

The City of Fayetteville Supplemental Pedestrian Plan: School Network Analysis

City Council Work Session

June 2, 2025



Purpose and Need

- Residents and City Council identified concerns over walkability within Fayetteville, especially near schools
- Major roadways create barriers between schools and the communities they service
- Recent planning efforts from FAMPO and City highlight need for pedestrian improvements near schools





Study Overview

- Performed as a supplement to the NCDOT Pedestrian Plan for City of Fayetteville
 - Identified 26 high-priority schools
 - Developed cut sheet recommendations for additional projects near 12 schools
- Recommendations today are presented for Council review and support





Study Overview

- Kicked off in June 2024
- Focused on K-12 public schools that service City residents
- Prioritized schools based on data-driven performance measures
- Developed cost-effective, implementation-ready project recommendations
- Met biweekly with team from City public services and Cumberland County Schools representatives throughout



Data Collection

- Total of 64 public schools within City limits or that service City population
- Generated a ½-mile walkshed for each based on existing streets/sidewalk





School Prioritization

- Developed a series of four scores:
- **A. School Population**
- **B.** Safety
- **C. Infrastructure**
- **D. Demographics**
 - Scores weighted as follows:

		Weighting	-
	Comp	ponent	Weight
	A. School Population Score		
		Student Enrollment	5%
		Students in Non-Transport Zone	15%
	Total		20%
		B. Safety Score	
		Bike Crashes	10%
		Ped Crashes	10%
		Average Bicycle LTS in Walkshed	5%
		Average Intersection Ped LOC in Walkshed	5%
		Average Speed Limit in Walkshed	5%
	Total		35%
		C. Infrastructure Score	
		AADT, Max in Walkshed	5%
		AADT, Access Road	5%
		Sidewalk to Road Ratio	10%
		Crosswalk to Intersection Ratio	10%
	Total		30%
+			
		D. Demographics Score	
		TDI	5%
		Zero Car Households	5%
		Walkshed Population	5%
l	Total		15%
			6



Prioritization

- Utilized three statistical methods to rank the schools:
 - Percentile
 - Z-Score
 - Cluster
- Identified 26 schools that ranked highly within any of the three methods

A.B. Wilkins High SchoolYesYesYesAnne Chestnutt Middle SchoolYesYesYesYesBrentwood Elementary SchoolYesYesYesYesCollege Lakes Elementary SchoolYesYesYesYesJ.W. Coon Elementary SchoolYesYesYesYesLewis Chapel Middle SchoolYesYesYesYesLoyd Auman Elementary SchoolYesYesYesYesLuther Jeralds Middle SchoolYesYesYesYesMary McArthur Elementary SchoolYesYesYesYesRamsey Street High SchoolYesYesYesYesSeventy-First High SchoolYesYesYesYesSherwood Park Elementary SchoolYesYesYesYesWestarea Elementary SchoolYesYesYesYesDouglas Byrd High SchoolYesYesYesYesPonderosa Elementary SchoolYesYesYesYesDouglas Byrd High SchoolYesYesYesYesBen Martin Elementary SchoolYesYesYesYesBen Martin Elementary SchoolYesYesYesYesMorganton Road Elementary SchoolYesYesYesYesWalker-Spivey Elementary SchoolYesYesYesYesWalker-Spivey Elementary SchoolYesYesYesYesWalker-Spivey Elementary SchoolYesYesYes <t< th=""><th>School</th><th>Percentile 🗐</th><th>7 60070</th><th>Cluster 🔻</th></t<>	School	Percentile 🗐	7 60070	Cluster 🔻
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Cumberland Road Elementary School Yes	Walker-Spivey Elementary School		Yes	
				Yes
Seventy First Classical Middle School	Cumberland Road Elementary School			Yes
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Prioritization

• Top 26 schools





School Engagement

- Reached out to the high-ranking schools for initial ideas and feedback
- Representatives from 11 of the 26 schools responded
 - There was general interest and excitement over safety improvements
 - Several schools mentioned a need for non-infrastructure solutions
- Draft ideas for pedestrian improvements near schools identified and shared with City staff
 - The 11 schools that originally responded agreed with the recommendations



Safety at Schools Toolkit

- Focus on pedestrian safety
- Crossing infrastructure is key
- Vertical and horizontal traffic calming
- Non-infrastructure solutions:
 - Crossing guards
 - School circulation planning
 - Walking and biking school buses
 - Education campaigns







Recommendations Development

- Applied the toolkit as follows:
 - 11 schools that responded
 - One additional school (AB Wilkins HS)
- Based recommendations on:
 - School engagement feedback
 - City Staff discussion
 - Current and ongoing projects
 - NCDOT Ped Plan recommendations
 - Desktop/field review of infrastructure





Results and Cost Estimates

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- Cost estimates include:
 - Construction quantities derived from planning-level concepts for each improvement
 - Right of way = \$10/ft²
 - 50% contingency for utility, SWE, etc.
 - No adjustment for inflation

School	Improvements	Cost
AB Wilkins HS	Crosswalk, sidewalk, trail	\$ 2.8 M
Brentwood ES	Crosswalk, sidewalk, trail	\$ 3.6 M
College Lakes ES	Crosswalk, sidewalk	\$ 2.9 M
umberland Mills ES	Crosswalk, sidewalk, trail	\$ 2.5 M
EE Miller ES	Crosswalk, sidewalk, trail	\$ 2.5 M
JW Coon ES	Crosswalk, sidewalk	\$ 2.5 M
Loyd Auman ES	Crosswalk, sidewalk, trail	\$ 2.0 M
Mary McArthur ES	Crosswalk, sidewalk	\$ 2.5 M
Ponderosa ES	Crosswalk, sidewalk	\$ 2.6 M
Ramsey Street HS	Crosswalk, sidewalk	\$ 2.0 M
Walker Spivey ES	Crosswalk, sidewalk	\$ 0.9 M
Westarea ES	Crosswalk, sidewalk	\$ 1.6 M

Total for 12 schools = \$ 27.9 M



Next Steps

Options:

- **Option 1:** Approve the Supplemental Fayetteville Comprehensive Pedestrian Plan Study and place on a Consent Agenda for adoption.
- **Option 2:** Do not approve the Supplemental Fayetteville Comprehensive Pedestrian Plan Study and provide staff with further direction.

Recommended Action:

• **Option 1:** Approve the Supplemental Fayetteville Comprehensive Pedestrian Plan Study and place on a Consent Agenda for adoption.



Questions / Discussion