068	Building Automation Systems	\$1,070,450
D4011	Sprinkler Water Supply	\$1,374,570
D5037	Fire Alarm Systems	\$9,403
D5092	Emergency Light & Power Systems	\$3,500
	Total	\$4,213,421

Total Capital Needs By System and Year



Year	Building System							Total
	A Sub-Structure	B Shell	C Interiors	D Services	E Equip. & Furnishings	F Spec. Const. & Demolition	G Bldg. Site Work	
2015	\$0	\$0	\$724,059	\$3,489,362	\$0	\$0	\$0	\$4,213,421
2016	\$0	\$0	\$468,986	\$0	\$0	\$0	\$0	\$468,986
2017	\$0	\$0	\$1,574,044	\$2,482,870	\$0	\$0	\$5,357	\$4,062,271
2018	\$0	\$4,196,585	\$0	\$516,159	\$0	\$0	\$0	\$4,712,744
2020	\$0	\$89,088	\$0	\$285,982	\$0	\$0	\$0	\$375,070
2021	\$0	\$0	\$358,819	\$0	\$0	\$0	\$0	\$358,819
2022	\$0	\$0	\$0	\$0	\$0	\$0	\$5,357	\$5,357
2023	\$0	\$0	\$1,145,919	\$0	\$0	\$0	\$0	\$1,145,919
Total	\$0	\$4,285,673	\$4,271,827	\$6,774,374	\$0	\$0	\$10,714	\$15,342,587

CURRENT REPLACEMENT VALUE

The Current Replacement Value has been determined as \$60,842,641 for the Santa Ana State Building Building (520). The Current Replacement Value is the existing building SF multiplied by the Cost per SF to construct a new, similar building. As noted previously, the basis of the Cost per SF amount is the Marshall & Swift Cost Valuation system. A copy of the cost calculation is included in Appendix H of this report.

Building Area	Cost/SF	Current Replacement Value
130,010 GSF	\$468	\$60,842,641

FACILITY CONDITION INDEX

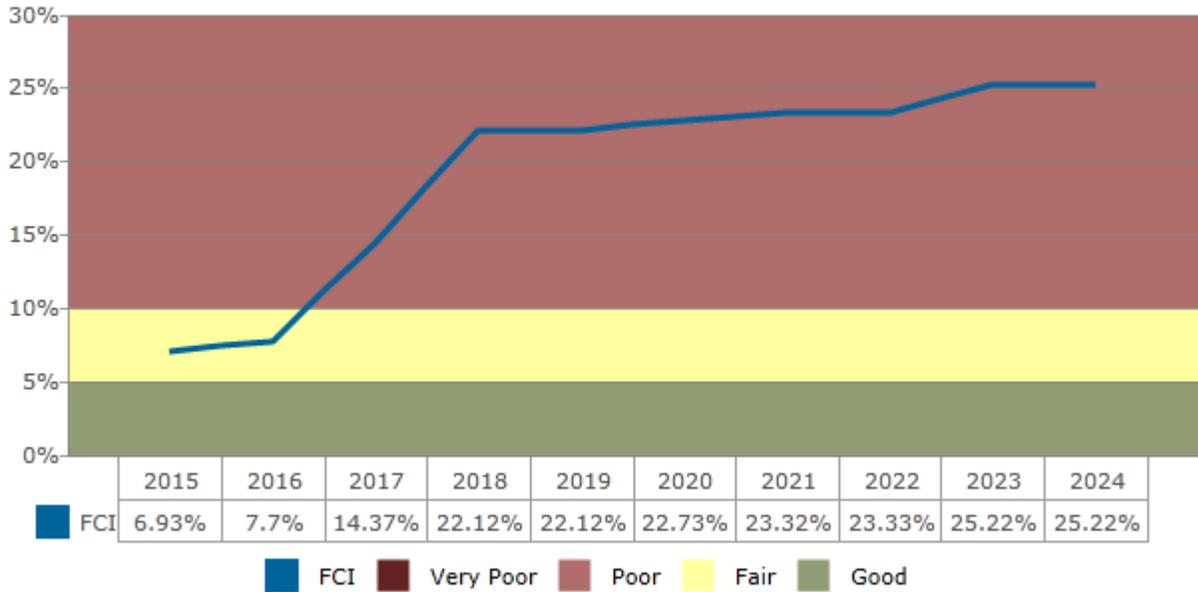
The FCI¹ is an indication of a building’s current and future overall condition. According to industry standards an FCI ratio of 65 percent, or the “rule of two-thirds,” is the threshold for identifying potential candidates for replacement or divestment.² Once the FCI ratio reaches 65 percent, or roughly two-thirds of the Current Replacement Value of the estimated cost to replace a building, it may not be prudent to continue to fund repairs. In cases where aggressive facilities planning is expected to be necessary, this threshold may be adjusted to address more pressing needs.

Condition	Definition	Value
Good	In new or well-maintained condition, with no visual evidence of wear, soiling or other deficiencies.	0% to 5%
Fair	Subjected to wear and soiling but is still in a serviceable and functioning condition.	Greater than 5% to 10%
Poor	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	Greater than 10% to 65%
Very Poor	Subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal is now necessary.	Greater than 65%

² Sean C. Rush (1991). *Managing the Facilities Portfolio: a Practical Approach to Institutional Facility Renewal and Deferred Maintenance*. National Association of College and University Business Officers. pp. 26–66. ISBN 978-0-915164-59-2.

The chart below indicates the cumulative effects of the FCI ratio over the ten-year study period assuming the required funds are NOT provided to address the identified repairs and replacements for each year.

Cumulative Effects of FCI over the Study Period



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APPENDICES

APPENDIX A: ACCESSIBILITY ISSUES

No accessibility issues were identified

APPENDIX B: GENERAL ASSESSMENT INFORMATION

A Substructure Systems

A10 FOUNDATIONS

Item	Description
A1011 Wall Foundations	A1011 Concrete Foundation
Condition	Fair
Qty / UOM	38,260 / SF
RUL (years)	36
Location	Foundation

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

B Shell Systems

B10 SUPERSTRUCTURE

Item	Description
B1012 Upper Floors Construction	B1010 Cast-in-place Concrete Beams and Floor Slabs
Condition	Fair
Qty / UOM	113,750 / SF
RUL (years)	36
Location	Throughout

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

B20 EXTERIOR ENCLOSURE

Item	Description
B2011 Exterior Wall Construction	B2011 Exterior Concrete Walls
Condition	Fair
Qty / UOM	92,000 / SF
RUL (years)	15
Location	Exterior Walls

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

Item	Description
B2021 Windows	B2021 Aluminum Windows
Condition	Fair
Qty / UOM	1,492 / EA
RUL (years)	3
Location	Exterior

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B2021	Replace B2021 Aluminum Windows	1,492.0 - EA	2652.8	IN - Beyond Rated Life	Priority 2	2018	3,957,971

Item	Description
B2031 Glazed Doors & Entrances	B2031 Glazed Entrance Doors
Condition	Fair
Qty / UOM	28 / EA
RUL (years)	5
Location	Entrance Doors

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended during the term.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B2031	Replace B2031 Glazed Entrance Doors	28.0 - EA	3181.7	IN - Beyond Rated Life	Priority 3	2020	89,088

COST SUMMARY:

Type	Year	Total Expenditures
B20 Exterior Enclosure	2018	\$3,957,971
B20 Exterior Enclosure	2020	\$89,088

B30 ROOFING

Item	Description
B3011 Roof Finishes	B3011 Built-Up Roofing
Condition	Fair
Qty / UOM	180 / SQ
RUL (years)	3
Location	Roof

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B3011	Replace B3011 Built-Up Roofing	180.0 - SQ	1325.6	IN - Beyond Rated Life	Priority 2	2018	238,614

COST SUMMARY:

Type	Year	Total Expenditures
B30 Roofing	2018	\$238,614

C Interiors Systems

C10 INTERIOR CONSTRUCTION

Item	Description
C1021 Interior Doors	C1021 Interior Doors
Condition	Fair
Qty / UOM	655 / EA
RUL (years)	2
Location	Interior Doors

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C1021	Replace C1021 Interior Doors	655.0 - EA	2403.1	IN - Beyond Rated Life	Priority 3	2017	1,574,044

COST SUMMARY:

Type	Year	Total Expenditures
C10 Interior Construction	2017	\$1,574,044

C30 INTERIOR FINISHES

Item	Description
C3012 Wall Finishes to Interior Walls	C3012 Paint Interior Walls, Drywall
Condition	Fair
Qty / UOM	219,892 / SF
RUL (years)	1
Location	Interior Wall Finishes

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, repainting the interior walls is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3012	C3012 Paint interior walls	219,892.0 - SF	2.1	IN - Appearance	Priority 3	2016	468,986

Item	Description
C3024 Flooring	C3024 Ceramic Tile
Condition	Fair
Qty / UOM	4,000 / SF
RUL (years)	13
Location	Interior Flooring

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

Item	Description
C3024 Flooring	C3024 Vinyl Tile Flooring
Condition	Fair
Qty / UOM	2,200 / SY
RUL (years)	6
Location	Interior Flooring

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3024	Replace C3024 Vinyl Tile Flooring	2,200.0 - SY	163.1	IN - Appearance	Priority 4	2021	358,819

Item	Description
C3024 Flooring	C3024 Terrazzo Flooring
Condition	Fair
Qty / UOM	15,000 / SF
RUL (years)	13
Location	Interior Finishes

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

Item	Description
C3025 Carpeting	C3025 Carpet Tiles - Standard
Condition	Fair
Qty / UOM	7,495 / SY
RUL (years)	0
Location	Office areas

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3025	Replace C3025 Carpet Tiles - Standard	7,495.0 - SY	96.6	IN - Beyond Rated Life	Priority 2	2015	724,059

Item	Description
C3031 Ceiling Finishes	C3031 Drywall – Painted Finished Ceilings
Condition	Fair
Qty / UOM	50,222 / SF
RUL (years)	8
Location	Interior Ceilings

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, repainting the interior ceilings is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3031	C3031 Paint Ceilings	50,222.0 - SF	4.5	IN - Appearance	Priority 4	2023	227,928

Item	Description
C3032 Suspended Ceilings	C3032 Acoustical Ceiling Tile
Condition	Fair
Qty / UOM	764 / CSF
RUL (years)	8
Location	Interior Ceilings

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3032	Replace C3032 Acoustical Ceiling Tile	764.0 - CSF	1201.6	IN - Appearance	Priority 4	2023	917,992

COST SUMMARY:

Type	Year	Total Expenditures
C30 Interior Finishes	2015	\$724,059
C30 Interior Finishes	2016	\$468,986
C30 Interior Finishes	2021	\$358,819
C30 Interior Finishes	2023	\$1,145,919

D Services Systems

D10 CONVEYING SYSTEMS

Item	Description
D1011 Passenger Elevators	D1011 Traction Elevator Machinery and Controls
Condition	Fair
Qty / UOM	3 / EA
RUL (years)	2
Location	Elevators 1-3

OBSERVATIONS/COMMENTS:

A 2015 assessment report by Elevator Consulting Associates is included in the appendices, and details the anticipated modernization cost included in the report. This includes the consultant's suggested additional costs for cab finishes, associated trades, and consulting fees.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D1011	Replace D1011 Traction Elevator Machinery and Controls	3.0 - EA	686140.0	FN - Modernization	Priority 2	2017	2,058,420

COST SUMMARY:

Type	Year	Total Expenditures
D10 Conveying Systems	2017	\$2,058,420

D20 PLUMBING

Item	Description
D2011 Water Closets	D2011 Commercial Grade Water Closet, 1.6 GPF Unit
Condition	Fair
Qty / UOM	5 / EA
RUL (years)	5
Location	Restrooms
Low Flow Toilet	Yes
System Grade	Commercial Grade

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2011	Replace D2011 Commercial Grade Water Closet, 1.6 GPF Unit	5.0 - EA	1233.1	IN - Beyond Rated Life	Priority 3	2020	6,166

Item	Description
D2011 Water Closets	D2011 Commercial Water Closet - Standard
Condition	Fair
Qty / UOM	39 / EA
RUL (years)	3
Location	Restrooms
Low Flow Toilet	Yes
System Grade	Commercial Grade

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2011	Replace D2011 Commercial Water Closet - Standard	39.0 - EA	1233.1	IN - Beyond Rated Life	Priority 3	2018	48,093

