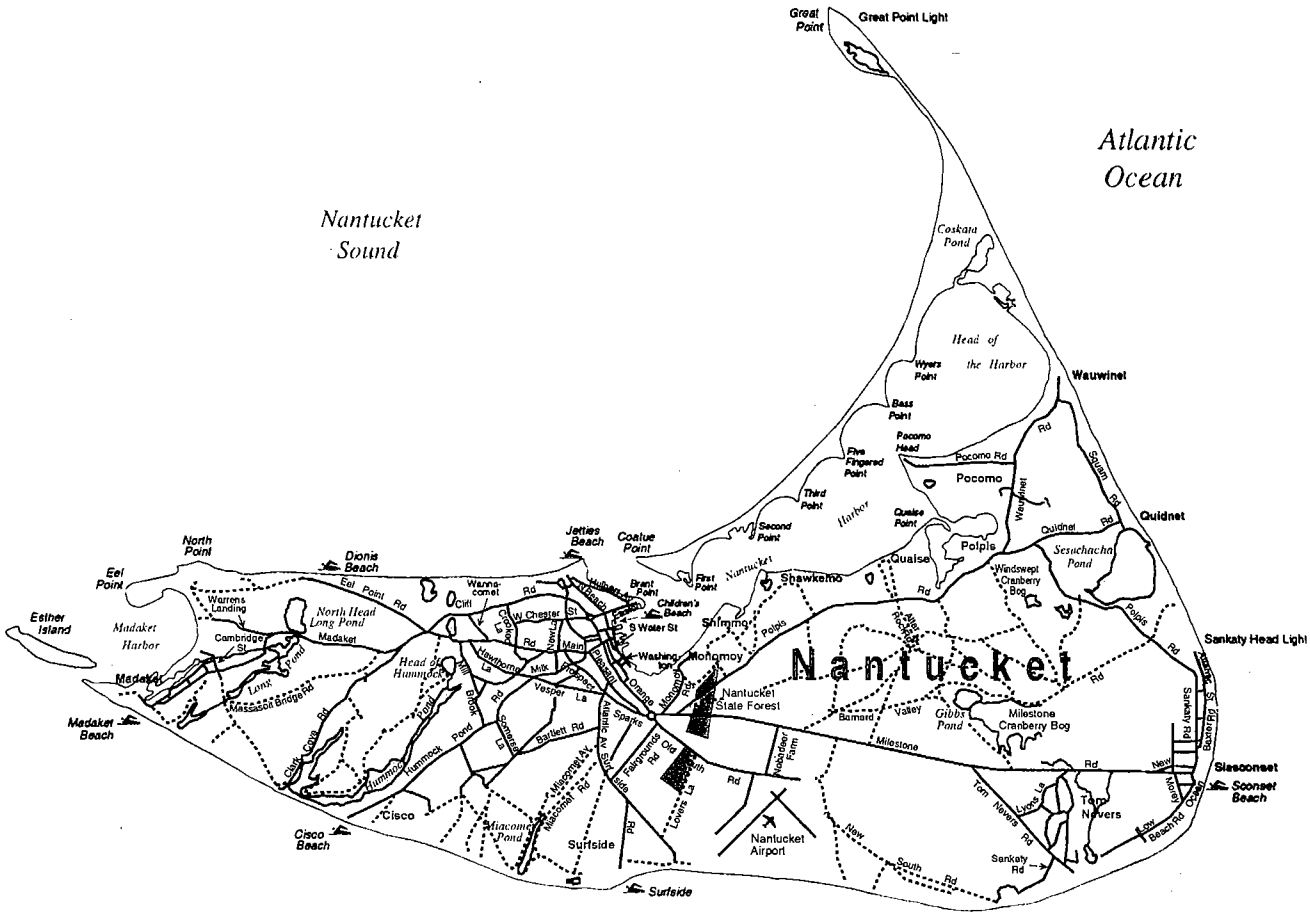
Nantucket Bicycle and Pedestrian Master Plan



Prepared for **Nantucket Planning and Economic Development Commission**

Prepared by ***VHB*/Vanasse Hangen Brustlin, Inc.**
Watertown, Massachusetts

November 1994

NANTUCKET BICYCLE AND PEDESTRIAN MASTER PLAN

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INTRODUCTION

Located 25 miles off the coast of Cape Cod, Nantucket Island is a premier summer resort where bicycling and walking are major modes of transportation. The island is approximately 14 miles long and three to six miles wide. The year-round population of about 6,000 swells to 40,000 during the peak summer period (July through Labor Day). The annual influx of seasonal residents and visitors severely taxes the island's surface transportation system, which generally consists of two-lane roads, several major bicycle paths, and a limited sidewalk system centered downtown.

The purpose of this report is to develop a long-range plan for the improvement of the bicycle and pedestrian transportation system on Nantucket Island. It is an update of the *Nantucket Bikeway Master Plan*[1] and includes an examination of pedestrian transportation as well. The plan must be sensitive to the environmental and historic resources which make Nantucket attractive to visitors and residents. At Town Meeting in 1990, the Nantucket voters approved *Goals and Objectives for Balanced Growth: A Broad Policy for the Island's Future*, which includes the following overall transportation goal:

> To provide a transportation system that will move people and goods to, from, and around the Island in a way that is safe, convenient, economical, and consistent with the Island's historic, scenic, and natural resources.

The minimization of vehicular travel, especially in the summer, is sought in part by the improvement of alternative modes of transportation. Bicycling and walking are significant transportation modes on Nantucket, and are integral to achieve the town's overall transportation goals. The town has determined that in order to retain its rural and historic character it can not respond to increasing automobile traffic by widening roads and building more parking. Nantucket seeks to protect the values and attributes which make it a special place for residents and visitors. It is the policy of the town to minimize the number of cars on the island and minimize vehicular travel on the island. To promote this policy, the town seeks to actively promote alternative transportation.

This plan examines current deficiencies in the bicycle and pedestrian circulation system on the island, evaluates alternatives that would address those deficiencies, and recommends a comprehensive long-range program of bicycle and pedestrian improvement projects. These projects are necessary to sustain the high rate of bicycling and walking on the island and increase the percentage

1/ Nantucket Planning and Economic Development Commission (NP&EDC), *Nantucket Bikeway Master Plan*, 1977.

of trips made on alternative modes. An increasing shift from autobile travel to alternative modes is essential to manage future growth on the island.

PEDESTRIAN FACILITIES

The island's pedestrian circulation system consists of an extensive sidewalk network in the downtown area, limited sidewalks beyond a half-mile radius from the town center, and the bicycle paths out-of-town. In 1993 the Town hired Access Plus to conduct a survey of sidewalks and curb cuts in downtown Nantucket. The consultants found that:[2]

> Nantucket is unique in its pedestrian nature--many services and public accommodations are within reasonable walking distance of one another--and residents, as well as tourists, use the sidewalks as the major form of transportation, at least around the downtown area. Other unique features of Nantucket pose some problems in designing accessible pedestrian routes: the sidewalks are brick, some are very narrow, some are buckling from elm tree roots, and some pedestrian crossings are on cobblestone streets, which are difficult to traverse in a wheelchair. Most of these features may be protected, at least in part, by Nantucket's historic preservation program--even the elms, which are extinct in the rest of New England.

A detailed map displaying the results of the Access Plus survey of downtown pedestrian facilities was provided to the Town. The map indicated:

- Good wheelchair ramps and sidewalks on Main and Broad Streets
- Deficiencies on Chestnut and Oak Streets
- Lack of wheel chair ramps at 75 street or driveway intersections
- About 75 walkway barriers, including utility poles, excessive slopes, buckling due to tree roots, and restricted sidewalk widths
- Lack of sidewalks on many side streets

Findings from the Access Plus report have been incorporated in the *Long Range Transportation Plan, Nantucket, Massachusetts*, adopted by the Nantucket Planning and Economic Development Commission in April 1994.

On the periphery of downtown, important sidewalk links are missing or in some cases substandard. This problem is particularly acute in the southeastern part

2/ Access Plus, *Survey of Nantucket's Pedestrian Facilities with respect to the Americans with Disability Act Requirements*, 1993.

of town where businesses, public buildings and residences are inadequately served. The Nantucket Public Works, Fire, and Police departments, the Nantucket Traffic Safety Committee, and the Nantucket Planning and Economic Development Commission (NP&EDC) have identified deficiencies in the pedestrian circulation system in the following areas:

- Sparks Avenue
- Orange Street, south of Union Street
- Pleasant Street, southeast of Five Corners
- Prospect Street
- Quaker Road
- North Beach Street

An application for federal funds under the Transportation Enhancement category to provide sidewalk improvements for each of the areas listed above was submitted by the Nantucket Planning and Economic Development Commission (NP&EDC) in April 1994.

Additional deficiencies were noted during field observations conducted as part of this study. Sidewalks are extremely narrow and obstructions are present along Washington, Francis and Union streets providing access from downtown to the southeast. The close proximity of abutting buildings will make it difficult to improve these sidewalks.

Nantucket also has an extensive network of off-road bicycling and walking trails. These include many of the dirt roads in rural parts of the island and conservation areas popular for hiking and bird watching.

BICYCLE FACILITIES

According to AASHTO[3] there are three distinct types of bicycle facility classification. The first, a bicycle path, is a bikeway physically separated from motorized vehicular traffic by an open space or a barrier and either within the highway right-of-way or within an independent right-of-way. The second, a bicycle lane, is a portion of roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists. The third, a shared roadway or bicycle route, is any roadway upon which a bicycle lane is not designated and which may be legally used by bicycles regardless of whether such facility is specifically designated as a bikeway. These facilities are sometimes referred to as Class I, II, and III bicycle facilities, respectively.

Nantucket currently has a fairly extensive network of bicycle paths and routes connecting various attraction points throughout the Island. These facilities are described as follows:

3/ "American Association of State Highway and Transportation officials (AASHTO), Guide for the Development of Bicycle Facilities, 1991.

Bicycle Paths (Class I Bicycle Facilities)

Milestone Bicycle Path

The Milestone Bicycle Path connects Rotary Circle in Nantucket to Main Street in Siasconset. The path is 6.4 miles long and runs in an east-west direction parallel to Milestone Road. This path is located on gently rolling terrain with scenic overlooks and recreation connections, including a miniature golf area and playing fields. The miniature golf area is accessible via a separate bicycle path which is located approximately 1.5 miles east of Rotary Circle. (This facility is discussed in a separate section.)

The Milestone facility consists of approximately 20 feet of bituminous asphalt roadway with 10-foot vehicular travel lanes in each direction and no shoulders, 10 feet of grass median separating the roadway from the path, 8 feet of bituminous asphalt bicycle path, and 4 feet of clearance to the adjacent woods. The pavement surface of the bicycle path is generally in good condition. Normal maintenance along the path consists of mowing the grass median and the grass buffer.

Regulatory control for intersections of the bicycle path and side streets vary according to relative side street use. At locations of substantial side street traffic, STOP signs are provided for both the path users and the side street traffic. At locations of low side street traffic, the path users have the right of way with the side street being under STOP control. The side street is also provided with bicycle warning signs.

A scenic overview towards Altar Rock is located approximately 4.5 miles east of Rotary Circle. A turnout for automobiles is provided adjacent to the bicycle path; however, a similar facility is not available for path users. The facility does offer two resting areas, one at the beginning and one at the end of the path, each providing benches and a water station. The path terminates at a rest area/recreational area along Main Street in Siasconset. Visitors travel on the Milestone Bicycle Path during the summer season to visit Siasconset Beach and town.

Areas of particular concern along this path primarily involve side obstructions and lack of signage. A series of bollards separating the path from the roadway, each approximately 300 feet long, currently exists in three separate locations along the path; 1.2 miles, 3 miles, and 5.3 miles east of Rotary Circle. These bollards are offset approximately one foot from the bicycle path, creating a potentially dangerous situation for inexperienced path users. Other side obstructions also exist along the path such as utility poles, fire hydrants and utility boxes.

The intersection of Tom Nevers Road and the Milestone Bicycle Path is under STOP control from both approaches; however, the westbound approach along the path has a substantial downgrade at this point, creating an uncomfortable situation for novice bicyclists and in-line skaters, potentially drawing them into the intersection.

Both informational and directional signage could be improved along this path. There are no signs informing path users that they are traveling toward their

desired location and the approximate distance to that location. The path terminates at the intersection of Main Street and New Street in Siasconset.

Nobadeer Farm Bicycle Path

The Nobadeer Farm Bicycle Path connects the Milestone Bicycle Path with a miniature golf recreation area approximately one-quarter mile south of Milestone Road. The path is curvilinear and runs in a north-south direction adjacent to Nobadeer Farm Road. The path is located in a wooded area and is not visible from Nobadeer Farm Road. The cross section of this facility consists of approximately 9 feet of bituminous asphalt with underbrush and small trees on each side of the path. The pavement surface is currently in very good condition and little maintenance along this path is needed. Three wooden bicycle racks and a large parking lot are also provided. The parking lot attracts beginner in-line skaters for easy access to both the Nobadeer Farm and Milestone Bicycle Paths. The miniature golf recreation area is considered a major attraction during the peak summer months.

This path is not identified on local bicycling maps, which limits its potential use. No signage is provided at the intersection of this path and the Milestone Bicycle Path to help guide users to the miniature golf recreation area, restroom facilities and the water station. Warning signage is not provided at sharp horizontal curvature.

Surfside Bicycle Path

The Surfside Bicycle Path is 2.5 miles long and connects the southern outskirts of Nantucket town with Surfside Beach. The path runs in a north-south direction and is parallel to Surfside Road. This path is located on generally level terrain and is within view of the adjacent roadway over its entire length. The bicycle path begins at the intersection of Surfside Road and First Way, in the vicinity of the Nantucket High School. Nantucket High School has approximately five traditional bicycle racks within view of the path. In addition, the Nantucket Elementary School is also adjacent to the path in the same general vicinity. A pedestrian crosswalk connects the Surfside path to a path leading to the Elementary School.

The roadway cross section consists of approximately 20 feet of bituminous asphalt roadway with 10-foot travel lanes in each direction and no shoulders. Four to thirty feet of grass median separates the roadway from the 8-foot wide bituminous asphalt bicycle path. The pavement surface of the bicycle path is currently in fair condition. There are locations of pavement distresses such as edge cracking, ridging, and potholes in various locations. There are also areas of inadequate utility patches and drainage washouts, leaving sand on the path. All of the above pavement distresses and inadequacies create potentially dangerous situations for path users.

A rest area facility is located at the Miacomet Indian Burial Ground, approximately 1 mile south of the beginning of the path. The rest area consists of benches and a water station. There are approximately six traditional bicycle racks provided for public use at the Surfside Beach terminus of the trail. The bicycle parking facility was at capacity during field observations. This path is

very popular because it is the shortest bicycle facility from downtown Nantucket with a direct connection to the beach and because the path is manageable for all bicycle ability levels.

Areas of particular concern along this path primarily involve the lack of signage and maintenance. There are no signs informing path users that they are traveling toward their desired location and the approximate distance to that location. In addition, regulatory signs are not provided when the path switches from the west side of the road to the east side of the road, approximately 2.3 miles from the beginning of the path. STOP signs and warning signs should be utilized at this location to caution the users of this intersection.

Currently, pavement distresses and poor drainage make the path somewhat uncomfortable for users at certain locations, which in the long run may require more extensive maintenance. Periodic sweeping of the trail should be considered in the short term to keep debris off the path.

Madaket Bicycle Path

The Madaket Bicycle Path is 5.6 miles long and connects Caton Circle in Nantucket to Madaket Beach. The path runs in an east-west direction and is parallel to Madaket Road. This path is generally curvilinear and is located on gently rolling terrain with scenic overlooks of various conservation lands. This bicycle path connects with the Cliff Road Bicycle Path, approximately 1.8 miles from Caton Circle. The path also connects with the main entrance to Sanford Farm. At this access point to Sanford Farm, a traditional bicycle rack is provided along with approximately 15 automobile parking spaces.

Madaket Road is 20 feet wide with 10-foot travel lanes in each direction and no shoulders. A grass median of varying width separates the road from the 8-foot wide asphalt bicycle path. At many locations the path is not visible from the adjacent roadway because of landscaping and the width of the separating median. The pavement surface of the bicycle path is currently in good condition and maintenance along the path is basically limited to removing debris on the trail from the adjacent roadway. This facility offers three resting areas. The first is located approximately two miles west of Caton Circle and provides benches and a water station. In addition, there is pedestrian access to the Sanford Farm walking path at this location. The other two resting areas are located beside Long Pond, approximately 3.5 and 4.0 miles from Caton Circle, and offer benches and a dock. There are approximately seven traditional bicycle racks provided for public use at Madaket Beach. The bicycle parking facility was at capacity during field observations.

