

Lowell RELIEF Budget Narrative

a. Budget Detail

See attached budget spreadsheet for greater budgetary details.

Lowell is proposing three separate measures related to greenhouse gas (GHG) reductions in our Reducing Emissions in Lowell through Infrastructure and Efficiency First (RELIEF) initiative partially funded through the Climate Pollution Reduction Grant (CPRG). These measures include LED Lighting, Solar-Enabling Infrastructure, and Participant Public Engagement. The first two categories have specific GHG emissions reductions associated with them, and the final category is intended to allow for meaningful participation from stakeholders.

Within these measures, Lowell is not requesting any EPA funds nor committing any funds as voluntary match for Personnel, Fringe benefits, Travel, Equipment, Supplies, or Indirect Costs. We have dedicated all EPA funds to direct contractual costs for GHG reduction measures and for participant/community support costs. Lowell's experienced team (see separate resumes) will manage and oversee this work funded as full-time city employees.

For both CPRG-funded categories of projects (LED lighting and solar-enabling infrastructure), our purchasing procedures require us to hire an Owner's Project Manager (OPM) and Design team to oversee funded projects of this magnitude. These competitively procured teams would provide the extra capacity and support to ensure that projects remain on time and on budget. We would be looking to contract for such services before calendar year 2025. Typically, OPM and Design costs are calculated as a percentage of total construction cost. These costs are typically around 15%. This percentage has been included in calculations for the individual projects across the portfolio. Having an OPM team responsible to the City of Lowell provides an extra level of oversight for large infrastructure projects. A small contingency of 3% was also included in pricing to factor in potential cost overruns due to market conditions. All projects completed in Lowell require adherence to prevailing wages. Our team will ensure compliance with these requirements, as well as the additional requirements of Davis-Bacon and Buy American provisions.

LED Lighting Costs and Considerations:

As mentioned in Lowell's workplan, over the past few years, Lowell has worked with contractors of our utility partner, National Grid (NGRID), to comprehensively assess energy conservation measures across our portfolio. The team has recently updated pricing and incentives around LED lighting. These base numbers were used in calculating an overall project cost on a facility-by-facility level. Due to the scope of the work that is proposed over 19 schools in the CPRG application, we do not have internal staffing capacity to complete such a large undertaking. This necessitates contracted services. A competitive process is intended for both OPM/Design work and for LED installation.

Because we want to realize the greatest GHG savings in the shortest amount of time, Lowell further prioritized facilities with the greatest GHG savings earlier in the implementation schedule. Based on prior LED retrofits in Middle Schools or larger Elementary Schools, a one-month timeframe was used per facility. Quarterly budgets for Year 1 in the SF-424A for LED lighting were estimated based on the sequencing of

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facilities identified in our workplan. To simplify calculations, project costs were rounded to the nearest \$1000 level. A summary of costs is shown in Budget Table 1.

BUDGET TABLE 1: SUMMARY OF LED COSTS

School	Address	Estimated Cost	Utility Incentive Estimate	Net Cost
BF Butler Middle School	1140 Gorham St	\$319,911	\$44,965	\$274,946
Bartlett Community Partnership	79 Wannalancit St	\$189,656	\$9,690	\$179,966
Cardinal O'Connell Early Learning Center	21 Carter St	\$73,190	\$18,845	\$54,345
Dr. An Wang Middle School	365 W. Meadow Rd	\$354,978	\$61,145	\$293,833
Dr. Gertrude Bailey Elementary School	175 Campbell Dr	\$249,448	\$31,250	\$218,198
Greenhalge Elementary School	149 Ennell St	\$285,053	\$53,710	\$231,343
Henry J. Robinson Middle School	110 June St	\$148,253	\$14,325	\$133,928
James S. Daley Middle School	150 Fleming St	\$473,300	\$57,940	\$415,360
James Sullivan Middle School	150 Draper St	\$338,817	\$50,180	\$288,637
John J Shaughnessy Elementary School	1158 Gorham St	\$203,270	\$42,030	\$161,240
Joseph McAvinnue Elementary School	131 Mammoth Rd	\$240,747	\$34,940	\$205,807
Leblanc Therapeutic Day School	58 Sycamore St	\$93,973	\$22,660	\$71,313
LHS Freshman Academy	40 Paige St	\$294,346	\$26,720	\$267,626
McHugh Riverside BRIDGE Program	73 Woburn St	\$70,870	\$17,270	\$53,600
Moody Elementary School	158 Rogers St	\$126,538	\$22,680	\$103,858
Pawtucketville Elementary School	425 W. Meadow Rd	\$356,048	\$62,435	\$293,613
Rogers STEM Academy	43 Highland St	\$438,594	\$90,720	\$347,874
S Christa McAuliffe Elementary	570 Beacon St	\$209,379	\$35,810	\$173,569
Washington Elementary School	795 Wilder St	\$141,757	\$34,530	\$107,227
	TOTAL	\$4,608,129	\$731,845	\$3,876,284

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Solar-Enabling Infrastructure Costs and Considerations:

As mentioned in Lowell's workplan, due to staffing constraints and to realize the greatest GHG emissions savings in the shortest amount of time, we are moving forward with a Power Purchase Agreement (PPA) with the solar vendor we have engaged. In order to implement PPAs at the Pyne School, Stoklosa Middle School, and STEM Academy, we need to have solar-enabling infrastructure. Again, due to limited staff capacity, we believe that contracted services, including an OPM/Designer are appropriate to complete the work in the most expeditious timeframe. A similar method has been used over the past several years in working with the Accelerated Repair Program of the Massachusetts School Building Authority.

