Martha's Vineyard Statistical Profile 2023



MARTHA'S VINEYARD



Published by the Martha's Vineyard Commission, 2023 Compiled and edited by Alex Elvin Maps by Chris Seidel

Above: Nashawena Island in Gosnold, photo by Richard Goldenberg Cover: Lambert's Cove Beach, photo by Rich Saltzberg

Acknowledgments

The Martha's Vineyard Commission would like to thank the following organizations that contributed their time and knowledge to this report.

Barnstable County Department of Human Services Dukes County Associate Commissioner for the Homeless **Eversource Energy Island Housing Trust** Island water departments Island Grown Initiative Karen Sunnarborg Consulting Martha's Vineyard Airport Martha's Vineyard Community Services Martha's Vineyard Hospital Martha's Vineyard Refuse Disposal and Resource Recovery District Martha's Vineyard Shellfish Group Woods Hole and Martha's Vineyard Steamship Authority Massachusetts Clean Energy Center Massachusetts Department of Environmental Protection Massachusetts Department of Revenue Massachusetts Department of Transportation Massachusetts Division of Local Services Massachusetts Division of Marine Fisheries Massachusetts Office of Travel and Tourism Menemsha Water Company National Oceanic and Atmospheric Administration Oak Bluffs Highway Department **Tisbury Department of Public Works** Town building, health, shellfish and wastewater departments; town accountants, assessors, administrators, clerks, tax collectors, treasurers Vineyard Power Vineyard Transit Authority **UMass Donahue Institute** US Bureau of Economic Analysis **US Census Bureau** Wampanoag Tribe of Gay Head (Aquinnah)

Contents

Introduction

I. Population and Demographics

| Historic population counts: Towns, county, Island, 1930-2020 | 3 |
|---|----|
| Population estimates: Towns, County, Island, 2012-2022 | 3 |
| Population density by town: 2012-2022 | 4 |
| Population and density: County comparison, 2022 | 4 |
| Population projections by town, 2020-2050 | 5 |
| Population projections by age group: County, 2020-2050 | 5 |
| Births per town, 2012-2022 | 5 |
| Crude death rate and deaths per year: County, 2002-2021 | 6 |
| Net migration: County, 2012-2022 | 7 |
| Gender by age group: County, 2011–2021; 2022 | 8 |
| Population by age group (percent of total): County, 2011-2021 | 8 |
| Older adult age distribution by town, 2021 | |
| Older adult population projections: County, 2020-2050 | 9 |
| Racial and ethnic diversity: County, 2010, 2020 | 10 |
| Racial and ethnic diversity by town: County, 2020 | 10 |
| Citizenship status: County, 2011–2021 | 11 |
| Registered voters per town: Island, 2012-2022 | 11 |
| | |

2. Land Use

| Land and water acreage per town, 2023 | 12 |
|---|----|
| Developed and undeveloped acres per town, and percent of total, 2023 | 12 |
| Watershed acreage: Island, 2017 | 12 |
| Acres of open space per town, 2023 | 13 |
| Protection and access to open space: County, 2023 | |
| Miles of trail by town, 2023 | 15 |
| Miles of special ways by town, 2023 | |
| Single-family building permits issued by town and year, 2012-2022 | |
| Total number of parcels per town, 2017-2023 | |
| Average and median lot size, various years | 16 |
| Parcel counts by year and use (selected): County, FY2012-FY2023 | |
| Parcel Types by town, FY2023 | |
| Number of structures per town, 2023 | |
| Historic buildings by time period, and number of buildings in national or | |
| local historic districts: By town | |

3. Economy

| Gross Domestic Product: County, 2011-2021 | 19 |
|--|----|
| Total full- and part-time employment: County, 2011-2021 | |
| Labor force, employed, unemployed, unemployment rate: County, 2022 | 19 |
| Seasonal unemployment rate: County, 2010–2022 | 20 |
| Unemployment rate: County comparison and ranking, 2010–2022 | 21 |
| Inflow and outflow of workers: County, 2012-2020 | 21 |
| Inflow and outflow of workers: Towns, 2020 | 22 |
| Median household and family income by town, 2011-2021 | |
| Median household income: ranking by town, 2011, 2021 | |
| Income per capita (towns), 2011-2021 | 24 |
| Income inequality (Gini index) by town, 2011-2021 | |
| Personal income: County, 1969–2021 | |

| Median earnings in last 12 months by town, 2011-2021 | .25 |
|---|------|
| Median earnings by gender and educational attainment: County, 202 I | . 25 |
| Gross flow of earnings: County, 1990–2021 | . 25 |
| Establishments and employees: County, 1978-2020 | . 26 |
| Industry rankings: County, 2021 | .26 |
| Employment by industry and town, 2021 | .27 |

Selected Industries

| Agriculture | |
|--|------|
| Farm employment, income, and expenses: County, various years through 2021 | 28 |
| Construction | |
| Wages and average monthly employment: County, 2011-2021 | |
| Wages by sub-industry: County, 2011-2021 | 29 |
| Finance and Real Estate | |
| Wages and average monthly employment: County, 2011-2021 | 30 |
| Finance and insurance: Wages by sub-industry; average monthly employment: | |
| County, 2011–2021 | 30 |
| Real estate and rental/leasing:Wages by sub-industry; average monthly employme | |
| County, 2011–2021 | |
| Health and Education | |
| Wages and average monthly employment: County, 2011-2021 | 31 |
| Health care and social assistance:Wages by sub-industry; average monthly | |
| employment: County, 2011–2021 | |
| Education:Wages by sub-industry; average monthly employment: | |
| County, 2011–2021 | |
| | |
| Services to Buildings and Dwellings (Mostly Landscaping) | |
| Wages and average monthly employment: County, 2011-2021 | 32 |
| | |
| Leisure and Hospitality | |
| Wages and average monthly employment: County, 2011–2021 | |
| Average monthly employment by sub-industry: County, 2011-2021 | |
| Average monthly employment by sub-industry: County, 2011-2021 | 32 |
| Membership Associations and Organizations | |
| Wages and average monthly employment: County, 2011-2021 | 33 |
| Public administration | |
| Tourism | |
| Domestic travel expenditures, payroll, tax receipts: County, 2012–2022 | 34 |
| Domestic travel expenditures and payroll, tax receipts, employment; employment | |
| County comparison, 2022 | |
| Domestic travel-generated employment and employment rate: | |
| County comparison, 2022 | 35 |
| Domestic travel expenditures, state taxes, employees, payroll: | |
| County comparison, 2022 | 25 |
| | 55 |
| Commercial Fishing | |
| Value of finfish, groundfish, and invertebrate landings in Dukes County, 2017–2022 | 2 36 |
| , | |

| value of finitish, groundish, and invertebrate landings in Dukes Councy, 2017–2022. | 50 |
|---|----|
| Value of shellfish landings in Dukes County, 2017-2022 | 37 |
| Selected industries: Seasonality (employment) in Dukes County, 2017-2022 | 38 |
| Total monthly employment: County and state, 2017-2022 | 39 |
| Average annual employment (all major NAICS sectors): Dukes County, 2021 | 39 |

4. Health and Education

| County health rankings: County, 2023 | 40 |
|---|----|
| Clinical care health trends: County (various time ranges) | 41 |
| Health outcomes and factors, 2023 | |
| Cancer incidence rates by county, 2016-2020 (5-year average) | 43 |
| Opioid overdose deaths: County comparison, 2012-2022 | 44 |
| Opioid related incidents by town, 2020-2023 | 44 |
| Lyme disease rates: County comparison, 2015 | 45 |
| Tick-borne disease rates: County comparison, 2019-2023 | 45 |
| Reported Covid cases and deaths, average daily incident rate: | |
| Dukes and Nantucket Counties, 2020-2023 | |
| Covid-19 case counts by town, as of July 2023 | 47 |
| Homelessness: County, 2016–2023 | 47 |
| Martha's Vineyard Community Services: Services provided in FY2023 | |
| | |

Food Security

| SNAP participation by town (percent of households), 2012-2021 | .48 |
|---|------|
| Island Food Pantry visits, 2019-2023 | |
| IGI Mobile Market sales to people in assistance programs, 2019-2023 | .48 |
| IGI Community Lunch program: Lunches made, average sold per week, 2018-2023 | .49 |
| IGI Prepared Meals Program: Frozen meals made, 2019-2022 | .49 |
| IGI Gleaning Program: Pounds of food gleaned, 2019-2022 | .49 |
| Martha's Vineyard Hospital inpatient discharges and emergency visits, 2013-2023 | . 50 |
| | |

| Martha's Vineyard Hospital Community Health Needs Assessment Report: | |
|--|----|
| Survey results, 2022 | 51 |
| Educational attainment by town, 2021 | 53 |
| Enrollment by Island school, 2012-2023 | 54 |
| Enrollment by gender, 2023 | 55 |
| Selected student populations, 2023 | 55 |
| Plans of high school graduates, 2021-2022 | 55 |

5. Housing and Real Estate

| Total housing units, 1970-2020 | 56 |
|--|----|
| Monthly housing costs for occupied units: County, state, nation, 2021 | 57 |
| Occupied housing units by town, 2011–2021 | 58 |
| Occupied housing units (percent of total) 2011-2021 | 58 |
| Owner vs. renter-occupied units by town, 2021 | 58 |
| Vacant units by town as percentage of total, 2011-2021 | 58 |
| Percentage of total housing units by town and year built, 2021 | 59 |
| Average household size, 2011-2021 | 59 |
| Housing tenure by town (renter- vs. owner-occupied units), 2011-2021 | 60 |
| Housing type and age of householder by town (renter vs. owner-occupied units): | |
| County, 2016/2021 | 61 |
| Household income (renter- vs. owner-occupied units): County, 2016/2021 | 61 |
| Single-family building permits issued by year and town, 2015-2022 | 62 |
| Affordable housing by town and type, 2023 | |
| Median rent by town, 2011-2021 | 63 |
| Number and percent of occupied housing units with a mortgage, by town, | |
| 2011-2021 | 63 |
| Cost burden: Percent of Households paying 30% or more of income on housing, | |
| by town, 202 I | 64 |
| Home sales: Listings, average and median price, days on market by town, | |
| 2010-2022 | 65 |
| Commercial real estate sales: Listings, average and median price, days on market | |
| by town, 2010–2022 | 66 |

6. Transportation

| Passengers, automobiles and trucks carried to and from Martha's Vineyard on | |
|---|----|
| SSA ferries, 2012-2022 | 67 |
| Cars parked at the Woods Hole, Falmouth, and Cataumet lots, 2012-2022 | 68 |
| Number of excursion automobiles by month and year: Martha's Vineyard, | |
| 2012-2022 | 69 |
| Other licensed ferries: Monthly passengers, 20012-2022 | 70 |
| Total ferry passengers (SSA and non-SSA), 2012-2022 | 71 |
| Enplanements by month, 2018-2022 | |
| Annual passenger enplanements, 2012-2022 | 71 |
| Airport operations, 1990-2022 | 72 |
| Active vehicles by town and type, 2020-2023 | 72 |
| Traffic counts at six locations, 2020-2022 | 73 |
| Vehicle crashes: County, 1992-2022 | 74 |
| Official road centerline mileage: All roads, 2017 | 74 |
| Average crashes by town, 1992-2022 | 74 |
| Miles of VTA bus routes per town | 74 |
| Miles of shared-use paths by town, 2023 | 74 |
| Vineyard Transit Authority fixed-route ridership, FY2007–FY2022 | 75 |

7. Energy and Environment

| Floodplain area (land only; acres) by town, 2023 | 76 |
|--|----|
| Buildings in FEMA floodplain and percent of total, 2023 | 76 |
| Mean sea level (rising trend), 1932-2022 | 77 |
| Annual relative sea level since 1960, and projections, 2022 | 77 |
| Annual average, maximum, and minimum air temperatures; annual precipitation; | |
| monthly drought severity index: Edgartown and Contiguous US, 1895-2022 | 78 |
| Temperature and precipitation anomaly | 79 |
| Enterococci levels by beach, various time ranges, 2023 | 80 |
| Coastal ponds: Impairment status and nitrogen limits | 86 |
| Annual shellfish harvests by town and type, 2012-2022 | 87 |
| Martha's Vineyard Shellfish Group seed production and by town and species, | |
| 2000-2022 | 89 |
| Martha's Vineyard Shellfish Group: Number of 1 mm quahogs and scallop seed | |
| distributed, 2000-2022 | 89 |
| Native plants by type: Martha's Vineyard | 90 |
| Rare species by town, 2023; and additions since 2019 | 90 |
| Water table elevations: Outwash plain aquifer, October 1991 | |
| Public and private wells per town, 2023 | |
| Public water consumption (municipal and tribal only), 2012-2022 | 91 |
| Public water connections and consumption (all reported systems), 2022 | |
| Public water and wastewater connections (municipal, tribal, and airport only), | |
| 2017, 2023 | 93 |
| Wastewater volume by system, 2012-2022 | 93 |
| Wastewater sludge shipped off-Island, 2022 | |
| Solid waste volume: Island, 2018-2022 | 94 |
| Energy and greenhouse gas baseline, 2020 | 95 |
| New England Power Grid breakdown, 2022-2023 | 94 |
| Electrical usage: Island towns, 2002-2022 | 97 |
| Electrical usage: Island towns, 2022 (monthly) | |
| Peak energy loads: Island, 2010-2022 | |
| Solar installations and capacity per town, 2021 | |
| Solar installations per year, cumulative capacity, median price per watt: | |
| County, 2003–2021 | 99 |
| Residential and commercial energy audits per town, 2012-2022 | |
| Leases in the Massachusetts Wind Energy Area, 2022 | |
| | |

8. Taxes and Town Services

| Total operating budgets by town, 2012-2022 | 102 |
|---|-----|
| General fund revenue and expenditures: County, 2011-2021 | 103 |
| General fund revenue and expenditures by town, 2011-2021 | 104 |
| General fund revenue and expenditures: Percent change by town, 2011-2021 | |
| General fund revenue by town: Breakdown for 2021 | 105 |
| General fund expenditures by town: Breakdown for 2021 | 105 |
| Enterprise and Community Preservation Act Fund Revenue, 2011-2021 | |
| Town revenue by source, (not including Enterprise and Community Preservation Ac | |
| funds), 2021 | 107 |
| Bond ratings by town and agency, 2011-2021 | |
| Assessed value by town and class, 2023 | 108 |
| Total assessed value by town, 2011-2023 | |
| Tax rate by town and class, 2023 | 109 |
| Personal property, commercial and industrial tax rates, 2011-2023 | |
| Average single-family tax bill per town, 2011-2023 | 110 |
| Average single-family tax bill and ranking, 2023 | |
| Vehicle excise collections by town, 2006-2022 | |
| Local option rooms tax by town, 2014-2023 | |
| Local option marijuana tax by town, 2022 | |
| Local option meals tax by town, 2013-2023 | |
| Total outstanding long-term debt by town, 2013-2022 | |
| Debt service as percent of town budget, 2013-2022 | 112 |
| Community Preservation Act: Approved projects by category, 2001–2017 | |
| Community Preservation Act: Approved projects by town, 2013-2022 | |
| Community Preservation Act: Total amounts charged by town and distributed | |
| by state as of 2022 | 115 |
| Community Development Block Grant awards 2006–2021 | |
| , · · | |

Maps

| Dukes County Land and Water | |
|---|----|
| Beaches/Swimming Access | 19 |
| Land Development Status | 20 |
| Structures - Year Built | 21 |
| Conserved Land/Open Space | 22 |
| MassHistoric Commission Inventory 12 | 23 |
| Flood Zones and Affected Buildings 12 | 24 |
| Major Watersheds | 25 |
| Major Watersheds and Pond Water Quality 12 | |
| Official Road Centerline Miles | 27 |
| Bus and Shared-Use Path Network I2 | |
| Special Ways | |
| Trail Network | |
| Waste Disposal Locations | 31 |
| Drinking Water Resources | 32 |
| Water Table Elevations: Central Outwash Plain | 33 |
| Glossary | 34 |

Martha's Vineyard Statistical Profile December 2023

Introduction

This update to the Martha's Vineyard Statistical Profile covers several important developments since the previous update in 2019, including the Covid-19 pandemic, the 2020 Census, the 2022 Vineyard Climate Action Plan, and the 2024-2044 Regional Transportation Plan, all of which have yielded new insight into the workings of Dukes County.

Wherever possible, data is shown for each of the six Island towns plus Gosnold, and for Dukes County as a whole. In some cases, other counties, the state, and the nation are included for comparison. Most of the data sets cover 10 years, although the actual range may vary depending on the source. We invite anyone to use the report for general planning purposes, or simply peruse the data at their leisure.

The Covid-19 pandemic affected nearly every aspect of Island life, including population, employment, wages, traffic, real estate, and housing. Most of the effects peaked in 2020, and different sectors have since rebounded to varying degrees. Section 3 reveals how industries were affected in terms of wages and average monthly employment, while section 6 highlights some of the ongoing effects in the transportation sector. (As of this year, wages in general have returned to the usual growth pattern, and monthly unemployment has fallen to below pre-pandemic levels.)

Property values increased dramatically during the pandemic (section 5), following a nationwide trend where many people sought refuge in rural counties. The spike in property values led to lower tax rates in several Island towns (section 8), although the average single-family tax bills continue to rise in all but Edgartown.

Other highlights include new data from the 2020 Census, which reveal a larger, more diverse, and more year-round population than in 2010; a new section on food security, focusing on the many programs offered through Island Grown Initiative; an Islandwide energy and greenhouse gas baseline developed as part of the Vineyard Climate Action Plan; new data on energy use and solar generation; longer-term data related to the Island's weather and climate; updated housing statistics; and an inventory of public well usage across the Island.

As always, we welcome any feedback. Questions and comments may be sent to Alex Elvin at elvin@mvcommission.org or the following address:

Martha's Vineyard Commission PO Box 1447 Oak Bluffs, MA 02557 (508) 693-3453

A Note on the American Community Survey

Much of the data in this report is drawn from the US Census Bureau's American Community Survey (ACS), which provides annual data estimates related to social, economic, housing, and demographic characteristics for particular areas. Unlike the 10-year Census, which in theory accounts for every resident in an area, the ACS is based on a sample of the population. For populations such as Dukes County with fewer than 65,000 people, the annual ACS numbers are based on survey responses over the previous five years. The 2021 ACS 5-Year Estimates, for example, are based on the years 2016-2020.

