



Students with disabilities are a key group to include when developing and implementing a Safe Routes to School program.<sup>1</sup> On average, one out of every seven students has some type of disability. Students with disabilities can benefit greatly from Safe Routes to School programs, which provide invaluable tools that support healthy lifestyles, bolster physical activity, and promote independence. Developing a program that is welcoming for students with disabilities broadens a program's reach, ensures all students can receive the benefits of the program, and enables students with and without disabilities to enjoy each other's company and learn safe and healthy habits together.

This publication provides information for Safe Routes to School staff, volunteers, or program leaders on how to plan and develop a program that considers and meets the needs of students with disabilities. This infobrief describes the benefits of Safe Routes to School for students with disabilities, strategies for including students with disabilities within the six E's of Safe Routes to School, important components of inclusive Safe Routes to School programming, considerations for students with different kinds of disabilities, and ways to partner and build your resources.



## The Benefits of Safe Routes to School for Students with Disabilities

Including youth with disabilities in Safe Routes to School programs enables them to experience the same benefits from Safe Routes to School programs available to other students. Walking and bicycling are important ways to get around, and can determine long term levels of independence for individuals with disabilities. Many disabilities limit the ability to drive a car. That means increased reliance on bicycling, walking, or transit; providing early education around transportation is crucial. Gaining bicycling skills travel range, and makes further destinations accessible for students reliant on walking, public transportation, and being driven by friends or family. Students experience self-growth and independence by being able to independently access neighborhood locations that were too far to walk or where public transportation was not available.<sup>2</sup> Safe Routes to School programs also support emotional well-being by creating community and supporting social interactions, as well as by giving students an opportunity to be self-reliant by transporting themselves independently.

Youth with disabilities are at a higher risk for developing health problems from sedentary behavior, are significantly less likely to achieve the recommended amount of daily physical activity, and are more likely to be obese than their peers without disabilities.<sup>3</sup> Safe Routes to School supports increased physical activity, develops healthy habits that can last a lifetime, and decreases the risk of chronic disease and obesity.<sup>4</sup> Improved health and transportation skills contribute to long term employment prospects for youth with disabilities.<sup>5</sup>

## Support for Safe Routes to School Within Laws and Regulations

Federal laws and regulations support including elements that ensure access for students with disabilities in Safe Routes to School initiatives. The Americans with Disability Act (ADA) requires that infrastructure projects include certain accessibility provisions and reasonable accommodations for individuals with disabilities. ADA requirements can include providing sidewalks and walkways that are wide and unobstructed so that a person in a wheelchair can access public buildings. ADA requirements can also include providing curb ramps with textured surfaces that can be detected by a person with a visual limitation using a cane, and other improvements that can be included within Safe Routes to School infrastructure projects. Non-infrastructure walking and biking programs such as Safe Routes to School education and encouragement programs do not necessarily receive the same level of guidance under ADA.<sup>6</sup>

The Individuals with Disabilities Education Act (IDEA) mandates the creation of an individualized education program (IEP) for every qualifying public school student. IEPs are tailored to meet the unique educational needs of an individual student with a disability. IEPs include both academic and developmental goals. The IEP team, which includes families, teachers, students, and others, can include personal mobility goals and participation in school-wide Safe Routes to School activities in an IEP. Including mobility training and Safe Routes to School in an IEP addresses the skills students with disabilities may need to strengthen their independent traveling skills.<sup>7</sup> Adding Safe Routes to School into an IEP creates a strong foundation for inclusive programming. Practitioners can collaborate with a student's IEP Team to make specific accommodations.

### What is Inclusion?<sup>8</sup>

Inclusion means transforming communities based on social justice principles in which all community members:

- Are presumed competent
- Are recruited and welcomed as valued members of their community
- Fully participate and learn with their peers
- Experience reciprocal social relationships.

