

# Memo



STATE OF RHODE ISLAND  
**ENERGY EFFICIENCY &  
RESOURCE MANAGEMENT COUNCIL**

**To:** Energy Efficiency and Resource Management Council  
**From:** EERMC Consultant Team  
**CC:** Steven Chybowski  
**Date:** July 28, 2022  
**Subject:** Council Budget Allocation Options with Descriptions and Cost Estimates

**CONSULTANT TEAM**

## SUMMARY

The Consultant Team (C-Team) provides the following write-ups and cost estimates for a variety of possible budget allocations for the Council to consider in evaluating its 2023 budget proposal. The table below summarizes cost estimates for each budget category, with a full description of what each item is, how its costs were estimated, and why it is within the Council's statutory authority included in the remainder of the memo.

Potential Budget Allocation	Page	Cost Estimate
<a href="#">Market Based Solutions Study</a>	2	\$70,000
<a href="#">Natural Gas Pruning Study</a>	4	\$70,000 - \$250,000
<a href="#">Energy Efficiency &amp; Climate Public Awareness Campaign</a>	7	\$35,000
<a href="#">EERMC Brand &amp; Communications Development</a>	9	\$30,000
<a href="#">Third Party Implementation Request for Information (RFI)</a>	10	\$11,100
<a href="#">Three-Year Plan Year Incremental Cost</a>	12	\$42,025

## Market Based Solutions Study

### Description

Energy Efficiency programs have historically been successful in driving reductions in building energy consumption (energy savings). Large portions of these energy savings have resulted from the implementation of efficient lighting upgrades<sup>1</sup>, often at low costs with short payback periods<sup>2</sup>. Energy efficiency programs have successfully transformed the lighting market, which is now effectively saturated with efficient LED lighting products in Rhode Island. To continue to drive energy savings and achieve climate goals, comprehensive deep energy retrofits will be required, but many existing program frameworks struggle to support these capital-intensive projects in the numbers required to maintain historical savings levels. One underlying reason for this difficulty is that these projects tend to have higher costs for energy efficiency programs in terms of dollars per unit of energy saved.

Market-based solutions may have the potential to circumvent many of the challenges faced by programs seeking to drive deeper savings beyond lighting, including split incentives<sup>3</sup>, pass-through of energy costs to building tenants<sup>4</sup>, and rate impacts<sup>5</sup>. The Council may wish to fund a study to explore viable market-based energy efficiency solutions, which may be able to drive significant activity without proportionate ongoing energy efficiency program budget growth. Energy savings agreements or performance contracts<sup>6</sup>, for example, are often undertaken by energy service companies (ESCOs) to minimize energy and operational costs at client sites. These contracts are typically performance-based, meaning that ESCOs earn revenue with higher performance while assuming the risks tied to underperformance.

An emerging example of a market-based approach is the Metered Energy Efficiency Transaction Structure (MEETS)<sup>7</sup> in which building operators or developers (“Energy Tenants”) sell metered energy efficiency savings to utilities. The MEETS framework<sup>8</sup> seeks to deliver benefits from comprehensive building upgrades and ongoing operation and maintenance to all involved parties including the utility, project investor, and building owner.

### Cost Estimate

The precise scope, timing, and any required market-based solutions to include in the study would be determined with Council input at the time an RFP is drafted. At a minimum, the study should assess the

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<sup>1</sup> Lighting savings comprised 74.3% of C&I Sector Electric Savings in 2021 and 69.9% in 2020.

<sup>2</sup> Payback period: duration of time, often measured in years, it takes for a customer’s cumulative energy cost savings to exceed their monetary contribution to energy efficiency upgrades.

<sup>3</sup> Split incentive: describes instances where neither the building owner nor tenant has incentives to make capital improvements to improve energy efficiency

<sup>4</sup> Tenants are often responsible for energy costs, thereby removing building owner incentives for making capital investments to improve energy efficiency

<sup>5</sup> Energy efficiency programs in Rhode Island and other jurisdictions are funded through a program surcharge (based on customer energy consumption). To increase energy efficiency program budgets to pursue additional savings, rates may be increased and create adverse rate impacts.

