

## I. PROJECT PURPOSE AND NEED

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*SR 26, Atlantic Avenue from Clarksville to Assawoman Canal  
Environmental Assessment and Section 4(f) Evaluation*



*U.S. Department of Transportation  
Federal Highway Administration*



*STATE OF DELAWARE  
Department of Transportation*

## I. PROJECT PURPOSE AND NEED

This section describes in detail the SR 26 Atlantic Avenue project area, discusses its significance, summarizes previous studies and improvements to SR 26, presents the project's purpose and need, and describes the proposed action. Traffic and accident history within the project area are provided as supporting data. In general terms, the purpose is to reduce traffic congestion, improve traffic safety, delineate driveway access and improve roadway conditions. The need is based on expected future traffic growth and the intensification of development throughout the project area.

### A. Background

#### 1. Project Area

The proposed transportation improvement project is located in the southeastern portion of Delaware's southernmost County, Sussex County (see **Figure I-1**). The SR 26, Atlantic Avenue project extends 3.94 miles between Omar and Powell Farm Roads in Clarksville and the Assawoman Canal (see **Figure I-2**).

Existing SR 26 within the project area is a two-lane (one 10-foot wide travel lane in each direction), undivided, east-west highway with narrow shoulders, no sidewalks and uncontrolled access. Through the developed areas of Millville and Ocean View there are numerous commercial and residential driveways that are often not well delineated (lack of pavement, paint stripes, etc.)

SR 26 is classified under the federal functional highway classification system as an "Urban-Other Principal Arterial," which is defined as "highways which provide long distance connections." It is the primary Delaware highway south of Indian River Bay connecting US 113 in the west and SR 1 in the east, which are both part of the National Highway System.

The incorporated municipalities of Millville and Ocean View are located along SR 26 within the project area. The beach communities of Bethany, Dewey and Rehoboth Beaches, South Bethany and Fenwick Island in Delaware, and Ocean City in Maryland are major seasonal traffic generators. Bethany Beach is located along SR 26/SR1 approximately three miles east of Assawoman Canal, the project's eastern terminus. Dewey and Rehoboth Beaches are located along SR 1, approximately eleven miles and thirteen miles north of Bethany Beach, respectively. Immediately south of Bethany Beach, along SR 1, are the beach communities of South Bethany (approximately two miles south), Fenwick Island (approximately six miles south), and Ocean City, Maryland (approximately sixteen miles south).

#### 2. Previous Studies

In the summer and fall of 1998, DelDOT collected traffic counts on SR 26 from US 113 to the Assawoman Canal, inventoried existing conditions in the study area, and prepared the *1999 Systems Analysis and Needs Report*. The *Needs Report* identified four factors that contribute to the need for improvements to SR 26. The need to reduce traffic congestion, improve safety, establish defined property entrances and exits, and improve roadway conditions was approved by the SR 26 Advisory Committee, a group that included local government leaders, business owners, developers, and local residents.