Item	Description
D2012 Urinals	D2012 Urinal - Standard
Condition	Fair
Qty / UOM	16 / EA
RUL (years)	3
Location	Men's Restrooms
Low Flow Toilet	Yes
System Grade	Commercial Grade

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2012	Replace D2012 Urinal - Standard	16.0 - EA	2440.7	IN - Beyond Rated Life	Priority 3	2018	39,051

Item	Description
D2013 Lavatories	D2013 China Wall Hung Sink and Faucet - Standard
Condition	Fair
Qty / UOM	38 / EA
RUL (years)	3
Location	Restrooms

OBSERVATIONS/COMMENTS:

Based on current condition and remaining useful life (RUL), replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2013	Replace D2013 China Wall Hung Sink and Faucet - Standard	38.0 - EA	1542.0	IN - Beyond Rated Life	Priority 3	2018	58,598

Item	Description
D2013 Lavatories	D2013 Wall Hung China Sink and Auto Faucet
Condition	Fair
Qty / UOM	6 / EA
RUL (years)	3
Location	Restrooms

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2013	Replace D2013 Wall Hung China Sink and Auto Faucet	6.0 - EA	1542.0	IN - Beyond Rated Life	Priority 3	2018	9,252

Item	Description
D2023 Domestic Water Supply Equipment	D2023 Domestic Water Distribution
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	5
Location	Boiler Room

OBSERVATIONS/COMMENTS:

The boiler room utilizes a domestic water booster pumping station which appears to have been upgraded in 2003. The station consists of two 7 1/2 hp pumps. Based on condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2023	Replace D2023 Domestic Water Distribution	2.0 - EA	17331.8	IN - Beyond Rated Life	Priority 3	2020	34,664

COST SUMMARY:

Type	Year	Total Expenditures
D20 Plumbing	2018	\$154,993
D20 Plumbing	2020	\$40,829

D30 HVAC

Energy Supply	
Item	Description
Fuel Oil Type	N/A
Fuel Gas Type	N/A
Solid Fuel Type	N/A
District Heat Type	N/A
District Cooling Type	N/A
Solar Thermal	N/A
Fuel Tank Type	N/A
Fuel Tank Size (gallons)	N/A
Fuel Tank Location	N/A
Gas Meter Location	N/A
Electrical Meter Location	Main Electrical Room
Water Meter Location	Boiler Room

Item	Description
D3022.1 Circulating Pumps	D3023 HW Circulating 10-25 HP
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	10
Location	Boiler Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

Item	Description
D3022.1 Circulating Pumps	D3022 HVAC Chilled Water Circulation Pumps 40 HP
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	2
Location	Boiler Room

OBSERVATIONS/COMMENTS:

The 40 hp chilled water distribution pumps and associated motors appear to be original, and in functional condition. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3022	Replace D3022 HVAC Chilled Water Circulation Pumps 40 HP	2.0 - EA	44806.8	IN - Beyond Rated Life	Priority 2	2017	89,614

Item	Description
D3022.1 Circulating Pumps	D3022 HVAC Heating Water Circulation Pumps 7.5 HP
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	5
Location	Boiler Room

OBSERVATIONS/COMMENTS:

The 5 hp HVAC hot water distribution pumps and associated motors appear to be original; one is functional, the other is being rebuilt. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3022	Replace D3022 HVAC Heating Water Circulation Pumps 7.5 HP	2.0 - EA	19837.2	IN - Beyond Rated Life	Priority 3	2020	39,674

Item	Description
D3023 Auxiliary Equipment	D3023 Condensate Return Pumps
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	2
Location	Boiler Room

OBSERVATIONS/COMMENTS:

The primary steam station is located within the utility area in the parking garage, and is original to the 1976 construction of the building. Based on condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3023	Replace D3023 Condensate Return Pumps	2.0 - EA	17336.2	IN - Beyond Rated Life	Priority 2	2017	34,672

Item	Description
D3041.1 Air Handling Units	D3041 VAV Boxes
Condition	Poor
Qty / UOM	345 / EA
RUL (years)	0
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

Based on condition and zero years RUL, replacement is recommended. The property has proposed replacing the Constant Air Volume(CAV)distribution system with a Variable Air Volume system to reduce energy costs.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041 VAV Boxes	345.0 - EA	2496.7	IN - Beyond Rated Life	Priority 1	2015	861,367

Item	Description
D3041.1 Air Handling Units	D3041 Interior AHU 2800 CFM
Condition	Fair
Qty / UOM	3 / EA
RUL (years)	2
Location	Lower Level

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041 Interior AHU 2800 CFM	3.0 - EA	11461.6	IN - Beyond Rated Life	Priority 2	2017	34,385

Item	Description
D3041.1 Air Handling Units	D3041 AHU, Fan Motor 30 HP
Condition	Fair
Qty / UOM	8 / EA
RUL (years)	3
Location	Mechanical Room on Each Floor

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041 AHU, Fan Motor 30 HP	8.0 - EA	35811.5	IN - Beyond Rated Life	Priority 2	2018	286,492

Item	Description
D3041.1 Air Handling Units	D3041 Supply Air SF - 4000 CFM - 10 HP
Condition	Fair
Qty / UOM	3 / EA
RUL (years)	3
Location	Penthouse Mechanical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041 Supply Air SF - 4000 CFM - 10 HP	3.0 - EA	12091.5	IN - Beyond Rated Life	Priority 2	2018	36,274

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust Fan < 15,000 CFM
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	2
Location	Rooftop

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3042	Replace D3042 Exhaust Fan < 15,000 CFM	1.0 - EA	16594.2	IN - Beyond Rated Life	Priority 2	2017	16,594

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust Fan 2000 CFM
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	2
Location	Rooftop

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3042	Replace D3042 Exhaust Fan 2000 CFM	2.0 - EA	3450.4	IN - Beyond Rated Life	Priority 2	2017	6,901

Item	Description
D3043 Steam Distribution Systems	D2020 Domestic Hot Water Heat Exchanger
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	Boiler Room

OBSERVATIONS/COMMENTS:

The steam heat exchanger for domestic hot water is in poor condition. Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3043	Replace D2020 Domestic Hot Water Heat Exchanger	1.0 - EA	25025.3	IN - Beyond Rated Life	Priority 1	2015	25,025

Item	Description
D3044 Hot Water Distribution	D3044 Steam Trap, 3-Inch,
Condition	Poor
Qty / UOM	5 / EA
RUL (years)	0
Location	Parking Garage

OBSERVATIONS/COMMENTS:

Based on condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3044	Replace D3044 Steam Trap, 3-Inch,	5.0 - EA	3717.5	IN - Beyond Rated Life	Priority 1	2015	18,588

Item	Description
D3052 Package Units	D3052 Computer/Sever Room AC, 3 Ton
Condition	Good
Qty / UOM	1 / EA
RUL (years)	17
Location	Rooftop

OBSERVATIONS/COMMENTS:

The main computer server room utilizes a single, three ton ductless split system cooling unit installed in 2011.

Based on condition and RUL, no further action is recommended.

Item	Description
D3063 Heating/Cooling Air Handling Units	D3063 Variable Frequency Drive, 40 HP Fan Motor, Install
Condition	Poor
Qty / UOM	6 / EA
RUL (years)	0
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

The older variable frequency drives (VFDs) are reported by the maintenance staff to be failing. Based on condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3063	Replace D3063 Variable Frequency Drive, 40 HP Fan Motor, Install	6.0 - EA	21076.6	IN - Beyond Rated Life	Priority 1	2015	126,460

Item	Description
D3068 Building Automation Systems	D3068 Pneumatic HVAC Controls w/DDC
Condition	Poor
Qty / UOM	130,010 / SF
RUL (years)	0
Location	HVAC DDC

OBSERVATIONS/COMMENTS:

Minor control upgrades were reportedly preformed circa 1990; the control system is an antiquated pneumatic system relying on simple two-input controllers only. The software being used is 'RC Studio', a legacy system with minimal functionality. It is recommended to convert the control system to a web-based electronic direct digital control (DDC) platform.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3068	Replace D3068 Pneumatic HVAC Controls w/DDC	130,010.0 - SF	8.2	FN - Modernization	Priority 1	2015	1,070,450

COST SUMMARY:

Type	Year	Total Expenditures
D30 HVAC	2015	\$2,101,890
D30 HVAC	2017	\$182,166
D30 HVAC	2018	\$322,767
D30 HVAC	2020	\$39,674

D40 FIRE PROTECTION SYSTEMS

Fire and Life Safety System	
Item	Description
Fire Alarm System Components Present	
Smoke detectors	Yes
Pull stations	Yes
Audible alarms	Yes
Strobe lights	Yes
Central fire alarm panel	Yes
Annunciator panel	Yes
Smoke Detectors Power Supply	Hardwired Electric
Carbon Monoxide Detectors	No
Heat Detector	Yes
Central Fire Alarm Panel Location	Security Desk
Annunciator Panel Location	Admin office
Fire Extinguishers	Yes
Fire Extinguisher Inspection Date	N/A
Distance to Nearest Fire Hydrant (ft)	50
Illuminated Exit Signs	Yes
Kitchen Suppression Systems	No
Halon Gas Systems	No
Smoke Evacuation Systems	No
Fire-rated Stairwells	Yes
Fire-rated Stairwell Finish	Masonry
Stairwell Discharge	Exterior of the building at Grade
Stairwell Pressurized	Yes
Fire-Rated Doors Observed	Yes
Location of Fire-Rated Doors	Stairwells
Fire Alarm Service Company	Champion Fire
Date of Last Fire Alarm Service	September 11, 2013
Are the individual office unit fire alarm systems monitored?	Yes
Are the common area fire alarm systems monitored?	Yes
Types of Common Areas Monitored	N/A
Fire Alarm Monitoring Company	Champion Fire

Item	Description
D4011 Sprinkler Water Supply	D4011 Wet-Pipe Sprinkler System
Condition	Poor
Qty / UOM	130,010 / SF
RUL (years)	0
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

Prior fire suppression service is limited to areas of the first floor. Replacement of limited system, and installation of new system at balance of locations are recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D4011	D4011 Install Wet Pipe Sprinkler System	130,010.0 - SF	10.6	CC - Life Safety	Priority 1	2015	1,374,570

COST SUMMARY:

Type	Year	Total Expenditures
D40 Fire Protection Systems	2015	\$1,374,570

D50 ELECTRICAL SYSTEMS

Item	Description
D5012 Low Tension Service & Dist.	D5012 Breaker Panel 225 Amps, 30 Circuits
Condition	Fair
Qty / UOM	24 / EA
RUL (years)	2
Location	Utility Areas/Closets

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5012 Breaker Panel 225 Amps, 30 Circuits	24.0 - EA	7864.3	IN - Reliability	Priority 2	2017	188,744

Item	Description
D5012 Low Tension Service & Dist.	D5010 Switchgear, Mainframe,>1200 Amps
Condition	Fair
Qty / UOM	3 / EA
RUL (years)	2
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5010 Switchgear, Mainframe,>1200 Amps	3.0 - EA	17847.0	IN - Reliability	Priority 2	2017	53,541

Item	Description
D5012 Low Tension Service & Dist.	D5012 Secondary Dry Transformer 112 kVA
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	3
Location	Utility Areas/Closets

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5012 Secondary Dry Transformer 112 kVA	2.0 - EA	19199.4	IN - Reliability	Priority 3	2018	38,399

Item	Description
D5037 Fire Alarm Systems	D5037 Fire Alarm Panel
Condition	Good
Qty / UOM	1 / EA
RUL (years)	0
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

The existing fire alarm panel will need to be replaced when fire sprinklers and are installed or expanded. The State Fire Marshall has notified the building that any new systems tied into the exiting fire alarm panel will exceed the connection points on the panel. Replacement of the panel is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5037	Replace D5037 Fire Alarm Panel	1.0 - EA	9402.5	CC - Life Safety	Priority 1	2015	9,403

Item	Description
D5037 Fire Alarm Systems	D5037 Fire Alarm System
Condition	Fair
Qty / UOM	130,010 / SF
RUL (years)	10
Location	Throughout Interiors

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

Item	Description
D5092 Emergency Light & Power Systems	D5092 Emergency Generator 125 kW
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	5
Location	Exterior of Building

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5092	Add secondary containment	1.0 - EA	3500.0	EN - Air/ Water Quality	Priority 1	2015	3,500
D5092	Replace D5092 Emergency Generator 125 kW	1.0 - EA	194865.2	CC - Life Safety	Priority 3	2020	194,865

