

Minnesota Safe Routes to School Strategic Planning Implementation School Siting Best Practices Memorandum

To: Dave Cowan, MnDOT SRTS Coordinator
From: Sara Zimmerman, Climate Equity Policy Center
Date: April 25, 2022
Re: Minnesota Safe Routes to School Strategic Planning Implementation School Siting Best Practices Memorandum

I. Introduction

For Minnesota and the nation, much rides on decisions about where new schools should be located and whether existing schools should be retained, remodeled, or closed. These decisions, collectively referred to as school siting decisions, influence a range of key metrics for students, schools, and communities. When schools are retained or newly located near residential areas where students live, there are a range of benefits – increased student physical activity levels from walking or bicycling to school, community use of school grounds and sites, reduced air pollution and climate emissions, lower private and district transportation costs, and fewer costs related to providing utility and related services to schools.

Unfortunately, over the past 50 years, trends towards larger school sites built on the outskirts of developed areas have halved the percent of schoolchildren who live within easy walking distance of their school.¹² Distance from school is the biggest barrier to walking to school.³ For students to be able to walk or bike to school, or to use student recreational facilities outside of school hours, it is essential that schools be located relatively near to where students live.

The good news: in the past 15 years, the trends that drove schools ever further from students' residences have begun to change. National policy has reversed, with federal agencies and others identifying the dangers of more distant schools and the benefits of healthy school siting.⁴ Concerns about student and community health have led to an increased focus on walkable communities. As the effects of climate change are becoming increasingly present, local and

¹ U.S. Department of Transportation, National Travel Survey. Travel to School: The Distance Factor. 2008.

² McDonald N, Brown A, Marchetti L, et al. "U.S. School Travel 2009: An Assessment of Trends." American Journal of Preventive Medicine, 41(2): 146-151, 2011, <https://pubmed.ncbi.nlm.nih.gov/21767721/>.

³ McDonald, N.C., "Children's Mode Choice for the School Trip: The Role of Distance and School Location in Walking to School," 2008, Transportation, 35(1), 23-35, <https://link.springer.com/article/10.1007/s11116-007-9135-7?LI=true>.

⁴ See, e.g., EPA, "School Siting Guidelines," 2011, https://www.epa.gov/sites/default/files/2015-06/documents/school_siting_guidelines-2.pdf.

state actors are beginning to adopt policy changes that reduce greenhouse gas emissions, bringing more focus on walkability, proximity to other destinations, co-location, and compact development.

However, although Minnesota scores well generally on measures of supportiveness for walking, biking, and Safe Routes to School,⁵ Minnesota has not made significant progress on walking or bicycling-friendly school siting practices. One study showed that 75 percent of Minnesota parents said distance affected decision re students walking/biking to school and 70 percent of Minnesota principals said distance was a major or moderate barrier to students walking & biking.⁶ A survey of Minnesota Safe Routes to School professionals found that respondents saw the two most challenging barriers to Safe Routes to School work as related to land use: 39 percent of respondents reported that one of the most challenging barriers to SRTS work was current infrastructure planning and design processes that prioritize vehicle transportation over walking and biking, and 34 percent saw the most challenging barriers as including school siting and land uses that are incompatible with walking or biking to and from school.⁷ This review looks at best practices for school siting in order to enable an assessment of what practices might support Minnesota as it strives to see healthier school siting decisions become the norm.

II. Background

Over the past several decades, schools have increasingly been built on the outskirts of communities, too far from children's homes for walking or biking to be practical. In 1969, about 45 percent of elementary school students lived one mile or less from school, and almost 90 percent of those children walked or bicycled to school. But by 2001, only 24 percent of elementary school students, and 18 percent of all students, lived within one mile of school, with fewer than half of those students walking or bicycle to school.^{8,9}

These changes are due in large part to school siting decisions that have influenced where schools are located in reference to student populations. School siting decisions include decisions about opening new schools, closing existing schools, or investing in the rehabilitation or expansion of older or dilapidated schools.

⁵ Safe Routes Partnership, "2020 State Report Cards: Making Strides: State Report Cards on Support for Walking, Bicycling, and Active Kids and Communities," 2020, <https://www.saferoutespartnership.org/resources/2020-state-report-map>.

⁶ Public Health Law Center, "Building Healthy Schools: Health Impact Assessment on Planning School Construction Projects in Minnesota," 2015, https://www.publichealthlawcenter.org/sites/default/files/HIA%20-%20Building%20Healthy%20Schools_0.pdf.

⁷ Minnesota Safe Routes to School, "Safe Routes To School Strategic Plan Update: Survey + Interview Summary + Listening Session," 2020.

⁸ McDonald NC. "Children's Travel: Patterns and Influences" (unpublished Ph.D. dissertation), 2005, www.uctc.net/research/diss118.pdf.

⁹ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "KidsWalk: Then and Now – Barriers and Solutions," 2008.

A. Why School Siting Matters

School siting issues matter for a range of reasons.¹⁰

- **Student physical activity and health:** American students get insufficient physical activity, with less than a quarter of students meeting CDC guidelines.¹¹ Studies show that distance and quality of the built environment (presence of sidewalks and bicycle amenities, slow vehicle speeds, safe crossings, etc.) are both important for influencing whether students walk or bicycle to school.¹² Healthy school siting means that students get physical activity and waste less time sitting in school buses and private vehicles.^{13,14,15} Higher numbers of students walk and bike to school, and students may also be able to access schools for physical activity outside of school hours.¹⁶ Schools located near to student homes can also support students in getting more sleep. More physical activity and more sleep support stronger academic performance for students.¹⁷
- **Air pollution:** Schools that are located near where students live can reduce air pollution in the community due to higher active transportation levels and reduced automobile commutes. They may also reduce exposure of students to idling vehicles, which can improve asthma and lung disease outcomes. Moreover, new research shows that students, as well as others, are exposed to considerably higher pollution levels when sitting within a car or school bus compared to ambient air.¹⁸ One study compared air pollution exposures of children who were bused to an area with cleaner air versus those who attended a nearby school with more polluted air, and found that overall exposure was two to three times higher for students who experienced the cleaner-aired school

¹⁰ Devajyoti Deka And Leigh Ann Von Hagen, "The Evolution of School Siting and Its Implications for Active Transportation in New Jersey," *International Journal of Sustainable Transportation*, 9: 602–611, 2015, https://vtc.rutgers.edu/wp-content/uploads/2015/05/SCHOOL-SITING_FINAL.pdf.

¹¹ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "Physical Activity Facts," <https://www.cdc.gov/healthyschools/physicalactivity/facts.htm>.

¹² U.S. Environmental Protection Agency, "Travel and Environmental Implications of School Siting," EPA 231-R-03-004, 2003, https://www.epa.gov/sites/default/files/2014-04/documents/school_travel.pdf.

¹³ McDonald NC, "Active transportation to school: Trends among U.S. schoolchildren, 1969–2001," 2007, *American Journal of Preventive Medicine* 32(6):509–516, <https://pubmed.ncbi.nlm.nih.gov/17533067/>.

