Talking Points: Why Walk or Bicycle to School?

National Bike to School Day
May 10, 2017

Communicating with the public and media about Bike to School Day? Below are a few important reasons communities nationwide support this event. Subsequent pages provide detailed background information on trends in school travel, reasons for walking and biking, Safe Routes to School and the event's history and reach.

Why walk or bike to school?

- Bike to School Day can help communities connect with many issues they care about whether it's creating safer routes to school, building a sense of community, or inspiring families to use their feet for the school commute more often.

- Each year participation in this event grows. More than 2,600 communities registered events on walkbiketoschool.org in 2016 and even more participated but didn't register online.

- Events are an easy way for students and families to try walking and bicycling to school with little commitment.

- Bike to School Day events lead to more walking and bicycling throughout the school year and encourage communities to launch ongoing walking and bicycling programs.

- Bike to School Day events can help encourage communities to implement policy or engineering changes that make it safer to walk and bike to school. In 2016, nearly 70% of event organizers indicated that their event led to planned, or already completed policy or engineering changes.

About Bike to School Day

The first-ever National Bike to School Day took place on May 9, 2012, in coordination with the League of American Bicyclists' National Bike Month. The event provides an opportunity for schools across the country to join together to celebrate and to build off of the energy of National Bike Month. Bike to School Day builds on the popularity of Walk to School Day, which is celebrated across the country – and the world – each October. Many communities and schools have been holding spring walk and bicycle to school events for years. For more information, and to see who is participating in this year's event, visit walbiketoschool.org.

Background Information

The information in this section can help provide more details and citations when communicating about particular topics of interest. Use the information categorized under the topics most compelling for your community. Topics include:

- Trends in school travel
- Reasons for walking: Safety, physical activity and concern for the environment
- Safe Routes to School

Trends in school travel

Fewer children walk or bicycle to school than did so a generation ago.

- In 1969, 48 percent of students in grades K through eight (ages 5 through 14) walked or bicycled to school.[1]
- In 2009, only 13 percent of students in grades K through eight walked or bicycled to school.[1]
- In 1969, 89 percent of students in grades K through eight who lived within one mile of school usually walked or bicycled to school.[2]
- In 2009, only 35 percent students in grades K through eight students who lived within a mile of school usually walked or bicycled to school even once a week.[2]
- This is an opportunity lost. Walking or bicycling to school gives children time for physical activity and a sense of responsibility and independence; it also creates an opportunity to be outdoors and provides time to connect with parents, friends and neighbors. The entire community benefits when there is less traffic congestion.
- One-time events like Bike to School Day can increase the number of students who walk or bicycle to school even weeks after the day of the event.[3]

Changes in school size and location have affected children's ability to walk or bicycle to school.

- Over the past few decades, many school districts have moved away from smaller, centrally located schools and have instead built schools on the edge of communities where land costs are lower and acreage has been more available.
- The percentage of students in grades K through 8 who live less than one mile from school has declined from 41 percent in 1969 to 31 percent in 2009.[1,2]
- Neighborhood schools not only have more students who live within walking and bicycling distance, they also encourage civic engagement and help strengthen sense of place in communities. Students at these schools also perform better academically and have higher graduation rates.[4]

Transportation costs are a significant expense.

- Environments that support walking and bicycling can help reduce school transportation costs. For example, infrastructure improvements at Pioneer Elementary School in Auburn, Washington, encouraged more children to walk and bicycle to school, decreasing bus use from six buses to one. Transportation costs were reduced by an estimated $220,000 per year and over 85 percent of students now walk or bicycle to school.[5]
- After adjusting for inflation, the average cost per student transported using bus service in 1980-1981 was $541. In 2012-2013 (the most recent year with data available), the average cost had risen to $950.[6]

Traffic-related safety concerns can impact decisions to walk or bicycle. When more children are driven, more parents become convinced that traffic conditions are unsafe for walking or bicycling.

