

HOUSTON: Safe Routes to School



This brief summarizes findings from the CHOICES Learning Collaborative Partnership simulation model of implementing Safe Routes to School (SRTS) initiatives in elementary and middle schools in Houston Independent School District. SRTS aims to help children safely walk and bicycle to school through infrastructure improvements, education, and promotional activities.

The Issue

Research shows that physical activity helps kids grow up at a healthy weight and reduces the risk of future chronic disease;¹ however, many kids do not get enough daily physical activity,² and without action, a majority of today's children will have obesity at age 35.³ This has substantial financial implications. The healthcare costs for treating obesity-related health conditions like heart disease and diabetes were \$147 billion in 2008.⁴

Every child deserves the opportunity to be healthy, and all kids need opportunities to be physically active, no matter where they live or where they go to school. Over recent decades, the declining rates of using physically active transportation modes like walking and bicycling to school may have contributed to lower than recommended levels of physical activity among youth.⁵ In Houston, concerns over pedestrian and bicycle safety may deter parents from allowing their child walk or bike to school. SRTS initiatives are an effective strategy to increase physical activity by promoting safer walking and bicycling opportunities⁶ and would be an important component of the City's effort to create safe, efficient and effective alternatives to traveling by car.

About Safe Routes to School

Houston envisions implementing SRTS as part of Houston's Vision Zero initiative, a comprehensive approach to address traffic safety to eliminate all traffic fatalities and serious injuries. Vision Zero can support SRTS initiatives to improve street safety and encourage more kids and families to walk and bike to and from school.

We estimated the cost to implement SRTS initiatives in Houston, including transportation infrastructure projects to improve the local physical environments around schools and education, encouragement and enforcement activities. Other necessary resources include a program coordinator and a Committee Taskforce to provide city-level oversight, administration, and project selection support.

Comparing Costs and Outcomes

CHOICES cost-effectiveness analysis compared the costs and outcomes over a 10-year time horizon (2017-2027) of implementing SRTS in Houston with the costs and outcomes associated with not implementing the program. We estimated that 199 elementary and middle schools serving grades K-8 in Houston Independent School District would implement a new SRTS program. Additional research suggests that 5.5% of students would shift from cars to active travel modes after SRTS implementation.⁶ This shift would result in some projected cost savings due to reduced vehicle use for school transportation trips.

Implementing Safe Routes to School in Houston is an investment in the future. By the end of 2027:



276,000 CHILDREN

would attend schools with safer transportation environments



15,500 CHILDREN WOULD WALK OR BIKE TO SCHOOL



48 MORE MINUTES OF PHYSICAL ACTIVITY PER WEEK

for students who start walking or biking to school

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Conclusions and Implications

Investing in initiatives that make it safer and more appealing to walk or bicycle to and from school can help more children accumulate recommended levels of physical activity. We estimate that over ten years, over 276,000 students in the Houston Independent School District would benefit from improved safety around schools and those that start walking or biking to school would engage in 48 more minutes of physical activity during the school week.

Implementing SRTS in Houston Independent School District would require an investment of \$19.5 million dollars over 10 years. When accounting for cost offsets due to reduced vehicle traffic for students who shift travel modes, the projected 10-year implementation costs are estimated to be cost-saving. In Houston, SRTS project implementation costs could be offset by savings associated with reduced vehicle travel that include \$4 million in environment-related cost savings. Additionally, families whose students start walking or bicycling and thus drive less for school transportation trips could average \$1,080 in savings.

SRTS initiatives, which include a combination of infrastructure improvements (e.g., adding sidewalks or traffic calming) and non-infrastructure activities (e.g., safety education, promotional events, enforcement and evaluation activities) may also reduce the risk of pedestrian and bicycle injury.^{7,8} Investing in SRTS projects that make walking and bicycling to school safer and easier opens opportunities for those families who want to allow their child to walk or bike but cannot because of safety concerns.⁹

These multiple benefits reinforce the importance of investing in effective strategies that promote accessible, safe, and convenient walking and biking options to improve the health of our students and the environments of our local communities.



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