Areas of particular concern along this path primarily involve side obstructions, horizontal curvature, roadway/pathway separation, and lack of signage. The point of most concern is located approximately 1.3 miles west of Caton Circle. At this location the path has a series of reverse horizontal curves (S-curves) with sharp radii. The first curve in the westbound direction has a utility pole located on the inside of the curve approximately six inches from the path's edge. This reduces the effective (usable) width of the path, forcing users toward the center of the path. On the opposite side of the path, at the same location, a 2-foot-high split rail fence is approximately one foot from the path's edge, further reducing

the effective width of the path. This loss of effective path width creates a bottlenecking effect.

Another area of concern along the path is located where the roadway and the path have no median separation. This type of functional operation causes confusion for both motorists and bicyclists. At these areas, bicyclists are forced to ride against traffic, which is contradictory to the basic "rules of the road." This type of functional operation also creates dangerous intersection situations. A vehicle operator exiting a side street does not anticipate high speed bicyclists approaching from the immediate right and therefore may not check to see if the path is clear. This situation is most obvious at the intersection of the path and Dukes Road. In addition, a vertical separation of approximately three inches separates the bicycle path from the roadway; however, this vertical separation is very difficult to identify because the roadway edge line conceals it. This three-inch "lip" creates a dangerous situation for bicyclists that do not anticipate a change in grade. Warning signs and pavement markings should be used to warn users in this area.

Both informational and directional signage along the Madaket Path could be improved. There are no signs informing path users that they are traveling toward their desired location and the approximate distance to that location.

Cliff Bicycle Path

The Cliff Bicycle Path begins at the intersection of Cliff Road and Crooked Lane. The path is 1.2 miles long and terminates at the Madaket Bicycle Path. The path runs in an east-west direction and is adjacent to Cliff Road. The path is located in a predominantly open rural area. The cross section of this facility consists of approximately 9 feet of bituminous asphalt with underbrush and open fields on either side of the path. The pavement surface is currently in very good condition and little maintenance along this path is needed. A scenic overlook of Nantucket Sound is located approximately one-tenth of a mile from the eastern end of the path. This overlook is in the vicinity of the Tupancy Links, a public pedestrian area (open fields) adjacent to the path. Bicycle parking facilities are not available in this area.

Areas of particular concern along this path primarily involve lack of regulatory and information signage. STOP signs are not provided at the path's intersections with Eel Point Road or Madaket Road. In addition, signage is needed to direct the path user in their desired direction at the intersection of the Cliff Bicycle Path and the Madaket Bicycle Path.

Bartlett Bicycle Path

The Bartlett Bicycle Path begins at the intersection of Appleton Road and Bartlett Road. This path is located on the southern side of Bartlett Road and runs for approximately 1,200 feet and in an east-west direction. The path terminates west of Mizzenmast Road for approximately 500 feet and then continues an additional 2,000 feet to Somerset Road.

The cross section of this facility, including the roadway, consists of approximately 18 to 20 feet of bituminous asphalt roadway with 9 to 10-foot

travel lanes in each direction and no shoulders. Two to four feet of grass median separates the roadway from the 8-foot wide bituminous asphalt bicycle path. The pavement surface of the bicycle path is currently in good condition.

A 6-foot wide asphalt sidewalk connects the Bartlett Bicycle Path at Appleton Road to the Surfside Bicycle Path. Despite its narrowness, this sidewalk is currently being used as a bikeway.

Shared Roadways (Class III Bicycle Facilities)

Shared roadways or bicycle routes outside Nantucket town are described in the following paragraphs.

Main Street (Siasconset)

Main Street in Siasconset has a posted speed limit of 30 miles per hour (mph) and a cross section of 18 feet, with travel lanes of approximately 9 feet in each direction and no shoulders. This type of cross section is very narrow for bicycle route.

Siasconset has very little signage to help bicyclists and pedestrians locate local attractions such as the beach, Sankaty Lighthouse, and Polpis Road. A rest area with benches and a bicycle rack is provided behind Siasconset Market. A bicycle rack is also located at the public beach at the end of Gully Road. This facility was at capacity during field observations. Access to the beach is currently difficult because of beach erosion over the winter months.

Sankaty Avenue/Shell Street (Siasconset)

Sankaty Avenue and Shell Street connect Siasconset with Polpis Road (location of future Bicycle Path) and the Sankaty Lighthouse. This roadway consists of a 20-foot cross section with 10-foot travel lanes in each direction and no shoulders. The pavement surface of this roadway is in good condition.

Polpis Road

Polpis Road connects various points of interest with Siasconset and Nantucket. It is located in a rural area and is generally rolling with a speed limit of 35 to 40 mph. The pavement is in very poor condition in most areas with the exception of an area of recent overlay. There is no signage to help guide bicyclists toward their desired locations. The two major attractions along Polpis Road are Windswept Cranberry Bog and Altar Rock.

Quidnet Road

Quidnet Road is approximately 1.3 miles long and connects Polpis Road with Squam Road in the Quidnet village.

Wauwinet Road

Wauwinet Road connects Polpis Road with the community of Wauwinet. This roadway is approximately 2.3 miles long with no posted speed limit. The pavement of this roadway is in very poor condition with a cross section of 16 feet with 8-foot travel lanes in each direction and no shoulders. Wauwinet is the gateway to the Coatue Wildlife Refuge and the Haulover, Coskata-Coatue Wildlife Refuge and the Nantucket National Wildlife Refuge. These refuge areas allow four-wheel-drive vehicles to access the beach at this location. There is a check-in area where a bicycle rack is located. This is a popular area for bicyclists during the peak season. During field observations the bicycle rack was near capacity.

Tom Nevers Road

Tom Nevers Road intersects Milestone Road in the southeastern part of the island. Tom Nevers Road is approximately 1.4 miles long and provides access to residential and recreation areas.

Hummock Pond Road

Hummock Pond Road connects the western outskirts of Nantucket town to Cisco Beach. The designated bicycle route begins towards the western end of Main Street, at the Soldiers' and Sailors' Monument, and follows Milk Street and then Hummock Pond Road to the beach. This roadway is approximately 3.8 miles long with a posted speed limit of 30 mph. The pavement of this roadway is in good condition with a cross section of 20 feet with 10-foot travel lanes in each direction and no shoulders. The roadway is located on rolling terrain and in a predominantly rural area. The roadway terminates at Cisco Beach where there are no parking facilities for bicycles. The lack of bicycle parking facilities at this location may discourage bicyclists from using this beach. Bicycle route signs are present at the beginning of the route in town; however, the signs are not used consistently and do not have destinations posted on them and are therefore ineffective.

Fairgrounds Road

Fairgrounds Road connects Surfside Road and the Surfside Bicycle Path to Rotary Circle and Old South Road just south of Milestone Road. This roadway is approximately one mile long with a posted speed limit of 30 mph. The pavement of this roadway is in good condition with a cross section of 20 feet with 10-foot travel lanes in each direction and no shoulders. Bicycle route signage is only provided at the intersection of this roadway and Old South Road.

Old South Road

Old South Road connects Rotary Circle with Nantucket Memorial Airport. This roadway is approximately two miles long with a posted speed limit of 45 mph. The pavement of this roadway is in good condition with a cross section of 22 feet with 11-foot travel lanes in each direction and no shoulders.

Cliff Road

This roadway connects the northern edge of the town of Nantucket with the Cliff Road Bicycle Path. It is approximately 1.1 miles from the intersection of Cliff Road and North Water Street to the beginning of the Cliff Road Bicycle Path. The posted speed limit on this section of Cliff Road is 30 mph. The pavement of this roadway is in good condition with a cross section of 20 feet with 10-foot travel lanes in each direction and no shoulders.

Summary

A summary of bicycle paths and routes is provided in Tables 1 and 2.

Table 1 **SUMMARY OF EXISTING BICYCLE PATHS**

Name	Limits	Length (miles)	Width (feet)
Milestone	Rotary Circle (Nantucket Town) Main Street/Morey Lane (Siasconset)	6.4	8
Nobadeer Farm	Milestone Road Miniature Golf Course	0.25	9
Surfside	Surfside Road/First Way (Nantucket Town) Surfside Beach	2.5	8
Bartlett	Surfside Road Somerset Road	0.23, 0.38	8
Madaket	Caton Circle (Nantucket Town) Madaket Beach	5.6	8
Cliff	Crooked Lane Madaket Road	1.2	9

Table 2

SUMMARY OF BICYCLE ROUTES (SHARED ROADWAYS) OUTSIDE NANTUCKET TOWN

Road Name	Limits	Length (miles)	Width* (feet)
Main Street (Siasconset)	Milestone Road to Shell Street	0.5	19
Sankaty Avenue/Shell Street (Siasconset)	Main Street to Polpis Road	1.2	20
Polpis Road	Sankaty Avenue to Milestone Road	7.4	22
Wauwinet Road	Polpis Road to Northern Terminus	2.3	16
Quidnet Road	Polpis Road to Squam Road	1.3	17
Tom Nevers Road	Milestone Road to Old Tom Nevers Rd	1.4	24
Milk Street	Main Street to Hummock Pond Road	0.8	20
Hummock Pond Road	Milk Street to Cisco Beach	3.8	20
Old South Road	Rotary Circle to Nobadeer Road	1.7	20
Fairgrounds Road	Surfside Road to Old South Road	0.9	20
Cliff Road	North Water Street to Crooked Lane	1.1	22

* Total roadway width including shoulders.

ANALYSIS OF TRAVEL PATTERNS AND ACCIDENTS

Traffic volume data were analyzed to indicate travel patterns, as well as the relative usage of streets. The desired travel patterns of pedestrians and bicyclists are similar to those of motorists as they seek the most direct routes between locations. The amount of vehicular traffic on a street is a factor to be considered when evaluating whether a street should be designated as a bicycle route or whether a separated bicycle path or bicycle lanes should be constructed. Accident history is also an important consideration when planning new bicycle and pedestrian facilities.

NANTUCKET TOWN

Traffic Volumes

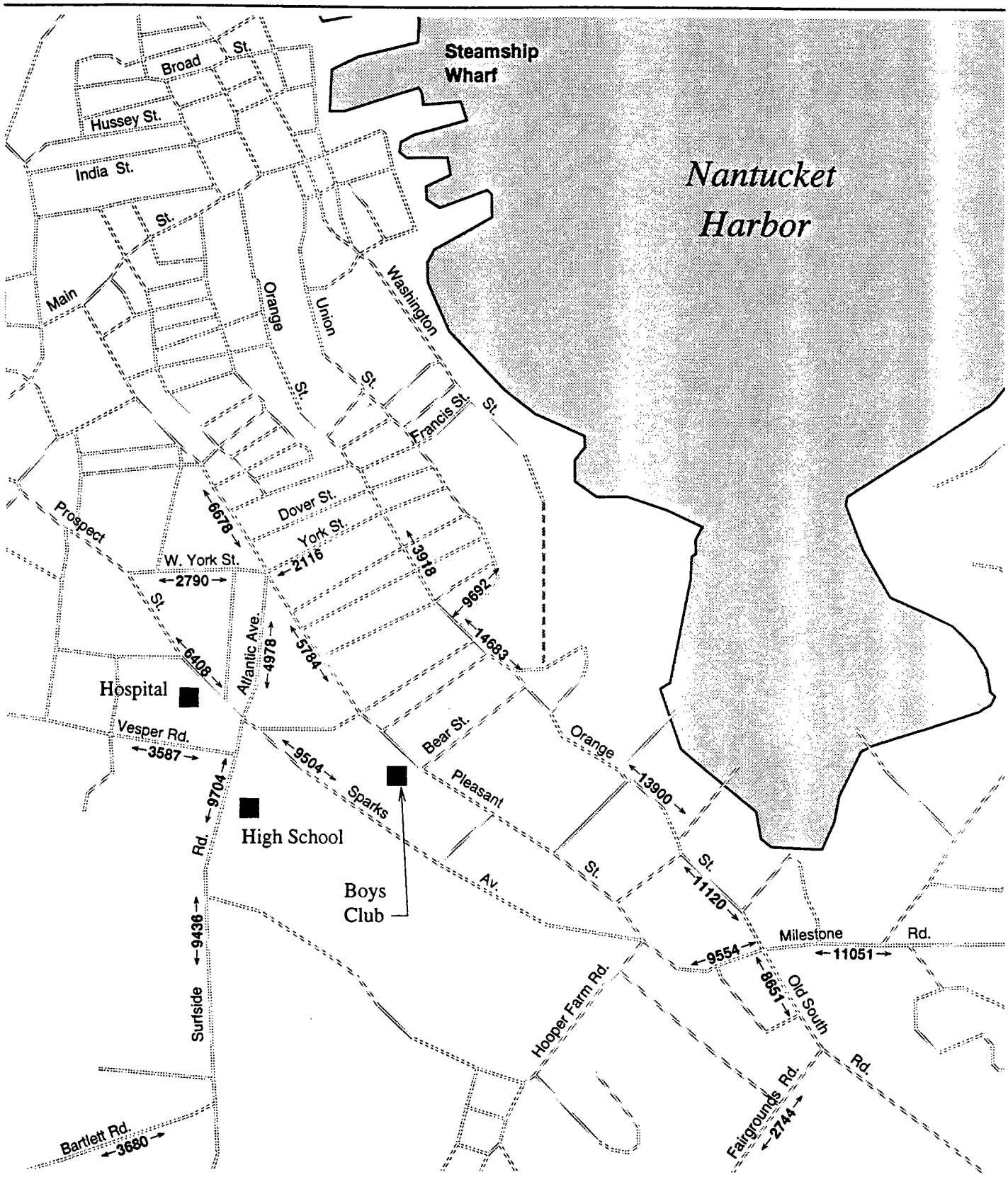
Between mid-June and the end of August 1990, the NP&EDC conducted an extensive traffic counting program. Automatic traffic recorder (ATR) counts were conducted at 35 locations for a period of four to eight days at each location. These counts have been used to determine summer average daily (ADT) traffic levels. The summer represents the season with highest levels of vehicular and bicycle traffic as well as the highest levels of ozone-related pollution.

There are about eight land gateways into Nantucket town. The heaviest traffic volumes occur on the approaches from the south and the southeast. Summer traffic on Milestone Road at the Rotary is 11,051 vehicles per day (vpd) and 8,651 vpd on Old South Road at the Rotary. The combined volume on Milestone and Old South roads is almost 20,000 vpd.

The next highest traffic volumes approaching town occur on Surfside Road near the high school where summer traffic is 9,704 vpd. The impact of traffic entering and exiting town from Surfside Road and the Rotary is discussed in detail later in this section.

Summer traffic to/from town from the west is significantly less with 3,000 to 4,000 vpd per road. Summer traffic is 4,130 vehicles on Hummock Pond Road southwest of town and 4,392 on Madaket Road near Main Street. Just north of downtown, Cliff Road summer traffic is 3,564 vpd and North Beach Street is 2,923 vpd.

Traffic volumes in the southeastern part of Nantucket town were analyzed to better define the traffic patterns to and from downtown from this direction (see



Vanasse Hangen Brustlin, Inc.

Summer Average
Daily Traffic (1990)

Figure 1

0 400 800 Feet

3995TRAF

Figure 1). These counts clearly show that by far the busiest route into downtown is from the Rotary along lower Orange Street and Union Street. In the summer or high season, traffic averages nearly 15,000 vpd on lower Orange Street and about 10,000 vpd on Union Street just north of Orange. Not only is this the busiest vehicular travel route on the island, it is also the island's major truck route.

Pleasant Street with summer traffic of 5,784 vpd and Sparks Avenue with summer traffic of 9,504 vpd are alternates to lower Orange Street for vehicles approaching downtown from the Rotary. Traffic from Surfside Road headed downtown continues on Atlantic Avenue where summer traffic is 4,978 vpd. Atlantic Avenue, Pleasant Street, and York Street intersect at Five Corners, a five-way stop controlled intersection. Continuing into town, Pleasant Street traffic in the summer is 6,678 vpd and York Street traffic is 2,116 vpd.

Accident Analysis

In-town bicycle accidents reported to the Nantucket Police Department in the seven-year period from 1987 to 1993 are summarized by street in Table 3. Town streets are ranked by the total number of accidents occurring in the seven-year period. The accident data obtained from the Police Department list the date of each accident and the street where the accident occurred. More detailed information on accident location and the causes of accidents was not provided.

