

New Mexico K-12

Statewide Facilities Condition

Final Report for Fiscal Year 2003-2004

Public School Capital Outlay Council

May 18, 2004



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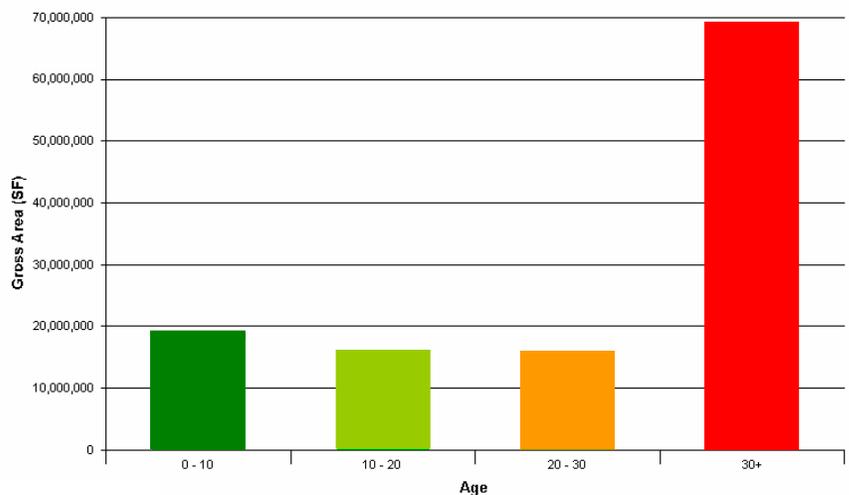
Report Abstract

Executive Summary

Most of the state's 89 school districts are coping with aging facilities, ever-evolving required programs and decreasing numbers of students. However, some districts are experiencing double digit growth in all or parts of their districts due to new student in-flow and internal demographic migration from one part of the district to another. Also, new technologies and national trends related to transitioning from a manufacturing-based economy to a service-based economy are profoundly changing school curricula and related facility needs.

In response to this pressure, some districts will need funding to construct new buildings or modify existing ones. Even greater expenditures will be needed to fund the accumulated backlog of essential repairs and renovations to existing facilities and infrastructure. This funding is critical to provide the quality of education that New Mexico's students deserve and to accommodate changing demographic, programmatic, and facility use needs to support the districts' educational mission.

Through an updated statewide assessment, the total estimated current cost of meeting the state's adequacy standards and addressing the backlog of repair and renovation costs is approximately \$2.3 billion. As shown below, these costs reflect, to a great extent, the aging condition of school facilities.



This report identifies funding needed to meet the rising costs for school building renewal and adequacy in New Mexico and provides a tool to prioritize funding needs to ensure that school facilities will meet the statewide adequacy standards in a reasonable and rational time frame.

Background and Objectives

Objectives of FY 2001-2002 Assessment

In May 2001, New Mexico's education department, on behalf of the Public School Capital Outlay Council (PSCOC), contracted with 3D/International (3D/I) to conduct a level 1 (L-1) condition assessment of all K-12 schools in the state. This assessment included site visits to each public school in each of the state's 89 school districts, about 739 in total.

3D/I completed the following objectives during this initial contract:

1. Reviewed relevant existing school data, including any prior assessments, master plans, inventories, and other facilities information at each of the 89 school districts.
2. Conducted a building inventory and assessment of facility conditions at all public school facilities statewide.
3. Developed a comprehensive public schools facilities condition assessment database and software that included a facility condition index ranking system known as Condition Management Estimating Technology (COMET).
4. Demonstrated and trained school facilities' personnel from all 89 school districts to access facilities assessment data using the new system.

Beyond the initial facility condition assessment in the first study, 3D/I conducted a further assessment of the condition of each school relative to the state's preliminary adequacy standards that were in the process of being developed.

Objectives of FY 2003-2004 Assessment

In September 2003, the PSCOC contracted with 3D/I to update the state's public school K-12 facility condition database, COMET.

3D/I researched and verified state funding provided through the PSCOC (combined actual and anticipated funding of about \$237 million for the deficiencies correction program and about \$200 million for critical capital outlay funding) and individual district's funding for facility corrections, renovations and new schools for projects actually begun between 2001 and 2003.

3D/I adjusted the database facility condition life cycles for each school facility to reflect funded corrections and improvements and then calculated the costs necessary for each facility to meet the state's adopted adequacy standards. Growth factors were developed by the state to reflect new or

expanded facility needs due to enrollment growth, and these needs were then incorporated into the costs of meeting the adequacy standards for each school.

Specific objectives for this contract included:

1. Updating the current school inventory and reflecting new schools funded through PSCOC awards, district funds, or other sources.
2. Updating facility condition data for each district's school facilities after review of underlying data by district and Public School Facilities Authority (PSFA) field personnel.
3. Updating the assignment of data within the data categories and their proposed weighting within the COMET database.
4. Updating the database to include the costs for each school to meet the state's adopted adequacy standards that apply to classroom space; other support space, such as cafeterias, libraries, and science labs; and educational equipment.
5. Incorporating a 5-year rolling average "growth" multiplier factor in the adequacy formulas to reflect demographic trends within a school or district.
6. Updating COMET cost models to reflect current trends in school construction replacement costs.
7. Updating the school facilities ranking after taking into account all of the above changes.
8. Conducting additional training for state and district staff in using and maintaining the COMET database.

The COMET system includes an updated school facility condition database that was prepared using consistent methodology and assumptions that provide forecasts of current and future school renewal and renovation costs. Upon completion of 3D/I's work, the state will have a dynamic capital planning software tool, COMET.

COMET will primarily operate as an objective prioritization and ranking tool to help guide funding for the state and its school districts. It will be available to the districts and will help them measure and meet the state's adequacy standards. It will also help the state and the districts forecast the impact of demographic trends on school facilities and will augment the ability of the districts to develop meaningful master plans and preventive maintenance plans as required under the state's standards-based capital outlay program.

Comparison of the 2001 and 2004 Assessments

The 2001 and 2004 reports were based on snapshots of facility condition assessments taken several years apart. Dynamic internal and external variables affect the COMET facility data, and facility conditions change almost daily, making comparisons between snapshot reports problematic.

In addition, 3D/I and the state made significant process and software innovations to customize the COMET database to reflect the state's new standards-based process. These innovations will foster new facility stewardship initiatives and make COMET a viable planning and monitoring tool for the new state administrative organization, the PSFA.

Major COMET data reporting innovations include the following:

Changes and Variables	2001 Assessment	2004 Assessment
RSMeans* Cost Data COMET cost models restructured in 2004 to reflect new RSMeans data classifications.	Base	Updated
Escalation Factor COMET cost escalation factor changed in 2004 to reflect 3% per year cost escalation used in all forecast cost reports.	0% / year	+3% / year added
Weighting Factors Priority weighting factors remain unchanged.	Established	Adopted
Soft Costs Soft costs were reduced in 2004 to reflect improved project oversight.	+60% add-on effect	+30% add-on effect
Growth Factors School growth factors were added in 2004 to estimate 5-year future school populations used in space adequacy calculations.	None included	Growth factors included
Adequacy Standards Adequacy calculations were changed in 2004 to reflect adopted state adequacy standards.	Preliminary standards used	Adopted standards used
Facility Condition Index (FCI) FCI use restructured and replaced with NMCI in 2004 to reflect inclusion of growth factors and adequacy costs.	FCI	NMCI

Changes and Variables	2001 Assessment	2004 Assessment
Facility Changes District facilities changed because of life cycle re-analysis between the two assessment periods. The 2004 study also includes new schools, additions and newly funded schools under design, and closed schools.	Base	Aging, new schools, additions, closures
Category Migration Data category assignments (1-8) were reviewed for changes of category status and many deficiencies migrated from an assigned category in the 2001 assessment to another in 2004.	Base	Category changes due to updated condition status
Funded Improvements Funding credit for PSCOC, district and other sources for new construction, additions, and renovations.	Base	Added cost credit adjustments to life cycles and listed deficiencies

* RSM means is an industry standard for construction cost estimating.

Summary of Findings

This updated assessment shows a total estimated current cost for the life cycle building renewal and repair needs and adequacy standards needs of \$2.3 billion. The report provides more detailed information on these needs and presents a number of funding strategies for addressing them.

In Finding 1 needs are shown by repair cost category to provide information on the relative urgency and seriousness of the needs. For example, the largest category of repair costs—\$828 million—represents systems that are beyond their estimated useful life. The second largest category, which is expired systems or other deficiencies that impinge on the students' ability to learn, and the third largest category, which is inadequate space as measured by the state's adequacy standards, each exceed \$500 million.

In Finding 2 some of the most significant types of repairs needed are identified. These include costs for addressing damaged cooling and heating equipment, insufficient classroom space, old and inadequate portable buildings, inadequate electrical systems and several other types of repairs.

Finding 3 breaks down the needs and the relative condition index used to compare the needs (the NMCI) by school type, including elementary schools, middle schools, high schools, special schools, combined schools and charter schools. Elementary schools are shown to have the highest total dollar need. However, when looked at in terms of the relative condition, high schools are at the top of the list in terms of both the NMCI and weighted NMCI.