Examples of levels of participation include:

- *Physical access:* The physical environment is accessible to all comers; no supports for participation are necessary. For instance, there is no special entrance or door for people with disabilities because the common door is accessible to anyone.
- *Programmatic access:* To ensure programmatic access, supports may be needed (e.g., volunteers and/or technology) to ensure that individuals with disabilities can participate in all program-based activities. Beyond immediate access and provisions at a facility or event, programmatic access also includes marketing, promotion, and other awareness and outreach activities that ensure all community members are aware of and feel welcomed to programs, facilities, and events.



## Including Students with Disabilities in the Six E's of Safe Routes to School

Students with disabilities should be considered in the planning and implementation of Safe Routes to School activities related to all of the Six E's of Safe Routes to School (education, encouragement, engineering, engagement, evaluation, and equity). Providing an inclusive framework that outlines strategies for engaging students with disabilities from the beginning of the planning of your Safe Routes to School program is crucial. Work with local partners with experience in developing inclusive programs to find solutions for program participation. The following are strategies to ensure students with disabilities are considered and included in each of the Six E's.

**Education:** Teach students, families, and educators about the broad range of transportation choices, accommodations, and resources available for students with disabilities. Work with school staff and the IEP team to identify barriers to participation and available accommodations. Contact local allied health professionals such as occupational, physical, recreational, or speech therapists to obtain educational materials or training. Obtain adapted bicycles and other equipment so that bicycling and walking education can include students of all abilities.

**Encouragement:** Use inclusive events and activities to promote walking, bicycling, public transportation, and being physically active for students of all abilities. Ask students, families, and special education teachers for input on walk and bike to school day planning and other encouragement activities. Structure encouragement programs to focus on group participation through class or group competitions instead of competitions focused on individuals. Organize inclusive programs by adding walking buddies, bus remote drop-off, or park and walk options to Safe Routes to School activities. Consider all students' needs in competition or activity guidelines for Safe Routes to School and encourage participation by incentivizing all types of walking, such as the use of wheelchairs.

**Engineering:** Identify engineering needs on and off campus for students of all abilities. Assess your school for ADA compliance and request any necessary site treatments to improve the safety, comfort, and convenience of walking and biking for students. Conduct a walk audit focused on accommodating all abilities with city or county public works or engineering staff, school administration, special education teachers, families, and students. Look for opportunities to improve streets, sidewalks, on campus walkways, and school driveways and parking lots.

**Engagement:** Talk to students, families, teachers, and school leaders to discuss traffic and motorist behavior making it unsafe for students with disabilities to walk or bike near schools. Identify adjustments that would discourage behavior that makes it challenging for all students to walk or bike to school, such as blocking ramps and access to the sidewalk. Train crossing guards to understand needs of students of all abilities.



**Evaluation:** Assess inclusion methods and participation of students with disabilities in your program. Conduct a pre- and post-program survey focused on access. Ensure that your survey uses inclusive language and is available in accessible formats. Ask students, parents, teachers, and other IEP team members for their input in evaluations. Identify specific improvements and adjustments to increase participation of students with disabilities.

**Equity:** Based upon program participation rates, make any necessary adjustments to increase participation by students with disabilities. Consider students with different types of disabilities, and assess whether your program needs to do additional work to include students with certain types of disabilities. Also, consider different aspects of students' identities. Are you reaching students with disabilities who are English language learners? Are you having equal success with students with disabilities of all genders? Establish a system to prioritize the highest needs of students with disabilities. Provide a variety of activities to accommodate all students. Considering all abilities in each E will support equity across your program.

For more information about different strategies within each E, reference the National Center on Health, Physical Activity and Disability's [Discover Inclusive Safe Routes to School Guide Book](#).





## Important Components of Inclusive Safe Routes to School Programming

Inclusive outreach and communications, training for Safe Routes to School leaders and staff, and supportive policies are important components for developing and implementing an inclusive Safe Routes to School program.