Orange Street had the most bicycle-related accidents during this period (30) followed by Union Street with 13 accidents. Twenty-seven (27) percent of all reported bicycle accidents in town occurred on Orange and Union streets.

Main Street, which is cobbled through most of downtown, had 11 reported bicycle accidents. Pleasant and South Beach streets each had 10 accidents during the seven-year period. Francis Street, which is only one-block long, had five accidents during this period. The bicycle route from downtown to the Rotary recommended by Young's Bicycle Shop includes Washington, Francis, Union, and Orange streets. The combined number of bicycle accidents on these four streets is 57, which represents 36 percent of all reported in-town bicycle accidents.

Vehicular accident data for 1991 were obtained from the Massachusetts Highway Department (MHD). MHD's accident data summary lists 154 total accidents on Nantucket in 1991. Of these accidents, 55 (36 percent) were classified as injury accidents. These data were examined primarily to discern accident patterns on roads leading to downtown from the Rotary, where traffic volumes and bicycle accident levels are higher than other parts of town.

Fourteen (14) vehicular accidents in 1991 occurred on Orange Street, and half of these accidents involved personal injuries. Nine persons were reported injured. Three of the injury accidents involved bicyclists, with two accidents occurring at the intersection of Dover Street and Orange Street and one at the intersection Beaver Street and Orange Street.

Four vehicular accidents occurred on Union Street in 1991 according to MHD records. Two of these accidents were at the intersection with Main Street, and one of these involved a pedestrian injury. MHD's records show one accident at

the corner of Francis and Union streets and one other accident on Washington Street. Neither of these involved injuries.

Pleasant Street and Sparks Avenue each had about half the number of accidents in 1991 as Orange Street based on MHD records. Two of six accidents on Pleasant Street occurred at the intersection with Williams Lane. One accident was reported at the intersection of Pleasant and Dover streets, and this involved an injury to a bicyclist. Trucks were involved in five of six accidents on Pleasant Street. The injury rate on Pleasant Street was 33 percent.

Eight accidents reported by MHD in 1991 were on Sparks Avenue. Four of these accidents occurred at the intersection with Hooper Farm Road, two at the intersection with Atlantic, and one at the Rotary. One injury accident occurred at each of these intersections.

Table 3

BICYCLE ACCIDENTS REPORTED TO NANTUCKET POLICE DEPARTMENT 1987-1993: NANTUCKET TOWN

Street	1987	1988	1989	1990	1991	1992	1993	Total
Orange Street	3	3	5	7	3	3	6	30
Union Street	2	2	0	5	1	2	1	13
Main Street	1	0	3	2	1	3	1	11
Pleasant Street	2	1	1	0	1	3	2	10
South Beach Street	5	1	1	0	1	1	1	10
Washington Street	3	2	1	0	1	0	2	9
Atlantic Avenue	1	4	2	1	0	0	0	8
Sparks Avenue	2	1	1	2	1	1	0	8
South Water Street	5	1	1	0	0	0	0	7
Francis Street	0	1	1	1	0	0	2	5
Easy Street	0	0	1	1	1	0	1	4
Centre Street	0	0	1	0	0	1	2	4
Prospect Street	1	0	1	0	0	0	1	3
Easton Street	2	0	0	1	0	0	0	3
Fair Street	0	0	1	0	2	0	0	3
Broad Street	1	1	0	0	0	0	0	2
Cherry Street	0	1	0	0	1	0	0	2
Lily Street	0	0	1	1	0	0	0	2
Quaker Road	0	0	1	0	0	1	0	2
Milk Street	0	0	0	0	0	2	0	2
Steamboat Wharf	0	2	0	0	0	0	0	2
Other Streets*	0	4	5	2	0	3	3	17
TOTAL	28	24	27	23	13	20	22	157

* Streets with only one bicycle accident in last seven years: W. Chester Road, Hulbert Avenue, North Beach Street, Vestal Street, North Liberty Street, Joy Street, Bathing Beach Road, Straight Wharf, Vesper Lane, New Whale Street, Federal Street, India Street, Harbor View Way, Hussey Street, Gardner Street, Dover Street, and Back Street.

OUT-OF-TOWN

Traffic Volumes

Out of town traffic volume data provided by the NP&EDC were analyzed to determine origin and destination travel patterns throughout Nantucket Island. Table 4 lists summer traffic volumes for major out-of-town roadways.

The heaviest traveled roadway outside of town is Surfside Road with a summer traffic of 9,440 vpd. This heavy volume occurs because this roadway is the only major collector for the most densely populated area on the Island. Surfside Road is also the main access road to Surfside Beach, a major attraction. This travel

pattern is mimicked on Madaket Road, Milestone Road and Hummock Pond Road, with their major attractions being Madaket Beach, the Town of Siasconset and Cisco Beach, respectively.

The second heaviest traveled roadway, Old South Road, has summer traffic of 8,650 vpd. This roadway is a major collector servicing a populated area and provides a direct connection from the Rotary to the Nantucket Memorial Airport via Macy's Lane. Macy's Lane also has one of the highest summer volumes, 4,450 vpd, because this roadway is the access road to the airport.

Polpis Road is also one of the most traveled roadways (summer traffic of 5,370 vpd) because it is primarily the only roadway servicing the northeast region of Nantucket Island. This roadway is considered a collector for the entire northeastern region of the Island.

Some of the roadways listed in Table 4 are primarily residential collectors serving their surrounding neighborhoods, such as Bartlett Road and Tom Nevers Road. Other roadways act as both collectors and connectors such as Vesper Lane and Fairgrounds Road. Vesper Lane connects Hummock Pond Road and Atlantic Avenue (roadways with high summer traffic levels) and also serves adjacent residencies as a collector road. This travel pattern is also obvious on Fairgrounds Road which connects Surfside Road and Old South Road.

Table 4

OUT-OF-TOWN SUMMER AVERAGE DAILY TRAFFIC VOLUMES

Street	Summer Traffic
Surfside Road	9,440
Old South Road	8,650
Polpis Road	5,370
Macy's Lane	4,450
Madaket Road	4,390
Milestone Road	4,300
Hummock Pond Road	4,130
Bartlett Road	3,670
Vesper Lane	3,590
Cliff Road	3,260
Fairgrounds Road	2,740
Wauwinet Road	2,070
Tom Nevers Road	1,590
Eel Point Road	960

Accidents

Out-of-town bicycle accidents reported to the Nantucket Police Department in the seven-year period from 1987 to 1993 are summarized in Table 5. Out-of-town roadways are ranked by the total number of accidents occurring in the seven-year history. The data obtained from the Police Department does not indicate whether the bicycle accidents listed occurred on a bicycle path adjacent to the street or on the street itself, where this condition exists. Furthermore, the data do not indicate accident location making it difficult to draw specific conclusions in regards to the operating conditions of the existing bicycle paths on Nantucket Island.

However, bicycle travel patterns can be formulated by evaluating the accident data presented in Table 5. It can be assumed that accidents on bicycle paths are in part related to path user volumes. Milestone Road, Madaket Road and Surfside Road have the highest number of recorded bicycle accidents on the Island in part because of extensive use patterns of the adjacent bicycle paths. It should be noted that the Madaket bicycle facility was not constructed until 1989, reducing the number of potential accidents on this facility to 21 for a five-year history.

Polpis Road has the highest number of bicycle accidents for an out-of-town roadway that does have an adjacent bicycle path. This is most likely because of poor sight distances, poor pavement conditions and high volumes of bicyclists using this roadway as a bicycle route loop coupled with the Milestone bicycle path. This is an area of particular concern because casual bicyclists use Polpis Road as a return route from the Town of Siasconset without prior warning to the poor roadway characteristics and conditions described above. However, this situation will be alleviated with the construction of the Polpis Bicycle Path.

Table 5

BICYCLE ACCIDENTS REPORTED TO NANTUCKET POLICE DEPARTMENT 1987-1993: OUT-OF-TOWN

Street	1987	1988	1989	1990	1991	1992	1993	Total
Milestone Road*	4	6	13	6	1	9	2	41
Madaket Road*	6	4	6	4	5	1	5	31
Surfside Road*	2	7	8	6	2	1	3	29
Polpis Road	1	7	2	0	1	2	2	15
Hummock Pond Road	3	4	0	2	0	1	0	10
Cliff Road	1	0	2	2	0	2	1	8
Old South Road	2	0	2	1	0	0	1	6
Fairgrounds Road	2	0	1	1	0	1	0	5
Bartlett Road	0	0	0	1	0	1	2	4
Wauwinet Road	0	0	1	1	0	0	1	3
Eel Point Road	1	1	1	0	0	0	0	3
Tom Nevers Road	0	0	1	0	0	1	0	2
Sankaty Road	0	0	0	0	0	1	0	1
TOTAL	22	29	37	24	9	20	17	158

* Data from the Nantucket Police Department do not indicate whether these bicycle accidents occurred in the road or on the separate bicycle paths. Note: the Madaket Bicycle Facility was not completed until 1989.

ANALYSIS OF BICYCLING AND WALKING SURVEY

A Bicycling and Walking Survey was prepared as part of the public participation component of this plan. A copy of the survey instrument is contained in the appendix. In early July 1994, the survey was mailed to all 1,700 box holders at the main post office in Nantucket. Surveys were also distributed at public meetings on June 27 and August 1, 1994. The purpose of this survey was to determine bicycling and walking patterns among residents, problem locations, and preferences for bicycle and pedestrian improvements. Some of the key findings of the survey are summarized below.

Of the 213 surveys that were returned, about 75 percent were completed by year-round residents and 14 percent by summer residents. Over 50 percent of respondents were over 45 years of age. Most respondents (86 percent) always have access to an automobile.

Of those who bicycle, 72 percent bicycle to the beach or for other recreational or sightseeing trips. About 17 percent bicycle to work on the island. Seventy-five percent of respondents said they walk for recreation or sightseeing trips but the component of beach trips is half that of bicycling. About 36 percent walk for shopping trips or to restaurants, and 16 percent walk to work.

Respondents were asked to rate seven categories of bicycle and pedestrian facilities on Nantucket. Facilities with the largest number of "adequate" responses are information centers and bicycle route maps. Walking paths/trails, bicycle route designation signs, and bicycle parking facilities had the greatest number of "inadequate" ratings.

Forty percent of respondents said that existing sidewalks are <u>not</u> adequately maintained and in good condition, and about 50 percent said that new sidewalks are needed at various locations on the island.

Separate bicycle paths are by far the preferred bicycle facility among those who completed the survey (153 responses). Thirteen respondents said they preferred a bicycle lane, and only one expressed a preference for bicycling in a wide traffic lane. When asked what additional bicycle paths or lanes the town should construct, 72 persons suggested Polpis Road as their first priority. Fifteen suggested Hummock Pond Road, and 11 suggested Old South Road.

NANTUCKET BICYCLING AND WALKING SURVEY

Resident/Visitor status

159	74.6%	Year round resident
30	14.1%	Summer resident
9	4.2%	Visitor for more than one week
15	7.0%	Visitor for less than one week
0	0.0%	No response
213	100.0%	

Age group

3	1.4%	Under 16
19	8.9%	16-29
84	39.4%	30-44
59	27.7%	45-59
48	22.5%	60+
0	0.0%	No response
213	100.0%	

Access to an automobile

181	85.8%	Always
19	9.0%	Sometimes
11	5.2%	Never
211	100.0%	

Use bicycle:

37	17.4%	To go to work
6	2.8%	To go to school
32	15.0%	To shop or dine out
48	22.5%	To go to the beach
105	49.3%	For recreation/sightseeing

Walk:

34	16.0%	To work
2	0.9%	To school
76	35.7%	To shop or dine out
24	11.3%	To the beach
136	63.8%	For recreation/sightseeing

Rating of existing bicycle/pedestrian facilities

	Adequate	Percent	Inadequate	Percent	No response	Percent
Bicycle parking facilities	79	37.1%	62	29.1%	72	33.8%
Bicycle route designation signs	71	33.3%	58	27.2%	84	39.4%
Directional signs	78	36.6%	49	23.0%	86	40.4%
Rest areas/water stations	79	37.1%	51	23.9%	83	39.0%
Bicycle route maps	89	41.8%	20	9.4%	104	48.8%
Information centers	92	43.2%	26	12.2%	95	44.6%
Walking paths/trails	69	32.4%	63	29.6%	81	38.0%

Are existing sidewalks adequately maintained and in good condition?

Yes	Percent	No	Percent	No response	Percent
108	50.7%	86	40.4%	19	8.9%

Are new sidewalks needed on the island?

Yes	Percent	No	Percent	No response	Percent
108	50.7%	57	26.8%	48	22.5%

What additional bicycle paths or bicycle lanes should the town construct?

(First choice)

Polpis Road	72
Hummock Pond Road	15
Old South Road	11
Orange Street	7
Fairgrounds Road	6
Washington Street	4
Cliff Road	4
Downtown	4
Prospect Street	3
Main Street	2
	128

Preferred facility for bicycling in rural areas on Nantucket:

Separate bicycle path	153	72.5%
Paved shoulder (bicycle lane)	13	6.2%
Wide traffic lane	1	0.5%
No response	44	20.9%
	211	100.0%

NANTUCKET TOWN

In-Town Bikeway System

The most pressing issue related to bicycle transportation in Nantucket town is the lack of an integrated system of bicycle routes connecting the town center with the outskirts of town where the island's major bicycle paths begin. The transition zone on the outskirts of town, which lacks an officially marked bicycle route system, represents the greatest conflicts between bicyclists, pedestrians, and vehicular traffic on the island.

In a study conducted in 1977, a recommendation was made to:

> . . . establish a marked Class III bike route serving the central business district which consists of a simple loop with connections to Jetties Beach, Madaket, Cisco, Surfside, and Siasconset/Polpis/Airport.[4]

To date the Town has not established such a system. This plan examines three alternative in-town bikeway plans, each of which would fulfill the basic requirements outlined above. Each alternative builds on the previous ones, addressing problem locations and other areas of concern. The alternatives are evaluated with respect to:

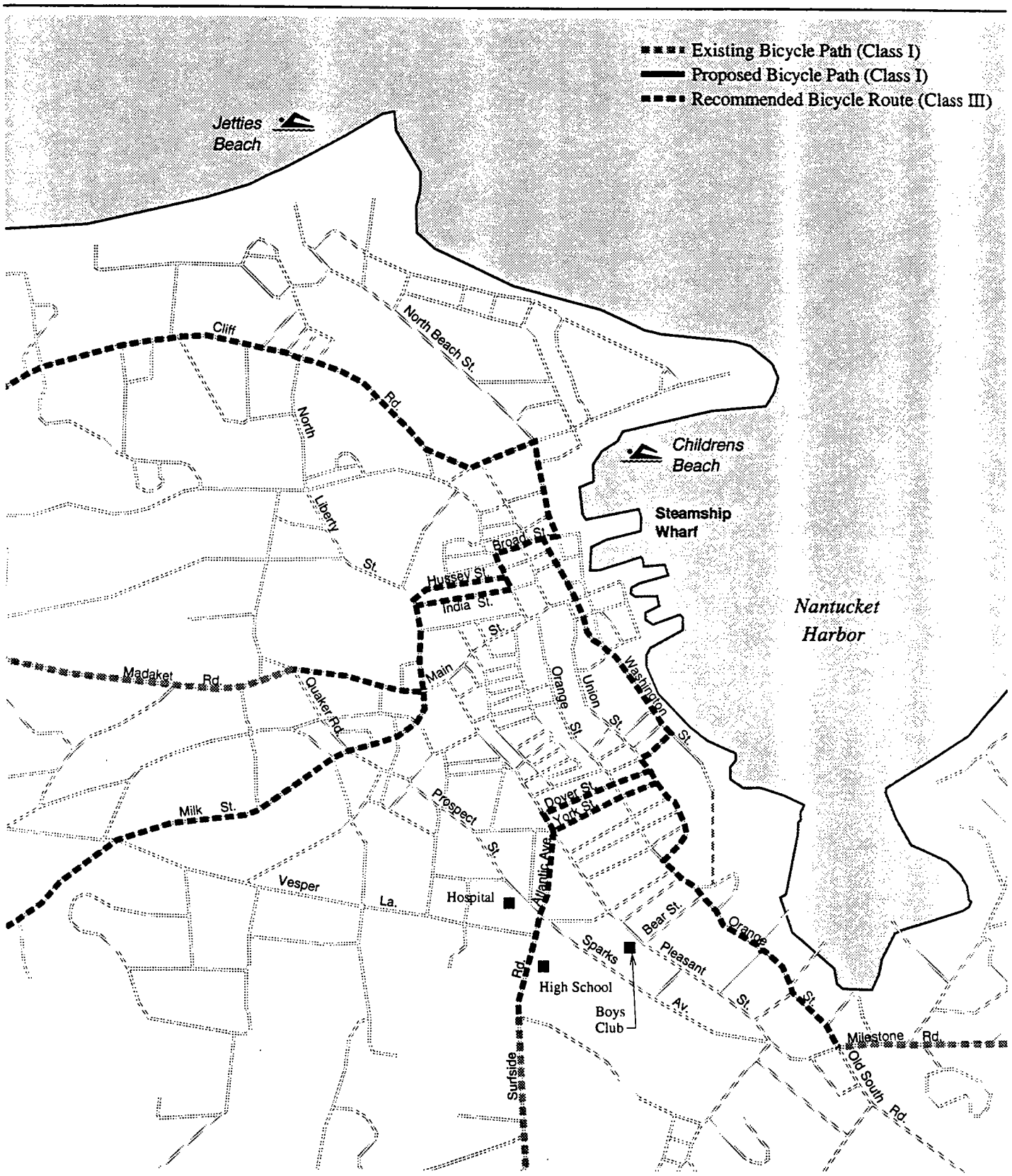
- directness and safety of routes/paths
- connections to major destinations
- simplicity of bikeway plan

Alternative 1

The first alternative bikeway plan is the unofficial bicycle route system published by Young's Bicycle Shop (see Figure 2). Young's bike map is the most popular of the town bike maps published by island bicycle rental shops, displaying color-coded routes to five locations: Madaket, Cisco, Surfside, Siasconset and Polpis.

