

Budget

Wheelersburg Local (049668) - Scioto County - 2014 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (179)

U.S.A.S. Fund #:

[Plus/Minus Sheet \(opens new window\)](#)

Purpose Code	Object Code	Salaries 100	Retirement Fringe Benefits 200	Purchased Services 400	Supplies 500	Capital Outlay 600	Other 800	Total
Instruction		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support Services		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Governance/Admin		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prof Development		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Family/Community		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Safety		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Facilities		32,362.00	0.00	12,000.00	114,526.00	0.00	0.00	158,888.00
Transportation		0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>		32,362.00	0.00	12,000.00	114,526.00	0.00	0.00	158,888.00
<b>Adjusted Allocation</b>								0.00
<b>Remaining</b>								-158,888.00

Application

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Applicants shall respond to the prompts or questions in the areas listed below in a narrative form.

A) APPLICANT INFORMATION - General Information, Experience and Capacity

1. Project Title: Illuminate For Less

2. Executive summary: Provide an executive summary of your project proposal and which goal(s) in question 9 you seek to achieve. Please limit your responses to no more than three sentences.

This project will reduce spending through efficient scheduling of lighting systems and reduced electrical consumption resulting in reduced utility bills. Being able to schedule, monitor and control this new efficient LED lighting system means that lighting is not on when and where it is not needed. LED lighting operates at a fraction of our existing metal halide fixtures and lamps.

1585 3. Total Students Impacted:

4. Lead applicant primary contact: - Provide the following information:

First Name, last Name of contact for lead applicant: Mark Knapp

Organizational name of lead applicant: Superintendent, Wheelersburg Local School District

Unique Identifier (IRN/Fed Tax ID): 049668

Address of lead applicant: 620 Center Street, P.O. Box 340 Wheelersburg, Ohio 45694

Phone Number of lead applicant: 740-574-8484

Email Address of lead applicant: mark.knapp@wheelersburg.net

5. Secondary applicant contact: - Provide the following information, if applicable:

First Name, last Name of contact for secondary applicant: George Grice

Organizational name of secondary applicant: Treasurer, Wheelersburg Local School District

Unique Identifier (IRN/Fed Tax ID): 049668

Address of secondary applicant: 620 Center Street, P.O. Box 340 Wheelersburg, Ohio 45694

Phone number of secondary applicant: 740-574-8484

Email address of secondary applicant: george.grice@wheelersburg.net

6. List all other participating entities by name: Provide the following information for each additional participating entity, if applicable: Mention First Name, Last Name, Organizational Name, Unique Identifier (IRN/Fed Tax ID), Address, Phone Number, Email Address of Contact for All Secondary Applicants in the box below.

N/A

7. Partnership and consortia agreements and letters of support: - (Click on the link below to upload necessary documents).

\* Letters of support are for districts in academic or fiscal distress only. If school or district is in academic or fiscal distress and has a commission assigned, please include a resolution from the commission in support of the project.

\* If a partnership or consortium will be established, please include the signed Straight A Description of Nature of Partnership or Description of Nature of Consortium Agreement.

UploadGrantApplicationAttachment.aspx

8. Please provide a brief description of the team or individuals responsible for the implementation of this project including relevant experience in other innovative projects. You should also include descriptions and experiences of partnering entities.

Darin Porter, Director of Operations, Safety & Transportation at Wheelersburg Local Schools, 15 years managing personnel and projects for the District. Previous project administration: Responsible for P-12 school construction project completed in 2008. He is a certified Building Operator. Dwayne Johnson, West End Electric Company, Consultant & Certified Electrician, has more than ten years of experience assisting customers with energy conservation projects. Mick Frazier, Wheelersburg Schools Maintenance Department, 20 years of experience in project management and implementation. He is a certified Building Operator. Chris Mounts, Wheelersburg Schools Maintenance Department, 15 years of experience in project implementation and facility maintenance. He is a certified Building Operator. Gary Gleim, Wheelersburg Schools Custodial Department, 25 years of experience in facility maintenance and operations. He is a certified Building Operator. Katherine Curry, American Electric Power, Grid Smart Implementation Consultant