Figure I-1  
SR 26, Atlantic Avenue Improvement Project Location Map

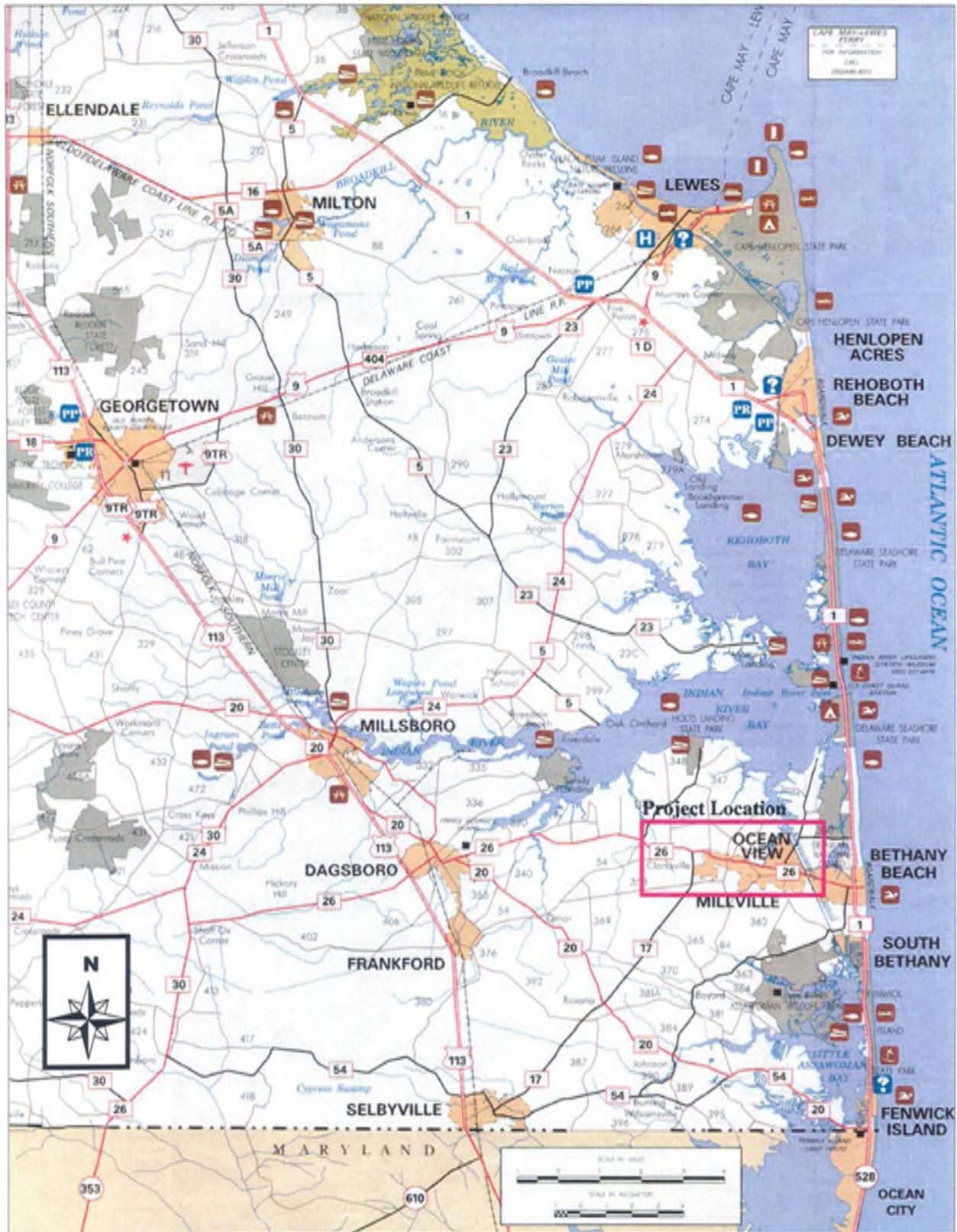
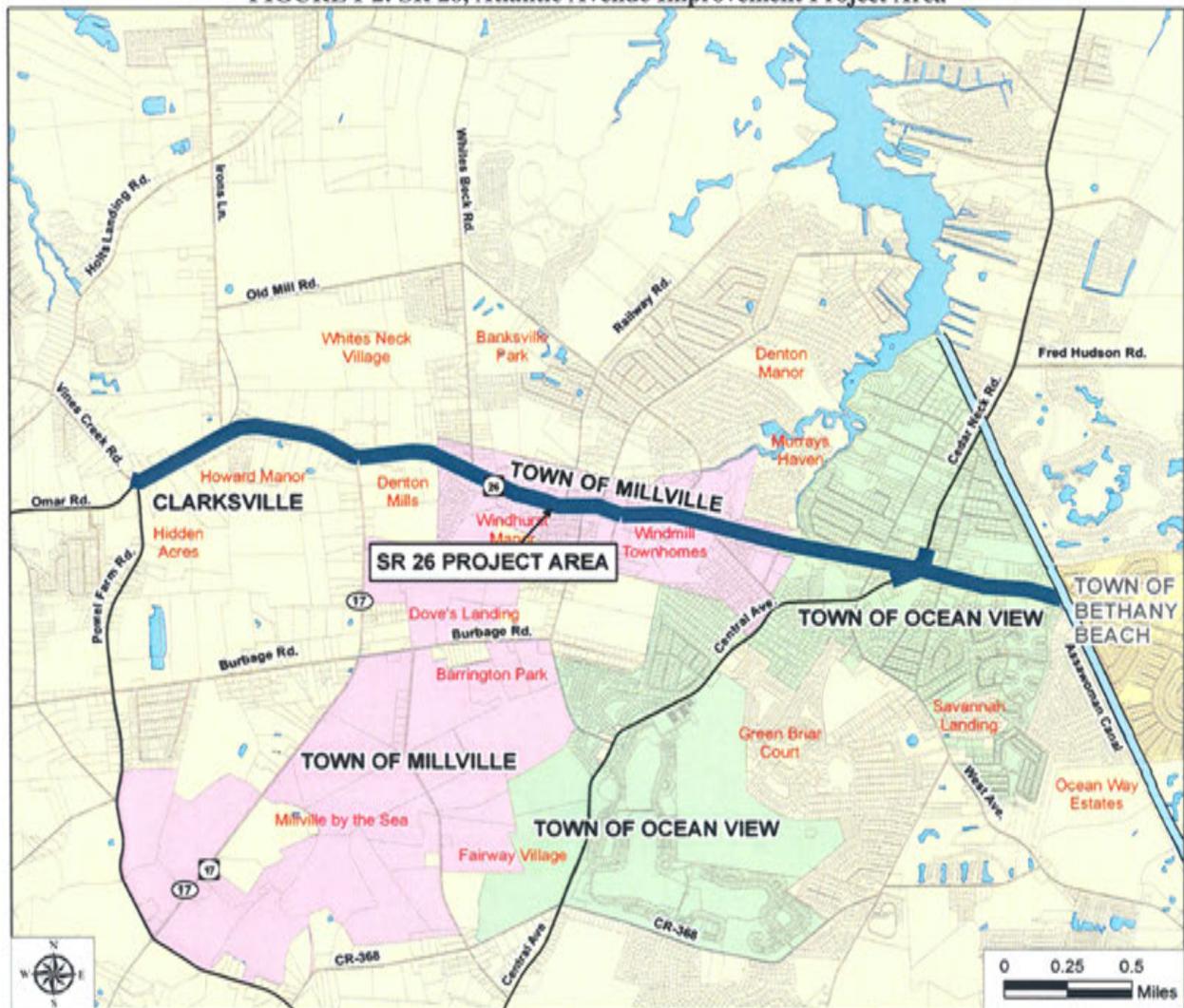


