



City of Palo Alto City Council Staff Report

(ID # 13503)

Meeting Date: 11/29/2021

Title: Safe Routes to School Annual Report 2020-2021

From: City Manager

Lead Department: Transportation Department

Recommendation

Staff recommends that the Council receive and hold a study session discussing the Annual Report for the Safe Routes to School Partnership.

Executive Summary

The local Safe Routes to School (SRTS) Partnership between the City of Palo Alto, the Palo Alto Unified School District (PAUSD), and the Palo Alto Council of PTAs (PTAC) works to reduce risk to students en route to and from school, and to encourage more families to choose alternatives to driving solo more often to promote healthy, sustainable school commutes. In May 2017, the Palo Alto Safe Routes to School Partnership adopted its first Five-Year Work Plan. This report and study session document the progress of the Safe Routes Partnership since then and provide program updates for FY 2021. Due to the pandemic, the [FY 2020 Annual Report](#) and [attachments](#) were transmitted to Council as an informational item in December 2020.

2020-21 Program Highlights

- City SRTS staff provided mainly online pedestrian and bicycle safety education to more than 5942 students in 150 classrooms, for a total of 238,920 instructional minutes. PAUSD supported this compulsory education with modifications to support social distancing.
- Led by City SRTS staff, the SRTS Partnership worked collaboratively to partially or fully complete more than 86 percent of Year 4 Work Plan Strategies.
- Upholding the SRTS commitment to equity, City SRTS Staff and PAUSD/PTA Safe Routes partners collaborated with the Bay Area Outdoor Recreation Program (BORP) to support a City-funded summer Adaptive Cycling Pilot event for 20 PAUSD exceptional needs students and parents. Additional equity-focused programs/activities included:
 - Roughly 200 student bikes repaired during 5 secondary school bike repair events.
 - 27 parent-facilitated holiday bike, helmet and lock donations.
 - A City SRTS Staff-led Spanish online SRTS presentation to 30 PAUSD parents.
 - A City SRTS Staff-led “Walk with Ruby Bridges” Black History Month suggested activity list with 30 signups.

- Other volunteer-led and organized events included:
 - A 12-participant parent-supported family ice-cream ride.
 - An 18-participant “Bike Everywhere Day” Family Ride.
 - A 15-participant Gunn/Fletcher SRTS “Getting to High School” ride.
 - 5 PTAC-supported secondary school Bike Repair events.
 - Socially-distanced “Walk and Chalk Return to School” encouragement events at seven campuses.
 - Paly and Gunn student led recreational and bike-repair Bike Clubs.
 - High School student representation at City School Transportation Meetings.
- Council approval to move forward with the VTA-grant funded South Palo Alto Bikeways project to enhance the Waverly Multi-Use Path, East Meadow Drive and Fabian Way.
- Charleston-Arastradero Bike Corridor Phase 2 Project completion.
- Office of Transportation 20mph speed limit sign installation around 27 schools.

Background

For more than 50 years, the City, PAUSD, and the PTA have maintained a child transportation safety-focused collaboration in Palo Alto, meeting monthly as the City/School Traffic Safety Committee (CSTSC). In 2006, this collaboration adopted a National Consensus Statement relying on a ‘5-E’ (Encouragement, Education, Engineering, Enforcement and Evaluation) injury prevention framework to support safe, healthy and active school commutes. In 2016, the Partnership adopted a sixth ‘E’ for Equity to align with national standards ensuring that SRTS Partners provide additional resources to support the needs of under-resourced or under-represented families. Additionally, the SRTS Partnership approved a “Five-Year Work Plan.” While Five-Year Work Plan objectives remain somewhat fixed from year to year, the strategies to achieve the goals change each year, based on priorities set by program partners (Refer to Attachment A for the 5-Year Work Plan). Five-Year Work Plan goals and strategies depend on the Safe Routes to School Partnership’s funding and capacity and may be subject to change as demand dictates.

In 2020, at the recommendation of the Safe Routes to School National Partnership, the term “Enforcement” was replaced with the term “Engagement” to support a more community-focused approach to supporting transportation safety and compliance with existing regulations.

Discussion

COVID-19 Impacts

Prior to the onset of the pandemic, most yearly SRTS mode share data reflected linear positive growth, warranting the creation of innovative, progressive programming strategies to sustain these trends.

In light of pandemic-related mental and physical health and safety considerations 2020-21 SRTS efforts to integrate daily physical activity into student schedules, foster independence and

academic achievement, reduce traffic congestion and pollution around schools, and promote healthy social and emotional stress reduction and coping skills were more relevant than ever.

When it became clear that 2019-20 school closures would present transportation challenges well into 2020-21, the Partnership pivoted to prioritize the transportation safety needs of more vulnerable student populations that faced disproportionate pandemic-related impacts, as highlighted by the Safe Routes to School National Partnership in Attachment C. These challenges provided a unique opportunity to further integrate equity and inclusion into SRTS education, encouragement, engagement, engineering program priorities. In addition to the outcomes shared in the 2020-21 program highlights, a recently drafted Equity and Inclusion Action Plan will help the Partnership advance strategic equity goals to maximize impact and support continued program growth. The plan will be reported out on as a part of next year's Council Report.

Proposed Pandemic-impacted City budget cuts prompted PTA Parent Transportation Safety Representatives to successfully advocate to restore school crossing guard program funding. Although the PAPD Traffic Team funding was not restored, remaining officers continued making themselves available to support schools during arrival and dismissal times, when feasible. This year's funding gaps also led City SRTS Staff to provide direct education to PAUSD students, where those programs are typically contracted out to regional pedestrian and bike educators. In doing so, staff achieved the outcomes captured in the 2020-21 Program Highlights, amidst navigating the complexities of halved teaching time, quarantined classrooms, differing levels of student and parent mastery with the Zoom platform and scheduling and accommodating all synchronous, asynchronous, distance, hybrid and mixed grade learning cohorts.

On-campus social distancing restrictions warranted the cancellation of yearly in-person 8th Grade Getting to High School events, the 6th Grade PTA-supported Back to School Bike Safety event, the 90-minute blacktop portion of the Third Grade "Bicycle Life Skills Bike Rodeo" and the PTA-supported "Bike Palo Alto" education and encouragement event. Online classroom-based pedestrian and bike safety lessons were provided in place of these programs, and the Bike Rodeo blacktop activity was converted into an opt-in summer class. Staff anticipate resuming regular in-class Bike Rodeos in Spring 2022 and are hopeful PTA partners will resurrect Bike Palo Alto as an in-person event next year.

Pandemic-related factors significantly elevated the number of SRTS-related community safety requests at the beginning of the 2021-22 school year. More than 168 direct and online SRTS-related program assistance inquiries were issued, and as City and District partners collaborate to catch up on these requests, resources and staff capacity are stretched. Parent partners and community members have been patient waiting for responses to their requests and some parent Transportation Safety Representatives volunteers have even pitched in to provide assistance in responding to concerns voiced by their school communities.

