



## 2015-2016 District Nominee Presentation Form

### CERTIFICATIONS

---

#### District's Certifications

The signatures of the district superintendent on the next page certify that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the superintendent's knowledge.

1. The district has been evaluated and selected from among districts within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
2. The district is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
3. OCR has not issued a violation letter of findings to the school district concluding that the nominated school district has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
4. The U.S. Department of Justice does not have a pending suit alleging that the school district has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
5. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school district in question; or if there are such findings, the state or school district has corrected, or agreed to correct, the findings.
6. The district meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

### U.S. Department of Education Green Ribbon Schools 2015-2016 District Sustainability Award

Name of Superintendent: Mr. Kelly Clenchy  
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

District Name: Littleton Public Schools  
(As it should appear on an award)

Address: 56 King Street, Littleton, MA 01460

Telephone: 978-540-2506 Fax: 978-540-2506

Web site/URL: [www.littletonps.org](http://www.littletonps.org) E-mail: [kclenchy@littletonps.org](mailto:kclenchy@littletonps.org)

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.



*YKR Clancy*  
\_\_\_\_\_  
(Superintendent's Signature)

Date: 2/1/2016

\_\_\_\_\_  
(Superintendent's Signature)

**Nominating Authority's Certifications**

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The district is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
2. The district meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Massachusetts Department of Elementary and Secondary Education

Name of Nominating Authority: Mitchell D. Chester  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

*Mitch D Chester*

Date: 1/1/2016

\_\_\_\_\_  
(Nominating Authority's Signature)

**SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS**

Provide a coherent summary that describes how your district is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments, being sure to cover equally all three Pillars. Then, include concrete examples for work in every Pillar and Element. Only districts that document progress in every Pillar and Element can be considered for this award.

**SUBMISSION**

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to [ed.green.ribbon.schools@ed.gov](mailto:ed.green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509  
Expiration Date: March 31, 2018



**Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

The Littleton Public School District (LPS) has been working diligently to reduce our energy consumption and to educate our students and staff about the benefits of living a healthy and environmentally-friendly lifestyle. In June of 2008 the School Committee of the Littleton Public Schools adopted an Energy Management and Conservation Policy. To facilitate and implement an energy management and conservation program the school committee entered into a four year contract with Cenergistic of Dallas, Texas. The foundation of the work began with the tracking of all usage through Energy CAP Professional software, which also offers a free service for community members to track their home or business energy usage. The town of Littleton was also designated as a Massachusetts Green Community, a designation and grant program to recognize and finance energy efficiency and renewable energy projects, such as reducing energy in municipal and school buildings or establishing power purchase agreements.

To help promote energy conservation the school community has become an Energy Star Partner and hired a district energy manager (almost a decade ago). As a result of the district's efforts over the past seven years, they have reduced their electricity and natural gas usage dramatically. They estimate a total reduction of 6,403 metric tons of CO<sub>2</sub>, equivalent to 1,334 passenger cars not driven for one year and 164, 179 tree seedlings planted and grown for ten years. The estimated cost savings equal \$1,521,601, a 34.6% cost avoidance. LPS staff have been instrumental in reducing energy through their behaviors, removal of classroom appliances, and use of google docs. Students have now assumed the lead role in directing the district's conservation efforts, as Green Teams at the middle and high schools levels assess our energy usage, look for opportunities to eliminate waste, and plan and implement energy savings initiatives.

LPS incorporates opportunities for students to learn about the environment and the importance of resource conservation at every grade level. Activities include: the engineering club installing insulated thermostats in the high school in order to mitigate observed energy waste; middle school and high school students weighing solid waste and determining the rate of reduction that has resulted from the recycling and composting to then include as a task in a mathematics lessons; students created a wiki post on their ecological footprint and connect it to international issues, such as deforestation in the Amazon; and the fourth grade unit on water being followed by a class trip to the watershed and electric/water department. The high school also offers an environmental science course.

Both middle and high Schools have established Green Teams that offer student learning opportunities through school-wide gardening and composting programs. Cafeteria workers collect waste from food preparation and students take the waste to the composting bins located at our middle and high school. Students initially researched and Green Teams are currently working on projects to reduce or eliminate idling at school and to reduce plastic water bottle consumption by instituting a reusable water bottle program and installing a water bottle refilling station that measures the number of plastic water bottles saved. Green Teams are also working with our school's National Honors Society chapter to establish Green Teams at both of our elementary schools, Shaker Lane (K-2) and Russell Street (3-5).

