

Town of North Topsail Beach

Crosswalk Inspection Report

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Crosswalk Assessment Criteria

The crosswalk inspection system evaluates five categories. Visibility, safety enhancements, and ADA compliance are scored from 1 to 5, with 5 representing excellent condition and 1 very poor. The remaining categories—traffic risk and pedestrian demand—are scored inversely, where 1 reflects high risk or high demand and 5 reflects low risk or low demand. Combined, these scores create a total of 25, with lower totals indicating greater need for refurbishment, replacement, or installation.

Existing Crosswalks

The following locations are the existing crosswalks for the town beginning at the Surf City limit and moving north.

1. Knowles Park - 3623 Island Dr, North Topsail Beach, NC 28460
2. Rogers Bay - 4021 Island Dr, North Topsail Beach, NC 28460
3. Jeffries Lot BA#34 - 272 New River Inlet Rd, North Topsail Beach, NC 28460
4. Richard C Peters Park - 465 New River Inlet Rd, North Topsail Beach, NC 28460
5. Villa Capriani - 790 New River Inlet Rd, North Topsail Beach, NC 28460

Requested Crosswalks

The following locations are the requested crosswalks for the town beginning at the Surf City limit and moving north.

1. Surf City Campground - 2460 Island Dr, North Topsail Beach, NC 28460
2. Osprey Drive - North Topsail Beach, NC 28460
3. Shipwatch Villas - 1896 New River Inlet Rd, North Topsail Beach, NC 28460
4. SeaGull Lane - North Topsail Beach, NC 28460

These recommendations will be addressed later in the report.

Things to Consider

The town currently has five crosswalks, spanning approximately 4.1 miles from Knowles Park in the south to Villa Capriani in the north, averaging 0.82 miles between crossings. This leaves 7.3 miles of main roads without designated crosswalks, notably in areas with the highest pedestrian traffic. These unmarked zones include densely populated residential areas along Island Drive and New River Inlet Road, where residents frequently cross without safe crossings.

While pedestrian warning signs exist, the absence of striping and lighting places both drivers and residents at significant risk. A 2014 study by the University of North Carolina on the seasonal population of the greater Topsail Island area concluded that between beach houses, duplexes, townhomes, condos, and mobile homes, the seasonal population increases to roughly 49,193. This means that along with pedestrian traffic crossing major roads increasing, vehicle traffic increases monumentally in our immediate area. More dangerously, by drivers who may not be familiar with our roadways or popular crossing areas which have no current crosswalks.

Table 3. Estimated Seasonal Population by Unit Type and Area

Unit Type	North Topsail Beach	Sneads Ferry	Surf City	Topsail Beach	TOTAL Greater Topsail Area
Beach Houses	8,434	2,076	14,102	7,801	32,414
Duplexes and Townhomes	3,592	0	2,088	537	6,217
Condos	6,737	137	1,673	393	8,941
Mobile Homes	215	148	1,229	30	1,621
Total	18,978	2,361	19,092	8,761	49,193

University of North Carolina, Carolina Population Center. (2014). Estimates of the seasonal population of the Greater Topsail Island area: Executive summary. Retrieved from <https://tispc.org/wp-content/uploads/2017/08/tispc-topsail-island-summer-population-exec-summary.pdf>

Further compounding the risk, data from the North Carolina Department of Transportation's 2022 Crash Facts report indicates that pedestrian accidents are more prevalent during darker hours. In 2022, 23.9% of pedestrian fatalities occurred between 6:00 PM and 5:59 AM, highlighting the increased risk pedestrians face during evening and nighttime hours. This underscores the critical need for improved crosswalk infrastructure, particularly in areas lacking adequate lighting and visibility.

Given these considerations, the establishment of additional crosswalks with proper lighting and signage is imperative to enhance pedestrian safety and reduce the risk of accidents in our community.

Non-Recommended Crosswalk Locations

While several crosswalk sites were requested for consideration, Public Works has determined that two of these — Osprey Drive and Shipwatch Villas — cannot be recommended for installation. This determination is based on proximity to existing or higher-priority crossings, lower pedestrian demand compared to other areas, and the need to distribute resources equitably across town rather than cluster them in areas that already have coverage.

