Executive Order 2006-001
High Performance Schools Task Force
Final Report

New Mexico
Energy, Minerals and Natural Resources Department
Energy Conservation & Management Division
January 8, 2007

Susie Marbury
Energy Efficiency & Green Building Administrator
susie.marbury@state.nm.us
505.476.3254
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High Performance (HiP) Schools Task Force

A. Final Report

1. **Background**
   In January, Governor Richardson signed Executive Order 2006-001 (see Appendix A-1), “State of New Mexico Energy Efficient Green Building Standards for State Buildings.” The executive order includes the following standards for executive branch agencies, which became effective immediately:

   - New construction of public buildings in excess of 15,000 square feet and/or using over 50 kW peak electrical demand shall build to and achieve a minimum rating of "LEED™ Silver." In achieving its LEED™ rating, the project must achieve a minimum delivered energy performance standard of one half the U.S. energy consumption for that building type as defined by the U.S. Department of Energy.
   - New construction and renovation projects of public buildings between 5,000-15,000 square feet in size shall achieve a minimum delivered energy performance standard of one half the U.S. energy consumption for that building type as defined by the U.S. Department of Energy.
   - Renovations of public buildings in excess of 15,000 square feet and/or using over 50 kW peak electrical demand and comprising upgrades or replacement of two of the three major systems (HVAC, lighting, and plumbing), shall achieve a minimum rating of "LEED Silver" and a minimum delivered energy performance standard of one half the U.S. energy consumption for that building type as defined by the U.S. Department of Energy.
   - All other new construction, renovations, repairs, and replacements of state buildings shall employ cost-effective, energy-efficient, green building practices to the maximum extent possible.

   In addition to stipulating the above standards for buildings under the purview of the Governor, the executive order convened a “Public Schools Clean Energy Task Force” that was charged with making “recommendations to implement aggressive energy efficiency measures in all existing school buildings and in the construction of all new schools and school renovations, including adopting the same efficiency standards established for executive branch agencies in this order.”

2. **Process**
   In accordance with the executive order, the task force included representatives from the Public Schools Capital Outlay Oversight Task Force (PSCOOTF), Public School Facilities Authority (PSFA), Public Education Department (PED), Legislative Counsel Services (LCS), New Mexico School Boards Association, New Mexico Coalition of School Administrators, design and construction professionals, and other interested parties. Letters of invitation were sent from the Secretary of Energy, Minerals and Natural Resources Department (EMNRD). The list of members is attached as Appendix A-2.

   The Energy Conservation and Management Division (ECMD) of EMNRD organized and facilitated a total of five meetings. Through a series of presentations, brainstorming, problem exploration, and group discussion, the task force gained a common understanding of high performance building practices, identified existing barriers to building and maintaining high performance schools, and formulated proposals to address those barriers. During the first
meeting, the task force adopted the name “HiP Schools Task Force” as an expression of their objective of creating high performance school buildings. The task force identified five areas of exploration to determine how to achieve that aim. The following table summarizes the ideas that developed over the course of the meetings:

