



Sustainable Building Guidelines

2023 Evaluation Report

Program Evaluation Division
Office of the Legislative Auditor
State of Minnesota



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February 2023

Members of the Legislative Audit Commission:

In 2001, the Legislature directed the departments of Administration and Commerce to develop sustainable building guidelines that would be required for certain capital construction projects. Today, those guidelines aim to reduce energy consumption, enhance the health and well-being of building occupants, and improve the quality of the environment.

We found that unclear state law, compounded by widespread disagreement and confusion about roles and responsibilities pertaining to the sustainable building guidelines, has led to a program that lacks adequate oversight and accountability. Further, the overall outcomes of the program are unknown, including how the guidelines have affected project costs and building sustainability, as well as the extent to which projects have complied with guideline requirements.

Our evaluation was conducted by Caitlin Badger (evaluation manager), Will Harrison, and Kyle Malone. The departments of Administration and Commerce cooperated fully with our evaluation, and we thank them for their assistance.

Sincerely,



Judy Randall
Legislative Auditor



OLA



Sustainable Building Guidelines

Unclear state law—exacerbated by inadequate oversight—has led to a program that lacks accountability and for which guideline compliance is unknown.

Report Summary

Roles and Responsibilities

Widespread disagreement and confusion about roles and responsibilities pertaining to the sustainable building guidelines have resulted in limited program oversight and accountability.

- Although state law identifies agencies responsible for *developing* the sustainable building guidelines, statutes do not assign an agency responsibility for *administering or overseeing* the guidelines after they are developed. (pp. 8, 13)

Recommendation ► The Legislature should determine which agency is responsible for administering and overseeing the guidelines and codify those duties in law. (p. 21)

- The roles of most project team members with regard to the sustainable building guidelines are not clearly defined. (p. 16)

Recommendation ► The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that the guidelines clearly define the roles of all individuals responsible for implementing the guidelines. (p. 22)

- It is unclear who—if anyone—is ensuring that projects comply with the sustainable building guidelines. (p. 41)

Recommendation ► The Legislature should direct the agency it tasks with administering and overseeing the sustainable building guidelines to monitor project compliance with the guidelines. (p. 47)

- Many project team members said they did not receive adequate training on how to fulfill their roles with regard to the sustainable building guidelines. (p. 22)

Recommendation ► The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that all individuals responsible for implementing the guidelines receive adequate training on their respective roles and responsibilities. (p. 23)

Background

In 2001, the Legislature directed the departments of Administration and Commerce to develop a set of sustainable building guidelines. State law requires the guidelines to incorporate a broad array of sustainability elements, including air quality, lighting, and energy efficiency standards.

Although any building project can choose to follow the sustainable building guidelines, the guidelines are required for certain capital construction projects. By law, all new buildings and major renovations that receive general obligation bond proceeds must adhere to the guidelines.

Numerous entities are involved in the implementation or administration of the guidelines. Although statutes require the departments of Administration and Commerce to develop the guidelines, the Center for Sustainable Building Research at the University of Minnesota has assumed primary responsibility for the ongoing administration of the guidelines. Further, project teams—typically composed of individuals working for state and local governments and private firms—are responsible for implementing the guidelines on a project-by-project basis.

Program Outcomes

Due to a lack of data, we were unable to determine the outcomes of the sustainable building guidelines. The state has not systematically tracked which projects are subject to the guidelines, whether projects have complied with the guidelines, or what effect the guidelines have had on the cost or sustainability of capital projects.

- The total number of projects subject to the sustainable building guidelines is unknown, and the standards for determining which projects are subject to the guidelines are unclear. (pp. 28-29)

Recommendation ► The Legislature should amend statutes to task an agency with responsibility for determining which projects are subject to the sustainable building guidelines. (p. 30)

Recommendations ► The Legislature should clarify law regarding the types of capital projects that are subject to the sustainable building guidelines. Further, the agency to which the Legislature assigns responsibility for identifying projects subject to the guidelines should clearly define and document any additional criteria used to determine which projects are subject to the guidelines. (pp. 30-31)

- Due to limitations with program data, the share of projects that have complied with the sustainable building guidelines is unknown. (p. 43)

Recommendation ► The Legislature should amend statutes to ensure that the state can successfully collect the data needed to determine whether projects complied with the sustainable building guidelines. (p. 47)

Recommendation ► The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that all project teams track their compliance with the guidelines. (p. 48)

- The overall effect of the sustainable building guidelines on building costs and sustainability is unknown. (pp. 52, 54)

Recommendation ► The Legislature should direct the agency it tasks with administering and overseeing the sustainable building guidelines to systematically evaluate the effects of the guidelines on building costs and sustainability. (p. 55)

Summary of Agencies' Responses

In a letter dated February 8, 2023, Department of Administration Commissioner Roberts-Davis said that “Admin supports accountability for each entity receiving bond funds...in meeting statutory requirements” and that the administration of the sustainable building guidelines should be the responsibility of the entity that has the staff with “the appropriate technical expertise,” the Center for Sustainable Building Research.

The Department of Commerce Commissioner Arnold—in a letter dated, February 8, 2023—stated that “The Department agrees with the findings and assessments as spelled out in OLAs [*sic*] review, specifically the need for clear accountability and oversight, addressing variances, funding, and communicating clear goals and objectives.”

The director of the University of Minnesota’s Center for Sustainable Building Research said in a letter dated February 7, 2023, that they “appreciate the...desire for clarity and accountability and the alignment of processes to achieve the legislature’s goals for sustainability in state-funded capital construction....” They further stated that clarity regarding aspects of project compliance “would significantly increase the impact of the program and the improved performance toward the Legislature’s goals for state construction.”

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Introduction

The sustainability of buildings can significantly affect both the building occupants and the environment. For example, a poorly insulated building may lead to chilly inhabitants and may require additional energy to heat, which in turn may increase heating costs and carbon dioxide emissions.

In 2001, the Legislature directed the state to develop a set of sustainable building guidelines for certain capital construction projects.¹ Today, according to the University of Minnesota’s Center for Sustainable Building Research, the state’s sustainable building guidelines aim to reduce energy consumption, enhance the health and well-being of building occupants, and improve the quality of the environment.²

Sustainable Building Guidelines

Throughout this report, we refer to the guidelines simply as the “sustainable building guidelines” or “the guidelines”; however, they are also commonly referred to as “Buildings, Benchmarks, and Beyond,” or the “B3 Guidelines.”

The Legislative Audit Commission directed the Office of the Legislative Auditor in March 2022 to evaluate the state’s sustainable building guidelines. We focused our evaluation on the following questions:

- **Who is responsible for enforcing the sustainable building guidelines?**
- **To what extent does the state ensure that projects subject to the sustainable building guidelines comply with the guidelines?**
- **To what extent have new buildings and major renovations that received funding from the bond proceeds fund complied with the sustainable building guidelines?**

To address these questions, we reviewed relevant state statutes and administrative rules as well as the sustainable building guidelines and various other program documents. We also analyzed program data about capital projects subject to the sustainable building guidelines and reviewed a sample of files to better understand how agency staff decide whether projects are subject to the guidelines.

To further understand the roles and responsibilities related to the sustainable building guidelines, we interviewed staff from key agencies, including the departments of Administration and Commerce, as well as Minnesota Management and Budget. We also interviewed staff at the Center for Sustainable Building Research, which has significant responsibilities for administering the guidelines. Further, we conducted a survey of individuals working in both the public and private sectors, who had experience working with the sustainable building guidelines on recent capital construction projects.

¹ *Laws of Minnesota* 2001, chapter 212, art. 1, sec. 2, codified as *Minnesota Statutes* 2022, 16B.325.

² University of Minnesota, College of Design, Center for Sustainable Building Research, *Minnesota B3 Guidelines: New Buildings and Major Renovations Version 3.2 Revision 01* (May 2021), 4.

Finally, to better understand how the guidelines are implemented on individual projects, we conducted an in-depth review of three projects that were subject to the sustainable building guidelines. Through these case studies, we reviewed project documents and data, and we interviewed individuals employed by private sector organizations—such as architectural and engineering firms—who played a key role in implementing the guidelines for those projects. We also interviewed staff working at state agencies and local units of government that were affiliated with projects subject to the guidelines.

Our evaluation focused on the ongoing administration and oversight of the sustainable building guidelines. We did not evaluate the process by which the guidelines were developed, nor did we determine whether the existing guidelines are appropriate given current sustainability trends and developments. Further, we did not analyze how the guidelines compare to other sustainability guidelines or rating systems, such as Leadership in Energy and Environmental Design (LEED) or the state's energy code.

Chapter 1: Background

In an effort to improve the sustainability of the structures in which we spend much of our lives, sustainability-related building codes and certification programs—such as Leadership in Energy and Environmental Design (LEED) and the International Green Construction Code—have proliferated across the country. In Minnesota, the sustainable building guidelines are a set of requirements that build on those regional and national efforts.

In this chapter, we begin by providing an overview of the sustainable building guidelines, followed by an explanation of the different entities with roles and responsibilities pertaining to the guidelines. We then briefly explain how the administration of the guidelines is funded before providing additional information about the capital bonding process in Minnesota.

Key Findings in This Chapter

- By law, all new buildings and major renovations that receive state general obligation bond proceeds must adhere to the sustainable building guidelines, which must incorporate several elements of sustainability.
- Statutes require the departments of Administration and Commerce to develop and review the sustainable building guidelines.

Sustainable Building Guidelines Overview

In 2001, the Legislature mandated the creation of sustainable building guidelines for certain capital construction projects that receive state funding.¹ The guidelines originally applied only to new building projects; however, in 2008, the Legislature amended the law to include major renovations.² We provide an overview of the guidelines below.

By law, all new buildings and major renovations that receive state general obligation bond proceeds must adhere to the sustainable building guidelines, which must incorporate several elements of sustainability.

According to Minnesota statutes, the sustainable building guidelines “are mandatory for all new buildings...and for all major renovations receiving funding from the bond proceeds fund....”³ In other words, all new buildings and major renovations that are funded in part or in whole with general obligation bonds must adhere to the guidelines.⁴

¹ *Laws of Minnesota* 2001, chapter 212, art. 1, sec. 2, codified as *Minnesota Statutes* 2022, 16B.325, subds. 1-3.

² *Laws of Minnesota* 2008, chapter 179, sec. 30, codified as *Minnesota Statutes* 2022, 16B.325, subds. 1-3.

³ *Minnesota Statutes* 2022, 16B.325, subd. 3. We describe “major renovations” in greater detail in Chapter 3.

⁴ The Legislature may also choose to require the guidelines for projects that are not funded with general obligation bonds. For example, the Legislature has at times required projects receiving funding from the Minnesota environment and natural resources trust fund to follow the sustainable building guidelines.

When the Legislature mandated the creation of the guidelines, it required the guidelines to take a broad approach to sustainability. By law, the sustainable building guidelines must:

- Include air quality and lighting standards.
- Create and maintain a healthy environment.
- Facilitate productivity improvements.
- Specify ways to reduce material costs.
- Consider the long-term operating costs of the building, including the use of renewable and certain other energy sources.⁵

Further, the sustainable building guidelines must incorporate energy efficiency performance standards, referred to as “Sustainable Building 2030.”⁶

The current version of the sustainable building guidelines comprises 25 individual guidelines, grouped into five categories.⁷ As seen in Exhibit 1.1, those categories are (1) performance management, (2) site and water, (3) energy and atmosphere, (4) indoor environmental quality, and (5) materials and waste. Each category includes guidelines intended to achieve particular outcomes. The purpose of the indoor environmental quality guidelines, for instance, is to “provide high-quality indoor environmental conditions to promote occupant health, well-being, and productivity.”⁸ See the Appendix for a complete list of the guidelines and their intended effects.

⁵ *Minnesota Statutes 2022*, 16B.325, subd. 2.

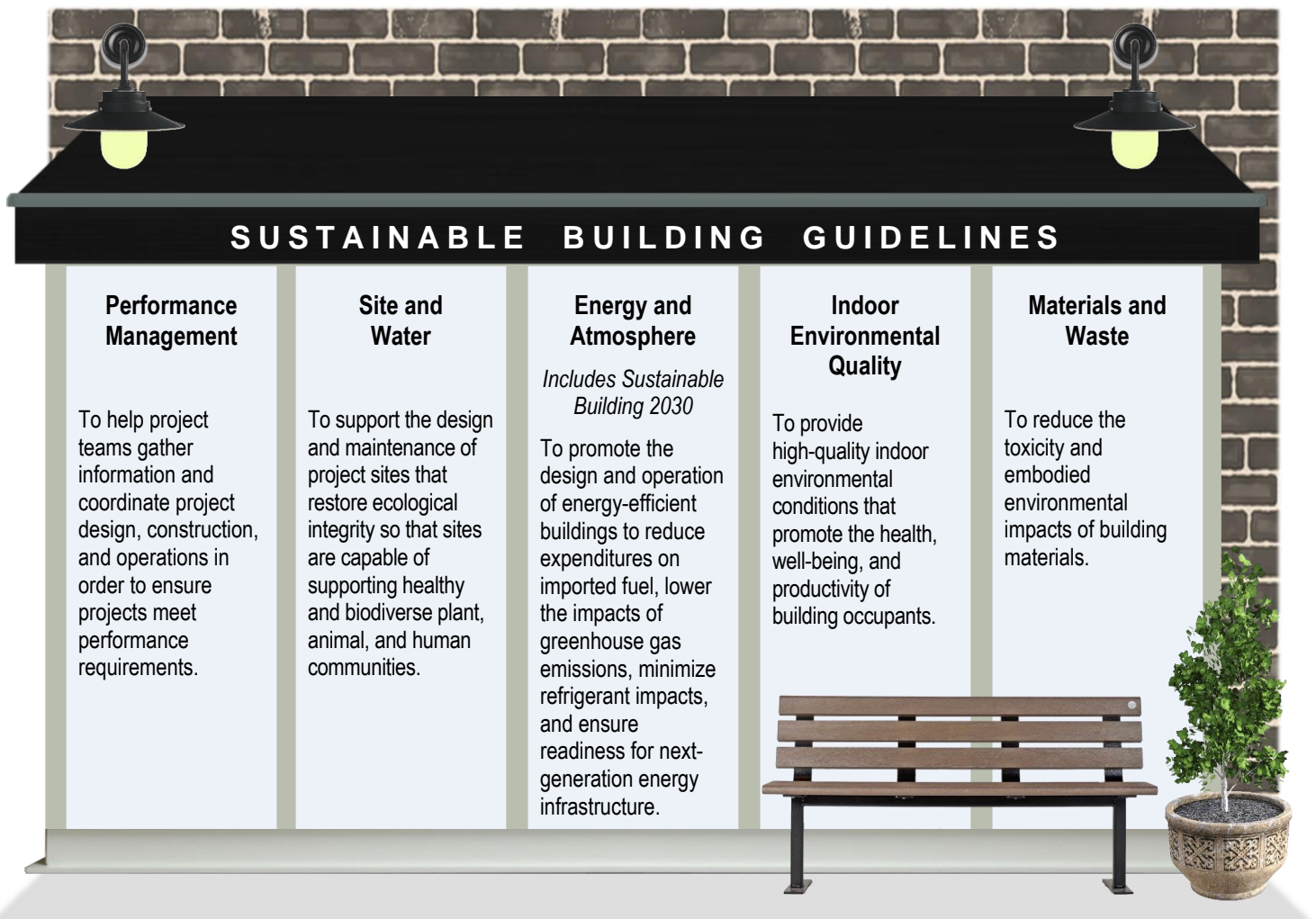
⁶ *Ibid.*, subd. 4; and 216B.241, subd. 9. We discuss Sustainable Building 2030 in greater detail later in this chapter.

⁷ The sustainable building guidelines have been updated several times since their inception.

⁸ University of Minnesota, College of Design, Center for Sustainable Building Research, *Minnesota B3 Guidelines: New Buildings and Major Renovations Version 3.2 Revision 01* (May 2021), 93.

Exhibit 1.1

The sustainable building guidelines are grouped into five categories, each with a different intent.



Source: Office of the Legislative Auditor, based on University of Minnesota, College of Design, Center for Sustainable Building Research, *Minnesota B3 Guidelines: New Buildings and Major Renovations Version 3.2 Revision 01* (May 2021).

Nearly all of the 25 guidelines include multiple requirements.⁹ For example, as seen in Exhibit 1.2, the guideline pertaining to atmospheric protection includes two broad requirements. Projects adhering to the sustainable building guidelines may need to meet up to 90 individual requirements, depending on the scope of the project.¹⁰ While some of the guideline requirements are relatively straightforward—selecting Energy Star appliances, for instance—others are more complex.

⁹ In addition to the guideline requirements, the sustainable building guidelines contain recommended components that projects can voluntarily pursue.

¹⁰ Some guideline requirements—such as the atmospheric protection guideline’s requirement to reduce refrigerant leakage—contain additional subrequirements.

Exhibit 1.2

The sustainable building guideline pertaining to atmospheric protection—like most other guidelines—includes multiple requirements.

Guideline E.4: Atmospheric Protection

Requirement	Description
Acceptable refrigerants	When selecting equipment, choose refrigerants for new and repaired equipment that are not currently designated “unacceptable” under the Environmental Protection Agency’s Significant New Alternatives Policy (SNAP) program. ^a
Reduce refrigerant leakage	Design, maintain, and operate mechanical equipment to reduce refrigerant leakage over the life of the building. Adhere to the following: <ul style="list-style-type: none"> • Equipment containing 2,000 pounds or more of certain refrigerants must include an automatic leak detection device. • Facilities shall conduct quarterly leak inspections or use automatic leak detection devices for equipment containing more than 50 pounds of refrigerant. • For equipment containing more than 50 pounds of refrigerant, leaks over a certain threshold must be repaired, subject to a plan for repair, or retired within 30 days of leak detection or refrigerant recharge. • Certain refrigerant recovery recordkeeping requirements must be met for equipment containing between 5 and 50 pounds of refrigerant. • For equipment containing between 5 and 50 pounds of refrigerant with annual leakage rates of 10 percent or greater, equipment operators must implement leak reduction measures sufficient to identify and minimize future leaks. Repaired systems must be monitored at least quarterly to ensure leak reduction is maintained.

Notes: Some guidelines contain recommended components that projects can voluntarily pursue in addition to the required components. The atmospheric protection guideline includes two additional recommended components.

^a Among other responsibilities, SNAP identifies refrigerant substitutes that pose a lower risk to human health and the environment.

Source: Office of the Legislative Auditor, based on University of Minnesota, College of Design, Center for Sustainable Building Research, *Minnesota B3 Guidelines: New Buildings and Major Renovations Version 3.2 Revision 01* (May 2021), 87.



