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# Creating Safer Routes to School for Fairfield Court Elementary Students

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Spring 2018



### Prepared for:

Virginia Department of Transportation Fairfield Court Elementary School Communities in Schools of Richmond

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# **Executive Summary**

The Safe Routes to School (SRTS) program, established by Congress in 2005, exists to make school travel routes safe for children to walk and bicycle. The three main issues identified by the SRTS program are all applicable to Fairfield Court Elementary and its students: traffic clogs the roads around schools, parents and children are walking and bicycling in unsafe conditions, and children are becoming less physically active (Frost, 2011).

Fairfield Court Elementary is located in Richmond's East End, an area that is home to four of the city's six large public housing projects. Two of these developments—Fairfield Court and Whitcomb Court—are within the service area of the school. The high levels of disinvestment in the study area and the age of the housing developments are reflected in the run-down state of much of the area's infrastructure, and the presence of crime in the area has led to concerns about students' safety from parents and teachers.

To identify and address specific issues at and around the school, a Walkabout study was held at the school. Walkabout Studies through SRTS are needs assessments that serve to convene community members, observe infrastructure and safety barriers to walking or biking to the school, and discuss potential solutions. Most issues identified during the Walkabout were summarized into four main categories: traffic calming, safe behavior, accessibility, and congestion.

In order to address these issues, three main goals were created for the school: Engage Parents and the Community; Increase Programmatic Support for Walking and Biking; and Improve Area Safety through Updated Infrastructure. Specific recommendations such as updating the physical education classes' programming to include pedestrian and bicycle safety and installing school zone infrastructure were included under each goal.

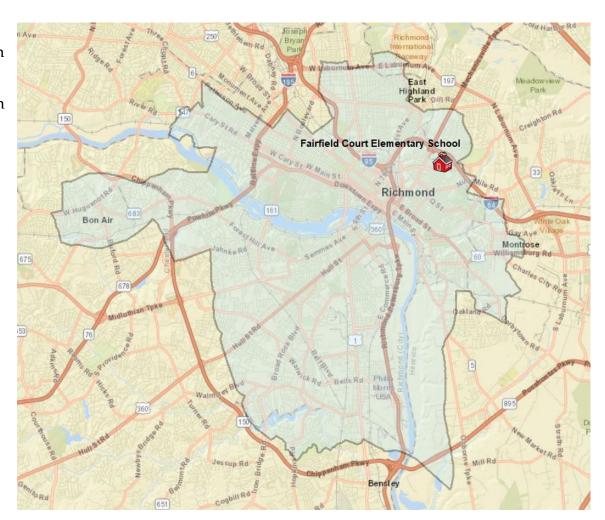
This plan can serve as a guide for Fairfield Court Elementary School and its community partners as they work to implement the various recommendations laid out herein. The implementation of this plan can serve to improve upon walking and biking conditions for students of the school, helping to encourage safety and health for all.

# I. Introduction

#### a. Plan Purpose

The purpose of this plan is to assist Fairfield Court Elementary School with conducting a Walkabout study and creating site recommendations through the guidelines of the Safe Routes to School (SRTS) program. A Walkabout study provides an opportunity for community stakeholders to "experience pedestrian and bicycle conditions, share perspectives, and build consensus around potential solutions" (Walkabout Mini-grants, 2017).

Fairfield Court Elementary is located in the Richmond's East End, northeast of the city's downtown. Map 1 illustrates the school's location in relation to the rest of the city.



Map 1: Plan Study Area; Map created by Author

The national SRTS program was established by Congress under the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). As written in this bill, the purpose of the SRTS program is to "enable and encourage children, including those with disabilities, to walk and bicycle to school," "make bicycling and walking to school a safer and more appealing transportation alternative," and to "facilitate the planning...of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools" (Safe Routes to School, 2017).



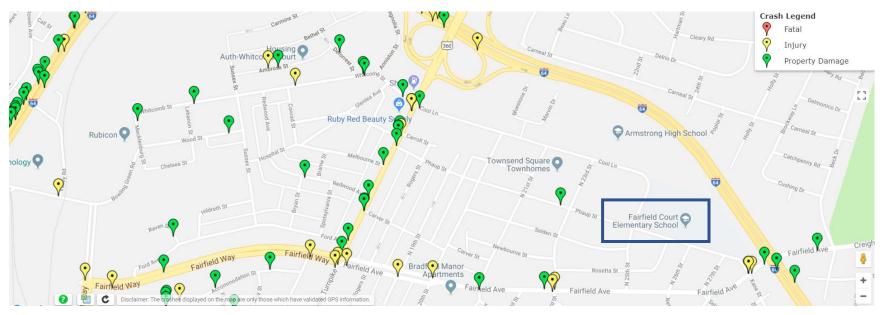
Image 1: Fairfield Court Elementary School Exterior

In general, SRTS programs work to make school routes safe for children to walk and bicycle. Their purpose is to combat several negatively trending indicators associated with children and their travel habits. There has been a steady decline in recent decades in the number of students who walk or bike to school. In 1969, approximately 50 percent of elementary and middle school-aged children walked to school. Since then, that number has dropped to less than 15 percent (Safe Routes to School 101, n.d.). This trend, combined with the fact that approximately a quarter of children get no physical activity in their free time, likely contributes to the rapidly increasing rates of overweight and obese children in the United States (Quick Facts and Stats, n.d.). Safety conditions are a concern because approximately 23,000 children between the ages of 5 and 15 were injured and more than 250 were killed while walking or bicycling in the U.S. in 2009 (Quick Facts and Stats, n.d.). An estimated 10-14 percent of vehicles on the road during the morning commute are making trips to schools, and this contributes to increased levels of air pollution in the vicinity of schools. SRTS and similar programs seek to improve walkability for students and reduce the number of cars needed to transport students to school, as doing so can create measurably better air quality around schools.

There are three main issues identified by the SRTS program that it tries to address:

- 1) "Traffic clogs the roads around schools, creating a difficult and unsafe environment for walking and bicycling,"
- 2) "Parents and children are walking and bicycling in unsafe conditions," and
- 3) "More children are becoming less physically active" (Frost, 2011).

The issues of traffic and safety are particularly relevant to the Fairfield Court Elementary area. Map 2 below illustrates the prevalence of automobile crashes in the vicinity surrounding the school from 2017. As shown, there are several high-traffic roads throughout the school zone, contributing to an unsafe environment for children to walk and bicycle to school. This plan will seek to address these and other issues through the framework of Virginia's state SRTS program and a Walkabout study.



Map 2: 2017 Crash Incident Locations; Map created by the Virginia DMV

State SRTS programs receive federal funding and in turn, fund studies to examine existing site conditions and develop activities and infrastructure recommendations for safety improvements and traffic reduction around schools (SRTS Talking Points, 2014). The program's purpose is multifold: enabling more children to walk and bike to school encourages a healthier and more active lifestyle from a young age, and reducing the number of children who are being driven to school gets more cars off of the road. These outcomes address the issue of creating a safer environment for children and also produces measurably better air quality around schools (SRTS Talking Points, 2014).

#### b. Client Description

The Virginia Department of Transportation (VDOT), as a whole, is responsible for building, maintaining, and operating the state's roads, bridges and tunnels (About VDOT, 2017). The agency's stated mission is to "plan, deliver, operate and maintain a transportation system that is safe, enables easy movement of people and



goods, enhances the economy and improves our quality of life" (Mission, 2014). The division within the organization that administers the SRTS program in Virginia is the Transportation and Mobility Planning Division (TMPD). Among other duties, the TMPD is responsible for implementing and integrating bicycle and pedestrian accommodations in transportation corridors around the state (Instructional Memorandum, 2017). VDOT is responsible for implementing the Program within their state with a federally-funded full-time SRTS Coordinator, who works within the TMPD (Toole Design Group, 2012).

