

# Awareness and Understanding Evaluation - DRAFT

## Introduction

This report documents findings from the study assessing to what extent people and agencies in Rhode Island are working towards compliance with the Rhode Island Green Buildings Act (“the Act”). The study addressed awareness and understanding of the Act, along with identification for barriers to compliance and recommendations for the future. Data were collected through interviews and surveys, providing both rich descriptive data along with more general understanding. The key findings were that Rhode Islanders need to have a greater awareness of the Act and additional support is needed to better integrate the Act into building and renovation projects. Three primary strategies were identified from these findings that will improve awareness and thus compliance with the Act, which are 1) widespread education, 2) dedicated staff or resources to support compliance with the Act, and 3) funding to support up-front costs for agencies.

## Methods

**Interviews** (N=8) were used to collect data from people in Rhode Island who were familiar with the Act and actively complying with the regulations. Participants were recommended by members of the Green Buildings Advisory Committee (GBAC), and recruited through targeted sampling to represent a variety of roles and familiarity with the Act. Ultimately, ten people participated across eight interviews, representing people involved in managing building projects or energy usage, administering funding for building projects, and coordinating work between agencies. Interviews took place in October and November 2023 through video calls, each conversation lasting approximately 30-60 minutes. Topics covered in the interviews included the participant’s understanding of the Act and related building construction or energy efficiency standards, reflections on success and challenges around complying with the Act, and recommendations for resources needed for compliance.

**Surveys** (N=60) were used to collect data from a broad range of people in Rhode Island representing roles and agencies that should be aware of or responsible for compliance with the Act. The recruitment list was drawn from prior data collection efforts, recommendations from GBAC, and searches for new contacts. Surveys were conducted through an online survey and took place from November 2023 through January 2024. The survey was sent to 432 people, 67% of whom represented state and/or municipal entities, 27% with public education entities, and the remaining 6% represented other related organizations.<sup>1</sup> While the overall response rate for the survey was 14%, under 10% of all those recruited indicated they had responsibilities

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<sup>1</sup> The final count includes a snowball sample (additional emails collected through the survey) and does not include invalid or bounced emails (27).

related to the Act and completed the survey. Topics on the survey included awareness and understanding of the Act, compliance with the Act, barriers to compliance, and recommendations for resources.

One **limitation** of the study was a notably low response rate, though this may suggest a gap in awareness that prevented engagement with the survey, and may be connected to a broader lack of compliance with the Act. While there are no definitive benchmarks for a “good” survey response rate, a similar survey reaching out to professionals might expect a 20-25% response rate. The survey had a 14% response rate, with an additional 11% of people who opened the link and did not start the survey, suggesting that from the recruitment email it seemed applicable to their work. For those who participated in the survey, about half of respondents either did not complete the survey or reported that their role was not related to the Act. Ultimately, beyond indications of limited awareness, survey findings represent only 28 people, or 6% of the recruited sample.

## Findings

Interviewees who were familiar with the Act and working towards compliance offered a few successful resources or strategies that they were aware of for supporting compliance with the Act. Some of the discussion around these strategies noted that GBA was written to bring more agencies in alignment with already adopted standards, so those already following an approved set of standards might not be aware that they were GBA compliant. Successful strategies included:

- aligning GBA requirements with municipal or organizational goals, such as Providence's Climate Justice Plan;
- aligning GBA requirements with existing standards or those already in use, such as NECHPs;
- communicating compliance requirements with contractors, by including language outlining requirements in requests for proposals
- Planning compliance and engaging multiple stakeholders early in the process, such as bringing RI Energy into conversations during the planning stage.

More often, in both the interviews and surveys, participants identified a variety of challenges or barriers they currently face with their work or anticipate being a challenge in the future. These highlighted that people and agencies in Rhode Island need additional support to increase awareness and compliance with the Green Buildings Act. The primary needs identified by participants included widespread education about the Act, dedicated staff or resources to support compliance with the Act, and funding to support up-front costs for agencies.

When asked what motivated their organization to comply with the Act, many survey respondents expressed multiple motivations for following GBA or similar guidelines. Most often they indicated state funding to support projects (14 of 16) and to be in compliance with laws and regulations (13 of 16). Many respondents also were motivated by shared values, as 10 people indicated long-term financial savings and 8 said that the Act aligned with their organizational mission. This

suggests incentives would drive compliance with the Act, but many agencies may prioritize compliance if they are better aware of the benefits or understand how the Act aligns with their mission.

