

# PROJECT DESCRIPTION

## Overview of WALK NC

The *WALK NC: Creating Safer Crossings for NC Communities* project will implement a series of systemic pedestrian improvements, including pedestrian countdown signal heads, crosswalks, and accessible routes at signalized intersections across 15 cities/towns in North Carolina. WALK NC will improve pedestrian safety at hundreds of State-maintained signalized intersections in historically underserved and marginalized communities. These changes will also improve accessibility for pedestrians crossing at signalized intersections by providing them with dedicated WALK phases and marked crosswalks. WALK NC will also implement additional signal timing improvements, such as Leading Pedestrian Interval (LPI), and close small gaps in the sidewalk network where they exist. This project will improve connections for residents and visitors in the selected cities/towns, making it easier for them to access transit, jobs, and the downtown areas. WALK NC will also lead to a mode shift, encouraging North Carolinians to walk more by providing access to safer crossings.

The North Carolina Department of Transportation's (NCDOT's) WALK NC application is part of a larger NCDOT program to improve pedestrian safety at signalized intersections across the State. NCDOT prioritized WALK NC communities based on pedestrian crash history, demographic data, and the number of signals lacking pedestrian features. NCDOT also included "sister cities" in their review, (i.e., cities/towns adjacent to high-ranked cities/towns that have similar characteristics).

## Snapshot

**Location:** 15 North Carolina cities/towns: Hamlet, Henderson, Kinston, Lumberton, Lexington, Oxford, Roanoke Rapids, Rockingham, Salisbury, Selma, Siler City, Smithfield, Washington, Weldon, Wilson

**Urban or Rural:** Rural

**Pedestrian Crash Rate:**

0.37 (Project Average)

0.23 (North Carolina)

**Pedestrian Fatality Rate:**

0.065 (Project Average)

0.046 (North Carolina)

**Estimated Completion Date:**

Q3 of 2027

**Project Cost:** \$12,300,000

**RAISE Funding Request:** \$9,000,000

**NCDOT Match Support:** \$3,300,000

**Zero-Vehicle Households:**

14.2% (Project Average)

5.5% (North Carolina)

**Areas of Persistent Poverty:**

55 census tracts (See [the table on page 3](#) for full list)

**Historically Disadvantaged Communities:**

88 census tracts (See [the table on page 3](#) for full list)

**Median Family Income:**

\$37,107 (Project Average)

\$60,516 (North Carolina)

**Project Website:**

[https://connect.ncdot.gov/resources/RAISE2023\\_WALKNC/Pages/default.aspx](https://connect.ncdot.gov/resources/RAISE2023_WALKNC/Pages/default.aspx)



## Project Location

The locations planned for improvement are across 240 signalized intersections in 15 cities/towns. NCDOT scored and ranked North Carolina cities/towns with populations greater than 5,000 to determine the WALK NC cities/towns, which are located in 6 NCDOT regional divisions. NCDOT considered both State- and municipal-owned intersections in the analysis. Cities/towns were ranked based on an index score that considered crash history, NCDOT's Environmental Justice and Transportation Disadvantage Index (TDI), percentage of on-roadway pedestrian-involved crashes within 250 feet of an NCDOT signal (2021 – 2022), and percentage of signals within the municipal limits that did not have a pedestrian signal head/WALK phase.<sup>1</sup>

