

# Broken Promises, Broken Schools:

## Report of the No Child Left Behind School Facilities and Construction Negotiated Rulemaking Committee

December 2011

### TRIBAL REPRESENTATIVES

and Federal representatives from the following offices of the Department of the Interior:

Office of Regulatory Affairs and Collaborative Action

Office of Facilities Construction and Management

Bureau of Indian Education

Office of the Solicitor – Division of Indian Affairs



## Broken Promises, Broken Schools: Report of the No Child Left Behind School Facilities and Construction Negotiated Rulemaking Committee<sup>1</sup>



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<sup>1</sup> See Appendix A for a list of Committee members and their biographies.



### Chapter 1 Includes:

- An overview of the Committee, its task, and its process
- The Federal Government's historical duty to educate native children
- Bureau-funded schools and their unmet facility needs
- Lack of transparency in the funding allocation process
- A summary of all of the Committee's recommendations from this report



## Chapter 1: Introduction

The No Child Left Behind Act of 2001 (NCLB or the Act) includes provisions to improve the education of Native American children<sup>2</sup>. One of those provisions directed the Secretary of the Interior to employ the mechanisms delineated by the Federal Advisory Committee Act<sup>3</sup> and the Negotiated Rulemaking Act<sup>4</sup> to assemble a committee for the specific purpose of preparing a report to Congress and the Secretary of the Interior. As elaborated in 25 U.S.C. § 2005(a)(5), this report is intended to provide Congress and the Secretary comprehensive information about the conditions and funding needs for facilities at Bureau-funded schools.

Specifically, NCLB directed the committee to prepare and submit to the Secretary:

- A catalog of school facilities that:
  - incorporates the findings from the Government Accountability Office study evaluating and comparing school systems of the Department of Defense and the Bureau of Indian Affairs;
  - rates such facilities with respect to the rate of deterioration and useful life of structures and major systems;
  - establishes a routine maintenance schedule for each facility;
  - identifies the complementary educational facilities that do not exist but that are needed; and
  - makes projections on the amount of funds needed to keep each school viable, consistent with the accreditation standards required pursuant to this Act.
- A report on the school replacement and new construction needs of Bureau-funded schools, and a formula for the equitable distribution of funds to address those needs.
- A report on the major and minor renovation needs of Bureau-funded schools, and a formula for the equitable distribution of funds to address such needs; and
- Revised national standards for heating, lighting, and cooling in home-living (dormitory) situations.

Per the requirements of NCLB, in the fall of 2006, DOI sought assistance from the U.S. Institute for Environmental Conflict Resolution (U.S. Institute) to convene a committee. The U.S. Institute, working with neutral contractors, conducted a convening assessment. The convening team conducted confidential interviews, reaching out to 198 individuals, representing 99 different schools.

In 2008, the BIA issued a Notice of Intent to Form a Negotiated Rulemaking Committee and to request nominations for tribal representatives on the committee. As required by the Act, the Secretary of the Interior was directed to select representatives of Indian tribes for the committee from among individuals nominated by tribes whose children attend Bureau-funded schools. To the maximum extent possible, the proportional representation of tribes on the committee would reflect the proportionate share of students from tribes served by the Bureau-funded school system. In addition, the Secretary was directed to consider the balance of representation with regard to geographical location, size, and type of school and facility, as well as the interests of parents, teachers, administrators, and school board members, in selecting tribal committee representatives. DOI received 57 letters nominating 40 tribal representatives and 14 letters nominating 12 tribal alternates. Nominees were vetted by DOI and selected, and then approved by the White House. DOI selected, according to the criteria noted above, 22 tribal representatives and nine tribal alternates, and appointed four federal representatives and alternates.

2. 107 Pub. Law 110, Part D; 115 Stat. 1425, 2007 (January 28, 2002).

3. 5 U.S.C. Appx. § 5 – 16.

4. 5 U.S.C. §§ 561 – 570a.

The Secretary of the Interior chartered the NCLB School Facilities and Construction Negotiated Rulemaking Committee (the Committee) (see Appendix A) in January 2010, roughly six years after the mandated time frame. Once convened, the Committee held seven multi-day meetings, during which they visited five Bureau-funded schools and received public comments from 12 tribal and school officials. The Committee deliberated at length upon the issues called for by Congress. The Committee also conducted five regional consultation sessions around the country, which were attended by more than 200 participants, and 16 tribes, schools, or tribal organizations submitted written comments (see Appendix B for an overview of the consultation process and findings). The Committee reviewed extensive data from federal agencies, and also submitted two data calls to Bureau-funded schools. The Committee respectfully submits the following report in compliance with the statutory mandate.

This report includes recommendations regarding how the Bureau should prioritize funding for construction work on Bureau-funded school facilities. The Committee is also submitting a catalog detailing the inventory and conditions of the facilities at each Bureau-funded school (due to the length of the catalog, drawn from a computerized database, the Committee submits the catalog as Sub-Report A). The Committee's recommendations include an analysis of this catalog and recommendations for improving its accuracy so that it can quantitatively and qualitatively guide the prioritization of repair and construction funding. A narrative summary of information contained in that Catalog and collected by the Committee is also included in this report.

The overarching conclusions to be derived from this report is that:

**The funding appropriated by Congress has not been sufficient to keep pace with the deterioration of Bureau-funded school facilities—it would take \$1.3 billion to bring all Bureau-funded schools up to acceptable condition. Furthermore, inadequate use and support of the computer database on which Indian Affairs relies, as well as lack of transparency and equity in the existing decision making process, has hampered a fair and effective allocation of funds.**

The Committee's findings contain strong support for extensive improvements in Indian Affairs' system of ad-

ministering school facilities and allocating construction monies for Bureau-funded schools. Recommendations for these improvements are contained in this report.

The DFO proposes, and the Committee endorses, a plan to implement the recommendations of this report as quickly as possible by incorporating these recommendations into the Indian Affairs Manual (IAM).

### The Federal Government's Historical Duty to Educate Native Children

The historical connection of Native American Indians to the earth, air, water, and other resources has a distinct identity that has been in existence since before the United States became an independent nation. Indeed, to secure a nation independent from the English crown, early U.S. governments were obliged to enter into more than 100 treaties with American Indian tribes. Treaties have long been regarded as the most legitimate and steadfast form of agreement between two nations. According to the United States Constitution, **"...all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land."**<sup>5</sup> These treaties constituted contractual agreements between sovereign nations. Through these contracts, American Indian tribes ceded vast stretches of their ancestral lands since time immemorial to the United States in exchange for specific promises and considerations. Many of those treaties included solemn commitments by the United States to accept trust responsibility for the education of American Indian children.

As Congress recently acknowledged in the Act:

*"Congress has declared that the Federal Government has the sole responsibility for the operation and financial support of the Bureau of Indian Affairs-funded school system that it has established on or near Indian reservations and Indian trust lands throughout the Nation for Indian children. It is the policy of the United States to fulfill the Federal Government's unique and continuing trust relationship with and responsibility to the Indian people for the education of Indian children and for the operation and financial support of the Bureau of Indian Affairs-funded school system to work in full cooperation with tribes toward the goal of ensuring*

5. Art. VI of the Constitution.

*that the programs of the Bureau of Indian Affairs-funded school system are of the highest quality and provide for the basic elementary and secondary educational needs of Indian children, including meeting the unique educational and cultural needs of those children.”<sup>6</sup>*

The federal obligation to American Indian children continues today. In December 2010, at the White House Tribal Nations Conference, the President of the United States of America reminded the public: “I said that so long as I held this office, never again would Native Americans be forgotten or ignored.” The President added, “[historical wrongs] serve as a reminder of the importance of not glossing over the past or ignoring the past, even as we work together to forge a brighter future. That’s why, last year, I signed a resolution, passed by both parties in Congress, finally recognizing the sad and painful chapters in our shared history—a history too often marred by broken promises and grave injustices against the First Americans.”<sup>7</sup>

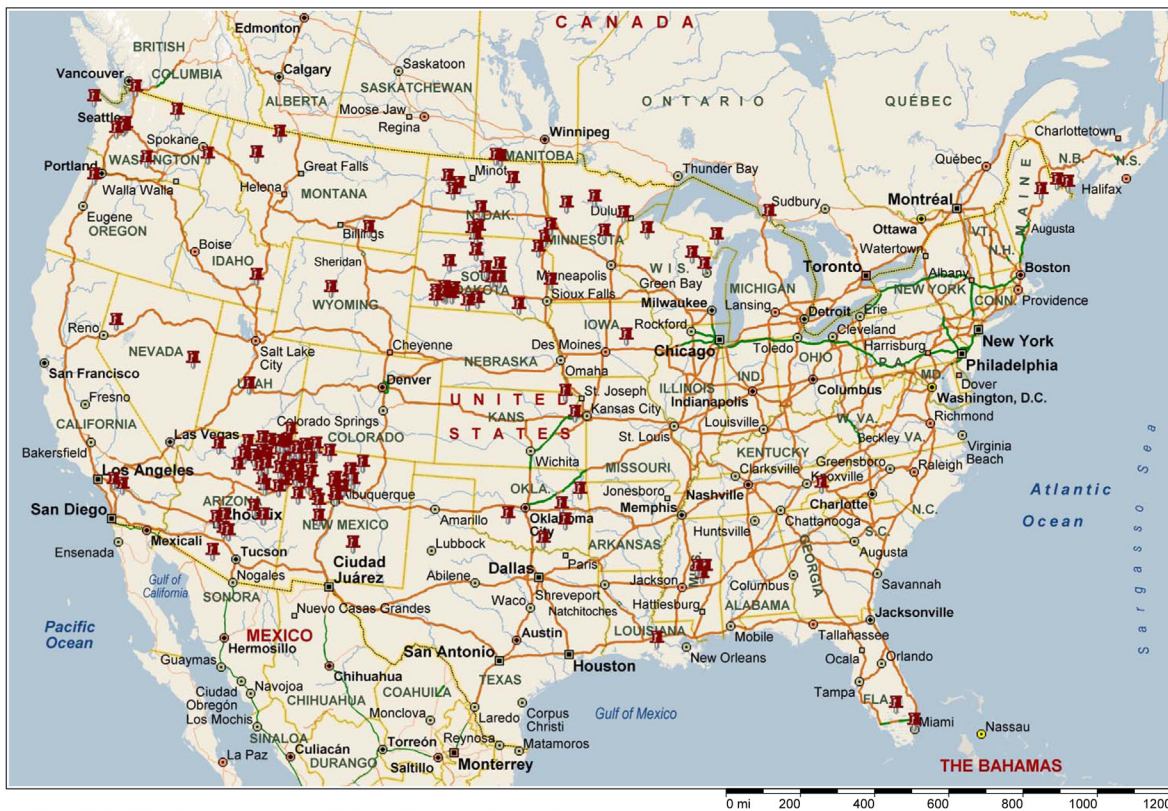
The origins and long history of the Federal Government’s trust responsibility respecting American Indian education is both complicated and unique; it is comprehensively summarized in the leading treatise, *Cohen’s Handbook of Federal Indian Law*:

*Provisions regarding Indian education appear with the earliest colonial laws. Beginning with the 1794 Treaty with the Oneida, [7 Stat. 47 (1794)] over 150 treaties between tribes and the United States have included educational provisions. For almost as long a time, Congress has legislated to provide for Indian education generally. In 1819, Congress established a permanent “civilization fund,” which, until its repeal in 1873, authorized the executive to spend an annual sum to employ teachers in Indian country to provide “against the further decline and final extinction of the Indian tribes ... and for introducing among them the habits and arts of civilization.” Civilization Fund Act, Act of Mar 3, 1819, 3 Stat. 516.<sup>8</sup>*

6. Pub. Law 107-110, § 1042, 115 Stat. 2007, codified at 25 U.S.C. § 2000.

7. President Barack Obama, “Remarks by the President at the White House Tribal Nations Conference.” White House Tribal Nations Conference. Washington, DC, December 16, 2010.

8. Cohen’s Handbook of Federal Indian Law, Section §22.03: Education. Copyright 2009, Matthew Bender & Company, Inc.



Pin marks show locations of Bureau-funded schools.



Beginning with the Kiowa Comanche Treaty of October 21, 1867 (15 Stat. 581), the United States entered into at least eight treaties containing identical provisions obligating the U.S. to provide school facilities for Indian education:

*“[t]he United States agrees that for every thirty children... a house shall be provided, and a teacher competent to teach the elementary branches of an English education, shall be furnished, who will reside among said Indians, and faithfully discharge his or her duties as a teacher.”<sup>9</sup>*

Unfortunately, as Cohen further explains, the U.S. has not fulfilled its treaty obligations to Indian education:

*[G]enerations of inadequate and inappropriate education have left a deep scar. In addition, failure to fully fund many, if not most, federal Indian education initiatives limits the efficacy of many education laws. Many Indian children attend school in facilities that are among the worst in the nation...*

*Opinions have long varied about the existence and extent of the United States legal obligation for Indian education. Today, however, Congress and the executive both agree that the federal government has a special responsibility for the education of Indian peoples. In 2001, Congress codified this responsibility more explicitly in the Native American Education Improvement Act.<sup>10</sup>*

The Commerce Clause of the United States Constitution vests Congress with plenary authority over the relationship between the Federal Government and Indian tribes.<sup>11</sup> In exercising that authority, Congress plays a fundamental role in helping – or hindering – the success of America’s First Americans. NCLB included mandates to implement Congress’ recognition that:

*It is the policy of the United States to fulfill the Federal Government’s unique and continuing trust relationship with and responsibility to the Indian people for the education of Indian children. The Federal Government will continue to work with*

9. Also: Treaty with the Cheyenne and Arapaho, October 28, 1867 (15 Stat. 593); Treaty with the Ute, March 2, 1868 (15 Stat. 619); Treaty with various tribes of Sioux, and Arapaho, of 1868 (15 Stat. 635); Treaty with the Crow, May 7, 1868 (15 Stat. 649); Treaty with the Northern Cheyenne and Northern Arapaho, May 10, 1868 (15 Stat. 655); Treaty with the Shoshonees and Bannacks, July 3, 1868 (15 Stat. 673); Treaty with the Navajo, June 1, 1868 (15 Stat. 677).

10. “Cohen’s Handbook of Federal Indian Law,” Copyright 2009, Matthew Bender & Company, Inc. §22.03: Education.

11. Constitution Art. I, § 8, C13.

*local educational agencies, Indian tribes and organizations, postsecondary institutions, and other entities toward the goal of ensuring that programs that serve Indian children are of the highest quality and provide for not only the basic elementary and secondary educational needs, but also the unique educational and culturally related academic needs of these children.<sup>12</sup>*

## Bureau-Funded Schools

The BIA and BIE within DOI are the federal agencies responsible for executing Congress’ directives regarding American Indian education. BIA funds 183<sup>13</sup> schools serving Native Americans located on 64 reservations in 23 states. Fifty-seven of these schools are managed directly by the BIE and 126 are operated by tribes with Bureau funding. The OFMC, under the Director of the OFECR, is responsible for recommending to the Director of the BIE the distribution of operations and maintenance funds, and for the management and funding of projects for the repair, renovation, and replacement of Bureau-funded schools.

Indian Affairs (IA) is responsible for funding, maintaining, repairing, and replacing the 183 schools educating American Indian students. IA’s relationship to those schools is like that of a state educational agency to the public schools it serves. A key distinction, however, is that state educational agencies receive tax revenues from the localities of their respective schools and Federal Impact Aid money (P.L. 81-815). In contrast, Bureau-funded schools cannot draw on the local tax base; they cannot issue bonds; they are primarily dependent upon support from the Federal Government. Bureau-funded schools must abide by 23 different state standards, federal standards, and in many cases, tribal standards.

Constructing and maintaining Bureau-funded school facilities is a major component of DOI’s trust responsibility to American Indians; it is a requirement of many treaties and statutes.<sup>14</sup> Breach of that responsibility constitutes a separate and significant chapter within the larger history of misuse, neglect, and violation of trust by the Federal Government in its dealings with Native Americans. Federal appropriations for maintaining and replacing Bureau-funded schools have not

12. 115 Stat. 1907; amending 20 U.S.C. § 7401.

13. There are 183 schools in BIA’s inventory. While two of these do not receive funds from BIA, they are still counted in their inventory, and so are included in all discussions within this report.

14. 115 Stat. 1907; amending 20 U.S.C. § 7401.



kept pace with the deterioration of these buildings nor with changing educational needs and requirements.

The United States, in its announcement of U.S. support for the United Nations Declaration on the Rights of Indigenous Peoples, proclaimed: “The Administration is also committed to supporting Native Americans’ success in K-12 and higher education.”<sup>15</sup> At the White House Tribal Nations Conference, the President added: “We’re rebuilding schools on tribal lands while helping to ensure that tribes play a bigger role in determining what their children learn.”<sup>16</sup> This Committee’s research and conclusions should help the Federal Government to fulfill these public declarations.

### The Unmet Need for Quality School Facilities

In his September 8, 2011, speech on the American Jobs Act, the President declared: “How can we expect our kids to do their best in places that are literally falling apart? This is America. Every child deserves a great school.”<sup>17</sup> This observation has a scientific basis – established research has explored the correlation between school facility conditions and academic performance (see Appendix C: Abstracts of Research Papers Associating School Conditions with Performance). Multiple studies have found significant links between inadequate facility conditions and poor performance for students and teachers. These studies have found that the quality of physical environments—including temperature, lighting, acoustics, and age of facilities—affects dropout rates, teacher retention, test scores, and student behavior. Direct testimony supports this correlation. For example, on September 11, 2010, in a statement to a Senate Committee on Indian Affairs hearing on Construction and Facility Needs at Bureau-funded schools, a student testified: “With an insufficient heating and cooling system, I have some classrooms that are very cold and others that are very warm. This is distracting when trying to do my work ... When students are expected to attend and work in a school like ours, it’s very difficult to work and take school seriously when our building is in the shape that it is.”<sup>18</sup> The principal of a different Bureau-funded school reported that structural defects in the classrooms forced teachers to

Average Age of Bureau of Indian Education Academic and Dorm Buildings	
Schools (Buildings age 0-10)	35
Schools (Buildings age 11-20)	29
Schools (Buildings age 21-30)	36
Schools (Buildings age 31-40)	34
Schools (Buildings age 41-50)	32
Schools (Buildings age over 50)	17
	<b>183</b>

Source: OFMC, 2011

Breakdown of Number and Cost of Deficiencies by Type of School			
Type of School	Number of Schools	Number of Backlogs Entered in FMIS	Estimated Cost of Backlogs
BIE-operated	60	5,575	\$ 461,235,377
P.L. 100-297 Grant	119	6,861	\$ 497,888,744
P.L. 93-638 Contract	4	270	\$ 8,493,183
<b>Totals</b>	<b>183</b>	<b>12,706</b>	<b>\$ 967,617,304</b>

Data from FMIS as of May 2011, not including those backlogs already funded for repair or renovation. The 63 schools remaining in poor condition as of September 2011 require an estimated \$1.3 billion to elevate them to an acceptable condition. Total backlogs and costs to elevate schools from poor condition are not equivalent since many schools would require full scale renovation or replacement.

Source: OFMC, 2011

15. “Announcement of U.S. Support for the United Nations Declaration on the Rights of Indigenous Peoples,” December 16, 2010.

16. President Barack Obama, “Remarks by the President at the White House Tribal Nations Conference.” White House Tribal Nations Conference. Washington, DC, December 16, 2010.

17. President Barack Obama, Speech to a Joint Session of Congress, September 8, 2011.

18 Lindsey White, Bug-O-Nay-Ge-Shig School, MN. United States Senate Committee on Indian Affairs, “Oversight Field Hearing on Preparing Our Students for Tomorrow in Yesterdays Schools: Construction and Facility Needs at Bureau of Indian Education Schools,” September 11, 2010, White Earth Reservation, MN.

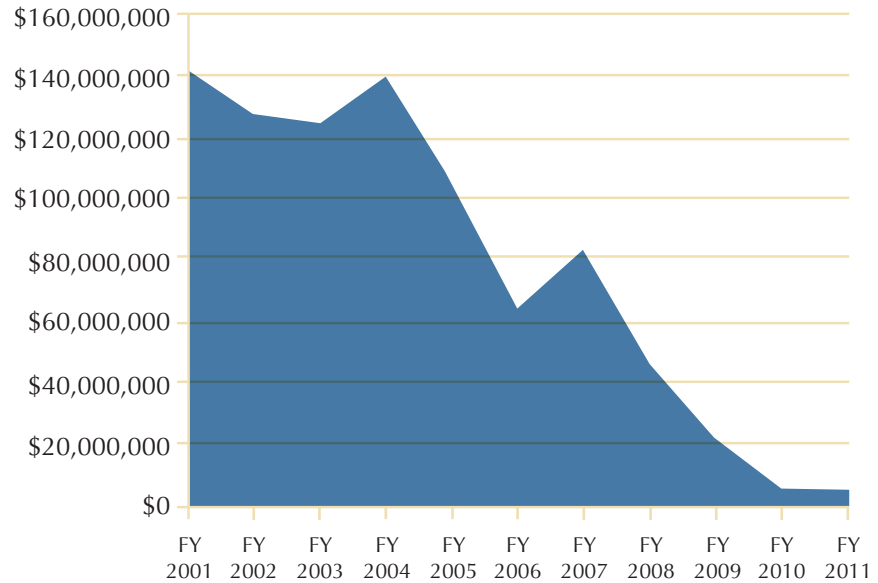


*“All thirteen years I’ve been told that education is very important, but it’s hard for me to believe this when I see how my school looks compared to other schools.”*

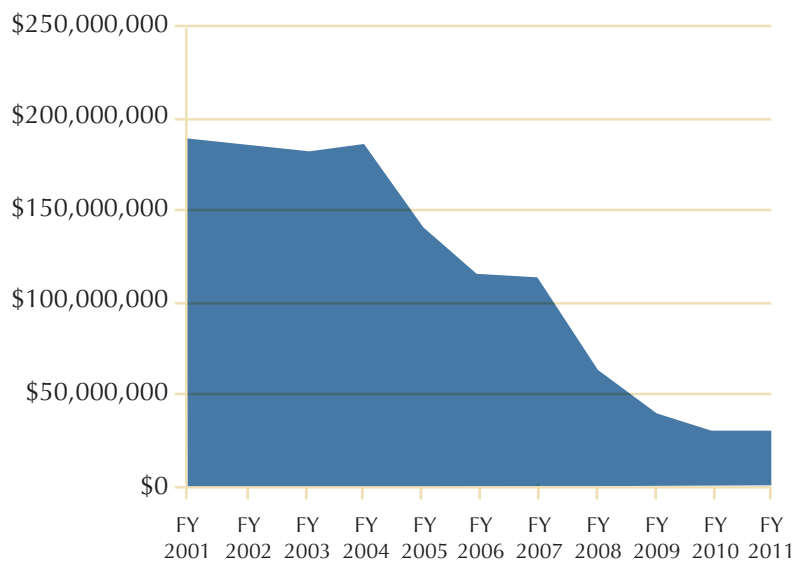
- As insightfully revealed by a student at the Bug-O-Nay-Ge-Shig School



### Funding for Replacement Schools\*



### Total Education Construction Funding FY 2001 to FY 2011\*



These charts illustrate the dramatic decrease in funding appropriated for school construction overall and the Replacement School Program in the past decade.

Source: OFMC, 2011.

\*Does not include FY09 ARRA Funding of \$244,239,342.

relocate students to a heated bathroom during winter. Testimony received by the Committee bolstered the conclusion that poor school facilities have negative impacts on students and teachers.

These stories are not limited to a few schools. The Bureau’s failure to provide environments conducive to academic achievement is well documented and long-standing. In 1997, the GAO reported a backlog of \$754 million in needed repairs.<sup>19</sup> These repairs are not minor – in many cases the structural deficiencies at old and inadequately maintained facilities mean that schools are literally falling down. The 1997 GAO report revealed that 25 percent of Bureau-funded school buildings are more than 40 years old. This figure has increased to 27 percent in the 14 years since GAO issued that report.

Estimated Cost for Bringing Bureau-Funded Schools in Poor Condition into Good or Fair Condition	
State	Cost
Arizona	\$663,042,527
Idaho	\$12,778,000
Louisiana	\$13,975,000
Maine	\$8,270,880
Minnesota	\$21,328,440
Mississippi	\$55,305,048
Montana	\$17,880,135
North Dakota	\$58,786,984
Nevada	\$500,000
New Mexico	\$265,633,212
Oklahoma	\$67,845,580
South Dakota	\$101,814,874
Utah	\$9,927,960
Washington	\$14,584,200
<b>TOTAL</b>	<b>\$1,311,672,840</b>

Source: OFMC, 2011

19. GAO Report, School Facilities – Reported Condition and Costs to Repair Schools Funded by Bureau of Indian Affairs, December 1997, GAO/HEHS-98-47.

In 2010, DOI requested only \$112 million for school facilities construction (2010 budget). With over \$967 million in estimated backlogs, this amount is clearly inadequate to address the documented needs of Bureau-funded schools. At this rate of investment, Bureau-funded schools will only fall further behind.

In recent years, construction and repair budgets for Bureau-funded schools have remained woefully inadequate, and resources are shrinking annually. DOI’s budgets for school facility operations, maintenance, and construction fell from \$204 million in 2007 to \$112 million in 2010. These declining appropriations pale in comparison to the identified need.

### Funding Levels of Bureau Schools and the New School Replacement Program Since 2001

Some classes are being held in buildings constructed more than 100 years ago. According to OFMC, at current support levels, it will take more than 60 years to replace the 63 Bureau-funded schools currently rated in poor condition. Since the planned useful life of such schools is considerably less than 60 years (industry standard is 40 years), it is clear that continued funding at these levels ensures a prolonged breach of the federal trust obligation to Native American students.