<table>
<thead>
<tr>
<th>Awareness/Education</th>
<th>Cost &amp; Payback</th>
<th>Operations &amp; Maintenance</th>
<th>Procurement/Project Delivery</th>
<th>Legal/Legislative/Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase an energy perspective with an educational perspective</td>
<td>Increase an energy perspective with an educational perspective</td>
<td>Determine value/cost of PSFA requiring maintenance contracts for 3 years: give time to stabilize systems</td>
<td>Address dealing with multiple buildings on campus &amp; potential site restrictions</td>
<td>Connect capital outlay &amp; maintenance</td>
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<tr>
<td>Improve knowledge level of HiP issues - professional development</td>
<td>Improve knowledge level of HiP issues - professional development</td>
<td>Evaluate soft payback: health quality of life, aesthetics; community; student performance</td>
<td>Keep HVAC systems simple - complexity of systems requires more expertise</td>
<td>Address Energy Efficiency vis-à-vis Adequacy Standards &amp; Zuni lawsuit</td>
</tr>
<tr>
<td>Establish a behavior programs with incentives</td>
<td>Establish a behavior programs with incentives</td>
<td>Address Staff issues: funding, retention/acquisition; seasonal/contract; rural districts' issues; skills/training</td>
<td>Address commissioning issue (PSFA currently doing enhanced T&amp;B)</td>
<td>Develop realistic timeline for implementation: legislative session; PSCOC award cycle; Zuni lawsuit</td>
</tr>
<tr>
<td>Integrate EE &amp; HiP goals in curriculum</td>
<td>Integrate EE &amp; HiP goals in curriculum</td>
<td>Employ life-cycle cost (LCC); use in value engineering; Connect capital outlay &amp; maintenance budgets</td>
<td>Include Maintenance as part of project planning</td>
<td>Prove it works: real data on student achievement &amp; cost savings</td>
</tr>
<tr>
<td>Increase awareness of utility bills &amp; classroom impact</td>
<td>Increase awareness of utility bills &amp; classroom impact</td>
<td>Plan for possible cost increase of 1-2%</td>
<td>Address funding formula that takes away money for energy savings</td>
<td>Need qualifications-based contractors: difficult to pre-qualify; need local contractors</td>
</tr>
<tr>
<td>Educate trades in new technologies</td>
<td>Educate trades in new technologies</td>
<td>Address cost of maintaining systems</td>
<td>Take advantage of PSFA oversight: data collection; recommended systems</td>
<td>Address cash balance distribution: to districts or state?</td>
</tr>
<tr>
<td>Educate owners &amp; other stakeholders</td>
<td>Educate owners &amp; other stakeholders</td>
<td>Address competing priorities with limited budgets</td>
<td>Address different perspectives on evap vs. refrigerated cooling (demo solar cooling)</td>
<td>Need more flexibility in procurement: address overall process: design-bid vs. CM @ risk</td>
</tr>
</tbody>
</table>
3. **Task Force Outcomes & Recommendations**

**Definition of High Performance School**

The terms “green”, “sustainable”, and “high performance” are all used to describe certain building characteristics that imply being better for the environment and for the people who occupy the buildings. The task force offers the following definition for high performance schools that is meant to also encompass the terms green and sustainable.

High Performance Schools provide the best educational building environment possible while striving to wisely use resources, including money, land, energy, water, and materials. The following components are required for high performance schools:

- Energy efficiency
- Indoor environmental quality, including:
  - Healthy (non-toxic) materials and finishes
  - Thermal comfort and control
  - Acoustical clarity and performance
  - Quality daylighting
- Water conservation
- Appropriate site selection and protection
- Design that enhances the unique aspects of the site, community, and culture
- Resource efficiency: functional to meet educational needs of intended occupants, as well as flexible to meet future uses
- Appropriate use of regional, recycled, and renewable materials.

The interaction of the above features is vital to a high performance school. Energy efficiency must be addressed in the context of the educational quality of the spaces. Use of materials should enhance the local culture and economy. Water and energy use reduction are symbiotic. How well the school functions to support the educational mission is not based on individual features, but on the integrated design of all the above.

Additionally, a high performance school is more than just the building. It is the product of both good design and construction and proper use and ongoing maintenance. The role of the building occupants is vital to realize the benefits of high performance schools. This requires owner and occupant education,
ongoing energy and performance measurements, and continuous evaluation and improvement. A high performance school also provides an educational opportunity to teach by example. As such, applicable features should be visible and instructive.

The executive order provided one basis for making a recommendation, that is, following the requirements of executive agency buildings. The task force acknowledges the importance of the goal of reducing energy consumption by 50% in all new construction and major renovations for public schools. Major renovations consist of upgrades or replacement of two of the major systems, including building envelope, HVAC, electrical, and plumbing. As a caveat to pursuing this goal, the LCS, legislative, PSCOC, and PSFA representatives note the state’s responsibility to abide by the rulings of the Zuni lawsuit to bring all New Mexico schools to adequacy.

The task force recognizes that there are many ways to achieve high performance schools and the 50% energy reduction goal. In assessing the requirement to use LEED, the consensus is that LEED is but one tool school districts may find helpful. Other tools include, but are not limited to, the Collaborative for High Performance Schools (CHPS) checklist, Energy Star and Portfolio Manager, integrated design including contractor participation, and commissioning.

The specifics of the task force recommendation to Governor Richardson follow.

