

EXECUTIVE SUMMARY



LOS ALAMOS COUNTY

Facility Condition Assessment

December 2022



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PROJECT OVERVIEW

SCOPE OF WORK

In July 2022, the Los Alamos County New Mexico Government contracted with Huitt-Zollars and ISES Corporation to perform a comprehensive Facilities Condition Assessment (FCA) for 38 County owned or operated facilities located in Los Alamos and White Rock, New Mexico and with a building area totaling more than 584,000 gross square feet (GSF). The County's total portfolio as of July 2022 was 47 buildings with over 620,000 GSF. A subset of the total portfolio was selected for the FCA to remain within project budget while including critical assets. The assessed portfolio is comprised of a wide range of facility types, including museum/exhibit, solid waste management, golf course, courthouse, police station, fire station, public aquatic recreation, senior and youth assembly, performance theater, public library, air terminal, storage, and public ice rink. Common hardscape items, such as pedestrian walkways, dedicated access roadways, perimeter fencing, associated paved plaza space, and public parking, are also included in overall costs for individual buildings. The extent of each of these was determined during the site investigations and agreed upon with County project management. This report is a summary of the assessment data to assist decision-makers in understanding the scope of the funding needs.

Fully published FCA reports were electronically delivered for each asset and contain a synopsis of visually apparent facility conditions and information known to ISES at the time of the inspection. Reports of conditions that cannot be visually observed were also considered, and the County management team reviewed all reports and provided commentary where field observations needed clarifications or enhancement. This was a team effort that included the County maintenance and operations supervisory team on site with the ISES inspection team. The County supervisory team provided safe ladder access and onsite explanations of systems and problems. The County project manager, Sara Rhoton PE, also attended the assessments and made all necessary arrangements for access and crucial report review/coordination of commenting to aid in report finalization. John Jarrard RA of Huitt-Zollars attended some FCA assessment sitework at the larger and more intense structures and also provided detailed report reviews during the process of finalization. The FCA reports each include a methodology description, various summary reports, prioritized recommendations with cost estimates, and an inventory of renewable components with associated lifecycle and replacement value data. Recommendations were made to bring each facility to modern standards without any expectation of change to space layout or function.

In addition to gathering necessary information related to the current conditions of the buildings and systems serving them, an initial equipment inventory was generated by ISES and provided in Microsoft Excel format (one file for each building). The equipment inventory effort included observation of all cyclically maintainable equipment and readily visible nameplate information to support the initiation of a formalized planned maintenance program. The equipment information includes size, description, year of service, manufacturer name, remaining useful life, cost to replace, area served, model number, serial number, and as much local

tag/nomenclature information as reasonably possible to acquire without major disassembly of the equipment or excessive disturbance of finishes such as ceilings.

Standard FCA reports include database entry of renewable components and lifecycle data, nonrecurring recommendations, and photolog entries. The data sorts, tables, and graphs included in the detailed assessment reports are self-printable within AMS (a specialized database application web-hosted for Los Alamos County by ISES via annual software and support agreement).

ISES assessors conducting the physical assessments and generating the recommendations included:

- Ric Gibbs PE, Architectural/Structural and ADA Assessor
- Bernard Cernosek, Architectural/Structural and ADA Assessor
- Jason Owen, MEP and Fire Safety Assessor

The overall Project Manager since initiation of the project is Douglas Fredendall, Vice President of Operations. He has monitored and reviewed assessments for the purposes of QC, guidance, and estimating assistance to the team and will continue to support the project through and after its conclusion.

FCA APPROACH

The findings in this report are based on nationally recognized FCA approaches, methods and best practices used to evaluate and assess the physical condition of higher educational and support facilities.

Each asset was inspected by an experienced architectural/engineering assessor. The surveys were visual and nondestructive and fully compliant with ASTM E2018-15 (Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process). The FCA evaluates major components, building systems and utilities related to each asset in the study. All equipment and building components that could be accessed received a thorough visual inspection. Select suspended ceiling tiles were lifted, and access doors were opened where possible to examine hidden equipment and building components that are integral to the survey. The scope included exterior equipment that is obviously associated with a building, such as a pad-refrigerant compressors/heat pumps, packaged HVAC units, outdoor switchgear, and site lighting, but not site transformers or high voltage splices/switches (which were specifically identified at each facility). In addition, the approach used for Los Alamos County facility assessments included supporting parking areas, curbs, drainage, gutters, drop inlets, and pedestrian walkways.

The objective of the FCA was to identify what is currently deficient in the buildings and what is expected to require attention within the next ten years based on existing conditions, industry averages and anticipated lifecycle failures. The evaluations looked for resource conservation opportunities, as well as compliance with the ADA Accessibility Guidelines.

The FCA data was obtained through onsite observations, equipment inspection, review of existing documentation and discussions with Los Alamos County operations and maintenance personnel to ensure that

all predominant system problems were identified and cataloged. County personnel provided specific direction regarding past component investments, probable service life complications, and system weaknesses/strengths to better align reported needs to the experience of the County and the realities of this location.

COST ESTIMATING

ISES uses and maintains an internal cost library to provide cost estimates for identified deficiencies. Although RSMMeans is one of the sources used in developing this library, our cost data is not limited strictly to published cost data indices. Our methodology allows our trained, experienced assessors to adjust useful life to reflect actual conditions of the systems inspected. This provides more detailed data, resulting in realistic budget costs.

The total costs include variable project delivery expenses (percentage cost markups for management, design, permitting, and soft costs) as determined by the owner. Cost estimates generated by ISES are indexed to local conditions and markups as the situation dictates. They can be reported by building, group of buildings, category of deficiency and numerous other ways.

AMS

ISES used our proprietary software, AMS (Asset Management System), to capture and process the data within the comprehensive FCA reports. AMS is secure, cloud-based and user-friendly. Its menu-driven system enables efficient management and organization of your FCA information. The AMS architecture is based on a relational database, eliminating the storage of redundant data. From easy data entry to quickly producing reports and graphics, AMS is a powerful and invaluable planning tool.

The power of AMS lies in its ability to sort data in numerous ways and generate customized reports to meet your needs. AMS allows you to easily track, sort and prioritize facility conditions by building, defined group or for all of the buildings in the database. Users can identify needs across multiple assets through utilization of user-defined queries. Results can be exported for integration into presentations, analytical studies, reports, CMMS databases and more.

We have offered AMS for continued use by Los Alamos County personnel, free of charge, for a period of one year following delivery of the final FCA report. After the first year, ISES will continue to host the database and provide access to Los Alamos County pursuant to payment of an annual hosting fee.

CONTACTS

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SUMMARY OF FINDINGS

An FCA provides detailed information associated with each building, including overall condition, and describes current conditions and highlights major deficiencies. Findings of the comprehensive assessment informed our development of facility renewal needs for recommended actions. All collected data is available within the AMS database for future access and analysis by your designated personnel.

Before the FCA results are presented, it is important to fully understand how they are classified and aggregated. Individual building components and systems have a lifecycle and are replaced (or renewed) cyclically, with many being renewed multiple times before a building as a whole reaches the end of its life expectancy (usually 100 to 150 years but can be longer or shorter depending on the construction). ISES classifies these as “recurring needs” regardless of the size of the need. Once a component or system is replaced, the clock starts ticking for the next renewal cycle. These recurring needs are further sub-divided into projected needs (due in the future) and deferred renewal needs. The deferred renewal needs are related to systems or components which have already passed the end of their *economically* useful life spans or have become technically obsolete but have not been replaced for funding reasons.