As a point of contrast, a 2001 report from the U.S. GAO<sup>20</sup> illustrates that Bureau-funded schools had significantly more building deficiencies than schools under the U.S. DODEA—the only other comparable federally-funded educational system. Furthermore, the DODEA recently introduced a plan to replace or renovate 134 schools by 2018 for an estimated cost of \$3.7 billion.<sup>21</sup> In 2010, OFMC calculated it would require \$1.3 billion to elevate the 63 schools in poor condition up to satisfactory condition.

**This Committee strongly recommends that the tribes, TIBC, the AS-IA and the Secretary of the Interior request of the President, and the President include in his budget request, funding for a comparable commitment to bring all Bureau-funded schools into acceptable condition.**

20. GAO survey. Source: NCES, Condition of America’s Public School Facilities: 1999, NCES 2000–32 (Washington, DC: U.S. Department of Education, June 2000).

21. Conference call between Committee members and DODEA’s Mike Smiley, September 20, 2011.

## Lack of Transparency in the Allocation Process

Another shortcoming of the Federal Government has been the inability of DOI to distribute the funds Congress has appropriated for building and maintaining Bureau-funded school facilities in a transparent manner. Affected tribal communities have expressed great frustration both with DOI's allocation decisions and with the lack of transparency characterizing the decision-making process. The White House promotes transparency, fairness, and objectivity in all federal agencies. In a 2009 memorandum to the heads of executive departments and agencies, the President wrote: "Transparency promotes accountability and provides information for citizens about what their Government is doing."<sup>22</sup> The White House has also explained: "Objectivity involves a focus on ensuring accurate, reliable, and unbiased information."<sup>23</sup>

DOI has not lived up to the White House's assertions, and this lack of transparency and objectivity has fostered ongoing tribal mistrust of the Federal Government. A Convening Report commissioned by DOI in preparation for this Negotiated Rulemaking, along with testimony received by the Committee, illustrated that many stakeholders perceive the prioritization of funding for repairs and renovations of schools as opaque, arbitrary, and unresponsive to the pressing needs of the schools. Lack of transparent decision-making has also contributed to suspicion that DOI made funding decisions in response to political pressure, rather than strictly basing its decisions on the actual needs of the schools.<sup>24</sup>

## Conclusion

Providing proper educational facilities is not only essential to fulfilling the academic, social, and cultural needs of Native American children, but is also a matter of trust responsibility for the Federal Government, as well as treaty rights for many tribes. Satisfying these obligations involves attention to both the condition of the facilities and the quality of the educational experience. While some Bureau-funded schools have improved in the past decade, more progress is needed. To promote successful educational experiences, children must be able to learn in environments that are safe, enriching, culturally appropriate, and technologically advanced.

To ensure the success of our most precious resources – our children and future leaders – we must provide them with exemplary educational programs in high-quality settings. Currently, more than one-third of Bureau-funded facilities are in substandard or poor conditions, un conducive to educational achievement; thus, we are unfairly restricting the opportunities for these students to receive an education on par with non-Bureau-funded school systems. As explained previously, there is a great volume of research establishing a direct correlation between facility environment and student achievement. Therefore, continued failure to provide adequate educational facilities violates long-standing and current federal obligations. The Committee hopes and believes the following report will help Congress understand the shortcomings of Bureau-funded school facilities and provide the Secretary of the Interior with processes to ensure an equitable distribution of funds.

22. President Barack Obama, "Memorandum for the Heads of Executive Departments and Agencies on Transparency and Open Government," January 12, 2009.

23. Office of Management and Budget, "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies," 66 Fed. Reg. 49,718, at 49,724; September 28, 2001.

24. Final Convening Report, Negotiated Rulemaking Committee on BIA-Funded School Facilities Construction, prepared by the Consensus Building Institute, with the U.S. Institute for Environmental Conflict Resolution, March 5, 2008.



### Summary of the Committee's Recommendations

- Tribes, TIBC, the AS-IA and the Secretary of the Interior should request of the President, and the President should include in his budget request to Congress, funding for a commitment to bring all Bureau-funded schools into acceptable condition.

### FMIS Recommendations

- All schools should use the Maintenance Management Schedule module in FMIS. OFMC or BIE should monitor whether schools are using this module and encourage those who are not to do so.
- OFMC and BIE should standardize revisions to the space guidelines (i.e., *Educational Space Criteria Handbook*, Nov. 2005) to include cultural spaces, reading labs, technology, etc.
- OFMC should include educational facilities in FMIS, by surveying the current space inventory of all 183 schools and comparing existing space against existing or revised space guidelines to identify educational space deficiencies.
- OFMC should prioritize assistance for the 40 to 50 schools (e.g., not new schools and not schools known to be effective at using FMIS) that have problems with FMIS access, making them the first to receive assistance from OFMC and their contractor on updating backlogs, providing training, and ensuring that systems are in place in each school to maintain FMIS.
- OFMC and BIE should guarantee that all Bureau-funded schools have equitable means and capabilities to regularly use and update FMIS.
- OFMC and BIE should explain the facilities funding process and FMIS's important role in that process during educational trainings for school administrators and school boards.
- OFMC should require that minimum training for facility managers include a 40-hour FMIS certification.
- OFMC and BIE should create a matrix that defines roles and responsibilities, including communication responsibilities, for all parties involved with FMIS—from the school level up to the Central level, including local schools, BIE Albuquerque, education line offices, agencies, OFMC Albuquerque, and BIA regional offices.
- OFMC and BIE should ensure regular technical assistance and monitoring for all schools using FMIS. This support should be consistently offered for all schools, including grant and contract schools.
- OFMC and BIE should highlight the responsibility of school administrators and facility staff to guarantee that FMIS is updated. This should be reinforced from the director's office, at the assistant deputy director level, and through ELO offices. FMIS updates should be required at the same level of priority as each school's annual report and NASIS updates.
- OFMC should create expectations, deadlines, and reminders for entering and removing backlogs and offer more training in this area for school boards and administrators. OFMC should enact a policy requiring schools to use FMIS.
- OFMC should develop a National FMIS Users Group. The National Users Group would include a representative from schools within each of the 22 educational line offices along with staff from OFMC. The user group should include representatives of BIE-operated, grant and contract schools. This distributed representation would ensure close coordination with regional user groups. Both the national and regional user groups would identify key problems and challenges and offer advice and support for effectively implementing FMIS. Such user groups could be similar to earlier efforts to support FACCOM.
- OFMC should create nine Regional FMIS support groups. This could include a roster of people in each region who are available to provide FMIS technical assistance to others in their region.
- The 40-hour basic training, along with refresher trainings, should be offered Regionally on a regular basis, and provided, when possible via remote means such as via the Internet, CDs, or other means.

- If something in the FMIS program is going to change, FMIS users should be given advanced notice and any necessary training before the changes take effect.
- Like NASIS, FMIS should be easily accessible for all users via the Internet (versus dedicated terminals), without compromising security. Schools should also be able to retrieve their FMIS backlogs from remote locations.
- OFMC and the CIO should respond to FMIS technical challenges more quickly and efficiently, including system issues, access and connectivity problems, and password availability.
- OFMC should warn all users via email when the system is going to be down, and for how long.
- OFMC and BIE should provide regional/agency support, or a regional assistance team, to ensure backlogs are input for all Bureau-funded schools that lack access for whatever reason.
- OFMC should improve communication between contractor and schools during the assessment process.
- OFMC should require formal entry and exit interviews between school leaders and contractor team.
- OFMC should require OFMC to provide a final copy of the contractor's Facility Assessment Report to the school upon request.
- OFMC should require the school's facility staff to accompany the contractor during the visit.
- Thirty days prior to the arrival of the Contractor, OFMC should send the school administrator a copy of the contractor's Scope of Work and a print-out of the school's list of backlogs from FMIS.
- Anyone with access from that location should receive notification if the FMIS gatekeepers change backlog entries.

### Replacement School Recommendations

- DOI should codify, and OFMC and BIE should implement detailed recommendations regarding the following:
  - Principles underlying the new approach to replacement schools
  - Eligibility requirements for applicants
  - Application review and creation of pool of schools for whole school replacement
  - A post-application process
  - A whole school replacement and renovation formula

### MI&R Recommendations

- OFMC and BIE should emphasize to the schools the importance of timely entry of data in FMIS.
- OFMC should annually publish a list of all S1, F2, and M1 backlogs. These are the backlogs eligible for MI&R funding.
- OFMC and BIE should publish the data call for schools to indicate their priority backlogs for MI&R funding.
- After all funding decisions are made, OFMC should issue an annual report of all regional and headquarters MI&R allocations, explaining each decision, to post and distribute.
- OFMC should convene regional committees made-up of one representative from each school in the region—grant/contract schools as well as BIE schools—to make decisions about the allocation of each region's MI&R funds.
- DOI should codify, and OFMC and BIE should implement the new MI&R formula and process.

### FI&R Recommendations

- The Committee recommends that Congress revisit the moratorium on school expansion.
- OFMC should distribute the FI&R ranking of schools annually to all schools, tribes, and regions along with a brief explanation of how the rankings were obtained.
- OFMC should announce the overall budget for FI&R funding each year, and annually publish the schools and projects to be funded each year along with the rankings, explaining FI&R project/school selection in more detail than location ranking in the *United States Department of the Interior Budget Justifications and Performance Information* (Green Book).
- OFMC should identify the individuals who compile and complete the ranking process for FI&R, make clear their roles and responsibilities, and publish these “roles and responsibilities” annually.
- OFMC should identify educational space deficiencies by comparing the Educational Space Criteria (and state accreditation requirements) to existing conditions at all schools.
- OFMC should add all educational space deficiencies into FMIS, categorized as Critical Health and Safety Capital Improvement (educational space deficiencies) backlogs, given a weighting factor of 9.
- The FI&R formula should factor educational space deficiencies into the overall location score.
- DOI should incorporate educational space deficiencies into the ranking factor of critical health and safety capital improvement with a ranking factor of 9 into DOI/OFMC policy to ensure future compliance.
- OFMC should normalize API scores for all school buildings to be worth 100 points.



### Chapter 2 Includes:

- An overview of the condition of schools
- A brief description of the FMIS system, indicating its compatibility with the five components as set out in NCLB 25 U.S.C. § 2005(a)(5)(A)(i)
- An identification of the primary limitations of the FMIS system as the ongoing catalog for tracking the conditions of schools
- Recommendations for improving this system and process<sup>25</sup>

25. The Committee includes a print-out of the current record of deficiencies contained in FMIS as of December 5, 2011, as Sub-Report A.





## Chapter 2: A Catalog of Facilities

### Summary of Recommendations from this Chapter

- Tribes, TIBC, the AS-IA, and the Secretary of the Interior should request of the President, and the President should include in his budget request to Congress, funding for a commitment to bring all Bureau-funded schools into acceptable condition.
- All schools should use the Maintenance Management Schedule module in FMIS. OFMC or BIE should monitor whether schools are using this module and encourage those who are not to do so.
- OFMC and BIE should standardize revisions to the space guidelines (i.e., *Educational Space Criteria Handbook*, Nov. 2005) to include cultural spaces, reading labs, technology, etc.
- OFMC should include educational facilities in FMIS, by surveying the current space inventory of all 183 schools and comparing existing space against existing or revised space guidelines to identify educational space deficiencies.
- OFMC should prioritize assistance for the 40 to 50 schools (e.g., not new schools and not schools known to be effective at using FMIS) that have problems with FMIS access, making them the first to receive assistance from OFMC and their contractor on updating backlogs, providing training, and ensuring systems are in place in each school to maintain FMIS.
- OFMC and BIE should guarantee that all Bureau-funded schools have equitable means and capabilities to regularly use and update FMIS.
- OFMC and BIE should explain the facilities funding process and FMIS's important role in that process during educational trainings for school administrators and school boards.
- OFMC should require that minimum training for facility managers include a 40-hour FMIS certification.
- OFMC and BIE should create a matrix that defines roles and responsibilities, including communication responsibilities, for all parties involved with FMIS—from the school level up to the central level, including local schools, BIE Albuquerque, education line offices, agencies, OFMC Albuquerque, and BIA regional offices.
- OFMC and BIE should ensure regular technical assistance and monitoring for all schools using FMIS. This support should be consistently offered for all schools, including grant and contract schools.
- OFMC and BIE should highlight the responsibility of school administrators and facility staff to guarantee that FMIS is updated. This should be reinforced from the director's office, at the assistant deputy director level, and through ELO offices. FMIS updates should be required at the same level of priority as each school's annual report and NASIS updates.
- OFMC should create expectations, deadlines, and reminders for entering and removing backlogs and offer more training in this area for school boards and administrators. OFMC should enact a policy requiring schools to use FMIS.

- OFMC should develop a National FMIS Users Group. The National Users Group would include a representative from schools within each of the 22 educational line offices along with staff from OFMC. The user group should include representatives of BIE-operated, grant and contract schools. This distributed representation would ensure close coordination with regional user groups. Both the national and regional user groups would identify key problems and challenges and offer advice and support for effectively implementing FMIS. Such user groups could be similar to earlier efforts to support FACCOM.
- OFMC should create nine Regional FMIS support groups. This could include a roster of people in each region who are available to provide FMIS technical assistance to others in their region.
- The 40-hour basic training, along with refresher trainings, should be offered Regionally on a regular basis, and provided, when possible via remote means such as via the Internet, CDs, or other means.
- If something in the FMIS program is going to change, FMIS users should be given advanced notice and any necessary training before the changes take effect.
- Like NASIS, FMIS should be easily accessible for all users via the Internet (versus dedicated terminals), without compromising security. Schools should also be able to retrieve their FMIS backlogs from remote locations.
- OFMC and the CIO should respond to FMIS technical challenges more quickly and efficiently, including system issues, access and connectivity problems, and password availability.
- OFMC should warn all users via email when the system is going to be down, and for how long.
- OFMC and BIE should provide regional/agency support, or a regional assistance team, to ensure backlogs are input for all Bureau-funded schools that lack access for whatever reason.
- OFMC should improve communication between contractor and schools during the assessment process.
- OFMC should require formal entry and exit interviews between school leaders and contractor team.
- OFMC should require OFMC to provide a final copy of the contractor's Facility Assessment Report to the school upon request.
- OFMC should require the school's facility staff to accompany the contractor during the visit.
- Thirty days prior to the arrival of the Contractor, OFMC should send the school administrator a copy of the contractor's Scope of Work and a print-out of the school's list of backlogs from FMIS.
- Anyone with access from that location should receive notification if the FMIS gatekeepers change backlog entries.

## Background

The Act at 25 U.S.C. § 2005(a)(5)(A)(i) calls for the Committee to prepare and submit a catalog of the condition of school facilities at all Bureau-funded schools which:

- (I) *incorporates the findings from the Government Accountability Office study evaluating and comparing school systems of the Department of Defense and the Bureau of Indian Affairs;*
- (II) *rates such facilities with respect to the rate of deterioration and useful life of structures and major systems;*
- (III) *establishes a routine maintenance schedule for each facility;*
- (IV) *identifies the complementary educational facilities that do not exist but that are needed; and*
- (V) *makes projections on the amount of funds needed to keep each school viable, consistent with the accreditation standards required pursuant to this Act.*

An accurate catalog tracking the conditions of Bureau-funded schools is essential to keeping facilities properly maintained and providing the basis for organizing repair and replacement projects. Such a catalog would provide a record of the conditions of Bureau-funded schools over time. It would also serve as a vehicle for ensuring the fair allocation of resources for maintenance, repair, and replacement – especially in the face of scarce resources. The Committee agrees that supporting the maintenance of a comprehensive and accurate catalog is as high a priority as all other school record keeping, such as attendance and academic achievement.

FMIS provides an acceptable basis for meeting Congress' request for a catalog of the conditions of school facilities, if improved as recommended in this report. FMIS achieves some, though not all, of the five components required by the Act.

The Committee notes that educational facility needs are absent from the current FMIS catalog. As a consequence, there has been no method for identifying educational facilities that are needed but do not exist, or highlighting insufficiencies of current educational spaces. However, the greatest limitations of FMIS are due to a lack of consistent and appropriate training, connectivity, and resources to ensure that users in the field are able to keep information current and accurate.

Therefore, to fulfill the requirements of NCLB, the Committee focused on developing detailed recommendations for changes in FMIS and IA. These modifications would allow FMIS to function as an accurate and useful catalog of the conditions of Bureau-funded schools, and thus serve as the basis for a formula to determine an equitable distribution of funds for repair and replacement.



Number of Schools New Replacement Construction, Replacement Facility* Construction Major FI&R			
Fiscal Year	Replacement School	Major FI&R	Replacement Facility Construction
1998-2001	10	11	-
FY 2002	5	8	-
FY 2003	5	10	-
FY 2004	8	5	-
FY 2005	9	6	-
FY 2006	4	6	-
FY 2007	0	2	2
FY 2008	0	1	1
FY 2009	1	0	1
FY 2010	0	1	2
FY 2011	1	0	1
ARRA	3	14	0
<b>Grand Total Projects</b>	<b>46</b>	<b>64</b>	<b>7</b>

Total number of schools receiving a replacement school, major renovation and repair, or replacement facilities since 2001.

Source: OFMC, 2011.

### Overview of the Conditions of School Facilities

Chronically inadequate funding for the operation and maintenance of Bureau-funded schools has resulted in a large backlog of repair work. As previously detailed, OFMC estimates it would require \$1.3 billion to bring the 63 Bureau-funded schools in poor condition up to adequate condition, and \$967 million to simply repair all of the reported deficiencies in the 183 schools. Compare this with the funding appropriation for 2011 of \$46 million. This amount is woefully insufficient to reduce the overall deficiency backlog of Bureau-funded schools.

Thanks to higher funding levels in the early part of the last decade, and the one-time infusion of funds under the American Recovery & Reinvestment Act (ARRA)<sup>26</sup>, the condition of many Bureau-funded schools has improved. In the past 10-year period, over \$1.5 billion in

construction and repair funds was devoted to reducing by 50 percent the number of schools in poor condition (as determined by the FCI).

In fiscal year 2002, 35 percent of schools were in good or fair condition and 65 percent were in poor condition. Upon the completion of existing construction projects scheduled in FY 2012, there will be an estimated 66 percent of schools in good or fair condition and 34 percent of schools in poor condition; 59 schools (or 31 percent) have improved from poor condition to good/fair. However, given the dramatic decrease in funding for education construction in the past 10 years, and particularly under the current budget, the Committee expects the number of schools in poor condition to rise. With inadequate maintenance and repair dollars, schools in fair condition can easily fall into poor condition once again.

ARRA provided IA the single largest education con-

26. Pub. Law 111-5; 123 Stat. 115, 168

\*The Replacement Facility Program began in 2007, providing a mechanism for constructing or replacing one or more buildings on a school campus, often in combination with major renovation and repair.



Indian Affairs Education Construction Funding FY 2001- FY 2011				
Fiscal Year	Replacement Schools	Replacement Facility Construction	FI&R Project Funding	Total Education Project Funding FY 2001 to FY 2011
FY 2001	\$141,238,000		\$48,962,000	\$190,200,000
FY 2002	\$127,799,000		\$61,088,000	\$188,887,000
FY 2003	\$124,409,000		\$59,100,000	\$183,509,000
FY 2004	\$139,612,000		\$48,873,000	\$188,485,000
FY 2005	\$105,550,000		\$37,021,000	\$142,571,000
FY 2006	\$64,530,000		\$50,474,000	\$115,004,000
FY 2007	\$83,891,000	\$26,873,000	\$4,670,000	\$115,434,000
FY 2008	\$46,716,000	\$9,748,000	\$7,267,000	\$63,731,000
FY 2009	\$22,405,000	\$17,013,000	\$0	\$39,418,000
FY 2010	\$5,964,000	\$17,013,000	\$6,570,000	\$29,547,000
FY 2011	\$21,462,988	\$29,465,950	\$0	\$50,928,938
ARRA	\$153,311,000	\$0	\$91,074,000	\$244,385,000
<b>Total</b>	<b>\$1,036,887,988</b>	<b>\$100,112,950</b>	<b>\$415,099,000</b>	<b>\$1,522,099,938</b>

Source: OFMC, 2011.

struction appropriation in history. As a result, \$153.3 million was allocated to replace deteriorating Bureau-funded schools, and \$91 million was assigned to repair educational facilities. Construction awards for these projects began in May of 2009; today all of the funds have been obligated, and some smaller projects have already been completed. More than 7,000 students will benefit through the use of adequate school facilities earlier than thought possible before passage of ARRA.

**While significant progress has been made to correct facility deficiencies, 63 schools currently remain in poor condition, and \$1.3 billion in funding is required to bring all education facilities into acceptable condition.**<sup>27</sup>

27. As stated earlier, the 63 schools remaining in poor condition require an estimated \$1.3 billion to elevate them to an acceptable condition. This figure includes more than simply fixing the deferred maintenance items in these schools. For example, if a facility has a number of leaks in the roof, ultimately it will be more economical to replace the entire roof rather than continue to fix leaks year after year. Therefore, the cost to replace the entire roof is included in the figure above, rather than the cost to mend all the separate leaks. Likewise, it may also be more cost-effective to replace an entire building or school rather than repair a number of deferred maintenance work items.

### Background on FMIS

IA currently uses FMIS, a computer program, to catalog and document the conditions of school facilities. FMIS provides the basis for budget formulation and asset management to improve, repair, and replace school facilities. While this system is not perfect, the Committee accepts it as the best available starting point for meeting the cataloging requirements in NCLB and ensuring that the formulas for prioritizing facility construction and repair dollars is fair, efficient, and transparent. The Committee sought to identify the most pressing challenges regarding FMIS. It has developed a list of recommendations detailing how to improve both the accuracy of data and the process for updating the content of FMIS. Software systems change from time to time; therefore, these recommendations apply to both the current and any future systems.

FMIS is a tool for OFMC to collect and manage information about school facility conditions at the local level. For this system to contain accurate data,

schools must routinely input facility deficiencies. Data is verified by contractors (remotely and during school visits) once every three years. Ultimately, the information provided by FMIS is only as valid as the data contributed by contractors, local agencies, and individual schools, as verified by OFMC.

In addition to the module for entering deficiencies, FMIS includes components for project management, inventory tracking, health and safety needs, routine maintenance work tickets, and cost estimating and budgeting. Up until now, this system has not recorded the educational needs or deficiencies of facilities in meeting educational requirements – it has only tracked the condition of existing facilities, not those facilities that might be missing or insufficient. A more extensive description of FMIS can be found in Appendix D.

### Finding as to the Five Requirements

The NCLB requires that the Committee's catalog include the five items listed on page 19 of this report. The following section describes the extent to which the existing FMIS catalog meets these requirements and suggests ways to fill in gaps where FMIS falls short.

*(I) Incorporates the findings from the Government Accountability Office study evaluating and comparing school systems of the Department of Defense and the Bureau of Indian Affairs.*

NCLB 25 U.S.C. § 2005(a)(1)-(4) called for the GAO, by January 2004, to submit the results of a national survey of the physical conditions of all Bureau-funded school facilities that would incorporate the findings from the GAO study evaluating and comparing school systems of the DOD and the BIA. GAO never issued such a report.<sup>28</sup> Therefore, the Committee is unable to incorporate any findings into its catalog regarding this requirement. The Committee recommends that GAO conduct the study mandated by NCLB.

However, it is interesting to note that in 2010, the DOD announced a plan to spend \$3.7 billion to elevate all of their schools into acceptable condition. The appropriation for DOD school construction for FY2010 was \$235 million, and their appropriation for FY2011 was \$438 million. In contrast, the appropriation for Indian school construction was \$29.5 million for FY2010 and \$50.9 million for FY2011. DODEA is also making a concerted effort to eliminate the use of portables. Furthermore, in the past three years, DOD schools have received full funding for their operations needs, while Bureau-funded schools had operations funds constrained at approximately 50 percent of need.<sup>29</sup>

DOI has not put forward an analogous plan to spend the \$1.3 billion needed to bring Bureau schools into acceptable condition by 2015. The Committee contends the federal duty enshrined in statutes and treaties noted in the Introduction to this report mandates at least equal attention to Indian schools.

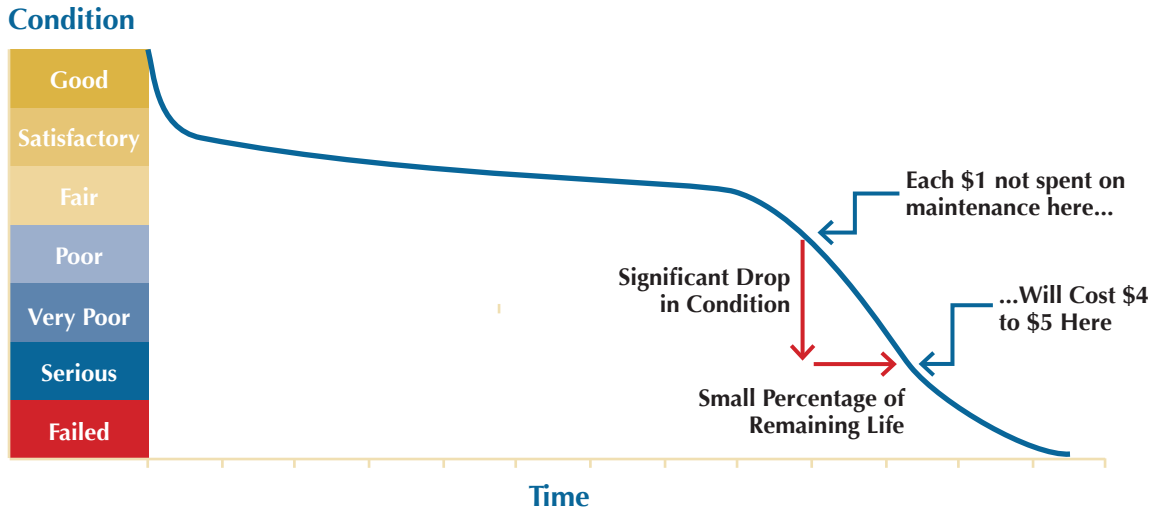
**This Committee strongly recommends that the tribes, TIBC, the AS-IA and the Secretary of the Interior request of the President, and the President include in his budget request to Congress, funding for a comparable commitment to bring all Bureau-funded schools into acceptable condition.**

*(II) Rates such facilities with respect to the rate of deterioration and useful life of structures and major systems.*

Because of the nature of school facilities in the often remote and harsh environments of Indian country, the rate of deterioration is not a static situation, but rather is highly dynamic. Beyond weather and environmental conditions, the largest factor impacting the rate of deterioration is the level of preventative maintenance.