Findings 4 and 5 address the estimated amounts needed each year just to maintain the current condition of the schools. Finding 4 is a 20-year forecast of expiring facility systems. Finding 5 presents two 10-year funding plans that would maintain the current condition of the schools at the current NMCI. The level-funding alternative estimates that \$109 million a year would be needed just to maintain the current conditions.

Finding 6 presents funding strategies that would improve the current condition of the schools using the overall NMCI as the measurement tool. Funding Strategy A sets a target statewide NMCI to be achieved over a 10-year period. Three options are provided. Funding Strategy B prioritizes adequacy needs over the general facility renewal costs. It provides a 10-year plan for a 100% pay down of the costs that have been explicitly identified as adequacy needs and 3 options for improving the NMCI relating to current and future facility renewal needs.

As shown in the table below, the costs of these options range from \$124 million a year to \$253 million a year. It should be noted that these are total estimated costs regardless of funding source. Presumably both state and local resources would be considered in any funding plan adopted by the state.

Summary of 10-Year Funding Strategies

Strategy A: Target Reduction in NMCI for all Categories

Option	Dollars in Millions	Resulting NMCI	Note
A-1	\$191	30%	(a)
A-2	\$220	25%	(a)
A-3	\$253	20%	(a)

Strategy B: 100% Pay Down of Adequacy Categories and Target Reduction in NMCI for Other Categories

Option	Dollars in Millions	Resulting NMCI	Note
B-1	\$220	25%	(b)
B-2	\$253	20%	(b)
B-3	\$287	15%	(b)

Note:

- (a): Amounts shown would reduce NMCI across all categories.
- (b): This includes the additional \$98 million a year that would be needed for 100% pay down of adequacy categories; these additional amounts would reduce all remaining categories to improve NMCI as indicated.

Finding 7 explains the use of the weighted NMCI as the methodology adopted by the state to prioritize individual schools' order of magnitude repair costs and relative ranking. Information on the costs and weighted NMCI by school and by district is provided in Appendices 1 through 3.

Database Update and Analysis

Update Methodology

The database update that 3D/I performed for New Mexico was based on the initial work 3D/I provided to develop a Level-1 facility condition database. See “Level-1 Facilities Assessment” below. The assessment analyzed each school building’s major systems and assigned industry recommended life cycles to determine the need for replacement of the systems. Refinements were added to the database to reflect New Mexico’s adopted adequacy standards and 5-year growth projections.

3D/I used the following steps to update the K-12 database:

Step 1—Gather and Analyze Existing Funding Documentation:

3D/I researched existing and anticipated funding records that applied to facility improvements after the initial 2001 assessment. Primary funding sources included funds awarded by the PSCOC through the deficiencies correction and critical capital outlay programs, direct legislative appropriations, and local general obligation bonds and property tax mill levies passed by districts.

Step 2—Revisit Each District: 3D/I staff visited each district’s central office to interview school facility administrators to update facility inventories for closed schools, renovated schools and new schools to determine relevant facility condition data. Over 40% of the state’s school campuses were then revisited to interview school staff, assess new construction, or investigate data anomalies.

During the visits, 3D/I staff reviewed and updated each district’s school facilities in relation to the state’s adequacy standards. Over 48 adequacy data attributes were collected and reviewed for each school, including school growth trends, student count by grade, educational space and area calculations, equipment count and site criteria.

Step 3—Prepare Special Analysis of Charter Schools/ Reflect Variances for Alternative Schools: 3D/I developed and implemented an innovative internet-based online survey software application to gather data about the education program of charter schools and the adequacy of their facilities. Charter school administrators were sent a web address where they answered questions regarding their facilities’ compliance with the standards or their implementation of alternative methods to achieve a standard. For example, many charter schools partnered with neighborhood community centers to provide athletic facilities in lieu of providing them at charter school facilities. Then, 3D/I prepared a special analysis of the ability of charter school facilities to meet the state’s adequacy standards, after taking into account the possible granting of variances from specific standards by the PSCOC.

Based on this information, in January 2004 the PSCOC granted one-year variances to all charter schools for programmatic standards that were being met by alternative methods. 3D/I then incorporated the variances into the final assessment for each charter school.

Due to the similarities between charter schools and alternative schools in terms of program delivery, the PSCOC also granted one-year variances in April 2004 to all alternative schools for programmatic standards that were assumed to be met by alternative methods.

Step 4—Conduct Data Entry and Quality Assurance: 3D/I entered collected data (facility update data, questionnaire data, and improvement funding) and updated the COMET database. Reports incorporating these revisions were issued to PSFA regional managers for review and comment. 3D/I assessors responded to PSFA comments by adjusting COMET data to correspond to facility improvements that had been initiated or were in design on January 1, 2004.

Based on the previously gathered data, visual observations, and discussions with the school principals and maintenance staff, the assessors:

1. Updated facility inventories;
2. Revised building system life cycles;
3. Adjusted systems categories to reflect repairs; and
4. Adjusted costs to reflect deficiency correction improvements and partially renovated systems.

The following terms and definitions used throughout this report are included here for clarification.

Terms and Definitions

Level-1 Facilities Assessment

The basis for the initial K-12 facility condition database was a level-1 (L-1) assessment. An L-1 assessment collects data from a review of drawings, other current documents, and a thorough visual inspection of facilities in which every accessible area of each building is investigated.

The first phase of an L-1 assessment develops cost models and life cycles of building components, which includes reviewing existing documents to determine types, ages, and components of the buildings, as well as any recent renovations.

In the second phase, assessors inspect the building systems to determine the remaining useful life. The survey information is loaded into the cost model, and the COMET program generates renewal schedules based on the model developed and the assessors' input.

3D/I's deficiency cost estimates are based on RSMeans building labor and material estimates and the Business Owners and Managers Association (BOMA) estimated useful life of building system components. However, COMET can be accommodated to individual client requirements. For example, BOMA recommends using 5 years to estimate the useful life of painting. However, if the client specifies repainting every 7 years, 3D/I would adjust the affected models.

Generally, a facility condition index (FCI) will be calculated for each building, and, if necessary, each major building component. Based on the index and the adjusted cost models, renewal forecasts will be developed for each building.

Because this assessment includes the cost of meeting the New Mexico adequacy standards, 3D/I developed a modified FCI, termed the New Mexico Condition Index, and calculated the NMCI for each K-12 building.

New Mexico Condition Index (NMCI)

The NMCI is a measure derived by 3D/I to reflect both the physical condition and the adequacy of a school facility in New Mexico relative to the state's adequacy standards. The NMCI is modeled after the concept of an FCI, which is a measure widely used in the building industry to represent the physical condition of a facility compared to its replacement value. The NMCI has been modified to include the adequacy standards, and, thus, its comparison with FCI standards is not appropriate. However, some understanding of the derivation and use of the FCI will aid in understanding the NMCI.

The term FCI was originally used by the U.S. Navy to aid in prioritizing repair funds. It has been adopted and refined by numerous national facility

maintenance, trade, and facility administrator associations and is generally used as a means of comparing relative facility conditions. The FCI measures the estimated cost of the current year “repair and replacement” deficiencies, including recommended modernization improvements and grandfathered code issues, divided by the estimated replacement cost of the facility based on contemporary construction standards and design best practices. The result of this division is an index, generally expressed as a percentage, which is the FCI. The higher the FCI, the poorer the relative condition of the facility.

Although the January 2003 report noted that current industry standards consider a building with an FCI of 0% to 5% good, 6% to 10% fair, and 10% and above poor, in practice few, if any, inventories of public buildings ever achieve an overall rating of 10% or below. These FCI guidelines are general guidelines that are under almost constant debate within the higher education and K-12 communities. 3D/I routinely finds existing average K-12 conditions throughout the United States to fall within the range of 25%-35% FCI. Also, the subjective standard noted above cannot be used to judge the condition of New Mexico schools using the NMCI, since it includes the costs of meeting adequacy standards that are not normally included in FCI measurements.

The NMCI uses the same basic principle as the FCI calculations, except that 4 of COMET's 9 categories of types of deficiencies are specifically modified to reflect the additional explicit costs of meeting New Mexico's adequacy standards relating to facilities, space, and equipment. These additional costs are shown in Category 1, Adequacy – Life/Safety; Category 6, Adequacy – Facility; Category 7, Adequacy – Space; and Category 8, Adequacy - Equipment. As explained below, the costs relating to space were calculated taking into account projected enrollment growth for each school.

$$\text{NMCI} = \frac{\text{Unweighted Repair Costs} + \text{Adequacy Costs}}{\text{Replacement Value}}$$

The NMCI is calculated as the sum of the estimated costs of current year repair and replacement deficiencies, including recommended modernization improvements and grandfathered code issues, and the estimated costs necessary to meet the adequacy standards (the numerator) divided by the projected replacement cost of the facility replaced to contemporary construction standards and design best practices (the denominator). The result of this division is an index, generally expressed as a percentage, which is the NMCI. The higher the NMCI, the poorer the relative condition of the facility and the less likely that the facility meets the adequacy standards.

Growth Factors and Space Deficiencies Resulting from Growth

At the request of the state, growth factors were incorporated into the New

Mexico database to reflect a projected 5-year student population for each school. The projections were used to calculate a school’s ability to meet the state’s adequacy standards for space based on the 5-year projected population.