The sections below explore the the barriers identified by interview and survey participants, along with their recommendations to address the challenges. The themes are interconnected, therefore better compliance with the Act would be supported by a person or group being responsible for day-to-day coordination of education efforts, helping people navigate the Act, and obtaining funding for projects. The recommendations are presented thematically, however the approaches outlined could be individually prioritized or adopted as a group of priorities.

**1. Widespread education is needed to support general awareness and compliance, as people who were familiar with the Act were generally knowledgeable about how it applied to their work.**

Interviewees were selected as representatives who were familiar with the Act and so were already actively working towards compliance. They described the Act as an effort for Rhode Island to have more energy efficient buildings in order to offset rising energy costs, get away from fossil fuels, and bring up the minimum standards for buildings. Most survey participants (n=41) were not aware of the Act or did not feel that it was applicable to their job. While they initially indicated that their role was not related to compliance with the Act, 8 people later described their role as planning/designing construction or renovation projects and managing policy/regulation compliance at public agencies in Rhode Island. For those who had heard of the Act (n=19), 9 said they use it as a guideline for their work, 6 said they did not know how to comply with the Act, 4 said they did not know how it applied to their work.

People who are already aware of the Act are likely to pay attention to updates and will actively work towards compliance, however the broader picture is that many people are likely unaware of the Act or not familiar enough to effectively comply. Fewer than half of people familiar with the Act (9 of 19 people) understood how to use it in relation to their work, these people were more likely to keep up with changes to the Act and reference multiple standards for their work. Survey respondents who were familiar with and used the Act said that they used it as a guideline for their work and were generally aware of the 2022 Amendment to the Act. Those who are aware of the Act were more likely to refer to multiple standards when doing construction and renovation work, with 5 of 20 people referring to two or more standards (all of whom use the Act for guidance), 8 people referring to a single set of standards, and 6 people saying that they do not currently follow any standards. People learned about the GBA from a variety of sources, such as seeking out regulations related to their job or learning about it from someone else, though there are not strong patterns for how people learn about the Act, indicating opportunities for widespread education efforts.

Responses from both samples suggested that understanding the Act is not the primary barrier for their compliance, though both mentioned situations that they were not confident to whether or not the Act applied. Interviewees broadly identified the awareness and understanding of the

Act as a barrier to compliance, ranging from people not knowing the Act exists to needing highly knowledgeable individuals or departments that would prioritize compliance. They talked about staff that lack expertise or experience to make informed decisions for green buildings, lack of communication between people doing similar work, and insufficient understanding for how upfront costs can lead to long-term savings. Similarly, survey participants felt that they needed access to experts or guidance for their work, along with not enough vendors being familiar with GBA requirements.

Both interviewees and survey participants identified a specific gap in understanding related to the Act around non-standard cases, and how those would trigger additional project work to be compliant with the Act. For example, would a renovation planning to replace and upgrade lighting or windows across a building trigger additional project work in order to be in compliance with the Act. Some survey respondents (n=5) similarly indicated a need for clarity in specific cases, such as impacts on historic preservation, how the 2022 changes affect projects already underway, or whether specific fixture upgrades would expand the scope of a project. One survey participant asked *“Does the GBA apply to specific measure improvements at a facility? (e.g. replacing all the lights or upgrading the HVAC controls that go across the whole building, but are specific to that measure and not a renovation per se).”* Participants made suggestions around creating and sharing clarifying resources, rather than changes to the Act itself.

Interview and survey participants offered a range of recommendations to address challenges related to awareness and understanding of the Act, such as concise documentation and active education efforts, as detailed in Table 1. Overlap with existing resources or programs suggest a lack of awareness for available support.

Table 1: Recommendations to address awareness and understanding of the Act

Theme	Recommendations
<b>Provide short explainer documents</b>	<ul style="list-style-type: none"> <li>• 1-2 pg. summary of GBA requirements / benefits</li> <li>• Planning timelines, when to involve different people / departments</li> <li>• Planning guidelines, understanding GBA requirements for non-expert stakeholders</li> <li>• Compliance checklists</li> </ul>
<b>Communicate directly with agencies</b>	<ul style="list-style-type: none"> <li>• Directly inform or remind agencies of current or updated processes</li> <li>• Direct agencies to available resources (e.g. website)</li> <li>• Ensure stakeholders across many roles and levels of hierarchy are aware of obligations</li> </ul>
<b>Educate contractors and industry professionals</b>	<ul style="list-style-type: none"> <li>• Identifying and filling contractor skill gaps</li> <li>• Support or incentivize training and upskilling</li> <li>• Requirements or guidance for planning post-construction energy needs and usage</li> </ul>