28. In 2003, GAO issued 2 related reports: GAO-03-955, Bureau of Indian Affairs Schools: Expenditures in Selected Schools Are Comparable to Similar Public Schools, but Data Are Insufficient to Judge Adequacy of Funding and Formulas, and GAO-03-692, Bureau Of Indian Affairs Schools: New Facilities Management Information System Promising, but Improved Data Accuracy Needed. Neither of these reports fulfills the requirement of NCLB § 2005(a)(1)-(4).

29. Conference call between Committee members and DODEA's Mike Smiley, September 20, 2011.



Buildings without sufficient preventative maintenance face a steep drop in condition, and the cost of facility repairs increases dramatically as the building reaches the end of its useful life.

Source: Applied Management Engineering, Inc., 2011

Funds for preventative maintenance are appropriated with funds for operating the facilities, known as Operations and Maintenance (O&M) funding. In each of the last five years, schools have been funded with sufficient Maintenance funding based on construction industry standards, but received an average of only 50 percent of the money actually needed for operations. Operations includes non-deferrable, fixed-cost items like fuel and electricity. Consequently, schools have been left with no choice but to fund operations with money intended to pay for preventative maintenance. As a consequence, maintenance needs go unmet, deferred maintenance grows, and the quality of the physical plant deteriorates far more rapidly than it should.

By not investing sufficient resources in preventative maintenance, schools not only deteriorate more rapidly, but the cost of repairs increases. For instance, if a small leak in a roof is not addressed now, it will likely lead to further structural damage that will later cost much more to repair or replace. Over decades, this shortchanging of actual maintenance spending shortens the overall life of school buildings and will force increased costs upon the Federal Government in the future, not to mention more deplorable conditions for the next generation of children.

Many Bureau-funded school facilities are being used far beyond their useful life. Forty years is the Internal Revenue Service (IRS) figure for the useful life of buildings, yet there are 49 Bureau-funded schools over 40 years of age. The average overall age of the buildings comprising schools in poor condition, weighted by square footage, is 50 years. **Investing money to keep these very old schools functional is far less cost-effective than constructing new schools; however, funding provided for replacing schools that have exceeded their useful lives is sorely insufficient.**

Average Age of Academic and Dorm Buildings	
Schools (Buildings age 0-10)	35
Schools (Buildings age 11-20)	29
Schools (Buildings age 21-30)	36
Schools (Buildings age 31-40)	34
Schools (Buildings age 41-50)	32
Schools (Buildings age over 50)	17
	<b>183</b>

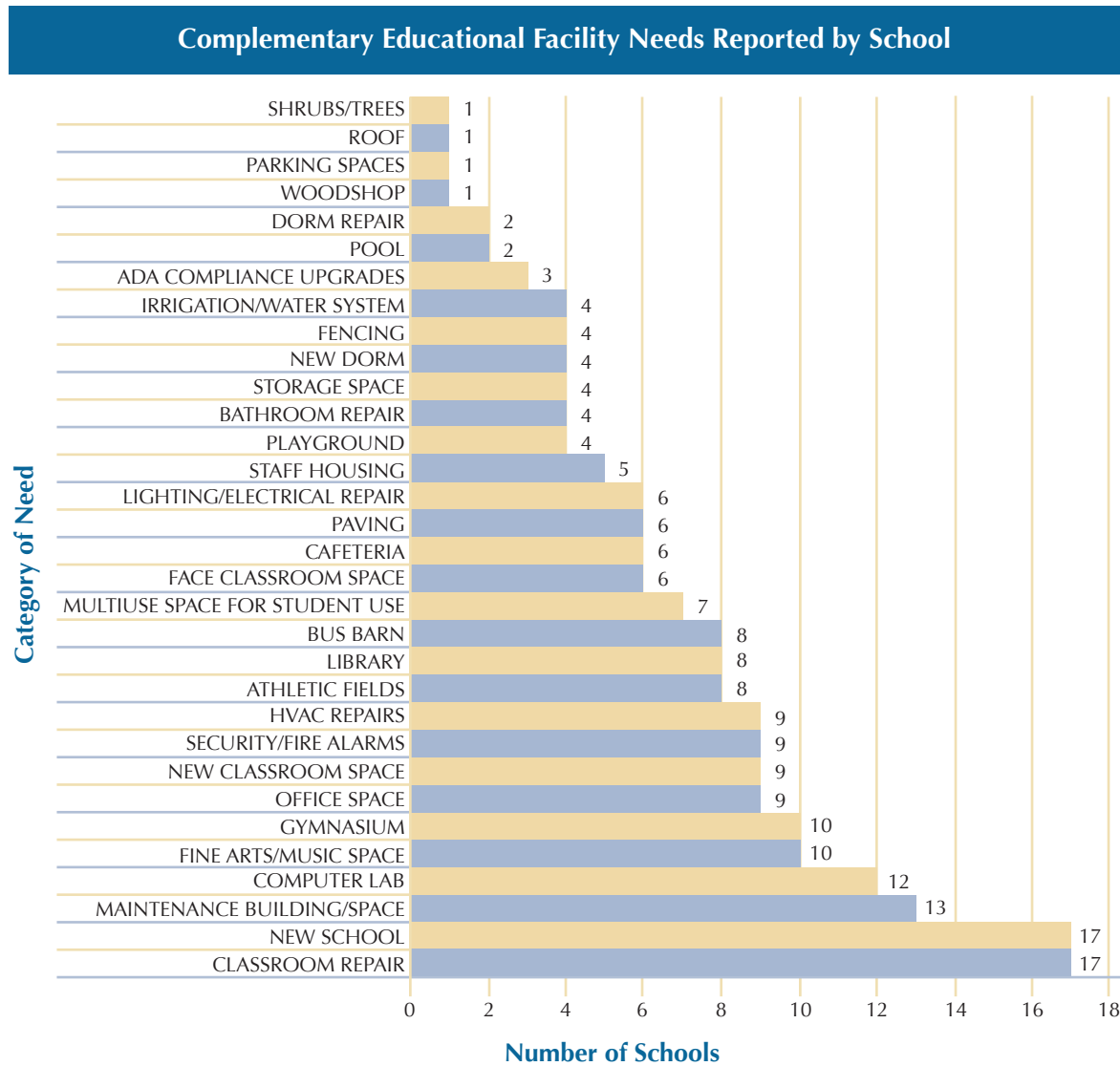
Source: OFMC, 2011

(III) Establishes a routine maintenance schedule for each facility.

FMIS adequately addresses this mandate. FMIS provides opportunities for schools to develop routine maintenance schedules through the Maintenance Management Schedule module. For instance, if all maintenance recommendations for a particular furnace model are entered into FMIS, the system will automatically generate a work ticket requesting routine maintenance at the appropriate time. This feature is used at the

discretion of local schools, but a recent survey determined that only 34 percent of responding schools enter preventative maintenance into FMIS. Thus, the data in FMIS does not provide an accurate system-wide picture of routine maintenance needs. IA needs this information for budgeting purposes. **The Committee therefore advises that all schools use Maintenance Management Schedule module. The Committee also recommends that OFMC or BIE monitor whether schools are using this module and encourage those who are not to do so.**

The facility needs identified by the schools can be categorized in the following way:



Source: Responses to the DFO's inquiry from 56 Bureau-funded schools regarding non-existent but needed educational facilities. August–November 2010, as summarized by CBI.



(IV) *Identifies the complementary educational facilities that do not exist but that are needed.*

Currently, FMIS does not identify complementary educational facilities that do not exist but are needed, nor is there any other inventory that makes this identification. The Committee agrees this is a fundamental shortcoming of this system that must be remedied in order to achieve a complete and accurate catalog of school conditions. In July 2010, to establish a rough sense of these needs, the DFO conducted a survey at the request of the Committee, asking each school to identify nonexistent but essential educational facilities. Fifty-six of the Bureau-funded schools responded, offering a wide range of types of facility needs.

**The Committee stresses the importance of an ongoing catalog documenting essential but missing educational facilities and detailing improvements to existing facilities to make them compatible with educational needs.** For example, schools could catalog a library that is too small for the school size, or a facility lacking telecommunications wiring needed for access to the Internet. Cultural spaces, reading labs, and other specialized educational facility components must be included in this system. This catalog could then serve as an effective tool for prioritizing funding for renovation, repair, and construction.

**RECOMMENDATIONS:** The Committee recommends the following methods for achieving this inventory:

- (I) Standardize revisions to the space guidelines (i.e., *Educational Space Criteria Handbook*, Nov. 2005) to include cultural spaces, reading labs, technology, etc.;
- (II) Survey the current space inventory of all 183 schools; and
- (III) Compare existing space against the revised guidelines to identify spatial deficiencies.

The scope of work for the 2011-2013 facilities conditions assessment contract administered by IA will include collecting data on unmet educational space needs, using the existing *2005 Educational Space Criteria Handbook* and facility inventory data. This will create a database of educational facility deficiencies that can be incorporated into formulas for FI&R and new facility/school replacement.

(V) *Makes projections on the amount of funds needed to keep each school viable, consistent with the accreditation standards required pursuant to this Act.*

IA uses FMIS to develop projections on the amount of O&M funds needed to keep facilities viable. However, as previously noted, FMIS does not include the deficiencies of all schools and, more importantly, FMIS does not document missing or insufficient educational facilities, as might be needed to be consistent with the accreditation standards of NCLB. Further, O&M funds are substantially constrained.

## Operations & Maintenance Need vs. Funding: FY 2006 through FY 2010

Fiscal Year	Funded Square Feet	Operations Need	Operations Funded	Operations Constrained	Percent Funding Constrained Below Need
2006	16,022,204	\$91,931,905	\$52,268,045	\$39,663,860	43.14%
2007	16,422,290	\$99,157,997	\$55,692,545	\$43,465,452	43.83%
2008	16,339,267	\$100,968,099	\$54,720,628	\$46,247,471	45.80%
2009	16,621,855	\$106,313,052	\$54,353,705	\$51,959,347	48.87%
2010	16,411,775	\$106,955,142	\$51,092,600	\$55,862,542	52.23%
Fiscal Year	Funded Square Feet	Maintenance Need	Maintenance Funded	Maintenance Constrained	Percent Maintenance Funding Above Need
2006	16,022,204	\$42,544,509	\$48,053,510	\$0	13%
2007	16,422,290	\$44,779,949	\$50,019,363	\$0	11%
2008	16,339,267	\$44,317,070	\$50,295,266	\$0	13%
2009	16,621,855	\$45,302,029	\$48,717,022	\$0	7%
2010	16,411,775	\$46,259,490	\$51,141,560	\$0	11%

Calculated funding needed and funding provided for O&M of Bureau-funded schools 2006-2010. While maintenance costs were funded at slightly above calculated need, the constraint of operations funds leads schools to spend much of their preventative maintenance dollars on operations needs.

Source: OFMC, 2011

The chart above illustrates the yearly funding needed for O&M—based on OFMC calculations—compared to the amount of funding actually provided. As shown by the chart, although Maintenance funds have been provided to meet or exceed the needed funding, the extreme constraint of Operations funding requires schools to use preventative maintenance funds to pay for necessary operations costs (e.g., electricity, heat, and other essentials).

Therefore, without increasing the funding for O&M, schools will continue to deteriorate as they are forced to use maintenance monies to fund necessary operations. Moreover, as revealed earlier, insufficient funding for yearly maintenance inevitably leads to higher costs for repairs in the future.

### Additional Identified Challenges and Recommended Improvements

Along with the required considerations, the Committee found several additional challenges hindering FMIS from meeting its purpose of providing information to make efficient and fair decisions about the allocation of facility repair and construction resources. This section highlights each of these challenges and provides a set of recommendations for improvement. **These improvements to the FMIS Catalog are critical in order for the proposed formulas in this report to meet the Act's requirements of equitability.**

### Accuracy of the Existing FMIS Data

**CHALLENGE:** Although it constitutes the best record of the condition of Bureau-funded schools, the data in FMIS is incomplete for the following reasons:

- (I) Not all schools have access to enter their own backlogs due to a lack of:
  - connectivity to the FMIS server;
  - computer equipment;
  - staff trained in FMIS or with sufficient time to keep FMIS information up-to-date;
  - staffing due to high turnover or insufficient funding to hire or task appropriate staff; or
  - experience and/or support from administration.

(II) Cost estimates entered into FMIS may not reflect changing materials costs, actual cost of isolation, and increasing costs caused by economic circumstances (see Appendix E for current OFMC methodology for estimating costs).

(III) Validation of actual deficiencies by contractors occurs only every three years.

(IV) Educational needs are not currently factored in.

The Bureau recently conducted a survey regarding FMIS use, asking schools about their access to FMIS, how frequently data is updated, and other questions designed to help the Committee understand the extent of school use of FMIS.

The following charts illustrate some of the findings from this survey.

Does your school have access to FMIS?	Yes	No
BIE-operated	27	18
Cooperative Day School	1	1
Grant or Contract School	53	17
<b>TOTAL</b>	<b>81</b>	<b>36</b>

How many individuals have a FMIS account at your location?	One	Two	Three	Four	Five	None
BIE-operated	9	9	4	5	2	16
Cooperative Day School	0	1	0	0	0	1
Grant or Contract School	20	29	10	1	2	9
<b>TOTAL</b>	<b>29</b>	<b>39</b>	<b>14</b>	<b>6</b>	<b>4</b>	<b>26</b>

How does your school use FMIS?	1. Creating/removing deficiencies and deferred maintenance (> \$25,000)	2. Creating abatement plans for deficiencies listed under Safety	3. Creating work tickets for maintenance (< \$25,000)	4. Responding to work tickets for preventative maintenance	5. Entering actual location information (electric, gas, etc.)	Other: I don't know/we don't do it
BIE-operated	20	20	18	24	25	11
Cooperative Day School	1	0	0	1	1	0
Grant or Contract School	48	41	17	15	54	3

In FMIS, how well do the existing open backlogs present the true construction needs for your school?	Very Well	Somewhat Well	Not Well at All	Other/ Not Sure
BIE-operated	12	18	10	5
Cooperative Day School	0	0	1	1
Grant or Contract School	19	28	15	5
<b>TOTAL</b>	<b>31</b>	<b>46</b>	<b>26</b>	<b>11</b>

Source: All four of the preceding tables are based on a survey conducted by OFMC of Bureau-funded schools in 2010.

Breakdown of Number and Cost of Deficiencies by Type of School			
Type of School	Number of Schools	Number of Backlogs Entered in FMIS	Estimated Cost of Backlogs
BIE-operated	60	5,575	\$ 461,235,377
P.L. 100-297 grant	119	6,861	\$ 497,888,744
P.L. 93-638 contract	4	270	\$ 8,493,183
<b>Totals</b>	<b>183</b>	<b>12,706</b>	<b>\$ 967,617,304</b>

According to FMIS as of May 2011, not including those backlogs already funded for repair or renovation.

Source: OFMC, 2011



There is a large discrepancy in FMIS reporting between the BIE-operated schools and the grant and contract schools. The preceding chart shows the total number of backlogs in FMIS by school type. This demonstrates more facility deficiencies are recorded for BIE-operated schools than for grant and contract schools: an average of 93 backlogs per BIE-school versus 58 for contract and grant schools. One reason for this may be that facility managers at Education Line Offices enter backlogs for some BIE-operated schools, but not for grant and contract schools. Whatever the cause, this discrepancy points to the likelihood that not all deficiencies at grant and contract schools are reflected in FMIS.

**RECOMMENDATIONS:** The Committee recommends all schools be brought up to equal footing in FMIS in order for formulas to function as intended. We suggest:

- (I) All recommendations in this chapter will help ensure that FMIS accurately reflects the needs of schools.
- (II) The Committee recommends prioritizing assistance for the 40 to 50 schools (i.e., not new schools and not schools known to be effective at using FMIS that have problems with FMIS access), making them the first to receive assistance from OFMC and their contractor on updating backlogs, providing training, and ensuring systems are in place in each school to maintain FMIS.
- (III) Guaranteeing all Bureau-funded schools have equitable means and capabilities to regularly use and update FMIS.
- (IV) Explaining the facilities funding process and FMIS's important role in that process during educational trainings for school administrators and school boards.
- (V) Requiring that minimum training for facility managers include a forty hour FMIS certification.

## Roles and Responsibilities

**CHALLENGE:** The division of roles between the OFMC and BIE leaves a gap at the local level; no OFMC staff are tasked with monitoring FMIS use and providing technical support to Bureau-funded schools. Schools do not know where to turn for assistance, and problems with FMIS use at many schools go unresolved. No one has the responsibility for monitoring FMIS use by Bureau-funded schools to ensure that backlogs are being entered.

According to NCLB (25 U.S.C. § 2006(b)(1)), all individuals who work at or with BIE-operated schools must be supervised by BIE. This includes custodial staff and facility managers. BIE-operated schools generally have facilities staff in charge of entering data into FMIS, but grant and contract schools may not. Bureau-funded schools are supported by local education line offices, which are staffed with individuals capable of supporting a wide range of educational needs. Yet few line office staff have expertise in FMIS, and thus cannot provide assistance to grant and contract schools needing technical support with their FMIS entry loads. Most BIA regional offices house regional facility managers employed by OFMC; however, with the exception of the Navajo region, these facility managers do not oversee grant and contract schools. Furthermore, coordination and communication between OFMC and BIE is limited. Since BIE has not been involved with FMIS, the system has not been identified as a high priority for school principals, superintendents, and ELOs. In response to this divide, BIE has recently hired a BIE facility specialist to serve as the BIE facility liaison to OFMC. Since March 2011, this liaison has been actively providing input and represents BIE at OFMC's planning sessions. Among other activities, the liaison is now participating and assisting in ensuring that school FMIS inventories are up-to-date.

**RECOMMENDATIONS:** The Committee strongly urges OFMC and BIE to develop a structure that improves communication, coordination, and teamwork to ensure that all schools receive FMIS training and technical assistance. To this end, the Committee proposes:

(I) Creating a matrix that defines roles and responsibilities, including communication responsibilities, for all parties involved with FMIS—from the school level up to the central office level, including local schools, BIE Albuquerque, agency offices\*, OFMC Albuquerque, and BIA regional offices. The matrix needs to delineate a clear responsibility to support schools with FMIS as well as a protocol for monitoring schools to verify they are using and updating the system routinely. The matrix should apply equally to contract and grant schools and their particular needs. The matrix should then be widely distributed to all school leaders, education line offices, regional offices, and other interested parties.

(II) Ensuring regular technical assistance and monitoring from OFMC and BIE for all schools using FMIS. This support should be consistently offered for all schools, including grant and contract schools, and especially where no on-site personnel have experience with FMIS.

(III) Highlighting the responsibility of school administrators and facility staff to guarantee that FMIS is updated. This should be reinforced from the director's office, at the assistant deputy director level, and through education line offices. FMIS updates should be required at the same level of priority as each school's annual report and NASIS updates. School administrators or facility staff should emphasize to school boards and other key school stakeholders the importance of FMIS as the basis for physical plant funding. Administrators or facility staff should also provide periodic reports to the school board and others regarding backlogs and information of interest to ensure up-to-date knowledge of school facilities and their importance for educational achievement.

(IV) Enacting a policy requiring schools to use FMIS. Create expectations, deadlines, and reminders for entering and removing backlogs; offer more training in this area for school boards and administrators.

## FMIS Entry Training and Support

**CHALLENGE:** OFMC has a 40-hour introductory training in FMIS for staff of Bureau-funded schools, which is held regularly in Albuquerque and occasionally in other regions. OFMC also offers a two-day refresher training in Albuquerque. However, some schools face abnormally high turnover rates in their facility staff, leaving gaps in their school's access to FMIS. Moreover, fluency with the program may take several months of experience after completing training, and if FMIS isn't used regularly, it is difficult to maintain system competency. The challenge of accurate local data entry is exacerbated by the complexity of the database and some of the technical expertise needed to identify and estimate deficiencies. Thus, OFMC must increase training opportunities and provide further ongoing support to local schools to ensure they are using the system properly.

### RECOMMENDATIONS:

(I) Develop a National FMIS Users Group. The National Users Group would include a representative from schools within each of the 22 educational line offices along with staff from OFMC. The user group should include representatives of BIE-operated, grant and contract schools. This distributed representation would ensure close coordination with regional user groups. Both the national and regional user groups would identify key problems and challenges and offer advice and support for effectively implementing FMIS. Such user groups could be similar to earlier efforts to support FACCOT.

(II) Create nine Regional FMIS support groups. This could include a roster of people in each region who are available to provide FMIS technical assistance to others in their region.

(III) The 40-hour basic training, along with refresher trainings, should be offered Regionally on a regular basis, and provided, when possible via remote means such as via the Internet, CDs, or other means.

(IV) If something in the FMIS program is going to change, FMIS users should be given advanced notice and any necessary training before the changes take effect.

\*Most agency offices are not involved with education construction, though there are exceptions.

## System Administration and Remote Access

**CHALLENGE:** FMIS users experience frequent challenges accessing the network. The program is only available on dedicated terminals, not via the Internet. This drastically limits school access as it requires all FMIS work to be done in one place and cuts off access if there are technical problems with that terminal. Bureau-funded schools also lack access to the information technology resources of DOI, as the Office of the Chief Information Officer of IA does not support the FMIS program. Technical problems (such as the system being down) occur without warning and may persist for long periods without response. Few FMIS users know where to turn for technical support. Compare this to the administration of the NASIS, the database used by all Bureau-funded schools to track attendance and other academic matters, which is available on the Internet through a password-protected project portal and offers extensive technical support. Reporting the condition of school facilities is critical to the success of Native American students, and FMIS should be as technically supported and conveniently available as NASIS.

### RECOMMENDATIONS:

- (I) Like NASIS, FMIS should be easily accessible for all users via the Internet (versus dedicated terminals), without compromising security. Schools should also be able to retrieve their FMIS backlogs from remote locations.
- (II) OFMC and the CIO should respond to FMIS technical challenges more quickly and efficiently, including system issues, access and connectivity problems, and password availability.
- (III) Via email, warn all users when the system is going to be down, and for how long.
- (IV) Provide regional/agency support, or a regional assistance team, to ensure backlogs are input for all Bureau-funded schools that lack access for whatever reason.

## Transparency of Facility Condition Assessment Contractors

**CHALLENGE:** OFMC hires a contractor to assess the condition of schools and confirms the accuracy of FMIS information by sending a team to visit each school once every three years. Many schools do not manage or update their own information in FMIS, so these contractor visits are very important as the only chance to update the deficiencies listed in FMIS.

Nevertheless, school administrators may not be well-informed about the role of the contractor. These administrators and local facility managers are currently encouraged (but not required) to meet with the contractors before and after the site visit. Thus, many school officials do not accompany the contractor during their assessment. Moreover, school leaders do not feel the contractors are accountable to their schools, and administrators are not aware of what information will be added to or changed in FMIS as a result of the visit.

### RECOMMENDATIONS:

- (I) Improve communication between contractor and schools during the assessment process.
- (II) Require formal entry and exit interviews between school leaders and contractor team.
- (III) Require OFMC to provide a final copy of the contractor's Facility Assessment Report to the school upon request.
- (IV) Require the school's facility staff to accompany the contractor during the visit.
- (V) Thirty days prior to the arrival of the Contractor, OFMC should send the school administrator a copy of the contractor's Scope of Work and a printout of the school's list of backlogs from FMIS.
- (VI) Anyone with access from that location should receive notification if the FMIS gatekeepers change backlog entries.



### Chapter 3 Includes:

- An overview and critique of past New School Replacement allocation systems
- An articulation of principles underlying a new, recommended process
- A detailed description of the new process and formula recommended by the Committee for the equitable distribution of New School Replacement funds



## Chapter 3: New School Replacement Program

### Summary of the Replacement School Recommendations

- DOI should codify, and OFMC should implement, detailed recommendations regarding the following:
  - Principles underlying the new approach to replacement schools
  - Eligibility requirements for applicants
  - Application review and creation of pool of schools for whole school replacement
  - Post-application process
  - Whole school replacement and renovation formula

### Introduction

The Act at 25 U.S.C. § 2005(a)(5)(ii) requires that the Committee develop a report on school replacement and new construction needs, creating a formula for the equitable distribution of funds for school replacement. This formula is to address six factors:

- (I) Size of school
- (II) School enrollment
- (III) Age of school
- (IV) Condition of school
- (V) Environmental factors
- (VI) School Isolation

The Act at 25 U.S.C. § 2005(a)(5)(i)(IV) also requires the Committee to identify complementary educational facilities that do not exist but are needed.

This chapter seeks to provide recommendations to this end.

Since Bureau-funded schools are found in many different demographic and environmental contexts, mathematical formulas can be complex in an effort to account for all the factors of such a diverse school system. Nonetheless, the objectivity and transparency that comes with using standard formulas to allocate scarce resources helps ensure the equitable distribution of resources.