Item	Description
D5092 Emergency Light & Power Systems	D5092 Emergency Transfer Switch
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	5
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5092	Replace D5092 Emergency Transfer Switch	1.0 - EA	10613.1	CC - Life Safety	Priority 3	2020	10,613

COST SUMMARY:

Type	Year	Total Expenditures
D50 Electrical Systems	2015	\$12,903
D50 Electrical Systems	2017	\$242,285
D50 Electrical Systems	2018	\$38,399
D50 Electrical Systems	2020	\$205,478

G Building Sitework Systems

G20 SITE IMPROVEMENTS

Site Information	
Item	Description
Main Ingress and Egress	West Santa Ana Boulevard
Access from	S
Additional Entrances	Civic Center Plaza
Access from	SE
Parking Count: Open lot	20
Parking Count: Sheltered by carports	0
Parking Count: Private garages	0
Parking Count: Subterranean garage	0
Parking Count: Freestanding parking structure	0
Number of ADA Compliant Spaces	0
Number of ADA Compliant Spaces for Vans	2
Method of obtaining parking count	Physical count
Property Identification Sign-Primary	Structure mounted
Property Identification Sign- Secondary	N/A
Illuminated Identification Signage	N/A
Building Identification Sign	Yes
Illuminated Sign	N/A
Location of Property ID Sign	Front elevation of building
Trees Present	No
Shrubs Present	Yes
Grasses Present	No
Flower beds Present	Yes
Decorative Rocks Present	Yes
Lava Rocks Present	No
Ponds Present	No
Fountains Present	No
Topography	Flat

Item	Description
G2022 Paving & Surfacing	G2020 Parking Lot Markings
Condition	Fair
Qty / UOM	7,200 / SF
RUL (years)	2
Location	Site

OBSERVATIONS/COMMENTS:

The asphalt pavement will require cracksealing, sealing and striping during the reserve term.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
G2022	Replace G2020 Parking Lot Markings	7,200.0 - SF	0.7	IN - Beyond Rated Life	Priority 3	2017	5,357
G2022	Replace G2020 Parking Lot Markings	7,200.0 - SF	0.7	IN - Beyond Rated Life	Priority 3	2022	5,357

COST SUMMARY:

Type	Year	Total Expenditures
G20 Site Improvements	2017	\$5,357
G20 Site Improvements	2022	\$5,357

The weather at the time of the assessment was:

Item	Description
Approximate Outdoor Temperature (degrees F)	70
Weather Conditions	Clear
Snow Covering Ground	No
Wind Conditions	Little to no wind

The documentation provided at the time of the assessment is as:

Item	Description
Site Plan Reviewed	No
Floor Plan Reviewed	Yes
Construction Drawings Reviewed	No
Termite Inspection Report Reviewed	No
Boiler Certificates Reviewed	No
Document Year Built Information Obtained From	State of CA DGS Fact Sheet

APPENDIX C: CERTIFICATION

EMG has completed a FCA of the subject property listed on the cover page. The FCA was performed at the Client's request using methods and procedures consistent with good commercial and customary practice conforming with ASTM E2018-08, Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process. Within this Property Condition Report (PCR), EMG's reference to the Client follows the ASTM guide's definition of User, that is, the party that retains EMG for the preparation of a baseline FCA of the subject property.

This report is exclusively for the use and benefit of the Client identified on the first page of this report. The purpose for which this report shall be used shall be limited to the use as stated in the contract between the client and EMG.

The opinions EMG expresses in this report were formed utilizing the degree of skill and care ordinarily exercised by any prudent architect or engineer in the same community under similar circumstances. EMG assumes no responsibility or liability for the accuracy of information contained within this report that has been obtained from the Client or the Client's representatives, from other interested parties, or from the public domain. The conclusions presented represent EMG's professional judgment based on information obtained during the course of this assignment. EMG's evaluations, analyses, and opinions are not representations regarding the building design, structural soundness, or actual value of the property. Factual information regarding operations, conditions, and test data provided by the Client or the Client's representative has been assumed to be correct and complete. The conclusions presented within this report are based on the data provided, observations made, and conditions that existed specifically on the date of the assessment. EMG certifies that EMG has no undisclosed interest in the subject property, that EMG's relationship with the Client is at arms-length, and that EMG's employment and compensation are not contingent upon the findings or estimated costs to remedy any noted deficiencies due to deferred maintenance and/or any noted component or system replacements.

EMG's FCA cannot wholly eliminate the uncertainty regarding the presence of physical deficiencies and/or the performance of a subject property's building systems. Preparation of a FCA in accordance with ASTM E2018-08 is intended to reduce, but not eliminate, the uncertainty regarding the potential for component or system failure and to reduce the potential that such component or system failure may not be initially observed. This FCA was prepared recognizing the inherent subjective nature of EMG's opinions as to such issues as workmanship, quality of original installation, and estimating the remaining useful life of any given component or system. It should be understood that EMG's suggested remedy may be determined under time constraints or may be formed without the aid of engineering calculations, testing, exploratory probing, the removal of materials, or design. Furthermore, there may be other alternate or more appropriate schemes or methods to remedy the noted physical deficiencies. EMG's opinions are generally formed without detailed knowledge from individuals familiar with the performance of noted components or systems.

Any questions regarding this report should be directed to the Program Manager.

