*Key Facts for School Board Members and Superintendents* 









When students participate in Safe Routes to School programs, they arrive at school safely, on time, and ready to learn. These programs help to develop healthy students with good attendance, and they support schools in achieving their mission of educating children and youth. School boards can play a critical role in supporting walking, bicycling, and Safe Routes to School. One of the best ways to make sure that walking, bicycling, and Safe Routes to School programs are vigorous and sustained over time in your district is to include these programs in school district policies.

#### How School Districts Benefit from Safe Routes to School

When students walk and bicycle to school, it can contribute directly to achieving the district's primary goal, while also providing additional benefits to the community, such as reduced congestion and air pollution, and increased social connections and a greater sense of community.

#### Academic Achievement

Districts around the country are embracing Safe Routes to School in order to obtain the important benefits of regular physical activity for students' overall academic achievement and the increased concentration and improved cognition that can result from individual periods of physical activity. Safe Routes to School programs complement the physical activity that students get during the school day; walking and bicycling to school increase the likelihood that students will meet daily recommended levels of physical activity, without requiring any additional time from the school day.



## What Is a Safe Routes to School Program?

Safe Routes to School programs encourage children to walk or bicycle to or from school. Some programs simply focus on getting students to walk or bicycle on National Walk to School Day, and may provide educational materials on safe walking and bicycling for PE classes. Other programs establish walking school buses and bicycle trains, with parents or volunteers who accompany groups of children on a daily, weekly, or monthly basis as they walk or bicycle to and from school. Federal or state funding is often available to support Safe Routes to School programs and to make safety improvements to street crossings, sidewalks, and bicycle lanes on the route to school. More information about Safe Routes to School is available from the California Department of Public Health's Technical Assistance Resource Center and the Safe Routes to School National Partnership.



The facts about academic achievement show:

- Physical activity and fitness boost learning and memory in children; fitness-associated performance benefits are largest for those situations in which initial learning is the most challenging.<sup>1</sup>
- Sixth- and ninth-grade students with high fitness scored significantly better on math and social studies tests compared with less fit students, even after controlling for socioeconomic status. Muscular strength and muscular endurance were significantly associated with academic achievement in all grades.<sup>2</sup>
- Lower-performing students appear to derive particular benefit from physical activity.<sup>3</sup> In addition, short bicycling exercise periods resulted in enhanced neuronal activity and increased cognitive performance for teenagers with intellectual and developmental disabilities.<sup>4</sup>
- When children get physical activity before class, they are more on task and fidget less. This is true for both girls and boys, and has been shown to be particularly beneficial for children who have the most trouble paying attention and those with attention deficit disorders.<sup>5</sup>

### Attendance, Attendance Dollars & Other District Benefits

Ignoring student wellness can be expensive. Healthy students have lower rates of school absenteeism. When students miss school, it can cost schools money and can translate into lower academic achievement. Absenteeism can affect classroom management and performance of other students.<sup>6</sup> At the same time, Safe Routes to School programs support student health and also increase parental and community engagement. The benefits can be important to meeting state and federal standards, maintaining district transparency, and gaining community support for school bonds and other efforts.

- Children who are overweight or obese have higher rates of school absenteeism than children of healthy weight.<sup>7</sup>
- In Springfield, Massachusetts, the school district implemented walking school buses to address chronic absenteeism, and found that students participating had better attendance rates than their peers.<sup>8</sup>

#### Safe and Healthy Kids

School districts care about having healthy students. Walking and bicycling to school through Safe Routes to School programs provides children with healthy physical activity and contributes to safer streets for children. When children get regular physical activity, their risk of chronic diseases such as asthma and diabetes decreases. In addition, they are less likely to be overweight or obese. Healthy students tend to be happier, less anxious, and have higher self-esteem, all conditions that contribute to students learning and thriving.

- Regular physical activity in childhood and adolescence improves strength and endurance, helps control weight, reduces anxiety and stress, and increases self-esteem.<sup>9</sup>
- Safe Routes to School programs can increase walking and bicycling by 20 to 200 percent.<sup>10</sup>
- A nationally representative study of adolescents showed that students who walked or bicycled to school got more physical activity and had lower levels of obesity.<sup>11</sup>
- Safe Routes to School interventions improved safety for students, leading to a 44 percent annual decrease in child pedestrian injuries during school travel hours.<sup>12</sup>

### **Tulare County District Embraces Safe Routes to School Benefits**

Ducor Union Elementary School District is a small rural school district in Tulare County, California. In 2013, the district identified a need to update their school wellness policy. Recognizing the many ways that Safe Routes to School assisted in achieving their mission, the district included language that set forth its overall support for active transportation to and from school, and made additional key commitments. The wellness policy encourages at least two district-wide events such as School Walk-A-Thons or Bike to School Days annually, and commits the district to providing sufficient crossing guards and visible storage facilities for bicycles.