Students and staff also have a wide range of opportunities to engage in healthy living, including healthy dietary options offered at our schools' cafeterias and athletic opportunities offered to students at every grade level and to school staff as well. Over the past year, Littleton High School has expanded its health and wellness offerings to include a yoga class and school lunches offer a salad bar, featuring greens and other vegetables grown by students in our on-site greenhouse. The middle and high School green teams have run school-wide assemblies to educate all students and staff about the group's ongoing efforts and projects. The district has also implemented policies to eliminate the usage of toxins throughout our schools and public buildings, including switching to non-toxic, environmentally friendly cleaning agents and pesticides. The Littleton Public School District works closely with the Littleton Sustainability Committee to research and implement environmental savings projects.

## ED-GRS District Nominating Authority Application

Littleton Public School District (LPS)

**District Contact Information:**

District Name: Littleton Public Schools

Street Address: 56 King Street

City: Littleton                      State: MA                      Zip: 01460

Website: [www.littletonps.org](http://www.littletonps.org)/ <http://littletonenergy.weebly.com>/ Facebook Page: LHS Green Team

Superintendent Name: Mr. Kelly Clenchy

Superintendent Email Address: [kclenchy@littletonps.org](mailto:kclenchy@littletonps.org) Phone Number: 978-540-2506

Lead Applicant Name (if different): Dave Riley

Lead Applicant Email: [driley@littletonps.org](mailto:driley@littletonps.org) Phone Number: 978-486-8938

|   |   |  |
|---|---|--|
| Number of schools at each Level<br>[ 2 ] Elementary (PK - 5 or 6)<br><b>Shaker Lane (K-2), Russell Street (3-5)</b><br>[ 1 ] Middle (6 - 8 or 9) <b>Littleton Middle (6-8)</b><br>[ 1 ] High (9 or 10 - 12) <b>Littleton High School (9-12)</b> | How would you describe your district?<br><input type="checkbox"/> Urban<br><input checked="" type="checkbox"/> Suburban<br><input type="checkbox"/> Rural | Is your district among the largest 50 districts in the country?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
|   |   | Total Enrolled:<br>1,596   |
| Does your district serve 40% or more students from disadvantaged households?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   | Receiving FRPL 9.3%<br>Limited English proficient 0.5%<br>Students with Disabilities 21.6%  | Graduation rate: 98%<br>Attendance rate: 96%   |

1. Is your district participating in a local, state or national program, such as EPA ENERGY STAR Portfolio Manager, EcoSchools, Project Learning Tree, or others, which asks you to benchmark progress in some fashion in any or all of the Pillars?

Yes  No Program(s) and level(s) achieved: Energy Star Partner

2. Has your district received any awards for facilities, health or environment?

Yes  No Award(s) and year(s) U.S. Environmental Protection Agency's (EPA's) Energy Star

The Littleton Public School District has been working diligently to reduce our energy consumption and to educate our students and staff about the benefits of living healthily and environmentally-friendly. In June of 2008 the School Committee of the Littleton Public Schools adopted an Energy Management and Conservation Policy. To facilitate and



implement an energy management and conservation program the school committee entered into a four year contract with Cenergistic of Dallas, Texas. One of the most important things we do, in order to manage and conserve our energy, is track all of our usage. We use Energy CAP Professional software from EnergyCap, Inc. As part of their program, they offer a free service (GreenQuest) for any community member to track their home or business energy usage.

To help promote energy conservation the school community has become an Energy Star Partner. As a result of our efforts over the past seven years, we have reduced our electricity and natural gas usage dramatically. Dave Riley has been serving as LPS's Energy Manager since the position's creation in 2007. Since implementing our energy savings program in 2008, we have reduced our electricity consumption by more than 30%. LPS staff has been instrumental in reducing energy consumption by removing all appliances in classrooms and alternatively sharing them in a centralized location. Students, however, have now assumed the lead role in directing our district's conservation efforts, as Green Teams at the Middle and High School levels assess our energy usage, look for opportunities to eliminate waste, and plan and implement energy savings initiatives.