¹⁴ McDonald NC, "Children's mode choice for the school trip: The role of distance and school location in walking to school," 2008, *Transportation* 35:23–35.

¹⁵ McDonald NC, "Critical factors for active transportation to school among low-income and minority students: Evidence from the 2001 National Household Travel Survey," 2008, *American Journal of Preventive Medicine* 34(4):341–344, <https://pubmed.ncbi.nlm.nih.gov/18374248/>.

¹⁶ Devajyoti Deka And Leigh Ann Von Hagen, "The Evolution of School Siting and Its Implications for Active Transportation in New Jersey," *International Journal of Sustainable Transportation*, 9: 602–611, 2015, https://vtc.rutgers.edu/wp-content/uploads/2015/05/SCHOOL-SITING_FINAL.pdf.

¹⁷ Wolfson AR and Carskadon MA. "Understanding adolescent's sleep patterns and school performance: a critical appraisal." [sic] *Sleep Medicine Reviews*, 7(6): 491-506 (2003), [http://dx.doi.org/10.1016/S1087-0792\(03\)90003-7](http://dx.doi.org/10.1016/S1087-0792(03)90003-7).

¹⁸ See, e.g., Gilliland J, Maltby M, Xu X, Luginaah I, Loebach J, Shah T. "Is active travel a breath of fresh air? Examining children's exposure to air pollution during the school commute." *Spat Spatiotemporal Epidemiol.* 2019 Jun;29:51-57. doi: 10.1016/j.sste.2019.02.004. Epub 2019 Apr 6. PMID: 31128631.

with the longer commute, due to the transportation exposures.¹⁹ Additionally, studies show that children's exposure to air pollution is significantly higher for children of color and low-income children.²⁰

- **Family involvement:** Lesser distances also support higher levels of family involvement in school activities, whether volunteering in the classroom or participating in PTA meetings or school events, with benefits for students.^{21,22}
- **Community access and use:** When schools are located in the heart of residential areas, students and the community at large are able to use school grounds after school hours, on weekends, and during the summer for physical activity, sports, or community events. Such use can occur through official shared use agreements or through more informal practices.²³ Schools located in communities can also function as electoral polling places, supporting voting access and allowing student learning about democracy. Additionally, many schools act as emergency shelters or gathering places, further emphasizing the need for nonmotorized access.
- **Preventing physical dangers to students:** School siting decisions influence students' exposure to physical hazards and environmental dangers. School siting decisions should avoid sites that pose dangers to students, such as those that are near freeways, near warehouses or other industries that see heavy truck traffic, in locations that require many children to face dangerous street or railroad crossings, near bodies of water, or on or near sites that may be polluted with toxic contaminants.
- **Climate change:** Climate change concerns are no longer simply fears about the future, but are affecting us here and now. Extreme weather, floods, drought, and deadly heat are having current impacts on Minnesotans, with more to come.^{24,25} The reality of climate change necessitates both mitigation – steep reductions in greenhouse gas emissions in order to curb the most catastrophic climate effects – and also adaptation – changes in our current practices in order to deal with the emerging effects of climate change. Transportation is the greatest contributor to greenhouse gas emissions in Minnesota and

¹⁹ Wolfe, Mary K et al. "Impact of School Location on Children's Air Pollution Exposure." *Journal of Urban Affairs* vol. 43,8 (2020), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8715954/>. doi:10.1080/07352166.2020.1734013.

²⁰ Grineski SE, Collins TW, "Geographic And Social Disparities In Exposure To Air Neurotoxicants At U.S. Public Schools," *Environ Res.* 2018 Feb;161:580-587, <https://pubmed.ncbi.nlm.nih.gov/29245126/>. doi: 10.1016/j.envres.2017.11.047.

²¹ Hoover-Dempsey KV and Sandler HM. "Parental Involvement in Children's Education: Why Does It Make a Difference?" *Teachers College Record*, 97(2): 310-331, 1995, www.vanderbilt.edu/peabody/family-school/papers/childrens_education.pdf.

²² Timberly L. Baker, Jillian Wise, Gwendolyn Kelley, and Russell J. Skiba, "Identifying Barriers: Creating Solutions to Improve Family Engagement," <https://files.eric.ed.gov/fulltext/EJ1124003.pdf> (describing transportation as significant barrier to family engagement).

²³ ChangeLab Solutions, "Shared Use Playbook," 2018, https://www.changelabsolutions.org/sites/default/files/SharedUsePlaybook-FINAL_20181128.pdf.

²⁴ Minnesota Pollution Control Agency, "Effects of climate change in Minnesota," <https://www.pca.state.mn.us/air/effects-climate-change-minnesota>.

²⁵ See, e.g., MNDOT, "Climate Change," <http://www.dot.state.mn.us/climate/mitigation.html>.

in the United States.²⁶ As a result, key recommendations to address climate change involve denser development, building destinations near each other, and encouraging walking, bicycling, and transit, along with a transition in energy source from fossil fuels to renewable electricity. School commutes can determine family transportation choices and contribute significantly to congestion and vehicle miles traveled.²⁷ Siting schools in locations that support climate-friendly travel is essential for a healthy future.

B. School Siting Trends and History

As described above, over the last century, the United States has experienced a long term trend toward larger sites and more students per school. Early American land use planning approaches emphasized locating schools centrally in neighborhood units.²⁸ But after World War II, a variety of trends encouraged consolidation of small schools and construction of new schools outside of existing communities.^{29,30}

These trends were reflected and promoted by recommendations by institutions such as the Council of Educational Facilities Planners International (CEFPI). CEFPI's national guidelines provided minimum acreage recommendations, which were widely adopted by states.^{31,32} Motivated by a sense that bigger is better, CEFPI's guidelines were intended to ensure abundant space for expansion, an array of programs and uses, substantial playing fields, and large parking lots.³³ From the 1970s through the early 2000s, CEFPI's minimum acreage recommendations for school campuses were:

- Elementary Schools = 10 acres plus 1 acre for every 100 students
- Junior High/Middle Schools = 20 acres plus 1 acre for every 100 students
- Senior High Schools = 30 acres plus 1 acre for every 100 students

²⁶ Climate Change Subcabinet, "Minnesota's Climate Action Framework," *Draft*, <https://climate.state.mn.us/sites/climate-action/files/2022-01/Climate%20Action%20Framework%20Draft.pdf>.

²⁷ U.S. Environmental Protection Agency, "Travel and Environmental Implications of School Siting," EPA 231-R-03-004, 2003, https://www.epa.gov/sites/default/files/2014-04/documents/school_travel.pdf.

²⁸ See, e.g., Gilliland J, Maltby M, Xu X, Luginaah I, Loebach J, Shah T. "Is active travel a breath of fresh air? Examining children's exposure to air pollution during the school commute." *Spat Spatiotemporal Epidemiol.* 2019 Jun;29:51-57. doi: 10.1016/j.sste.2019.02.004. Epub 2019 Apr 6. PMID: 31128631.