While there is no official secondary client for this plan, a variety of stakeholders assisted with its development and execution. Fairfield Court school employees, parents, and community partners were involved in the process to provide guidance and input. The organization Communities in Schools (CIS) of Richmond works to bring community resources inside public schools by positioning on-site coordinators to directly assess students' needs and help them succeed (Who We Are, 2018). The on-site CIS coordinator for Fairfield Court Elementary was an active participant in the development

and execution of the Walkabout study. CIS also plans to be able to use the results and recommendations from this plan to more easily apply for assistance and grant funding for the school. The Richmond City Health District also employs a SRTS employee as part of their community health initiatives, and Greater Richmond Fit4Kids is a local non-profit that has been the sponsor of VDOT's Safe Routes to School grant on behalf of Richmond City Public Schools. These representatives who largely work with SRTS efforts within their relative organizations were also involved during the plan's process. These organizations, while not official clients of the plan, were integral to its development.









#### c. State Context

The Virginia SRTS program has contributed to the implementation of 190 infrastructure and non-infrastructure projects, 19 Walkabout mini-grants, and 150 QuickStart mini-grants (Williams, 2017). There are various ways that VDOT provides financial assistance to schools, including the school Walkabout mini-grant, which will be the type of study conducted in this plan. Walkabouts bring together local stakeholders, help those involved to experience firsthand current pedestrian and bicycle conditions at and around the school, and make recommendations and work on consensus-building around potential solutions (Virginia Safe Routes, 2014). Various organizations can apply for these and other grants; in Richmond, the nonprofit organization Fit4Kids received a non-infrastructure grant from VDOT that funded a part-time SRTS coordinator to implement the program in seven public Title I schools. Fairfield Court Elementary is one of those

schools. Initial conversations held with Fairfield Court Elementary staff members and stakeholders illustrated the school's desire to participate in a Walkabout study. Many infrastructure issues surrounding the school were immediately touched upon, and staff and community members indicated how an official plan detailing these shortcomings could be beneficial for the school. Creation of the plan therefore proceeded once it was agreed that the process would benefit the school and its students.



#### d. Outline of Plan Document

This plan will more fully explore the background of the SRTS program and its importance within Virginia and Fairfield Court Elementary in particular. Specific research questions will be identified and answered in order to complete this plan. It will detail the findings from the Walkabout study of the area around Fairfield Court Elementary and other research conducted. Based on the results of the Walkabout study, appropriate recommendations will then be made. Finally, an implementation process will be detailed. Potential resources will be described in accordance with the infrastructure and non-infrastructure recommendations that are made.

# II. Approach

#### a. Theoretical Assumptions

This plan has drawn influence mainly from the Communicative Action theory of planning, assuming that a deliberative process and open communication will lead to a just and proper outcome. In regards to the SRTS program, it can be assumed that the planners, parents, and school officials involved have a shared purpose in making the walking and biking environment around the school safer for students, which makes this theory applicable to the program. In the context of SRTS, the community was able to inform the process by disclosing facts that may not have been initially apparent, since they have been interacting with the space for much longer than the planning team coming from outside of the neighborhood.

The SRTS program is set up to encourage participation from parents, school leaders, and community partners. When Walkabouts are conducted, the team to conduct them usually consists of the planner consultants, the principal, an engineer from the city in which the school is located, Parent Teacher Association (PTA) members, students from the school, and a representative from the relevant VDOT district. After incorporating the thoughts of all who are involved, the planner will then provide a report that identifies the issues and offers recommendations and implementation strategies. By incorporating the views of community members who live in the neighborhood and school officials who work with their students on a near-daily basis, this plan will seek to avoid misrepresenting community desires during the recommendation and implementation phase. The involved public agencies are assumed to have the best interests of the community in mind when seeking to improve safety and health conditions, but it is still important to actually obtain information from the community, as well as their thoughts and feelings toward the project.

This plan seeks to involve the community before the final plan is presented in order to obtain input and make adjustments accordingly. For SRTS, it is important to let the community guide the changes they want to see occur and address their needs as they define them. Tactical urbanism techniques have been implemented in other cities to draw attention to the need for additional safety measures around bike and pedestrian areas, such as testing a pop-up design in Paso Robles, California, where "hay bales and traffic cones were used as barriers to section off a pedestrian walking lane on a main car thoroughfare; pinwheels were added to the top for extra visibility" (Powers, 2017). Putting quick-fix examples such as this in place may serve to work through the visioning process with community members' input.

Transportation planning plays a huge role in determining how cities are shaped. Transportation planning can affect land use planning, catalyze street-level urban design, and lead to an increase in pedestrian-friendly landscapes (Legacy, 2017). The concept of walkability is more frequently becoming incorporated into transportation planning, and there are now several nationally scoped databases that describe walkability based on amenity density, land use mix, and other built environment features (Weinberger, 2012). The link between the built environment and walkability is important from both physical and policy perspectives, both of which SRTS addresses. Multi-modal transportation planning is a theory that has more recently become popular in the transportation planning field. There are many people who do not or cannot use personal transportation, and creating a transportation system should therefore incorporate many different methods of travel (Litman, 2017). This plan will seek to improve upon the methods of travel that are available in the Fairfield Court area.

#### b. Research Questions

With the goals of the SRTS program in mind, the main question that this plan sought to answer was: What are the biggest infrastructure, safety and behavioral barriers to increasing the number of students who can walk or bike to school at Fairfield Court Elementary and how can they best be addressed? There were many types of information gathered to answer this

question. Gathering existing conditions within a half mile around the school during the actual Walkabout study was a major portion of this plan. Infrastructure conditions such as speed limits, number of travel lanes, road classification and network connectivity, placement of marked pedestrian crossings, and sidewalk width and continuity were examined through direct observation. Behavioral traits of students and parents such as how students travel to school or the reasons why those who don't walk or bike choose not to, as well as activities or programs at the school that educate or encourage students to walk or bike, were examined through discussions with community partners and the administration of surveys.

To gather this information, various supplemental questions were asked: Are there sidewalks connecting the surrounding neighborhoods to the school? What condition is the surrounding infrastructure in? What are the speed limits on the roads in the vicinity of the school? What are traffic and crash counts in the area surrounding the school? What reasons do students or their parents give for not walking or biking to school? What improvements do parents or teachers identify that, if implemented, would make it more likely that they would allow or encourage their children or students to walk or bike to school? Does the school have any programs in place to encourage students to walk or bike?

#### c. Sources of Information

Much of the information to answer the above questions was gathered through original research conducted at the site of the school. The Walkabout process allowed the questions regarding the physical conditions of the area to be answered. Distributing an approved survey by the National Center for SRTS through the school to students and their parents helped to determine answers to the questions of how many students walk or bike, or why students do not walk or bike. Some information such as existing educational or encouragement programs was also obtained directly from the school. Finally, DMV data was used to determine traffic and crash counts.

#### d. Stakeholder Outreach Methods

Stakeholder knowledge and opinions were incorporated into the development of this plan. An initial meeting held with a community stakeholder group at the school identified thoughts and input for developing the Walkabout study. The Communities in Schools and Greater Richmond Fit4Kids representatives at Fairfield Court Elementary were thereafter the main basis for this plan's outreach. Input on the written plan was sought from all Walkabout participants prior to finalizing it. Finally, in regard to infrastructure recommendations formed as a result of this plan that reach out into the neighborhoods surrounding the school, community members within that area can be brought into the process whether or not they are directly involved with the school as implementation begins.

#### e. Analytical Methods

There are various methods by which the existing conditions surrounding the school were collected, including observation, interviews, student and parent surveys, and reviews of City of Richmond GIS data. The combination of observation, interviews, and surveys were analyzed in conjunction with each other to determine if the barriers to walking or biking identified within the surveys reflected the gathered observations. Some recommendations were therefore created through this qualitative method. Quantitative data was also gathered and analyzed through these collection methods. Prevalent survey answers from parents and teachers regarding their opinions about letting their children or students walk or bike was also illustrated. Data from the City of Richmond was utilized to analyze walkable connections for the neighborhoods and households within the school zone boundaries.