LPS incorporates opportunities for students to learn about the environment and the importance of resource conservation at every grade level. Students and staff also have a wide range of opportunities to engage in healthy living, including healthy dietary options offered at our schools' cafeterias and athletic opportunities offered to students at every grade level and to school staff as well.

The district has implemented policies to eliminate the usage of toxins throughout our schools and public buildings, including switching to non-toxic, environmentally friendly cleaning agents and pesticides.

Both Middle and High Schools have established Green Teams that offer student learning opportunities through school-wide gardening and composting programs. Cafeteria workers collect waste from food preparation and students take the waste to the composting bins located at our Middle and High School. Students initially researched and Green Teams are currently working on projects to reduce or eliminate idling at school and to reduce plastic water bottle consumption by instituting a reusable water bottle program and installing a water bottle refilling station that measures the number of plastic water bottles saved. Green Teams are also working with our school's National Honors Society chapter to establish Green Teams at both of our elementary schools, Shaker Lane (K-2) and Russell Street (3-5).

Over the past year, Littleton High School has expanded its health and wellness offerings to include a yoga class and school lunches offer a salad bar, featuring greens and other vegetables grown by students in our on-site greenhouse. The Middle and High School Green Teams have run school-wide assemblies to educate all students and staff about the group's ongoing efforts and projects. The Littleton Public School District works closely with the Littleton Sustainability Committee to research and implement environmental savings projects.

## **Pillar I: Reduced Environmental Impact and Costs**

### **Energy**

The Littleton Public School began its Energy Conservation Program in July of 2007 and has since drastically reduced our energy consumption and spending. The following data reflects LPS's energy reduction between July of 2007 and December 2015:



**Energy Type: Electric Units: KWH**

|  | <b>Use</b> | <b>Cost</b> |
|--|------------|-------------|
| Estimated Use & Cost Without Energy Management | 21,899,329 | \$2,452,179 |
| Actual Use & Cost With Energy Management       | 15,145,677 | \$1,696,389 |
| Cost Avoidance %                               | 30.8%      | 30.8%       |
| Cost Avoidance \$                              | 6,753,652  | \$755,790   |

**Energy Type: Natural Gas Units: THERM**

|  | <b>Use</b> | <b>Cost</b> |
|--|------------|-------------|
| Estimated Use & Cost Without Energy Management | 1,386,795  | \$1,809,320 |
| Actual Use & Cost With Energy Management       | 809,623    | \$1,054,157 |
| Cost Avoidance %                               | 41.6%      | 41.7%       |
| Cost Avoidance \$                              | 577,172    | \$755,163   |

**Energy Type: Water Units: KGAL**

|  | <b>Use</b> | <b>Cost</b> |
|--|------------|-------------|
| Estimated Use & Cost Without Energy Management | 17,573     | \$137,109   |
| Actual Use & Cost With Energy Management       | 17,375     | \$126,461   |
| Cost Avoidance %                               | 1.1%       | 7.8%        |

|                   |     |          |
|-------------------|-----|----------|
| Cost Avoidance \$ | 198 | \$10,648 |
|-------------------|-----|----------|

**Energy Type: Facility Energy & Cost Totals Units: MMBTU**

|   | Use            | Cost               |
|---|----------------|--------------------|
| <b>Estimated Use &amp; Cost Without Energy Management</b> | <b>213,422</b> | <b>\$4,398,608</b> |
| <b>Actual Use &amp; Cost With Energy Management</b>       | <b>132,654</b> | <b>\$2,877,007</b> |
| <b>Cost Avoidance %</b>                                   | <b>37.8%</b>   | <b>34.6%</b>       |
| <b>Cost Avoidance \$</b>                                  | <b>80,768</b>  | <b>\$1,521,601</b> |

**Cumulative Greenhouse Gas Reduction**

Energy Reduction Impact: 6,403 metric tons of CO<sub>2</sub> (80,772 MMBTU), equivalent to the following:

- 1,334 Passenger cars not driven for one year
- 164,179 Tree seedlings planted and grown for 10 years

**Energy Cont.**

- Teachers ensure that the lights are turned off, blinds are closed, and computers and other electronics are powered off. Additionally, prior to school vacations, teachers are reminded to unplug all devices from outlets. Our energy manager checks to ensure electricity shut down and reports back to teachers on their performance.
- In the Spring of 2015, the high school Engineering Club has insulated thermostats at the high school in order to mitigate observed energy waste.
- Google Drive/ technology implemented in many classrooms and administratively in order to save paper.
- Single-stream recycling to reduce waste.
- The Littleton Public School works closely with the Littleton Sustainability Committee to research and implement environmental savings projects, which currently includes gathering bids from solar energy providers to replace and/or supplement electricity with solar energy captured on school grounds.