- School travel by private family vehicle for students grades K through 12 accounted for 10 to 14 percent of all automobile trips made during the morning peak period in 2009 and two to three percent of the total annual trips made by family vehicle in the U.S.[1]
- If more children walked or bicycled to school, it would reduce the number of cars near the school at pick-up and drop-off times, making it safer for walkers and bicyclists and reducing congestion.[7]
- Fifty-five percent of parents who reported not allowing their children to walk or bicycle to school identified the number of cars along the route to school as a significant issue in their decision-making process.[8]

Promising trends

Around the country communities are working to improve health and increase the appeal of walking and bicycling to school. And there are signs of success that help shed light on what could help bring positive changes to even more places. While there is much work to be done, we are on the right road.

- One-time events like Bike to School Day can increase the number of students who walk or bicycle to school even weeks after the day of the event.[3,9]
- Bike to School Day events often turn into regularly occurring walking and bicycling programs, which over time can get significantly more students walking and bicycling to school.[3]
- Parent survey data collected by 6,500 schools from 2007 through 2014 show that parent-perceived school support for walking and bicycling for the school trip increased from 24.8 percent to 40.8 percent from 2007 to 2014.[10]
- Complete Streets policies which aim to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities, support the concepts needed for safe walking and bicycling to school. Since the late 1990s more than 900 regional and local agencies, 33 states, the Commonwealth of Puerto Rico, and the District of Columbia have adopted Complete Streets policies.[11]

Safety

Walking and bicycling need to be safe and accessible transportation options. This means creating safe environments for students of all abilities and teaching safety skills to walkers, bicyclists and drivers.

Safe walking and bicycling environments include:

- Neighborhood schools that are within walking and bicycling distance from homes;

- Sidewalks or bicycle-paths that connect homes with schools;
- Child-friendly opportunities to cross streets (such as the presence of adult crossing guards, raised medians, as well as traffic and pedestrian signals);
- Slow vehicle speeds accomplished through roadway safety measures (traffic calming) and police enforcement where needed; and
- Pathways that are accessible for students of all abilities.

Driver behaviors, like speeding and distracted driving, can undermine safety. Attentive drivers traveling at slower speeds can saves lives.

- Speeding reduces a driver's peripheral vision, increases the distance needed to stop and increases the severity of injury to a pedestrian in a crash.
- A car traveling 40 mph requires 300 feet, or an entire football field, to come to a complete stop. At 30 mph a car needs 200 feet to stop and at 20 mph requires only 100 feet.[12]
- Higher speeds exponentially increase the chances that a driver will hit a pedestrian crossing or along the roadway and that the injuries sustained will be life changing (brain injury, physical impairment) or life ending.
- Distracted driving draws a driver's vision from the road, hands off the steering wheel or mind off of the act of driving. Examples include talking or texting on the phone and eating while driving.
- Distracted driving increases the braking distance needed to safely avoid pedestrians and bicyclists. Multi-tasking while driving also slows cognitive ability, processing and reaction time.[13]

Safety education includes working with:

- Children - to provide them with basic safety skills, such as how to choose where to walk and where to cross streets, how to obey crossing guards and be visible to drivers.
- Parents - to create awareness of the need for pedestrian and bicyclist safety education and opportunities to walk and bicycle and the importance of practicing safety skills with their children.
- Drivers - to alert all drivers to the presence of walkers and bicyclists and the need to slow down.
- Law enforcement - to enhance pedestrian and bicyclist safety with school zone enforcement.
- Local officials - to identify changes that improve walking and bicycling conditions around schools.

Teaching children walking and bicycling safety skills can help create lifelong travel skills.

- Short periods of skills-based training can significantly improve child pedestrian behavior.[14]
- Safety education activities should be scheduled for times when all students can participate.

Physical activity

Physical activity contributes to overall health.

- Children need 60 minutes of physical activity every day.

Many kids are not getting the exercise that they need.