Sample Guideline Requirements for Building Occupancy

- Report annually on indoor consumption of potable or harvested groundwater.
- Conduct annual inspections of stormwater infrastructure.
- Submit ongoing soil sampling results at least once every three years.
- For the first year following building occupancy, conduct bird safety monitoring by walking the perimeter of the building and observing all accessible setbacks and roof areas at least twice per week.
- For certain projects, at year five of building occupancy, monitor bat boxes to ensure at least 50 percent of boxes are occupied with bats.

— Center for Sustainable Building Research,
*Minnesota B3 Guidelines: New Buildings and
Major Renovations Version 3.2 Revision 01* (May 2021)

The sustainable building guidelines include requirements that apply throughout a project’s lifecycle. Projects must first adhere to requirements during the four phases of building design and construction: predesign, design, final design, and closeout. The guidelines also include requirements that apply after construction is complete and the building is occupied. Some of these requirements—such as annual water consumption reporting—must be met for up to ten years.

According to the sustainable building guidelines, the guidelines were written to align whenever possible with other sustainable building design standards—such as LEED—while “maintaining regional values, and

priorities.”¹¹ Both LEED and the guidelines focus on many of the same issues, including site sustainability, water consumption, energy and atmosphere, indoor environmental quality, and materials and waste.¹² However, whereas LEED allows project teams to select which sustainability components to pursue after meeting certain prerequisites, the sustainable building guidelines are a list of requirements that all project teams must follow.

Sustainable Building 2030

Sustainable Building 2030 is a set of energy-efficiency performance standards mandated by law and incorporated into the sustainable building guidelines.¹³ According to statutes, the standards established by Sustainable Building 2030 are intended to “significantly reduce carbon dioxide emissions by lowering energy use in new and substantially reconstructed buildings.”¹⁴

Statutes require the performance standards to follow an energy-use reduction schedule shown in Exhibit 1.3. By law, the reduction should be measured against a baseline—the energy consumption of an average building in 2003.¹⁵ The Sustainable Building 2030 standards outlined in law become progressively more stringent every five years, thus demanding that newer buildings improve energy efficiency or make greater use of renewable energy sources.¹⁶

According to researchers at the University of Minnesota, the Sustainable Building 2030 standards are substantially more stringent than the Minnesota Commercial Energy Code, the energy conservation component of the state’s building code. The university’s analysis estimated that a building designed according to the current energy code would consume approximately 51 percent less energy per square foot compared to an average building in 2003.¹⁷ For comparison, the Sustainable Building 2030 performance standard in 2023 is an 80 percent reduction against a 2003 baseline.

¹¹ University of Minnesota, College of Design, Center for Sustainable Building Research, *Minnesota B3 Guidelines: New Buildings and Major Renovations Version 3.2 Revision 01* (May 2021), 4.

¹² An analysis conducted by staff at the University of Minnesota comparing LEED to an older version of the sustainable building guidelines concluded that a hypothetical project adhering to the required guidelines would qualify for LEED Gold certification—the second-highest of the four LEED certification tiers. University of Minnesota, College of Design, Center for Sustainable Building Research, “LEED Credit Breakdown” (Microsoft Excel spreadsheet, 2018).

¹³ *Minnesota Statutes 2022*, 16B.325, subd. 4; and 216B.241, subd. 9(a).

¹⁴ *Minnesota Statutes 2022*, 216B.241, subd. 9(a).

¹⁵ More specifically, the reduction should be measured against an average building in the same building sector in 2003. For instance, a new office building would be compared to another office building, not an industrial warehouse. A program staff member explained that they also consider additional building characteristics, such as the building’s operating schedule, when determining the required reduction.

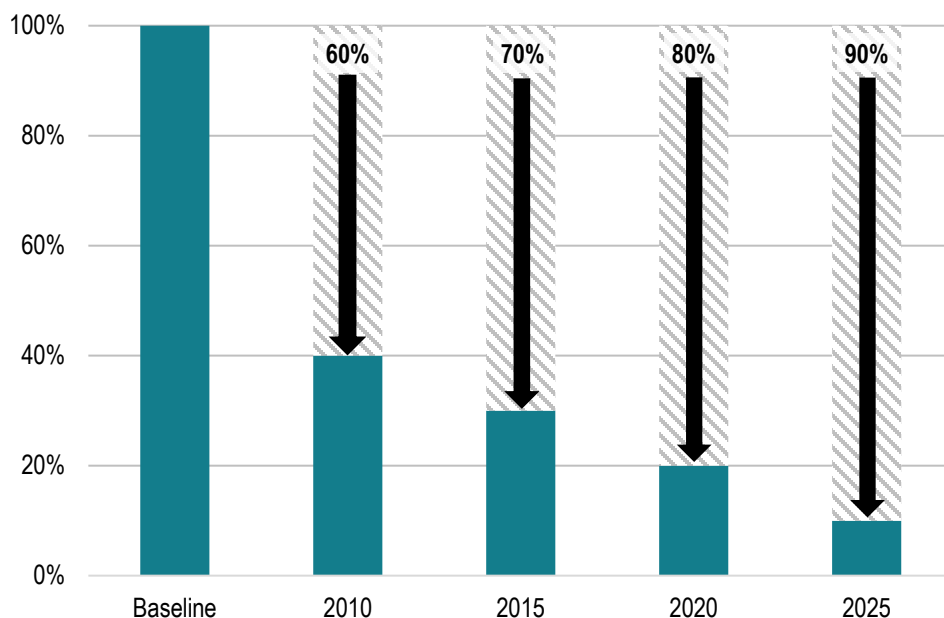
¹⁶ *Minnesota Statutes 2022*, 216B.241, subd. 9(c), includes a requirement that an energy standard undergo a cost-effectiveness evaluation before being implemented. While *Minnesota Statutes 2022*, 16B.325, subd. 2, states that the sustainable building guidelines “must focus on achieving the lowest possible lifetime cost,” there is no requirement to evaluate the cost-effectiveness of the guidelines overall.

¹⁷ Patrick Smith, University of Minnesota, College of Design, Center for Sustainable Building Research, “Sustainable Building 2030 Overview” (PowerPoint presentation for the City of Bloomington, June 18, 2021), 13.

Exhibit 1.3

The Sustainable Building 2030 energy-use performance standards in state law become progressively more stringent every five years.

**Building energy consumption
relative to a 2003 baseline**



Notes: The above graphic shows the energy consumption reduction targets, measured against the 2003 energy consumption per square foot of an average building in a given building sector. The applicable standard is based on the year in which design begins. For example, a new student dormitory project for which design began in 2019 is required to meet the 2015 energy standard. According to the Sustainable Building 2030 requirements, the dormitory should be designed to consume 70 percent less energy per square foot compared to an average dormitory in 2003. A dormitory that began design in 2021, meanwhile, should be designed to consume 80 percent less energy per square foot.

Source: Office of the Legislative Auditor, based on *Minnesota Statutes* 2022, 216B.241, subd. 9(c).

Overview of Roles and Responsibilities

Responsibilities related to the sustainable building guidelines are distributed across multiple entities in the public and private sectors. Below, we provide an overview of the various entities with responsibility for the guidelines.

Statutes require the departments of Administration and Commerce to develop and review the sustainable building guidelines.

According to statutes, “The Department of Administration and the Department of Commerce, with the assistance of other agencies, shall develop sustainable building design guidelines...”¹⁸ Statutes also require the commissioners of those two agencies to “review the guidelines periodically.”¹⁹

¹⁸ *Minnesota Statutes* 2022, 16B.325, subd. 1.

¹⁹ *Ibid.*, subd. 4.

In practice, the Department of Administration’s purview has been the sustainable building guidelines overall, whereas the Department of Commerce has focused its attention on Sustainable Building 2030. According to an interagency agreement between the two departments, the Department of Administration “will implement, maintain and update sustainable building design guidelines.”²⁰ In contrast, a Department of Commerce representative told us that Commerce’s focus is on the guidelines’ energy component.

Although statutes task the departments of Administration and Commerce with developing the guidelines, other entities also play important roles with regard to the guidelines. For instance, the departments of Administration and Commerce both contract with the Center for Sustainable Building Research at the University of Minnesota for assistance with the guidelines. Additionally, individuals—such as architects and engineers—that comprise the team of people working on individual projects play a key role in implementing the guidelines on a project-by-project basis. We discuss the roles and responsibilities of the departments of Administration and Commerce, the Center for Sustainable Building Research, and project teams at greater length in Chapter 2.

Financial Overview

The sustainable building guidelines may affect the total cost of capital projects in multiple ways. First, the guidelines may affect the direct cost of designing and constructing a project. For example, fulfilling the guideline requirements may necessitate hiring specialists who would not otherwise have been part of the design team, such as an acoustician, which may increase design costs. Second, the guidelines may affect the costs of operating or maintaining a building once it is occupied. For instance, selecting more durable building materials may decrease the lifetime costs of a building through reduced maintenance expenses. Likewise, decreasing a building’s energy consumption may reduce the cost of operating the building. We discuss the relationship between the sustainable building guidelines and the cost of capital projects in greater detail in Chapter 5.

In addition to individual project costs, there are also costs pertaining to the development and administration of the sustainable building guidelines overall.

By law, the Department of Commerce may assess public electric and gas utilities up to \$1 million annually to pay for costs pertaining to the sustainable building guidelines, including program administration, oversight, and other activities.

Statutes establish two streams of funding for the administration of, and revisions to, the sustainable building guidelines. By law, the Department of Commerce may bill public gas and electric utilities up to \$500,000 per fiscal year to pay for costs associated with

²⁰ Minnesota Department of Administration and Minnesota Department of Commerce, *State of Minnesota Interagency Agreement*, signed June 2018, last amended June 2022.

the guidelines.²¹ In addition, statutes direct the Department of Commerce to contract with the Center for Sustainable Building Research for various activities specific to Sustainable Building 2030, at a cost of up to \$500,000 annually; these funds also come from assessments on public utilities.²²

In total, statutes allow the Department of Commerce to assess public utilities \$1 million for costs associated with the sustainable building guidelines and Sustainable Building 2030. The total assessments allowed by law have not changed since the Legislature authorized them.²³

According to the Department of Commerce, in recent years, the department has assessed public utilities the full \$1 million authorized by law, all of which was used for contracts with the Center for Sustainable Building Research for the administration of the guidelines. Staff at the departments of Administration and Commerce said that neither department allocates additional funds for the administration of the sustainable building guidelines or Sustainable Building 2030; any agency staff working on the guidelines do so as one of many other job responsibilities.

Capital Construction Overview

In 2020 the Legislature authorized the sale of more than \$1 billion in general obligation bonds for capital improvement projects across Minnesota. In accordance with the Minnesota Constitution, these funds must be used “to acquire and better public land and buildings and other public improvements of a capital nature.”²⁴

Other Statutory Requirements



As part of our evaluation, we compared aspects of the administration of the sustainable building guidelines to the administration of some other statutory requirements for capital projects. Throughout the report, we denote those comparisons using the purple symbol in this box.

Capital projects that receive general obligation bond funds must adhere to a number of statutory requirements in addition to the sustainable building guidelines. For example, projects must meet certain prevailing wage requirements and provide accommodations in some spaces for individuals who are hard of hearing.²⁵ Many recipients of bond proceeds are also required to submit a predesign report describing the purpose, scope, cost, and other aspects of the project.²⁶ Many of the requirements for capital projects apply regardless of the specific mechanism the Legislature uses to allocate bond funds, which we describe in greater detail below.

²¹ *Minnesota Statutes 2022*, 216B.241, subs. 1f(a) and 1f(d). With regard to the assessments described in this chapter, public gas and electric utilities do not include certain municipality or cooperative electric associations and certain retail sellers of gas and electricity. By law, the Department of Commerce must bill utilities in proportion to their gross operating revenue from the sale of gas or electricity within Minnesota during the last calendar year.

²² *Minnesota Statutes 2022*, 216B.241, subs. 1e(b), 9(b), and 9(d).

²³ Note that the two \$500,000 utility assessments were authorized in different years. When adjusted for inflation, the \$1 million in total utility assessments permitted by law is equivalent to about \$682,000 in 2022 dollars.

²⁴ *Minnesota Constitution*, art. XI, sec. 5(a).

²⁵ *Minnesota Statutes 2022*, 177.41-177.43; and 16C.054.

²⁶ *Minnesota Statutes 2022*, 16B.335, subs. 1-3.

The Legislature takes several approaches to providing general obligation bond proceeds, which has implications for the administration of the sustainable building guidelines.

1 Appropriation to a State Agency for an Agency Project

Lake Vermilion-Soudan Underground Mine State Park — \$5,800,000

To the commissioner of natural resources for “the predesign, design, and construction of a campground and related infrastructure at Lake Vermilion-Soudan Underground Mine State Park.”

— *Laws of Minnesota 2020, Fifth Special Session, chapter 3, art. 1, sec. 7, subds. 1 and 7*

2 Appropriation to the Department of Administration on Behalf of Another Agency

Human Services: Child and Adolescent Behavioral Health Services Facility — \$1,750,000

To the commissioner of administration for the “design, construction, and furnishing of a large motor activity and ancillary space for the Child and Adolescent Behavioral Health Hospital.”

— *Laws of Minnesota 2020, Fifth Special Session, chapter 3, art. 1, sec. 18, subds. 1 and 4*

3 Appropriation to a State Agency for a Grant to a Local Government

Grand Rapids; IRA Civic Center — \$5,000,000

To the commissioner of employment and economic development for “a grant to the city of Grand Rapids for the design, construction, and equipping of capital improvements to the IRA Civic Center.”

— *Laws of Minnesota 2020, Fifth Special Session, chapter 3, art. 1, sec. 21, subds. 1 and 21*

4 Block Appropriation to a State Entity for Initiative Grants

Metropolitan Council — \$5,000,000

“For grants to cities within the metropolitan area...for capital improvements in municipal wastewater collection systems....”

— *Laws of Minnesota 2020, Fifth Special Session, chapter 3, art. 1, sec. 17, subd. 2*

The Legislature often finances capital projects with general obligation bond proceeds in one of four ways. First, the Legislature may explicitly name and describe a capital project in law and appropriate funds directly to the state agency that owns the project, as shown in the example to the left.

Second, the Legislature may appropriate funding for a capital project to the Department of Administration to oversee a project on behalf of another state agency, rather than appropriating funds to the agency directly. The Department of Administration oversees capital projects for several state agencies, including the Minnesota departments of Corrections, Human Services, and Veterans Affairs.

Third, the Legislature may appropriate funds for a grant to a local unit of government, such as a city or county government. The Legislature appropriates these funds to a state agency, which then signs a grant agreement with the local government named in law. While the local government oversees the development of the project, the state agency that received the appropriation continues to act as the steward of the funds.

Finally, the Legislature allocates block appropriations for different initiatives, such as grants for the construction of public libraries. For these initiatives, the Legislature appropriates funds to an agency (the Minnesota Department of Education in the case of library grants) that the agency then distributes through grants to other political subdivisions for projects that are not explicitly named in law.

Although all new buildings and major renovations that receive general obligation bond funds must adhere to the sustainable building guidelines, the approach by which the Legislature funds projects has implications for the administration of the guidelines. For instance, because projects that received general obligation bond proceeds through block appropriations are not named in law, identifying those projects is more difficult, thus complicating the identification of capital projects that are subject to the guidelines. As another example, the roles and responsibilities of the project team members who implement the sustainable building guidelines vary depending on how the project is funded. We discuss team member roles and responsibilities in the next chapter.



OLA

Chapter 2: Program Roles, Responsibilities, and Support

Clear roles and responsibilities are central to the success of any program. As we discussed in Chapter 1, numerous entities are involved with the implementation or administration of the sustainable building guidelines. In this chapter, we delve more deeply into the roles and responsibilities of those various actors. We also discuss the extent to which individuals felt they had adequate training and support to perform their roles.

Key Findings in This Chapter

- State law does not assign responsibility for the ongoing administration or oversight of the sustainable building guidelines.
- The Center for Sustainable Building Research at the University of Minnesota—rather than a state agency—has assumed primary responsibility for administering the sustainable building guidelines.
- Widespread disagreement and confusion about roles and responsibilities regarding the sustainable building guidelines have resulted in limited program oversight and accountability.

Roles and Responsibilities

Statutory Responsibilities

As we described in Chapter 1, statutes require the departments of Administration and Commerce to develop and periodically review the sustainable building guidelines.¹ However, the successful implementation of the guidelines requires more than developing and reviewing them. For instance, it is important to ensure that the project teams with responsibility for implementing the guidelines are clearly informed of their responsibilities and comply with the guidelines. In short, after developing or reviewing the guidelines, someone then needs to administer and oversee them.

State law does not assign responsibility for the ongoing administration or oversight of the sustainable building guidelines.

Statutes do not explicitly charge any state agency with administering or overseeing the sustainable building guidelines. For example, as seen in Exhibit 2.1, statutes do not task a specific agency, such as the department of Administration or Commerce, with identifying which projects are subject to the sustainable building guidelines, enforcing compliance, or evaluating the outcomes of the guidelines overall. Additionally, while the Legislature has assigned certain responsibilities pertaining to state bonding to Minnesota Management and Budget (MMB), statutes do not assign any duties pertaining to the sustainable building guidelines to MMB.

¹ *Minnesota Statutes 2022*, 16B.325, subs. 1 and 4; and 216B.241, subd. 1f(a).

Exhibit 2.1**Statutes establish limited duties for state agencies with regard to the sustainable building guidelines.****SUSTAINABLE BUILDING GUIDELINES****Key duties assigned in law:**

The departments of Administration and Commerce shall:

- Develop sustainable building design guidelines with the assistance of other agencies.
- Review the sustainable building guidelines periodically, maintain the guidelines, and revise them as needed.

Key duties not assigned in law:

- Identify projects that are subject to the guidelines.
- Require submission of guideline-related data.
- Monitor compliance with the guidelines.
- Enforce guideline participation and compliance.
- Evaluate whether the guidelines are having their intended effect.

SUSTAINABLE BUILDING 2030**Key duties assigned in law:**

The Department of Commerce shall:

- "...contract with the Center for Sustainable Building Research at the University of Minnesota to coordinate development and implementation of energy-efficiency performance standards, strategic planning, research, data analysis, technology transfer, training, and other activities related to the purpose of Sustainable Building 2030."
- Report every three years to the Legislature on the cost-effectiveness and progress of implementing Sustainable Building 2030.
- Annually assess utilities for the purpose of fulfilling obligations regarding Sustainable Building 2030 and may annually assess utilities for the purpose of fulfilling obligations regarding the sustainable building guidelines, among other responsibilities.

Note: Statutes also require the departments of Administration and Commerce to maintain and update a benchmarking tool so that all public buildings can "maintain energy use information."

Source: Office of the Legislative Auditor, based on *Minnesota Statutes 2022*, 16B.325, subds. 1 and 4; and 216B.241, subds. 1e-1f and 9.