Possible factors generating an elevated number of SRTS-related community safety requests include:

- Traffic congestion and poor driver/bicyclist behavior exacerbated by:
 - A year of work-from-home and distance learning policies disrupting normal traffic patterns;
 - The closure of some school entry points to align with PAUSD social distancing protocols;
 - A cohort of distance learning and Kindergarten families that may have missed a year of active transportation messaging and on-foot or bike practice;
 - A move toward car-based event programming to accommodate social distancing guidelines to minimize the risk of COVID transmission;
 - An elevated number of Spare the Air Alerts due to wildfire increases and other poor air quality events;
 - Delayed, missed, abbreviated or less interactive 2020-21 SRTS educational programs impacted by truncated teaching schedules and policies limiting the presence of adult educators on campus.
- Staff and volunteer capacity limitations including:
 - Implications of constrained City financial resources, resulting in adjusting staffing resources to accommodate special grant activities, diminishing capacity for general program coordination;
 - Labor shortages in key support roles including: crossing guards, bus drivers and police officers
 - Turnover of existing, tenured staffing, resulting in delays in hardscape and signal modification projects due to recruiting and training activities.
 - Overcommitted parent volunteers, several of whom resigned from their roles due to distance learning choices and personal family challenges related to navigating the pandemic.

Preliminary data suggests that the aforementioned factors have resulted in 2021-22 declines in active transportation mode share. As conditions normalize, a return to the average 1% year-over-year mode-share growth experienced in pre-pandemic years is anticipated (See Attachment B for 2019 travel mode data). 2022-23 academic year strategies in the Five-Year Plan will focus on achieving this goal. A comprehensive table of 2020-21 SRTS activities organized by the Six Es is provided below.

Table 1:
Safe Routes to School Program Activities, 2020-2021

DATE	ACTIVITY	PARTNERS (IN ORDER OF LEADERSHIP)	DESCRIPTION	OUTCOMES
ENCOURAGEMENT				
Bi-Monthly	City School Transportation Safety Committee Meetings	CPA SRTS, PTA, Palo Alto Police Department, PAUSD, Community	Community Meetings	<ul style="list-style-type: none"> • 6 2-hour meetings • Approx. 130 participants total, or 21 participants

DATE	ACTIVITY	PARTNERS (IN ORDER OF LEADERSHIP)	DESCRIPTION	OUTCOMES
		Participants		per meeting
Bi-Monthly	City School Transportation Safety Committee Planning Meetings	CPA SRTS, PTA, PAPD, PAUSD,	Agenda-setting meetings to support CSTSC	<ul style="list-style-type: none"> 5 1-hour meetings
10/15-11/01/20	Fall Walk & Chalk School Reopening Events	PTA, PAUSD, CPA SRTS	Green transportation encouragement events to support the return to school	<ul style="list-style-type: none"> 7 School-based events
1/20/20	Ruby Bridges Winter Walk and Roll Activities	CPA SRTS, Youth for Community Service	An online Google form highlighting various options and activities	<ul style="list-style-type: none"> Outreach to more than 50 community members 30 Participants
11/19/20	PAUSD Family Engagement Specialist Event	PAUSD, PTA, CPA SRTS	Online Zoom Q&A-based parent event	<ul style="list-style-type: none"> 34 Participants
6/29/21	Silicon Valley Bike Coalition Annual Bike Summit	CPA SRTS, SVBC	Participation in a panel of 3 presenters sharing active transportation best practices	<ul style="list-style-type: none"> 5-minute "Palo Alto Safe Routes to School: "Pandemic Edition" presentation
EDUCATION				
Ongoing	Spare the Air Youth Meetings	Metropolitan Transportation Commission, City, Regional Providers	Sharing best practices in SRTS programs across the Bay Area	<ul style="list-style-type: none"> 4 quarterly meetings
August-November 2020	Sixth-Eighth Grade Back to School Bicycle Safety Lesson	PAUSD, CPA SRTS	Bicycle safety online education provided to all PAUSD 6-8 grade students	<ul style="list-style-type: none"> 14 1-hour presentations 950 students
March-May 2021	Bicycle Life Skills Lesson	CPA SRTS, PAUSD	1 30-45-minute online bicycle safety lesson for all PAUSD 3rd graders	<ul style="list-style-type: none"> Supported 744 students
3/1-5/1/21	K-2 Pedestrian Safety Lesson	CPA SRTS, PAUSD	30-minute online pedestrian	<ul style="list-style-type: none"> Supported 2003 students

DATE	ACTIVITY	PARTNERS (IN ORDER OF LEADERSHIP)	DESCRIPTION	OUTCOMES
			safety education classroom lessons	
4/1-6/1/21	Fifth Grade Bicycle Safety Refresher	CPA SRTS, PAUSD	45-minute grade-based online bike safety education	<ul style="list-style-type: none"> Supported 787 students
8/1-11/1/20	Grades 6-8 Bike Safety Lessons via EdPuzzle	CPA SRTS, PAUSD	Gradewide assembly-based bike safety education for grades 6-8	<ul style="list-style-type: none"> Supported 2420 students
6/1/21	Middle School Bike Skills	WheelKids Bicycle Club CPA SRTS	Adjusted for COVID	<ul style="list-style-type: none"> Six 4.5- hour classes 77 students Approx. 77 parents
ENGINEERING				
Ongoing	2012 Bicycle + Pedestrian Transportation Plan Projects	Transportation staff, Public Works staff	Improvements identified by the community to enhance walking and bicycling	<ul style="list-style-type: none"> Ongoing design feedback CSTSC input
Ongoing	South Palo Alto Bikeway Support	Transportation and Public Works staff	Projects on school routes arising from VERBS grant analysis and from PAUSD or PTA requests	<ul style="list-style-type: none"> Ongoing design feedback CSTSC input Education/ outreach assistance
Ongoing	Palo Alto 311 Service Requests	CPA SRTS	Requests for improvements on school routes submitted by the community	<ul style="list-style-type: none"> 11 completed requests
Ongoing	Pedestrian and Bicycle Advisory Committee (PABAC) Support	CPA SRTS	Monthly reports of SRTS activities and collision data shared with PABAC advisory committee	<ul style="list-style-type: none"> 12 summary reports at monthly PABAC meetings
ENGAGEMENT/ENFORCEMENT*				

