

Martha's Vineyard Economic Profile

Prepared by
John J. Ryan
DEVELOPMENT CYCLES
Amherst, MA 01002
413.549.4848

Prepared for
The Martha's Vineyard Commission and
The Island Plan Livelihood and Commerce Work Group

January 2008

The Island Plan
Livelihood & Commerce Work Group
Economic Profile

Table of Contents

Introduction	2
Summary	2
Demographic & Economic Trends	3
Characteristics of Current Economic Activity	4
The Underground Economy	5
Key Livelihood and Commerce Issues	5
Paradigms and Opportunities	6
Promising Initiatives	8

The Economic Profile is a summary document. The following Appendices provide additional information and detail.

- Appendix A. Notes on Methodology and Study Limitations
- Appendix B. Demographic and Economic Trends
- Appendix C. Characteristics of Current Economic Activity
- Appendix D. Industry Profiles
- Appendix E. The Underground Economy

The Island Plan
Livelihood & Commerce Work Group
Economic Profile

Introduction

The Martha's Vineyard Commission (MVC) engaged consultant John Ryan, Principal of Development Cycles in Amherst, Massachusetts, to review a wide range of economic and demographic information for Dukes County in order to present an economic trends profile that reflects upon the key issues facing the Livelihood and Commerce Work Group. The following is a summary of key findings and recommendations.

The analyses and recommendations in this report reflect the opinions of the consultant only. They have not been approved by and do not necessarily reflect the opinions of the Martha's Vineyard Commission, the Island Plan Steering Committee, or the Island Plan Livelihood and Commerce Work Group.

Note: For more details on the methodology and limitations of this report see Appendix A. Notes on Methodology and Study Limitations

Summary

Over the past half century, the Vineyard has developed as one of the premier resort and vacation-based destinations in the Northeast. It has utilized its natural beauty and location to capitalize on national changes in demographics and wealth formation. Those changes have provided the economic drivers for the island's rapid growth in population, housing, job formation, and real estate values. Since 1980, the island's total wages paid have grown at an inflation-adjusted, compound rate of five-percent/year. By comparison, total wages in Massachusetts during this period actually declined by 0.5 percent/year after inflation. During this time, the island has developed two overlapping economies: one to serve the growing population of vacationers and one to serve the year-round population.

The key characteristics of the island's economy include relatively low wages and high costs, substantial accumulation of asset value for those fortunate enough to own homes, continued demand for relatively low paying service jobs, significant seasonal fluctuations in demand for workers, high dependence on the spending of seasonal owners and vacationers, and a high perceived quality of life.

In the consultant's view, the key challenges facing the island's economy over the next 50 years include addressing limits to growth, finding "career path" work opportunities for a new generation of residents, attending to the needs of a much larger senior population, and integrating the role of a large foreign-worker presence.

The Island Plan
Livelihood & Commerce Work Group
Economic Profile

In the simplest terms, the consultant sees the island's overriding challenge as the need to increase the proportion of high-wage jobs without increasing the need for low-wage workers. The most promising opportunities to address this challenge include adding value to the island's vacation-related offerings through the integration of educational, cultural and environmental experiences; diversifying the economic base to include more non-vacation-related professional services that can be "exported" off-island; and expanding efforts to retain and circulate more local earnings on-island. The following summarizes some of the key findings and recommendations from the consultant's study of the island economy.

Demographic and Economic Trends

The era of high economic growth rates is over. Population, housing starts, seasonal residents, and day visitors all went through an extended period of rapid growth starting around 1970. All of these growth rates have slowed in this decade. The next 20 years will likely be marked by much slower job and housing growth. The ability of residents to expand income enough to remain on the island will be more a function of the diversification of employment than of growth in the existing resort/tourism base.

As in all areas of Massachusetts, the Vineyard population is aging. The percentage of the island's seniors is rising faster and the concentration of children is declining faster than elsewhere in the state. High housing costs have virtually stopped domestic immigration and reduced the number of young working families. Finding workers to serve the rapidly growing senior population will be a major consideration for Martha's Vineyard over the next two decades.

The Vineyard's workforce is non-traditional and entrepreneurial. Islanders are far more likely than their statewide counterparts to be self-employed, to work part-time or seasonally, and to live in adult-only households. They are no more likely to receive non-earned income and are far less likely to receive public assistance. More than three quarters of all workers work in enterprises with fewer than five employees.

The transition to a year-round economy is happening, but slowly. There have been significant shifts in the island's dependence on its 16-week "high season" since 1990. The shoulder seasons are expanding, and there is a higher winter baseline of economic activity. But change comes slowly: winter wages accounted for 19 percent of annual wages in 1990 and 20 percent in 2006.

Note: For more details on demographic and economic trends see [Appendix B. Demographic and Economic Trends](#).

Characteristics of Current Economic Activity

Year-round residents purchase only about a third of the goods and services sold on the island. Seasonal homeowners and their guests generate more economic activity (38 percent) than do residents; vacationers and day visitors generate about 26 percent.

The visitor-related component of the economy produces far more low-wage jobs than high-wage jobs. The core visitor-related industries of Construction; Retail; Accommodation and Food Services; Arts, Entertainment and Recreation; and Property Services employ about half of wage-earning workers. These core industries produce only 20 percent of the island's high-paying jobs and 80 percent of its low-paying jobs. By comparison, other year-round economic activities produce twice as many high-paying jobs as they do low-paying ones (1,184 to 586).

Note: The consultant recognizes that year-round residents also utilize these activities; they are referred to as visitor-related because they constitute the core of services offered to vacationers.

Many low-wage workers are making significantly more than those doing the same jobs elsewhere in Massachusetts. The market seems to reflect, at least partially, the higher cost of living on the island in the compensation paid to the lowest-wage workers. The island's low average wage (73 percent of the statewide average) and low median household income (90 percent of the statewide median) is more a function of the nature of the jobs present than the level of wages within those sectors.

By contrast, traditionally high wage jobs tend to pay less on the island than elsewhere in Massachusetts. The ceiling seems to be formed partly by a higher reliance on part-time and seasonal work, but also by the limited number of professional, financial, business, scientific, technical, educational and health-related jobs that serve the visitor and year-round populations or that sell services to a market beyond the island itself.

The Vineyard has only a very small base of those high-paying jobs projected to grow fastest within the Cape and Islands economy. The Vineyard seems to lack the infrastructure needed to attract a larger share of the fast-growing, high-paying professional, technical, health, and education-related jobs taking hold nearby.

Note: For more details on characteristics of current economic activity see [Appendix C. Characteristics of Current Economic Activity](#) and [Appendix D. Industry Profiles](#).

The Underground Economy

Martha's Vineyard has many of the characteristics that support unreported employment, most notably a large foreign workforce and regular utilization of contract labor. In all, the consultant estimates that there are 16 unreported jobs for every 100 reported jobs, and these jobs pay \$12 in unreported wages for every \$100 in reported wages. This represents at least 1,200 unreported jobs and \$34 million in unreported wages. The actual numbers could be dramatically higher if the unsubstantiated estimate of 5,000 year-round undocumented foreign residents is close to accurate.

The chief significance of the underground economy may be in lost community stability. Underground workers stay for shorter durations. Since income is often saved for use somewhere else, the value of that labor does not circulate in the local economy as fully as it might. These residents cannot establish the credit or verify the income needed to purchase homes or borrow for long-term purchases. The underground economy also promotes focus on a shorter timeframe, with lower investments in capital, training and skill development.

Note: For more details see [Appendix E. The Underground Economy](#).

Key Livelihood and Commerce Issues

A Place for the Next Generation: Nearly 2,000 young people have graduated from the Martha's Vineyard Regional High School in the past 10 years. According to school department summaries, more than 70 percent of them went off to college. How many will return to the island is anyone's guess. Many residents came here to raise families and establish roots. High housing and living costs, coupled with limited opportunities for living-wage jobs, puts that hope at risk for many families. Focusing strategically on creating "career-path" jobs on the island for the next generation represents a critically important issue.

Aging and Health Care: By 2020, more than 22 percent of islanders will be senior citizens. Between 650 and 750 will be at least 80 years old. In less than a decade, the 65-and-over age cohort will be the fastest growing sector of the population. The consultant predicts that the largest growth in islanders' personal expenditure over the next 20 years will be for health care and the associated costs of aging. How and where care will be delivered, who will provide these services, and how much the services will cost represent major economic questions with no easy answers.

The Island Plan
Livelihood & Commerce Work Group
Economic Profile

Growth and Stewardship: When it comes to environmental vulnerability, it is hard not to see small islands with rapid growth, significant economic disparities, and limited natural resources as microcosms of our planet. Environmental and energy issues will certainly grow in importance as aspects of the island's livelihood and commerce. Finding the right balance between growth and stewardship is not likely to get any easier in the years ahead. Globally, one key entrepreneurial cutting edge is focused on finding profitable solutions to these challenges. It is worth asking in what ways that same entrepreneurial energy can be applied to growth and stewardship at the microcosmic level.

Foreign-born Residency: For more than a decade, the island has seen a dramatic increase in the presence of Brazilian and Central American residents. Yet, in all of that time, it seems little is known about the size, character and essential role of this segment of the community. While this is understandable given the polarization of opinion about foreign residency at a national level, it is unlikely that the Vineyard benefits from any group remaining in the shadows. Some greater level of understanding and engagement seems in order.

Paradigms and Opportunities

Looking at the long-term economy of Martha's Vineyard, the consultant sees balancing the following linked paradigms as rich areas for creative opportunity. The essential challenge seems to be how to see these as "both...and" rather than "either...or."

Islanders and Mainlanders: There are probably no islanders anywhere that don't, at some level, separate the world into these categories. There is nothing like a perimeter of ocean to distinguish "them" from "us." But there may be benefit in questioning how the notion of islanders vs. mainlanders serves the wellbeing of those who live and work here. In the consultant's view, the most important elements to cultivate for the island's future economic success are the financial and personal resources of its seasonal residents and those who are choosing to move to the island in retirement. These two groups' capacity to provide ideas, investment, contacts, entrepreneurial advice, training, and partnerships is a unique and inestimable resource. Getting this segment of the population to identify itself as "islanders" has the potential to transform the economic base of the Vineyard.

Resource-based and People-based: Martha's Vineyard, like all other resort communities, rests on the value of its natural resources. In this case, ocean, beaches, landscape, and climate represent the critical natural resources that drive visitation and investment on the island. It is possible to see vacation-related economic activity as a modified extraction industry like forestry or fishing or mining, extracting the economic

The Island Plan
Livelihood & Commerce Work Group
Economic Profile

value of these given resources in a (hopefully) sustainable fashion. Like other extraction industries, vacation-related activity is based on a high initial capital investment (in this case, vacation homes) and then relies upon lower labor costs as a percentage of economic activity. Adding value to the natural resource is the predominant strategy for breaking the cycle of low wages in extraction industries, and vacation-related economic activity is no exception.

At the same time, economic growth in extraction industries is limited by the capacity of the resource to sustain itself. Stewardship, preservation, limits on growth are especially important concepts in a resource-based economy. These issues are less central, when the economy is based more heavily on the skills and enterprise of its workforce than on the value of its natural resources. While many of the efforts of the Livelihood and Commerce Work Group are rightly focused on adding value to the vacation-related industry, a separate focus on how to develop industries that are not directly dependent on that natural resource provides even greater opportunity for higher paying work. Again, the key link may be the seasonal island residents who are often leaders in these other industries off-island.

Tradition and Innovation: The Vineyard's unique heritage contributes mightily to the island's economic value. The island's fishing and agricultural past, its Wampanoag roots, the old family names still present, the Methodist campground, the generations of returning visitors, the Portuguese heritage, and the black summer community in Oak Bluffs all represent essential ingredients of the Vineyard's appeal. These and many more traditional images give a depth of resonance and a sense of place valued by residents and visitors alike.

How does a community nurture this unique heritage while continually redefining itself in relation to changing world and national trends? How does it foster new traditions that reward the "genuine" over the artificial? Part of the answer lies in keeping those traditions alive, not as monuments, but as symbols of and links to the values that engendered them here. In the consultant's view, the core concept of offering a "living community" as the basis for both visitor and non-visitor efforts will translate into higher paid and more valuable work and quality of life for residents.

Local and Global: The Vineyard is still small enough to be highly personal. It is also a globally recognized destination. Fewer degrees of separation exist here between relative large extremes of wealth and influence. That combination is a big part of its appeal. How does the Vineyard capitalize on that special combination to create more high-wage job opportunities? In the consultant's view, the essential challenge for the island's livelihood and commerce over the next half-century is to diversify its economic base and reduce the importance of vacation activities and "asset maintenance."

The Island Plan
Livelihood & Commerce Work Group
Economic Profile

For all the benefits of an economy based on serving the vacation needs of its wealthy visitors (lower taxes, lower off-season population and demands) there is a downside to putting all of one's eggs in this basket. If the island expands *only* its personal and property services to this population, it will inevitably create more economic stratification, more dependence on low-wage jobs, less generational continuity, and more economic and social needs to address. The island has a strong entrepreneurial culture with a too-narrow scope. What is most needed is the infrastructure and capacity to export high-value services not necessarily outside of the United States, but certainly off-island. Simply offering more of the medical, financial, and professional services needed to serve Vineyard residents would provide many more good quality jobs.

Promising Initiatives

The following reflects the consultant's initial thoughts regarding five "Promising Initiatives" drafted by the Livelihood and Commerce Work Group.

1. **Set up an eco/cultural tourism program.** The consultant sees considerable value in this initiative as part of an integrated effort to provide more "value-added" and educational tourism experiences. Key goals include a focus on deepening and lengthening the visitor's experience, stay, and connection to the island; providing more interesting and higher-paid work experiences; capturing more of the "life learning" market for older visitors; and continuing to broaden the shoulder- and off-season visitor experience.
2. **Create new food processing and production infrastructure.** It's a stretch to see how agriculture and food production create many living-wage jobs on the island or how they might represent the highest value use of undeveloped and unrestricted land. That said, a working landscape on Martha's Vineyard adds enormously to the quality of experience that drives asset values and tourism. Putting 500 or 1,000 acres of new and existing conservation land into active farm use would represent a powerful expression of the Vineyard as a living community. This initiative needs a "master plan" that begins with an understanding of the land capacity, the growing season, market needs and opportunities; selects the range of products; and identifies the public and private sources of financing for the infrastructure needed.
3. **Establish a program to encourage local production and buying.** The consultant sees a lot of room for new and creative thinking in this area, with the key focus on keeping more local earnings circulating locally. The initiative needs a detailed feasibility assessment to determine what areas of unmet need exist and what areas of local buying and production can hope to compete effectively for

The Island Plan
Livelihood & Commerce Work Group
Economic Profile

local dollars. More importantly, the focus needs to go beyond retail shopping opportunities. Far more local earnings flow off-island to purchase insurance, mortgages, auto loans, and health services than for even big-ticket purchases such as automobiles and appliances.

4. **Set up a community-owned island electric utility.** Again, as a mechanism to keep earnings circulating locally, this initiative has considerable merit. Analyzing the financial feasibility of such an undertaking given the island's scale and seasonal demands, and identifying the professional skills and processes needed to take the idea from concept to profitable reality represent the next steps.
5. **Use incentives and other mechanisms to secure commercial and agricultural land.** The consultant suggests using the existing open space and conservation mechanisms to expand agricultural land and keeping the focus of this initiative on developing the capacity to offer commercial office space. This initiative represents a key element of a larger effort to expand the number of professional, year-round (non-vacation-related) jobs on the island.

The consultant recommends three additional initiatives to consider as the work group moves forward.

- ❖ **Develop linkages with seasonal residents:** As expressed previously, the consultant believes that the most significantly under utilized resource available to the island is its visitors and retirees. What steps might occur at this planning level to begin engaging those seasonal and retired residents in shaping the island's economic future?
- ❖ **Provide entrepreneurial training to sole proprietors and micro-businesses.** The Vineyard has a thriving culture of sole proprietors and micro-businesses. Over 70 percent of the island's business establishments have fewer than five employees, and that does not include the 2,000 or more self-employed individuals and unreported businesses. It is easy to see how one means to earn a living wage on the island is to become one's own "chief cook and bottle washer," thus limiting overhead and maximizing individual earning potential. This seems like an especially ripe environment to build entrepreneurial capacity. What common needs do these sole and micro-businesses have that could be handled more efficiently? What marketing, operational, and financial tools would allow the scope of entrepreneurial activity to grow? What outside linkages and partnerships could begin to export what is done especially well on-island to other locations? It seems that some focus on this type of "continuing education" could have enormous payback over time.