Growth factors were calculated by the PSFA for each school based on the 40-day membership count during the previous 5 years (if 5 years were not available, a 5-year district average was used). The average annual percentage increase (or decrease) in membership over the 5-year period was calculated and, if the result was positive, this increase was defined as the baseline growth factor. Schools with a decrease in enrollment were not impacted by the use of the growth factor.

A school’s baseline factor was compounded for 5 years to obtain the school’s 5-year growth factor. The school’s current student population was then multiplied by the 5-year growth factor to determine a projected school population to calculate adequacy standard requirements. These requirements were then compared to current conditions to derive adequacy of space needs.

About 30% of the schools statewide have positive growth, and of those, 43 are designated as high-growth schools with 5-year compounded growth factors exceeding 125%.

Example: Rio Rancho Elementary School student population is projected to be 127% of the current population within 5 years:

School	5 Previous Years' Average 40-day Membership Factor	5-Year Compounded Growth Factor
Rio Rancho Elementary	1.049	1.271

Space Adequacy Growth Tests in COMET

Two tests for meeting space adequacy growth exist within COMET:

Adequacy Standards Test: Each school is measured against the state’s adequacy standards using student population as a criterion. The student population is adjusted using the growth factor multiplier so that adequacy standards are measured against the school’s 5-year projected population.

For example, 15 square feet per student is required to meet the adequacy standard for computer lab space. The adequacy of computer lab space is determined by multiplying 15 square feet by the projected student population 5-years in the future. If the school’s existing computer lab space meets or exceeds the 5-year projected computer lab requirement, the school meets the standard. If the existing space is less than the requirement, the difference between the required space area and the existing space area is the space

deficiency expressed in cost replacement dollars.

Gross Area Test: Gross area spaces, in addition to the adequacy standards spaces, are needed to make a school functional—assembly areas, common areas, mechanical, and circulation areas. Each school’s gross area was measured against the *State Adequacy Standards Reference Guide* using the appropriate square feet per student multiplied by the projected 5-year future population.

For example, the *Reference Guide* recommends 300 gross square feet per student for a 100-student high school. Adequacy is determined by calculating the projected 5-year school population and multiplying it by 300 square feet. If the school’s total gross square feet meets or exceeds the recommended 5-year projected gross-square-feet, the school meets the *Reference Guide*’s recommendation. If existing space is less than the *Reference Guide*, the difference between the recommended space area and the existing space area is calculated as a space deficiency expressed in cost replacement dollars based on the appropriate school type replacement cost model.

72 schools were calculated as having insufficient space based on the gross area test, and their combined gross space deficiency costs amounted to about \$154,404,000.

The complete list of each school’s growth factors for FY2003-2004 is attached in Appendix 1. Growth factors will be adjusted by PSFA each year to reflect the rolling average of the previous 5 years of 40-day school membership data.

	Data category	Weight
1	Adequacy Life, Safety, Health	3.50
2	Potential Mission Impact / Degraded	1.50
3	Mitigate Additional Damage	2.00
4	Beyond Expected Life	0.25
5	Grandfathered or State/District Recommended	0.50
6	Adequacy - Facility	1.00
7	Adequacy - Space	3.00
8	Adequacy - Equipment	0.50
9	Normal - Within Life Cycle*	0.00

Weighted New Mexico Condition Index (Weighted NMCI)

Weighted NMCI scoring uses the same basic principle as the NMCI calculations, except that COMET’s categories are weighted. In other words, a weighting factor is multiplied by the value of each category (the more critical a need, the higher the factor) so that facilities with a higher proportion of higher weighted categories receive a higher score. The weights that are applied to each category are based on policy judgments as to criticality of need rather than having all categories of equal value. The weights included in this report were tentatively adopted by the PSCOC in April 2004.

For example, the following illustrates two facilities with equal NMCI, but with differences in the way the costs are split between critical and non-critical deficiencies:

Facility	Replacement Cost	Higher Weighted Category (Critical)	Lower Weighted Category (Non-critical)	NMCI	Weighted NMCI
School 1	\$10,000,000	\$1,000,000	\$2,000,000	30.0%	40.0%
School 2	\$10,000,000	\$2,000,000	\$1,000,000	30.0%	50.0%

Weighted Score = {(2.0 x High Priority) + (1.0 x Low Priority)} / Replacement Cost

Considering the weighted score would cause School 2 to have a higher NMCI ranking than School 1, even though their NMCI's are equal.

Weighted scoring is intended to more accurately rank facilities that have similar NMCI's and to place emphasis on the criticality of a deficiency category type.

NMCI weighting is based on the following formula:

NMCI =

$$\frac{[(\text{Category 1} \times 3.5) + (\text{Category 2} \times 1.5) + (\text{Category 3} \times 2.0) + (\text{Category 4} \times 0.25) + (\text{Category 5} \times 0.5) + (\text{Category 6} \times 1.0) + (\text{Category 7} \times 3.0) + (\text{Category 8} \times 0.5) + (\text{Category 9} \times 0.0)]}{\text{Replacement Cost}}$$

Category Definitions and Weighting Factors

Each COMET deficiency was assigned to data categories 1 through 9, to reflect that deficiency's type and priority status. The following list provides a brief summary of each data category and its relative cost weighting in the database:

Category #	Description
1:	<p>Adequacy—Immediate Code/Life/Health: (Weight Factor: 3.5) Used only for critical issues that pose immediate threats to the life, health or safety of persons within the facility. Examples include;</p> <ul style="list-style-type: none"> - Obvious friable asbestos; potential release into the air. - Unprotected exit corridors. - Serious code violations such as blocked egress, improper fire detection/warning, electrical hazards, structural failures, emergency lighting, etc.
2:	<p>Degraded w/ Potential Mission Impact: (Weight Factor: 1.5) Assigned to systems or deficiencies that are mission critical and beyond useful life or most systems that are 150% beyond expected life. Examples include:</p> <ul style="list-style-type: none"> - Fire alarm/detection systems whose age is between 100% and 150% of the life cycle. - Any system that is in serious disrepair or where failure is imminent. - Severely damaged walls, floors and ceilings. - Most systems that are greater than 150% of the BOMA life expectancy.

- 3: Mitigate Additional Damage:**
(Weight Factor: 2.0)
Assigned to systems or deficiencies that should be repaired to mitigate additional damage. Examples include:
- Roofs that are leaking.
 - Exterior walls, doors, window systems that chronically leak.
 - Inadequate ventilation systems that could result in moisture damage or mold creation.
- 4: Beyond Expected Life:**
(Weight Factor: 0.25)
Assigned to systems or deficiencies that are beyond expected BOMA life cycles, but, exhibit no signs of immediate repair requirements. Examples include:
- Electrical service equipment that is 110% of the expected BOMA life yet is functioning well.
 - Most interior finishes not severely damaged, torn, etc.
- 5: Grandfathered or State/District Recommended:**
(Weight Factor: 0.50)
Assigned to systems or deficiencies that are code issues that are "grandfathered" or standards specific to the local agency or jurisdiction. Examples include:
- Fire sprinkler systems, ADA improvements, etc.
 - Finishes, flooring type, architectural standards, etc.
- 6: Adequacy—Facility Related:**
(Weight Factor: 1.0)
Assigned to systems or deficiencies that are determined to be related to the adequacy standards and are an inherent part of the facility. Examples include:
- Expired portable buildings.
 - ADA issues (readily achievable).
 - Insufficient Parking.
 - Wiring for LAN, CATV or internet.
 - Fixed equipment such as lab stations, etc.
- 7: Adequacy—Space Related:**
(Weight Factor: 3.0)
Assigned where additional space is required in order to meet state adequacy standards. Examples include:
- Additional classroom, career education, lab space, etc.
 - Core support areas needed to support mission critical space.
- 8: Adequacy—Equipment:**
(Weight Factor: 0.50)
Assigned where schools do not meet state adequacy standards for non-fixed equipment. Examples include:
- No projection screens.
 - Insufficient number of computers.
 - Playground equipment.
- 9: Normal / Within Life Cycle:**
(Weight Factor: 0.0)
Assigned to a system by default in the COMET database that is within its projected or estimated useful life cycle and does not need replacement. This category will only have money allocated to it upon systems' expirations annually due to another year's turnover. Therefore, as an indicator for needed category reassignment, a Category 9 cost is a flag for the expired system to be reassigned to one of the active Category 1-8 categories for repair or replacement consideration.

Cost Models

COMET incorporates RSMeans-derived cost models to assign life cycle costs to the various systems within a building. Cost models are model representations of school buildings, broken out by building systems and assigned costs-per-square-foot values. Cost models start with data from

RSMMeans. Models are modified to represent a facility that meets the client's local standards as well as local cost trends.

Facility Replacement Cost

Replacement cost represents the hypothetical cost of rebuilding or replacing an existing facility under today's codes and construction standards. For example, an existing school that currently does not have a fire sprinkler, but requires one under today's codes, would include costs for this system as part of its replacement value. It is determined by multiplying the gross area of the facility by a square-foot cost included in that facility's cost model.