DATE	ACTIVITY	PARTNERS (IN ORDER OF LEADERSHIP)	DESCRIPTION	OUTCOMES
Ongoing	Monthly Collision Reporting	PAPD	Juvenile bicycle and pedestrian collision data shared monthly with Safe Routes/Transportation staff	<ul style="list-style-type: none"> 103 Collisions
Ongoing	Traffic Law Enforcement	PAPD	Juvenile bicycle and pedestrian traffic citations shared monthly with Safe Routes/Transportation staff	<ul style="list-style-type: none"> 270 Juvenile Citations/Warnings
Ongoing	Bikes Registered on Bike Index	Bike Index, CPA SRTS, PAPD		<ul style="list-style-type: none"> 1142 total bicycles registered since 2019 5 bikes recovered
Ongoing	Juvenile Traffic Safety Diversion Program	PAPD, Traffic Safe Communities Network of Santa Clara County	Traffic School for youth with on-bike citations	<ul style="list-style-type: none"> 1 Juvenile diversion class. Approx. 45 students and 30 parents
Ongoing	Adult Crossing Guards	PAPD	Crossing guards for elementary and middle school students at qualifying intersections	<ul style="list-style-type: none"> 29 Crossing Guards
EVALUATION				
Ongoing	SRTS Data Providers Network Regional Meetings	Santa Clara Dept. of Public Health, City	Sharing of County resources and best practices	<ul style="list-style-type: none"> 4 2-hour Meetings
7/1/20-11/1/20	SRTS Parent Tally	CPA	Assessment Survey gauging parent support for active school commutes	<ul style="list-style-type: none"> 481 Responses
EQUITY				
Ongoing	Local Equity Presentations and Meetings	CPA SRTS, City Manager's Office	PAUSD VTP Parent meeting and Youth for Community Service Ruby	<ul style="list-style-type: none"> 2 45-minute presentations

DATE	ACTIVITY	PARTNERS (IN ORDER OF LEADERSHIP)	DESCRIPTION	OUTCOMES
			Bridges Presentation	
Ongoing	Bike, Helmet and Bike Light Giveaways	CPA, Stanford, BikesBridge	Ongoing coordination	<ul style="list-style-type: none"> 25 bike helmets shared with PAPD Approx. 27 parent volunteer-facilitated bike, bike light and lock donations
Ongoing	Materials Translation	CPA SRTS	Translation of SRTS Communication materials into Spanish	<ul style="list-style-type: none"> 2 translations
12/1/2020-5/1/2021	Bike Repair	VeloFix, PTA, CPA SRTS	Free school-based bicycle repair clinics funded through the City of Palo Alto. Extra repair costs funded by PTA.	<ul style="list-style-type: none"> 200 bikes repaired at secondary schools 40 student bikes given away via Gunn ReCycles

Source: Office of Transportation, October 2021

Program Evaluation

As shown in Table 2, the 2020-21 education programs reached approximately 5,942 students or roughly the same number of students educated in a normal year, but at about half the number of instructional minutes in alignment with the PAUSD modified teaching schedule.

Table 2: 2020-2021 Safe Routes to School Core Education Program Reach

PROGRAM	NUMBER OF LESSONS/ ASSEMBLIES/DOWNLOADS	NUMBER OF PAUSD STUDENTS TAUGHT
<i>K-2 Pedestrian Safety Digital Download</i>	385	385
<i>K-2 Grade compulsory online Pedestrian Safety for Distance Learning and Hybrid Cohort A and Cohort B Classrooms</i>	110	2,003
<i>3rd Grade compulsory online lessons for Distance Learning and Hybrid Classrooms</i>	22	744
<i>3rd Grade Socially Distanced Bike Rodeo*</i>	3	100
<i>5th Grade compulsory online Bike Safety Refresher Distance Learning and Hybrid/In Person Classrooms</i>	23	787
<i>6-8 grade compulsory online "Back to School Bike Safety Education" Lessons</i>	N/A	2,420

<i>Summer Exceptional Needs Adaptive Cycling Event*</i>		25
Total for Core Education Programs	50	5,942

Source: Office of Transportation, October 2021

** Denotes in-person activity, all other classes were held online*

In addition to post-program surveys of teachers, administrators, and volunteers, the Partnership collects yearly data to estimate levels of school commute alternative mode use. In a typical year, a table sharing the outcomes of bike counts and travel mode tallies would be included in this presentation. However, since the 2020-21 school year was a statistical outlier from previous years, it was impossible to incorporate meaningful data into longitudinal analyses. Data collection has resumed for the 2021-22 school year, and results will be reported out during the 2021-22 Annual Report out to the City Council. 2019-2020 school year data is shared in the Attachment B.

Some data gathering efforts moved forward in 2020-21, including the administration of an elementary school parent travel tally. Data validity was compromised by only 481 out of 4,056, or 12% of parents responding to survey completion requests. This also led to an over-representation of one particular school population (Ohlone) in the survey results by a margin of almost 2:1. Future efforts to improve parent response results may include intensifying a collaboration with PAUSD's Office of Educational Technology, supporting regional efforts to add parent school commute questions to the California Healthy Kids Survey, providing additional resources to incentivize voluntary survey completion, or using staff time/possible grant funding to promote more effective outreach.

While limited conclusions can be drawn from this data, it was noteworthy that the number one response (41%) to what accommodations might influence parents who do not currently permit their children to walk or bike to school to consider doing so was "greater access to protected pathways." This could be a significant data point as the City builds out school-focused engineering projects and plans. Further analysis of a larger sample size to confirm the validity of this data point is warranted.

Table 3: If your child(ren) do not walk or bike to school regularly, what treatments/actions might encourage you to reconsider allowing them to do so? Check all that apply.

SCHOOL TYPE	# RESPONDENTS	% OF RESPONDENTS
More protected pathways	173	41.4%
Ensuring my child has a better understanding of the rules of the road when walking/bicycling	120	28.7%
Ensuring my child becomes a more proficient bicyclist	117	28%
Waiting until my child gets older	107	25.6%
More school crossing guards to help student pedestrians cross at a particular intersection	96	23%
Not applicable, my child(ren) walk or bike to school	96	23%

A trusted student/adult to walk/bike to school with my child	84	20.1%
A walking school bus or bicycle train organized by the school along a particular route to/from school	72	17.2%
Changes to transportation infrastructure to help moderate vehicle speeds along certain routes	65	16.6%
Changes to my work schedule or location	69	16.1%
Changing the speed of traffic along the school route	44	10.5%
A bicycle that will help me/my child cover longer distances more quickly, such as an electric bicycle	32	7.7%
A working bicycle for me/my child	26	6.2%
None of these things would lead me to reconsider	21	5%

Source: Office of Transportation, December 2020

Additional metrics evaluated educator and parent opinions of the revised K-8 online curriculum. Findings indicated that approximately 80% of educators favor in-person, hands-on lessons.