**Implement a Pilot Program with a 50% Energy Reduction Goal**

- Assess the implementation of the energy reduction goal
- Use all new projects, including new construction, additions, and major renovations
  - over the next five years;
  - to include all levels of schools (elementary, middle, and high);
  - to cover diverse climates.
- Invest in training school boards, faculty, staff, and other occupants as to the direct benefit of energy conservation and high performance buildings on operational funds and student performance.
  - Put together a “road show” of presentations on the benefits of HiP Schools that could be given at the various School Board and Administrator conferences and workshops held every year as well as offered to districts for their own meetings.
  - Offer consulting assistance on:
    - integrated design,
    - life-cycle costing.
  - Develop guidelines for achieving the energy reduction goals, including lessons learned, that can be shared with other school districts, as well as, other state and local government entities.
  - Provide funding to offer application-based financial assistance for additional design fees required to maximize or advance energy conservation.
  - Provide funding to offer financial assistance for energy audits on existing buildings.
- Establish a benchmark for the 50% reduction goal.
  - Use EPA’s Target Finder to set initial energy benchmark.
  - Compare actual performance against both the benchmark and other local data, as applicable.
Assess and reevaluate the appropriateness and effectiveness of the benchmark and the goal and recommend changes accordingly.

- Incorporate features of high performance school into PSFA’s current school guidelines including relevant aspects of:
  - LEED-NC/LEED for Schools,
  - Collaborative for High Performance Schools (CHPS),
  - Commissioning, retro-commissioning,
  - Integrated design methodology.

- Measure results.
  - Install sub-meters as required to measure consumption:
    - at least by building (In some cases sub-metering by schools might be sufficient.),
    - by major end-use, as appropriate,
    - include automatic collection.
  - Using installed meters and/or sub-meters, track the post-occupancy energy use of new or renovated buildings on the state’s Facilities Information Management System (FIMS) and compare results to energy models,
    - preferably through an automated Energy Management System (EMS),
    - include Indoor Air Quality (IAQ) measurements for the enhanced learning environment.
  - Do Post Occupancy Evaluations (POEs)
    - after at least a year of occupancy
    - compare results against design intent, including energy use and daylighting models.

- Keep the task force intact as an ongoing steering committee for the pilot program.
  - Continue the discussion about how to achieve the above definition of high performance schools and incorporate vetted suggestions into the PSFA Guidelines.
  - Evaluate goals and achievements.
  - Make suggestions for continuous improvement of the pilot.

- Request operational funds to provide the education and support for school districts to implement this recommendation and capital outlay funds for additional design and construction costs.

- At the end of the pilot period, evaluate all the results and make recommendations for how to proceed with future projects. This includes assessing the energy benchmarking and monitoring process, the appropriateness of the energy reduction goal, and implementation of recommended high performance building standards.

Considerations for 2007 legislative session

- **Construction Manager as Contractor (CMc):** Allow this procurement method using a qualifications-based selection of a contractor. Currently the Design-Bid process is required on all but very large projects. This prevents the contractor from being part of the design team early in the project. By providing a mechanism for the contractor to be integrated into the project team early in design, the team can achieve more reliable cost information, do a better life-cycle cost analysis, make more informed choices, and assure better constructability. The whole-systems design approach is better served with the contractor’s early and ongoing participation.

- **Cash balances:** Remove disincentives for school districts to achieve aggressive energy efficiency goals by allowing schools to retain savings from energy efficiency in cash balances.
Non-legislative and Longer-term initiatives

- **Administration Funding:** Request executive branch support for design and construction costs associated with the pilot program, on a grant application basis.
- **Educational standards:** Work with PED to include energy consumption/high performance principles in curriculum standards.
- **Life-cycle costing:** Address disconnects between capital outlay & operations budgets so energy efficiency measures can be chosen based on a life-cycle cost basis.
- **Maintenance:** Ensure funding is available to properly maintain systems for ongoing energy efficiency, including staffing, training, and seasonal & contract work. Address issues specific to rural districts.
- **Awareness:** Increase understanding of HiP schools issues, including energy consumption, for all stakeholders (district personnel, school administrations, teachers, students, building professionals, and the public). In particular, hold a statewide conference that illuminates the issues and provides solutions.

Renewable Fuels Reduction
The executive order also asked the task force to address the public schools’ implementation of Executive Order 05-049. EO 05-049 deals with the use of renewable fuels in vehicles. The members of the HiP Schools task force, whose expertise is related to school buildings, not vehicles, felt that their experience and knowledge were not suited to this task and recommended that PED take on this responsibility. This should be facilitated through the Clean Energy Development Council (CEDC).