### Overview of the Past System for Allocating New School Replacement Funding

Currently no formula or mechanism for prioritizing funding for whole-school replacement exists. In the past, OFMC used several different processes to prioritize the replacement of Bureau-funded schools. These methods were all based in part, but not entirely, on the data provided by FMIS or its predecessor database system, FACCOM. The New School Replacement Construction Program focused on projects that would replace a majority of a school campus or, in the event that the existing site could not be used, the entire campus. Prior to FY 1994, the Bureau developed a prioritized list for school replacement each year. Beginning in FY 1993, upon instruction of Congress, the Bureau (through OFMC) created a multi-year priority list for fiscal years 1993, 2000, 2003, and 2004. Costs for schools replaced under this program ranged from \$10 million to \$60 million. Please see Appendix F for a detailed listing of all schools on these lists.

To develop the FY 1993-2003 lists, as an example of previous processes to prioritize schools for replacement, the Bureau invited schools to submit applications. The Bureau weighed applications against a set of criteria with associated points or scores that included:

- Building code deficiencies (15 points)
- Environmental risks (10 points)
- Accessibility (5 points)

- Unmet educational program requirements reflected by educational space utilization, inappropriately housed students, accreditation deficiencies, and students per square foot of classroom space (20 points)
- Building and equipment condition (30 points)
- Site conditions (10 points)
- Availability of alternative facilities (5 points)
- Historical enrollment trends (5 points)

An evaluation committee reviewed applications. One subcommittee ranked applications based on facilities criteria, while another subcommittee ranked applications based on educational factors. These two subcommittees independently forwarded their rankings to a steering committee that merged the education and facilities rankings into one list. The list of priority schools was then approved by AS-IA and published in the Federal Register.

### New School Replacement Program Problems

A review of past Federal Register notices, information presented in the Convening Report for this Negotiated Rulemaking, and the reflections of Committee members indicate the listing of prioritized schools for new construction created confusion, uncertainty, frustration, and disappointment among affected tribes and schools. Concerns raised have included but are not limited to the following:

- The application process, in some stakeholders' view, favored schools with the greatest skill in completing applications and making a compelling case for their school; it did not effectively prioritize the schools in actual greatest need.
- The process was not clear and transparent to all who participated.
- The list of priority replacement schools changed over a period of years and school replacement priority rankings shifted. Numerous lists were developed through these processes, and schools

often did not know which was the official list and whether they were on it.<sup>30</sup>

- The ranking on each list established expectations about the order of funding and construction among the schools listed; strong disappointment ensued if that ranking changed for whatever reason.
- The educational program requirements did not fully account for actual educational needs beyond a narrow set of parameters. Cultural educational needs, insufficient space for educational activities as measured against educational space guidelines, and other factors were not considered in the school replacement process.
- Although the method was adjusted over time, the initial application process did not allow for major repair and renovation of existing buildings or replacement of a few key buildings, to bring the whole school up to sufficient standards.

### A New Approach to New School Replacement and Renovation

The Committee has developed new approaches for prioritizing schools for replacement that include both a process and a formula for generating a prioritized list of schools. The following subsections detail this new approach.

#### Principles

Formulas can be successfully used to prioritize funding if: 1) the data used for such formulas is comprehensive and accurate; and 2) the formulas are clear and fair. As demonstrated in Chapter 2, the data for formulas contained in FMIS must be improved in order for a formula based on that data to provide adequate results. The Committee has identified additional principles to guide the creation of a new formula for prioritizing school replacement. These principles include:

30. Year by year, changes in the priority list may have been due to schools not being able to find suitable building sites during design, repairs made using funds from the F&R and facilities replacement program that obviated the need for New School Replacement, or other individual reasons. However, the broad view in Indian Country was that the list changed as individual tribes with political connections were able to reorganize and prioritize the list according to their needs, rather than the needs of all Bureau-funded schools.

- Funding should be needs based.
- Formulas must foster compliance with health and safety standards.
- Formulas must account for educational needs.
- The Bureau-assembled database providing the variables used in the formulas must be improved to ensure valid results.
- Formulas must be uniformly applied.
- Formulas must not be susceptible to manipulation.
- Formulas must be practicable.
- Formulas should be defensible legally and technically.
- Any decision-making process used in addition to the formulas must also be clear, consistent, transparent, and compliant with these principles.

### RECOMMENDATIONS:

Every five years (or sooner if sufficient levels of funding are allocated), the Bureau will generate a new list of schools for replacement. The list should be based on an application process, but this process should be grounded primarily on readily available data and easily measurable criteria that would increase the ability of all schools, regardless of size, resources, or grant writing ability, to participate. The Committee recommends that schools on the FY 2004 list that have not yet received funding should be replaced prior to initiating this new approach.

The general approach is as follows:

**Overview:** The New School Replacement and Renovation Program should allow for a mixture of replacement and renovation activities. Some schools can be modernized with a combination of new and renovated buildings and might not require a complete campus replacement.

#### Eligibility for Application:

(I) OFMC should generate a list of all schools whose overall FCI is “poor” based on FMIS, as well as a list of schools that are both 50 years or older and educating 75 percent or more of students in portables. Only schools on one or both of these lists should be eligible to apply for the New School Replacement Program.

(II) All schools meeting the condition(s) in (I) above should be ranked based on FCI; however, if schools do not apply, they should not be considered for new school replacement.

(III) The announcement of the initiation of the process should be well publicized and must include communication and outreach that extends far beyond the Federal Register notice process. Letters should be sent to all schools and ELOs by the Director of the BIE and to tribal leaders by the AS-IA.

(IV) During the five-year process, schools should still be eligible for MI&R and FI&R monies, as needed, to ensure the school can continue to operate and improve its physical condition to meet educational needs.

(V) The ability of a school to cost-share should not be a factor in the ranking of applicants. Cost-sharing should continue to be allowed in determining the final designs for a school included in the pool for funding.

(VI) The application process should be clear, relatively simple, and based on as much quantitative data as possible. The application process should also allow schools to describe their particular circumstances and needs.

#### Application Review and Creation of the Pool of Schools for New School Replacement:

(I) OFMC should review the applications for completeness and accuracy within the FMIS database, and input location scores, which are worth up to 65 points (out of 100), and remove names and identifying characteristics to prepare for review.

(II) As soon as applications are submitted, a National Review Committee should be formed made up of individuals from each of the regions, selected by the Regional MI&R Committees (described in the next chapter), plus one representative each from OFMC and BIE. Each region will select one person and the Navajo region will select three people. The Review Committee members should all be knowledgeable about school facilities and shall not include anyone from schools that are submitting applications.



A summary of the steps in the recommended Replacement School and Renovation Program.



The Review Committee should use the points in the formula (see Chart 1 on page 38) to rank applicants based on the other application criteria (worth up to 35 points). The Review Committee should identify the 10 applicants with the highest number of points.

(III) The Bureau should publish the names of the 10 schools with the highest rankings in alphabetical order and these schools should be invited to present at a public meeting in Albuquerque.

(IV) At the public meeting, schools could present their arguments regarding their rankings and the Review Committee could ask and answer questions.

(V) After deliberation, the Review Committee should select five schools for the funding pool for that five-year period. The Review Committee should be required to clearly explain its selection process in detail.

(VI) The selected pool of schools should then be reviewed by AS-IA for final approval.

(VII) In the Federal Register, the Bureau should publish a list of all schools that applied ranked by FCI and the list of schools expected to be funded in the five-year time frame. The Federal Register notice should state clearly that those in the rankings not in the top pool of schools anticipated to be funded should understand that: 1) they will not be funded in the five-year window, 2) they will have to reapply, and 3) the rankings will be recalculated based on new information in the next five-year cycle of application. The intent of this approach is to be transparent about rankings to all schools.

**Post-Application:**

(I) All schools in the replacement pool should then undergo initial pre-planning for readiness (e.g., site availability, soil testing, available utilities, etc).

(II) The Bureau should develop readiness criteria for the pool.

(III) Schools would then be funded for construction based on: 1) ranking, 2) readiness, and 3) budget.

(IV) The pool should be fixed for the length of the term. If the Bureau is able to fund all five schools in under five years, it should reinitiate this application process for another round sooner than five years to ensure there are no gaps in activity.

(V) If any of the selected schools are not built in the five-year period due to a lack of funding, they should be “grandfathered” into the next ranking of schools for the next time frame.

(VI) Naturally, emergencies and condemnations must be addressed in real time and could affect funding for other projects.

(VII) Pre-planning money for the schools in the pool would be provided to ascertain that:

- Tribe has certified that land is available;
- Utilities are available;
- Soils have been tested (geotechnical surveys);
- NEPA review is completed.

A reasonable timeline to get pre-planning completed would be provided.

Please note that the timing of the process should be aligned with annual federal budgets to ensure monies are available for pre-planning and programming once the pool of schools is selected.



## New School Replacement and Renovation Formula

The formula for ranking schools should include the following criteria. Only applications from schools rated in poor condition, or 50 years and older and educating 75 percent or more students in portables, shall be reviewed.

**Chart 1**

Points	Description	Method for Calculating
65	Condition of Facilities and Educational Space Deficiencies	Overall school location score from FMIS (out of 1000) x .065. Data fixed on date application is due.
5	Crowding	Actual students per square foot divided by standard for that school in <i>Educational Space Criteria Handbook</i> (times 100). Award points based on Chart 2.
5	Declining or Constrained Enrollment Associated with Poor Facilities	Award points based on narrative provided on this criterion, based on Chart 3.
5	Inappropriate Educational Space	Award points based on percent of students in inappropriate educational space in portables, dormitory space, leased space, according to Chart 4.
5	Accreditation Risk	Award points based on the number and severity of citations in the accreditation, according to Chart 5.
10	School Age	Award points based on the average age of school's educational and dormitory buildings, according to Chart 6.
5	Cultural Space Needs	Points based on response to the following: 1) is there a specific tribal requirement; 2) is there a program; 3) is there a lack of space for that program or requirement, according to Chart 7.

The key evaluation criteria for prioritizing schools for whole school renovation and replacement.

The following section explains each of the criteria in more detail, as well as a chart showing how each will be measured.

### Crowding

Each school would first calculate students per square foot per grade based on the averages of the last three years enrollment (per NASIS), divided by the total square feet of core educational space. This ratio would then be compared with the standard for that school (per grade) in the *Educational Space Criteria Handbook* (times 100). This would yield a crowding factor and points would be awarded based on the chart on the next page.

The application will lay this formula out for applicants in a simple way that they can fill in, using statements like: "Enter the number of students per grade." OFMC will confirm that the numbers in the application are consistent with FMIS and NASIS data.

**Chart 2**

Crowding Factor	Points Awarded
140 and above	5
130 to 139	4
120 to 129	3
110 to 119	2
101 to 109	1
100 and below	0

**Declining or Constrained Enrollment Associated with Poor Facilities**

Poor facilities may cause declining or constrained enrollment. Schools should explain how the condition of their facilities is causing decreasing enrollments, inability to utilize existing space, etc. Schools must support their explanation with data such as transfer data from NASIS (students requesting moves out of their geographic boundary), student/parent surveys, demographic information, waiting lists, or other data. All lists and data would be verified by the Review Committee prior to finalizing rankings.

**Chart 3**

Declining or Constrained Enrollment Associated with Poor Facilities	Points Awarded
School has closed a building due to poor conditions	5
School can demonstrate students are transferring because of poor facilities and/or because school has waiting list on day 11 according to NASIS	3

**Inappropriate Educational Space**

Up to 5 points will be awarded to schools with students being educated in spaces that are not designed or appropriate for instruction. This includes portables, dormitories, or leased facilities.

**Chart 4**

Percentage of Students Taught (based on last three year average) in Portables, Dormitories, or Leased Facilities	Points Awarded
95% to 100%	5
80% to 95%	4
60% to 79%	3
40% to 59%	2
20% to 39%	1
Below 20%	0

## Accreditation Risk

Applicants should identify the facilities that do not meet the school’s accreditation requirements. For example, a school could note a state requirement for a chemistry lab that is nonexistent. Or, a school might document an accreditation citation for lacking a library. The applicant should provide a copy of the relevant standards in their application. The intent of this criteria would be to identify schools not meeting minimal requirements from such standard-setting bodies as: the FACE program guidelines, tribal requirements (i.e., Navajo NCA), state requirements, etc. Cultural educational space deficiencies should not be indicated in this section, but noted in the section titled Cultural Space Needs

**Chart 5**

Citations in Accreditation Named by the Accreditation Body (documentation should be provided)	Points Awarded
Accreditation at highest risk (numerous, severe citations)	5
Accreditation at high risk (numerous citations, some severe)	4
Accreditation at risk (some citations, some severe)	2-3
Accreditation citations, not extensive nor severe	1
No citations	0

## School Age

The average age of a school would be calculated by including the age of each building that is a dormitory or school building that the applicant intends to be replaced or renovated in the program. Buildings that are not meant to be part of the program would not be included in the average.

**Chart 6**

Average Age of School Buildings or Dormitories to be Replaced or Renovated Under the Application	Points Awarded
Over 60	5
50 to 59	4
40 to 49	3
30 to 39	2
20 to 29	1
Below 20	0

### Cultural Space Needs

Bureau-funded schools should provide space for critical cultural programs such as instruction in tribal language, tribal culture, and traditional arts. Up to 5 points will be awarded for cultural space needs.

**Chart 7**

Determining Cultural Space Needs	If Yes, Points Awarded
Did the school respond yes to: <ul style="list-style-type: none"> <li>• Is there a requirement for native language/cultural education? (please provide the Tribal Council requirement/resolution)</li> <li>• Is there a lack of adequate or sufficient space to support this program and/or requirement?</li> </ul>	4
Is there an existing cultural program that requires space?	1

### Other Considerations

Applicants may provide additional information about their particular circumstances and contextual details that the Review Committee should be aware of during the review process. This information may be used to break any ties in the overall ranking by points

### Factors Not Considered

NCLB directs that the formula developed by the Committee include “school isolation” as a “necessary factor in determining an equitable distribution of funds.” The Committee concluded that the overarching goal of basing funding prioritization on the needs of the schools would not be furthered by including isolation as a criterion. The Committee maintains that the schools in the worst condition should be fixed first, whether isolated or in metropolitan areas. Once schools are prioritized, geographic isolation will have to be taken into account regarding higher construction costs, more difficult logistics, and so forth. However, once a school is part of the funded pool, no matter how isolated, it should in no way be discriminated against in terms of setting the order of funding.





#### Chapter 4 Includes:

- An overview and critique of the existing MI&R and FI&R Renovation and Repair program
- Detailed recommendations for a new process and formula for the equitable distribution of MI&R funding
- Detailed recommendations for a new process and formula for the equitable distribution of FI&R funding

## Chapter 4: Formulas for Minor and Major Renovation and Repair

### Summary of MI&R Recommendations

- OFMC and BIE should emphasize to the schools the importance of timely entry of data in FMIS.
- OFMC should annually publish a list of all S1, F2, and M1 backlogs. These are the backlogs eligible for MI&R funding.
- OFMC and BIE should publish the data call for schools to indicate their priority backlogs for MI&R funding.
- After all funding decisions are made, OFMC should issue an annual report of all regional and headquarters MI&R allocations, explaining each decision, to post and distribute.
- OFMC should convene regional committees made up of one representative of each school in the region—grant and contract schools as well as BIE schools—to make decisions about the allocation of each Region’s MI&R funds.
- OFMC and BIE should codify and implement the new MI&R formula and process.

### Summary of FI&R Recommendations

- The Committee recommends that Congress revisit the moratorium on school expansion.
- OFMC should distribute the FI&R ranking of schools annually to all schools, tribes, and regions along with a brief explanation of how the rankings were obtained.
- OFMC should announce the overall budget for FI&R funding each year, and annually publish the

schools and projects to be funded each year along with the rankings, explaining FI&R project/school selection in more detail than location ranking in the *United States Department of the Interior Budget Justifications and Performance Information* (Green Book).

- OFMC should identify the individuals who compile and complete the ranking process for FI&R, make clear their roles and responsibilities, and publish these roles and responsibilities annually.
- OFMC should identify educational space deficiencies by comparing the Educational Space Criteria (and state accreditation requirements) to existing conditions at all schools.
- OFMC should add all educational space deficiencies into FMIS, categorized as Critical Health and Safety Capital Improvement (educational space deficiencies) backlogs, given a weighting factor of 9.
- The FI&R formula should factor educational space deficiencies into the overall Location Score.
- DOI should incorporate educational space deficiencies into the ranking factor of Critical Health and Safety Capital Improvement with a ranking factor of 9 into departmental/OFMC policy to ensure future compliance.
- OFMC should normalize API scores for all school buildings to be worth 100 points.

## Introduction

The Act at 25 U.S.C. § 2005(a)(5)(ii) requires that the Committee develop a report on school replacement and new construction needs, creating a formula for the equitable distribution of funds for school replacement. This formula is to address six factors:

- (I) Size of school
- (II) School enrollment
- (III) Age of school
- (IV) Condition of school
- (V) Environmental factors
- (VI) School Isolation

The Act at 25 U.S.C. § 2005(a)(5)(i)(IV) also requires the Committee to identify complementary educational facilities that do not exist but are needed.

This chapter seeks to provide recommendations for the programs of MI&R and FI&R. For each category of funding, the Committee recommends:

- (I) Communication enhancements
- (II) Engagement improvements
- (III) Formula revision

The Committee was not asked to review and make recommendations regarding the allocation of funds for routine O&M of school facilities. The Committee does note, however, that the O&M budget has a direct impact on the improvement and repair needs at Bureau-funded schools; insufficient funding for routine maintenance allows small problems to turn into big ones that draw funding from the MI&R and FI&R programs. As stated in the Catalog of Facilities Chapter (page 23), operations funds have been constrained by approximately 50 percent per year for Bureau-funded schools.

## Overview of the Current Systems for Allocating Improvement and Repair Funding

Funding for Bureau-funded school improvement, repair, and renovation is divided into several accounts or “buckets” of funding. OFMC has some flexibility to move allocations among these categories in order to best meet the needs of school facilities. The following briefly describes the current system for allocating improvement, repair, and renovation monies.

## MI&R

MI&R funds address serious health/safety and other high-priority deficiencies at Bureau-funded facilities (except teachers’ quarters). Most MI&R projects correct problems that put the facility out of compliance with applicable life safety statutes, codes, and requirements including those found in: the Americans with Disabilities Act; Uniform Federal Accessibility Standards; U.S. Environmental Protection Agency requirements; and the National Fire Protection Association Codes and Standards. Such projects may address issues such as fire doors, alarms, structural repairs, etc. To qualify under MI&R, projects must exceed \$2,500 in cost and typically do not exceed \$500,000 in cost. There are special MI&R programs concerning specific components, such as roofs, energy, portables, demolition, and condition assessment.

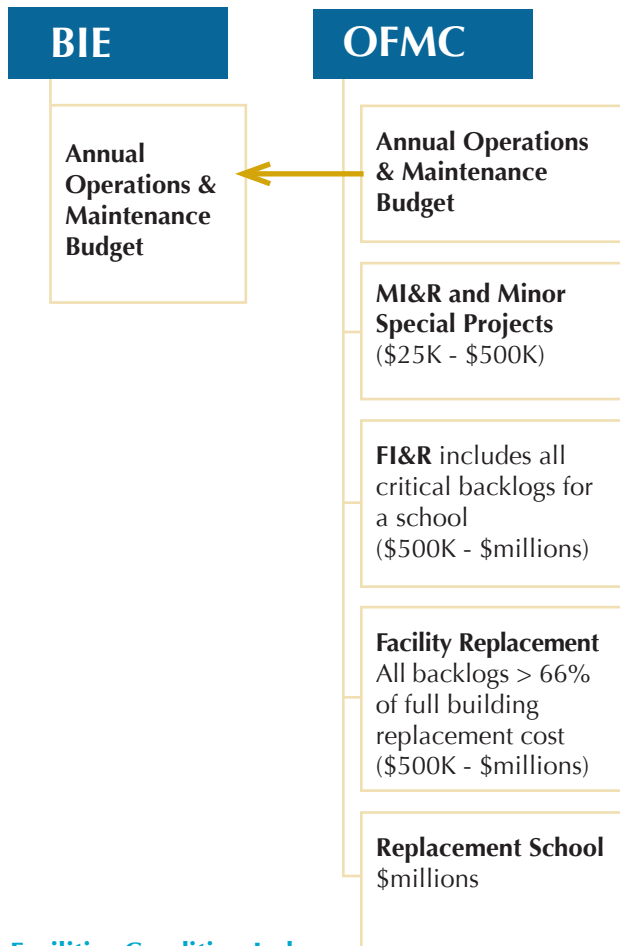
## FI&R

Most FI&R projects consist of major renovation of or repairs to an existing asset. As with MI&R, projects under FI&R can correct deficiencies that cause non-compliance with applicable codes and other regulatory or Executive Order requirements. FI&R projects typically address all repairs needed for a single building or all maintenance required by an entire campus. As such, rather than being one backlog or one specific project, they consist of most or all of the backlogs for a building or location. Such projects range from \$500,000 up to many millions. A detailed explanation of the current FI&R formula can be found in Appendix G.

## Facility Replacement

The Replacement Facility Construction program was established in FY 2007 to replace individual buildings when the total cost of all deferred maintenance exceeds 66 percent of the cost of replacing the building; it also provided funding for schools lacking key academic facilities required for accreditation. This program was distinct and separate from the Replacement School Program, though it can be combined with FI&R to respond comprehensively to the needs of a school campus, replacing or constructing some buildings and renovating others. Like FI&R projects, these ventures typically ranged in cost from about \$500,000 to multiple millions.

The following chart graphically explains these programs:



**Facilities Condition Index**

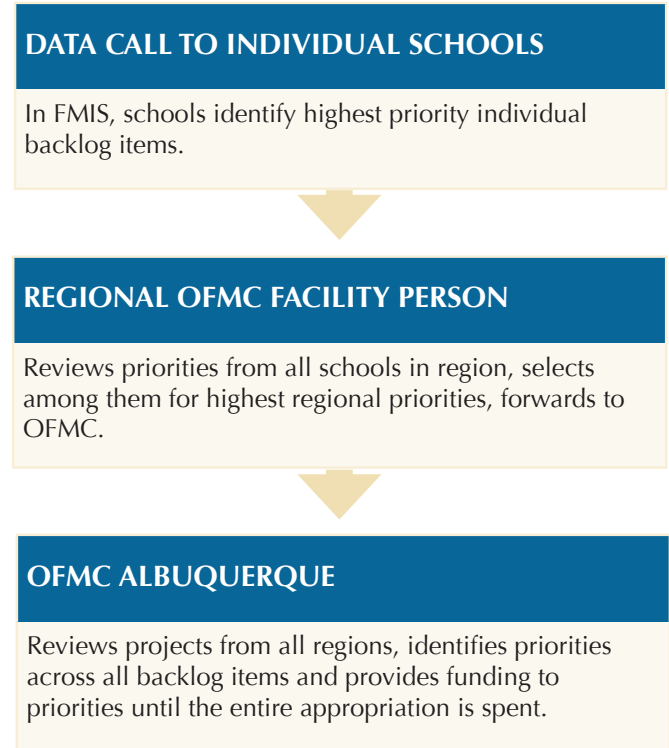
Another calculation related to the FI&R program is the FCI. FCI provides a numerical rating of the condition of a school as a whole, based on the ratio of cost of deficiencies to current plant value. It is used to determine whether a school is ranked in good, fair, or poor condition.

**MI&R**

**2010 MI&R Process**

Up until 2010, the allocation of MI&R funds was based on a process rather than a formula. Each year, OFMC requested that schools submit MI&R priorities to OFMC’s regional offices, which then organized the lists of individual school priorities into a list of regional priorities. In turn, these regional priorities were reorganized at the headquarter level to establish overall MI&R spending priorities for the year across the 183 schools.

The following chart graphically displays this process:



MI&R process from 2010 and earlier.

**2011 MI&R Process**

In 2011, OFMC made a change in its process of allocating MI&R funds to focus funding on schools in the worst condition. For 2011, 69 schools in and nearing poor condition status based on the FCI were identified for MI&R funding. Based on FCI scores, these schools were considered the schools with the “worst deficiencies.” The 2011 MI&R allocation process was a collaborative effort between BIE and OFMC which used established criteria in utilizing risk assessment to justify deferred maintenance repairs. The process identified and justified viable improvement and repair priorities with an emphasis on stakeholder participation.

The FCI ranking establishes a base priority of targeted schools and identifies the worst deficiencies at these schools as viable projects by a fully documented validation process. The process identifies and prioritizes deferred maintenance backlogs that will correct major building systems and components including any urgent critical system failures (e.g., roofs, HVAC, fire alarms, electrical systems), which have the potential to close down the education program. All deficiencies selected for repair must be backlogs in the FMIS system; fund-

ing is limited so it is extremely important that backlogs targeted for repair are top priority.

A team at OFMC, with BIE and the Division of Safety and Risk Management representation, reviews the regional lists and makes recommendations to finalize the MI&R funding allocations.

### MI&R Problems

The Committee has identified problems with the current MI&R allocation process including, but not limited to, the following:

- Schools are not informed of how OFMC prioritizes individual projects within the critical health and safety category.
- There is too little communication between OFMC and schools once the initial requests are submitted.
  - Decisions are not transparent—schools do not understand why they receive money for some projects but not others.
  - Inadequate communication gives poor results—projects that were submitted because they should be done together (e.g., replacing fire doors and fire alarms) are not funded together, with wasteful consequences.
- Ranking is done without clear and consistent criteria across regions. Without guidance from OFMC to all schools regarding what factors to take into consideration when prioritizing projects, schools identify needs that do not reflect OFMC's priorities (e.g., life and safety).
- Inadequate attention to educational facility needs. OFMC and BIE are separate offices within IA. Therefore, BIE's ELOs have no direct authority to affect OFMC's prioritization decisions for MI&R projects. This raises the concern that the need for correcting educational space deficiencies is given less weight than the need to repair and improve existing facilities, regardless of educational space deficiencies.

