

Preface

This document has been prepared to assist with the planning of Nantucket's future. It is noted that the general topic of transportation on Nantucket is an understandably pressing matter that directly impacts everyone on-Island and everyone interacting with on-Island matters.

This document attempts to distill the results of a considerable body of data collection and analysis, with recommendations based on this work, professional review, and the input of Nantucketers. No single solution to Nantucket's transport issues exists; for the Island to address these matters will require involved and interactive solutions and management.

Importantly, Nantucket is truly a "real" place where "real" people live and work. At the same time, it is today a premier place to visit and recreate. As long as this duality persists, the tension created by the needs

to satisfy the transport needs of the residents and the transport desires of visitors, without sacrificing the character of the Island, will direct transportation solutions on Island.

Over the past four hundred years or so of its conventionally recorded history, Nantucket has established a rich and elaborate past. The historic record documents Nantucketers overcoming many difficult and complicated problems, ranging from devastating fires to incredible economic changes. Today's transportation issues, while cloaked in different details, must be addressed with similar resolve and long term determination.

However, Nantucket's history, the potential of its future, and the rather fragile and special nature of the Island, demand very careful and long-range planning for how growth and change will occur over the next several years.

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Introduction

Whether residing in, visiting, reading about, or planning for Nantucket, there is one recurrently encountered positive statement: “this is a special place.”¹ It has previously been noted as a planning goal that “a visit to Nantucket [should be] a pleasant experience.”² Further, the Island has been described as a “valued outpost” and that one of its “principal roles, in the greater scheme of things, is to provide a quiet, rural, scenic, and historic setting within which visitors and residents can recharge and refresh their souls.”³

Equally as important, however, is the fact that Nantucket is also a “real” place where people live,

¹ *Goals and Objectives for Balanced Growth*, adopted by vote of Town Meeting, November 13, 1990, p.21; and Citizen’s Transportation Alliance as quoted in *Transportation Focus Group Recommendations*, Summer, 1997, p.1

² *Transportation Focus Group Recommendations*, *ibid.*, p.1

³ *Goals and Objectives for Balanced Growth*, *ibid.*, p. 21.

work and recreate year round. The needs of the year round residents and those of the summer tourists do not necessarily follow parallel paths. This is especially true of the transportation needs which vary so dramatically during “the season” compared with other times of year.

These differences on, and descriptions of, the Island clearly establish the need for the careful and particularized nature of all planning efforts for Nantucket, so that the special place may indeed continue to be special and yet fully function as well. The approach for Nantucket’s transportation systems must especially be particularized to the needs and nature of the Island to preserve and perhaps enhance the presently positive experiences, accommodate the summer season, and direct the likely impacts of future growth within these outer bounds.

Historic Background and Travel on Nantucket

It is fair to note that today, and in terms of distance travelled, the principle means of travelling around the Island of Nantucket is by private automobile. However, and despite their current ubiquity, automobiles have only been a part of the transportation system on the Island since 1918, following a self-imposed four year ban of autos on Nantucket⁴.

In terms of the number of trips taken, however, the most prevalent mode of travel on Nantucket is on foot. This is as it has always been, and will ever be, since the first human literally set foot on the Island and became Nantucket's first pedestrian. Pedestrian trips make up at least a part of every journey taken on Nantucket, whether that pedestrian trip involves a

⁴ In May, 1914 the Town voted 376 to 234 to make it unlawful for a person to operate an automobile on any highway in Nantucket. In 1918, the Town lost its only railroad to the iron needs of the War effort and in May of that year the earlier ban was repealed by a vote of 333 to 296.

walk of several miles, a few steps to a transit stop or walking to a parked automobile.

From several environmental perspectives, pedestrian trips are "good" trips. Pedestrian trips are not consumptive of fossil fuels and are essentially non-polluting. These same facts are also true for bicycle trips, although the bicycle traveler also enjoys a fourfold to fivefold increase in the speed over the pedestrian. Bicycle travel is in all likelihood the most energy efficient mode of travel that presently exists on Nantucket.

Pedestrian travel is also the most historic mode of human travel on the Island. At times in the past, before the advent of mechanized modes of travel and when horses were scarce, walking was the principal means of getting around the Island simply because there was no other widely available alternative.