**Water and Grounds**

- The district has implemented policies to eliminate the usage of toxins throughout our schools and public buildings, including switching to non-toxic, environmentally friendly cleaning agents and pesticides.
- Domestic water supplied by Littleton Light, Electric, and Water.
- The Green Teams are working on an initiative to reduce and eventually eliminate plastic water bottle consumption at the schools by instituting a reusable water bottle program and installing a water bottle refilling station that



measures the number of plastic water bottles saved. The High School Green Team has set the goal of eliminating the sales of all plastic water bottles at the high school by the end of the 2016-17 school year.

- Middle school students learn about issues associated with disposable water bottles and about the environmental cost of single-serving beverages in general. As part of the middle school curriculum, students watch Beth Terry's animated short film *The Story of Bottled Water* (Storyofstuff.org)

### **Waste, Hazardous Waste**

- Student teams responsible for collecting recycling from each classroom and office at the end of each school day
- Student and teacher teams wrote a grant and were awarded funds to design and build composting bins at each of the district's schools.
- Composting programs at both High School and Middle School. While the High School composts pre-consumer food waste, the Middle School composting program now includes post-consumer waste. Students have been and continue to learn which foods they can compost after eating lunch. As Middle School students move to the High School, the post-consumer practice will also move to the High School.
- As part of the community service learning projects at LMS, students have started a composting crew. Students from Health Club and the Green Team made the bins in the spring of 2016. Sign ups to supervise the composting during lunch are open to anyone in the school that is interested. Students also sign up to turn the compost on a weekly basis during the fall and spring.
- The Middle and High School Green Teams are in the planning process of an initiative to weigh solid waste and determine the rate of reduction that has resulted from our current single-stream recycling and composting programs. Students plan to include elementary school students and incorporate the task into mathematics lessons.
- Custodial cleaning products have been changed to include only non-toxic, environmentally friendly cleaners that are certified by the Massachusetts Operational Services Division.

### **Transportation**

- Green Teams have established idling reduction programs at all schools. Students obtained materials, such as No Idling signs from the Commonwealth of Massachusetts Department of Environmental Protection Program's Green Team.
- The proximity of elementary, middle, and high schools reduces driving for parents dropping off and picking up students from multiple schools.
- All district vehicle purchases meet high fuel efficiency standards.
- Students who live less than two miles from the school they attend are provided with safe routes and are encouraged to walk to school.

## **Pillar 2: Improve the health and wellness of students and staff**

Littleton Public Schools has improved the health and wellness of our students and staff by eliminating the use of toxic and environmentally destructive cleaning agents and pesticides. Temperature and air quality is measured in each of the buildings and each building is equipped with regulation fire and carbon monoxide detectors.

### **Insect and Pest Management**

- Since removing all refrigerators and other appliances from individual classrooms, which was originally undertaken to reduce energy consumption, evidence of pests and insects, mainly mice and ants, has significantly decreased.
- Custodial staff switched to non-toxic pest and insect solutions to treat isolated areas that show evidence of pest or insect presence.
- Composting buildings are strategically set away from buildings to avoid pest and insect issues.

### **Contaminant Controls and Indoor Air Quality**

- Carbon Monoxide monitors are installed, tested, and otherwise maintained throughout each LPS building.
- Smoking is prohibited in all LPS buildings.

### **Asthma Control**

- LPS students diagnosed with asthma have individualized asthma plans devised by their personal physicians. LPS shares asthma plans with staff members and works to reduce and/or eliminate common asthma triggers throughout its buildings.

### **Moisture Control**

- Custodial staff is trained to inspect for signs of moisture buildup in LPS buildings.
- Snow removal from building roofs is kept up by custodial staff in order to avoid moisture issues.

### **Chemical Management**

- Littleton High School is the only LPS school building that houses science labs equipped with chemicals. Consequently, LHS science labs have a pH neutralization system in place to neutralize lab experiment byproducts.
- Toxic and environmentally harmful cleaning agents used throughout the LPS buildings were replaced with non-toxic, environmentally friendly products.