Needs that are one-time only occurrences are called “nonrecurring,” since once completed, they do not recur on a cyclical basis. Examples are one-time patches in a roof section to allow the roof system as a whole to fulfill its anticipated lifespan or upgrading a building to comply with ADA or new fire safety standards.

The following section summarizes the FCA results to give a clear picture of renewal needs over the next ten years. This information will assist stakeholders in making decisions to achieve the goal of adequately funding facility improvements for these assets.

Table 1. General summary of FCA Findings.

SUMMARY REVIEW			
<i>Number of Assets Inspected</i>	38	<i>10-Year Renewal Needs</i>	\$37,265,866
<i>Total GSF</i>	584,392	<i>Deferred Renewal</i>	\$4,603,985
<i>Weighted Average Year Built</i>	1996	<i>10-Year Renewal Needs/SF</i>	\$63.77
<i>Average Age at Inspection</i>	26	<i>Facility Condition Index</i>	0.02
<i>Current Replacement Value</i>	\$293,742,000	<i>Facility Condition Needs Index</i>	0.13

10-YEAR RENEWAL NEEDS

The FCA process for the inspected facilities resulted in a database of recommended projects and component renewal costs totaling nearly **\$37.3 million** that should be addressed over the next ten years.

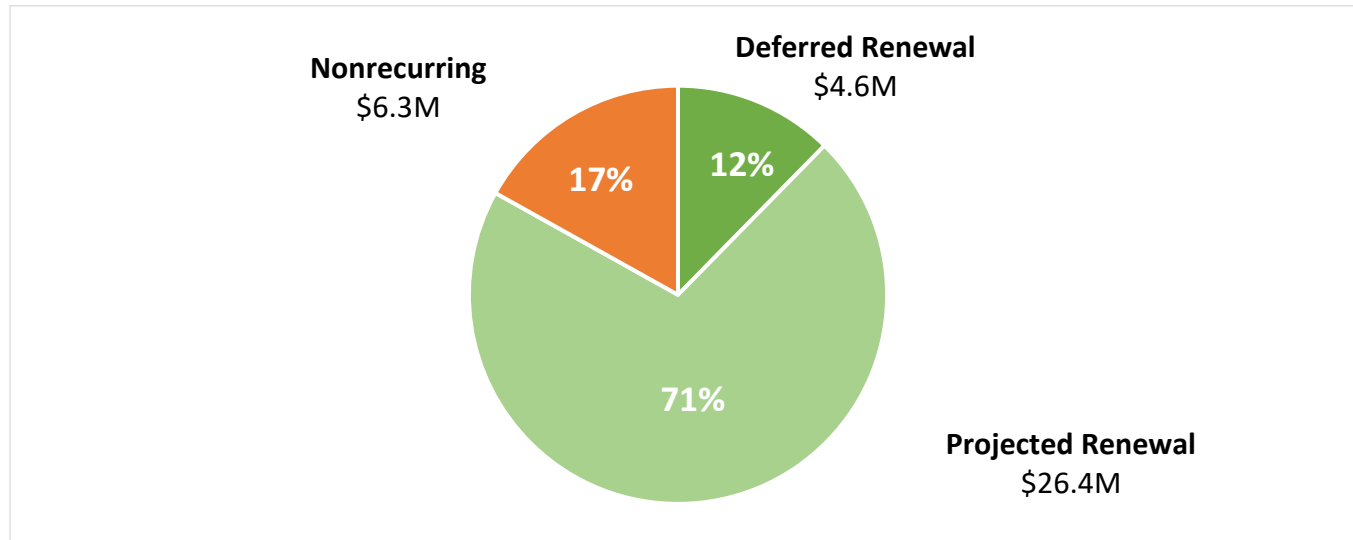


Figure 1. 10-Year Renewal Needs broken out as deferred, projected, and nonrecurring needs.

Almost \$4.6 million of the needs are considered Deferred Renewal. This equates to 12% of the total needs. ISES also identified approximately \$6.3 million in Nonrecurring needs and \$26.4 million in Projected Renewal needs.

Table 2. Actual values from Figure 1.

TYPE	%	\$
Deferred Renewal	12%	\$4,603,985
Projected Renewal	71%	\$26,362,235
Nonrecurring Needs	17%	\$6,299,647
TOTAL		\$37,265,867

AGE OF ASSETS

The average year built for this group of buildings (weighted by gross square footage) is 1996, for an average age of 26 years old at the time of inspection.

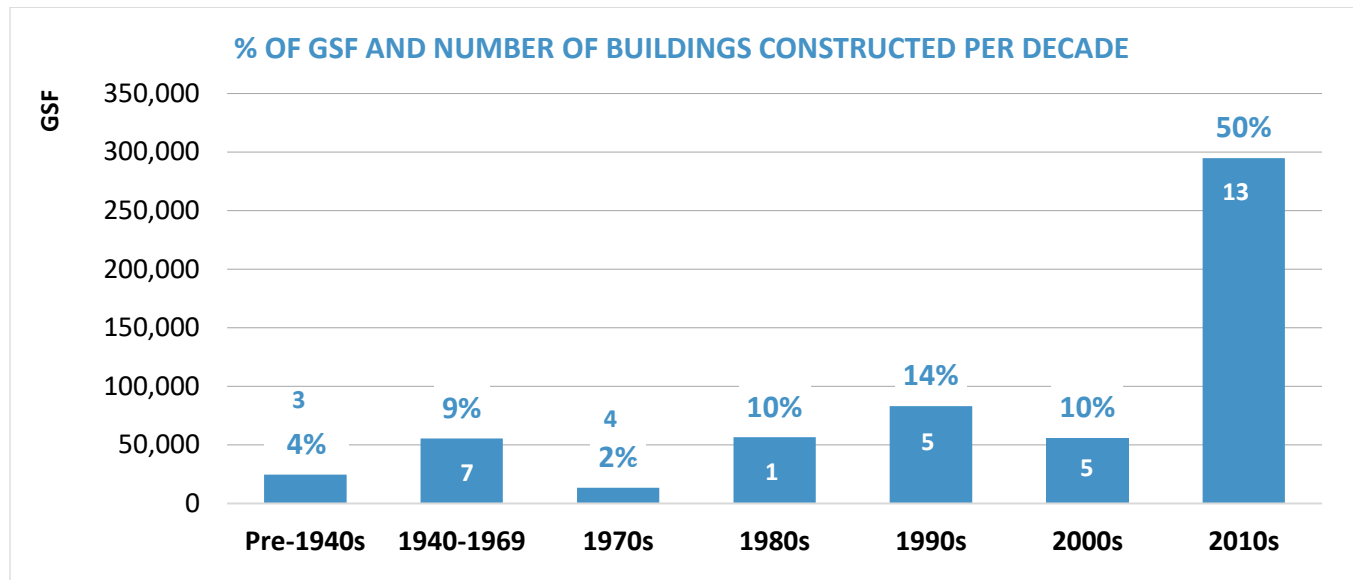


Figure 2. The values inside each column represent number of buildings constructed for that decade.