The Island Plan
Livelihood & Commerce Work Group
Economic Profile

- ❖ **Optimize the environment for remote work and telecommuting.** Neither U.S. Census nor Massachusetts Department of Labor and Workforce Development data tell us much about the sector of the local workforce that works for a remote employer via computer, telephone, and occasional off-island travel. This is certainly a growing trend that supports the kind of higher-paying professional work needed to afford life on the island. The Vineyard has many attractions for this kind of work and could develop this sector with greater intentionality. What infrastructure and linkage characteristics promote development of remote work professions? It may prove well worth the effort to explore this emerging economic niche.

Appendix A: Notes on Methodology and Study Limitations

The Martha's Vineyard Commission (MVC) engaged consultant John Ryan, Principal of Development Cycles in Amherst, Massachusetts, to provide technical assistance to the Island Plan Livelihood and Commerce Work Group. The consultant reviewed a wide range of existing sources of economic and demographic information for Dukes County in order to present an economic trends profile that reflects upon the key issues facing the Livelihood and Commerce Work Group. This profile attempts to deepen the analysis beyond the basic summary numbers to assess underlying trends, linkages, opportunities, and challenges.

Scope of Study

The profile addresses the following areas:

- ❖ Business Sectors: the role of key industry sectors, with a focus on key economic drivers
- ❖ Population Sectors: the economic contribution and impact of various population sectors, including year-round residents, part-time and seasonal residents, vacationers, and day visitors
- ❖ Workforce Characteristics: seasonal and year-round employment and the impact of the underground economy
- ❖ Future Employment Trends: employment growth sectors and their impact on wages and household incomes given key demographic, economic, and commercial trends

Methodology

The consultant used a wide range of resources to complete this economic review. Key sources include the following: the U.S. Census Bureau population data for 1980, 1990 and 2000; the U.S. Census Bureau business data for 1997 and 2002; the labor market information sources maintained by the Massachusetts Executive Office of Labor and Workforce Development; meals-tax and room-tax information from the Massachusetts Department of Revenue; ridership data from the Woods Hole, Martha's Vineyard, and Nantucket Steamship Authority; Martha's Vineyard Commission surveys of Vineyard residents, visitors and businesses; enrollment data from Martha's Vineyard Public Schools; economic development data from the Cape Cod Commission; and housing data from The Warren Group (publisher of *Banker & Tradesman* magazine) and the U.S. Department of Housing and Urban Development (HUD).

Appendix A: Notes on Methodology and Study Limitations

Limitations

This study has a number of limitations to consider when reviewing the findings and recommendations provided:

- ❖ The analyses and recommendations in this report reflect the opinions of the consultant only. They have not been approved by, and do not necessarily reflect the opinions of, the Martha's Vineyard Commission; the Island Plan Steering Committee; or the Island Plan Livelihood and Commerce Work Group.
- ❖ The information, estimates, and opinions contained in this report are derived from sources considered to be reliable. The consultant assumes the possibility of inaccuracy of individual items and for that reason relies on no single piece of information to the exclusion of other data, and analyzes all information within a framework of common knowledge and experienced judgment.
- ❖ One of the most significant limitations of this report is the reliance on official data sources that appear to substantially undercount the presence of foreign-born residents. The official data suggest as few as 300 foreign-born residents on the island, clearly an under-representation. The consultant was given anecdotal reports suggesting that as many as 5,000 Brazilian citizens live on the island, most year-round. While the consultant does not see housing utilization and food sales data to corroborate a number this high, this highlights a dramatic gap that may exist in the quality of some of the data. Until there is a meaningful census of undocumented, foreign-born population, the validity of findings on population, job growth, and the underground economy will remain suspect.

Additional Notes

- ❖ Much of the information in this report comes from the Massachusetts Executive Office of Labor and Workforce Development's (EOLWD) two major employment series. These series are longstanding and provide detailed local information on a month-to-month basis. The ES-202 data report local jobs and wages for different industrial classifications wherever employers pay wages to employees. This series does not report self-employed persons and a number of other job types (e.g., domestic workers, real estate agents, and insurance agents). The data are based on

Appendix A: Notes on Methodology and Study Limitations

the location of the job, not on the person who performs the job. The Local Area Unemployment Statistics (LAUS) series is based on a model that begins with a residential survey and relies on changes in wage reporting, unemployment claims, and other data to estimate the number of residents in the workforce, employed and unemployed. This series is based on the residence of the worker, not on the location of the job; its totals include a number of job types excluded from the ES-202 series, most notably those self-employed. Neither series distinguishes between part-time and full-time employment. This information is less meaningful as a measure of the absolute value of the information given than for its measure of trends over time and for its comparative value with other geographic areas.

- ❖ Martha's Vineyard constitutes six of the seven towns of Dukes County. The seventh town, Gosnold, on the Elizabeth Islands, has a population of fewer than 100 people. Thus, statistics for Dukes County can be considered representative of Martha's Vineyard. The two terms are used interchangeably in this report.
- ❖ In this report, the term “vacationer” is used to encompass two sub-categories: *seasonal residents*—homeowners or others coming to the Vineyard for a month or more, and *visitors* (tourists)—people coming for shorter time periods: a few weeks, a few days, or a few hours.

Appendix B: Demographic and Economic Trends

This Appendix looks in more detail at the key demographic and economic trends that help shape the future Livelihood and Commerce issues for Martha's Vineyard.

Population and Housing Growth

Population and housing growth have been by far the most significant driving forces in the island's economy since at least 1970. From 1970 to 2000, the island population grew at an average rate of 300 new residents per year, 200 of them working-age adults. The same period saw an average of 240 new homes built each year, half for residential use and half for vacation purposes. At the most basic level, this growth generated demand for a wide range of jobs and services.

Essentially, the island was developing two overlapping economies simultaneously: one to serve the growing population of vacationers and one to serve the year-round population. There is considerably more economic activity than there was 25 years ago. In 1980, wages paid for work on Martha's Vineyard totaled \$33.6 million. In 2006, that number was \$291 million. By this measure, the island's economy grew at an inflation-adjusted annually compounded rate of 5 percent per year over this period. By comparison, total State wages actually declined by 0.5 percent/year over the same period, after adjusting for inflation.

While the Vineyard's population growth since 1980 has been faster than that in any other Massachusetts town except Nantucket, the official rate of growth has slowed significantly since the 2000 Census. With a lower natural increase (births minus deaths) and virtually no officially reported net migration onto the island from within the United States, the Vineyard's only real growth sector since 2000 has been international migration. Based on the U.S. Census Bureau's population estimate for 2006, international migration accounts for more than 60 percent of the island's official growth since 2000.

Fig. B.1
Dukes County Population Growth
1970-2006

	1970-1979	1980-1989	1990-1999	2000-2006
Annual Rate of Population Growth	4.60%	3.02%	2.88%	0.59%

SOURCE: U.S. Census Bureau

Appendix B: Demographic and Economic Trends

Over the years, local officials have consistently argued that the Census undercounts the island's true residential population. The official 2006 Census continues to provide fuel for that controversy. It reports a total Hispanic or Latino population on island of 229 residents, far fewer than most local estimates of the island's residents from Brazil and Central America. Here the absence of reliable data hampers our understanding of trends. If the number of undocumented residents has indeed grown dramatically in recent years, this could offset the officially reported declining rate. Growth may actually be as robust as in the past. Whatever the true year-round population, the reality of slower growth in housing starts, seasonal vacationers, and permanent residents will likely be an important factor in the shape of the island's economic future.

Age Distribution

Since 1980, the island's working-age population has grown at a slightly faster rate than the population as a whole. In 1980, 19- to 64-year-olds represented 59 percent of the total population. Working-age residents increased to 62 percent of the population in 2000 and stands there today, but that trend is starting to reverse. The state data center projects that the county's working-age population will decline to below 60 percent by 2020, as the baby-boom population retires. By comparison, the Commonwealth's population of working-age residents increased from 61 percent of all residents in 1980 to 64 percent in 2007. It is projected to be 61 percent again in 2020.

In 1980, the island also had a smaller share of children and a larger share of seniors than did the state as a whole. By 2000, the county and state percentages nearly converged, largely as a result of the island's higher birthrate and the in-migration of households with children. But since 2000, the trend seems to be reversing. The percentage of the island's seniors (65 and over) is rising faster and the concentration of children is declining faster than in the state as a whole. In 2000, the Vineyard had 1,500 more children than seniors; by 2020 it will likely have 800 fewer.

The population over the age of 65 is projected to grow from 2,600 to 4,700 between 2007 and 2020, while the number of children will grow only from 3,750 to 4,100. Finding workers to serve the rapidly growing senior population will be a major consideration for Martha's Vineyard over the next two decades. It shares this challenge with the state as a whole, but will find itself competing directly with neighboring Barnstable County, where the imbalance between working-age and retirement-age residents is projected by the Census to be even greater.

Other Demographic Characteristics

Other demographic phenomena impact the local economy significantly. The following data, derived from the 2000 Census, show differences between Dukes County and the state as a whole:

- ❖ Dukes County has significantly more one- and two-person households (66 percent to 60 percent).
- ❖ Dukes County has far fewer households with children at home (23 percent to 33 percent).
- ❖ Dukes County has a higher concentration of persons 16 and over who work part time (25 percent to 17 percent) or less than 40 weeks per year (23 percent to 14 percent).

Note: From 1990 to 2000 there was an increase in the percentage of Dukes County's adult residents who worked less than 40 weeks of the year (20 percent in 1990; 23 percent in 2000) and part time (22 percent in 1990; 25 percent in 2000).

- ❖ Dukes County has slightly fewer households with two or more working residents (60 percent to 61 percent).
- ❖ More than 95 percent of Dukes County's working residents work within the county.
- ❖ Dukes County workers are more than three times as likely to be self-employed (19 percent to 6 percent).
- ❖ Dukes County households are no more likely to have retirement, interest, dividend, rental, or other income.
- ❖ Dukes County residents are less than half as likely to receive public assistance or SSI income.

Household Income

Vineyard household incomes are lower than those in the state as a whole. In 1999, the median household income for Dukes County was \$45,559, or 90 percent of the statewide median. During the 1990s, the percentage of very low income Dukes County households

Appendix B: Demographic and Economic Trends

(those with incomes below 50 percent of the state’s median income) dropped slightly to less than one in four households. The number earning more than 100 percent of the state’s median increased from 40 percent to 46 percent, with the largest increase among those earning more than 150 percent of the state’s median. Compared to the state, Dukes County households are less likely to have very low incomes (23 percent compared to 25 percent at less than 50 percent of the median) or very high incomes (24 percent compared to 30 percent at greater than 150 percent of median). It is interesting to note, for an island that projects an image of wealth, income differences between richer and poorer residents are actually smaller than they are in Massachusetts as a whole.

Fig. B.2
 Household Income as a Percentage of Massachusetts Median
 Dukes County, 1990, 2000

	1990	2000
Dukes County		
Less than 50% of median	25%	23%
50–79% of median	19%	22%
80–99% of median	16%	9%
100–149% of median	20%	22%
150% or more of median	20%	24%
Massachusetts		
Less than 50% of median	22%	25%
50–79% of median	18%	15%
80–99% of median	10%	10%
100–149% of median	21%	20%
150% or more of median	29%	30%

SOURCE: U.S. Census Bureau, 1990, 2000

Housing

One of the most significant economic trends on the island is in the cost of housing. From 1990 to 2006, the median cost of a home sold in Dukes County increased at an average rate of 14 percent per year. This compares to an average statewide increase of 5.3 percent per year. The percentage of Dukes County homeowners paying 35 percent or more of household income for monthly housing costs increased from 15 percent in 1989 to 26 percent in 1999; during the same period the state numbers dropped from 16 percent to 15 percent of homeowners. According to the 2000 Census, 500 island owner-occupants (more than one in ten) had housing costs greater than 50 percent of their total household income. Both in the short term (in light of the current mortgage scandals) and over the

The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
Appendix B: Demographic and Economic Trends

long term, the capacity of residents to handle the cost of owning a home on the island will feature strongly in shaping the economic future.

Fig. B.3
Median Home Value and Median Rent
 Dukes County and Massachusetts 1990, 2000, 2006

	1990	2000	2006
Dukes County			
Median home value	\$197,400	\$315,500	\$640,000
Median gross rent	\$647	\$741	\$1,300
Massachusetts			
Median home value	\$162,200	\$182,800	\$300,000
Median gross rent	\$580	\$684	\$1,200

SOURCE: U.S. Census Bureau 1990, 2000, 2006 Warren Group and HUD Fair Market Rents

The 1990's were relatively favorable for the 40 percent of Vineyard households that rent. The percentage of Dukes County renters paying 35 percent or more of household income for rent dropped from 38 percent in 1989 to 23 percent in 1999. That number is likely on the rise, however, in this decade. After increasing by less than 20 percent during the 1990s, both county and statewide median rents have increased by 75 percent in this decade already. Overall, Dukes County's household incomes remain 10 percent lower than the state's, but its rents are 10 percent higher and its median home costs are more than double those of the state.

Employment and Wages

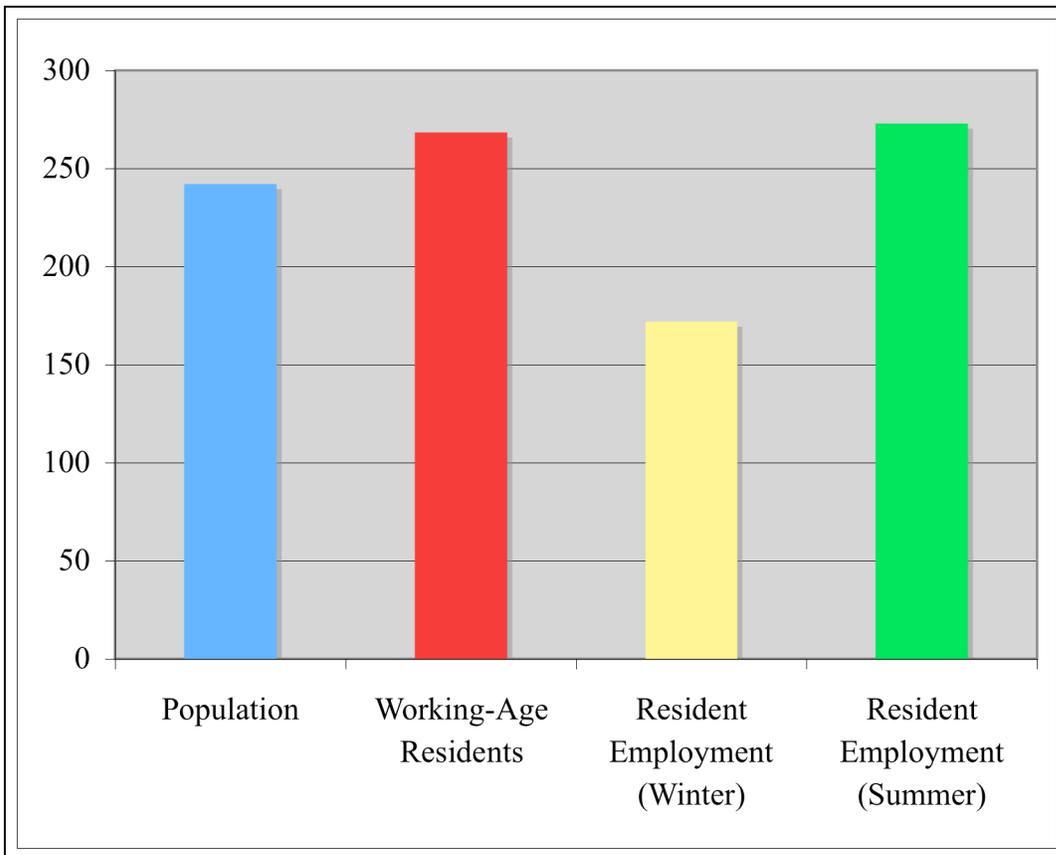
As the population has grown, so too has employment. From 1990 to 2006, the average number of employed residents on Martha's Vineyard grew by 172/year in the winter and 273/year in the summer months. Looking at first-quarter employment as the most reflective of year-round jobs, there are roughly 8,351 island residents working year-round. That number increased at an average rate of 3.6 percent annually during the 1990s, or nearly six times the rate of growth statewide. As the Vineyard's officially reported population growth has slowed, reported employment growth has also slowed in this decade, averaging only 1.5 percent annually since 2000. During this period, the state's employment fell by 0.5 percent annually.