The route to Cisco and Madaket begins on lower Broad Street and follows Broad, Centre, Hussey (out), India (in), and Gardner Streets to Main Street at the

4/ *Nantucket Central Business District Circulation and Parking Study, 1977.*



Vanasse Hangen Brustlin, Inc.

In-Town Bikeway Plan
Alternative 1

Figure 2

3995A1

Soldiers and Sailors Monument. At this point the Madaket route branches to the west on Main Street and the Cisco route continues on Milk Street to Hummock Pond Road.

Young's route to Cliff Road also begins on lower Broad Street and follows South Beach and Easton Streets to Cliff Road. No specific route to Jetties Beach is designated on Young's map.

Bicyclists traveling southeastward from the town center are directed to South Water and Washington Streets to reach Surfside, Siasconset, and Polpis. This route branches on Union Street with access to Surfside along York Street (out), Dover Street (in), and Atlantic Avenue. The route to Siasconset and Polpis continues on Union Street to lower Orange Street, which it follows to the Rotary.

Young's recommended in-town bicycle routes connecting the town center to points west generally are direct and along streets with lower traffic volumes (summer traffic less than 4,500 vpd). The narrowest streets are Gardner (14 to 18 feet wide) and Hussey (14 feet wide). Hussey Street is one-way (out) and India Street is one-way (in). Parking is allowed on many parts of these streets, including parking over the curb on the sidewalk. Only one bicycle accident was reported on each of these streets during the last seven years. Hussey Street and India Street function well for inbound and outbound bicycle traffic. Motor vehicles follow behind bicyclists and conflicts are minimized. Improvements to Gardner Street should be evaluated including removal of parking where present and initiation of a truck ban.

Young's in-town bicycle route from the town center to the south follows along the busiest streets on the island. The route to Siasconset is along lower Union Street and lower Orange Street, which have summer traffic in the 10,000 to 14,000 vpd range. This is also a major truck route, and accident levels on the two streets are the highest in town. Points of conflict include the intersections of Washington Street and Francis Street, Francis Street and Union Street, and Union Street and Orange Street. Tight corners and high traffic volumes make these intersections difficult for both motorists and bicyclists. Poor and incomplete sidewalks present problems for those walking.

The route to Surfside diverts from the Siasconset route just south of the intersection of Union and Francis Streets. Dover (in) and York (out) Streets are the designated bicycle routes between Union Street and Five Corners. From there the bicycle route is along Atlantic Avenue. Because they are one-way streets, Dover Street and York Street function well as bicycle routes. These streets are 14 feet wide with the exception of East York Street which is only 11 feet wide. Summer traffic volumes range from 2,116 vpd on York Street to 4,978 vpd on Atlantic Avenue. Points of conflict include the intersection of Dover and Union Streets, Five Corners, and the intersection of Surfside Road, Atlantic Avenue and Sparks Avenue.

Alternative 2

Alternative 2 was designed to improve key aspects of Alternative 1, in particular to:

- Improve the safety of bicyclists crossing Surfside Road near the High School between the existing bicycle path and the vehicular travel lanes (shared roadway).
- Add a bicycle route to Jetties Beach.
- Simplify the bikeway system by combining Cliff Road bicycle route with the Madaket/Cisco route between lower Broad and Gardner Streets.
- Redesign Siasconset route to avoid high traffic conflict areas along lower Union and Orange Streets.

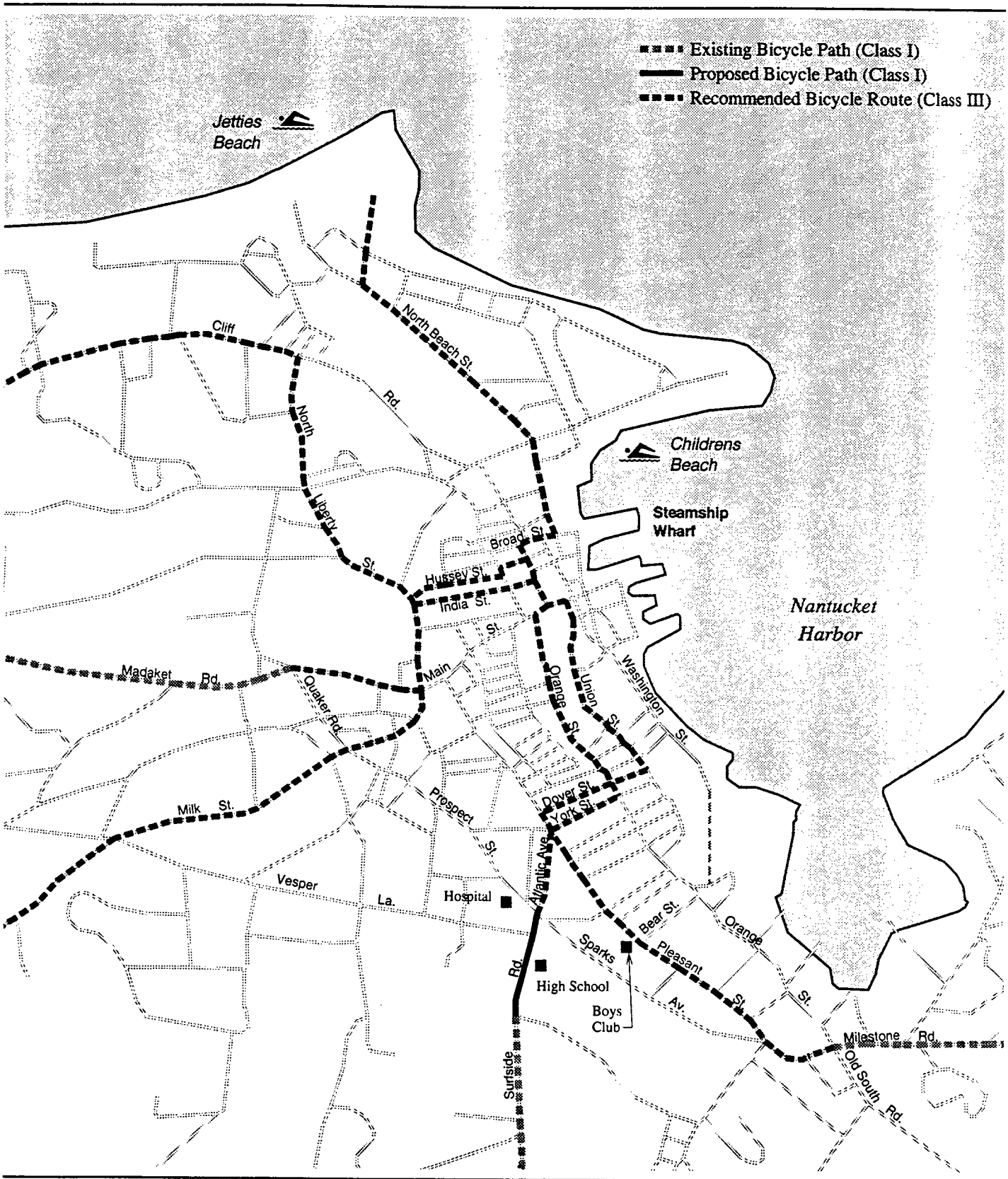
As shown on Figure 3, this alternative includes a short extension of the Surfside bicycle path from First Way to Sparks Avenue. The existing 6-foot wide asphalt path on the western side of Surfside Road would be widened to 8 feet between First Way and a point opposite the driveways to the High School. Between the driveways, a crosswalk would be installed. From the crosswalk north to Sparks Avenue, the sidewalk on the east side of Surfside Road would be widened from 3 to 8 feet. This project would improve bicycle operations as the Surfside route transitions from a separate path to a shared roadway.

Alternative 2 includes a designated bicycle route from lower Broad Street to Jetties Beach via South Beach Street, North Beach Street, and Bathing Beach Road. North and South Beach Street are both 20 feet wide, and Bathing Beach Road is 24 feet wide. Summer traffic on North Beach Street is less than 3,000 vpd. Bathing Beach Road and North Beach Street each had only one reported bicycle accident in the last seven years while 10 occurred on South Beach Street.

The bicycle route to Cliff Road has been combined with the route to Madaket and Cisco along Broad, Hussey, and India Streets. With this change, bicyclists bound for the Madaket and Cliff bicycle paths and the Cisco bicycle route would all leave downtown along the same route. Otherwise, there would be three routes converging on the town center for the west and north. North Liberty Street provides the connection between Gardner Street and Cliff Road in Alternative 2. North Liberty Street is 16 feet wide and traffic volumes are relatively low.

The most significant difference between Alternatives 1 and 2 lies in the route between the town center and the Rotary. Union Street south of Dover Street and lower Orange Street, which are recommended bicycle routes in Alternative 1 (Young's), are not so designated in Alternative 2. Instead, bicyclists traveling between the town center and points south and east would be directed along the one-way sections of Union and Orange Streets. Inbound bicyclists would follow Dover Street and Union Street to Main Street. Outbound bicyclists would use Orange Street and York Street to Five Corners.

At Five Corners, the route would divide with the Surfside route heading south on Atlantic Avenue (same as Alternative 1) and the Siasconset route following Pleasant Street to Sparks Avenue and then Sparks Avenue to the Rotary.



Vanasse Hangen Brustlin, Inc.

In-Town Bikeway Plan
Alternative 2

Figure 3

0 700 1400 Feet

3995A2

Crosswalks would be installed at the Rotary across Old South Road and Sparks Avenue. Bicycle crossing signs would be installed in advance of potential conflict locations including crosswalks and intersections where bicyclists turn across traffic (e.g., Dover Street at Orange Street). The Surfside and Siasconset bicycle routes recommended in Alternative 2 are considered preferable to those in Alternative 1, primarily because of lower traffic volumes. Traffic on Pleasant Street is half that of lower Orange Street, though the route is less direct. The one-way sections of Union and Orange Streets provide less potential conflicts between bicyclists and motorists since they are both traveling in the same direction and there is no oncoming traffic.

In Alternative 2, the crossing point of all in-town bicycle routes is Federal Street between India and Chestnut Streets. Federal Street is 32 feet wide with parallel parking on both sides. The Visitor Information Center is conveniently located on Federal Street at Chestnut Street. Bicyclists traveling to and from the south would travel on one block of the cobbled section of Main Street and a short cobbled section of Federal Street near Main Street.

Alternative 3

While Alternative 2 addresses more of the requirements of a comprehensive bikeway system than Alternative 1, a third alternative was developed which includes bicycle paths in town (see Figure 4). Bicycle paths, which are separated from adjacent roads, are suggested that would connect the Siasconset (Milestone) and Surfside bicycle paths to the Washington Street extension near the boat yard.

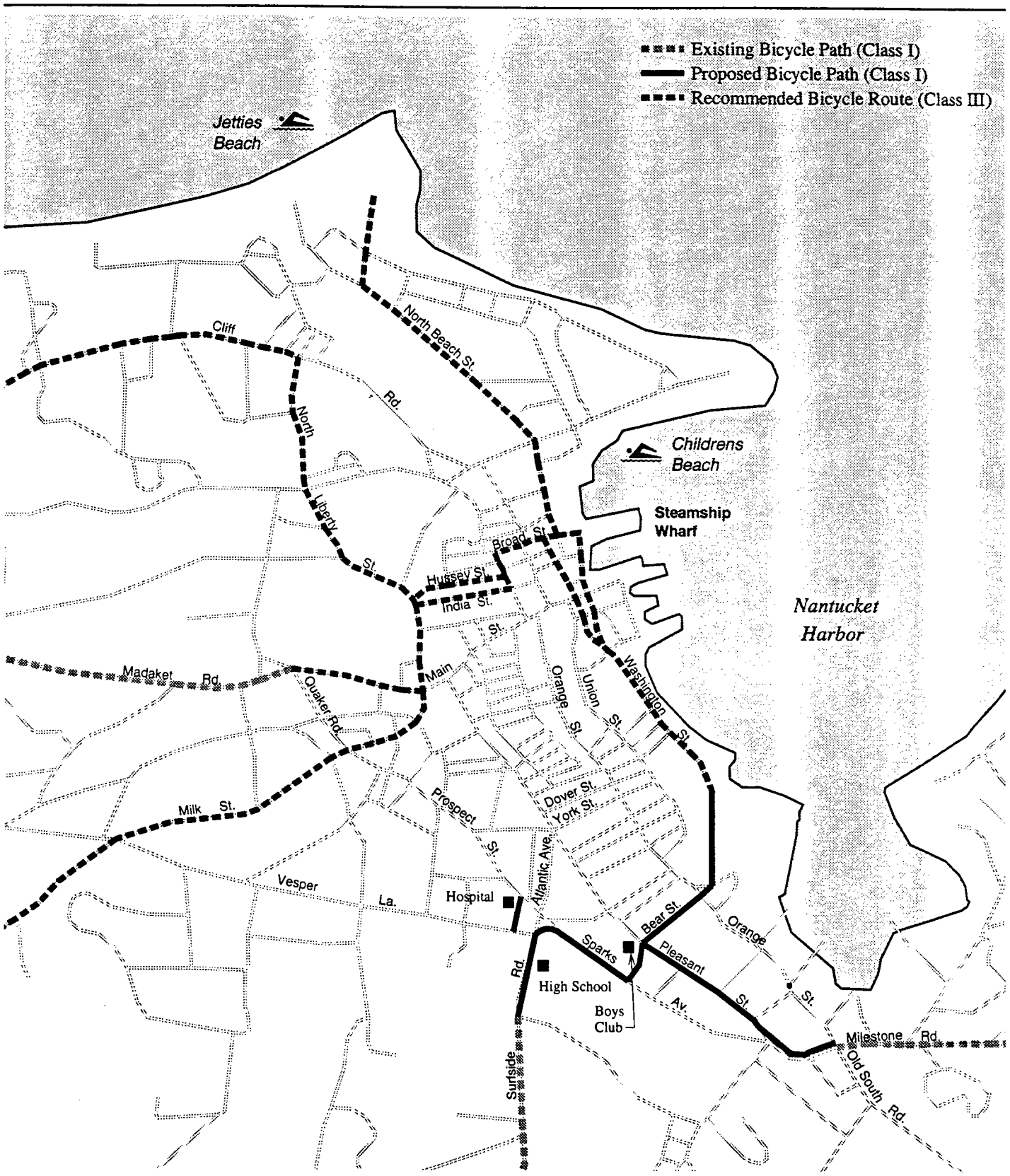
Two separate bicycle paths are proposed:

- Beginning at the Rotary, along the north side of Sparks Avenue and then along the southwestern side of Pleasant Street to Bear Street, and

- Beginning at the High School, along the east side of Surfside Road, along the southwest side of Sparks Avenue, along the eastern side of the Boys Club property, along Bear Street, and along the old railroad right of way to the Washington Street extension.