4. **ECMD Implementation Recommendations**

Pilot Demonstration Projects
To carry out the intent of the task force’s recommendations in a manner that is consistent with ECMD’s mission, workload, and staffing, ECMD recommends that we, in concert with PSFA and the HiP Schools Task Force, monitor four to five specific schools construction/renovation projects to use for the pilot demonstration. The task force recommends that the schools be chosen based on an expressed interest in participating. Districts might apply for participation in the pilot study through the existing PSCOC on-line capital outlay application process. That being said, we would ideally want a variety of projects by size, location, school type, and approach. Using the PSFA Guidelines as a baseline, possible approaches may include an energy target only approach, an energy target with full commissioning approach, a LEED Silver approach, and possibly one or two other variations. ECMD would provide technical assistance to these project teams as they develop their goals and strategies. ECMD and PSFA would verify that the energy models meet the reduction targets and would work with the participating school districts to have POEs performed. The districts would commit to track their energy usage via PSFA-FIMS. The HiP Schools Task Force would monitor the results of these projects and use them as the basis for future recommendations.

Outreach and Replication for Future Projects
In carrying out the above demonstration projects, one key purpose is to capture the lessons learned and expand the infrastructure of expertise in doing high performance building projects. That accumulated knowledge will then be used to refine and replicate these projects throughout New Mexico School Districts. ECMD, in collaboration with PED, PSFA, CID and the HiP Schools Task Force, would develop directed trainings for school district decision makers,
building professionals, schools operations and maintenance staff, and others that reflect the best practices of the pilots as well as improvements that stem from the project results. The goal is to have both adequate professional expertise throughout the state and standards and procedures that support high performance construction and renovation of all New Mexico’s schools.
5. **Appendix**
   A. Executive Order 2006-001
   B. List of Task Force Members
   C. Presentation at First Task Force Meeting
STATE OF NEW MEXICO ENERGY EFFICIENT GREEN BUILDING STANDARDS FOR STATE BUILDINGS

WHEREAS, the State of New Mexico is committed to improving the health of its employees and its citizens, increasing the production and use of clean energy sources, reducing waste, conserving water, and reducing greenhouse gas emissions, and desires to empower sustainable economic development;

WHEREAS, the Federal Government through programs fostered within many of its key agencies, numerous State governments as well as municipalities across the U.S. have adopted high performance green building principles through the incorporation of the U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) rating system into their building services;

WHEREAS, a recent study by the Lawrence Berkley National Laboratory completed the most definitive cost-benefit analysis of green buildings ever conducted and concluded that the financial benefits of green design are between $50 and $70 per square foot in a LEED building, more than 10 times the additional cost associated with building green. Additionally, the large positive impact on employee productivity and health gains suggests that green building has a cost-effective impact beyond just the utility bill savings;

WHEREAS, studies have indicated that student attendance and performance is higher in green school buildings;

WHEREAS, recognizing that a building’s initial construction costs represents only 20-30 percent of the building’s entire costs over its 30 to 40 year life, emphasis should be placed on the “life cycle costs” of a public building rather than solely on its initial capital costs; and

WHEREAS, the construction industry in the State of New Mexico represents a significant portion of our economy and a significant portion of the building industry is represented by small business and an increase in sustainable building practices will encourage and promote new and innovative small business development throughout the State.

NOW, THEREFORE, I, Bill Richardson, Governor of the State of New Mexico, declare that the State adopt specific standards to implement and facilitate the use of high performance energy efficient green building practices for all state-funded existing and new buildings throughout the State of New Mexico.

State Capitol • Room 400 • Santa Fe, New Mexico 87501 • 505-476-2200 • www.governor.state.nm.us
IT IS THEREFORE ORDERED that all Executive Branch state agencies, including the Higher Education Department, adopt the U.S. Green Building Council’s LEED™ rating system consistent with all applicable laws to achieve the following:

- New construction of public buildings in excess of 15,000 square feet and/or using over 50 kW peak electrical demand shall build to and achieve a minimum rating of “LEED™ Silver.” In achieving its LEED™ rating, the project must achieve a minimum delivered energy performance standard of one half the U.S. energy consumption for that building type as defined by the U.S. Department of Energy.
- New construction and renovation projects of public buildings between 5,000-15,000 square feet in size shall achieve a minimum delivered energy performance standard of one half the U.S. energy consumption for that building type as defined by the U.S. Department of Energy.
- Renovations of public buildings in excess of 15,000 square feet and/or using over 50 kW peak electrical demand and comprising upgrades or replacement of two of the three major systems (HVAC, lighting, and plumbing), shall achieve a minimum rating of “LEED Silver” and a minimum delivered energy performance standard of one half the U.S. energy consumption for that building type as defined by the U.S. Department of Energy.
- All other new construction, renovations, repairs, and replacements of state buildings shall employ cost-effective, energy-efficient, green building practices to the maximum extent possible; and