### Benefits of Safe Routes to School in School District Policies

How can school boards ensure that the benefits of Safe Routes to School programs are available to the students in their district? One of the most significant steps that a board can take is to incorporate Safe Routes to School provisions into district policies. Including Safe Routes to School in your district's policies has a number of benefits:

Creating a Consistent and Supportive Atmosphere for **Healthy Students:** First, district policies play an important role in creating a culture that supports active transportation, including bicycling and walking to school. Supportive policies can generate a consistent climate throughout the school district that assists in changing attitudes among school officials and families. It is not uncommon to find districts in which some schools actively encourage students to walk and bicycle, while other schools strongly discourage or even prohibit them. When schools take inconsistent approaches to walking and bicycling, students and families get mixed messages, and the district misses out on the full benefit for health and academic achievement. By setting policy to support Safe Routes to School, school boards create a culture that embraces active students and supports the connection between healthy students and academic success.

Maximizing Opportunities to Support Physically Active Students: Second, there are many opportunities in district policies to increase and maximize a district's support of and commitment to Safe Routes to School. School boards may use policy or procedures to expand the role and authority of the student transportation department, moving the department from the restrictive role of simply busing a limited number of eligible children, to the broader goal of providing programs and structures that ensure that all students get to school in ways that promote safety and health. Boards may include walking and bicycling safety and skills in their health curriculum and physical education programs, and may identify aspects of site selection and planning of new and renovated schools that eliminate design barriers to walking and bicycling. Without revisions to district policies, these changes may be difficult to incorporate into existing processes and may not remain in place in the future.

Eliminating Obstacles to Health: Finally, district policies and procedures often contain components that discourage or impede some aspects of Safe Routes to School efforts, and boards can revise policies to address these issues. For example, it is fairly common for school district policies to prohibit riding bicycles on school property, even though bicycling on school property is appropriate for noncongested areas, when bicycle riding skills are being taught, and sometimes during non-school hours. School boards can revise policy language to create the flexibility to support safe bicycling and walking, while eliminating specific barriers.

### Where to Include Safe Routes to School

Addressing Safe Routes to School can require updating and inserting new provisions into a wide array of school policies, as well as the places where policies are communicated or implemented. Policies to update include:

- School district policies and administration regulations
- Wellness policies
- Transportation department policies
- Curriculum, such as health and PE curricula
- Plans required by state law, such as California's Local Control and Accountability Plans
- Parent and student handbooks
- School and district websites



### **School Board Members: Community Leaders for Health**



Zerrall McDaniel

Zerrall McDaniel is a school board member in Calaveras County, California. As a board member, Zerrall has taken a special interest in matters related to student health and served on the district wellness committee. When the superintendent asked her to attend a meeting with the county public health department, she wasn't sure

what role she could play. But as Joan Mazetti of Calaveras County Public Health began to describe their new initiative under the CA4Health program to address student and community health, Zerrall was inspired. "I began to see such great potential for our schools, and kids, and our whole community," she explained. Zerrall headed up the district's participation in the effort. Like many rural communities, the town is split by a state highway, and parents were reluctant to allow their children to cross the state highway or walk along the roads, which were lacking continuous sidewalks. With funding from a California Department of Transportation Community Based Transportation Planning Grant, they developed a mobility plan that captured residents' vision of a community plan that would address safety, beauty, and jobs. They began to increase walking and physical activity for students by developing a fun annual community walk. Working together with the public health team, they applied for funding to develop a half a mile of missing sidewalk that will connect to the high school, with the goal of increasing physical activity and health for students and the community.

Zerrall recommends a focus on health to other school board members. Not only can this work create positive associations and support for the district throughout the community, but in addition, "The health work gets good press," she says. Now, Zerrall is spreading the word about the importance of health beyond Calaveras County. Zerrall says, "We are creating relationships with other school boards and having meetings to try and actually spread change. We want to share these ideas with our supposedly rival school districts – throughout the county, and then beyond the county."

#### **Conclusion: School Boards Matter**

School boards and superintendents play a key role in determining the direction and support for physical activity opportunities such as walking and bicycling to school. By recognizing the crucial relationships between physical activity, healthy students, student attendance, and academic achievement, school boards can take steps to support student health and achieve district goals.