ACS results are released every year, but changes over time are shown here in non-overlapping five-year increments, ending with latest available data from 2021. This presents a more accurate picture, since the 5-year estimates have a smoothing effect and do not necessarily reflect year-by-year changes.

Because the ACS is based on a sample of each population, the data comes with a degree of uncertainty, or sampling error, which increases for smaller populations where the sample size is more limited. As such, small changes in the data over time may not be statistically significant. It should also be noted that monetary data in the ACS are adjusted for inflation only to the final year in the 5-year period.

For more information on the ACS, we recommend that readers consult the ACS handbook, <u>Understanding</u> and <u>Using American Community Survey Data</u>, and view the data sets directly on the US Census website, <u>data.census.gov</u>, which include the margins of error and other information.

I. POPULATION AND DEMOGRAPHICS

Population counts tend to differ from source to source. Aquinnah's population in 2020, for example, ranges from 439 (2020 Census) to 496 (Aquinnah street list). The American Community Survey 5-year estimates include a degree of uncertainty, but also provide consistency over time, among towns and counties, and among other data sets available through the US Census Bureau. The historic population counts on this page are considered the most accurate tally of year-round residents.

Historic population counts: Towns, county, Island, 1930-2020

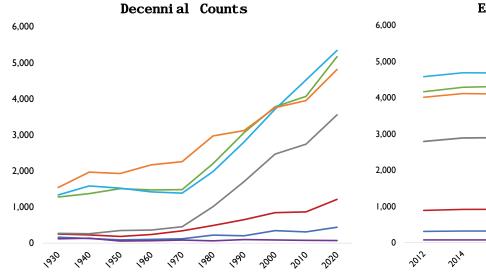
Source: US Census Bureau (Decennial Census Count), town street lists

| | 1930 | 1940 | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 | 2020 | Street List 2022 |
|------------|-------|-------|-------|-------|-------|-------|--------|---------|--------|--------|---------------------|
| Aquinnah | 161 | 127 | 88 | 103 | 118 | 220 | 201 | 344 | 311 | 439 | 496 ¹ |
| Chilmark | 252 | 226 | 183 | 238 | 340 | 489 | 650 | 843 | 864 | 1,212 | 1,195 |
| Edgartown | 1,276 | 1,370 | 1,508 | 1,474 | 1,481 | 2,204 | 3,062 | 3,779 | 4,067 | 5,168 | 4,835 |
| Gosnold | 120 | 136 | 56 | 66 | 83 | 63 | 98 | 86 | 75 | 70 | UA |
| Oak Bluffs | 1,333 | 1,584 | 1,521 | 1,419 | 1,385 | 1,984 | 2,804 | 3,713 | 4,524 | 5,341 | 5,123 |
| Tisbury | 1,541 | 1,966 | 1,930 | 2,169 | 2,257 | 2,972 | 3,120 | 3,755 | 3,952 | 4,815 | 4,274 |
| W.Tisbury | 270 | 260 | 347 | 360 | 453 | 1,010 | 1,704 | 2,467 | 2,740 | 3,555 | 3,059 |
| County | 4,953 | 5,669 | 5,633 | 5,829 | 6,117 | 8,942 | 11,639 | I 4,987 | 16,535 | 20,600 | UA |
| MV | 4,833 | 5,533 | 5,577 | 5,763 | 6,034 | 8,897 | 11,541 | 14,901 | 16,460 | 20,530 | 18,982 'Ages 16+ |

Population estimates: Towns, County, Island, 2012-2022

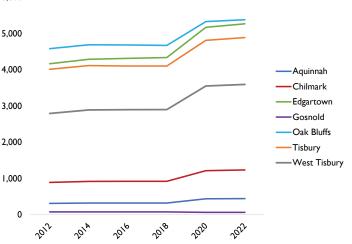
Source: US Census Bureau, Population Division (via UMass Donahue Institute)

| | 2012 | 2014 | 2016 | 2018 | 2020 | 2022 | % Change |
|-------------------|--------|--------|--------|--------|--------|--------|----------|
| Aquinnah | 312 | 322 | 322 | 321 | 440 | 444 | 42% |
| Chilmark | 890 | 919 | 922 | 922 | 1,215 | 1,235 | 39% |
| Edgartown | 4,164 | 4,288 | 4,314 | 4,337 | 5,169 | 5,266 | 26% |
| Gosnold | 76 | 77 | 76 | 76 | 65 | 64 | -16% |
| Oak Bluffs | 4,581 | 4,687 | 4,682 | 4,671 | 5,329 | 5,379 | 17% |
| Tisbury | 4,012 | 4,114 | 4,101 | 4,101 | 4,811 | 4,886 | 22% |
| West Tisbury | 2,794 | 2,890 | 2,898 | 2,901 | 3,550 | 3,594 | 29% |
| Dukes County | 16,829 | 17,297 | 17,315 | 17,329 | 20,579 | 20,868 | 24% |
| Martha's Vineyard | 16,753 | 17,220 | 17,239 | 17,253 | 20,514 | 20,804 | 24% |



Estimates 2012-2022

Town



Population density by town (year-round residents per square mile): 2012-2022

Source: US Census Division, Population Division; MVC (land area)

Oak Bluffs and Tisbury, with their relatively small area, dense neighborhoods, and proximity to the mainland, are by far the most densely populated towns in the county. Each occupies less than 8% of the Vineyard's total land area, but accounts for about a quarter of its population.

| | 2012 | 2014 | 2016 | 2018 | 2020 | 2022 |
|--------------|--------|--------|--------|--------|--------|--------|
| Aquinnah | 58.45 | 60.33 | 60.33 | 60.14 | 82.44 | 83.19 |
| Chilmark | 49.09 | 50.69 | 50.85 | 50.85 | 67.01 | 68.11 |
| Edgartown | 156.10 | 160.75 | 161.72 | 162.59 | 193.78 | 197.41 |
| Gosnold | 5.76 | 5.84 | 5.76 | 5.76 | 4.93 | 4.85 |
| Oak Bluffs | 626.46 | 640.96 | 640.27 | 638.77 | 728.75 | 735.59 |
| Tisbury | 613.84 | 629.44 | 627.45 | 627.45 | 736.08 | 747.56 |
| West Tisbury | 111.56 | 115.39 | 115.71 | 115.83 | 141.74 | 143.50 |
| Island | 164.62 | 169.19 | 169.37 | 169.51 | 201.30 | 204.13 |

Population density: Town comparison (year-round residents per square mile), 2022

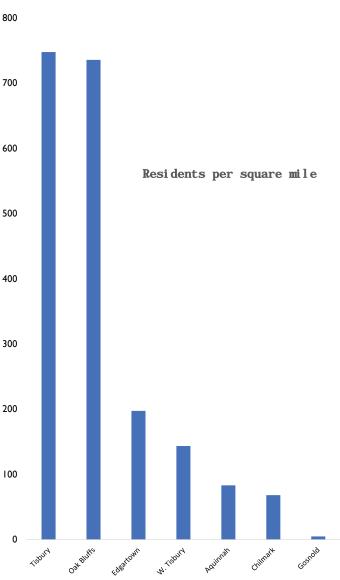
Source: US Census Bureau, Population Division; MVC (land area)

| Tisbury 747.56 Oak Bluffs 735.59 Edgartown 197.41 W.Tisbury 143.50 Aquinnah 83.19 Chilmark 68.11 Gosnold 4.85 | | | |
|---|------------|--------|-----|
| Edgartown 197.41 W.Tisbury 143.50 Aquinnah 83.19 Chilmark 68.11 | Tisbury | 747.56 | |
| Edgartown197.41W.Tisbury143.50Aquinnah83.19Chilmark68.11 | Oak Bluffs | 735.59 | 70 |
| Aquinnah83.19Chilmark68.11 | Edgartown | 197.41 | 700 |
| Chilmark 68.11 600 | W.Tisbury | 143.50 | |
| Chillinark 00.11 | Aquinnah | 83.19 | |
| Gosnold 4.85 | Chilmark | 68.11 | 600 |
| | Gosnold | 4.85 | |

Population and density (year-round residents per square mile): County comparison, 2022

Source: US Census Bureau, Population Division (via UMass Donahue Institute)

| , | | |
|------------|------------|-----------|
| County | Population | Density |
| Middlesex | 1,617,105 | 1,963.80 |
| Worcester | 862,927 | 570.32 |
| Essex | 806,765 | 1,611.38 |
| Suffolk | 766,381 | 13,096.95 |
| Norfolk | 725,531 | 1,815.72 |
| Bristol | 580,068 | 1,043.29 |
| Plymouth | 533,069 | 806.64 |
| Hampden | 461,041 | 745.53 |
| Barnstable | 232,457 | 587.73 |
| Hampshire | 162,588 | 307.33 |
| Berkshire | 127,859 | 137.29 |
| Franklin | 70,894 | 100.98 |
| Dukes | 20,868 | 201.08 |
| Nantucket | 14,421 | 301.63 |
| | | |

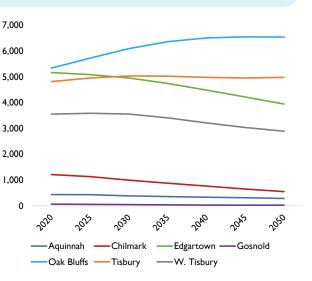


Population projections by town, 2020-2050

Source: UMass Donahue Institute Vintage 2022 Population Projections; US Census Bureau Population Division

According to the UMass Donahue Institute (UMDI), if recent trends in births, deaths, and migration continue with no change, the county population as a whole will peak around 21,072 in 2030, then decline to 19,226 by 2050. The projected decline is largely in the 45-74 age group, including much of the Baby Boomer generation. It should be noted that the recent trends as determined by UMDI do not include 2020, which may have been an anomalous year due to the pandemic, although the full 2020 Census count was used for that year's population. The projections also do not account for factors such as the demand for housing, which would likely cause many vacated units to be filled, including by in-migration. The full UMDI methodology is available <u>here</u>.

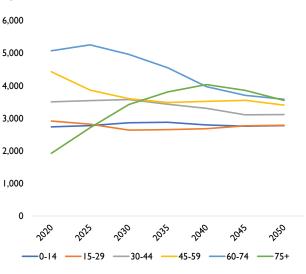
| Aquinnah 438 433 386 362 335 316 288 Chilmark 1,213 1,133 996 879 767 654 554 |
|---|
| Chilmark 1,213 1,133 996 879 767 654 554 |
| |
| Edgartown 5,166 5,084 4,955 4,743 4,485 4,219 3,947 |
| Gosnold 70 59 49 39 32 29 27 |
| Oak Bluffs 5,339 5,724 6,095 6,359 6,507 6,550 6,539 |
| Tisbury 4,816 4,955 5,032 5,024 4,976 4,954 4,978 |
| W.Tisbury 3,554 3,589 3,559 3,411 3,214 3,038 2,893 |
| County 20,596 20,977 21,072 20,817 20,316 19,760 19,226 |



Population projections by age group: County, 2020-2050

Source: UMass Donahue Institute Vintage 2022 Population Projections; US Census Bureau Population Division

| | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 0-14 | 2,739 | 2,776 | 2,864 | 2,880 | 2,797 | 2,759 | 2,776 |
| 15-29 | 2,917 | 2,821 | 2,639 | 2,654 | 2,682 | 2,770 | 2,787 |
| 30-44 | 3,507 | 3,544 | 3,577 | 3,432 | 3,307 | 3,109 | 3,118 |
| 45-59 | 4,429 | 3,866 | 3,604 | 3,485 | 3,520 | 3,555 | 3,408 |
| 60-74 | 5,077 | 5,257 | 4,963 | 4,553 | 3,972 | 3,707 | 3,585 |
| 75+ | 1,927 | 2,713 | 3,425 | 3,813 | 4,038 | 3,860 | 3,552 |



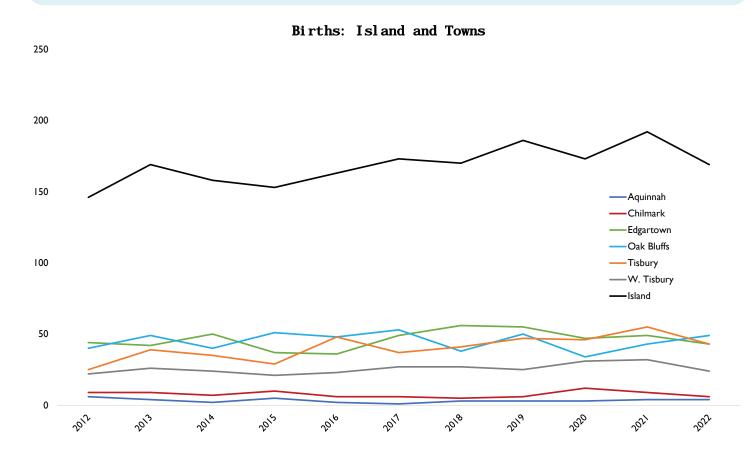
Births per town, 2012-2022

Source: MA Dept. of Public Health

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|------------|------|------|------|------|------|------|------|------|------|------|------|
| Aquinnah | 6 | 4 | 2 | 5 | 2 | I | 3 | 3 | 3 | 4 | 4 |
| Chilmark | 9 | 9 | 7 | 10 | 6 | 6 | 5 | 6 | 12 | 9 | 6 |
| Edgartown | 44 | 42 | 50 | 37 | 36 | 49 | 56 | 55 | 47 | 49 | 43 |
| Oak Bluffs | 40 | 49 | 40 | 51 | 48 | 53 | 38 | 50 | 34 | 43 | 49 |
| Tisbury | 25 | 39 | 35 | 29 | 48 | 37 | 41 | 47 | 46 | 55 | 43 |
| W.Tisbury | 22 | 26 | 24 | 21 | 23 | 27 | 27 | 25 | 31 | 32 | 24 |
| Total | 146 | 169 | 158 | 153 | 163 | 173 | 170 | 186 | 173 | 192 | |

5 Martha's Vineyard Statistical Profile | 2023

Islandwide, the number of annual births increased about 16% between 2012 and 2022, owing largely to a 72% increase in Tisbury. An 11% increase Islandwide in 2021 (the largest annual increase since 2012) may have been influenced by increased population and/or conception during the Covid-19 pandemic. The data here show resident births, or births to those who report living in a specific town, as opposed to all births that occur in each town. (Most births on the Vineyard occur at the Martha's Vineyard Hospital in Oak Bluffs.) A notable increase in deaths statewide during the height of the pandemic in 2020 did not necessarily play out on the Vineyard, where the increase fell within the normal variation.



Crude death rate and deaths per year: County, 2002-2021

Source: Centers for Disease Control and Prevention

| Year | Deaths | Rate | Year | Deaths | Rate |
|------|--------|-------|------|--------|-------|
| 2002 | 128 | 826.8 | 2012 | 149 | 874.4 |
| 2003 | 154 | 985.3 | 2013 | 140 | 811.3 |
| 2004 | 127 | 808.7 | 2014 | 129 | 743.3 |
| 2005 | 129 | 819.4 | 2015 | 156 | 901.8 |
| 2006 | 133 | 843.5 | 2016 | 156 | 904.6 |
| 2007 | 118 | 741.3 | 2017 | 142 | 819.6 |
| 2008 | 135 | 836.8 | 2018 | 170 | 979.7 |
| 2009 | 122 | 745.1 | 2019 | 144 | 830.8 |
| 2010 | 139 | 840.6 | 2020 | 169 | 967.9 |
| 2011 | 140 | 835 | 2021 | 171 | 810.5 |

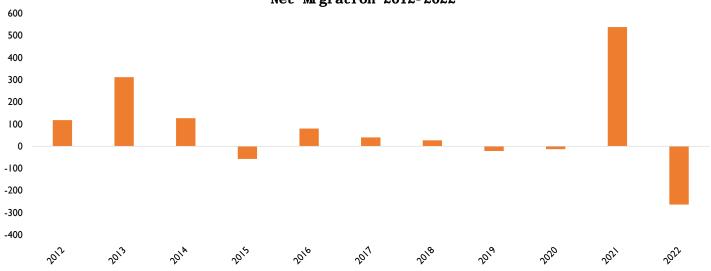
Death Rate: Dukes County and Mass. 1,200 1,000 800 600 400 County -State 200 0 2010 2020 2002 2006 2008 2012 2018 2014 2016

Net migration: County, 2012-2022

Source: US Census Population Division

Many smaller, less populous counties saw an increase in domestic migration during the Covid-19 pandemic starting in 2020. The trend in Dukes County peaked in 2021, and has since declined to well below pre-pandemic levels.

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|
| Net | 118 | 312 | 127 | -57 | 80 | 40 | 27 | -21 | -13 | 538 | -263 |
| International | -4 | 0 | I | I | 44 | 51 | 38 | 39 | 0 | 28 | 62 |
| Domestic | 122 | 312 | 126 | -58 | 36 | -11 | -11 | -60 | -13 | 510 | -325 |



Net Migration 2012-2022

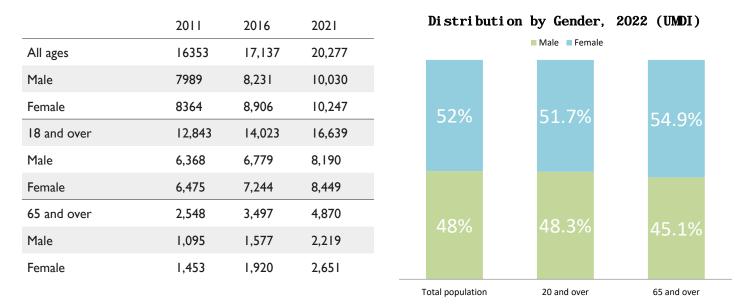


Photo by Rich Saltzberg

Gender by age group: County, 2011-2021; 2022

Source: American Community Survey 5-Year Estimates; UMass Donahue Institute

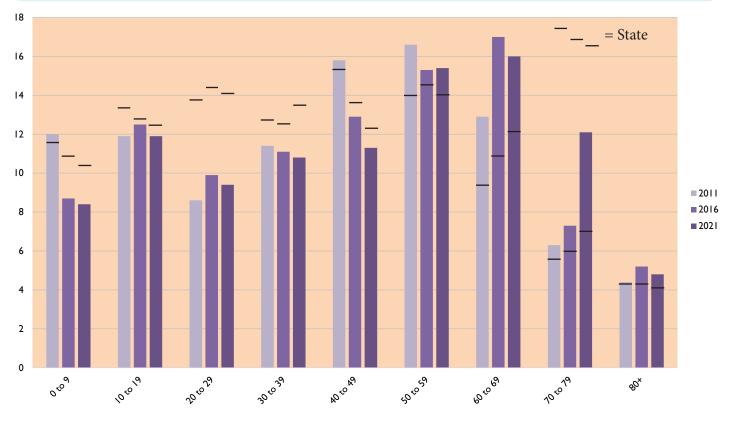
Dukes County leans slightly female as a result of higher female longevity. The difference is more pronounced among older age groups, as shown below. The data here is from the American Community Survey (2011-2021), as well as the UMass Donahue Institute (2022).