B) PROJECT DESCRIPTION - Overall description of project and alignment with Outcomes

9. Which of the stated Straight A Fund goals does the proposal aim to achieve? - (Check all that apply)

Student achievement

Spending reductions in the five-year fiscal forecast

Utilization of a greater share of resources in the classroom

10. Which of the following best describes the proposed project? - (Select one):

New - never before implemented

Existing and researched-based - never implemented in your district or community school but proven successful in other educational environments

Mixed Concept - incorporates new and existing elements

Enhancing/Scale Up - elevating or expanding an effective program that is already implemented in your district, school, or consortia partnership

11. Describe the innovative project.

This project will allow the district to replace existing metal halide light fixtures and lamps with energy conserving LED fixtures and lamps. Existing fixtures and lamps are inefficient, waste energy and are costly to operate. The District is forced to reduce lighting usage by not using some lights or reducing the time others were in use. This reduction impacts overall building safety and security for students, staff and community. For this project the District will be able to use existing poles for parking lot lighting and some interior fixtures/ wiring infrastructure which will reduce the cost of implementation of the project. The plan is to replace pole lights with LED fixtures, building wall packs with LED fixtures, flood lights with LED fixtures, and interior corridor lights with LED lamps. In order to effectively manage the lighting systems, a centralized control system would also be installed that will provide the capability to control, configure, monitor and report on the lighting system for maximum energy efficiency and productivity. The District currently uses a facilities scheduling program to manage the use of building spaces and provides services like HVAC and lighting to those spaces based on occupancy, especially for after-hours building use. We are equipped to efficiently manage our resources and it is an established practice. However, when the fixtures themselves are inefficient, management of the resources has a limited savings potential. LED technology is a high-performance, high-efficiency, long-life solution with outstanding performance results. The District completed a test installation of LED fixtures at our transportation facility over the past summer with satisfactory results. The District has improved the lighting at that facility and has reduced utility bills. A process for making these changes has been established and the District is fully able to implement this project based on the test facility project. This project can be managed and installed with existing District staff with the assistance of a certified electrical consultant.

12. Describe how it will meet the goal(s) selected above. - If school/district receives school improvement funds/support, include a brief explanation of how this project will advance the improvement plan.

How it will meet goal selected in 9: This project will reduce spending through better scheduling of lighting systems and reduced electrical consumption which will result in reduced utility bills. Being able to schedule, monitor and control this new efficient lighting system means that lighting is not on when and where it is not needed. LED lighting operates at a fraction of our existing metal halide fixtures and lamps. For example, the metal halide wall packs consume 196 watts of electricity compared to 56 watts for the LED wall packs while they are in operation. The metal halide pole lights consume 1,096 watts while in operation compared to 240 watts for the LED pole lights. Pole lights will have an occupancy sensor which detects motion and decreases lighting levels up to 70% during periods of inactivity. Utility bills will be reduced as a result.

**C) SUSTAINABILITY - Planning for ongoing funding of the project, cost breakdown**

13. Financial Documentation - All applicants must enter or upload the following supporting information. Responses should refer to specific information in the financial documents when applicable:

a. Enter a project budget

b. Upload the Straight A Financial Impact Template forecasting the expected changes to the five-year forecast resulting from implementation of this project. If applying as a consortia or partnership, please include the five-year forecasts of each school district, community school or STEM school member for review.

c. If subsection (b) is not applicable, please explain why, in addition to how the project will demonstrate sustainability and impact.

Please see uploaded project budget.

14. What is the total cost for implementing the innovative project?

158,888.00 \* Total project cost

\* Provide a brief narrative explanation of the overall budget. The narrative should include the source and amount of other funds that may be used to support this concept (e.g., Title I funding, RttT money, local funding, foundation support, etc.), and provide details on the cost of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.).