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#### **Notes**

- <sup>1</sup> Lees C, Hopkins J. (2013). "Effect of Aerobic Exercise on Cognition, Academic Achievement, and Psychosocial Function in Children: A Systematic Review of Randomized Control Trials." Prev Chronic Dis. 24(10), E174. doi: 10.5888/pcd10.130010. See also Singh, A., L. Uijtdewilligen, et al. (2012). "Physical Activity and Performance at School: A Systematic Review of the Literature Including a Methodological Quality Assessment." Arch Pediatr Adolesc Med 166(1): 49-55. Raine LB, Lee HK, Saliba BJ, Chaddock-Heyman L, Hillman CH, et al. (2013). "The Influence of Childhood Aerobic Fitness on Learning and Memory." PLoS ONE, 8(9), e72666. doi: 10.1371/journal.pone.0072666. Martinez-Gomez, D., J. R. Ruiz, et al. (2011). "Active Commuting to School and Cognitive Performance in Adolescents: The AVENA Study." Arch Pediatr Adolesc Med 165(4): 300-305 (finding that active commuting to school was associated with better cognitive performance in teenage girls; in addition, girls who commuted by foot or bicycle for more than 15 minutes performed better than those with shorter trips).
- <sup>2</sup> Coe, D. P., Peterson, T., Blair, C., Schutten, M. C., & Peddie, H. (2013). "Physical fitness, academic achievement, and socioeconomic status in school-aged youth." J Sch Health, 83(7), 500-507. doi: 10.1111/josh.12058.
- <sup>3</sup> Drollette, E. S., Scudder, M. R., Raine, L. B., Moore, R. D., Saliba, B. J., Pontifex, M. B., & Hillman, C. H. (2014). "Acute exercise facilitates brain function and cognition in children who need it most: an ERP study of individual differences in inhibitory control capacity." Dev Cogn Neurosci, 7, 53-64. doi: 10.1016/j. dcn.2013.11.001.
- <sup>4</sup> Vogt T, Schneider S, Anneken V, Strüder HK. (2013). "Moderate cycling exercise enhances neurocognitive processing in adolescents with intellectual and developmental disabilities." Res Dev Disabil, 34(9), 2708-2716.
- <sup>5</sup> Olga S. Jarretta, Darlene M. Maxwell, Carrie Dickerson, Pamela Hogea, Gwen Daviesa & Amy Yetleya. "Impact of Recess on Classroom Behavior: Group Effects and Individual Differences." The Journal of Educational Research, Volume 92, Issue 2, 121-126 (1998), DOI: 10.1080/00220679809597584. See also Mahar MT, Murphy SK, Rowe DA, Golden J, Shields AT, Raedeke TD. "Effects of a classroom-based program on physical activity and on-task behavior." Med Sci Sports Exerc. 2006 Dec;38(12):2086-94.

- <sup>6</sup> Chang, Hedy and Romero, Mariajose," Present, Engaged and Accounted For: The Critical Importance of Addressing Chronic Absence in the Early Grades," National Center for Children in Poverty, 2008, http://www.nccp.org/publications/pdf/text\_837.pdf; see also Balfanz, Robert, and Vaughan Byrnes, "The Importance of Being in School: A Report on Absenteeism in the Nation's Public Schools," 2012, p. 24, http://new.every1graduates.org/wp-content/uploads/2012/05/FINALChronicAbsenteeismReport\_May16.pdf.
- <sup>7</sup> Geier AB, Foster GD, Womble LG, McLaughlin J, Borradaile KE, Nachmani J, Sherman S, Kumanyika S, Shults J., "The relationship between relative weight and school attendance among elementary schoolchildren." Obesity. August 2007;15(8):2157-61.
- <sup>8</sup> Attendance Works, Springfield: Walking School Bus, http://www.attendanceworks.org/what-works/springfield-walking-school-bus/.
- <sup>9</sup> Centers for Disease Control and Prevention. Physical Activity Facts, 25 Apr. 2011, http://www.cdc.gov/healthyyouth/physicalactivity/facts.htm.
- <sup>10</sup> Marla R. Orenstein, Nicolas Gutierrez, Thomas M. Rice, Jill F. Cooper, and David R. Ragland, "Safe Routes to School Safety and Mobility Analysis" (April 1, 2007). UC Berkeley Traffic Safety Center. Paper UCB-TSC-RR-2007-1. http://repositories.cdlib.org/its/tsc/UCB-TSC-RR-2007-1
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- <sup>12</sup> Charles DiMaggio and Guohua Li, "Effectiveness of a Safe Routes to School Program in Preventing School-Aged Pedestrian Injury," Pediatrics, 2013, doi: 10.1542/peds.2012-2182.