Since 1990, local summer employment has grown faster than population at an absolute level. Winter employment has provided enough new jobs for 70 percent of new working-age residents. Throughout the year, jobs have more than kept pace with population

The Island Plan
Livelihood & Commerce Work Group
Economic Profile
Appendix B: Demographic and Economic Trends

growth. Again, at a basic level, part of the reason people have moved to the Vineyard is because there is work.

Fig. B.4
Annual Increase in Population, Working-Age Residents and Resident
Employment Dukes County 1990-2006



SOURCE: U.S. Census, Massachusetts EOLWD

The MA Executive Office of Labor & Workforce Development (EOLWD) tracks local jobs by industry for Dukes County. As these numbers do not include the self-employed and certain other job classifications, the numbers are significantly smaller than the numbers reported in the Resident Employment series. Indeed, the gap suggests that there could be more than 2,000 self-employed workers in the county on a year-round basis, representing as many as one in four working residents. This is a significant and unique characteristic of the local labor force. Both as a resource and as a limitation, it impacts efforts to direct the flow of the island's economy.

Appendix B: Demographic and Economic Trends

From 1990 to 2006, local wage-paying jobs grew by 100/year in both winter and summer, suggesting that most of the real net growth is in year-round jobs. Overall, local wage-paying jobs have increased by 400 jobs, or 5 percent, in the past five years, at a time when the number of statewide wage-paying jobs has actually declined.

Note: Wage-paying jobs refers to those jobs reported on the Massachusetts EOLWD's ES-202 report; this report excludes self-employed individuals and certain other job classifications.

The following looks at several industries key to the Vineyard's economy and compares the growth of each industry with similar growth statewide.

Fig. B.5
Wage-Paying Jobs by Selected Industry
 Dukes County and Massachusetts 1990–2006

	Total Jobs			Retail			Accommodation and Food Services		
	1990	2001	2006	1990	2001	2006	1990	2001	2006
Dukes Co. Workers	5931	7181	7578	916	1297	1281	851	1257	1283
Co. Annual Change		1.9%	1.1%		3.8%	-0.2%		4.3%	0.4%
MA Annual Change		0.8%	-0.5%		1.7%	-0.4%		1.1%	1.0%
	Health Care & Social Assistance			Professional & Business Services			Construction		
	1990	2001	2006	1990	2001	2006	1990	2001	2006
Dukes Co. Workers	599	727	730	349	488	565	380	577	708
Co. Annual Change		1.9%	0.1%		3.6%	3.2%		4.7%	4.5%
MA Annual Change		1.3%	1.5%		1.4%	-0.4%		0.0%	0.3%
	Public Administration & Education			Arts, Entertainment & Recreation			All Other		
	1990	2001	2006	1990	2001	2006	1990	2001	2006
Dukes Co. Workers	868	1097	1144	258	319	366	1968	1738	1867
Co. Annual Change		2.4%	0.9%		2.1%	2.9%		-1.1%	1.5%
MA Annual Change		1.5%	-1.1%		1.6%	1.3%		0.0%	-2.1%

SOURCE: ES-202 MA EOLWD

During the 1990s, all of the key economic sectors on the island grew faster than those in the state as a whole. In the past five years, however, Retail, Accommodation and Food Services, and Health Care and Social Assistance jobs have essentially stayed the same

Prepared by

App B-7

January 2008

John J. Ryan

DEVELOPMENT CYCLES

Amherst, MA 01002

Appendix B: Demographic and Economic Trends

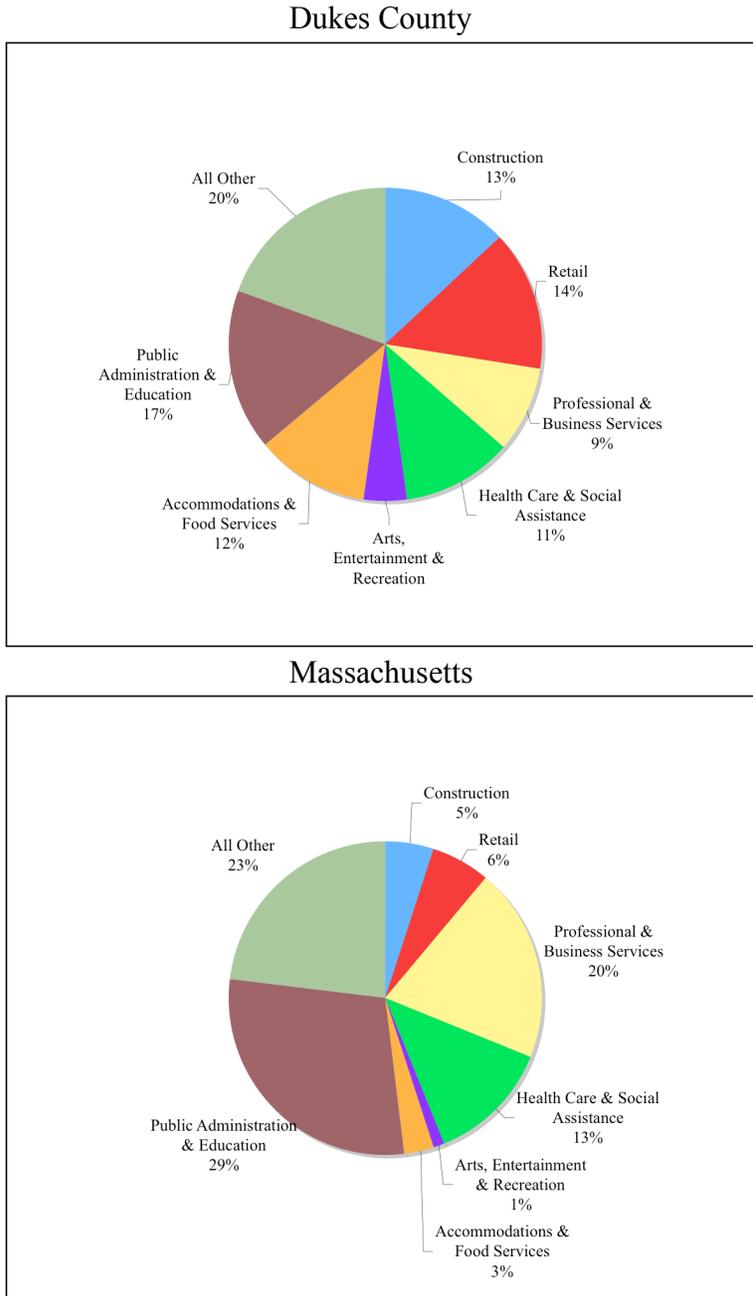
island-wide. It may be that these industries have stopped growing, that there has been some consolidation of part-time jobs into more full-time employment, or that more jobs are coming off the books. Given the significant rise in average wages for the lower-paying Retail and Accommodation and Food Services jobs, it is likely that consolidation may explain the better part of the phenomenon. While there was a noticeable growth in part-time employment in the 1990s, that trend may be reversing on the Vineyard in this decade.

The following gives a view of how much each selected industry contributes to the overall wages paid in Dukes County and how that differs from the state as a whole. As might be expected, the key vacation-related industries—Construction, Retail, Accommodation and Food Services, and Art, Entertainment and Recreation—play a much bigger role in the local economy than in the state economy. Taken together, they constitute 43 percent of all wages paid, compared to just 15 percent for the state as a whole. Interestingly, those four industries paid 50 percent of all local wages in 1990. This diversification of jobs away from the four core resort industries is a slow but crucial trend in the island's economic future. The industries underrepresented in comparison to the state—especially Professional and Business Services, Health Care and Social Assistance, and Public Service and Education—offer some of the best opportunities for living-wage, year-round jobs.

In 1990, the average wage paid for all jobs in Dukes County was \$18,209. That represented just 70 percent of the average for the state at that time. By 2006, the Dukes County average wage had more than doubled (\$38,346) and was still just 73 percent of the statewide average. The reason for this is not that the same jobs pay less (though there are several industries where that is so) but that the island's greater dependence on lower-paying industries significantly lowers the average wage.

The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
 Appendix B: Demographic and Economic Trends

Fig. B.6
 Total Wages by Industry as a Percentage of all Wages Paid
 Dukes County and Massachusetts, 2006



SOURCE: Massachusetts EOLWD

Appendix B: Demographic and Economic Trends

The county's average wage for the lowest-paying industries such as Retail; Arts, Entertainment and Recreation; and Accommodation and Food Services is actually significantly higher than the state's, and it is increasing faster than in the state. Higher-paying Health Care and Social Assistance and Construction jobs have risen to statewide averages since 1990. Public Administration and Education jobs were once paid well below statewide averages, but the gap has been closing since 1990. Only Professional and Business Services lags substantially behind. This industry sector lumps many high-paying professional jobs with the lower-paying Property Management sector. Property Management is where a much higher proportion of Professional and Business Services jobs occur on the island, thus deflating the average wage.

Fig. B.7

Average Wage for Selected Industry as a Percentage of State Average
 Dukes County 1990, 2001, 2006

	Construction	Retail	Professional & Business Services
1990	85%	98%	60%
2001	83%	108%	61%
2006	98%	119%	68%
Annual Change			
1990–2001	15%	5%	7%
2001–2006	6%	4%	6%
	Health Care & Social Assistance	Arts, Entertainment & Recreation	Accommodation & Food Services
1990	86%	79%	102%
2001	89%	90%	141%
2006	99%	116%	146%
Annual Change			
1990–2001	7%	8%	17%
2001–2006	8%	8%	3%
	Public Admin. & Education	All Other	Total
1990	64%	70%	70%
2001	79%	56%	67%
2006	85%	56%	73%
Annual Change			
1990–2001	6%	5%	7%
2001–2006	7%	4%	7%

SOURCE: Massachusetts EOLWD

Prepared by

John J. Ryan

DEVELOPMENT CYCLES

Amherst, MA 01002

App B-10

January 2008

Appendix B: Demographic and Economic Trends

Again, it is important to see that the island's low average wages is the result of the type of jobs offered there, not the comparability of pay. Though this was once a more significant issue, Dukes County now often pays wages higher than the statewide average, especially in the least skilled job classifications.

Seasonality

Has the Vineyard become more dependent or less dependent on the summer tourist season over the past two decades? The following tracks the rate of growth along a number of economic activities from 1990 to 2006, comparing first-quarter (January–March) with third-quarter (July–September) growth.

Fig. B.8
Seasonal Growth in Key Economic Indicators
Dukes County, 1990–2006*

	1st Quarter	3rd Quarter
Total employed persons	49%	47%
Total wage-paying jobs	37%	19%
Total wages	307%	220%
SSA passenger trips	53%	12%
SSA automobile trips	33%	13%
SSA truck trips	81%	63%
Meals tax gross receipts	105%	106%

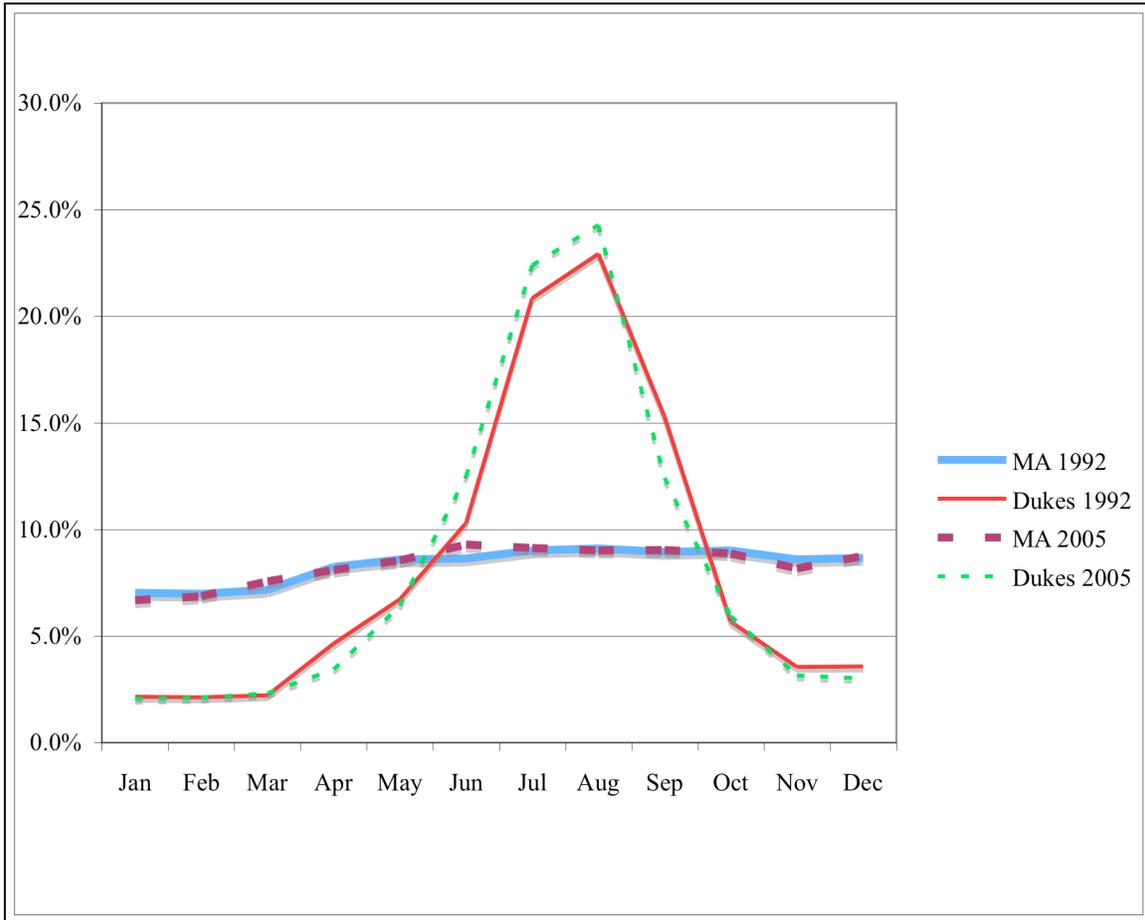
*Meals Tax Gross Receipts compares 1992 and 2005

SOURCE: Massachusetts EOLWD, SSA, Massachusetts Department of Revenue

In general, the data support the view that the island is becoming less dependent on the July and August high season, that the shoulder seasons are expanding, and that there is a higher winter baseline of economic activity. In absolute terms, all of the net growth in ferry trips, and in wage-paying jobs can be accounted for by growth in year-round rather than summer activity. In both of these areas, the greatest increases have occurred in the fourth quarter (October–December). Still, the overall movement is relatively slow. In 1990, first-quarter wages accounted for 19 percent of the annual total; in 2006 first-quarter wages were still just 20 percent of the total. Taxable food sales doubled during that period, with both winter and summer sales increasing at the same rate. Still, as the following indicates, the seasonal nature of that industry remains nearly as stark as it was in 1990.