Population by age group (percent of total): County, 2011-2021

Source: American Community Survey 5-Year Estimates

In 2021, the median age in Dukes County (47.9) was 8.3 years higher than in the state (39.6), according the American Community Survey. The difference reflects the county's larger elder population, but also its smaller number of residents ages 0–39, and especially ages 20–29. People over 65 (including much of the Baby Boomer generation) has been the fastest growing age group in both the state and the county.

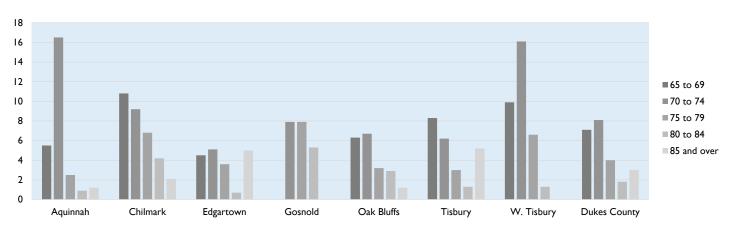


Older adult age distribution by town (percent of population), 2021

Source: American Community Survey 5-Year Estimates (S0101)

In keeping with the overall pattern in Dukes County, every Island town in 2021 was estimated to have a higher percentage of people ages 65–74, especially Chilmark, West Tisbury, and Aquinnah. Edgartown and Tisbury by comparison had a higher percentage of people in the upper range (85 and over), while West Tisbury and Gosnold had no residents over 84. It should be noted that the margins of error in this data set may account for some of the variation among towns and from year to year.

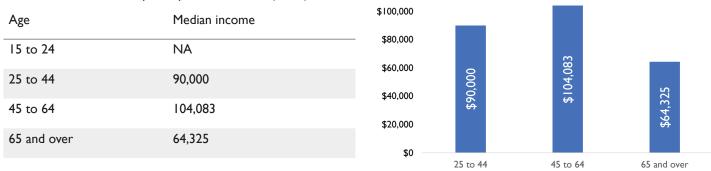
| | Aquinnah | Chilmark | Edgartown | Gosnold | Oak Bluffs | Tisbury | W.Tisbury | Dukes County |
|-------------|----------|----------|-----------|---------|------------|---------|-----------|--------------|
| 65 to 69 | 5.5 | 10.8 | 4.5 | 0 | 6.3 | 8.3 | 9.9 | 7.1 |
| 70 to 74 | 16.5 | 9.2 | 5.1 | 7.9 | 6.7 | 6.2 | 16.1 | 8.1 |
| 75 to 79 | 2.5 | 6.8 | 3.6 | 7.9 | 3.2 | 3 | 6.6 | 4 |
| 80 to 84 | 0.9 | 4.2 | 0.7 | 5.3 | 2.9 | 1.3 | 1.3 | 1.8 |
| 85 and over | 1.2 | 2.1 | 5 | 0 | 1.2 | 5.2 | 0 | 3 |



\$120,000

Median household income by age of householder, 2021





Older adult population projections: County, 2020-2050

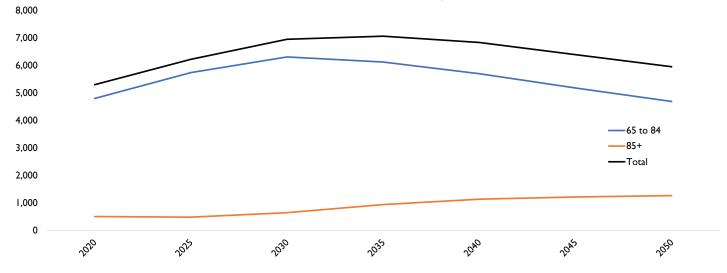
Source: UMass Donahue Institute (V2022)

According to the UMass Donahue Institute, if recent trends in births, deaths, and migration continue (see page 5), the county's older population as a whole (ages 65 and up) will continue to increase in the coming years, peaking at about 7,064 in 2035, then decline to about 5,954 in 2050. At the same time, the population over 85 (the upper end of the Baby Boomer generation) will continue to increase through 2050.

| | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|----------------|-------|-------|-------|-------|-------|-------|-------|
| 65 to 84 | 4,800 | 5,740 | 6,310 | 6,126 | 5,700 | 5,180 | 4,690 |
| Percent change | - | 19.5 | 9.9 | -2.9 | -7.0 | -9.1 | -9.5 |
| 85 and over | 501 | 481 | 644 | 938 | 1,135 | 1,212 | 1,264 |
| Percent change | - | -4.0 | 33.9 | 45.7 | 21 | 6.8 | 4.3 |

9 Martha's Vineyard Statistical Profile | 2023

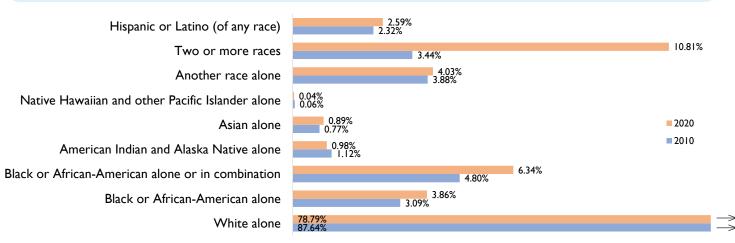
Older Adult Population Projections



Racial and ethnic diversity (percent of total population): County, 2010, 2020

Source: US Census Decennial Counts

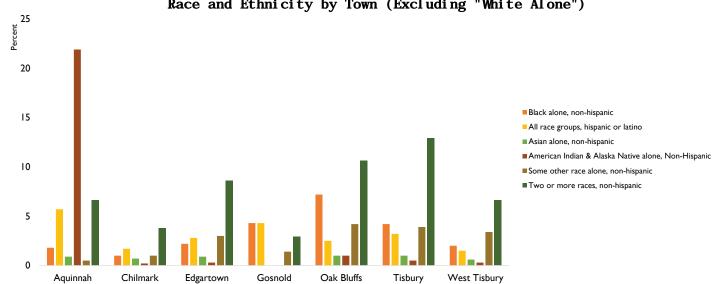
According to the US Census, although 79% of Dukes County residents identify as white, the county has become more racially diverse since 2010, most notably in terms of the number of non-Hispanic people identifying as having two or more races, which increased about 194% between 2010 and 2020, and the number of people identifying as black (one or more races), which increased about 65% in the same period. Both populations are concentrated largely in Edgartown, Oak Bluffs, and Tisbury, and to some extent West Tisbury. The Hispanic/Latino and Asian populations saw smaller increases, while Native American and other non-Hispanic populations declined slightly. (Hispanic or Latino people may identify as any race in the US Census.)



Racial and ethnic diversity by town (percent of total population): County, 2020

Source: US Census Decennial Counts

| | Aquinnah | Chilmark | Edg. | Gosnold | O.B. | Tisbury | W.Tis. | County | State |
|---|----------|----------|------|---------|------|---------|--------|--------|-------|
| White | 62.6 | 91.6 | 82.2 | 87 | 73.4 | 74.2 | 85.6 | 78.79 | 69.65 |
| Black or African-American | 1.8 | I | 2.2 | 4.3 | 7.2 | 4.2 | 2 | 3.86 | 7.03 |
| American Indian and Alaska Native | 21.9 | 0.2 | 0.3 | 0 | I | 0.5 | 0.3 | 0.98 | 0.34 |
| Asian | 0.9 | 0.7 | 0.9 | 0 | I | I | 0.6 | 0.89 | 7.23 |
| Native Hawaiian, other Pacific Islander | 0 | 0 | 0.02 | 0 | 0.13 | 0 | 0.06 | 0.04 | 0.03 |
| Another race | 0.5 | I | 3 | 1.4 | 4.2 | 3.9 | 3.4 | 4.03 | 7.07 |
| Two or more races | 6.6 | 3.8 | 8.6 | 2.9 | 10.6 | 12.9 | 6.6 | 10.81 | 4.67 |
| Hispanic or Latino (of any race) | 5.7 | 1.7 | 2.8 | 4.3 | 2.5 | 3.2 | 1.5 | 2.59 | 12.63 |



Race and Ethnicity by Town (Excluding "White Alone")

Citizenship status: County, 2011-2021

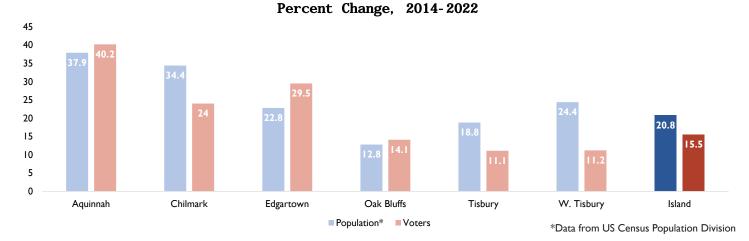
Source: American Community Survey 5-Year Estimates (B05002)

| | 2011 | 2016 | 2021 | State (2021) |
|-----------------------------------|--------|--------|--------|--------------|
| Total population 5 years and over | 15,288 | 16,449 | 20,277 | 6,984,723 |
| Native | 92.5% | 90.3% | 86.9% | 82.4% |
| Foreign-born | 7.5% | 9.7% | 13.1% | 17.6% |
| Naturalized U.S. citizen | 4.7% | 4.7% | 7.8% | 9.6% |
| Not a U.S. citizen | 2.8% | 4.9% | 5.3% | 8.0% |

Registered voters per town: Island, 2012-2022

Source: Town reports, town clerks

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--------------|-------|-------|--------|--------|--------|--------|-------|-------|-------|--------|--------|
| Aquinnah | UA | UA | 281 | 297 | 325 | 344 | UA | UA | 420 | 407 | 394 |
| Chilmark | 908 | 910 | 920 | 925 | 978 | 998 | 1,193 | 1,189 | 1,054 | 1,089 | 1,141 |
| Edgartown | 3,162 | 3,194 | 3,290 | 3,128 | 3,321 | 3,597 | 3,625 | 3,740 | 3,806 | 4,153 | 4,262 |
| Oak Bluffs | 3,245 | 3,531 | 3,672 | 3,679 | 3,831 | 3,767 | 3,865 | 3,825 | UA | 4,113 | 4,191 |
| Tisbury | 3,385 | 3,291 | 3,333 | 3,363 | 3,485 | 3,508 | 3,540 | 3,553 | 3,492 | 3,689 | 3,702 |
| West Tisbury | 2,404 | 2,506 | 2,510 | 2,499 | 2,605 | 2,553 | 2,567 | 2,605 | 2,691 | 2,740 | 2,792 |
| Island | UA | UA | 16,020 | 15,906 | 16,561 | 16,784 | UA | UA | UA | 18,212 | 18,504 |



2. LAND USE

The following tables and charts highlight some of the Island's major land-use characteristics, including its 25,486 acres of open space, about 56% of which is open to the public. Each town includes at least one major coastal pond, which in most cases occupies a significant portion of the town's inland area. Edgartown, for example, is 22% water.

Land and water acreage per town, 2023

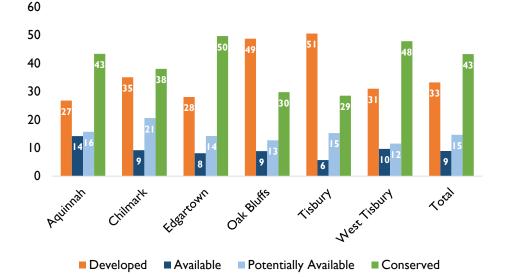
Source: Massachusetts Bureau of Geographic Information

| | Land | Pond | Offshore |
|--------------|--------|-------|----------|
| Aquinnah | 3,415 | 611 | 23,492 |
| Chilmark | 11,604 | 1,334 | 54,727 |
| Nomans Land | 605 | 33 | NA |
| Edgartown | 17,130 | 4,898 | 63,263 |
| Gosnold | 8,444 | 363 | 77,621 |
| Oak Bluffs | 4,679 | 675 | 13,178 |
| Tisbury | 4,183 | 572 | 6,663 |
| West Tisbury | 16,029 | 850 | 11,261 |

Developed and undeveloped acres per town, and percent of total, 2023 Source: MVC Change from 2018 shown in blue

| | Developed | Available | Potentially available | Conserved | Total |
|-----------------------|---------------|---------------------------|--------------------------|---------------------------|-------------------------------------|
| Aquinnah | 912 (+8%) | 484 (-37%) | 535 (-22%) | I,477 (+39%) | 3,407 |
| Chilmark ¹ | 4,065 (+9%) | 1,066 <mark>(-19%)</mark> | 2,384 (-2%) | 4,686 (+21%) | 12,201 |
| Edgartown | 4,799 (+6%) | 1,390 <mark>(-14%)</mark> | 2,436 (-6%) | 8,494 (+6%) | 17,119 |
| Oak Bluffs | 2,277 (+7%) | 415 (-35%) | 592 (- <u>2%</u>) | 1,391 (+10%) | 4,675 |
| Tisbury | 2,110 (+17%) | 238 (-30%) | 637 (-26%) | I,I90 (+5%) | 4,177 |
| W.Tisbury | 4,964 (+3.7%) | 1,549 <mark>(-19%)</mark> | I,844 (-8%) | 7,662 (+7%) | 16,019 |
| Island | 19,127 (+7%) | 5,142 (-22%) | 8,428 (-8%) | 24,901 (+11%) L Inclue | 57,599 ding Noman's Land. |





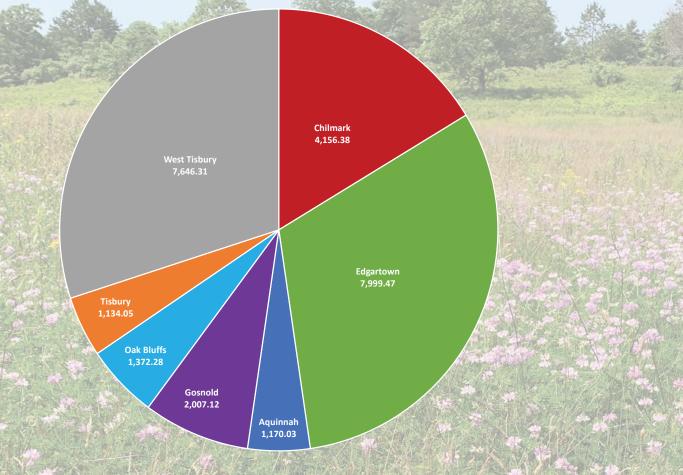
Watershed acreage: Island, 2017

Source: MVC, based on development analysis from March 2017 and watershed boundaries per MVC and Mass Estuaries Project

| Coastal watershed | 13,034 |
|-----------------------|--------|
| Caleb's Pond | 244 |
| Cape Pogue | 2,456 |
| Chilmark Pond (lower) | 1,467 |
| Chilmark Pond (upper) | 1,946 |
| Crackatuxet Pond | 325 |
| Crystal Lake | 99 |
| Edgartown Great Pond | 5,659 |
| Eel Pond | 312 |
| Farm Pond | 436 |
| Homer Pond | 384 |
| James Pond | 414 |
| Jobs Neck Pond | 530 |
| Katama Bay | 4,265 |
| Lagoon Pond | 4,477 |
| Long Pond | 479 |
| Menemsha Pond | 2,711 |
| Oak Bluffs Harbor | 421 |
| Oyster Pond | 2,586 |
| Pocha Pond | 1,086 |
| Sengekontacket Pond | 5,226 |
| Squibnocket Pond | 1,725 |
| Lake Tashmoo | 2,926 |
| Tisbury Great Pond | ,9 9 |
| Watcha Pond | 1,089 |

12 Martha's Vineyard Statistical Profile | 2023

Acres of open space per town, 2023 Source: MVC and Island Conservation Partnership



Public access definitions:

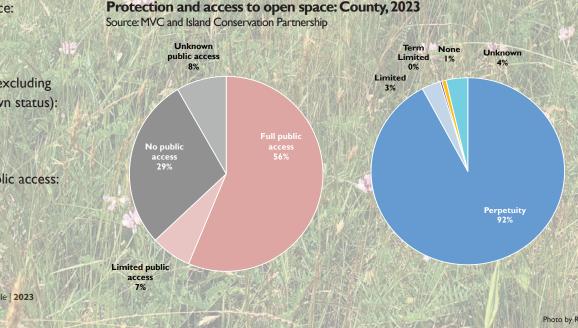
Full: Property is open to the public.

Limited: Some stipulation in the conservation restriction or deed that access is limited—perhaps to members only, or only during certain times of the year, etc.

10.4

None: Property is closed to the public.

Unknown: Further research is required to determine the level of public access.