²⁹ See, e.g., Gilliland J, Maltby M, Xu X, Luginaah I, Loebach J, Shah T. "Is active travel a breath of fresh air? Examining children's exposure to air pollution during the school commute." *Spat Spatiotemporal Epidemiol.* 2019 Jun;29:51-57. doi: 10.1016/j.sste.2019.02.004. Epub 2019 Apr 6. PMID: 31128631.

³⁰ U.S. Environmental Protection Agency, "Travel and Environmental Implications of School Siting," EPA 231-R-03-004, 2003, https://www.epa.gov/sites/default/files/2014-04/documents/school_travel.pdf.

³¹ Constance Beaumont, "Historic Neighborhood Schools in the Age of Sprawl: Why Johnny Can't Walk to School," National Trust for Historic Preservation, 2000, <https://files.eric.ed.gov/fulltext/ED450557.pdf>.

³² Janell Weihs, "IssueTrak: State Acreage Policies," 2003, CEFPI, <https://www.saferoutespartnership.org/sites/default/files/pdf/issuetrak0903.pdf>.

³³ Carrie Makarewicz, "Balancing Educational Opportunities with Sustainable Travel and Development," in Elizabeth Deakin, ed., *Transportation, Land Use, And Environmental Planning*, 2019, https://books.google.com/books?id=NCG5DwAAQBAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false.

The US Environmental Protection Agency began paying attention to school siting issues as early as 2003, publishing a key study called “Travel and Environmental Implications of School Siting.”³⁴ This study followed an influential report on the loss of historic and community-centered schools published by the National Trust for Historic Preservation in 2000.³⁵ Other analyses showed the detrimental effects of large minimum acreage guidelines on rural schools and communities.³⁶ In response to these critiques and after receiving an EPA grant to study the issue, CEFPI revised its recommendations in 2004, embracing a more flexible approach to school size that reflects community context and the benefits of community-centered schools.³⁷

Nonetheless, in many states, large minimum acreage guidelines were embedded in law or policy, and practices leading to large sites did not change. Even where state guidelines did change, these changes were often not accompanied by changes in school planning processes at the district level, and so changes had minimal impact.³⁸

Responding to ongoing challenges and in response to Congressional instructions, the EPA developed detailed non-binding school siting guidelines in 2011.³⁹ In addition to addressing concerns about toxics and the ability to use schools as emergency centers, these also set out a number of considerations regarding preferred school siting, including recommendations around distance, size, and design of schools, as well as issues around school transportation options and sidewalk connectivity.

EPA, the National Trust for Historic Preservation, and other experts identify a number of key policies and state practices that influence school site determinations. Additionally, sustainability oriented institutions call for community-centered schools and maximum acreage guidelines. For example, the LEED-Neighborhood Development rating system (LEED-ND) developed by the U.S. Green Building Council calls for new school campuses not to exceed 15 acres for high schools, 10 acres for middle schools, and 5 acres for elementary schools.⁴⁰ Key state practices include:

³⁴ U.S. Environmental Protection Agency, “Travel and Environmental Implications of School Siting,” EPA 231-R-03-004, 2003, https://www.epa.gov/sites/default/files/2014-04/documents/school_travel.pdf.

³⁵ Constance Beaumont, “Why Johnny Can’t Walk to School,” National Trust for Historic Preservation, 2000, <https://files.eric.ed.gov/fulltext/ED450557.pdf>.

³⁶ Barbara Kent Lawrence, “Policy Brief: Land for Granted: The Effects of Acreage Policies on Rural Schools and Communities,” The Rural School and Community Trust, 2003, https://www.ruraledu.org/user_uploads/file/Land_for_Granted.pdf.

³⁷ National Association of Realtors, “School Building and Siting,” June 3, 2014, <https://www.nar.realtor/articles/school-building-and-siting>.

³⁸ McDonald NC, Salvesen DA, Kuhlman HR, Combs TS., “The Impact of Changes in State Minimum Acreage Policies on School Siting Practices,” Journal of Planning Education and Research. 2014;34(2):169-179. doi:10.1177/0739456X14522493.

³⁹ U.S. Environmental Protection Agency, “School Siting Guidelines,” 2011, https://www.epa.gov/sites/default/files/2015-06/documents/school_siting_guidelines-2.pdf.

⁴⁰ U.S. Green Building Council, “Neighborhood Schools,” <https://www.usgbc.org/credits/lt36?view=language>.

- **Presence or absence of minimum acreage guidelines:** State practices around required or recommended minimum acreage sizes exert pressures on school siting that lead to large schools far from residential areas.
- **Maximum acreage guidelines:** In contrast, some states have maximum acreage guidelines, and will not provide state funding for larger sites, which can encourage schools to be located within communities.
- **Renovation/reconstruction cost cut-offs:** Many state funding requirements include a preference for new construction over renovation, through a guideline called the 60 percent rule that dictates that if renovation is estimated to be 60 percent of the cost of building a new school, new construction should occur instead.
- **State mandated busing distances:** Busing distance requirements and reimbursement formulas can also play complex roles in influencing school site decisions, but likely have a lesser overall impact.
- **District/community coordination:** Some states require that school districts coordinate with local governments in considering site decisions, supporting decisions that are more informed, have more buy in, and align with development goals for the community at large.
- **Design guidelines:** Some states have specific school siting design guidelines; such guidelines can support healthy school siting and design, for example if they include pedestrian access requirements, but can impede healthy design, for example if there are large parking requirements.

Today, thirteen states still require large minimum acreage guidelines.⁴¹ Many others, like Minnesota, do not technically have such requirements, but as a practical matter make it very unlikely that large minimum acreage guidelines will not be followed. Minnesota's minimum acreage guidelines recommend twice as much minimum acreage as CEFPI's recommendations at their height.⁴²

C. Diverse Schools

Decisions about school siting are intertwined with another complex matter: the effect of school locations on the racial, ethnic, and economic diversity of the student population. Communities across the United States vary widely in the diversity of their populations, but few neighborhoods are well-integrated across race and income, and neighborhoods are often not representative of the demographics of their community or school district as a whole. Schools often end up highly segregated. This is true when children attend their neighborhood school and also is a common feature of charter schools or school choice assignment policies, despite initial hopes to the contrary. Since the late 1980s, racial and ethnic segregation in schools has increased

⁴¹ Michelle Lieberman, Margo Pedroso, Sara Zimmerman, "Making Strides 2020: State Report Cards on Support For Walking, Bicycling, And Active Kids And Communities," 2020, Safe Routes Partnership, Appendix F (School Siting and Design: School Minimum Acreage Guidelines Scoring Details by State), https://www.saferoutespartnership.org/sites/default/files/resource_files/making-strides-2020-final.pdf.

⁴² Constance Beaumont, "Historic Neighborhood Schools in the Age of Sprawl: Why Johnny Can't Walk to School," National Trust for Historic Preservation, 2000, <https://files.eric.ed.gov/fulltext/ED450557.pdf> ("Minnesota, on the other hand, recommends twice as much land as does CEFPI for a large high school: 60 acres plus one acre for every 100 students.").

significantly.⁴³ Meanwhile, a range of studies show that attending a diverse school is important for the educational and occupational success of children of all races.^{44,45,46}

Fortunately, being thoughtful about racial and economic diversity during decisions about school siting and school assignment policies can support schools that are both walkable and diverse. Approaches can include siting schools on the border between neighborhoods serving different racial, ethnic, or socioeconomic groups; designing student attendance policies to balance walkability and diversity; and coordinating with local governments to encourage mixed-income housing near schools.