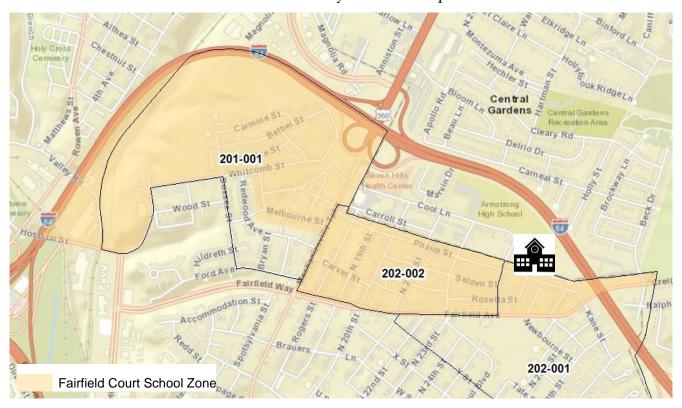
Table 1: Analytical Methods

Research Question	Analytical Method/Data Used
Are there sidewalks connecting the surrounding neighborhoods to the	Physical observation
school? How wide and what condition are they in?	
What are the speed limits on the roads in the vicinity of the school?	Physical observation
What are crash counts in the area surrounding the school?	Quantitative analysis of VDOT crash data
What reasons do teachers believe limit students from walking or biking to	Qualitative analysis of teacher survey,
school?	conducted through school
Does the school have any programs in place to encourage students to	Correspondence with school officials
walk or bike?	
What is the socioeconomic distribution of the school's attendees?	Quantitative analysis of Census data
What is the availability of personal vehicles to Fairfield Court Elementary	Quantitative analysis of Census data
families?	
How may a presence or lack of economic disadvantage influence	Inferred analysis based on conditions
infrastructure conditions around the school?	after quantitative analysis of Census data

# III. Research Findings

#### a. Demographic Analysis

The Richmond Public School boundaries for Fairfield Court Elementary School include neighborhoods on the east and west sides of Mechanicsville Turnpike directly south of I-64 in Richmond's East End. There are three Census Block Groups (CBG) that intersect the school zone boundaries, which will be used for demographic analysis. Map 3 below illustrates the school zone and CBG boundaries and the study area for this plan.



Map 3: Fairfield Court Elementary School Zone & Census Block Group Boundaries, created by Author

Poverty levels and the percentage of households without a personal vehicle will be examined for each CBG in this demographic analysis. These measurements were chosen in order to provide socioeconomic context to the neighborhoods that the school serves. Ensuring students have the ability to travel safely to school is of high importance no matter their socioeconomic status, but this analysis demonstrates how the Fairfield Court Elementary area could greatly benefit from a dedicated focus on student safety.

Each of the three CBGs in the study area have poverty rates above 60 percent (U.S. Census, ACS 2016). In Block Group 201-001, most of which falls within the Fairfield Court Elementary School zone, 400 out of 623 surveyed households (64.2%) were below the poverty line in 2016. Block Group 202-002, which is entirely within the school zone, had 483 out of 730 surveyed households (66.1%) below the poverty line, and Block Group 202-001, while only containing a small portion of households within the school zone, had 521 out of 807 (64.6%). The high poverty rate in this area reflects the run-down infrastructure resulting from a history of systematic disinvestment, signifying the importance of altering the physical environment to better ensure student safety.

The number of households in an area that do not own personal vehicles can also signify how many students must rely on taking the bus, walking or biking to school. According to the 2016 American Community Survey, over half of households in each of the three CBGs in the study area do not own vehicles. Block Group 201-001, which is located the furthest distance away from the school and across the four-lane Midlothian Turnpike, has the highest percentage of households without vehicles at 67.6% (U.S. Census, ACS 2016). These numbers indicate that many of the students at Fairfield Court Elementary have no choice but to walk, bike, or take the bus to school, increasing the sense of urgency around providing safer routes by which they can travel. In addition, one study on parental involvement at schools found that "51 percent of low-income parents agreed that their jobs prevented them from becoming involved in school activities, whereas only 26 percent of middle-income parents and 12 percent of high-income parents agreed" (Chavkin, 1989). Therefore, when considering safety improvements in light of the demographic makeup of the area, the Safe Routes to

School program should "take parental convenience and time constraints into account by providing ways children can walk to school supervised by someone other than the parent" (McDonald, 2009).

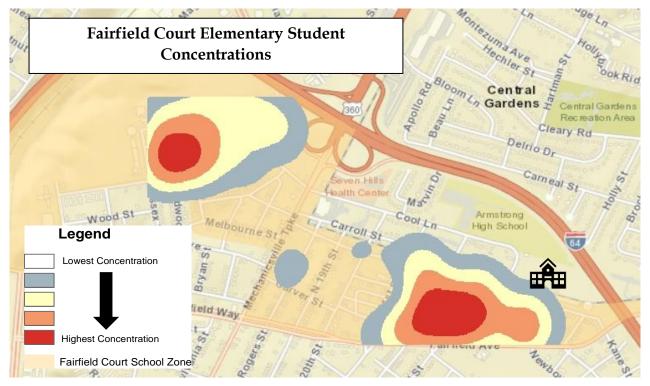
Block Group	Percent Households: below Poverty	Percent Households: no Personal Vehicle
201-001	64.2%	67.6%
202-002	66.2%	52.3%
202-001	64.6%	56.4%
City of Richmond Total	25.4%	16.8%

Table 2: Demographic Data, U.S. Census ACS 2016

#### b. Existing Conditions

Fairfield Court Elementary is located at 2510 Phaup Street in Richmond's East End, an area that is home to four of the city's six large public housing projects. Two of these developments – Fairfield Court and Whitcomb Court – are within the service area of the school. Built in the 1950's as part of the "slum clearance" initiatives in the city, these original structures still stand today. The original process for creating these developments relied on the Richmond Housing Authority selecting poorly-maintained houses, especially those close to the city's commercial district, for eminent domain in order to demolish existing structures and construct new public housing (Germer, 2015). These qualifications nearly always meant that the homes of black families were chosen for demolition. This sequence of events led to racial segregation within the city of Richmond and the establishment of concentrated poverty that still exists today (Germer, 2015). The high levels of poverty in the study area and the age of the housing developments are reflected in the run-down state of much of the area's infrastructure, and the presence of crime in the area has led to concerns about students' safety from parents and teachers. The physical layout of the area spans from Whitcomb Court Housing in the far northwest corner of the study area to Fairfield Court Housing in the southeast. Most students reside in these two developments, as shown in Map 4 below through a heat map to illustrate student density while protecting student address data. This heat

map was created by inputting individual student address data to the Point Density tool within ArcMap software, one that calculates the density of features in a neighborhood.

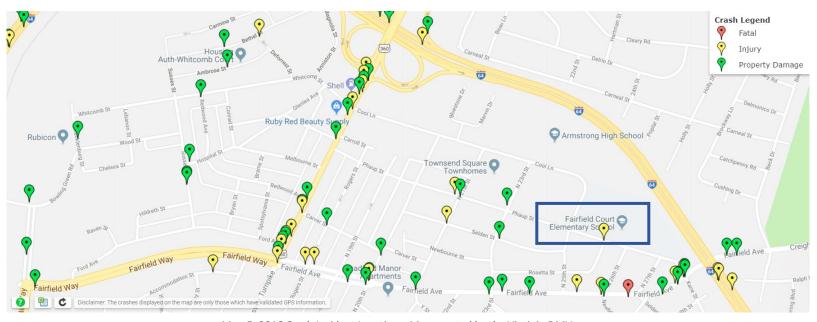


Map 4: FCES Student Locations represented in heat map format

While there is no official count of the number of students who walk to school each day, the estimated count is approximately 150. The topography of this area is fairly flat, so those 150 students would not have to travel up and down hills to reach school. While topography is not a significant barrier to walking and biking, the existing infrastructure presents issues for safe travel. While all students live within a mile of Fairfield Court Elementary, those living in Whitcomb Court must cross the heavily trafficked Mechanicsville Turnpike in order to reach the school. Richmond Public Schools has a policy that if students live over one mile away or have significant infrastructure barriers to reaching the

school, a bus will transport the students. Mechanicsville Turnpike still remains a barrier, however, if a student happens to miss that bus.