### *Inclusive Outreach and Communication*

Inclusive outreach and communication is important for all members of an IEP Team. Family members, school staff, and students themselves are often champions for individuals with disabilities. To advocate for inclusion of students with disabilities in Safe Routes to School, individuals must have easy access to information and solutions. Families and students may not know they can participate, so provide parents and students with this information. Program leaders can ensure all families and students are aware of program opportunities by asking the school to share information with all families of students with IEPs. The information should say that all students are welcome, including those with and without disabilities. Encourage families that feel that their children would like to participate but would require accommodations to reach out and provide a specific contact or way to do so.

### *Training*

Training on inclusion is a great way to move towards inclusive Safe Routes to School programming. Ensure all staff has a base of knowledge around inclusion. Trainings can help with understanding needs and solutions. Provide opportunities for staff or Safe Routes to School leaders to go beyond the basic knowledge and expand their expertise in this area. For additional information on training, reference resources from the [Office of Special Education Programs](#), or contact NCHPAD.

NCHPAD provides individualized, web-based materials, health communication information, referral and consultation services to people with disabilities, families, caregivers, policymakers, and professionals in the public health, fitness, health care, and aging sectors. Resources are focused on increasing opportunities for people with disabilities to be physically active and make healthy food choices and healthy community design. NCHPAD provides training via online platforms or in-person, depending on the size of the audience. Contact NCHPAD toll-free at 1-800-900-8086 (voice and TTY), or by sending an email to [email@ncpad.org](mailto:email@ncpad.org).

### *Policy*

Policy sets the tone for inclusive programming. Review school policies around walking and bicycling, making sure policies are supportive of Safe Routes to School for students of all abilities. Create supportive and inclusive Safe Routes to School policy as part of the work of a school Safe Routes to School team, or a sub-team of the existing coordinated school health or wellness team, with teachers and staff, special education and IEP teams, parent organizations, community groups and district level wellness team members. District Wellness and Safe Routes to School policies should emphasize engaging students with disabilities.



## Considerations for Students with Different Kinds of Disabilities

When trying to address the needs of individuals with disabilities, programs sometimes make the mistake of grouping all individuals together. Understanding the unique needs of each student can open access to participation in Safe Routes to School. Practitioners should keep in mind students will need to be supported based on their specific needs. This information may be available in the student's school enrollment form or IEP. As a Safe Routes to School practitioner, it may be daunting to find solutions on your own. Partner with the individuals and organizations listed below to identify needs and inclusive strategies.



### Physical

Students with physical disabilities that affect mobility may move more slowly than most of their peers. Some may need a support person such as a family member or aide. Safe Routes to School practitioners should check walking routes, ensuring that the sidewalk is clear and unbroken, and that there are curb ramps. Some students with physical disabilities may have limited energy or stamina. Accommodations may include such as support by an adult, assistance pushing a wheelchair, or help finding an adaptive bicycle.

### Behavioral/Emotional

It can be challenging for many students with behavioral or emotional disabilities to participate in a group setting and follow rules. Practitioners should know a student with a behavioral or emotional disability is not intentionally acting out. A combination of practice and staff patience can help students. Practitioners should provide close and friendly supervision, and ensure that group sizes and adults/child ratios allow for adequate supervision. Remain consistent with rules, and try to avoid changing them once they have been established. Do not embarrass or threaten a student. If participating in a group walk or bike ride, it may be effective to practice the route ahead of time one-on-one with only the student and staff. Consider setting up a contract with the student in a supportive manner, and reviewing progress on the agreement throughout the program.

### Intellectual

Students with intellectual disabilities may take more time than their peers to learn walking and bicycling skills, practitioners should be aware of this and allow additional time to learn concepts and mechanics. Some students with intellectual disabilities may require that lessons be repeated. Practitioners can break down tasks to help students learn skills. A walking or bicycling buddy can provide support and supervision while a student practices skills. Buddies are often family members, aides, or older students; it is important that buddies are trusted by the student they are walking or bicycling with.