While statutes outline some additional responsibilities for the Department of Commerce, these duties are limited and are specific to Sustainable Building 2030—the guidelines' energy component; they do not pertain to the guidelines overall. For example, the Department of Commerce must report to the Legislature every three years on the cost-effectiveness and progress of implementing Sustainable Building 2030.²

² *Minnesota Statutes 2022*, 216B.241, subd. 9(f).

Even though statutes do not assign responsibility for administering and overseeing the implementation of the sustainable building guidelines to any state agency, the departments of Administration and Commerce have taken on some responsibility for administering the program.³ Staff from both agencies said they work cooperatively to determine program priorities. These staff also attend quarterly meetings with representatives from the Center for Sustainable Building Research and its subcontractors to review the center's progress towards fulfilling contractual obligations and to discuss program needs and activities. Nevertheless, agency staff undertake few activities pertaining to the ongoing administration of the sustainable building guidelines.

The Center for Sustainable Building Research at the University of Minnesota—rather than a state agency—has assumed primary responsibility for administering the sustainable building guidelines.

The departments of Administration and Commerce have contracted with the Center for Sustainable Building Research to handle most responsibilities associated with the sustainable building guidelines. For example, contractually, the center—or its subcontractors—is responsible for developing and managing the guidelines; determining, ensuring, and reporting on compliance with the guidelines; reaching out to agencies subject to the guidelines; providing education and assistance to project teams; and more.

The Center for Sustainable Building Research, in collaboration with its subcontractors, also provides a software tool that project teams use to track whether they are adhering to the guidelines. To use this tool, project teams contact the Center for Sustainable Building Research to add their projects to a guidelines database. Then, as projects progress through the different project phases, the tool tracks—and in some cases—determines the project's compliance with individual guideline requirements based on the data submitted by project team members, which are added to the guidelines database. The center and one of its subcontractors also provide project teams with a tool to track how projects are performing with regard to certain sustainability elements—such as energy consumption—once the building is occupied.⁴

In essence, the Center for Sustainable Building Research oversees the day-to-day administration of the sustainable building guidelines. Center staff answer questions from project teams about how to meet the guidelines, and they spearhead revisions to the guidelines. Center staff provide training, explanatory materials, and the tools needed to track compliance with the guidelines. For many projects, a center staff person even acts as the agency contact for the project, a key role that reviews and approves the information project team members submit to the guidelines database. We discuss this role further in the following section.

³ An MMB official confirmed that, beyond publishing resources that list the guidelines as a requirement for capital projects, MMB does not play any role regarding the sustainable building guidelines.

⁴ This tracking tool is available to public building owners across the state; its use is not limited to projects that must comply with the sustainable building guidelines.



Project Team

Project team members are responsible for advancing projects through the sustainable building guidelines during each phase of design and construction and during building occupancy, including completing required documentation.

— **Center for Sustainable Building Research, Minnesota B3 Guidelines: New Buildings and Major Renovations Version 3.2 Revision 01 (May 2021)**

Project Team Responsibilities

Project team members—such as architects, engineers, interior designers, and energy modelers—play an integral role in implementing the guidelines on individual projects. Members of the project team provide information about the project’s compliance with the guidelines, coordinate the completion of guideline requirements, review whether information about the project is complete and accurate, and—as we discuss in Chapter 3—sometimes decide whether to exempt the project from meeting certain requirements altogether.

Project teams responsible for implementing the sustainable building guidelines often include individuals working for state and private entities.

For any given project, numerous individuals in a variety of roles may be involved in implementing the sustainable building guidelines. For example, for one project we reviewed, more than a dozen project team members were assigned to one or more of at least 19 different roles.⁵

Project roles are typically filled by a combination of individuals working in the public and private sectors. For instance, the agency contact—who plays a key role in reviewing and approving data on guideline compliance during a project’s design and construction—should be an employee of the state agency that receives the project appropriation.⁶ On the other hand, the guideline leader—the individual who coordinates the guideline-related work of the other project team members—tends to be a design professional employed by a private-sector firm.

The roles of most project team members with regard to the sustainable building guidelines are not clearly defined.

Statutes do not define the role of project team members in implementing the sustainable building guidelines. They do not, for instance, describe what role agency or local government staff play in ensuring that projects comply with the guidelines, nor do they describe the roles of contracted firms in implementing the guidelines.

Further, the sustainable building guidelines themselves do not define the roles for most project team members. While there are at least 19 different roles to which an individual could be assigned, the guidelines define only two roles—the agency contact and guideline leader—as shown in Exhibit 2.2. For the remaining roles, including the owner, architectural leader, landscape leader, and more, the guidelines do not define the roles or clearly describe the responsibilities of individuals holding those roles. The departments of Administration or Commerce also do not provide information about project team members’ responsibilities.

⁵ Several individuals were assigned to multiple roles.

⁶ For certain projects, a Center for Sustainable Building Research staff person serves as the agency contact.

Exhibit 2.2

The sustainable building guidelines do not define the majority of project team member roles.

Project Team Roles	Key Responsibilities	Typical Employer
Agency contact	<ul style="list-style-type: none"> • Provide data about certain guidelines • Review and approve project documentation submitted by other team members • Approve variance requests^a 	State agency ^b
Guideline leader	<ul style="list-style-type: none"> • Coordinate the completion of tasks required to comply with the guidelines • Review project data submitted by other team members • Request variances as needed 	Private-sector firm
Owner	<p>Role is undefined</p> <ul style="list-style-type: none"> • Able to view data submissions from other team members 	Likely a state agency or local government
Acoustics leader, architectural leader, civil leader, design and construction commissioning leader, electrical leader, energy leader, interior design leader, landscape leader, mechanical leader, structural leader	<p>Roles are undefined</p> <p>Typically, people in these roles do one or more of the following:</p> <ul style="list-style-type: none"> • Complete assigned tasks and submit necessary documentation • Sign off that individual guideline requirements have been completed • Request variances as needed 	Private-sector firm

Note: The table above does not include all roles assigned to project team members working on the sustainable building guidelines; however, those other roles are also undefined.

^a We discuss variances in Chapter 3.

^b For certain projects, a staff member at the Center for Sustainable Building Research acts as the agency contact.

Sources: Office of the Legislative Auditor, based on University of Minnesota, College of Design, Center for Sustainable Building Research, *Minnesota B3 Guidelines: New Buildings and Major Renovations Version 3.2 Revision 01* (May 2021); and University of Minnesota, College of Design, Center for Sustainable Building Research, *Minnesota B3 Guidelines: B3 Guidelines Project Role: Agency Contact* (April 2021).



As a first time Guideline Leader, I felt unsure what aspects of compliance with the [sustainable building] guidelines were my direct responsibility, and which ones I could delegate, or oversee loosely.... The Guideline document does not clearly delineate responsibility, making it difficult to get a snapshot of what will need to be accomplished throughout the project by each member, particularly the guideline leader.

— Guideline leader

Many project team members we spoke with told us that expectations were not clear about how to fulfill their roles with regard to the sustainable building guidelines. When we asked one individual if expectations about how to fulfill their role as agency contact were clearly communicated, they replied, “absolutely not.” Another agency contact we interviewed said that expectations pertaining to their role were not clear to them “by any means.” An individual assigned to be the guideline leader for another project we reviewed told us they did not know prior to our interview that they were considered to be a guideline leader, even though construction for that project was complete.

Despite the confusion among some individuals we interviewed, when we surveyed project team members with experience working on recent capital projects that were subject to the guidelines, the majority of respondents indicated that their responsibilities related to the guidelines were clear.⁷ Sixty-seven percent of owners, 59 percent of agency contacts, and 81 percent of guideline leaders agreed or somewhat agreed that their responsibilities related to the sustainable building guidelines were clear. However, while many survey respondents said their responsibilities were clear, this does not necessarily mean that they correctly understood their responsibilities. As we discuss below, people we interviewed sometimes had conflicting understandings of who was responsible for certain tasks.

Discussion

As we described above, statutes do not assign responsibility for the ongoing administration or oversight of the sustainable building guidelines to a specific agency. Further, the roles and responsibilities of most project team members are not clearly defined. In this section we discuss how those two issues have affected the program.

Widespread disagreement and confusion about roles and responsibilities regarding the sustainable building guidelines have resulted in limited program oversight and accountability.

Over the course of our evaluation, we encountered several differing views with regard to what entity is responsible for monitoring or ensuring that projects comply with the sustainable building guidelines. For example, the Legislature often appropriates funds to the Department of Employment and Economic Development (DEED) for grants for capital projects owned and overseen by local governments. The sustainable building guidelines state that “The agency, State entity, or non-State organization that receives general obligation bond funding for a project is obligated to ensure that the project adheres to the [sustainable building] Guidelines” (DEED in this example). However, when we asked DEED staff about the agency’s role in ensuring those projects comply with the guidelines, a staff member told us that they assumed that the Department of Administration was responsible for ensuring that projects adhere to the guidelines. However, an official at the Department of Administration told us that the agency or local government entity that owns the project is responsible for ensuring compliance.⁸ In addition, as we discuss further in Chapter 4, there was considerable disagreement among the project team members that we surveyed about who is responsible for ensuring compliance with the guidelines.

Further, agency staff and project team members sometimes assumed that other entities were taking actions related to the guidelines that they were not. For instance, some project team members believed that the Center for Sustainable Building Research

⁷ We surveyed all individuals listed in the sustainable building guidelines database as an agency contact, guideline leader, and/or owner who had accessed the database since 2020 and had worked on at least one project subject to the guidelines that had been added to the database since 2017. Of the 146 individuals we contacted, we received 92 responses, for a survey response rate of 63 percent.

⁸ The agency that receives the project appropriation is not necessarily the project owner. As we discussed in Chapter 1, for local government projects, the local government owns and oversees the development of the project while a state agency receives the appropriation.

reviews and approves individual guideline waivers referred to as “variances.” Yet, as we discuss in Chapter 3, the center is not currently responsible for reviewing and approving most variances. Others thought that the center reviews the compliance information that team members input into the guidelines database before the project is approved to move on to the next phase of work; however, the center does not do so for all guidelines.⁹

The lack of clarity in law around specific duties pertaining to the sustainable building guidelines has ultimately hindered oversight and accountability at the programmatic and project level. Exhibit 2.3 lists several additional guideline-related duties that are not assigned in law and describes how the lack of clarity pertaining to these responsibilities affects program oversight. We discuss these topics in greater detail later in this report.

Exhibit 2.3

A lack of clear roles and responsibilities has hindered oversight.

Guideline Responsibilities	Issue
Unclear which agency should identify projects subject to guidelines	The state cannot systematically monitor or enforce compliance with the guidelines without first determining which projects are subject to guidelines.
Unclear to many project team members who approves variances	Projects may be inappropriately exempted from meeting certain guidelines.
Unclear which agency should analyze the overall effect of the guidelines on building cost or sustainability	The state cannot determine if the guidelines are having their intended effect without analyzing the guidelines’ impacts on projects.

Note: We discuss the process for determining which projects are subject to the guidelines, guideline variances, and the overall effect of the sustainable building guidelines later in this report.

Source: Office of the Legislative Auditor.

Roles and Responsibilities for Other Bonding Requirements

Although the Legislature has not clarified what agency is responsible for administering and overseeing the sustainable building guidelines, it has taken a different approach for several other statutory requirements for capital projects. As we described in Chapter 1, the sustainable building guidelines are just one of a number of requirements to which capital projects are expected to adhere. We briefly discuss the oversight of some of those other requirements below.

In contrast to the law regarding the sustainable building guidelines, statutes explicitly establish agency oversight responsibilities for other statutory requirements for capital projects.

We reviewed several other statutory requirements for projects receiving general obligation bond funds and found that—unlike the law regarding sustainable building

⁹ Unless the Center for Sustainable Building Research is filling the role of agency contact, the center—with the assistance of one of its subcontractors—only reviews information submitted by project teams about guideline requirements for Sustainable Building 2030.

guidelines—statutes more clearly assign oversight responsibility to a specific agency for several of those requirements. For example:



Prevailing wage requirements. With certain exceptions, by law, any contract for any wholly or partially state-funded construction or remodeling project must include prevailing wage stipulations.¹⁰ State law assigns responsibility for enforcing prevailing wage requirements to the Department of Labor and Industry and grants the department the authority to demand and review records relating to prevailing wage requirements.¹¹ Further, statutes require the department to employ at least three investigators to perform onsite project reviews, investigate potential violations, and conduct training and outreach.¹²



Predesign submittal. In many cases, before a capital project can proceed to design, statutes require that the recipient of the appropriation submit a predesign report that describes the purpose, scope, cost, and other aspects of the project.¹³ By law, the commissioner of the Department of Administration must receive and review the report and issue a recommendation about the project.



Full funding requirement. In the case of capital projects for which the Legislature's appropriation is not sufficient, by itself, to cover the full cost of the project or project phase, state law requires that there be sufficient nonstate commitments to cover the remainder of the costs.¹⁴ Statutes require that the commissioner of MMB determine that commitments are sufficient to cover the remaining project costs before project funding is released.

Recommendations

The recommendations we present here and throughout the remainder of the report assume that the Legislature intends for all new construction and major renovation projects receiving general obligation bond proceeds to follow the guidelines, as is currently required by law.¹⁵ However, as the Legislature considers our recommendations, it should reflect upon what role it wants the guidelines to play in promoting building sustainability. Does the Legislature intend for the guidelines to be *requirements*, as is currently established in law? Or, for example, does the Legislature instead intend for the guidelines to be sustainability goals or *best practices* that capital projects should strive to meet, rather than requirements capital projects must meet?

¹⁰ For example, contracts must “state the prevailing wage rates, prevailing hours of labor, and hourly basic rates of pay.” *Minnesota Statutes 2022*, 177.43, subds. 1-3 and 7.

¹¹ *Minnesota Statutes 2022*, 177.43, subd. 6. For highway-related contracts, statutes assign enforcement authority to the Minnesota Department of Transportation. *Minnesota Statutes 2022*, 177.44, subds. 1 and 7.

¹² *Minnesota Statutes 2022*, 177.43, subd. 6.

¹³ *Minnesota Statutes 2022*, 16B.335, subds. 1-3.

¹⁴ *Minnesota Statutes 2022*, 16A.502.

¹⁵ *Minnesota Statutes 2022*, 16B.335, subd. 3.

These fundamental questions have significant implications for how the guidelines should be administered, as well as implications for the level of state resources needed to achieve the guidelines' desired ends. Neither the Department of Administration nor the Department of Commerce employ staff devoted solely to working on the sustainable building guidelines; staff currently working on the guidelines do so as one of many other responsibilities. Further, because funding supporting the guidelines (assessments on public utilities) is not tied to inflation, program funding has effectively decreased over time.¹⁶ If the Legislature intends for the guidelines to be a requirement for capital projects, the state may need to reconsider the level of resources currently devoted to this program in order to ensure that it is effectively administered and overseen. Conversely, if the Legislature intends for the guidelines to be best practices, ensuring compliance becomes unnecessary, which would reduce the resources needed to adequately administer and oversee the guidelines.

RECOMMENDATION

The Legislature should determine which agency is responsible for administering and overseeing the sustainable building guidelines and codify those duties in law.

Regardless of the Legislature's ultimate decision regarding the intent of the sustainable building guidelines, the Legislature should more clearly outline in law its expectations for the administration and oversight of the guidelines. Although the Legislature clearly identified in law which agencies are responsible for *developing and reviewing* the sustainable building guidelines, it failed to specify what agency was responsible for *administering and overseeing* the guidelines after they were developed. This has contributed to substantial disagreement and confusion about roles and responsibilities regarding the guidelines and has hindered overall accountability.

To improve oversight and accountability, the Legislature should identify which state agency has primary responsibility for administering and overseeing the sustainable building guidelines. Although it may make sense for that agency to collaborate with other state agencies or nonstate entities on various aspects of the guidelines, we recommend that the Legislature assign overall responsibility for the guidelines to a single state agency. Given the large number of individuals and agencies involved in the bonding process overall, and with the sustainable building guidelines specifically, we believe that assigning guideline administration and oversight responsibilities to one agency will help mitigate confusion about who is ultimately responsible for the program.

The Legislature should also carefully consider to what extent contracted entities—such as the Center for Sustainable Building Research—have decision-making and enforcement responsibilities for the sustainable building guidelines, as opposed to assigning those duties to a state agency. Currently, the center has significant discretion in administering the guidelines. While we appreciate the need for technical experts—such as the Center for Sustainable Building Research—to be involved in the development and implementation of the guidelines, we believe that the involvement of contracted entities should be limited to an advisory role. We believe that the duties to

¹⁶ As we discussed in Chapter 1, total assessments established in law on public utilities for costs associated with the sustainable building guidelines have not changed since the Legislature authorized them.

administer, oversee, and enforce the guidelines more appropriately rest with a state agency, rather than a contracted entity.

RECOMMENDATION

The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that the guidelines clearly define the roles of all individuals responsible for implementing the guidelines.

As we described above, project team members do not always clearly understand their role with regard to implementing the sustainable building guidelines. Yet, project team members play an important role in implementing the guidelines on individual projects.

Once the Legislature determines which agency has overall administrative and oversight responsibilities for the sustainable building guidelines, that agency should oversee the process of defining all project team member roles.

Training and Support

The establishment of clear roles and responsibilities—in law and in the guidelines—is only one aspect of ensuring that the sustainable building guidelines are implemented effectively. The individuals responsible for implementing the guidelines also need to understand how to perform their roles. Further, they need access to adequate assistance should they have questions about how to perform their responsibilities. We discuss the extent to which project team members felt they received sufficient training and support below.

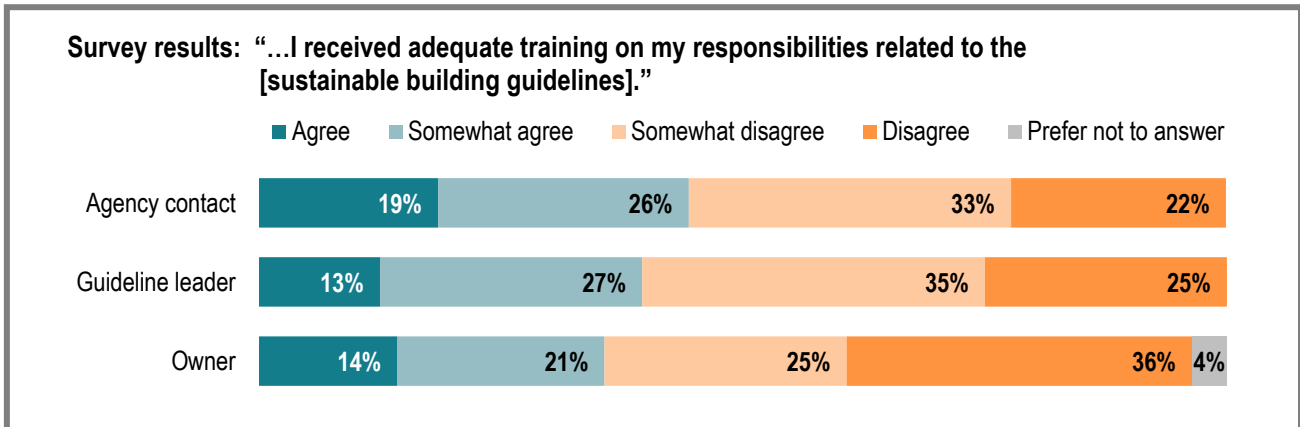
Training

According to the Department of Administration’s joint powers agreement with the Center for Sustainable Building Research, the center is to “Provide education, training, and technical support to project teams.”¹⁷ The center periodically provides training sessions on the sustainable building guidelines and includes a number of training resources on its website.