FIGURE I-2: SR 26, Atlantic Avenue Improvement Project Area



### 3. Previous Improvements along SR 26

The section of SR 26 east of Assawoman Canal to Delaware Route 1 (SR 1) was improved by the Delaware Department of Transportation (DelDOT) in 2001 to relieve congestion and alleviate safety concerns. These same congestion and safety concerns also exist along SR 26 west of the Assawoman Canal. These concerns were identified in the *SR 26 Systems Analysis and Needs Report (1999)*. The proposed improvements to SR 26 would improve safety and general mobility conditions for residents and the traveling public who regularly use SR 26.

#### B. Project Purpose

The *purpose* of the SR 26, Atlantic Avenue Improvement Project (SR 26 Project) is to reduce traffic congestion and improve safety on SR 26 from Clarksville to the Assawoman Canal. The *1999 Systems Analysis and Needs Report* for SR 26 identified four primary project goals:

- Reduce traffic congestion
- Improve traffic safety
- Improve roadway conditions
- Delineate driveway access

#### C. Project Need

These goals were developed to address the following project *needs*:

- **Traffic Congestion** – Increase in population, tourism and development has decreased mobility along SR 26. SR 26 currently provides an east-west linkage between US 113 and the Delaware Beach area. The existing two-lane road cannot handle current or future traffic which is especially severe during peak summer months. Traffic congestion is further exasperated due to the fact there is limited separation of turning vehicles from mainline through traffic. There are limited separate left-turn lanes or right-turn lanes therefore through lanes become blocked by vehicles waiting for the opportunity to make left turns into residences and businesses along the roadway or slowing down to make right turns.
- **Safety** - Accident rates in the study area exceed state and county averages for similar roadways. Numerous, non-standardized access points in the corridor increase the potential for crashes. Lack of sufficient pedestrian and bike facilities along the roadway largely limits multi-modal travel options and increases the safety risks for those attempting to walk or bike along the existing roadway. No standard clear zone exists within the project limits and there are some locations where utility poles are located within the paved areas outside of the roadway, which are dangerous in run off of the road type accidents.
- **Roadway Deficiency** – SR 26 provides the primary east-west route between US 113 and SR 1. The current 2-lane roadway typical section is of sub-standard design for a Principal Arterial highway and does not support the function of this type of roadway and cannot sufficiently handle the through-traffic demand. The roadway lacks sufficient sidewalks for pedestrians and has limited shoulders for bicyclists limiting the system

connectivity for these travel modes along the roadway. In addition, the segment of SR 26 is inconsistent with the 3-lane upgraded highway segment east of the Assawoman Canal. The roadway would serve as the primary evacuation route in emergency situations.

- **Economic development** – The project limits are contained within the Towns of Ocean View and Millville, which are designated as growth areas. The project area is experiencing substantial increases in population, tourism and residential and commercial development. Development capacity in this planned growth area is being restricted by traffic congestion. Many of these businesses are dependent on seasonal tourism which could benefit from improved accessibility to businesses.

Traffic data analysis indicates a need to improve traffic capacity and operations on SR 26, Atlantic Avenue within the project area (primarily within Millville). The need for transportation improvements stems from persistent and fast-paced growth within and around the project area and from the roadway being one of the main arteries for accessing the Delaware Beach resort areas.

Traffic problems are most pronounced at or near intersections, although some mid-block sections also experience long delays and safety problems. Numerous non-standardized access points, as well as generally poor roadway conditions, are major factors that contribute to the congestion and safety problems.

Although some traffic problems are evident year-round, congestion along SR 26, Atlantic Avenue is especially severe during summer months. **Table I-1** and **Figure I-3** show the Annual Average Daily Traffic (AADT) and the Summer Average Daily Traffic (Summer ADT) for the years 1985 through 2006. The data clearly shows that the traffic volumes are much higher in the summer. The higher summer volumes are attributable to tourist traffic traveling to and from the beach areas. Overall traffic volumes have peaked during the summer tourism season at approximately 28,000 vehicles per day along SR 26 within the project limits.