Lastly, transportation injury data requests and inquiries continue to be hindered by limited staff capacity to define the data set, as well as incorporate variables such as chronic under-reporting of pedestrian and bicyclists crashes, the lack of available solo bike crash data, challenges measuring the severity of collisions and more.

Adopted SRTS Objectives, 2018-2022

The 2019-20 Five-Year Work Plan as reviewed and accepted at the April 19, 2019, City School Transportation Safety Committee (CSTSC) continued serving as a roadmap for the program's development, as the need for staff to triage pandemic impacts delayed the Team's capacity to achieve Year 4 strategies for achieving program goals to grow and strengthen community-wide support through the SRTS Six E's model for safe, active, healthy, and sustainable school commutes via the seven key Five-Year Plan objectives. Detailed Year 1-4 Safe Routes to School Partnership yearly and ongoing strategies are shared in Attachment A.

1. Adopt and institutionalize key SRTS practices and policies across the Partnership and gather best practices from elsewhere
2. Provide, continue, and enhance school- and community-based SRTS education programs, materials, and communications
3. Expand and enhance SRTS events, encouragement programs, and materials to communicate the value of SRTS to parents, students, and the community
4. Gather data to assess and improve SRTS program outcomes
5. Engineer routes to school to develop more safe and efficient networks for families choosing active transportation
6. Increase awareness and engagement between City Departments and the community to advance awareness of the SRTS mission, goals, and strategies
7. Commit to an equitable distribution of SRTS resources to encourage broad SRTS community participation

2020-21 City/PAUSD/PTA Safe Routes to School Partnership 5 Year Plan Year 4 Strategies

Year 4 Strategies Fully Completed

- S-1 Including Youth as the Fourth Partner of the PA SRTS Partnership
- S-2 Enhance SRTS online educational materials and resource library
 - Enhance High School youth outreach
- S-3 Pilot one Winter Walk and Roll event
 - Conduct two local family cycling events
- S-4 Complete Year 3 Strategy to distribute a PAUSD parent survey
 - Develop a behavior change-focused SRTS infographic
- S-7 Increase SRTS outreach to students with special needs and other disabilities by conducting a minimum of one SRTS presentation

Year 4 Strategies Partly Completed

- S-1 Hold two PAUSD/City/PTA Partnership meetings to reinitiate PAUSD SRTS policy implementation and renew Partnership Consensus Statement
- S-3 Ensure updated, standardized SRTS language is included in all PAUSD websites and parent handbooks
- S-6 Ensure that relevant transportation concept plans, updated Pedestrian Bicycle Plans and proposed community engagement strategies are reviewed by the CTSTSC
- S-7 Complete Year 3 Strategy to Work with PAUSD Family Engagement Specialists to develop an Equity Action Plan

Year 4 Strategies Not Completed (mainly due to pandemic-related social distancing barriers)

- S-5 Complete two site assessments
- S-6 Work with the Community Services Department to administer a bicycle facility Needs Assessment i.e. "Safe Routes to Parks"

Summary

Percentage of Year 4 Strategies Completed: 57%

Percentage of Year 4 Strategies Fully or Partly Completed: 86%

Percentage of Year 4 Strategies Not Completed: 14%

Policy Implications

This program is consistent with key transportation goals in the City's *Comprehensive Plan 2030*, including creating a sustainable transportation system, reducing congestion, and providing a safe environment for all road users. Specific policies and programs include:

- Policy T-1.16: Promote personal transportation vehicles as an alternative to cars (e.g. bicycles, skateboards, roller blades) to get to work, school, shopping, recreational facilities and transit stops.

- Program T-1.16.4: Participate in local and regional encouragement events such as Palo Alto Walk and Rolls, Bike to Work Day, and Bike Palo Alto! that encourage a culture of bicycling and walking as alternative to single-occupant vehicle trips.
- Policy T1.19: Provide facilities that encourage and support bicycling and walking.
- Program T1.19.2: Prioritize investment for enhanced pedestrian access and bicycle use within Palo Alto and to/from surrounding communities, including by incorporating improvements from related city plans, for example the 2012 Palo Alto Bicycle + Pedestrian Transportation Plan and the Parks, Trails & Open Space master Plan, as amended, into the Capital Improvements Program.
- Policy T-2.7: Work with the PAUSD to resolve traffic congestion issues associated with student drop-off and pick-up. Address pedestrian and bicycle access, circulation and related issues such as coordinating bell schedules on City rights-of-way adjacent to schools and on PAUSD property.
- Program T6.1.1: Follow the principles of the Safe Routes to Schools program to implement traffic safety measures that focus on safe routes to work, shopping, downtown, community services, parks, and schools including all designated school commute corridors.
- Program T6.1.2: Develop, distribute, and aggressively promote maps and apps showing safe routes to work, shopping, community services, parks and schools within Palo Alto in collaboration with stakeholders, including PAUSD, major employers, TMA's, local businesses and community organizations.
- Policy T-6.2: Pursue the goal of zero severe injuries and roadway fatalities on Palo Alto city streets.
- Policy T-6.4: Continue the Safe Routes to School partnership with PAUSD and the Palo Alto Council of PTAs.
- Policy T-6.5: Support PAUSD adoption of standard Safe Routes to School policies and regulations that address the five E's of education, encouragement, enforcement, engineering and evaluation.
- Program T6.6.2: Continue to provide educational programs for children and adults, in partnership with community-based educational organizations, to promote safe walking and the safe use of bicycles, including the City-sponsored bicycle education programs in the public schools and the bicycle traffic school program for juveniles.

- Program T6.6.3: Work with PAUSD and employers to promote roadway safety for all users, including motorized alternatives to cars and bikes such as mopeds and e-bikes, through educational programs for children and adults.

Timeline

The Safe Routes to School Partnership supports an ongoing, year-round program which includes both engineering and programmatic elements. A timeline of recently completed and upcoming infrastructure projects that reduce risk to students is included in Table 5.

