Martha’s Vineyard
Affordable Housing Nexus Study

A Study of the Relationship Between Non-Residential Developments of Regional Impact and the Availability of Housing for Low- and Moderate-Income Island Residents

Prepared For
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May 2003

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Executive Summary

The Martha's Vineyard Commission (MVC), a regional planning agency with regulatory authority, is required to evaluate the likely impacts of significant proposed developments, called Developments of Regional Impact (DRI), in order to determine whether the proposal will have a beneficial or detrimental effect upon the Island. One of the categories the MVC must examine is the impact upon affordable housing. The MVC has long inferred that both residential DRIs and non-residential DRIs pose impacts to affordable housing. In re-examining its method for quantifying the likely impacts to housing, the MVC desired to better determine if there is any correlation between non-residential development and affordable housing and, if so, the magnitude of the correlation and how to quantify it for each DRI.

The Martha's Vineyard Commission engaged John Ryan, Principal of Development Cycles, located in Amherst, MA to perform a Nexus Study that examines the relationship between the development of non-residential property and its impact on the supply of needed housing for island residents. The information from this study is to be combined with the MVC's method for similarly quantifying the affordable housing impacts of residential DRIs. The following provides a brief summary of key findings:

1. A legitimate, significant, and measurable need exists for low and moderate income housing for year round Island residents. As a regional planning agency with regulatory powers, the MVC's basis for continuing to consider the availability of low- and moderate-income housing for island residents when evaluating DRI applications – both for residential and non-residential development – is as strong on Martha's Vineyard as it is in any other jurisdiction in Massachusetts, and is comparable to the justification present in most of the communities that have adopted such measures nationwide.

2. During the past decade, the island of Martha's Vineyard has seen an increase of almost thirty percent in the year-round population and an increase of more than thirty percent in the number of households and jobs. It is clear that this trend will continue. But more importantly, wages have not kept pace with the sharp increase of property values on the island.

3. There are many factors that play a significant role within the housing dynamic on Martha's Vineyard. In the consultant's view, the MVC's Affordable Housing Policy is right to recognize that both residential and non-residential endeavors impact the availability of housing for low- and moderate-income residents. Therefore, both residential and non-residential types of developments have an appropriate role in assuring that they do not exacerbate the island's housing

affordability problem. **A rational basis does exist between the development of commercial property and the housing needs of the employees generated by that commercial property.**

4. It is the MVC's role to determine whether proposed residential or non-residential developments will have a beneficial or detrimental impact on affordable housing. The Nexus Study can assist the MVC to develop recommendations for various mitigation measures to help provide both a more equitable method of evaluating DRI projects and estimating affordable housing impacts in a more accurate way.

5. In evaluating linkage models nationwide, there is no uniform method to determine linkage. The Martha's Vineyard Commission has considerable flexibility when drafting its Affordable Housing Policy.

6. It is the opinion of the Consultant that both the MVC's current and draft Affordable Housing Policies meet the test of having a rational basis and having a rough proportionality in estimating the likely housing impacts of proposed developments. If the MVC should move forward using either policy as its basis for guiding applicants, the consultant would recommend that the MVC consider amending the Intensity Codes as indicated in the full report.

7. The consultant also prepared several alternative linkage models for determining the suggested mitigation to balance the expected impacts of various types of non-residential development on the availability of housing for low and moderate-income island residents. These alternative models looks at several economic variables to determine probable impacts to affordable housing. These linkage models aim to meet the legal requirement for rough proportionality as well as flexibility to respond to specific applications.

Introduction

1. Purpose of this Study

Chapter 831 of the Massachusetts Acts of 1977 imposes a duty on the Martha's Vineyard Commission (hereafter MVC or the Commission) to balance the probable benefits and detriments of each application for a Development of Regional Impact (DRI). In making a finding of the probable benefits and detriments of a proposed development, the Commission must consider, along with other factors, whether "the proposed development will favorably or adversely affect the supply of needed low and moderate income housing for island residents (Sec. 15(d))."

In order to provide a consistent basis for evaluating the impact on housing need, the MVC adopted in 1986 its current Affordable Housing Policy for Residential and Non-Residential Developments of Regional Impact (see Appendix A). This policy provides guidance to applicants on how to offer a development that balances its impact on the supply of needed low and moderate income housing for island residents. When looking at a non-residential development, this policy calls for a scaled payment that increases with the size of the floor area of the proposed development.

The Commission drafted a replacement to this policy in 2000 (see Appendix B). In order to strengthen the legal basis of its Affordable Housing Policy in the light of federal case law, the Commission engaged John Ryan, Principal of Development Cycles, located in Amherst, MA to perform this Nexus Study, examining the relationship between the development of non-residential property and its impact on the supply of needed housing for Island residents.

This Nexus Study proceeds in three parts:

- Part I asks the question, "Is there a rational basis for linking the development of non-residential commercial property on Martha's Vineyard to the supply of needed low and moderate income housing for Island residents?
- Part II explores issues for the Commission to consider when giving DRI applicants guidance for insuring that commercial development will have a beneficial – or at least not a detrimental – impact on affordable housing needs.
- Part III then reviews the MVC's new Affordable Housing Policy and offers an alternative model for determining the expected impact of non-residential commercial development on the supply of affordable housing and proposes a range of affordable housing contributions suggested to balance that impact.

2. Methodology

The consultant performed the following tasks in the preparation of this study:

- The consultant met with key island stakeholders to discuss issues related to non-residential development, the MVC Affordable Housing Policy, and the supply of needed low and moderate-income housing for island residents.

- The consultant reviewed the MVC enabling legislation, its current and proposed Affordable Housing Policy, the legal correspondence regarding that policy, and the non-residential decisions of the MVC since 1986.

- The consultant collected relevant demographic, employment, wage, and commercial development information for Martha's Vineyard since 1990.

- The consultant identified and evaluated other jurisdictions that have policies linking commercial development to the provision of affordable housing.

- The consultant evaluated alternative models for determining the nexus between commercial development and affordable housing.

In the course of this research, the consultant used a wide range of sources, including: the 1990 and 2000 U.S. Census of Population; the 2001 Housing Needs Assessment for Martha's Vineyard prepared by Development Cycles; the 1997 U.S. Census of Business; employment data provided by the MA Division of Employment and Training; tax assessment data provided by the MA Department of Department of Revenue and by local Assessors; published reports and discussions with city officials in communities with linkage programs for commercial development (see Appendix F).

3. Limitations

There are a number of key limitations to consider when evaluating the findings and recommendations of this report. These limitations largely represent gaps in the chain of information that would allow for a direct determination of the impact of non-residential development on the need for affordable housing on Martha's Vineyard. Each gap increases the number of assumptions or judgments the consultant must make. Among these gaps include the following:

- The U.S. Census information on household income does not report household income by household size, nor does it report household income in a manner that directly corresponds to HUD's definition of low and moderate-income households. This requires the consultant to estimate the number of island residents who would qualify as low- or moderate-income households in accordance with the Commission's charter.

- The Massachusetts Department of Employment & Training lists the average wage for a large number of occupations. This information does not however report wage distribution. This makes it more difficult to determine the exact relationship between a job type and the actual number of low-paying jobs it creates.

- The Island's local Assessor records do not provide enough information to determine precisely how much new commercial property was added to the market during the past decade. This makes it more difficult to track the historical increase in occupied commercial space in a manner consistent with changes in employment or household formation.

In each case, the consultant used professional judgment to estimate the impact based on the available information after reviewing approaches used in other jurisdictions.

Part I. Evaluation of Rational Basis

Is there a rational basis for linking the development of non-residential commercial property on Martha's Vineyard to the supply of needed low and moderate income housing for island residents?

This appears to be a key question for the MVC to consider when evaluating the benefits and detriments of a non-residential DRI application. The courts have determined that such a rational basis must exist for this linkage in order for a jurisdiction to justify requesting an offsetting contribution from a developer of commercial property. This question may be broken down into two parts. Part I of this study takes these questions in turn:

- Is there a really a shortage of housing for low and moderate-income residents and is it likely that this need will continue?
- Is there a relationship between non-residential commercial development and the kind of job growth that affects the need for affordable housing?

Note that the Martha's Vineyard Commission, as a regional planning agency with special regulatory powers from the state to review DRIs, does not require linkage through zoning as a municipality might do under home rule authority. The purpose of this exercise is to estimate the potential impact of a non-residential development on the need for affordable housing so that the Applicant can offer to make a contribution to an affordable housing entity to offset this impact.

1. Affordable Housing Need

In 2001, the Island Affordable Housing Fund (IAHF) commissioned a study by this consultant to assess the need for affordable year-round housing on Martha's Vineyard (see Appendix C for an Executive Summary of that study). Since the publication of that study, the 2000 U.S. Census has published detailed housing and income information regarding Island residents. These two sources provide the following indicators of current housing need for low and moderate-income residents:

- According to the 2000 U.S. Census, the median value of owner-occupied homes on Martha's Vineyard is $304,000. This is 63.7 percent higher than the median for the state as a whole. The Island's lower quartile home value is also more than 60 percent higher than the state at $216,000. More recent housing transactions suggest housing prices significantly higher than those indicated in the Census.

- Based on renter household income distributions listed in the 2000 Census, only about 23 percent of the Island's renters could afford to finance a home priced in the Census-reported lower quartile of housing prices. This compares to 40 percent of renters statewide.

- A 2001 study prepared by CHAPA, a statewide housing advocacy organization, compared how much of a down payment the median household in each Massachusetts community would need to afford the monthly payments on the median priced home in that community. For the state as a whole, the median household would need a down payment of roughly $60,000. For the Vineyard communities, the down payment needed is more than $200,000, or approximately two-thirds the median home value, in order to get monthly mortgage payments low enough to require only about 30 percent of the owner's gross household income

- The 2001 Housing Needs Assessment estimates that more than 60 percent of the Island's roughly 1,000 renters who earn less than 80 percent of household median income pay more than 30 percent of their gross income on rent. The 2000 Census confirms that 60 percent of those residents earning less than $35,000 pay more than 30 percent of their income for rent. It is interesting to note that the Census reports that 36 percent of all Island renters pay more than 30 percent of their income for rent, compared to 39 percent statewide. The problem of rental cost is focused on lower income residents; otherwise the major supply need is for moderately priced homeownership opportunity.

- The 2001 Housing Needs Assessment estimates that as many as 450 year-round renter households must vacate their apartments during the summer months in order to make room for summer residents and vacationers.

- Even those who already own a home experience the high cost and lack of housing availability on the island. The U.S. Census reports that 32 percent of Vineyard owners make monthly mortgage and housing payments greater than 30 percent of their gross income. This compares with 23 percent for owners statewide.

Overall Housing Needs Assessment:

The 2001 study, Preserving Community: An Island-wide Housing Needs Assessment drew the following conclusions:

> "In the 1990s, Martha's Vineyard added 2,700 seasonal and part-time homes and 1,000 owner-occupied homes but built fewer than 50 new year-round rental apartments and distributed less than 20 youth lots for affordable homeownership.