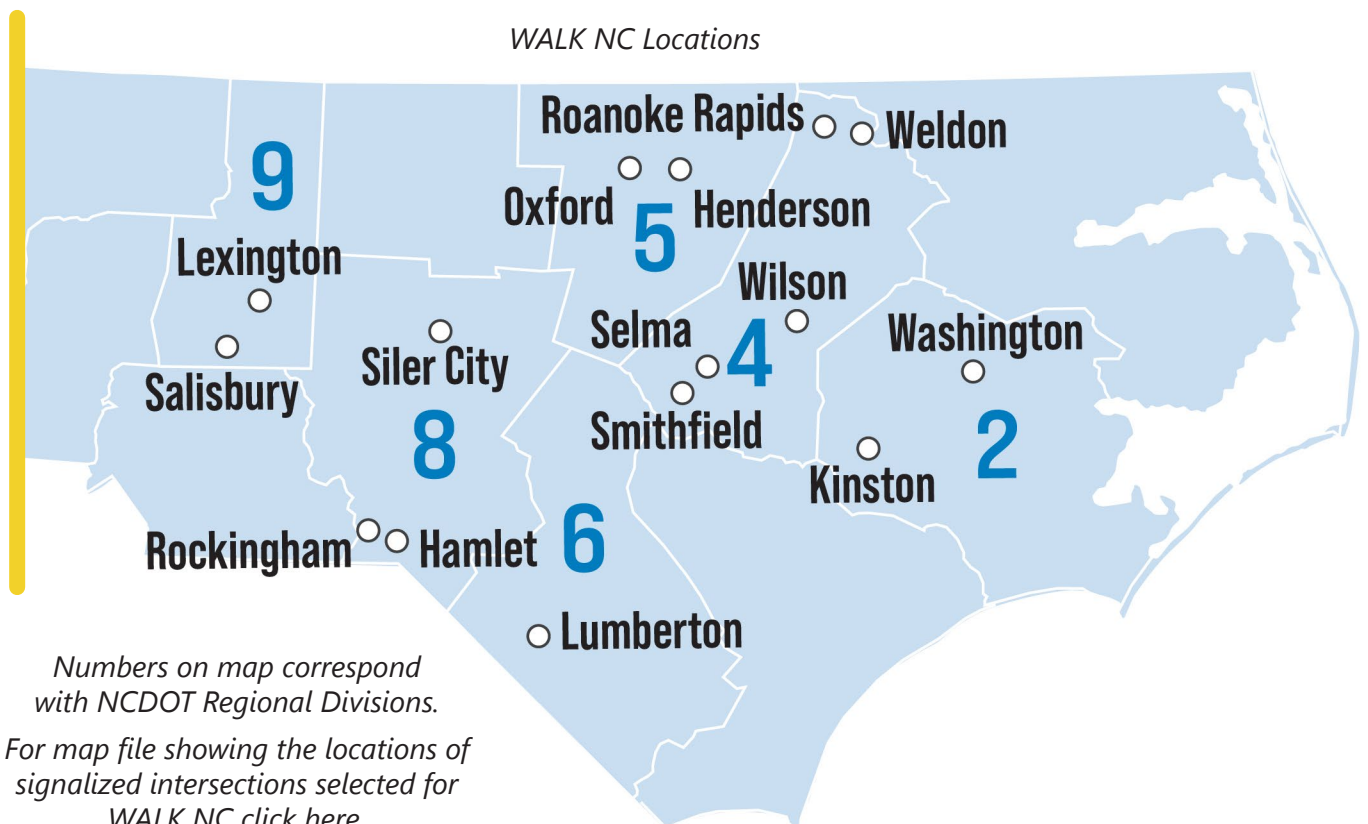
<sup>1</sup> The methodology for selecting WALK NC cities/towns is further described in the [Pedestrian Signal RAISE Grant Memo](#).

## Areas of Persistent Poverty

WALK NC will create new and safer crossings for pedestrians as well as connect vulnerable and low-income neighborhoods in Areas of Persistent Poverty. The table on the next page, page 3, lists the census tracts in each city/town that meet the United States Department of Transportation (USDOT) definition of an Area of Persistent Poverty. All of the WALK NC communities are also located in rural areas, per the 2010 census designation.

## Historically Disadvantaged Communities

Many of the census tracts for WALK NC meet USDOT's definition of a historically-disadvantaged community, as shown in the table on the next page, page 3. Of the 91 census tracts affected by WALK NC, only 1 census tract is not in an historically disadvantaged community.



*Areas of Persistent Poverty and Historically Disadvantaged WALK NC Communities.*

<b>City / Division # (County)</b>	<b>Census Tracts</b>	<b>Area of Persistent Poverty</b>	<b>Historically Disadvantaged Community</b>
<b>Kinston / 2</b> (Lenoir County)	102, 104, 105, 109, 113	✓	✓
	106, 108, 110.01, 114		✓
<b>Washington / 2</b> (Beaufort County)	9303, 9304, 9310	✓	✓
	9302, 9305.01		✓
<b>Roanoke Rapids / 4</b> (Halifax County)	9301, 9303, 9304, 9305.01, 9305.02, 9306	✓	✓
<b>Selma / 4</b> (Johnston County)	403.01, 403.02	✓	✓
	404, 407, 409.01		✓
<b>Smithfield / 4</b> (Johnston County)	406	✓	✓
	407, 408, 409.01, 409.02, 412.01, 412.02		✓
<b>Weldon / 4</b> (Halifax County)	9301	✓	✓
	9302		✓
<b>Wilson / 4</b> (Wilson County)	1, 2, 3, 6, 7, 8.01, 8.02	✓	✓
	9, 10, 13, 15		✓
<b>Henderson / 5</b> (Vance County)	9606, 9608, 9610	✓	✓
	9609		✓
<b>Oxford / 5</b> (Granville County)	9704	✓	✓
	9702, 9703		✓
<b>Lumberton / 6</b> (Robeson County)	9606, 9607.01, 9607.02, 9610, 9611, 9616.02, 9618.02	✓	✓
	9609	✓	
<b>Hamlet / 8</b> (Richmond County)	9706, 9710, 9711	✓	✓
	9709		✓
<b>Rockingham / 8</b> (Richmond County)	9703, 9706, 9707	✓	✓
	9708, 9709		✓
<b>Siler City / 8</b> (Chatham County)	204.02	✓	✓
	203,204.01		✓
<b>Lexington / 9</b> (Davidson County)	614, 615, 616	✓	✓
	612.01, 618.03		✓
<b>Salisbury / 9</b> (Rowan County)	502.01, 502.02, 503, 504, 507, 508, 511.02, 513.03	✓	✓
	505, 512.01, 512.02, 512.04		✓

WALK NC Community Profiles.