Under this alternative, bicycle access into the town center would be provided by a simple loop comprised of two major routes and one minor route, all beginning on lower Broad Street. Bicyclists bound for the south and southeast (Surfside, Milestone, Polpis, Airport) would follow a bicycle route on Washington Street and a bicycle path on the abandoned railroad right-of-way and then on a bicycle path along Bear Street to Pleasant Street. Bicyclists bound for the west (Madaket, Cliff, and Cisco) would use a second route on Broad, Centre, Hussey and India Streets to Gardner Street. The third bicycle route would connect lower Broad Street to Jetties Beach using North and South Beach Streets and Bathing Beach Road. The latter two routes are the same in Alternatives 2 and 3. These portions of the in-town bikeway plan consist of designated bicycle routes on relatively low traffic volume streets.

The improvements proposed in Alternative 3 are intended to minimize bicyclist exposure at conflict locations in the southeastern part of town. No bicycle route would be designated on any portion of Orange and Union Streets, where



Vanasse Hangen Brustlin, Inc.

In-Town Bikeway Plan
Alternative 3

Figure 4

0 700 1400 Feet

3995A3

27 percent of bicycle accidents occurred between 1987 and 1993. Bicyclists could travel entirely on bicycle paths from both the Rotary and the High School to Washington Street, instead of traveling in the road with vehicular traffic. This would minimize but not eliminate conflicts between motorists and bicyclists.

Under Alternatives 1 and 2, bicyclists traveling from Surfside must cross the intersection of Atlantic and Sparks Avenues, maneuver through Five Corners, and turn from Dover Street onto Union Street. Each of these three locations presents conflicts between bicyclists and motorists. Under Alternative 3, the same bicyclists would also cross vehicular travel lanes at three locations: the current school crossing on Sparks Avenue and at new crossings on Pleasant Street and Orange Street at both ends of Bear Street. The latter location represents the greatest potential conflict between crossing bicyclists and through traffic due to the shear volume of traffic on Orange Street. Summer traffic on Orange Street at this location is approximately 14,000 vpd.

If Alternative 3 were implemented, crosswalks would be installed on both ends of Bear Street across Pleasant and Orange Streets. Advance warning signs (bicycle/pedestrian crossing) would be installed 250 feet in advance of both new crosswalks. Vegetation would be trimmed along Orange Street near the crosswalk to provide adequate sight distance. A sidewalk improvement is proposed for this segment of Orange Street which should improve sight distance. The actual location of the Orange Street crosswalk would be determined during preliminary engineering for the design of the bicycle path. The location would be dependent on the linkage designed between the abandoned railroad berm and the Bear Street bicycle path. The crossing could be located at the Goose Pond Lane intersection, the Bear Street intersection, or between the two. A short section of bicycle path would be necessary along Orange Street if the railroad and Bear Street bicycle paths did not meet at Bear Street.

Bear Street is a one-block-long street with vehicular travel restricted to one direction: from Orange Street to Pleasant. The existing right-of-way appears sufficient to allow the reconstruction of the road to include one 12-foot-wide travel lane and an 8-foot-wide bicycle path with separation.

Alternative 3 also includes the construction of a short bicycle path along the eastern edge of the hospital property linking Prospect Street and Vesper Lane. Together with sidewalk improvements recommended for both streets, a pedestrian system would be constructed from the Rotary to Main Street, effectively linking the Milestone, Surfside, and Madaket bicycle paths. The High School becomes a major focal point for both pedestrian and bicyclist travel in Alternative 3.

Other Alternatives Considered

In addition to Alternatives 1 through 3, several related projects were considered. A bicycle path along Orange Street between the Rotary and the intersection with the proposed railroad bicycle path was considered. This would provide a more direct route between the Rotary and Washington Street downtown. Unfortunately, a bicycle path on this section of Orange Street does not appear feasible due to limited space. An 8-foot wide separated bicycle path on the northeastern side of the street would require the relocation of utility poles and could affect the use of adjacent commercial and residential properties, most

notably the Marine Lumber Complex. It is believed that the completion of a 4-foot wide sidewalk on the southwestern side of lower Orange Street is feasible. This sidewalk improvement is recommended.

While Alternative 3 includes a bicycle path on the section of Pleasant Street between Sparks Avenue and Bear street, this facility could instead be located on Sparks Avenue on the entire segment between the Rotary and Surfside Road. Currently, there is a 3-foot asphalt sidewalk on the southeastern side of Sparks Avenue in this location. Properties near the Rotary on this side of Sparks Avenue could be negatively affected by widening this facility to Class I standards. Putting the bicycle path along Pleasant Street is considered more feasible with less roadside obstructions and better access to commercial attractions. Bicyclists are more likely to use a path from the Rotary to town via Pleasant Street than Sparks Avenue.

Recommended In Town Bikeway Plan

Following public review of the draft Bicycle and Pedestrian Master Plan, the NP&EDC commissioners expressed support for Alternative 3 over Alternatives 1 and 2. However, the commissioners recommend that an engineering feasibility study be conducted to determine the specific impacts of the following:

- a bicycle path along Orange Street between the Rotary and the railroad right-of-way

- the bicycle path along Pleasant Street linking the Rotary to Bear Street, as described in Alternative 3

These two options provide a connection from the Milestone Bicycle Path to the railroad right-of-way, where a new bicycle path to downtown would be constructed. The first option (Orange Street Bicycle Path) is considered preferable if it is determined to be feasible.

It is also recommended that the engineering feasibility study evaluate the option contained in Alternative 3 to connect the Surfside Bicycle Path to the railroad right-of-way. This will include an examination of the impacts of constructing the path adjacent to the Boys Club and within the current Bear Street right-of-way as well as the requirements for safe crossings especially at Orange Street. The engineering evaluation of this crossing will include the construction of a four-foot-wide sidewalk on the west side of Orange Street, which is expected to improve sight distance.

Other options which may be evaluated and considered before selecting a final in town bikeway plan are:

- a bicycle path beginning at Surfside Road opposite Glen Meadows and connecting to the bicycle path proposed for the railroad right-of-way in Alternative 3 (see Appendix, comment of NP&EDC Commissioner Peter Matthews dated September 13, 1994).

- a bicycle lane or route on Francis and Union Streets connecting to Orange Street for outbound bicyclists and the use of the railroad right-of-way for bicyclists going into town.

Recommended Sidewalk Improvements

Sidewalk improvements on lower Sparks Avenue, lower Orange Street, Quaker Road, and Pleasant Street between Bear Street and Five Corners would complete important links in the pedestrian circulation system in the southeastern part of town (see Figure 5). Improvements are also recommended on Union Street (from Francis Street to Orange Street), Francis Street, and Washington Street, which is an important pedestrian route to downtown. North of Nantucket town center, the existing sidewalk along North Beach Street would be improved.

Downtown Pedestrian and Bicycle Facilities

As discussed in the Analysis of Existing Facilities section, Access Plus conducted an evaluation of pedestrian facilities in the downtown area. The deficiencies in the pedestrian system include the lack of wheel chair ramps at many downtown intersections, missing sidewalk links, and barriers that restrict the effective width of many sidewalks. The Town has acknowledged these problems and begun the process of prioritizing projects and applying for federal funds to assist in their implementation. Results of the Bicycling and Walking Survey will be used by NP&EDC to supplement the Access Plus findings.

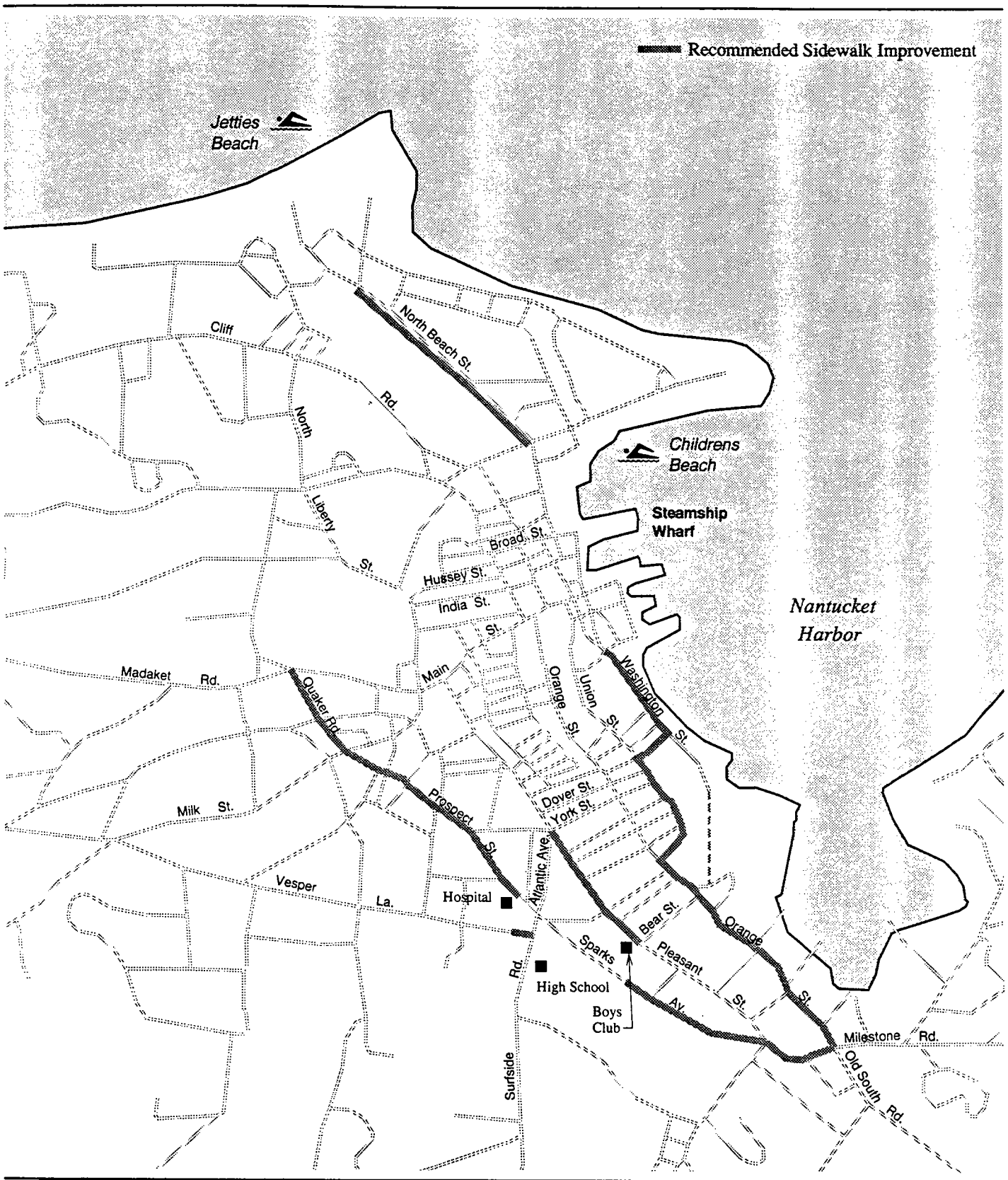
Two bicycle-related concerns in the downtown area are the lack of adequate bicycle parking facilities and information on bicycle routes. Bicycles are now parked along most downtown sidewalks; some are in bicycle racks and others chained to utility poles. Often the manner in which the bicycles are parked restricts the effective width of the sidewalks. Since downtown is predominately a pedestrian environment, it would be useful to have a central bicycle parking facility. In addition, bicycle route maps and other educational materials should be displayed at existing visitor information centers. Bicycle route directional signs, coordinated with the Historic District Commission, should be provided downtown leading bicycles to the routes out of town. This project is now being coordinated by Visitor Services.

OUT-OF-TOWN

The purpose of this section is to develop a long-range plan for the improvement of the existing bicycle transportation network on Nantucket Island. One of the Town's overall transportation goals, as stated in the *Goals and Objectives for Balanced Growth: A Broad Policy for the Island's Future,* is:

> To construct and maintain an Island-wide system of bicycle paths in accordance with the community's Bike Master Plan.

The above mentioned document lists bicycle paths to be constructed over the next 20 years. The first objective of this study was to evaluate the function of these potential bicycle paths within a comprehensive bicycle network and in light of adjacent street traffic and cross section, accident history, and observed vehicle speeds. The second objective was to identify the existing bicycle facility



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Recommended Sidewalk Improvements

Figure 5

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network throughout the Island, and determine the Island's origin and destination patterns by identifying major attraction points.

The existing bicycle facility network was then evaluated in a comprehensive manner to determine existing deficiencies, such as missing connections and lack of collectors. Once these deficiencies were identified and travel patterns were determined, a comprehensive network of bicycle facilities throughout the Island was developed and priorities were assigned for each of the proposed improvement projects. Short-term projects would be implemented during the first five years (1995-1999), mid-term projects in the second five years (2000-2004) and long-term projects in the third five years (2005-2009). Depending on funding availability, the plan could be implemented in a shorter or longer period than shown here (15 years). Proposed and existing bicycle facilites are shown on Figure 6.

South Central Island

The major deficiencies in the current bicycle transportation network in the South Central part of Nantucket Island are the lack of connectors between bicycle facilities, limited collector routes servicing residential areas, and the absence of a bicycle path connection to the Nantucket Memorial Airport. Another significant issue to be addressed in this plan is whether a major bicycle path should be constructed between the outskirts of Nantucket Town and Cisco Beach along Hummock Pond Road. Other potential bicycle paths are evaluated and priorities are recommended based on the ability of each path to meet plan objectives (continuity among routes and service to major residential areas and trip attractors).

Bicycle Route to Airport

One major objective for this portion of the Island should be to connect the Nantucket Memorial Airport with existing bicycle paths. This connection would provide safe access for both pedestrians and bicyclists to the airport while at the same time promoting the use of bicycles as an alternative transportation mode. Three alternatives are discussed below for this route.

The first alternative to connect existing bicycle facilities with the airport is to designate Old South Road and Macy's Lane as bicycle routes. Old South Road and Macy's Lane are used as the main access route to the airport and therefore have comparatively high summer traffic, 8,650 vpd and 4,450 vpd, respectively. In addition, high vehicle speeds were observed on these roadways. These roadway characteristics create a less than desirable atmosphere for bicyclists (unless the existing cross section and sight distance can be upgraded accordingly).

The second alternative for this connection is to construct a bicycle path from the Rotary to a terminus at Nantucket Memorial Airport along Old South Road and either Macy's Lane or Miller's way. Although a bicycle path along this route to the airport would be longer and costlier than other alternatives, it would provide access through a growing area and provide a good connection to Fairgrounds Road (see discussion under Old South Road).

Bicycle Facilities

- Existing Bicycle Path (Class I Facility)
- (S) Proposed Bicycle Path (Short Term)
- (M) Proposed Bicycle Path (Mid Term)
- (L) Proposed Bicycle Path (Long Term)
- Recommended Bicycle Route (Class III Facility)

Source:
Base Map provided by BikeMaps Massachusetts, Cambridge, MA

Vanasse Hangen Brustlin, Inc.

Figure 6

Proposed and Existing Bicycle Facilities

The third alternative bikeway plan to connect existing bicycle facilities with the airport is to extend the existing Nobadeer Farm bicycle path south to the intersection of Old South Road, and continue across Old South Road and onto airport property. At this point the path would continue through airport property on a route to be determined as part of the airport master planning process.

The Town of Nantucket has already secured some of the easements needed to construct the path along Nobadeer Farm Road. In addition, the airport has agreed to consider allowing the construction of a bicycle path on their property to allow a more direct route to the airport terminal from Nobadeer Farm Road. This would also avoid any potential takings or easement issues along Macy's Lane and provide a more direct connection from Nobadeer Farm Road. Therefore, connecting the Rotary with the Nantucket Memorial Airport by extending the existing Nobadeer Farm bicycle path is the recommended alternative. This alternative provides access to the airport along a bicycle path for the least cost. The construction of this bicycle facility should be implemented during the short-term plan.

Old South Road

Old South Road provides a direct connection between the Rotary and Macy's Lane which is the main access road to the Nantucket Memorial Airport. This is the busiest travel corridor from Nantucket Town to the Airport as evident by summer traffic for these two roadways of 8,650 vpd and 4,450 vpd, respectively. Old South Road is also a major collector road servicing one of the most populated areas of Nantucket. As previously discussed Old South Road's existing characteristics create a less than desirable atmosphere for bicyclists.