PRIMARY USE

Table 3. Primary use types of the inspected buildings.

PRIMARY USE	# ASSETS	GSF	TOTAL %
Shops/Trade (ST)	6	128,203	22%
Office/Administrative (OF)	5	96,403	16%
Firehouse (FH)	5	65,889	11%
Natatorium (EP)	1	56,620	10%
Library (LY)	2	54,307	9%
Courthouse (CH)	1	43,503	7%
Classroom/Academic (CL)	5	31,285	5%
Museum/Exhibit (AM)	3	29,873	5%
Warehouse/Storage/Utility (WH)	4	27,900	5%
Food Service/Dining (FS)	2	16,635	3%
Student Union (SU)	1	15,523	3%
Theater/Auditorium (TH)	1	10,125	2%
Retail (RT)	2	8,126	1%
TOTALS	38	584,392	100%

CURRENT REPLACEMENT VALUE (CRV)

ISES traditionally calculates CRV by prorating the base cost per GSF according to use type (e.g., theater, fire station, police station, courthouse, administration building, etc.). We start with the RSMeans Square Foot costs that are published for each facility type. This base number is adjusted for the facility size and local area city cost indices. Then modifiers for professional fees, construction markups, construction/project oversight, and demolition of existing structure are added.

Traditional methods of calculating CRV do not take into account the historic significance of a structure. Replacement of a historic structure would only occur in the event of a catastrophic loss of the building. In such occurrences, the normal practice ISES observes is to calculate the cost to construct modern facilities that meet your architectural standards rather than attempt to mimic the historical construction style that has been lost.

The calculated CRV for this group of assets is nearly **\$294 million**. As stated, this is not the market value, but an estimated cost to replace based on the national average cost for each building type adjusted to Los Alamos County and further adjusted to include soft costs and County management costs. Due to the remote location, the local costs are adjusted upward to mimic realities of construction.

FACILITY CONDITION INDEX (FCI)

The FCI provides a relative measure for an objective comparison of building condition. It is a simple calculation derived by dividing the *Deferred Renewal Needs* by *Current Replacement Value*. The average FCI for this data set is **0.02**, which indicates that overall building portfolio is in **Good** condition.

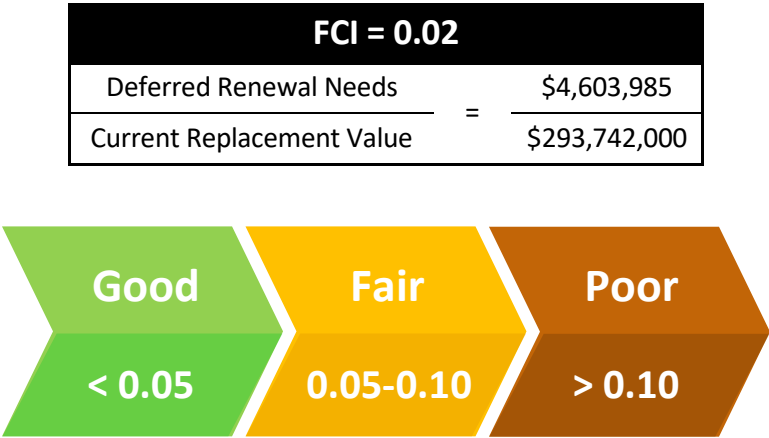


Figure 3. Apply these FCI standards to assess where a facility falls within the range of conditions.

FACILITY CONDITION NEEDS INDEX (FCNI)

The FCNI provides a lifecycle cost comparison against all buildings for identifying worst case/best case building conditions. It is a ratio of *10-Year Renewal Needs* (including Deferred Renewal) to the *Current Replacement Value*. The average FCNI for this data set is 0.13. This is lower than our client average of **0.24**, as amassed by more than 30 years of performing FCAs.

FCNI = 0.13		
10-Year Renewal Needs	=	\$37,265,866
Current Replacement Value		\$293,742,000



Figure 4. Apply these FCNI standards to assess where a facility falls within the range of conditions.

This FCNI scale shows ranges that can be used to benchmark the relative condition of each facility and represents averages based upon our extensive FCA experience. It spans from 0.00 (typically new construction) to 0.60 or above. A FCNI greater than 0.60 signifies that replacement should be considered instead of renewal. The reader is cautioned to examine each facility independently for mitigating factors (i.e., historic structures, temporary structures, facilities with abnormally low replacement costs, such as warehouses, etc.).

HOW TO USE THE FCNI

COMPARING INDIVIDUAL BUILDINGS

The FCNI is most commonly used to compare one building to another and guide renovation/restoration investments by comparative analysis. The index can be used as an evaluation tool when applying it to a single facility. The lower the FCNI, the better the facility condition. FCNIs that are greater than 1.0 indicate that the sum of the estimated cost of renewal needs recommended to restore the facility to modern standards is greater than the hard costs to replace the building. It should also be noted that this is an index, not a percentage. It can, especially in the case of historic facilities requiring specialized restorative techniques, exceed 1.00.

COMPARING GROUPS OF BUILDINGS

The FCNI can also be used for comparing groups of facilities to other groupings, including entire campuses. Comparisons in this vein form the basis of analysis for comparing the overall state of facilities to another comparable grouping. **Note that the above ranges *do not* apply to multiple facility groups.** Variability of the index when expressed for groups of buildings is reduced as the sample sets (groups) get larger.

RENEWAL NEEDS BY SYSTEM

A viable approach to capital planning is to analyze the 10 year renewal needs by building system, as shown in Figure 5. Within this context, the magnitude of the HVAC, Electrical, Interior, and Exterior needs compared to the other systems appears to indicate these should be a priority for renewal either individually or as part of major building renovations.

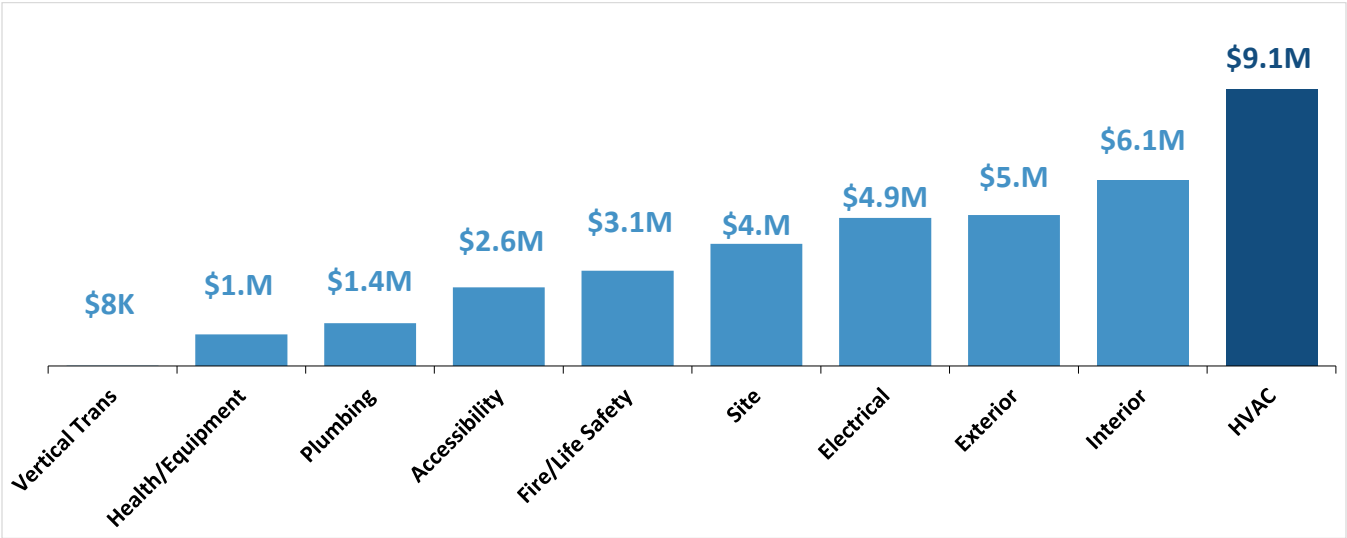


Figure 5. Renewal needs for each Building System by Weight of Total Needs.