Table 5: SRTS Infrastructure Project Timelines

PROJECT	SCHOOL ROUTES TO BE IMPROVED	COMPLETION DATE OR FUTURE CONSTRUCTION START
Churchill Avenue Enhanced Bikeway, Phase 0	Palo Alto HS	Completed April 2016
Cowper Street at Coleridge Avenue High-visibility Crosswalks	Walter Hays	Completed April 2016
Georgia Ave High-visibility Crosswalk and Curb Extension	Fletcher MS Gunn HS	Completed Summer 2016
Los Robles Avenue Bikeway Enhancements	Briones Fletcher MS Gunn HS	Completed Summer 2016
Park Boulevard Bicycle Boulevard Early Implementation (Stanford Avenue to Cambridge Avenue)	Greene MS Palo Alto HS	Completed Summer 2016
Middlefield Road and North California Avenue Complete Street Project	Greene MS Palo Alto HS	Completed Fall 2016
Garland Drive Sharrows	Greene MS	Completed Winter 2017
Overcrossing/Undercrossing Improvements	Greene MS Palo Alto HS	Completed August 2017
Arastradero Road at Donald Drive Spot Safety Improvements	Fletcher MS	Completed September 2017
Cowper Street at Coleridge Avenue Traffic Circle Trial	Walter Hays	Completed September 2017
Colorado Avenue at Sandra Place Spot Safety Improvements	Ohlone	Completed July 2018
Channing Avenue and St Francis Drive Enhanced Bikeway	Duveneck	Completed Summer 2018
Ross Road Bicycle Boulevard	El Carmelo Ohlone Palo Verde Greene MS Gunn HS Palo Alto HS	Completed November 2019; Adjustments November 2020 Additional minor concrete work will be done late 2021
Amarillo Avenue-Moreno Avenue Bicycle Boulevard	El Carmelo Ohlone	Completed November 2019; Adjustments November

PROJECT	SCHOOL ROUTES TO BE IMPROVED	COMPLETION DATE OR FUTURE CONSTRUCTION START
	Palo Verde	2020
Charleston-Arastradero Corridor Project Phase 1 and 2	Barron Park Briones Hoover Fairmeadow JLS MS Fletcher MS Gunn HS	November 2020
Charleston-Arastradero Corridor Project Phase 3	Barron Park Briones Hoover Fairmeadow JLS MS Fletcher MS Gunn HS	Construction started Oct. 2021
Churchill Avenue Enhanced Bikeway, Phase 1	Palo Alto HS	Construction starts Spring 2022
Churchill Avenue Highway-Railroad Crossing Safety Improvement Project	Palo Alto HS	Spring 2022
East Meadow Drive and Fabian Way Enhanced Bikeway (as part of South Palo Alto Bikeways Project)	Fairmeadow Hoover Palo Verde JLS MS Gunn HS	Estimated construction start Spring 2023
Bryant Street Bicycle Boulevard Extension (East Meadow Drive to San Antonio Road)	Fairmeadow Hoover JLS MS Gunn HS	TBD via a new public outreach process for NTSBB* projects
Bryant Street Bicycle Boulevard Upgrade (Menlo Park City Limits to East Meadow Road)	Addison El Carmelo JLS MS Greene MS Palo Alto HS Gunn HS	TBD via a new public outreach process for NTSBB* projects
Louis Road-Montrose Avenue Bicycle Boulevard	Fairmeadow JLS MS Gunn HS	TBD via a new public outreach process for NTSBB* projects
Maybell Avenue Bicycle Boulevard	Briones Fletcher MS Gunn HS	TBD via a new public outreach process for NTSBB* projects
Park Boulevard-Wilkie Way Bicycle Boulevard	Barron Park Briones Fletcher MS Gunn HS	TBD via a new public outreach process for NTSBB* projects

PROJECT	SCHOOL ROUTES TO BE IMPROVED	COMPLETION DATE OR FUTURE CONSTRUCTION START
Stanford Avenue Bicycle Boulevard	Barron Park Briones Fletcher MS Gunn HS	TBD via a new public outreach process for NTSBB* projects

Source: Office of Transportation, October 2021

*NTSBB: Neighborhood Traffic Safety and Bicycle Boulevard Project

Resource Impacts

The 2019-20 Safe Routes to School (PL-00026) capital budget was \$104,000. Staff consisted of two (2) full-time coordinators for a total of two (2) FTEs (full time equivalent). This capital improvement project (CIP) allows for strategic investments in school route safety infrastructure, such as crosswalks, pedestrian flashing beacons, improved signage, and street markings.

Safe Routes to School infrastructure projects are financed through a variety of means, including the Safe Routes to School (PL-00026), Bicycle and Pedestrian Transportation Plan Implementation (PL-04010), and Street Maintenance (PE-86070) CIPs as well as through several grant programs.

Stakeholder Engagement

The Safe Routes to School Partnership is a collaborative program. According to the International Association of Public Participation (IAP2), collaborative programs allow for "partnership with members of the public to identify problems and develop solutions." The program is supported by bi-monthly City/School Transportation Safety Committee meetings, a Five-Year Plan that is developed and adopted by SRTS stakeholders to further the mission of the Partnership, and yearly reports to the City/School Liaison Committee and City Council. Safe Routes staff work directly with PTA and PAUSD leaders as well as with other stakeholders in the community to further the Partnership's goals.

Environmental Review

This agenda item is informational only and is not a "project" requiring review under the California Environmental Quality Act (CEQA).

Attachments:

- **Attachment3.a:** Attachment A: SRTS Partnership Year 4 of 5 Year Plan 2021
- **Attachment3.b:** Attachment B: 2019-2020 SRTS Bike Count and Travel Tally Data
- **Attachment3.c:** Attachment C: 2021 National SRTS Back To School Factsheet

Safe Routes to School Five Year Work Plan (Last edit: 10/16/21)