Make it easy and accessible for families to understand the opportunities for and request program accommodations. Provide ideas for accommodation options such as assistance crossing the street, assistance by an adult, or providing one-on-one instruction.

### Program Highlight: Norte

Norte, a bicycling non-profit in Michigan, runs a preschool balance bike program at a local school serving students with autism. Executive Director Ty Schmidt worked with parents and teachers to identify student needs. Schmidt found that providing the bicycle education opportunity, balance bikes, and communication with families was all that was needed to have full participation in the class.



## Partnering and Building Your Resources

Involving people whose professional and personal experience includes working with students with disabilities in your Safe Routes to School team can help in identifying and implementing the best strategies for inclusion of students with disabilities. Below are some individuals you should consider including.

- **Special Education Teacher:** These teachers have direct contact with students with disabilities and understand what accommodations are needed. They may also be very helpful in choosing an accessible route to school.
- **Parent of Student with a Disability:** Parents and family members of students with disabilities have personal experience with helping their young person adapt to various environments. They can assist with performing access reviews and serving on Safe Routes to School teams.
- **Allied Health Professionals:** Occupational, physical, recreational, or speech therapists have expertise in how a student's condition affects their needs and potential accommodations. These individuals can help understand how certain disabilities affect learning, communication, and mobility. They can also help with ideas for including students in Safe Routes to School.
- **School Transportation Staff:** Transportation staff can explain where lift-equipped buses can and cannot drop students and whether or not an additional or alternate starting point is required.
- **Local Special Recreation Staff:** These individuals have experience in providing inclusive recreation opportunities for children and youth with disabilities and may be helpful in understanding strategies for including students with disabilities in Safe Routes to School.
- **Adapted PE Teachers:** Adapted PE teachers have extensive experience designing physical education programming for students with disabilities and are experts in adapting various kinds of physical activities. They can provide information and resources on how to adapt Safe Routes to School programming for students.
- **Disability Service Organizations:** Nonprofit disability service organizations focus on supporting individuals with disabilities to live independently. Some may have a cross-disability focus (e.g., Centers for Independent Living) while others support individuals with a specific condition. These organizations often have local branches. Staff have a wealth of knowledge that could serve to improve program implementation and train Safe Routes to School practitioners.
- **National and Regional Resources and Organizations:** The National Center on Health, Physical Activity and Disability (NCHPAD), Parent Training and Information Centers (PTIs), and federal agencies such as the Department of Education can assist Safe Routes to School programs through information and technical assistance.

### Program Highlight: Eugene, Oregon

In Eugene, Oregon, bike education programs at the Eugene School District 4J, Bethel School District, and Springfield Public Schools include students of all abilities by providing opportunities for students to use adapted bikes. While the school districts own fleets of traditional bikes, the City's recreation program provides a variety of adapted bikes that they let students use as needed.





## Adapted Bikes

Some adults with disabilities ride adapted bikes and drive adapted cars for transportation. Introducing students at a young age to bicycle handling skills and street safety helps prepare students to get around independently for life. Providing an opportunity for students to learn about and use adapted bicycles may help with this process and aid independent mobility as an adult.

### Balance Bikes

Balance bikes do not have pedals or a drivetrain. These bicycles allow children of all needs to quickly and easily learn how to ride a bike. The low center of gravity and ease-of-use makes it easier for children with disabilities to learn to ride a bike.



From left: A balance bike and a handcycle

### Handcycles

These bicycles are powered by the upper body, providing an alternative for individuals who cannot use their lower extremities.

### Recumbent Bicycles

These bicycles are helpful for balance and promote a gentle spinal posture. Bicycles are available for adults and children.

### Tandem Bikes

These bicycles are built for two, providing a space for a buddy to accompany a rider. Tandems come in a variety of styles and have two and three wheel options. Some are designed so that a “driver” sits in the back while the individual with special needs sits on a lower seat in the front.