> During the same period, the local economy added more than 1,500 relatively low paying service and retail jobs. This imbalance between the exclusive development of high cost homes and the creation of lower paying jobs defines the problem."
>
> "… Lower-income renters have a particularly difficult challenge. An estimated 53 percent, or 977 renter households, earn less than 80 percent of the Island's median household income. One third of all lower-income respondents to the renter survey lack secure year-round housing. A quarter of these renters experience overcrowding. Sixty-two percent of lower-income households pay more than 35 percent of their income for rent. This means that roughly 600 households, or a third of all renters, are currently struggling to pay for rent, food and other essential items of life. The percentage of renters struggling has grown worse despite a decade of economic growth."
>
> "… The challenges to establishing a secure residence on Martha's Vineyard are quickly becoming insurmountable for a growing segment of the population, including a majority of those who grew up here, many skilled and well paid workers, and older households of moderate income. Traditionally a problem limited to young households, single parents, new arrivals and those with limited employment skills and aspirations, it has grown to include a significant portion of the long-term population. Over the next decade, more than 1,000 young Island residents will be forming new households with little chance of renting or owning on the Vineyard."

It remains the consultant's firm conclusion that the conditions present in 2001 remain in effect, and that a legitimate, significant and measurable need exists for low- and moderate-income housing for year-round Island residents. The MVC's basis for continuing to consider the availability of low- and moderate-income housing for island residents when evaluating DRI applications – both for residential and non-residential development – is as strong on Martha's Vineyard as it is in any other jurisdiction in Massachusetts, and is comparable to the justification present in most of the communities that have adopted such measures nationwide.

2. Relationship of Commercial Development and Housing Need

During the past decade, the Vineyard saw not only a 29 percent increase in population and a 32 percent increase in households, it saw a 36 percent increase in the number of local jobs. A key question is whether the wages paid for the jobs created matched the changes in housing costs over the decade.

According to the MA Division of Employment in Training (DET), the average annual wage paid for all jobs performed on the Vineyard in 2001 was $30,145. The average annual wage for all jobs statewide is $37,800. In all, the Island faces a situation where median home costs are at least 60 percent higher than the statewide median and median rents are at least eight percent higher but wages are 20 percent lower than the statewide average.

Sixty-three percent of all year-round jobs on Martha's Vineyard consist of retail or service jobs. According to the DET, these two job types paid an average wage of $23,475and $24,530 respectively in 2001. From 1990 to 1999, 80 percent of the Island's net job growth came in these two sectors.

In 2000, the DET projected job growth for the Cape and Islands Service Delivery Area (SDA) from 1998 to 2008. Martha's Vineyard accounts for about 7 percent of the job base in this SDA. The DET projects that the Cape and Islands will create 13,550 new jobs over that ten-year period. If the Vineyard grew proportionately, it would see a growth of 950 jobs. What will those new jobs entail? The following lists the DET's ten fastest growing jobs for the SDA:

Home Health Aides	Laborers, Landscaping
Registered Nurses	Nursing Aids
Waiters & Waitresses	Cashiers
Retail Salespersons	General Office Clerks
General Mgrs & Top Execs	Teachers Aides

Nine of these 10 growth areas currently pay average wages less than the average for jobs generally. Indeed, the study projects that 95 percent of the net job growth in the SDA will come in the service and retail trade areas.

Many communities with high housing prices simply rely on commuters to fill their lower paying jobs. Wellesley, Weston and Lincoln, for example, represent three of the highest cost communities in Massachusetts. According to the 2000 Census and DET data, residents fill less than 25 percent of local jobs in these three communities. By contrast, the Vineyard houses over 95 percent of its local workforce. As an island, Martha's Vineyard has a much greater practical responsibility to house those who work there.

During the decade, the Island's supply of commercial space grew to support the demands of its 1,093 new and existing employers. According to MA Department of Revenue data, the number of commercial and industrial properties on Martha's Vineyard grew 18 percent to 793. At the same time, the assessed value of all commercial and industrial property increased by only 16 percent. This compares to an increase of 80 percent in residential value over that period. Based on information provided by the Assessors in Edgartown, Oak Bluffs and West Tisbury, the consultant estimates that the Island includes roughly 2.8 million square feet of commercial space, representing just over 400 square feet per employee. Approximately 385,000 square feet of new commercial space came on line from 1990 to 2000 to support the roughly 1,800 new jobs created. This represents roughly 213 new square feet of commercial space for each new job created.

Clearly, the wages for jobs created in the past decade do not match the cost of housing on the Island. Moreover, we can expect that trend to continue through the next decade as job growth continues to focus on lower-paying retail and service employment. In the consultant's view, the driving forces behind this mismatch of housing costs and job demands include the following:

- The attractiveness of the Vineyard as a retirement and second home location: this continues to drive up housing and land costs and reduces their availability to serve low and moderate-income residents

- The growing year-round demand for services and commercial goods from the Island's tourist, second home and retirement population: this continues to encourage new commercial enterprises that generate relatively low-paying jobs

- The Vineyard's island geography: this reduces the capacity of commuters housed in less costly communities to fill local job demand

In the consultant's view, the MVC's Affordable Housing Policy is right to recognize that both new residential and new commercial endeavors play a role in diminishing the availability of housing for low and moderate income for Island residents. The residents of new high-cost housing help generate demand for low paying service and retail jobs, while commercial developments provide the space for these jobs to take place. Both new housing and new commercial developments derive much of their economic benefit from the attractiveness of the Island as a tourist, second home and retirement community. Because both residential and non-residential types of development play a role in generating the jobs filled by new low and moderate-income residents, both have an appropriate role in assuring that the Island can provide year-round housing for these residents, an appropriate role in helping assure ~~assuring~~ that the Island can provide year-round housing for these residents. **A rational basis does exist between the development of commercial property and the housing needs of the employees generated by that commercial property.**

Part II. Issues Regarding Commercial Development Linkage

What issues might the Commission consider when giving DRI applicants guidance for insuring that commercial development will have a beneficial impact on affordable housing needs?

Given that there is a rational basis for linking commercial development to the availability of affordable housing, the MVC has the responsibility to make clear to prospective DRI applicants how they may insure that their proposal provides a positive regional benefit in this regard. The courts will likely look to see that this guidance meets two criteria: 1) there be at least a rough proportionality between the expected impact of the DRI and the affordable housing contribution needed to offset that impact; and 2) there be enough flexibility to reflect the unique conditions of any given non-residential development and its overall benefit to the area of regional impact. In order to more fully explore how the MVC might provide such guidance, the consultant examined the following issues:

- The Commission's previous decisions regarding non-residential DRI applications
- The experience of commercial linkage programs nationwide
- Some important legal and practical considerations

1. <u>The Commission's Previous Non-residential DRI Decisions</u>

It is important to note that the MVC has linked affordable housing contributions to non-residential DRI permits since 1986. The Commission staff reviewed the history of DRI filings, and identified 74 non-residential projects approved over that 16-year period. Table II.1 looks at the contributions agreed to by non-residential applicants for these 74 projects. The Table looks at contributions over time, contributions by size of project, and contributions by type of project.

[NOTE: These represent estimates based on the consultant's evaluation of the historical data provided. Not all decisions provided clear indications of project type, size, and contribution. Moreover, not all of these approved projects proceeded to construction. Nonetheless, they provide a summary of the general direction of the Commission's decisions over time. Cash/ Land represents those applicants who offered cash or land as their contribution; Housing represents those who offered to provide housing for employees directly; an example of other included donations of time to Habitat for Humanity.]

Table II.1 Summary of Contributions Offered by Approved Developments of Regional Impact, Martha's Vineyard, 1986-2002

Contributions by Date

SIZE (SF)	DRIs #	APPROX SQ. FT.	CASH/ LAND	HOUSING	OTHER/ UNKNOWN	$/ PSF (Cash/ Land)	SF/ UNIT of HSG
1986-1989	21	300,000	3	11	7	$4.00	3,000
1990-1995	15	75,000	10	3	2	$0.75	2,200
1996-2002	38	250,000	31	3	4	$2.50	6,500
TOTAL	74	625,000	44	17	13	$2.75	3,750

Contributions by Size of Project

SIZE (SF)	DRIs #	APPROX SQ. FT.	CASH/ LAND	HOUSING	OTHER/ UNKNOWN	$/ PSF (Cash/ Land)	SF/ UNIT of HSG
<4000	16	36,000	7	6	3	$1.56	3000
4000-9,999	27	162,000	15	8	4	$0.70	2200
10,000+	14	390,000	12	1	1	$3.50	6500
Size Unknown	17	Unknown	10	2	5	Unknown	Unknown
TOTAL	74	625,000	44	17	13	$2.75	3,750

Contributions by Type of Project

SIZE (SF)	DRIs #	APPROX SQ. FT.	CASH/ LAND	HOUSING	OTHER/ UNKNOWN	$/ PSF (Cash/ Land)	SF/ UNIT of HSG
AIR BUS PK	16	114,000	13	0	3	$0.47	na
DIST/ WARE	6	35,600	4	0	2	$0.60	na
HOTEL	7	28,000	0	7	0	na	4,250
OFFICE	6	24,000	3	3	0	$1.60	4,350
RECREATION	7	54,000	5	1	1	$9.00	4,200
REST/ RETAIL	15	166,000	8	4	2	$3.75	1,250
Other/ Unknown	17	203,400	11	2	5	na	7,000
TOTAL	74	625,000	44	17	13	$2.75	3,750

Looking at DRI applications over time, key changes include a greater use of monetary contributions instead of direct housing contributions in recent years. Eleven of the seventeen DRIs that offered to provide direct housing (typically for employees) did so in the first four years. As the cost of housing has climbed, the percentage of applicants offering to provide housing directly has fallen. A majority of projects in the 1980s offered to provide housing directly, while less than 10 percent have over the past seven years. It is also interesting to note that the average monetary contribution per square foot of developed space was higher in the 1980s than in more recent years. The contribution averaged roughly $4.00 per square foot in the first four years; it dropped to only $.75 per square foot in the recession years of the early 1990s; and has increased to about $2.50 in the past several years. In all, Commission decisions have resulted in approval of roughly 625,000 of non-residential space and provided contributions of $1.4 million in cash and land, and about 28 units of housing.

It appears that mid-sized projects between 4,000 and 10,000 square feet, actually offered the smallest cash contributions on a per square foot basis. The 13 smallest projects agreed to pay an average of $1.56 PSF for housing or provided one unit of housing for each 3,000 SF of space developed. Fifteen mid-sized projects paid only $.70 PSF, although the eight mid-sized projects offering to provide housing offered one unit for every 2,200 square feet of developed space. The largest projects (10,000 square feet and over) offered the greatest monetary contribution at $3.50 PSF.

Finally, the table shows a significant variability from one type of project to another. Projects in the Airport Business Park and Distribution and Warehouse projects paid the smallest contributions on a PSF basis. Recreation projects with their large outdoor area and smaller building developments offered the greatest PSF contributions.

The Table suggests that the Commission has evaluated a relatively large number of non-residential projects over time. Affordable housing contributions appear to have declined after the first few years and appear to have varied significantly from one project to another. A consistent formula for recommending housing contributions based on current conditions may help provide a more equitable and substantial result from one DRI to the next.

2. Commercial Linkage Programs Nationwide

A relatively small but growing number of other communities, largely in high cost states like California and Massachusetts, have by-laws that link non-residential development applications with contributions for affordable housing. Some of these by-laws date back to the mid-1980s.

Table II.2 summarizes the provisions of these by-laws in 18 separate jurisdictions identified by the consultant. The table indicates a relatively wide distribution of approaches and fee structures, probably reflecting differing Nexus study approaches as well as inevitable political negotiation. The larger cities tend to focus fees only on larger commercial developments, whereas smaller communities more commonly apply a lower fee to all developments. About half of all jurisdictions set variable fees for different types of development; the other half charge one fee for all types of non-residential development. Three communities listed (Seattle, WA, Sunnyvale, CA and Westwood, MA) only apply fees when applicants seek density bonuses.