<sup>6</sup> Energy Savings Performance Contracts:

<https://betterbuildingssolutioncenter.energy.gov/sites/default/files/news/attachments/RILA%20ESA%20Primer.pdf>

<sup>7</sup> MEETS Summary Page: <https://www.meetscoalition.org/how-meets-works/>

<sup>8</sup> MEETS Summary Report: <http://www.meetscoalition.org/wp-content/uploads/MEETS-AC-Description.pdf>

landscape of potential market-based solutions and determine which solutions might work well in the Rhode Island energy efficiency landscape and why.

The C-Team estimates a budget of approximately \$70,000 is reasonable for this research study. While a more refined scope of work and budget would be established as part of the solicitation process, this was the cost<sup>9</sup> allocated to a Council-funded study regarding the applicability of various financing tools in the energy efficiency space to Rhode Island efficiency programs<sup>10</sup>. While the content of that study differs from this proposal, it is similar in that the study both surveyed other jurisdictions for tools or approaches that are currently in use, and then assessed and recommended a subset of those for consideration in Rhode Island.

### Statutory Authority

The following statute(s) related to the Council's purposes, powers, and/or duties are included as reference for why the Council feels this budget item is within its purview.

- According to [§ 42-140.1-6](#) (a), the Council has the powers *“to make any studies of conditions, activities, or problems related to the state’s energy needs, usage, and supplies to carry out its responsibilities.”*
- As noted in [§ 42-140.1-3](#) (b)(1), one of the Council’s purposes is to *“Evaluate and make recommendations, including, but not limited to, plans and programs, with regard to the optimization of energy efficiency, energy conservation, energy resource development; and the development of a plan for least-cost procurement for Rhode Island.”*

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<sup>9</sup> [RI EERMC October 2015 Meeting Minutes](#), see section 4a.

<sup>10</sup> [A Review of Energy Efficiency Financing in Rhode Island: Memo on Findings](#)

## Natural Gas Pruning Study

### Description

As part of the 2021 Act on Climate, Rhode Island has established statewide greenhouse gas emissions reduction targets. Though sector-specific GHG emissions reduction targets were not included in the legislation, building sector energy efficiency will be a crucial contributor to achieving the statewide goal of net-zero emissions by 2050<sup>11</sup>.

Natural Gas currently represents the most common heating fuel in the state<sup>12</sup>. In order to support the achievement of statewide climate goals, substantial amounts of natural gas system decommissioning will likely be needed<sup>13</sup>. The scope of a study focusing on gas decommissioning could take a range of forms; the C-Team has identified three representative options, listed below. Note that the Council could seek to cover all of these tasks with a larger study, or initially solicit only the first and/or second and assess results before considering the third.

Potential EERMC-Commissioned Studies:

1. Cross-Jurisdictional Natural Gas Decommissioning Study
  - a. A research-based study could explore natural gas decommissioning efforts implemented in other jurisdictions to assess program designs, methods, costs and benefits, non-energy impacts, and applicability to Rhode Island.
2. Rhode Island Natural Gas Decommissioning Feasibility Analysis
  - a. An analytical study could assess where natural gas infrastructure decommissioning is feasible in Rhode Island's gas system, in terms of gas system operational constraints, economics, consumer needs, and other relevant factors.
3. Comprehensive Natural Gas Decommissioning Demonstration
  - a. A comprehensive demonstration's scope would encompass all aspects of cross-jurisdictional research on natural gas decommissioning and assessment of eligible decommissioning sites in Rhode Island. In addition, a comprehensive demonstration could:
    - i. Assess cost, technical requirements, and feasibility of decommissioning natural gas distribution infrastructure
    - ii. Identify scenarios for recommended natural gas system decommissioning (e.g., aging pipeline replacement, damaged pipeline infrastructure) and quantify benefits of gas decommissioning
    - iii. Develop replicable criteria based on economic viability, technical feasibility, and customer benefits to inform gas decommissioning decision-making process
    - iv. Propose decommissioning strategies based on data-driven analysis

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<sup>11</sup> Working Draft of the 2022 Update to the 2016 Greenhouse Gas Emissions Reduction Plan:

<https://climatechange.ri.gov/act-climate/working-draft-workplan>.