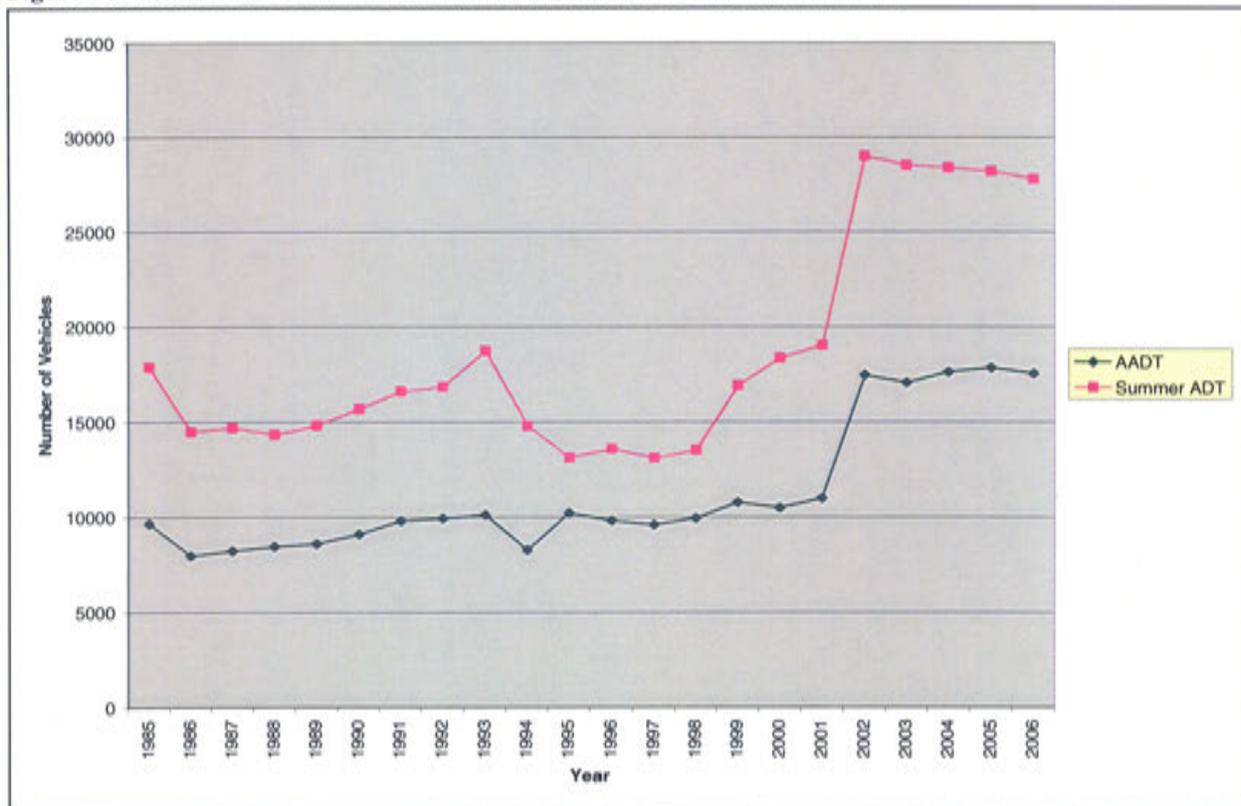
Furthermore, traffic within the project area is expected to increase, since there are nearly 9,200 dwelling units and over 935,000 square feet of commercial space proposed for new development. Major developments added to the corridor include a shopping center and residential development within the Millville Town Center, located on eastbound SR 26, Atlantic Avenue, opposite the Old Mill Drive intersection.

**Table I-1: SR 26 West of Millville to East of Millville AADT and Summer ADT**

Year	AADT	Summer ADT
1985	9,657	17,883
1986	7,961	14,474
1987	8,221	14,680
1988	8,453	14,327
1989	8,595	14,819
1990	9,099	15,688
1991	9,799	16,608
1992	9,936	16,841
1993	10,115	18,731
1994	8,274	14,775
1995	10,209	13,122
1996	9,810	13,587
1997	9,599	13,095
1998	9,939	13,504
1999	10,774	16,915
2000	10,492	18,361
2001	10,997	19,025
2002	17,468	28,997
2003	17,075	28,515
2004	17,638	28,397
2005	17,849	28,201
2006	17,545	27,791