Table II.2 Non-Residential Linkage Programs in Other Communities, October 2002

Community	Fee Basis	Fee Applies To What Size
Massachusetts		
Boston	$6.00 PSF	above 100,000 sf
Cambridge	$3.00 PSF	above 30,000 sf
Somerville	$2.60 PSF	above 30,000 sf
Westwood	1 unit/ 12 employees	when exceeding FAR
Nantucket	Up to 1 unit/ 4,000 sf	on all square footage
California/ Washington		
Berkeley	$3.00- $6.00 PSF	on all square footage
Cupertino	$2.00 PSF	on all square footage
Livermore	Up to $.81 PSF	on all square footage
Menlo Park	$.76-$1.92 PSF	on all square footage
Napa & County	$.20- $1.40 PSF	on all square footage
Oakland	$4.00 PSF	above 25,000 sf
Palo Alto	$12.00 PSF	on all square footage
Pleasanton	$0.50	on all square footage
Sacramento & County	$.27- $.99	on all square footage
San Diego	$.26- $1.06	on all square footage
San Francisco	$7.55-$14.96	above 25,000 sf
Seattle, WA	$13.00- $20.00	when exceeding FAR
Sunnyvale	$7.14	when exceeding FAR

A review of these provisions raises a number of issues that may be relevant to the MVC's deliberations:

- *Pay out schedule:* Boston claims that their program has allocated more than $45 million for the construction of nearly 5,000 affordable housing units since 1986. Their primary justification for linkage is that commercial development attracts higher paying workers who want to live in the City and therefore place additional demands on the community's housing stock. Boston's by-law offers an extended payment schedule that varies from 7-years for downtown developments to 12-years for neighborhood developments. The longer pay out schedule reduces the developer's burden for upfront capital, but results in a discounted present value for the funds received. Other communities vary payment terms, ranging from payment at receipt of a building permit, to payment at time of occupancy, to payment spread out over several years.

- *Phasing to avoid reaching size threshold:* Somerville's by-law exempts projects under 30,000 square feet in size, but ensures that, when developments proceed in phases, it is the sum of all phases that determines the size of the project.

- *Payment as density bonus:* Westwood, Massachusetts's provisions apply only when a developer seeks to exceed the standard Floor Area Ratio (FAR) established for the commercial development generally.

- *Payment indexed to home prices:* Westwood's fee is pegged to the amount of subsidy needed for a resident earning 80 percent of the region's median to be able to afford the purchase price of a home in the bottom 10-percent of homes sold in the community using 30 percent of their income. Westwood calls for developers to fund this difference on one home for each 12 new employees. The Nantucket Planning Board has the zoning authority to require up to one inclusionary unit for each 4,000 feet of gross floor area. The fee in lieu of payment is negotiable but is based on the average sale price of non-exempt residential property for their RC-2 district in the prior year. This represents a huge fee ceiling given the current cost of housing on Nantucket where such an average priced home now costs as much as $800,000. Still, the Nantucket Planning director says the provision has been applied, without legal challenge, to all larger non-commercial developments including a golf course.

- *Employment density factors:* A number of nexus studies (though not all) recognize that different types of commercial development will result in more or less employees per square foot. An obvious example is that warehouse or distribution space would typically have far fewer employees per square foot than retail or restaurant space. Interestingly enough, half of the community's reviewed choose to charge a uniform rate for all types of commercial development.

- *Fee ceiling*: Berkeley, California's $3.00- $6.00/psf fee represents a contribution ceiling. The applicant may negotiate with the local authority for a lower fee on the grounds of other overriding benefits to the city.

What seems apparent from this review of other linkage policies is that there is no uniform application of the rational basis or rough proportionality standard. The MVC may wish to consider these issues in reviewing its existing Affordable Housing Policy, but is free to fashion its linkage in the manner that it sees fit.

3. Legal and Practical Considerations

The following represent additional issues that the MVC may wish to consider when applying the affordable housing policy to non-residential developments.

- *Minimum Development Size Thresholds:* Table II.3 estimates the number of employees by employer size for the Vineyard in the most recent year for which data exists.

Table II.3 Employment Estimate by Size of Employer,
Martha's Vineyard, 1999

	1-4 Employees	5-9 Employees	10-19 Employees	20-49 Employees	50+ Employees	Total
Number of						
Employers	621	183	86	28	8	966
	64%	19%	9%	3%	1%	100%
Number of						
Employees	1708	1281	1290	980	1600	6859
(estimate)	25%	19%	19%	14%	23%	100%

SOURCE: Employers by Employee Size and Total Employment, DET, 2002.

This table indicates that the island's employment is spread relatively evenly over the whole range of employer sizes. It supports an argument that any project meeting DRI thresholds be asked to share in the cost of providing affordable housing.

- *Fee ceiling with capacity to negotiate:* as with Berkeley, California's linkage program, the MVC may wish to pose its guidance in terms of a maximum requested fee and provide the client specific opportunity to demonstrate other benefits to the community that may argue for a smaller affordable housing contribution.

- *Impact on development costs*: one concern raised in opposition to the application of linkage fees to commercial development is that it will render commercial development less feasible and/or result in higher commercial rents passed on to small employers. Discussions with local Realtors, builders and commercial developers on Martha's Vineyard suggests that the current total development cost of commercial development runs between $200 and $300 psf for fully finished interior space. At these rates, each $3.00 PSF contribution to balance affordable housing needs would increase developer's overall costs by 1.0 to 1.5 percent.

Part III. Alternative Linkage Models

Part III reviews the MVC's Draft Affordable Housing Policy for Non-residential Development. In this section, the consultant also works step-by-step through an alternative model for determining the suggested contribution needed to balance the expected impacts of various types of non-residential development on the availability of housing for low and moderate-income island residents.

1. The MVC's Draft Affordable Housing Policy for Non-residential Development

The key provisions of the MVC's draft policy for non-residential DRIs include the following:

1) Alternative monetary contributions suggested for newly constructed developments, large land developments, and speculative sub-divisions
2) An opportunity to provide a self-designed proposal
3) A base requested contribution of $1.00 for each square foot of building space created (or $500 per acre for large land developments such as golf courses)
4) An intensity of use multiplier that distinguishes relative levels of employment density

With regard to the MVC's definition of alternative monetary contributions for new non-residential construction, large land developments, and speculative sub-divisions, it is the consultant's judgment that these differing provisions have a rational basis in determining the impact of new DRIs on the availability of affordable housing.

With regard to the provision that encourages applicants to provide a self-designed proposal, it is the consultant's judgment that this represents an important provision giving the applicant a right to make a case for the unique conditions present in their proposed development.

With regard to the base requested contribution of $1.00 per square foot of construction or $500 per acre for large land developments, it is the consultant's judgment that this requested contribution is well below the amount that would be justified by the Nexus study given the cost of housing on Martha's Vineyard and established link between commercial development and the availability of housing for low and moderate-income Island residents.

With regard to the particular Intensity Codes chosen by the MVC, the consultant would recommend that the following codes might better reflect the combination of Employment Density (number of expected employees per square foot of development) and the relative impact of these types of development on the incomes of residents holding these jobs:

Development Type	MVC Code	Consultant's Recommendation
Agricultural	1	1
Communication	2	1
Construction	2	1
Entertainment	2	3*
Financial	2	1
Gas Station/ Repair	3	2
Health Care	3	1
Hotel/ Lodging	3	3
Landscaping	1	2*
Manufacturing	2	1
Office	3	2
Recreation	1 or 2	3*
Restaurant	3	4
Retail	2	3
Service	2	2
Transportation	3	2*
Utility	1 or 2	1
Warehouse	1	1
Wholesale	2	1

*The types of development indicated by an asterisk * are highly variable based on the nature of the development proposed. No single Intensity Code would likely reflect the range of potential DRIs within these broad development types.*

In summary, it is the consultant's view, that the MVC's Draft Affordable housing Policy for Non-Residential Developments meets the test of a) having a rational basis and b) having rough proportionality between the requested contribution and the likely impact. If the MVC should move forward using this policy as its basis for guiding applicants, the consultant would recommend that the MVC consider amending the Intensity Codes as shown above.

2. An Alternative Linkage Model That Takes Into Account Employment Density and Average Wage Information

The following works step-by-step through an alternative model for determining the suggested contribution needed to balance the expected impacts of various types of non-residential development on the availability of housing for low and moderate-income island residents. This model takes the average wage information of differing development classifications more directly into account when determining the suggested contribution. Within the model other alternative approaches are indicated in italic following each step.

Step 1. Determining the Average Space Requirements for Various Development Classifications

The U.S. Department of Energy's Energy Information Administration (EIA) published a nationwide survey of commercial buildings in 1999 that indicates the average floor space needed for various types of commercial activity (see Appendix D). Key commercial types include the following:

Development Classification	Average Square Feet/ Employee	Rough Multiplier
Medical	367	1.0
Office	416	1.0
Restaurant	459	1.0
Retail	1,021	0.4
Warehouse/ Storage	1,685	0.3
Hotel/ Lodging	1,919	0.2

The MVC may reasonably use the EIA's published average as a starting basis for evaluating how many employees a given type of commercial development would normally generate. The consultant has provided a rough multiplier to simplify the relationship between different development classifications. The 1.0 multiplier represents the number of employees projected per 400 square feet of finished interior space.

[Alternatively, the MVC could apply a single standard for all development types based on the overall average of 400 square feet per employee estimated for the Island currently. The guidelines could provide applicants, especially those like lodging, retail and warehousing, a place to estimate employment specific to their project. Alternatively, an island-specific survey that established local medians for different non-residential uses would likely have even greater credibility.]

Step 2. Identifying the Corresponding Job Classifications

The MA Department of Employment and Training (DET) maintains employment information at a county level for a number of Standardized job classifications, or SIC codes. For a number of these classifications there is a strong correlation between the type of commercial activity and the job classification it serves. This includes the following:

Development Type	Standard Job Classifications
Office Building	Finance/ Insurance/ Real Estate Transportation/ Public Utilities/ Communication Services (except Hotel & Lodging, Amusement & Recreation)
Retail	Retail Trade (except Eating & Drinking Est.)
Eating & Drinking Est.	Eating & Drinking Establishments
Hotel & Lodging	Hotel & Lodging
Industrial	Manufacturing
Warehouse/ Distribution	Wholesale Trade
Other	Agricultural, Construction, Amusement & Recreation

For most job classifications, the MVC could reasonably assume that a proposed non-residential development of a given type would generate jobs in the corresponding job classifications. Some proposals will be immediately obvious: a proposed restaurant would expect to generate Eating & Drinking workers, for example. Other proposals might require MVC judgment on how to correlate the proposal to the jobs that would be created. A gas station proposal, for example, might include a certain amount of square footage for auto repair and a certain amount as a convenience store. In that case, the MVC might recommend allocating a portion of the development to Service/ Other and a portion to Retail/ Other.

For developments aimed to serve other job classifications, the correlation between the type and size of the development and the jobs generated is less clear. Of the job classifications listed in the MVC’s Draft Affordable Housing Policy, the correlation between size of development and expected jobs generated would likely vary significantly on a case-by-case basis for some job types. Agricultural, Construction, Landscaping, and Amusement & Recreation, as well as some Transportation and Utility proposals would fall into this case-by-case grouping. For these types of development, the MVC might choose to assess the likely impact in terms of jobs created for that specific application.