Many project team members said they did not receive adequate training on how to fulfill their roles with regard to the sustainable building guidelines.

In our survey of project team members, about 55 percent of agency contacts and about 60 percent of guideline leaders and owners disagreed or somewhat disagreed that they received adequate training on their responsibilities related to the guidelines. Several project team members explained that there was not any training available or that they were unaware of training being available.

¹⁷ Minnesota Department of Administration and University of Minnesota, Center for Sustainable Building Research, Work Plan and Scope, *State of Minnesota Joint Powers Agreement*, signed July 2021, last amended June 2022.



Several project team members described having to try to figure out what to do with regard to the guidelines on their own. One agency contact described their experience with the guidelines as “sink or swim.” A guideline leader said they did not receive any training or coaching on the guidelines and agreed that their efforts to learn their guideline responsibilities was a “trial by fire.” Several individuals we interviewed thought there should be additional training or said that additional training would have been helpful.



It would be beneficial to provide training or online videos of how [the sustainable building guidelines work]. Personally I felt I didn’t understand the guidelines and the requirements required for the project to move forward.

— Guideline leader

RECOMMENDATION

The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that all individuals responsible for implementing the guidelines receive adequate training on their respective roles and responsibilities.

As we discussed in the previous section, many project team members we interviewed were confused about their roles and responsibilities with regard to the sustainable building guidelines, which has contributed to limited accountability at the project level. Once the Legislature determines which agency has overall administrative and oversight responsibilities for the guidelines, that agency should ensure that all project team members receive adequate training on their roles and responsibilities pertaining to the sustainable building guidelines.



Training of team member responsibilities, expectations, and lines of communication should be made available prior to the beginning of each project requiring [the sustainable building guidelines].

— Agency contact

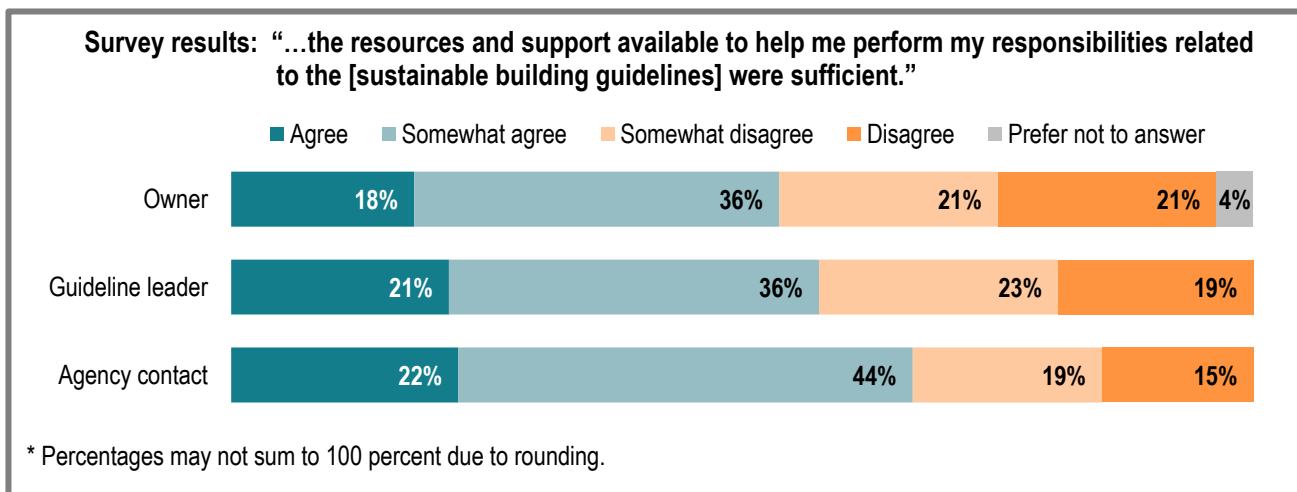
To account for turnover within both public agencies and private firms, the state agency that is granted oversight responsibilities for the guidelines should ensure that training is provided on an ongoing—rather than a one-time—basis. Further, because the private firms working on projects subject to the guidelines may be different from one project to the next, continual education about guideline roles and responsibilities is necessary.

Program Support

Per its joint powers agreement with the Department of Administration, the Center for Sustainable Building Research is responsible for providing technical support to the project teams implementing the guidelines. For instance, according to a staff member at the Department of Administration, the center provides information about the guidelines to project teams and answers team members’ technical questions. We found, however, that some project team members were unfamiliar with the center. In fact, 13 percent of survey respondents reported having never heard of the Center for Sustainable Building Research. Below, we discuss the extent to which project team members said they received adequate support with regard to implementing the sustainable building guidelines.

Project team members had mixed opinions as to whether they received sufficient resources and support to perform their responsibilities.

Respondents to our survey were generally divided on whether they received sufficient support to perform their responsibilities related to the sustainable building guidelines. For instance, nearly 55 percent of owners agreed or somewhat agreed that the resources and support available to help them perform their responsibilities related to the guidelines were sufficient, while slightly less than 45 percent disagreed or somewhat disagreed.¹⁸ Guideline leaders had similar responses. Agency contacts were somewhat more positive, with about two-thirds agreeing or somewhat agreeing that the resources and support available to them were sufficient.



Although project team members were divided over whether they received sufficient resources and support overall, project team members generally indicated that they received helpful and timely assistance when they sought it out. Over 85 percent of survey respondents who had interacted with the Center for Sustainable Building Research agreed or somewhat agreed that they received useful assistance from the

¹⁸ Four percent of owners responded that they preferred not to answer this question.



[The Center for Sustainable Building Research] has been professional and timely with requests for information, clarification, and guidance on how to navigate the [sustainable building guideline] process.

— Guideline leader

center when they had questions about the sustainable building guidelines.¹⁹ Slightly more than two-thirds of respondents agreed or somewhat agreed that they received timely assistance from the center.

Although survey respondents had generally positive opinions regarding the assistance provided by the Center for Sustainable Building Research, several respondents provided written comments about challenges relating to long response times from the center. For example, one guideline leader

commented that “resources [and] support were available...but the response time did not keep up with the project speed.” An agency contact we spoke with said that they have been unable to reach anyone at the center to help them resolve a data reporting issue, despite trying “for quite some time.”

A lack of timely support could have important consequences for projects attempting to comply with the sustainable building guidelines. For instance, one guideline leader commented that, for these types of projects, time is money; they explained that delays can mean that a project needs to increase its budget. Another respondent commented that lengthy response times hinder their ability to incorporate feedback from the center into the project in a timely and cost-effective manner.



Getting help was difficult from a timing standpoint, often waiting weeks or months for a response.

— Owner

RECOMMENDATION

The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that project team members receive adequate support to implement the guidelines.

Projects must fulfill a significant number of requirements to comply with the sustainable building guidelines. Given the extent and complexity of the guidelines, it is important that project teams have access to timely and useful assistance. The agency to which the Legislature assigns responsibility for administering and overseeing the sustainable building guidelines should ensure that project team members have access to adequate resources to fulfill their responsibilities.

¹⁹ Totals in this paragraph include the 53 respondents who (1) indicated that they had interacted with the Center for Sustainable Building Research and (2) did not select “not applicable.”



OLA

Chapter 3: Guideline Applicability

If a capital project is to successfully comply with the sustainable building guidelines, it first must be clear (1) that the project is subject to the guidelines, and (2) which guidelines that project must meet. In this chapter, we discuss the process for determining which capital projects must adhere to the sustainable building guidelines. We also discuss the process by which capital projects may be exempted from meeting certain guideline requirements.

Key Findings in This Chapter

- The total number of projects subject to the sustainable building guidelines is unknown.
- The criteria used to determine which projects are subject to the sustainable building guidelines are unclear and may not align with requirements in law.
- Guideline waivers—such as variances—are not explicitly permitted in law; nonetheless, the vast majority of projects in our review received at least one variance.

Identifying Projects Subject to the Guidelines

By law, the sustainable building guidelines apply to many—but not all—capital projects. As we discussed in Chapter 1, the guidelines apply only to capital projects receiving

general obligation bond proceeds; they do not apply to projects funded through other mechanisms, such as revenue bonds or General Fund appropriations. Also, by law, only capital projects that are “new buildings” or “major renovations” must adhere to the sustainable building guidelines; renovation projects that are not “major” are not subject to the guidelines.¹ As directed by law, the guidelines outline criteria to determine when a project is a “major renovation.”² Those criteria are listed in the box to the left.

If a project team believes that their project is not subject to the guidelines—for example, because the renovated area is smaller than 10,000 square feet—the team may choose to submit a nonapplicability request form.³ However, while project teams *may* submit a nonapplicability request form if they believe the project is not subject to the guidelines, the Department of Administration does not require a project team to do so. Instead, a project team may simply choose not to follow the guidelines.



Major Renovations

A project is considered a major renovation and must comply with the guidelines if it has both of the following characteristics:

- Renovated area includes 10,000 square feet or more.
- It encompasses “at least the replacement of the mechanical, ventilation, or cooling system of the building, or a section of the building.”

— Center for Sustainable Building Research, *Minnesota B3 Guidelines: New Buildings and Major Renovations Version 3.2 Revision 01 (May 2021)*, 5

¹ *Minnesota Statutes* 2022, 16B.325, subd. 3.

² *Minnesota Statutes* 2022, 16B.325, subd. 2, states “the guidelines shall define ‘major renovations,’” as long as that definition does not encompass buildings that do not meet certain minimum specifications outlined in law. We discuss those specifications later in this section.

³ From 2012 to 2022, the Department of Administration approved 167 (91 percent) of the 183 nonapplicability requests submitted, meaning the department determined that those projects were not required to adhere to the guidelines.

The total number of projects subject to the sustainable building guidelines is unknown.

Although it is possible to review all projects that received bond proceeds to determine which projects must adhere to the guidelines, we were unable to identify a state agency that is doing so. A staff member at the Department of Commerce said that the department does not maintain a list of projects subject to the guidelines. Likewise, a representative from Minnesota Management and Budget (MMB) said that their agency does not collect or maintain information about which projects are new buildings or major renovations, which would indicate which projects are subject to the guidelines. While a staff member at the Department of Administration told us that the department determines which projects are subject to the guidelines amongst the projects for which it receives an appropriation, the staff member stated that the department does not believe it is responsible for identifying all capital projects that are subject to the guidelines. In short, there appears to be no comprehensive record of all projects that are subject to the sustainable building guidelines.



It is important to note that agencies similarly do not identify which capital projects are subject to some of the other statutory requirements affecting bond-funded projects. For example, a representative from the Department of Labor and Industry said that the agency does not maintain a comprehensive list of capital projects subject to prevailing wage requirements.⁴ Likewise, we were unable to identify a specific entity that determines which projects must present plans and cost estimates to the Legislature before preparing final plans and specifications for the project.⁵

Applicability Criteria in Law

Aspects of state law regarding which capital projects are subject to the sustainable building guidelines are unclear.

Even if an agency was to try to determine which capital projects are subject to the guidelines, some of the criteria in law for making such a determination are unclear. First, statutes do not indicate under what circumstances—if any—building additions are subject to the guidelines. For instance, should additions be treated as new buildings or as major renovations or as a separate category entirely? Second, the language in law regarding major renovations is unclear. As we discussed above, statutes direct the guidelines to establish a definition for major renovations. Statutes also identify certain criteria that the definition must incorporate:

The guidelines shall define “major renovations” for purposes of this section. The definition may not allow “major renovations” to encompass less than 10,000 square feet or to encompass less than the

⁴ As discussed in Chapter 2, state law assigns responsibility for enforcing prevailing wage requirements to the Department of Labor and Industry. *Minnesota Statutes 2022*, 177.43, subd. 6.

⁵ Statutes require recipients of funding for many capital projects to present a “program plan and cost estimates” for the project to certain legislative committees before preparing final plans and specifications for the project. *Minnesota Statutes 2022*, 16B.335, subd. 1.

replacement of the mechanical, ventilation, or cooling system of the building or a section of the building.⁶

When one tries to apply these criteria, it is not clear whether the Legislature means that major renovations:

1. Must be projects that are at least 10,000 square feet *and* encompass a mechanical, ventilation, or cooling system replacement, or
2. Include projects that are at least 10,000 square feet but do not involve the replacement of a mechanical, ventilation, or cooling system *as well as* projects that include the replacement of a mechanical, ventilation, or cooling system, but are less than 10,000 square feet.

Although the interpretation of law regarding major renovations is unclear, the guidelines have adopted the more restrictive of the two interpretations—that major renovations must be at least 10,000 square feet *and* include a mechanical, ventilation, or cooling system replacement.

Applicability Determinations

As we discussed above, if a project team believes that their project is not subject to the guidelines, the team may choose to submit a nonapplicability request form. On the form, the project team indicates which of the “major renovation” criteria that the project does not meet, or if there are other reasons they believe that the project is not subject to the guidelines. The Center for Sustainable Building Research reviews the request and makes a recommendation to the Department of Administration as to whether the project is subject to the guidelines. Staff at the Department of Administration then accept or reject the center’s recommendation.

The criteria used to determine which projects are subject to the sustainable building guidelines are unclear and may not align with requirements in law.

The criteria that the Center for Sustainable Building Research and the Department of Administration use to make applicability recommendations and determinations are unclear. Although the guidelines clearly articulate the criteria a project must meet to be considered a major renovation, a representative from the Department of Administration told us of several additional criteria that need to be met for a project to be subject to the guidelines. For example, the staff person stated that the building should be enclosed and occupied.⁷ However, neither of these criteria are outlined in the guidelines. Further, a staff member from the Center for Sustainable Building Research told us that the center bases some applicability recommendations on past precedent that has not been formally documented.

⁶ *Minnesota Statutes* 2022, 16B.325, subd. 2.

⁷ According to this staff person, a wastewater treatment plant, for instance, is not an occupied building.

In addition, it was not clear that the criteria used to make determinations about whether projects were subject to the guidelines aligned with requirements in law. Statutes do not identify any of the additional applicability criteria listed by the Department of Administration staff person as reasons why a building would not be subject to the guidelines.⁸ For instance, statutes do not say that only occupied buildings are subject to the guidelines. Although law allows additional criteria to be included in the guidelines' definition of a *major renovation*, state law does not allow the guidelines to establish additional applicability criteria for *new buildings*. Rather, statutes simply state that the guidelines are mandatory for *all* new buildings that receive general obligation bond proceeds.⁹

Finally, staff from the Department of Administration and the Center for Sustainable Building Research sometimes provided conflicting accounts of the conditions that would lead them to determine that a project was not subject to the guidelines. For example, a representative from the Department of Administration said that amphitheaters are not enclosed and were thus generally not subject to the guidelines, whereas a representative from the center said they were subject to the guidelines. Additionally, a representative from the Department of Administration said that a building should be heated or cooled to be subject to the guidelines, whereas the guidelines—the development of which is led by the center—explicitly state that exceptions are not allowed based on whether a project is heated or cooled.

A representative from the Department of Administration stated that the current process of identifying projects that are subject to the guidelines is “more art than science” and explained that the department’s approach to identifying which projects are subject to the guidelines is based on its understanding of the legislative intent and the focus of the guidelines. For example, according to this staff member, the foundational purpose of the guidelines was to reduce energy costs in buildings, so a reasonable interpretation of that intent is that the building has to be occupied. Nonetheless, the staff member acknowledged that this criterion is not included in law.

RECOMMENDATIONS

The Legislature should:

- **Amend statutes to assign an agency responsibility for determining which projects are subject to the sustainable building guidelines.**
- **Clarify law regarding the types of capital projects that are subject to the sustainable building guidelines.**

The Legislature should identify an agency that is responsible for identifying all projects that are subject to the guidelines, and codify that agency’s duty to do so in law. Without knowing which projects are subject to the guidelines, it is not possible to track and ensure their compliance.

⁸ *Minnesota Statutes* 2022, 16B.325, subd. 2.

⁹ *Ibid.*, subd. 3.

Further, we recommend that the Legislature clarify the criteria of a major renovation and determine under what circumstances—if any—building additions are subject to the guidelines. If, as the Department of Administration purports, the Legislature intended for projects meeting other conditions to be exempt from following the guidelines, the Legislature should specify those conditions in law as well.

RECOMMENDATION

The agency to which the Legislature assigns responsibility for identifying projects subject to the sustainable building guidelines should clearly define and document the criteria for making applicability determinations.

We believe that a more systematic approach is needed to identify which capital projects are subject to the sustainable building guidelines. After the Legislature decides which agency is responsible for identifying the projects subject to the guidelines, that agency should define the criteria used to make applicability decisions. For example, if the agency would like to further refine the definition of a major renovation, as law permits, it should document the applicability criteria in the guidelines and ensure that applicability determinations are made based only on documented criteria. Finally, the agency must ensure that any additional applicability criteria comply with the law.

Notification About Guideline Applicability

State agencies provide information to project teams about the sustainable building guidelines in several ways. For example, MMB provides information on its website about bonding requirements both before and after the Legislature passes a bonding bill. That information identifies the sustainable building guidelines as one of several statutory requirements that apply to bond-funded capital projects. Additionally, the Department of Administration includes information about the sustainable building guidelines in a manual describing the project predesign process.