Crash data from the DMV illustrates the prevalence of automobile incidents and unsafe road conditions in the area. In 2016, there were 56 total crashes within the school zone. Thirty-six percent of those resulted in injury, and one crash resulted in a fatality. One crash with injury was on Phaup Street directly in front of the school, and involved a pedestrian (DMVNow, 2018). Of the 56 total crashes, 25 percent were within an hour of the school's arrival or dismissal times. The number of crashes decreased in 2017 with 35 total incidents, 31 percent of which involved injuries and 26 percent of which were within an hour of the school's arrival or dismissal times (DMVNow, 2018). The map below shows the locations of the crashes from 2016, including the pedestrian injury in front of Fairfield Court Elementary.



Map 5: 2016 Crash Incident Locations; Map created by the Virginia DMV

There are existing efforts at the elementary school to improve walking and biking for students, mainly perpetuated by Greater Richmond Fit4Kids. The organization is currently in their third year of delivering encouragement programming, by the name of Trekking Tuesdays (FitzPatrick, 2018). Students who walk to school can obtain a punch card from the Fit4Kids ambassador and bring it back to get punched each week. Once the student has collected ten punches, their accomplishment is acknowledged with a small gift provided by the Fit4Kids office. The Walking School Bus (WSB), a program that targets at-risk students with attendance and tardiness concerns to ensure that they get to school, was also recently begun. It is led daily by volunteers and picks up between twelve and fifteen students each day. Student participation in the WSB is being tied to a reduction in their truancy rates. Fit4Kids has also provided almost twenty bikes to the school's Physical Education teacher for use behind the school, a unique opportunity due to its proximity to Armstrong High School and its outdoor facilities. The P.E. teacher also hopes to have a formal bike club soon, and Fit4Kids plans to expand these opportunities and have a weekly opportunity in partnership with CIS and VCU Rambikes next year (FitzPatrick, 2018). Finally, the organization holds Walk to School Day and Bike to School Day events, as well as Crossing Guard Appreciation Day when the school has a crossing guard. Student Travel Tally Week is also conducted in October and May or June, and Parent Safety Perception Surveys are distributed during these times.

#### c. Walkabout Study

Walkabout Studies through SRTS are needs assessments that serve to convene community members, observe infrastructure and safety barriers to walking or biking to the school, and discuss potential solutions. Participants in the walkabout for Fairfield Court Elementary convened at the school on the morning of February 6th. Participants in the walkabout included representatives from the Richmond Police Department, Richmond Public Schools, Metro Richmond Boys & Girls Club, Peter Paul Development Center, Bridging Richmond, the City of Richmond Department of Public Works, the Virginia Department of Transportation, Richmond City Health District, the Sheriff's office, Sports Backers, Communities in Schools, and a few parents of students at Fairfield Court Elementary. Four teams were formed in order to

observe student travel during the morning arrival period in different locations. These locations are shown in Map 6 and detailed below.

- Team 1: Phaup Street & 25<sup>th</sup> Street
- Team 2: Phaup Street & 26<sup>th</sup> Street
- Team 3: Began at Newbourne & 23rd Streets, walked down Rosetta Street with students traveling to school
- Team 4: Cool Lane & Mechanicsville Turnpike



Map 6: Walkabout Observation Locations, created by Author

Teams observed activity and recorded notes on safety and infrastructure issues from 8:30 a.m. until the arrival period was complete at 9:15 a.m. After students had arrived at school for the day, walkabout participants gathered to debrief and discuss what they observed, as well as make suggestions for improving on recorded issues. Most of the issues that were

discussed during this period can be summarized into four main categories: traffic calming, safe behavior, accessibility, and congestion. These issues will be described in further detail below. Potential solutions to these issues will be presented later in Section 5 of this plan, Recommendations. The issues of traffic calming, safe behavior, accessibility, and congestion will be discussed in further detail in the following section categories.

a. Traffic Calming: During the observation period, many vehicles were observed exceeding the 25 miles per hour speed limit traveling through the area. In the area on Phaup Street directly outside of the school, there are no signs or flashing lights that designate the area as a school zone. It was noted that this setup puts responsibility on the students to be aware of what is going on, rather than encouraging or requiring drivers to slow down and be aware



Image 2: Pedestrian crossing signs, the only ones outside of the school: taken by Louise Lockett on 2-6-18



Image 3: Faded crosswalks: taken by Sarah Powers on 2-6-18

of the student presence in the area. Many intersections throughout the area have faded crosswalks, or do not have any at all. This lack of visual cues makes it less likely that drivers will be looking out for pedestrians as they travel through those areas and creates uncertainty for children as to where is a safe location to cross the street. Several participants noted students ran across the road in places with no stop signs or crosswalks.



Image 4: Paint indicating "School" has been paved over: taken by Sarah Powers on 2-6-18



Image 5: Faded signs, installed in 1998: taken by Sarah Powers on 2-6-18

b. Safe Behavior: Observations during the walkabout indicated that the prevalence of speeding cars, curves, and reduced visibility corners creates many unsafe situations for students crossing the street, even when remaining in crosswalks. Also, as the students were traveling into the school on this particular morning, there was no crossing guard in place. Crossing guards in the City of Richmond are put in place by the Richmond Police Department, and schools often do not receive communication when they leave their position or are unable to report to work. On the days where this occurs, there is no traffic control at the tricky intersections on Phaup Street, closest to the school. In addition, many children must travel throughout the neighborhood and cross various streets without assistance.



Images 6, 7, 8: Students crossing roads alone or in unsafe situations, taken by Sarah Powers and Louise Lockett on 2-6-2018

c. Accessibility: Participants noted many locations throughout the area that would be difficult for mobility-impaired students to navigate. While there were ramps angling down to the road from sidewalk corners, many of these ramps were obscured by large collections of leaves and debris, which can be left behind after leaf pickup by the

City. Potholes were also prevalent at the base of accessibility ramps leading from sidewalks down to crosswalks. Rolling trash bins had been placed in the middle of the sidewalk in some locations, blocking much of its width. As of 2016, approximately 18 percent of Fairfield Court Elementary students were disabled (Virginia DOE, 2016), so these identified issues have the potential to affect this population.



Image 9: Large amount of leaves blocking curb ramp, taken by Sarah Powers on 2-6-2018



Image 10: Trash bins blocking sidewalk, taken by Sarah
Powers on 2-6-2018

d. Congestion: The bus and parent drop off areas in front of the school are not well-defined. This causes unsafe situations for students when cars, daycare vans, and buses are traveling through the same area or competing for space. Many parents also drop their kids off on the side of the street opposite of the school, creating more activity

and children running across the street. Crosswalks were also blocked by cars at several points during the drop-off period. This conflicting use of space is illustrated in the photos below.







e. Other Issues: Several issues not easily classified into the above categories were mentioned by participants in the Walkabout. It was noted that SRTS focuses on accessibility for students walking and biking, but that nobody was aware of any students that bike to school. This was thought to be partially due to the fact that the only bike rack available to students is not in immediate proximity to the school; rather, it is on the opposite side of the Gill Community Center, which puts an entire building between the bike rack and the front entrance to the school. The distance between these two points, as well as the fact that there would be no visibility and therefore observation to prevent vandalism or theft, may dissuade students from choosing to leave bikes there. Another large barrier for many students is the lack of bike ownership at all. Even those who do own bikes may not own bike locks, adding to the potential for theft.

Students are also not let into the building prior to 8:45 a.m. due to Richmond Public School policy, meaning that any students who arrive early must remain outside without adult supervision regardless of weather conditions. Finally, city officials and a Richmond Police Department officer stated that Cool Lane is largely in Henrico County. The troublesome intersection of Mechanicsville Turnpike and Cool Lane is within the City of Richmond, then crosses into the county's jurisdiction immediately afterward, and returns to city boundaries approximately 140 feet north of the intersection of 25th and Phaup Streets, which is behind the school. Image 14 illustrates the existing conditions in this location. Sidewalks are intermittent and sometimes present on one side of the road before abruptly ending. There are very clear social trails, or informal and non-designated paths through the grass caused by human traffic alone, on both sides of Cool Lane along its length between Mechanicsville Turnpike and Phaup Street, indicating significant pedestrian usage despite the lack of consistent sidewalks. An example of the sidewalk ending and a social trail forming is shown in Image 15. Improvements to this area are limited from the City's viewpoint, however, due to the fact that most of it is not within city boundaries.