Replacement cost includes construction costs and soft costs for fees, permits and other expenses to reflect a total project cost.

Order of Magnitude Repair Cost

These are the estimated budget costs to make partial or full replacement of expired systems, costs for out-of-cycle repair adjustments and costs for adequacy issues- health/safety, facility, space, and equipment. Because adequacy costs may in fact be required in addition to the replacement cost of a current facility, the total order of magnitude repair costs can exceed the replacement cost. For example, if space adequacy standards applied to a facility require additional classroom space, the added space cost equivalent may be in addition to the existing facility's replacement cost.

Order of magnitude repair costs are budget numbers, not actual project costs. The L-1 facility data should not be considered specific scope-of-work descriptions for individual buildings; rather, it is a repair-program budgeting tool that offers reference data for the repair planning process.

Within a construction project program, substantial cost differences may be recognized from the estimated cost figures provided in the COMET database, depending on the method of repair, procurement, the construction market at the time, and the actual scope of work anticipated. Detailed engineering studies may also be required to fully determine costs associated with individual component failures that are beyond the scope of the L-1 assessment.

The scope of the L-1 assessment findings and the figures contained in the COMET database do not include additional renovation costs and mark-ups that may be recommended as part of the PSFA project analysis or within the district's proposed comprehensive repair program, of which the COMET facility assessment is but one input component. The L-1 assessment also does not include information regarding the affordability of any potential repairs or replacements, nor does it prioritize the district's objectives that will become a major component of any district facility repair plan.

Additional Other Costs—Soft Costs

Soft costs are additional costs that are necessary to accomplish the corrective work but are not directly attributable to the deficient system. Soft costs vary by user but usually include architect and contractor fees, contingencies, and other owner-incurred costs necessary to fully develop and build a school.

Soft costs currently included in the COMET database are as follows:

Soft Cost Formulas		
General Contract	Range	Used
General Conditions/Overhead & Profit	(5-12% of MACC*)	10.00%
Contingency	(5-15% of MACC)	10.00%
Gross Receipts Tax	(5-7.5% of MACC)	6.50%
Other Costs		
Design (Work + Reimbursables + GRT)	(3-8% of MACC)	6.00%
Materials Testing	(.25-1% of MACC)	0.75%
Land Acquisition	(1-6% of MACC)	0.00%

*MACC – Maximum allowable construction costs

Life Cycles

3D/I assigned expected life cycles to all the building systems based on BOMA-recommended cycles, manufacturer’s suggested life, or by the state’s recommended life based on historical records. BOMA standards are a nationally recognized source of life cycle data (based on its members’ historical data) for various components and/or systems associated with facilities.

Renewal Factors

Renewal factors represent the difference in the cost of renovating or replacing an existing system, rather than new construction of a building system. For example, installing a new built-up roof on an existing building would include removing and disposing of the old roof, a cost not associated with new construction. Using a 20% premium to account for demolition costs, a renewal factor of 120% would be assigned.

System Cost Adjustments

COMET life cycles can include cost adjustments for system life cycle renewals. The New Mexico K-12 database includes both positive and negative adjustments. Positive adjustments are used when a system is less than 100% used, but repairs are required. For example, the exterior wall

system is less than 100 years old, but costs for repairs are added. Negative adjustments are used to give credit for partial renovations that have occurred in the facility. For example, if 25% of a school has new vinyl flooring and all other vinyl flooring in the facility is statistically at 100% of its estimated useful life, COMET would record the system as 100% used with a negative adjustment entered for the renewed portion of the system (in this case, 25%).

Building Systems

Buildings were divided into the following 25 systems, (with expected life cycles and renewal factors noted):

Group	System	Life Cycle	Renewal Factor
Site	Site Utilities	50 yrs	110%
	Parking / Walks	30 yrs	110%
Structural	Foundation / Slab / Structure	100 yrs	100%
	Exterior Wall	100 yrs	100%
	Exterior Doors / Windows	30 yrs	110%
	Roof	20 yrs	120%
Interiors	Walls / Doors	40 yrs	90%
	Ceilings	15 yrs	110%
	Floors	12 yrs	110%
	Wall Finishes	12 yrs	100%
Mechanical and Plumbing	Heating / Cooling	30 yrs	100%
	Air / Ventilation	20 yrs	100%
	Plumbing / Fixtures	30 yrs	100%
Electrical	Communication / Security	15 yrs	90%
	Electrical Service	30 yrs	90%
	Lighting / Branch Circuits	20 yrs	90%
Specialties	Cabinets / Boards	25 yrs	110%
Code/Life	ADA	100 yrs	100%
	Fire Alarm / Detection	15 yrs	90%
	Fire Sprinklers	30 yrs	130%
	Egress	100 yrs	100%
Adequacy	Gym Equipment	30 yrs	110%

Group	System	Life Cycle	Renewal Factor
	Outdoor Equipment	30 yrs	100%
	Technology	10 yrs	90%
	Labs (High School only)	30 yrs	110%

Reference Organizations

Several organizations are referenced throughout the document and include:

Acronym	Organization
BOMA	Building Owners and Managers Association: national organization of public and private facilities focused on building management tools and maintenance techniques. COMET contribution: building component effective economic life expectancies.
RSMeans	RSMeans: primary national company specializing in construction cost estimating data. COMET contribution: cost models and deficiency pricing.

Findings

Findings

The updated assessment of New Mexico school facilities shows a total estimated current cost for the life cycle building renewal and repair needs and adequacy standards needs of \$2.281 billion. While this total amount has changed little from the \$2.289 billion shown in the previous report, several of the components that make up the total have changed significantly.

Table 1: Comparison of the 2001 and 2004 Assessments

	Order of Magnitude Repair Cost	Replacement Cost
2004 Statewide	\$ 2,281,096,626	\$5,302,181,483
2001 Statewide	\$ 2,288,942,296	\$6,081,226,708
Period over Period Change	\$ (7,845,670)	\$ (779,045,225)

Since 2001, the state has funded about \$437 million for new schools, renovations, infrastructure improvements, equipment, and other school improvements. However, the COMET database comparison of both assessment periods reflects statewide facility condition improvement of only about \$8 million. Why?

Renewals and Escalation

The primary reason more improvement is not recognizable between the two assessment periods given the state’s significant funding for repairs is the nature of the facility condition moving target.

Since the 2001 assessment, about \$273 million, which equals 3 years of additional building system renewal costs, have become due. Added to those renewal costs is a cost escalation at a nominal rate of 3% per year (about \$200 million) to the state’s 2001 backlog renewal repair costs of \$2.3 billion.

COMET Exclusions

Another significant reason that COMET does not capture and account for all facility-related funding is that some of the state funding has been allocated to needs that were not in the original assessment—mold, asbestos and lead paint remediation, water wells, educational technology, and furnishings and equipment. This further diluted net repair progress as reported in the COMET database. Also, some of the districts’ funding has been allocated to facility improvements beyond the adequacy standards and other non-facility improvements.

In other words, while the state’s funding of \$437 million for repairs has significantly improved public school facilities, it has been offset by new renewal and escalation costs, as well as spending on COMET-excluded deficiencies.

Report Changes and Variables

As noted previously in the section “Comparison of the 2001 and 2004 Assessments”, the COMET database was restructured to reflect refinements that affected the 2004 costs. For example, the replacement cost difference of \$779 million is attributable to facility demolitions, school closings, and the 2004 reduced soft costs.

Funding Strategies for Bringing New Mexico’s Schools to Adequacy

New funding strategies will be needed to meet the challenges faced by New Mexico in implementing a funding program to ensure that all school facilities throughout the state are adequate to provide a quality education for New Mexico’s students. The strategy chosen by the state’s policymakers will need to take into account a number of factors—aging buildings, changing educational programs, new teaching technologies and shifting student demographics—as well as limited public resources.

In addition to providing detailed information on the facility needs at individual schools, the COMET system provides information on statewide needs and includes a forecasting model that looks at future needs and alternative funding options for meeting those needs. The FINDINGS and FUNDING OPTIONS discussed below are intended to provide the state’s policymakers with information to develop a funding strategy that will meet the needs of the state and its local school districts.

Finding 1: Repair Cost by Category

The majority of repair costs fall under Category 4: systems that are beyond their estimated useful life. While the building systems may continue to function, statistically they are predicted to fail based on their industry-recommended useful life. The large dollar amounts in this category have a significant impact on future facility renewal needs but do not have a significant impact on the ranking of projects because of the diminished weight applied to this category.

The second largest cost category, Category 2, represents expired systems or cost adjustments that directly threaten the facility's ability to support its intended mission. In other words, the deficiency or inadequacy impinges on the students' ability to learn. For example, a leaking roof in a classroom might provide broad disruption to operations, enough to warrant abandoning the classroom space.

The third largest cost category, Category 7, is space adequacy and represents over-crowding or additional space needs as measured by the state's adequacy standards, including expected enrollment growth. Approximately 70% of the space needs are attributable to current enrollment levels, with the remainder reflecting the projected growth resulting from the inclusion of the growth factors.

Table 2 provides a summary of the overall order of magnitude for repair costs for both general facility condition deficiencies and adequacy deficiencies of life/safety, facility, space, and equipment.