The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
Appendix B: Demographic and Economic Trends

Fig. B.9
Monthly Meals Receipts as a Percentage of Annual Total
 Dukes County and Massachusetts, 1992, 2005

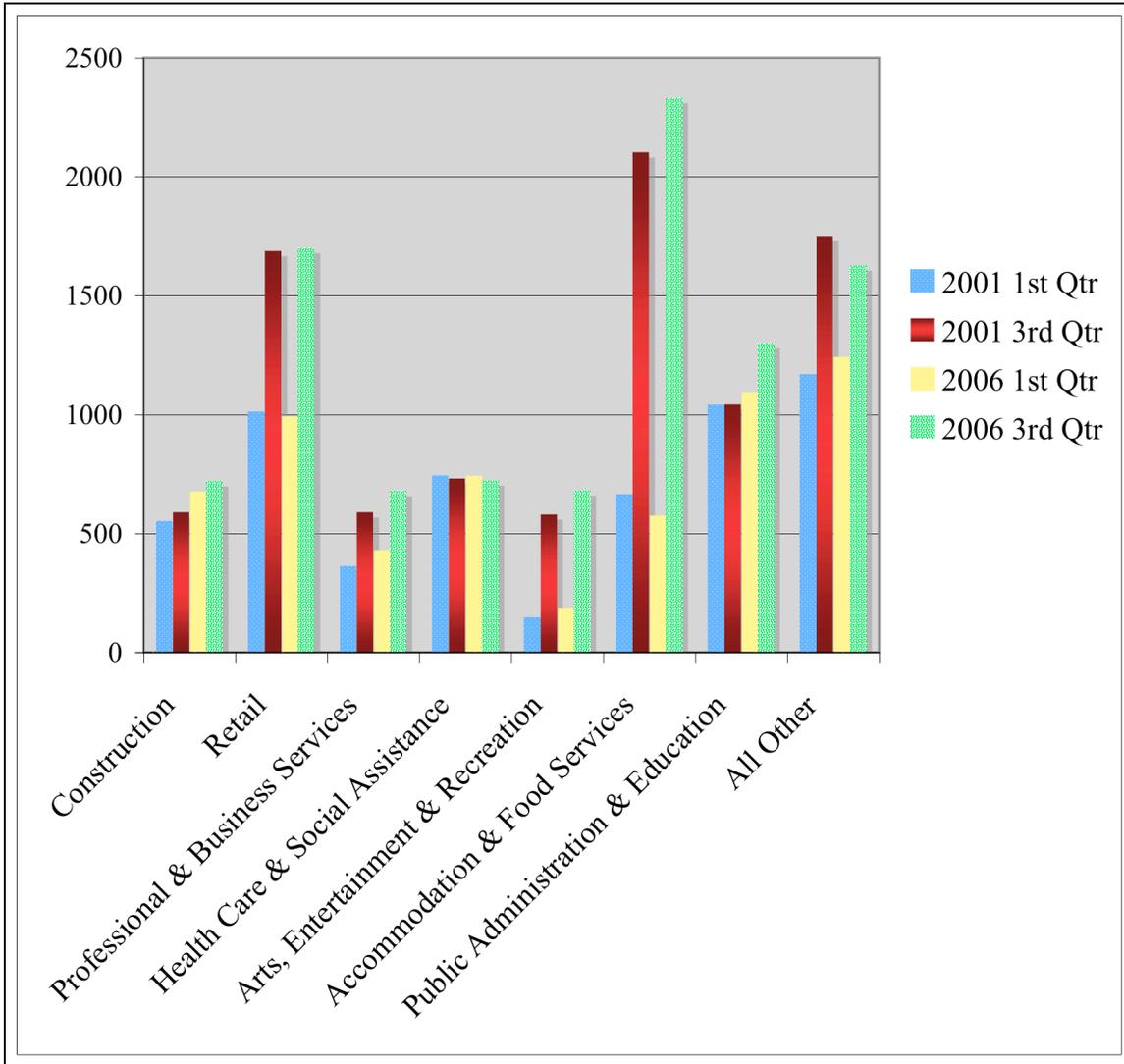


SOURCE: Massachusetts Department of Revenue

From 2001 through 2006, the island’s greatest first-quarter gains in wage-paying jobs came from Construction (22 percent), Professional and Business Services (19 percent), and Arts, Entertainment and Recreation (29 percent). Accommodation and Food Services (-13 percent) and Retail (-2 percent) actually lost first-quarter jobs. Summer jobs during the same period followed a similar but slightly different path: the same industries led the gaining industries, except that Public Administration and Education saw the largest summer-to-summer increase (25 percent). While Accommodation and Food Services jobs declined by 13 percent winter to winter, their summer-to-summer numbers grew by 11 percent. The range of All Other industries experienced the biggest summer-to-summer job losses (-7 percent).

The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
Appendix B: Demographic and Economic Trends

Fig. B.10
 Summer and Winter Job Growth, By Industry
 Dukes County, 2001-2006



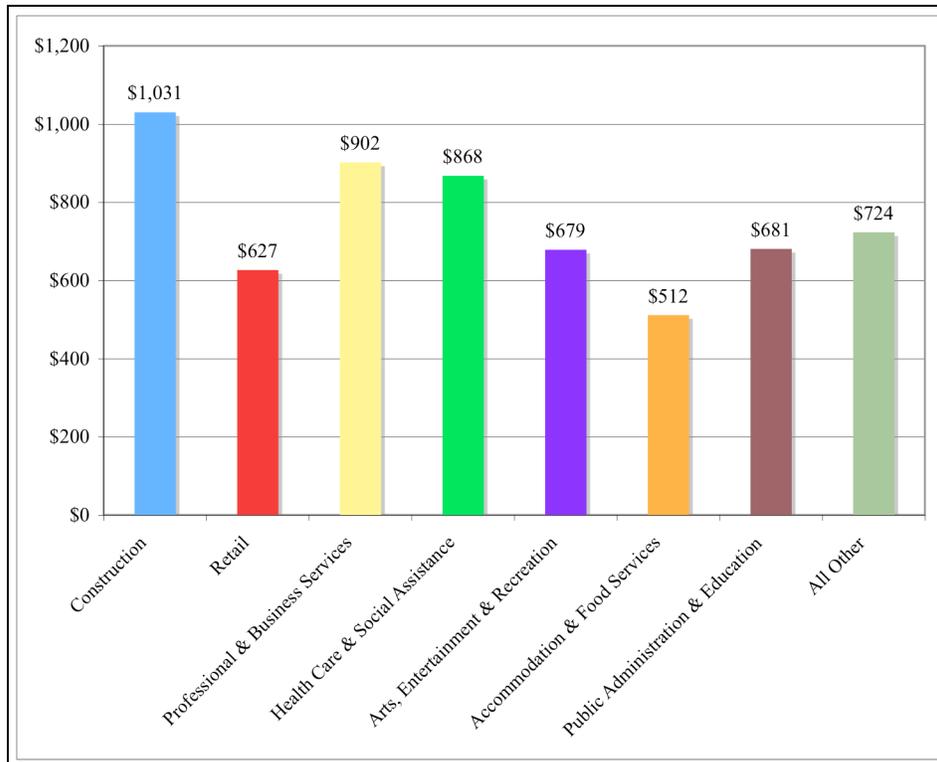
SOURCE: Massachusetts EOLWD

Appendix C: Characteristics of Current Economic Activity

Appendix C looks more closely at Martha's Vineyard's current economic activity through three lenses. The first looks at how different industry groups contribute to the overall economic activity; the second estimates the relative importance of residents, second-home owners, vacationers, and day visitors to the local economy; and the third looks at the seasonal ebbs and flows of the economy.

Contributions By Industry

Fig. C.1
Average Weekly Wages, By Industry
Dukes County, 2006



SOURCE: Massachusetts EOLWD

Note: The data on employment by industry comes largely from the Massachusetts Executive Office of Labor and Workforce Development (EOLWD) ES-202 data series. It reports local jobs and wages for different industrial classifications wherever employers pays wages to employees. This series does not report self-employed persons and a number of other job types (e.g., domestic workers, real estate and insurance agents). The data are based on the location of the job, not on the person who performs the job.

Appendix C: Characteristics of Current Economic Activity

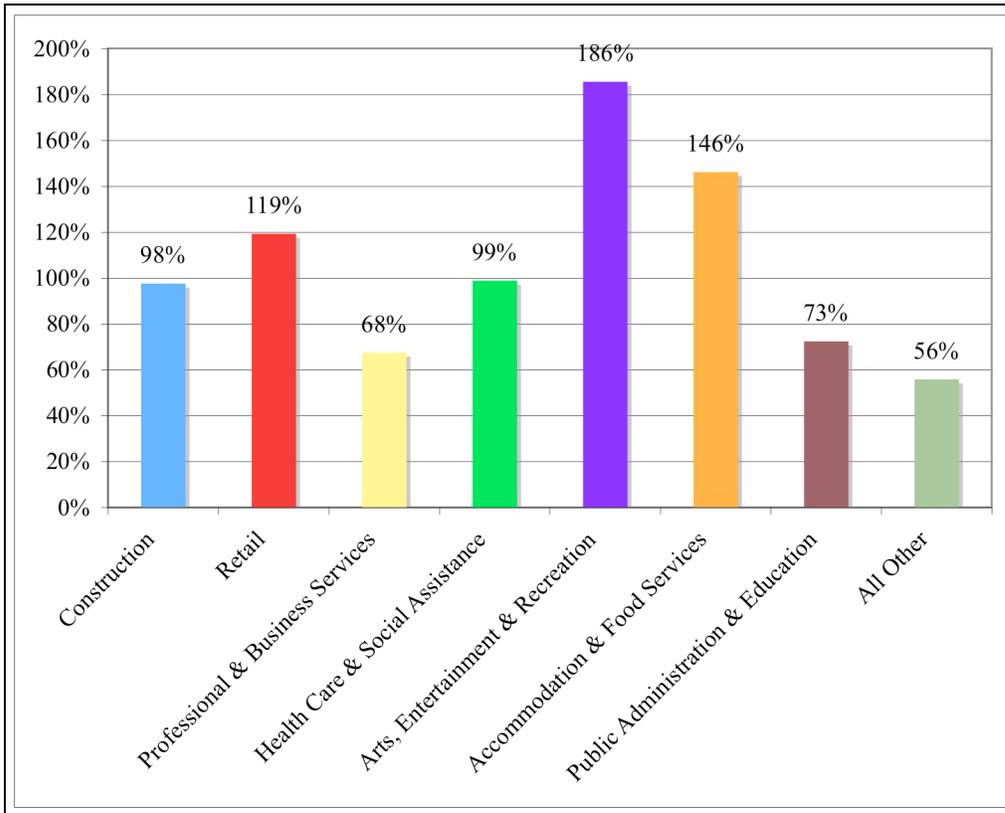
Clearly, not all jobs are alike in their ability to provide a living wage. For Dukes County in 2006, only Construction paid an average wage equal to the average wage for all jobs in Massachusetts. Several of the Vineyard's biggest employment industries are in the lowest tier of wages. More than half of all wage earners on the island work in the Retail; Food and Accommodations; Arts, Entertainment and Recreation; and Public Administration and Education industries. None of these pays an average wage above \$35,000/year.

Comparing county and state average wages paid by industry shows that the Vineyard's lowest-paying jobs actually pay much more than the same jobs pay in the rest of the state, while some of its highest-paying jobs pay significantly lower than the state average. Though Arts, Entertainment and Recreation jobs on the Vineyard pay an average wage of just \$671/week, that is nearly twice as much as workers in that industry get paid statewide. Similarly, Retail and Accommodation and Food Services workers are paid significantly higher than their statewide counterparts. At the other end of the pay continuum, Professional and Business Services workers and Public Administration and Education workers are paid at levels lower than those in the state as a whole. It seems as though there is some real market compensation for the high cost of living on the island, at least for the lowest-paid workers. Among the higher-paid industries, the ceiling seems to be set by a higher reliance on part-time and seasonal work and also by the limited number of professional, financial, business, scientific, technical, education, and health-related jobs, especially those that sell services to a market beyond the island, itself.

Appendix C: Characteristics of Current Economic Activity

Fig. C.2

Average Wage as a Percentage of State Average Wage, By Industry
Dukes County, 2006



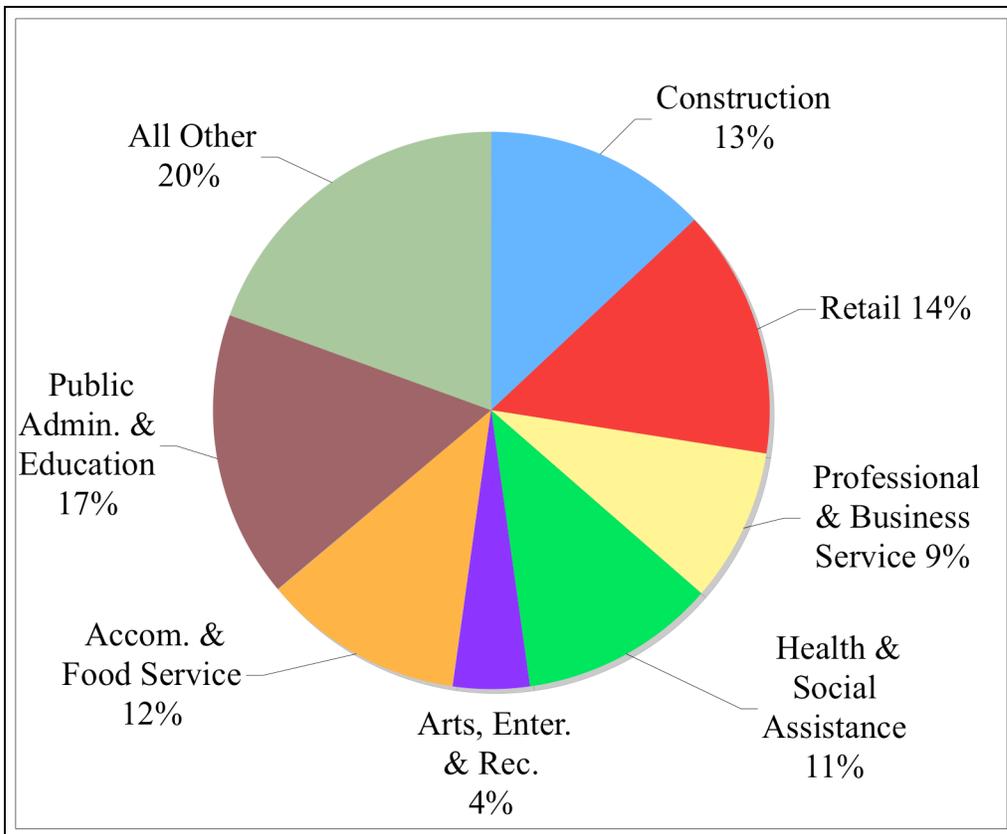
SOURCE: Massachusetts EOLWD

In many ways, total wages by industry provides the most reliable single indicator of how the Vineyard's economy works. No one industry dominates. The cluster of vacation-dominated industries (Construction, Retail, Accommodation and Food Services; Arts, Entertainment, and Recreation; as well as the property management and real estate components of Professional and Business Services) accounts for approximately half of the total wages paid on the island. It is reasonable to assume that these vacation-related jobs account for a still larger percentage of the earnings made by the island's roughly 2,000 self-employed workers and its underground labor sectors. At the same time, half of those who receive a paycheck do so for jobs that are not directly related to the island's vacation/resort activities. This reinforces the sense that the island's economy has a primary focus on serving the needs of second homeowners, vacationers, and tourists but has a secondary economy whose function is to serve the needs of the year-round population.

Appendix C: Characteristics of Current Economic Activity

Note: The consultant recognizes that residents purchase goods and services from these vacation-dominated industries and that vacationers purchase goods and services from the other sectors. The consultant highlights this somewhat artificial division to focus on those industries that are primarily driven by the needs of vacationers. Later in this section, the consultant looks at how much residents, seasonal owners, and other vacationers consume these goods and services.

Fig. C.3
Total Wages, By Industry
Dukes County, 2006



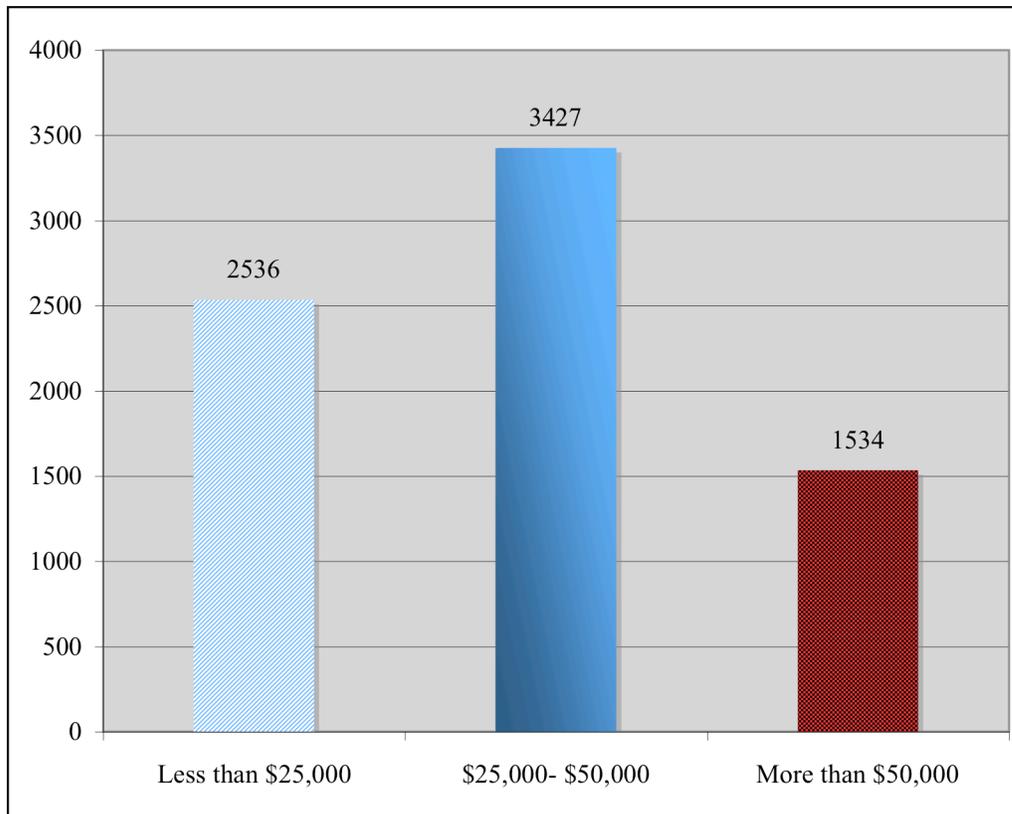
SOURCE: Massachusetts EOLWD

The consultant evaluated several hundred occupations that make up these major industrial classifications within the Cape and Islands Labor Market Area. The goal was to get beyond the limitations of industry wages and provide some analysis of higher-paying, moderate, and lower-paying jobs. In all, the consultant estimates that only about one wage-paying job in five on the island pays more than \$50,000/year, the average wage

Appendix C: Characteristics of Current Economic Activity

paid for all jobs statewide. Nearly half of all wage-paying jobs (46 percent) pay between \$25,000 and \$50,000; another 34 percent pay less than \$25,000/year. Of all the counties in Massachusetts, only Barnstable County has a comparable concentration of jobs paying less than \$25,000/ year. In the consultant's view, the most important focus of the Livelihood and Commerce Work Group's efforts should be on developing those industries that can produce more high-wage jobs.