Image 14: Lack of sidewalks on Cool Lane, taken by Author on 2-6-2018

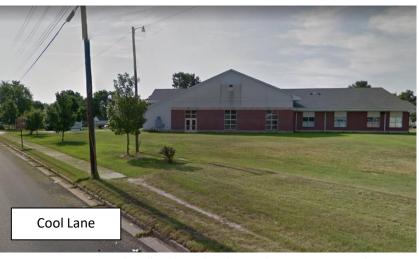


Image 15: Inconsistent sidewalk and social trail on Cool Lane, Source: Google Maps

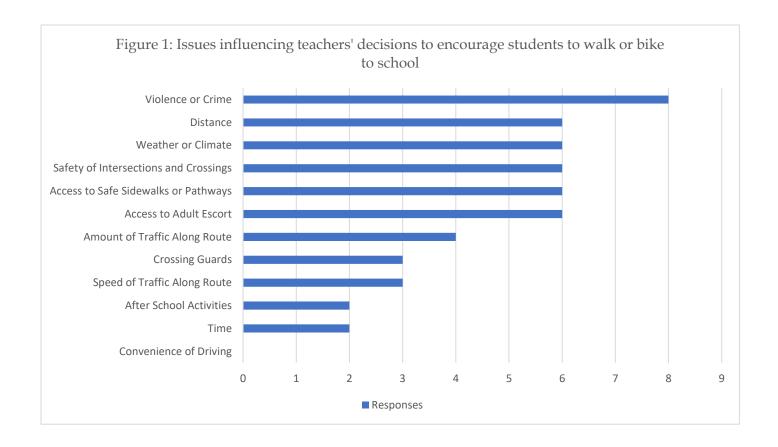
#### d. Teacher Surveys

Since teachers were supervising their students during the Walkabout Study and were unable to participate, a survey was administered in order to gain their input. The Communities in Schools coordinator sent the survey to 61 teachers and staff via email on February 7<sup>th</sup>, the day after the Walkabout study, and eleven responses were received. The goal of this survey was to gather input from people who interact with the neighborhood on a near-daily basis.

Teachers were also in the unique position to provide insight into student comments or actions if they have observed any. Questions were modified from a SRTS take-home parent survey to apply to teacher perspectives and experiences.

Only four out of eleven teacher respondents reported having heard from students or observed students walking or biking in unsafe conditions while traveling to or from school. However, these responses are somewhat subject to interpretation. They could imply that unsafe situations are less common than may be immediately assumed based on the existing conditions of the area, but they could also be interpreted as teachers not having enough exposure to students' commutes to witness significant issues. In terms of the school's influence on student behavior, seven respondents believed that the school either encourages or strongly encourages students to walk or bike to school. It is important to remember the aforementioned issues regarding bicycle infrastructure at the school, however. Even if the school verbally encourages students to bike to school, they likely won't unless there is a safe place for them to leave their bikes during the day.

When presented with a series of issues and asked to identify all of which would influence their decision to encourage students to walk or bike to school, teachers returned a variety of responses. The most common issue for the area that teachers identified was violence and crime—this will have to be addressed from a more robust perspective than the Safe Routes to School Program can provide, but it is an important point to keep in mind. The full list of responses to this question is shown in Figure 1 on the next page.



Additional suggestions and comments provided by teachers reiterated some of the issues that were observed during the Walkabout Study. Four of the eleven respondents wrote that installing additional signs or flashing lights in the area would improve safety conditions for students as they travel to and from school. One teacher wrote about the confusion that can result from cars and buses using the same drop-off area. Neighborhood violence and the issue of not allowing students into the school early, even during bad weather, were each also mentioned in the additional comments section of the survey. The full survey questions and responses are shown in Table 3 on the next page.

Table 3: FCES Teacher Survey

Questions	Responses
Have you ever had students voice concerns to you about feeling unsafe while walking or biking to/from school?	N: 8 (72.7%) Y: 3 (27.3%)
Have you ever observed students walking or biking to/from school in unsafe conditions?	N: 7 (63.6%) Y: 4 (36.4%)
In your opinion, how much does the school encourage or discourage walking and biking to/from school?	Encourages: 6 (54.5%) Neither: 4 (36.4%) Strongly Encourages: 1 (9.1%) Discourages: 0 Strongly Discourages: 0
On most days, how do your students arrive at school? (Check all that apply)	School Bus: 9 (81.8%) Walk: 8 (72.7%) Vehicle: 6 (54.5%) City Bus: 1 (9.1%) Unsure: 1 (9.1%) Bike: 0
In what grade do you believe students should be allowed to travel to/from school without an adult?	3rd: 3 (27.3%) 4th: 3 (27.3%) 2nd: 2 (18.2%) 5th: 2 (18.2%) 6th: 1 (9.1%) K - 1st: 0 7th - 12th: 0
How much fun is walking or biking to/from school for your students?	Neither: 8 (72.7%) Fun: 3 (27.3%) Very Fun: 0 Boring: 0 Very Boring: 0

How healthy is walking or biking to/from school for your students?	Very Healthy: 7 (63.6%) Healthy: 3 (27.3%) Neither: 1 (9.1%) Unhealthy: 0 Very Unhealthy: 0
Which of the issues listed below would affect your decision to encourage students to walk or bike to/from school? (Check ALL that apply)	Violence or Crime: 8 (72.7%) Access to Safe Sidewalks or Pathways: 6 (54.5%) Safety of Intersections and Crossings: 6 (54.5%) Access to Adult Escort: 6 (54.5%) Weather or Climate: 6 (54.5%) Distance: 6 (54.5%) Amount of Traffic Along Route: 4 (36.4%) Speed of Traffic Along Route: 3 (27.3%) Crossing Guards: 3 (27.3%) Time: 2 (18.2%) Before or After School Activities: 2 (18.2%) Convenience of Driving: 0
Please describe any general and/or infrastructural improvements you would recommend to improve safety conditions for students as they travel to/from school.	"Encourage not to send out students too early in cold or bad weather."  "Our students live in a public housing project, which leaves them vulnerable to neighborhood violence."  "Working school limit sign that lights up warning drivers that this is a school zone."  "Speed limit sign (electronic) radar"  "I would recommend a complete sidewalk along Cool Ln with more flashing lights and better defined crosswalk at Mechanicsville tnpk and Cool Lane. I would recommend speed bumps or round-about in addition to more flashing light during arrival and dismissal in front of school building along Phaup St."  "Lighting/ proper sidewalks/ painted road crossing areas and signs"

#### e. Project Integration

Existing projects conducted by other agencies and organizations in the Fairfield Court area should also be kept in mind while proceeding with SRTS recommendations. Creating safer travel routes for students is not an isolated opportunity, and these efforts can be combined with other ongoing improvements to further enhance quality of life for families and children in the area.

Empowerment Center is an organization that was founded in order to improve life in Mosby Court, but has expanded to serve much of the East End since its inception. The organization has the following vision: "To build a vibrant 21st Century Green Living Community with residents of the East End of Richmond, Virginia. This effort will transform marginalized neighborhoods into those known for homeownership, greenways, urban gardens, access to healthy foods, education, and social programs that build and affirm self-efficacy, dignity and self-sufficiency for



Image 16: Focus Area for Richmond Food Justice Corridor, from Kinfolk
Community Empowerment Center

individuals while empowering entire communities" (Tuttle, 2015). The Food Justice Corridor is an initiative that seeks to use urban agriculture as a community engagement tool to address health and economic inequalities, with one target audience being youth (Tuttle, 2015). Safe Routes to School recommendations and improvements could be aligned with Food Justice Corridor to link students to not only safer travel, but also healthy foods and community engagement.

29th Street Bike/Walk Boulevard: This project seeks to improve safety, accessibility, and connectivity along the 29th Street corridor from Fairfield Court Elementary to Libby Hill, the James River, and into the Virginia Capital Trail. Preliminary design is being conducted in early 2018, and construction is currently planned for 2019. While this is not specifically a route that FCES students would use to travel to and from school, it could still serve as a safety amenity for those who are traveling south from the neighborhood.