Total acres of open space:

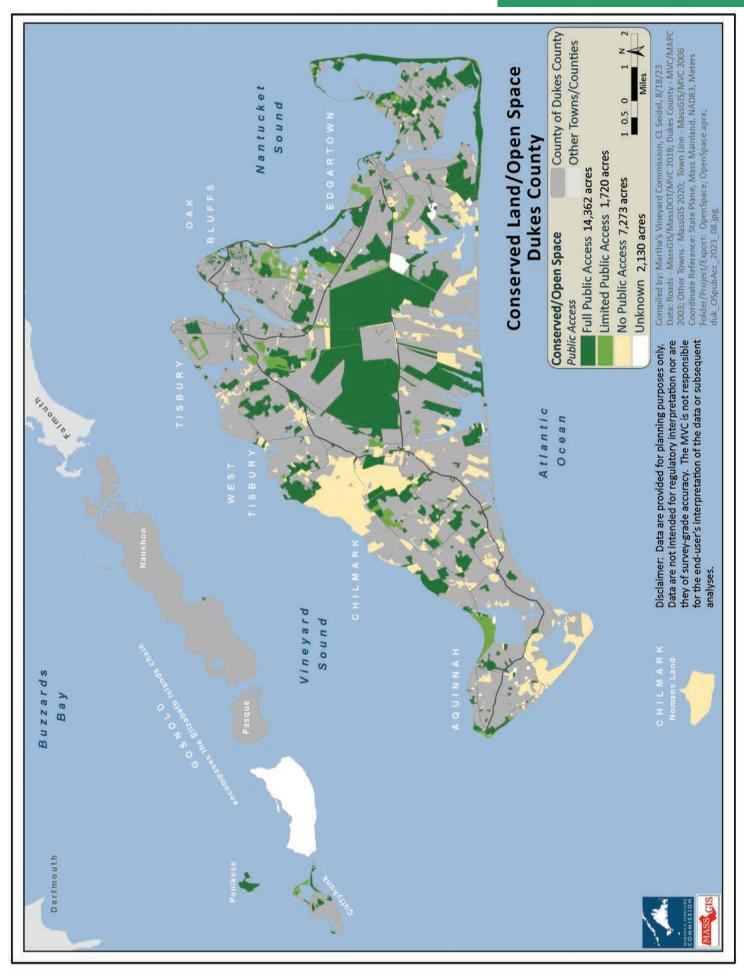
25,486

Total protected acres (excluding properties with unknown status):

24,384

Total acres with full public access:

14,362



Miles of trail by town, 2023

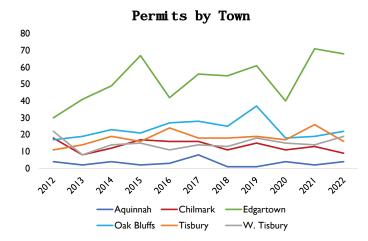
Source: MVC and Island Conservation Partnership¹ See map, page 130

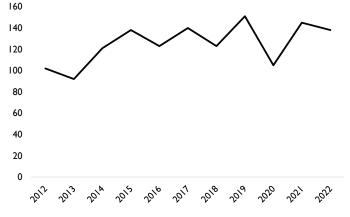
| | Managed Trail | Unmanaged Trail |
|--------------|---------------|-----------------|
| Chilmark | 32.6 | 0.5 |
| Edgartown | 79.6 | 6.4 |
| Aquinnah | 4.4 | 1.7 |
| Gosnold | Not available | Not available |
| Oak Bluffs | 12.1 | 2.7 |
| Tisbury | 14.0 | 3.6 |
| West Tisbury | 59.3 | 5.0 |
| County | 202.0 | 19.9 |

¹ Managed trails are those maintained by the town or conservation group. Unmanaged trails are walking paths (e.g. ancient ways) that do not receive regular maintenance

Single-family building permits issued by town and year, 2012-2022 Source: Town building departments and town reports, MVC data

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|------------|------|------|------|------|------|------|------|------|------|------|------|
| Aquinnah | 4 | 2 | 4 | 2 | 3 | 8 | I | I | 4 | 2 | 4 |
| Chilmark | 18 | 8 | 12 | 17 | 16 | 16 | 11 | 15 | 11 | 13 | 9 |
| Edgartown | 30 | 41 | 49 | 67 | 42 | 56 | 55 | 61 | 40 | 71 | 68 |
| Oak Bluffs | 17 | 19 | 23 | 21 | 27 | 28 | 25 | 37 | 18 | 19 | 22 |
| Tisbury | 11 | 14 | 19 | 16 | 24 | 18 | 18 | 19 | 17 | 26 | 16 |
| W.Tisbury | 22 | 8 | 14 | 15 | 11 | 14 | 13 | 18 | 15 | 14 | 19 |
| Island | 102 | 92 | 121 | 138 | 123 | 140 | 123 | 151 | 105 | 145 | 138 |





Miles of special ways by town, 2023

Source: MVC 2018 GIS Data based on town bylaw-written description of delineation See map, page 129

West Tisbury and Edgartown account for about three quarters of the special way mileage on the Island, with about half in West Tisbury and a third in Edgartown. Those towns also have the most land area, and more of the undeveloped land where special ways created an early travel network.

| Chilmark | 2.9 |
|-----------------|------|
| Edgartown | 16.3 |
| Aquinnah (2018) | 5.0 |
| Gosnold | 0 |
| Oak Bluffs | 7.9 |
| Tisbury | 2.1 |
| West Tisbury | 22.3 |
| County | 51.5 |

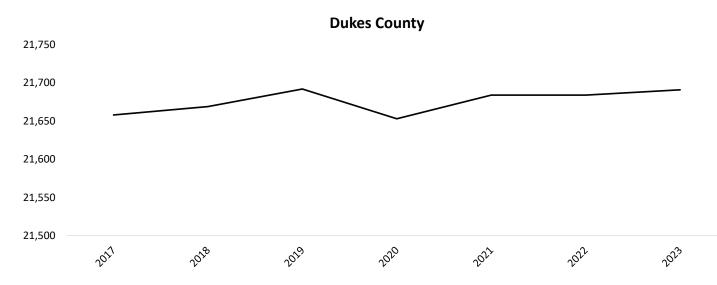
Total

Total number of parcels per town, 2017-2023

Source: Massachusetts Division of Local Services

The number of parcels in a given area may change over time as parcels are subdivided or combined. The total number in Dukes County has held steady in the last several years. Aquinnah, Gosnold, and West Tisbury saw declines in their parcel counts, while the total number in Dukes County increased by about 0.2%

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| Aquinnah | 988 | 998 | 995 | 974 | 974 | 976 | 979 |
| Chilmark | 2,380 | 2,383 | 2,392 | 2,393 | 2,389 | 2,388 | 2,386 |
| Edgartown | 6,592 | 6,588 | 6,591 | 6,594 | 6,607 | 6,604 | 6,597 |
| Gosnold | 266 | 268 | 268 | 268 | 268 | 264 | 264 |
| Oak Bluffs | 5,117 | 5,131 | 5,134 | 5,159 | 5,172 | 5,175 | 5,176 |
| Tisbury | 3,491 | 3,492 | 3,493 | 3,493 | 3,504 | 3,507 | 3,519 |
| W.Tisbury | 2,824 | 2,809 | 2,819 | 2,772 | 2,770 | 2,770 | 2,770 |
| County | 21,658 | 21,669 | 21,692 | 21,653 | 21,684 | 21,684 | 21,691 |



Average and median lot size (acres), various years

Source: Massachusetts Bureau of Geographic Information

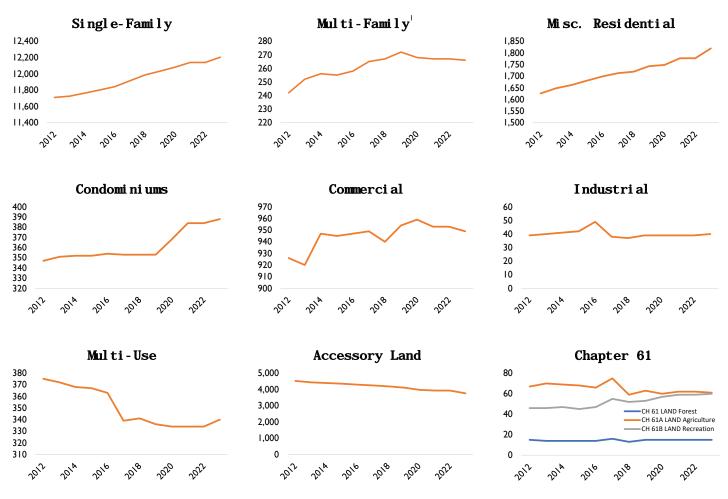
| | Average lot size | Median lot size |
|-----------------------------|---------------------|--------------------|
| Aquinnah (FY22) | 3.61 | 2.11 |
| Chilmark (FY23) | 4.98 | 3.00 |
| Edgartown (FY23) | 2.60 | 0.53 |
| Gosnold (FY21) ¹ | 2.72 | 0.36 |
| Oak Bluffs (FY22) | 0.83 | 0.25 |
| Tisbury (FY22) | 1.15 | 0.41 |
| W.Tisbury (FY23) | 5.72 | 1.80 |

¹ Cuttyhunk only. For Gosnold as a whole, including all the Elizabeth Islands, the average lot size is 42.11 acres, and the mean lot size is 0.36 acres.



Photos by Sheri Caseau

Parcel counts by year and use (selected): County, FY2012–FY2023 Source: MA Division of Local Services



Parcel Types by town, FY2023 (Based on the <u>MA Property Type Classification Codes</u>)

Source: MA Division of Local Services

| | Single-family | Multi-family ¹ | Condos | Apartments | Misc. residential | Multi-use | Commercial | Accessory land | Industrial | Open space | Chapter 61 ² | Individuals, part- nerships, associa- tions, trusts, LLCs | Other | Exempt |
|------------|---------------|---------------------------|--------|------------|-------------------|-----------|------------|----------------|------------|------------|-------------------------|---|-------|--------|
| Aquinnah | 394 | 0 | 4 | Ι | 32 | 3 | 18 | 319 | 0 | 0 | 10 | 1,058 | 14 | 152 |
| Chilmark | 1,099 | 0 | 3 | 0 | 22 9 | 5 | 19 | 867 | 2 | 0 | 34 | 3,324 | 185 | 521 |
| Edgartown | 3,539 | 71 | 152 | 5 | 686 | 97 | 367 | 1,115 | 5 | 0 | I | 261 | 13 | 206 |
| Gosnold | 127 | 10 | 0 | 2 | 21 | 2 | 2 | 56 | 0 | 0 | 7 | 133 | 4 | 36 |
| Oak Bluffs | 3,418 | 130 | 94 | 5 | 258 | 80 | 175 | 643 | 4 | 0 | 18 | 1,951 | 33 | 349 |
| Tisbury | 2,138 | 36 | 126 | 13 | 245 | 87 | 312 | 288 | 15 | 0 | 36 | 1,624 | 90 | 222 |
| W.Tisbury | 1,489 | 19 | 9 | 3 | 348 | 66 | 56 | 466 | 14 | 0 | 30 | 686 | 28 | 267 |
| County | 12,204 | 266 | 388 | 29 | 1,819 | 340 | 949 | 3,754 | 40 | 0 | 136 | 9,037 | 367 | 1,753 |

¹ Sum of two- and three-family parcels.

² Includes forested, agricultural, and recreational land.

Number of structures per town, 2023¹

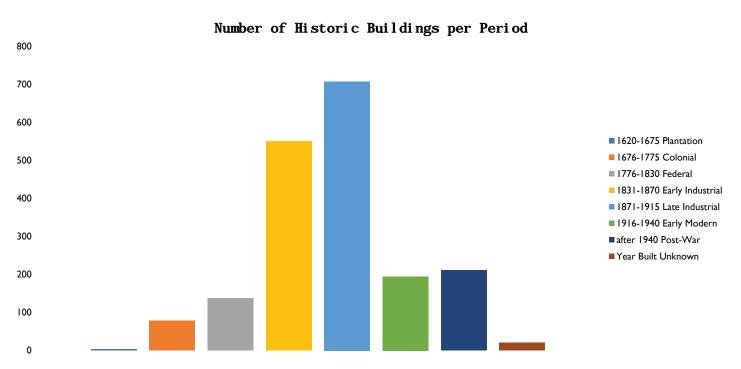
Source: MassGIS

| | Chil. | Edg. | Aqu. | Gos. | O.B. | Tis. | W.T. | Total | <u>Status</u> |
|-------|-------|-------|------|------|-------|-------|-------|--------|---|
| S-NR | 11 | 173t | 5 | 7 | 58 | 86 | 60 | 400 | S = Seasonal |
| S-R | 1,366 | 3,701 | 354 | 222 | 2,381 | 1,302 | 1,152 | 10,478 | YR = Year Round |
| YR-NR | 103 | 380 | 66 | 20 | 309 | 389 | 349 | 1,616 | <u>Use type</u> NR = Non Residential |
| YR-R | 788 | 2,235 | 188 | 24 | 2,041 | 1,838 | 1,683 | 8,797 | R = Residential |
| Total | 2,268 | 6,489 | 613 | 273 | 4,789 | 3,615 | 3,244 | 21,291 | i intesidentiai |

Historic buildings by time period, and number of buildings in national or local historic districts: By town² Source: MVC, Massachusetts Historical Commission

See map, page 123

| Construction year and period | Aqu. | Chil. | Edg. | Gos. | O.B. | Tis. | W.T. | Total |
|---|------|-------|------|------|------|------|------|-------|
| 1620–1675: Plantation | 0 | 0 | I | 0 | I | 0 | 2 | 4 |
| 1675–1775: Colonial | 0 | 18 | 22 | 0 | 3 | 8 | 28 | 79 |
| 1776–1830: Federal | 0 | 6 | 76 | 0 | 7 | 18 | 30 | 137 |
| 1831–1870: Early Industrial | 14 | 28 | 166 | 0 | 194 | 62 | 87 | 551 |
| 1871–1915: Late industrial | 11 | 8 | 101 | I | 507 | 51 | 29 | 708 |
| 1916–1940: Early Modern | 25 | 11 | 74 | I. | 63 | 12 | 9 | 195 |
| After 1940: Post-War | 15 | 6 | 129 | 0 | 17 | 4 | 40 | 211 |
| Year unknown | 0 | 8 | 2 | 0 | 3 | 6 | 2 | 21 |
| Total ³ | 65 | 85 | 571 | 2 | 795 | 161 | 227 | 1906 |
| In local historic districts ³ | 0 | 0 | 545 | 0 | 92 | 56 | 99 | 792 |
| In state or national districts ⁴ | 7 | 0 | 473 | 0 | 322 | 7 | 0 | 809 |



¹ Only those with a roofprint greater than 400 square feet; could be a business, primary home, guest home, barn, garage, shed, etc. ² Only buildings not indicated as demolished by MHC. Range of construction dates per MHC is 1660 to 2014. ³ The MHC database is not a complete inventory of all buildings existing or previously existing. ⁴ These sometimes overlap.

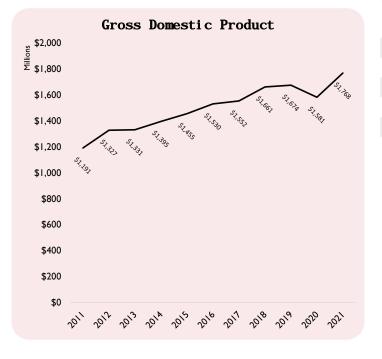
¹⁸ Martha's Vineyard Statistical Profile | 2023

3. ECONOMY

Dukes County has a strongly seasonal economy, although each industry and town responds somewhat differently to the annual cycles. Unemployment typically declines in the spring, drops further in summer, then climbs again in the fall when summer visitors depart. Key economic indicators such as employment, wages, and Gross Domestic Product all declined significantly during the Covid-19 pandemic beginning in 2020. The effects were most pronounced in April of that year, shortly after Massachusetts declared a state of emergency. A more detailed look at key industries on the Island during this period begins on page 28.