Fig. C.4
Wage Distribution
Dukes County, 2006



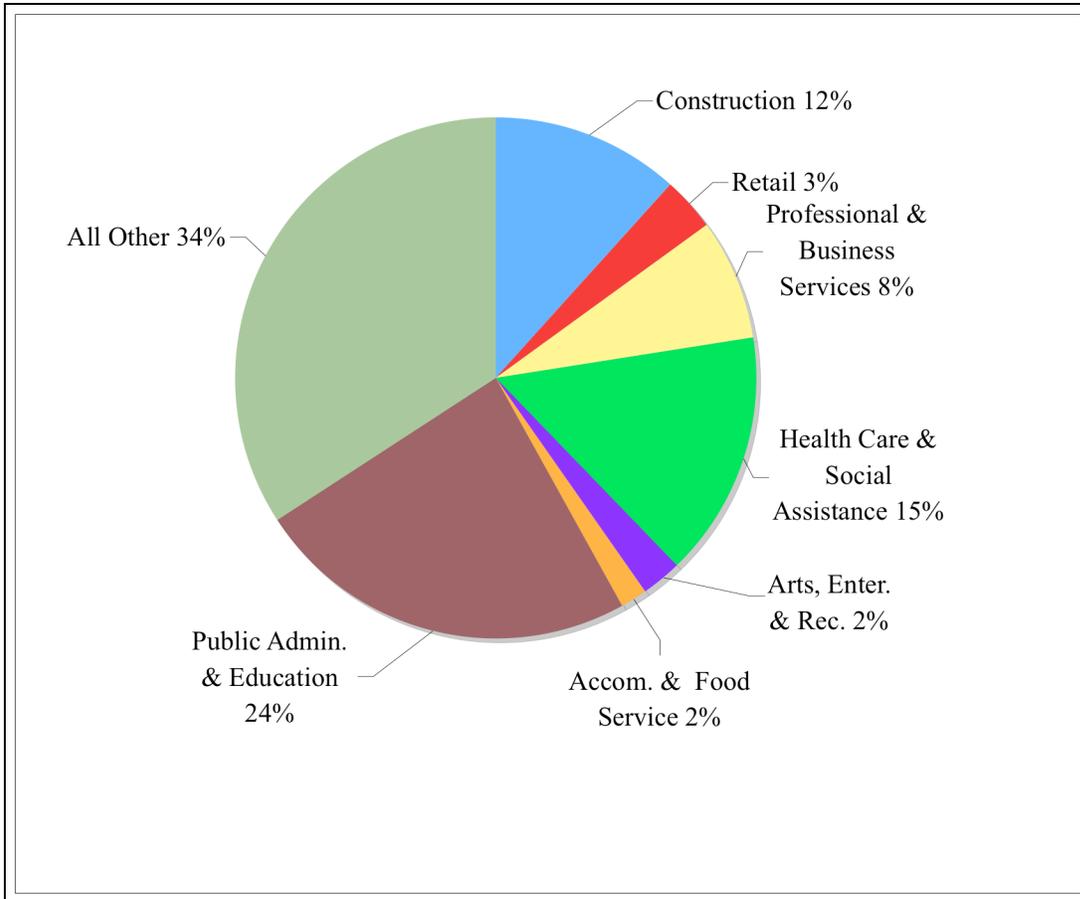
SOURCE: Development Cycles estimate from Massachusetts EOLWD

Looking at which industries produce the greatest number of high-, moderate-, and low-paying jobs, it is sobering to realize that only about 20 percent of the island's 1,534 high-wage jobs occur in the core vacation-related industries of Construction, Retail, Food and Accommodations, Property Management, and Arts, Entertainment, and Recreation. At the same time, these industries produce more than 2,000 of the 2,500+ low-wage jobs. By comparison, the non-tourism-dominated industries produced more than twice as many

Appendix C: Characteristics of Current Economic Activity

high-wage jobs (1,218) as they do low-wage jobs (497). The non-vacation sector also produces 56 percent of jobs paying between \$25,000 and \$50,000.

Fig. C.5
Higher Paying Jobs
Dukes County, 2006



SOURCE: Development Cycles estimate from Massachusetts EOLWD

Appendix C: Characteristics of Current Economic Activity

Fig. C.6

Wage Distribution by Vacation-Related Status

Dukes County, 2006 Estimate

	Less than \$25,000	\$25,000– \$50,000	More than \$50,000
Vacation-related industries	2039	1507	316
Non-vacation-related industries	497	1920	1218
Total	2536	3427	1534

SOURCE: Development Cycles estimate from Massachusetts EOLWD

NOTE: Vacation-related industries include Construction; Retail; Arts, Entertainment and Recreation; Accommodation and Food Services; and the Property Management and Real Estate component of Professional and Business Services. Non-Vacation-related industries include Health Care and Social Assistance; Public Administration and Education; the remainder of Professional and Business Services; and All Other Industries.

In 2004, the Massachusetts EOLWD projected job growth for the Cape and Islands for the decade ahead. They identified a number of industries that would be likely to grow fastest and have the greatest need for workers to fill new positions and replace retiring and relocating job holders. The consultant compared their list of fastest-growing job types with the numbers of these workers employed in Dukes County in 2006 and with the average wage paid to those workers. The purpose was to see how well positioned Dukes County is to capture those emerging jobs.

Among the ten industries projected to grow at the fastest rate on the Cape and Islands, four offer relatively high paying jobs: software publishers, management and technical consulting services, scientific research and development services, and computer systems design. In 2006, Dukes County reported only 42 workers in these jobs with two categories having too few employers to record the number of workers. Only one of the high growth areas has as many as 100 workers in Dukes County, and workers in that category—Residential Care Facilities—are among the lowest-paid workers on the island.

Among the ten industries creating the most net new jobs, once again Dukes County has few workers in the high-paying jobs and significant numbers only in the lower-paying industries. These are jobs not projected to grow somewhere far removed from the Vineyard, but within the Cape and Islands Labor Market Area where relatively similar conditions exist. The biggest gainer in high-paying jobs over the next decade will very likely be the Vineyard's closest neighbor, Falmouth. Finding ways to build some

Appendix C: Characteristics of Current Economic Activity

infrastructure to support these high-growth, high-paying industries is one way to avoid continuing dependence on the existing cluster of industries that create a preponderance of low-wage jobs.

Fig. C.7

Growing Job Types

Cape & Islands Labor Market Area, 2004–2014 (projected)

Job Type	Projected Growth in LMA 2004–14	2006 Jobs Dukes County	Average Weekly Wage 2006
<i>Ten Fastest Growing Industries</i>			
Software publishers	49%	n/a	n/a
Management and technical consulting services	46%	28	\$1,314
Residential care facilities	39%	106	\$564
Home health care services	35%	55	\$563
Child day care services	29%	35	\$431
Other professional and technical services	28%	37	\$550
Scientific research and development services	27%	n/a	n/a
Computer systems design and related services	25%	14	\$1,363
Office administrative services	25%	n/a	n/a
Waste treatment and disposal and mgmt. services	25%	60	\$877
<i>Ten Industries Creating Most New Jobs</i>			
Food services and drinking places		909	\$471
Hospitals, private		n/a	n/a
Junior colleges, colleges and universities		n/a	n/a
Management and technical consulting services		28	\$1,314
Residential care facilities		106	\$564
Employment services		n/a	n/a
Offices of health practitioners		13	\$561
Computer systems design and related services		14	\$1,363
Scientific research and development services		n/a	n/a
Software publishers		n/a	n/a

NOTE: "New jobs" includes new positions and job replacements

SOURCE: Massachusetts EOLWD

Appendix C: Characteristics of Current Economic Activity

A different data source, the U.S. Economic Census, provides some indication of how much each of the Vineyard's key industries generates in terms of sales, shipment, receipts, and revenues. The most recent data available are from the 2002 Economic Census (the 2007 Economic Census will not report findings until 2009). To provide a more current estimate of overall revenues by industry, the consultant multiplied the 2002 information by the increase in wages paid within those industries from 2002 to 2006 on the assumption that revenues would rise more or less at the rate of wages.

For some industries, most notably Construction, the Census does not report revenue at the county level. To obtain estimates in this industry, the consultant looked at a range of comparable areas for which data were available and applied a ratio of revenue per employee to current Vineyard data. For the Accommodation and Food Services industries, the consultant utilized more current Department of Revenue data. These estimates of locally generated revenues should be seen as rough estimates. They show the Vineyard economy producing \$830 million in sales or other revenue. Just over half of the total comes from retail sales and construction.

Fig. C.8
 Sales, Shipments, Receipts or Revenue by Selected Industry
 Dukes County, 2006 Estimate

	2006 Sales	Pct of Total
Retail	\$320,000,000	39%
Construction	\$106,000,000	13%
Health Care & Social Assistance	\$72,000,000	9%
Food Services	\$72,000,000	9%
Accommodations	\$60,000,000	7%
Administrative, Support & Waste Mgmt.	\$48,000,000	6%
Arts, Entertainment & Recreation	\$48,000,000	6%
Other Services	\$45,000,000	5%
Professional, Scientific & Tech.	\$35,000,000	4%
Real Estate & Rental & Leasing	\$25,000,000	3%
Total	\$831,000,000	

SOURCE: Development Cycles from 2002 U.S. Economic Census and from Massachusetts EOLWD

Contributions by Resident and Visitor Status

This section of the profile focuses on the various contributions to the local economy of its residential population, second-homeowners and their guests, overnight vacationers (those

Appendix C: Characteristics of Current Economic Activity

who rent homes or stay in guest accommodations), day visitors, and working commuters. The numbers that follow represent the consultant's best estimates based on the available data. They should not be confused with hard data.

The number of people actually on Martha's Vineyard ranges considerably from fewer than 15,000 on given days in the winter to over 75,000 on peak summer weekends. By reviewing the monthly ferry records, seasonal housing data, room occupancy data, and MVC visitor surveys, the consultant estimates that there are roughly 10.5 million people-days of occupancy on the island annually. Over an average year, that occupancy breaks down by type roughly as follows.

Fig. C.9
Total Days of Occupancy by Resident Status
Dukes County, 2006 Estimate

Resident Status	Occupant Days	Percent of Total
Year-round residents	5,250,000	50%
Seasonal owners and guests	3,150,000	30%
Vacationers	1,500,000	15%
Day visitors	500,000	5%
Work commuters	75,000	<1%

SOURCE: Development Cycles estimate from SSA Annual Summaries, Massachusetts DoR room occupancy data, and MVC Surveys and Estimates, 10/07

Over the course of the year, residents constitute only half of the actual day-to-day occupants. Seasonal owners and their guests constitute 30 percent of the island's overall occupancy, vacationers 15 percent, and workers and day visitors 5 percent. Each of these groups is engaged in differing levels of economic activity each day they are on the island. By updating the sales and revenue data from the 2002 Economic Census, using the Massachusetts Department of Revenue data on Meals and Room Taxes, and drawing from the visitor surveys, the data indicate that the island generates roughly \$500 million in the predominantly vacation based activities of retail, entertainment, dining out, and transient lodging that generates a room tax.

Appendix C: Characteristics of Current Economic Activity

Fig. C.10

Vacation-related Sales by Resident and Visitor Status

Dukes County, 2006 Estimate

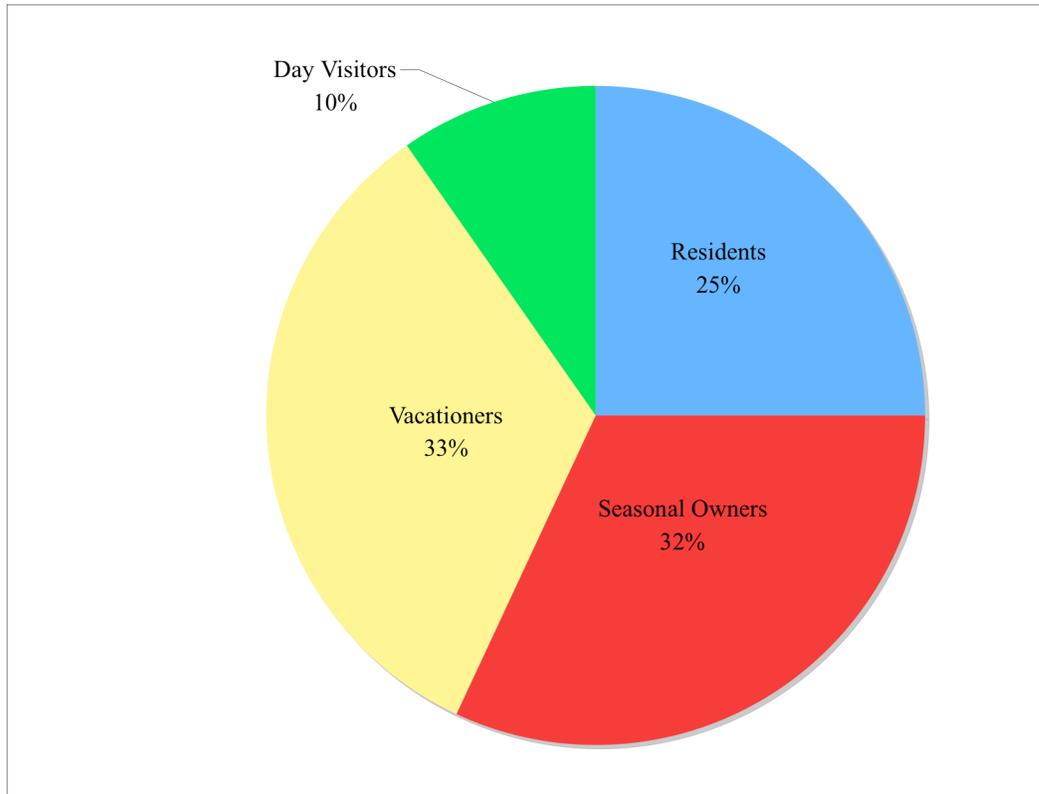
	Retail (\$ million)	Arts, Entertainment & Recreation (\$ million)	Food & Drink (\$ million)	Lodging (\$ million)	Total (\$ million)
Residents	100	7	18	0	\$125
Seasonal owners and guests	120	22	18	0	\$160
Vacationers	70	16	20	60	166
Day visitors and workers	30	3	16	0-	49
Total (\$ million)	320	48	72	60	500

SOURCE: Development Cycles estimates based on MVC Visitor Surveys, Massachusetts Department of Revenue Room and Meals Tax data, 2005, and 2002 US Economic Census

Year-round residents account for about 31 percent of on-island retail sales, about one in seven of all recreation and entertainment dollars spent, and a quarter of all restaurant sales. Overall, residents account for one-quarter of all these retail and vacation-related activities. Seasonal owners and guests, and overnight vacationers each make about one-third of the retail and vacation-related purchases, with seasonal owners spending more retail dollars and vacationers spending more on transient lodging. Though day visitors have the highest daily spending on non-lodging purchases, their overall contribution is significantly smaller. Commuting workers contribute less than 1 percent to these expenditures.