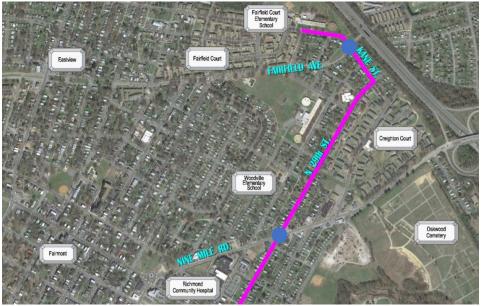


Image 17: Proposed Bike/Walk Boulevard in the Fairfield Court area; from Richmond DPW

Vision Zero: Vision Zero is a "multidisciplinary global strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all" (Vision Zero, 2018). In Richmond, the Safe and Healthy Streets Commission (SHSC) is the advisory board guiding its development and implementation. The Department of Public Works (DPW) is involved in improving the built environment and policies to improve the safety of Richmond transportation systems for all users. The Vision Zero Action Plan identifies the approach that Richmond will follow to decrease the number of traffic-related incidents. Any SRTS improvements would also further the goals of Vision Zero.

VISION 7 F R

City of Richmond Bicycle Master Plan: This plan seeks to "guide the city and other local partners in improving the existing bicycle infrastructure, constructing new facilities for bicyclists in the city," and developing related programs and policies (Richmond Bicycle, 2014). It includes a metric to build out a connected network of bikeways; DPW identifies opportunities to meet this metric and also intends to design and construct 25 miles of buffered bike lanes (Richmond Bicycle, 2014).



- o Department of Public Works Paving: Some of the streets around the school are slated to be repaved by the City of Richmond's DPW, including Fairfield Avenue and N 21st Street. However, the budget for Fiscal Year 2019 has not yet been set, and there is no guarantee that those projects will be funded. Any infrastructure improvements in the area should be coordinated with DPW so work can be coordinated where appropriate.
- Operatment of Public Utilities Gas Work: Gas line work was being conducted by the Department of Public Utilities (DPU) at the time of the Walkabout study, including streets such as Phaup Street and Mechanicsville Turnpike. The scheduled end date for this project is February 2019. Any road paint projects by DPW in that area would need to be done after DPU work is completed to avoid new road cuts through freshly painted areas.

# IV. Vision Statement

Fairfield Court Elementary School and the neighborhoods that it serves form a cohesive environment through which students can walk and bike safely, increase physical activity, and enjoy an improved quality of life.

# V. Recommendations

In order to address the issues identified in the research findings of this plan and achieve the vision for the area, recommendations for Fairfield Court Elementary will be proposed. Broad goals will be listed for the area, followed by objectives, actions, and methods and resources for achieving those goals.

### Goal 1: Engage Parents and the Community

- Objective 1.1: Provide Walking Assistance to Students. The school can work to encourage neighbors, parents, and
  caretakers to accompany students as they walk to school. This can help facilitate safe behavior by reminding
  children to look both ways before crossing the street or to cross at crosswalks when possible.
  - O Action 1.1.1: Continue the Walking School Bus (WSB) program. WSB is a program that Fairfield Court Elementary partners such as Greater Richmond Fit4Kids are currently implementing that will help to achieve this goal. To form a WSB, parents, caretakers, and community volunteers can choose certain mornings during the week to walk with children as they travel to school. The WSB program at Fairfield Court Elementary is in effect five days a week during Spring 2018.
  - o *Action 1.1.2: Increase parental outreach for the Walking School Bus.* The community partner organizations involved at the school can increase outreach and the number of parents and caretakers who are involved

- with the WSB. The school does not currently have a Parent-Teacher Association (PTA), but this would be another useful source for increasing involvement if one is formed in the future.
- Action 1.1.3: Include parental observation throughout neighborhood. Parents and caretakers could assist with
  walking observation efforts by simply monitoring the area or block outside of their house while students are
  traveling in the mornings. This request could be relayed to parents and caretakers through school meetings,
  informational flyers sent home with students, or the PTA if one is created.
- <u>Objective 1.2: Increase Awareness of Potential Pedestrian Issues in Neighborhood</u>. In addition to requesting observation assistance for traveling students, the community should also be encouraged to be aware of some of the previously discussed issues on streets and sidewalks they could hold influence over as residents.
  - O Action 1.2.1: Establish a protocol for storing household trash bins. Since several sidewalks and pathways were blocked by obstacles such as rolling trash bins, a protocol for better placement for these items could be established with residents. This could be done through the Fairfield Court Resource Center, Richmond Redevelopment Housing Authority, or by the City of Richmond leaving flyers on the trash bins themselves. Contact with these entities regarding this action item has not yet been made.
  - Action 1.2.2: Report adverse street conditions. Some concerns were voiced and issues were observed regarding street maintenance and conditions in the area surrounding the school. Such issues include leaves and debris blocking curb ramps and fire hydrants leaking into the sidewalks and streets. The most immediate action that can be taken regarding those issues or any concerns about street, sidewalk, or signage conditions is to directly contact the City of Richmond's Department of Public Works at (804) 646-7000. Residents can also call 311, the city's customer contact line, or use the smartphone app SeeClickFix to report issues. This information should be made more easily available to neighborhood residents by displaying it at RRHA properties or the Boys and Girls Club, which is located next door to the school, for families to see or sending informational flyers home with parents.

- <u>Objective 1.3: Create a stakeholder advisory group for SRTS issues at the school</u>. To ensure SRTS can remain a focus for the school and community after the completion of this plan, a permanent advisory group can serve as a continued voice for SRTS issues at Fairfield Court Elementary.
  - Action 1.3.1: Designate one community and one parent leader to serve as main advocates for SRTS implementation at the school. These designees would have the role of bringing up SRTS issues at Community Support Team meetings and informing additional parents about the SRTS program initiatives and how to get involved.
  - Action 1.3.2: Hold quarterly meetings with group to ensure SRTS recommendations are being implemented. Regular meetings will help to ensure the continuation of SRTS initiatives. One meeting can be held per 9-week Richmond Public School period.

### Goal 2: Increase Programmatic Support for Walking and Biking

Some issues can be addressed by implementing programming or educational outreach at the school. Most programmatic fixes have the potential to be implemented over a short time frame, while more permanent or physical fixes will have a longer implementation timeline.

#### ❖ Potential Financial Resources

o *Safe Routes to School Grants*. Non-infrastructure grants between \$5,000 and \$100,000 are available from the Virginia SRTS program and can be used to fund education, encouragement, evaluation and enforcement programs. Non-infrastructure program elements "generally take the form of an activity or program such as inschool safety education, public outreach activities, traffic enforcement, education on the benefits of walking and bicycling, and other related activities" (Virginia SRTS Grants, 2018). Applications for these grants are accepted once per year, and the "Virginia Safe Routes to School Non-Infrastructure Grant Program Guidelines" publication can provide additional guidance during the application process (Non-Infrastructure, 2017).

- QuickStart Mini-grants are also available through the Virginia SRTS program; they are \$1,000 grants for schools that are interested in funding a small Safe Routes to School activity. Applications are accepted six times per year, in the spring and the fall (Virginia SRTS Grants, 2018).
- Voices for Healthy Kids, Active Places. The National SRTS Partnership seeks to help underserved communities "navigate the complexities of transportation funding and policies by providing coaching and technical assistance" through their work with this organization (Voices, 2017). There are "Incubator Grant" opportunities through Voices for Healthy Kids to assist with bike and pedestrian appropriations, especially in communities of color and those where children may be more at risk for obesity. They seek to "support state and local financing mechanisms that create equitable, long-term funding for bicycling and walking" (Voices, 2017). Funding requests may range from \$15,000 to \$30,000, and applications are accepted four to five times per year.
- Wish for Wheels. This nonprofit organization gives new bicycles and helmets to children in low-income communities. As of November 2017, Wish for Wheels had provided over 30,000 bicycles to students.