Figure 6 compares this data to the ISES Mean of client data. This table indicates that Los Alamos County has generally lower needs comparatively, in the Plumbing, Electrical, Interior, and HVAC categories. Fire/Life Safety needs are on par with the ISES average. Needs are slightly higher in the Accessibility, Health, and Site categories. However, the Site category comparison is not a valid comparison, since most ISES clients place Site needs in a separate report and do not include the majority of major site elements in the building condition assessment.

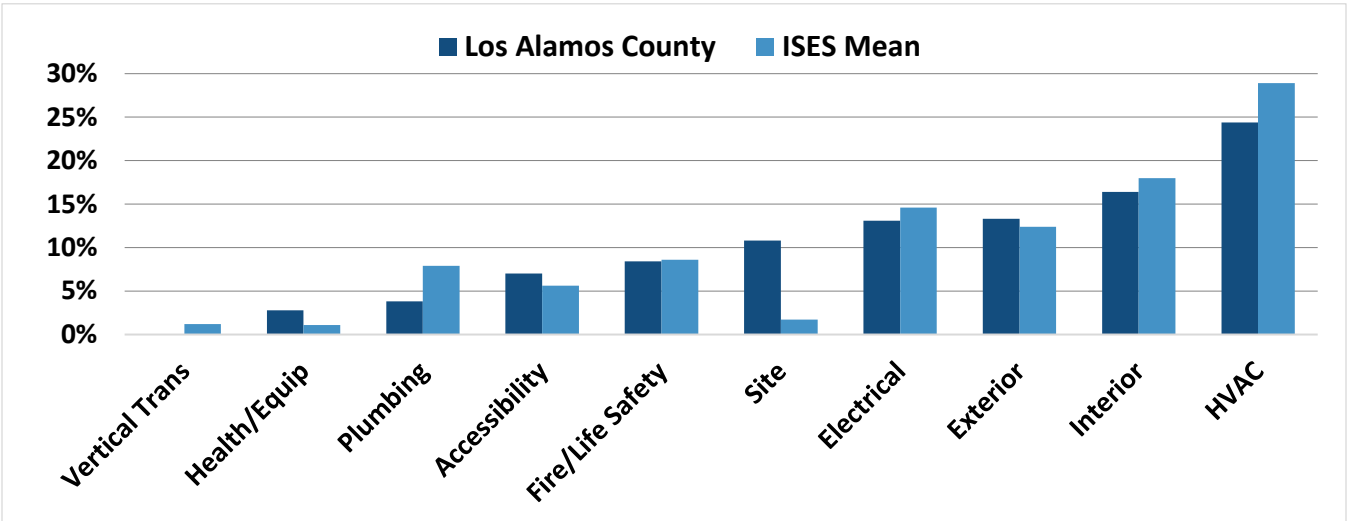


Figure 6. Comparison to the average found across ISES clients.

The table on the following page provides a detailed breakdown of all renewal needs listed by system, priority class (nonrecurring), and year (recurring), with totals for each category.

RENEWAL NEEDS MATRIX

All dollars shown as Present Value

CATEGORY	NONRECURRING PROJECT NEEDS			RECURRING COMPONENT REPLACEMENT NEEDS											
	High	Medium	Low	Deferred Renewal	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
ACCESSIBILITY	0	2,089,514	504,039	0	0	0	0	0	0	0	0	0	0	0	\$2,593,553
EXTERIOR	0	21,462	457,059	1,191,124	251,015	188,243	548,318	200,225	371,943	520,854	391,127	64,838	487,550	280,522	\$4,974,280
INTERIOR	0	0	352,589	588,353	1,210,295	34,847	132,551	1,127,610	1,065,466	477,005	171,902	38,808	800,169	116,448	\$6,116,043
PLUMBING	0	22,490	0	371,862	112,676	0	43,809	86,008	5,395	3,182	216,818	37,841	458,288	49,770	\$1,408,140
HVAC	0	0	199,932	371,711	31,031	1,409,071	90,464	2,360,426	17,776	160,575	2,791,406	22,103	1,351,994	282,570	\$9,089,058
FIRE/LIFE SAFETY	139,999	428,244	701,424	15,350	0	0	0	0	214,049	120,856	1,126,239	0	0	393,260	\$3,139,423
ELECTRICAL	0	318,729	7,055	315,542	96,572	65,355	358,449	171,996	32,503	65,286	634,745	393,662	2,376,284	40,725	\$4,876,905
SITE	446,259	186,991	363,165	897,713	42,667	56,978	689,624	230,051	33,781	437,969	144,999	99,660	353,446	36,195	\$4,019,497
VERT. TRANS.	0	0	0	0	0	0	0	0	0	0	0	0	9,709	0	\$9,709
HEALTH/EQUIP.	0	33,909	26,787	852,328	0	0	0	0	0	0	14,470	35,279	76,485	0	\$1,039,258
SUBTOTAL	\$586,258	\$3,101,339	\$2,612,050	\$4,603,985	\$1,744,255	\$1,754,494	\$1,863,214	\$4,176,315	\$1,740,914	\$1,785,729	\$5,491,706	\$692,191	\$5,913,925	\$1,199,491	\$37,265,866
TOTAL NONRECURRING PROJECT NEEDS			\$6,299,647	TOTAL RECURRING COMPONENT REPLACEMENT NEEDS										\$30,966,219	

CURRENT REPLACEMENT VALUE	\$293,742,000	GSF	TOTAL 10-YEAR FACILITY RENEWAL NEEDS	10-YEAR NEEDS/SF
FACILITY CONDITION NEEDS INDEX	0.13			
FACILITY CONDITION INDEX	0.02	584,392	\$37,265,866	\$63.77

RENEWAL NEEDS BY CLASSIFICATION

Another way to sort and analyze renewal needs is to collectively look at the deficiency classifications that are driving the recommendations.

- 17% are considered Deferred Renewal or recommended for Corrective Action.
- 12% are to comply with changing standards, also known as Plant Adaption.
- 71% are for future replacements of renewable components based on existing useful life.

Table 4. Actual values from Figure 7.