### **Nutrition and Fitness**

The Littleton Public School's Physical Education and Wellness curriculum uses the Massachusetts Health Frameworks as a guide. The program is designed to enable students to learn and practice the skills necessary to deal with all life situations in a healthy and responsible manner during and beyond their school years. Students will also gain an appreciation of physical activity in helping to maintain a healthy lifestyle. Elementary students take a bi-weekly gym class and daily recess. Students at LMS have Health/Wellness and PE class twice a week this allows students to have 4 class periods during the week in which they engage in physical activity. Students at LHS are required to take a semester of gym class each year and a full year of Health class during their All students in Health/Wellness engage in some sort of physical activity for the first 15 minutes of class, activities range from yoga, fitness walking, aerobics, circuit training, and more. Students then have a health lesson that for the last 30 minutes.

- Fit for Life program instituted in 2015.
- Yoga classes offered to students as a course and to staff as a professional development opportunity
- CPR certification graduation requirement
- Green Team Garden to Table program. Using our onsite greenhouse during the winter and outside gardens in the warmer weather, Green Team students organically grow greens and other vegetables, which are served to students in the salad bar that is available during lunch

## **Pillar 3: Effective Environmental and Sustainability Education**

Professional development and extended advisory time has emphasized healthy living presentations, including:

- LMS Green Team Presentation
- [LHS Green Team Presentation](#)
- [Certified Nutritionist O'Meara's presentation](#)
- Managing Stress Professional Development

- [Marion Stoddart's Work of 1000 presentation](#) (scheduled for 3/30/16)

Environmental education is incorporated into each grade level's curriculum. For example, students at the elementary levels are introduced to the practice of recycling, learn which materials can be recycled, and are expected to apply their learning and recycle in throughout the school. At the after school program, Tigers' Den, elementary students learn which materials can be composted and compost their compostable snacks. They use the compost in the school's garden, which the kids help to plant and maintain, and whenever possible, reap the harvest. The Russell Street School Student Council is currently working on activities to promote recycling at school. Elementary curriculum includes nonfiction articles on the oceans, rainforests, trees, Earth Day. A unit on Water includes learning related to water quality and the 4th grade visits the Nashua River Watershed Association and learns the story of how Marion Stoddart fought to clean up the river. The 4th grade also takes a field trip to the Littleton Electric, Light, and Water Department and learns about the distribution of energy source throughout the town. The 4th grade social studies curriculum includes a lesson on the Colorado River and the many communities who share the water. 2nd graders at Shaker Lane study various animal habitats and learn how animals live in their environments and how they can be destroyed by human behavior. Each level has articles about environmental topics like conservation, recycling, endangered species, and protecting the environment.

Students at the middle school read an article on the impact of plastic water bottles on the environment as part of a reading comprehension lesson, and classroom libraries feature books about climate change and the environment. The LMS curriculum includes a lesson in which students create a Wiki post on their ecological footprint. They take a test online and it calculates "how many Earths" their lifestyle uses. Then, they look at deforestation in the Amazon and talk about sustainability. Middle school students also learn about Heifer International and their environmental work, and then take a field trip to Overlook Farm. Students look at environmental issues in various countries around the world as part of our World Geography curriculum.

Littleton High School students can elect to take an Environmental Science course, which covers topics including biodiversity, use of fossil fuels and alternative energy, toxic waste and nuclear power, and the portrayal of environmental issues in the media (the myth of environment "versus" economy, for example. All LHS students are exposed to lessons on environmental issues throughout the curriculum. In Chemistry, for example, including nuclear reactions, acid/base chemistry, and concentration (ppm of toxins in water, for example). In Graphic Arts, students design and ad campaign, in which they create a mock ad campaign addressing environmental conservation. The history curriculum includes lessons on the near extinction of the buffalo, environmental concerns worldwide, and the development of the Environmental Movement post WWII. Creative Writing's reading list includes Into the Wild and English classes include nonfiction articles related to environmental concerns such as Jennifer Price's "The Plastic Pink Flamingo: A Natural History." The French III textbook includes a unit on environmentalism that includes informational readings on French programs to reduce waste and clean up the environment. Teachers throughout the building reuse photocopies of articles, packets, and other supplementary texts. Many teachers are providing previously printed material online through technologies such as Google Classroom, Vocabulary.com, etc.