The Island Plan
Livelihood & Commerce Work Group
Economic Profile
Appendix C: Characteristics of Current Economic Activity

Fig. C.11
Resident and Visitor Status as a Percent of Vacation-related Sales
Dukes County, 2006 Estimate



SOURCE: Development Cycles estimate based on MVC Visitor Surveys, Massachusetts Department of Revenue Room and Meals Tax data, 2005, and 2002 US Economic Census

Beyond these vacation-related purchases, the U.S. Economic Census provides revenue data on various other types of services. This information does not indicate all sales (notably excluding Wholesale Trade, Public Administration, Education, Transportation, Insurance and Financial Services), but it does capture much of the remaining economic activity. Updated to reflect 2006 totals, the data indicate another roughly \$330 million in economic activity.

The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
Appendix C: Characteristics of Current Economic Activity

Figure C.12
Other Goods and Services Purchased
 Dukes County, 2006 Estimate

	2006 Revenue
Construction	\$106,000,000
Health Care & Social Assistance	\$72,000,000
Administrative, Support & Waste Mgmt.	\$48,000,000
Other Services	\$45,000,000
Professional & Business Services	\$35,000,000
Real Estate and Rental & Leasing	\$25,000,000
Total	\$331,000,000

SOURCE: Development Cycles estimates based on updating of 2002 U.S. Economic Census

Based on the following estimate of services purchased, the consultant estimates that residents and seasonal owners each purchase 47 percent of these services, with the rest purchased by non-resident commercial and other sectors.

Figure C.13
Percent of Other Goods and Services Purchased, By Resident Status
 Dukes County, 2006 Estimate

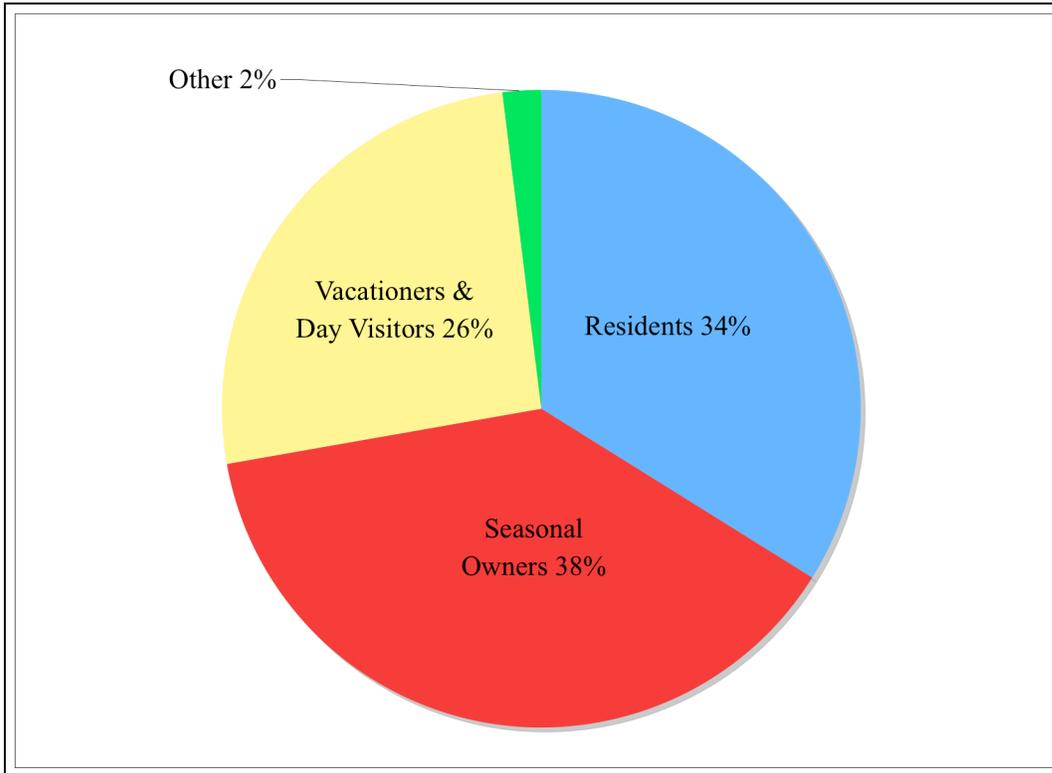
	Residents	Seasonal Owners	Other Non- resident
Construction	25%	70%	5%
Real Estate & Rental & Leasing	25%	10%	65%
Professional & Business Services	60%	40%	0%
Administrative, Support & Waste Mgmt.	40%	60%	0%
Health Care & Social Assistance	75%	25%	0%
Other Services	60%	35%	5%

SOURCE: Development Cycles based on MVC Visitor Surveys, Massachusetts Department of Revenue Room and Meals Tax data, 2005, and 2002 US Economic Census

Taken together, these vacation-related and other service activities generate an estimated \$831 million/year in economic activity. Of this combined economic activity, residents account for about \$280 million (34 percent), seasonal owners \$320 million (38 percent), vacationers and day visitors \$216 million (26 percent), and other sources \$15 million (2 percent).

The Island Plan
Livelihood & Commerce Work Group
Economic Profile
Appendix C: Characteristics of Current Economic Activity

Fig. C.14
Overall Purchases of Goods and Services, By Resident Status
Dukes County, 2006 Estimate



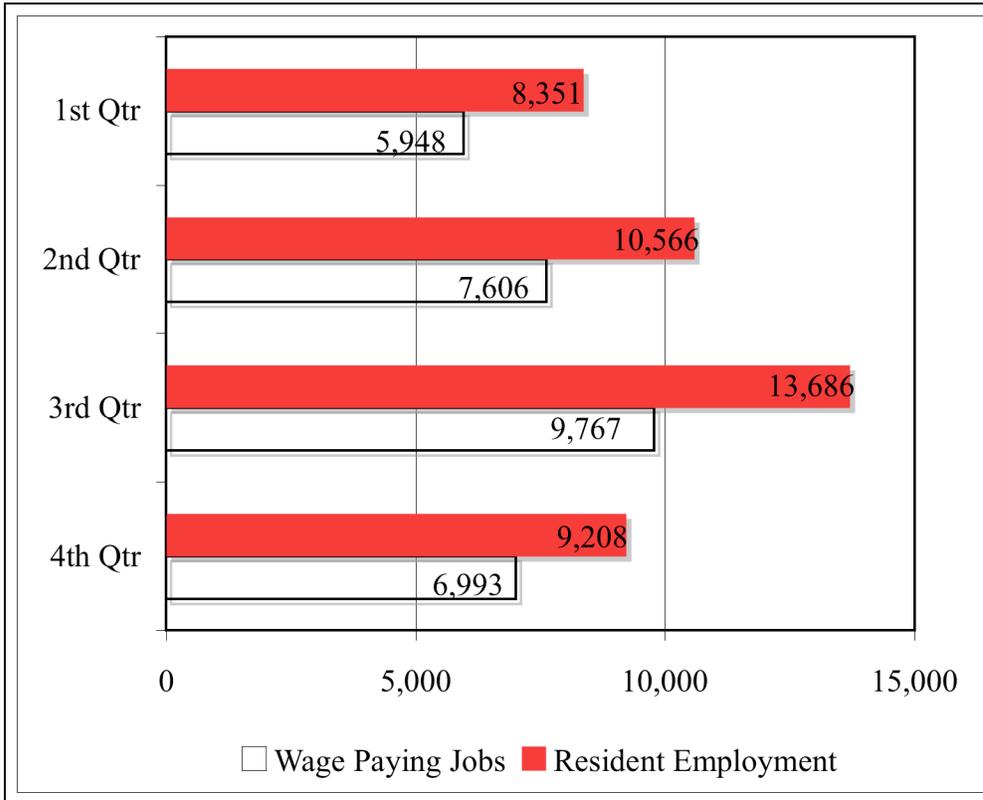
SOURCE: Development Cycles estimate based on MVC Visitor Surveys, Massachusetts Department of Revenue Room and Meals Tax data, 2005, and 2002 US Economic Census, 10/07

Seasonal Contributions

Finally, looking at the current local economy in terms of seasonality, the consultant focused on quarterly employment and jobs as well as quarterly wages. Throughout most of the year, there are roughly 40 percent more employed residents than there are wage-paying local jobs. Given that relatively few workers commute off-island, this discrepancy suggests a high level of self-employment and a relatively high level of contract labor and unreported work. In absolute numbers, the gap between employment and wage-paying jobs expands from 2,400 in the winter to 4,000 in the summer. The numbers indicate that the summer months attract between 3,000 and 4,000 workers who are only temporary residents. Perhaps as many as 1,000 year-round residents either stop working in winter or move away temporarily to work elsewhere.

The Island Plan
Livelihood & Commerce Work Group
Economic Profile
Appendix C: Characteristics of Current Economic Activity

Fig. C.15
Resident Employment and Wage Paying Jobs, By Quarter
Dukes County, 2006

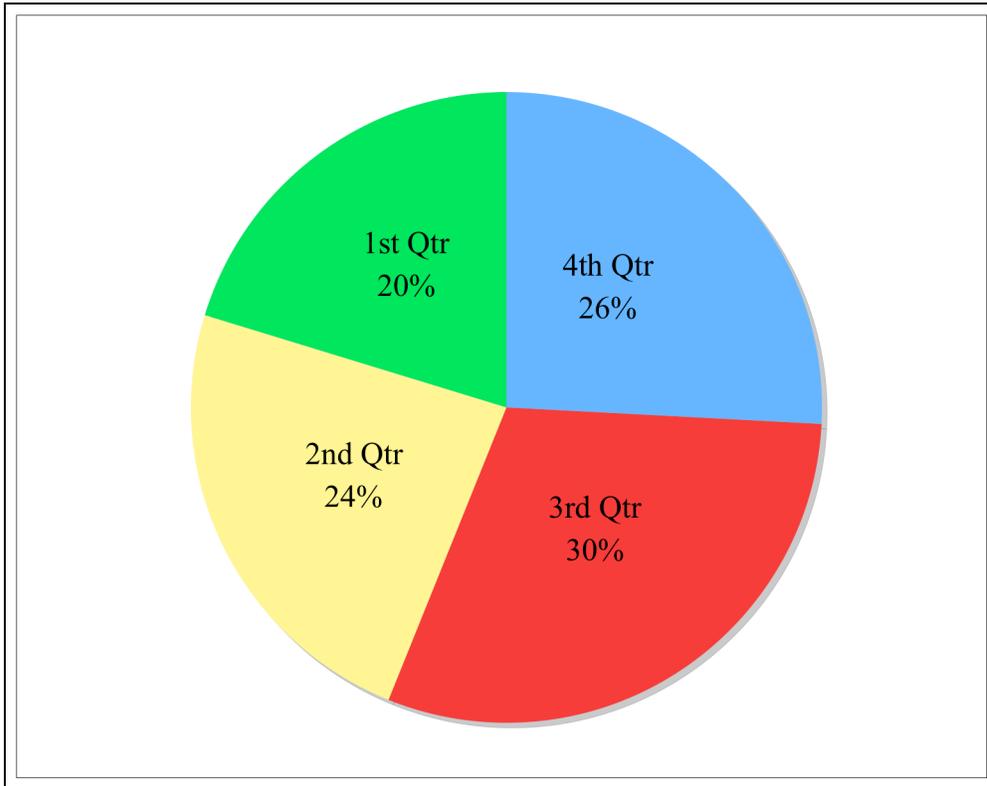


SOURCE: Massachusetts EOLWD

It is significant that the six spring and fall months now generate half of the total wages paid (up from 44 percent in 1990). The local wage-paying job base contracts in winter and expands in summer, but the concept of earning one's living over the summer and surviving on that income for the rest of the year is clearly no longer in play.

The Island Plan
Livelihood & Commerce Work Group
Economic Profile
Appendix C: Characteristics of Current Economic Activity

Fig. C.16
Total Wages, By Quarter
Dukes County, 2006



SOURCE: Massachusetts EOLWD

The Island Plan
Livelihood & Commerce Work Group
Economic Profile
Appendix D: Industry Profiles

In the eight following pages, Appendix D provides individual profiles for the major industry classifications in Dukes County. The data come from the Massachusetts Executive Office of Labor and Workforce Development (EOLWD), the U.S. Department of Labor's Bureau of Economic Analysis and the U.S. Census Bureau.

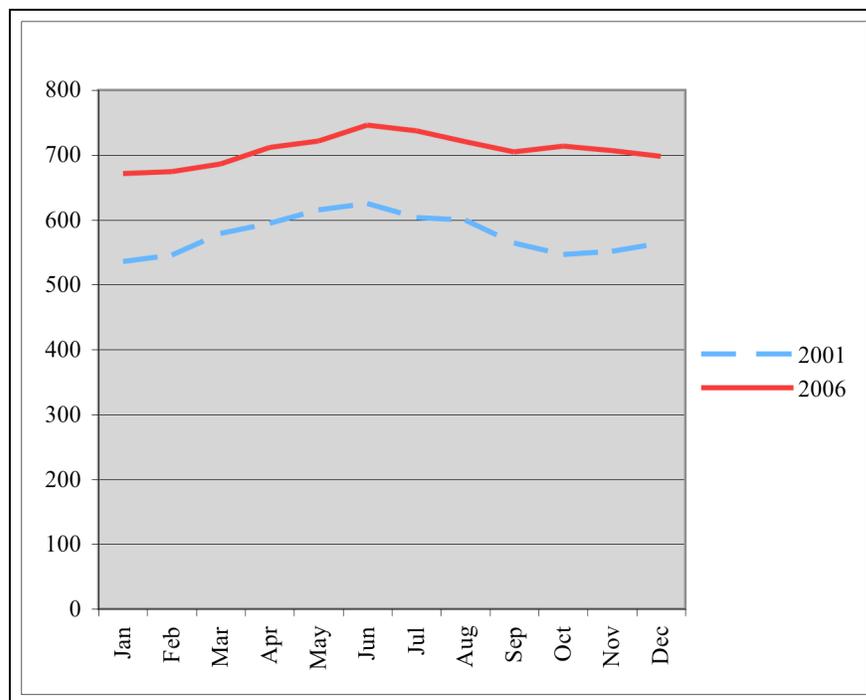
The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
Appendix D: Industry Profiles

Construction SIC 23	Dukes County Total	Percent of County Total	Compared to State	County Change 2001- 2006	State Change 2001- 2006
Total Sales, 2006 (\$000s)	\$331,000	32%	7%	65%	24%
Total Wages, 2006 (\$000s)	\$37,951	13%	5%	59%	11%
Average Monthly Employment, 2006	708	9%	5%	23%	2%
Average Annual Wage, 2006	\$53,612	139%	100%	29%	7%
Number of Establishments, 2006	198	17%	10%	2%	1%
Percent 1-4 Employees, 2005	73%	70%	70%	n/a	n/a

Jobs by Type and Wage Level

High Paying (>\$50,000)	25%	2%
Medium Paying (\$25,000- \$49,999)	48%	4%
Low Paying (<\$25,000)	27%	2%
Estimated Percent Unreported, 2007	25%	14%