Table 2: Summary of Repair Costs by Category

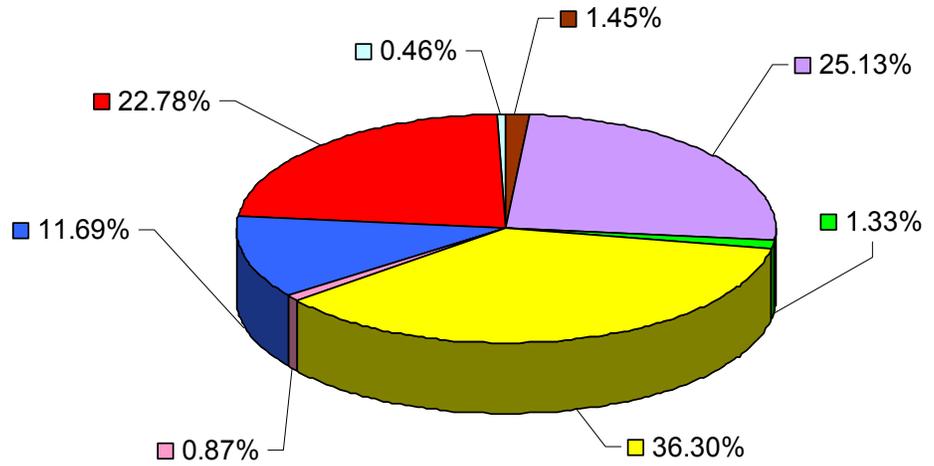
	Category	Weight	Repair Cost	% Total Repair Cost	NMCI	Weighted NMCI
1	Adequacy Life, Safety, Health	3.50	\$32,986,671	1.45%	0.76%	2.66%
2	Potential Mission Impact / Degraded	1.50	\$573,140,820	25.13%	10.99%	16.49%
3	Mitigate Additional Damage	2.00	\$30,357,091	1.33%	0.59%	1.18%
4	Beyond Expected Life	0.25	\$827,987,132	36.30%	15.62%	3.91%
5	Grandfathered or State/District Recommended	0.50	\$19,777,719	0.87%	0.49%	0.25%
6	Adequacy - Facility	1.00	\$266,607,583	11.69%	5.34%	5.34%
7	Adequacy - Space	3.00	\$519,648,626	22.78%	9.99%	29.97%
8	Adequacy - Equipment	0.50	\$10,590,984	0.46%	0.21%	0.11%
9	Normal - Within Life Cycle*	0.00	\$0	0.00%	0.00%	0.00%
	Total		\$2,281,096,626	100.00%	43.99	59.89

* Category 9 is used by COMET to flag expired systems for reassignment to one of the other categories; therefore, there will never be amounts noted under this category.

Chart 1: Category Costs by Percentage of Total Repair Cost

This chart depicts the information in Table 2.

% Priority by Total Cost



- 1 - Adequacy Life, Safety, Health
- 2 - Potential Mission Impact / Degraded
- 3 - Mitigate Additional Damage
- 4 - Beyond Expected Life
- 5 - Grandfathered or State/District Recommended
- 6 - Adequacy - Facility
- 7 - Adequacy - Space
- 8 - Adequacy - Equipment

Finding 2: Selected Major Areas of Deficiencies

Table 3 identifies some of the significant types of repairs needed. Any given type of repair may appear in one or more of the categories shown in Table 1. For example, some roof repairs may impact life safety (Category 1) while others are recommended because of the age of the roof (Category 4).

Table 3: Major Deficiency Examples

Deficiency	Total \$
Damaged Heating / Ventilation / Cooling Equipment	\$ 257,000,000
Insufficient School Classroom Space	\$ 217,000,000
Portable Buildings Beyond Useful Life / Insufficient Space	\$ 202,500,000
Damaged Lighting / Branch Circuits	\$ 139,000,000
Damaged Ceilings	\$ 84,344,000
ADA Deficiencies and Damaged Walkways	\$ 74,000,000
Damaged Roofs	\$ 64,517,000
Insufficient General Square Footage	\$ 62,000,000
Damaged Plumbing / Fixtures	\$ 55,000,000

Damaged cooling and heating equipment reflect the 30+ year average age of most New Mexico schools. Insufficient classroom space represents the cost for space needed to meet the space adequacy standards. Portable buildings account for about 3.5 million square feet of space, and most are beyond their estimated 15-year useful life. The electrical systems—lighting and power—have not kept up with today's requirements for efficient lighting and portable equipment electrical demand.

Finding 3: NMCI by School Type

38% of the total renewal and adequacy needs are related to New Mexico elementary schools. The next largest facility group, high schools, account for 34% of the total renewal and adequacy needs.

Replacement cost represents the cost for facility replacement using today’s construction costs and modern building requirements. Both school replacement and deficiency repair costs for the accumulated backlog of essential repairs and renovations, and adequacy considerations include hard and soft construction costs.

Table 4 provides a summary of order of magnitude, costs of repair and adequacy requirements compared to facility replacement cost for each school group.

Table 4: Cost Summary by School Type

Facility Group	Order of Magnitude Repair Cost	Replacement Cost	NMCI	Weighted NMCI
Statewide	\$ 2,281,096,626	\$ 5,302,181,483	43.99%	59.89%
Elementary Schools	\$ 873,694,866	\$ 2,160,890,700	40.43%	56.58%
Middle Schools	\$ 555,543,409	\$ 1,424,802,164	38.99%	57.10%
High Schools	\$ 769,401,394	\$ 1,469,969,443	52.34%	66.29%
Special Schools	\$ 25,335,543	\$ 56,284,358	45.01%	39.86%
Combined Schools	\$ 21,659,986	\$ 70,816,499	30.59%	37.95%
Charter Schools	\$ 16,956,561	\$ 59,093,755	28.69%	15.59%
Non-instructional*	\$ 18,504,822	\$ 60,324,564	30.68%	NA

*Non-instructional areas include administration, warehouse, and other support facilities.

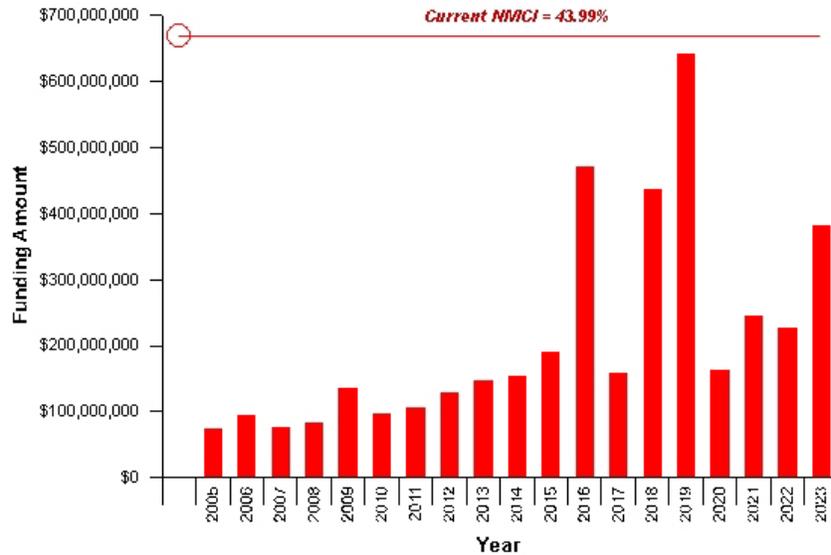
Finding 4: 20-year Facility Renewal Forecast

An integral part of this report is a look toward the future. Having identified today's needs, a simulation of infrastructure decay has been prepared. Renewal costs of buildings' component systems, e.g., roofs, walls, plumbing systems, and electrical systems, average about 2.75% of buildings' total replacement values each year over a 100-year estimated building life. If the funding need is deferred, the funding needed for that year's renewal estimate is forecasted to grow approximately 3% each year due to cost inflation or escalation.