Prepared By: Geoffrey Straniere, Field Observer

Reviewed By: 
Matthew Anderson, Program Manager

APPENDIX D: PHOTOS



Front elevation



:- Typical elevation



:- Typical elevation



:- Typical elevation



B2011 Exterior Concrete Walls



B2011 Exterior Concrete Walls



B2021 Aluminum Windows



B2031 Glazed Entrance Doors



B2031 Glazed Entrance Doors



C1021 Interior Doors



C1021 Interior Doors



C3012 Paint Interior Walls, Drywall



C3024 Terrazzo Flooring



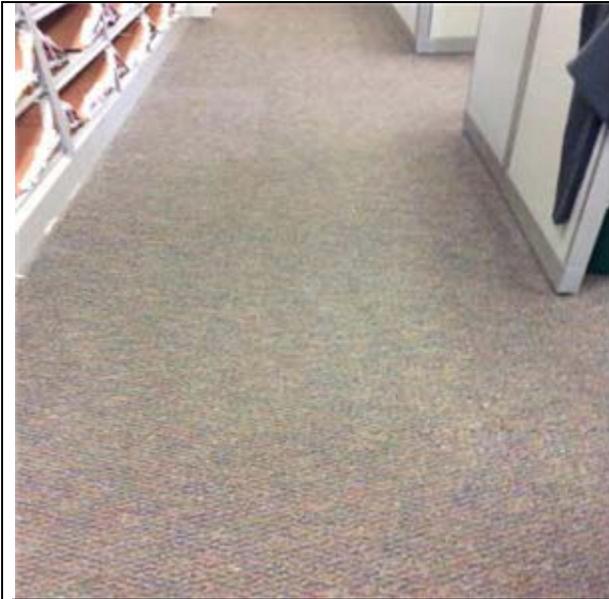
C3024 Ceramic Tile



C3024 Vinyl Tile Flooring



C3025 Carpet Tiles - Standard



C3025 Carpet Tiles - Standard



C3031 Drywall – Painted Finished Ceilings



C3032 Acoustical Ceiling Tile



D2011 Commercial Grade Water Closet, 1.6 GPF Unit



D2011 Commercial Water Closet - Standard



D2012 Urinal - Standard



D2013 China Wall Hung Sink and Faucet - Standard



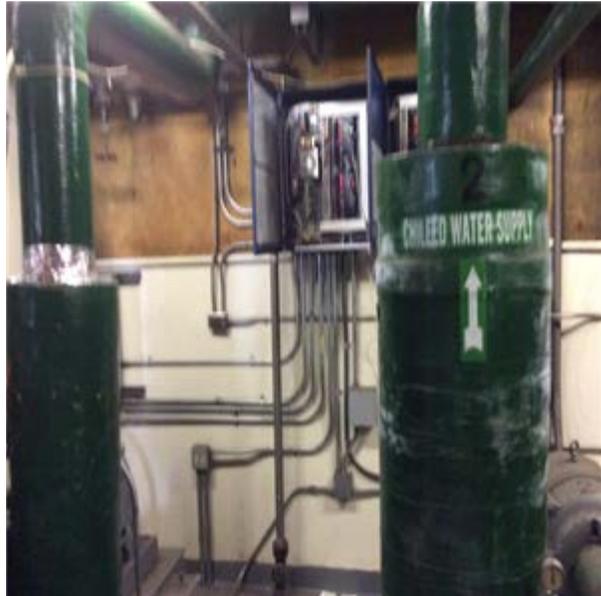
D2023 Domestic Water Distribution



D3022 HVAC Heating Water Circulation Pumps 7.5 HP



D3023 HW Circulating 10-25 HP



D3022 HVAC Chilled Water Circulation Pumps 40 HP



D3023 Condensate Return Pumps



D3041 Interior AHU 2800 CFM



D3041 Supply Air SF - 4000 CFM - 10 HP



D3041 VAV Boxes



D3041 AHU, Fan Motor 30 HP



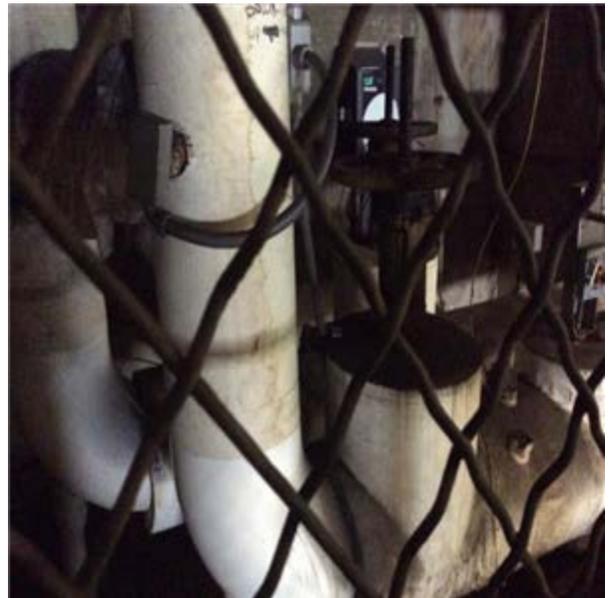
D3042 Exhaust Fan 2000 CFM



D3042 Exhaust Fan < 15,000 CFM



D2020 Domestic Hot Water Heat Exchanger



D3044 Steam Trap, 3-Inch,



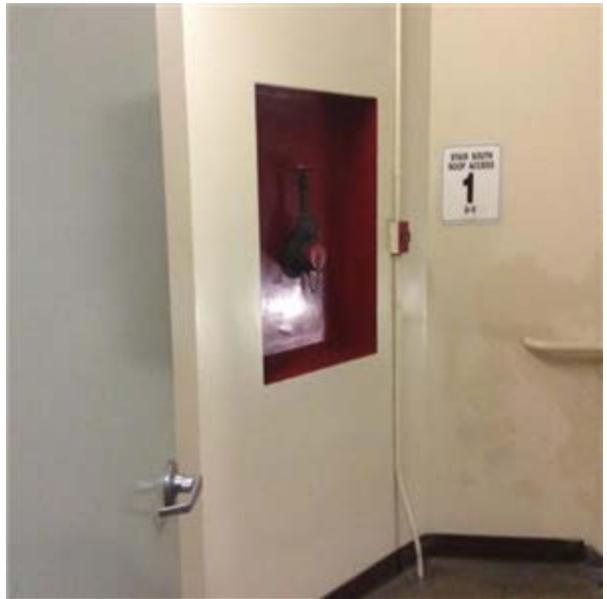
D3052 Computer/Sever Room AC, 3 Ton



D3063 Variable Frequency Drive, 40 HP Fan Motor, Install



D3068 Pneumatic HVAC Controls w/DDC



D4011 Wet-Pipe Sprinkler System



D5010 Switchgear, Mainframe, >1200 Amps



D5012 Breaker Panel 225 Amps, 30 Circuits



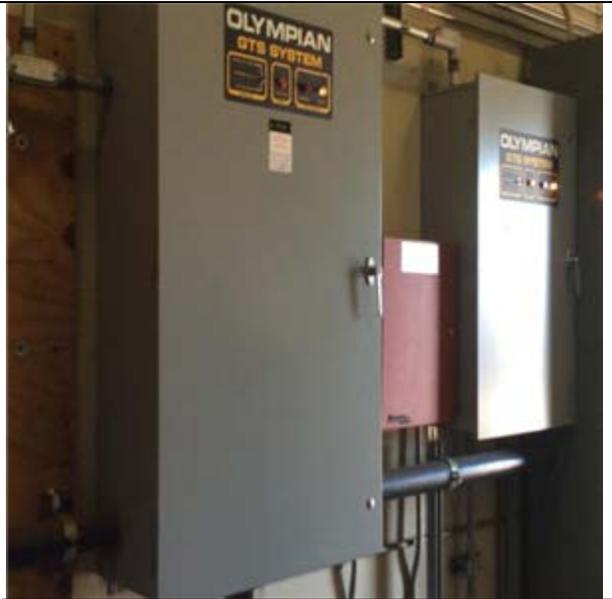
D5012 Secondary Dry Transformer 112 kVA



D5037 Fire Alarm Panel



D5037 Fire Alarm System



D5092 Emergency Transfer Switch



D5092 Emergency Generator 125 kW



G2020 Parking Lot Markings

APPENDIX E: TERMINOLOGY AND ABBREVIATIONS

TERMINOLOGY and ABBREVIATIONS	
Actual Knowledge	Information or observations known first hand by EMG.
ADA	The Americans with Disabilities Act
AHU	Air Handling Unit
Ancillary Structures	Structures that are not the primary improvements of the Property but which may have been constructed to provide support uses.
ASTM	American Society for Testing and Materials
Baseline	A minimum scope level of observation, inquiry, research, documentation review, and cost estimating for conducting a Property Condition Assessment as normally conducted by EMG.
BOMA	Building Owners & Managers Association
Building	Referring to the primary building or buildings on the Property, which are within the scope of the FCA.
Building Codes	A compilation of rules adopted by the municipal, county and/or state governments having jurisdiction over the Property that govern the property's design &/or construction of buildings.
Building Department Records	Information concerning the Property's compliance with applicable Building, Fire and Zoning Codes that is readily available for use by EMG within the time frame required for production of the Property Condition Assessment.
Building Systems	Interacting or interdependent components that comprise a building such as structural, roofing, side wall, plumbing, HVAC, water, sanitary sewer and electrical systems.
BUR	Built Up Roof
CBC	California Building Code
Component	A piece of equipment or element in its entirety that is part of a system.
CFM	Cubic Feet per Minute, usually referring to air flow in a heating or cooling system.
Dangerous or Adverse Conditions	Situations which may pose a threat or possible injury to the Project Manager, or those situations which may require the use of special protective clothing, safety equipment, access equipment, or any precautionary measures.
Deferred Maintenance	Deficiencies that result from postponed maintenance, or repairs that have been put off until a later time and that require repair or replacement to an acceptable condition relative to the age of the system or property.
DHW	Domestic Hot Water
DDC	Direct Digital Controls, for HVAC systems
Dismantle	To take apart; disassemble; tear down any component, device or piece of equipment that is bolted, screwed, secured, or fastened by other means.
DWV	Drainage Waste Ventilation
EPDM	Ethylene propylene diene terpolymer, a single ply roofing material, usually black
EIFS	Exterior Insulation and Finish System
EMS	Energy Management System
Engineering	Analysis or design work requiring extensive formal education, preparation and experience in the use of mathematics, chemistry, physics, and the engineering sciences as provided by a Professional Engineer licensed to practice engineering by any state of the 50 states.
Expected Useful Life (EUL)	The average amount of time in years that a system or component is estimated to function when installed new.

TERMINOLOGY and ABBREVIATIONS	
FEMA	Federal Emergency Management Agency
Fire Department Records	Information generated or acquired by the Fire Department having jurisdiction over the Property, and that is readily available to EMG within the time frame required for production of the FCA.
FIRM	Flood Insurance Rate Maps
FM	Factory Mutual
FRT	Fire Retardant Treated
Guide	A series of options or instructions that do not recommend a specific course of action.
HP	Horse Power, a unit of measure for pumps and motors.
HVAC	Heating, Ventilating & Air Conditioning
IAQ	Indoor Air Quality
Immediate Repairs	Physical deficiencies that require immediate action as a result of: (i) existing or potentially material unsafe conditions, (ii) significant negative conditions impacting tenancy/marketability, (iii) material building code violations, or (iv) poor or deteriorated condition of critical element or system, or (v) a condition that if left “as is”, with an extensive delay in addressing same, has the potential to result in or contribute to critical element or system failure within one (1) year.
Interviews	Interrogatory with those knowledgeable about the Property.
kVA	Kilo Volt Amps, a measurement used for electrical devices where Amps is the plural of Amperage, a measure of electrical force.
kW	One thousand Watts, a measure of electrical output.
Material	Having significant importance or great consequence to the asset’s intended use or physical condition.
MEP	Mechanical, Electrical, and Plumbing
NFPA	National Fire Protection Association
Observations	The results of the Project Manager’s Walk-through Survey.
Observe	The act of conducting a visual, unaided survey of items, systems or conditions that are readily accessible and easily visible on a given day as a result of the Project Manager’s walk-through.
Obvious	That which is plain or evident; a condition that is readily accessible and can be easily seen by the Project Manager as a result of his Walk-through without the removal of materials, moving of chattel, or the aid of any instrument, device, or equipment.
Owner	The entity holding the deed to the Property that is the subject of the FCA.
Physical Deficiency	Patent, conspicuous defects, or significant deferred maintenance of the Property’s material systems, components, or equipment as observed during the Project Manager’s Walk-through Survey. Material systems, components, or equipment that are approaching, have realized, or have exceeded their typical Expected Useful Life (EUL); or, that have exceeded their useful life result of abuse, excessive wear and tear, exposure to the elements, or lack of proper or adequate maintenance. This definition specifically excludes deficiencies that may be remedied with routine maintenance, miscellaneous repairs, normal operating maintenance, and conditions that do not present a material deficiency to the Property.
PVC	Poly Vinyl Chloride

TERMINOLOGY and ABBREVIATIONS	
Practically Reviewable	Information that is practically reviewable means that the information is provided by the source in a manner and form that, upon examination, yields information relevant to the property without the need for extraordinary analysis of irrelevant data.
Practice	A definitive procedure for performing one or more specific operations or functions that does not produce a test result.
Primary Improvements	The site and building improvements that are of fundamental importance with respect to the Property.
Project Manager	The individual Professional Engineer, Contractor, or Registered Architect having a general, well rounded knowledge of all pertinent site and building systems and components that conducts the on site visit and walk-through observation.
Property	The site and building improvements, which are specifically within the scope of the FCA to be prepared in accordance with the agreement between the Client and EMG.
Readily Accessible	Those areas of the Property that are promptly made available for observation by the Project Manager without the removal of materials or chattel, or the aid of any instrument, device, or equipment at the time of the Walk-through Survey.
Reasonably Ascertainable	Information that is publicly available, provided to EMG's offices from either its source or an information research/retrieval concern, practically reviewable, and available at a nominal cost for either retrieval, reproduction or forwarding.
Recreational Facilities	Spas, saunas, steam baths, swimming pools, tennis courts, playground equipment, and other exercise, entertainment, or athletic facilities.
Remaining Useful Life (RUL)	<p>The consultant's professional opinion of the number of years before a system or component will require replacement or reconditioning. The estimate is based upon observation, available maintenance records, and accepted EUL's for similar items or systems.</p> <p>Inclement weather, exposure to the elements, demand on the system, quality of installation, extent of use, and the degree and quality of preventive maintenance exercised are all factors that could impact the RUL of a system or component. As a result, a system or component may have an effective age greater or less than its actual age. The RUL may be greater or less than its Expected Useful Life (EUL) less actual age.</p>
Replacement Costs	Costs to replace the system or component "in kind" based on Invoices or Bid Documents provided by the current owner or the client, construction costs developed by construction resources such as <i>Means</i> and <i>Dodge</i> , EMG's experience with past costs for similar properties, or the current owner's historical incurred costs.
RTU	Rooftop Unit
Shut-Down	Equipment or systems that are not operating at the time of the Project Manager's Walk-through Survey. Equipment or systems may be considered shutdown if it is not in operation as a result of seasonal temperatures.
Significant	Important, material, and/or serious.
Site Visit	The visit to the property by EMG's Project Manager including walk-through visual observations of the Property, interviews of available project personnel and tenants (if appropriate), review of available documents and interviews of available municipal personnel at municipal offices, all in accordance with the agreement for the Property Condition Assessment.

TERMINOLOGY and ABBREVIATIONS	
Specialty Consultants	Practitioners in the fields of engineering, architecture; or, building system mechanics, specialized service personnel or other specialized individuals that have experience in the maintenance and repair of a particular building component, equipment, or system that have acquired detailed, specialized knowledge in the design, assessment, operation, repair, or installation of the particular component, equipment, or system.
Structural Component	A component of the building, which supports non-variable forces or weights (dead loads) and variable forces or weights (live loads).
Suggested Remedy	A preliminary opinion as to a course of action to remedy or repair a physical deficiency. There may be alternate methods that may be more commensurate with the Client's requirements. Further investigation might make other schemes more appropriate or the suggested remedy unworkable. The suggested remedy may be to conduct further research or testing, or to employ Specialty Consultants to gain a better understanding of the cause, extent of a deficiency (whether observed or highly probable), and the appropriate remedy.
Survey	Observations as the result of a walk-through scan or reconnaissance to obtain information by EMG of the Property's readily accessible and easily visible components or systems.
System	A combination of interacting or interdependent components assembled to carry out one or more functions.
Technically Exhaustive	The use of measurements, instruments, testing, calculations, exploratory probing or discover, and/or other means to discover and/or troubleshoot Physical Deficiencies, develop scientific or Engineering findings, conclusions, and recommendations.
Term	Reserve Term: The number of years that Capital Reserves are projected for as specified in the Expenditure Forecast.
TPO	Thermoplastic polyolefin, a white single ply roofing material, usually white
Timely Access	Entry provided to the Project Manager at the time of his site visit.
UST	Underground Storage Tank
Walk-through Survey	The Project Manager's site visit of the Property consisting of his visual reconnaissance and scan of readily accessible and easily visible components and systems. This definition connotes that such a survey should not be considered in depth, and is to be conducted without the aid of special protective clothing, exploratory probing, removal of materials, testing, or the use of special equipment such as ladders, scaffolding, binoculars, moisture meters, air flow meters, or metering/testing equipment or devices of any kind. It is literally the Project Manager's walk of the Property and observations.

APPENDIX F: BUILDING FACT SHEET

SANTA ANA BUILDING FACT SHEET
605 W. Santa Ana Boulevard
Santa Ana
Orange County
Category 2 - Medium Priority - Further Study Required

BUILDING INFORMATION

- Age: 38 years (completed in 1976)
- Size:*
 - 8-story
 - 130,010 GSF 103,750 NUSF 97,367 Assigned SF
 - 0.46 Acre Parcel
 - 20 surface parking spaces
 - Capacity - 209 occupants
- Financial:
 - Joint Powers acquisition paid off in December 2001
 - No Encumbrances
 - BRA Rate - \$1.64/month per SF, FY 2013-14 (DGS Price Book)
 - \$1.69/month per SF, FY 2014-15 (Proposed DGS Price Book)
 - A non state-owned central plant provides heating and cooling
- LEED Status: Certified LEED-EB, 2010
- Tenants: 10 Agencies, larger tenants include Department of Industrial Relations (28,074 SF), Board of Equalization (18,505 SF), Department of Health Care Services (17,736 SF) and Employment Development Department (13,255 SF)



SPI Structure #: 2952
 Real Property #: 9634
 BPM #: 520

COMPLETED STUDIES AND SIGNIFICANT FINDINGS

A. 1995 Seismic Retrofit Study

This investigation classified the building as a Level VI seismic risk, and resulted in completion of a structural retrofit, completed in 2003 (see additional details below).

B. 1998 Renovation / Sale Analysis

This analysis compared the cost / benefits over a 25-year timeframe of renovating the existing building to building a new building. The study recommended that the state complete the required seismic and fire and life safety projects, and continue to occupy the building. The project cost was \$10,949,000, of which, the Federal Emergency Management Agency (FEMA) contributed \$3,882,000. The renovation was completed in 2003, at which time the building received the Energy Star Award for upgrades performed as part of the project.

C. 2010 American Disability Act Accessibility Compliance Survey

Major accessibility-related deficiencies were identified throughout the building. These deficiencies create path-of-travel issue for future tenant improvement projects.