Source: DelDOT

**Figure I-3: SR 26 West of Millville to East of Millville AADT and Summer ADT**



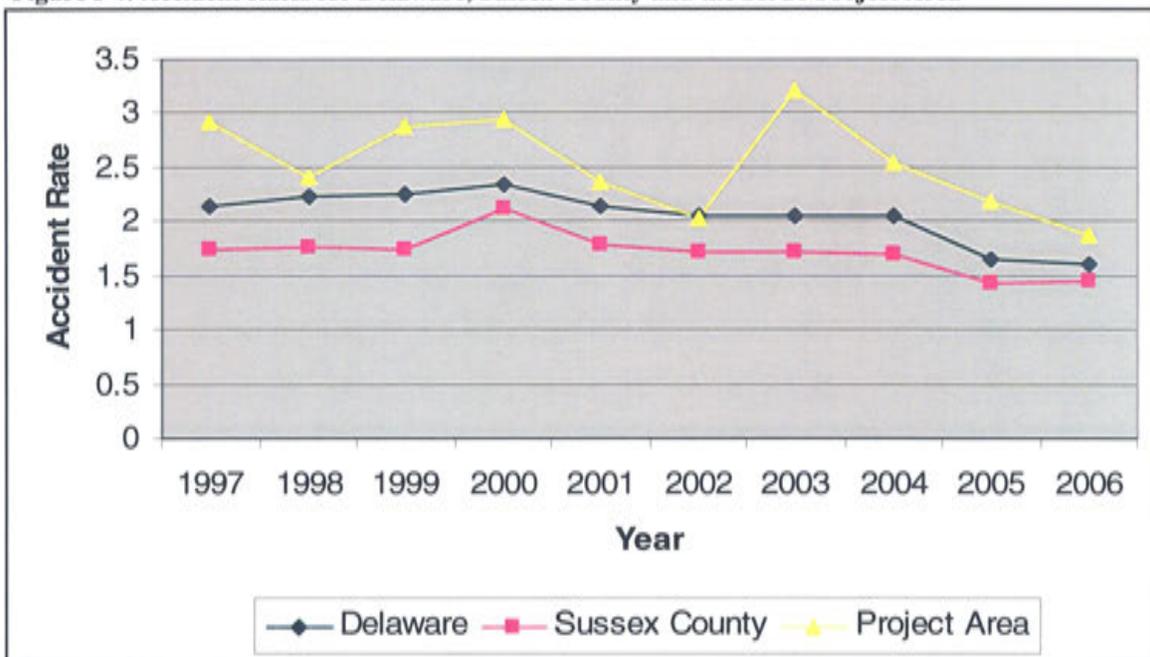
In regards to traffic safety, reported accident data from 1997 to 2006 indicate that the project area has higher accident rates than similar roadways in both Sussex County and the State of Delaware as a whole. **Table I-2** and **Figure I-4** show the accident rates for five locations in the project area and compares them to the rates for Delaware and Sussex County. Accident rates therefore provide a uniform base for roadway comparison and for identification of roadway safety issues.

**Table I-2: Accident Rates for Delaware, Sussex County and the SR 26 Project Area**

Location	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Delaware	2.14	2.22	2.25	2.35	2.15	2.06	2.04	2.06	1.65	1.60
Sussex County	1.73	1.76	1.75	2.11	1.78	1.72	1.71	1.70	1.43	1.45
Location 1 <sup>1</sup>	6.34	2.63	4.44	4.97	2.38	3.4	4.64	2.244	1.380	1.410
Location 2 <sup>2</sup>	2.51	1.62	2.24	0.77	2.93	1.25	0	1.860	3.104	2.105
Location 3 <sup>3</sup>	2.99	3.08	3.02	3.47	2.79	1.21	3.03	2.281	1.610	1.856
Location 4 <sup>4</sup>	1.17	3.07	3.31	1.46	2.32	3.01	5.39	3.729	3.685	2.999
Location 5 <sup>5</sup>	0.92	0.45	0.84	2.02	0.91	2.51	1.62	3.150	3.169	1.185
Project Area	2.93	2.40	2.87	2.95	2.36	2.02	3.22	2.547	2.189	1.868