Decision Matrix: Requested Crosswalk Sites Not Recommended			
Location	Distance to Nearest Existing/Recommended Crosswalks	Pedestrian Traffic Demand	Justification for Not Recommending
Shipwatch Villas	• 0.23 miles from BA#2 • 0.51 miles from SeaGull Lane (both recommended sites)	• Low demand • Nearby proposed access points	• Overlaps coverage with recommended sites • Limited added value for safety/access
Osprey Drive	• 0.23 miles north of Jeffries BA#34 access crosswalk • 0.24 miles south of Richard C Peters Park crosswalk	• Moderate demand • Close vicinity to pre-existing sites	• Two crosswalks <0.24 miles away • Concentration of town resources while gaps remain elsewhere • Potential 'blindness' by drivers navigating several crosswalks in less than a half mile.

Recommendation Crosswalk Locations

Currently, there are five crosswalks within the town limits. The Public Works Department recommends adding six additional crosswalks, bringing the total to eleven. This expansion would reduce the average distance between crossings to less than one mile, ensuring that every resident in North Topsail Beach is within convenient and safe walking distance to a designated crossing.

Decision Matrix: Requested Crosswalk Sites Recommended			
Location	Distance to Nearest Existing/Recommended Crosswalks	Pedestrian Traffic Demand	Justification for Recommending
County BA#1	>0.5 miles	Very High- county owned	- Major public access point - Potential cost-share/grants
County BA#2	>0.5 miles	Very High- county owned	- Major public access point - Potential cost-share/grants
Island Dr & NRIR	<0.5 miles from BA#34 crosswalk	High- major intersection with bike lanes on each side	- Improves safety at convergence of two state-owned roads - Reduces pedestrian/vehicle conflicts
11 th Ave	>0.75 miles	Moderate to high- residential corridor (large complex)	- Supports large population - Reduces lengthy gap between crossing points
SeaGull Ln	>0.8 miles	High- Dense housing on sound side	- High-demand residential quarter - reduces gap between crossing points
Surf City Campgrounds	>2.8 miles	High- Heavy seasonal camping	- Reduces large service gap - Major access point

Given that many of these crossings are located on state-owned roads, we recommend seeking financial support from NCDOT, as well as from Onslow County for Beach Access areas #1 and #2, which are county-owned and experience high traffic. By leveraging state and county assistance for these high-priority locations, the town can allocate more of its own resources to complete the remaining recommended crosswalks, maximizing pedestrian safety across the community. Implementing this plan ensures comprehensive coverage, enhances safety, and demonstrates the town's commitment to accessible, walkable streets.

Potential Funding Options to Consider

- Federal grants
 - USDOT Safe Streets and Roads for All (SS4A) grants
 - Transportation Alternatives Program (TAP)
 - Budgeted at \$1.498 Billion for 2026
- NCDOT Highway Safety Programs
 - Spot Safety Projects
 - (42) active projects across NC for crosswalks
 - Highway Safety Improvement Program (HISP)
 - (140) active projects across NC for crosswalks
- Cost-share agreements between NCDOT and NTB

Summary of Crosswalk Findings and Recommendations

Location	Type	Total Score	Condition Rating	Priority
*/** County BA#1	Crosswalk	0	Critical	1
*/** County BA#2	Crosswalk	0	Critical	1
** Island Dr & NRIR at Town hall	Crosswalk	0	Critical	1
*/** 11th Ave & Island Dr	Crosswalk	0	Critical	1
** SeaGull Ln & NRIR	Crosswalk	0	Critical	1
** Surf City Camp & Island Dr	Crosswalk	0	Critical	1
Jeffries BA#34 (Zone 3)	Crosswalk	8	Critical	1
Rogers Bay BA#31 (Zone 2)	Crosswalk	9	Critical	1
*BA#4 at RCP (Zone 3)	Crosswalk	9	Critical	1
Knowles Park (Zone 2)	Crosswalk	11	High Priority Refurbishment	2
Villa Capriani (Zone 3)	Crosswalk	15	High Priority Refurbishment	2

** Indicates County Access point for beach*

**** Indicates non-existent crosswalk/Public Works recommendation**

References

1. Seasonal Population of the Greater Topsail Island Area

University of North Carolina, Carolina Population Center. (2014). Estimates of the seasonal population of the Greater Topsail Island area: Executive summary. Retrieved from <https://tispc.org/wp-content/uploads/2017/08/tispc-topsail-island-summer-population-exec-summary.pdf>

2. North Carolina 2022 Traffic Crash Facts

North Carolina Department of Transportation. (2022). North Carolina 2022 Traffic Crash Facts. Retrieved from <https://connect.ncdot.gov/business/DMV/CrashFactsDocuments/2022%20Crash%20Facts.pdf>