D. 2012 Access Compliance Conceptual Budget/Evaluation

Follow up to the 2010 American Disability Act Accessibility compliance Survey this report provides the Conceptual Cost and Path of Travel Plans. ADA upgrades have been proposed for this building as part of DGS's ten year ADA Compliance Upgrades and Deferred Special Repairs Program.

ADDITIONAL BUILDING ISSUES

Electrical usage is at full capacity, any new tenancy or configuration will require additional panel capacity. The cost to complete necessary tenant improvements is increased due to the need for asbestos mitigation and path of travel accessibility upgrades. There is a large homeless population surrounding the building, and the level of building security currently in place does not guarantee prevention of unauthorized entry.

CURRENT UTILIZATION PROJECTS

- CUIAB to backfill 20,000 sf of former BOE space on the 1st and 2nd floor.

RECENTLY COMPLETED PROJECTS

TBD

Cost

* Source: Statewide Property Inventory

Santa Ana Building Fact Sheet

605 W. Santa Ana Boulevard
Santa Ana

**Category 2 - Medium Priority
Further Study Required**

ACTIVE PROJECTS

Cost

TBD

PLANNED SPECIAL REPAIRS BY FISCAL YEAR

Estimated Cost

TBD

DGS STRATEGY: Significant ADA and HazMat issues need to be resolved to ensure adequate conditions for backfill tenants. Further study is necessary to determine the specific repairs required as well as the appropriate funding source. Future Five Year Plans may include funding requests for projects.

APPENDIX G: COST TABLES

10 YEAR EXPENDITURE FORECAST



Santa Ana Building
605 West Santa Ana Boulevard
Santa Ana, California

Useful Life	Estimated Useful Life
	Remaining Useful Life

Plan Type	OP: Operations	CC: Code Compliance
	EN: Environmental	FN: Functionality
	IN: Integrity	

Legend	Deferred
	Scheduled

Element #	Component Description	Asset	Location	Action	EUL (Yrs)	RUL (Yrs)	Qty.	Unit of Meas.	Unit Cost	Plan Type	Priority	2015 Year 0	2016 Year 1	2017 Year 2	2018 Year 3	2019 Year 4	2020 Year 5	2021 Year 6	2022 Year 7	2023 Year 8	2024 Year 9	Total - Deferred	Total - Scheduled
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A. SUBSTRUCTURE																																
Substructure Subtotal												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

B. SHELL																																
B20 EXTERIOR ENCLOSURE																																
B2021	Aluminum Window, 4-0 X 6-0, Upper Floor Floor	B2021 Aluminum Windows	Exterior	Replace B2021 Aluminum Windows	25	3	1,492.00	EA	\$2,652.80	IN - Beyond Rated Life	Priority 2	\$0	\$0	\$0	\$3,957.971	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,957.971								
B2031	Aluminum 3'-0" X 7'-0"	B2031 Glazed Entrance Doors	Entrance Doors	Replace B2031 Glazed Entrance Doors	30	5	28.00	EA	\$3,181.71	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$0	\$0	\$0	\$89,088	\$0	\$0	\$0	\$0	\$0	\$0	\$89,088								
B30 ROOFING																																
B3011	Tpo, Roof 45 Mills, Full Adhered	B3011 Built-Up Roofing	Roof	Replace B3011 Built-Up Roofing	20	3	180.00	SQ	\$1,325.63	IN - Beyond Rated Life	Priority 2	\$0	\$0	\$0	\$238,614	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$238,614								
Shell Subtotal												\$0	\$0	\$0	\$4,196,585	\$0	\$89,088	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,285,673

C. INTERIORS																								
C10 INTERIOR CONSTRUCTION																								
C1021	Fire Door, Wood, Flush, 60 Minute, Incl. Demo, with Hardware	C1021 Interior Doors	Interior Doors	Replace C1021 Interior Doors	30	2	655.00	EA	\$2,403.12	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$1,574.044	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,574.044
C30 INTERIOR FINISHES																								
C3012	Paint Interior Walls, Drywall	C3012 Paint Interior Walls, Drywall	Interior Wall Finishes	C3012 Paint interior walls	10	1	219,892.00	SF	\$2.13	IN - Appearance	Priority 3	\$0	\$468,986	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$468,986
C3024	Vinyl Tile	C3024 Vinyl Tile Flooring	Interior Flooring	Replace C3024 Vinyl Tile Flooring	18	6	2,200.00	SY	\$163.10	IN - Appearance	Priority 4	\$0	\$0	\$0	\$0	\$0	\$0	\$358,819	\$0	\$0	\$0	\$0	\$0	\$358,819
C3025	Carpet Tiles - Standard	C3025 Carpet Tiles - Standard	Office areas	Replace C3025 Carpet Tiles - Standard	10	0	7,495.00	SY	\$96.61	IN - Beyond Rated Life	Priority 2	\$724,059	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$724,059	
C3031	Drywall - Painted Finished Ceilings	C3031 Drywall - Painted Finished Ceilings	Interior Ceilings	C3031 Paint Ceilings	20	8	50,222.00	SF	\$4.54	IN - Appearance	Priority 4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$227,928	\$0	\$0	\$0	\$227,928	
C3032	Acoustical Tile With Exposed Grid System	C3032 Acoustical Ceiling Tile	Interior Ceilings	Replace C3032 Acoustical Ceiling Tile	20	8	764.00	CSF	\$1,201.56	IN - Appearance	Priority 4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$917,992	\$0	\$0	\$917,992	
Interiors Subtotal												\$724,059	\$468,986	\$1,574,044	\$0	\$0	\$0	\$358,819	\$0	\$1,145,919	\$0	\$724,059	\$3,547,768	

D. SERVICES																																
D10 CONVEYING SYSTEMS																																
D1011	Traction Elevator Machinery and Controls	D1011 Traction Elevator Machinery and Controls	Elevators 1-3	Replace D1011 Traction Elevator Machinery and Controls	25	2	3.00	EA	\$686,140.00	FN - Modernization	Priority 2	\$0	\$0	\$2,058,420	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,058,420								
D20 PLUMBING																																
D2011	Commercial Grade Water Closet With 1.6 Gpf Unit	D2011 Commercial Grade Water Closet, 1.6 GPF Unit	Restrooms	Replace D2011 Commercial Grade Water Closet, 1.6 GPF Unit	20	5	5.00	EA	\$1,233.15	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$0	\$0	\$0	\$6,166	\$0	\$0	\$0	\$0	\$0	\$0	\$6,166								
D2011	Flush Valve & Water Closet	D2011 Commercial Water Closet - Standard	Restrooms	Replace D2011 Commercial Water Closet - Standard	25	3	39.00	EA	\$1,233.15	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$0	\$48,093	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,093								
D2012	Urinal	D2012 Urinal - Standard	Men's Restrooms	Replace D2012 Urinal - Standard	35	3	16.00	EA	\$2,440.67	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$0	\$39,051	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39,051								
D2013	China Wall Hung Lavatory and Faucet	D2013 Wall Hung China Sink and Auto Faucet	Restrooms	Replace D2013 Wall Hung China Sink and Auto Faucet	20	3	6.00	EA	\$1,542.05	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$0	\$9,252	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,252								
D2013	China Wall Hung Lavatory and Faucet	D2013 China Wall Hung Sink and Faucet - Standard	Restrooms	Replace D2013 China Wall Hung Sink and Faucet - Standard	35	3	38.00	EA	\$1,542.05	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$0	\$58,598	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$58,598								
D2023	Hydronic Circulating Pump, 7.5 HP	D2023 Domestic Water Distribution	Boiler Room	Replace D2023 Domestic Water Distribution	20	5	2.00	EA	\$17,331.84	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$0	\$0	\$0	\$34,664	\$0	\$0	\$0	\$0	\$0	\$0	\$34,664								
D30 HVAC																																
D3022.1	Circulation Pump, 7 to 10 HP	D3022 HVAC Heating Water Circulation Pumps 7.5 HP	Boiler Room	Replace D3022 HVAC Heating Water Circulation Pumps 7.5 HP	20	5	2.00	EA	\$19,837.20	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$0	\$0	\$0	\$39,674	\$0	\$0	\$0	\$0	\$0	\$0	\$39,674								
D3022.1	Circulation Pump 40 HP	D3022 HVAC Chilled Water Circulation Pumps 40 HP	Boiler Room	Replace D3022 HVAC Chilled Water Circulation Pumps 40 HP	20	2	2.00	EA	\$44,806.80	IN - Beyond Rated Life	Priority 2	\$0	\$0	\$89,614	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$89,614								
D3023	Condensate return system (SIMPLEX PUMP, FLOAT SWITCH, 3/4 HP, 15 GPM)	D3023 Condensate Return Pumps	Boiler Room	Replace D3023 Condensate Return Pumps	20	2	2.00	EA	\$17,336.19	IN - Beyond Rated Life	Priority 2	\$0	\$0	\$34,672	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,672								
D3041.1	Air Handling Units	D3041 VAV Boxes	Throughout Facility	Replace D3041 VAV Boxes	25	0	345.00	EA	\$2,496.72	IN - Beyond Rated Life	Priority 1	\$861,367	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$861,367								
D3041.1	Air Handler 4,000 to 8,000 CFM	D3041 Supply Air SF - 4000 CFM - 10 HP	Penthouse Mechanical Room	Replace D3041 Supply Air SF - 4000 CFM - 10 HP	20	3	3.00	EA	\$12,091.49	IN - Beyond Rated Life	Priority 2	\$0	\$0	\$0	\$36,274	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,274								
D3041.1	Air Handler 3480 CFM	D3041 Interior AHU 2800 CFM	Lower Level	Replace D3041 Interior AHU 2800 CFM	15	2	3.00	EA	\$1,146.16	IN - Beyond Rated Life	Priority 2	\$0	\$0	\$34,385	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,385								
D3041.1	Air Handler 18,000-20,000 CFM	D3041 AHU, Fan Motor 30 HP	Mechanical Room on Each Floor	Replace D3041 AHU, Fan Motor 30 HP	15	3	8.00	EA	\$35,811.55	IN - Beyond Rated Life	Priority 2	\$0	\$0	\$0	\$286,492	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$286,492								
D3042	Exhaust Fan, Sidewall 11,250 CFM	D3042 Exhaust Fan < 15,000 CFM	Rooftop	Replace D3042 Exhaust Fan < 15,000 CFM	20	2	1.00	EA	\$16,594.18	IN - Beyond Rated Life	Priority 2	\$0	\$0	\$16,594	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,594								
D3042	Exhaust Fan 2000 CFM	D3042 Exhaust Fan 2000 CFM	Rooftop	Replace D3042 Exhaust Fan 2000 CFM	10	2	2.00	EA	\$3,450.37	IN - Beyond Rated Life	Priority 2	\$0	\$0	\$6,901	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,901								
D3043	Multi-pass shell and tube (Cast iron heads, 40 to 180 deg., steam 10 psi, 96 GPM)	D2020 Domestic Hot Water Heat Exchanger	Boiler Room	Replace D2020 Domestic Hot Water Heat Exchanger	30	0	1.00	EA	\$25,025.32	IN - Beyond Rated Life	Priority 1	\$25,025	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,025								
D3044	Steam Trap, 3/4-Inch,	D3044 Steam Trap, 3-Inch,	Parking Garage	Replace D3044 Steam Trap, 3-Inch,	20	0	5.00	EA	\$3,717.52	IN - Beyond Rated Life	Priority 1	\$18,588	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,588								
D3063	Variable Frequency Drive, 40 HP Fan Motor, Install	D3063 Variable Frequency Drive, 40 HP Fan Motor, Install	Throughout Facility	Replace D3063 Variable Frequency Drive, 40 HP Fan Motor, Install	10	0	6.00	EA	\$21,076.63	IN - Beyond Rated Life	Priority 1	\$126,460	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$126,460								
D3068	Direct Digital Controls (DDC) Extensive	D3068 Pneumatic HVAC Controls w/DDC	HVAC DDC	Replace D3068 Pneumatic HVAC Controls w/DDC	20	0	130,010.00	SF	\$8.23	FN - Modernization	Priority 1	\$1,070,450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,070,450								
D40 FIRE PROTECTION SYSTEMS																																
D4011	Sprinkler Head	D4011 Wet-Pipe Sprinkler System	Throughout Facility	D4011 Install Wet Pipe Sprinkler System	25	0	130,010.00	SF	\$10.57	CC - Life Safety	Priority 1	\$1,374,570	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,374,570								
D50 ELECTRICAL SYSTEMS																																
D5012	Secondary Dry Transformer 75 kVA	D5012 Secondary Dry Transformer 112 kVA	Utility Areas/Closets	Replace D5012 Secondary Dry Transformer 112 kVA	40	3	2.00	EA	\$19,199.43	IN - Reliability	Priority 3	\$0	\$0	\$0	\$38,399	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38,399								
D5012	Switchgear, Mainframe, 1600 Amps	D5010 Switchgear, Mainframe,>1200 Amps	Main Electrical Room	Replace D5010 Switchgear, Mainframe,>1200 Amps	40	2	3.00	EA	\$17,846.98	IN - Reliability	Priority 2	\$0	\$0	\$53,541	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,541								
D5012	Breaker Panel 225 Amps, 30 Circuits	D5012 Breaker Panel 225 Amps, 30 Circuits	Utility Areas/Closets	Replace D5012 Breaker Panel 225 Amps, 30 Circuits	40	2	24.00	EA	\$7,864.32	IN - Reliability	Priority 2	\$0	\$0	\$188,744	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$188,744								
D5037	Fire Alarm Panel	D5037 Fire Alarm Panel	Main Electrical Room	Replace D5037 Fire Alarm Panel	15	0	1.00	EA	\$9,402.52	CC - Life Safety	Priority 1	\$9,403	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,403								
D5092	Transfer Switch	D5092 Emergency Transfer Switch	Main Electrical Room	Replace D5092 Emergency Transfer Switch	25	5	1.00	EA	\$10,613.06	CC - Life Safety	Priority 3	\$0	\$0	\$0	\$0	\$0	\$10,613	\$0	\$0	\$0	\$0	\$0	\$0	\$10,613								
D5092	Diesel Generator 150 kW	D5092 Emergency Generator 125 kW	Exterior of Building	Add secondary containment	0	0	1.00	EA	\$3,500.00	EN - Air/ Water Quality	Priority 1	\$3,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,500									
D5092	Diesel Generator 150 kW	D5092 Emergency Generator 125 kW	Exterior of Building	Replace D5092 Emergency Generator 125 kW	25	5	1.00	EA	\$194,865.20	CC - Life Safety	Priority 3	\$0	\$0	\$0	\$0	\$0	\$194,865	\$0	\$0	\$0	\$0	\$0	\$0	\$194,865								
Services Subtotal												\$3,489,362	\$0	\$2,482,870	\$516,159	\$0	\$285,982	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,489,362	\$3,285,012