<sup>1</sup>Location 1 - S54 to SR17 (Mile Point 17.9 to 18.83)  
<sup>2</sup>Location 2 - SR17 to West Millville Municipal Limits (Mile Point 18.83 to 19.20)  
<sup>3</sup>Location 3 - West to East Millville Municipal Limits (Mile Point 19.20 to 20.63)  
<sup>4</sup>Location 4 - East Millville Municipal Limits to S357 (Mile Point 20.63 to 21.13)  
<sup>5</sup>Location 5 - S357 East to Ocean View Municipal Limits (Mile Point 20.63 to 21.13)  
<sup>6</sup>Location 6 - S357 East to Ocean View Municipal Limits (Mile Point 20.63 to 21.13)

**Figure I-4: Accident Rates for Delaware, Sussex County and the SR 26 Project Area**



While the accident rates for specific locations within the project limits may fall below County and State averages, the accident rates for the entire project area are generally at or above the rates for Sussex County and the State of Delaware as depicted in **Figure I-2**. Since 1999, the number of reported accidents along SR 26, Atlantic Avenue in the project area has increased dramatically, with many of these accidents occurring between intersections. The accident rate along SR 26, Atlantic Avenue within the project area over the five year period from 2002 through 2006 was 2.189, which exceeded the five year statewide average of 2.04 for the same time period for similar type roadways by 7% and the County-wide average of 1.7 by 22%.

#### **D. Proposed Action**

The proposed action would involve widening SR 26 from its intersection with Omar and Powell Farm Roads in Clarksville to the Assawoman Canal, a distance of approximately 3.94 miles (see **Figure I-2**). Access to businesses along this length of SR 26 would also be improved to provide safer ingress and egress for adjacent properties.

The typical section for this project under the preferred alternative (Revised Alternative D) would be two 11-foot wide travel lanes, 5-foot wide shoulders on both sides and a 12-foot wide continuous shared center left-turn lane. Safety grading along the outside would also be provided, based upon a 40 MPH Design Speed. The segment of SR 26 from Clarksville to west of Railway Road would be an open section with roadside drainage ditches. The section from west of Railway Road to the Assawoman Canal would be a closed section with curb, gutter, and closed drainage. The majority of the closed section would also have a 3-foot grass strip behind the curb and gutter that will be used for utilities. Five-foot wide sidewalks would be provided from Windmill Road to the Assawoman Canal.

The following intersections with SR 26 would be improved: Powell Farm Road, Irons Lane, Whites Neck Road, Railway Road, Windmill Road, Clubhouse Road, Old Mill Road, Doc's Place, Cedar Drive, Woodland Avenue, Central Avenue, West Avenue, and Tyler Drive. The preferred alternative, Revised Alternative D, would provide a continuous shared center left-turn lane between these intersections and mid-block areas. Right turn lanes would be added at most intersections. The intersection of SR 26 and Central Avenue would be realigned, and turn lanes would be added in each direction.

A closed drainage system with curb and sidewalks would also be installed along SR 26, from west of Railway Road to the Assawoman Canal. This section will typically provide 11-foot wide travel lanes, 5-foot wide shoulders, a continuous 12-foot wide center left-turn lane, and a 3-foot wide buffer strip from the back of curb to the edge of a 5-foot wide sidewalk.

Minor and major strips of property acquisition are required throughout the project corridor, involving both historic and non-historic properties. Right-of-way impacts vary from sliver acquisitions, full property acquisition takes, permanent easements, and temporary construction easements. But in regards to historic property acquisition, no historic property would be fully acquired, nor would any historic structure be directly impacted by right-of-way acquisition for this project. These proposed improvements are consistent with the project purpose and would address the project needs, as recommended in the *1999 Systems Analysis and Needs Report* and by the SR 26 Advisory Committee.