[The MVC could provide a more extensive list of job classifications from the MA DET data and identify their development classification as well. They could alternatively treat all job types in the same fashion.]

Step 3. Determining the Average Wage for Workers in Identified Job Classifications

Since not all job types pay the same wage, not all types of development will have the same impact on the availability of housing for low and moderate-income residents. The DET provides annual average wage information for a wide range of Standardized Industrial Classifications (SIC). These include the job classifications listed above. For the calendar year 2001, the DET lists the Average Wage by Job Classification as follows:

Job Classification	Average Wage (Annual)	Pct of Overall Average Wage
ALL JOBS	$30,145	100.0%
HIGH IMPACT (<80%)		
Amusement & Recreation Services	$21,578	71.6%
Eating & Drinking Retail	$21,714	72.2%
MODERATE IMPACT (80-99%)		
Social Services	$24,298	80.6%
All Other Retail	$24,627	81.8%
Hotel & Lodging Services	$25,615	85.0%
All Other Services	$29,912	99.2%
LOW IMPACT (100-119%)		
Agricultural	$30,857	102.4%
Manufacturing	$32,381	107.4%
Trans., Comm. & Public Utilities	$35,207	116.8%
Health Services	$35,291	117.1%
VERY LOW IMPACT (120%+)		
Finance, Insurance & Real Estate	$39,813	132.1%
Wholesale Trade	$41,275	136.7%

Construction	$41,928	139.1%

Clearly, those job types with the lowest average wage have the greatest impact on the need for affordable housing, whereas the impact lessens as average wages rise. The consultant has chosen to group these major job classifications into four wage groupings: HIGH IMPACT for those job types with an average wage less than 80 percent of the average for all Island jobs; MODERATE IMPACT for jobs with an average wage between 80-99 percent of the Island's average; LOW IMPACT for jobs with wages between 100-119 percent; and VERY LOW IMPACT for job types with average wages between 120-149 percent of the Island's average wage. This number (along with changes in housing prices) can be reliably tracked on an annual basis.

[The Average Wage information is less valuable than median wage or wage distributions, but it is the only information regularly collected by the MA DET. The MVC may chose to ignore wage information given the limiting factor of the Average Wage. Also as above; the MVC could expand the number of job classifications listed. It could treat each job type separately instead of combining them into impact groupings.]

Step 4. Estimating Number of Workers Per Household

In order to determine the relationship between wages and household income we need to know how many workers typically work in a given household. The 2000 U.S. Census indicates that the average number of workers per household for all Island households with a householder between 16 and 65 years old is 1.56 workers. If we exclude one-person households, the average rises to 1.70. In the consultant's view, this latter number is the most appropriate multiplier to use in order to indicate the equivalent household income that would apply to a given job classification. Interestingly enough, when we use this multiplier with the average wage for the Island, it produces a number very close to the HUD median household income estimate:

2001 Household Equivalent Method ($30,145x1.70)	$51,247
2001 HUD Median Household Income	$51,900

Step 5. Converting Wage Information by Job Classification to Household Income Equivalents

If a given household earned the average wage for all Island jobs ($30,145) and had the average number of Island workers per household (1.70) it would have the equivalent household income of $51,247. How would that compare to a household made up of average restaurant workers or average construction workers? The following converts average wages to average Household Income Equivalents for each of the major job classifications in order to gage the relationship between job type and overall household income.

Job Classification	Average Annual Wage	Household Income Equivalent
ALL JOBS	$30,145	$51,247
HIGH IMPACT (<80%)		
Amusement & Recreation	$21,578	$36,683
Eating & Drinking Retail	$21,714	$36,914
MODERATE IMPACT (80-99%)		
Social Services	$24,298	$41,307
All Other Retail	$24,627	$41,866
Hotel & Lodging Services	$25,615	$43,546
All Other Services	$29,912	$50,850
LOW IMPACT (100-119%)		
Agricultural	$30,857	$52,427
Manufacturing	$32,381	$55,047
Trans., Comm. & Public Utilities	$35,207	$59,852
Health Services	$35,291	$59,995
VERY LOW IMPACT (120%+)		
Finance, Insurance & Real Estate	$39,813	$67,682
Wholesale Trade	$41,275	$70,168
Construction	$41,928	$71,278

Step 6. Defining the Gap Between Household Income Equivalents and Housing Affordability

The following represents the current affordable purchase price of housing at various income levels for Martha's Vineyard based on 2001 income and housing price data:

Income	Household	Purchase	Lower

Level (% of Median)	Income	Price*	10 Percent Value	Gap
80%	$41,500	$147,500	$225,000	$77,500
100%	$51,900	$185,000	$225,000	$40,000
120%	$62,300	$232,000	$225,000	$0
150%	$77,850	$284,000	$225,000	$0

*NOTE: Purchase Price is based on a 30-year fixed rate mortgage @ 6.00 percent interest with taxes and insurance equaling .015 percent of purchase price monthly using 30 percent of gross household income.

According to the data provided by the Island real estate service LINK, $225,000 represents the lowest ten percent of value for all homes sold Island-wide in 2001. The gap between what a median income household can afford based on current wages and what it costs to purchase a home in this lowest quartile is $40,000. This gap is larger for those households with less well-paying jobs and smaller for higher paying jobs.

A key question becomes what percentage of this gap would represent a contribution that balances the proposed development’s impact on affordable housing. The MVC’s Affordable Housing Policy uses the state’s guideline of 10 percent affordability for residential DRIs. This may serve as a starting point for considering non-residential developments as well, that is each non-residential development would be expected to contribute 10 percent of the projected housing gap its projected employees face. Using this 10 percent measure, the amount of contribution a non-residential DRI would need to balance impacts on housing would vary based on the average income of the jobs it generates, as follows:

Average Wage as a % of All Jobs	Affordable Housing Contribution/ Employee
HIGH IMPACT (<80%)	$7,750
MODERATE IMPACT (80-99%)	$4,000
LOW IMPACT (100-119%)	$0
VERY LOW IMPACT (120-149%)	$0

[A wide number of alternative methods exist for determining the recommended contribution to mitigate the impacts of a non-residential development on housing. If the MVC chose to use the lowest quartile home price ($285,000 in 2001) rather than the lowest 10 percent] it would result in all four income categories making at least some

contribution. The MVC could alternatively set some minimal level of contribution from all types of development, as each will have additional employees and therefore impact the Island's housing conditions in some manner.]

Appendix D provides a summary statement of the proposed model for linkage between non-residential development and the availability of housing for low and moderate-income residents. This model aims to meet the legal requirement for rough proportionality as well as flexibility to respond to specific applications. This is followed by a graphic summary of how the proposed model would impact different development classifications based on current wages, household incomes, and housing values.

Conclusion

Although the absence of certain economic data prevented the study from determining the exact impact of non-residential development on the need for affordable housing, this analysis finds a strong direct connection between new, non-residential development and housing affordability on Martha's Vineyard. The study concludes that both the MVC's current and draft Affordable Housing Policies meet the litmus test of establishing a rational basis and a rough proportionality when evaluating the likely impacts that commercial development are likely to have on affordable housing. It further concludes that there is no uniform method for determining linkage models and offers three alternative linkage models for the MVC to consider.

Two of the linkage models use a sliding scale method using economic variables such as income and employees as a basis. These models have the potential to more sensitively evaluate different types and scales of development proposals, but limited availability of some of the economic data requires either making assumptions or using averages, which may offset any gains in sensitivity. Alternatively, there could be a model based on a simple flat fee on the square footage of the building. Each of these linkage models — or even some combination of them — will render somewhat different but perfectly defensible results. The Martha's Vineyard Commission has a great deal of flexibility when drafting an Affordable Housing Policy to help it weigh the potential impacts of development.

Appendix A

Martha's Vineyard Commission

AFFORDABLE HOUSING POLICY

MAY 1998

The issue of housing, and in particular the availability of affordable year-round housing, is a concern that should be in the minds of all Islanders. Both seasonal and year-round residents of Martha's Vineyard who presently own their own home must rely upon services provided by others who can be classified as "essential workers". Essential workers are generally identified as teachers, policemen and women, governmental employees, health and human service providers, among others.

The legislation that has created the Martha's Vineyard Commission has very clearly indicated that one of the responsibilities of the Commission is to identify any impacts a specific proposal may have upon the availability of housing and in particular the impact upon the supply of low and moderate income housing opportunities. That responsibility so set forth excludes no segment of the developmental world and it is clear that all who propose any form of developmental change bear some responsibility for their impact upon the availability of affordable, year-round housing opportunities.

It is for these reasons that the Martha's Vineyard Commission has developed and set forth an affordable housing policy that is intended to ensure the continuance of a wide variety of opportunities for the provision of affordable housing units for the residents of the Island of Martha's Vineyard.

The policy has been divided into two parts; the first part deals with the relationship of residential developments and affordable housing and the second part addresses the relationship of non-residential developments and affordable housing.

Part I: Affordable Housing Policy for Residential Developments

The Martha's Vineyard Commission, in concert with the mandate contained in sections 14 and 15 of chapter 831 of the Acts of 1977, as amended, that it, (the Commission) consider in its decision making process, the supply of needed low and moderate income housing for Island residents, hereby adopts the following policy.

Any application for a development of Regional Impact (DRI) involving the creation of ten (10) or more lots by division or subdivision, or involving ten (10) or more dwelling units must include, at the discretion of the applicant, either of the following provisions satisfactory to the Commission:

a. Ten percent (10%) of the buildable lots or dwelling units within such development shall be provided to the Dukes County Regional Housing Authority for the purpose of meeting the needs of low and moderate-income residents housing needs. The required affordable housing shall be provided on-site.

The lots or dwelling units so provided shall be exempt from any growth rate provisions established within the town in which they are located as well as being exempt from all covenants established within the development in which they are located.

OR

b. Twenty percent (20%) of the currently assessed value of the property in question shall be provided to the Dukes County Regional Housing Authority, to be administered by said Authority for the purposes of providing affordable housing to Island residents. The sum to be deposited shall be provided to the Regional Housing Authority within eighteen (18) months of the date of approval of the plan by the local board(s).

The Martha's Vineyard Commission may permit the affordable housing requirement to be met through the provision of off site buildable lots, of equivalent size, only if the applicant provides convincing evidence that the on-site provision of affordable housing lots would not be in the best interest of the MVC Regional Policy Plan nor of this policy.

As used in this policy, the following terms shall have the following meanings:

"buildable" - shall mean a parcel of land complete with an installed well or municipal water hook-up and an approved septic system design or approved municipal sewer hook-up.

"equivalent size" - shall mean a parcel or parcels of land whose acreage when taken in total shall equal the acreage of a parcel or parcels of land that would be dedicated to affordable housing uses if contained within the development. (as example: one 3 acre on-site lot equals 3 one acre lots off-site or 6 half acre lots off-site of any combination thereof)

While the Martha's Vineyard Commission hereby adopts the percentages noted in 'a' and 'b' above, such figures being based on certain studies commissioned by the Commission showing that this requirement is appropriate to meet the needs on the Island for affordable housing, the Commission also recognizes that there may be special circumstances where adjustments to the percentages and deviations from the strict adherence to the policies are appropriate.