The budget includes 205 LED light fixtures and/or LED lamps to replace existing metal halide lights for \$114,526 in material costs. The total budget figure includes labor costs of \$32,362.00 which includes aerial lift equipment, and labor hours for working at parking lot poles. Installation of the centralized lighting control system, along with training and setup is estimated at \$12,000.00. Existing staff will be used for any additional labor associated with the project and will not be an additional cost.

15. What new/recurring costs of your innovative project will continue once the grant has expired? If there are no new/recurring costs, please explain why.

0.00 \* Specific amount of new/recurring cost (annual cost after project is implemented)

\* Narrative explanation/rationale: Provide details on the cost of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.). If there are no new/recurring costs, please explain why.

This is basically a one-time improvement project that will not have new or recurring costs associated with it. We anticipate existing utility bills will be less as a result and the District will also gain valuable storage space from maintaining a smaller inventory of replacement components. LED lamps are warranted for five years or 100,000 hours which is an impressive return for our investment. Labor costs associated with LED systems are typically less than other systems regarding frequency of lamp and ballast replacement. Overall end-use costs are also substantially less with LED systems compared to metal halide fixtures and lamps.

16. Are there expected savings that may result from the implementation of the innovative project?

14,672.00 \* Specific amount of expected savings (annual)

\* Narrative explanation/rationale: Provide details on the anticipated savings (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.).

First year savings will be \$38,592, which includes a one-time American Electric Power Grid Smart incentive of \$23,920 and utility reduction of \$14,672. Annual utility reductions starting in year 2 are expected to be \$14,672. Our K12 facility opened in 2008, and is approaching an age where maintenance costs are expected to increase for our mechanical systems, including lighting. The District expects to incur less lighting system maintenance costs with the implementation of this project.

17. Provide a brief explanation of how the project is self-sustaining. If there are ongoing costs associated with the project after the term of the grant, this explanation should provide details on the cost reductions that will be made that are at least equal to the amount of new/recurring costs detailed above. If there are no new/recurring costs, explain in detail how this project will sustain itself beyond the life of the grant.

The project is self-sustaining. The District will continue to receive monthly electric bills, but the bills will be less based on reduced consumption. Future rate increases only expand the argument for this project being self-sustainable.

**D) IMPLEMENTATION - Timeline, communication and contingency planning**

18. Fill in the appropriate dates and an explanation of the timeline for the successful implementation of this project. In each explanation, be sure to briefly describe the largest barriers that could derail your concept or timeline for implementation and your plan to proactively mitigate such barriers. In addition, the narrative should list the stakeholders that will be engaged during that stage of the project and describe the communication that occurred as the application was developed.

Describe the ongoing communication plan with the stakeholders as the project is implemented. (Stakeholders can include parents, community leaders, foundation support and businesses, as well as educational personnel in the affected entities.)

\* Proposal Timeline Dates

Plan (MM/DD/YYYY): 02/28/2014

\* Narrative explanation

Acquire competitive quotes on materials, the District will issue purchase orders as required, develop a project schedule with electrical consultant. District will consult with staff and coordinate the project with other activities and projects. Darin Porter will report to the Board on a monthly basis.

Implement (MM/DD/YYYY): 04/15/2014

\* Narrative explanation

Following the schedule developed during the planning phase, the successful contractor will install new fixtures and lamps to pole lights and interior lights as well as replace all building wall packs and floodlights. Interior construction activity will be scheduled as to not impact student learning. Darin Porter, Operations Director, will report to the Board on a monthly basis.

Summative evaluation (MM/DD/YYYY): 05/31/2014

\* Narrative explanation

The project will be completed by May 31, 2014. Darin Porter, Operations Director, will report to the Board on a monthly basis. His reporting will include trend data on electricity usage to evaluate the effectiveness of the project.