2005	72,730,500
2006	94,020,700
2007	76,902,300
2008	82,498,800
2009	134,638,700
2010	96,108,600
2011	106,260,200
2012	128,588,000
2013	146,202,700
2014	152,462,000
2015	190,319,500
2016	469,399,100
2017	159,083,400
2018	436,322,600
2019	641,320,000
2020	163,032,500
2021	243,817,100
2022	226,780,300
2023	380,397,500
Future	905,118,200

Chart 2: Future Facility Renewal Funding Forecast

Future Facility Funding to Maintain Current NMCI for New Mexico Schools K-12



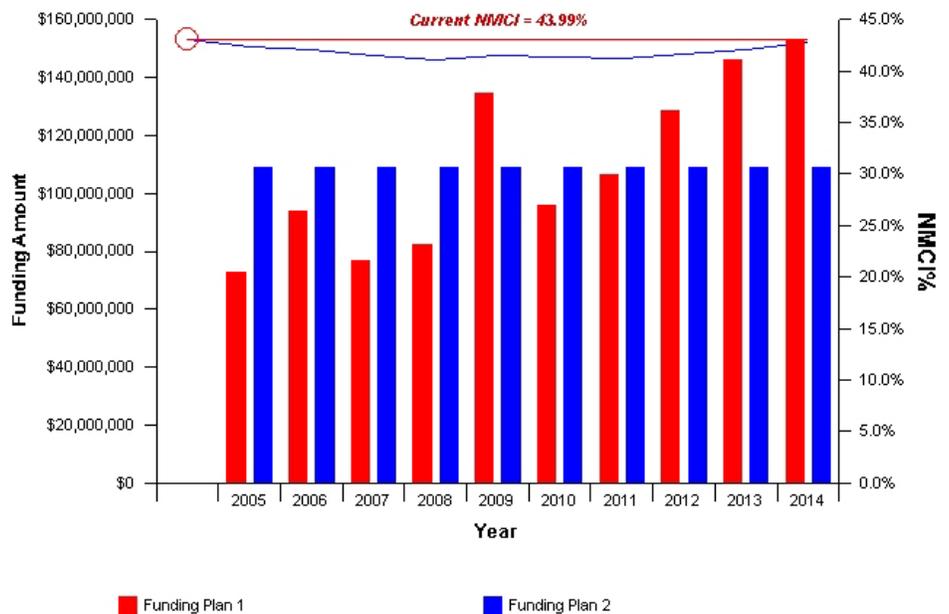
*By analyzing each school building's component system life cycles and building age, the system renewal funding costs can be forecast. For example, a building's roof might last 20 years as designed using its manufacturer's recommended application. If it had been put in place in 1994, it would require renewal in 2014. Adequacy deficiencies are not renewable systems and are excluded from this chart.

Finding 5: 10-Year Funding to Stabilize the Current NMCI

This chart is a forecast of future funding needs for expiring facility systems and assumes no funding to pay down current repair costs. This funding will keep the current facility condition stable at the current NMCI. Adequacy deficiencies are not renewable systems and are excluded from this chart.

Chart 3: Future Funding on Expired Systems

Future Facility Funding to Maintain Current NMCI for New Mexico Schools K-12



Year	Funding Plan 1 Annual Renewal Funding	Funding Plan 2 Level Renewal Funding
	NMCI = 43.99%	
2005	\$72,730,500	\$109,041,250
2006	\$94,020,700	\$109,041,250
2007	\$76,902,300	\$109,041,250
2008	\$82,498,800	\$109,041,250
2009	\$134,638,700	\$109,041,250
2010	\$96,108,600	\$109,041,250
2011	\$106,260,200	\$109,041,250
2012	\$128,588,000	\$109,041,250
2013	\$146,202,700	\$109,041,250
2014	\$152,462,000	\$109,041,250
Total	\$1,090,412,500	\$1,090,412,500

Finding 6: Funding Strategies

This report presents policymakers with two basic funding strategies to improve the overall NMCI of New Mexico schools.

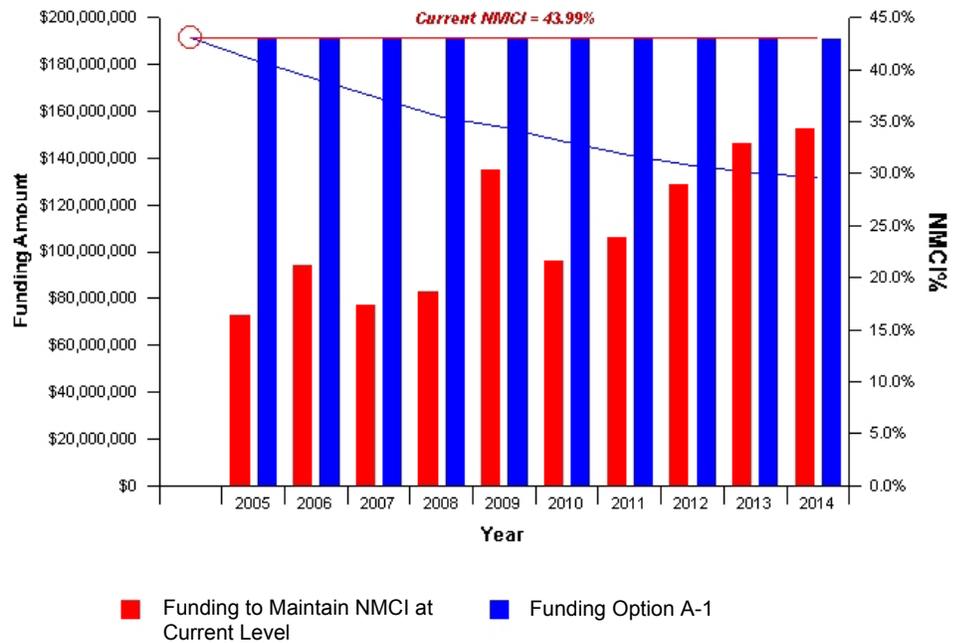
- Funding Strategy A sets a target statewide NMCI in 3 options that would represent a straight-line improvement of the 3 major components of the NMCI simultaneously: backlog renewal costs, adequacy costs and future renewal costs over a 10-year period.
- Funding Strategy B prioritizes adequacy needs over the general facility renewal costs. It provides 100% pay down of the adequacy deficiencies over a 10-year period, and then presents 3 options for the straight-line improvement of backlog renewal and future renewal over 10 years.

Funding Strategy A: Setting a Statewide Target NMCI

In this strategy New Mexico policymakers would set a statewide NMCI target that would reflect significant improvement in the condition of school facilities. The decision of what the target should be will have to be determined by the policymakers based on knowledge of what constitutes a “good” school and what represents a realistic funding goal. This is a standard approach to facilities planning, and it provides a straightforward way of implementing long-term master plans and measuring progress.

The following charts show the funding needs that would be required to meet alternative NMCI targets.

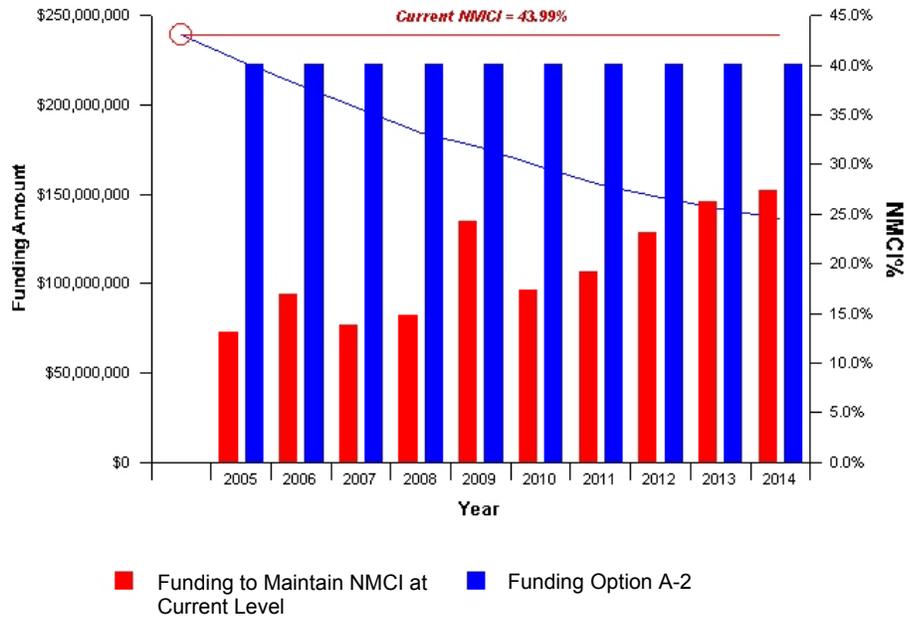
Option A-1: Future Funding to Achieve NMCI=30%



Year	Maintain Stable NMCI Renewal Funding NMCI = 43.99%	Funding for Option A-1 Level Funding NMCI = 30%
2005	\$72,730,500	\$191,037,706
2006	\$94,020,700	\$191,037,706
2007	\$76,902,300	\$191,037,706
2008	\$82,498,800	\$191,037,706
2009	\$134,638,700	\$191,037,706
2010	\$96,108,600	\$191,037,706
2011	\$106,260,200	\$191,037,706
2012	\$128,588,000	\$191,037,706
2013	\$146,202,700	\$191,037,706
2014	\$152,462,000	\$191,037,706
Total	\$1,090,412,500	\$1,910,377,060

Amounts shown in RED are the future annual renewal funding amounts needed to maintain the NMCI at its current level. Amounts shown in BLUE are the amounts required to pay down current facility and adequacy deficiency amounts plus the future amounts needed to pay down future building system renewals to achieve a projected NMCI of 30% within 10 years.