Part II: Affordable Housing Policy for Non-Residential Developments

The Martha's Vineyard Commission, further, in concert with the mandate contained in Section 14 and 15 of chapter 831 of the Acts of 1977, as amended, hereby adopts the following policy with respect to commercial/retail developments:

a. For developments of 2,000 square feet up to 3,999 square feet:
$1,000 for the first 2,000 square feet and $0.50 per square foot for every square foot over 2,000 square feet.

b. For developments of 4,000 square feet up to 5,999 square feet:
$2,000 for the first 4,000 square feet and $1.00 per square foot for every square foot over 4,000 square feet.

c. For developments of 6,000 square feet up to 7,999 square feet:
$4000 for the first 6,000 square feet and $1.50 per square foot for every square foot over 6,000 square feet.

d. For developments of 8,000 square feet and greater:
   $7,000 for the first 8,000 square feet and $2.00 per square foot for every square foot over 8,000 square feet.

It should be noted that, in addition to the above monetary contribution, any development of regional impact involving the creation of a non-residential development of greater than 2,000 square feet and which displaces, either by demolition of or change of use of, or both, dwelling unit(s) must replace said loss with newly created, year-round affordable replacement unit(s) of comparable size. Such newly created replacement units(s) shall be provided on-site unless, in certain circumstances, the applicant provides convincing evidence that the on-site provisions of new, year-round affordable replacement unit(s) would not be in the best interest of the MVC Regional Policy Plan nor of this policy.

The Martha's Vineyard Commission recognizes the unique nature of developments occurring at the Martha's Vineyard Airport, including but not limited to characteristically greater building sizes, residential zoning prohibitions, and County Airport residential use restrictions. The Martha's Vineyard Commission hereby adopts the following policy with respect to developments of regional impact proposed to be located at the Martha's Vineyard Airport:

> Any development of regional impact greater than 2,000 square feet proposed to be located at the Martha's Vineyard Airport, shall provide to the Dukes County Regional Housing Authority, a monetary contribution equal to 30% (thirty per cent) of the sum that would be provided if the development were proposed for a location other than at the Martha's Vineyard Airport.

While the Martha's Vineyard Commission hereby adopts the provisions of both the Residential and Non-Residential aspects of this policy, such provisions being based on information and data supplied by legal counsel, and by other certain studies prepared by the Commission staff showing that these requirements are appropriated to meet the needs of Island residents for affordable, year-round housing, the Commission also recognizes that there may be special circumstances where adjustments to these figures and deviations from the strict adherence to the policies are appropriate.

Approved by Vote of the Commission
May 21, 1998
Linda B. Sibley, Chairman

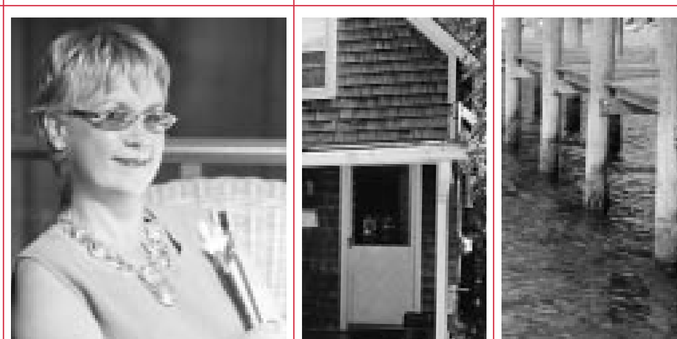
MARTHA'S VINEYARD

PRESERVING COMMUNITY

An Island-wide Housing Needs Assessment

JOHN J. RYAN
DEVELOPMENT CYCLES

November 2001



Acknowledgements

The consultant and the IAHF would like to acknowledge all of those who helped in this effort to identify the nature of housing needs for island residents. The Needs Assessment and Renter Survey were true community efforts.

In particular, thanks go out to the James Held and Kenn Karakul Charitable Foundation for underwriting this study.

Other's include IAHF's Needs Assessment Committee members Mary Alpern, Derrill Bazzy, Zee Gamson, Jim Held, Dale Julier, Kenn Karakul, Tony Nevin, Leah Smith, Juleann VanBelle, Ben Warnke, and Suzi Wasserman. Thanks also go to Jeff Parker, Tim Vitalis, Benjamin Koren, Patrick Workinger, and Rick Presbrey. Special appreciation goes to Charlie Utz, CreativeWorks of Vineyard Haven who designed the renter survey and provided photos for the report as a courtesy to the cause.

The following individuals and organizations assisted in the making survey response so successful: Ned Robinson Lynch, MV Community Services; Tom Dresser, Windemere Nursing and Rehabilitation Center; Maia Gaillard, Martha's Vineyard Hospital; also the Tisbury Town Hall, West Tisbury Library, Biga, Black Dog Café and Island Entertainment; the Island Charter School, Oak Bluffs School, Tisbury School, West Tisbury School, Edgartown School, and the Martha's Vineyard Regional High School.

Finally, the consultant would like to express heartfelt appreciation to Susan Spence and John Abrams for their infectious passion and dedication to this effort and for their ceaseless good cheer, hard work, and support.



Executive Summary

Affordable housing for year-round residents has been a lively topic of conversation and debate on Martha's Vineyard for the past few years. But who are the households that are really feeling the pinch? How many households are affected and in what ways? These nagging questions continue to stymie efforts to translate housing concerns into a plan of action to address local needs.

To answer these open issues and help develop an effective response, the Island Affordable Housing Fund engaged consultant John Ryan of Development Cycles to do a housing needs assessment. The purpose was to evaluate the housing needs — both rental and ownership — for the 15,000 year-round residents of Martha's Vineyard. This study does not address the separate problem of housing the estimated 5,500 seasonal workers who are employed on the Island during the summer.

The following Executive Summary provides a synopsis of the assessment, answering basic questions and pointing the way toward Island-wide solutions.

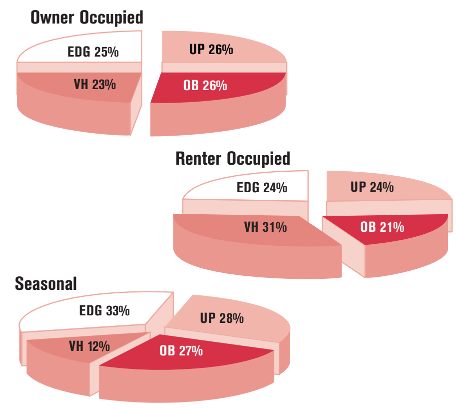
METHODOLOGY

The consultant interviewed a broad cross section of Islanders and relied heavily on 386 responses to a renter survey. Other sources include the U.S. Census, the Massachusetts State Data Center (MISER), the Martha's Vineyard Commission, and CACI, a private demographic service. The study also drew from housing data provided by the *Martha's Vineyard Times,* LINC Real Estate data service, and the Warren Information Group; employment information from the Department of Employment and Training; and additional data provided by the Steamship Authority and the National Association of Home Builders.

KEY FINDINGS

In the 1990s, Martha's Vineyard added 2,700 seasonal and part-time homes and 1,000 owner-occupied homes but built fewer than 50 new, year-round rental apartments and distributed less than 20 youth lots for affordable homeownership. During the same period, the local economy added more than 1,500 relatively low-paying service and retail jobs. This imbalance between the exclusive development of high-cost homes and the creation of lower-paying jobs defines the problem. High home prices (85 percent above the statewide median), high rents (at least 30 percent over the statewide median), and low wages (27 percent below the statewide average) are the result.

Share of Overall Housing, 2000



EDG: Edgartown   OB: Oak Bluffs
VH: Tisbury   UP: Up Island

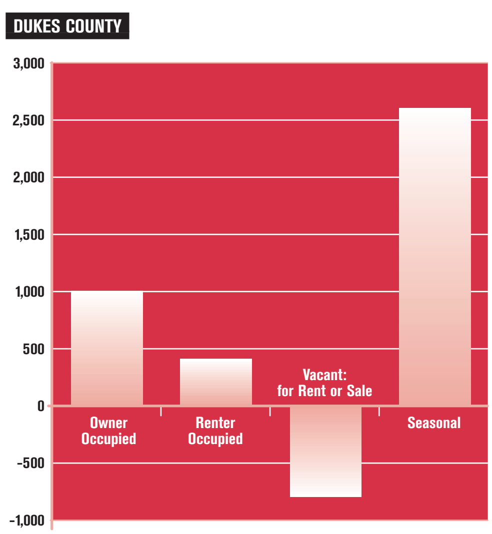
Island Renters

Seventy percent, or roughly 1,300 Island renter households, are composed of adults only. This is typical of renters elsewhere in Massachusetts. Fifty-eight percent live in one- and two-person households. This is also typical. What is atypical is the scarcity of multi-family rental dwellings. According to census data, only about nine percent of renters live in single family homes statewide, whereas in Dukes County more than 75 percent of renters live in such housing. The mismatch of housing types with the size of renter households may be a major factor contributing to the housing shortage.

Lower-income renters have a particularly difficult challenge. An estimated 53 percent, or 977 renter households, earn less than 80 percent of the Island's median household income. One-third of all lower-income respondents to the renter survey lack secure year-round housing. A quarter of these renters experience overcrowding. Sixty-two percent of lower-income households pay more than 35 percent of their income for rent. This means that roughly 600 households, or a third of all renters, are currently struggling to pay for rent, food, and other essential items of life. The percentage of renters struggling has grown worse since 1990 despite a decade of economic growth.

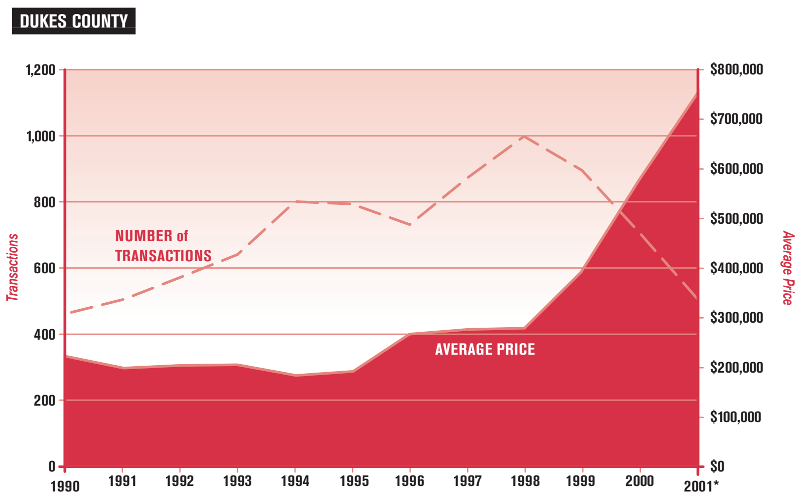
The survey revealed that single parents with dependent children are at particularly high risk. To solve just this problem, the Island would need to provide immediate housing solutions for at least 76 families.

Changes in Number of Island Households, by Housing Type, 1990–2000



Sources: US Census, 1990, 2000

Changes in Real Estate Activity, 1990–2001



Source: Martha's Vineyard Times

**2001 transaction information was available only through June 30 and has been projected through the end of the year.*

Note: The data includes arms-length sales of residential and commercial, and improved and unimproved land made in the six island towns and recorded in the Dukes County Registry of Deeds. Partial interests, condominiums, time shares, beach lots, unbuildable lots, and foreclosures are not included.