### MI&R Recommendations

The Committee makes the following recommendations to improve the MI&R process:

### OFMC should improve communication by doing the following:

- Emphasize to the schools importance of timely entry of data in FMIS.
- Annually publish a list of all S1, F2, and M1 backlogs. These are the backlogs eligible for MI&R funding.
- Publish the data call for schools to indicate their priority backlogs for MI&R funding.
- After all funding decisions are made, issue an annual report of all regional and headquarters MI&R allocations, explaining each decision.
- Post the collected information on the Bureau's website, distribute to all school principals, facility managers, and ELOs, and distribute at Bureau key conferences and trainings.

### OFMC should improve engagement by doing the following:

- Convene regional committees made up of one representative of each school in the region to make decisions about the allocation of each region's MI&R funds (a proportional amount of 2/3 of total MI&R funds). Representatives should include grant/contract schools as well as BIE schools.

### OFMC should improve the formula for prioritizing the allocation of MI&R funds by establishing a formula prioritizing MI&R funding. The formula and process would work as follows:

- MI&R funds will be divided into two pools—a regional pool and a headquarters pool. Two-thirds of the funds will go into the regional pool to be allocated to OFMC regional offices for allocation by regional committees, and 1/3 of the funds will become the headquarters pool and be allocated by OFMC.
- The regional pool will be allocated to each region proportionately based on the square footage of all schools' educational and dormitory space in that region, based on FMIS. Regional funds not needed or unspent by a region (due to new schools, updated facilities, etc.) will be reallocated across the other regions according to the same square footage approach.





A summary of the steps in the recommended MI&R program.

- These regional funds will be allocated across schools in that region by regional committees consisting of one representative of each school in the region, deliberating in an open and transparent manner, and allocated to fund the eligible (S1, F2, and M1) backlogs highlighted as priorities by the individual schools that are between \$2,500 and \$500,000. Only projects within this cost range will be funded by these regionally allocated funds. If there are large critical projects over \$500,000 that the region deems as highest priority, they will bring this to the attention of OFMC. **Funds will not be allocated within a region by the school square footage, but by need. The square footage distribution of funds is only at the regional level to ensure distribution of funds across all regions.**
- Prioritized projects in each region that are not allocated by regions will be forwarded to OFMC for potential funding from the headquarters fund, (consisting of 1/3 of the MI&R funds in total).
- OFMC will allocate its portion of the MI&R funds consistent with its 2011 MI&R process, drawing from the eligible (S1, F2, and M1) backlogs highlighted as priorities by the individual schools with the highest FCI rankings but not funded by the regional funds. OFMC may fund individual backlogs over \$500,000 from their headquarters pool when necessary to cover major or special projects.

### FI&R and Facility Replacement

The FI&R program funds numerous larger projects for schools that exceed the typical repair done with MI&R monies. These projects customarily exceed \$500,000 and may cost millions of dollars. Typical projects include replacement of plumbing, HVAC, roofs, and other systems. Sometimes, a building needs so many MI&R projects that a major rehabilitation of that building is in order, and can be done with FI&R monies. Occasionally, the combined cost of FI&R and MI&R projects for a specific building exceeds 66 percent of the replacement cost of the building. In such cases, the facility may be eligible for complete replacement.

The FI&R formula is used as a basis for determining whether a building should be replaced. Once a school ranks high for FI&R monies, as OFMC reviews that school to plan a set of construction activities, they evaluate each building with deficiencies and determine if that building should be wholly replaced versus repaired/renovated. If replacement is deemed necessary, that part of the project is then funded through the Facility Replacement program.

### Current FI&R Process

The current FI&R process for allocating funds is based on data collected in the FMIS system:

- (I) Individual schools enter all backlogs and costs into FMIS. The data is reviewed and revised as described in more detail in Chapter 2 of this report.
- (II) Through a complex formula, OFMC generates an overall project score for a school, giving it a priority ranking versus all other schools in the system for facilities and repair funding (see Appendix G for detailed description of the existing approach).
- (III) The current formula to develop an overall project score is as follows:
  - Relative weighed score of specific backlog for the facility (based on FMIS backlogs)\* 75%) + API average\* 25%) = Final Project Score.
  - API is a consideration of the criticality of the buildings with backlogs within the school to the overall educational mission. For instance, outbuildings, shops, and other non-education buildings would have lower criticality.
  - OFMC reviews these project scores generated automatically by the formula in FMIS, checks for mistakes, removes irrelevant backlogs, and “re-ranks” the school according to the same formula.
  - OFMC then incorporates rankings into a five-year project plan. To provide consistency and certainty, projects are “locked in” during the first and second years. However, the last three years’ rankings are subject to change based on new information from FMIS.

- FI&R money only funds renovation of existing facilities. It cannot be used to expand square footage or fund new buildings. However, if OFMC determines that a facility must be expanded in order to correct square footage deficiencies to bring a building up to current educational standards, the existing building perimeter may be expanded up to 25 percent.

### Key Summary Points to the FI&R Formula

While the calculations in the FI&R formula are detailed and complex, there are, in general, a few key points the Committee identified as most important in understanding this formula:

(I) The number and total cost of backlogs do not affect a school's overall FI&R score. Schools with the most backlogs or the highest costs are not necessarily ranked the highest in overall score. Small schools with large relative needs may rank higher than larger schools with more expensive but less serious needs.

(II) The FI&R score is affected by:

- The critical/essential categories of backlogs (i.e., health and safety issues);
- The relative value of those critical backlogs as compared to all backlog costs (i.e., if critical backlogs make up a large percentage of the total backlog costs in that school); and
- The criticality of the buildings with backlogs (i.e., if the buildings with critical backlogs are essential to education).

(III) The formula does not discriminate in any way based on tribe, geography, ability to pay, or size of school. The FI&R formula has no inputs relative to these items.

(IV) The formula does not prioritize backlogs against any educational criteria. Currently, the FI&R formula does not account for the critical impact of a project on a school's quality of education. Nor does it include essential educational needs that cannot be represented by deferred maintenance backlogs.

### Expansion Moratorium

In the Department of the Interior and Related Agencies Appropriations Act of 2006, Congress provided that no funds shall be used to support expanded grades for any school beyond the grade structure in place at each school in the BIA school system as of October 1, 1995.<sup>31</sup> The law also prohibits funding any new Bureau-funded schools, preventing the creation of charter schools. This language has been included in each appropriation since then. The Committee respects Congress' underlying goal of ensuring adequate funding for existing school programs, but it is the view of the Committee that an unintended consequence of this blanket moratorium has been to block important opportunities to improve the efficiency and serviceability of some Bureau-funded schools. **The Committee recommends that Congress revisit the moratorium on school expansion.**

### FI&R Formula Strengths and Weaknesses

The Committee has identified several strengths with the current process. The FI&R formula:

- Is specific, data-based, and reasoned;
- Does not discriminate by school size, project cost, location, or ability to pay; and
- Helps ensure a fairer allocation of money that cannot be easily changed due to politics, personalities, and individual influence.

However, the Committee has also identified several shortcomings in the current FI&R process.

- It is quite complex and not well understood by schools: most schools do not know of the formula, how it works, and what inputs or criteria are key.
- It is completely dependent on the accuracy and comprehensiveness of FMIS data to generate a needs-based ranking. The formula is only as good as the data it is based on and FMIS needs improvements as noted in other chapters.

31. Public Law 104-134, 110 STAT. 1321-171

- The formula does not account for any educational needs. The current approach has no way of accounting for two important educational space deficiencies:
  - The system does not identify backlogs that have significant negative educational impacts (e.g., inability to use a reading lab);
  - It does not account for space that is either entirely missing (e.g., we have no reading lab at all) or space that is far too small (e.g., the reading lab can only handle half of our children).
- It does not account for inappropriately housed students in portables. An FI&R ranking may be low in a school dependent on numerous portables because FI&R only focuses on the condition of buildings, not their adequacy.
- It does not calculate whole building replacement, putting even greater pressure on FI&R dollars for repair and renovation when a building is identified in the FI&R ranking as needing complete replacement under the facilities' replacement program.
- By investing in F&IR projects, a school may be improved sufficiently to make it a lower priority for a whole school replacement program.

### FI&R Recommendations

The Committee makes the following recommendations for improvements to the current FI&R process regarding communication, consultation, and formula.

#### OFMC should increase and enhance communication by implementing the following recommendations:

- Distribute the FI&R ranking of schools annually to all schools, tribes, and regions along with a brief explanation of how the rankings were obtained;
- Annually publish the schools and project to be funded that year along with the rankings;
- Announce the overall budget for FI&R funding that year along with above information;
- Explain FI&R project/school selection process in greater detail than merely the location ranking published in the Green Book; and

- Identify the individuals who compile and complete the ranking process for FI&R, and make clear their roles and responsibilities. OFMC should publish these "roles and responsibilities" annually.

#### OFMC would improve the formula for prioritizing and allocating FI&R monies by implementing the following recommendations. In order to identify educational needs and develop a means to rank these needs, OFMC must:

- Conduct a study of all schools, comparing the *Educational Space Criteria Handbook* (and state accreditation requirements) to existing conditions to determine educational space deficiencies (see the Catalog of Facilities Chapter of this report for further detailed recommendation);
- Add all educational space deficiencies into FMIS, and incorporate them into the FI&R formula as Critical Health and Safety Capital Improvement (educational space deficiencies) backlogs, given a weighting factor of 9.
- Factor educational space deficiencies into the overall Location Score for FI&R formula.

Including educational needs into the FI&R formula with a ranking factor of 9 should be incorporated into OFMC policy to ensure future compliance.

#### The Committee recommends the following revised formula:

- (Relative weighed score (based on FMIS backlogs) \* 75%) (*weighed education deficiency score is included in above*)

PLUS

- (API Average \*25%) (*normalized so that all school buildings have an API score of 100*)

= Overall Final Project Score

This new FMIS formula will generate a prioritized list arranged worst first (combined building and educational space deficiencies), and FI&R monies will be used as available each year to fund these projects.



## Chapter 5: Appendices

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[Appendix A:](#) Committee Members and Alternates

[Appendix B:](#) Summary of Consultation Process and Findings

[Appendix C:](#) Abstracts of Research Papers Associating School Conditions with Performance

[Appendix D:](#) Extensive Description of FMIS

[Appendix E:](#) Method for Estimating for New Construction

[Appendix F:](#) Previous Whole School Replacement Priority Lists

[Appendix G:](#) Current FI&R Formula Description

[Appendix H:](#) Glossary of Terms



## Appendix A: Committee Members and Alternates

### Tribal Representatives



**Gregory Anderson** is the Superintendent of the Eufaula Dormitory in Eufaula, Oklahoma. He has

been involved in Indian education for 27 years at many levels and has served on numerous Federal committees for improvement and reform in Indian education. Mr. Anderson was appointed in April 2002 by President George W. Bush to serve on the National Advisory Council on Indian Education and was re-appointed by President Barack Obama to continue serving on NACIE in August 2010. He was selected in 2002 to serve on the Department of the Interior - Bureau of Indian Affairs first NCLB Negotiated Rulemaking Committee of 2005. He served as co-chairman for the Committee, which developed recommendations for proposed regulations for the No Child Left Behind Act of 2001. In July 2010, Oklahoma Governor Brad Henry appointed Mr. Anderson to the Oklahoma Advisory Council on Indian Education. He is involved in public service at the local level, and has served as Vice-Mayor and Council President for the city of Eufaula, Oklahoma. Mr. Anderson is a graduate of Eufaula High School and went on to earn his bachelor's degree in Journalism from the University of Oklahoma, a master's degree in Education Administration from East Central Oklahoma University and his superintendent's certification through the Oklahoma State Department of Education. He

resides in Eufaula, Oklahoma and is married to Becky Anderson. They have two children—son Brett, 17, and daughter Alex, 13—who attend Eufaula Public Schools. He is serving a co-chair for this NCLB School Facilities and Construction Negotiated Rulemaking Committee.



**Janice Azure**, a member of the Turtle Mountain Band of Chippewa Indians, has worked in education with

the Dunseith Public School for 18 years. She also has worked for the tribe in the Tribal NEW program, the Tribal Work Experience Program and the Tribal Child Care Block Grant Program, rising to Tribal Secretary and Program Director. She also served two terms on the Tribal Council. She and her husband own and run a family business in Dunseith, North Dakota. Ms. Azure also volunteers her time in community fundraisers for members of the community who are ill. She is the mother of six children, and has 22 grandchildren and 2 great-grandchildren.



**Jimmie C. Begay** is a member of the Navajo Tribe and has been in Indian Education for more than 30 years as a

teacher, school principal, and Executive Director of Grant/Contract Schools. He also was a Health Director for one grant school entity. He also served more than 15 years as Board of Director for the Association of Contract

Tribal Schools, a national association consisting of grant and contract schools which advocated for self determination. Mr. Begay has 20 years experience as project management for design/construction projects, namely Rock Point Community School, Jeeh deez ah' Academy Inc., Rough Rock School, and Lukachukai Community School where Validation project was done. He was involved with working with local school boards, architects, contractors and federal government to complete these projects. For the last four years Mr. Begay performed duties on the Navajo Nation Board of Education. In 2011 he was elected to four more years to serve on the board. Mr. Begay earned his bachelor's degree in Secondary Education and master's degree in Educational Administration from New Mexico Highlands University, Las Vegas, New Mexico. He also testified before Congress for legislative changes or for new legislation affecting Indian Education and advocated for educational funding.



**Margie R.S. Begay** is Navajo, and was born and raised on the Navajo reservation at Wheatfields, Arizona. Her parents are the late Tom Slim Begay and Marie N. Begay. She has eight brothers, a deceased brother, and four sisters. Margie has two children, Ashley, her daughter, and Ryan, her son, who with his wife, Aldercy, have two children, Ariyah and Seth. Her grandchildren are her pride and joy. Her interest and involvement

in education came from being a parent and her love of doing local work. Ms. Begay holds a B.A. in Administration. From 1998 to the present she has acted as School Board president to Lukachukai Community Board of Education, Inc., and as the Secretary/Treasurer of the Tsaille/Wheatfields Chapter of the Navajo Nation. She has been president of the Associated Navajo Community Control School board Association, and vice-president of the Native American Grant School Association. She has also served as the vice president, and formerly as secretary, of the Chinle Agency Council. Ms. Begay has worked as the Chinle Agency Commissioner for the Navajo Nation to the Government Development Office. In addition to her elected and volunteer positions, Ms. Begay works as a Senior Planner to the Division of Transportation, and on her farm. Ms. Begay serves as an Alternate Tribal member of the Committee.



**Faye Blueeyes** is Program Director and Director of Finance/Special projects at Dzilth-No-O-Dith-Hle Community Grant School, where she is, amongst other tasks, responsible for special projects pertaining to facilities. Prior to this, she worked for Shiprock Alternative Schools, Inc. for 24 years, holding numerous positions, including Director of Facilities and New School Construction Project Director. In this role, she directed the completion of a \$26.9 million new school construction, and managed all school facility and FMIS data. She has provided testimony to the

House of Representatives on issues involving budget and education, and also served on an earlier No Child Left Behind Negotiated Rulemaking Committee. Ms. Blueeyes holds a master's degree in Curriculum and Instruction and a bachelor's degree in Elementary Education. Ms. Blueeyes serves as an alternate member of the Committee.



**Gerald "Jerry" Leroy Brown**

was born at the Flathead Reservation on January 7, 1940, at St. Ignatius, Montana. His mother, Dorothy Morigeau Brown was Salish and Kootenai and his father, Thomas W. Brown, Sr. was Oglala Lakota. They had eight children, seven boys and one girl. The family moved to San Francisco, CA under the BIA Relocation Program in 1957. Mr. Brown graduated from Mission High School in 1958. After serving in the U.S. Army, Mr. Brown attended college at San Francisco State College, Carroll College, Helena, Montana, University of Colorado workshop on Indian Affairs, graduating from Montana State University in 1965 with a B.A. in Sociology. After college, Jerry directed the Community Action Program for his tribe, Confederated Salish and Kootenai Tribes until he entered UCLA School of Law in 1968. He received his J.D. from UCLA in 1971. His primary professional career was in school desegregation, working in various regions of the country. He is currently retired and living on the Flathead Reservation, where he serves as chair of the Two Eagle River School Board and teaches part-time for the Salish

Kootenai College at Kicking Horse Job Corps Center. He is serving as a co-chair for this NCLB School Facilities and Construction Negotiated Rulemaking Committee.



**Fred Colhoff** is an enrolled member of the Oglala Sioux tribe, and has been involved in school facilities

and maintenance for 20 years. Mr. Colhoff worked with the Head Start transportation department and the Lakota Community Homes in housing maintenance, before attending the Western Dakota Vo-Tech Institute for building and grounds maintenance. Mr. Colhoff worked as the Lady of Lords School Maintenance Supervisor for three years, and currently works as the Wounded Knee district school facility manager, where he is responsible for FMIS data entry.



**Joy D. Culbreath** graduated from Lubbock High School and attended South-eastern Oklahoma State

University where she received a bachelor's degree in Business Education and Elementary Education, master's of Behavioral Studies (Certified Professional Counselor) and master's of Administration. Joy worked for Southeastern Oklahoma State University for 27 years in TRIO programs and teaching in the Business Department. After her retirement, Joy was asked by the Choctaw Nation of Oklahoma to help build an adult education program. She began the program as its only employee, doing every-

thing from teaching GED classes to clerical work. After directing the Adult Education Program for four years, she was named as Executive Director in charge of all Education programs within the Choctaw Nation. Another program under Joy's direction is Jones Academy, a legacy school founded by the Choctaw Nation in 1891. This residential school is rapidly becoming a nationwide example of excellence in Tribally-operated schools (see [www.jonesacademy.org](http://www.jonesacademy.org)). In 1997 Chief Pyle asked Joy to build a language program for the Choctaw Nation. Other tribes have looked to this language program as they try to build their own. Joy serves as an officer on the Jones Academy Foundation Board of Directors and on the alumni board for Southeastern Oklahoma State University. Joy has a great love for children and young people. Among other awards, she was recognized by the Oklahoma State Board of Regents as the first recipient of the "Champion for Student Success" award.



**Judy DeHose** is a member of the White Mountain Apache Tribe, where she has been active in tribal development and education for her entire career. She was a Tribal Council member for the White Mountain Apache Tribe for eight years, and also has worked as the supervisor for the Cibecue Complex and as the tribe's Title VII Program Director. Ms. DeHose has served as a member of the White Mountain Apache Committee, as chair of the White Mountain Apache Health

Authority Board, as an elected Tribal Council representative for Cibecue Community on the White Mountain Apache Tribal Government, and as Cibecue Community President.



**Shirley Gross** has been Program Coordinator for the Pierre Indian Learning Center for 32 years, where she is responsible for the day-to-day management of the fiscal affairs of the organization, and managed construction of a new dormitory. She works with facilities staff on a daily basis for operations and maintenance issues and is responsible for communications with the Director of the Office of Facilities Management and Construction. Prior to her tenure at the Learning Center, Ms. Gross spent 13 years as Business Manager for the Fort Pierre Public Schools, where she was also involved in coordination for new school construction.



**Lester Hudson** currently serves as the Chief Executive Officer of Ch'ooshgai Community School in Tohatchi, New Mexico, a position he has held since 2007. Previously, Mr. Hudson worked as an Education Program Administrator for the Office of Indian Education Programs at three agencies. Mr. Hudson received his master's of Education Administration from the University of New Mexico, and a bachelor's in Science Education from New Mexico State University.

He is a licensed New Mexico K-8 Instructional Leader and a New Mexico K-12 Education Administrator.



**Bryce In the Woods** is a District I Council Representative for the Cheyenne River Sioux Tribe. He was re-elected in 2008 after serving a four year term. As Council Representative, he has served in many roles, including as Wolakota Chairman, Veterans Affairs Chairman and Education Vice-Chairman. He has also worked as a Certified Chemical Dependency Counselor for the Four Bands Healing Center and as a Youth Outreach Worker for the Cheyenne River Sioux Tribe Healthy Nations initiative. He is a veteran of the US Army. Mr. In the Woods serves as an alternate member of the Committee.



**Fred R. Leader Charge** is a member of the Rosebud Sioux Tribe, and graduated from St. Francis Indian School in 1976. Mr. Leader Charge worked at the Rosebud housing authority, now SWA Corps, rising from maintenance man to executive director over the course of his tenure. He is trained in maintenance, inspection and administration. Mr. Leader Charge returned to St. Francis in 2001 as maintenance supervisor, and in 2004 was appointed to his current position of Operations and Maintenance director. When Mr. Leader Charge started at St. Francis, FMIS was not



in use at the school, and Mr. Leader Charge has coordinated an effort to get training and technological resources in place. Mr. Leader Charge is married with three children and two step-children, and is grandfather to 10 grandchildren and four step-grandchildren. Mr. Leader Charge serves as an alternate member of the Committee.



**Frank Lujan** is the Governor of the Pueblo of Isleta, a position he has held since 2007, and is responsible for monitoring over 32 tribal government service provider programs and supervises department directors and operations. Mr. Lujan possesses more than 31 years of professional experience in project management for facilities management and construction. He oversaw construction of the Isleta Elementary School as project manager, and worked as an engineering technician and as supervisory facilities operations specialist with the Southwest Regional Office of the Bureau of Indian Affairs. Mr. Lujan has served as an elected Tribal Council member of the Isleta Tribal Council, studied Civil Engineering at New Mexico State University, and received a certificate in Architectural Drafting from Draughton's Business College.



**Nancy Martine-Alonzo** is a member of the Ramah Band of Navajo Tribe, part Yaqui and Spanish heritage, born and raised in Pine Hill, New Mexico. She recently retired with 37 years of services as an educator with public school, BIE schools, and state and tribal governments. She is currently the Executive Director for the Albuquerque Area Indian Health Board Inc., a consortium of seven tribes in New Mexico and Southern Colorado for Audiology and HIV/AIDS Prevention programs. In 2007, services expanded to include an Albuquerque Area Southwest Tribal Epidemiology Center (AASTEC) which serves 27 tribes in the southwest region to provide health-related research, surveillance and training to improve the quality of life of American Indians; and to provide accurate and timely health data to member tribes. She has a bachelor's degree, two master's degrees, education specialist certificate, and is an education doctorate candidate, all in the field of education and organizational administration. She holds a lifetime K-8 teaching certification and K-12 administration certification. She serves on numerous local and national education and health task forces and advisory councils, and is President of the Ramah Navajo School Board, Inc. She is the parent of seven children, and has 10 grandchildren. Ms. Martine-Alonzo serves as an Alternate Tribal member of the Committee.



**Merrie Miller White Bull** is a second term Tribal Council representative for the Cheyenne River Sioux Tribe. She represents District 4, which is the second largest district on the Cheyenne River Reservation. Merrie was elected to the Tribal Council in December of 2006. Merrie is the chairman of the Education Committee, Chairman of the Election Board Committee, and Vice-Chairman of the Judiciary for the Cheyenne River Sioux Tribe. Merrie is married to Kevin White Bull and they have three children ages 21, 19, and 13. Merrie has a bachelor's degree in Elementary Education and is currently certified in the State of South Dakota. Before Merrie was a Tribal Council representative she worked for the Bureau of Indian Affairs at the Cheyenne Eagle Butte School. Merrie has dedicated her life to serving children, she has coached more than 150 girls as a dance coach throughout the years working at the C-EB school, and choreographs routines for the C-EB school drama club. Merrie also coached a dance team for children ages 4 to 12 years old. Merrie continues to look for ways to help out in her community. She is serving as a co-chair for this NCLB School Facilities and Construction Negotiated Rulemaking Committee.



**Betty Ojaye**, Navajo, is the Executive Director of Navajo Preparatory School, Inc., Farmington, NM.

In her 20-year leadership role at Navajo Prep School, she helped fundraise to oversee a \$40 million school campus revitalization project that included restoration of historic buildings, as well as the Navajo Nation's first LEED GOLD Certification for Construction established by the U.S. Green Building Council.



**Charles Monty Roessel** currently serves as Superintendent for Rough Rock Community School, a

position he has held since 2007. Mr. Roessel has also served as Executive Director and Director of Community Services for the school. He has coordinated and implemented the master plan for Rough Rock Community School construction needs and worked to achieve new school construction for the K-12 school campus, including construction of two dormitories, a high school, middle school and elementary school. In 2008, he provided testimony on school construction to the Senate Indian Affairs Committee. Mr. Roessel holds an Ed.D. in Educational Administration and Supervision from Arizona State University, a master's in Journalism, and a bachelor's in Photo-Communication and Industrial Arts. Mr. Roessel is a published writer and photographer, and has worked as vice-president and editor for the *Navajo*

*Nation Today* and managing editor for the *Navajo Times Today*. He is serving as a co-chair for this NCLB School Facilities and Construction Negotiated Rulemaking Committee.



**Jerald Scott House** has been employed with the Navajo Nation, Division of Community Development,

Design and Engineering Services for the past 25 years, and is responsible for project management services to plan, initiate, implement, monitor/control, and close-out capital outlay projects. This involves the planning, design, and construction of public facilities on the Navajo Nation funded by various agencies through federal, state, and tribal appropriations. Mr. House majored in Civil Engineering at the University of New Mexico and took Project Management courses from the University of Wisconsin. He is currently involved in revising the Navajo Nation's policy and procedures for project management, procurement, and contracting for project implementation and development. Mr. Scott House serves as an Alternate Tribal member of the Committee.



**Andrew Tah** has been in education for 39 years as a teacher and administrator (vice principal, principal and superintendent).