D. Roles and Authority

Different actors have different roles and responsibilities relative to school siting.

Federal

Traditionally, the federal government has not had heavy involvement in K-12 education. Although that changed with the more prescriptive 2002 No Child Left Behind Act and its successors, the federal government has not engaged deeply with local school siting decisionmaking. Rather, the federal government has played a role as a source of information, recommendations, and encouragement. As noted above, the EPA developed and funded work and publications in support of smart school siting, ranging from their voluntary *School Siting Guidelines* to school siting decisionmaking tools.^{47,48}

State

As a matter of custom and practice, school siting and facilities decisions are largely delegated to local school districts in most states, including Minnesota. However, states have ultimate authority over school districts, and state law provides the authorizing framework for districts' existence as local governmental entities, establishing general oversight and regulation. In addition, when states provide funding for school construction and renovation, this creates additional opportunities to direct local decisionmaking through requirements tied to this funding.

⁴³ Gary Orfield, "Reviving the Goal of an Integrated Society: A 21st Century Challenge," UCLA, 2009.

⁴⁴ Amy Stuart Wells, Lauren Fox, and Diana Cordova-Cobo, "Report K-12: How Racially Diverse Schools and Classrooms Can Benefit All Students," The Century Foundation, 2016, https://production-tcf.imgix.net/app/uploads/2016/02/09142501/HowRaciallyDiverse_AmyStuartWells-11.pdf.

⁴⁵ National Coalition on School Diversity, "Research Brief No. 10: The Complementary Benefits of Racial and Socioeconomic Diversity in Schools," 2017, <https://school-diversity.org/pdf/DiversityResearchBriefNo10.pdf>.

⁴⁶ Juvonen J, Kogachi K, Graham S. "When and How Do Students Benefit From Ethnic Diversity in Middle School?" *Child Dev.* 2018 Jul;89(4):1268-1282. doi: 10.1111/cdev.12834. Epub 2017 Jun 20, <https://pubmed.ncbi.nlm.nih.gov/28631304/>.

⁴⁷ U.S. Environmental Protection Agency, "School Siting Guidelines," 2011, https://www.epa.gov/sites/default/files/2015-06/documents/school_siting_guidelines-2.pdf.

⁴⁸ US EPA, *Smart School Siting Tool: User Guide and Workbooks*, 2015, <https://www.epa.gov/smartgrowth/smart-school-siting-tool>.

In most states, state requirements steer decisions but do not dictate them. When it comes to state funding of school facilities, a few states provide no assistance; a few provide all costs; and most, including Minnesota, fall in the middle.⁴⁹ As described further below, although school construction funding is mostly local, the Minnesota Department of Education (MDE) has strong influence over districts' decisions about school siting and construction based upon required approvals. Experts have called for changes to state policy and have urged specific policy actions to increase walkability around schools and to increase local interagency and interjurisdictional collaboration.

School Districts

State law may provide direction and constraints upon school siting decisions, but local school districts and their elected boards are generally in charge of school siting and design decisions; this is the case in Minnesota. Large school districts engage in school facilities rehabilitation and new construction with some regularity, and as a result they often have policies and expertise to guide these decisions. In contrast, for small districts, school siting decisions arise infrequently, and there is rarely institutional expertise or previous experience to draw upon, often leading to heavy reliance on school planning and architect firms.

Local Jurisdictions

Local jurisdictions – cities, counties, and towns – are deeply affected by school siting decisions, which may affect property values, development patterns, transportation, and more. Although different states have different frameworks, it is common for local jurisdictions to have limited or no zoning authority, veto power, or even designated decisionmaking role over school siting decisions. Coordination, information sharing, and collaboration between districts and local jurisdictions is important for positive results for all. Without such collaboration, it can be hard for local jurisdictions to accomplish the goals set out in their comprehensive planning – schools may find themselves surprised by unexpected influxes of students due to new development, and cities and towns may see traffic congestion or sprawl following a new school, allow with depressed property values and blight around closed school sites.

III. MN Current Practices

As of the 2021-22 school year, Minnesota has 328 school districts, 2200 schools, and 170 charter schools.⁵⁰ Minnesota has 851,000 students in public schools, with 70,000 of these students in charter schools. Student demographics are: White (72%), Black (11%), Latinx (8%), Asian/Pacific Islander (7%), American Indian (2%), and eligible for free/reduced lunch (39%). Segregation is increasing in Minnesota schools, with 25% of Black students in the Minneapolis

⁴⁹ Texas Legislative Council, Research Division, "Facts at a Glance: State Roles in Financing Public School Facilities," 2006, <https://www.tlc.texas.gov/docs/policy/OnlineFinancePubSch.pdf>.

⁵⁰ Tim Strom, "Minnesota School Finance: A Guide for Legislators," Minnesota House Research, October 2021, <https://www.house.leg.state.mn.us/hrd/pubs/mnschfin.pdf>.

area in hypersegregated schools.⁵¹ Around half of Minnesota’s public school students attend school in the Twin Cities metro region, and the other half are in smaller cities, towns, and suburbs, or in rural areas. Although some regions are seeing expanding enrollment, as a general matter school enrollment is declining in Minnesota.

The average age of a main school building in the United States is 44 years.⁵² Among schools where major renovation had occurred, the average time since the most recent major renovation is 12 years.⁵³ The American Society of Civil Engineers (ASCE) estimates that as of 2014, schools in Minnesota had \$3.7 billion worth of infrastructure needs (ASCE, 2014). On average, Minnesota districts construct 15 new/fully remodeled schools/year and conduct 25 major renovations/year.⁵⁴

A. Overview

How are school siting decisions made in Minnesota? As in other states, decisionmaking occurs primarily at the local school district level, but the state department of education (the Minnesota Department of Education, or MDE) has regulatory and approval authority that plays a significant role in generating school siting decisions that result in sprawl rather than walkable schools. The state must approve most local school construction financing. However, the state does not itself fund most school construction, although it does provide certain funds and financing support to qualifying lower-income districts. In Minnesota, the state is prohibited from imposing strict requirements for large school sites, but MDE nonetheless has created a regime that strongly encourages them in its *Guide for Planning School Construction Projects in Minnesota* (“*School Construction Guide*”).⁵⁵ The *School Construction Guide* has not been promulgated as a rule via Minnesota’s formal rulemaking process; instead, the *Guide* serves as a compilation of information for school districts to consider in planning projects, warning districts of the totality of factors the commissioner will be taking into account when making findings on the facility review and comment.⁵⁶

B. State Requirements and Legal Framework

⁵¹ Myron Orfield & Will Stancil, “Why Are The Twin Cities So Segregated?” *Mitchell Hamline Law Review*, Vol. 43:1, 2017, https://mitchellhamline.edu/law-review/wp-content/uploads/sites/37/2017/07/01_Orfield_1_62.pdf.