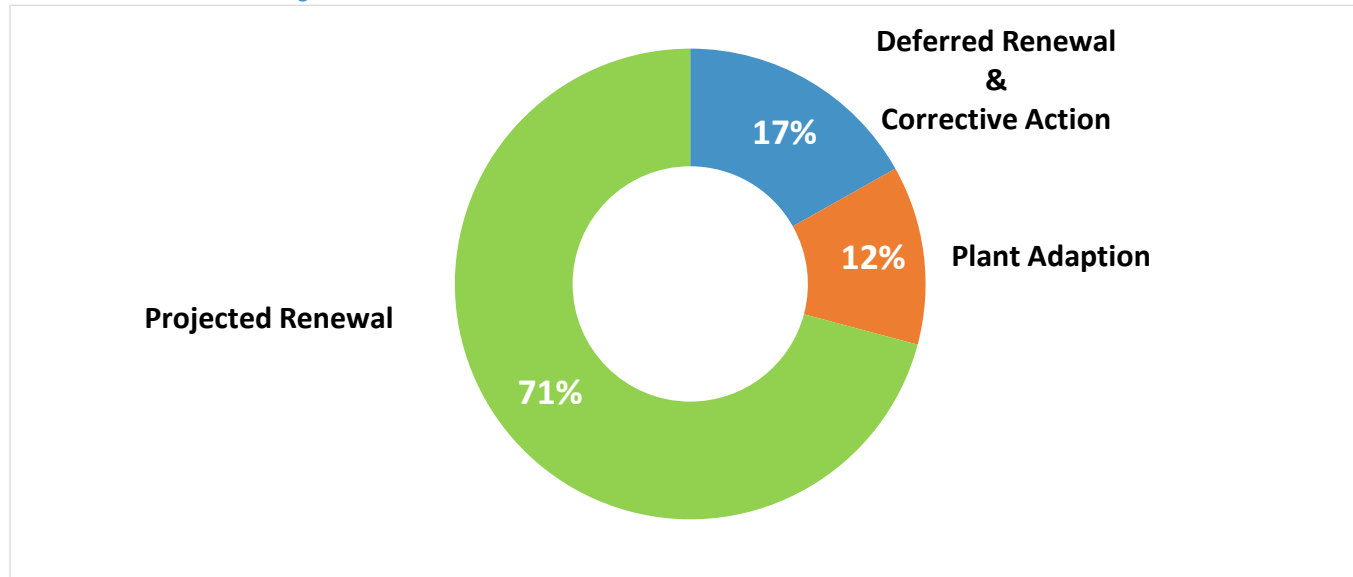


Figure 7. Classification of 10-Year Renewal Needs.

TYPE	CLASSIFICATION	%	\$
Recurring	<i>Deferred Renewal</i>	12%	\$4,603,985
Recurring	<i>Projected Renewal</i>	71%	\$26,402,803
Nonrecurring	<i>Corrective Action</i>	5%	\$1,715,232
Nonrecurring	<i>Plant Adaption</i>	12%	\$4,584,415
TOTAL			\$37,306,435

RENEWAL NEEDS BY PRIORITY

Recurring Component or System renewal needs are prioritized by *Need Year* to indicate the urgency of the recommendations. While Recurring Needs are year-based, making further prioritization unnecessary, each Nonrecurring Need has an assigned priority to indicate the criticality of the recommended work.

PRIORITY 1 – HIGH

- a. correcting a cited safety hazard
- b. stopping accelerated deterioration
- c. returning a facility to normal operation

PRIORITY 2 – MEDIUM

- a. repairs to prevent further deterioration
- b. improvements to facility approach/entry and access to goods and services (DOJ ADA title III, priorities 1 and 2)
- c. correction of potential safety hazards

PRIORITY 3 – LOW

- a. improving access to restrooms and other amenities (DOJ ADA title III, priorities 3 and 4)
- b. bringing a facility into compliance with current building codes as grandfather clauses expire
- c. increasing usability following an occupancy or use change
- d. actions that are recommended but not required by code.

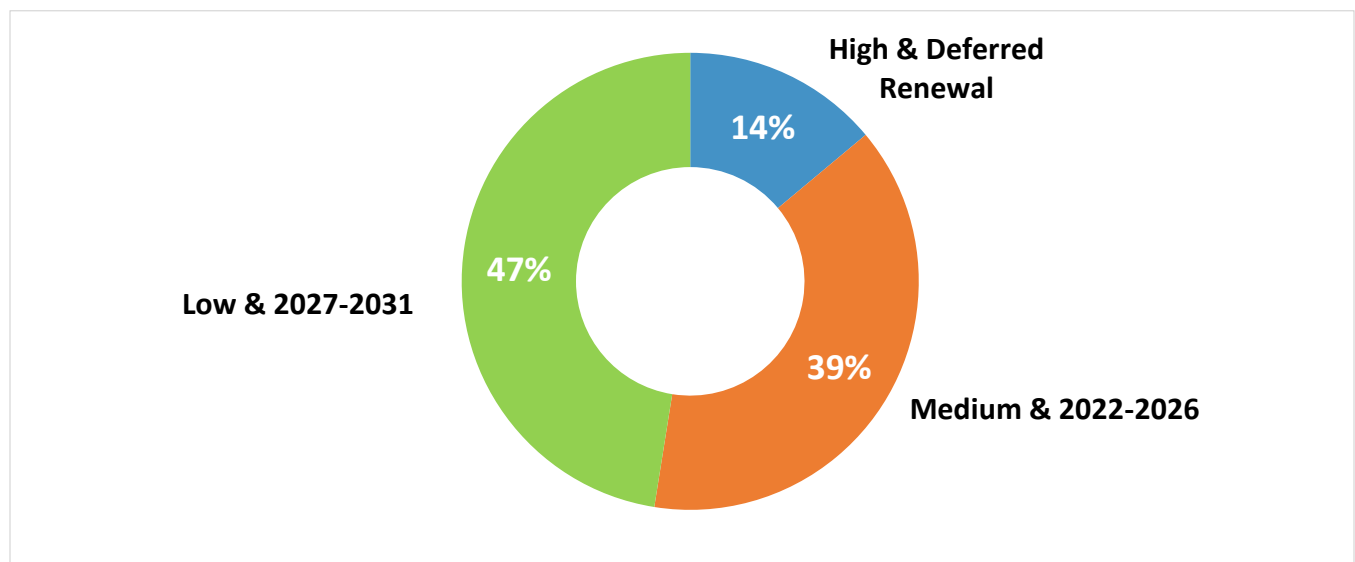


Figure 8. 10-Year Renewal Needs by Priority.

Table 5. Actual values for Figure 8.

PRIORITY	%	\$
<i>High & Deferred Renewal</i>	14%	\$5,190,243
<i>Medium & 2022-2026</i>	39%	\$14,380,532
<i>Low & 2027-2031</i>	47%	\$17,695,092
TOTAL		\$37,265,867

RECOMMENDED RENEWAL STRATEGY

The preceding sections have outlined the overall facility renewal needs at Los Alamos County Public Works. A strong maintenance program, a portfolio of buildings in which half were built since 2000, and strategic renovations have led to an overall FCNI that is above par compared to average ISES clients from the perspective of overall need. However, an examination of individual building FCIs shows that some buildings have significant deferred needs. Six stand out as the best candidates for renovation or aging system replacements based on combined consideration of the FCI and FCNI indices.

The facilities suggested for budgetary focus are shown below in order of highest priority based on FCNI, FCI and criticality of services supported.