He is the superintendent of schools for the Department of Dine Education, Navajo Nation, and is retired from the federal government, where he was an Education Line Officer.



**Arthur Taylor** currently serves as the Native American Tribal Liaison for the University of Idaho, and is

responsible for coordinating, planning and implementing open dialogue between members of the Native American tribes in the Northwest and members of the University of Idaho in order to best serve the people of the reservations and surrounding areas. Arthur spent five years as Assistant Director of Multicultural Student Programs and Services at the University of Notre Dame and six years on the Nez Perce Tribal Executive Committee. He holds a master's in Organizational Leadership from Gonzaga University, a master's in Cultural and Educational Policy Studies from Loyola University and is currently an Ed.D. candidate in Education at the University of Idaho. Arthur is from Lapwai, Idaho and is a member of the Nez Perce tribe.



**Willie Tracey, Jr.** served as a Member of the 21st Navajo Nation Council, 2007-2011 Education

Committee, where he worked cooperatively with education providers to assure educational goals were successfully attained by Navajo Nation while establishing friendly policies, methods, procedures and laws that govern BIE, grant and charter institutions on Navajoland. He also served on the 20th Navajo Nation Council, 2001-2006 Transportation and Community Development Commit-



tee where he effectively coordinated legislative matters that administered new road / bridge construction, road maintenance and transportation system improvement planning and development. Mr. Tracey was officially appointed by the 20th Navajo Nation Council to represent the Nation on the Intertribal Transportation Association, which elected him Vice-President for three consecutive two-year terms. He also served as a Ganado Community Secretary / Treasurer for two consecutive terms from 1996 - 2001. Other employment positions include Senior Transportation Planner for the Navajo Department of Transportation; Planner with Apache County District II Road Department; Employee Development Officer and a Contract Analyst for the Navajo Nation Workforce Development. Mr. Tracey presently is employed with the Department of Dine Education, Office of Dine Culture, Language and Community Services, as a Project Manager to establish an alternative form of academic measuring standards.



**Jerome Wayne Witt** has worked in construction for most of his life. He worked in facilities management for the BIA Pine Ridge Agency for 18 years, becoming a facility foreman. Mr. Witt then joined the Rosebud agency as a facilities manager for the BIA and the school system. The Rosebud agency was a pilot agency for the development of FACCOM, and Mr. Witt has been involved with FACCOM and FMIS since the programs began. Mr. Witt retired from the BIA, and joined the Shannon County School

District as the maintenance director before working at the Loneman School as a special projects manager. He is now the project manager for the design and construction of the new K-8 54,000 square foot Loneman school. Mr. Witt is married with five grown children. He also raised a grandson who graduated from Loneman, and Mr. Witt works there to give back to the school. Mr. Witt is an enrolled member of the Oglala Sioux tribe.



**Catherine M. Wright** currently serves as Director of the Hopi Board of Education for the Hopi Tribe, where she works with members of the Board of Education, the Hopi Department of Education, the Bureau of Indian Education and local school boards on issues including revisions to the Hopi Education Ordinance, developing strategies for enhancing and promoting education opportunities, and surveying facility needs for local schools. She has served as a member of the Polacca Day School Board/First Mesa Elementary School Board, acted as President of the Polacca Day School Board and as Vice President of the Hopi Board of Education. An attorney, Ms. Wright worked extensively on trust asset issues involving the Hopi Tribe, acted as Senior Attorney for the Hopi Legal Services, and ran a private practice. She holds a J.D. from the University of Texas and a master's in Anthropology from Washington University. Her son Nicolaas recently graduated from University of California at Berkeley after attending K-12 on the Hopi Reservation.



**Dr. Kenneth H. York** has worked in education and development over the course of his career. He served as school principal for the Choctaw Tribal Schools for eight years, in two K-8 schools. He also worked as an Educational Planner for the Choctaw Tribal Schools and Tribal Courts, developing educational strategies and plans for youth and planning a youth/adult drug court within the judicial system. For the past five years, Dr. York has worked for the Mississippi Band of Choctaw Indians Tribal Administration, where he is currently the Director of Development Division. Dr. York holds an Ed. D in Educational Administration with collateral in American Indian Studies from the University of Minnesota, a master's in Educational Administration from the University of Minnesota and a master's in Management from Belhaven College. Dr. York is a member of the Mississippi Band of Choctaw Indians.



**Albert Yazzie** is a retired Indian educator who worked in Navajo public school education for 24 years as a teacher, principal, associate superintendent and superintendent. He was involved in school construction planning for Ganado public schools at the elementary, intermediate and high school level. Mr. Yazzie was instrumental in bringing impact aid monies to Indian public schools, working to change legislation at the national and state level. Mr. Yazzie also served as executive

director for the Wide Ruins Community School and as principal at the Rock Point High School, both grant schools. Mr. Yazzie was appointed by former president George H. W. Bush to serve on the National Indian Education Advisory Council, served on the board of the National Indian Education Association, and was president of the Arizona Indian Impact Aid Association. He is served on the U.S. Census Advisory Committee on the American Indian and Alaska Native (AIAN) Populations for the 2010 Census. In addition to his current involvement on the No Child Left Behind Negotiated Rulemaking Committee, Mr. Yazzie is giving back to the community where he grew up as a member of the Red Lake farm board, and takes care of the family ranch. Mr. Yazzie has three children—Melanie, Darryle and Tarajeau—who all work in education.



**Lorena Zah-Bahe** has been involved in education for 35 years. She holds a degree in Elementary Education, attended Northern Arizona University and Arizona State University, and was both a teacher and school administrator. Ms. Zah-Bahe's career has been in work with tribally controlled schools. She currently works at the Department of Dine Education, where she monitors and provides technical assistance to Bureau funded schools. Previously she was the Director of the Association of Navajo Community Controlled Schools; she spent more than 20 years with the organization. Her experience includes lobbying

Congress, reviewing Indian education legislation to improve the status of Indian education on a national level and working as an advocate for Indian self determination and tribally operated programs and schools. Ms. Zah-Bahe is a former president of the National Indian Education Association. She is serving as an alternate co-chair for this NCLB School Facilities and Construction Negotiated Rulemaking Committee.

### Federal Representatives



**Jacquelyn Cheek**  
*Special Assistant to the Director, Bureau of Indian Education*  
Ms. Cheek is the Special

Assistant to the Director, Bureau of Indian Education (BIE) at the Department of the Interior. Ms. Cheek has worked in various positions in Indian Affairs in the Department since the mid-1980s. Prior to working in the BIA, Ms. Cheek was a consultant with Native American Consultants, Inc., in Arlington, Virginia. Her first job in Washington, D.C. was as the Public Information Officer for the Presidential Commission on Indian Reservation Economies in 1984. Ms. Cheek came to Washington, D.C. by way of Boston, Massachusetts, serving as the Director of Education Programs at the urban Indian Center known as the Boston Indian Council. She has held various positions in Indian education since 1973, as a teacher's aide for summer youth programs, as an afterschool teacher for troubled youth, as the lead coordinator of a curriculum development project, a culture-based curriculum develop-

ment consultant, and as a Head Start teacher and administrator for the Seneca Nation of Indians, just to name a few. She holds two master's degrees: one in Human Development and another in Education, from the Harvard Graduate School of Education. She also has a Bachelor of Arts degree in English from the State University of New York at Fredonia. Ms. Cheek is an enrolled member of the Seneca Nation of Indians, Allegany Reservation in New York. She continues her education in various subject areas, encourages the use of interns within her office, volunteers web publishing skills upon request, enjoys cooking, making fry bread and beadwork, and loves to dance to her Seneca songs. Ms. Cheek serves as an alternate member of the Committee.



**Regina Gilbert**  
*Regulatory Policy Specialist, Office of Regulatory Affairs and Collaborative Action, Office*

*of the Assistant Secretary - Indian Affairs*  
Regina has earned a Bachelor of Science in Business Administration from Northern Arizona University, as well as a master's in Business Administration from the University of New Mexico. Regina worked in the private sector before joining the Federal Government in February 2003. During her time with the Office of Regulatory Affairs and Collaborative Action, Regina has performed various duties that include participating in various Indian Affairs committees, providing technical assistance to improve efficiency and effectiveness on various land trust issues, and en-

sure compliance with related laws and regulations. Regina is a member of the Hopi Tribe and returns often to the Hopi reservation to visit family and continue involvement with the Hopi culture. Ms. Gilbert serves as an alternate member of the Committee.



**Emerson Eskeets**  
*Deputy Director,  
Bureau of Indian  
Affairs Office  
of Facilities  
Management  
and Construction*

Emerson Eskeets started his career in the early 80s with the U.S. Army Corps of Engineers, and served in both the Seattle and Sacramento districts. He joined the Bureau of Indian Affairs in the early 90s. As the Deputy Director for the Office of Facilities Management and Construction, his responsibilities include management of the day-to-day operations of education, detention and housing construction projects as well as operations and maintenance across Indian country. This includes preparation of cost estimates and bids, preparing contracts and/or project administration of \$500-600 million in construction projects across Indian country. Emerson earned his Bachelor of Science in Mechanical Engineering from the University of New Mexico. He is a member of the Navajo Nation and a veteran. He enjoys outdoor activities including camping, fishing and hunting, and family time. Mr. Eskeets serves as an alternate member of the Committee.



**James Porter**  
*Attorney  
Advisor, Office  
of the Solicitor  
Division of  
Indian Affairs*  
Jim Porter

worked for 20 years in the construction trades before earning a bachelor's in English followed by a law degree, both from George Mason University. Since joining the Solicitor's Office in 2007, Jim has worked on a variety of matters affecting American Indians and their relationship with the Federal Government.



**John "Jack"  
Rever**  
*Director, Office  
of Facilities  
Environment and  
Cultural Re-  
sources*

As a licensed professional engineer, Jack has spent more than 40 years in the engineering, design, construction, and program management industries. He holds a B.S.E.E. from the University of Maryland and an M.B.A. with an emphasis on Financial Management from The George Washington University. During his 28 years of service in the U.S. Navy, Jack served as a member of the Civil Engineer Corps, overseeing design and construction projects in Asia, Europe, and the U.S. He is a Vietnam veteran and served in the battle for Hue during the Tet Offensive of 1968. Following his retirement from active duty, Jack was named a Vice President for one of the leading U.S. engineering firms where he managed a design office

and was later named as a Principal in a consortium of firms overseeing the design and construction of the last rail tunnel section of the original Washington Metropolitan Area Transit Authority system. Additional assignments at the engineering firm included appointment as the Director of Construction and Deputy Director of the New Construction Division for the Los Angeles Unified School District. The Los Angeles Unified School District is the largest single non-federal education construction program in the U.S. As the Director of Construction, Jack provided oversight for the design and construction of more than 330 schools in Los Angeles and as Deputy Director his oversight responsibilities included planning, design, construction and real estate acquisition. In 2005, while continuing his service to others, Jack accepted his current position with the Department of the Interior where he oversees engineering, design, and construction of schools, detention facilities and tribal support facilities across Indian country. He would enjoy more time to hunt, fish, and play golf.





**Michele Singer**  
*Director, Office of Regulatory Affairs and Collaborative Action, Office of the Assistant*

*Secretary - Indian Affairs*

Ms. Singer is responsible for the review and revision of all federal regulations governing Indian Affairs at the Department of the Interior. She is also currently charged with implementing a dispute resolution program for Indian Affairs. Ms. Singer's regulatory work began in 2005 with the largest and most comprehensive revision of trust management regulations undertaken at the Department in many years. This has involved coordination with employees from throughout the Department, tribes, individual Indians, Congress, and state and local governments. Ms. Singer first became involved in

Interior's trust management reform efforts as an attorney in the Office of the Solicitor working on individual Indian and tribal litigation matters. Then, as Chief of Staff for the Office of the Special Trustee for American Indians (OST), Ms. Singer worked on the Indian trust business process reengineering effort as well as the reorganization of both OST and the Bureau of Indian Affairs. Michele received a law degree from Georgetown University and worked as a litigator in Washington, D.C., and for the Attorney General of the Cheyenne River Sioux Tribe prior to coming to the Department of the Interior. She is a member of the California, Washington, D.C., and Cheyenne River Sioux Tribal Court Bars. Ms. Singer serves as the Designated Federal Officer for the NCLB School Facilities and Construction Negotiated Rulemaking Committee.



**David Talayumtewa**  
*Deputy Director, Bureau of Indian Education*  
David Tala-

yumtewa is an enrolled member of the Hopi tribe with more than 25 years of service with the Office of Indian Education Programs, which is now the Bureau of Indian Education. He has served as the Chief Administrative Officer for the Hopi tribe, a Business Manager and Education Line Officer for OIEP/BIE at the Hopi Education Line Office, Special Assistant to the Deputy Director, School Operations, BIE, and currently serves as the Assistant Deputy Director, Administration for the BIE. He was honorably discharged from the U.S. Army Reserves as a 1st Lieutenant.



## Appendix B: Summary of Consultation Process and Findings

The NCLB Facilities and Construction Negotiated Rulemaking Committee held five regional tribal consultations during the period of June 15 to July 19, 2011. The consultations took place in Window Rock, Arizona; Seattle, Washington; Phoenix, Arizona; Rapid City, South Dakota; and Miami, Florida. The sessions were facilitated by members of the Committee, and more than 200 participants attended. The Committee also received written comments from 16 tribes, schools, or tribal organizations.

The following is a summary of the key themes and ideas that the Committee heard during the consultations and from the written comments that were submitted. Many of the comments reinforced the findings and recommendations that the Committee had come to during their deliberations. Some comments pushed the Committee to rethink or further explore some of their draft language or recommendations. The Committee reviewed transcripts from all of the consultation sessions as well as copies of all of the written comments prior to their final Committee meeting in September 2011. They drew on this summary as a guide for their conversations in that meeting, to deliberate on the concerns raised by tribal participants and explore possible changes to their draft report. Among other changes, the final report fleshes out the mechanisms for ongoing school and regional input, to ensure that the new formulas will lead to greater transparency and engagement for tribes.

### Broad Issues

#### (1) Poor inter-agency communication, coordination, and planning and lack of responsiveness to state, tribal, and other guidelines:

- Communication and partnership between BIE and BIA is a serious problem. We need support for FMIS and facilities located at the ELO offices. Move the facilities and operations budget from BIA to BIE.
- Structural problem of too many different offices, programs, funding buckets, makes it difficult to get any problems solved in a comprehensive manner. Also, different agencies have different building, safety, and academic requirements and reporting lines, which confuses schools and delays funding.

- There is a discrepancy between ages funded by ISEP (age 5 by Dec. 31) and Kindergarten entry age in our state (S.D. – 5 by Sept. 1). We have service for pre-K for those between those ages. But we were denied that classroom! This should be addressed as an educational facility deficiency and added to space guidelines.
- There is an impossible loop in getting a FACE program—can't have the space without the program, denied the program if you don't have the space. This needs to be fixed.

#### (2) Strengthen recommendations; turn them into regulations or legislation:

- Needs stronger language on consequences for the Bureau to ensure this gets done. Report says schools “must” and “will,” but Bureau “should” and “may.”
- Strong desire to see recommendations turned into regulations and statutes.
- Concerns about clarity, transparency, and fairness in implementing the recommendations, and request that all processes be codified as regulations and/or statutes.
- Stay away from one-size-fits-all formulas. Formulas will work differently in remote areas versus urban areas; tailor formulas to meet specific regional and tribal needs. The government should honor its treaty to protect and educate the children of the Navajo Nation regardless of any formulas the Committee has come up with. In the introduction, strongly emphasize the uniqueness of the Navajo Nation and Native American culture and their contribution to the country. Emphasize the government's treaty with the Navajo nation, and distinguish Native Americans from immigrant or minority populations and programs, with which they are often included.

#### (3) Increase transparency and fairness in funding and negotiation process:

- Some regions felt underrepresented or ignored and felt that others were overrepresented on the Committee, which led to unequal representation and bloc voting. Request for a viewing of all selection criteria for Committee members.



- Concern that the consultations were not true consultations, but merely an information session since government decision-makers such as Jack Rever and Emerson Eskeets were not present.
- Many advocated for funding parity with DOD schools and among Bureau-funded schools.
- More transparency in budget and spending for schools. Provide schools with a breakdown of the budget and spending.

#### **(4) Incentives for properly maintained schools:**

- Concern that success in doing the best you can with your limited O&M to keep up your school—or using your own money to fix critical problems—is punished, not rewarded. There should be a way to reward success and provide incentives to keep schools in good repair. Tribes who put their own money in to keep their schools going are less likely to get a new school.

#### **(5) Disappointment with budget for BIA school facilities:**

- Need more money. Need to fight for more money. More tribal leadership to fight for more facility money.
- Include options for cost-sharing in report, which might have positive impact on congressional funding decisions.

#### **Potential issues for Committee discussion:**

1. Stronger recommendations about coordination between BIA and BIE.
2. Whether curriculum and coordination issues, such as the FACE and ISEP issues, are within the Committee's charge and, if so, how to address them.
3. Additional and/or stronger language regarding increased funding from Congress.
4. Incentives that encourage or reward schools for maintenance.
5. Greater explanation about Committee selection, tribal consultation process.

## **FMIS**

### **(1) FMIS support for schools is not sufficient:**

- Participants at all sessions echoed the Committee's concerns about the lack of local FMIS expertise and lack of coordination between BIA and BIE, which they saw as a big problem.
- Provide additional guidance to schools to supplement face-to-face training for inputting information into FMIS (CD-ROM of step-by-step instructions, guidance on suggested monthly input activities, guidelines on time commitment required, etc).
- Participants report ongoing challenges getting access to FMIS at schools. Stories of submitting applications, getting no response, and of FMIS system being down.
- Agreement that available FMIS training on a regular basis is very important.
- FMIS trainings not offered at a time that is convenient for administrators. Offer trainings at a more convenient time. Suggest increasing the amount of trainings offered in the summer.
- Develop Bureau manpower to assist schools with inputting their backlog data. Staff time is very limited; provide additional funding for schools to hire a data-entry person for FMIS.
- Strong agreement with putting FMIS on a web-based system so everyone has access to it.
- Concerned that voluntary FMIS support committees will not be sufficient. Multiple recommendations that a FMIS expert be located at ELO offices.
- Tribal members should be able to nominate whomever they choose to be on the FMIS committee without input or objection from OFMC, and tribal members should decide the amount of members on the committee.

### **(2) Suggested changes to FMIS data entry and access:**

- Report should include specific recommendations as to how to bring FMIS up to capacity, including a timetable for implementing solutions.
- School-board members should be allowed to take the FMIS training and help with FMIS entry or oversight.

- Consider adding “geographic location” as one of the factors in the facilities index, to account for risks of weather and seismographic conditions. Consider expanding FMIS to cover funding for liability and facilities insurance, security costs, housing, and certificate of occupancy issues.
- The formula for determining space needs should take into account birthrates of the reservation and the special needs population.
- Revisit the space requirements in light of the growing size of students (obesity, also improved nutrition) and individual school needs for accreditation, mission, and goals.
- FMIS should have a built-in depreciation factor as the schools age and require more maintenance, renovations, or replacement.
- More weight given to educational environment factors such as class size, illumination, acoustical treatment, heating, cooling, ventilation, general educational space provisions, and age of facilities.
- Explain more fully how “educational space deficiencies” would be identified, evaluated, and entered into the database. Educational space deficiencies should be established under a separate system from the FMIS system.

### **(3) Increase transparency, responsiveness, and flexibility with contractors and inspectors:**

- Too much time goes by without safety inspections. Ensure safety inspections every year – they aren’t happening, even when requested. Allow tribal safety officers to enter safety backlogs. Use Indian Health Service fire/safety inspectors.
- Contractor should be giving a report to schools after assessments, but this isn’t happening. There is no accountability for the construction or work performed resulting in spending more funds to fix already funded projects.
- Safety inspector should be giving a report to the school after assessment, which isn’t happening. One school was told they could not have the report after requesting it.

### **(4) Streamline system administration; increase agency transparency and communication:**

- Need better communication and transparency, and less bureaucracy (streamlining the funding!). Can’t figure out who to contact to solve problems of getting quarters, getting a FMIS terminal, getting a safety inspection, etc. Also, lack of communication between BIA, contractors, and schools leads to poorly constructed facilities that are not suited for the school’s environment or needs; decisions are made at a distance with no true knowledge of the school or community that the facility will serve.
- Concern about manipulation; there is a “good ole boy” network and potential for upgrading of backlogs to appear more dire in order to receive more points. How can we assure that this doesn’t happen? FMIS can be manipulated by entering many backlogs into the system, which can affect school placement on the replacement list. Politics affects FMIS funding—those closer to Albuquerque and are able to make frequent visits get more funding.
- Data entered into FMIS just sits there until you make calls to the right people who push it through to the Gatekeepers – this is a flaw in the system. BIE personnel do not input data in a timely manner, if at all. Recommend that schools receive a quarterly report on what is the status of the backlog items, possibly from the Gatekeepers.
- Tribal chairs should be in charge of funds rather than regional offices—this would eliminate red tape and delays in funding and give schools more control over how money is spent. Give some control over the FI&R funding to regional level for school input. Close down the regional office and re-direct funds to programs that serve students.

### **(5) Inaccuracy of existing data in FMIS:**

- All the concerns raised by the Committee about FMIS accuracy were echoed during the consultations. High turn-over, insufficient staffing, lack of connectivity, lack of capacity, etc.
- Additional infrastructure problems are often uncovered during renovation and new construction, but by then it is too late to enter into backlog—consider reworking FMIS to capture these issues.
- FMIS does not accurately reflect the deteriorating

condition of the schools—many schools rated in good condition, but actually falling apart. Once safety and health concerns are addressed, the systems (fire alarms, smoke detectors) are obsolete within a decade.

- Concerns about whether the existing FMIS is tailored enough to the needs of schools to be the right mechanism. Allow alternative methods of evaluating facility condition where FMIS may not be a reliable indicator.
- Update FMIS backlog costs annually and verify accuracy of the costs of the backlogs (backlogs entered at the local level are often changed by those at the regional level).
- School leaders still don't recognize the importance of FMIS. Emphasize to grant schools the necessity and rationale for entering information into FMIS. Grant and contract schools are experiencing considerably more difficulty entering the data and would be more negatively affected if funding decisions are based on FMIS.

#### **Potential issues for Committee discussion:**

1. Options for improving access to FMIS, including hiring additional FMIS technical support, online FMIS entry, and supplemental training such as CD-ROMs and guidance documents.
2. Development of criteria and selection process for the FMIS committee.
3. Increased reporting and distribution of FMIS data, contractor assessment reports, and safety inspection findings to schools.
4. Increased participation (including system access and funds distribution) of tribal chairs and school board members in the FMIS process.
5. Allow additional factors such as geographic location, liability insurance, housing, certificate of occupancy issues, and security costs to be entered into FMIS and calculated in the location score.
6. Revise space guidelines.

## **MI&R**

### **(1) Increase transparency and clarify misperceptions about formula:**

- Support the idea of an annual report clarifying why our priorities aren't funded.
- The most important word: transparency! Squeaky wheel gets help, not all principals know. Make sure the communication is clear!
- Many participants mistakenly thought MI&R regional funds would be divided evenly among schools within each region, and feared this would cause undue competition among schools and unfair distribution to larger schools.

### **(2) Reopen discussion on the recommended MI&R formula:**

- Agree with the idea that schools funded for replacement are eligible for MI&R while they wait.
- Support the formula because it removes politics and manipulation.
- As a small school in a small region, we disagree with the funding of regions by square footage.
- Concern that new MI&R formula does not take existing building age and condition into consideration. The repair needs and costs for older buildings are significantly greater than newer buildings.
- Concern that new MI&R formula does not distinguish between building types or uses. Additionally, it does not allow different funding levels based on building type or use.
- Concern that new formula does not make any allowance for location conditions, climate, and weather, which can influence the rate of wear on a building.
- Concern that new MI&R formula bases funding on area, which will motivate schools to keep old, unused buildings that would otherwise be demolished in order to maintain maximum area.
- A fairer method would be to assess relative need, (e.g., by assessing the deferred maintenance backlog in each region) and allocating funding according to the largest backlogs.
- Formula does not take into account prior school

replacement and repair funding from BIA or ARRA.

- Concern that the presence of ELOs and BIA facilities managers on the regional committee will tip the allocation decisions toward BIE-operated schools.
- Allow schools receiving funding to have some say on which backlog item to remedy first.

#### Potential issues for Committee discussion:

1. Revisit the 2/3 regional, 1/3 national distribution of funds.
2. Clarify the recommendation to make clear that funding within regions will be based on critical health and safety backlogs from FMIS, and not distributed to each school based on square footage.
3. Consider addition of suggested criteria to the MI&R formula, including building characteristics (e.g., age, condition, type, and usage), climate and weather conditions.

## FI&R

### (1) Additional criteria that the formula should take into account:

- Accreditation risk should be a factor for FI&R, it is one of the most important things – without accreditation, we aren't a school. Also important given student mobility.
- Formula should take modular spaces, unusable spaces, age of schools, and new school funding into account.
- Concern that undersized academic spaces will not be given enough points.
- Allow schools to supplement facilities data with other evidence including the FCI, environmental reports, inspections, and regions by Bureau safety officers, etc.

### Potential issues for Committee discussion:

1. Consider adding accreditation risk, inadequate or inappropriate spaces, school age, and new school funding as factors in the FI&R formula.

## Replacement School

### (1) Include schools not ranked as poor:

- If you have a significant number of students in portables, even if the school overall is rated as “good” or “fair,” you should still be eligible to be considered for a new school.
- Highly over-crowded schools should be able to apply for new school even if not ranked as poor by FCI.