- The Middle and High School Green Teams have run school-wide assemblies to educate all students and staff about the group's ongoing efforts and projects.
- This upcoming spring, Littleton High School will host an assembly featuring Marion Stoddart, who will address students and staff as she presents the ground-breaking documentary, *Work of 1000*. In addition to Stoddart's presentation, we will be granted licensing rights for *Work of 1000* to be used for future educational purposes at Littleton Public Schools.
- Freshman and AP Biology courses
- Health and fitness course requirements for all students
- Ms. Perry's Wellness Committee

 **Dr. Mark Branco**  
@LMSchool

 Unfollow

**Littleton Middle School students building composting bins and later composting post-consumer waste from lunches.**

Wyatt & Payson make sure they are composting correctly at the end of lunch.



**Littleton High School's composting bins constructed by high school students and teachers at the beginning of the 2015-16 school year to compost refuse from lunch preparation.**



Example of monthly energy report generated by Dave Riley, LPS's Energy Manager, to all faculty and staff.

**Littleton Public Schools Energy Conservation Program**

David Riley, Energy Manager

Through December 14, 2015

**Cumulative Cost Avoidance**

|                      |             |
|----------------------|-------------|
| Expected Energy Cost | \$4,398,610 |
| Actual Energy Cost   | \$2,877,007 |
| Program Savings      | \$1,521,603 |
| Percent Savings      | 34.6%       |
| Other Savings        | \$2,123     |
| Total Savings        | \$1,523,726 |



**Expected Energy Cost**  
 Anticipated expense without energy management.  
 Base year usage after adjustments for such variables as changes in weather, equipment, schedules, occupancy and prices.

**Actual Energy Cost**  
 Actual utility costs for electricity, gas, water, sewer, etc. obtained directly from bills.

**Program Savings**  
 The difference between Expected and Actual Cost, calculated in accordance with the International Performance Measurement & Verification Protocol. Does not include savings attributable to reduced equipment maintenance and replacement costs and other collateral benefits. These savings can increase the program savings up to 20%.

**Other Savings**  
 Additional documented savings attributable to Program activities but not the direct result of usage reductions, such as rebates, refunds, tariff changes, etc.

**Cumulative Greenhouse Gas Reduction**

|  |              |                                 |
|--|--------------|---------------------------------|
| <b>Energy Reduction Impact:</b>            | 80,772 MMBTU | 6,403 equiv. metric tons of CO2 |
| <hr/> This is equivalent to the following: |              |                                 |
| Passenger cars not driven for one year:    | 1,334        |                                 |
| Tree seedlings grown for 10 years:         | 164,179      |                                 |

**LPS's Energy Management and Conservation Policy**

As the School Committee of the Littleton Public Schools, we believe it to be our responsibility to ensure that every effort is made to conserve energy and natural resources while exercising sound financial management. The implementation of this policy is the joint responsibility of the board members, administrators, teachers, students and support personnel. Its success is based on cooperation at all levels.

The district will maintain accurate records of energy consumption and cost of energy and will provide information to the local media on the goals and progress of the energy conservation program. The principals will be accountable for energy management on their campus with energy audits being conducted and conservation program outlines being updated. Judicious use of the various energy systems of each campus will be the joint responsibility of the principal and head custodian to ensure that an efficient energy posture is maintained on a daily basis.

To ensure the overall success of the energy management program, the following specific areas of emphasis will be adopted:

1. All district personnel will be expected to contribute to energy efficiency in our district. Every person will be expected to be an "energy saver" as well as an "energy consumer."
2. Energy management will be made part of the superintendent's and the principal's annual evaluation.
3. Administrative Energy Guidelines will be adopted that will be the "rules of the game" implementing our energy program.

In order to maintain a safer and healthier learning environment and to complement the energy management program, the Superintendent and Energy Manager shall develop and implement a preventive maintenance and monitoring plan for its facilities and systems, including HVAC, building envelope, and moisture management. District personnel are expected to provide leadership in developing a realistic energy ethic and awareness of energy needs and costs. The Superintendent and the Energy Manager shall develop short and long range strategies in the areas of facilities management and preventive maintenance.

*Adopted: June 19, 2008*