Gross Domestic Product: County, 2011-2021

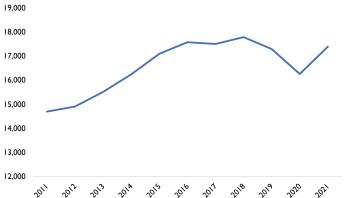
Source: Bureau of Economic Analysis



Total full- and part-time employment (number of jobs): County, 2011-2021

Source: Bureau of Economic Analysis

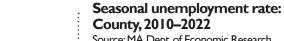
| 2011 | 14,697 |
|------|--------|
| 2013 | 15,515 |
| 2015 | 17,101 |
| 2017 | 17,581 |
| 2019 | 17,303 |
| 2021 | 17,398 |



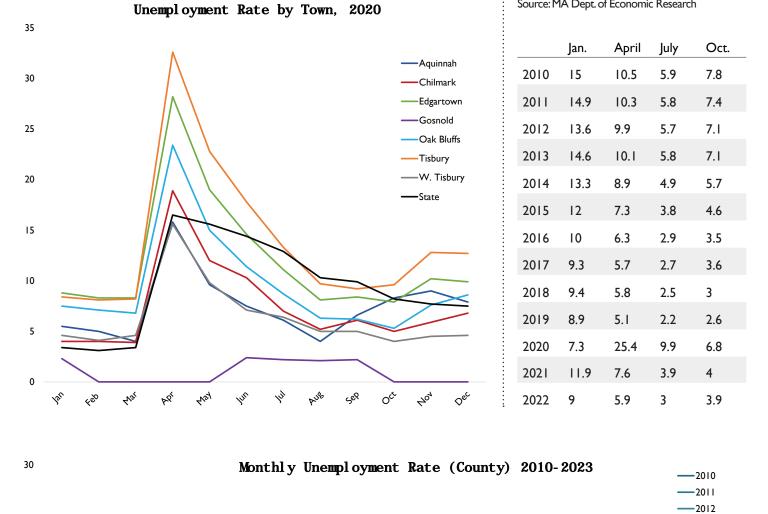
Labor force, employed, unemployed, unemployment rate: County, 2022 (monthly, not seasonally adjusted) Source: MA Dept. of Economic Research

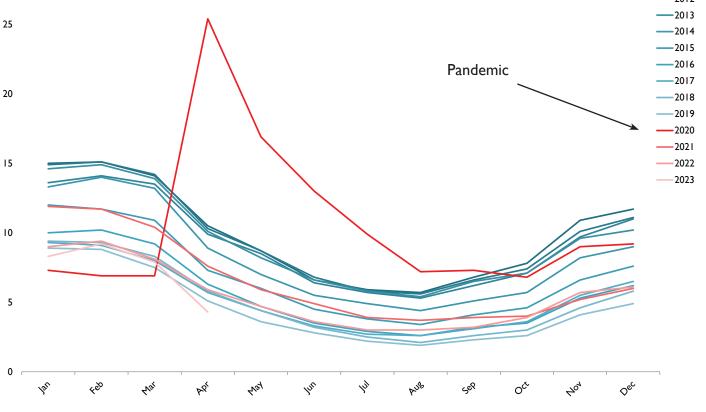
| Period | Labor force | Employed | Unemployed | County rate | State rate |
|-----------|-------------|----------|------------|-------------|------------|
| January | 8,440 | 7,681 | 759 | 9 | 4.6 |
| February | 8,563 | 7,759 | 804 | 9.4 | 4.3 |
| March | 8,633 | 7,932 | 701 | 8. I | 3.9 |
| April | 8,905 | 8,377 | 528 | 5.9 | 3.5 |
| May | 9,481 | 9,033 | 448 | 4.7 | 3.6 |
| June | 11,008 | 10,613 | 395 | 3.6 | 3.9 |
| July | 11,978 | 11,617 | 361 | 3 | 3.9 |
| August | 11,757 | 11,410 | 347 | 3 | 3.9 |
| September | 10,064 | 9,737 | 327 | 3.2 | 3.5 |
| October | 9,257 | 8,896 | 361 | 3.9 | 3.4 |
| November | 8,508 | 8,025 | 483 | 5.7 | 3.3 |
| December | 8,505 | 7,982 | 523 | 6.1 | 3.3 |
| Annual | 9,592 | 9,089 | 503 | 5.2 | 3.8 |

19 Martha's Vineyard Statistical Profile | 2023



Source: MA Dept. of Economic Research

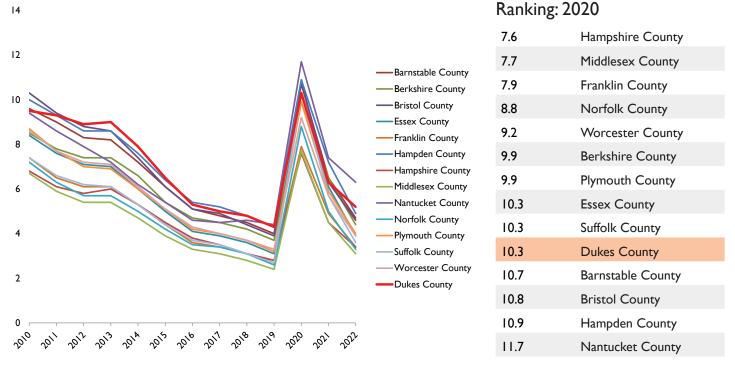




20 Martha's Vineyard Statistical Profile | 2023

Unemployment rate: County comparison and ranking, 2010–2022

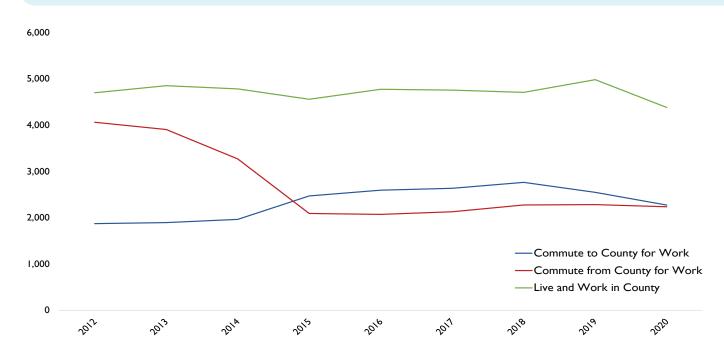
Source: MA Dept. of Economic Research

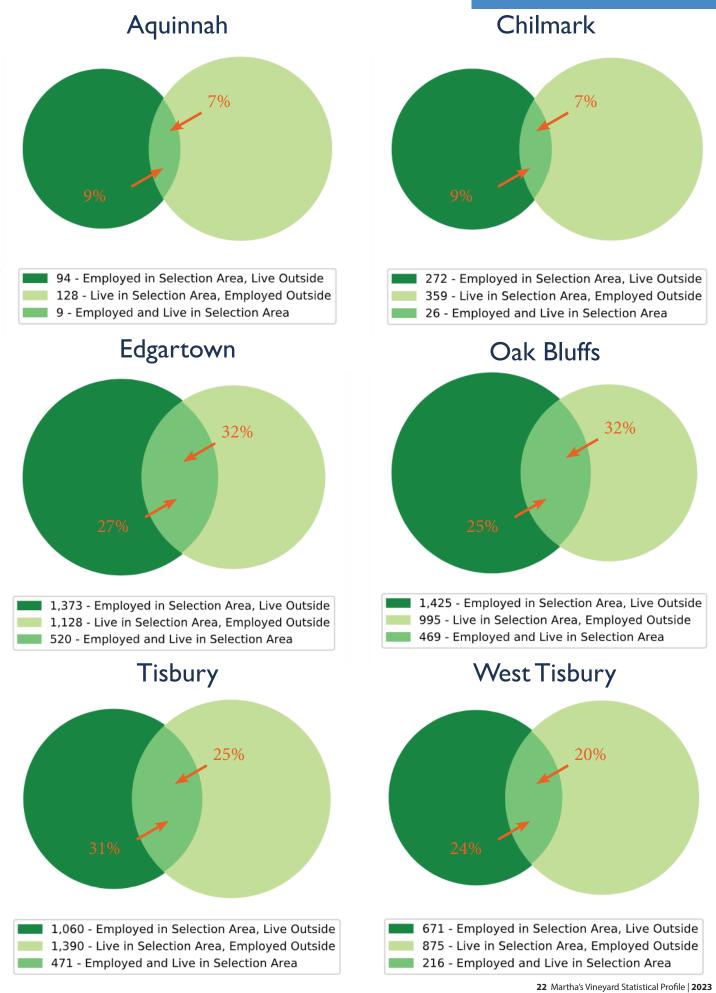


Inflow and outflow of workers: County, 2012-2020

Source: OneTheMap (US Census Bureau, Center for Economic Studies)

According to OnTheMap, an online service maintained by the US Census Bureau, the number of workers commuting to Dukes County from elsewhere surpassed the number commuting from Dukes County in 2015. The numbers of have leveled out somewhat since then, and the two measures were the about the same in 2020. The changing balance of workers commuting to or from Dukes County may suggest an increased number of jobs on the Vineyard, but it may also suggest that more people who had been commuting off-Island have moved closer to their work, possibly as a result of the Island's housing shortage, cost of living, or other factors. It should also be noted that Massachusetts joined the OnTheMap database in 2012, after which there may have been a period of adjustment. This may explain some of the variation in the data for Dukes County between 2012 and 2015.





Median household and family income by town, 2011-2021

Source: American Community Survey 5-Year Estimates (DP03)

In the ACS data, family income measures the income of all family members over the age of 15 living in the same residence, while household income applies to all family and non-family members living together. The median of those figures is the middle value, with half the incomes above and half below. Median household incomes in Dukes County have been somewhat lower than in the state since 2016. It should be noted that the margins of error may account at least partly for the variations seen here in median income over time.

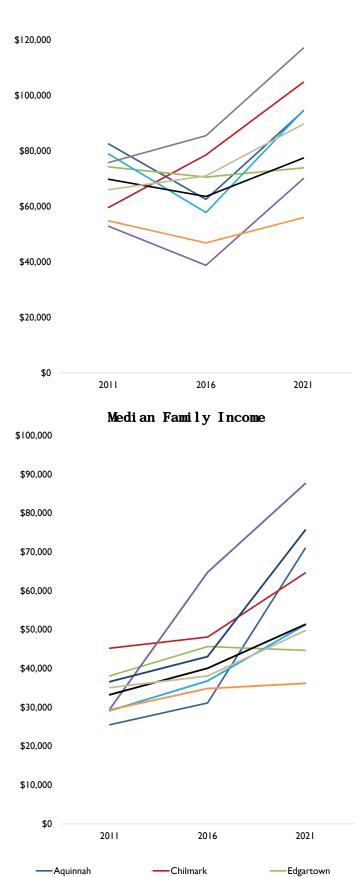
| | 2011 | 2016 | 2021 |
|--------------|-----------|-----------|-----------|
| Aquinnah | \$82,500 | \$62,500 | \$94,375 |
| | \$106,250 | \$64,609 | \$101,250 |
| Chilmark | \$59,583 | \$78,542 | \$104,716 |
| | \$79,688 | \$143,571 | \$114,931 |
| Edgartown | \$74,214 | \$70,556 | \$73,849 |
| | \$82,583 | \$82,422 | \$111,667 |
| Gosnold | \$52,813 | \$38,750 | \$70,000 |
| | \$61,250 | - | \$118,750 |
| Oak Bluffs | \$78,890 | \$57,773 | \$94,545 |
| | \$84,846 | \$96,714 | \$125,982 |
| Tisbury | \$54,762 | \$46,816 | \$55,938 |
| | \$73,523 | \$56,954 | \$70,189 |
| West Tisbury | \$75,759 | \$85,469 | \$117,035 |
| | \$87,566 | \$92,522 | \$173,500 |
| County | \$69,760 | \$63,534 | \$77,392 |
| | \$82,659 | \$92,514 | \$111,385 |
| State | \$65,98I | \$70,954 | \$89,645 |
| | \$83,37I | \$90,180 | \$113,822 |

Median household income: ranking by town, 2011, 2021 Source: American Community Survey 5-Year Estimates

| 2021 | | 2011 | |
|-----------|--------------|----------|--------------|
| \$117,035 | West Tisbury | \$75,759 | West Tisbury |
| \$104,716 | Chilmark | \$74,214 | Edgartown |
| \$94,545 | Oak Bluffs | \$54,762 | Tisbury |
| \$94,375 | Aquinnah | \$78,890 | Oak Bluffs |
| \$73,849 | Edgartown | \$59,583 | Chilmark |
| \$70,000 | Gosnold | \$52,813 | Gosnold |
| \$55,938 | Tisbury | \$82,500 | Aquinnah |

Median Household Income





Oak Bluffs

-County

Tisbury

State

-Gosnold

-West Tisbury

Income per capita (towns), 2011-2021

Source: American Community Survey 5-year estimates (DP03)

| | 2011 | 2016 | 2021 |
|------------|----------|-----------|----------|
| Aquinnah | \$25,512 | \$31,128 | \$70,958 |
| Chilmark | \$45,210 | \$48,087 | \$64,598 |
| Edgartown | \$38,083 | \$45,627 | \$44,665 |
| Gosnold | \$29,511 | \$64,762 | \$87,603 |
| Oak Bluffs | \$29,117 | \$36,789 | \$51,258 |
| Tisbury | \$29,384 | \$34,833 | \$36,180 |
| W.Tisbury | \$36,592 | \$43,073 | \$75,630 |
| County | \$33,228 | \$40,05 I | \$51,354 |
| State | \$35,051 | \$38,069 | \$49,746 |

Earnings: While income may come from many sources, including Social Security, child support, and public assistance, earnings typically refer to wages and salary.

Personal income: County, 1969-2021

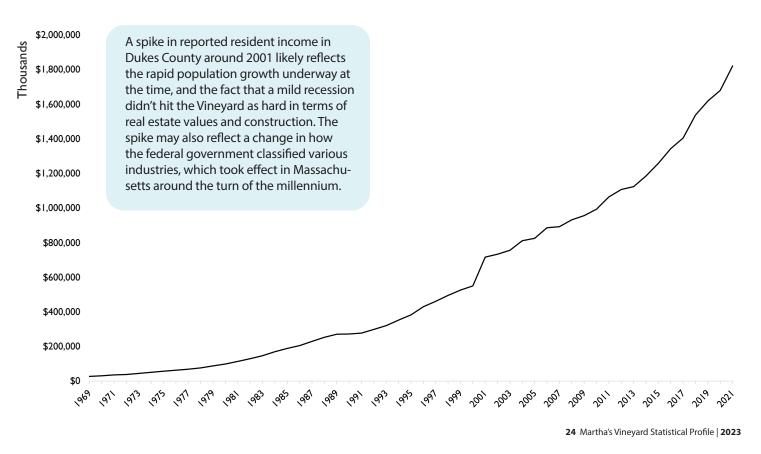
Source: Bureau of Economic Analysis

Income inequality (Gini index) by town, 2011-2021

Source: American Community Survey 5-Year Estimates (B19083)

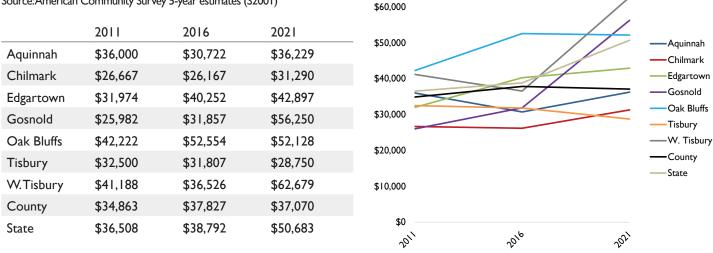
The Gini index, named for the statistician Corrado Gini, is a measure of income inequality. The values range from 0 to 1, where 0 equals perfect equality (everyone has the same income) and 1 equals perfect inequality (all the income goes to a single person or group). Dukes County has exceeded the state and national index values since 2016.

| | 2011 | 2016 | 2021 |
|---------------|------|------|------|
| Aquinnah | 0.41 | 0.52 | 0.60 |
| Chilmark | 0.62 | 0.59 | 0.48 |
| Edgartown | 0.42 | 0.59 | 0.47 |
| Gosnold | 0.39 | 0.55 | 0.62 |
| Oak Bluffs | 0.40 | 0.46 | 0.55 |
| Tisbury | 0.49 | 0.53 | 0.41 |
| West Tisbury | 0.38 | 0.41 | 0.53 |
| Dukes County | 0.44 | 0.52 | 0.53 |
| Massachusetts | 0.47 | 0.48 | 0.49 |
| United States | 0.47 | 0.48 | 0.48 |



Median earnings in last 12 months by town, 2011-2021*

Source: American Community Survey 5-year estimates (S2001)



\$70.000

Median earnings by gender and educational attainment: County, 2021

Source: American Community Survey 5-Year Estimates (S2001)

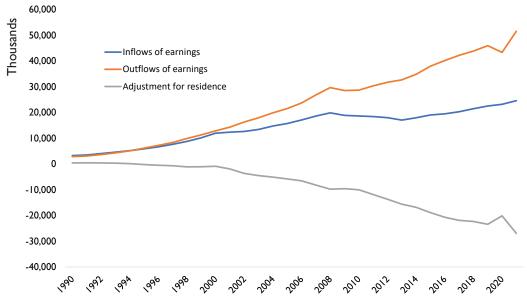
Earnings often reveal major differences according to gender. As a whole, the difference in Dukes County was slightly less than nationwide, with women earning about 77 cents for every dollar earned by a man in 2021. Compared to the national and state estimates, the disparity in Dukes County was greater for women without a high school degree, and less for those with a bachelor's degree or higher.

| | Men | Women | Difference in county | Difference in state | Difference in nation |
|---|----------|----------|----------------------|---------------------|----------------------|
| Population 25 and over with earnings | \$48,179 | \$37,046 | -23% | -23% | -24% |
| Less than high school graduate | \$31,342 | \$15,833 | -49% | -34% | -34% |
| High school graduate (includes equivalency) | \$38,125 | \$26,887 | -29% | -33% | -32% |
| Some college or associate's degree | \$46,711 | \$29,205 | -37% | -26% | -32% |
| Bachelor's degree | \$45,556 | \$50,833 | -12% | -26 | -30% |
| Graduate of professional degree | \$74,036 | \$74,850 | -1% | -29% | -31% |

Gross flow of earnings: County, 1990-2021

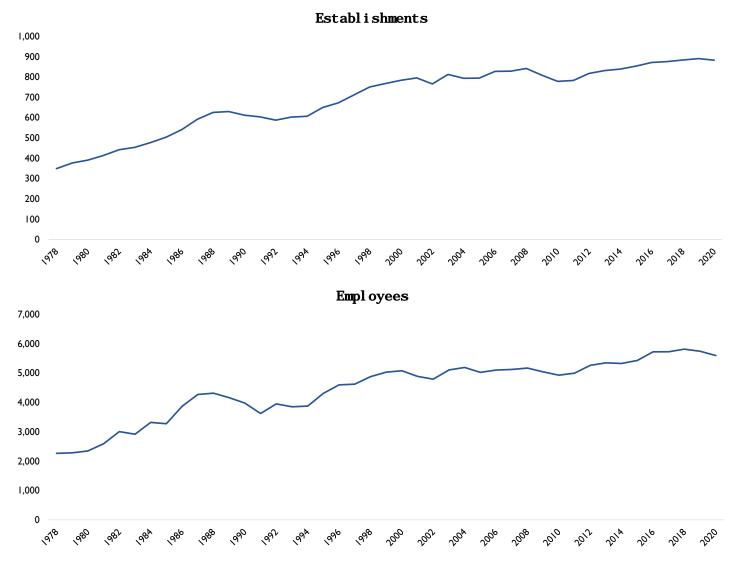
Source: Bureau of Economic Analysis

This chart shows the total annual earnings that **Dukes County residents** gained from working in other counties (inflow), and the total earnings that people from other counties, including seasonal workers, gained from working in Dukes County (outflow). The difference is called the adjustment for residence. In Dukes County, the outflow of earnings has outpaced the inflow since the 1990s, due largely to the seasonal economy.