Another mode of travel that is presently of growing seasonal significance on the Island is the Nantucket

Regional Transit Authority's shuttle service that runs during the summer season. Nantucket's explosive, and brief, Summer visitor growth presents the greatest group of planning problems, especially including transportation issues; the shuttle has proven to be one successful means of addressing this seasonal influx of travelers.

Motor Vehicles and Nantucket's Future

As automobiles are the principle mode of travel on the Island presently and vast societal momentum, governmental policies and manufacturing systems exist to continue to promote automobile travel, this mode must be a part of the planning for the future of Nantucket. This planning involves the matters of where to store motor vehicles (parking) and along which routes and at what speeds they will be allowed and expected to travel.

All aspects of planning for automobiles (and other motor vehicles) on Nantucket also necessarily invokes a fundamental question for all planning efforts for the future of a place so finite as Nantucket: **is there a limit**, in this case to the number of motor vehicles, **that the Island can accommodate?**⁵

The answers to this question must in part be determined by Nantucketers on a qualitative basis. However, to assist with these determinations many of the vehicular traffic impacts have been quantified in the following pages based on present (1998) travel patterns.

Effectively, the people of Nantucket have directed that the future of Nantucket shall not be one that encourages the need for, or use of, motor vehicles. This direction is in keeping with the history of Nantucket, but it also represents the need for a series of behavioral

modifications, as the level of auto use in the U.S. is quite high, and “the mainland” is the source of many of the Island’s summer visitors.

Innumerable existing societal systems (especially in the U.S.) serve to induce motor vehicle travel. To illustrate the level and magnitude of this mode of travel, in the United States approximately 1.9 million new drivers were added each year from 1986 to 1995. When the average travel behavior of only one of those vehicles or one of those drivers is considered, the numbers are small, but taken together the numbers are staggering.

For example, in the U. S. in 1993 approximately 170 million drivers drove 135 million automobiles that consumed 75 billion gallons of fuel while the

⁵ The question of limits may be fairly posed for all modes of travel (and other matters) on Island. This document has limited this focus to the auto question due to the significance and pervasive nature of auto-dominated travel and use on Island today.

occupants logged 2.8 trillion person miles of travel. This amount of auto fuel would fill a lake the size of Nantucket 7 feet deep.⁶ In addition, and again on a national level, personal auto travel is increasing each year.

Related to the question of limits, the people of Nantucket as a part of the comprehensive planning process, and 1997 Town Meeting vote, have already stated they do not wish to implement many conventional traffic control devices, including: road widenings; building turning lanes; installing signals (“traffic lights”); or, for the most part, building new roads.

Limitations of these sorts are understandable philosophically because they are intended to control, direct and manage larger volumes of motor vehicles. In order to assess the impacts of these and other existing

premises, including the potential effects of the existing (1998) zoning, this portion of the comprehensive plan has analyzed some future condition transportation scenarios.

If Nantucket is to continue to be the “valued outpost” it has been, the national trends need to be avoided. Unfortunately, as the existing Nantucket data shows, this will prove to be a significant challenge, because in the peak of the season, many Nantucket dwellings are generating vehicular trips at a rate that is higher than the national rate. For this reason, limits and changes to several existing conditions will be necessary.

Nantucketers have faced the issue of self-imposed limitations previously. More than three hundred thirty

⁶ Source: Highway Statistics data files of the United States Department of Transportation Federal Highway Administration, Office of Highway Information Management and calculations by Chester Chellman, P.E. (Nantucket size assumed to be a

years ago, land-based transportation choices were limited to walking and animal power. However, fearing the adverse impacts of too many animals grazing on the Island, Nantucketers voted at that time to limit themselves to one horse per household.⁷

Existing Conditions and Travel Behavior

Presently there are seven means of travel between points on the Island of Nantucket, these are: walking; biking; NRTA shuttle (seasonal); taxis; tour buses (seasonal); private automobile; and, to a limited extent, by boat (limited by the availability of public landing areas).

When an individual contemplates travelling from one point to another, there are three basic decisions that must be made: the time of day for that journey; the mode of travel for that journey; and the route along which that

rectangle of 17 by 3 miles). Total vehicle fuel consumption in 1993 was 137 billion gallons; 183% of the auto portion.