IT IS FURTHER ORDERED, that the General Services Department, in coordination with the Energy, Minerals and Natural Resources Department, the Construction Industries Division, and the New Mexico Chapter of the U.S. Green Building Council, shall develop criteria and a workable process for implementing this system; and

IT IS FURTHER ORDERED, that the General Services Department encourage private-sector building owners that lease to State agencies to comply with the same energy-efficiency performance standards required of State agencies in this Executive Order by offering preference points as determined by the Evaluation Committee for each lease RFP conducted under jurisdiction of the General Services Department; and

IT IS FURTHER ORDERED, that the Energy, Minerals, and Natural Resources Department (EMNRD) convene a “Public Schools Clean Energy Task Force” that shall be advisory in nature and shall make recommendations to implement aggressive energy efficiency measures in all existing school buildings and in the construction of all new schools and school renovations, including adopting the same energy efficiency standards established for executive branch agencies in this order. The Task Force shall also address the public schools’ implementation of Executive Order 05-049, Requiring the Increased Use of Renewable Fuels in New Mexico State Government. The Task Force shall consist of representatives from EMNRD, Public Education Department, New Mexico Coalition of School Administrators, New Mexico School Boards Association, Public School Facilities Authority, Public Schools Capitol Outlay Task Force, and other members as appropriate. The Task Force shall report to the Governor by August 1, 2006 on its findings and recommendations; and
IT IS FURTHER ORDERED, that the Local Government Division of the Department of Finance and Administration, evaluate and develop recommendations to ensure that the siting of public buildings, including schools, minimizes transportation-related energy usage; and

IT IS FURTHER ORDERED, that the Construction Industries Division (CID) and the Construction Industries Commission (CIC) pursue updating residential and commercial building codes to promote and encourage consumers to develop state-of-the-art cost-effective energy efficient buildings and, in cooperation with EMNRD, engage the active support and participation from the CID and CIC on green building outreach, training, and technical assistance efforts; and

IT IS FURTHER ORDERED, that all State agencies are encouraged to work cooperatively with one another to achieve the goals outlined in this executive order.

THIS ORDER supersedes any other previous orders, proclamations, or directives in conflict. This Executive Order shall take effect immediately and shall remain in effect until such time as the Governor rescinds it.

DONE AT THE EXECUTIVE OFFICE THIS 16TH DAY OF JANUARY, 2006

WITNESS MY HAND AND THE GREAT SEAL OF THE STATE OF NEW MEXICO

BILL RICHARDSON GOVERNOR

REBECCA VIGIL-GIRON SECRETARY OF STATE
## HiP Schools Task Force Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Position</th>
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<tbody>
<tr>
<td>Mark Anderson</td>
<td>NM School Board Association, Cimarron</td>
</tr>
<tr>
<td>Fermin Aragon</td>
<td>Construction Industries Division</td>
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<tr>
<td>Sharon Ball</td>
<td>Legislative Council Service</td>
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<tr>
<td>James Barfoot</td>
<td>NM School Board Association, Farmington</td>
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<tr>
<td>Robert Bittner</td>
<td>Public School Facilities Authority</td>
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<tr>
<td>Karen Leigh Cook</td>
<td>Green Building Task Force</td>
</tr>
<tr>
<td>Norm Gabel</td>
<td>Associated General Contractors</td>
</tr>
<tr>
<td>Gene Gant</td>
<td>NM School Board Association, Las Cruces</td>
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<tr>
<td>Nancy Gonzales</td>
<td>NM School Board Association, Questa</td>
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<tr>
<td>Robert Gorrell</td>
<td>Public School Facilities Authority</td>
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<tr>
<td>Howard Kaplan</td>
<td>US Green Building Council NM Chapter</td>
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<tr>
<td>Andre Larroque</td>
<td>Public School Facilities Authority</td>
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<tr>
<td>Bill Lewis</td>
<td>NM Coalition of School Administrators, Lovington</td>
</tr>
<tr>
<td>Rick Miera</td>
<td>Public Schools Capital Outlay Oversight Task Force</td>
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<tr>
<td>Don Moya</td>
<td>Public Education Department</td>
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<tr>
<td>Antonio Ortiz</td>
<td>Public Education Department</td>
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<tr>
<td>Joe Price</td>
<td>NM School Board Association, Aztec</td>
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<tr>
<td>Ron Rioux</td>
<td>Albuquerque Public Schools</td>
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<tr>
<td>David Robertson</td>
<td>Albuquerque Public Schools</td>
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<tr>
<td>Gail Ryba</td>
<td>Southwest Energy Efficiency Project</td>
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<tr>
<td>Tom Sullivan</td>
<td>NM Coalition of School Administrators</td>
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<tr>
<td>Paula Tackett</td>
<td>Legislative Council Service</td>
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B-1
1. Why are we here?