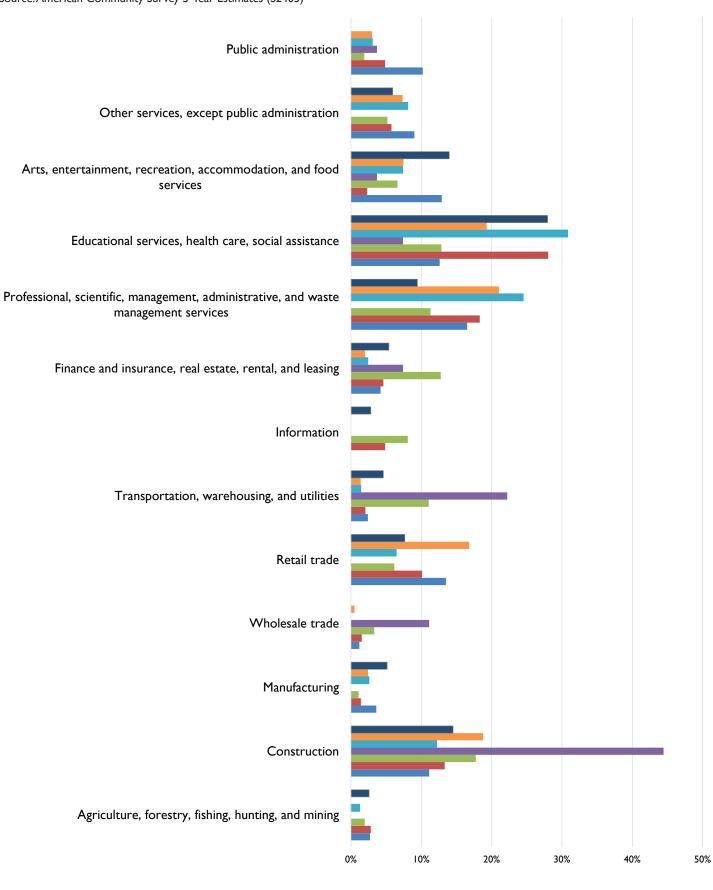
Establishments and employees: County, 1978-2020

Source: American Community Survey 5-Year Estimates (Business Dynamics Statistics)



Industry rankings (full-time, year-round civilian employed population 16 and over): County, 2021 Source: American Community Survey 5-Year Estimates (S2405)

| 1,412 | Educational services; and health care and social assistance |
|-------|--|
| 1,234 | Professional, scientific, and management; and administrative and waste management services |
| 1,121 | Construction |
| 418 | Arts, entertainment, and recreation; and accommodation and food services |
| 418 | Finance and insurance; and real estate and rental and leasing |
| 371 | Retail trade |
| 286 | Other services, except public administration |
| 207 | Public administration |
| 203 | Information |
| 190 | Manufacturing |
| 153 | Transportation and warehousing, and utilities |
| 92 | Agriculture, forestry, fishing and hunting, and mining |
| 32 | Wholesale trade |



■W. Tisbury ■ Tisbury ■ Oak Bluffs ■ Gosnold ■ Edgartown ■ Chilmark ■ Aquinnah

Employment by industry and town (full-time, year-round civilian employed population 16 and over), 2021 Source: American Community Survey 5-Year Estimates (S2405)

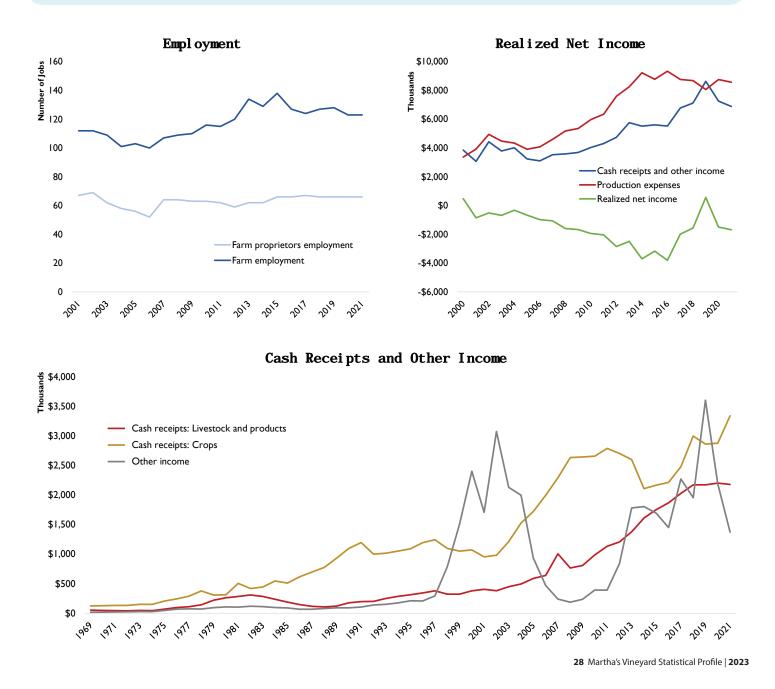
ECONOMY: Selected Industries

This section highlights some of the industries that have particular economic, cultural, or social importance to Dukes County. Note that a general decline in employment and wages during the height of the Covid-19 pandemic in 2020, and a subsequent rebound, was not the same across all industries.

Agriculture

Farm employment (full- and part-time), income, and expenses: County, various years through 2021 Source: Bureau of Economic Analysis

Farm income and profitability can be hard to pin down, in part because bookkeeping may differ among farms, and not every farm on the Vineyard is out to make a profit (though most are). It's possible, for example, that profit itself may sometimes be counted as a production expense, if it all goes into wages, and the result on paper may be an overall loss.



Construction

Wages and average monthly employment: County, 2011-2021

Source: MA Dept. of Economic Research



Wages by sub-industry: County, 2011-2021

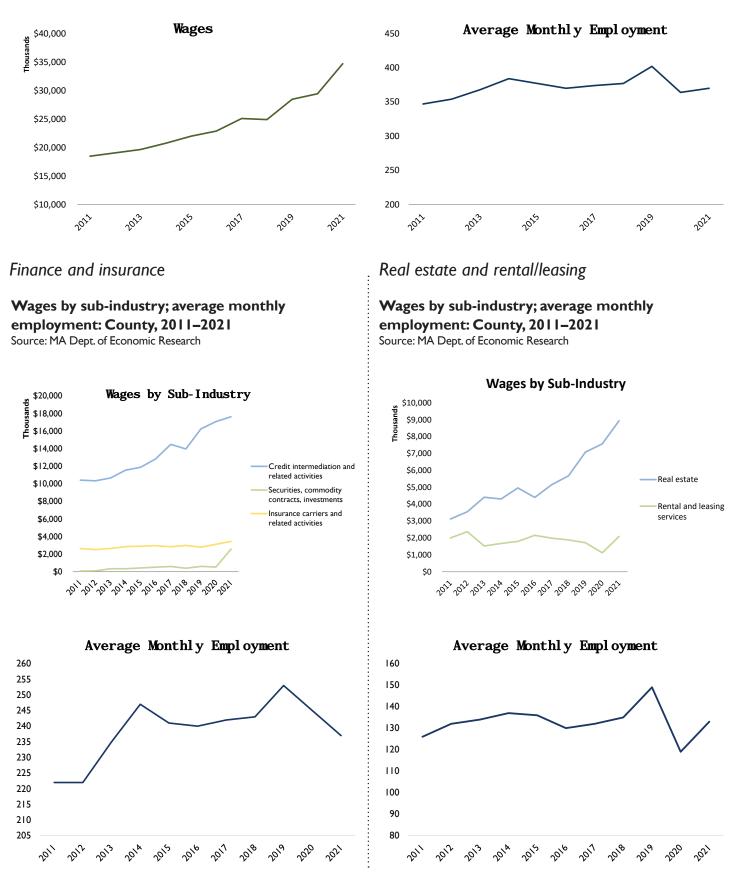
Source: MA Dept. of Economic Research



Finance and Real Estate

Wages and average monthly employment: County, 2011-2021

Source: MA Dept. of Economic Research

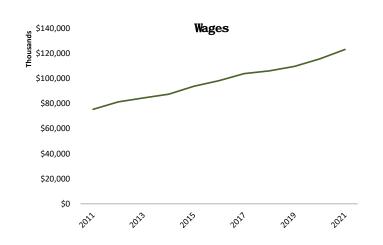


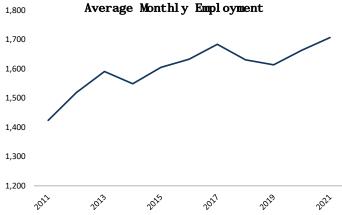
³⁰ Martha's Vineyard Statistical Profile | 2023

Health and Education

Wages and average monthly employment: County, 2011-2021

Source: MA Dept. of Economic Research

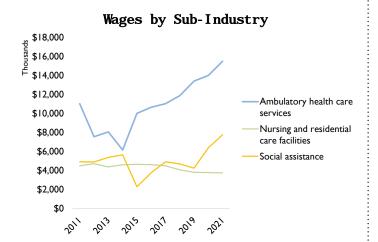


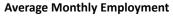


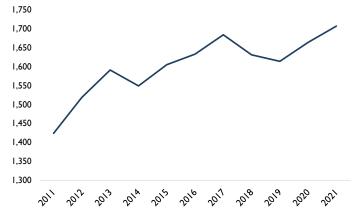
Health care and social assistance

Wages by sub-industry; average monthly employment: County, 2011–2021 Source: MA Date of Francemic Pascarch

Source: MA Dept. of Economic Research







Education

640

620

600

580

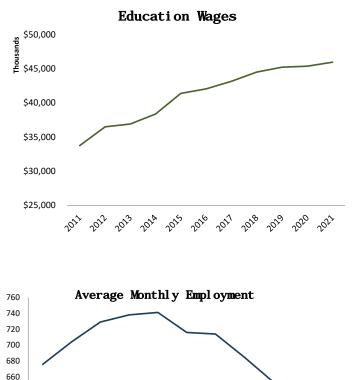
560

540

2011

2013

Wages by sub-industry; average monthly employment: County, 2011–2021 Source: MA Dept. of Economic Research



2019

2021

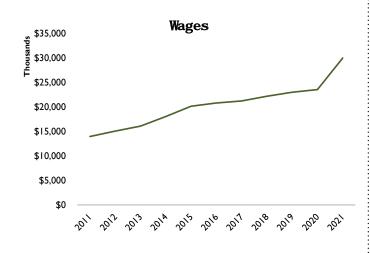
2027

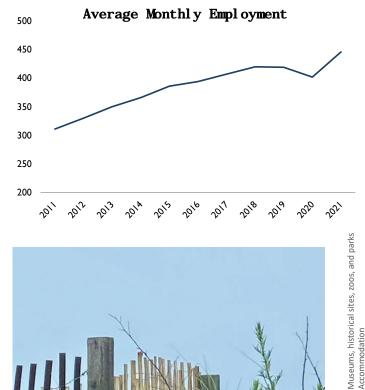
2015

Services to buildings and dwellings (mostly landscaping)

Wages and average monthly employment: County, 2011-2021

Source: MA Dept. of Economic Research





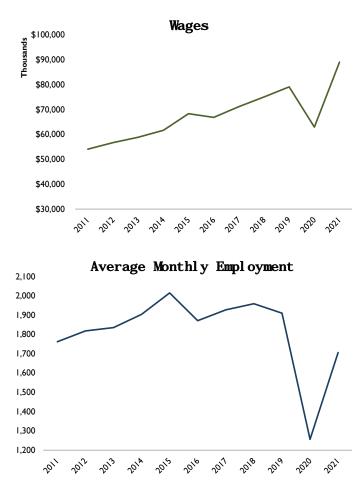


Performing arts and spectator sports Amusements, gabling and recreation Food services and drinking places

Accommodation

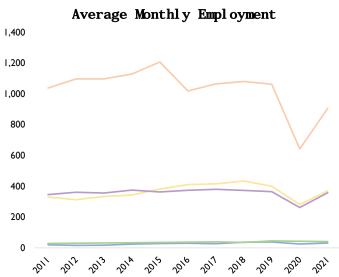
Leisure and hospitality





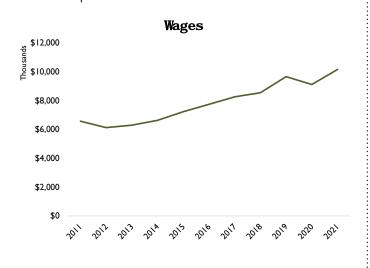
Average monthly employment by sub-industry: County, 2011-2021

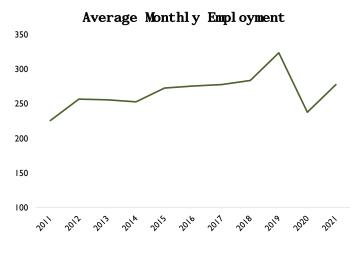
Source: MA Dept. of Economic Research



Membership associations and organizations

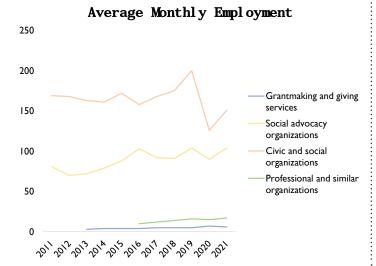
Wages and average monthly employment: County, 2011-2021 Source: MA Dept. of Economic Research





Average monthly employment by sub-industry: County, 2011-2021

Source: MA Dept. of Economic Research



Public administration

Wages and average monthly employment: County, 2005–2017

Source: MA Dept. of Economic Research

550

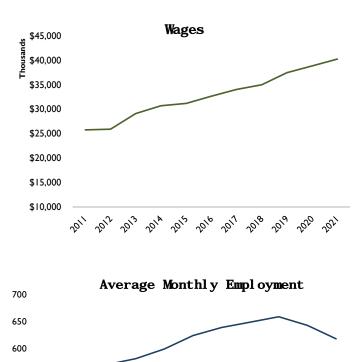
500

450

400

2)

1012



Wages by sub-industry: County, 2012–2017 Source: MA Dept. of Economic Research

2018

2017

2019

2020

2021

Average Monthly Employment 350 300 Executive, legislative and general government 250 Justice, public order, 200 and safety activities 150 Administration of human resource 100 programs Administration of 50 economic programs 0 2011 afer a la 6

Tourism

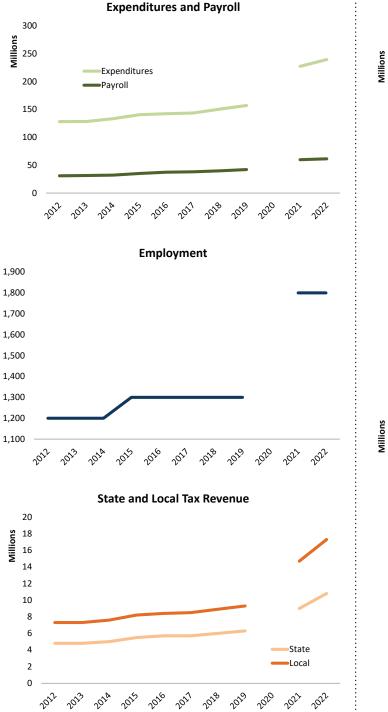
Because of its small size and population, Dukes County has a limited overall impact on state tourism compared to other counties when it comes to expenditures, travel-generated tax receipts, and employment. But on a per-capita basis, it ranks third in the state for domestic travel expenditures (money spent by travelers in the county), and second for both state tax receipts and employment. Those factors underscore the important role that tourism has long played in the region. Tourism data for Dukes County was not available for 2020.

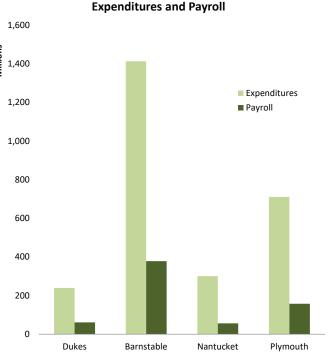
Domestic travel expenditures, payroll, tax receipts: County, 2012–2022

Source: Massachusetts Office of Travel and Tourism

Domestic travel expenditures and payroll, tax receipts, employment; employment rate: County comparison, 2022

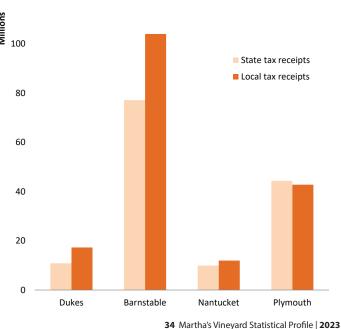
Source: Massachusetts Office of Travel and Tourism





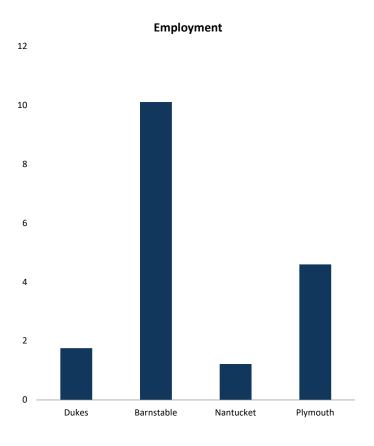
Expenditures and Payroll

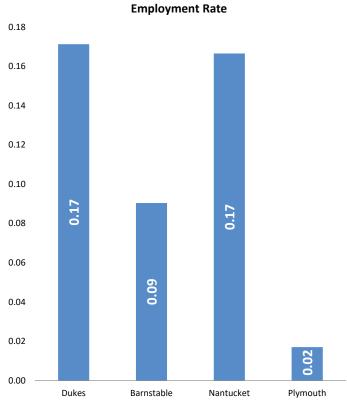
120



Domestic travel-generated employment and employment rate:* County comparison, 2022

Source: Massachusetts Office of Travel and Tourism; American Community Survey 5-Year Estimates





* Rate based on civilian workforce in 2021 (American Community Survey).