### (2) Additional criteria to consider in the formula:

- Some participants supported using AYP as a factor, to reward success. Others commented that they supported not using AYP as a factor.
- Willingness to combine two schools into one should provide some extra points.
- Consider awarding more points (two or three) to account for conditions that are either unique to the individual school or have not been anticipated by the Committee (e.g., lack of comparable educational facilities, availability of alternative dormitory space).
- Consider excluding from application process schools accused of mismanagement, at risk of losing grant status, in restructuring under NCLB, or which don't have land.
- Accreditation risk deserves more points. Even if not many schools are in that situation, if they were, it would deserve more points. Others oppose using accreditation risk since each state's method is different.
- The cultural space criteria is too narrow—our whole school is a cultural space. There are many space needs schools have due to their unique relationships with tribal communities—for example, schools serving older kids need a day-care. These should be included, but need to correlate with what OFMC will actually build.
- Space in portable buildings should not be calculated as part of the space in any of the formulas (i.e., crowding, average age of building criteria) since portable buildings are temporary. However it should be a major factor in the “inappropriate space” criteria.



- “Severely overcrowded schools”: Severely overcrowded schools should be treated the same as “schools in worst condition” for the purposes of eligibility and scoring. Severely overcrowded schools should be defined as “schools in which 50 percent or more of the school’s ISEP enrollment is housed in temporary structures” or “schools whose square footage needs for new school replacement equals or exceeds their current permanent construction in the FMIS inventory.”
- Consider weighting the average age of instructional and residential buildings higher than storage and other secondary use buildings in the “school age” criteria.
- Concern that data on “declining enrollment” criteria could be subjective and easily manipulated since it is not captured as hard data.
- More consideration should be given to schools that have been out of compliance for major safety violations.

### **(3) Schools undergoing the construction process face many concerns:**

- There needs to be a way to account for significant increases in enrollment in newly constructed schools.
- Recommend that parents’ and community’s choice of site for new school be honored.
- Dorms should be included as part of the construction of new schools.
- Include a cost-of-living increase in the replacement funds since backlogs are often in the system for years and the original cost does not reflect the impact of inflation.
- The formula should take into account environmental and infrastructure factors that affect the schools, and these repairs should be factored into new construction funding.
- Allow newly constructed schools to build facilities for new programs that they did not have in old school.
- Make sure every region has an education construction line officer, and provide clear lines of authority in the roles of engineers. Ensure timely response from BIE during entire construction process, par-

ticularly responses to prefunding, preconstruction, and construction process letters.

### **(4) Suggestions for making new school selection process clearer, more transparent, and more fair:**

- Establish clear, published criteria for how the top five will be ordered for allocation. Provide technical assistance to schools in completing the new school application and guide them through the process.
- Confusion over rankings – “I was on the list, then wasn’t.” This could be made worse by the proposal to publish the scores of all schools that apply for, but are not granted, new schools.
- Create a historical process document to educate people about new school replacement lists—what happened and where are we now?
- Recommend going back to 10-year school replacement period (rather than five-year period) since school staff turnover is very high and information is not carried over from one administrator to the next, which causes a great deal of information loss.
- Objection to listing first five schools in alphabetical order rather than by priority—there was concern that schools in most dire need may end up at bottom of alphabetical list, which will harm their chances of school replacement.
- Application process for replacement schools should be an online process—not paper and pencil.
- Create an automatic system that schedules anticipated replacement based on the projected life of facilities. Include a factor for unforeseen catastrophes.
- Ensure that certain criteria are not double-weighted in the scoring process (for example, cultural space is included in the FMIS score and also receives additional points in the new school formula).
- The Review Committee should be required to conduct site visits at each of the 10 finalist schools before the public meeting.
- Allow the five unsuccessful schools to be grandfathered into the next round so that they do not have to apply again; they will compete against five newly qualified schools. Provide the five unsuccessful schools with any excess or unused construction funds.



- Concern about presenting at the public meeting in Albuquerque: schools with more eloquent speakers could influence the ranking, and schools in remote locations need funding to pay for travel.
- Clear definition and criteria of how the 65 points from FMIS will be awarded, similar to the classification in the previous formula.

**(5) Suggestions for selection criteria and process of Review Committee members:**

- Make sure that the people who make up the ranking committee will be neutral. Put school board members on the committee because, unlike ELOs and administrators who just follow orders from headquarters, school board members are the most likely to be neutral.
- Rotate new members onto Review Committee every five years. Have committee members come from the tribes of the selected schools.
- Committee member nominations should be automatically accepted, as long as they meet Review Committee criteria.

**Potential issues for Committee discussion:**

1. Allow schools that are not ranked in poor condition to apply if they meet other criteria—such as overcrowded, inappropriately housed, over a certain age.
2. Consider additional criteria such as willingness to combine schools, mismanagement, accreditation risk, and broaden culture criteria in the New School formula.
3. Add section with recommendations to address concerns after selection—contracting and construction process.
4. Increase education and transparency mechanisms regarding replacement list and ranking process.
5. Consider keeping or changing alphabetical approach to replacement school listing.
6. Develop selection criteria for New School Review Committee.
7. Develop clear criteria for ordering the top five schools.



## Appendix C: Abstracts of Research Papers Associating School Conditions with Performance

The following collection of abstracts was edited from a website maintained by the engineering firm Fanning Howey, and was downloaded from their website (<http://www.fanninghowey.com/oakhill/research/building-conditions.pdf>) on May 6, 2011. Used with permission.

### **TITLE: School Facility Conditions and Student Academic Achievement**

**AUTHOR:** Glen I. Earthman, Virginia Polytechnic Institute and State University

**PUBLICATION DATE:** October 1, 2002

**ABSTRACT:** This paper shows that the condition of school facilities has an important impact on student performance and teacher effectiveness. In particular, research demonstrates that comfortable classroom temperature and noise level are very important to efficient student performance. The age of school buildings is a useful proxy in this regard, since older facilities often have problems with thermal environment and noise level. A number of studies have measured overall building condition and its connection to student performance; these have consistently shown that students attending schools in better condition outperform students in substandard buildings by several percentage points. School building conditions also influence teacher effectiveness. Teachers report that physical improvements greatly enhance the teaching environment. Finally, school overcrowding also makes it harder for students to learn; this effect is greater for students from families of low socioeconomic status. Analyses show that class size reduction leads to higher student achievement.

1. School facility conditions affect student academic achievement.
2. School building design features and components have been proven to have a measureable influence upon student learning.
3. Among the influential features and components are those impacting temperature, lighting, acoustics, and age.
4. Researchers have found a negative impact upon student performance in buildings where deficiencies in any of these features exist.
5. Overcrowded school buildings and classrooms have been found to be a negative influence upon student performance (especially for minority/poverty students).
6. In cases where students attend school in substandard buildings they are definitely handicapped in their academic achievement.
7. Correlation studies show a strong positive rela-

tionship between overall building conditions and student achievement.

8. Researchers have repeatedly found a difference of between 5–17 percentile points difference between achievement of students in poor buildings and those students in standard buildings (when the socioeconomic status of students is controlled).
9. Ethnographic and perception studies indicate that poor school facilities negatively impact teacher effectiveness and performance and therefore have a negative impact on student performance.
10. All of the studies cited in this report demonstrate a positive relationship between student performance and various factors or components of the built environment. The strength of that relationship varies according to the particular study completed; nevertheless, the weight of evidence supports the premise that a school building has a measurable influence on student achievement.

**TITLE: Testimony of Kathleen J. Moore, Director of the School Facilities Planning Division, California Department of Education** (to the Committee on Education and Labor, United States House of Representatives)

**DATE:** February 13, 2008

1. There is a growing body of research on the importance of school facility condition, design, and maintenance on student performance and teacher workplace satisfaction.
2. U.S. Dept. of Education cites over 40 academic research papers... Researchers have repeatedly found a difference of between 5-17 percentile points between achievement of students in poor buildings and those students in above-standard buildings.
3. Design Council of London review of 167 sources... Showed clear evidence that extremely poor environments have a negative effect on students and teachers and improving these have significant benefits.
4. Poor building conditions greatly increase likelihood that teachers will leave their school.
5. Numerous studies have confirmed the relationship between a school's physical conditions and

improved attendance and test scores, particularly in the areas of indoor air quality, lighting, thermal comfort and acoustics.

6. There is a consensus in the research that newer and better school buildings contribute to higher student scores on standardized tests.
7. Student attitudes and behavior improve when the facility conditions improve.
8. Teachers report that adequate space and access to technology are important variables to deliver curriculum.
9. Facility directors report that new and renovated schools can provide better opportunities for small schools
10. Building design such as large group instruction areas, color schemes, outside learning areas, instructional neighborhoods, and building on the student scale had a statistically significant impact on performance.
11. School quality can affect the ability of an area to attract businesses and workers.
12. The physical condition of school facilities impact student achievement and experience as well as teacher retention and community vitality.

**TITLE: Do K-12 School Facilities Affect Education**

**Outcomes?** (Staff information report for Tennessee Advisory Commission on Intergovernmental Relations)

**DATE:** January 2003

1. Almost all of the studies conducted over the past three decades have found statistically significant relationships between the condition of a school, or classroom, and student achievement.
2. In general, students attending school in newer, better facilities score five to 17 points higher on standardized tests than those attending in standard buildings.
3. School facility factors such as building age and condition, quality of maintenance, temperature, lighting, noise, color, and air quality can affect student health, safety, sense of self, and psychological state.
4. Research has also shown that the quality of facilities influences citizen perceptions of schools and can serve as a point of community pride and increased support for public education.
5. Of special importance is the effect that facilities have on time in learning, which is universally acknowledged as the single most critical classroom variable. Every school year, many hours of

precious and irreplaceable classroom time are lost due to lack of air conditioning, broken boilers, ventilation breakdowns, and other facilities related problems.

6. It is unreasonable to expect positive results from programs that have to operate in negative physical environments.
7. The quality of the learning environment is known to affect teacher behavior and attitudes toward continuing to teach.
8. Review of 141 published studies, 21 papers presented at professional conferences, 97 published studies. Summary:
  - a. Age of Facility:
    - i. Students had higher achievement scores in newer facilities (math, reading, composition)
    - ii. Fewer disciplinary incidents in newer facilities
    - iii. Attendance records were better in new facilities
    - iv. Social climate factors perceived by students were considerably more favorable in a new school
  - b. Condition of Facility:
    - i. As the condition of the facility improved, achievement scores improved
    - ii. Stimulating environments promoted positive attitudes in students
    - iii. Higher student achievement was associated with schools with better science labs
  - c. Thermal Factors:
    - i. Eight or nine studies found significant relationship between the thermal environment of a classroom and student achievement and behavior
    - ii. Consistent pattern of higher achievement in air conditioned schools
    - iii. Excessive temperatures caused stress in students
  - d. Visual/Lighting
    - i. Light in the classroom seemed to have a positive effect on attendance rates
    - ii. Light had a positive effect on achievement
    - iii. Daylight in the classroom seemed to foster higher achievement
  - e. External Noise:
    - i. Higher student achievement was associated with schools with less external noise
    - ii. Outside noise caused students to be dissatisfied with their classrooms

- iii. Excessive noise caused stress in students
- f. Air Quality:
  - i. Poor air quality causes respiratory infections, aggravates allergies, and causes drowsiness and shorter attention spans
  - ii. When students do not feel well when they are in school, or miss school due to air quality problems, learning is adversely affected

**TITLE: Do School Facilities Affect Academic Outcomes?**

(National Clearinghouse for Educational Facilities)

**AUTHOR:** Mark Schneider, Professor of Political Science at the State University of New York, Stony Brook.

**DATE:** November 2002

1. How can we expect students to perform at high levels in school buildings that are substandard?
2. Clean, quiet, safe, comfortable, and healthy environments are an important component of successful teaching and learning.
3. Synthesis of earlier studies correlated student achievement with better building quality, newer school buildings, better lighting, better thermal comfort and air quality, and more advanced laboratories and libraries. More recent reviews report similar links between building quality and higher test scores.
4. Students in newer buildings outperformed students in older ones and posted better records for health, attendance, and discipline.
5. Good facilities had a major impact on learning.
6. Research does show that student achievement lags in shabby school buildings – such as those with no science labs, inadequate ventilation, and faulty heating systems.
7. Other studies tie building quality to student behavior...Vandalism, leaving early, absenteeism, suspensions, expulsions, disciplinary incidents, violence, disruption in class, tardiness, racial incidents, and smoking all have been used as variables in these studies.
8. Good teaching takes place in schools with a good physical environment.
9. The general attitudes, behaviors, and relationships among pupils and staff are more conducive to learning in those schools which have had significant capital investments.

**TITLE: Good Buildings, Better Schools, An Economic Stimulus Opportunity With Long Term Benefits**

(Economic Policy Institute Briefing Paper)

**AUTHOR:** Mary Filardo, founder of 21st Century School Fund

**DATE:** April 29, 2008

1. Many of the key educational initiatives designed to give the nation's children the tools and knowledge they need for the future have facility related implications.
2. Building deficiencies impair the quality of teaching and learning and contribute to health and safety problems of staff and students.
3. Building design and facility conditions have also been associated with teacher motivation and student achievement.
4. Classroom lighting and thermal comfort are commonly cited by teachers as determinants of their own morale and the engagement of their students.
5. 53 studies linked design features to student achievement.

**SOURCE: National Clearinghouse of Educational Facilities**

**AUTHORS:** Jack Buckley and Mark Schneider

**DATE:** February 2004

1. A myriad of factors clearly affect teacher retention, but most teaching takes place in a specific physical location (a school building) and the quality of that location can affect the ability of teachers to teach, teacher morale, and the very health and safety of teachers.
2. Many schools suffer from "Sick Building Syndrome" which in turn increases student absenteeism and reduces student performance.
3. Ability to control classroom temperature as central to the performance of both teachers and students.
4. Teachers believe thermal comfort affects both teaching quality and student achievement.
5. Classroom lighting plays a particularly critical role in student performance.
6. The consensus of 17 studies is that appropriate lighting improves test scores, reduces "off task" behavior, and plays a significant role in the achievement of students.
7. Good acoustics are fundamental to good academic performance.
8. Higher student achievement is associated with schools that have less external noise.
9. Outside noise causes increased student dissatis-



faction with their classrooms and excessive noise causes stress in students.

10. Teachers believe that noise impairs academic performance.

**TITLE: The Effects of the School Environment on Young People's Attitudes Towards Education and Learning** (Summary report for England's National Foundation for Educational Research)

**AUTHORS:** Peter Rudd, Frances Reed, and Paula Smith  
**DATE:** May 2008

1. There is a good deal of evidence to indicate that student attitudes had become more positive after the move into a new school building.
2. Those students who "felt safe" most or all of the time increased from 57 to 87 percent.
3. Those students who "felt proud" of their school increased from 43 to 77 percent.
4. Those students who "enjoyed going to school" increased from 50 to 61 percent.
5. Those students who perceived that bullying was a big problem decreased from 39 to 16 percent.

**TITLE: Acoustics in Schools** (Ceilings and Interior Systems Construction Association white paper report)

**DATE:** November 2009

1. Children, especially those younger than 13 years of age, have an undeveloped sense of hearing, making the impact of background noise on hearing, comprehending, and learning more pronounced for children than adults.
2. Students with learning, attention, or reading deficits are more adversely affected by poor acoustic conditions than the average student.
3. Loud or reverberant classrooms may cause teachers to raise their voices, leading to increased teacher stress and fatigue.

**TITLE: Relationship Between School Facility Conditions and the Delivery of Instruction; Evidence From a National Survey of Principals** (*Journal of Facility Management*)

**AUTHOR:** Ibrahim Duyar

**DATE:** 2010

1. Six of ten facility conditions are statistically and positively associated with the delivery of instruction.
2. Facility conditions accounted for 43 percent of the explained variation on the delivery of instruction with medium sized effect.

3. The paper supported the notion that educational facilities do matter and they affect the delivery of instruction.

**TITLE: Teacher Attitudes About Classroom Conditions** (*Journal of Educational Administration*)

**AUTHORS:** Glen I. Earthman and Linda K. Lemasters  
**DATE:** 2009

1. Differences between the responses of teachers in satisfactory buildings are significant compared to those of teachers in unsatisfactory buildings (responses concerning attitudes and impressions).
2. Physical environment influences attitudes of teachers, which in turn affects their productivity and these effects could cause morale problems in the teaching staff.
3. The conditions of the classroom can cause morale problems with teachers.

**TITLE: Having an Impact on Learning** (*School Planning and Management*)

**AUTHOR:** Deb Moore

**DATE:** August 2009

1. Facilities DO impact learning.
2. Research shows that facilities can be an asset or a detriment to the educational process and to student achievement.
3. Researchers have repeatedly found a difference of 5–17 percentile points between achievement of students in poor buildings and those students in above-standard buildings. (When controlled for socioeconomic status). The average is around 10 points.
4. Building age, windows in the instructional area and overall building condition were positively related to student achievement.
5. Results showed a direct correlation between better facility conditions and student outcome.
6. (1,100 schools in Canada)... shows substantial differences between schools with different facility conditions.
7. In all cases, schools in top-ranked facility condition have better learning environments than schools in bottom ranked condition. Students work with more enthusiasm. The morale of teachers is higher. There is less disruption of classes by students. Teacher expectations of students are higher.
8. Facilities are one of the things we can change that will positively affect students and staff.



## Appendix D: Extensive Description of FMIS Source: OFMC, 2011

### FMIS – Facility Management Information System

FMIS was developed by IA/OFMC as a modernized facility/asset management application to carry out IA's responsibility for planning, designing, constructing, operating and maintaining Bureau-funded facilities.

FMIS is used to assist IA, BIE and tribal staff in managing the entire Indian Affairs Facilities Management Program. The data is used to identify, plan, perform and evaluate all facilities program-related work. All major facilities management work processes are supported in FMIS including planning, scheduling,

designing, constructing, operating, and maintaining facilities.

FMIS is used for recording improvement and repair needs, health and safety issues, abatement plans for the health and safety issues, and the execution of new and renovation construction projects from conception through project completion.

FMIS serves as an ongoing communication link with all of its users. It provides management planning, engineering, operations and maintenance and fiscal control to central office, regional offices, agency offices and school locations.

### FMIS Features and Benefits

- Provides concise, organized information to make value-based decisions
- Improves project planning and management of construction activities
- Provides cost-justified project management and construction management
- Automates project prioritization and ranking capabilities
- Fosters continuous maintenance improvement practices
- Delivers instant retrieval of data online
- Promotes strategic planning – meeting IA's five year planning requirements
- Allows ability to track level of commitments, obligations and expenditures
- Improves project capitalization of assets
- Allows ability to apply inflation indexing for inventory asset replacement

- Contains values and backlog items to improve project cost estimating
- Improves cost estimating process that conforms with industry standards
- Improves automation and procedural support for employee quarters program
- Improves reporting for environmental, health and safety programs and provides for accurate accounting of resources utilized on these and all facility management programs

### FMIS Modules

- **Inventory**  
FMIS inventory module manages all IA inventory including all buildings, towers, sites, and utilities. Site inventory also includes inventory of equipment, landscaping, roads, sidewalks, etc.

- **Backlog/Inspections**

FMIS backlog module collects the specific work items needed to improve and repair buildings, towers, sites and utilities. The work items are tracked from identification of the need through all stages to completion

- **Project Management**

Project management tracks all stages of projects from planning, design and construction including warranty

- **Budget**

Budget module provides an accounting of funds appropriated to operate, maintain repair, or construct new IA facilities

- **Work Ticket/Work Planning**

This module is used for the day-to-day operations and maintenance activities for planning, scheduling and executing corrective work on the building assets, equipment and infrastructure

## Appendix E: Method for Estimating for New Construction Source: OFMC, 2011

**Step 1. Determine Student Enrollment** - In January 2004, BIA implemented a new enrollment projection policy. This methodology uses the sum of least squares linear regression analysis which results in a more realistic assessment of the future enrollment and square footage requirements. Once the student enrollment is determined in joint efforts with BIE and OFMC, project the education program requirements space needs utilizing the *Education Space Criteria Handbook*.

Establish base cost/square foot (sf) for specific building types: academic (schools), dormitories, employee quarters and maintenance shop/bus garage. The base cost is for the building cost/sf only. RS means construction cost  $\frac{3}{4}$  cost/sf data is used for this purpose. The RS means  $\frac{3}{4}$  cost column indicates that 75 percent of the indicated project type had lower costs and 25 percent had higher costs. Why does BIA use the means  $\frac{3}{4}$  cost? The  $\frac{3}{4}$  cost data is used, in lieu of the median cost, due to the following factors not accounted for in the geographic indexing factor described below:

- a. Indian Preference. All construction projects on reservations must comply with federal and tribal laws requiring Indian or tribal preference in hiring and training of Indian construction workers and subcontractors.
- b. Federal Minimum Wage (Davis-Bacon Act) Requirement. All construction over \$2000 must comply with the Act. Wages not less than those specified in a wage determination must be paid and the appropriate recordkeeping by the construction contractor must be maintained. Contractors claim the reporting requirements are an administrative burden that adds to the cost of construction.
- c. Tribal Courts. Generally speaking, all lawsuits under a construction contract must be tried in tribal courts if the contract is between a tribal organization (tribe, grantee, school board) and a construction contractor. Contractors claim they do not get fair treatment in tribal courts and add costs to their bids to cover this risk.

- d. Social Programs. Federally funded construction requires compliance with certain programs such as: veterans preference, woman-owned business preference, small business preference. Contractors claim there is a cost involved in complying with these requirements.
- e. LEED Compliance. Contractors must provide extensive documentation relative to materials installed so that the architect can apply for LEED certification. This requirement adds, although minimally, to the cost of construction.

**Step 2.** Using geographic indexing factors developed by Hanscomb Associates for BIA-OFMC, the base cost/sf is adjusted to the specific project location, not just the closest city.

**Step 3.** The geographically adjusted cost/sf is further adjusted by adding in the following additional factors:

- a. Building Size. Buildings smaller than the typical size in the RS means cost book cost more per square foot. Buildings larger than the typical size cost less due to economies of scale. The adjustment factor varies based on building type and size.
- b. Special Foundations. Because of poor soils conditions at most BIA school locations, special foundations must be constructed (concrete pier and grade beam, “waffle slabs”) or special engineered fill (dirt or gravel) material must be hauled long distances to the site. A five percent factor is used for this additional cost. (Under review—this factor is probably more than indicated.)
- c. Energy Policy Act of 2005. Energy efficient mechanical and electrical systems are required to meet the energy reduction requirements of the Act and could add approximately five percent to the cost of construction. The BIA does not feel that current RS means cost/sf adequately reflects this policy requirement. (Under review—this factor is probably more than indicated.)
- d. LEED Compliance. OMB Circular A-11 and BIA-OFMC require compliance with the U.S. Green Building Council’s LEED Green Building rating system. BIA estimates that this requirement adds ap-

proximately three percent to the cost of construction. The Resource Conservation and Recovery Act requires federal agencies to give preference in the use of recycled materials for construction. Compliance with additional Executive Orders; (e.g. E.O. 13101, Greening the Government through Waste Prevention, Recycling and Federal Acquisition; E.O. 13123, Greening the Government through Efficient Energy Management; and E.O. 13148, Greening the Government through Leadership in Environmental Management), adds to the cost of construction.

- e. **Tribal Taxes and Fees.** The cost/sf is further adjusted to add applicable tribal sales taxes and Tribal Employment Rights Ordinance fees.
- f. **Inflation.** The cost/sf is further adjusted to mid-point of anticipated construction. BIA uses the *Engineering News-Record* annual rate for building construction, unless there are compelling reasons to use a different rate.

**Step 4.** After the cost for each building type is established, the site and utilities costs are factored in.

**Step 5.** Establish total cost by adding “soft costs.” Soft cost descriptions and their respective percentages are identified below. The soft costs factor is multiplied by the sum of the building cost to arrive at the total soft cost. The soft cost is added to the building cost to get the total building cost.

**Soft Costs (Indirect Costs)**

Calculated as a percentage of direct construction cost for the building. They include:

<b>Planning Phase Costs:</b>	2%
Preparation of education specifications, program of requirements (architectural programming), topographic and legal survey of construction site, National Environmental Protection Act compliance, archeological survey and report, historic preservation compliance (Section 106 of HPA), flood hazard determination, environmental assessment; sub-surface soils investigation and geotechnical report; utilities survey, assessment and report; determination of required easement and road Right of Way. Preparation of site master plan, preliminary architectural and engineering requirements. Preparation of preliminary construction estimate. Tribal administrative costs during planning phase (includes tribal or school board	

staff salaries and benefits, project manager, travel, audit, board meeting costs). These costs are necessary under PL 93-638 contracts with tribes or PL 100-297 grants with Bureau-funded school boards.

<b>Design Phase Costs:</b>	
Architect-engineer (AE) fees for production of drawings and specifications	6%
Value engineering, LEED and commissioning services during design, AE reimbursable expenses (travel, printing, etc.)	2%
Tribal administrative costs during design (includes tribal or school board staff salaries (percent of time basis) and benefits, project manager, travel, audit, board meetings)	2%

<b>Construction Phase Costs:</b>	
AE construction administration, inspection, materials testing, commissioning services during construction, LEED costs during construction phase	10%
Furniture, fixtures and equipment including technology equipment	8%
Contingency during construction (covers unforeseen costs during construction and overbids). Includes change orders or shortfalls in other line items	10%
Tribal administrative costs during the construction phase (includes tribal or school board staff salaries, percent of time basis) and benefits, project manager, travel, audit, board meetings	2%

<b>Project Management by BIA staff or by Contract for all phases of project (includes salaries, benefits, travel, supplies, and training):</b>	
Planning Phase	2%
Design Phase	10%
Construction Phase	+ 30%
Current BIA Soft Cost Rate	42%
Project Management/Administrative OH by BIA or by Contract	+ 12%
<b>Total Soft Costs (as a percentage)</b>	<b>54%</b>

## Appendix F: Previous Whole School Replacement Priority Lists

### Table of Priority List Schools for Whole School Replacement FY 1993 to FY 2004

The following table lists the schools that were identified by the BIA in a Federal Register notice as prioritized for funding for whole school replacement. Please note that all schools listed, with the exception of those in red, have been funded and construction is either under way or complete.