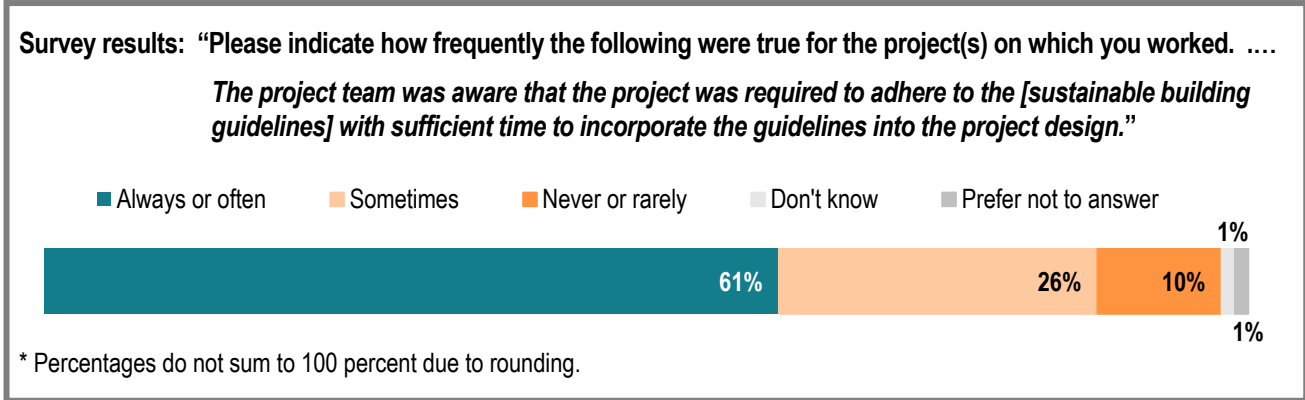
However, not all project teams receive information about the guidelines through the sources described above. For instance, some projects do not go through MMB's capital budgeting process prior to passage of the bonding bill, and some projects are not required to undergo a predesign review by the Department of Administration. Furthermore, the materials provided by MMB and the Department of Administration do not identify the individual projects that are subject to the guidelines, leaving it up to individual project teams to make that determination for their own projects.

Given these limitations, we surveyed project team members to learn more about the extent to which project teams were adequately informed that their projects were subject to the sustainable building guidelines.¹⁰

¹⁰ We surveyed all individuals listed in the sustainable building guidelines database as an agency contact, guideline leader, and/or owner who had accessed the database since 2020 and had worked on at least one project subject to the guidelines that had been added to the database since 2017. Of the 146 individuals we contacted, we received 92 responses, for a survey response rate of 63 percent.

Some survey respondents indicated that project teams were not always aware that the project was subject to the sustainable building guidelines with enough time to incorporate the guidelines into the project design.

For the guidelines to be effective, it is important that project teams are aware of the guideline requirements with enough time to incorporate them into the project plans. However, survey respondents indicated that this does not always occur. Ten percent of respondents said that their project teams were never or rarely aware that their projects were subject to the sustainable building guidelines with sufficient time to incorporate the guidelines into the project design.¹¹ An additional 26 percent of respondents said that project teams were only sometimes aware that their projects were subject to the sustainable building guidelines with sufficient time to incorporate the guidelines into the project design.



If a project team does not learn that their project is required to follow the guidelines until late in the design process, the team may have to go back and redo parts of the design work to ensure that the building will meet guideline requirements. A Department of Administration staff member, for instance, described working with two project teams that were confused about whether their projects were required to adhere to the guidelines; once the teams realized they had to follow the guidelines, the project teams had to go back to the drawing board to account for the guidelines’ requirements. Similarly, a guideline leader for another project said the project team was



It was a surprise when it was understood that the project did indeed need to meet the [sustainable building] guidelines. The result was a complete redesign of the shell of the building, causing significant project delays and increase [sic] costs....

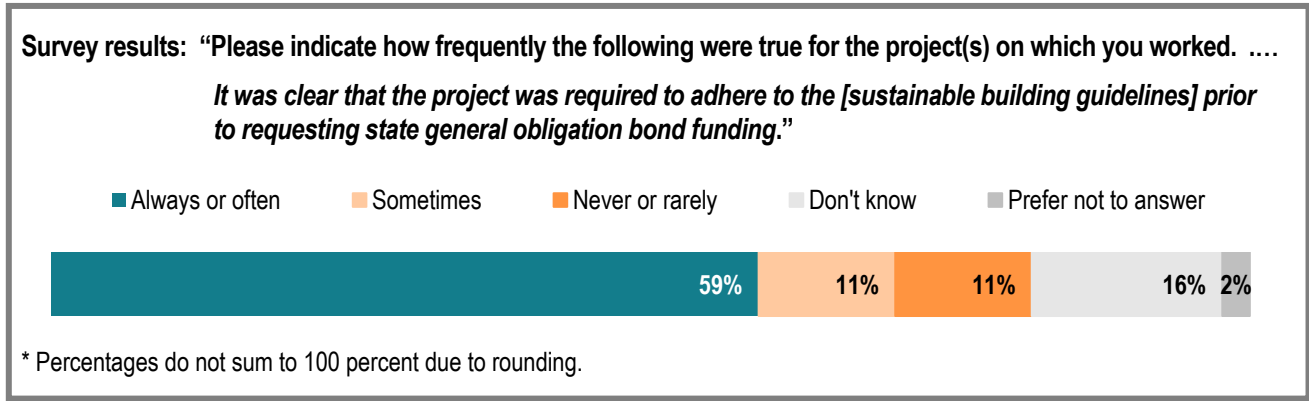
— **Guideline leader**

not sure whether the project had to follow the guidelines until the team was well into the design process. Because they did not integrate the guidelines into the design from the outset, the guideline leader said the project team then had to play “catch-up” to meet the requirements.

The current bonding process presents challenges to ensuring that projects are notified of the sustainable building guideline requirements in time to incorporate the guidelines into the project design. Capital projects may request bond funding at various points in the project

¹¹ Survey results reflect only the opinions of project team members working on projects that were in the guidelines database. Results do not reflect the opinions of individuals working on projects that were not included in the database, either because the project team was unaware of the guideline requirements or for some other reason.

lifecycle; some projects request funding before they begin design, whereas other projects may not request funds until design is underway. This may present issues if a project team seeks funding for a capital project after starting design and the project team was not previously aware of the requirement to adhere to the guidelines. Eleven percent of survey respondents said it was never or rarely clear prior to requesting state general obligation bond funding that the projects on which they worked were required to adhere to the sustainable building guidelines; another 11 percent said it was only sometimes clear.



RECOMMENDATION

The agency to which the Legislature assigns responsibility for identifying projects subject to the sustainable building guidelines should directly inform project teams that their projects are subject to the guidelines.

Earlier, we recommended that the Legislature task an agency with identifying all bond-funded projects subject to the guidelines. After the agency identifies the projects subject to the guidelines, we recommend that the agency directly inform those project teams that their projects must adhere to the guidelines. Having an agency proactively reach out to project teams may help to reduce any confusion about whether the guidelines are required for a project and increase the likelihood that more projects have sufficient time to incorporate the guidelines into the project design.

Although notifying project teams that their projects are subject to the guidelines is an important step, we acknowledge that efforts to do so will face certain challenges. As we discussed above, ensuring that project teams understand that they must adhere to the sustainable building guidelines with sufficient time to incorporate the guidelines into design is complicated by the timing of bonding requests. Additionally, as we discussed in Chapter 1, not all bond-funded projects are explicitly named in law, making it more difficult to identify projects subject to the guidelines and notify project teams of guideline requirements. Both the Legislature and the state agency to which the Legislature assigns responsibility for identifying projects subject to the guidelines should consider how they might better notify all individuals seeking general obligation bond funds of the sustainable building requirements.

Individual Guideline Waivers

Some projects that are subject to the guidelines overall are not required to adhere to each of the requirements for all 25 individual guidelines. Below, we discuss the process by which projects are exempted from meeting individual guideline requirements.

There are two key ways in which a project may be waived from meeting a specific guideline requirement.¹² First, sometimes the Center for Sustainable Building Research waives specific requirements if they fall outside of the scope of a project. For example, if a project solely involves interior work, the center might waive requirements pertaining to work that would occur outside of the building, such as the requirement to create a soil management and erosion control plan or the requirement to use pollinator-friendly plantings.

In addition to waivers due to project scope, project teams may also request that the project be exempt from a specific requirement through a “variance” process. According to the guidelines, variances are meant to be used when the guidelines conflict with the project’s intended use or in the case of a technological limitation. For example, as described on the following page, a correctional facility may not be able to meet certain lighting requirements due to security needs, so it may request a variance for that requirement. As another example, while the guidelines outline certain requirements for stormwater management, some soil types are not conducive to meeting those requirements. Because there are not readily available technologies to address these limitations posed by soil type, a project team may request a variance.



Guideline Waivers

There are two types of waivers that exempt projects from meeting specific guideline requirements.

- **Out-of-scope determinations:** Used for situations in which a guideline requirement falls outside of the scope of work of a given project.
- **Variances:** Used for situations in which a guideline requirement conflicts with the intended use of the project or in situations in which “available technologies or methodologies do not permit the project to meet the...performance threshold” of a particular guideline requirement.

— Center for Sustainable Building Research,
*Minnesota B3 Guidelines: New Buildings and
Major Renovations Version 3.2 Revision 01*
(May 2021), 14

¹² In addition to the two primary guideline waiver approaches discussed here, new buildings and major renovations that are considered “small buildings” may follow a different path to completing the guidelines. This “Small Buildings Path” provides alternative compliance methods for certain guidelines and exempts the project from meeting certain other guidelines altogether. A project is a “small building” if it includes less than 20,000 gross square feet of conditioned space. University of Minnesota, College of Design, Center for Sustainable Building Research, *Minnesota B3 Guidelines: New Buildings and Major Renovations Version 3.2 Revision 01* (May 2021), 7.

St. Cloud Correctional Facility Intake and Loading Dock Expansion Project	
<p>This project sought to increase the function and security of the St. Cloud correctional facility. Thirteen variances were approved for this project.</p> <p>A sample of approved variances and the rationale for why they were necessary are below.</p>	
Guideline Requirement	Variance Justification
Control direct solar penetration with shading devices.	“Safety and security requirements for this facility and necessary layout of interior spaces precludes providing daylight for continuously occupied spaces, therefore no need for shading devices.”
Divert 75 percent of construction and demolition waste from the landfill.	“Contractor claims the available waste haulers did not have a transfer station. The best they could do was supply separate metal, wood, and concrete/rubble dumpsters.”
<p>Source: Minnesota B3 Guidelines Tracking Tool, accessed fall 2022.</p>	

Guideline waivers—such as variances—are not explicitly permitted in law; nonetheless, the vast majority of projects in our review received at least one variance.

Statutes do not indicate that projects can be required to meet certain guidelines but not others, whether for programmatic, technological, or other reasons. Likewise, statutes do not indicate that projects may be exempted from meeting certain guidelines as a result of project scope. According to state law, the sustainable building guidelines “are mandatory” for all new buildings and major renovations that receive general obligation bond proceeds.¹³

Nevertheless, in our review of projects for which construction was complete, project data indicated that 92 percent of projects were granted a variance for at least one guideline requirement, either during design or construction, or after the building was occupied.¹⁴ The median number of variances for a project was 8, while the maximum number of variances granted for a project was 36.¹⁵



¹³ *Minnesota Statutes* 2022, 16B.325, subd. 3.

¹⁴ Data reported here include projects (1) that were added to the guidelines database between January 2012 and June 2022, and (2) for which data indicated that the project was required by law to follow the guidelines because the project received general obligation bond funding. We determined that a project had completed construction if the data indicated the project was currently in the occupancy phase; program data indicated that about 50 projects were complete. Totals exclude instances in which project teams requested a *provisional* variance. Project teams may use provisional variances when they do not have enough information to determine compliance with a specific guideline requirement. They are not supposed to be used for the final project phase in which a guideline is required. University of Minnesota, College of Design, Center for Sustainable Building Research, *Minnesota B3 Guidelines: Variance Guidance* (August 2021), 2.

¹⁵ As we discussed in Chapter 1, the current version of the guidelines includes 25 guidelines, most with multiple requirements.

When we asked agency staff to describe the legal basis for allowing variances, a representative from the Department of Administration stated that the Legislature did not mandate that projects adhere to specific guidelines; additionally, statutes assign responsibility for the development of the guidelines to the departments of Administration and Commerce. The agency further explained: “This implies Admin and Commence [*sic*] also have authority to provide waivers to specific guidelines based on applicability to specific projects.”

Variance Process



The variance process needs significant clarification on procedures and processes.

— **Guideline leader**

In addition to being questionable under existing law, aspects of the variance process lack clarity. First, it is unclear what entity has been responsible, in practice, for approving variance requests. According to the guidelines, the agency contact—rather than the Center for Sustainable Building Research or the departments of Administration or Commerce—is responsible for determining whether variance requests made by the project team are acceptable. However, when we took a deeper look at three completed projects, none of the agency contacts assigned to those projects thought they were responsible for granting variance requests. Further, they did not recall granting variances, even though each of the projects received multiple variances.¹⁶ When we surveyed project team members who had worked on recent capital projects that were subject to the guidelines, 36 percent of survey respondents disagreed or somewhat disagreed that it was clear who was responsible for approving variance requests.¹⁷

Additionally, many survey respondents were unclear about the circumstances under which a variance is permissible. Although the guidelines describe both circumstances in which a variance should and should not be requested, 40 percent of survey respondents disagreed or somewhat disagreed that it was clear what criteria needed to be met for a variance request to be approved.



The sustainable building guidelines describe circumstances in which the use of variances should be restricted.

Conditions that are not grounds for a variance:

- Budgetary or project schedule constraints.
- A need to adjust standard design and construction processes used by the project team in order to comply with the guidelines.
- Requirements were overlooked that cannot be addressed at later phases.

Additionally:

- Variances will not be considered if alternative design strategies have not been evaluated.
- Small or irregular sites are not an automatic reason for a variance.
- Sustainable Building 2030 requirements are not eligible for variances.

— **Center for Sustainable Building Research,
Minnesota B3 Guidelines: New Buildings and
Major Renovations Version 3.2 Revision 01
(May 2021)**

¹⁶ The sustainable building guidelines database does not maintain data on who approved variance requests.

¹⁷ Totals in this section exclude respondents who did not know if it was clear.

The current process for granting variances to the sustainable building guidelines lacks adequate oversight and accountability.

In addition to the lack of clarity about the variance process among project team members, three issues in particular have contributed to the lack of adequate oversight and accountability; we describe those issues in greater detail below.

Variances were not consistently requested for reasons allowed by the guidelines.

In an analysis of recent variances, one of the Center for Sustainable Building Research's subcontractors found that only 31 percent of requested variances were "valid," meaning that the subcontractor determined that the requests demonstrated an appropriate use of the variance process. In contrast, the subcontractor found that 26 percent of the requested variances did not meet program requirements, either because they were requested for invalid or unjustified reasons or because there was insufficient information to determine whether the request was valid or necessary.¹⁸

In our in-depth examination of three projects subject to the guidelines, we likewise found instances in which variances had been approved for reasons the guidelines do not allow.

Some agency contacts with responsibility for approving variances may not be qualified to do so.

As shown in the box to the left, individuals need meet only limited requirements to be designated as the agency contact for a project. Two of the three agency contacts we interviewed expressed concerns about their ability to make variance determinations. For instance, one said they would not have had enough information to address variance requests. A staff member at the Center for Sustainable Building Research explained that the capacity of agency contacts varies, which has implications for how thoroughly projects follow the guidelines. The staff person expressed concerns that some agency contacts may approve variance requests

that are not justified, rather than challenging the project's design team to find another approach for adhering to the guideline requirements.

The variance process is susceptible to potential conflicts of interest. Assigning the responsibility to approve variances to an agency staff member—such as an agency contact or owner—poses a potential conflict of interest. For many projects owned by state agencies, this means that the agency that is responsible for overseeing the



There are limited prerequisites to become an agency contact.

Individuals assigned to be an agency contact must meet only minimal requirements, despite being assigned significant responsibilities for approving variances and overseeing guideline compliance.

- Although the Center for Sustainable Building Research recommends that the agency contact have prior experience with construction projects, it is not required.
- The center does not require the agency contact to have prior experience with the sustainable building guidelines.
- The center does not require the agency contact to be involved in or familiar with the project's design or construction. In the case of projects owned by local governments, the agency contact may only be affiliated with the project to the extent that they work for the state agency that received the project appropriation.

¹⁸ The subcontractor further found that 43 percent of requested variances should have been addressed through other mechanisms. The study looked at all variances requested by spring 2021 for projects (1) using the sustainable building guidelines version 3.0 and newer, and (2) that reported being past the predesign phase as of February 2021. Forty-two percent of those variances were still pending approval, meaning they were still subject to change and possible denial.



...if your goal is to avoid abuse of variances you don't want the Owner, Guideline Leader, or Project Architect approving them.

— Guideline leader

building's design and construction is able to exempt itself from adhering to certain guidelines. For instance, an agency could decide that certain guideline requirements are not an agency priority and exempt themselves from meeting those requirements. A few individuals described how allowing agency staff to approve variances opens the door to misuse of the variance process. For example, a staff member at the Center for Sustainable Building Research said that they had concerns that allowing agencies to approve their own variances could create a conflict of interest or an incentive to waive guidelines.

Recommendations

We have significant concerns about the lax implementation of the guideline waiver process, particularly with regard to the process for granting variances. It is not clear that variance requests are consistently reviewed, nor is it clear that the individuals with responsibility for approving variance requests are consistently qualified to do so. Further, the current process is susceptible to agencies exempting themselves from meeting guidelines for inappropriate reasons. We provide a number of recommendations pertaining to the guideline waiver process below.

RECOMMENDATION

The Legislature should amend statutes to clarify if, and under what circumstances, guideline waivers are permissible.

When implemented properly, we believe variances are a common-sense approach to addressing unique project characteristics that may conflict with the requirements established in the sustainable building guidelines. Similarly, the ability to waive guideline requirements that are outside of the existing scope of a project is a practical way to limit the extent to which the guidelines may increase the scale of the project. Nonetheless, guideline waivers—either through the variance process or as a result of project scope—are not clearly permitted by law.

The Legislature should amend *Minnesota Statutes* 2022, 16B.325, to clarify whether guideline waivers are allowed. If the Legislature decides to allow guideline waivers, they should also stipulate the general circumstances under which waivers are allowable. For example, should variances be used only in instances of technological limitations or when the project's intended use conflicts with the guidelines—as is currently established in the guidelines? Or are there different conditions—such as cost—for which the Legislature would consider a variance to be appropriate?

RECOMMENDATIONS

The Legislature should amend statutes to:

- **Direct the agency that it tasks with administering and overseeing the sustainable building guidelines to oversee the guideline waiver process.**
 - **Identify the type of entity that is responsible for approving waivers to the sustainable building guidelines.**
-

In Chapter 2, we recommended that the Legislature identify a state agency with responsibility for administering and overseeing the sustainable building guidelines overall. If the Legislature decides to permit guideline waivers, the Legislature should require that agency to oversee the guideline waiver process. Among other possible responsibilities, the agency should oversee any changes to the guideline waiver process as a result of legislative directives; ensure project teams are clearly informed of their responsibilities regarding guideline waivers; and further clarify, as necessary, the conditions under which a guideline waiver is appropriate.