<sup>12</sup> Natural Gas accounted for 55.3% of home heating in 2019 according to the Energy Information Administration:

<https://www.eia.gov/state/data.php?sid=RI>

<sup>13</sup> According to an American Gas Foundation study (p. 18) 1,660-3,780 TBtu of biomethane resources could be produced annually for pipeline injection by 2040. This represents 5-12% of 2021 U.S. Natural Gas Consumption:

<https://www.eia.gov/dnav/ng/hist/n9140us2A.htm>

- v. Include energy efficiency stakeholders and customers to ensure all aspects of feasibility, cost-effectiveness, and equity are considered
- vi. Evaluate best electrification technologies to support gas system decommissioning
- vii. Assess existing and new financing options to facilitate transition away from natural gas use
- viii. Coordinate with existing SRP efforts related to Non-Pipes Alternatives
- ix. Determine barriers and risks to electrification, as well as potential mitigation strategies

*Note: It may be the case that a comprehensive demonstration is better supported through collaboration with the utility team and funded as an energy efficiency or system reliability procurement program activity rather than through a Council budget allocation; however, we have included the additional scope areas here both for completeness and to illustrate what work may follow on from the activities listed in areas 1) and 2) above.*

## Cost Estimate

1. Cross-Jurisdictional Natural Gas Decommissioning Study: The C-Team estimates a total cost of \$70,000 for this research-based study. Similar to the Market Based Solutions item above, the scope of a Natural Gas Decommissioning Study would likely be comparable to the 2014 financing study, focusing on surveying other jurisdictions and synthesizing recommendations for Rhode Island, albeit regarding a different topic.
2. Rhode Island Natural Gas Decommissioning Feasibility Analysis: As a result of Aquidneck Island natural gas outages in January 2019, the Division developed an investigative report<sup>14</sup> to understand the system failure. As part of this report, the Division estimated that hiring technical consultants to perform detailed modeling of natural gas pipelines under different operational scenarios would cost at least \$250,000. Though that analysis is not precisely what is contemplated for the Council here (a study that would assess the overall pipeline infrastructure for areas that may represent opportunities for pruning), the cost estimate is nevertheless a reasonable reference for a detailed gas system analysis that was recently developed by a Rhode Island state agency.
3. Comprehensive Natural Gas Decommissioning Demonstration: After assessing natural gas pipeline decommissioning practices in other jurisdictions and determining eligible decommissioning areas, the next step could be to engage with the utility, community-based organizations, and customers to implement natural a gas decommissioning demonstration. Such efforts would demonstrate the benefits of natural gas distribution system pruning and inform larger-scale efforts. The California Energy Commission issued an RFP<sup>15</sup> and awarded two

<sup>14</sup> Aquidneck Island Gas Outage – DPUC Report:

[https://ripuc.ri.gov/sites/g/files/xkgbur841/files/eventsactions/AI\\_Report.pdf](https://ripuc.ri.gov/sites/g/files/xkgbur841/files/eventsactions/AI_Report.pdf)

<sup>15</sup> CA Energy Commission – Strategic Pathways and Analytics for Tactical Decommissioning of Portions of Natural Gas Infrastructure RFP: <https://www.energy.ca.gov/solicitations/2020-12/gfo-20-503-strategic-pathways-and-analytics-tactical-decommissioning-portions>

demonstration grants<sup>16</sup> to conduct such work, each for nearly \$1 million. The RFP called for the identification of at least three eligible natural gas decommissioning sites at a minimum budget of \$700,000. Given the option to initially focus on a single site, the C-Team estimates a comprehensive demonstration cost to be approximately \$250,000.

*Note: As with other items, a more refined scope of work and budget would be established as part of the solicitation process for any of the above items the Council elects to pursue.*

### **Statutory Authority**

The following statute(s) related to the Council's purposes, powers, and/or duties are included as reference for why the Council feels this budget item is within its purview.

- According to [§ 42-140.1-6](#) (a), the Council has the powers "to make any studies of conditions, activities, or problems related to the state's energy needs, usage, and supplies to carry out its responsibilities."

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<sup>16</sup> Awarded Grants for Tactical Decommissioning Studies (CEC Business Meeting Agenda, p. 5): [https://www.energy.ca.gov/sites/default/files/2021-05/2021-06-09-Agenda\\_ADA.pdf](https://www.energy.ca.gov/sites/default/files/2021-05/2021-06-09-Agenda_ADA.pdf)

## Energy Efficiency & Climate Public Awareness Campaign

### Description

As the least cost clean energy resource, energy efficiency plays a foundational role in addressing climate change and achieving Rhode Island's clean energy goals. It is, therefore, critical that the public continue to see efficiency investment as a necessary action for combating climate change. The Council could solicit professional services to develop and deliver a public awareness campaign that promotes the benefits of energy efficiency in the context of climate mitigation.