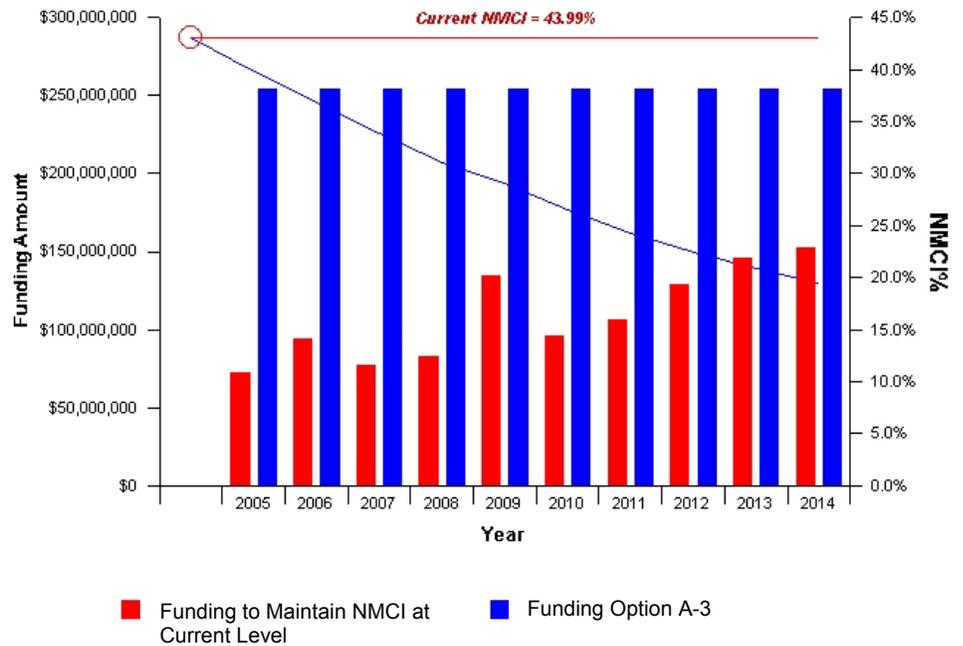
Option A-2: Future Funding to Achieve NMCI=25%



Year	Maintain Stable NMCI Renewal Funding NMCI = 43.99%	Funding for Option A-2 Level Funding NMCI = 25%
2005	\$72,730,500	\$220,196,654
2006	\$94,020,700	\$220,196,654
2007	\$76,902,300	\$220,196,654
2008	\$82,498,800	\$220,196,654
2009	\$134,638,700	\$220,196,654
2010	\$96,108,600	\$220,196,654
2011	\$106,260,200	\$220,196,654
2012	\$128,588,000	\$220,196,654
2013	\$146,202,700	\$220,196,654
2014	\$152,462,000	\$220,196,654
Total	\$1,090,412,500	\$2,201,966,540

Amounts shown in RED are the future annual renewal funding amounts needed to maintain the NMCI at its current level. Amounts shown in BLUE are the amounts required to pay down current facility and adequacy deficiency amounts plus the future amounts needed to pay down future building system renewals in order to achieve a projected NMCI of 25% within 10 years.

Option A-3: Future Funding to Achieve NMCI=20%



Year	Maintain Stable NMCI Renewal Funding NMCI = 43.99%	Funding for Option A-3 Level Funding NMCI = 20%
2005	\$72,730,500	\$253,844,251
2006	\$94,020,700	\$253,844,251
2007	\$76,902,300	\$253,844,251
2008	\$82,498,800	\$253,844,251
2009	\$134,638,700	\$253,844,251
2010	\$96,108,600	\$253,844,251
2011	\$106,260,200	\$253,844,251
2012	\$128,588,000	\$253,844,251
2013	\$146,202,700	\$253,844,251
2014	\$152,462,000	\$253,844,251
Total	\$1,090,412,500	\$2,538,422,510

Amounts shown in RED are the future annual renewal funding amounts needed to keep the current NMCI stable. Amounts shown in BLUE are the amounts required to pay down current facility and adequacy deficiency amounts plus the future amounts needed to pay down future building system renewals to achieve a projected NMCI of 20% within 10 years.

Funding Strategy B: Setting Separate NMCI Targets for Categories

This strategy represents a different approach to facility planning that would be more focused on the adequacy standards. It would be formulated to ensure that adequate funding would be provided to meet life safety, facility, space and equipment needs identified in the adequacy standards and that an “acceptable” level of improvement in the general building condition would also be achieved.

The state’s adequacy standards are incorporated in 4 sets of data categories: life/safety (Category 1); facility (Category 6); space (Category 7); and equipment (Category 8), all of which have been separately captured in the COMET database.

COMET also captures general building condition issues within 4 other data categories typical of building renewal and repair: mission critical repairs (Category 2), mitigation repairs to avoid further deterioration (Category 3), systems operating beyond their estimated useful lives (Category 4), and so-called “grandfathered” code issues (Category 5).

Category Funding Overview

A. Life/Safety, Facility, Space, and Equipment Adequacy Funding (Categories 1, 6, 7, and 8)

About \$980 million would be needed for current and forecasted adequacy needs. Using level payments and 3% escalation, annual funding of about \$98 million would be needed over the next 10 years to achieve 100% pay down;

Yr	Period	Balance	Principal	Escalation	Payments
2004		\$841,627,866			
2005	10	\$757,465,079	\$84,162,787	\$25,248,836	\$109,411,623
2006	9	\$673,302,293	\$84,162,787	\$22,723,952	\$106,886,739
2007	8	\$589,139,506	\$84,162,787	\$20,199,069	\$104,361,855
2008	7	\$504,976,720	\$84,162,787	\$17,674,185	\$101,836,972
2009	6	\$420,813,933	\$84,162,787	\$15,149,302	\$99,312,088
2010	5	\$336,651,146	\$84,162,787	\$12,624,418	\$96,787,205
2011	4	\$252,488,360	\$84,162,787	\$10,099,534	\$94,262,321
2012	3	\$168,325,573	\$84,162,787	\$7,574,651	\$91,737,437
2013	2	\$84,162,787	\$84,162,787	\$5,049,767	\$89,212,554
2014	1	(\$0)	\$84,162,787	\$2,524,884	\$86,687,670
			\$841,627,866	\$235,085,240	\$980,496,464
				Level Payments	\$98,049,646

B. Backlog Renewal Funding

(Categories 2, 3, 4, and 5)

About \$1.7 billion would be needed to address current backlog renewal needs. Using level payments and 3% escalation, about \$168 million in annual funding would be needed over the next 10 years to achieve 100% pay down (100% pay down would achieve an NMCI = 0%).

Yr	Period	Balance	Principal	Escalation	Payments
2004		\$1,439,468,760			
2005	10	\$1,295,521,884	\$143,946,876	\$43,184,063	\$187,130,939
2006	9	\$1,151,575,008	\$143,946,876	\$38,865,657	\$182,812,533
2007	8	\$1,007,628,132	\$143,946,876	\$34,547,250	\$178,494,126
2008	7	\$863,681,256	\$143,946,876	\$30,228,844	\$174,175,720
2009	6	\$719,734,380	\$143,946,876	\$25,910,438	\$169,857,314
2010	5	\$575,787,504	\$143,946,876	\$21,592,031	\$165,538,907
2011	4	\$431,840,628	\$143,946,876	\$17,273,625	\$161,220,501
2012	3	\$287,893,752	\$143,946,876	\$12,955,219	\$156,902,095
2013	2	\$143,946,876	\$143,946,876	\$8,636,813	\$152,583,689
2014	1	\$0	\$143,946,876	\$4,318,406	\$148,265,282
			\$1,439,468,760	\$235,085,240	\$1,676,981,105
				Level Payments	\$167,698,111

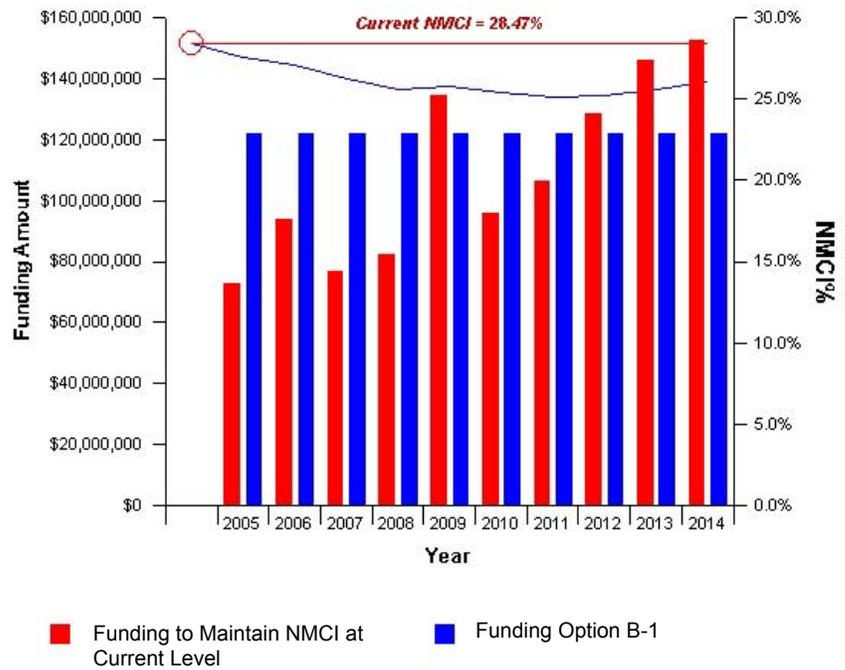
C. Future Renewal Funding

About \$1.1 billion is needed to fund future building renewal. Using level payments and 3% escalation, annual funding of about \$109 million is needed to meet future facility renewal needs over the next 10 years to stabilize the current facility conditions statewide.

If funding were to achieve 100% of these goals, the combined payments would total about \$374 million each year for the next 10 years.