In addition to determining which agency is responsible for overseeing the guideline waiver process, the Legislature should identify the type of entity, or entities, that are responsible for approving waivers. For example, the Legislature could amend law to clarify that agency contacts are responsible for approving waivers, that an independent third party (such as the Center for Sustainable Building Research) is responsible, or that the state agency that the Legislature tasks with overseeing the guidelines is responsible. The Legislature could also decide that a combination of these entities should approve project waivers; for example, perhaps an independent third party could conduct an initial review of waiver requests to ensure they meet program requirements, and an agency staff member could then grant final approval. There are important considerations that need to be weighed when making this policy decision, including what type of entity is best qualified to grant guideline waivers, and whether the entity may have ulterior motives to either approve or deny a waiver. We feel that it is most appropriate for the Legislature to determine which entity is best suited to the task.

RECOMMENDATIONS

The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that:

- **The individuals responsible for implementing the guidelines are clearly informed of who is responsible for granting variances and the circumstances in which variances are appropriate.**
- **Waivers are approved in the manner permitted by law and consistent with the guidelines.**

Although guideline waivers can be an effective way to address conflicts between the sustainable building guidelines and individual capital project needs, project teams could also use waivers to improperly avoid following certain guidelines. To ensure that the guideline waiver process is not abused, the agency assigned responsibility in law for administering and overseeing the sustainable building guidelines should ensure that project team members are clearly informed of the conditions in which variances are appropriate as well as their respective roles and responsibilities for requesting, reviewing, and approving variances. Additionally, that agency should ensure that waivers are granted only under the circumstances permitted by law and in accordance with the guidelines.



OLA

Chapter 4: Guideline Compliance

By requiring the sustainable building guidelines in law, the Legislature established that there is a public interest in ensuring that general obligation bond proceeds are used for buildings that are constructed in a sustainable manner. In this chapter, we describe the extent to which the state ensures that projects subject to the sustainable building guidelines comply with them. We then discuss the degree to which capital projects over the last ten years have complied with the guidelines and the consequences for noncompliance.

Key Findings in This Chapter

- It is unclear who—if anyone—is ensuring that projects comply with the sustainable building guidelines.
- Due to limitations with program data, the share of projects that have complied with the sustainable building guidelines is unknown.

Ensuring Compliance

It is unclear who—if anyone—is ensuring that projects comply with the sustainable building guidelines.

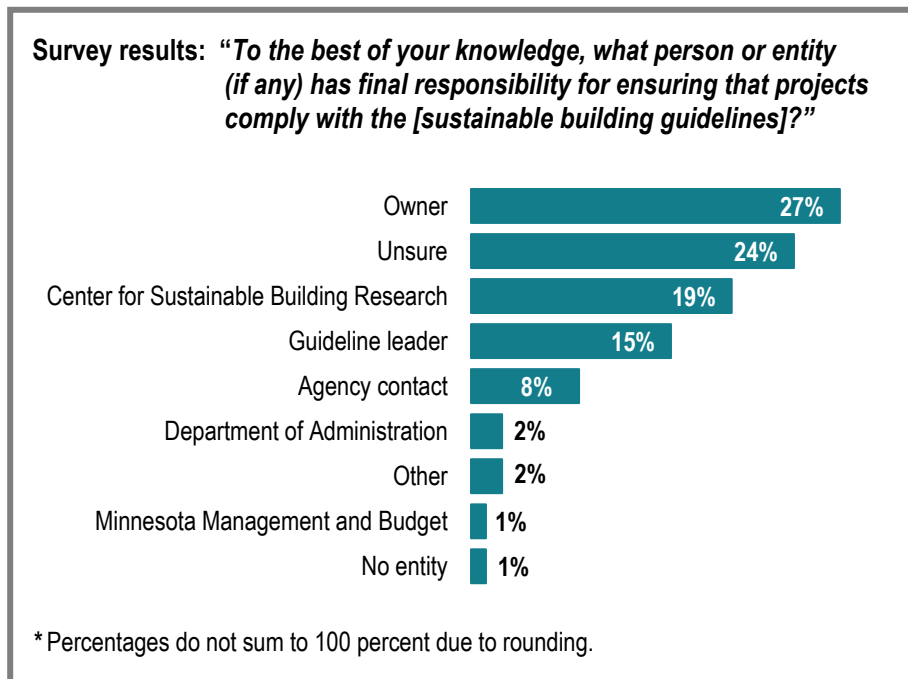
Statutes do not identify a state agency that is responsible for overseeing compliance for all projects subject to the sustainable building guidelines. Statutes do not, for instance, direct an agency to track the compliance of all projects, nor do statutes direct an agency to provide assistance or resources to projects that are noncompliant. According to a staff member at the Department of Administration, the Center for Sustainable Building Research is responsible for reviewing project team submissions to ensure that projects comply with the guidelines. However, a staff member at the center said that, given the center’s resources, they typically take a reactive, rather than a proactive, approach to assisting projects. For instance, the staff person explained, the center will assist individuals that contact them directly for help, but they do not systematically reach out to projects that are noncompliant in an effort to bring them into compliance.

We were unable to identify an agency that systematically tracks project compliance with the sustainable building guidelines for all projects subject to the guidelines. Although the Center for Sustainable Building Research provides public information about compliance for some projects, compliance was “undetermined” for a substantial share of projects. As of December 2022, compliance was undetermined for 25 percent of projects for the design and construction phases of work.¹ Additionally, compliance

¹ Program data on project compliance include projects that were not statutorily required to adhere to the guidelines; the database does not provide a way to identify only projects subject to the guidelines by law. Additionally, the project compliance data include only projects that have completed the design phases, not all projects subject to the guidelines. Office of the Legislative Auditor, based on University of Minnesota, College of Design, Center for Sustainable Building Research, B3 Case Studies Database, <https://casestudies.b3mn.org/Projects?ViewMode=TableView>, accessed December 2, 2022.

with the guideline requirements during the occupancy phase was undetermined for 76 percent of projects.²

Statutes also do not identify an entity that is responsible for ensuring compliance at the individual project level. As we discussed in Chapter 2, there is confusion among project team members about their roles and responsibilities with regard to the guidelines. When we surveyed project team members to ask who had final responsibility for ensuring that projects comply with the guidelines, responses varied substantially, as shown in the box below.³



In practice, project team members—if anyone—appear most likely to take steps to ensure that individual projects adhere to the guidelines. As we discussed in Chapter 2, as projects progress through the different project phases, team members enter data into a database. Based on those data, the guidelines software tool indicates whether the project has complied with an individual guideline. With the exception of the Sustainable Building 2030 requirements, no one outside of the project team reviews the information entered into the database or the software tool’s determination to systematically confirm that all projects have complied with the guidelines.⁴

² This analysis included only projects for which the data indicated that the building was occupied and for which those data were sufficiently complete.

³ We surveyed all individuals listed in the sustainable building guidelines database as an agency contact, guideline leader, and/or owner who had accessed the database since 2020 and had worked on at least one project subject to the guidelines that had been added to the database since 2017. Of the 146 individuals we contacted, we received 92 responses, for a survey response rate of 63 percent.

⁴ The Center for Sustainable Building Research and one of its subcontractors independently determine whether projects have complied with the Sustainable Building 2030 guidelines.

Compliance Outcomes

In the last ten years, about

260

capital projects that were subject to the sustainable building guidelines were added to the guidelines database.

Although the total number of projects subject to the sustainable building guidelines is unknown—as we discussed in Chapter 3—in the last ten years, about 260 projects that were subject to the guidelines by law were added to the guidelines database.⁵ Of those projects, 65 percent were new buildings, 21 percent were major renovations, and 13 percent were both a new construction and a major renovation. Program data indicated that only about 50 projects (19 percent) had completed construction as of June 2022.⁶

As we explain below, however, there are significant issues with the program’s data, and even this project count should be considered an estimate. For example, this total may not include all projects subject to the guidelines, because—as we discuss more below—it is not clear that all projects subject to the guidelines are included in the program’s database. Additionally, although this total is supposed to represent projects that were required by law to adhere to the guidelines, a few project team members who responded to our survey indicated that some of these projects were not required to adhere to the sustainable building guidelines.⁷ We also identified several projects for which the data indicated they had received state general obligation bond funds (and thus would be subject to the guidelines) that did not actually receive general obligation bond funds.⁸

Due to limitations with program data, the share of projects that have complied with the sustainable building guidelines is unknown.

Given the significant issues with the program’s data, we were unable to determine how many projects have complied with the sustainable building guidelines. The box at the right shows several key limitations with the program’s data. For example, as the Center for Sustainable Building Research has revised the guidelines over time, it has changed

There are several limitations to program data that prevented us from determining the share of projects that complied with the guidelines.

1. Data do not reliably identify which projects were required by law to adhere to the guidelines.
2. Data do not clearly indicate whether a specific guideline was required for a given project.
3. There is conflicting data on whether a project was compliant with a guideline.
4. It is not clear that all projects subject to the guidelines are included in the program data.
5. Project teams do not maintain up-to-date project data.

⁵ Data reported here include projects (1) that were added to the guidelines database between January 2012 and June 2022, and (2) for which data indicated that the project was required by law to follow the guidelines because the project received general obligation bond funding.

⁶ We defined a project as having completed construction if the data indicated the project was currently in the occupancy phase.

⁷ The sustainable building guidelines database also includes information on projects that are not required by state law to adhere to the guidelines. Project teams follow the guidelines and track their compliance for various reasons. For example, the Center for Sustainable Building Research told us that the City of Saint Paul requires some of its building projects to follow at least some of the sustainable building guidelines.

⁸ For example, we identified several projects that were funded by trunk highway bonds instead of general obligation bonds.

which guidelines are required. Yet, program data do not clearly identify which guidelines were required for a specific project at the time that project was underway; the data indicate only which guidelines are currently required.⁹ As a result, it is not possible to systematically determine the extent to which projects have complied with the guidelines that were required for each project. We discuss additional issues that prevented us from determining guideline compliance in greater detail below.

It is unclear whether all projects required to adhere to the sustainable building guidelines are tracking their compliance with the guidelines.

As we discussed in Chapter 3, we were unable to identify an agency that systematically identifies which projects are required to follow the guidelines. Instead, it is up to each individual project team to determine whether a project may be subject to the guidelines and then initiate contact with the Center for Sustainable Building Research in order to either begin tracking their compliance with the guidelines or to submit a nonapplicability request form. Yet, without systematically ensuring that all projects potentially subject to the guidelines take one of these two actions, it is possible that some projects that are subject to the guidelines may slip through the cracks.

Because no entity maintains a list of all projects subject to the guidelines, we could not say conclusively how many projects that were subject to the guidelines were not tracking their compliance. Nonetheless, when we compared capital projects listed in the 2020 bonding bill with program data, we found a significant number of projects that were missing from the guidelines database.¹⁰ We identified nearly 100 projects that could be subject to the guidelines because their description in law indicated they could involve the construction or renovation of a building. As of June 2022, nearly 60 of those projects had not been added to the guidelines database, meaning that compliance data for those projects were missing.¹¹ Some of these projects may not be subject to the guidelines—because they do not qualify as major renovations, for instance. However, of the nearly 60 projects not tracking their compliance with the guidelines, the Department of Administration identified at least 12 as being subject to the guidelines.

Similarly, a Center for Sustainable Building Research staff person independently reviewed the 2020 bonding bill and identified at least 25 projects that they thought could be subject to the guidelines but were missing from the guidelines database. As of June 2022, 19 of those projects (76 percent) had yet to enter project information in the database or submit a nonapplicability request form.¹²

⁹ Program data indicate which version of the guidelines a project followed and which guidelines are *currently* required for that version. However, the Center for Sustainable Building Research has made changes within the same version of the guidelines that are not tracked in the database in a way that clearly indicates which guidelines were required for a specific project.

¹⁰ *Laws of Minnesota 2020*, Fifth Special Session, chapter 3, art. 1.

¹¹ It is possible that some of these projects have not yet tracked their compliance with the guidelines because they have not started any design work. However, because so many projects do not maintain up-to-date project data, it is difficult to determine the extent to which this is the case.

¹² Neither the Department of Administration nor the Center for Sustainable Building Research provided evidence of following up with any of those 19 projects.

Projects subject to the sustainable building guidelines do not maintain up-to-date project information; however, the Legislature has not granted an agency authority in law to require projects to submit data.

According to a 2022 Center for Sustainable Building Research report, a substantial share of project teams did not maintain up-to-date project data.¹³ In the report, 67 percent of projects had not submitted up-to-date data during the design and/or construction phases of the project. This problem was even more pronounced for projects that had reached the occupancy phase; 99 percent of those projects had not submitted data that were required after the building was occupied.

We likewise found that projects did not maintain up-to-date data. For instance, we identified many projects that have likely completed construction but have not provided data to the Center for Sustainable Building Research that indicate construction is complete. Of the approximately 260 projects we identified as being required to follow the sustainable building guidelines, we identified more than 60 projects that appeared to have completed construction despite the fact that the data indicated construction for these projects was incomplete.¹⁴ For example, as of June 2022, program data indicated that the Palace Theater in downtown Saint Paul was still under construction; however, this facility has been open to the public since March 2017.

The lack of up-to-date data on projects has significant implications for any analysis of project compliance. One cannot accurately determine whether a project has adhered to the guidelines if the data necessary for that analysis are missing. Further, a Center for Sustainable Building Research staff member and a representative from one of its subcontractors told us that the rate of project compliance with the guidelines may be lower if up-to-date data were available for projects that have completed construction. The staff member explained that many projects would rather delay the submission of their project data than admit to not complying with the sustainable building guidelines.

Although a significant share of projects had not submitted up-to-date data, statutes do not give any state agency authority to require projects to submit data pertaining to the sustainable building guidelines. A staff member from the Department of Commerce expressed concerns about their ability to get projects to provide the data needed to track compliance. This person explained that the department cannot require projects to provide data—all they can do is ask.

¹³ University of Minnesota, College of Design, Center for Sustainable Building Research, “Agency Report” (Microsoft Excel spreadsheet, May 27, 2022).

¹⁴ We first identified projects in the program data that were more likely to be complete based on factors such as the project schedule. We then searched for evidence online that those buildings were occupied or that construction was complete. Although construction for these projects appeared to be complete, it is possible that some of these buildings could be in the “correction period”—the final construction phase. The “correction period” occurs after a building has completed actual construction but before the building is considered by the guidelines to be in the occupancy phase. It involves testing and adjusting systems and other aspects of a building to make sure that their performance is in line with expectations.

Consequences for Noncompliance

There are few—if any—consequences for not complying with the sustainable building guidelines.

State statutes do not explicitly outline any consequences for projects that fail to adhere to the sustainable building guidelines. For example, statutes do not stipulate that project funds should be withheld until a noncompliant project is brought into compliance, nor do statutes indicate that project funding should be returned to the state in the event of noncompliance at the conclusion of construction.

Agency staff described several consequences that they could *possibly* impose upon projects that do not comply with the sustainable building guidelines, but they expressed uncertainty about their feasibility. For instance, staff at Minnesota Management and Budget told us that the state could possibly require owners of projects operating under a grant agreement (local government projects) to repay bond funding in the event a project did not comply with the guidelines. However, staff said that the department has never taken these steps and they were not sure of the legal implications of doing so. A Department of Administration staff member commented that there could—possibly—be consequences for contractors if they are in violation of the language in their contracts, although the staff member said any such violations would have to be “egregious.”

Some project team members said that they were not aware of any consequences for noncompliance or that there were no consequences. One guideline leader said they were not sure what pushes a project to adhere to the guidelines, and that if the project could not meet the guidelines, it is “just unfortunate.” Another guideline leader said, “It would be helpful if there was more accountability... if projects don’t comply with [the sustainable building guidelines]. Right now, they can linger...and nothing really happens.”



There’s not much recourse I’m aware of for projects that don’t meet [the sustainable building guidelines], aside from the bad optics possibly.

— Agency contact

Given that we do not currently know the extent to which noncompliance is an issue, we are not at this time recommending that the Legislature establish consequences for projects that do not comply with the guidelines. Once the state has a clearer sense of the extent to which compliance is a problem, the Legislature should then consider whether and what kind of consequences for noncompliant projects are needed.

Recommendations

One key question we were asked to consider as part of this evaluation was: Who is responsible for enforcing compliance with the sustainable building guidelines? The answer to this question appears to be “no one.” We were unable to identify an entity tracking whether all projects subject to the guidelines actually followed them, and project teams do not consistently track compliance on a project-by-project basis. We were also asked to determine to what extent projects have complied with the guidelines. However, due to limitations of the program’s data, the rate of compliance is unknown.

RECOMMENDATION

The Legislature should direct the agency it tasks with administering and overseeing the sustainable building guidelines to monitor project compliance with the guidelines.

We recommended in Chapter 2 that the Legislature identify an agency in law with overall responsibility for administering and overseeing the sustainable building guidelines. The Legislature should task that agency with overseeing project compliance. While reviewing all of the information submitted for each guideline requirement for each project that is subject to the guidelines would be unreasonably resource intensive, the agency should regularly review overall compliance across all projects and identify projects that are not adhering to the guidelines. It should then reach out to these projects in an effort to bring them into compliance.

As part of the agency’s duties to monitor compliance, the Legislature should also direct the agency to periodically report to the Legislature on project compliance for the program as a whole. Because projects can be compliant (or noncompliant) at different phases of a project’s life cycle, we recommend that the agency report on project compliance at different key phases of that cycle. At a minimum, we think this should include reporting on project compliance at the end of construction and during the building occupancy. Reporting on compliance at different project phases—rather than reporting at only one phase—will provide a more complete picture of project compliance.

RECOMMENDATION

The Legislature should amend statutes to ensure that the state can successfully collect the data needed to determine whether projects complied with the sustainable building guidelines.

Statutes do not currently identify an entity with authority to require project teams to report missing data for projects subject to the sustainable building guidelines. Yet, if project teams fail to provide up-to-date data, then the state cannot determine the extent to which projects are complying with the guidelines.



We recommend that the Legislature amend statutes to ensure that the state can collect up-to-date data from project teams. For example, the Legislature could directly require project teams to provide these data to the state. Alternatively, the Legislature could take a similar approach with the sustainable building guidelines as it does with prevailing wage and grant authority to require project data to the agency with oversight responsibilities for the program.¹⁵

RECOMMENDATION

The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that all project teams track their compliance with the guidelines.

Currently, some project teams do not track their compliance with the sustainable building guidelines. However, it is difficult to determine the scope of this issue, because, as we discussed in Chapter 3, there is not a comprehensive list of projects subject to the guidelines. The first step to addressing this problem is to determine which projects are required to follow the guidelines. Next the agency that the Legislature tasks with administering and overseeing the guidelines should ensure that all of those projects begin tracking their progress towards complying with the guidelines. The agency should further ensure that projects submit up-to-date data, something a significant share of projects are not currently doing.

¹⁵ *Minnesota Statutes 2022*, 177.43, subd. 6.

Chapter 5: Program Goals and Outcomes

Program goals play an important role in effective program implementation because they describe what it is a program is trying to achieve. Goals can also serve as standards that help one assess a program's effectiveness or determine its outcomes.