	<ul style="list-style-type: none"> <li>• Broad education / awareness campaign to industry professionals responsible for doing GBA compliant work</li> </ul>
<b>Provide documentation explaining needs &amp; Benefits of GBA</b>	<ul style="list-style-type: none"> <li>• Education around procurement and offsetting costs</li> <li>• Make connections between GBA and other state/city legislation</li> <li>• Communicate reasons or justifications for GBA compliance</li> <li>• Education to support organizational culture shifts to prioritize GBA-related work</li> </ul>
<b>Provide documented examples of compliance with GBA</b>	<ul style="list-style-type: none"> <li>• Example RFP language that requires GBA compliance</li> <li>• Examples for projects that are not clearly applicable to the Act</li> <li>• Example applications of interpretation of standards</li> </ul>
<b>Outline post-construction guidelines</b>	<ul style="list-style-type: none"> <li>• Information or standards for post-construction energy usage</li> <li>• Require / encourage entities to plan for post-construction energy needs early during process</li> </ul>
<b>Educate agencies</b>	<ul style="list-style-type: none"> <li>• Staff education around principles and priorities related to GBA compliance</li> <li>• Directing staff to existing resources</li> </ul>
<b>Educate the public</b>	<ul style="list-style-type: none"> <li>• Public education around GBA and requirements, to help foster support for funding local green building projects</li> <li>• Communicating or demonstrating long-term public benefits that offset initial costs</li> </ul>

**2. Public entities could better comply with the Act if there was an individual or group responsible for helping agencies navigate requirements and maintain a central system for monitoring and verification.**

Interviewees identified barriers around the staff expertise and capacity to comply with the Act, particularly as it felt like the burden of compliance was an individual's responsibility rather than a widespread collective effort. In addition to the broad need for education around the Act as discussed in the section above, attention was drawn to smaller municipalities that could not support the full range of staff expertise needed so would benefit from access to subject matter experts that could work across regions. Interviewees also emphasized a need for monitoring and verification, through a simple and centralized system. Without such processes, agencies do not prioritize GBA compliance and current reporting is insufficient to evaluate progress towards widespread improvements to infrastructure in Rhode Island.

Survey respondents shared similar barriers, as about half (7 of 16) indicated that access to experts and resources would help agencies understand how to comply with the Act. Specifically, they wanted clarity on navigating how specific use cases apply, with one person writing that they wanted *“clear, online guidance document as to what projects are, or are not, subject to GBA”* and another simply requesting *“examples [and] access to experts for guidance”*. Some

respondents (5 of 16) felt that the compliance process was unclear or burdensome and that there was a need for oversight or accountability. A few people (3 of 16) shared that processes or requirements were not clearly communicated to vendors.

Interview and survey participants offered recommendations to address challenges related to supporting implementation, verification, and monitoring compliance with the Act. This included 1) creating systems to make navigating peculiarities of a given situation easier or 2) setting up active monitoring and verification systems, as detailed in Table 2. Overlap with existing resources or programs suggest a lack of awareness for available support.

Table 2: Recommendations to support implementation, verification, and monitoring compliance with the Act.

Theme	Recommendations
<b>Establish dedicated staff to coordinated GBA compliance</b>	<ul style="list-style-type: none"> <li>• Centralized oversight and accountability</li> <li>• Staff that can follow-up and check-in on agencies at multiple points in the planning and building process</li> <li>• Staff responsible for communicating GBA requirements and determining project eligibility</li> <li>• Staff responsible monitoring and verifying compliance with the GBA</li> </ul>
<b>Provide access to shared subject matter experts</b>	<ul style="list-style-type: none"> <li>• Certified energy managers</li> <li>• Energy coach or energy advocate, available for reviewing existing structures or future plans</li> <li>• Grant writers</li> </ul>
<b>Coordinate access to experts and specialists</b>	<ul style="list-style-type: none"> <li>• Experts that understand contracting for sustainable buildings / energy use</li> <li>• Experts reviewing contracts and aligning with GBA requirements</li> <li>• Guidance around tracking and understanding energy procurement and usage</li> <li>• Guidance for balancing restrictions and requirements for building projects</li> <li>• Architect, builder, and contractor recommendations (or certification)</li> </ul>
<b>Establish active verification of compliance</b>	<ul style="list-style-type: none"> <li>• Follow-up or annual reporting through a portfolio manager</li> <li>• Use or adapt check-lists from standards outlined in GBA</li> <li>• Inspections</li> <li>• Actively monitoring compliance from start to finish, reaching out directly to and communicating with agencies</li> </ul>