- As age or grade in school increases, physical activity participation drastically declines.[15]
- Less active children are more likely to be overweight.[16]
- Research shows that overweight children are at increased risk of obesity, and chronic diseases, such as diabetes, heart disease, high blood pressure, asthma and various cancer types in adulthood. [17,18,19,20,21]

In 2012, more than one-third of children aged 10 to 17 years old were overweight.[22]

- Childhood obesity has more than doubled in children and quadrupled in adolescents in the past 30 years.[23]
- Some communities and states have recently measured reductions in childhood obesity rates and promoting walking and bicycling was one of the strategies used.[24]
- Children with disabilities are at a higher risk for sedentary behavior and can therefore benefit from more opportunities to be active.[25]

Walking and bicycling to school offers an opportunity for children to get physical activity as part of their daily routine.

- Walking and bicycling to school can contribute significantly to children getting the recommended amount of daily physical activity.[26]

Potential benefits of physical activity for youth include:

- Weight control
- Reducing blood pressure
- Raising HDL ("good") cholesterol
- Improved cardiorespiratory endurance, muscular fitness and bone health
- Reduction in the risk of diabetes and some kinds of cancer
- Improved mental health [27,28,29]

Physical activity is associated with improved academic performance in children and adolescents.[30,31,32,33]

Environment and air quality

Private vehicle emissions contribute to air pollution and global climate change, both of which threaten human and environmental health.

- Transportation accounts for 26 percent of overall greenhouse gas emissions, and passenger cars are responsible for the majority, more than 60 percent, of those emissions.[34]
- Traffic congestion, which can be a particular problem during school drop-off and pick-up times, increases vehicle emissions that play a role in heightened risk of illness and death for drivers.[35]

Air pollutants are especially harmful to children as their respiratory systems are still developing.

- Motor vehicles emit air pollutants like ozone, nitrogen oxides, carbon monoxide, particulate matter and volatile organic compounds. Exposure to these air pollutants can cause short-term health problems, like headaches; nausea; skin and eye irritation; and nose, throat, and lung inflammation. These pollutants can also aggravate and intensify long-term respiratory and cardiovascular health problems, such as asthma and heart disease.[36]
- Children are particularly vulnerable to the effects of air quality because they breathe 50 percent more air per pound of body weight than adults. As a result, childhood asthma rates are one of the most common pollution-related health problems in America and more than seven million children currently live with asthma.[37] Annually, more than 10.5 million school days in the United States are lost due to childhood asthma.[38]
- Children exposed to high levels of vehicle emissions were found to have significantly lower grades, even when controlling for other factors that affect school performance.[39]

Air quality is measurably better at schools placed in neighborhoods with integrated street and sidewalk networks, and these schools have more students arriving by bicycle and on foot.[40]

Walking and bicycling to school provide opportunities for children and families to reduce their carbon usage and contribute to the health of the environment.

- If a family walks to school twice a week rather than driving, they can reduce their carbon emissions by 131 pounds each year.[41]
- If half of the students at an average-sized elementary school choose to walk or bike to school, their impact would be a savings of 36 tons of greenhouse gas emissions a year.[41] This is the equivalent of the carbon-removing abilities of 1,000 trees.[42]

Exposure to nature and time for free outdoor play can have multiple health benefits including stress reduction, relief of ADHD symptoms in children and increased cognitive and motor functioning.

An active trip to school offers children an opportunity to spend time in the natural environment. When appropriate and safe, walking and bicycling to school is an experience that can help children develop a sense of independence that is important for development.[43,44,45,46,47,48]

About Safe Routes to School

Safe Routes to School (SRTS) programs are sustained efforts by families, other community members, community leaders, schools and local, state, and federal governments to enable and encourage children to safely walk or bicycle to school.

- As of June, 2016 federal funding has enabled more than 19,035 schools across the country to participate in the national Safe Routes to School program.
- In May 2006, the National Center for Safe Routes to School was established to assist communities in enabling and encouraging children of all abilities to safely walk and bicycle to school. The National Center for Safe Routes to School is maintained by the University of North Carolina Highway Safety Research Center with funding from the U.S. Department of Transportation Federal Highway Administration.
- Many communities launch SRTS programs as a result of Bike to School events.
- For information about Safe Routes to School, please visit www.saferoutesinfo.org.

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