In this chapter we discuss the extent to which there are goals for the sustainable building guidelines. We then describe the extent to which the state has examined program outcomes, including outcomes related to how the sustainable building guidelines affect project costs and how the guidelines affect the sustainability of capital projects subject to the guidelines.

Key Findings in This Chapter

- Generally, neither the Legislature nor any state agency has established measurable program goals for the sustainable building guidelines.
- The overall effect of the sustainable building guidelines on building costs is unknown.
- The overall effect of the sustainable building guidelines on building sustainability is unknown.

Program Goals

During our evaluation, we heard questions and concerns about the scope of the sustainable building guidelines, including that the scope was unclear or that the scope had gone beyond what the Legislature originally intended. For example, one legislative staff person questioned whether the state intended only for the guidelines to reduce energy costs and greenhouse emissions, or if the guidelines were also meant to cover other topics, such as water conservation. In this section, we discuss the extent to which it is clear what the sustainable building guidelines are supposed to achieve.

The primary objectives of the sustainable building guidelines as described in law are obsolete.

Statutes state that the primary objectives of the sustainable building guidelines “are to ensure that all new state buildings, and major renovations of state buildings, initially exceed the state energy code, as established in Minnesota Rules, chapter 7676, by at least 30 percent.”¹ However, the referenced chapter of Minnesota rules was repealed in 2009. Thus, the primary objectives of the sustainable building guidelines, as described in statute, have been out of date for more than ten years.

¹ *Minnesota Statutes* 2022, 16B.325, subd. 1.

RECOMMENDATION

The Legislature should update the primary objectives of the sustainable building guidelines.

The terms “sustainable building” and “sustainability” can be used in different ways and can include a broad and varying scope of sustainability elements. For example, when defining a sustainable building, one individual might only take into account whether a building was designed to conserve energy, whereas another individual might also consider whether the building design improved the habitat around the building and reduced the waste generated during construction. As such, it is important that the Legislature clearly indicate what it would like the sustainable building guidelines to accomplish.

The Legislature should revise statutes to remove the reference to the repealed rules and update the description of the guidelines’ primary objectives. If the Legislature would like the primary objectives of the guidelines to continue to focus on energy conservation, it could consider replacing the existing language with reference to Sustainable Building 2030. If the Legislature wishes to shift or broaden the guidelines’ focus away from or beyond energy consumption, it should clarify those objectives with a different standard.

Generally, neither the Legislature nor any state agency has established measurable program goals for the sustainable building guidelines.

Statutes require the sustainable building guidelines to incorporate several sustainability elements; however, the Legislature has not established measurable program goals for most of those requirements. For example, statutes require the guidelines to address air quality, lighting, and productivity; however, the Legislature has not outlined performance goals or standards for any of these areas.² With regard to the sustainable building guidelines, the Legislature has only established measurable performance standards pertaining to energy usage.³

The Legislature also has not directed a state agency to establish performance goals for the sustainable building guidelines, and no entity has established such goals. As we discussed in Chapter 1, the sustainable building guidelines are grouped into five different categories of sustainability, including “site and water” and “materials and waste.” Although the guidelines incorporate the Sustainable Building 2030 energy standards, energy conservation is just one component of the current guidelines. No one has established program goals for any of the four other categories of guidelines.

² *Minnesota Statutes* 2022, 16B.325, subd. 2.

³ *Ibid.*, subd. 4; and 216B.241, subd. 9(c). As we discussed in Chapter 1, Sustainable Building 2030 includes specific targets for reducing energy consumption.

Example Guideline Goals: Material Selection
Current Project Goal
<p>Guideline M.2: Environmentally Preferable Materials, requirement A.</p> <p>When selecting materials for building construction, at least 55 percent of materials must fall into one of several preferred material categories, such as materials that are being reused, were made from recycled materials, or are recyclable.</p>
Hypothetical Program Goal
<p>Eighty percent of projects subject to the sustainable building guidelines will meet the following requirement: at least 55 percent of building materials used for the project must fall into at least one of the preferred material categories outlined in Guideline M.2, requirement A.</p>
<p>Source: Office of the Legislative Auditor, based on University of Minnesota, College of Design, Center for Sustainable Building Research, <i>Minnesota B3 Guidelines: New Buildings and Major Renovations Version 3.2 Revision 01</i> (May 2021).</p>

It is worth noting that the guidelines themselves do contain some measurable performance standards for sustainability areas beyond energy conservation; however, these standards do not reflect goals for the program as a whole. Rather, these metrics reflect standards for individual buildings. Further, as we discussed in Chapter 3, some

projects may be exempted from meeting these individual project requirements through a guideline waiver. The box above shows an example of a project-level goal that is currently included in the sustainable building guidelines, as compared to a hypothetical program goal that could be established to measure the program’s performance overall.

Although there are generally no program goals for the sustainable building guidelines, the state has established sustainability goals for the broader enterprise. These goals—monitored by the Department of Administration’s Office of Enterprise Sustainability—have a different focus than the sustainable building guidelines.⁴ For example, they cover topics such as the fuel used by the state’s fleet of vehicles, and they focus on the performance of existing—rather than new—buildings. Nonetheless, these goals show that it is possible to set measurable standards for a broad range of sustainability metrics.

Enterprise Sustainability Goals
<ol style="list-style-type: none"> 1. Greenhouse Gas Emissions: 30 percent reduction of greenhouse gas emissions by 2025 relative to a 2005 calculated baseline. 2. Energy Consumption: 30 percent reduction in consumption of energy per square foot by 2027 relative to a 2017 adjusted baseline. 3. Sustainable Procurement: 25 percent of total spend on Priority Contracts are sustainable purchases by 2025. 4. Reduce Fleet Fossil Fuel Consumption: 30 percent reduction of State Fleet consumption of fossil fuels by 2027 relative to a 2017 adjusted baseline. 5. Reduce Solid Waste: 75 percent combined recycling and composting rate of Solid Waste by 2030. 6. Reduce Water Consumption: 15 percent reduction of water use by 2025 relative to a 2017 adjusted baseline. <p>Source: Minnesota Department of Administration, “Office of Enterprise Sustainability,” https://mn.gov/admin/government/sustainability/, accessed August 16, 2022.</p>

⁴ The Office of Enterprise Sustainability also provides support to state agencies to help them meet enterprise sustainability goals. The Office of Enterprise Sustainability does not play a direct role in overseeing the sustainable building guidelines.

RECOMMENDATION

The Legislature should direct the agency it tasks with administering and overseeing the sustainable building guidelines to establish measurable goals for the guidelines.

It is difficult to determine whether the sustainable building guidelines are meeting their intended purpose without first establishing specific performance goals for the program. While we appreciate that the Legislature has established performance standards with regard to energy consumption, the guidelines currently encompass a much broader definition of sustainability. Once the Legislature determines what agency is responsible for administering and overseeing the sustainable building guidelines, the Legislature should direct that agency to establish specific, measurable goals for other sustainable building elements included in the guidelines. Those goals should be informed by the broad objectives that the Legislature identifies for the guidelines overall.

It is worth noting that it would be challenging to set performance standards for all of the guidelines or guideline requirements. For instance, the indoor environmental quality guidelines seek—in part—to improve occupant productivity, which may be difficult to measure. Nevertheless, the state’s enterprise sustainability goals show that it is possible to set goals for sustainability areas other than energy consumption. The agency tasked with overseeing the sustainable building guidelines should develop several measurable goals that better represent the breadth of the guidelines and track the program’s progress towards meeting those goals.

Program Outcomes

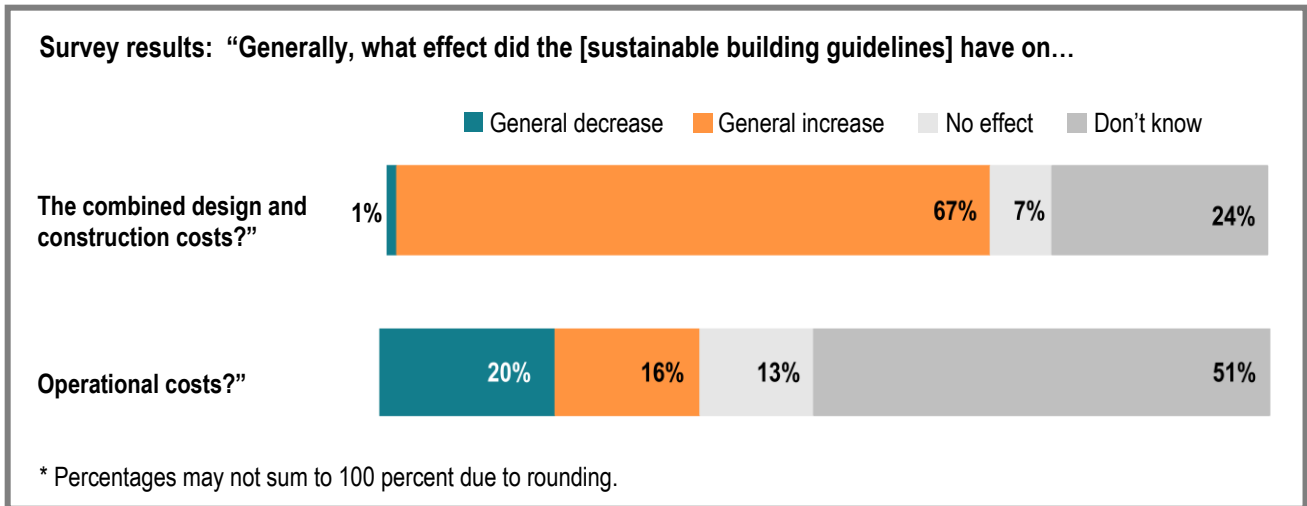
Over the course of this evaluation, we received several questions about how the sustainable building guidelines have affected capital projects. In this section, we discuss two program outcomes: (1) the effect of the guidelines on building costs, and (2) the effect of the guidelines on building sustainability.

The overall effect of the sustainable building guidelines on building costs is unknown.

Currently, neither the state nor the Center for Sustainable Building Research systematically analyzes the effect of the sustainable building guidelines on project costs. As we described in Chapter 1, the sustainable building guidelines have the potential to affect project costs, for example by increasing project design costs or decreasing operating costs over the lifetime of the building. However, no one systematically collects or analyzes cost data for all projects subject to the guidelines.⁵

⁵ The Department of Commerce reports annually on energy and cost savings due to Sustainable Building 2030; however, these reports are based on estimates generated during the project’s design, rather than on actual building performance. As such, they represent estimated effects on energy consumption and cost rather than the actual effects.

Because no one systematically tracks how the sustainable building guidelines affect costs, we asked project team members for their opinions on how the guidelines affected the cost to create and operate buildings subject to the guidelines.⁶ The majority (67 percent) of survey respondents said that the sustainable building guidelines generally increased the overall cost of building design and construction. In contrast, respondents had mixed opinions on how the guidelines affected operational costs, with 20 percent saying they generally decreased operational costs and 16 percent saying they generally increased operational costs. A substantial share of respondents said that they did not know how the guidelines affected building costs—particularly operational costs.



The survey data presented above reflect project team members’ opinions on how the guidelines affected project costs and may be subject to the team member’s own personal biases for or against the guidelines. As a result, it is unknown to what extent these team member opinions align with the guidelines’ actual effect on costs. Nevertheless, several survey respondents explained their views on costs due to the sustainable building guidelines. For example, one guideline leader explained that there is a reasonable cost-benefit for most of the guidelines, and that the benefits gained by things such as air quality improvement are substantial when compared to their cost. On the other hand, one guideline leader said, “The required documentation and reporting just adds cost at the design, construction and building operation levels.”



There are adequate metrics in place within [the sustainable building guidelines] to ensure projects meet an appropriate life cycle cost to own and operate.

— **Guideline leader**

There is no doubt that the [sustainable building] guidelines added significant cost to the project. Operationally I feel that while the building is more efficient, the complex systems require far more routine and preventative maintenance, are generally more expensive to maintain, and will cost more to replace. This will almost certainly overshadow the energy savings in the long run.

— **Owner**

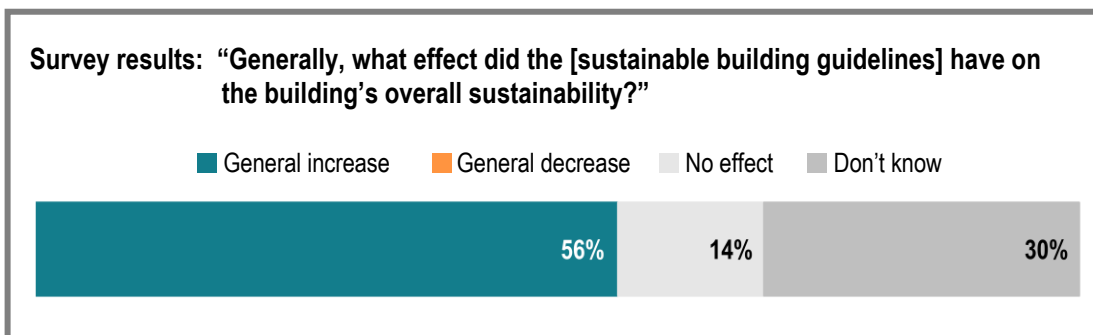
⁶ We surveyed all individuals listed in the sustainable building guidelines database as an agency contact, guideline leader, and/or owner who had accessed the database since 2020 and had worked on at least one project subject to the guidelines that had been added to the database since 2017. Of the 146 individuals we contacted, we received 92 responses, for a survey response rate of 63 percent. Survey totals in this paragraph exclude respondents who indicated the questions were “not applicable.”

The overall effect of the sustainable building guidelines on building sustainability is unknown.

Just as no one evaluates the effects of the guidelines on project costs, no one systematically evaluates how the sustainable building guidelines affect the sustainability of capital projects. For example, no one has systematically examined whether the sustainable building guidelines have decreased water consumption for buildings subject to the guidelines or examined whether the guidelines have decreased the amount of waste generated by buildings. Although the Center for Sustainable Building Research maintains a database of projects that has some project-level data, most of the data are based on estimates rather than actual outcomes, and the database does not include all projects subject to the guidelines.

Even if someone sought to systematically report on the guidelines' effect on building sustainability, no entity is currently prioritizing the collection of project performance data. A representative from the Department of Administration said that data collected after the building is occupied are “nice to have,” but that the program is more about design and construction, whereas the occupancy phase is “beyond the scope.” A staff person from the Center for Sustainable Building Research told us that the center has not focused much staff time on ensuring that projects submit data that are required after the building is occupied. As we discussed in Chapter 4, as of May 2022, 99 percent of projects were not up-to-date on reporting operations data—which include sustainability metrics—after the building was occupied.

Because no one tracks how the sustainable building guidelines actually affect sustainability, we asked project team members for their opinions on how the guidelines impacted the overall sustainability of the projects on which they worked.⁷ Slightly more than 55 percent of survey respondents said that the guidelines generally increased the building's overall sustainability, while no respondents said the guidelines decreased the building's overall sustainability.



⁷ As we discussed above, “sustainability” is an ambiguous term, which means that a building's “overall sustainability” may have different meanings for different survey respondents. Survey totals in this paragraph exclude respondents who indicated the question was “not applicable.”

Again, the survey data presented above reflect project team members' opinions on how the guidelines affected sustainability and may be subject to bias; it is unknown to what extent respondent opinions align with the guidelines' actual effect on building sustainability. Nevertheless, several survey respondents further explained their perspectives on how the guidelines affected building sustainability,



The Guidelines add design and construction costs to our projects. I don't believe this is a [sic] efficient use of state resources or budgets for the little extra in sustainability. We already adhere to stringent codes in MN.

— Agency contact, guideline leader, and owner

offering somewhat mixed

opinions on the extent to which the guidelines increased sustainability. For example, one guideline leader said that the sustainable building guidelines are “a great program and a great tool to use for projects that would not necessarily be designed with sustainability in mind.” Conversely, another guideline leader said, “...sustainability in design is already part of the design process; many of the things implemented the design team would have done anyway out of good practice.”



...[the sustainable building guidelines have] made Minnesota's overall building stock more sustainable by improving design, engineering and construction practices within the state.

— Guideline leader

RECOMMENDATION

The Legislature should direct the agency it tasks with administering and overseeing the sustainable building guidelines to systematically evaluate the effects of the guidelines on building costs and sustainability.

Given the available data, it is not currently possible to determine the sustainable building guidelines' overall effect on project costs or the sustainability of capital projects. Furthermore, no one with responsibilities related to the guidelines is ensuring the collection or analysis of data on program outcomes. The Legislature should direct the state agency to which it assigns oversight of the guidelines to systematically track and evaluate the effects of the guidelines on building costs—including design, construction, and operational costs.

The Legislature should also direct the agency to which it assigns responsibility for overseeing the program to track and analyze data on building sustainability outcomes. Doing so will require having up-to-date and accurate data on actual—as opposed to estimated—building performance metrics for all buildings required to adhere to the guidelines. The agency should identify several key metrics that it can realistically track based on the measurable goals it has established for the program. For example, the agency could set a goal that a certain percentage of buildings meet the guideline requirement to divert at least 75 percent of nonhazardous construction and demolition waste from landfills.

We acknowledge that there will be challenges with evaluating program outcomes. For example, it is not possible to compare the *actual* construction costs for a building that has followed the sustainable building guidelines to the *actual* cost of constructing *that same building* without following the guidelines. Although analyses of program outcomes may necessarily involve some degree of estimation, we think it is important to have a clearer understanding of how the guidelines affect both the cost and sustainability of capital projects.