⁵² National Center for Education Statistics, “Condition of America’s Public School Facilities: 2012-13,” 2014, <https://nces.ed.gov/pubs2014/2014022.pdf>.

⁵³ National Center for Education Statistics, “Condition of America’s Public School Facilities: 2012-13,” 2014, <https://nces.ed.gov/pubs2014/2014022.pdf>.

⁵⁴ Public Health Law Center, “Building Healthy Schools: Health Impact Assessment on Planning School Construction Projects in Minnesota,” 2015, https://www.publichealthlawcenter.org/sites/default/files/HIA%20-%20Building%20Healthy%20Schools_0.pdf.

⁵⁵ Minnesota Dept of Education, [*Guide for Planning School Construction Projects in Minnesota*](#), November 2018.

⁵⁶ Email dated April 12, 2022 to Sara Zimmerman from Tim Strom, Legislative Analyst, MN House of Reps, House Education Finance Committee.

Under Minnesota law, school districts have a duty to furnish children with school facilities.⁵⁷ Minnesota funds the overall provision of education at the state’s public and charter schools at the state level, through the general education revenue program.⁵⁸ In contrast, major facilities construction projects are generally financed at the local level.⁵⁹ Minnesota’s Education Code sets out the state requirements around school facilities. Note that although the state does fund school operations, the amount of funding has fallen over time, and many local districts are turning to local taxpayers to support school operations as well as school construction, with particularly challenging financial and educational impacts for rural and low-income districts.⁶⁰

School construction is primarily financed with general obligation bonds, which are issued by the school district. Bonds generally require both voter approval and also “review and comment” by the state commissioner of education. Once bonds are approved, districts may impose property taxes for 105 percent of what is required to repay the bonds. Districts could raise money for school construction by issuing a levy, or tax, which would also require voter approval and commissioner review and comment. Generally, districts borrow money using bonds and then repay it using annual levies for a set period of time.⁶¹

As noted above, general obligation bonds to pay for school construction must generally have voter approval, except under certain circumstances (e.g. financing construction or repair after a calamity or if the bonds are to be paid back entirely out of the annual operating capital revenue). Projects to be paid for by bonds must be submitted by the district to the commissioner for review and comment for any project that will require more than \$2 million, or, if the district has existing capital debt, for any project over \$500,000.

Process for Local School Construction, Including MDE Approval & Financing

1. **Need:** District identifies a need for a new or renovated school facility.
2. **Conceptual Planning:** District works with planning or architecture firm to identify project needs and potential sites and to develop a rough design and cost estimate; district also works with financial advisor to plan for bond needs and property tax impact
3. **State Approval:**
 - a. For large capital projects that meet the monetary requirements, districts must submit a school construction project proposal to the commissioner for review and comment. Districts may not engage in various behaviors, including soliciting construction bids, prior to review and comment.

⁵⁷ MN Statutes s. 123B.02, subd. 2.

⁵⁸ Tim Strom, “Minnesota School Finance: A Guide for Legislators,” Minnesota House Research, October 2021, <https://www.house.leg.state.mn.us/hrd/pubs/mnschfin.pdf>.

⁵⁹ Tim Strom, “Minnesota School Finance: A Guide for Legislators,” Minnesota House Research, October 2021, <https://www.house.leg.state.mn.us/hrd/pubs/mnschfin.pdf>.

⁶⁰ Yasmine Askari, “Four takeaways from the 2021 school election results in Minnesota,” MinnPost, 11/5/21, <https://www.minnpost.com/education/2021/11/four-takeaways-from-the-2021-school-election-results-in-minnesota/>.

⁶¹ Tim Strom, “Minnesota School Finance: A Guide for Legislators,” Minnesota House Research, October 2021, <https://www.house.leg.state.mn.us/hrd/pubs/mnschfin.pdf>.

- b. The commissioner has 60 days to review the educational and economic advisability of the project under the requirements and guidelines set forth in the *School Construction Guide*.⁶²
4. **Referendum:** When the commissioner’s review comes back:
 - a. If positive, then the district may hold a referendum to get 50 percent voter approval for the sale of bonds. Only these projects can receive state support via debt support equalization aid (primarily for low-income districts).⁶³
 - b. If unfavorable, then the board must reconsider the project, and if it wishes to go forward, must receive approval of at least 60 percent of voters.⁶⁴
 - c. If negative, the project may not proceed; however, there is a meeting requirement and appeal process.⁶⁵
5. **Design Phase:** If voters approve the referendum, the bonds can be issued. They can be used to purchase the anticipated site or can be used for other school construction purposes. The formal design process can take place at this stage.
6. **Construction:** Following design, construction can begin. Construction contracts must be awarded within two years of approval or the review and comment becomes invalid.

Commissioner’s Review and Comment

What is involved in the commissioner’s review and comment? Review and comment submissions require quite a bit of information. Districts must submit a cover letter and a packet of information, including details regarding the district population, existing school facilities, deficiencies of existing facilities, a description of the project, including acreage, square footage, costs, and dates of construction, and project financing. The district must also submit documentation requiring the district and contractors to comply with various requirements, including consultation with affected local jurisdictions re utilities, safe walking and biking (note that this compliance requirement provides the only mention of bicycling in the *School Construction Guide*), and more.⁶⁶

The *School Construction Guide* explains that school districts mold their submissions to avoid the possibility of negative reviews: “There are only a few school construction project proposals submitted each year where an unfavorable or negative review and comment is considered.”⁶⁷ The *Guide* goes on to provide renovations on smaller sites as an example of what school districts have learned to avoid: “School districts’ review and analysis of project options typically leads districts to rule out project options (e.g., renovate an old school on a limited site) that

⁶² Minnesota Dept of Education, [Guide for Planning School Construction Projects in Minnesota](#), November 2018.

⁶³ Minnesota Dept of Education, [Guide for Planning School Construction Projects in Minnesota](#), November 2018.

⁶⁴ Minn. Stat. §§ 123B.70; 123B.71.

⁶⁵ Minn. Stat. § 123B.70, subd. 3.

⁶⁶ Minnesota Dept of Education, [Guide for Planning School Construction Projects in Minnesota](#), November 2018.

⁶⁷ Minnesota Dept of Education, [Guide for Planning School Construction Projects in Minnesota](#), November 2018, page 16.

project architects and/or school finance staff advise are likely to receive an unfavorable or negative review and comment.”⁶⁸

A 2019 review of the notice and comment process by the Office of the Legislative Auditor found that the current process should be improved, particularly with regard to two issues: (1) the need for MDE to provide more analysis of the basis for their conclusions; and (2) the fact that state law required MDE to include public comments in the notice and comment documents, but there is no process for soliciting those comments.⁶⁹ The review suggested changes to state law to address these issues.