A bicycle path is recommended on the southern side of Old South Road connecting to Fairgrounds Bicycle Path (see below) on the west and the Nobadeer Farm Bicycle Path on the east. This facility will allow residents along Old South Road access to the island's bicycle path network, provide a direct route from Nantucket Town to the Nantucket Memorial Airport, and create a bicycle path loop system. The Old South Bicycle Path should be implemented in the mid-term plan.

Fairgrounds Road

Fairgrounds Road provides a direct connection between the Rotary and Surfside Road. Summer traffic on this roadway averages 2,740 vpd. The posted speed limit is 30 mph, and the road is currently signed as a bicycle route. It was recommended in the Long Range Transportation Plan that this bicycle facility be upgraded to a bicycle path. This facility will provide path users from the northeastern side of the Island direct access on a bicycle path to Surfside Beach via the Surfside Bicycle Path, avoiding the congested area surrounding Sparks Avenue and Atlantic Avenue. This bicycle facility should be located on the northwest side of Fairgrounds Road for an eventual connection to a bicycle path located on the southern side of Old South Road. The construction of the Fairgrounds Bicycle Path should be implemented during the short-term plan.

Bartlett Road/Somerset Lane

Bartlett Road and Somerset Lane provide a connection between the Surfside Bicycle Path and the Hummock Pond Bicycle Route. These roadways are both considered neighborhood feeders primarily servicing one of the most populated areas on Nantucket. Bartlett Road has an existing bicycle path on the southern side of the road between Appleton Road and Mizzenmast Road. The path discontinues for approximately 500 feet on the southern side of the roadway and then continues connecting with Somerset Lane. It is recommended that the existing six foot sidewalk from Surfside Road to Appleton Road be upgraded to an eight-foot-wide bicycle path. A bicycle path should also be constructed to connect the two existing pieces of the Bartlett Bicycle Path. In addition, Somerset Lane should be designated a bicycle route to complete the bicycle route connection to Hummock Pond Road. This bicycle route system will act as both a collector to the surrounding residences and a connector between the Surfside Bicycle Path and the Hummock Pond Bicycle Route. The completion of the Bartlett Road Bicycle Path should be implemented during the short-term plan.

Vesper Lane and Hummock Pond Road

Vesper Lane connects Atlantic Avenue and Surfside Road with Hummock Pond Road. Land use along Vesper Lane is primarily residential and open space. This roadway has a summer traffic of 3,590 vpd and a posted speed limit of 30 mph. It is recommended that Vesper Lane be designated a bicycle route in the short-term plan connecting the Hummock Pond Road and Milk Raod with the Surfside Bicycle Path. This route serves as a collector facility to Nantucket High School and Elementary School.

As a mid-term project, a bicycle path should be constructed along Vesper Lane, as mentioned in the Nantucket's Long Range Transportation Plan, to better serve the community as a safe connector to the High School and the Elementary School. This facility will also serve as a collector/connector to Nantucket Town when coupled with the long-term project of upgrading Hummock Pond Road from a bicycle route to a bicycle path, as discussed below.

Hummock Pond Road connects Cisco Beach with Milk Street and Vesper Lane. Hummock Pond Road is currently designated a bicycle route. Summer traffic averages 4,130 vpd, and the posted speed limit is 30 mph. Currently this roadway has good sight distance because of its straight alignment, offering good visibility for both bicyclists and motorists. This roadway is the only access road to Cisco Beach from Nantucket Town. It is recommended that this roadway remain a bicycle route in the short and mid-term periods because it currently functions well and the costs involved in constructing a separate bicycle path for a distance over the four miles are not currently justified.

It is further recommended that the construction of a bicycle path be implemented for the western side of Hummock Pond Road during the long-term plan. It is apparent from field visits and other measures that environmental impacts would be reduced by constructing the bicycle path on the western side of the Hummock Pond Road. This bicycle path will connect a major attraction, Cisco Beach, with the existing network of bicycle paths via the proposed Vesper Bicycle Path. This facility will also be considered a collector servicing the Cisco

Beach area residences. This facility was listed in the Long Range Transportation Plan as a desirable project.

Western Island

Western Island is the portion of the Island surrounding Madaket, Cliff and Eel Point Road. This section of the Island is less developed therefore having a less congested atmosphere. Major attractions within this portion of the Island include Madaket Beach, Dionis Beach, the Sanford Walking Farm and the Tuppancy Links conservation area.

Madaket Bicycle Path

The Madaket Bicycle Path connects Caton Circle with Madaket Beach. This bicycle path was designed in 1987-88 and constructed in 1989. This bicycle facility is known for its winding curves through a rural area with scenic views. This bicycle path has also become one of the most popular bicycle facilities on the Island in recent years. The Nantucket Chief of Police has expressed concern about several winding (horizontal) curves on the Madaket Bicycle Path which have inadequate sight distance. It is recommended that warning signs and center lines be installed at locations along the path where horizontal curves do not meet the latest AASHTO guidelines. In some locations additional mitigation measures may need to be taken to ensure the safety of path users. In the vicinity of Mill Street the path goes into a series of reverse horizontal curves (S-turns) with sharp radii. At this particular location it is recommended that warning signs and center lines be installed to warn users of the upcoming situation. In addition, side obstructions within these curves (a utility pole and box) should be relocated to increase the effective width of the path. The split rail fence located on the southern side of the path should be retrofitted or replaced to meet the latest AASHTO guidelines. A comprehensive accident analysis and field observations of this location should be implemented to ensure these mitigation measures improve the path's safety and operating conditions. These actions should be implemented during the short term plan.

If these measures do not improve the path's safety and operating conditions at this location, it is recommended that the paths pavement cross section be widened within the S-curves to increase the effective width of the path. If increasing the effective width of the path does not improve operating conditions and more importantly safety at this location, it is recommended that this section of path be realigned to provide better operational characteristics.

Another concern on the Madaket Bicycle Path are the areas along the path where the roadway and the path have no median separation as discussed in the existing conditions section of this report. During the design stages of this bicycle facility, it was not anticipated that the popularity of this path would be so great that the volumes of path users would compromise some of the original assumptions made during the planning of this facility. Because of the high volumes of pedestrians, bicyclists, in- line skaters and other path users, areas of no median separation between the roadway and the path have recently become a safety issue. It is recommended that these areas be reevaluated because of the increase in volumes found on this bicycle path. During the original planning of this path, wetland encroachment was the primary factor deterring the use of a

median separation at these particular locations. However, because of the potential safety hazard presented by this lack of separation, it is recommended that these areas be reevaluated for potentially installing a median separation.

If median separation is found not to be feasible, the installation of permanent type traffic channelizers may be a feasible alternative to providing a visual separation between the roadway and the path. This alternative would only help to define the separation of the trail and would not provide barrier protection for the path users. Permanent type traffic channelizers may also impact the visual aesthetics of Madaket Road potentially making it a less desirable alternative to providing a grass median separation. However, this alternative could be a low cost solution to an existing problem, potentially improving the current operating conditions. The reevaluation for the installation of a median separation or permanent type traffic channelizers should be implemented within the short-term plan.

The entrance to the Madaket Bicycle Path located at the intersection of Main Street, Quaker Road and Madaket Road, also known as Caton Circle is problematic. This intersection tends to be an area of congestion during the peak summer months as inferred by the Madaket Road summer ADT of 4,400 vpd. This congestion is escalated by bicyclists and other path users accessing the only entrance point to the Madaket Bicycle Facility. Furthermore, lack of crosswalks and signage add confusion to this already congested location. To address the confusion and lack of direction path users experience at this location, it recommended that crosswalks be installed across Main Street from Caton Circle to Quaker Road and across Quaker Road linking the existing Madaket bicycle facility with Main Street. This will help guide path users to and from Main Street in an orderly manner, concentrating crossing movements at two distinct locations. Warning signs should also be installed at these locations. In addition, the entrance throat to the path should be widened and arrows designating entering and exiting points should be painted on the paths surface along with a center strip to further define entering and exiting points. This mitigation measure should also be implemented within the short-term plan.

Access to Dionis Beach

Dionis Beach Road connects Eel Point Road to a major attraction, Dionis Beach. In the summer, traffic on Eel Point Road averages 960 vpd, making it a very low volume road used mainly by people accessing Dionis Beach and residents living along Eel Point Road. The Nantucket Planning and Economic Development Commission recommends that bicycle paths be constructed as part of the short-term plan on both Eel Point Road and Dionis Beach Road to accommodate bicyclists accessing Dionis Beach. Furthermore, Cliff Road, from North Liberty to the existing Cliff Bicycle Path, should be designated as bicycle routes to connect Dionis Beach to the network of bicycle facilities servicing the Island. The above designations should also be implemented within the short-term plan.

Eastern Island

The major deficiencies in the current bicycle transportation network in the eastern part of Nantucket Island are the absence of a safe Class I and III bicycle route loop system connecting the outskirts of Nantucket Town to Siasconset,

lack of complete connections between attractions, and limited collector routes servicing residential areas.

Milestone/Polpis Bicycle Loop

The implementation of the Polpis Bicycle Path will provide an additional connection from the outskirts of Nantucket Town to Siasconset creating a loop system. This loop system will also act as a collector to residential areas in the northeast region of the Island.

The Milestone/Polpis bicycle route loop system will potentially alleviate some of the congestion currently found on the Milestone Bicycle Path by providing an alternative return or beginning route for path users visiting Siasconset. This congestion was cited by the Nantucket Police Chief as the main reason for the high number of bicycle accidents on the Milestone Bicycle Path. Side obstructions reducing the path's effective width could also be factor in this high accident rate. Therefore, it is recommended that the three series of bollards, discussed in the existing conditions section of this report, be removed to increase the path's effective width at these locations. This should be implemented within the short term plan.

To better define the loop system it is recommended that Main Street and Sankaty Avenue in Siasconset, from New Lane to Siasconset Center and from Main Street to Anne's Street, respectively, be designated as bicycle routes. This should be implemented when the Polpis Bicycle Path is completed.

New South Road Bicycle Path

The Airport Commission and the Nantucket Electric Company are contemplating improvements to an approximately 2,800-foot-long section of New South Road, which runs along the eastern edge of the airport. New South Road runs between Milestone Road and an area referred to as "the bunker", which is planned for commercial and industrial development. New South Road also connects to Madequecham Valley Road, a dirt road which leads to several homes, conservation lands, and remote beaches. Because of traffic including trucks accessing "the bunker" area, the NP&EDC finds it desirable to provide a separate bicycle path along the northern section of New South Road and possibly into "the bunker". The commission has determined that no land takings would be necessary to construct the bicycle path. The project is recommended in the short-term plan.

Quidnet Road Bicycle Path

Quidnet Road is a narrow, 1.3-mile-long road running from Polpis Road to Quidnet Village. The right-of-way is 30 feet wide. An 800-foot-long, 20-foot-wide easement for a bicycle path was granted to Nantucket County as part of the Quidnet Briar Patch Subdivision. The easement is on the north side of the road and connects on the west with another easement owned by the Town of Nantucket. The NP&EDC recommends the construction of a bicycle path along Quidnet Road as part of the long term plan.

Tom Nevers Road Bicycle Path

Tom Nevers Road provides an important connection between Milestone Road and the beach and recreation areas at Tom Nevers. The right-of-way of Tom Nevers Road is 60 feet wide, and partial easements are in place for a bicycle path. A bicycle path along Tom Nevers Road was included in the 1977 Nantucket Bikeway Master Plan. The NP&EDC recommends the construction of a bicycle path along Tom Nevers Road as part of the long term plan.

TRANSPORTATION IMPROVEMENT PROGRAM

INTRODUCTION

The recommendations contained in the previous section are presented in this section by project. Projects have been prioritized into three categories based on the sequence of implementation. Short-term projects would been implemented in the first five years (1995-1999), mid-term projects in the second five-year period (2000-2004), and long-term projects in the third five-year period (2005-2009).

Order-of-magnitude construction cost estimates are provided for most projects. The estimates do not include the cost of right-of-way acquisition or design. Bicycle paths are estimated to have an order-of-magnitude construction cost of $62.50 per linear foot, which is the approximate unit cost for the Polpis Bicycle Path. Other order-of-magnitude cost estimates are based on unit costs contained in *Means Sitework and Landscape Cost Data (1993)*. A city cost index of 20 percent was applied to the Means figures to account for regional variations. An additional adjustment of 65 percent was made based on a comparison of the unit cost of the Polpis Bicycle Path compared to the average in Massachusetts. The total adjustment made to the Means figures was 85 percent.

The remainder of the section is presented in outline form and contains recommendations for island-wide programs followed by projects in each of the geographic areas on the island.

ISLAND-WIDE PROGRAM

The following recommendations affect the bicycle and pedestrian transportation system throughout the island:

- The designated bicycle route system should be reviewed periodically by the NP&EDC and the Nantucket Department of Public Works in concert with the Traffic Safety Committee, and the Board of Selectmen.

- New bicycle paths should conform to AASHTO guidelines to the extent feasible. Current AASHTO guidelines require a minimum width of eight feet and a desirable width of 10 feet. The guidelines also call for a minimum separation of five feet between the path and the roadway, and two feet of clear space between the path and adjacent landscaping.

- A comprehensive bicycle education program should be developed. A key component of the program is the preparation and distribution of a map of bicycle facilities. The map should include bicycle safety information and appropriate cautions on bicycle routes. While there are no national standards on bicycle routes (shared roadways), the streets and roads selected as bicycle routes on Nantucket should be those that present the least conflicts between bicyclists and vehicles. It is important that this information be conveyed on the bicycle maps and in other bicycle education materials published by the Town.

- Maintenance of bicycle paths should include sweeping the trail clear of debris (i.e., glass, sand, branches, etc.), mowing grass medians and shoulders, tree pruning (to avoid overgrowth which may interfere with the operational characteristics of the path), trash removal (to maintain a pleasing environment), sign replacement, pavement marking replacement, and trail surface maintenance and rehabilitation (to ensure distress free travel surfaces). Maintenance of bicycle routes should also include sweeping roadway edges to clear road debris (i.e., glass, sand, branches, etc.), eliminating pavement distress along the roadway shoulders (i.e., edge cracking, pot holes, etc.) and maintaining a sign program designating bicycle route classification.

NANTUCKET TOWN

Projects 1-8 are recommended for implementation in the short-term in Nantucket town. Descriptions of these projects are provided below and in Tables 6-10.

1. Bicycle Improvement: Surfside Road to Washington Street

Investigate the feasibility of constructing the following bicycle paths:

1a. Surfside Road

- On west side of road, beginning near First Way, widen existing 6-foot wide asphalt path for a distance of 600 feet to the north.

- Install crosswalk at this location to connect to east side of road between two driveways to the High School.

- Install Bicycle Crossing Sign (W11-1) 250 feet south of crossing on east side of road.

- Widen existing 3-foot wide concrete sidewalk by 5 feet for a distance of 250 feet to the north.

- Construct a bicycle path connecting Surfside Road and Sparks Avenue at southeastern part of intersection for a distance of 200 feet.

1b. Sparks Avenue

- On south side of street, beginning near Surfside Road, widen existing 3-foot wide asphalt path for a distance of 900 feet to the southeast.
- Use existing school crossing at Boys Club, or relocate if necessary, to connect with the following.

1c. Boys Club Property

- Construct bicycle path, 400 feet long, connecting Sparks Avenue and Pleasant Street across southeastern edge of Boys Club property (easement required).
- Install crosswalk across Pleasant Street, linking proposed bicycle path between Boys Club site and Bear Street.
- Install Bicycle Crossing signs (W11-1) on both sides of Pleasant Street 250 feet in advance of crossing.

1d. Bear Street

- Reconstruct roadway to provide one one-way travel lane and separated bicycle path between Pleasant Street and Orange Street, a distance of 750 feet.
- Install crosswalk on Orange Street, connecting Bear Street bicycle path to new path along old railroad right-of-way.
- Install Bicycle Crossing sign (W11-1) on both sides of Orange Street 250 feet in advance of crossing.
- Trim vegetation along Orange Street to improve sight distance at crossing.

1e. Old Railroad Right-of-Way

- Construct bicycle path on existing berm, connecting end of Washington Street Extension to Orange Street at Bear Street intersection, a distance of 800 feet (easements required near Goose Pond Lane, a private road).

Summary of Projects 1a through 1d

Bicycle path linking northern terminus of existing Surfside Road Bicycle Path to Washington Street Extension, recommended bicycle route to town center.