Mission						
To enhance and sustain the City/PAUSD/PTA/Youth community partnership to reduce risk to students en route to and from school, and to encourage more families to choose healthy, active, sustainable alternatives to driving solo more often.						
Goal						
To grow and strengthen community-wide support through the SRTS 6 E's (Education, Encouragement, Engineering, Engagement, Evaluation, and Equity) model for safe, active, healthy, sustainable, school commutes.						
Long-Term Objectives* (O)						
O-1	O-2	O-3	O-4	O-5	O-6	O-7
Adopt and institutionalize key SRTS practices and policies across the Partnership and gather best practices from elsewhere	Provide, continue and enhance school and community-based SRTS education programs, materials and communications	Expand and enhance SRTS events and encouragement programs and materials to communicate the value of SRTS to parents, students and the community	Gather data to assess and improve SRTS program outcomes	Engineer routes to school to develop a more safe and efficient network for families choosing active transportation	Increase awareness & engagement between City Departments and the community to advance awareness of the SRTS mission, goals & strategies	Commit to an equitable distribution of SRTS resources to encourage broad SRTS community participation
Year One Strategies (S) Items Listed in Bold = Completed Activities						
S-1	S-2	S-3	S-4	S-5	S-6	S-7
Work toward PAUSD SRTS policy adoption	Build out two Stanford service learning education, evaluation & enforcement projects Expand Youth for Environmental Sustainability Conf. Participation	Develop SRTS Public Service Announcements Increase Spanish and Mandarin materials Develop SRTS educational posters	Participate in countywide SRTS data pilot Integrate Statewide Traffic System (SWITRS) data into SRTS Pilot online travel tally	Complete two site assessments and update Walk and Roll Maps	Update City Comprehensive Plan policies	This goal was not developed
Year Two Strategies (S) Items Listed in Bold = Completed Activities						
S-1	S-2	S-3	S-4	S-5	S-6	S-7
Develop a PAUSD SRTS policy to sustain ongoing commitment from PAUSD	Explore optional and compulsory SRTS high school education programs	Develop a communications plan outline Develop a public list of carpooling resources	Develop a PAUSD parent survey to evaluate participant demographics and identify challenges to more active transportation	Complete two site assessments with updated Walk and Roll Maps for Palo Verde and Gunn H.S.	Create an enforcement strategy to reflect changing staffing levels by shifting traffic enforcement role to patrol officers	Conduct a bike repair class with student input Promote safer routes for East Palo Alto PAUSD student bicyclists
Year Three Strategies (S) Items Listed in Bold = Completed Activities						
S-1	S-2	S-3	S-4	S-5	S-6	S-7
Develop school report cards summarizing travel mode split, SR2S activities undertaken, and the level of green travel status	Implement optional and compulsory SRTS high education programs	Develop fact-based and consistent Safe Routes to School messages that can be used on social media	Administer a PAUSD parent survey to evaluate participant demographics and identify challenges to more active transportation	Complete two site assessments with updated Walk and Roll Maps for Palo Verde and Gunn H.S.	Work with PAPD/City to promote the Bike Index Registry as a means of preventing bike theft and create a workflow at PAPD to include Bike Index checks on all recovered bikes	Work with PAUSD Family Engagement Specialists to develop an Equity Action Plan to support underrepresented and under-resourced communities
Year Four Strategies (S) Items Listed in Bold = Completed Activities						
S-1	S-2	S-3	S-4	S-5	S-6	S-7
Hold two PAUSD/City/PTA Partnership meetings to re-initiate PAUSD SRTS policy implementation and renew Partnership Consensus Statement Include Youth as the Fourth Partner of the PA SRTS Partnership	Enhance High School youth outreach Enhance SRTS online educational materials and resource library	Ensure updated, standardized SRTS language is included in all PAUSD websites and parent handbooks Pilot one Winter Walk and Roll event Conduct two local family cycling events	Complete Year 3 Strategy to distribute a PAUSD parent survey Develop a behavior change-focused SRTS infographic	Complete two site assessments	Work with the Community Services Department to administer a bicycle facility needs assessment ie. "Safe Routes to Parks" Ensure that relevant transportation concept plans, updated Pedestrian Bicycle Plans and proposed community engagement strategies are reviewed by the CTSTSC	Complete Year 3 Strategy to Work with PAUSD Family Engagement Specialists to develop an Equity Action Plan Increase SRTS outreach to students with special needs and other disabilities by conducting a minimum of one SRTS presentation

*Contingent on safe routes to school funding/capacity and subject to change as demand dictates.

Objective 1: Adopt and institutionalize key SRTS practices and policies across the Partnership and gather best practices from e

- S-1. Support Safe Routes to School Transportation Safety Representatives at each school site
- S-2. PTA inspires action and educates potential leaders about public process, governance and SRTS Advocacy
- S-3. Support increased uniform patrol presence to encourage and enforce compliance with existing laws
- S-4. Maintain the City School Traffic Safety Committee (CSTSC) as a forum to further the SRTS Partnership's mission, goals & strategies
- S-5. Improve communication of SRTS Consensus Statement and other policies, including PAUSD Building for Excellence Requirements, Palo

Objective 2: Provide, expand and enhance school and community-based SRTS education programs and materials

- S-1. Cultivate a community of parents and others to build a network of skilled leaders for education and advocacy
- S-2. Support active transportation events during the year by setting up information tables, assisting families with route planning and responding to infrastructure concerns
- S-3. Maintain K-2 in-class educational offerings and optimize the program to match students capabilities, support educational best practices and incorporate infrastructure updates
- S-4. Maintain 3rd grade Bicycle Life Skills in-class Curriculum and optimize program to match student capabilities, support best practices and incorporate infrastructure updates
- S-5. Maintain 5th grade in-class educational offerings and optimize the program to match studnets capabilities, support best practices and incorporate infrastructure updates
- S-6. Maintain 6th grade in-class educational offerings and optimize programs to match student capabilities, support best practices and

Objective 3: Expand & enhance encouragement programs to communicate the value of SRTS to parents & the community

- S-3. Support Bike to Work Day
- S-4. Support City participation in Bike Palo Alto as communicated by the City Manager's Office
- S-5. Communicate program activities and successes to the broader community
- S-6. Use Walk and Roll Maps and "Safety Tips for Peds/Bikes/Drivers" as part of messaging
- S-7. Employ purposeful incentives to support SRTS participation
- S-8. Communicate the value of bicycling, walking, transit and sharing rides
- S-9. Enhance website functionality and user experience
- S-10. Support parent education, including Back to School Nights, spring information nights for rising 5th, 6th, and 7th graders and providing SRTS information in Back to School packets
- S-11. Develop a communication plan outline for crisis communications

Objective 4: Gather data to assess and improve SRTS program outcomes

- S-1. Incorporate traffic and engineering data into mode split and modal share assessments
- S-2. Explain the purpose of data collection to PAUSD administrators and share the data
- S-3. Conduct yearly online travel tallies for PAUSD grades K-12
- S-4. Conduct yearly bike counts
- S-5. Manage local and administrative data requests

Objective 5: Engineer routes to school to develop a more safe and efficient network for families choosing active transportation

- S-1. Assist with bicycle infrastructure design review to inform the planning process
- S-2. Design and provide materials and education about new infrastructure improvements
- S-3. Advocate as a Partnership for the rapid implementation of bike network, bike boulevards, bike racks, arterial projects and bicycle plans
- S-4. Respond to Safe Routes to School -related Palo Alto 311 request
- S-5. Conduct community site visits
- S-6. Provide crossing guard management, including assessing needs, developing contracts and replying to public feedback
- S-7. Develop material to support new engineering/infrastructure treatments

Objective 6: Deepen awareness & engagement across City Department & among community reps to advance & institutionalize SRTS

- S-1. Support the build-out of the City of Palo Alto Bicycle and Pedestrian Transportation Plan
- S-2. Provide students and families with transit system information and offer guidance of proposed transit changes
- S-3. Model walking, biking, carpool, and transit through daily transportation decisions
- S-4. Assist with plans to develop a more efficient roadway network for families choosing active transportation
- S-5. Collaborate with local agencies, including public works, utilities, law enforcement and district officials to support motorist, pedestrians, and bicyclists

Objective 7: Commit an equitable distribution of SRTS resources to encourage broad SRTS community participation

- S-1. Develop Spanish and Chinese language materials
- S-2. Promote a "no-guilt approach" to encourage participation via all transportation modes
- S-3. Support free service, such as bike repair, helmet and bike light distribution and compulsory education to ensure that under-resourced students can access important safety resources in a way that does not stigmatize them
- S-4. Ensure ongoing awarness regarding the geopgrahic distribution of SRTS staff time and resources among Palo Alto regions and across

Attachment B – 2019-2020 SRTS Bike Count and Travel Tally Data

2019-2020 alternative mode share/shift, calculated by using bike rack counts and classroom travel tallies are conducted each fall. Bike rack counts are administered by PTA volunteers calculating the number of parked bikes at their school. More detailed SRTS data can be found in Attachment C.