Minnesota Smart School Siting Statutory Protections

As discussed above, in the 1990s and early 2000s, substantial school minimum acreage requirements adopted by state departments of education and state legislatures played a large role in poor school siting decisions around the country, including in Minnesota. In reaction to this, in 2009, Minnesota advocates were successful in persuading the state legislature to eliminate department of education policies that required large minimum acreages and favored new construction over renovation.⁷⁰

As a result, Minnesota state statutes now specifically limit the commissioner’s authority with regard to minimum acreage and renovation/new construction. The commissioner may not give a negative or unfavorable review and comment based on a conclusion that the site has too little acreage.⁷¹ In addition, the commissioner’s evaluation of whether a school should be renovated or replaced cannot be based simply on the ratio of renovation to replacement costs.⁷² Rather, the authority to make these decisions is retained by the local school districts.

However, despite these statutory requirements, the *School Construction Guide*⁷³ and the Review and Comment Checklist,⁷⁴ which are each prominently displayed on the MDE School Construction site, make it very clear that there is a strong expectation that districts will abide by old minimum acreage guidelines and construction/renovation cost ratios (see below for further discussion).

Renovation Versus Replacement

⁶⁸ Minnesota Dept of Education, [Guide for Planning School Construction Projects in Minnesota](#), November 2018, page 16.

⁶⁹ Minnesota Office of the Legislative Auditor, “Department of Education ‘Review and Comment’ Process for Construction Projects, Special Review,” November 7, 2019, <https://www.auditor.leg.state.mn.us/sreview/doesconstruction.pdf>.

⁷⁰ Smart Growth America, “Chalk up a victory for Minnesota and neighborhood schools,” 2009, <https://smartgrowthamerica.org/chalk-up-a-victory-for-minnesota-and-neighborhood-schools/>.

⁷¹ Minn. Stat. § 123B.70, subd. 1(b).

⁷² Minn. Stat. § 123B.70, subd. 1(c).

⁷³ Minnesota Dept of Education, [Guide for Planning School Construction Projects in Minnesota](#), November 2018.

⁷⁴ Minnesota Dept of Education, “Review and Comment Checklist,” 2019, <https://education.mn.gov/MDE/dse/schfin/fac/cons/>

The Review and Comment Checklist requires a statement that renovation does not exceed 60 percent of the cost of replacement. The Checklist states: “If the renovation project approaches or exceeds 60 percent of the facility replacement cost or if the school site acreage varies significantly from the recommended site size guidelines, it is recommended that the district submit documentation regarding the educational adequacy of the facility, site size and the economic rationale for the board decision regarding the decision to initiate and complete the proposed project.”⁷⁵ The requirements for extra documentation to justify these decisions, and the chill created by the threat of an unfavorable or negative review, create a significant disincentive to these types of projects, despite the statutory authorization. These requirements seem inconsistent with the statutory requirements.

The *School Construction Guide* contains a section that focuses on the decision to renovate or replace.⁷⁶ The section contains a set of questions a district should consider, and stresses that the decision is a complex and multifactorial one. The 60 percent ratio is discussed as a rule of thumb that should prompt serious consideration of replacement rather than renovation, but not as a rule. There is a discussion of the role of schools in rural communities and the impact of closure, but no discussion of proximity to the student body, ability to walk or bicycle, or the value of a school to its existing neighborhood. Additionally, there is discussion of life cycle costs of the building to the district, but no discussion of external costs to families or local jurisdictions. Overall, the bias definitely leans towards replacement.

It is also worth noting that larger considerations that merit some evaluation are also absent from the factors set out. There is also no discussion of land use issues around compact development, reducing climate emissions, and protecting green fields, and there is no recognition that planning for the future requires anticipating changes due to climate adaptation and changes in transportation modes.

Site Selection

The *School Construction Guide*'s section on site selection also demonstrates a strong preference for new, large sites.⁷⁷ Support for retaining an existing site is characterized as a matter of sentiment, and the *Guide* implies that such sentiment should likely be overcome in recognition of the need for larger sites that can accommodate more program needs: “School districts consider improving an existing school rather than building a new school because of positive feelings for the old school and its central location. If considering renovating an existing school, it is important to understand that an inadequately sized site may make it very difficult or impossible to solve current site issues and construct an addition onto the school to accommodate new programs in a cost-effective manner.”

⁷⁵ Minnesota Dept of Education, “Review and Comment Checklist,” 2019, <https://education.mn.gov/MDE/dse/schfin/fac/cons/>

⁷⁶ Minnesota Dept of Education, [Guide for Planning School Construction Projects in Minnesota](#), November 2018, Part 2.06 (page 51).

⁷⁷ Minnesota Dept of Education, [Guide for Planning School Construction Projects in Minnesota](#), November 2018, Part 2.07 (page 53).

The site selection discussion goes on to note the positive effects of large site size and sets out a long list of problems associated with smaller site size. Note that Minnesota’s school site size guidelines are considerably larger than the original, problematic CEFPI guidelines described above:

Size	Old CEFPI Guidelines	Current Minnesota Guidelines
Elementary School	10 acres plus an acre for each 100 students	10-15 acres plus an acre for each 100 students
K-8 or Middle Level School	20 acres plus an acre for each 100 students	25-35 acres plus an acre for each 100 students
K-12 School or Small High School	30 acres plus an acre for each 100 students	35-40 acres plus an acre for each 100 students
Large High School (>2,000 students)	30 acres plus an acre for each 100 students	60 acres plus an acre for each 100 students (minimum 80 acres)

For example, Minnesota’s guidelines state that a high school built to accommodate more than 2000 students should be at least 60 acres, plus an additional acres for each 100 students, equaling a minimum of 80 acres. That is around 40 square city blocks.⁷⁸ But much smaller sites with higher numbers of students and playing fields exist in most large cities. The guide does clearly acknowledge the legal standard: “The local school board retains the authority to determine minimum acreage needed to accommodate the school and related facilities.”

The overall effect of the minimum acreage framing is this: the recommendations eliminate any or almost any possible challenges on a site due to future size limitations, but replaces those possible challenges with guaranteed challenges related to inability to find such sites near student populations, low likelihood of low carbon or active modes of transportation to school, high environmental impacts through development of agricultural or natural lands, and likelihood of traffic congestion.

The school siting section also discusses location, encouraging location near the center of a community, near student population concentrations “or growth areas.” Proximity to major roads and bus lines is mentioned, but not safe walking/biking paths. The section also recommends avoiding congested areas or freeways.

The section includes a segment on school site access, which mentions important considerations, including the needs to provide some separation of areas. There is no mention of bicycling access or accommodation, and no real mention of walking, though there are a few references to “student walkways.” There is no reference to Safe Routes to School. Districts are

⁷⁸ City blocks vary widely in size; this estimate is based upon cities with small to mid-sized blocks.

referred to MNDOT for assistance in transportation planning and user access to school sites, but are not referred to the MNDOT SRTS team.

Other relevant considerations are discussed elsewhere in the *Guide*. For instance, there is a section about complying with environmental/sustainable building design.