Construction Employment, By Month
 Dukes County, 2001-2006



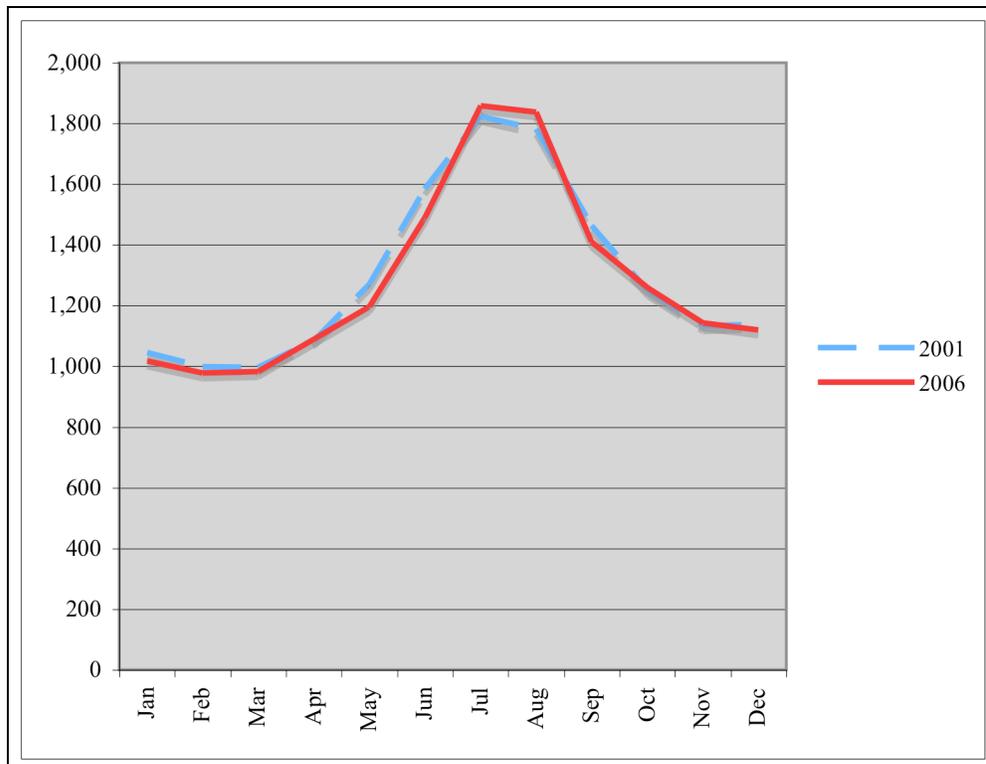
The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
Appendix D: Industry Profiles

Retail SIC 44-45	Dukes County Total	Percent of County Total	Compared to State	County Change 2001- 2006	State Change 2001- 2006
Total Sales, 2006 (\$000s)	\$325,000	31%	15%	12%	8%
Total Wages, 2006 (\$000s)	\$41,793	14%	6%	20%	7%
Average Monthly Employment, 2006	1281	17%	11%	-1%	3%
Average Annual Wage, 2006	\$32,604	85%	119%	22%	10%
Number of Establishments, 2006	198	18%	11%	-7%	-3%
Percent 1-4 Employees, 2005	67%	70%	47%	n/a	n/a

Jobs by Type and Wage Level

High Paying (>\$50,000)	4%	1%
Medium Paying (\$25,000- \$49,999)	35%	6%
Low Paying (<\$25,000)	61%	10%
Estimated Percent Unreported, 2007	15%	16%

Retail Employment, By Month
 Dukes County, 2001-2006



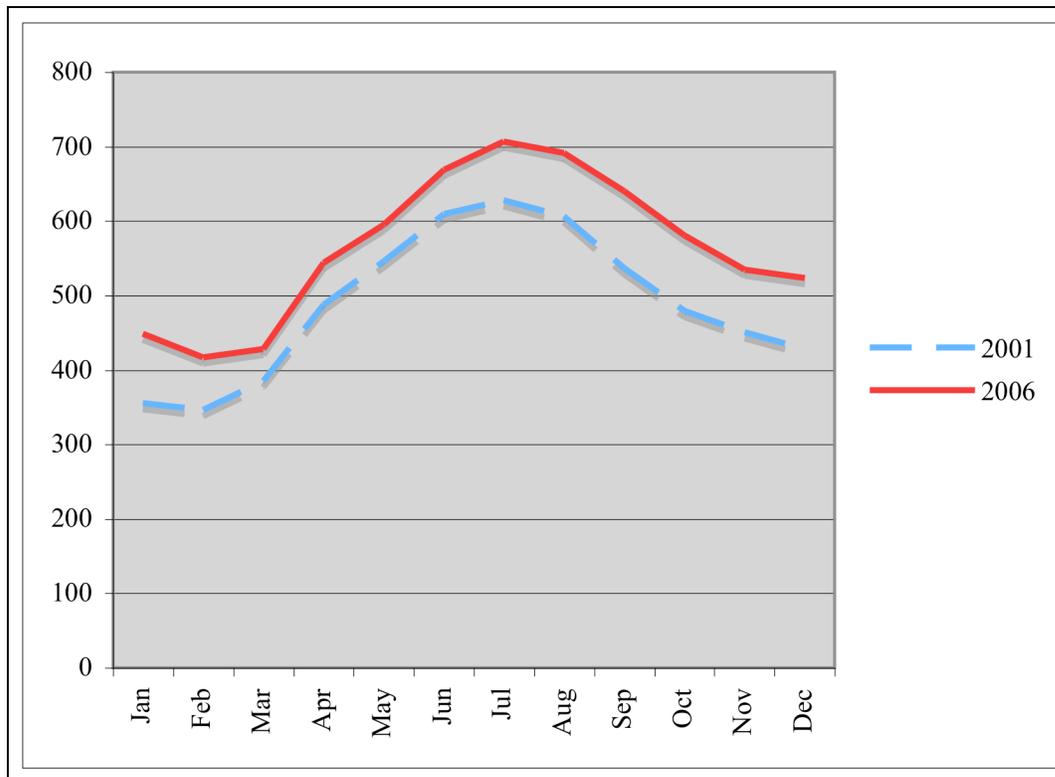
The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
 Appendix D: Industry Profiles

Professional & Business Services SIC 54-56	Dukes County Total	Percent of County Total	Compared to State	County Change 2001-2006	State Change 2001-2006
Total Sales, 2006 (\$000s)	\$76,000	7%	10%	25%	15%
Total Wages, 2006 (\$000s)	\$26,494	9%	20%	53%	17%
Average Monthly Employment, 2006	607	8%	15%	16%	-2%
Average Annual Wage, 2006	\$46,904	122%	68%	32%	20%
Number of Establishments, 2006	132	12%	19%	6%	4%
Percent 1-4 Employees, 2005	70%	70%	67%	n/a	n/a

Jobs by Type and Wage Level

High Paying (>\$50,000)	21%	2%
Medium Paying (\$25,000- \$49,999)	52%	4%
Low Paying (<\$25,000)	27%	2%
Estimated Percent Unreported, 2007	20%	10%

Professional and Business Services Employment, By Month
 Dukes County, 2001-2006



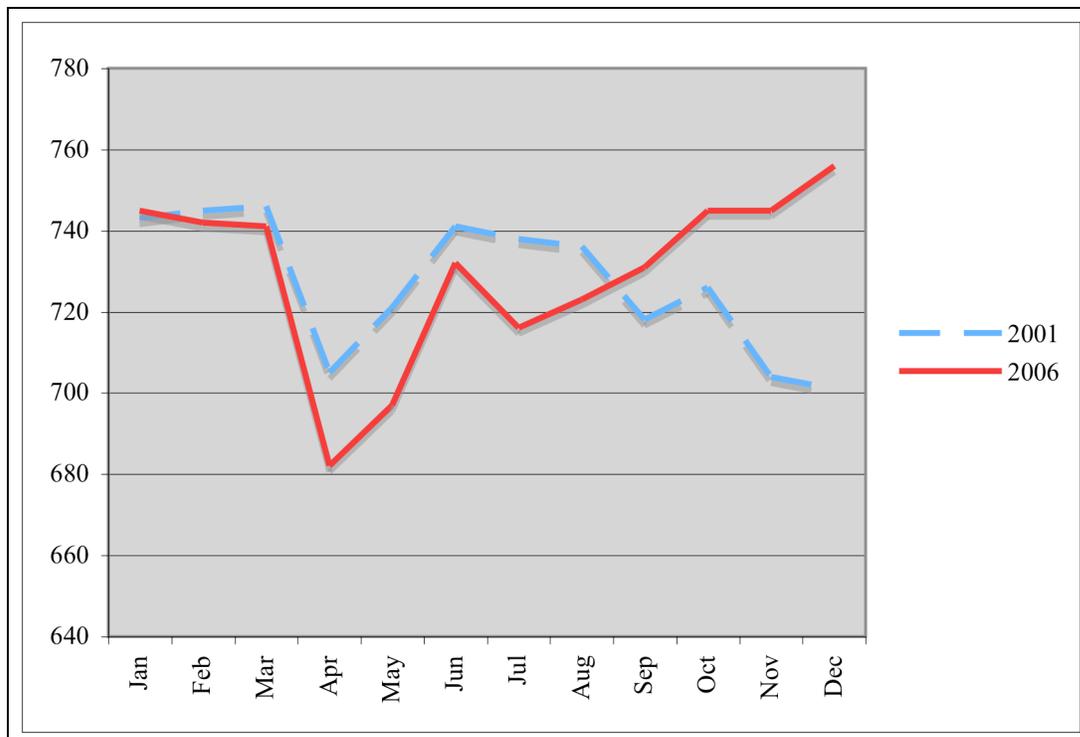
The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
Appendix D: Industry Profiles

Health Care & Social Assistance SIC 62	Dukes County Total	Percent of County Total	Compared to State	County Change 2001– 2006	State Change 2001– 2006
Total Sales, 2006 (\$000s)	\$72,000	7%	8%	33%	31%
Total Wages, 2006 (\$000s)	\$32,953	11%	13%	40%	38%
Average Monthly Employment, 2006	730	10%	15%	1%	8%
Average Annual Wage, 2006	\$45,136	117%	99%	40%	26%
Number of Establishments, 2006	50	4%	8%	4%	4%
Percent 1–4 Employees, 2005	62%	70%	40%	n/a	n/a

Jobs by Type and Wage Level

High Paying (>\$50,000)	32%	3%
Medium Paying (\$25,000- \$49,999)	46%	5%
Low Paying (<\$25,000)	22%	2%
Estimated Percent Unreported, 2007	5%	3%

**Health Care and Social Assistance Employment, By Month
 Dukes County, 2001-2006**



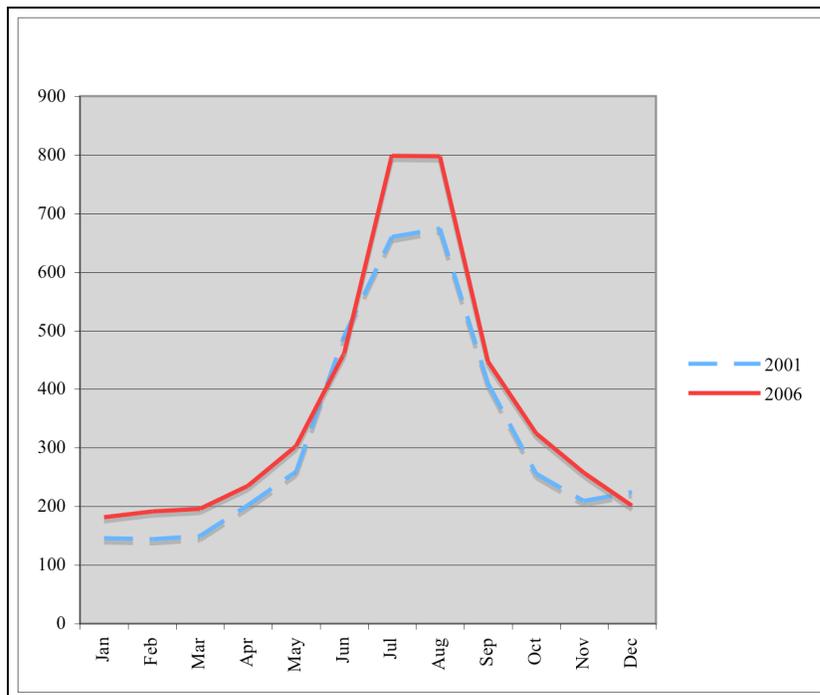
The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
Appendix D: Industry Profiles

Arts, Entertainment & Recreation SIC 71	Dukes County Total	Percent of County Total	Compared to State	County Change 2001– 2006	State Change 2001– 2006
Total Sales, 2006 (\$000s)	\$48,000	5%	1%	48%	18%
Total Wages, 2006 (\$000s)	\$12,920	4%	1%	63%	22%
Average Monthly Employment, 2006	366	5%	2%	15%	7%
Average Annual Wage, 2006	\$35,308	92%	174%	42%	10%
Number of Establishments, 2006	45	4%	2%	10%	14%
Percent 1–4 Employees, 2005	65%	70%	55%	n/a	n/a

Jobs by Type and Wage Level

High Paying (>\$50,000)	10%	1%
Medium Paying (\$25,000- \$49,999)	50%	3%
Low Paying (<\$25,000)	40%	2%
Estimated Percent Unreported, 2007	25%	8%

**Arts, Entertainment and Recreation Employment, By Month
 Dukes County, 2001-2006**



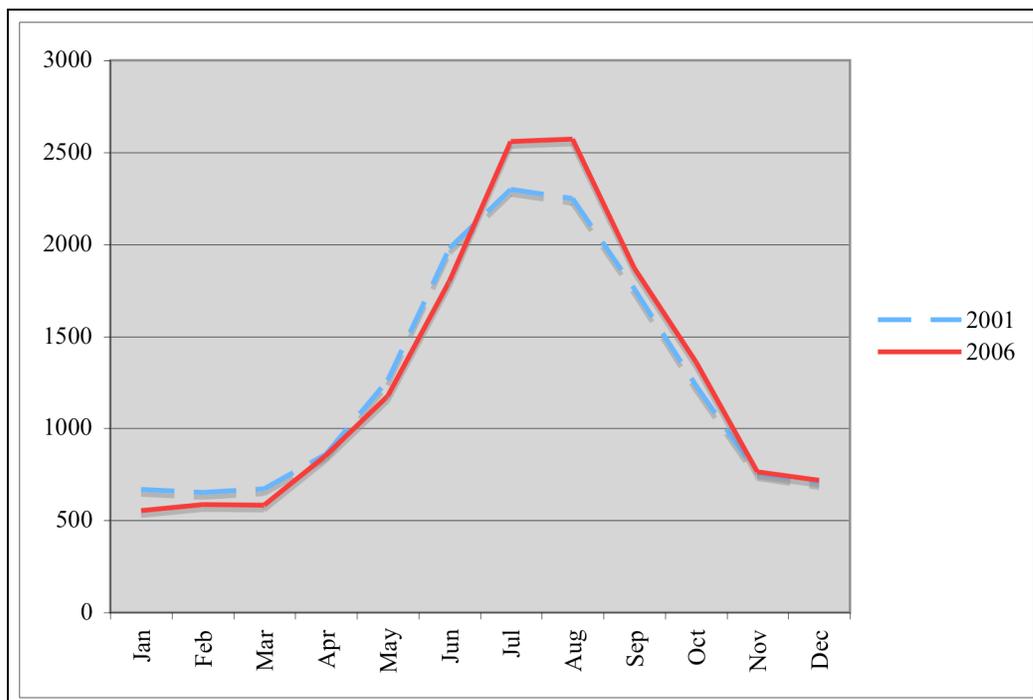
The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
 Appendix D: Industry Profiles

Accommodation & Food Services SIC 72	Dukes County Total	Percent of County Total	Compared to State	County Change 2001–2006	State Change 2001–2006
Total Sales, 2006 (\$000s)	\$128,000	13%	2%	47%	38%
Total Wages, 2006 (\$000s)	\$34,158	12%	3%	17%	19%
Average Monthly Employment, 2006	1283	17%	8%	2%	5%
Average Annual Wage, 2006	\$26,624	69%	146%	16%	13%
Number of Establishments, 2006	125	11%	7%	-3%	7%
Percent 1–4 Employees, 2005	73%	70%	41%	n/a	n/a

Jobs by Type and Wage Level

High Paying (>\$50,000)	2%	0%
Medium Paying (\$25,000- \$49,999)	34%	6%
Low Paying (<\$25,000)	64%	11%
Estimated Percent Unreported, 2007	25%	27%

Accommodation and Food Service Employment, By Month
 Dukes County, 2001-2006



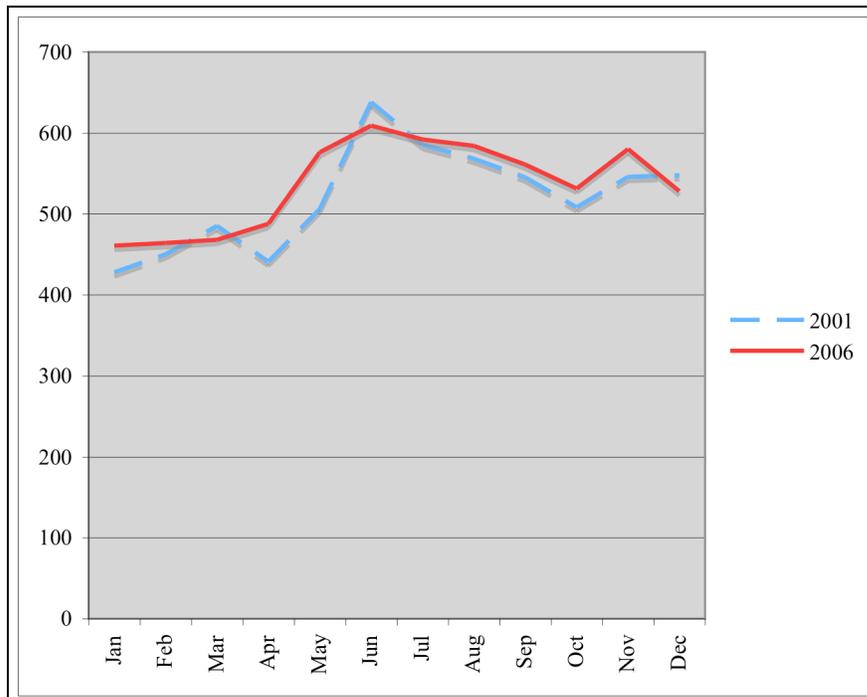
The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
 Appendix D: Industry Profiles