An experienced firm could provide strategic marketing consultation, communication planning, and effective implementation in coordination with the EERMC Education Working Group. Such a campaign would be comprised of an organized set of communication tactics, designed, and executed in a way that is tailored to Rhode Island communities and complementary to existing efforts.

The Council's educational video series, currently under development, could be a core element of this campaign. This effort would also coordinate with EERMC brand and communication development activities, should the Council choose to move forward with that budget item.

Activities could include, but may not be limited to the following:

- Facilitate identification and honing of strategic objectives, target audiences, and key messages
- Conduct literature review of relevant reports, policy, and resources (e.g., Nonparticipant Market Barriers Study, Act on Climate, etc.)
- Conduct supplemental research if deemed necessary by the EERMC Education Working Group (e.g., focus groups, surveys, interviews, etc.) Note: in-depth supplemental research may require additional budget
- Survey and build on existing efficiency and climate related outreach efforts in Rhode Island (e.g., Rhode Island Energy marketing campaigns)
- Conceptualize, design, implement, and evaluate a public awareness campaign, including a variety of outreach elements and platforms, such as video, web, social media, in-person events, print media, etc.
- Integrate campaign with existing EERMC public outreach events (i.e., EERMC Annual Public Forum and Energy Lecture Series)

### Cost Estimate

The following contracts serve as references to inform the proposed activities, estimated level of effort, and allocation amount. A more refined scope of work and budget would be established as part of the solicitation process. We estimate a budget of approximately \$35,000 for this item.

- Events & Outreach (2021)
  - 12 months, \$30,000
  - Services: Public forum, lecture series, video outreach
  - Selected vendor proposal: [http://rieermc.ri.gov/wp-content/uploads/2021/04/duffyshanley-technical-isbe-cost-proposal\\_event-1.pdf](http://rieermc.ri.gov/wp-content/uploads/2021/04/duffyshanley-technical-isbe-cost-proposal_event-1.pdf)
- K-12 Educator Training (2021)
  - 12 months, \$45,000

- Services: Curriculum development, five half-day trainings, on-demand training module
- Selected vendor proposal: <http://rieermc.ri.gov/wp-content/uploads/2021/06/gbri-technical-isbe-cost-proposals.pdf>
- Education Video Series (2021)
  - 16 months, \$75,000
  - Services: Development & production of eleven 2-5 minute videos
  - Selected vendor proposal: [http://rieermc.ri.gov/wp-content/uploads/2021/04/duffyshanley-rfp-technical-isbe-cost-proposal\\_video-1.pdf](http://rieermc.ri.gov/wp-content/uploads/2021/04/duffyshanley-rfp-technical-isbe-cost-proposal_video-1.pdf)
- Needs Assessment for Energy Education (2018)
  - 12 months, \$25,000
  - Services: Assessed educational needs of public officials and business stakeholders through a strategic literature review, surveys, and interviews
  - Selected vendor proposal: [http://rieermc.ri.gov/wp-content/uploads/2018/02/evergreen-economics\\_technical-proposal.pdf](http://rieermc.ri.gov/wp-content/uploads/2018/02/evergreen-economics_technical-proposal.pdf)

### Statutory Authority

The following statute(s) related to the Council’s purposes, powers, and/or duties are included as reference for why the Council feels this budget item is within its purview.

- In accordance with [§ 42-140.1-3](#) (b)(4), one of the Council’s purposes is to *“Promote public understanding of energy issues and of ways in which energy efficiency, energy conservation, and energy resource diversification and management can be effectuated.”*



## EERMC Brand & Communications Development

### Description

As the Council continues to expand its public education and outreach activities, enhancing its own distinct brand and communications tools would help fulfill its mandate to promote public awareness of energy efficiency programs and their benefits. The Council could solicit professional services for strategic consultation and further development of EERMC brand identity and outreach functions to foster greater awareness of Council efforts and build public recognition, reputation, and credibility over time.