### Potential Programmatic Resources

- Walk & Bike to School. This subset of the National SRTS Partnership provides resources geared toward schools seeking to engage in Walk to School or Bike to School days. There are documents that can help schools with promoting the event, decorating the school, or getting the students involved in and excited about the event (Walk & Bike to School, 2018). There are also materials to help schools sustain the momentum from a Walk or Bike to School event day.
- Attendance Works. Not having access to safe routes to travel to school can factor into students' likelihood of missing school. The Attendance Works organization provides toolkits with suggestions and resources for engaging families and helping to emphasize why daily attendance matters (Toolkits, 2018).
- National Center on Health, Physical Activity and Disability. When seeking to improve walking and biking conditions for students, it is incredibly important to also consider those with disabilities. Not only is ADA compliance required, but it also benefits the entire community for those with temporary and permanent

- disabilities. Including disabled students in walking and biking programs can also enable them to be more mobile and independent as they progress through life.
- o *National Highway Traffic Safety Administration*. There are several publications from the NHTSA that can assist when creating new programming within the school.
  - <u>Bikeology</u> is a bicycle safety curriculum the organization created for physical education teachers working with middle school students (Bikeology, 2018). However, some of the curriculum can still apply to elementary school students, especially when considering the issues Fairfield Court Elementary faces with students interacting with traffic.
  - <u>The Child Pedestrian Safety Curriculum</u> teaches and encourages pedestrian safety and is particularly structured for students in kindergarten through 5<sup>th</sup> grade. The curriculum contains materials regarding walking near traffic, crossing streets, crossing intersections, parking lot safety, and school bus safety. Each lesson builds upon previous set of skills learned (Child Pedestrian, 2018).
- <u>Objective 2.1: Implement Observation Assistance for Traveling Students</u>. Since lack of supervision for students outside of the school was named as an issue, ensuring there are enough eyes on the street to help children through the busiest intersections outside of the school should be a priority.
  - Action 2.1.1: Create a rotation of staff members for observation during the arrival and dismissal periods. Rotation for
    this duty could be done on a daily or weekly basis, but an important step for improving safety conditions
    outside of the school will be ensuring that there is consistent adult supervision during the busy times of day.
  - O Action 2.1.2: Create a safety patrol program for older students to participate in. Encouraging older students to help supervise, assist with crossing, and model good behavior for the younger ones can simultaneously build leadership skills and put more eyes on the street when needed during the busy times of day. Students could be granted incentives for participating in such a program, such as early access to the gym to play either before their post or during the after-school period. The school could also expand this into other applications

such as a hallway monitoring program, further increasing the reach of modeling good behavior. This combination of supervisory assistance would help to ensure that children are more likely to cross the street safely even on days when there is no crossing guard present.

- <u>Objective 2.2: Create Biking Support Measures for Students</u>. As mentioned, there were no students observed biking to school during the Walkabout study, and no respondents from the teacher survey had witnessed any students biking. The first step to addressing this is working to provide students with bikes. Once more students own their own bicycles, Fairfield Court Elementary can provide programmatic support to teach students to ride and encourage them to bike to school.
  - Action 2.2.1: Continue holding bike and walk to school days in conjunction with National Bike to School Day in May and National Walk to School Day in October. While walker turnout for these events is usually high at Fairfield Court Elementary, organizers should work to increase bike riding participation. This could help teach children what to watch for while traveling through the neighborhood, when to stop at roads, and related bike safety tips, hopefully resulting in more bikers throughout the year.
  - Action 2.2.2: Incorporate bike skills and safety lessons into P.E. curriculum. The P.E. teacher at Fairfield Court
    Elementary has access to approximately 20 bikes for students. The school is also partnering with VCU
    RamBikes to deliver more opportunities in the school. An official bike curriculum, including bike and traffic safety, should be developed and administered to all student grades at the school.
  - Action 2.2.3: Determine the number of students who would like to bike to school. The school can work to gauge the number of bikes that would be needed from community partners, donations or fundraisers.
  - o *Action 2.2.4: Provide bikes for students to ride.* One example of a method to supply students with bikes outside of the school setting is in the City of Galax, Virginia, where the City created a bicycle library. The city keeps the bikes in a trailer and allows students to borrow them for a certain period of time for personal use outside of the school. Richmond Public Schools could collaborate with the City of Richmond to create a similar

- partnership. Donation drives or fundraisers could be another approach to supply personal bikes for students of FCES and the Richmond Public School system. There are also programs where students can assist in repairs at a bike maintenance shop, eventually earning the bike they have been working on.
- o Action 2.2.5: Provide Bicycle Security Options at the School. A new bike rack should be installed directly in front of the school to provide students with a secure location to leave their bikes while at school. The availability of bike locks is also an important point to consider, and the school could start a bike lock loan program in order to assist children who may not have access to their own. Such an example can be seen at Humboldt Park Charter School in Milwaukie, Wisconsin. The lock loan process involves having the students check out a key from the school secretary and lock their bike using the lock of the same color, which is left outside on the bike rack. The student then returns the key and signs the lock back in at the end of the day (Newborn, 2014). Image 17 illustrates this color-coded system in place.

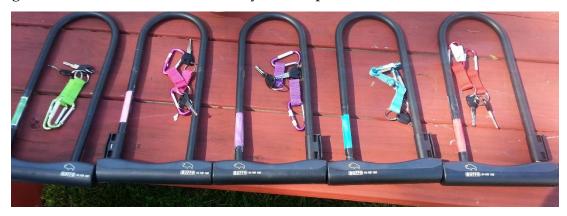


Image 18: Color-Coded Bike Locks, photo from Jake Newborn, 2014

## Goal 3: Improve Area Safety through Updated Infrastructure

#### ❖ Potential Financial Resources

- o Safe Routes to School grants. There are Infrastructure Grants available within the Virginia SRTS program itself to fund projects that alter the built environment. Examples of such eligible projects include sidewalks, bicycle facilities, pedestrian signals, crosswalks, and pedestrian-scale lighting (Virginia SRTS Grants, 2018). The amount of the grant varies for each cycle. Applications for infrastructure grants are accepted once every other year; the next award cycle will be in 2019.
- o *City of Richmond Department of Public Works*. FCES must work with DPW during their budgeting process prior to the new fiscal year of any desired improvements in order to prepare for any infrastructural updates.

### • Objective 3.1: Implement Traffic Calming Measures.

- Action 3.1.1: Identify several primary walking routes that can serve the majority of students so that limited resources can be strategically allocated. It will be most efficient to identify largely intact routes that can be fixed with spot improvements, such as small sidewalk gaps, curb ramps, and low-cost intersection improvements.
- Action 3.1.2: Refresh Painted Crosswalks. The City's Department of Public Works (DPW) should conduct an evaluation of where crosswalks could be repainted or refreshed. While not the sole solution, having more noticeable lines for vehicles can assist with encouraging better driver behavior. However, some neighborhoods in the area are slated for repaving, so DPW must wait until that process is complete before undertaking the painting process or do painting as part of the repaving project. The budget for repaving in Fiscal Year 2019 has not been set, so the timeline of this action is still uncertain.

o Action 3.1.3: Utilize Temporary Infrastructure. The use of portable stop signs as an intermediate solution during arrival and dismissal times could be used to address the lack of traffic control at the intersection directly in front of the school. Staff members could be in charge of placing and removing these signs, an example of which is shown in Image 19. This could be aligned with staff placement and observation outside of the school when such measures are in effect, allowing both of these duties to be completed by staff on a rotational basis. The average cost of a portable stop sign, post, and base similar to the example shown in Image 19 is approximately \$150 to \$200. The school



Image 19: Portable Stop Signs, Image from www.ParkingLotSafetyProducts.com

would also need a storage area of approximately ten square feet to store the signs out of the way when not in use.

o Action 3.1.4: Install Permanent School Zone Infrastructure. While portable stop signs may serve as a short-term traffic calming solution, to better serve the school and community over the long term, permanent traffic calming measures should be implemented. This could include permanent stop signs, as well as speed bumps, school zone signage, and flashing lights to accompany such signage during the arrival and dismissal times. It will be important to implement a variety of approaches such as these to slow vehicles and ensure a safer environment around the school. Students should be aware of their surroundings and have the knowledge of how to cross roads safely, but the heavier safety burden is on drivers passing through the area in order to allow the kids to be kids and have fun while walking or biking. DPW has entered a work order to replace existing signage and paint that is worn down. The intent is to freshen those items up over the summer so they are complete by the new school year in the fall.