Education & Public Administration SIC 61& 92	Dukes County Total	Percent of County Total	Compared to State	County Change 2001–2006	State Change 2001–2006
Total Sales, 2006 (\$000s)	n/a	n/a	n/a	n/a	n/a
Total Wages, 2006 (\$000s)	\$48,559	17%	13%	39%	23%
Average Monthly Employment, 2006	1144	15%	14%	5%	2%
Average Annual Wage, 2006	\$42,447	110%	87%	33%	14%
Number of Establishments, 2006	55	5%	3%	-13%	13%
Percent 1–4 Employees, 2005	n/a	70%	n/a	n/a	n/a

Jobs by Type and Wage Level

High Paying (>\$50,000)	32%	5%
Medium Paying (\$25,000- \$49,999)	52%	8%
Low Paying (<\$25,000)	16%	2%
Estimated Percent Unreported, 2007	0%	0%

Education and Public Administration Employment, By Month
 Dukes County, 2001-2006



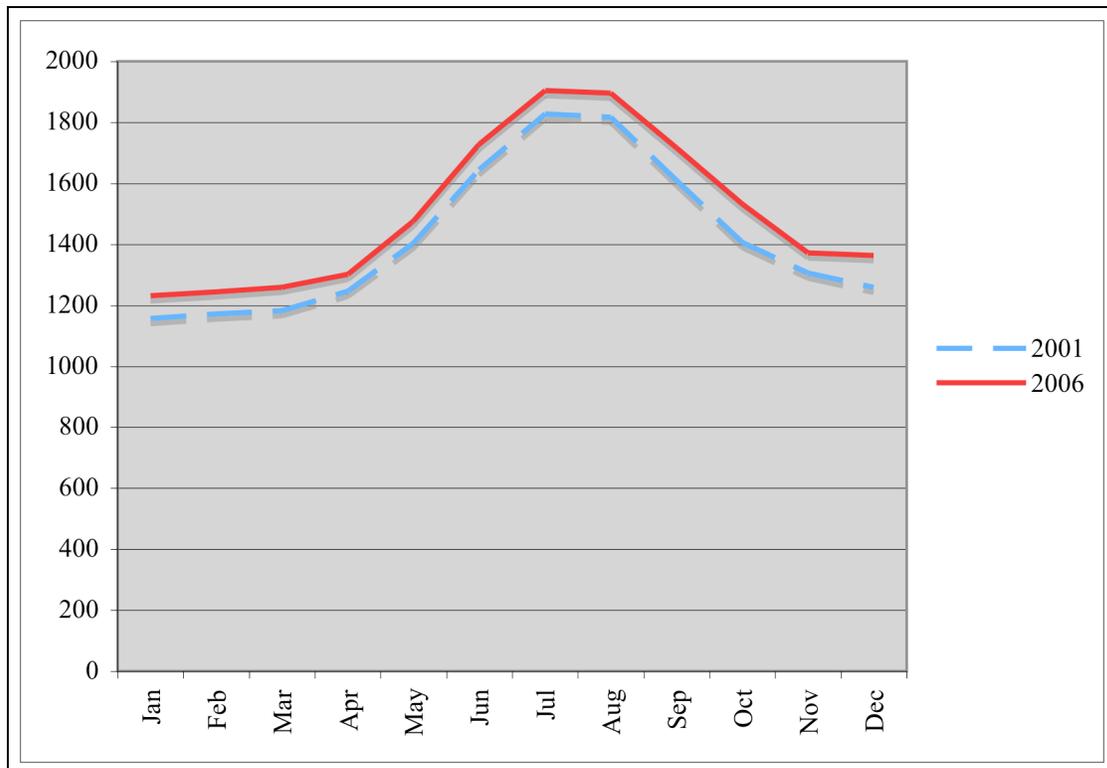
The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
Appendix D: Industry Profiles

All Other Industries SIC 11, 22, 31–33, 42, 48–49, 51–53, 81	Dukes County Total	Percent of County Total	Compared to State	County Change 2001– 2006	State Change 2001– 2006
Total Sales, 2006 (\$000s)	n/a	n/a	n/a	n/a	n/a
Total Wages, 2006 (\$000s)	\$56,514	19%	43%	25%	5%
Average Monthly Employment, 2006	1501	20%	31%	19%	-11%
Average Annual Wage, 2006	\$37,650	98%	56%	7%	18%
Number of Establishments, 2006	315	28%	40%	0%	12%
Percent 1–4 Employees, 2005	70%	70%	54%	n/a	n/a

Jobs by Type and Wage Level

High Paying (>\$50,000)	37%	7%
Medium Paying (\$25,000- \$49,999)	56%	11%
Low Paying (<\$25,000)	7%	1%
Estimated Percent Unreported, 2007	18%	21%

All Other Employment, By Month
 Dukes County, 2001-2006



The Island Plan
Livelihood & Commerce Work Group
Economic Profile
Appendix E: The Underground Economy

Appendix E looks briefly at the island's underground economy.

The consultant uses the term “underground” or “informal” economy to cover those work and economic transactions that would normally be subject to taxes and regulation but are instead handled through unreported payments. This definition focuses on work and economic activity that would be legal if reported. It includes a wide range of common island activities, from unreported tips to undocumented dishwashers, from under-the-table payments for contract labor to cash-based services, from child care to therapy, from weekly rentals of vacation homes to room-for-work barter arrangements. On the Vineyard, the underground economy consists both of unreported work performed by documented residents and unreported work performed by undocumented residents.

By its very nature, there are no direct data available about underground or informal economic activity on Martha's Vineyard. Indeed, no truly comprehensive study of the size of the underground economy exists in the United States. The consultant reviewed the national literature on the subject and compared the island's wage, sales, and tax data against those in Massachusetts generally in order to make the following observations on the scale and nature of the island's underground economic activity.

The underground economy is a large and growing part of the overall U.S. economy. The National Center for Policy Analysis (NCPA) has put the number of Americans who earn a large part of their income underground at 25 million, or 16 percent of the size of the reported labor force. They suggest that it grew from 4 percent of the Gross Domestic Product [GDP] in 1970 to 9 percent in 2000. That level would amount to over \$1 trillion/year today. A recent *Wall Street Journal* report suggested that the underground economy was growing at a rate of 5.6 percent annually, significantly faster than the mainstream economy. Undocumented foreign workers and increases in the use of “contract” labor are the major causes cited for this rise in underground economic activity.

The literature identifies certain characteristics of otherwise legal work most closely associated with the underground economy. A number of the key characteristics fit the profile of Vineyard work: areas with a high foreign-worker population; personal and property services, such as domestics, child care, and property maintenance; cash businesses, such as restaurants; self-employed persons; seasonal businesses and temporary work needs; low-skill jobs, and jobs with high workers' compensation insurance rates.

The consultant looked at several industries that provide information to the government about employees, wages, and revenue. Where there is a high rate of unreported employment, one might expect to see payroll as a smaller percentage of sales or

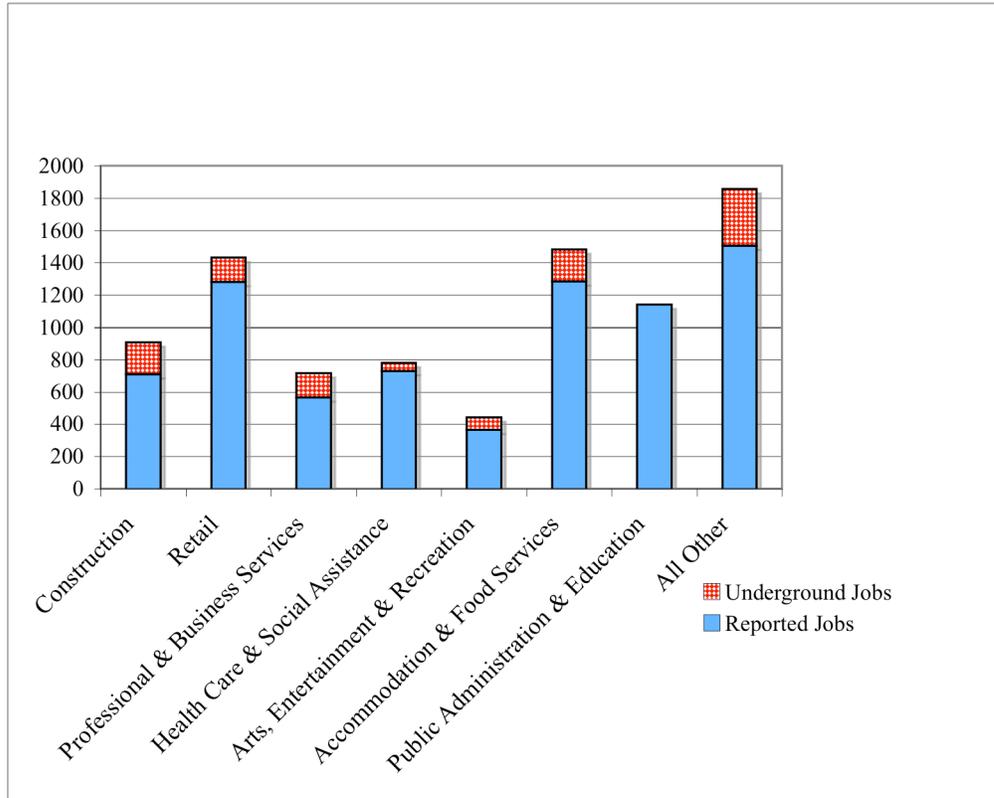
The Island Plan
Livelihood & Commerce Work Group
Economic Profile
Appendix E: The Underground Economy

conversely a higher value of revenue per reported employee. When comparing Dukes County to the rest of Massachusetts, the reverse was actually true. Especially in areas like Accommodation and Food Services and Retail, payroll as a percentage of sales was higher and sales per employee lower than for the state as a whole. If employers in these areas are hiring a higher-than-usual number of unreported employees, they are not reporting the revenue either. That is the nature of the underground economy; it is very difficult to track.

Martha's Vineyard has many of the characteristics that support unreported employment, most notably a large foreign workforce and regular utilization of contract labor. In all, the consultant estimates the underground economy on Martha's Vineyard conservatively at 12 percent of reported wages and 16 percent of reported jobs. This represents at least 1,200 unreported jobs and \$34 million in unreported wages. The actual numbers could be dramatically higher if the unsubstantiated estimate of 5,000 year-round undocumented foreign residents is close to accurate.

The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
Appendix E: The Underground Economy

Fig. E.1
Reported & Unreported Jobs
 Dukes County, 2006 Estimate

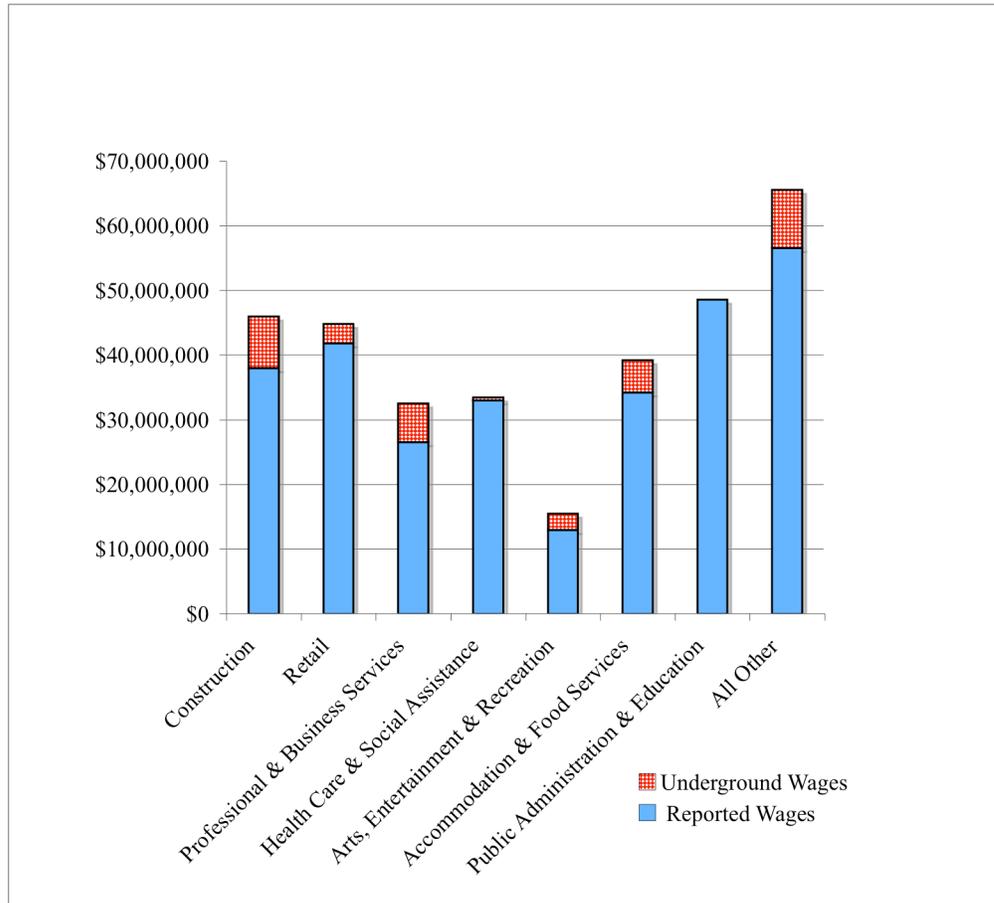


SOURCE: Massachusetts EOLWD and Development Cycles, 11/07

What is the larger significance of this underground economy regardless of whether it represents 12 or 20 or even 30 percent of the local economic activity? This is a tricky topic to engage productively, in part because of the inherent moral and ethical issues, in part because it is not clearly known, and in part because of its connection to the politically charged issue of “illegal immigration.”

The Island Plan
 Livelihood & Commerce Work Group
 Economic Profile
Appendix E: The Underground Economy

Fig. E.2
Reported & Unreported Wages
 Dukes County, 2006 Estimate



SOURCE: Massachusetts EOLWD and Development Cycles, 11/07

It is important simply to recognize that the underground exists. With the equivalent of at least 1,200 jobs and \$34 million in wages, this conservative estimate of the island’s underground labor market is as large as the reported size of the Accommodation and Food Services or Retail industries. By comparison, the informal practice of renting one’s home on a weekly basis during the summer adds \$60–\$100 million/year in largely unreported income, much of which accrues to non-residents. The underground economy is directly linked to the perception that the island houses more residents than are officially reported. It also contributes to the sense that there is more money circulating, and that conditions for young adults and poorer residents may not be as bad as official reports indicate.

The Island Plan
Livelihood & Commerce Work Group
Economic Profile
Appendix E: The Underground Economy

It is also important to recognize that the national trend and the local conditions and culture suggest that the underground economy is not going away and indeed may be growing more rapidly than the reported economy. Many islanders, especially younger and less-established residents, may combine both reported and unreported work. The island's high concentration of self-employed businesses and the growing importance of personal and property services also promote unreported cash transactions.

Leaving aside the issue of lost taxes, the chief significance of the underground economy may be in lost community stability. Workers stay for shorter durations. Since income is often spent elsewhere, the value of that labor does not circulate in the local economy as fully as it might. Residents cannot establish the credit or verify the income needed to purchase homes or borrow for long-term purchases. Though many residents may work under the table for years, the practice promotes focus on a shorter timeframe, with lower investments in capital, training and skill development. One aspect of the Livelihood and Commerce Work Group's planning may be to focus on strategies to ease the transition from an underground to a traditional economy for residents.