Walking Safety Assessment for Speer Elementary

2019

Prepared for the City of Arlington and Arlington ISD Prepared by the North Central Texas Council of Governments Funding from the State Farm Good Neighbor Citizenship Company Grant

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INTRODUCTION

Why Safe Routes to School?

Safe Routes to School (SRTS) is a nationwide initiative with the goal of enabling and encouraging more students to walk and bicycle to school through <u>Engineering</u> infrastructure investments, and <u>Education</u>, <u>Encouragement</u>, <u>Enforcement</u>, and <u>Evaluation</u> programs—the Five Es of SRTS.

SRTS initiatives are proven to improve safety and air quality, increase the number of students that walk and bike, contribute to children's social and academic success, and provide a foundation for life-long healthful habits.

Planning Efforts

In 2018, the City of Arlington contracted with Dunaway Associates to develop SRTS assessments for six school campuses, including Speer Elementary. The scope of work for these assessments included conducting an inventory of existing infrastructure in place around the schools, site visits to confirm the condition of the existing infrastructure, and the identification of gaps or deficiencies in the existing infrastructure that will need to be addressed for each school. Infrastructure that was evaluated includes sidewalks, ADA ramps, crosswalks, and school zone signing.

In 2015, with funding from a federal TIGER planning grant, the North Central Texas Council of Governments (NCTCOG) put out a survey to gauge interest in the development of a SRTS plans for local schools. Arlington City staff responded with interest in the development of a plan for Speer Elementary. Ultimately, Speer Elementary was not selected for the development of a SRTS plan at that time; however, with funding to develop additional SRTS plans through a State Farm grant, NCTCOG reached back out to the City of Arlington in 2019 to develop a SRTS plan for Speer Elementary and nearby Webb Elementary.

City of Arlington staff requested that NCTCOG conduct a more limited planning effort to supplement the work already done by Dunaway Associates—namely, to conduct an in-person observation of school arrival and dismissal, and provide any additional recommendations that might come out of that effort for City staff consideration.

This report summarizes the findings from the in-person observations, and identifies additional recommendations intended to improve the safety of students walking and bicycling to Speer Elementary.

EXISTING CONDITIONS

School Overview

Speer Elementary is located along Fuller Street, west of N. Cooper Street. It is bordered by Texas Health Arlington Memorial Hospital to the north, and residential neighborhoods to the east, south and west. Figure 1 demonstrates the elementary school's attendance zone.

Location: 811 Fuller Street, Arlington, TX 76012 Number of Students:¹ 738 Grades Served: PK-6 Student Demographics:¹

- Economically Disadvantaged: 89%
- English Learners: 60%
- Race/Ethnicity: 77% Hispanic, 12% African American, 5% White, 2% Asian, 3% Other

School Hours:

- Doors Open: 7:45 a.m.
- Class Starts: 8:20 a.m.
- Dismissal: 3:35 p.m.



Figure 1 - School Context and Walk Zone

¹ Source: Texas Education Agency. 2017-2018 School Profile.

Crash History

The locations of crashes between a motor vehicle and a pedestrian or bicyclist between 2013 and 2017 were obtained from the Texas Department of Transportation and are shown in **Figure 2**. There were several crashes along routes frequented by students, including one at Fuller and Scott, one at Fuller and Cooper where students cross with the assistance of crossing guards, and one at Fuller and NL Robinson. There were also two crashes at N. Center Street and Rogers Street, which is along a route that many students take to walk to the Boys and Girls Club on Elm Street.



Walking Safety Assessment

On May 23, 2019, a walking assessment and arrival/dismissal observations were completed by NCTCOG and City of Arlington staff. Primary student walking routes, and potential safety issues or deterrents to walking or bicycling to school were also identified. The results of this assessment are summarized in the following sections.

School Circulation

Figure 3 identifies the walking routes and parent circulation routes, the locations of crossing guards, school signs, and crosswalks; and issues for students walking to school.

The primary entrance to the school is at Fuller and Drummond; however, there is a secondary entrance off Woodrow Street. Pick-up and drop-off primarily occurs in the two school driveways and on-street along Fuller and Woodrow.

While no students were observed walking to or from adjacent residential streets to the south of the school, significant numbers of students walked to/from school along Fuller, crossing at N. Cooper Street. Following school dismissal, 186 students crossed Cooper Street at Fuller Street. Of those students, 160 continued walking east on Fuller Street, 12 walked north on Cooper Street, and 14 walked south along Cooper. Two students were observed bicycling to and from school.

Figure 3 - Existing Conditions and Issues



Key Issues

Key issues that affect the safety of students walking to bicycling to school, or that act as barriers to more students walking or bicycling, are summarized below. The location of each of these issues is shown in **Figure 3**.

A. No students were observed walking from the residential streets adjacent to the school: Woodrow, Drummond, Gardiner, and Scott. Observed barriers to walking include 1) the lack of sidewalks on Woodrow, Gardiner, and Scott, and 2) the poor condition of sidewalks on Drummond and the presence of parked cars blocking the sidewalks.