1. Airport Terminal
2. Animal Shelter
3. Betty Ehart Senior Center
4. Fire Station 2
5. Fuller Lodge
6. Los Alamos Little Theater

The deferred needs of these six assets comprise 53% (\$2,459,560) of the total deferred needs of the assessed properties.

If this portion of the portfolio is to remain viable and useful, their needs cannot be deferred indefinitely. Where they are crucial to the County's future use strategy, then renovation makes sense. If their usefulness is marginal due to their aging design compared to current expectations, then adaptive reuse, razing or replacement strategies should prevail.

Secondary use facilities were omitted from inclusion in the focus list because they do not provide service to the public and/or are utilitarian in their use, thus they are perceived to be lower return investments. High-need secondary facilities include Red Cross Building, Golf Course Maintenance, and Ice Rink – Zamboni Building. The Airport Storage/Old Incinerator facility is troubling from the perspective of hazardous material, thus is a significant liability.

An important step in the development of a renewal strategy is determining the correct level of investment. Though there are many variables that go into determining investment levels, one industry rule of thumb is that the capital cost of maintaining and using a structure is between 1.5% and 2.5% of physical plant portfolio value (total CRV of the portfolio) per year, given there is no accumulated need (deferred renewal) and all needs are met as they arise. Use of generalities such as this, however, cannot be justified when accurate FCA data, such as that presented herein, is available. Using the FCA data generated and provided via the AMS web software, Los Alamos County can develop a renewal funding strategy that is both well documented and usable in real time.

With the FCA in place, it becomes a simple matter each year to adjust this plan in light of funding strategy changes and campus priorities.

As previously discussed, the FCA identified needs in three major categories, and each must be addressed separately in terms of establishing funding strategies.

Figure 9. Cost Categories.

Category 1 - Nonrecurring One-Time Expenditures (Upgrade Costs)

- These are investment needs that do not recur on a cyclical basis and are typically related to code upgrades, ADA compliance, facility use change, etc.

Category 2 – Projected Recurring Renewal Needs (Keep-up Costs)

- This category encompasses all recurring needs that are not in a deferred status.

Category 3 – Deferred Recurring Renewal Needs (Catch-up Costs)

- These items are past the end of their *economically* useful life, though are not necessarily in a failed state, and ideally should have already been renewed for economic reasons.

With these definitions in mind, here are the totals in each category at Los Alamos County

Table 6. Totals in each cost category.

Cost Category	\$
Nonrecurring Needs – “Upgrade costs”	\$6.3 million
Deferred Recurring Renewal Needs – “Catch-up costs”	\$4.6 million
Projected Recurring Renewal Needs – “Keep-up costs”	\$26.4 million

Before determining the amount of funding required, Los Alamos County must first address whether the status quo is acceptable or needs improvement. If it is acceptable, then the primary focus would be to fully fund the Projected Recurring needs to avoid losing ground, plus any critical Nonrecurring needs. However, if the status quo needs improvement, then the strategy should also include reducing the Deferred and other Nonrecurring needs over a predetermined timeframe. While Los Alamos County facilities are in a relatively good position overall compared to the typical ISES client, deferred and 2022 renewal needs account for 17% of the estimated 10-year needs. It is assumed that the preference would be to work toward reducing that over the next 10 to 20 years. Such a funding strategy could look like the following:

- Address 50% of upgrade and repair costs (Nonrecurring), with the emphasis on ADA and Fire/Life Safety
- Reduce catch-up costs (Deferred Renewal) by 60%
- Fully fund keep-up costs (Projected Renewal)

This would result in the facilities renewal funding levels shown below. Please note that this funding strategy is a proposed starting point, and it can and should be examined and revised by the county master plans and priorities. Also, these amounts are above and beyond normal facilities operations and preventative maintenance budgets.

Table 7. Annual Funding Strategy.

Cost Category	Total Funding For 10 Years	Annual Funding Amount
Upgrade costs	\$3.15 million	\$315,000
Catch-up costs	\$2.76 million	\$276,000
Keep-up costs	\$26.4 million	\$2.64 million
TOTALS	\$32.3 million	\$3.23 million

Determining funding levels for the Nonrecurring needs is more complex than can be adequately addressed in a simple examination of individual facility needs. Consideration should be given to the facilities master plan, space utilization data, program requirements, and how the facilities overlay those requirements. Also, many of the nonrecurring recommendations will not be addressed until such time as the facility in question undergoes a total renovation (such as the addition of fire suppression), and such needs in facilities that should be demolished and replaced due to poor condition or functional obsolescence might never be funded. For property owners whose physical plant portfolio has grown with new construction, but whose overall use population has not grown or has declined, portfolio reduction can be a solid strategy.

APPENDICES

APPENDIX A

Asset List by Asset Code

Appendix A is a general building inventory sorted by building number. The table includes typical stats such as primary use, year built, and size and also provides valuable information like CRV, total renewal costs, FCNI, and FCI.

ASSET CODE	ASSET NAME	USE	BUILT	GSF	CURRENT REPLACEMENT VALUE	TOTAL 10-YEAR NEEDS	FCNI	FCI
200101	AIRPORT TERMINAL	OF	1947	2,577	2,139,000	1,361,116	0.64	0.31
200102	AIRPORT STORAGE/INCINERATOR	WH	1951	3,337	1,098,000	219,562	0.20	0.06
2003	ANIMAL SHELTER	ST	2010	3,982	2,108,000	598,841	0.28	0.02
2005	AQUATIC CENTER	EP	1987	56,620	33,916,000	1,849,230	0.05	0.02
2011	BETTY EHART SENIOR CENTER	CL	1997	18,597	10,067,000	2,726,132	0.27	0.11
2017	COMMUNITY BUILDING	SU	1948	15,523	7,939,000	663,274	0.08	0.00
201901	ECO STATION ADMIN BUILDING	OF	2009	3,157	2,065,000	143,865	0.07	0.00
201902	ECO STATION TRANSFER STATION	WH	2009	15,100	4,505,000	613,847	0.14	0.01
2023	FIRE STATION 2	FH	1948	7,197	2,889,000	722,767	0.25	0.03
2025	FIRE STATION 3	FH	2008	33,000	12,175,000	2,292,472	0.19	0.00
202701	FIRE STATION 4 - MAIN BUILDING	FH	1965	14,068	5,385,000	1,010,628	0.19	0.03
202702	FIRE STATION 4 - TANKER BUILDING	FH	2003	4,030	1,706,000	235,480	0.14	0.02
2029	FIRE STATION 6	FH	1990	7,594	3,048,000	618,316	0.20	0.03
2031	FULLER LODGE	AM	1928	21,614	10,341,000	2,428,335	0.23	0.01