- Objective 3.2: Simplify the Student Drop Off and Pick Up Process.
  - o *Action 3.2.1: Create a separate drop-off area for buses.* A significant issue at arrival time was the confusion caused by buses, daycare vans, and cars dropping off students in the same location. Since the construction of a new bus loop is unlikely due to the high cost of such an undertaking, this issue would best be addressed by creating a separate designated drop-off area for buses and clearly delineating where parents should drop their children off in front of the school. A suggestion for this approach is shown in Map 7 on the next page. Buses can approach the school by turning left onto Phaup Street from Fairfield Avenue. Students can then be let off of the bus between N. 26th and N. 27th Streets. Cars and daycare vans can approach the school by turning onto N. 26th Street from Fairfield Avenue, then turning left onto Phaup Street. Students can be dropped off when cars are between Rosetta Street and N. 26th Street and clear of any crosswalks.



Map 7: Suggested Drop-Off Areas, Map created by Author

- Action 3.2.2: Create a protocol for car and daycare van drop-off. The school should develop a policy to require
  cars and day care vans to loop around if on the opposite side of the street from the school before dropping
  children off or picking them up. Cars should also not be allowed to stop to drop off children if in the middle
  of a crosswalk.
- Objective 3.3: Encourage Cross-Jurisdictional Collaboration for Additional Improvements. One issue discussed in the Research Findings section is that the section of Cool Lane leading from Whitcomb Court to Fairfield Court Elementary is within Henrico County boundaries. While this may complicate the process of proceeding with improvements in this area, the issues are nonetheless important to address. The parent and community leaders who have been selected as SRTS advocates for the school should plan to actively encourage collaboration between the two jurisdictions, especially since the timeline for completion of the following action items extends over a longer period.
  - Action 3.3.1: Install additional sidewalks on Cool Lane. Sidewalks should be installed along the length of the
    corridor, filling in the present gaps. The Departments of Public Works from City of Richmond and Henrico
    County should collaborate to implement these infrastructural improvements in the area. The lack of this
    basic pedestrian provision from the space presents safety issues for those traveling through.
  - Action 3.3.2: Paint new crosswalks on Cool Lane. Additional crosswalks are needed where missing along this
    stretch of road, especially in the area directly adjacent to Armstrong High School. In order to assist with
    paint estimates, the approximate width of Cool Lane in this area is between 30 and 35 feet. Proposed
    crosswalks are shown in Map 8 on the next page.



Map 8: Proposed Crosswalks on Cool Lane, Map created by Author

# VI. Implementation Plan

**Goal 1: Engage Parents and the Community** 

Actions	Timeline	Collaborators			
Objective 1.1: Provide Walking Assistance to Students.					
<b>1.1.1:</b> Continue the Walking School Bus (WSB) program.	Spring 2018 - Fall 2018	Fairfield Court Elementary School (FCES), Communities in Schools (CIS), Greater Richmond Fit4Kids (GRF4K)			
<b>1.1.2:</b> Increase parental outreach for the Walking School Bus.	Fall 2018 – Spring 2019	FCES, CIS, Parent-Teacher Association (PTA), GRF4K, Richmond Public Schools Office of Family & Community Engagement (FACE)			
<b>1.1.3:</b> Include parental observation throughout neighborhood.	Fall 2018 - Spring 2019	FCES, PTA, GRF4K, FACE			
Objective 1.2: Increase Awareness of Pedestrian Issues in Neighborhood.					
<b>1.2.1:</b> Establish a protocol for storing household trash bins.	Fall 2018 - Spring 2019	Richmond Redevelopment & Housing Authority (RRHA)			
<b>1.2.2:</b> Report adverse street conditions.	Fall 2018	RRHA, Boys & Girls Club			
Objective 1.3: Create a stakeholder advisory group for SRTS issues at the school.					
<b>1.3.1:</b> Designate one community and one parent leader to serve as main advocates for SRTS implementation at the school.	Fall 2018 – Spring 2019	FCES, PTA, FACE			
<b>1.3.2:</b> Hold quarterly meetings (one per 9-week school period) to ensure SRTS recommendations are being implemented.	Fall 2018 – Spring 2019	FCES, PTA, FACE			

# Goal 2: Increase Programmatic Support for Walking and Biking

Actions	Timeline	Collaborators		
Objective 2.1: Implement Observation Assistance for Traveling Students.				
<b>2.1.1:</b> Create a rotation of staff members for observation during the arrival and dismissal periods.	Fall 2018	FCES		
<b>2.1.2:</b> Create a safety patrol program for older students to participate in.	Fall 2018 – Spring 2019	FCES, CIS		
Objective 2.2: Create Biking Support Measures for Students.				
<b>2.2.1:</b> Continue holding bike and walk to school days in conjunction with National Bike to School Day in May and National Walk to School Day in October.	Spring 2018 – Fall 2018	FCES, CIS, GRF4K, Richmond City Health District (RCHD)		
<b>2.2.2:</b> Incorporate bike skills and safety lessons into P.E. curriculum.	Fall 2018	FCES, GRF4K		
<b>2.2.3:</b> Determine the number of students who would like to bike to school.	Spring 2019	FCES, CIS		
2.2.3: Provide bikes for students to ride.	Spring 2019 – Spring 2020	GRF4K, Bike Walk RVA, RPS		
<b>2.2.4:</b> Provide bicycle security options at the school.	Spring 2019 – Fall 2019	FCES		

# **Goal 3: Improve Area Safety through Updated Infrastructure**

Actions	Timeline	Collaborators		
Objective 3.1: Implement Traffic Calming Measures.				
<b>3.1.1:</b> Identify several primary walking routes that can serve the majority of students so that limited resources can be strategically allocated.	Fall 2018	FCES, CIS, GRF4K, RCHD		
<b>3.1.2:</b> Refresh Painted Crosswalks.	Fall 2018 – Spring 2019	City of Richmond Department of Public Works		
<b>3.1.3:</b> Utilize Temporary Infrastructure.	Fall 2018 - Spring 2019	FCES, Richmond Police Department (RPD)		
<b>3.1.4:</b> Install Permanent School Zone Infrastructure.	Fall 2019 – Summer 2020	City of Richmond Department of Public Works		
Objective 3.2: Simplify the Student Drop Off and Pick Up Process.				
<b>3.2.1:</b> Create a separate drop-off area for buses.	Fall 2018 – Spring 2019	FCES, RPD		
<b>3.2.2:</b> Create a protocol for car and daycare van drop-off.	Spring 2018-Fall 2018	FCES, RPD		
Objective 3.3: Encourage Cross-Jurisdictional Collaboration for Additional Improvements.				
3.3.1: Install additional sidewalks on Cool Lane.	Fall 2020 – Summer 2021	City of Richmond & Henrico County Departments of Public Works		
<b>3.3.2:</b> Paint new crosswalks on Cool Lane.	Spring 2020 - Fall 2020	City of Richmond & Henrico County Departments of Public Works		

#### a. Proposed Timeline

As shown in the timeline below, many programmatic recommendations can be implemented immediately or within a fairly short timeframe of approximately six months to one year. Most physical improvements will take place over a longer time period, as more extensive planning and budgeting must occur between the relevant collaborative agencies and Fairfield Court Elementary School.



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#### b. Collaborative Partners

In addition to the collaborators listed in conjunction with each action item above, there are other organizations in the Richmond area that could assist with implementing this plan's recommendations. A list of potential partners is presented below.

- Bike Walk RVA
- Bridging Richmond
- Sports Backers
- City of Richmond Department of Public Works
- Richmond Police Department
- Richmond City Health District
- Richmond Redevelopment & Housing Authority

- Boys and Girls Club of Metro Richmond
- Peter Paul Development Center
- St. Stephens Episcopal Church
- Henrico County Department of Public Works
- Richmond Public Schools
- Greater Richmond Fit4Kids
- Communities in Schools

#### c. Conclusion

Overall, this plan should guide Fairfield Court Elementary School and its community partners as they work to implement the recommendations that have been detailed above. The implementation of this plan should serve to improve upon walking and biking conditions for students of the school and help to encourage safety and health for all of the area's residents.

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