OLA

List of Recommendations

- The Legislature should determine which agency is responsible for administering and overseeing the sustainable building guidelines and codify those duties in law. (p. 21)
- The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that the guidelines clearly define the roles of all individuals responsible for implementing the guidelines. (p. 22)
- The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that all individuals responsible for implementing the guidelines receive adequate training on their respective roles and responsibilities. (p. 23)
- The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that project team members receive adequate support to implement the guidelines. (p. 25)
- The Legislature should:
 - Amend statutes to assign an agency responsibility for determining which projects are subject to the sustainable building guidelines.
 - Clarify law regarding the types of capital projects that are subject to the sustainable building guidelines. (p. 30)
- The agency to which the Legislature assigns responsibility for identifying projects subject to the sustainable building guidelines should clearly define and document the criteria for making applicability determinations. (p. 31)
- The agency to which the Legislature assigns responsibility for identifying projects subject to the sustainable building guidelines should directly inform project teams that their projects are subject to the guidelines. (p. 33)
- The Legislature should amend statutes to clarify if, and under what circumstances, guideline waivers are permissible. (p. 38)
- The Legislature should amend statutes to:
 - Direct the agency that it tasks with administering and overseeing the sustainable building guidelines to oversee the guideline waiver process.
 - Identify the type of entity that is responsible for approving waivers to the sustainable building guidelines. (p. 38)

- The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that:
 - The individuals responsible for implementing the guidelines are clearly informed of who is responsible for granting variances and the circumstances in which variances are appropriate.
 - Waivers are approved in the manner permitted by law and consistent with the guidelines. (p. 39)
- The Legislature should direct the agency it tasks with administering and overseeing the sustainable building guidelines to monitor project compliance with the guidelines. (p. 47)
- The Legislature should amend statutes to ensure that the state can successfully collect the data needed to determine whether projects complied with the sustainable building guidelines. (p. 47)
- The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that all project teams track their compliance with the guidelines. (p. 48)
- The Legislature should update the primary objectives of the sustainable building guidelines. (p. 50)
- The Legislature should direct the agency it tasks with administering and overseeing the sustainable building guidelines to establish measurable goals for the guidelines. (p. 52)
- The Legislature should direct the agency it tasks with administering and overseeing the sustainable building guidelines to systematically evaluate the effects of the guidelines on building costs and sustainability. (p. 55)

Appendix

The Sustainable Building Guidelines

Guideline	Intent
Performance Management	
P.1 Design and Construction Process	“To support...compliance and outcome tracking...by facilitating the creation and communication of relevant project goals and information.”
P.2 Operations Process	“To ensure that buildings perform optimally.”
Site and Water	
S.1 Site and Water Connections	To create sites that are resilient, healthy, and sustainable, and to “ensure connections between the surrounding environment and the site....”
S.2 Site Water Quality and Efficiency	“To restore the natural water cycle of Minnesota biomes..., reduce and limit the amount of chemicals and soil leaving the site, reduce the potable water usage, and to respond to the ecological factors of the project site....”
S.3 Soil	“To ensure the maintenance and restoration of healthy soils....”
S.4 Vegetation	“To optimize the ecological function of project sites by restoring Minnesota’s native vegetation, protecting natural areas, conserving existing site features, and selecting vibrant and appropriate vegetation....”
S.5 Animal Habitat Support	“To protect and support site animal habitat resilience by reducing the negative impact of the built environment on animal species and providing supportive environments for at-risk native species essential to ecosystem health.”
Energy and Atmosphere	
E.1 Energy Efficiency	“To establish and meet the building energy and carbon performance standard in design and operation in order to significantly reduce carbon dioxide emissions and lower energy use.”
E.2 Renewable Energy	“To facilitate the implementation of onsite renewable energy and promote the development of offsite renewable energy....”
E.3 Efficient Equipment and Appliances	“To reduce energy use associated with equipment and process loads in buildings.”
E.4 Atmospheric Protection	“To select refrigerants that reduce environmental impacts, including harm to the environment, risk to human health, and ozone depletion potential.”
E.5 EV-Ready	“To enable and encourage a transition to lower-carbon transportation infrastructure.”

(Continued on next page)

The Sustainable Building Guidelines (concluded)

Guideline	Intent
Indoor Environmental Quality	
I.1 Low Emitting Materials	“To minimize occupant exposure to volatile organic compounds.”
I.2 Moisture and Water Control	To ensure “a moisture-safe building envelope.”
I.3 Ventilation	“To promote good indoor air quality by implementing appropriate outdoor air ventilation and exhaust systems” and limiting the inflow “of particulates and soil gases into the building.”
I.4 Thermal Comfort	“To promote occupant thermal comfort through active and passive means, and to provide occupants with the ability to control the conditions in their space.”
I.5 Lighting and Daylighting	“To promote occupant comfort by providing adequate levels of natural and artificial light to maintain sufficient light levels for tasks being performed.”
I.6 Effective Acoustics	“To promote productive, supportive, and comfortable acoustic environments for all occupants and to control unwanted noise.”
I.7 View Space and Window Access	To “help reduce eyestrain and dry eyes from computer-based work” and promote a connection to the outdoor environment in order to improve occupant productivity, attentiveness, and satisfaction.
I.8 Ergonomics and Physical Activity	To promote the creation of spaces that encourage physical activity and reduce the risk of workplace-related injury.
I.9 Wayfinding and Universal Access	“To ensure that buildings can be used by all regular occupants, visitors, and other users regardless of age, gender, culture, or ability level.”
Materials and Waste	
M.1 Life Cycle Assessment	“To use life cycle analysis to quantify and minimize the environmental impact of building materials....”
M.2 Environmentally Preferable Materials	“To improve [the] environmental impacts of construction through the selection of environmentally preferable materials and products.”
M.3 Waste Reduction and Management	“To minimize [the] use of resources and negative environmental impacts through design decisions and careful reduction and management of waste generated during the construction process and building occupancy.”
M.4 Health	To minimize the use of potentially hazardous materials.

Source: Office of the Legislative Auditor, based on University of Minnesota, College of Design, Center for Sustainable Building Research, *Minnesota B3 Guidelines: New Buildings and Major Renovations Version 3.2 Revision 01* (May 2021).

February 8, 2023

Ms. Judy Randall
Office of the Legislative Auditor
Centennial Building, Room 140
658 Cedar Street
Saint Paul, MN 55155

Dear Ms. Randall:

Thank you for the opportunity to review and comment on the Office of the Legislative Auditor's program evaluation of Sustainable Building Guidelines. We appreciate the opportunity to work with the OLA in identifying ways to improve the Guidelines.

The Department of Administration (Admin) takes its responsibility to ensure compliance with legal requirements seriously. The OLA's careful review of Admin's initial comments and subsequent revisions to make the report as accurate, clear, and objective as possible are appreciated. While the scope of the audit did not evaluate effectiveness of individual sustainability guidelines, we would like to acknowledge that the sustainability measures implemented, including meeting SB23030 energy performance standards, have had a direct impact on reducing energy consumption and greenhouse gas emissions across a wide spectrum of state funded bond projects.

Admin's response to each of the recommendations in the performance evaluation is detailed below.

Recommendation:

The Legislature should determine which agency is responsible for administering and overseeing the sustainable building guidelines and codify those duties in law.

Response:

The relevant legislative committees have been aware that Admin contracts with the Center for Sustainable Building Research (CSBR) at the University of Minnesota for the administration of the sustainable building guidelines or "B3 program." Admin believes the administration of the B3 program should continue with the entity with the staff having the appropriate technical expertise to administer the B3 program.

Recommendation:

The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that the guidelines clearly define the roles of all individuals responsible for implementing the guidelines.

Response:

Admin contracts with CSBR for the administration of the B3 program. Entities receiving state appropriations are responsible for compliance with applicable statutory requirements.

Design firms should continue to be contractually obligated to provide designs meeting B3 requirements and have flexibility to structure roles and responsibilities for their teams.

Recommendation:

The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that all individuals responsible for implementing the guidelines receive adequate training on their respective roles and responsibilities.

Response:

CSBR regularly offers training on the sustainable building guidelines. It is the responsibility of design firms and entities receiving bond funds to ensure those responsible for meeting the guidelines engage in the training and support opportunities. Additional funding resources from the legislature would be helpful to enhance training.

Recommendation:

The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that project team members receive adequate support to implement the guidelines.

Response:

CSBR provides technical support to project teams. Additional resources would be helpful to enhance technical support. Projects that provide timely submissions and engage technical support early in design process have been able to successful meet the guidelines.

Recommendation:

The Legislature should:

– Amend statutes to assign an agency responsibility for determining which projects are subject to the sustainable building guidelines.

– Clarify law regarding the types of capital projects that are subject to the sustainable building guidelines.

Response:

Admin's understanding is that the entity receiving a state bond appropriation directly or via grants is responsible for understanding the requirements associated with use of those funds. Admin supports the legislature providing any clarification needed either in statute or as part of appropriations to specifically indicate which projects are subject to B3 sustainable building guidelines rather than assigning a state agency that responsibility.

Admin supports the legislature providing any clarification needed on the types of capital projects that are subject to the sustainable building guidelines.

Recommendation:

The agency to which the Legislature assigns responsibility for identifying projects subject to the guidelines should clearly define and document the criteria for making applicability determinations.

Response:

Admin supports the legislature providing any clarification needed on the types of capital projects that are subject to the sustainable building guidelines.

Recommendation:

The agency to which the Legislature assigns responsibility for identifying projects subject to sustainable building guidelines should directly inform project teams that their projects are subject to the guidelines.

Response:

Admin agrees with the challenges noted with identifying all projects subject to the guidelines in a timely basis. Admin supports the legislature providing any clarification needed either in statute or as part of appropriations to specifically indicate which projects are subject to B3 sustainable building guidelines rather than assigning a state agency that responsibility.

Recommendation:

The Legislature should amend statutes to clarify if, and under what circumstances, waivers are permissible.

Response:

Admin supports clear roles, responsibilities, criterion, and processes for granting variances.

Recommendation:

The Legislature should amend statutes to:

– Direct the agency that it tasks with administering and overseeing the sustainable building guidelines to oversee the guideline waiver process.

– Identify the type of entity that is responsible for approving waivers to the sustainable building guidelines.

Response:

Admin supports clear roles, responsibilities, criterion, and processes for granting variances.

Recommendation:

The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that:

– The individuals responsible for implementing the guidelines are clearly informed of who is responsible for granting variances and the circumstances in which variances are appropriate.

– Waivers are approved in the manner permitted by law and consistent with the guidelines.

Response:

Admin supports clear roles, responsibilities, criterion, and processes for granting variances.

Recommendation:

The Legislature should direct the agency it tasks with administering and overseeing the sustainable building guidelines to monitor project compliance with the guidelines.

Response:

Admin supports accountability for each entity receiving bond funds directly or via grants in meeting statutory requirements.

To the extent additional resources are provided to enhance support and compliance for the B3 program, the most effective approach will be to continue to have those functions with the entity with the technical expertise in the subject area (CSBR).

Recommendation:

The Legislature should amend statutes to ensure that the state can successfully collect the data needed to determine whether projects complied with the sustainable building guidelines.

Response:

Admin supports accountability for each entity receiving bond funds directly or via grants in meeting statutory requirements.

Recommendation:

The agency that the Legislature tasks with administering and overseeing the sustainable building guidelines should ensure that all project teams track their compliance with the guidelines.

Response:

Admin supports accountability for each entity receiving bond funds directly or via grants in meeting statutory requirements.

Recommendation:

The Legislature should update the primary objectives of the sustainable building guidelines.

Response:

Admin supports clear objectives for the sustainable building guidelines.

Recommendation:

The Legislature should direct the agency it tasks with administering and overseeing the sustainable building guidelines to establish measurable goals for the guidelines.

Response:

Admin supports clear, measurable goals for the guidelines.

Recommendation:

The Legislature should direct the agency it tasks with administering and overseeing the sustainable building guidelines to systematically evaluate the effects of the guidelines on building costs and sustainability.

Response:

Admin supports tracking progress towards meeting the goals for the guidelines.

We appreciate the opportunity to respond to your recommendations and the opportunity work with you throughout this performance evaluation. We value the work of your office and the professionalism of your staff. If you have any questions or need additional information, please contact Stacie Christensen at 651-201-2500.

Sincerely,



Alice Roberts-Davis
Commissioner



OLA

February 8, 2023

Caitlin Badger
Evaluation Manager
Office of the Legislative Auditor
140 Centennial Building
658 Cedar Street
St. Paul, MN 55155
VIA E-MAIL: Caitlin.Badger@state.mn.us

Dear Ms. Badger,

Thank you for the opportunity to review and comment on the evaluation of the Minnesota Sustainable Building Guidelines (B3). The Department appreciates the time and effort that the OLA has dedicated to undertaking a detailed review of the Buildings, Benchmarks, and Beyond or B3 initiative.

The Department acknowledges the need to review the B3 programs current operating procedures and policies. We are also committed to making improvements to B3 in an effort to ensure the program drives results to help the state reach its Sustainability, Energy Efficiency, and Green House Gas reduction goals.

The Department agrees with the findings and assessments as spelled out in OLAs review, specifically the need for clear accountability and oversight, addressing variances, funding, and communicating clear goals and objectives. The Department also recognizes that some of the recommendations put forth in the review, should the legislature decide to act on them, would require additional conversations and the resources needed to achieve those goals. The Department is available and committed to providing the technical assistance needed in developing any revised language to the current statute.

The Department would like to emphasize that should the legislature decide to make any revisions to Minn. Stat. § 16B.325 that other statutes that pertain to state building Energy Efficiency and renewable energy that may impact B3 also be addressed to ensure alignment with the purpose and intent of the legislation.

The Department is satisfied with the Office of the Legislative Auditors review of the B3 program. The Department thanks the OLA for their time and thoroughness in developing the B3 review.

Sincerely,



Grace Arnold
Commissioner



OLA

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February 7, 2023

Judy Randall, Legislative Auditor
Office of the Legislative Auditor
Room 140 Centennial Building, 658 Cedar Street,
St. Paul, MN 55155-1603

Dear Ms. Randall:

The staff of the Center for Sustainable Building Research (CSBR) has reviewed the report to the legislature from the Office of the Legislative Auditor on the Sustainable Building Guideline (B3). We appreciate the review of the program, the desire for clarity and accountability and the alignment of processes to achieve the legislature's goals for sustainability in state-funded capital construction in Minnesota. As we report to the legislature quarterly, the program saves the state over \$16.7 million in operating costs for every year and \$83.5 million to date for the projects we track. In addition, work on innovative sustainable projects in the B3 program builds the capacity of the design, construction and operations industries to improve the quality of the built environment for all construction in Minnesota.

A review of the Minnesota Sustainable Building Guidelines needs to understand some key aspects of the program, sustainability guidelines, and the construction industry to be effective. Please consider the following important considerations:

Need for Clear Accountability and Oversight: The report identifies the need for clarity on project compliance—including guidance on individual requirements related to specific project scope, who is responsible for ensuring that they are met, the consequences for non-compliance and incentives for compliance. Guideline waivers, intended to be used in instances of programmatic conflict or technical infeasibility, would be improved by applying a consistent process among projects and between appropriate Agencies. Improving these aspects of the program would significantly increase the impact of the program and the improved performance toward the Legislature's goals for state construction.

Goals of the Legislature and Development of Guidelines: There are a variety of statutes that govern the B3 and SB2030 programs. The optimal process for creating, managing and maintaining sustainable guidelines for state construction is for the Legislature to provide goals for what they would like to achieve for sustainability (resilience and other goals) and then direct the departments in collaboration with CSBR to provide guidelines with stakeholder feedback to achieve those goals. This structure allows guidelines to continuously be updated based upon feedback from users, changes in the industry and new research that provides guidance to improve performance.

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Resources to Support the Program: In addition to clear oversight and accountability, the programs have been flat funded since their creation. This reduces the amount of resources for project support, training, research and other aspects of the program every year. With clear goals from the Legislature and clear oversight from state departments, the B3 team can develop an optimized work plan to achieve the goals with efficient use of resources.

Structure of the Minnesota Sustainable Building Guidelines: A real asset of the B3 program is that it fundamentally differs from voluntary programs like LEED. Requirements must be met for all projects, which creates a clear relationship between the overall goals of the program (provided by the Legislature) and guidance given to project teams and performance tracked on projects.

Project Impact: Even though a complete list of projects cannot be created for compliance of B3 because of the issues mentioned above about the need for clarity and accountability, a partial list of compliance and impact can be tracked and does show the potential impact of the program.

Sincerely,



Richard Graves, AIA
Director and Associate Professor
Center for Sustainable Building Research
University of Minnesota

Cc: Patrick Smith, CSBR, Caitlin Badger, OLA

Forthcoming OLA Evaluations

RentHelpMN

Southwest Light Rail Transit Construction: Metropolitan Council Decision Making

Southwest Light Rail Transit Construction: Metropolitan Council's Oversight of Contractors

State Programs That Support Minnesotans on the Basis of Racial, Ethnic, or American Indian Identity

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Agricultural Utilization Research Institute (AURI), May 2016

Agricultural Commodity Councils, March 2014

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Driver Examination Stations, March 2021

Safety in State Correctional Facilities, February 2020

Guardian ad Litem Program, March 2018

Mental Health Services in County Jails, March 2016

Health Services in State Correctional Facilities, February 2014

Economic Development

Minnesota Investment Fund, February 2018

Minnesota Research Tax Credit, February 2017

Iron Range Resources and Rehabilitation Board (IRRRB), March 2016

Education (Preschool, K-12, and Postsecondary)

Minnesota Department of Education's Role in Addressing the Achievement Gap, March 2022

Collaborative Urban and Greater Minnesota Educators of Color (CUGMEC) Grant Program, March 2021

Compensatory Education Revenue, March 2020

Debt Service Equalization for School Facilities, March 2019

Early Childhood Programs, April 2018

Perpich Center for Arts Education, January 2017

Standardized Student Testing, March 2017

Minnesota State High School League, April 2017

Minnesota Teacher Licensure, March 2016

Environment and Natural Resources

Petroleum Remediation Program, February 2022

Public Facilities Authority: Wastewater Infrastructure Programs, January 2019

Clean Water Fund Outcomes, March 2017

Department of Natural Resources: Deer Population Management, May 2016

Recycling and Waste Reduction, February 2015

DNR Forest Management, August 2014

Financial Institutions, Insurance, and Regulated Industries

Department of Commerce's Civil Insurance Complaint Investigations, February 2022

Government Operations

Oversight of State-Funded Grants to Nonprofit Organizations, February 2023

Sustainable Building Guidelines, February 2023

Office of Minnesota Information Technology Services (MNIT), February 2019

Mineral Taxation, April 2015

Councils on Asian-Pacific Minnesotans, Black Minnesotans, Chicano/Latino People, and Indian Affairs, March 2014

Health

Emergency Ambulance Services, February 2022

Office of Health Facility Complaints, March 2018

Minnesota Department of Health Oversight of HMO Complaint Resolution, February 2016

Minnesota Health Insurance Exchange (MNsure), February 2015

Minnesota Board of Nursing: Complaint Resolution Process, March 2015

Human Services

Child Protection Removals and Reunifications, June 2022

DHS Oversight of Personal Care Assistance, March 2020

Home- and Community-Based Services: Financial Oversight, February 2017

Managed Care Organizations' Administrative Expenses, March 2015

Jobs, Training, and Labor

Unemployment Insurance Program: Efforts to Prevent and Detect the Use of Stolen Identities, March 2022

State Protections for Meatpacking Workers, 2015

Miscellaneous

Board of Cosmetology Licensing, May 2021

Minnesota Department of Human Rights: Complaint Resolution Process, February 2020

Public Utilities Commission's Public Participation Processes, July 2020

Economic Development and Housing Challenge Program, February 2019

Minnesota State Arts Board Grant Administration, February 2019

Board of Animal Health's Oversight of Deer and Elk Farms, April 2018

Voter Registration, March 2018

Minnesota Film and TV Board, April 2015

Transportation

MnDOT Workforce and Contracting Goals, May 2021

MnDOT Measures of Financial Effectiveness, March 2019

MnDOT Highway Project Selection, March 2016

MnDOT Selection of Pavement Surface for Road Rehabilitation, March 2014

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