This imbalance between the exclusive development of high-cost homes and the creation of lower-paying jobs defines the problem. High home prices, high rents, and low wages are the result.

Homeownership Opportunity

The current median, single-family home price is $375,000, nearly double that of a decade ago. The past two years have seen the virtual disappearance of homes sold for under $200,000.

In today's market, there is nothing the median-income renter can buy. Even the year-round family earning the median income of $56,000 would find nothing to purchase without the equity from their existing home. In the past year, the 1,228 renter households earning less than $50,000 had to compete with off-Island buyers for the chance to purchase one of just nine homes that sold Island-wide for under $175,000, the highest price these renters could normally afford.

Single-family Homes Sales, Dukes County, 2000–2001

	2000	2001 (through Oct, 10, 2001)
Total Transactions	430	250
Median Sale Price ($)	325,000	375,000
Sales<$200,000	35	9
Sales $200,000–$249,999	47	30
Sales>$1 million	46	35

Implications

The challenges to establishing a secure residence on Martha's Vineyard are quickly becoming insurmountable for a growing segment of the population, including a majority of those who grew up here, many skilled and well paid workers, and older households of moderate income. Traditionally a problem limited to young households, single parents, new arrivals, and those with limited employment skills and aspirations, it has grown to include a significant portion of the long-term population. Over the next decade, more than 1,000 young Island residents will be forming new households with little chance of renting or owning on the Vineyard.

Wealth is concentrating here at an accelerating pace. The forces driving this are likely to increase in the decade ahead as the baby boomer population reaches its maximum earning potential and approaches retirement age. The influx of wealth drives up housing prices, fuels demand for lower-paying service and retail jobs, and decreases year-round housing availability.

Today, the core of the Island's economy consists of longtime residents who earn ordinary incomes but own homes with a high market value. The crux of the problem is that there will likely remain an off-Island market for the high-priced homes but the buyers will not fill the essential jobs that the previous owners held. As these essential jobs turn over, the local economy will face three choices: 1) pay extraordinary salaries commensurate with housing costs; 2) rely on off-Islanders willing to commute to jobs here; or 3) provide a pool of moderately-priced housing that cannot be "scooped up" by wealthy buyers who choose to relocate to the Vineyard in the years ahead.

The third choice clearly provides the best long-term solution. This study recommends a goal of 100 to 150 homes per year divided evenly between year-round rental housing and affordable homeownership. This does not necessarily mean new housing, but it does require that the housing be dedicated to serve long-term affordability. If sustained at even the 100-unit level for the eight remaining years of this decade, it would bring the number of affordable homes on Island to at least ten percent of the year-round total. More importantly, it would be a tremendous legacy from current residents of the Island to future generations.

ADDRESSING THE NEED

Among current renters, there are an estimated 230 households that are: 1) paying more than 35 percent of their income for rent; and 2) renting a home with no year-round housing option. These represent the renters in most critical need. To provide secure, affordable, year-round housing for these most critically affected renters would require 190 dwellings priced below-market rents, and another 40 at market. Adding this number of protected rentals over the next three to five years would make a significant difference for ordinary Island renters. Moreover, sustaining that pace throughout the decade would go a long way toward ensuring secure housing options for Island teens as they form new households.

Providing secure, affordable housing is as important to preserving essential community values as efforts to conserve open space and other critical resources.

On the ownership side, the study suggests that there are 237 renter households that earn between $40,000 and $75,000 *and* have lived on Martha's Vineyard for a minimum of ten years. For more than 90 percent of these long-term residents, homeownership is not an option in the current market. To make such an option available to these long-term residents would require developing between 50 and 75 ownership opportunities per year over the next three to five years. Sustaining this effort to ensure affordable homeownership throughout the decade would begin to address the long-term issue of providing for the turnover of essential Island jobs.

Estimate, Affordable Housing Need, Renters, 2001

RENTING RESIDENTS EXPERIENCING SERIOUS RENTAL PROBLEMS

DUKES COUNTY

Household Income Income, % of Median	*Total Renter Households*	**Experiencing Critical Problems*	*%*
<80	977	190	19
80–99	321	28	9
100–139	235	12	5
≥140	311	0	0
TOTAL	**1,844**	**231**	**13**

* *Paying more than 35% of rent and lacking year-round housing.*

RENTAL HOUSING NEEDED TO ADDRESS CRITICAL PROBLEMS

DUKES COUNTY

	Below Market	*Market*	*Below-market Rents ($ per month)*	*Maximum Market Rents ($ per month)*
One Bedroom	65	15	450–470	800
Two Bedrooms	79	15	625–750	1,000
Three-plus Bedrooms	46	10	750–900	1,200
TOTAL	**190**	**40**		

Source: Development Cycles, October 2001

Key Actions

The study has identified a number of existing and new program approaches to address the scale of housing need. These actions and programs would result in a diversity of housing options that would be widely scattered and appropriately scaled for the Vineyard. They are summarized along with an estimate of their cost in the table printed on the back page.

Why Act Now?

Over the course of this study, both year-round and part-time Islanders expressed a sense of imperative about acting on this problem now. Key reasons include the following:

Preserve the Community. For the first time, the vast majority of renters face the prospect that they will never find a stable rental or be able to buy a home on the Island. Many of these renters are long-term Island residents who play a crucial role in the Vineyard's economic, civic, social and cultural life. A concerted effort to develop affordable homeownership and year-round rental opportunities would provide security, hope, and alternatives to leaving the Island.

Sustain Quality of Life. Many of the Island's essential community values are at risk. It is the very capacity of a place to provide continuity of culture and livelihood that makes it possible to preserve these values. Providing secure affordable housing is as important to preserving these values as efforts to conserve open space and other critical resources.

Attract Key Professionals. The Island's capacity to attract professionals who provide essential services — health, educational, municipal and skilled trade workers — is declining just as the retirement rate for these jobs begins to climb. Addressing housing issues now will help avert a crisis later.

Estimate, Affordable Housing Need, Homeowners, 2001

FIRST-TIME HOMEOWNERSHIP, LONG-TERM ISLAND RESIDENTS

DUKES COUNTY Income Range ($)	Price Range ($)	Qualified Renters with 10+ Years on Island	% Served by Market	Qualified Residents Needing Help to Buy
40,000–49,999	150,000–179,999	114	2	112
50,000–59,999	180,000–224,999	66	3	64
60,000–74,999	225,000–299,999	77	21	61
TOTAL		257		237

OVERALL UNITS OF HOUSING NEEDED, BY TOWN

DUKES COUNTY	Below-market Rental	Market Rental	Ownership for Qualified 10-year Residents	TOTAL
Aquinnah	6	0	24	30
Chilmark	12	2	45	59
Edgartown	48	14	47	99
Oak Bluffs	48	12	40	100
Tisbury	56	10	61	127
West Tisbury	20	2	20	42
TOTAL	190	40	237	467

Source: Development Cycles, October 2001

Maintain Continuity of Generations. Over the course of the next decade, more than 1,000 current Island teens will leave the nest. Providing secure, year-round, rental housing opportunities will help the Vineyard retain more of its children. On the other end of the spectrum, additional housing options are needed for senior citizens. This would also serve to free up existing homes for the next generation.

Protect Investment. The combined asset value of all Island housing is approaching $6 billion and has been growing at the rate of nearly $500 million per year over the past five years. It would take less than one percent of the Island's housing valuation to fund affordable housing initiatives for the rest of the decade. This would be a wise investment which would protect existing investments and help to avoid economic decline.

Solve Our Own Problems. As an Island, we have made meaningful progress in historic preservation, open space protection, and public transportation; the new challenge is affordable housing.

CONCLUSION

An Island-wide consensus sees housing as a critical community issue that can no longer be ignored. A broad effort is underway to begin solving the housing crisis. To effectively address this problem over the course of the next decade, the effort will need to build on values that are currently shared by the community. These include:

- a deep appreciation for the Island's natural beauty and heritage
- a history of tolerance and respect for the individuals who live here and their unique contributions to Island life
- a tradition of crafting Island solutions for Island problems
- the small town value of knowing one's neighbors
- the desire for a slower and more balanced pace of life
- a heritage of easy social mixing among people of different incomes and educational and social backgrounds
- a preference for Vineyard-style design and scale

All six towns, Island employers, seasonal and year-round residents, and the several organizations dedicated to housing must act now and must act together if progress is to be made toward solving this debilitating crisis.

Estimated Cost of Addressing Housing Need, 2001–2005

RENTAL HOUSING ***GOAL: To provide 190 below-market and 40 market-rate housing units to serve rental households in critical need.***

OPTION	Units	Per Unit Subsidy Needed ($)	Source of Subsidy	Total Subsidy Needed ($)	Description
Summer rental conversions	25	6,000 annually	IAHF Fund-raising	3,000,000 endowment	Pay landlords to convert summer rentals to year-round market and below-market rents
Rental Rehab	20	40,000	IAHF Fund-raising/ MHP/State Programs	800,000	Rehab rundown properties for owner in exchange for long-term affordable rent contract
Purchase Existing Rental Properties	20	80,000	MHP/Municipal Bonds/IAHF/ Other Local Funds	1,800,000	DCRHA purchases existing rental properties and manages
Dedicated Housing for Essential Service Employees	30	60,000	School Department, Towns, Hospital/ MHP/State Programs	1,800,000	New mixed ownership and rental development on land already owned by essential service employers
New, Subsidized, Mixed-income Developments	60	60,000	LIHTC/Other Public and Private	3,600,000	Appropriately sited, designed, and screened multi-unit (12–24 per site) projects
New Rental Clusters (locally funded)	45	80,000	IAHF/ CPA/Other Local Funds	3,600,000	Small infill rental housing projects
Zoning Support for Supplementary Apartments	30	0	Private Market	0	Craft second dwelling and supplementary apartment zoning to promote year-round rental
TOTAL	**230**	**$59,130**		**$13,600,000**	

OWNERSHIP HOUSING ***GOAL: To provide 237 affordably priced homes for long-term island residents.***

OPTION	Units	Per Unit Subsidy Needed ($)	Source of Subsidy	Total Subsidy Needed ($)	Description
Soft Second Mortgages	40	15,000	IAHF/CPA/ Other Local Funds	600,000	Provide $15,000 down-payment assistance as 1% loans
House Moves	10	65,000	IAHF/CPA/ Other Local Funds	650,000	Provide expense money to move existing houses slated for demolition
Subsidize Home Purchase	40	80,000	IAHF/CPA/ Other Local Funds	3,200,000	Provide average $80,000 to buy down existing homes
Expanded Resident Homesite Effort	27	100,000	IAHF/CPA/ Other Local Funds	2,700,000	Reinvigorate local efforts to provide resident homesites thorough public/private donation
Dedicated Housing for Essential Service Employees	30	60,000	School Department, Towns, Hospital/ MHP/State Programs	1,800,000	New mixed ownership and rental development on land already owned by essential service employers
Foreclosure and Tax Taking	10	50,000	IAHF/CPA/ Other Local Funds	500,000	Purchase and resale of foreclosed properties and properties taken for taxes (subsidy covers legal, write-down costs)
Infill Pocket Developments	50	80,000	IAHF/CPA/ Other Local Funds	4,000,000	Land acquisition for future housing, 10 parcels
Zoning Support for Substandard Lots	39	0			Craft zoning to promote small lots dedicated to affordable housing
TOTAL	**237**	**$63,000**		**$14,950,000**	