2019 Parked Bicycle Counts at PAUSD Schools

School Type	2019 Parked Bikes	% Biking	% pt. + or – since 2016-17
Elementary	759	16%	0
Middle	1,674	63%	+13
High	2,102	51%	+10
Total	4,535	39%	+8

Source: Office of Transportation, December 2019

Classroom travel tallies are administered by teachers through a show of student hands. In 2016-17, new online data gathering methods for the classroom travel tally helped expand the program's capacity to conduct travel tallies at the secondary level. The City has a goal of reaching a mean district response rate of 70%. The mean tally response rate was 49% in the first year of this effort; this year the mean district response rate was 68%. Table 4 shows the travel mode percentages aggregated by school type for the current school year.

2019 PAUSD Classroom Tally of Mode to School

	Walk Scooter Skate (%)	Bike (%)	Carpool (%)	Transit (%)	Drive (%)	Resp. Rate (%)	Alt. Transp. Mode (%)	Alt. Mode Shift + or – since 2016-17 (%)
Elem.	25	16	6	3	50	80	50	+3
Middle	13	57	8	2	20	84	80	+3
High	9	54	6	6	24	61	75	+6
Average	15	42	7	4	31	75	68	+4

Source: Office of Transportation, December 2019

Data Interpretation

Weather variations, date of data collection, absenteeism, classroom tally participation rates, school-based special events, volunteer-based calculation errors, and whether bicycles are left in the rack or removed during the school day impact the validity of these results.

Importantly, the small mode shift changes across all school levels are well within the norm of data fluctuations and suggest sustained levels of alternative mode use at a rate that is more than twice the national average. Nevertheless, the relatively high use of the family car for school

commutes of two miles or less, particularly at the elementary level, continues to represent a growth area for the program. For this reason, the SRTS Partnership will seek to:

- Sustain active mode share numbers; and
- Provide bicycle, pedestrian and driver safety education to accommodate the buildout of infrastructure appropriate for such high levels of alternative transportation.

Classroom travel tallies are administered by teachers through a show of student hands. In 2016-17, new online data gathering methods for the classroom travel tally helped expand the program's capacity to conduct travel tallies at the secondary level. The City has a goal of reaching a mean district response rate of 70%. The mean tally response rate was 49% in the first year of this effort; this year the mean district response rate was 68%. Table 4 shows the travel mode percentages aggregated by school type for the current school year.



Why Safe Routes to School is an Essential Part of Reopening: Talking Points for Safe Routes Back to School 2021

During the pandemic, students, families, schools, and other community members have dealt with fear, isolation, and endless attempts to be creative in challenging situations. Now, we are faced with a new challenge: dealing with the chaos of returning to “normal.” As schools re-open, there will be a plethora of daunting challenges. Below is an outline of some of the challenges that have either surfaced because of or were exacerbated by the pandemic and talking points to outline how Safe Routes to School can provide the tools to address some of those concerns. While Safe Routes to School cannot solve every problem, it can address some significant health and safety challenges while enabling easier access to community destinations and resources that fill other gaps. With thoughtfulness and creativity, we can help communities thrive in this period of transition.

COVID-19 Has Taken a Toll on Our Communities and Our Kids

During the pandemic, kids lost access to places and activities (both in and out of school) where they could find social connections and physical activity. This took a serious toll, especially on the most vulnerable populations. For everyone, the sustained periods of stress and fear brought on by the pandemic have contributed to a collective and individual trauma. Keeping that in mind, it makes sense that moving into a new school year may be challenging and everyone involved will require more support than they did pre-pandemic.

The Health and Academic Impacts of Isolation and Remote Learning

Learning loss has been a growing concern as students learning remotely have struggled to stay engaged in a virtual classroom, but there is also significant concern around physical and mental health because of students' isolation. This is particularly acute for the many families coping with significant stress levels during the pandemic, from fear of contracting and recovering from the virus to financial, housing, and food insecurities.

- Parents of students learning remotely or in hybrid models were more likely than parents of students learning in-person to report that their children



experienced decreased physical activity, time spent outdoors, time with friends, and worsened mental or emotional health.¹

- Nearly three-quarters of parents polled in a national survey shared that they were concerned about their children's learning loss during the pandemic due to virtual learning.² That same poll showed that the vast majority of parents in the United States are concerned about the toll remote learning has taken on their children's physical and mental wellbeing.³



Disparate Impacts by Race and Socioeconomic Status

The pandemic and movements for racial justice in 2020 have underscored racial and economic disparities that were decades in the making.

- In 2020, anti-Asian hate crimes increased by 150 percent in the nation's largest cities.⁴
- The pandemic disproportionately impacted the mental, physical, and economic health of low-income communities and Black, Indigenous, and people of color communities.
 - Black, Indigenous, and people of color workers are more likely to be employed in frontline or essential fields, which were required to continue going to work in conditions that placed them at high risk for exposure to COVID-19.⁵
 - These same workers are also much more likely to have pre-existing health conditions, lack health insurance, and lack access to health care.⁶
 - Black, Native, and Latinx Americans are also more likely to live in dense, multi-generational housing, further increasing the risk of exposure to their communities.⁷
- As families of color and families with lower incomes face disparate health and economic hardships during COVID-19, children of color and children of families with lower incomes are impacted by those challenges. Children of color have disproportionately

experienced learning loss, challenges with the digital divide, food insecurity, and housing instability during the pandemic.⁸

- The movements for racial justice this year highlighted racial profiling and over-policing in Black communities that have been happening for decades. For example, in a study from Minneapolis, Minnesota, Black cyclists made up almost half of the incident or arrest reports associated with being stopped for a bicycling citation, despite making up only 18 percent of the total Minneapolis population. The report warns that inequitable law enforcement actions may impede efforts to diversify the demographics of bike riders and bike advocates because of fear of targeted policing.⁹

A Spike in Traffic Danger

With fewer people driving, roads that were designed for cars to move quickly facilitated higher speeds and more fatal crashes.