<b>Adopt simple, digital systems for monitoring and verification</b>	<ul style="list-style-type: none"> <li>• Digital streamlined systems for collecting and reviewing plans and reporting on compliance</li> <li>• Digital, streamlined systems for post-construction monitoring (e.g. EPA Dashboards)</li> <li>• Narrative report sections to justifying choices, especially for those not obviously "green"</li> </ul>
<b>Support navigating standards / resources</b>	<ul style="list-style-type: none"> <li>• Knowledgeable staff who can answer questions and direct people to resources related to GBA</li> <li>• Staff that can identify issues before they become a problem</li> <li>• Guidance when navigating non-obvious applications and exemptions for compliance with GBA</li> </ul>
<b>Create a community and culture of peer learning</b>	<ul style="list-style-type: none"> <li>• Build a culture that supports prioritizing GBA compliance because it benefits the agencies</li> <li>• Model community of practice off of public school efforts, support cross-district communication</li> <li>• Shared learning opportunities, across agencies and staff roles</li> <li>• Community of practice between agencies, specifically aimed at supporting less-resourced entities</li> <li>• Facilitate conversations between agencies, contractors, suppliers, etc.</li> <li>• Coordination between senior staff at an agency</li> </ul>

### **3. Additional funding would help people comply with the Act to support staff time around navigating design and construction, as well as the added expense of construction**

Interviewees discussed funding as generally being a barrier to compliance, with some focus on the upfront costs related to audits and certifications along with the costs related to actually implementing green building standards. One interviewee specifically talked about how their projects use the LEED checklist but were not certified due to the associated costs. Another focused on the upfront building costs, and how projects can get derailed when the needs are greater than the available resources. Similarly, half of survey respondents (8 of 16) also generally identified cost of implication or certification and general access to funding to support construction and renovation projects as a barrier to compliance with the Act.

Participants offered a few recommendations to address funding-related barriers to compliance with the Act, such money to support third-party verification or building costs, as detailed in Table 2. Overlap with existing resources or programs suggest a lack of awareness for available support. While this section includes the fewest identified barriers and recommendations, procuring funding appears to be a substantial challenge. Additionally, the resources and

programs suggested in the previous two sections would require funding to create and disseminate resources or establish and maintain systems.

Table 3: Recommendations for direct funding to support or incentivize compliance with the Act.

Theme	Recommendations
<b>Provide funding for audits and/or certifications</b>	<ul style="list-style-type: none"><li>• Funding for energy audits in order to be eligible for existing grants/funding opportunities</li><li>• Funding to pay for LEED or other certification processes</li><li>• Funding for additional staff or 3rd-party oversight</li></ul>
<b>Provide financial support for upfront costs</b>	<ul style="list-style-type: none"><li>• Financial incentives for net zero buildings</li><li>• Funding greater than increased costs of green building design and construction</li><li>• Incentives for going beyond the minimum standards</li><li>• Supporting additional staff time needed to ensure compliance</li></ul>

## Conclusion / Discussion

This section to be completed after review of findings with the Committee.



## Impact / Cost Matrix

The matrix below was used to categorize the recommendations from survey and interview respondents, using impact and cost as the primary factors. Impact is defined as high (solutions that are expected to make notable or significant difference in agencies complying with the GBA) or low (solutions that may make a difference for some people or agencies). Costs include staff time, funding, or other resources, and are defined as high (requiring many resources to start up or maintain) or low (can be implemented quickly or cheaply with current resources).

**Note:** This version of the matrix is a draft based on how the interview and survey participants talked about their recommendations, and will be updated after discussion with the Committee.

High Impact / Low Cost	High Impact / High Cost
<ul style="list-style-type: none"> <li>• Directly communicate with agencies</li> <li>• Provide short explainer documents</li> <li>• Coordinate access to experts and specialists</li> </ul>	<ul style="list-style-type: none"> <li>• Provide funding for audits and/or certifications</li> <li>• Provide financial support for upfront costs</li> <li>• Educate contractors and industry professionals</li> <li>• Establish dedicated staff to coordinated GBA compliance</li> <li>• Provide access to shared subject matter experts</li> <li>• Establish active verification of compliance</li> <li>• Adopt simple, digital systems for monitoring and verification</li> <li>• Support navigating standards / resources</li> <li>• Create a community and culture of peer learning</li> </ul>
Low Impact / Low Cost	Low Impact / High Cost
<ul style="list-style-type: none"> <li>• Provide documentation explaining needs &amp; Benefits of GBA</li> <li>• Provide documented examples of compliance with GBA</li> <li>• Outline post-construction guidelines</li> <li>• Educate agencies</li> </ul>	<ul style="list-style-type: none"> <li>• Educate the public</li> </ul>