	Division/City	County	% Living in Poverty	Median Family Income	2022 Population Estimates
2	Kinston	Lenoir	27.90%	\$33,280	19,546
2	Washington	Beaufort	30.60%	\$38,843	9,705
4	Roanoke Rapids	Halifax	20.40%	\$43,704	15,128
4	Selma	Johnston	33.60%	\$25,421	6,601
4	Smithfield	Johnston	30.00%	\$33,957	11,630
4	Weldon	Halifax	27.30%	\$37,832	1,524
4	Wilson	Wilson	21.30%	\$46,146	47,731
5	Henderson	Vance	25.60%	\$36,147	14,954
5	Oxford	Granville	24.00%	\$39,399	8,775
6	Lumberton	Robeson	31.10%	\$38,514	18,694
8	Hamlet	Richmond	25.70%	\$32,224	6,022
8	Rockingham	Richmond	28.70%	\$33,351	9,031
8	Siler City	Chatham	26.20%	\$40,440	7,848
9	Lexington	Davidson	24.90%	\$32,698	19,516
9	Salisbury	Rowan	23.70%	\$44,656	35,760
<b>Total 2022 Population Estimates:</b>					232,465

## Project History

NCDOT completed an inventory of State-maintained signals in 2021, determining that approximately 3,500 NCDOT signals located in urban areas did not include pedestrian WALK phases where sidewalks are in place. The lack of pedestrian countdown signal heads and protected time for pedestrian crossings exposes pedestrians to crash risks at signalized intersections.

In response to increasing pedestrian crash trends in North Carolina, the NCDOT Traffic Safety Unit (TSU) developed a framework for the Pedestrian Safety Improvement Program (PSIP). The PSIP is part of the NCDOT Highway Safety Improvement Program (HSIP). The NCDOT PSIP is a data-driven, multi-step, and iterative approach for developing pedestrian safety projects with local

municipalities that are overrepresented statewide in fatal and serious injury pedestrian crashes. The PSIP includes robust and predictive data analysis to identify specific locations and entire cities/towns for review.

The NCDOT WALK NC RAISE grant proposal is part of the PSIP. If funded, WALK NC will implement low-cost countermeasures, such as crosswalks, pedestrian countdown signal heads, and LPIs using a systemic approach in communities of greatest need. NCDOT prioritized cities/towns for WALK NC based on pedestrian crash history and crash rates, numbers of NCDOT signals lacking pedestrian countdown signals, and share of the local population considered historically disadvantaged.



## Addressing Pedestrian Safety Challenges

The WALK NC communities have limited resources and opportunities to implement multimodal transportation improvements. With the help of this RAISE grant, NCDOT will be able to implement many proven, low-cost, and simple countermeasures to address pedestrian safety and mobility challenges. WALK NC will incorporate several of the Federal Highway Administration's (FHWA's) Proven Safety Countermeasures<sup>1</sup>, specifically: Crosswalk Visibility Enhancements, Leading Pedestrian Intervals (LPIs), and Walkways. These safety improvements will increase visibility of pedestrians at intersections and allow adaptive software to assist those that need longer to cross. As included in the *Merit Criteria: Safety* section, NCDOT studies have shown a **50% reduction in crashes where adding a pedestrian WALK signal, crosswalks, and LPIs at signalized intersections**. Other WALK NC benefits include increasing access for pedestrians by installing short sidewalk segments to close gaps and upgrading the curb ramps, especially for pedestrians with mobility impairments.

*Over decades, NCDOT has installed hundreds of pedestrian countdown signal heads and other crossing infrastructure improvements across the State as part of the HSIP, other projects, and in partnership with local governments. Recently, as part of the PSIP, NCDOT has begun implementing LPIs across large areas in cities/towns of all sizes. However, WALK NC will provide NCDOT the opportunity to install these low-cost improvements at hundreds more locations, working at the city-wide scale – leading to noticeable change in some of the State's most underserved communities and small towns.*



Over 1/3 of all NCDOT-maintained signals in cities/towns do not include pedestrian walk phases.



*Residents in Siler City meeting at an intersection without pedestrian signal heads*

<sup>1</sup> <https://highways.dot.gov/safety/proven-safety-countermeasures>