Table 6

PROPOSED BICYCLE PATH: SURFSIDE ROAD TO WASHINGTON STREET

Location	Length Material	Cost (feet)	Unit Cost ($)	Total ($)
Railroad Right-of-Way	asphalt	800	62.50	50,000
Bear Street	asphalt	750	62.50	46,875
Boys Club Property	asphalt	400	62.50	25,000
*Sparks Avenue	asphalt	900	10.23	9,207
Surfside-Sparks Diagonal	asphalt	200	62.50	12,500
*Surfside (east) @ High School	concrete	250	26.50	6,625
*Surfside (west) to First Way	asphalt	600	4.60	2,760
Total		3,900		152,967

* Width added to existing facility.

2. Bicycle Improvement: Rotary to Bear Street

2a. Pleasant Street

- Construct bicycle path on southwestern side of street between Bear Street and Sparks Avenue, a distance of 1,600 feet.
- Install crosswalk across Pleasant Street at Sparks Avenue intersection.
- Install Bicycle Crossing sign (W11-1) on northeastern side of Sparks Avenue and southwestern side of Pleasant Street 250 feet in advance of crossing.

2b. Sparks Avenue

- Construct bicycle path on north side of Sparks Avenue between Rotary and Pleasant Street, a distance of 750 feet.

2c. Rotary

- Install crosswalk across Old South Road at Rotary; remove/redesign island on this leg of the intersection if necessary.
- Install crosswalk across Sparks Avenue at Rotary.
- Install Bicycle Crossing signs (W11-1) on south side of Sparks Avenue and on the east side of Old South Road 250 feet before crossings.

Summary of Projects 2a through 2c

Bicycle path linking Milestone Bicycle Path to Bear Street/Railroad Bicycle Path.

Table 7

PROPOSED BICYCLE PATH: ROTARY TO BEAR STREET

Location	Material	Length (feet)	Unit Cost ($)	Total Cost ($)
Pleasant Street	asphalt	1,600	62.50	100,000
Sparks Avenue	asphalt	750	62.50	46,875
Total		2,350		146,875

3. Bicycle/Pedestrian Improvement: Prospect Street to Vesper Lane

3a. Nantucket Cottage Hospital

- Construct bicycle path, 350 feet long, connecting Prospect Street and Vesper Lane across eastern part of hospital property.

3b. Vesper Lane

- Install crosswalk on Vesper Lane at intersection with hospital path.
- Construct 4-foot wide concrete sidewalk and precast concrete curb on south side of Vesper Lane from Surfside Road to the west for a distance of 200 feet (to new crosswalk)

Summary of Projects 3a and 3b

Table 8

PROPOSED BICYCLE PATH AND SIDEWALK: PROSPECT STREET TO VESPER LANE

Location	Material	Length (feet)	Unit Cost ($)	Total Cost ($)
Nantucket Cottage Hospital	asphalt	350	62.50	21,875
Vesper Lane	concrete	200	39.60	7,920
Total		550		29,795

4. Pedestrian Improvement: Sparks Avenue

4a. Sparks Avenue

- Widen existing 3-foot wide asphalt sidewalk by 1 foot (southwest side of street) for a distance of 2,400 feet between Rotary and Boys Club.
- Add curbing along this sidewalk

Summary of Project 4a

Table 9

SIDEWALK IMPROVEMENTS: SPARKS AVENUE

Location	Material	Length (feet)	Unit Cost ($)	Total Cost ($)
Sparks Avenue (path)	asphalt	2,400	2.70	6,480
Sparks Avenue	concrete curb	2,400	9.75	23,400
Total		2,400		29,880
Option to Replace Existing 3-foot Asphalt Sidewalk with 4-foot Concrete				
Sparks Avenue	concrete*	2,400	39.60	95,040

* Includes precast concrete curb.

5. Pedestrian Improvements: Various Locations in Town

5a. Orange Street

- Construct 4-foot wide concrete sidewalk on southwestern side of Orange Street between Rotary and Union Street, a distance of approximately 2,400 feet.
- Install precast concrete curb along sidewalk.

5b. Prospect Street

- Construct 4-foot wide concrete sidewalk on southwestern side of Prospect Street between Nantucket Cottage Hospital and Milk Street, a distance of 2,100 feet.
- Install precast concrete curb along sidewalk.

5c. Quaker Road

- Construct 4-foot wide concrete sidewalk on western side of Quaker Road between Madaket Road and Milk Street, a distance of 900 feet.
- Install precast concrete curb along sidewalk.

5d. Pleasant Street

- Construct 4-foot-wide concrete sidewalk on southwestern side of street between Bear Street and York Street (Five Corners).
- Install precast concrete curb along sidewalk.

5e. North Beach Street

- Upgrade existing sidewalk on western side of street between Easton Street and Bathing Beach Road.
- Install precast concrete curb along sidewalk.

5f. Washington, Francis and Union Streets

- Upgrade existing sidewalks on Washington and Francis Streets and on Union Street between Francis and Orange Streets.

Table 10

SIDEWALK IMPROVEMENTS: VARIOUS LOCATIONS IN TOWN

Location	Material	Length (feet)	Unit Cost ($)	Total Cost ($)
Lower Orange Street	concrete*	2,400	39.60	95,040
Prospect Street	concrete*	2,100	39.60	83,160
Quaker Road	concrete*	900	39.60	35,640
Pleasant Street	concrete*	1,500	39.60	59,400
North Beach Street	**	2,400	**	**
Washington Street	**	1,700	**	**
Francis Street	**	300	**	**
Union Street	**	1,300	**	**
Total		9,300		368,280

* Includes precast concrete curb.
** Not yet determined

6. Designate Bicycle Route System in Town

- See previous chapter for recommended bicycle route system.
- Install minimal signing downtown directing bicyclists to major bicycle paths (Milestone, Surfside, Madaket, Cliff and Polpis) and bicycle routes to Cisco Beach and Jetties Beach.
- Install directional signs at turns along designated routes.
- Publish map of bicycle routes which includes bicycle safety information and description of roadway conditions.

7. Downtown Information Center and Bicycle Parking Facilities

- Provide additional bicycle parking facilities in a central location downtown.
- Display downtown and island bikeway system maps and bicycle safety information at existing visitor information centers.

8. Handicapped Accessibility Improvements

- Implement recommendations of Access Plus Study with respect to wheelchair ramps and sidewalk improvements downtown.

SOUTH CENTRAL ISLAND

Projects 9-13 are recommended for implementation in the South Central portion of Nantucket Island. Descriptions of these projects are provided below and in Table 11.

9. Bicycle Improvement: Nobadeer Farm Road to Nantucket Memorial Airport (Short-Term)

9a. Nobadeer Farm Road

- Extend existing bicycle path an additional 2,000 feet on the eastern side of the road to Old South Road.

9b. Nantucket Memorial Airport

- Continue bicycle path across Old South Road and through airport property on a route to be determined as part of the airport master planning process.

10. Bicycle Improvements: Milestone Bicycle Path to Surfside Bicycle Path (Short-term)

10a. Fairgrounds Road

- Construct bicycle path from Old South Road to Surfside Road (4,750 feet) on the northwestern side of the road.
- Install crosswalk across Surfside Road connecting the proposed Fairgrounds Bicycle Path with the existing Surfside Bicycle Path.

10b. Old South Road

- Construct bicycle path from Rotary Circle to the proposed Fairgrounds Bicycle Path on the southern side of Old South Road (700 feet).

Summary of Project 10

Bicycle path adjacent to a portion of Old South Road and all of Fairgrounds Road linking Rotary Circle (beginning of Milestone Bicycle Path) with the Surfside Bicycle Path.

11. Bicycle Improvement: Fairgrounds Road to Macy's Lane (Mid-term)

11a. Old South Road

- Construct bicycle path from Fairgrounds Road to Macy's Lane on the southern side of South Road (7,100 feet).

Summary of Project 11

Bicycle path adjacent to Old South Road linking Fairgrounds Road and Macy's Lane.

12. Bicycle Improvement: Bartlett Road to Hummock Pond Road (Short-term)

12a. Bartlett Road

- Upgrade existing 6-foot asphalt facility to an 8-foot asphalt path (2,000 feet).
- Complete connection of Surfside Bicycle Path to Somerset Bicycle Route by constructing (500 feet) the missing piece along the south side of Bartlett Road in the vicinity of Mizzenmast Road.

12b. Somerset Road/Lane

- Designate as a bicycle route connecting Hummock Pond Bicycle Route and Bartlett Bicycle Path.

Summary of Project 12

Bicycle path connecting the Surfside Bicycle Path with Somerset Road. Continue this connection to Hummock Pond Road by designating Somerset Lane a bicycle route.

13. Bicycle Improvements: Surfside Road to Hummock Pond Road

13a. Vesper Lane

- Short-term Plan: Designate as a bicycle route connecting the Surfside Bicycle Path and the Hummock Pond Bicycle Route.
- Mid-term Plan: Construct bicycle path from the Surfside Bicycle Path to the proposed Hummock Pond Bicycle Path (3,000 feet).

13b. Hummock Pond Road

- Short-term Plan: Designate as a bicycle route connecting Milk Street and Vesper Lane with Cisco Beach.
- Short-term Plan: Provide bicycle parking facilities at Cisco Beach.
- Long-term Plan: Construct bicycle path from Vesper Lane to Cisco Beach (21,750 feet) on the western side of the road.

13c. Milk Street

- Designate as a bicycle route from Gardner Street to Hummock Pond Road.

Summary of Project 13

Connect the Surfside Bicycle Path with Hummock Pond Bicycle Route (short-term) to Cisco Beach.

Table 11 **PROPOSED BICYCLE PATHS: SOUTH CENTRAL ISLAND**

Location	Material	Unit Length (feet)	Total Cost ($)	Cost ($)
Nobadeer Farm Road	Asphalt	2,000	62.50	125,000
Fairgrounds Road	Asphalt	4,750	62.50	296,875
Old South Road (west)	Asphalt	700	62.50	43,750
Subtotal				340,625
Old South Road (middle section)	Asphalt	7,100	62.50	443,750
Bartlett Road	Asphalt	2,000	4.60	9,200
Bartlett Road	Asphalt	500	62.50	31,250
Subtotal				40,450
Vesper Lane	Asphalt	3,000	62.50	187,500
Hummock Pond Road	Asphalt	21,750	62.50	1,359,375

* Width added to existing facility.

WESTERN ISLAND

Projects 14 and 15 are recommended for implementation on the western part of Nantucket Island. Descriptions of these projects are provided below and in Table 12.

14. Bicycle Improvements: Madaket Bicycle Path

14a. Series of Reverse Horizontal Curves 13 Miles West of Caton Circle

(Short Term)

- Install Warning Signs (W1-5).
- Relocate utility pole and box.
- Upgrade split rail fence to conform with AASHTO Guidelines.
- Study operational characteristics of this section.
- Comprehensive accident analysis of this section.

(Mid Term, if above doesn't work)

- Widen pavement cross section within the horizontal curves to increase the effective width of the path, or
- Realign/upgrade to improve operating conditions.

14b. Areas of No-Median Separation (5,280 feet)

(Short Term)

- Study the feasibility of reconstructing the path to include a 4-foot median separation or installing channelizers at edge of roadway.

14c. Improve Access to the Bicycle Facility Entrance

- Install crosswalk across Main Street from Caton Circle to Quaker Road.
- Install crosswalk across Quaker Road linking existing bicycle facility with Main Street.
- Install bicycle crossing signs (W11-1) at all approaches.
- Widen the entrance throats and provide entering and exiting direction arrows on the pavement.

Summary of Project 14

Improve the existing conditions of the Madaket Bicycle Path including horizontal curvature, areas of no median separation, and improved access.

15. Bicycle Improvement: Cliff Road to Dionis Beach

15a. Eel Point Road (short-term)

- Construct bicycle path from existing Cliff Bicycle Path to Dionis Beach Road on the northern side of the road (3,500 feet).

15b. Dionis Beach Road (short-term)

- Construct bicycle path connecting with the proposed Eel Point Bicycle Path on the eastern side of the road (1,200 feet).
- Provide bicycle parking facilities at Dionis Beach.

Summary of Project 15

Bicycle path adjacent to Eel Point Road connecting the Madaket and Cliff Bicycle Paths with Dionis Beach.

Table 12 **PROPOSED BICYCLE PATHS: WESTERN ISLAND**

Location	Material	Length (feet)	Unit Cost ($)	Total Cost ($)
Madaket Path S-Turns	--	--		*
Madaket Path Median Separation	--	--		*
Madaket Path Entrance Improvements	--	--		*
Eel Point Road	Asphalt	3,500	62.50	218,750
Dionis Beach Road	Asphalt	1,200	62.50	75,000

* Not yet determined.

EASTERN ISLAND

Projects 16 and 17 are recommended for implementation on the eastern part of Nantucket Island. Descriptions of these projects are provided below and in Table 13.

16. Bicycle Improvements: Milestone Bicycle Path

16a. Milestone Bicycle Path

- Install crosswalk connecting the Milestone Bicycle Path with the proposed Polpis Bicycle Path.
- Remove three sets of bollards (900 feet)

Summary of Project 16

Improve the existing conditions of the Milestone Bicycle Path by removing side obstructions.

17. New Bicycle Paths: Eastern Island

17a. Quidnet Road

- Construct bicycle path on the north side of Quidnet Road between Polpis Road and Squam Road (6,860 feet).

17b. Tom Nevers Road

- Construct bicycle path on the east side of Tom Nevers Road (7,390 feet).

17c. New South Road

- Construct bicycle path on the west side of New South Road between Milestone Road and Madequecham Valley Road.

Summary of Project 17

Bicycle paths on Quidnet, Tom Nevers, and New South Roads to serve as collector facilities linking to Polpis and Milestone Bicycle Paths.

Table 13 **PROPOSED BICYCLE PATHS: EASTERN ISLAND**

Location	Material	Length (feet)	Unit Cost ($)	Total Cost ($)
Milestone Road (remove bollards)	--	900		*
Quidnet Road	Asphalt	6,860	62.50	428,750
Tom Nevers Road	Asphalt	7,390	62.50	461,875
New South Road	Asphalt	2,800	62.50	175,000

* Not yet determined.

APPENDICES

Bicycling and Walking Survey

1094/TPr/
03995.AA1

NANTUCKET

BICYCLING AND WALKING SURVEY

■ If you bicycle or walk on Nantucket, we would like to know what problems you encounter and any suggestions you may have for improving the bicycle and pedestrian facilities on the island. Residents and visitors are encouraged to participate in the survey.

■ Please take the time to complete the brief survey inside. You may mail the completed survey (see instructions on back) or return it personally to the Nantucket Planning & Economic Development Commission at 1 East Chestnut Street in Nantucket.

■ Your comments and suggestions will help the Town develop a long-range plan for improving bicycle and pedestrian facilities on the island that is responsive to the needs of residents and visitors. If you have any questions please call Beth Giannini at the Planning Commission at 228-7237.

■ Filling out the survey will only take a few minutes, and your assistance is greatly appreciated. Thank you very much.

Please return the survey no later than July 18, 1994

BULK RATE
U.S. POSTAGE
PAID
NANTUCKET, MA
PERMIT NO. 37

Dated Material
Please Open
Promptly!