As of January 2011, construction has not begun at schools listed in red below.

Rank	FY 1993 Priority List [58 FR 579; 1/6/93]	FY 2000 Priority List [66 FR 1689; 1/9/01]	FY 2003 Priority List [68 FR 4098; 7/9/03]	FY 2004 Priority List [69 FR 13870; 3/24/04]
1	Pinon Community School Dorm	Tuba City Boarding School	Turtle Mountain High School	Dilcon Community School
2	Eastern Cheyenne River Consolidated School	Second Mesa Day School	Mescalero Apache School	Porcupine Day School
3	Rock Point Community School	Zia Day School	Enemy Swim Day School	Crown Point Community School
4	Many Farms High School	Baca/Thoreau (Dlo' Ayazhi) Consolidated Community School	Isleta Pueblo Day School	Muckleshoot Tribal School
5	Tucker Day School	Lummi Tribal School	Navajo Preparatory School	Dennehotso Boarding School
6	Shoshone-Bannock/Fort Hall School	Wingate Elementary School	Wingate High School	Circle of Life Survival School
7	Standing Pine Day School	Polacca Day School	Pueblo Pintado Community School	Keams Canyon Elementary School
8	Chief Leschi School Complex	Holbrook Dormitory	Bread Springs Day School	Rough Rock Community School
9	Seba Dalkai Boarding School	Santa Fe Indian School	Ojo Encino Day School	Crow Creek Elementary/Middle/High School
10	Sac and Fox Settlement School	Ojibwa Indian School	Chemawa Indian School	Kaibeto Boarding School
11	Pyramid Lake	Conehatta Elementary School	Beclabito Day School	Blackfeet Dormitory
12	Shiprock Alternative School	Paschal Sherman Indian School	Leupp School	Beatrice Rafferty School
13	Tuba City Boarding School	Kayenta Boarding School	-	Little Singer Community School
14	Fond du Lac Ojibwe School	Tiospa Zina Tribal School	-	Cove Day School
15	Second Mesa Day School	Wide Ruins Community School	-	-
16	Zia Day School	Low Mountain Boarding School	-	-
17	-	St. Francis Indian School	-	-
18	-	Turtle Mountain High School	-	-
19	-	Mescalero Apache School	-	-
20	-	Enemy Swim Day School	-	-

A few points to note:

- Prior to FY 1993, the Bureau developed an annual prioritized list of schools needing complete replacement; however, this generated multiple yearly lists, and many schools on these lists went unfunded due to a changing list the next year. Consequently, Congress directed the Bureau to create a continuous multi-year priority ranking list for new school construction as of FY 1993.
- For both FY 2000 and FY 2003, the Bureau (through the OFMC) administered an application process allowing all interested schools to apply. OFMC provided detailed application instructions, created a comprehensive scoring system, and selected, via an evaluation committee, prioritized schools in rank order.
- In FY 2004, Congress requested that the Bureau develop another list of priorities for new school construction to identify a sufficient number of schools to allow continual replacement through FY 2007. The Bureau, via OFMC, created this FY 2004 list by reviewing FMIS data and identifying likely schools in need. In turn, OFMC retained a contractor who conducted a site review and rating of visited schools.



Appendix G: Current FI&R Formula Description Source: OFMC, 2011

The following appendix provides detailed background on the existing FI&R scoring and rankings processes.

**FMIS Categories and Ranking**

FMIS itself, based on policies applied to the entire DOI, categorizes each proposed construction or maintenance project into one of nine “ranking categories” (e.g., “Critical Health and Safety Deferred Maintenance”). Each of these categories has a weighting factor of from 1 to 10.

DOI Weighting Factors that IA-OFMC Uses		Weighted Factor
CHSdm	<p><b>Critical Health and Safety Deferred Maintenance</b> - A facility deferred maintenance need that poses a serious threat to public or employee safety or health. Examples:</p> <ul style="list-style-type: none"> <li>• Repair fire alarm</li> <li>• Fire sprinkler protection system repair</li> </ul>	10
CHSci	<p><b>Critical Health and Safety Capital Improvements</b> - A condition that poses a serious threat to public or employee safety or health and can only be reasonably abated by the construction of some capital improvements. Examples:</p> <ul style="list-style-type: none"> <li>• Install a fire alarm or sprinkler system where one does not exist</li> <li>• Repair or replacement of a facility with structural failure</li> </ul>	9
EPHPBSci	<p><b>Energy Policy, High Performance, Sustainable Buildings CI</b> - Policy Act of 2005 or the guiding principles of the Memorandum of Understanding for High Performance and Sustainable Buildings Deferred Maintenance and/or Capital Improvement Needs.</p>	5
CMdm	<p><b>Critical Mission Deferred Maintenance</b> - A facility-deferred maintenance need that poses a serious threat to a Bureau’s ability to carry out its assigned mission. Examples:</p> <ul style="list-style-type: none"> <li>• Replacement of facility’s deteriorated generator that supplies power to a mission-critical asset</li> <li>• Repair of deferred maintenance items that if not accomplished quickly compromises the public’s investment in the structure</li> </ul>	4
CCci	<p><b>Code Compliance Capital Improvement</b> - A facility capital improvement need that will meet compliance with codes, standards, and laws. Example:</p> <ul style="list-style-type: none"> <li>• Providing accessibility to comply with ADA</li> </ul>	4
Odm	<p><b>Other Deferred Maintenance</b> - A facility deferred maintenance need that will improve public or employee safety, health, or accessibility; complete unmet programmatic needs and mandated programs; protect natural or cultural resources, or improve a facility’s ability to carry out its assigned mission. Examples:</p> <ul style="list-style-type: none"> <li>• Facility repair or rehabilitation to increase program efficiency</li> <li>• Repair or maintenance of existing systems or system component</li> </ul>	3
Oci	<p><b>Other Capital Improvements Health and Safety Deferred Maintenance</b> - Other capital improvement is the construction of a new facility or the expansion or rehabilitation of an existing facility to accommodate a change of function or new mission requirements. Examples:</p> <ul style="list-style-type: none"> <li>• Construction of a new school or dormitory</li> <li>• Major alterations to a school dormitory to convert its function to academic classroom use</li> </ul>	1

### Relative Weighted Score per Backlog

The FI&R formula then weights each backlog in the system for a particular school. For instance, imagine a school with a Critical Health and Safety deferred maintenance backlog at an estimated cost of \$26,196. To get the relative weighted score for this backlog, the estimated cost of the backlog is divided by the estimated total cost of all backlogs for this school multiplied by the category weighting (in this case 10, the highest ranking or weight). So, if the estimated total cost of all backlogs for a school is \$492,495, then this particular backlog has a weight of 0.5319. To keep the scores clear, this initial weighting is multiplied by 100 to get the final relative weighted project score. The formula and our example:

- $(\text{Backlogs cost} / \text{total cost of all backlogs}) \times \text{weighted factor for that backlog} \times 100 = \text{weighted relative score for that backlog}$
- $(\$26,196 / \$492,495) \times 10 \times 100 = 53.19$

Location Name	FCI	Category	Rank	DOI Category	Weight Factor	Number of Backlogs	Backlog Cost	Backlog Weight	Weighted Relative Score
School A	0.11046	E	3	EPHPBSci	5	1	\$ 6,657	0.81%	6.76
School A	0.11046	H	1	CHSdm	10	4	\$ 26,196	6.36%	53.19
School A	0.11046	M	1	CHSdm	10	13	\$ 342,778	83.25%	696.00
School A	0.11046	M	2	CHSdm	4	7	\$ 44,049	4.28%	35.78
School A	0.11046	M	3	Odm	3	9	\$ 72,815	5.31%	44.35
						<b>TOTALS</b>	<b>\$ 492,495</b>	<b>100%</b>	<b>836.08</b>

Two things to note: 1) if the backlog is not entered into the FMIS system, it is never given a score, and this may affect the school’s overall eligibility for FI&R funding, and; 2) accurate cost estimates are important because if they are inaccurate, the project score is inaccurate as well.

### Relative Weighted Score per School

Once the relative weighted scores per backlog are calculated, the calculation for the school as a whole is simple. All of the relative weighted project scores are added to get the total relative weighted score per school. There are a few important things to note about this calculation. The relative weighted score per school is not affected by the number or cost of backlogs. A school rated in high need under the FI&R formula would have several critical backlogs in health and safety (i.e., high category weights) relative to the school’s overall backlogs and their cost. Schools with the most backlogs or the highest scores do not necessarily come out with the highest relative weighted score per school across the system. For instance, in a past fiscal year, the Yakama Tribal School had the highest overall FI&R ranking with a total estimate backlogs cost of just under \$500,000. There were several schools with much more costly total backlogs (in the millions) who ranked lower in the total scoring, but whose expensive backlogs had lower weight factors.

Also, it is important to note that this score does not account for any critical educational need. Scores are based on facility or physical issues such as health and safety, energy, and so forth. There is not a category for important or essential educational needs. So, for instance, a critical mission-deferred maintenance backlog has a lower category ranking than a health and safety backlog. A room essential for teaching first graders reading may not be usable without a critical mission backlog project, but since that project has a lower category score (4 versus 10), it is possible it won’t get funded for some time. And, if the reading room is in suitable condition (i.e., no backlogs) but is simply too small to be useful for the number of students, then that educational need is in no way captured by the current FI&R formula.

### Asset Priority Index

In addition to the relative weighted score per school, the FI&R formula takes into account how critical the particular buildings with backlogs in that school buildings are to the overall educational mission. To do this, an API is also calculated. Every building within a school is given an asset priority ranking. That ranking is based on the criticality of building to overall education (e.g., maintenance shed as less critical than a classroom building). Each building can have a maximum API score of 100. The ranking has three components: mission criticality (is it critical to education?); operations (is it critical to the functioning of the school?); and substitution (can the function be done in a different building?). Each building with a backlog is scored and these individual building scores are combined. Then, to scale or average the scores, the sum of the individual building scores is divided by the total number of buildings. This yields an API average. For instance, in our example school, there are six buildings, all with an API score of 100, and so the school as a whole has an API of 100.

### Overall School or Location Score (Final Project Score)

To get the final score used to compare a school against all other schools with backlogs in the FMIS system, the two scores need to be added together—the relative weighted score per school and the API. The FI&R formula gives a greater weight to the weighted relative score than to the API. To get the complete school or location score, the API is multiplied by 25 percent (X 10 again just to keep the same relative scale in numbers) and the relative weighted score is multiplied by 75 percent. In our example, the school relative weighted score of 836.08 is multiplied X 75 percent and added to 100 X 25 percent X 10 to yield an overall location or school score of 877. The formula and our example:

- (Weighted relative scores of all backlogs x 75%) + (API Average (the priority of all the buildings with backlogs in that school X10 for scaling) X 25%) = final overall project score
- 836.08 X 75% = 627 and 100 X 25% X 10 = 250. 627 + 250 = 877

The following matrix illustrates the calculations to obtain this overall location score in more detail.

Location Name	FCI	Category	Rank	DOI Category	Weight Factor	Number of Backlogs	Backlog Cost	Backlog Weight	Weighted Relative Score	
School A	0.11046	E	3	EPHPBSci	5	1	\$ 6,657	0.81%	6.76	
School A	0.11046	H	1	CHSdm	10	4	\$ 26,196	6.36%	53.19	
School A	0.11046	M	1	CHSdm	10	13	\$ 342,778	83.25%	696.00	
School A	0.11046	M	2	CHSdm	4	7	\$ 44,049	4.28%	35.78	
School A	0.11046	M	3	Odm	3	9	\$ 72,815	5.31%	44.35	
<b>TOTALS</b>							<b>\$ 492,495</b>	<b>100%</b>	<b>836.08</b>	<b>627</b>
API	Building	Building Type	Mission Criticality	Operations	Substitutability	Total API	API Average			
School A	1T	School, Day	60	20	20	100				
School A	2T	School, Day	60	20	20	100				
School A	3T	Office	60	20	20	100				
School A	4T	Office	60	20	20	100				
School A	5T	School, Vocational Shop	60	20	20	100				
School A	6A	Office	60	20	20	100				
<b>TOTAL</b>						<b>600</b>	<b>100</b>	<b>250</b>	<b>877</b>	
<b>FINAL PROJECT SCORE</b>									<b>877</b>	

## Comparison of Schools

Once the location or school score is determined, it can be compared to all the other school location scores to prioritize projects across the system. An example of a location score ranking from a previous fiscal year is included below:

Location Name	Fiscal Year	Location Score	Location FCI	Number of Backlogs	Total Backlog Cost
Yakama Tribal School	2009	833.3794	0.1105	34	\$492,495
Cibecue Community School	2009	632.5658	0.2577	78	\$2,709,091
Lukachukai Boarding School	2009	629.8443	0.3817	74	\$2,942,192
Coeur D'Alene Tribal School	2009	628.6586	0.0861	22	\$957,673
Bug-O-Nay-Ge-Shig School	2009	606.2827	0.0243	27	\$411,524
Kin Dah Lichi'i Olta (Kinlichee)	2009	579.9163	0.1935	17	\$798,118
Hotevilla Bacavi Community School	2009	567.9706	0.5464	70	\$2,383,182
Sho-Ban School District No. 512	2009	559.0765	0.0382	9	\$296,514
Cottonwood Day School	2009	554.0987	0.3174	4	\$619,294
Marty Indian School	2009	551.4163	0.0614	48	\$1,339,255
T'lis Nazbas Community School	2010	547.4448	0.3834	204	\$7,778,987
Nenahnezad Boarding School	2009	528.4948	0.2418	117	\$3,464,395

## Facilities Condition Index

The FCI is a separate index that uses a different formula for calculation. Note that “facility” in this usage means an entire school and not a particular building. It is related to the FI&R rankings in that, if a school does not have a “poor” condition as determined by the FCI, then it is not likely to receive FI&R monies even if its FI&R score and ranking is high. Thus, the FCI serves as a kind of “check” to make sure schools in most need are receiving the limited funding available.

### The FCI formula is:

$FCI = \text{Cost of Deficiencies} / \text{Current Replacement Value}$

The FCI provides a simple, valid, and quantifiable indication of the relative condition of a facility or group of facilities for comparisons with other facilities, and groups of facilities: the higher the FCI, the worse the condition. In general, the condition of the schools is based on FCI values as follows:

- 0.0-0.05 = Good condition
- 0.06-0.10 = Fair condition
- > 0.10 = Poor condition

Because this facility index is calculated for an entire school, not a particular building within that school, the FCI ranges from less than .05 to as high as in the .50s. A general construction practice is that individual buildings whose backlog costs are equal to or greater than 66 percent of the replacement cost of the whole building should simply be replaced, not renovated or repaired. The FCI, since it's a reflection of an entire school campus, not a building, rarely exceeds that 66 percent threshold because at least some buildings on campus are likely to be in fair or good condition. That does not mean, however, that individual buildings in a school do not need to be replaced and it does not mean that a whole new school is not needed.

## Appendix H: Glossary of Terms

**Asset Priority Index (API)** API is a measure of the importance of a constructed asset to the mission of the installation where it is located. API is a numeric range from one (1), for little or no importance, to one hundred (100), for very important.

**Assistant Secretary - Indian Affairs (AS-IA)** The Office of the AS-IA is the primary policy setting and management oversight organization for IA functions, responsible for fulfilling U.S. trust obligations to the federally recognized American Indian tribes and Alaska Natives, and individual Indian trust beneficiaries.

**Adequate Yearly Progress (AYP)** The NCLB requires states to develop objective criteria for measuring school performance, and to establish targets for annual improvements in school performance as a condition for receiving federal grant aid. 20 U.S.C. § 6311. NCLB requires that school performance improves each year, as measured by standardized tests. AYP is the amount of improvement required by NCLB. The Act sets out criteria for defining AYP, but directs each state to craft its own definition of AYP. Per DOI regulations, each state's definition of AYP applies to the Bureau-funded schools in that state. 25 C.F.R. § 30.104.

**Bureau of Indian Affairs (BIA)** The principal bureau within Indian Affairs responsible for the administration of federal programs for federally recognized Indian tribes, and for promoting Indian self-determination.

**Bureau of Indian Education (BIE)** The BIE is responsible for all IA education program activities necessary to provide quality education opportunities and safe, secure, and healthy learning environments to all students attending Bureau-funded schools.

**Bureau** As defined in 25 U.S.C. § 2021 (Bureau of Indian Affairs Programs), 25 U.S.C. § 2511 (Tribally Controlled School Grants), 25 U.S.C. § 2801 (Indian Law Enforcement), and 25 U.S.C. § 3202 (Indian Child Protection and Family Violence Prevention), "Bureau" means the Bureau of Indian Affairs.

**Bureau-funded School** One of the 183 schools funded by the BIA. 125 Bureau-funded schools are operated by Tribes; the rest are operated by BIE.

**The No Child Left Behind School Facilities and Construction Negotiated Rulemaking Committee (The Committee)** The Committee was chartered to serve as an advisory committee subject to the provisions of the Federal Advisory Committee Act (FACA), 5 U.S.C. Appendix 2, under the authority of 25 U.S.C. § 2005(a)(5) for the purpose of preparing a catalog and report regarding the physical conditions of Bureau-funded schools.

**Consensus Building Institute (CBI)** A not-for-profit organization specializing in public collaboration and dispute resolution, hired by the U.S. Institute to facilitate the NCLB Facilities and Construction Negotiated Rulemaking Committee.

**Complementary Educational Facilities** NCLB at 25 U.S.C. § 2005(a)(5)(A) directed the Committee to identify educational facilities that are needed, but do not exist.

**Cultural Space** Space required to provide an academic program specific for native language/cultural education. This could be a requirement placed on the school through a tribal resolution.

**Designated Federal Officer (DFO)** A federal employee charged with responsibility for managing a rulemaking committee. 5 U.S.C. appx. § 10(e). The DFO for the Committee is Michele Singer, Office of Regulatory Affairs and Collaborative Action. See Appendix A.

**United States Department of Defense Educational Activities (DoDEA)** DoDEA operates 194 schools in 14 districts located in 12 foreign countries, seven states, Guam, and Puerto Rico. All schools within DoDEA are fully accredited by U.S. accrediting agencies. Approximately 8,700 educators serve more than 86,000 DoDEA students.

**United States Department of the Interior (DOI)** The Department that manages the United States public lands and minerals, and is the agency charged with primary responsibility for carrying out the Federal government's trust responsibilities to Indian tribes and Alaska Natives. This mission is accomplished through the coordinated efforts of the Department's bureaus and offices, other Federal agencies, and the tribes. The Department's other responsibilities include managing and protecting the 20 percent of the Nation's

land set aside as national parks, national wildlife refuges, and other public lands; providing access to public lands and the Outer Continental Shelf for renewable and conventional energy development; supplying and managing water resources in 17 western states; and managing hydropower resources on federal lands.

**Education Line Officer (ELO)** An employee of the BIE at one of 22 offices located around the country, who is the point of contact between Bureau-funded schools and the federal government. The ELO is responsible for the administration and implementation of the BIE education programs and activities, including school operations.

**Facilities Condition Index (FCI)** The ratio of the cost of performing accumulated Deferred Maintenance (DM) to the Current Replacement Value (CRV) for a constructed asset.  $FCI = DM/CRV$ . FCI is a calculated indicator of the depleted value of a constructed asset to determine a condition value (e.g., good, fair and poor). The range is from zero (0) "(best)," for a newly constructed asset, to one (1.0) "(worst)," for a constructed asset with a DM value equal to its CRV. An acceptable rating for BIA schools is under 0.10. All schools with ratings above 0.10 are deemed as being in poor condition. All those with ratings between 0.05 and 0.099 are deemed as being in fair condition. Those with ratings below 0.05 are deemed as being in good condition.

**Facilities Construction, Operation and Management (FACCOM)** The information system for tracking conditions of Bureau-funded school facilities prior to development of FMIS.

**Family and Child Education (FACE)** A BIE program implementing a comprehensive family literacy model of lifelong learning. FACE educates mothers about proper prenatal nutrition, developmental milestones, and early literacy through book sharing; prepares 3- to 5-year-olds for school entry; fosters parental involvement in their children's education; and promotes continuing education for the parents themselves.

**Facilities Improvement and Repair (FI&R)** A funding category in the OFMC budget. FI&R includes major renovation or repair of an existing asset in order to restore



and/or extend the life of the asset. FI&R projects include bringing facilities into compliance with codes (e.g., life safety, ADA, OSHA, environmental, etc.) and other regulatory or Executive Order compliance requirements.

**Facilities Management Information System (FMIS) (“feemiss”)** A software program used by BIA to collect, categorize, and manage detailed information on every component of every Bureau-funded school. Beyond that, OFMC uses FMIS to ensure efficient planning, design, construction, improvement, repair, operations and maintenance of IA-owned and IA-funded Indian education, law enforcement and general administration facilities.

**Gatekeeper** A contractor hired by OFMC under the condition assessment contract to review backlog deficiencies to verify and validate for cost estimates and to prevent duplications.

**Government Accountability Office (GAO)** Supports Congress in meeting its constitutional responsibilities and helps improve the performance and accountability of the Federal Government for the benefit of the American people.

**Inspector General, U.S. Department of the Interior (IG)** The Office of the Inspector General is responsible for ensuring the ethical conduct of the Department’s employees, by performing audits, investigations, evaluations, inspections, and other reviews of the Department’s programs and operations.

**Indian Affairs (IA)** A primary division within DOI, IA provides services directly or through contracts, grants, or compacts to a service population of about 1.7 million American Indians and Alaska Natives who are enrolled members of 565 federally recognized tribes in the 48 contiguous United States and Alaska. IA is headed by the AS-IA. BIA and BIE are two offices within Indian Affairs.

**Inappropriate Educational Space** Many Bureau-funded schools lack sufficient classroom space for all their students. Schools are compelled to conduct classes in whatever space is available. This report categorizes such non-classroom areas as Inappropriate Educational Space.

**Leadership in Energy and Environmental Design (LEED)** An internationally recognized green building certification system, providing third-party verification that a building or community was designed

and built using measurable green building design, construction, operations and maintenance solutions.

**Location Score** Also known as the final project score, is the final score used to compare a school against all other schools with backlogs in the FMIS system. The location score is calculated by combining the API score and the ranking category factor score. See Appendix G for detailed calculations.

**Minor Improvement and Repairs (MI&R)** A funding category in the OFMC budget. MI&R addresses serious health/safety and other high-priority deficiencies at Bureau-funded facilities (except teachers’ quarters). MI&R funds are used to resolve FMIS backlog items ranging from \$2,500 to \$500,000.

**Native American Student Information System (NASIS)** A centralized database and data processing system used to create statistical reports and to track student performance. Analysis of the information in NASIS helps schools improve by identifying the variables affecting student learning. Data collected through NASIS can be shared between state, federal, and tribal governments.

**The No Child Left Behind Act of 2001 (Pub. Law 107-110; 115 Stat. 1425) (NCLB) (The Act)** An Act of Congress supporting standards-based education reform, premised on the belief that setting high standards and establishing measurable goals can improve individual outcomes in education. The Act requires states to develop assessments in basic skills to be given to all students in certain grades, if those states are to receive federal funding for schools. The Act addresses the education of Indian children by the Federal Government.

**Office of Facilities, Environmental and Cultural Resources (OFECR)** OFECR is responsible for IA facilities management and construction, environmental management, safety and risk management, and cultural resources management programs.

**Office of Facilities Management and Construction (OFMC)** An office within Indian Affairs, under the Director of the OFECR. The mission of OFMC is to ensure the efficient and effective stewardship of resources for new construction, renovation, and maintenance of Bureau-funded facilities.

**Operations and Maintenance (O&M)** A funding category in the OFMC budget. O&M includes the following: recurring maintenance and repair costs; utilities (includes plant operation and purchase of energy); cleaning and/or janitorial costs (includes pest control, refuse collection and disposal as well as recycling operations); and roads/grounds expenses (includes grounds maintenance, landscaping and snow and ice removal from roads, piers and airfields).

**Region** Delivery of program services to the federally recognized tribes and individual Indians and Alaska Natives, whether directly or through contracts, grants or compacts, is administered by the 12 regional offices and 83 agencies that report to the BIA Deputy Director-Field Operations, located in Washington, D.C. However, the OFMC works with a set of 10 modified regions. These regions do not include BIA’s Alaska region, since Alaska does not have Bureau-funded schools. Nor does it include the BIA’s Pacific region, which is serviced by the Western region for the purposes of school construction. Therefore, for the purposes of this report, the Committee refers to the 10 modified regions of Eastern, Eastern Oklahoma, Great Plains, Midwest, Navajo, Northwest, Rocky Mountain, Southern Plains, Southwest, and Western.

**Tribal Interior Budget Council (TIBC)** The TIBC, formerly known as the Indian Affairs Tribal Budget Advisory Council (TBAC), provides a forum and process for tribes and federal officials to work together in developing annual budget requests for Indian programs in DOI. It provides cooperative participation in IA budget formulation, justification, and information. TIBC meetings also serve as an education forum to better inform tribes of the IA budget process and advise on the status of Indian Country initiatives throughout the Federal Government. The TIBC includes two tribal representatives from each of the 12 BIA regions.

**United States Institute for Environmental Conflict Resolution (U.S. Institute)** A program within the Udall Foundation, an independent federal agency. Congress established the Institute in 1998 to help resolve environmental disputes that involve the federal government by providing mediation, training and related services.