It is probably unrealistic to expect New Mexico, or any other public entity, to provide funding to achieve a 100% pay down of existing building renewal needs. Thus, in addition to the total funding of the life/safety, facility, space, and equipment adequacy needs (Categories 1, 6, 7, and 8), shown in 'A' above, the following charts show the funding required to reduce the current NMCI for the building renewal and replacement categories (28.47%) to a lower NMCI.

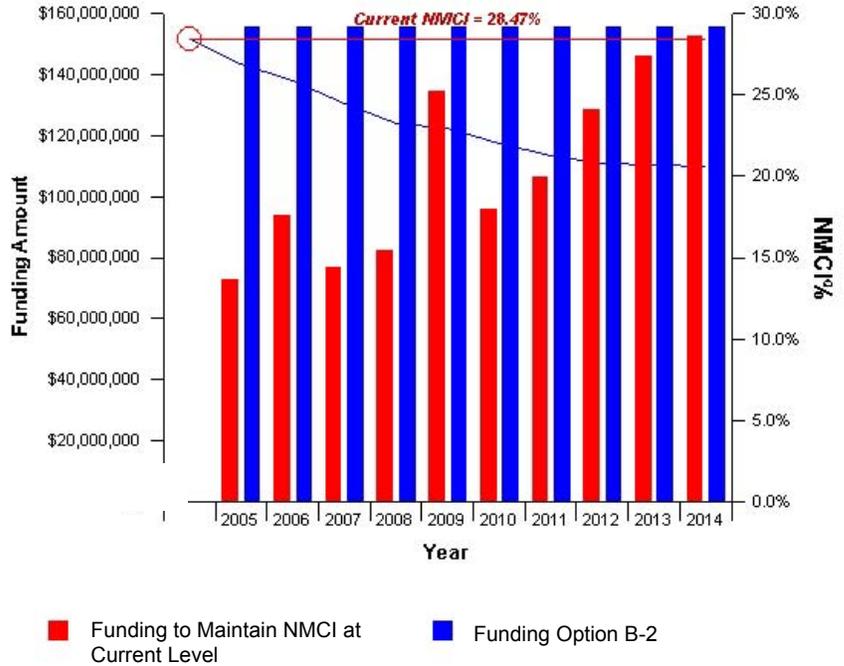
Option B-1: Future Funding to Achieve Renewal NMCI=25%



Year	Funding to Maintain Stable Renewal NMCI NMCI = 28.47%	Funding for Option B-1 Level Funding NMCI = 25%
2005	\$72,730,500	122,147,008
2006	\$94,020,700	122,147,008
2007	\$76,902,300	122,147,008
2008	\$82,498,800	122,147,008
2009	\$134,638,700	122,147,008
2010	\$96,108,600	122,147,008
2011	\$106,260,200	122,147,008
2012	\$128,588,000	122,147,008
2013	\$146,202,700	122,147,008
2014	\$152,462,000	122,147,008
Total	\$1,090,412,500	1,221,470,080

Amounts shown in RED are for the future annual renewal funding amounts needed to keep the current renewal NMCI stable. Amounts shown in BLUE are the amounts required to pay down current facility deficiency amounts plus the future amounts needed to pay down future building system renewals in order to achieve a projected NMCI of 25% within 10 years. Payments for adequacy needs are excluded from this chart.

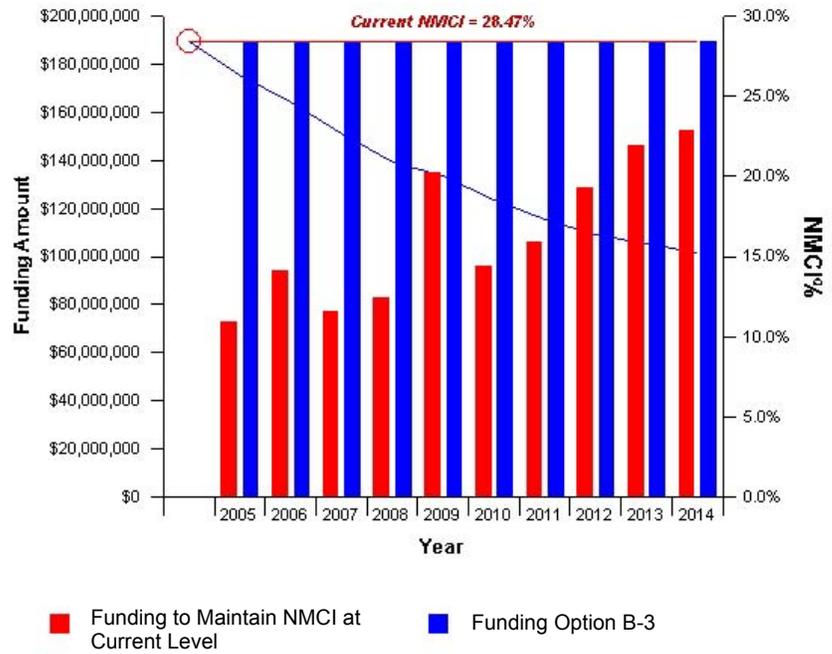
Option B-2: Future Funding to Achieve Renewal NMCI=20%



Year	Funding to Maintain Stable Renewal NMCI NMCI = 28.47%	Funding for Option B-2 Level Funding NMCI = 20%
2005	\$72,730,500	155,794,787
2006	\$94,020,700	155,794,787
2007	\$76,902,300	155,794,787
2008	\$82,498,800	155,794,787
2009	\$134,638,700	155,794,787
2010	\$96,108,600	155,794,787
2011	\$106,260,200	155,794,787
2012	\$128,588,000	155,794,787
2013	\$146,202,700	155,794,787
2014	\$152,462,000	155,794,787
Total	\$1,090,412,500	1,557,947,870

Amounts shown in RED are for the future annual renewal funding amounts needed to keep the current renewal NMCI stable. Amounts shown in BLUE are the amounts required to pay down current facility deficiency amounts plus the future amounts needed to pay down future building system renewals in order to achieve a projected NMCI of 20% within 10 years. Payments for adequacy needs are excluded from this chart.

Option B-3: Future Funding to Achieve Renewal NMCI=15%



Year	Funding to Maintain Stable Renewal NMCI NMCI = 28.47%	Funding for Option B-3 Level Funding NMCI = 15%
2005	\$72,730,500	\$189,442,574
2006	\$94,020,700	\$189,442,574
2007	\$76,902,300	\$189,442,574
2008	\$82,498,800	\$189,442,574
2009	\$134,638,700	\$189,442,574
2010	\$96,108,600	\$189,442,574
2011	\$106,260,200	\$189,442,574
2012	\$128,588,000	\$189,442,574
2013	\$146,202,700	\$189,442,574
2014	\$152,462,000	\$189,442,574
Total	\$1,090,412,500	\$1,894,425,740

Amounts shown in RED are for the future annual renewal funding amounts needed to keep the current NMCI stable. Amounts shown in BLUE are the amounts required to pay renewal down current facility deficiency amounts plus the future amounts needed to pay down future building system renewals to achieve a projected NMCI of 15% within 10 years. Payments for adequacy needs are excluded from this chart.

Finding 7: Method Used to Prioritize Projects

The statewide NMCI for New Mexico’s school facilities is calculated at 43.99%.

	Data category	Weight
1	Adequacy Life, Safety, Health	3.50
2	Potential Mission Impact / Degraded	1.50
3	Mitigate Additional Damage	2.00
4	Beyond Expected Life	0.25
5	Grandfathered or State/District Recommended	0.50
6	Adequacy - Facility	1.00
7	Adequacy - Space	3.00
8	Adequacy - Equipment	0.50
9	Normal - Within Life Cycle*	0.00

Weighted NMCI

In order to prioritize a school’s order of magnitude repair costs and relative ranking or scoring, the state requested that 3D/I modify the NMCI to create a weighted NMCI using the weights shown on the left.

This report provides a School Ranking Report, District Summary Report and District Detail Report, all of which show the estimated repair costs, replacement costs and weighted NMCI for each school in New Mexico. As previously noted, the state decided to use the weighted NMCI calculated from the COMET database as a tool to rank the relative condition of school facilities, including any deviations from the adequacy standards. The School Rankings Report, therefore, lists the schools in order of the weighted NMCI. The District Summary Report and the District Detail Report are sorted alphabetically, with the weighted NMCI and school ranking shown for each school.

NMCI School Ranking

Individual school ranking by weighted NMCI score for Categories 1-8*.

Appendix 1

* Category 9 has no cost value and is used as a data reassignment flag.

Statewide District Summary

District summary by weighted NMCI score for Categories 1-8*.

Appendix 2

* Category 9 has no cost value and is used as a data reassignment flag.

Statewide District Detail Summary

District and school detail by weighted NMCI score for Categories 1-8*.

Appendix 3

* Category 9 has no cost value and is used as a data reassignment flag.

School Growth Factors

Appendix 4

Growth factors were calculated for each school using its 5-year data of 40-day membership counts through the 2002-2003 school years. Year over year differences were calculated, and these were averaged to obtain the school's 5-year growth factor.

These factors were then compounded for the next 5-year period to develop the forecasted growth factor used in the space adequacy standards calculations.