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
All Buildings	4,657	67,338	81,852	14.5	823	60
Building Floorspace (Square Feet)						
1,001 to 5,000	2,348	6,774	11,125	2.9	609	57
5,001 to 10,000	1,110	8,238	10,968	7.4	751	53
10,001 to 25,000	708	11,153	11,378	15.7	980	65
25,001 to 50,000	257	9,311	9,243	36.2	1,007	78
50,001 to 100,000	145	10,112	12,777	69.9	791	80
100,001 to 200,000	59	8,271	8,856	139.4	934	90
200,001 to 500,000	23	6,851	8,798	296.3	779	101
Over 500,000	7	6,628	8,707	929.0	761	110
Principal Building Activity						
Education	327	8,651	8,927	26.4	969	50
Food Sales	174	994	980	5.7	1,014	118
Food Service	349	1,851	4,031	5.3	459	84
Health Care	127	2,918	6,219	22.9	469	66
Inpatient	11	1,865	3,350	168.2	557	165
Outpatient	116	1,053	2,869	9.1	367	56
Lodging	153	4,521	2,356	29.5	1,919	150
Mercantile	667	10,398	11,384	15.6	913	65
Retail (Other Than Mall)	534	4,766	4,668	8.9	1,021	62
Enclosed and Strip Malls	133	5,631	6,716	42.2	838	77
Office	739	12,044	28,969	16.3	416	53
Public Assembly	305	4,393	3,147	14.4	1,396	54
Public Order and Safety	72	1,168	1,702	16.2	686	95
Religious Worship	307	3,405	1,654	11.1	2,059	29
Service	478	3,388	4,554	7.1	744	63
Warehouse and Storage	603	10,477	6,216	17.4	1,685	49
Other	102	1,222	1,453	12.0	841	49
Vacant	253	1,908	261	7.6	Q	Q
Year Constructed						
1919 or Before	419	4,034	3,911	9.6	1,031	46
1920 to 1945	499	6,445	5,925	12.9	1,088	52
1946 to 1959	763	9,127	9,832	12.0	928	52
1960 to 1969	665	10,866	12,886	16.3	843	63
1970 to 1979	774	11,840	15,842	15.3	747	64
1980 to 1989	846	13,931	19,828	16.5	703	69
1990 to 1999	690	11,094	13,628	16.1	814	64
Floors						
One	2,879	26,800	29,908	9.3	896	58
Two	1,168	16,985	18,749	14.5	906	61
Three	420	8,928	9,545	21.3	935	60
Four to Nine	178	10,180	15,069	57.2	676	85
Ten or More	11	4,445	8,582	386.9	518	97
Census Region and Division						
Northeast	686	12,360	14,407	18.0	858	66
New England	208	3,735	3,889	18.0	960	59
Middle Atlantic	479	8,625	10,518	18.0	820	69
Midwest	1,188	16,761	18,279	14.1	917	56
East North Central	782	11,205	11,668	14.3	960	56
West North Central	406	5,556	6,611	13.7	840	56
South	1,762	23,485	29,186	13.3	805	58
South Atlantic	748	11,001	14,051	14.7	783	57
East South Central	396	5,220	5,908	13.2	884	65
West South Central	618	7,264	9,226	11.8	787	56
West	1,021	14,731	19,981	14.4	737	62
Mountain	315	4,579	5,201	14.5	880	54
Pacific	705	10,152	14,780	14.4	687	66

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
Climate Zone: 45-Year Average						
Under 2,000 CDD and --						
More than 7000 HDD	525	5,890	5,857	11.2	1,006	62
5500-7000 HDD	986	17,083	18,323	17.3	932	60
4000-5499 HDD	1,085	16,243	22,136	15.0	734	60
Fewer than 4000 HDD	1,134	16,333	21,145	14.4	772	60
2,000 CDD or More and --						
Fewer than 4000 HDD	926	11,788	14,393	12.7	819	57
Workers (main shift)						
Fewer than 5	2,376	14,321	4,240	6.0	3,377	52
5 to 9	807	6,325	5,313	7.8	1,190	60
10 to 19	683	8,028	8,588	11.8	935	65
20 to 49	487	10,814	14,098	22.2	767	74
50 to 99	174	8,898	11,427	51.1	779	81
100 to 249	90	8,356	12,617	92.4	662	80
250 or More	39	10,595	25,569	270.0	414	96
Weekly Operating Hours						
39 or Fewer	978	6,596	3,517	6.7	1,876	11
40 to 48	1,156	13,105	15,619	11.3	839	43
49 to 60	986	14,200	20,714	14.4	686	55
61 to 84	664	12,458	16,147	18.7	772	74
85 to 167	474	9,116	10,796	19.2	844	104
Open Continuously	398	11,863	15,060	29.8	788	168
Ownership and Occupancy						
Nongovernment Owned	4,135	54,994	67,787	13.3	811	60
Owner Occupied	2,801	37,785	46,555	13.5	812	63
Nonowner Occupied	1,099	15,596	21,233	14.2	735	66
Unoccupied	236	1,613	0	6.8	0	0
Government Owned	521	12,343	14,065	23.7	878	57
Vacancy Status						
Completely Vacant	140	953	0	6.8	0	0
Mostly Vacant	113	956	261	8.5	Q	Q
Partially Vacant	697	15,520	20,518	22.3	756	53
Not At All Vacant	3,707	49,910	61,073	13.5	817	65
Number of Establishments						
One	3,528	43,343	48,677	12.3	890	63
2 to 5	688	10,582	12,379	15.4	855	61
6 to 10	114	3,574	6,580	31.4	543	73
11 to 20	48	3,260	5,965	68.0	547	76
More than 20	27	4,811	8,251	175.2	583	77
Currently Unoccupied	251	1,769	0	7.0	0	0
Energy Sources (more than one may apply)						
Electricity	4,395	65,716	81,768	15.0	804	62
Natural Gas	2,670	45,525	56,264	17.1	809	65
Fuel Oil	434	13,285	19,583	30.6	678	68
District Heat	117	5,891	8,654	50.2	681	83
District Chilled Water	50	2,750	4,637	55.4	593	81
Propane	451	6,290	6,349	14.0	991	59
Wood	79	570	578	7.2	986	69
Coal	Q	Q	Q	Q	Q	Q
Solar	Q	Q	Q	Q	Q	Q
Other	69	1,563	2,578	22.7	606	56

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
Space-Heating Energy Sources (more than one may apply)						
Electricity	1,880	32,291	43,236	17.2	747	65
Natural Gas	2,380	37,902	45,992	15.9	824	63
Fuel Oil	377	5,611	6,542	14.9	858	61
District Heat	96	5,534	8,116	57.7	682	79
Propane	307	2,728	2,428	8.9	1,123	51
Wood	66	377	338	5.7	1,115	70
Coal	Q	Q	Q	Q	Q	Q
Solar	Q	Q	Q	Q	Q	Q
Other	26	409	760	15.8	538	50
Primary Space-Heating Energy Source						
Electricity	1,128	17,627	25,423	15.6	693	70
Natural Gas	2,189	32,729	39,164	15.0	836	62
Fuel Oil	302	3,719	4,247	12.3	875	60
District Heat	77	5,077	7,008	66.0	724	85
Propane	282	2,107	1,907	7.5	1,105	49
Wood	Q	Q	Q	Q	Q	Q
Coal	Q	Q	Q	Q	Q	Q
Solar	N	N	N	N	N	N
Other	Q	Q	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)						
Electricity	3,450	55,545	72,764	16.1	763	65
Natural Gas	142	1,914	2,846	13.5	672	75
District Chilled Water	50	2,750	4,637	55.4	593	81
Water-Heating Energy Sources (more than one may apply)						
Electricity	1,546	24,171	33,505	15.6	721	62
Natural Gas	1,520	29,196	35,930	19.2	813	72
Fuel Oil	110	2,218	2,905	20.2	763	75
District Heat	62	4,182	5,870	67.5	712	102
Propane	130	1,371	1,465	10.5	936	77
Cooking Energy Sources (more than one may apply)						
Electricity	437	13,733	18,369	31.4	748	89
Natural Gas	505	16,785	21,352	33.2	786	81
Propane	118	1,754	2,187	14.9	802	72
Energy End Uses (more than one may apply)						
Buildings with Space Heating	4,016	61,602	78,082	15.3	789	63
Buildings with Cooling	3,560	58,474	77,367	16.4	756	66
Buildings with Water Heating	3,239	56,115	73,385	17.3	765	68
Buildings with Cooking	857	24,681	31,603	28.8	781	81
Buildings with Manufacturing	151	3,126	4,351	20.7	718	56
Buildings with Electricity Generation	172	11,882	18,904	69.3	629	93
Percent of Floorspace Heated						
Not Heated	641	5,736	3,770	8.9	1,521	38
1 to 50	576	7,593	5,239	13.2	1,449	57
51 to 99	627	10,745	13,056	17.1	823	71
100	2,813	43,264	59,787	15.4	724	63

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
Percent of Floorspace Cooled						
Not Cooled	1,097	8,864	4,485	8.1	1,976	41
1 to 50	1,012	16,846	14,146	16.6	1,191	61
51 to 99	751	16,966	23,833	22.6	712	73
100	1,796	24,662	39,388	13.7	626	65
Percent Lit When Open						
Zero	34	173	Q	5.1	3,151	92
1 to 50	835	9,187	4,917	11.0	1,868	58
51 to 99	1,228	20,665	28,668	16.8	721	67
100	2,096	34,233	47,951	16.3	714	67
Building Never Open/ Electricity Not Used	464	3,080	261	6.6	11,787	10
Percent Lit When Closed						
Zero	2,174	20,771	21,669	9.6	959	43
1 to 50	1,688	30,950	41,943	18.3	738	61
51 to 100	143	2,160	3,096	15.1	698	73
Building Never Closed/ Electricity Not Used	652	13,457	15,143	20.7	889	108
Heating Equipment (more than one may apply)						
Heat Pumps	492	8,923	12,616	18.1	707	63
Furnaces	1,460	14,449	15,845	9.9	912	54
Individual Space Heaters	894	17,349	19,140	19.4	906	61
District Heat	96	5,534	8,116	57.7	682	79
Boilers	581	19,522	24,374	33.6	801	72
Packaged Heating Units	1,347	25,743	32,224	19.1	799	70
Other	185	4,073	7,008	22.1	581	75
Cooling Equipment (more than one may apply)						
Residential-Type Central Air Conditioners	676	8,329	10,136	12.3	822	59
Heat Pumps	485	9,147	13,463	18.8	679	64
Individual Air Conditioners	799	14,276	16,652	17.9	857	66
District Chilled Water	50	2,750	4,637	55.4	593	81
Central Chillers	130	12,909	21,586	99.7	598	84
Packaged Air Conditioning Units	1,953	36,527	48,283	18.7	757	68
Swamp Coolers	136	2,219	2,425	16.3	915	63
Other	49	1,312	1,838	26.7	714	61
Main Equipment Replaced Since 1995 (more than one may apply)						
Heating	984	13,220	16,913	13.4	782	64
Cooling	1,085	17,390	23,164	16.0	751	67
Lighting Equipment Types (more than one may apply)						
Incandescent	2,193	38,156	49,616	17.4	769	67
Standard Fluorescent	3,778	60,344	77,862	16.0	775	65
Compact Fluorescent	607	20,666	30,075	34.1	687	76
High Intensity Discharge	430	19,223	21,658	44.8	888	73
Halogen	572	17,926	25,668	31.3	698	73
Other	58	1,004	1,393	17.5	720	73
Water Heating Equipment						
Centralized System	2,472	35,579	45,136	14.4	788	68
Distributed System	566	10,899	14,348	19.3	760	64
Combination of Centralized and Distributed System	200	9,637	13,902	48.1	693	84