Such efforts could include, but may not be limited to the following:

- Design a new EERMC logo
- Update mission statement, tagline, and other relevant language or copy
- Refresh website with updated content and brand aesthetic
- Have professional photographs taken of Council and Rhode Island efficiency subject matter for use in future outreach and communications efforts
- Create an event tabling set-up for in-person events (e.g., tablecloth, banner, poster)
- Develop printed communication materials
- Subscribe to an email distribution system & build a stakeholder mailing list
- Create EERMC email address(es)
- Set up an EERMC-specific virtual meeting account
- Increase social media presence

### Cost Estimate

The following contracts serve as references to inform the proposed activities, estimated level of effort, and allocation amount. A more refined scope of work and budget would be established as part of the solicitation process. We estimate a budget of up to \$30,000 for this item, depending on the specific scope of work solicited.

- EERMC Website Refresh (2017)
  - \$50,000 line item in C-Team budget (\$30,000 directly to web developer)
  - Meeting minutes & C-Team work plan: <http://rieermc.wpengine.com/wp-content/uploads/2017/09/eeac-meeting-minutes-01-19-2017.pdf>
- MA Energy Efficiency Advisory Council (EEAC) Rebrand & Website Redesign (2014)
  - \$30,000

### Statutory Authority

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- In accordance with [§ 42-140.1-3](#) (b)(4), one of the Council's purposes is to *"Promote public understanding of energy issues and of ways in which energy efficiency, energy conservation, and energy resource diversification and management can be effectuated."*

## Third Party Implementation Request for Information (RFI)

### Description

Governor McKee's initial budget proposal included a request for the Office of Energy Resources (OER) to work in coordination with the EERMC to issue a Request for Proposals (RFP) by no later than March 31, 2023 to determine if 3<sup>rd</sup> Party Implementation of the energy efficiency programs would be in the best interest for Rhode Island energy consumers<sup>17</sup>. While the final Rhode Island State Budget<sup>18</sup> removed this request, its inclusion in the initial draft budget indicates that there is interest in exploring 3<sup>rd</sup> Party Implementation in Rhode Island. The Council may wish to be prepared should a similar proposal be included in a future state budget and/or legislatively approved in the future.

This potential EERMC budget item has been modified to reflect the removal of the 3<sup>rd</sup> Party Implementation RFP from the State budget. The C-Team's suggested amendment would be for the Council to develop, issue, and evaluate responses to a Request for Information (RFI) rather than an RFP. This would enable the Council to collect information needed for an informed decision about whether and how the market may respond to an RFP should it be required to do so in the future. This information would be of use if the EERMC was charged with overseeing an RFP in the future; it would also be useful information to other actors in Rhode Island, to inform their position regarding whether 3<sup>rd</sup> Party Implementation has the potential to benefit Rhode Islanders and inform a future determination regarding whether to go to RFP for such services.

It is also worth noting that Rhode Island is not alone in considering alternative program implementation models. The Massachusetts Energy Efficiency and Advisory Council has discussed the potential for researching alternative program models, including third-party implementation within the past year<sup>19</sup>. Furthermore, there are several existing entities that already operate in a framework where a third-party implements state or regional energy efficiency programs such as [Efficiency Vermont](#), [Efficiency Maine](#), [Energy Trust of Oregon](#), and the [DC Sustainable Energy Utility](#).

### Cost Estimate

We estimate that the cost to the EERMC for this would be \$11,100. This cost is based on an estimated 60 hours of incremental effort for the C-Team at an average rate of \$185 per hour. We estimated that it would take approximately 20 hour each for (1) conducting initial research that would help inform the development of the RFI, (2) the development the RFI itself, and (3) the review, evaluation, and synthesis of responses. These estimates are based on the presumption that, as has been the case with previously issued Council RFPs, the RFI would be authored in collaboration with OER, who would also oversee and facilitate the issuance and selection process, so the C-Team's time could focus on providing technical advice at each stage.