The costs of this solar-enabling infrastructure include the 15% cost of construction for the OPM/Design team and a 3% contingency to factor in potential cost overruns due to market conditions. The other costs were based on an average of \$42/sq. ft. that has been seen in recent roof projects in Lowell and in the solar vendor's network.

Quarterly budgets for Year 1 in the SF-424A for solar-enabling infrastructure were estimated based the 15% of construction cost. In the first year, the OPM is the only vendor that is anticipated to incur costs. Costs were divided evenly over the quarters. To simplify calculations, project costs were rounded to the nearest \$1000 level. A summary of costs is shown in Budget Table 2.

BUDGET TABLE 2: SUMMARY OF SOLAR-ENABLING INFRASTRUCTURE COSTS:

School	Address	Estimated Cost
Kathryn P. Stoklosa Middle School	560 Broadway St	\$ 1,717,948
Pyne Arts School	145 Boylston St	\$ 1,937,647
Rogers STEM Academy	43 Highland St	\$ 2,397,118
	TOTAL	\$ 6,052,713

Public Engagement

In the development of this proposal with our community partners we have committed to a Community Advisory Committee with stakeholders representing the diverse constituencies in Lowell. We are committed to providing stipends for Committee members, and providing gift cards, food, childcare and translation services at informational events (as needed) that the committee plans. Though we have included estimates of these costs based on other public engagement efforts, Lowell believes strongly in partnering with the Advisory Committee to refine expenses with a more transparent and engaging process. We will work with our EPA Contract officer to submit complete justifications for all expenditures and seek approval prior to incurring obligations. This budget line item represents our deep commitment to directly support our community members and ensure strong community engagement throughout the project implementation.

It is anticipated that each calendar year would include public engagement sessions that last approximately two hours. In the Q1 meeting of each year, we would look to outline anticipated timelines, measures, and sequencing and would solicit input on ways that we can better refine these areas. In the final quarter of the year, we seek to refine our plans for the following year. Quarterly budgets for the SF-424A assume this sequencing of incurred costs, although, as stated above, we would lean on our Advisory Committee to help us shape deeper engagement.

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b. Expenditure of Awarded Funds

The City of Lowell has a history of utilizing a standardized approach, procedures, and controls to ensure the awarded grant funds will be expended in a timely and efficient manner. In addition to coordination with the OPM team, Lowell would utilize our standing weekly meeting with Lowell Public Schools (LPS) and City Sustainability and Facilities staff to discuss progress, address challenges, and brainstorm additional ways to enhance impacts of RELIEF projects funded through CPRG.

At these meetings, as work progresses, individual core team members will be assigned responsibility for ensuring work completed is inspected post-installation. This will facilitate meeting quality assurance and quality control objectives. Where applicable, members of NGRID would also be notified of completed work and given the opportunity to coordinate on a post-installation inspection in conjunction with municipal staff.

If deficiencies are identified at the time of post-installation inspection, a written report of such deficiencies will be prepared and provided to the appropriate contractor and/or sub-contractor for corrective action. Once corrective action is completed, the City will send the request for payment. Typically, payment can be made within a week of satisfactory completion.

The City of Lowell has a number of financial controls to ensure that awarded grant funds are expended in a responsible manner, beginning at the bid solicitation phase. Prior to working with contractors, the municipality always includes a request for information on the financial health of prospective contractors. An assessment of this information is factored into the evaluation of proposals received. At the contracting phase, multiple levels of approval are needed for full execution, including approvals from the Chief Solicitor, Department Head, City Auditor, and City Manager. All of these layers of approval ensure that: the scope of work aligns with objectives of the grant; sufficient protections are built into the contract to ensure compliance with grant objectives; appropriate accounts are set up and sufficient funding exists for the project to proceed; and that the contract is aligned with municipal priorities. Similar processes exist for approval of purchase orders and payments for work completed. These robust systems ensure that multiple parties are involved to ensure responsible use of grant funds.

c. Reasonableness of Costs

EPA's funds toward Lowell's RELIEF project will leverage substantial additional funding. The lighting contracts will be discounted by NGRID incentive amounts committed to each project. In addition, in parallel to the lighting and solar enabling infrastructure work, Lowell will direct other city grants and funds to complete weatherization (WX) at all schools. There are also several solar-enabling infrastructure projects that have identified non-CPRG funding. These projects are anticipated to be completed prior to 2030. The solar enabling infrastructure investments also allow us to leverage private sector partners to finance solar through with PPAs. We strategically chose measures for the CPRG to allow for the most cost-effective measures that would provide the quickest implementation timelines. This is reflected in the less than \$400/MTCO_{2e} reduced by 2050 metric. In order to be a good steward of EPA's funds, Lowell will also require our contractors to utilize, document, and provide transparency into how the federal tax deductions for energy efficiency projects. Specifically, Lowell will request supplemental information on the incorporation of enhancements to 26 US Code § 179D from the Inflation Reduction Act.