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
Personal Computers						
None	1,617	9,583	4,785	5.9	2,003	48
1 to 4	1,636	13,853	12,711	8.5	1,090	65
5 to 9	542	6,528	7,485	12.0	872	62
10 to 19	403	7,514	9,200	18.7	817	64
20 to 49	247	8,087	9,668	32.7	836	76
50 to 99	105	5,867	7,268	55.9	807	68
100 to 249	71	6,818	9,574	96.0	712	77
250 or More	36	9,088	21,162	252.4	429	89
Photocopiers						
None	2,825	21,631	18,897	7.7	1,145	57
One	1,114	12,928	12,963	11.6	997	62
2 to 4	540	15,620	16,785	28.9	931	68
5 to 9	102	5,384	8,217	52.6	655	68
10 or More	75	11,774	24,991	156.7	471	79
Other Electronic Equipment (more than one may apply)						
Laser Printers	1,949	46,567	66,979	23.9	695	66
FAX Machines	2,807	54,764	74,706	19.5	733	68
Medical Diagnostic Equipment	86	2,493	5,625	29.1	443	61
Energy-Related Space Functions (more than one may apply)						
Commercial Food Preparation	767	23,328	30,350	30.4	769	82
Activities with Large Amounts of Hot Water	698	21,793	25,850	31.2	843	91
Building Shell Conservation Features (more than one may apply)						
Multipaned Windows	2,130	38,193	49,935	17.9	765	64
Tinted, Reflective, or Shading Glass	1,283	29,915	43,137	23.3	694	65
HVAC Conservation Features (more than one may apply)						
Variable Air-Volume System	550	19,387	30,546	35.3	635	75
Economizer Cycle	567	21,256	32,923	37.5	646	77
HVAC Maintenance	2,786	53,395	71,290	19.2	749	68
Energy Management and Control System (EMCS)	460	21,613	31,767	47.0	680	76
Lighting Conservation Features (more than one may apply)						
Specular Reflectors	843	19,994	28,787	23.7	695	72
Electronic Ballasts	2,167	42,035	55,879	19.4	752	68
Skylights or Atriums	580	18,286	21,158	31.5	864	62
Off-Hour Equipment Reduction (more than one may apply)						
Heating	2,862	39,969	50,855	14.0	786	52
Cooling	2,622	39,161	52,130	14.9	751	55
Lighting	3,675	51,083	65,064	13.9	785	54
Office Equipment	184	9,063	12,473	49.2	727	56

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
N=No responding cases in sample.
Note: Due to rounding, data may not sum to totals.
Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A of the 1999 Commercial Buildings Energy Consumption Survey.

Appendix D. Summary of Alternative Linkage Model for Non-Residential Developments of Regional Impact

In order to ensure that a non-residential DRI proposal balances its impact on the availability of low and moderate-income housing for Island residents, the applicant should consider the following:

1) Employment density: for the purpose of determining the likely number of jobs generated by the addition of non-residential space, the following standards should be applied as determined by the MVC:

    a. Office, Medical and Eating & Drinking space shall be assumed to generate one employee per 400 square feet of Gross Leasable Area (GLA). These development classifications shall have a Employee Density Multiplier of 1.00

    b. All other Retail space shall be assumed to generate one employee per 1,000 square feet of Gross Leasable Area (GLA). These development classifications shall have a Employee Density Multiplier of 0.40

    c. Warehouse, Storage and Distribution space shall be assumed to generate one employee per 1,333 square feet of Gross Leasable Area (GLA). These development classifications shall have a Employee Density Multiplier of 0.30

    d. Hotel & Lodging space shall be assumed to generate one employee per 2,000 square feet of Gross Leasable Area (GLA). These development classifications shall have a Employee Density Multiplier of 0.20

    e. All other types of proposed non-residential space should include an estimate by the applicant of the number of employees to be employed in the operation of the proposed space

2) Job Classification: for the purpose of determining the type of jobs generated by the addition of this space, the applicant shall indicate which of the following job classifications will be involved in the proposed enterprise:

    a. Agricultural (SIC Division A
    b. Construction (SIC Division C)
    c. Manufacturing (SIC Division D)
    d. Transportation, Communications & Public Utilities (SIC Division E)
    e. Wholesale Trade (SIC Division F)
    f. Retail: Eating and Drinking (SIC 58)
    g. Retail; all Other (SIC Division G not including SIC 58)
    h. Finance, Insurance & Real Estate (SIC Division H)
    i. Hotel & Lodging Services (SIC 70)
    j. Amusement & Recreation Services (SIC 79

k. Health Services (SIC 80)
l. Social Services (SIC 83)
m. All Other Services (SIC Division I not including SIC 70,79,80, 83)

3) Average Annual Wages: for the purpose of determining the impact of the proposed development on the availability of housing for low and moderate-income residents, the MVC shall refer to the Massachusetts Division of Employment and Training's most current Annual Employment and Wages Summary for Dukes County and categorize applications as follows:

   a. if the average wage for the job type(s) generated is less than 80 percent of the average for all jobs in Dukes County, then the proposed DRI shall be considered to have a HIGH IMPACT

   b. if the average wage for the job type(s) generated is between 80 and 99.9 percent of the average for all jobs in Dukes County, then the proposed DRI shall be considered to have a MODERATE IMPACT

   c. if the average wage for the job type(s) generated is between 100 and 119.9 percent of the average for all jobs in Dukes County, then the proposed DRI shall be considered to have a LOW IMPACT

   d. if the average wage for the job type generated is between 120 and 149.9 percent of the average for all jobs in Dukes County, then the proposed DRI shall be considered to have a VERY LOW IMPACT

   e. The MVC shall maintain a record of the DET's Annual Employment and Wage information in order to advise applicants as to which category their proposal best represents

4) Housing Affordability Gap: in order to determine the contribution recommended to balance the impact of a proposed non-residential DRI on housing availability, the MVC shall provide the applicant with the following guidance:

   a. For a DRI with a HIGH IMPACT, the applicant may elect to contribute (for each employee projected in #1) a sum equivalent to 10 percent of the dollar gap between the purchasing power* of a household earning 80 percent of the current HUD median income for Dukes County and the cost of a residence at the lowest 10 percent of value for all homes and condominiums sold on Martha's Vineyard in the previous full calendar year.

   b. For a DRI with a MODERATE IMPACT, the applicant may elect to contribute (for each employee projected in #1) a sum equivalent to 10 percent of the dollar gap between the purchasing power* of a household earning 100 percent of the current HUD median income for Dukes County and the cost of a residence at the lowest 10 percent of value for all homes and condominiums sold on Martha's Vineyard in the previous full calendar year.

c. For a DRI with a LOW IMPACT, the applicant may elect to contribute (for each employee projected in #1) a sum equivalent to 10 percent of the dollar gap between the purchasing power* of a household earning 120 percent of the current HUD median income for Dukes County and the cost of a residence at the lowest 10 percent of value for all homes and condominiums sold on Martha's Vineyard in the previous full calendar year.

d. For a DRI with a VERY LOW IMPACT, the applicant may elect to contribute (for each employee projected in #1) a sum equivalent to 10 percent of the dollar gap between the purchasing power* of a household earning 150 percent of the current HUD median income for Dukes County and the cost of a residence at the lowest 10 percent of value for all homes and condominiums sold on Martha's Vineyard in the previous full calendar year.

e. The MVC shall maintain both the HUD income level and the lowest 10 percent home value information as a resource for the applicant.

NOTE: purchasing power should be based on 90 percent financing at the current 30-year fixed rate average rate assuming taxes and insurance at .015 percent of the purchase price per month using 30 percent of the household's gross monthly income.

5) <u>Determining Total Recommended Contribution</u>: the recommended housing contribution shall be determined as follows:

a. Measure the Gross Leasable Area (GLA)

b. Apply the appropriate Employee Density Multiplier for the type of development proposed

c. Divide the product of GLA * Employee Density Multiplier by 400 to determine the expected number of employees

d. Identify the Job Classification for the expected employees generated by the DRI

e. Determine the ratio of average wage for the Job Classification(s) generated to the Average Wage for all jobs on Martha's Vineyard to determine the Impact Classification

f. Determine the per employee value representing 10 percent of the housing gap for the appropriate Impact Classification

g. Multiply that value times the projected number of employees

h. To determine the recommended contribution on a PSF basis, divide the total recommended contribution by the GLA.

6) Special Circumstances: the applicant may include any special circumstances that may mitigate the impact of the proposed development on the availability of housing for low and moderate-income residents. Such circumstances may include developments with a mixed employee base; developments with unusual space requirements or wages; and developments aimed for seasonal use only. The applicant may also ask the MVC to consider other benefits generated by the proposed development.

How the Proposed Linkage Model Affects Recommended Contributions
By Development Classification Based on 2001 Data

DEVELOPMENT CLASSIFICATION	CORRESPONDING SIC JOB CLASSIFICATION	EMPLOYEE DENSITY MULTIPLIER/[1]	AFFORDABILITY GAP (Per Employee)[2]	RECOMMENDED CONTRIBUTION (PSF)
Medical	Health Services	1.0	$0	$0.00
Office	Social Services	1.0	$4,000	$10.00
	All Other Services	1.0	$4,000	$10.00
	Finance, Insurance & R.E.	1.0	$0	$0.00
Restaurant	Eating & Drinking Retail	1.0	$7,750	$19.38
Retail	All Other Retail	0.4	$4,000	$4.00
Warehouse/ Storage	Wholesale Trade	0.3	$0	$0.00
Hotel/ Lodging	Hotel & Lodging Services	0.2	$4,000	$2.00
Other	Agricultural	Case-by-case	$0	$0.00
	Amusement & Recreation	Case-by-case	$7,750	$7,750/ employ
	Construction	Case-by-case	$0	$0.00
	Manufacturing	Case-by-case	$0	$0.00
	Trans., Comm. & Pub. Util.	Case-by-case	$0	$0.00

1/ The Employee Density Multiplier is based on the typical number of FTE employee generated by 400 square feet of finished interior space.

2/ The Affordability Gap represents 10 percent of the gap that exists between the buying power of an average household earning the average wage for this job type and the cost of a home valued at the lowest 10 percent of all homes sold in the previous year.

Appendix E. List of Contacts for Other Jurisdictions with Non-Residential Linkage By-laws.

Massachusetts

Nantucket John Pagini NP&EDC 508-228-7237

Boston John Avault BRA 617-722-4300

Cambridge Darcy Jameson, Housing Director 617-349-4600

Somerville Eamon McGilligan, Planner 617-625-6600 x2500

Westwood Diane Beecham, Planner 781-251-2581

Mass DET www.detma.org

Other

Palo Alto, CA Cathy Siegel, Planning 650-329-2441

Sunnyvale, CA Trudy Ryan, Planning 408-730-2444

City of Oakland Jeff Levin, Comm. Dev.

See also Http://www.oaklandnet.com/government/hcd/policy/docs/linkage_study.pdf and linkage_final_ordinance.pdf

Urban Land Institute Rick Davis, Reference 202-624-7117

DOE-EIA Joelle Davis Michaels 202-586-8952