ASSET CODE	ASSET NAME	USE	BUILT	GSF	CURRENT REPLACEMENT VALUE	TOTAL 10-YEAR NEEDS	FCNI	FCI
203301	GOLF COURSE MAINTENANCE	WH	1990	8,463	2,663,000	651,572	0.24	0.07
203302	GOLF COURSE CLUBHOUSE	FS	2015	13,230	7,992,000	782,321	0.10	0.00
2035	HISTORICAL MUSEUM	AM	1918	2,283	1,291,000	75,635	0.06	0.00
203701	ICE RINK - MAIN BUILDING	RT	1991	4,806	2,047,000	334,656	0.16	0.07
203702	ICE RINK - ZAMBONI BUILDING	WH	2003	1,000	1,732,000	753,340	0.43	0.00
2047	JUSTICE CENTER	CH	2010	43,503	24,452,000	2,917,147	0.12	0.01
2051	MESA PUBLIC LIBRARY	LY	1994	43,732	23,447,000	2,174,199	0.09	0.00
2053	MUNICIPAL BUILDING	OF	2013	64,038	33,099,000	3,658,138	0.11	0.00
2055	NATURE CENTER	AM	2015	5,976	3,232,000	415,401	0.13	0.00
2063	PCS BUILDING 1	ST	2010	50,886	22,296,000	2,526,422	0.11	0.00
2065	PCS BUILDING 2	ST	2010	7,331	3,881,000	193,654	0.05	0.01
2067	PCS BUILDING 3	ST	2010	41,202	18,221,000	1,071,928	0.06	0.01
2069	PCS BUILDING 4	ST	2010	21,474	10,309,000	1,097,896	0.11	0.01
2071	PCS BUILDING 5	OF	2010	26,025	14,090,000	1,308,420	0.09	0.00
2073	PCS BUILDING 6	ST	2010	3,328	1,762,000	245,529	0.14	0.01
2079	LOS ALAMOS LITTLE THEATRE	TH	1945	10,125	6,107,000	1,329,728	0.22	0.08
2085	WHITE ROCK YOUTH ACTIVITY CENTER	CL	1948	2,566	1,453,000	183,575	0.13	0.00
2087	RED CROSS BUILDING	OF	1928	606	396,000	142,292	0.36	0.06
208901	WHITE ROCK COMPLEX SENIOR CENTER	CL	1972	3,861	2,186,000	340,260	0.16	0.00
208902	WHITE ROCK COMPLEX ACTIVITY CENTER	CL	1972	3,116	1,764,000	148,425	0.08	0.00
208903	WHITE ROCK COMPLEX MEAL CENTER	FS	1972	3,405	2,287,000	82,506	0.04	0.00
208904	WHITE ROCK COMPLEX TOWN HALL	CL	1972	3,145	1,780,000	279,109	0.16	0.00

ASSET CODE	ASSET NAME	USE	BUILT	GSF	CURRENT REPLACEMENT VALUE	TOTAL 10-YEAR NEEDS	FCNI	FCI
2095	WHITE ROCK VISITOR CENTER	RT	2013	3,320	1,460,000	314,464	0.22	0.03
2099	WHITE ROCK LIBRARY	LY	2015	10,575	6,414,000	755,385	0.12	0.00
GRAND TOTALS				\$584,392	\$293,742,000	\$37,265,867	6.42	0.10

APPENDIX B

Asset List by FCNI

Appendix B provides a building list sorted by FCNI in descending order. This report is useful for directing funding for remodels and renovations. If a building is high on the list and projected to be a relevant part of the campus mission for years to come, it is recommended that the building be sustained to a minimal degree until a major renovation or facility replacement can be funded.

ASSET #	ASSET NAME	USE	BUILT	GSF	CURRENT REPLACEMENT VALUE	TOTAL 10-YEAR NEEDS	FCNI
> 0.60 (Replace)							
200101	AIRPORT TERMINAL	OF	1947	2,577	2,139,000	1,361,116	0.64
0.60 – 0.51 (Poor)							
NONE							
0.50 – 0.31 (Below Avg)							
203702	ICE RINK - ZAMBONI BUILDING	WH	2003	1,000	1,732,000	753,340	0.43
2087	RED CROSS BUILDING	OF	1928	606	396,000	142,292	0.36
0.30 – 0.21 (Fair)							
2003	ANIMAL SHELTER	ST	2010	3,982	2,108,000	598,841	0.28
2011	BETTY EHART SENIOR CENTER	CL	1997	18,597	10,067,000	2,726,132	0.27
2023	FIRE STATION 2	FH	1948	7,197	2,889,000	722,767	0.25
203301	GOLF COURSE MAINTENANCE	WH	1990	8,463	2,663,000	651,572	0.24
2031	FULLER LODGE	AM	1928	21,614	10,341,000	2,428,335	0.23
2079	LOS ALAMOS LITTLE THEATRE	TH	1945	10,125	6,107,000	1,329,728	0.22
2095	WHITE ROCK VISITOR CENTER	RT	2013	3,320	1,460,000	314,464	0.22

ASSET #	ASSET NAME	USE	BUILT	GSF	CURRENT REPLACEMENT VALUE	TOTAL 10-YEAR NEEDS	FCNI
0.20 – 0.11 (Good)							
2029	FIRE STATION 6	FH	1990	7,594	3,048,000	618,316	0.20
200102	AIRPORT STORAGE/INCINERATOR	WH	1951	3,337	1,098,000	219,562	0.20
2025	FIRE STATION 3	FH	2008	33,000	12,175,000	2,292,472	0.19
202701	FIRE STATION 4 - MAIN BUILDING	FH	1965	14,068	5,385,000	1,010,628	0.19
203701	ICE RINK - MAIN BUILDING	RT	1991	4,806	2,047,000	334,656	0.16
208904	WHITE ROCK COMPLEX TOWN HALL	CL	1972	3,145	1,780,000	279,109	0.16
208901	WHITE ROCK COMPLEX SENIOR CENTER	CL	1972	3,861	2,186,000	340,260	0.16
2073	PCS BUILDING 6	ST	2010	3,328	1,762,000	245,529	0.14
202702	FIRE STATION 4 - TANKER BUILDING	FH	2003	4,030	1,706,000	235,480	0.14
201902	ECO STATION TRANSFER STATION	WH	2009	15,100	4,505,000	613,847	0.14
2055	NATURE CENTER	AM	2015	5,976	3,232,000	415,401	0.13
2085	WHITE ROCK YOUTH ACTIVITY CENTER	CL	1948	2,566	1,453,000	183,575	0.13
2047	JUSTICE CENTER	CH	2010	43,503	24,452,000	2,917,147	0.12
2099	WHITE ROCK LIBRARY	LY	2015	10,575	6,414,000	755,385	0.12
2063	PCS BUILDING 1	ST	2010	50,886	22,296,000	2,526,422	0.11
2053	MUNICIPAL BUILDING	OF	2013	64,038	33,099,000	3,658,138	0.11
2069	PCS BUILDING 4	ST	2010	21,474	10,309,000	1,097,896	0.11
0.10 – 0.00 (Excellent)							
203302	GOLF COURSE CLUBHOUSE	FS	2015	13,230	7,992,000	782,321	0.10
2071	PCS BUILDING 5	OF	2010	26,025	14,090,000	1,308,420	0.09

ASSET #	ASSET NAME	USE	BUILT	GSF	CURRENT REPLACEMENT VALUE	TOTAL 10-YEAR NEEDS	FCNI
2051	MESA PUBLIC LIBRARY	LY	1994	43,732	23,447,000	2,174,199	0.09
208902	WHITE ROCK COMPLEX ACTIVITY CENTER	CL	1972	3,116	1,764,000	148,425	0.08
2017	COMMUNITY BUILDING	SU	1948	15,523	7,939,000	663,274	0.08
201901	ECO STATION ADMIN BUILDING	OF	2009	3,157	2,065,000	143,865	0.07
2067	PCS BUILDING 3	ST	2010	41,202	18,221,000	1,071,928	0.06
2035	HISTORICAL MUSEUM	AM	1918	2,283	1,291,000	75,635	0.06
2005	AQUATIC CENTER	EP	1987	56,620	33,916,000	1,849,230	0.05
2065	PCS BUILDING 2	ST	2010	7,331	3,881,000	193,654	0.05
208903	WHITE ROCK COMPLEX MEAL CENTER	FS	1972	3,405	2,287,000	82,506	0.04