E. EQUIPMENT & FURNISHING																																	
Equipment & Furnishing Subtotal												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

F. SPECIAL CONSTRUCTION AND DEMOLITION																						
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Element #	Component Description	Asset	Location	Action	EUL (Yrs)	RUL (Yrs)	Qty.	Unit of Meas.	Unit Cost	Plan Type	Priority ²	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total - Deferred	Total - Scheduled
												Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9		

Special Construction And Demolition Subtotal												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G. BUILDING SITEWORK																									
G20 SITE IMPROVEMENTS																									
G2022	G2022 Paving & Surfacing	G2020 Parking Lot Markings	Site	Replace G2020 Parking Lot Markings	5	2	7,200.00	SF	\$0.74	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$5,357	\$0	\$0	\$0	\$0	\$5,357	\$0	\$0	\$0	\$0	\$10,714	
Building Sitework Subtotal												\$0	\$0	\$5,357	\$0	\$0	\$0	\$0	\$5,357	\$0	\$0	\$0	\$0	\$10,714	

Z. GENERAL																							
General Subtotal												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

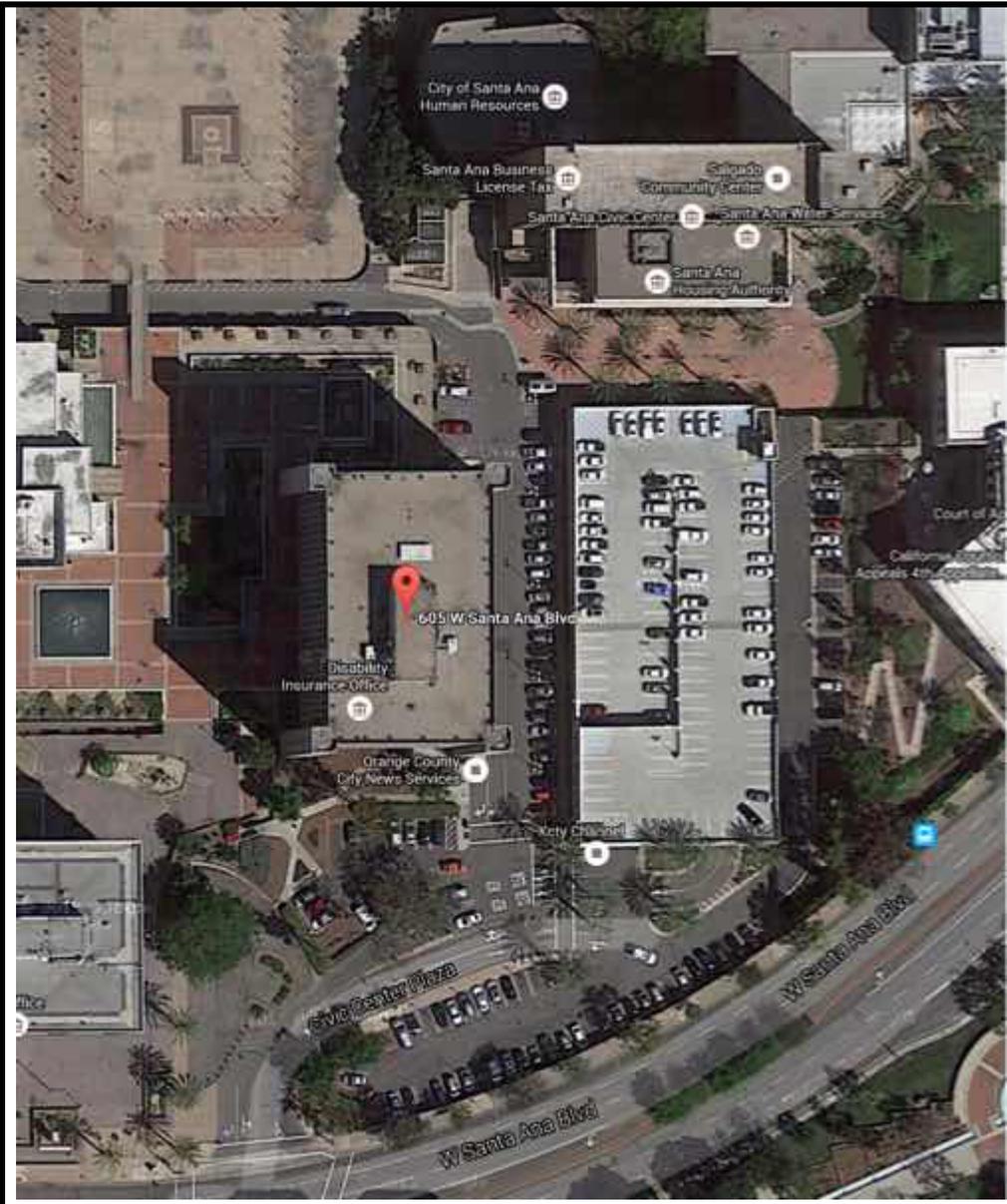
Expenditure Totals per Year	\$4,213,421	\$468,986	\$4,062,271	\$4,712,744	\$0	\$375,070	\$358,819	\$5,357	\$1,145,919	\$0	\$4,213,421	\$11,129,166
Total Cost (Inflated @ 5% per Yr.)	\$4,213,421	\$492,435	\$4,478,654	\$5,455,591	\$0	\$478,695	\$480,852	\$7,538	\$1,693,045	\$0	Total *	\$15,342,587

* - Present Value Currency

Footnotes
1 Detailed descriptions for Useful Life and Plan Type can be found in the Appendices of the Facility Condition
2 Detailed Descriptions of the Priorities can be found in the Appendices of the Facility Condition Assessment

Current Repl.Value \$40,842,641

APPENDIX H: SUPPORTING DOCUMENTATION



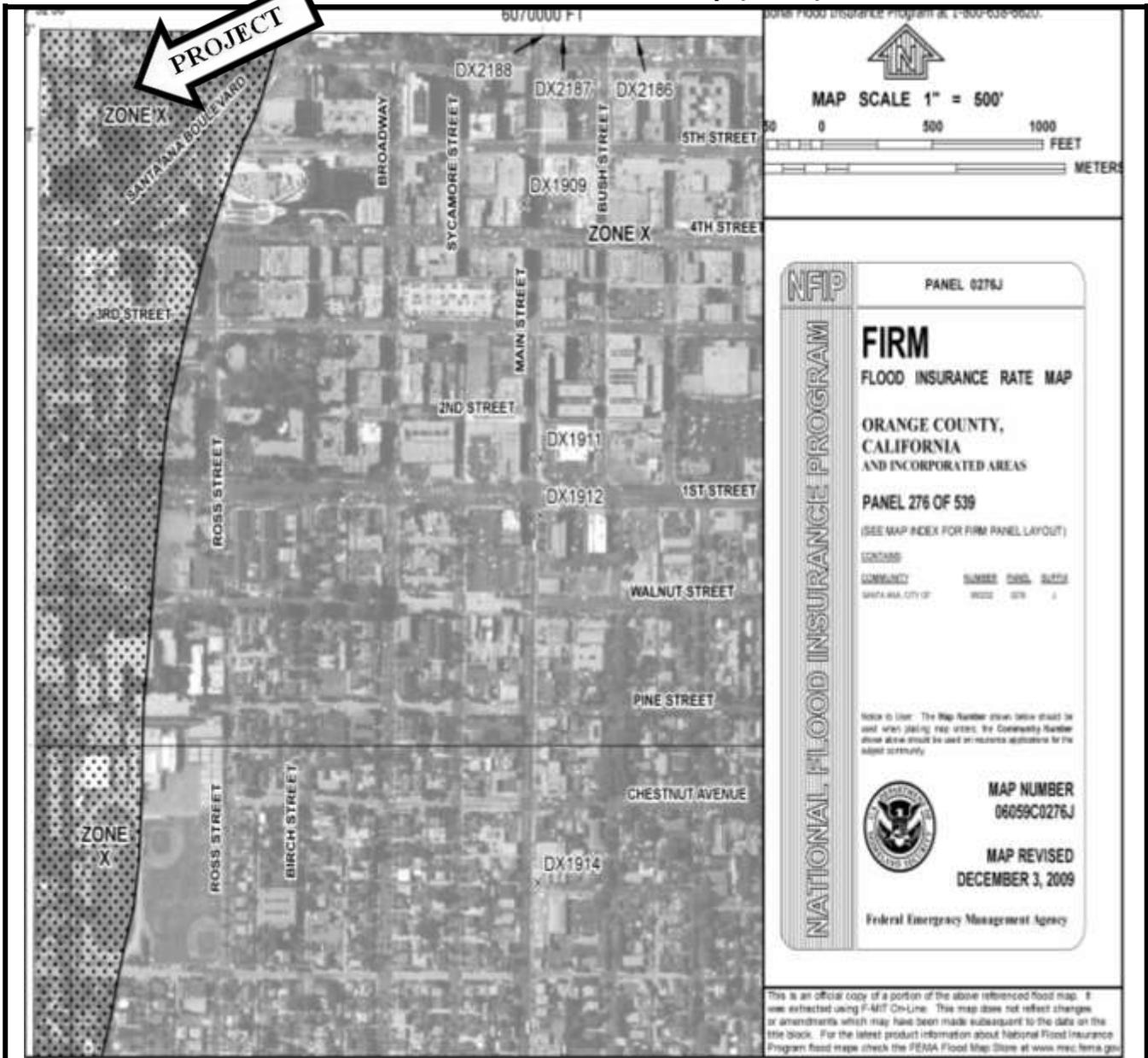


Source:
 The north arrow indicator is an approximation of 0° North.

Project Number:
 111326.14R-049.305
Project Name:
 Santa Ana State Building

On-Site Date:
 March 5 to March 6, 2015

FEMA Flood Insurance Rate Map (FIRM)



Source:

FEMA

Subject Property is located in Flood Zone **Shaded X** and within Community and Panel Number 06059C0276J, effective December 3, 2009.



Not drawn to scale. The north arrow indicator is an approximation of 0° North.