Postal Patron
Nantucket, MA 02554

▲ To Mail: Fold in half so return address is visible. Staple or tape closed ▲

NANTUCKET

BICYCLING AND WALKING SURVEY

■ Use the space below for additional comments or suggestions on bicycling and walking on Nantucket

NANTUCKET PLANNING & ECONOMIC
DEVELOPMENT COMMISSION
1 EAST CHESTNUT STREET
NANTUCKET, MA 02554

Public Comments on Draft Plan

1094/TPr/
03995.AA1

9.13.94

BICYCLE + PEDESTRIAN MASTER PLAN

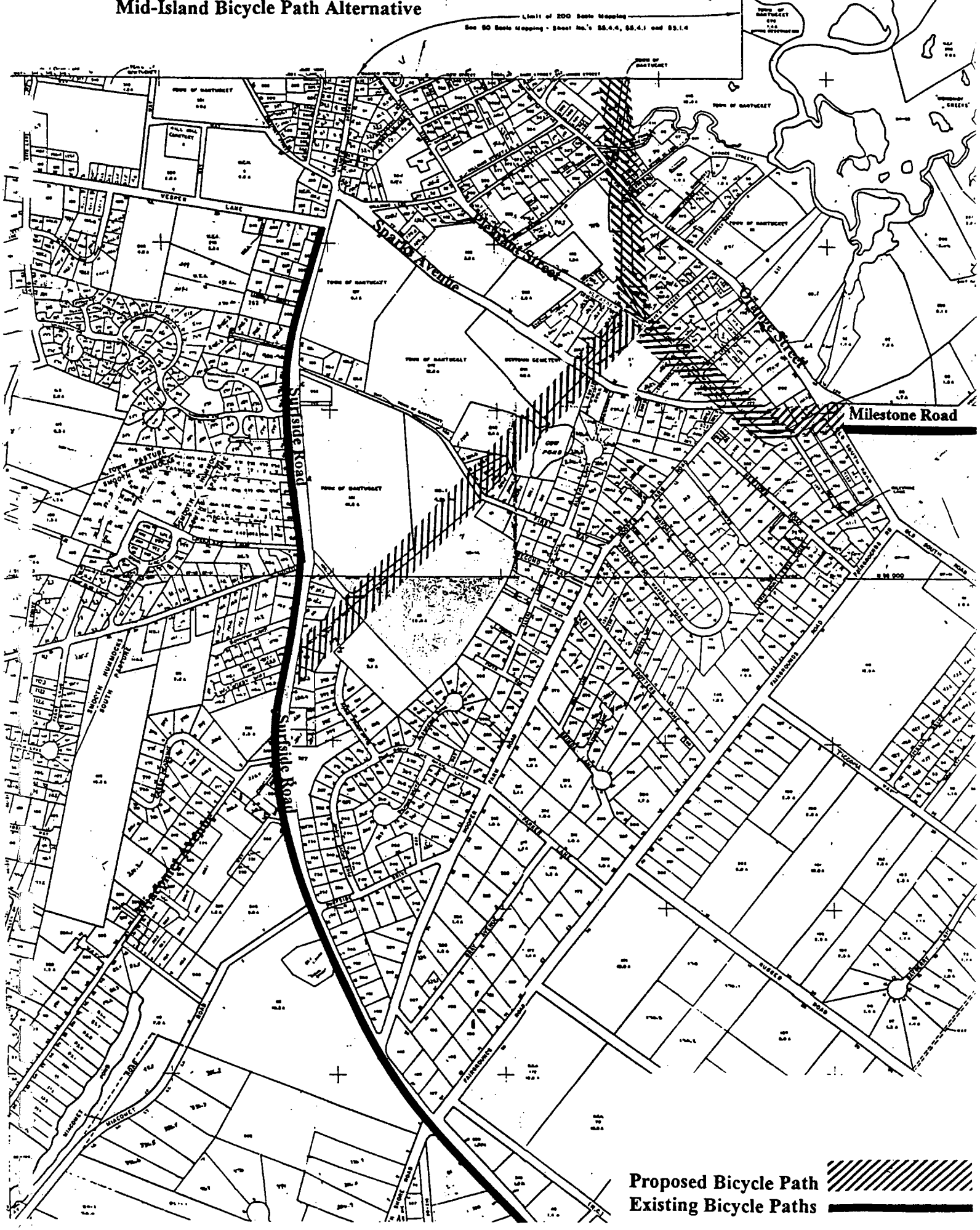
COMMENTS ON DRAFT FR. (VHB) BY: PETER MATHEN
325.4914

TO: BETH GIANNINI, VHB

1. BICYCLES SHOULD BE PRIMARY FOCUS
   - MOST DANGEROUS SITUATIONS VS. CARS
   - BIKE CONGESTION @ INTERSECTIONS, STREETS W/O BIKE LANES SLOW DOWN TRAFFIC
2. EASIER TO ASSESS MAJOR OUT OF TOWN ROUTES/ BIKE PATH
3. MORE DIFFICULT TO ASSESS / + IMPROVE EDGE OF TOWN ACCESS TO BIKE PATHS.
   - FOCUS OF MASTER PLAN p. 20
   - "THE TRANSITION ZONE"; AGREED.
4. URGENT PRIORITY:
   NEED IN PLACE BY NEXT SEASON,
   - IDENTIFY ALL IN-TOWN STREETS + INTERSECTIONS THAT ARE HAZARDOUS FOR BIKES → NEED A BIKE LANE (A CONTINUOUS YELLOW LINE ON ONE SIDE OF STREET)

   EXAMPLES:
   - PROSPECT STREET (PERIMETER TRAFFIC)
   - PLEASANT + LOWER PLEASANT STREET
   - ATLANTIC AVE.
   - BEGINING OF CLIFF RD.

Mid-Island Bicycle Path Alternative



Plan Comm - Civic League

NANTUCKET CIVIC LEAGUE - BIKING FORUM - HIGH SCHOOL - 8/1/94
NOTES OF PROPOSALS BY ANNA HALL (Formerly Coordr. Cycling Club)

1. No BICYCLE RIDING of any kind on Main, Easy, Upper Union, Lower India, Oak, East Chestnut, South Water, Federal, Centre, Walnut, Liberty, Gardner, North Liberty, South Beach.

   Ride bikes only on these streets, (per directions): From Rotary ride bikes to Washington, to Union Street (proceeding on Union optional), or right onto Francis to Washington, to Easy St. to Broad. Turn right on Steamer Wharf and left onto Broad, left onto South Beach, left on Easton to West Chester, left onto New Street.

2. From Main take Orange south past corner Union to Rotary.

3. From Rotary take Sparks Ave. taking right onto Atlantic Ave. (Surfside Road); or left onto Prospect St., across Main unto Quaker Road. STOP and walk bikes on Main St., or walk bikes scross onto Madaket Bike Path.

4. From Rotary take Sparks Ave. and proceed to Pleasant Street straight ahead to Main and STOP and WALK BIKES either way.

OTHER MISCELLANEOUS ROUTES

5. From Straight Wharf (HY-LINE) proceed walking bikes to Easy Street, right onto Easy St., left onto Broad, right onto South Beach, left onto Easton, jog right onto Centre, then left onto Westchester to New St.

6. From Steamboat Wharf straight up walking bikes, turning right onto South Beach, left onto Easton, to Center, left (jog) to West Chester to New Street.

7. Corner of Center & No. Liberty, bikes may be ridden, turning right onto Cliff Road or left to Madaket Bike Path.

BONUS RACE

8. A section at the foot of Orange at the corner of Main and Liberty should be set off for bikers to gather fora fast race to the end of Orange where Union comes in. First group will be ten speeds, then mountain bikes,kids, lead by Police Car. Several other police on duty.

To: Beth Giannini
Nantucket Planning & Economic Development Commission
From: Kathy Van Lieu
Re: Bicycle and Pedestrian Master Plan
Date: 8/12/94

Dear Beth:
In getting involved with the bike and pedestrian planning, it is my wish to help save the Town money, help plan for the inevitable growth that will continue on Nantucket, and try to do what is best for an activity that is close to my heart in as democratic and realistic a way as possible. Yes, I do have a "special interest", as many people who assert their opinions are accused of having, but I also have the interests of my home and community in mind. I would very much like to continue to help in whatever way I can, beginning with the suggestions I have offered below. It is not my wish to merely voice my opinion and then complain about what happens. Please feel free to call me whenever you think I might be able to assist.

Milestone Road Path:

I have not experienced any problem with bollards or other path-side obstructions that have the effect of squeezing traffic flow into a narrower passage.

In the interest of not posting more signs around Nantucket as well as preserving tradition, the old stone mile markers on the north side of the roadway are adequate distance signs for cyclists.

Concerning directional signs, either the existing or improved road signs should be sufficient for cyclists as well as motorists rather than having double the number of signs for both kinds of traffic.

I suspect that the comparison of bicycle accidents on the Milestone Road versus the Polpis Road really only indicates that there are a lot of inept cyclists on the Milestone Path. If accidents only involve cyclists and no motor vehicles, the same type of accidents are going to occur regardless of the Class of the bike path or of the motor traffic on the road.

In Town bike routes:

I think that sending people down Pleasant to get to the Center of Town is far better than relying on Orange, Union and Washington. I avoid those most assiduously. Turn right from Pleasant on to High, cross over to Hiller, then left on Fair down to Main. Leaving Town, exit on Hussey. In other words, use the west and north west streets more.

In spite of the above, it is not entirely realistic to think that many people will willingly go even slightly out of the way. Therefore, I believe that an Orange Street bike path and side walk are TOP PRIORITY, far above the Polpis Path. The Railroad bed between Washington and Orange sounds nice, but again, that dumps people onto Washington, a road that motorists seem to want to make into a highway. A friend of mine here adds the suggestion of installing speed bumps on Washington Street where the bike path would enter.

A Class I path to the airport seems absurd, except for the fact that the Old South Road area is getting more built up and those people might be encouraged to commute on bikes, or walk, if there were a path there.

More suggestions:

Make excellent maps available for bike routes. Our streets can be very confusing to tourists unfamiliar with it all. I suggest including tiny pictures of Landmarks on the maps, along with "off-road" alternatives. The popularity of off-road bikes can certainly be taken advantage of.

Signs that tell motorists to give right of way to cyclists, etc.

Signs directing traffic flow.

Ticket cyclists and roller-bladers for not obeying rules of the road. This is very important in Europe.

Bicycle parking improvements desperately needed downtown. And to encourage more cycling and less cars, make parking for cyclists EXTRA convenient and privileged, not the other way around as suggested in the Master Plan. Give car parking spots to bike racks only.

NP & EDC
AUG 26 1994
RECEIVED

Andy Vorce
Planning Commission

Thanks for asking for member opinions on the Bike Path Plan as it exists so far. I think all the ideas are good. My preference would be to concentrate on the in-town bike exits and enterings from the South West: the big slow down is on the cross town approaches in the areas accessed by the combinations of Washington and Orange ,along the water front, and Prospect and Sparks Avenues leading to the upper town, Madaket, and Cisco areas.

I think it is to the Town's advantage to push for Class 1 bikeways along these town routes, asking bikers to take a maze of twists and turns to avoid these direct routes is unreal. With the exception of small areas along Prospect where the houses are right on the road (a bi-pass could be made by way of Mill and Milk Streets), I see no problem that could not be overcome - there will have to be taking and agreements with Conservation people along the water front, Washington St. area, but it would be to the Town's ultimate advantage. I believe this is advocated by the the Study engineers as being the most satisfactory, if the Town wanted to pursue this course in spite of its being more involved with private interests.

This past Summer of '94 has to be a capper in terms of pushing and shoving - of travel travail, on the sidewalks as well as on the streets with new admitted volumes of visitors arriving by air and water. Somebody, the Planning Commission could be the encouragement, has to advocate immediate measures that will show a corrective effect for the coming 1995 summer season. We continue to spit out comprehensive plans but do not push for the enactment of measures to alleviate our most pressing problem, that of transporting people in and out of our town area.

Coupled with work on the downtown bike way, there should be an immediate push for some sort of shuttle bus service, establishment of out-of-town parking, a continuation of the Taxi Voucher System, if this has proven at least somewhat popular and a hard look at the idea of each house hold being entitled to one down-town auto permit: one car only at a time to be allowed down town. Simply adding buses to our present traffic will merely compound our traffic problems. By encouraging bicycle and pedestrian traffic in town and by discouraging private autos, we provide a window for a shuttle bus system.

Basically we should see the island down town summer traffic solution as resulting from a barrage of related reforms, as agreed by our Bike Plan Study Engineers during the question period after their last public bicycle forum; improving the territory for bike use must go hand-in-hand with solutions to the over numbers of fast moving autos on our down town streets. As a Commission, we can only strongly advise; at this time we we will also need Town leaders to propel our reform suggestions into Town Meeting for approval.

Alan Brown, Dukes Road, PO 1874, Nantucket, 02554

COOK'S CYCLE SHOP, INC.

6 SOUTH BEACH STREET
NANTUCKET, MASSACHUSETTS 02554
TELEPHONE 228-0800

RENTALS RENTALS

Dear Beth —
I thought
there might be a
suggestion here

Lucille Sanguinetti
228-9266
or
My son, Shedden,
owner of Cook's
228-0800

on the 'Sconset bike bath which parallels the 'Sconset Road and follow it until you see the Polpis Road—the second lefthand turn—branching off. Follow the Polpis Road from here.

Tour 8: Quidnet

Returning to the Polpis Road from Wauwinet, don't miss the opportunity to visit quaint Quidnet village. This tiny hamlet overlooks the Atlantic Ocean, Sesachacha Pond and Sankaty Lighthouse. A public way leads through a cut in the dune to a wonderful beach, distinctive for its calm but deep waters. Or, you may prefer the pond's quiet beach and waters, ideal for children and a nice alternative if an on-shore breeze makes the sea side beach unappealing.

FROM CATON CIRCLE: Cross on to Quaker Road. Follow Quaker Road across Milk Street and straight on to Prospect Street. Passing the Old Mill on the left and the hospital on the right, continue on to the stop sign. Take a quick jog through the intersection to Sparks Avenue, with the school on your right. Continue on until you come to the Milestone Rotary. Here, get on the 'Sconset bike bath which parallels the road to 'Sconset and follow it until you see the Polpis Road—the second lefthand turn—branching off. continue along the Polpis Road for several miles. The road leading to Quidnet is about a half mile beyond the Wauwinet turn-off as you cycle toward 'Sconset. A narrow road leads you to a stop sign, at which point you make a right. Follow the road as it loops above the pond and dead-ends at the dunes. A path to the right leads down to the pondside beach.

Biking Tips

- **Obey stop signs**
- **Heed one-way streets**
- **Walk bikes on sidewalks**
- **Take wind direction into consideration—ride against the wind on out-bound trips so you'll get some extra help on the trip back**
- **Children 12 and under *must* wear helmets —Cooks' recommends them for *all* ages**

Tour 7: Polpis, Pocomo and Wauwinet

Although a bike path is planned for the near future, right now the Polpis Road is without one, making it the longest and most heavily traveled pathless road on Nantucket. Caution should be foremost as you wend your way along this winding road to the northeastern most points of the island. Biking past farmland and residential areas with such charming names as Shimmo, Shawkemo, and Quaise, you pass the dirt road leading to Altar Rock, the Lifesaving Museum and saltmarshes, and an old Quaker cemetery (no headstones as they were considered too garish by the simple Quaker folk) before reaching the Wauwinet intersection. A few yards before these paved roads intersect, there is a hard pan clay road on the left that leads to the head of Polpis Harbor. Here, under the shelter of tall shade trees, is an ideal picnic spot and one to inspire the painter and photographer.

Back at the paved road, go left on to the Wauwinet Road and head for Pocomo. En route, keep an eye out for Nantucket Island School of Design and the Arts (NISDA). About two hundred feet down their access road on the right is the colorfully named Eat Fire Spring. Even in drought conditions, the spring flows copiously. According to Indian legend, this spring was within the territorial boundaries of the all powerful Sachem Wauwinet, which is said to explain why his spring never ran dry. Back on the road again, continue on the Wauwinet Road again until you reach the Pocomo turnoff on the left (it's easy to miss as the sign is hand-painted). Ride out this road—it will turn to dirt about half way—until you reach a parking area on a little bluff overlooking Pocomo Point, Coatue and the head of the harbor. The view down harbor of Nantucket Town is spectacular, especially at sunset. Upper harbor bathing and windsurfing are popular pursuits to watch or enjoy here.

Cycling back to the Wauwinet Road from Pocomo, turn left and continue out to Wauwinet. Wauwinet is a small village situated at the head of Nantucket Harbor—about nine miles from town and four miles from 'Sconset. Built on a strip of land only 300 yards wide, it is the access point to the wonderful fishing areas and wildlife reserves of Great Point, Coskata and Coatue (accessible only by four-wheel drive vehicles). With the harbor on one side and the Atlantic Ocean on the other, Wauwinet offers visitors both types of swimming, a scenic spot to partake of spectacular sunsets and the general atmosphere of a wild and romantic location.

FROM CATON CIRCLE: Cross on to Quaker Road. Follow Quaker Road across Milk Street and straight on to Prospect Street. Passing the Old Mill on the left and the hospital on the right, continue to the stop sign. Take a quick jog through the intersection to Sparks Avenue, with the school on your right.

COOK'S CYCLES
SHOP INC.

6 S. Beach Street

228-0800

Maps and Biking Tours

All biking tours begin at COOK'S CYCLE SHOP by turning lef and pedaling to Easton Street. Turn left onto Easton and rid through Chester Street, then bear right to West Chester Stree Continue on West Chester to the stop sign at the North Libert Street intersection. Continue for one block. Make a left on Ne Lane. Follow New Lane to CATON CIRCLE at the head of th Madaket Road. ***Individual routes begin at this point unles otherwise noted.***