As noted above, there is only one mention of bicycling in the entire guide – the reference to the compliance documentation that must accompany the review and comment that requires consultation with the affected government about safe access for pedestrians and cyclists. There is no mention of safe paths or access for students and staff on bicycles and no mention of bicycle parking.⁷⁹

State Capital Funding for Qualified Districts (mostly low-income districts)

As noted, although generally the state does not provide funding for school construction, the state does provide some support for school construction, primarily for low-income districts.⁸⁰

- Minnesota provides debt service equalization payments for eligible districts, in which the state assists in paying the principal and interest on loans. This is provided for districts that are debt burdened relative to their tax capacity (defined as exceeding 15.74 percent of the net tax capacity).⁸¹ This provides state financial support for school facilities projects in districts with lower tax capacity (generally those that are in lower income communities).
- There is also a program through which the state issues bonds and lends or grants funds to qualifying districts for capital projects (via the Maximum Effort School Aid Law). These funds now generally go to districts with low property values.⁸²

Overall, states that provide funding, rather than just oversight, usually impose more control or requirements upon school construction decisions. However, the state funding provided for low-income districts does not appear to involve additional requirements (other than the inability to move forward with an unfavorable review).

Facilities Maintenance Program

A 2015 law created the Long-Term Facilities Maintenance Revenue program, which requires a 10 year facilities plan, updated annually, and provides a per pupil formula revenue source for

⁷⁹ Minnesota Dept of Education, [Guide for Planning School Construction Projects in Minnesota](#), November 2018, page 15.

⁸⁰ Each year the commissioner of education certifies the amount needed for the loans to the commissioner of finance, who issues general obligation bonds to pay for them. Texas Legislative Council, Research Division, “Facts at a Glance: State Roles in Financing Public School Facilities,” 2006, <https://www.tlc.texas.gov/docs/policy/OnlineFinancePubSch.pdf>.

⁸¹ Minnesota Statutes, section 123B.53.

⁸² Tim Strom, “Minnesota School Finance: A Guide for Legislators,” Minnesota House Research, October 2021, <https://www.house.leg.state.mn.us/hrd/pubs/mnschfin.pdf>.

specific facilities maintenance projects.⁸³ This funding is not sufficient for large capital projects, but does allow for smaller renovation projects and other kinds of updates and maintenance. By incentivizing long range facilities planning, this policy encourages informed planning.

Other Approvals

The *School Construction Guide* lays out a number of additional approvals that school construction projects must receive under various circumstances: HVAC inspection and approval; state building code compliance, overseen by local or state authorities; plumbing compliance; OSHA compliance; Environmental Health review and inspections for work involving swimming pools, school cafeterias, sewage treatment systems, and certain pollutants/hazardous exposures; rules relating to wetlands, which are established by the Department of Natural Resources but enforced by local jurisdictions; fire safety compliance by the state fire marshal; and environmental assessments and review. Some of these as well as other areas only require compliance, not approval.

Local Jurisdictions

Under the “other approvals” described above, there are some limited roles in school construction oversight anticipated for local planning staff or local jurisdictions, for example conducting building code inspections or enforcing wetlands protections. The *School Construction Guide* also contains a section that asserts that municipalities have the authority to guide the development of educational facilities and to approve local building plans. However, the quoted statutory sections seem to show something a little different – more big picture and less mandatory.⁸⁴

C. State Climate Policy

Minnesota state policy has prioritized responding to the changing climate. Minnesota took early action in 2007, with its Next Generation Energy Act. The Act set statutory goals to reduce greenhouse gas emissions in the state to 15 percent below 2005 levels by 2015, 30 percent below 2005 levels by 2025, and 80 percent below 2005 levels by 2050.⁸⁵ Minnesota has taken considerable action towards these goals, but is not meeting them.⁸⁶

⁸³ Minn. Stat. § 123B.595.

⁸⁴ “Under Minnesota Statutes, section 462.352, subdivision 8, municipalities have the authority to guide the future development of public facilities, including educational facilities and under Minnesota Statutes, section 471.468, the authority to approve local building project plans. School districts must check with and fulfill the review and approval requirements of any applicable municipal or other local authority (township, county, or regional) as appropriate.” Minnesota Dept of Education, [Guide for Planning School Construction Projects in Minnesota](#), November 2018, page 30. Minnesota Statutes, section 462.352 just provides definitions. Minnesota Statutes, section 471.468 was repealed in 2015.

⁸⁵ See, e.g., MNDOT, “Climate Change,” <http://www.dot.state.mn.us/climate/mitigation.html>.

⁸⁶ Kirsti Marohn, “Minnesota may miss greenhouse gas emission goals,” 1/14/21, <https://www.mprnews.org/story/2021/01/14/minnesota-may-miss-greenhouse-gas-emission-goals>.

In 2019, an executive order highlighting the severity of the climate threat established the Climate Change Subcabinet, including leadership of 15 state agencies, with goals to achieve 100 percent clean energy by 2050.⁸⁷ The Department of Transportation is among the 15 agencies that make up the Subcabinet, but the Department of Education is not.

Transportation is the largest source of greenhouse gas emissions in the United States and in Minnesota.⁸⁸ As a result, the Climate Change Subcabinet's draft Climate Action Framework establishes clean transportation as its first goal.⁸⁹ The first priority action states: "More funding for non-motorized transportation. Evaluate current funding priorities and direct more resources towards non-motorized transportation to support a comprehensive statewide pedestrian and bicycle network." Initiative 1.1 describes increasing investment in safe, comfortable, and convenient walking, biking, and transit opportunities; creating more opportunities for biking, walking, transit, and telecommuting; and planning for land use that supports multimodal options.

IV. Best Practices

The following set of 10 principles set out a group of overall approaches toward ensuring safe, integrated, walkable, healthy, cost-effective school locations.⁹⁰ These principles were developed by national stakeholders in 2012. These principles can be effectuated through state policy, school district policy, local governmental policy, as well as implementation processes.

1. **Collaborative Planning:** Work toward meaningful coordinated planning between school districts and local governments, with the goal of sharing data, addressing joint needs regarding school locations, ensuring due consideration of environmental impact and other siting factors, and encouraging residential and mixed-income residential development near school sites.
2. **Long-Term Data-Driven Planning:** Engage in long-term planning, based on data including projected student enrollment, demographics, residential density of children, anticipated development, and student transportation costs. Provide a substantial role for public input.
3. **Account for All Costs:** Consider all costs and benefits of different options, not only the cost of construction and land acquisition, but also the cost of required street and utility infrastructure, transportation to the site, and disposal of closed facilities; assess costs and benefits not only for the school district, but also for students, families, staff, local jurisdictions, and the community.

⁸⁷ Executive Order 19-37, Establishing the Climate Change Subcabinet and the Governor's Advisory Council on Climate Change to Promote Coordinated Climate Change Mitigation and Resilience Strategies in the State of Minnesota,

https://mn.gov/governor/assets/2019_12_2_EO_19-37_Climate_tcm1055-412094.pdf.

⁸⁸ Climate Change Subcabinet, "Minnesota's Climate Action Framework," *Draft*, <https://climate.state.mn.us/sites/climate-action/files/2022-01/Climate%20Action%20Framework%20Draft.pdf>.