Project Number:

111326.14R-049.305

Project Name:

Santa Ana State Building

Onsite Date:

March 5-6, 2015

Expected Useful Life (EUL) Table	
SITE SYSTEM ITEMS	
ROADWAYS/ PARKING/ WALKWAYS	
Asphalt pavement	25
Asphalt seal coat	5
Concrete pavement	50
Curbing, asphalt	25
Curbing, concrete	50
Parking, stall striping	5
Parking, gravel surfaced	15
Security gate- rolling gate	10
Security gate- lift arm	10
Sidewalk, asphalt	25
Sidewalk, brick paver	30
Sidewalk, concrete	50
STORM SEWER, DRAINAGE AND EROSION CONTROL	
Catch basins, inlets, culverts	50
Earthwork, grading and erosion control	50
Storm drain lines	40
LANDSCAPING, TOPOGRAPHY AND FENCING	
Fencing, chain-link (4' height)	40
Fencing, dumpster enclosure (wood)	12
Fencing, Tennis Court (10' height)-Chain link	40
Fencing, wood privacy (6' height)	15
Fencing, wrought iron (4-6' height and decorative)	50
Fencing, concrete masonry unit (CMU)	30
Irrigation System	30
Retaining walls, 80 lb block type	50
Retaining walls, concrete masonry unit (CMU) with brick face	40
Fencing, PVC (6' height)	25
Retaining walls, timber (railroad tie)	25
SITE SYSTEM ITEMS	
GENERAL SITE IMPROVEMENTS	
Lighting (pole mounted)	25
Mail kiosk	10
Pool deck	15
Pool/ spa plaster liner	8
Signage, monument	20
Signage, roadway/ parking	10
Tennis court / basketball court surface (paint markings)	5

GENERAL SITE IMPROVEMENTS	
Tennis court Surface (acrylic emulsion)	10
Tot-lot (playground equipment)	10
SITE SANITARY AND WATER	
Domestic Hot Water (DHW) - supply / return	30
Lift station	50
Sanitary lines	50
Sanitary treatment	40
Water main	40
Water supply lines	50
Water tower	50
SITE MECHANICAL / ELECTRICAL	
Compactors	15
Dumpsters	10
Electrical distribution center	40
Electric main	40
Emergency Generator	25
Gas lines	40
Gas main	40
Heating supply/ return	40
Power distribution	40
Transformer	30
BUILDING ARCHITECTURAL ITEMS	
Wood Decks	20
Storage Sheds	30
Carports	40
Garages	50
Basement Stairs	50
Building mounted exterior lighting	10
Building mounted High Intensity Discharge (HID) lighting	10
Bulkhead	10
Canopy, concrete	50
Canopy, wood / metal	40
Ceilings, open or exterior	30
Chimney	40
Common area doors, interior (solid wood/ metal clad)	30
Common area floors, ceramic / quarry tile, terrazzo	50+
Common area floors, wood (strip or parquet)	30
Common area floors, resilient tile or sheet	15
Common area floors, carpet	8
Common area floors, concrete	50+

BUILDING ARCHITECTURAL ITEMS	
Common area railing	20
Common area ceiling, concrete	50+
Common area ceiling, acoustic tile (drop ceiling),	15
Common area countertop and sink	20
Common area dishwasher	15
Common area disposal	5
Common area kitchen cabinets, wood	15
Common area wall coverings	15
Caps, copings (aluminum/ terra-cotta) - Parapet	25
Exterior common door, aluminum and glass	30
Exterior common door, solid core wood or metal clad	25
Exterior stairs, wood	15
Exterior stairs, metal pan- concrete filled	30
Exterior stairs, concrete	50
Exterior unit door, solid wood/ metal clad	25
EXTERIOR CLADDING	
Aluminum Siding	40
Brick or block	40
Brownstone or stone veneer	40
Exterior Insulation Finishing Systems (EIFS)	20
Glass block	40
Granite block	40
Metal/ glass curtain wall	30
Precast concrete panel (tilt-up)	40
Vinyl siding	25
Wood shingle/ clapboard/ plywood, stucco, composite wood	20
Cement-board siding (Hardi-plank)/ non integral color	45
Fire Escapes	40
Foundations	50+
Roof hatch	30
Roof skylight	30
Insulation, wall	50+
Interior lighting	15
Interior railings	20
Mail facility, interior	20
Parapet wall,	50+
Penthouse	50
Railing, roof	25

INTERIORS	
Public bathroom accessories	7
Public bathroom fixtures	15
Refrigerator, common area	10
BUILDING ARCHITECTURAL ITEMS	
ROOF COVERINGS	
Built-up roof - Ethylene Propylene Diene Monomer (EPDM) / Thermoplastic Polyolefin (TPO)	20
Asphalt shingle (3-tab)	20
Wood shingles (cedar shake)	25
Slate, clay, concrete tile	40
Metal	40
Roof drainage exterior (gutter/ downspout)	10
Roof drainage interior (drain covers)	30
Roof structure	50+
Slab	50+
Service door	25
Soffits (wood/ stucco)	20
Soffits (aluminum or vinyl)	25
Stair structures	50+
Storm/ screen doors	7
Storm/ screen windows	10
Waterproofing (foundations)	50+
Windows (frames and glazing), vinyl or aluminum	30
Wood floor frame	50+
BOILER ROOM EQUIPMENT	
Blowdown and Water Treatment	25
Boiler Room Pipe Insulation	Included in boiler
Boiler Room Piping	Included in boiler
Boiler Room Valves	15
Boiler Temperature Controls	Included in boiler
Oil-fired, sectional	22
Gas/ dual fuel, sectional	25
Oil/ gas/ dual fired, low MBH	30
BOILERS	
Oil/ gas/ dual fired, high MBH	40
Gas fired atmospheric	25
Electric	20

BUILDING HEATING WATER TEMPERATURE CONTROLS	
Common area	15
Buzzer/Intercom, central panel	20
Central Unit Exhaust, roof mounted	15
Chilled Water Distribution	50+
Chilling Plant	15
Cooling Tower	25
Combustion Air, Duct with fixed louvers	30
Combustion Air, Motor louver and duct	25
CONDENSATE, FEEDWATER, WATER	
Feedwater only (hydronic)	10
Cooling Tower	25
DHW Circulating Pumps	by size
Tank only, dedicated fuel	10
Exchanger in storage tank	15
Exchanger in boiler	15
External tankless	15
Instantaneous (tankless type)	10
Domestic Hot Water Storage Tanks, Small (up to 150 gallons)	15
Domestic Hot Water Storage Tanks, Large (over 150 gallons)	15
Domestic Cold Water Pumps	15
ELECTRICAL & ELEVATOR	
Electrical Switchgear	50+
Electrical Wiring	30
Elevator, Controller, dispatcher	15
Elevator, Cab	15
Elevator, Machinery	30
Elevator, Shaft-way Doors	20
Elevator, Shaft-way Hoist rails, cables, traveling	25
Elevator, Shaft-way Hydraulic piston and leveling	25
EMERGENCY ALARM AND FIRE PROTECTION	
Call station	10
Emergency Generator	25
Emergency Lights	8
Evaporative Cooler	15
Fire Extinguisher	10
Fire Pumps	20
Fire Suppression	50+
Flue Exhaust	w/boiler
Free Standing Chimney	50+
Fuel Oil Storage	25

EMERGENCY ALARM AND FIRE PROTECTION	
Fuel Transfer System	25
Gas Distribution	50+
Heat Sensors	15
Heat Exchanger	35
Heating Risers and Distribution	50+
MECHANICAL – ELECTRIC – PLUMBING ITEMS	
Heating Water Circulating Pumps	by size
Heating Water Controller	15
Hot and Cold Water Distribution	50
HVAC	
Pad/ roof condenser	20
A/C window unit or through wall	10
Fan coil unit, electric	20
Fan coil unit, hydronic	30
Furnace (electric heat with A/C)	20
Furnace (electric heat with A/C)	20
Furnace (gas heat with A/C)	20
Packaged terminal air conditioner (PTAC)	15
Packaged HVAC (roof top units)	20
Heat pump condensing component	20
Heater, electric baseboard	25
Heater, wall mounted electric or gas	20
Hydronic heat/ electric A/C	20
Line Dryers	15
Master TV System	10
Motorized Valves	12
Outdoor Temperature Sensor	10
Pneumatic lines and Controls	30
POWER VENTILATOR	
Purchased Steam Supply Station	50+
Sanitary Waste and Vent System	50+
Sewage Ejectors	50
Smoke and Fire Detection System, central panel	15
Solar Hot Water	20
SUMP PUMP	
Commercial Sump Pump	15
Water Softening and Filtration	15
Water Tower	50+

PLAN TYPE DEFINITION

Within the report text a Plan Type is assigned to the various cost categories. The following is a brief description of the Plan Types that may be used in the report.

Code Compliance (CC)

- **Accessibility:** Conditions that are not in conformance with the American Disabilities Act Accessibility Guidelines
- **Building Code:** Conditions that are not in conformance with the Building codes
- **Life Safety:** Conditions that are not in conformance with the NFPA 101 Life Safety Code

Operations (OP)

- **Energy:** Conditions that adversely affect energy use or will decrease water or energy usage
- **Maintenance:** Components or systems that can usually be accomplished by the current maintenance staff
- **Security:** Conditions that compromise the protection of the asset or its occupants

Environmental (EN)

- **Air/ Water Quality:** Conditions that affect air or water quality
- **Asbestos:** Reported or suspected asbestos-containing material(ACM)
- **Lead:** Reported lead based paint
- **PCB:** Reported PCB containing equipment

Functionality (FN)

- **Mission:** Components which do not meet the mission of the organization
- **Modernization:** Conditions that need to be upgraded in appearance or function
- **Plant Adaptation:** Components or systems that must change to fit a new or adapted use
- **Obsolescence:** Components or systems that are or are becoming obsolete
- **Capacity:** Components or system which cannot meet demand load

Integrity (IN)

- **Appearance:** Problems with the material or system appearance that are not functional in nature
- **Reliability:** Components or systems which cannot be depended on to function as designed
- **Beyond Rated Life:** A component or system that has exceeded its rated life

Estimate of Structures Cost Using Marshall Cost Systems			
Santa AnaState Building			
Site Calculation			
Estimate of Unusual Land Improvements Cost (Estimators Data Cost Base):			
Description	Cost	Estimated \$/ SF	Unusual Land Total
			\$0
Total			\$0
Estimate of Unusual Land Improvements Cost (Estimators Cost Data Base):			
Estimate of Structure Cost :			
Building Type	Cost per SF	Number of SF	Building TypeTotal
Main Building	\$374.39	130,010	\$48,674,113
	\$0.00	0	\$0
	\$0.00	0	\$0
	\$0.00	0	\$0
	\$0.00	0	\$0
Total		130,010	\$48,674,113
Estimate of Adjustments for Fees:			
Description	% increase		
Soft Costs	25.00%		
	0.00%		
	0.00%		
Total Fees/ Interest included in Marshall System			25.00%
Total Structure Estimate:			
Description	Unit	Fee Adjust	Adjusted Totals
Main Building	\$48,674,113	25.00%	\$60,842,641
	\$0	25.00%	\$0
	\$0	25.00%	\$0
	\$0	25.00%	\$0
	\$0	25.00%	\$0
Cost Per SF	\$467.98	Total Estimate	\$60,842,641

APPENDIX I: PRE-SURVEY QUESTIONNAIRE

Property Condition Assessment: Pre-Survey Questionnaire

This questionnaire should be completed by someone knowledgeable about the subject property. The completed form should be presented to EMG's Field Observer on the day of the site visit. If the form is not completed, EMG's Project Manager will require additional time during the on-site visit with such a knowledgeable person in order to complete the questionnaire. During the site visit, EMG's Field Observer may ask for details associated with selected questions. This questionnaire will be utilized as an exhibit in EMG's final Property Condition Report.