19. Describe the expected changes to the instructional and/or organizational practices in your institution.

The District will be better equipped to schedule campus lighting based on occupancy and after-hours events due to the lighting controls management system. While this is not a new practice, it is one that will be greatly enhanced and will provide tighter management of the lighting systems. The District will be able to create a more secure environment for staff and students that are working or involved in after school activities. LED systems have noise levels that are almost non-existent compared to metal halide fixtures, which can sometimes be disruptive to student learning.

**E) SUBSTANTIAL IMPACT AND LASTING VALUE - Impact, evaluation and replication**

20. Describe the rationale, research or past success that supports the innovative project and its impact on student achievement, spending reduction in the five-year fiscal forecast or utilization of a greater share of resources in the classroom.

The District is currently an accredited Energy Star facility and regarding utility costs, operates at 83 cents per square foot. We have been successful in reducing operational costs to allow the general fund to better support instructional programs. This project will allow the District to be significantly more efficient and save utility costs. Estimated impact to the 5 year forecast is expected to approach \$100,000.

21. Is this project able to be replicated in other districts in Ohio?

Yes

No

22. If so, how?

The Wheelersburg School District would be willing to serve as a model for other districts and the OFCC. The District will provide to interested parties information on our project, the impact to our general fund, and details regarding our project implementation. Other districts should be able to replicate this project or a similar project within a six-month timeframe, depending on availability of funding.

23. Describe the substantial value and lasting impact that the project hopes to achieve.

The District will be spending less on building operations, which will provide more dollars to spend on our core mission: instruction. With an estimated \$100,000 reduction in general fund expenditures, the

District will be able to replace or expand instructional programs that impact student performance.

24. What are the specific benchmarks related to the fund goals identified in question 9 that the project aims to achieve in five years? Include any other anticipated outcomes of the project that you hope to achieve that may not be easily benchmarked.

First year savings will be \$38,592, which includes a one-time American Electric Power Grid Smart incentive of \$23,920 and utility reduction of \$14,672. Annual utility reductions starting in year 2 are expected to be \$14,672 based on current rates.

25. Describe the plan to evaluate the impact of the concept, strategy or approaches used.

\* Include the method by which progress toward short- and long-term objectives will be measured. (This section should include the types of data to be collected, the formative outputs and outcomes and the systems in place to track the program's progress).

\* Include the method, process and/or procedure by which the program will modify or change the program plan if measured progress is insufficient to meet program objectives.

1. The District currently utilizes an energy-management software as part of an HVAC controls system. The specific program that will be used to evaluate and monitor savings is the Energy Dashboard, which displays real-time utility demand and usage for electricity and natural gas in our facility. The district maintains a utility spreadsheet that is updated monthly with usage amounts, bill amounts, historical usage comparisons, and weather data measured in heating-degree days or cooling-degree days. If this project is granted, the District will monitor and measure savings accurately and frequently to insure savings are realized. The District will track progress using these tools and is excited to have an opportunity to become more efficient. If results are less than anticipated, the District will evaluate lighting schedules, investigate utility rates for hidden increases, and review the project scope with project partners to determine the cause.

By virtue of applying for the Straight A Fund, all applicants agree to participate in the overall evaluation of the Straight A Fund for the duration of the evaluation timeframe. The Governing Board of the Straight A Fund reserves the right to conduct evaluation of the plan and request additional information in the form of data, surveys, interviews, focus groups, and any other related data to the legislature, governor, and other interested parties for an overall evaluation of the Straight A Fund.

PROGRAM ASSURANCES: I agree, on behalf of this applicant agency and/or all identified partners to abide by all assurances outlined in the Assurance section of the CCIP. In the box below, enter "I Accept" and indicate your name, title, agency/organization and today's date.

I agree. Mark Knapp, Superintendent Wheelersburg Local School District October 24, 2013