B. Safety issues at the intersection of Drummond Drive and Fuller Street: adjacent to the school entrance there are conflicting turning movements, no crossing guards, and cars parked in the crosswalk. It is a wide street crossing and the crosswalk markings are faded.





- **C.** There is no clear or safe location for students that live along Gardiner Street to cross Fuller Street to walk to school.
- D. Additional crossing enhancements are needed to improve the safety of students and parents crossing N. Cooper Street at Fuller Street. Based on FHWA guidance,² school crossing signs alone at this location, even with crossing guards, do not provide adequate protection for pedestrians crossing seven lanes of traffic, on a roadway with 32,000 annual average daily traffic (AADT). Under the Texas Manual on Uniform Traffic Control Devices, based on the volume of students crossing, additional improvements such as a pedestrian hybrid beacon would be warranted. FHWA guidance recommends that, given the number of lanes on N. Cooper Street, the speed limit, and the AADT, the following countermeasures should strongly be considered:
 - a. High-visibility crosswalk markings, adequate nighttime lighting levels
 - b. Advance Yield Here to (Stop Here For) Pedestrians sign and yield (stop) line

² Federal Highway Administration. (2018). Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations. Federal Highway Administration. (2018). Field Guide for Selecting Countermeasures at Uncontrolled Pedestrian Crossing Locations.

- c. Pedestrian refuge island
- d. Pedestrian hybrid beacon





RECOMMENDATIONS

The general recommendations listed here are a selection of ideas for addressing the previously outlined issues, to improve safety and encourage more students to walk to school. The recommendations are intended to supplement and, in the case of the priority sidewalk improvements, offer potential revisions to the proposed improvements in the Safe Routes to School Plan prepared by Dunaway in May 2019.

Location	Recommendation	Reason	Time- frame	Responsible Agency
A Drummond Dr, Woodrow St., Gardiner St., and Scott Dr. between Fuller St. and Sanford St.	Sidewalks: Prioritize maintenance of the sidewalks and the installation of sidewalks on at least one side of the street, as funds become available.	To make it easier for students that live near the school to walk to school.	Long	City Public Works Dept.
	Curb Ramps: Prioritize installing curb ramps on Fuller, Woodrow, Drummond, Gardiner, and Scott, as funds become available.	To make it easier for students that live near the school to walk to school.	Long	City Public Works Dept.
	Conduct code enforcement on Drummond Dr. to ensure that vehicles parked in driveways do not block the sidewalk.	To make it easier for students to walk to school.	Short	City Code Compliance Dept.
B Intersection of Fuller St. and Drummond Dr.	Paint the curb at the crosswalk and between the crosswalk and the school driveway red for No Parking, and sign as No Parking. Relocate the sign for No Parking - Bus Loading Zone to the west of the crosswalk.	Ensure that students can access the marked crosswalk and are visible to cars traveling through on Fuller.	Short	City Public Works Dept.
	Re-stripe/maintain the crosswalk.	Improve visibility of the faded crosswalk.	Short	City Public Works Dept.
	Evaluate the need for all-way Stop signs to better control conflicting turning movements.	Improve the safety of students crossing Fuller, and of cars turning.	Medium	City Public Works Dept.
	Conduct enforcement (or remind parents) to ensure that cars do not park in the crosswalk or in No Parking zones.	Ensure that students can access the marked crosswalk and are visible to cars traveling through on Fuller.	Short	City Police Dept. Speer ES Staff
C Intersection of Fuller St. and Gardiner St.	When sidewalks are installed on Gardiner, stripe a crosswalk at Gardiner and Fuller and, depending on student crossing volumes, assign a crossing guard to this location.	Provide a clear and safe route for students that live along Gardiner St. to cross Fuller St. and walk to school.	Long	City Public Works Dept.
D Intersection of Fuller St. and Cooper St.	At the mid-block crosswalk, move the stop lines farther back from the crosswalk (20 ft min.) and install "Yield Here to Pedestrians" signs on both sides of the approach.	Bring greater attention to the presence of the school crosswalk and put greater distance	Short	City Public Works Dept.

Location	Recommendation	Reason	Time- frame	Responsible Agency
		between vehicles and students crossing.		
	Install yellow-green sign post reflectors on the "School Crossing Here" sign posts.	Bring greater attention to the presence of the school crosswalk.	Short	City Public Works Dept.
	Move the School Crossing signs located on the eastern half of the crosswalk to the north side of Fuller.	The signs do not align with the location of the crosswalk.	Short	City Public Works Dept.
	Conduct a warrant study for the installation of pedestrian-activated flashing signs, rectangular rapid flashing beacon, or pedestrian hybrid beacon at the mid-block crosswalk	Further enhance the safety of pedestrians using the crosswalk	Medium	City Public Works Dept.