⁸⁹ Minnesota Department of Natural Resources, "Our Minnesota Climate: Goal 1: Clean transportation," <https://engage.dnr.state.mn.us/our-mn-climate-transportation>.

⁹⁰ ChangeLab Solutions, "Ten Principles of Smart School Siting," http://changelabsolutions.org/sites/default/files/Ten%20Fundamental%20Elements%20of%20Smart%20School%20Siting.Short_2012.01.26_0.pdf.

4. **Co-Location and Shared Use:** Consider making it feasible for students and the larger community to share resources (e.g., libraries, gymnasiums, parks, fields) by locating facilities near to each other and, where desired, through joint use agreements detailing use and responsibility will be shared.
5. **Preference for Renovation:** Consider renovating existing facilities before building new, especially where historic facilities are in question.
6. **Diverse, Walkable Schools through School Siting and Assignment Policies:** Work toward schools that allow students and staff to walk and bicycle, and serve a student body that represents the racial, ethnic, and socioeconomic diversity of the community's students and families. Ensure that both school location and also student attendance zones/assignment policies support walkability and diversity.
7. **Equity in School Facilities:** In weighing determinations about school construction, closures, and rehabilitation, consider equity of school facilities to avoid providing some students with a learning environment that is inferior to that provided to others.
8. **Health Impacts:** Take all health impacts of proposed sites into account (through a health impact assessment or another methodical analysis of health impacts), including the location's supportiveness and safety for physical activity; air pollution and asthma levels; past or present toxic contamination of site or nearby areas; and nearby sources of pollution or toxic contaminants, such as highways, industrial facilities, or pesticide applications.
9. **Safe Routes to School:** Support Safe Routes to School programs to maximize opportunities for walking and biking to school.
10. **Safe Infrastructure for Walking, Bicycling, and Public Transportation in School Vicinity:** Improve the safety and convenience of travel by foot, bike, and public transportation near schools and on school property by providing safe infrastructure.

A. State Policy & Practice

At the state level, there are a variety of policies and practices that can support healthy school siting.

- Eliminate counterproductive requirements, guidelines, and practices such as high minimum acreage requirements and new construction requirements
- Develop a range of site size recommendations for different community contexts, identified values, and goals
- Limit funding or support for megasites or sites located far from student residences
- Incentivize walkable, community-centered schools
 - Create significant funding pools for which eligibility is limited to well-sited schools for school construction, SRTS programming, or active transportation infrastructure
- Require districts to submit student and staff transportation plans as part of school site design and planning, including projected mode split and transportation-based greenhouse gas emissions profiles
- Provide funding, incentives, and technical assistance resources to support schools promoting active transportation or public transportation commutes by faculty and staff;

resources may be available as a component of transportation demand management approaches due to districts being large employers

- Support co-location of schools and complementary public resources like pools, parks, and libraries
- Require collaborative planning between local jurisdiction and school district
- Require or incentivize school site health impact assessments or evaluations to compare sites and avoid hazards
- Prohibit siting schools on or near toxic pollutants

Specific best practice approaches taken by states include:

- **[Oregon State School Siting Handbook](#)**: Oregon provides a detailed handbook to support schools in siting decisions.
- **[Oregon Quick Response Program](#)**: Oregon also has funding and assistance for multimodal quick response projects requested by local jurisdictions, including school and other public facilities siting decisions and assessment.
- **Minnesota Incentive for Long Term Planning**: Minnesota's requirement that school districts have long-range facilities plans to participate in the Long-Term Facilities Maintenance Revenue program.
- **Arizona School Siting Checklist**: Arizona's DOT developed an [Active School Neighborhood Checklist](#) and online resource: These were very useful but were not fully supported and the interactive features are no longer available.

B. Best Practices: Districts

Best practices for districts involve determining how to institutionalize and implement smart school siting principles. Approaches include:

- Adopting smart school siting policies: school district policies that consider factors such as overall land use patterns, walkability and proximity of schools to residences, collaborative planning, and avoiding areas that pose hazards for students' health and well-being. Policies can address not only siting, but also the design of school sites, which can also affect students' physical activity. Healthy school design includes outdoor space for play and physical activity and provides safe and convenient entry for students, families, and teachers walking and bicycling.
- Engage in collaborative school siting planning
- Commit to creating school siting committees with diverse stakeholders
- Commit to comparing different potential sites/options, including renovation and new sites, using objective metrics that address educational program needs, walkability, cost, health, etc. See, e.g., EPA Smart School Siting Tool.⁹¹
- Ensure that site design prioritizes active design features, including: covered parking for bicycles, scooters, skateboards, and other micromobility modes; separation of different transportation modes; safe walking and bicycling access to school grounds from

⁹¹ US EPA, *Smart School Siting Tool: User Guide and Workbooks*, 2015, <https://www.epa.gov/smartgrowth/smart-school-siting-tool>.

convenient neighborhood access points; prioritizing physical activity spaces over parking; and so on.⁹²

C. Best Practices: Local Jurisdictions

Best practices for local jurisdictions include:

- Develop collaborative relationships with school district personnel, including facilities departments, board members, principals, and the superintendent
- Involve school/district stakeholders in bicycle, pedestrian, and transit planning to support network connectivity and provide access for the school trip and for caregivers' second destinations after dropping students off
- Engage in information sharing and collaborative planning
- Consider the role that development exactions may play in school siting decisions, including school land donations by developers; amend exaction laws to support smart school siting.
- Use creative approaches in working with districts to accomplish local goals around school sites, walkability, including assisting in piecing together school sites, collaborating on financing so that schools can also serve as community centers or other community resources, etc.

D. Minnesota HIA Recommendations

A number of Minnesota stakeholders conducted a health impact assessment (HIA) of Minnesota's *School Construction Guide* and practices in 2015, looking at the potential for improvements to support healthy eating, active living, and other healthy practices.⁹³ The HIA resulted in the following relevant recommendations:

- Remove minimum acreage text but encourage planners to consider adequacy of spaces for outdoor play, shared use agreements, future expansion needs, on-site storm water drainage, and well-planned student arrival/departure areas.
- Revise school siting guidance to include maximizing the number of students who live within a school's walk zone, and re-define "center of community/school district" to mean a location near current or anticipated centers of student population growth.
- Recommend conducting a walkability/bikeability assessment when a new school site is being considered, including discussion of plans to address infrastructure challenges.

⁹² See, e.g., Safe Routes Partnership, "Keep Calm and Carry On to School: Improving Arrival and Dismissal for Walking and Biking," 2021, https://saferoutespartnership.org/sites/default/files/resource_files/keep_calm_and_carry_on_to_school_-_improving_arrival_and_dismissal_for_walking_and_biking.pdf

⁹³ Public Health Law Center, "Building Healthy Schools: Health Impact Assessment on Planning School Construction Projects in Minnesota," 2015, https://www.publichealthlawcenter.org/sites/default/files/HIA%20-%20Building%20Healthy%20Schools_0.pdf.

- Provide guidance to help school districts explore options for co-locating a school facility with another community asset, e.g., a park building, recreation/community center, health center, or public library