Name of person completing questionnaire: Gary Larson

Building name: Santa Ana State Building (520)

What is your association with this property? BPM Office Building Manager II

What is the length of your association with this property? 3 years and 3 months

Phone number: 714-558-4658

Please provide information about inspections relating to the following items

Inspections	Date Last Inspected	List Name & Contact for Maintenance Contractor, if any.
1. Elevators	DIR Elevator Inspection 8/28/2012	Fujitec - Dispatch 310-464-8270 - Fujitec contract contact: John Raczkowski 310-924-7164
2. HVAC, Mechanical, Electric, Plumbing	2-05-2015 various MAX-IMO PM Tickets annual, semi-annual, quarterly, monthly, weekly, daily	BPM Staff
3. Life-Safety/Fire	SFM requested Fire Life Safety corrections that are in planning and funding stages	
4. Roofs	Inspected weekly or more often. Roof replacement scheduled FY 2014-2015	BPM Staff / Contractor for Roof Replacment not selected as of 2/05/2015

5. List any major capital improvements within the last three years.

Install new Fire Alarm System Repair concrete spalling on decking outside the first floor

6. Are there any other major capital expenditures planned in the near term?

various energy saving projects are being evaluated as possible ESCO projects.

7. What is the age of the roof(s)?

20+

8. What building systems (HVAC, roof, interior/exterior finishes, paving etc.) are the responsibilities of contractors to repair or replace?

Elevator cooling HVAC units are to be replaced as part of the reroofing project.

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any Yes responses. Note: N/A indicates "Not Applicable", Unk indicates "Unknown"

Question	Y	N	N/A	Unk	Comments
9. Are there any unresolved building, or fire code issues?	x				PSB planning repairs required by the SFM. Funding is being obtained to correct the issues.
10. Are there any "down" or unusable units?		x			
11. Are there any problems with erosion, storm-water drainage or areas of paving that do not drain?	x				No drains for rain water under building and plaza parking areas. Low spot fills with rain water on sidewalk in front of the ground floor engineer shop east entrance.
12. Is the property served by a private water well?		x			
13. Is the property served by a private septic system or other waste treatment systems?		x			
14. Are there any problems with foundations or structures?				x	
15. Is there any water infiltration in basements or crawl spaces?			x		
16. Are there any wall, or window leaks?	x				Leaks from roof comes down interior walls, these leaks are currently small leaks when it rains.
17. Are there any roof leaks?	x				Yes, small roof leaks of undetermined origin when it rains.
18. Is the roofing covered by a warranty or bond?		x			
19. Are there any poorly insulated areas?	x				Windows
20. Is Fire Retardant Treated (FRT) plywood used?			x		
21. Is exterior insulation and finish system (EIFS) or a synthetic stucco finish used?		x			
22. Are there any problems with the utilities, such as inadequate capacities?	x				The building was built in the early 70s when offices required less electrical power. The the utilites switch gear to the building is obsolete and needs to be replaced. The building does not have dual redundant electrical supply to the building.
23. Are there any problems with the landscape irrigation systems?	x				

Question	Y	N	N/A	Unk	Comments
24. Has a termite/wood boring insect inspection been performed within the last year?			x		
25. Do any of the HVAC systems use R-11, 12, or 22 refrigerants?	x				rooftop elevator HVAC units use R-22. Due to be replaced FY 2014-2015
26. Has any part of the property ever contained visible suspect mold growth?	x				The 2nd floor snack shop had mold remediation of it's ceiling in 2014. The tenant had without BPM approval installed an incorrect Ac coil mounted to it's ceiling. this caused moisture to collect on the ceiling and mold growth on the ceiling. A contractor was used for mold remediation.
27. Is there a mold Operations and Maintenance Plan?		x			
28. Have there been indoor air quality or mold related complaints from tenants?		x			
29. Is polybutylene piping used?		x			
30. Are there any plumbing leaks or water pressure problems?	x				Occasional Drain pipe leaks from old rusted pipe that cracks caused by incorrect installation with the seam down.
31. Are there any leaks or pressure problems with natural gas service?			x		
32. Does any part of the electrical system use aluminum wiring?		x			
33. Are there transformers inside the building?	x				
34. Do any Commercial units have less than 200-Amp service?				x	
35. Are there any recalled fire sprinkler heads (Star, GEM, Central, Omega)?				x	Not per the last inspection.
36. Is there any pending litigation concerning the property?		x			
37. Has the State previously completed an ADA or 'Title 24 review?				x	I think it has been completed
38. Have any ADA or Title 24 improvements been made to the property?	x				ADA improvements are in planning and funding stages.
39. Does a Barrier Removal Plan exist for the property?	x				In the planning and funding stages
40. Has the Barrier Removal Plan been approved by a credentialed third party?				x	

Question	Y	N	N/A	Unk	Comments
41. Have there been any ADA or Title 24 related complaints?		x			
42. Have there been any complaints about the elevators or wait times?	x				The elevators are old and break down daily at times. Elevator Modernization is required. Contract for elevator contractor is in the bidding stage.
43. Are there any problems with exterior lighting?	x				Areas of the building do not have any exterior lighting. Homeless camp outside the building in the dark and damage wall, glass, and floor.
44. Are there any other significant issues/hazards with the property?				x	Exterior concrete walls have some spalling that needs to be evaluated by a specialist.
45. Are there any unresolved construction defects at the property?				x	

APPENDIX J: ELEVATOR REPORT



Elevator Assessment

**Building 520 – Santa Ana State Building
605 W. Santa Ana Blvd.
Santa Ana, CA**

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Appendix A – Elevator Equipment Summary

The following chart provides an “at a glance” summary of all of the elevator equipment at the subject property.

Bank/Elevator Description	Elevator Number	Speed	Capacity	Floors Served	Date of Original Install	Date of Last Mod	Next Mod Due	Elevator Type	Machine Manuf.	Motor Control	Control Manuf.	Door Size/ Style	Door Equip. Manuf.
Elevators 1-3 (Group – ID# 56771, 56772, 57533)	1	500 fpm	4,000 pounds	G, 1-8	1972	1991	1-2 years	Overhead Gearless Traction	General Dynamics	Generator	MCE	42" x 84" Center Opening	GAL
	2	500 fpm	4,000 pounds	G, 1-8	1972	1991	1-2 years	Overhead Gearless Traction	General Dynamics	Generator	MCE	42" x 84" Center Opening	GAL
	3	500 fpm	4,000 pounds	G, 1-8	1972	1991	1-2 years	Overhead Gearless Traction	General Dynamics	Generator	MCE	42" x 84" Center Opening	GAL

Elevator Number	State Inspection Date	State Inspection Status	5-Year Test Date	5-Year Test Status	Annual Test Date	Annual Test Status	Fire Service Testing Logs	Machine Room Maintenance Logs	Overall Level of Maintenance	Modernization Priority
1	8/2012	Past Due	Not Required	Not Required	Not Required	Not Required	None	None	Average For Age	High
2	8/2012	Past Due	Not Required	Not Required	Not Required	Not Required	None	None	Average For Age	High
3	8/2012	Past Due	Not Required	Not Required	Not Required	Not Required	None	None	Average For Age	High

Appendix B – Repair Items

The following chart details items that must be scheduled for repair prior to the end of the current maintenance contract. Contractor shall provide a schedule to Owner and Consultant within two weeks of receipt of this report.

Building 520 – Santa Ana State Building				
Current Items			These Columns For Use by Contractor and in Future ECA Visits	
Item #	Item Description	Units Affected	Item Complete	Comments
1	None noted			

Appendix C – Maintenance Corrections

The following chart details minor maintenance items (cleaning, lubrication, adjustments, etc.) which should be addressed to the greatest extent possible prior to the building walkthroughs for the elevator maintenance bid process, projected to take place the first two weeks of April, 2015.

Building 520 – Santa Ana State Building				
Current Items			These Columns For Use by Contractor and in Future ECA Visits	
Item #	Item Description	Units Affected	Item Complete	Comments
1	Provide fire service testing logs and maintenance logs in machine room	1-3		
2	Install guard cover for ropes	2		
3	Properly store spare parts in machine room	1-3		
4	Clean tops of cars	1-3		
5	Replace bezel on fire service keyswitch	1-3		
6	Hall doors scraping at "G" - adjust	1-3		
7	Sweep pits	1-3		

Appendix D – Owner’s Maintenance Items

The following items are not part of your elevator contract, and thus are typically corrected by building engineering or another non-elevator sub-contractor. ECA is happy to discuss any of these items at any time. Please feel free to call or e-mail Matt Ensley or Sean Colgan with any questions you may have.

Sean Colgan: 916-337-3572 – sean.colgan@elevatorconsultingassociates.com

Matt Ensley: 213-247-8992 – matt.ensley@elevatorconsultingassociates.com

Building 520 – Santa Ana State Building				
Current Items			These Columns For Use by University and in Future ECA Visits	
Item #	Item Description	Units Affected	Item Complete	Comments
1	The annual inspection certificates in the elevators have expired. If new certificates have been received, post in elevators as soon as possible.	1-3		
2	Properly label machine room door – “Elevator Equipment Room – Authorized Personnel Only”	1-3		

Appendix E – Modernization Recommendation

It is commonly held in the industry that elevator equipment should be modernized every 20-25 years. While this is a valid generalization, the actual time for modernization can vary greatly from property to property, depending on the type of equipment installed, its age, the level of usage, etc. In this case, your equipment was last modernized in 1991 (23 years ago). The MCE controls have components that have been listed as obsolete by the manufacturer, in particular the black box drive. The machines are also now over 50 years old, and we would recommend replacing those in the near term as well. These elevators are already 23 years past their last modernization, so they are certainly in the typical range for modernization. We are aware that the process is already under way to modernize these elevators, and we do recommend that continue, resulting in a modernization being completed in the next 1-2 years.

The following table shows the scope of the modernization based on our current observations. Note that the scope may change slightly by the time the elevators are modernized based on the condition of the equipment at that time, changes in code or ADA, etc.

Elevator Modernization Plan	
Item	Action
Elevator Control	New Solid State
Motor Control (Drive)	New
Dispatching	Standard
Traction Machine	New
Secondary/Deflector Sheaves	New
Governor	New
Hoist Ropes	New
Car Safety	Retain
Load Weighing Operation	New
Car Button Station	New
Car Position Indicator	New
In-Car Communication (ADA Phone)	New
Car/Hall Lanterns	New
Hall Button Stations	New
Alarm Bells	New
Hoistway Limits	New
Wiring	New
Car Guides	New
Counterweight Guides	New
Counterweight	Retain
Guide Rails	Retain
Door Operation	New Closed Loop
Car and Hall Door Equipment	New/Refurbish as needed
Door Restrictor	New

Door Detector Edge	New
Pit Switch	New
Pit Springs/Buffers	Retain
Earthquake Operation	New
Protection Against Ascending Car Overspeed and Unintended Car Movement (Rope Gripper)	New
Compliance with then-current elevator code	Included
Compliance with ADA	Included
Cab Interiors	Optional

The total recommended budget for the elevator portion of this modernization without cab interiors is \$900,000 (\$300,000 per elevator). If you choose to refurbish the cab interiors (floors, side and back walls and ceiling), we would recommend a budget of \$75,000 (\$25,000 per elevator). This budget assumes fairly standard finishes for the cab interiors. If you feel that you may want custom or “better than average” cabs, you may wish to add a contingency of 20% to this budget.

Please note that the given budget is in 2015 dollars. For each year after 2015 that the modernization is budgeted, we recommend adding 5-7% to our budget numbers. This is to account both for increases in union labor and also for continued recovery in the elevator modernization market, which has been on the upswing for the past few years.

Not included in the above is work by other trades. When an elevator modernization occurs, it often precipitates the requirement for work in other related areas, either due to code changes since installation, different requirements for the new control systems, desired changes in look of the systems, etc. The most common required work is electrical work (new or modified disconnects in the machine room, increase in lighting, etc.), fire and life safety work (addition of smoke detectors in elevator areas, addition or removal of sprinklers, etc.), general contracting (modifications for access to machine areas, cutting and patching for new fixtures, etc.) and potentially other areas. It is difficult for ECA to provide accurate budgets at this time, as our expertise is in the area of elevators and not necessarily in these other areas. However, we can estimate in this case that the required work by other trades will be roughly \$125,000. We think this is a fairly conservative estimate and, combined with our other budgets should provide you a placeholder to allocate the proper funds (we don’t want this work to be a surprise for you down the road).

Finally, as the State typically employs an elevator consultant for assistance with elevator modernization projects, we would recommend adding \$30,000 to the budget for that purpose.

The total budget for the recommended modernization project is \$1,055,000. This includes the elevator contractor’s portion of the work, work by other trades, and elevator consulting. It does not include cab interior refurbishment, which would add \$75,000 to the total project cost.

We would be happy to discuss this modernization recommendation or any other aspect of this report at any time. Please contact Sean Colgan at 916-337-3572, or by email at sean.colgan@elevatorconsultingassociates.com.



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