Domestic travel expenditures, state taxes, employees, payroll (percent of total and expenditures per capita): County comparison, 2022

Source: Massachusetts Office of Travel and Tourism; US Census (2020 population counts)

| | Percent of expenditures | | Expenditures per capita | | Percent of state tax receipts | | State tax receipts per capita |
|------------|-------------------------|------------|----------------------------|------------|-------------------------------------|------------|-------------------------------------|
| Suffolk | 48.25 | Nantucket | \$21,061.84 | Suffolk | 33.67 | Nantucket | \$695.13 |
| Middlesex | 12.07 | Suffolk | \$13,274.22 | Middlesex | 17.62 | Dukes | \$525.70 |
| Norfolk | 7.37 | Dukes | \$11,624.44 | Norfolk | 8.88 | Suffolk | \$449.88 |
| Barnstable | 6.44 | Barnstable | \$6,170.37 | Essex | 7.25 | Barnstable | \$336.87 |
| Essex | 5.51 | Berkshire | \$4,966.16 | Barnstable | 7.24 | Berkshire | \$282.18 |
| Worcester | 4.76 | Norfolk | \$2,228.38 | Worcester | 6.34 | Norfolk | \$130.36 |
| Plymouth | 3.24 | Middlesex | \$1,622.92 | Plymouth | 4.16 | Middlesex | \$115.09 |
| Hampden | 3.15 | Essex | \$1,494.30 | Hampden | 4.14 | Essex | \$95.44 |
| Berkshire | 2.92 | Hampden | \$1,485.67 | Bristol | 3.85 | Hampden | \$94.64 |
| Bristol | 2.72 | Plymouth | \$1,339.02 | Berkshire | 3.42 | Plymouth | \$83.55 |
| Nantucket | 1.37 | Worcester | \$1,211.43 | Dukes | 1.02 | Worcester | \$78.46 |
| Dukes | 1.09 | Franklin | \$1,207.11 | Hampshire | 0.98 | Franklin | \$76.79 |
| Hampshire | 0.72 | Bristol | \$1,030.04 | Nantucket | 0.93 | Bristol | \$70.85 |
| Franklin | 0.39 | Hampshire | \$980.42 | Franklin | 0.51 | Hampshire | \$64.60 |
| State | 100 | State | \$3,122.46 | State | 100 | State | \$151.65 |

Commercial fishing (see also shellfish bushels by town and type, page 87)

While employment and wage statistics were not available for the commercial fishing industry, the following data show the reported value of fish, shellfish, and invertebrates landed in Dukes County by year and species.

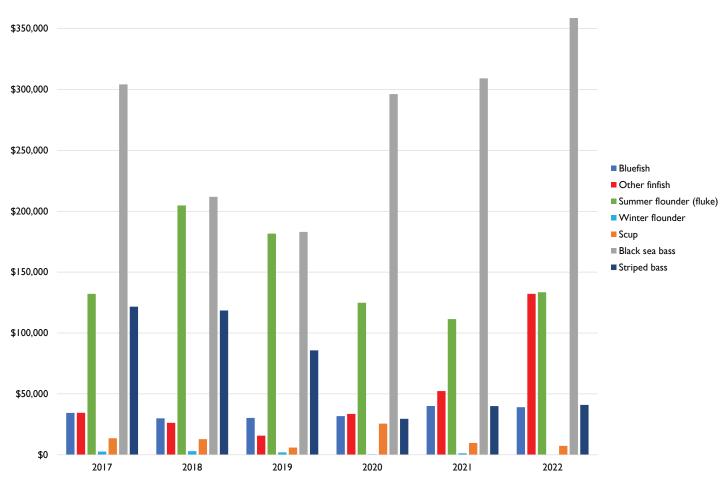
Value of finfish, groundfish and invertebrate landings in Dukes County, 2017-2022

Source: Standard Atlantic Fisheries Information System (SAFIS) Dealer Database; provided by the Division of Marine Fisheries

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-------------------------|--------|--------|--------|---------|---------|---------|
| Bluefish | 17,253 | 12,057 | 11,910 | 11,944 | 16,520 | 13,757 |
| Other finfish | 16,869 | 14,878 | 8,362 | 6,908 | 8,721 | 21,661 |
| Summer flounder (fluke) | 27,690 | 39,977 | 40,768 | 33,154 | 24,615 | 28,591 |
| Winter flounder | 974 | 1,052 | 692 | 140 | 352 | * |
| Other groundfish | * | 36,500 | * | * | * | 754 |
| American lobster | 90,776 | 80,011 | 75,598 | 80,167 | 93,560 | 72,436 |
| Other invertebrates | 11,630 | 1,748 | * | * | * | 1,197 |
| Scup | 21,226 | 20,942 | 10,838 | 41,654 | 14,830 | 11,754 |
| Black sea bass | 97,198 | 66,867 | 69,225 | 130,523 | 115,607 | 178,684 |
| Striped bass | 22,679 | 21,327 | 14,871 | 5,103 | 6,398 | 7,550 |

Finfish and Groundfish Value





*Withheld

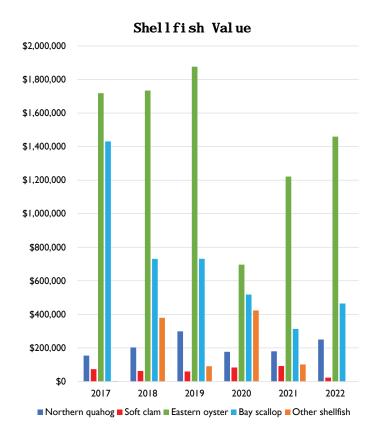


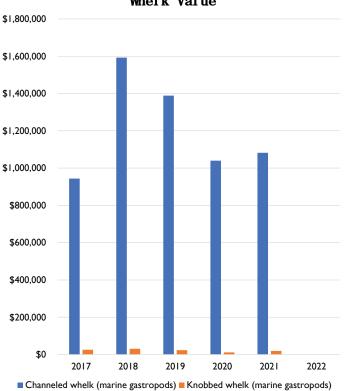


Value of shellfish landings in Dukes County, 2017-2022

Source: Standard Atlantic Fisheries Information System (SAFIS) Dealer Database; provided by the Division of Marine Fisheries

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Northern quahog | \$154,279 | \$203,110 | \$298,713 | \$176,890 | \$179,543 | \$249,971 |
| Soft clam | \$73,321 | \$62,484 | \$59,632 | \$83,332 | \$92,089 | \$22,960 |
| Eastern oyster | \$1,717,935 | \$1,733,723 | \$1,876,288 | \$696,622 | \$1,221,067 | \$1,459,077 |
| Bay scallop | \$1,431,016 | \$730,563 | \$731,421 | \$518,222 | \$313,301 | \$465,095 |
| Other shellfish | \$2,785 | \$379,598 | \$91,203 | \$423,391 | \$101,301 | * |
| Channeled whelk (marine gastropods) | \$943,846 | \$1,592,415 | \$1,388,621 | \$1,039,998 | \$1,082,236 | * |
| Knobbed whelk (marine gastropods) | \$25,740 | \$30,948 | \$23,408 | \$11,682 | \$19,420 | * |





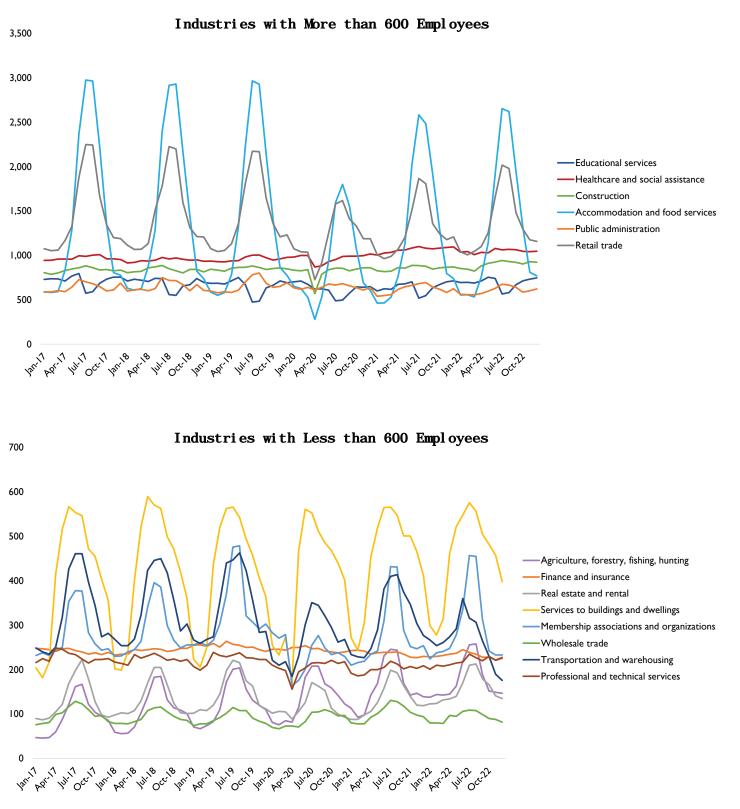
Whelk Value

*Withheld.

Selected industries: Seasonality (employment) in Dukes County, 2017-2022

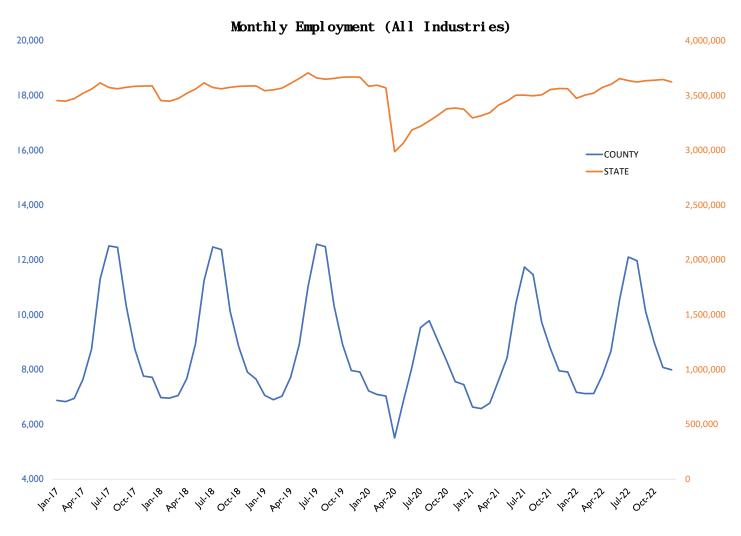
Source: MA Department of Economic Research

The charts below illustrate the seasonality of selected industries in Dukes County, and also how monthly employment was affected by Covid-19. Among the industries most affected in terms of employment were accommodation and food services, retail trade, transportation and warehousing, and membership associations and organizations. Less affected were services to buildings and dwellings (mostly landscaping), construction, agriculture and related fields, wholesale trade, educational services, and public administration. The comparative seasonality of Dukes County and the state is shown on the following page.



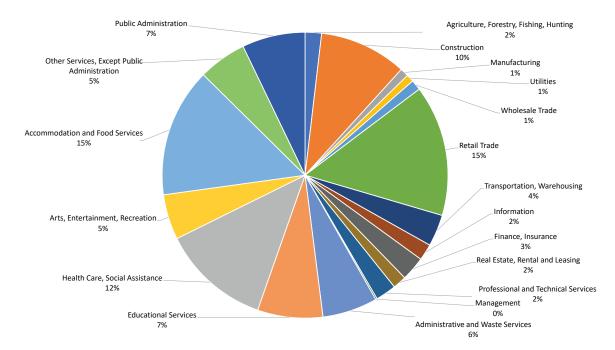
Total monthly employment: County and state, 2017-2022

Source: MA Department of Economic Research



Average annual employment (all major NAICS sectors): Dukes County, 2021

Source: MA Department of Economic Research

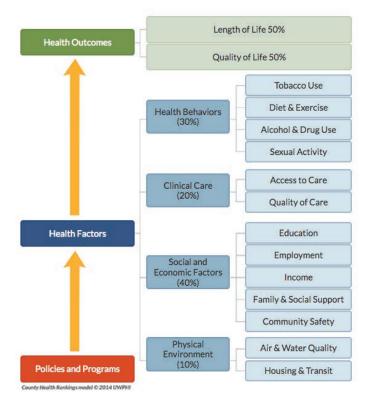


4. HEALTH AND EDUCATION

The <u>County Health Rankings</u>, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, measures vital health factors in counties across the United States. The program helps communities understand what factors influence their overall quality and length of life, as outlined in the chart below. As of 2023, Dukes County ranked second in the state for quality of life (see glossary), despite its lower ranking for clinical care and other health factors.

County health rankings: County, 2023

Source: University of Wisconsin Population Health Institute (County Health Rankings and Roadmaps)



Health outcomes (ranking)

| Overall | Length of Life | Quality of Life |
|------------|----------------|-----------------|
| Nantucket | Middlesex | Nantucket |
| Middlesex | Nantucket | Dukes (2) |
| Norfolk | Norfolk | Norfolk |
| Dukes (4) | Suffolk | Middlesex |
| Hampshire | Hampshire | Barnstable |
| Plymouth | Dukes (6) | Franklin |
| Essex | Essex | Plymouth |
| Franklin | Plymouth | Hampshire |
| Barnstable | Worcester | Worcester |
| Worcester | Franklin | Essex |
| Suffolk | Barnstable | Berkshire |
| Bristol | Bristol | Suffolk |
| Berkshire | Hampden | Bristol |
| Hampden | Berkshire | Hampden |

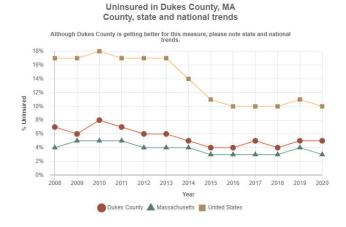
Health factors (ranking)

| Overall | Health behaviors | Clinical care | Social and economic factors | Physical environment |
|------------|------------------|---------------|-----------------------------|----------------------|
| Middlesex | Middlesex | Hampshire | Middlesex | Hampshire |
| Norfolk | Norfolk | Norfolk | Norfolk | Nantucket |
| Hampshire | Hampshire | Middlesex | Hampshire | Dukes (3) |
| Nantucket | Nantucket | Barnstable | Nantucket | Barnstable |
| Barnstable | Essex | Berkshire | Franklin | Franklin |
| Dukes (6) | Suffolk | Worcester | Plymouth | Berkshire |
| Franklin | Dukes (7) | Suffolk | Dukes (7) | Essex |
| Plymouth | Barnstable | Plymouth | Worcester | Suffolk |
| Worcester | Plymouth | Franklin | Barnstable | Middlesex |
| Berkshire | Berkshire | Essex | Essex | Worcester |
| Essex | Franklin | Hampden | Berkshire | Plymouth |
| Suffolk | Worcester | Dukes (12) | Suffolk | Bristol |
| Bristol | Bristol | Bristol | Bristol | Norfolk |
| Hampden | Hampden | Nantucket | Hampden | Hampden |

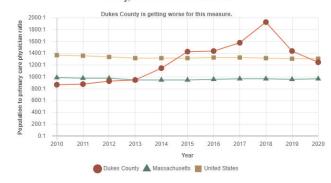
Clinical care health trends: County (various time ranges)

Source: University of Wisconsin Population Health Institute (County Health Rankings and Roadmaps)

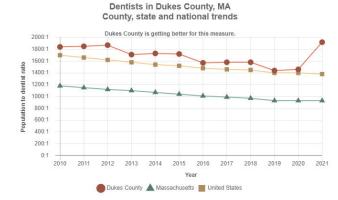
According to data on the County Health Rankings website, Dukes County ranks 12th among the 14 counties in Massachusetts for clinical care. Six of the seven factors that go into that determination are shown in the graphs below, which also show recent county, state, and national trends. The number of mental health providers (also a factor) was not compared to prior years, although the County Health Rankings indicate there was one provider per 160 residents in Dukes County, compared to 140:1 in the state and 340:1 in the US. For more information about the data, including methods and limitations, visit <u>countyhealthrankings.org</u>.



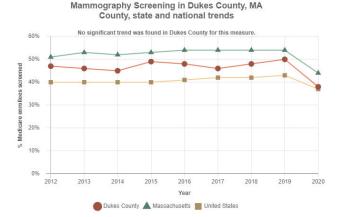
Primary Care Physicians in Dukes County, MA County, state and national trends



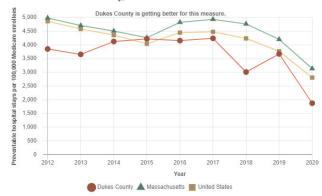
Notes: The data in this table reflect the average population served by a single primary care physician.



Notes: The data in this table reflect the average population served by a single dentist.