### Statutory Authority

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<sup>17</sup> [State of Rhode Island Draft Budget for FY2023](#), See Section 39-2-1.2(q) on page 113

<sup>18</sup> [State of Rhode Island FY 2023 Budget](#)

<sup>19</sup> [MA EEAC July 28, 2021 Meeting Minutes](#); [MA EEAC August 18, 2021 Meeting Minutes](#); [MA EEAC September 22, 2021 Meeting Minutes](#)

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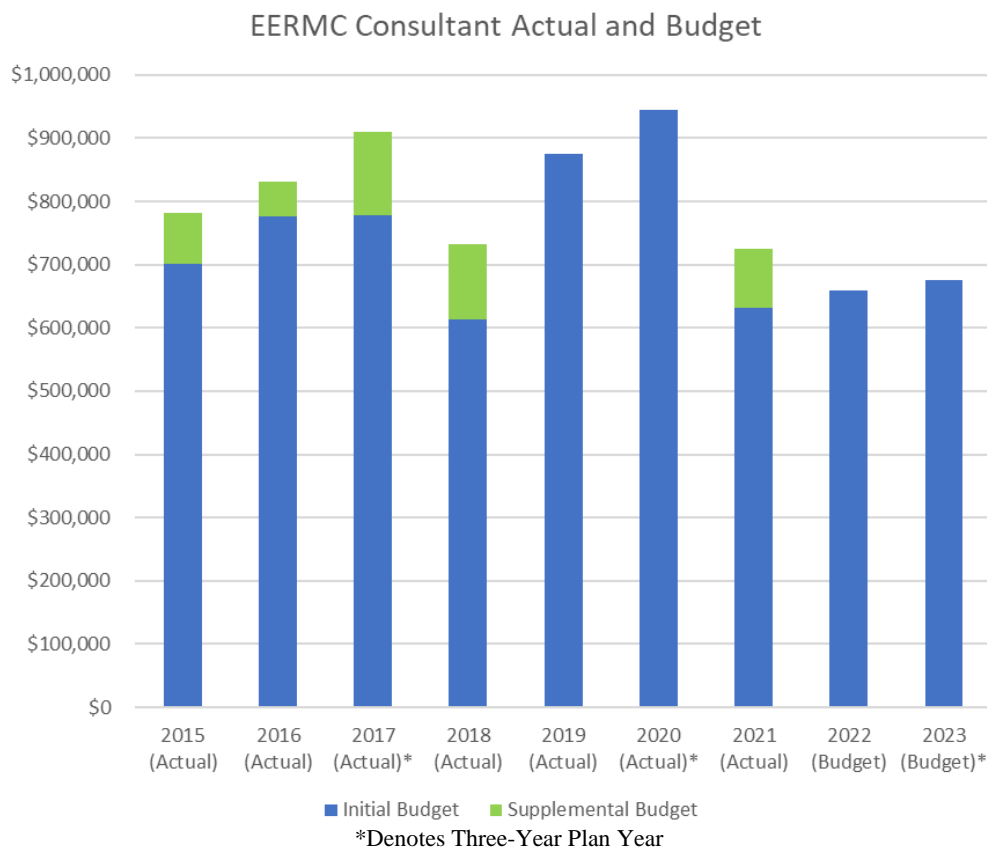
## Three-Year Plan Year Incremental Cost

### Description

Energy efficiency planning processes in 2023 will include development of Three-Year Plan Targets, a Three-Year Plan, and an Annual Plan. These years have historically required higher levels of funding compared to previous years in the Three-Year Plan cycle. We have included this item at the request of OER and in the spirit of transparency to ensure the Council, including its new members, are aware of this historical cadence of energy efficiency planning expenses.

### Cost Estimate

For the last two 3-Year Plan years, the C-Team budget has been on average ~9% higher than the previous year (see graph below)<sup>20</sup>. For reference, the draft budget for consultant services in 2023 that was included in the June meeting materials<sup>21</sup> was \$15,471 (~2%) higher than the approved budget for 2022 (\$659,529). Applying the historical averaged referenced above to the 2022 budget would result in a 2023 budget of \$717,025. If the Council elected to set a budget at this level, it would need to allocate an additional \$42,025 beyond what is included in the current draft of the budget.



<sup>20</sup> Values in graph are based on the [C-Team’s budget update memo](#) provided at the January 2022 EERMC meeting.

<sup>21</sup> <http://rieermc.ri.gov/wp-content/uploads/2022/06/2023-eermc-budget-proposal-draft-1.pdf>

### **Statutory Authority**

The following statute(s) related to the Council's purposes, powers, and/or duties are included as reference for why the Council feels this budget item is within its purview.

- According to [§ 42-140.1-6](#) (b), the Council has the powers *"To adopt amend bylaws, to establish committees, to elect and/or appoint officers and agents, and to engage consultants and professional services as necessary and appropriate to fulfill its purposes."*