APPENDIX C

Definitions

10-YEAR RENEWAL NEEDS

Renewal needs are developed to address anything that is currently deficient or expected to require attention within the next ten years based on existing conditions, industry averages and anticipated lifecycle failures. Recommendations are developed to restore facilities to like-new standards and condition, enhance user safety and mitigate school liability. They replenish the lifecycle of existing components but do not include updates related to departmental space or program use changes, system replacements as a reaction to failure, or specialized program-related equipment. Routine facilities maintenance and repair activities are also not considered to be facilities renewal efforts.

RECURRING NEEDS

Renewal needs associated with cyclical replacement or renewal of major components and building systems.

Recurring needs are stored in the Renewable Component Inventory that is developed for each building inspected. This is a record of installation dates, lifecycle information and renewal costs based on industry standard life expectancies. The result is a detailed year-by-year projection of Recurring Needs for the entire lifespan of the facility. The inventory is categorized by ASTM UNIFORMAT II classification codes.

Examples include roofs, chillers, windows, finishes and air handling units.

DEFERRED RENEWAL

Cyclical renewal needs that are past due for completion but have not yet been accomplished as part of normal maintenance or capital repair efforts. Further delay could impair the proper functioning of the facility.

Estimated costs include compliance with applicable codes, even if such compliance requires expenditures beyond those essential to correct the needed repairs. (These do not pertain to components found in what is considered to be program-use space within a building.)

Specific ranges for acceptable lifecycle extensions were defined by industry standards. All equipment, systems and other specific assets that remain in service beyond those ranges have been grouped in the *Deferred Renewal* category.

PROJECTED RENEWAL

Cyclical renewal efforts that will be due within the 10-year timeframe of the FCA. These represent regular or normal facility maintenance, repair or renovation that should be planned in the near future. (These efforts do not pertain to components found in what is considered to be program-use space within a building.)

NONRECURRING NEEDS

Renewal needs associated with one-time facility repairs and improvements. They typically consist of enhancements to accommodate accessibility, address fire/life safety issues or alter a building for a new use. They can also include deficiencies that negatively affect the structure or systems and components within.

Nonrecurring Needs are stored as project recommendations that are categorized by system and include estimated costs.

Examples include repair of building façade damage or installing an ADA entrance ramp.

PLANT/PROGRAM ADAPTION

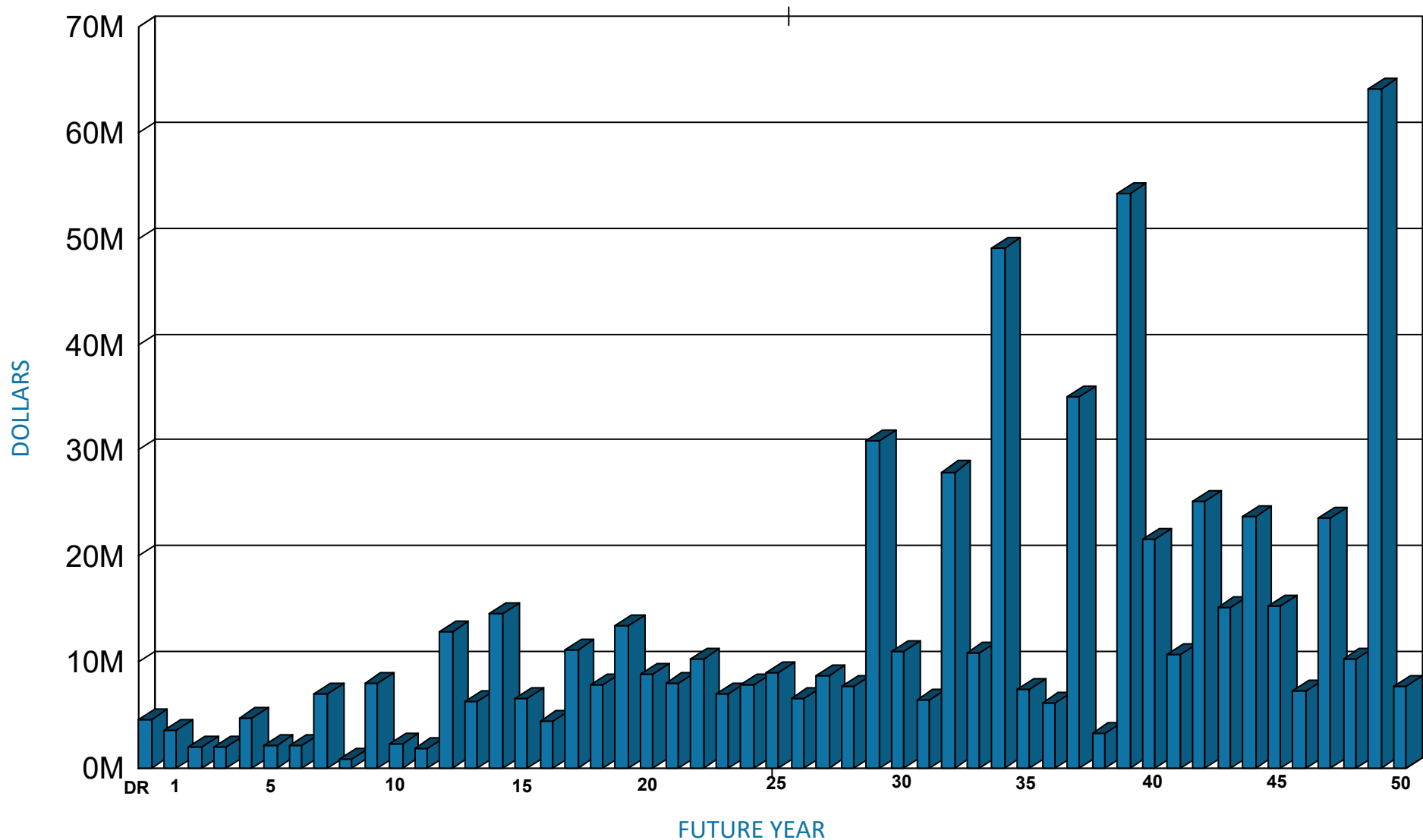
Isolated costs required to adapt the physical plant to the evolving needs of the organization and to changing codes or standards. These are expenses beyond normal maintenance.

Examples include compliance with changing codes, facility alterations required by changed teaching or research methods, and improvements occasioned by the adoption of modern technology (e.g., the use of personal computer networks).

CORRECTIVE ACTION

One-time costs for repairs needed to correct random and unpredictable deficiencies. These recommendations are not related to aligning a building with codes or standards, but could have an effect on building aesthetics, safety, or usability.

RECURRING COMPONENT EXPENDITURE PROJECTIONS



Average Annual Renewal Cost per SF \$8.98