- Even though people were driving less during the pandemic, the number of traffic fatalities did not drop at the same rate, causing deaths per mile to jump by 30 percent.¹⁰
- Traffic crashes were more severe because people were speeding on the emptier roads.¹¹
- Speeding is a serious concern for road users outside of cars, and particularly for Black, Indigenous, and people of color communities, who are more likely to live in areas lacking safe, quality walking and biking infrastructure.^{12, 13}





How Walking, Rolling, and Safe Routes to School Can Help

As schools return to in-person learning, students, families, and school districts will be facing significant challenges. Safe Routes to School may not be able to address every one of those challenges, but it can provide tools to help support students and their families as schools reopen. Below is a collection of talking points to outline how Safe Routes to School programming can help students and families safely and affordably navigate their neighborhoods, improve physical and mental health, boost academic performance, cut costs, and build community connections. Even as federal, state, and local guidance changes, Safe Routes to School activities such as walking school buses are easy to adapt to different health and safety guidelines. Thoughtful programming, tailored to the local context with a focus on the most vulnerable families, can help people thrive as our communities reopen.

Improved Physical Health

Safe Routes to School supports increased physical activity, helps students and their families form healthy habits that can last a lifetime, and decreases the risk of chronic disease and obesity.

- In a study of adolescents, 100% of the students who walked both to and from school met the recommended levels of 60 or more minutes of moderate to vigorous physical activity on weekdays.¹⁴
- Walking and rolling to daily destinations, like school, provide an opportunity for physical activity outside of school time, augmenting physical education in school. Walking one mile to and from school each day is two-thirds of the recommended sixty minutes of physical activity a day. Children who walk to school have higher levels of physical activity throughout the day.^{15, 16}

Improved Social/Emotional Health

During the pandemic, many families were coping with significant stress levels, from fear of contracting and recovering from the virus, financial, housing, and food insecurities, to dealing with grief, and trauma. After the struggle of isolation, physical activity and social connection can help kids and their families reach better social and emotional wellbeing.

- Physical activity, movement, and play can be productive ways of combating stressors. Physical activity and physical education can support students' social and emotional learning, including managing emotions, establishing relationships, and feeling empathy for others.¹⁷
- Students can build stronger friendships and relationships through walking and biking together. Based on a CDC evaluation of 145 informants from 184 walking school bus programs from 2017 to 2018, every additional walking school bus trip per week was related to a 21 percent increase in the odds of experiencing less bullying.¹⁸
- Increasing the number of interactions with families and neighbors by walking and rolling through neighborhoods can build and reinforce positive social connections.

Lower Transportation and Health Care Costs for School Districts and Families

Walking and biking are low-cost options for students to get to and from school, reducing the amount of money needed to purchase and maintain personal and school vehicles.

- Transportation is the second-highest household expense in the United States. In 2019, Americans spent an average of \$10,742 to purchase, fuel, and insure their vehicles.¹⁹

- In 2016, an average of 13 percent of household expenditures went to transportation. However, for people with incomes in the bottom 20% of the U.S., one-third of their expenditures went to transportation costs. People making less money are hardest hit by a lack of affordable transportation options.²⁰
- Safe Routes to School programs can significantly reduce the cost of bussing for school systems. American school districts currently spend \$100 million to \$500 million annually to bus children for just one or two miles due to hazardous conditions. Improving walking conditions near schools could reduce this cost substantially, by decreasing the need for school bus service for students who live close enough to walk or bike to and from school.²¹
- Approximately 55 percent of children are bused to school, and we spend \$21.5 billion nationally each year on school bus transportation, an average of \$854 per child transported per year.²²
- Safer options for commuting to school can save people from the emotional and financial cost of injuries and fatalities. In New York City, the total cost of implementing SRTS was just over \$10 million, but it produced estimated cost reductions of \$221 million by reducing costs associated with injury, lifelong disability, and death.²³



Reduced Student Tardiness and Absences

Lack of transportation options can be a barrier to getting to school on time or at all, especially for students in communities where there is no option other than to walk or bike to school.

- A Walking School Bus study in Springfield, Massachusetts showed that students participating in the program had a better attendance rate (approximately 2 percent) than their peers. One student who was tardy or absent 22 days in the 2010-11 school year was not late or absent once after joining the program.²⁴
- Based on a CDC evaluation of 145 informants from 184 walking school bus programs from 2017 to 2018, every additional walking school bus trip per year was related to a 23 percent increase in the odds of experiencing a reduction in tardiness.²⁵

Reduced Traffic Congestion and Improved Air Quality

Traffic congestion, particularly at school arrival and dismissal, is not only inefficient but it's also dangerous for kids and bad for air quality as cars sit idling. By boosting the number of children walking and bicycling, Safe Routes to School projects reduce traffic congestion and improve air quality which can reduce asthma attacks

- In 2009, school travel by private vehicle accounted for 10 to 14 percent of all automobile trips made during morning rush hour.²⁶
- While distance to school is the most commonly reported barrier to walking and bicycling, private vehicles still account for half of school trips between 1/4 and 1/2 mile—a distance easily covered on foot or bike.^{27, 28}
- Children exposed to traffic pollution are more likely to have asthma, permanent lung deficits, and a higher risk of heart and lung problems as adults.²⁹
- Over the last 25 years, among children ages 5 to 14, there has been a 74 percent increase in asthma cases.³⁰ In addition, 14 million days of school are missed every year due to asthma.³¹
- One-third of schools are located in “air pollution danger zones.”³²

Improved Academic Performance

Student health has been linked to academic performance. Walking and/or rolling to school can help ensure students arrive ready to learn.

- One study found that after walking on a treadmill for 20 minutes, children responded to test questions with greater accuracy and had more brain activity than children who had been sitting. Children also completed learning tasks faster and more accurately following physical activity.³³
- Physically fit children have larger hippocampal volume and basal ganglia, brain components both connected with learning.³⁴
- 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.³⁵
- When children get physical activity before class, they are more focused on their tasks. Data shows that this is particularly beneficial for children who have the most trouble paying attention and those with attention deficit disorders.³⁶



- Groups of children walking or biking together along with one or more adults can provide a safe space to practice new routes or modes of active transportation.
- Safe Routes to School programming can help prepare children to safely respond to bullying or harassment.
- Safe Routes to School programming can increase safety on the routes to school without increasing police presence, especially in Black communities that experience over-policing and racial profiling.

Increased Safety from Personal and Traffic Violence

Safe Routes to School programming can help ensure that walking, rolling, and biking can be a safe and enjoyable choice, not just a necessary risk for those who have no other options.

- Increasing the number of people using the streets, better lighting, and better street design can increase individual sense of safety as well as decrease actual criminal activity. Data shows that the safer that people feel in their neighborhood, the more time they spend walking.³⁷

Conclusion

As schools reopen, Safe Routes to School programming will be an essential part of ensuring children and their families have access to the resources they need and a valuable tool for ensuring the health and safety of school communities. For many, active transportation can be a welcome addition for the physical, social, and mental health benefits, while for other kids and their families, walking and rolling are their only options. Let's make sure that regardless of how people choose to move through their neighborhoods, they are safe doing so.

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