At the request of the Governor
To implement Executive Order 2006-0001

“State of New Mexico
Energy Efficient Green Building Standards for State Buildings”

2. Why the Executive Order?

Better use of state resources

Better use of state dollars

Supports Climate Change Initiative
2. Why the Executive Order?

Supports Clean Energy State

Executive Branch Building Requirements

- > 15,000 SF - > 50,000W peak
- New Construction or Renovations
  - LEED-NC Silver
  - ½ energy of typical U.S. school
- 5,000 – 15,000 SF
  - ½ energy of typical U.S.
- All other construction, renovations, repairs, & replacements
  - cost-effective energy-efficient practices to extent possible

3. Why LEED?

High Performance Schools (HiP Schools)

What is LEED-NC?

- Leadership in Energy & Environmental Design
- Green building rating system
- Design & construction tool
- Nationally recognized
- Third-party verification

LEED Categories

- Indoor Environmental Quality 23%
- Sustainable Sites 22%
- Energy & Atmosphere 27%
- Water Efficiency 8%
- Materials & Resources 20%

3. Why LEED?

Increase Energy Efficiency

The daylit schools used 22% to 64% less energy than non-daylit schools and the payback on all the new daylit schools was below three years.

Nicklas and Bailey, 1995
**3. Why LEED?**

**Improve Indoor Environmental Quality**
- **Indoor Air Quality** has a direct affect on attendance and performance.
- The **temperature range** most conducive to learning is 68° – 74°F.
- The **humidity range** most conducive to learning is 40-70%RH.
- Teachers should have the ability to control the classroom's physical environment.
- LEED-NC for Schools is being designed for use by K-12 schools to address issues such as student transportation and classroom acoustics.

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**4. Why HiP Schools?**

**Save on utility bills**

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**State Utility Expenditures**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabinet Level Agencies</td>
<td>$13,076,796</td>
</tr>
<tr>
<td>Universities</td>
<td>$24,709,629</td>
</tr>
<tr>
<td>Public Schools</td>
<td>$38,044,036</td>
</tr>
</tbody>
</table>

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**Where are New Mexico schools' $ going?**

- Athletics 23%
- Educational Materials 25%
- Utilities 48%
4. Why HiP Schools?

### Better Learning Environments

5. Why Better Learning Environments?

### Quotes

Studies indicate that the benefits of green schools are numerous:

- Green schools can save 40% or more on energy costs.
- Students in schools that rely primarily on daylighting perform up to 26% better on standardized tests than their counterparts in poorly lit schools.
- An estimated 17 million school days were lost in 1997 due to asthma. Taking steps to address air pollutants leading to asthma would mean higher school attendance.

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### Quotes

- Between the ages of 5 and 18, a student may spend 14,000 hours inside a school building.
  
  Environmental Defense Fund, 1999

- Children are more severely affected by air pollution than adults because of their narrow airways, more rapid rate of respiration, and the fact that they inhale more pollutants per pound of body weight.

  American Academy of Pediatrics
Eight benefits to HiP Schools

- Increased student performance
- Increased student/staff attendance
- Increased teacher satisfaction
- Reduced operational cost
- Reduced liability exposure
- Reduced impact on the environment
- Opportunity for the school building as a teaching tool
- Support community values

The ABCs of HiP Schools

How do we get there?

Assess Current Situation

Identify Barriers & Opportunities

Develop Recommendations

Resources

- www.usgbc.org
- www.eefpi.org
- www.chps.net
- http://www.sbicouncil.org/highperformanceschoolbuildings.htm