### Tricycles

These bicycles are great for motor control, posture stability and children with mobility issues. Like tandems, tricycles also come in a variety of styles and can provide options for varying needs.

A number of organizations provide adaptive bicycles or funding for local programs to purchase adapted bicycles. [Shriners](#) and [Kiwanis](#) will donate funds to purchase adapted equipment for youth with disabilities, including adapted bikes and other recreational equipment. [AMBUCS](#) provides Amtryke therapeutic tricycles to individuals unable to operate a traditional bike.

## Conclusion

Safe Routes to School benefits students of all abilities, and brings strong physical activity and independent mobility benefits to students with disabilities. By working with students, families, school staff, and other partners, Safe Routes to School programs can be developed around an inclusive framework that engages and benefits all students.

## References

1. U.S. Department of Education, National Center for Education Statistics. Digest of Education Statistics, 2008 (NCES 2009-020), Chapter 2. Available online at: [http://nces.ed.gov/pubns2009/2009020\\_2a.pdf](http://nces.ed.gov/pubns2009/2009020_2a.pdf).
2. Orsini, A.F & O'Brien, C. (2006). “Fun, Fast and Fit: Influences and Motivators for Teenagers who Cycle to School.” *Children, Youth and Environments*. 16(1): 121-132. Retrieved 25 September 2016 from <http://www.colorado.edu/journals/cye>
3. Physical Activity and Youth with Disabilities. Rimmer JH, Rowland J. Physical activity for youth with disabilities: A critical need in an underserved population. *Dev Neurorehabil* 2007;11(2): 1751-8431 and Jalpa A. Doshi, PhD, Daniel Polsky, PhD, and Virginia Chang, MD, PhD. “Prevalence and Trends in Obesity among Aged and Disabled U.S. Medicare Beneficiaries, 1997-2002.” *Health Affairs*, Vol. 26, no. 4 (2007), pp. 1111-1117.
4. Alexander et al., The broader impact of walking to school among adolescents. *BMJonline*. Accessed 9/16/05 at [bmj.bmjournals.com](http://bmj.bmjournals.com). Cooper et al., Commuting to school: Are children who walk more physically active? *Am J Prev Med* 2003; 25 (4); American Heart Association. Exercise (Physical Activity and Children). Accessed 9/16/05 at [www.americanheart.org/presenter.jhtml?identifier=4596](http://www.americanheart.org/presenter.jhtml?identifier=4596) Centers for Disease Control and Prevention. The Benefits of Physical Activity. Accessed August 22, 2016 at <https://www.cdc.gov/physicalactivity/basics/pa-health/index.htm>.
5. San Francisco Bicycle Coalition, A Parent's Guide to Youth Cycling. June 30, 2008, <https://www.education.com/download-pdf/article/15337/>.
6. Safe Routes to School National Partnership Final Position Paper on Students with Disabilities, November 4, 2009, [http://www.saferoutespartnership.org/sites/default/files/pdf/Serving\\_Students\\_with\\_Disabilities\\_SRTSNP\\_11\\_4\\_09\\_FINAL.pdf](http://www.saferoutespartnership.org/sites/default/files/pdf/Serving_Students_with_Disabilities_SRTSNP_11_4_09_FINAL.pdf).
7. Safe Routes to School National Partnership, Final Position Paper on Students with Disabilities. November 4, 2009, [http://www.saferoutespartnership.org/sites/default/files/pdf/Serving\\_Students\\_with\\_Disabilities\\_SRTSNP\\_11\\_4\\_09\\_FINAL.pdf](http://www.saferoutespartnership.org/sites/default/files/pdf/Serving_Students_with_Disabilities_SRTSNP_11_4_09_FINAL.pdf).
8. National Center for Health Physical Activity and Disability, Definition of Inclusion. 2018, <https://www.nchpad.org/1456/6380/Definition-of-Inclusion>.