Preventable hospital stays in Dukes County, MA County, state and national trends



Flu Vaccinations in Dukes County, MA County, state and national trends Dukes County is getting better for this measure 70% 609 1 and 50% nuivia: 40% 30% 20% Medicare 109 0% 2012 2013 2014 2015 2016 2017 2018 2019 2020 Yea 🛑 Dukes County 🔺 Massachusetts 📕 United States

| | | | 3 |
|--|---------|-------|---------|
| Health outcomes and factors, 2023 | | | |
| Source: University of Wisconsin Population Health Institute (County Health Rankings and Roadmaps) | | 1 | - |
| Health outcomes | County | State | US |
| Years of potential life lost before age 75 per 100,000 population (age-adjusted) | 5,800 | 5,700 | 7,300 |
| Percentage of adults reporting fair or poor health (age-adjusted) | 10% | 11% | 12% |
| Average number of physically unhealthy days reported in past 30 days (age-adjusted) | 2.6 | 2.4 | 3.0 |
| Average number of mentally unhealthy days reported in past 30 days (age-adjusted) | 4.5 | 4.5 | 4.4 |
| Percentage of live births with low birthweight (< 2500 grams) | 5% | 7% | 8% |
| | | | 1 |
| Health behaviors | | | / |
| Percentage of adults who are current smokers | 135 | 11% | 16% |
| Adult obesity: Percentage of adults that report a BMI of 30 or more | 25% | 25% | 32% |
| Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best) | 8.2 | 9.2 | 7.0 |
| Percentage of adults age 20 and over reporting no leisure-time physical activity | 17% | 19% | 22% |
| Percentage of population with adequate access to locations for physical activity | 97% | 95% | 84% |
| Percentage of adults reporting binge or heavy drinking | 24% | 19% | 19% |
| Percentage of driving deaths with alcohol involvement | 50% | 31% | 27% |
| Number of newly diagnosed chlamydia cases per 1,000 population | 259.6 | 361.3 | 481.3 |
| Number of births per 1,000 female population ages 15-19 | 4 | 8 | 19 |
| | | Ŭ. | 1000 |
| Clinical care | | | 1 |
| Percentage of population under age 65 without health insurance | 5% | 3% | 10% |
| Ratio of population to primary care physicians | 1,250:1 | 970:1 | 1,310:1 |
| Ratio of population to dentists | | 930:1 | 1,380:1 |
| Ratio of population to mental health providers | 160:1 | 140:1 | 340:1 |
| Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees | 1,876 | 3,136 | 2,809 |
| Percentage of female Medicare enrollees ages 65-74 that received an annual mammography screening | 38% | 44% | 37% |
| Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination | 61% | 59% | 51% |
| | 0170 | 0,,0 | 5170 |
| Social and economic factors | | | |
| Percentage of adults ages 25 and over with a high school diploma or equivalent | 96% | 91% | 89% |
| Percentage of adults ages 25-44 with some post-secondary education | 63% | 75% | 67% |
| Percentage of population ages 16 and older unemployed but seeking work | 6.5% | 5.7% | 5.4% |
| Percentage of children under age 18 in poverty | 13% | 13% | 17% |
| Income inequality: Ratio of household income at the 80th percentile to income at the 20th percentile* | 4.6 | 5.4 | 4.9 |
| Percentage of children that live in a household headed by single parent | 23% | 24% | 25% |
| Number of membership associations per 10,000 population | 22.3 | 9.3 | 9.1 |
| Number of deaths due to injury per 100,000 population | 78 | 71 | 76 |
| | 10 | 1 | |
| Physical environment | | | |
| Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) | 5.4 | 6.8 | 7.4 |
| Indicator of the presence of health-related drinking water violations | No | 0.0 | |
| Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lac | | | |
| of kitchen or plumbing facilities | 21% | 17% | 17% |
| Percentage of the workforce that drives alone to work | 66% | 66% | 73% |
| Among workers who commute in their car alone, the percentage that commute more than 30 minutes | 10% | 44% | 37% |
| | | | |

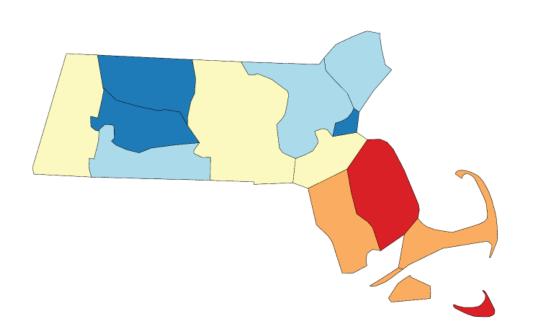
Cancer incidence rates (all types, age-adjusted) by county, 2016-2020 (5-year average)

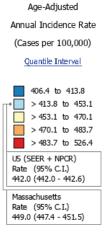
Source: Centers for Disease Control, National Cancer Institute

| | | Average annual | 5-year trend in | |
|---------------|--------------------|----------------|-----------------|-------------|
| | Age-adjusted rate* | count | incidence rates | County rank |
| Nantucket | 526.4 | 71 | -1 | I |
| Plymouth | 484.7 | 3,402 | -0.8 | 2 |
| Barnstable | 483.7 | 1,982 | -1 | 3 |
| Dukes | 482.8 | 139 | -1 | 4 |
| Bristol | 473 | 3,432 | -0.5 | 5 |
| Worcester | 470.1 | 4,805 | -0.1 | 6 |
| Berkshire | 463.2 | 936 | 0.8 | 7 |
| Norfolk | 462.7 | 4,177 | -0.6 | 8 |
| Essex | 453.1 | 4,595 | -0.5 | 9 |
| Hampden | 436.8 | 2,574 | -0.7 | 10 |
| Middlesex | 426.6 | 8,136 | -1.4 | 11 |
| Franklin | 413.8 | 452 | -0.7 | 12 |
| Suffolk | 408.9 | 3,210 | -2.3 | 13 |
| Hampshire | 406.4 | 809 | -1.2 | 14 |
| Massachusetts | 449.4 | 38,719 | -0.4 | |
| United States | 442.3 | 1,698,328 | -0.4 | |
| | | | | |

*Per 100,000

Incidence Rates[†] for Massachusetts by County All Cancer Sites, 2016 - 2020 All Races (includes Hispanic), Both Sexes, All Ages





Notes:

Notes: State Cancer Registries may provide more current or more local data. Data presented on the State Cancer Profiles Web Site may differ from statistics reported by the State Cancer Registries (for more information). * Incidence rates (cases per 100,000 population per year) are age-adjusted to the 2000 US standard population (19 age groups: <1, 1-4, 5-9, ..., 80-84, 85+). Rates are for invasive cancer only (except for bladder which is invasive and in situ) or unless otherwise specified. Rates calculated using SEER*Stat. Population counts for denominators are based on Census populations as modified by NCI. The US Population Data File is used for SEER and NPCR incidence rates. Rates are computed using cancers classified as malignant based on ICD-O-3. For more information see <u>malignant.html</u> Data for the United States does not include data from Puerto Rico.

Opioid overdose deaths: County comparison, 2012-2022*

Source: Massachusetts Dept. of Public Health

The Massachusetts Department of Public Health counts opioid-overdose deaths as those confirmed as relating to heroin, opioid-based prescription painkillers, or other unspecified opioids. The deaths may be suicides or unintentional. In 2022, Dukes County had an opioid-related death rate of 34.4, placing it 10th among the state's 14 counties. Island physicians and others have estimated a higher incidence of opioid-overdose deaths than the numbers reported by the state.

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total 2012- 2022 |
|------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------|
| Barnstable | 24 | 43 | 53 | 67 | 81 | 67 | 71 | 73 | 76 | 80 | 86 | 740 |
| Berkshire | 16 | 22 | 29 | 32 | 35 | 30 | 40 | 39 | 56 | 62 | 48 | 418 |
| Bristol | 95 | 115 | 145 | 172 | 243 | 239 | 218 | 260 | 233 | 293 | 277 | 2,372 |
| Dukes | 0 | - I | 5 | 7 | 3 | 2 | 4 | 3 | 6 | 5 | 6 | 42 |
| Essex | 93 | 119 | 205 | 236 | 274 | 301 | 273 | 279 | 254 | 291 | 276 | 2,658 |
| Franklin | 8 | 10 | П | 18 | 14 | 9 | 22 | 17 | 20 | 36 | 27 | 198 |
| Hampden | 59 | 69 | 64 | 98 | 130 | 113 | 209 | 199 | 215 | 213 | 227 | 1,642 |
| Hampshire | П | 30 | 26 | 16 | 36 | 28 | 38 | 39 | 34 | 44 | 37 | 349 |
| Middlesex | 118 | 152 | 273 | 341 | 402 | 350 | 322 | 304 | 300 | 360 | 383 | 3,436 |
| Nantucket | 0 | 0 | I | I | 2 | 3 | I | 2 | I | 4 | 2 | 17 |
| Norfolk | 70 | 82 | 125 | 164 | 213 | 167 | 170 | 129 | 156 | 163 | 160 | 1,663 |
| Plymouth | 57 | 86 | 110 | 174 | 190 | 202 | 151 | 176 | 185 | 167 | 190 | 1,755 |
| Suffolk | 90 | 110 | 146 | 199 | 241 | 252 | 215 | 218 | 288 | 300 | 305 | 2,449 |
| Worcester | 91 | 115 | 162 | 222 | 246 | 250 | 281 | 267 | 280 | 281 | 331 | 2,608 |
| Total | 733 | 954 | 1,356 | 1,748 | 2,110 | 2,013 | 2,015 | 2,005 | 2,104 | 2,300 | 2,357 | 20,351 |

50

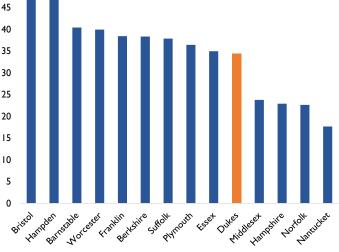
*Massachusetts residents; all intents

Opioid related incidents (reported), by town, 2020-2023

Source: MA Ambulance Trip Record Information System (MATRIS), as documented by EMS

| | 2020 | 2021 | 2022 | 2023 |
|-------|------|------|------|------|
| Aqu. | 0 | 0 | 0 | 0 |
| Chil. | 1-4 | 1-4 | 0 | 0 |
| Edg. | 6 | 1-4 | 7 | I-4 |
| Gos. | 0 | 0 | 0 | 0 |
| O.B. | 7 | П | 9 | 5 |
| Tis. | 5 | 10 | 5 | I-4 |
| W.T. | I-4 | 0 | 1-4 | 0 |

Opioid-Related Death Rate, 2022 (per 100,000)



According to the CDC, the Lyme disease rate in Dukes County in 2015 was the highest of any county in the state, followed by Nantucket. A change in reporting practices in Massachusetts in 2016 led to dramatically lower CDC figures in all counties between 2016-2020. However, data from the DPH Bureau of Infectious Disease and Laboratory Sciences indicate that Dukes and Nantucket Counties together still have by far the highest rate of tick-borne disease in general, based on the number of emergency room visits that led to a tick-borne disease diagnosis.

Lyme disease rates (per 10,000 population): County comparison, 2015

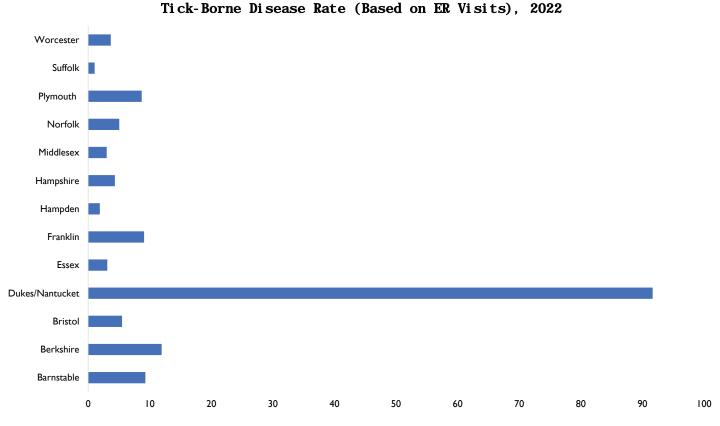
Tick-borne disease rates (per 10,000 emergency room visits): County comparison, 2019-2023*

Source: Centers for Disease Control and Prevention, 2020 Census for population data

| Dukes | 28.6 |
|------------|------|
| Nantucket | 23.9 |
| Plymouth | 11.6 |
| Bristol | 10 |
| Franklin | 9.2 |
| Norfolk | 7.4 |
| Barnstable | 7 |
| Berkshire | 6.8 |
| Hampshire | 6.7 |
| Worcester | 6.3 |
| Middlesex | 4.3 |
| Essex | 3.8 |
| Hampden | 3.9 |
| Suffolk | 1.3 |
| | |

Source: Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences

| | 2019 | 2020 | 2021 | 2022 | 2023 |
|-----------------|-------|--------|--------|--------|--------|
| Barnstable | 9.59 | 9.56 | 13.15 | 14.98 | 14.98 |
| Berkshire | 10.54 | 11.92 | 18.93 | 14.35 | 14.35 |
| Bristol | 6.45 | 8.15 | 7.94 | 11.65 | 11.65 |
| Dukes/Nantucket | 89.58 | 107.02 | 110.07 | 148.04 | 148.04 |
| Essex | 3.48 | 3.18 | 4.45 | 3.97 | 3.97 |
| Franklin | 15.09 | 13.39 | 18.66 | 11.6 | 11.6 |
| Hampden | 4.3 | 3.24 | 3.84 | 4.25 | 4.25 |
| Hampshire | 15.89 | 11.57 | 16.29 | 10.94 | 10.94 |
| Middlesex | 5.7 | 4.5 | 4.64 | 4.93 | 4.93 |
| Norfolk | 6.64 | 7.49 | 8.45 | 8.57 | 8.57 |
| Plymouth | 8.73 | 11.99 | 13.06 | 16.25 | 16.25 |
| Suffolk | 1.56 | 1.7 | 1.39 | 2.14 | 2.14 |
| Worcester | 7.25 | 6 | 6.28 | 5.34 | 5.34 |



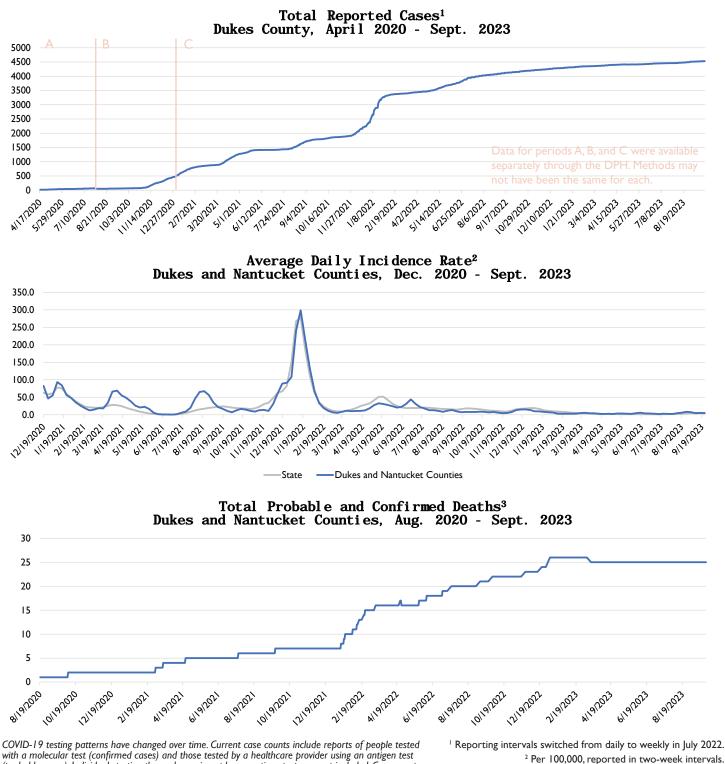
*Does not include patients from out of state, or whose county was missing from the data.

Reported Covid cases and deaths, average daily incident rate: Dukes and Nantucket Counties, 2020-2023

Source: Massachusetts Dept. of Public Health

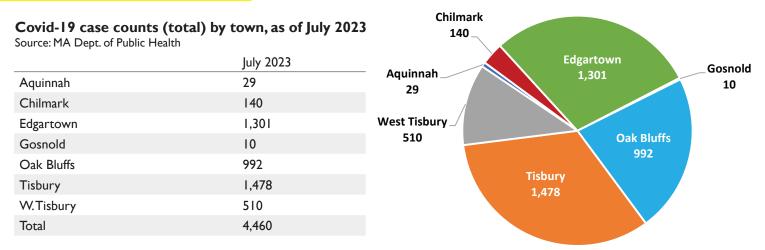
The first Covid case in Dukes County, as recorded by the Dept. of Public Health, was on March 21, 2020. The virus spread across the Island at a rate of a few cases per week through that summer, with a total of 64 by October. Cases multiplied that fall, reaching almost 500 by the end of the year. The spread continued unabated through 2021, with more than 3,300 cases reported in Dukes County by February 2022. This included an especially steep rise beginning in late 2021, as shown in the charts below. New cases began to level off somewhat in early 2022, with a total of 4,530 cases reported in Dukes County as of September 2023.

The DPH reports a total of 25 Covid deaths in Dukes and Nantucket counties combined as of September 2023.



with a molecular test (confirmed cases) and those tested by a healthcare provider using an antigen test (probable cases). Individuals testing themselves using at-home antigen tests are not included. Case counts represent only a portion of people with COVID-19 and should be interpreted with caution. Current case counts should not be compared to earlier parts of the pandemic. - DPH 2023

³ Reported in daily intervals.



Homelessness: County, 2016–2023

Source: Barnstable County Department of Human Services; Dukes County Associate Commissioner for the Homeless

Homelessness on the Vineyard has been difficult to gauge, with many people in transitional or sub-standard housing likely falling under the radar. The annual point-in-time counts conducted by the Cape and Island Regional Network on Homelessness occur on a single night in January and include the number of observed unsheltered people, defined as those living in a place not intended for habitation, such as a car, park, encampment, abandoned house, or on the street. However, the counts do not include people living in hotels or sheltering with family and friends. As another measure, the Dukes County Associate Commissioner for the Homeless reports 33 homeless individuals as observed on Jan. 24, 2023, but estimates a total of about 120-130 individuals or families dealing with homelessness on the Island.

Annual point-in-time counts (BCDHS)

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|------------|------|------|------|------|------|------|------|------|
| Dukes | 6 | 4 | П | 2 | 14 | 9 | 9 | 4 |
| Nantucket | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 40 |
| Barnstable | 54 | 39 | 39 | 36 | 32 | 15 | 24 | 28 |

Dukes County: Individuals observed on January 24, 2023 33

Martha's Vineyard Community Services: Services provided in FY2023*

Source: Martha's Vineyard Community Services

| Island Counseling Center | Islandwide Youth Collaborative |
|--|---|
| Substance use treatment and recovery services: 2,761 | Family members served: 406 |
| Older adult mental health services: 1,616 | Family services provided: 4,731 |
| Enhanced urgent care / walk-in services: 737 | Client and Community Access Team |
| Other services: 9,833 | Requests for multi-lingual translation services: 498 |
| Peer Recovery Support Center (Red House) | Translation service hours: 641 |
| Peer Recovery program members: 231 | Disability Services |
| Peer Recovery services: 1,440 | Children, adults, and families served: 110 |
| Connect to End Violence (domestic abuse services) | Family Support Center services provided: 241 |
| Crisis Hotline calls: 398 | Daybreak service days: 251 |
| Students in Healthy Relationship classes: 952 | Adult employment services provided: 871 |
| Total services and contacts: 4,862 | Student and young adult employment services provided: 515 |
| Early Childhood programs | Veterans Outreach Program |
| Head Start home visits: 970 | Veterans served: 80 |
| Head Start family enrollment: 40 | Services provided: 1,616 |
| Family Center caregivers served: 472 | *Does not indicate individuals served or number of cases. |
| Early Childhood Center enrollment: 62 | For more information, visit mvcommunityservices.org. |

Food Security

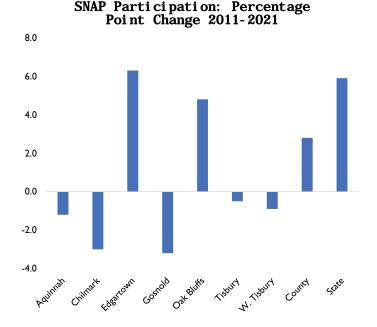
Food security refers to a person's access throughout the year to food that meets his or her dietary needs and preferences and supports a healthy lifestyle. According to the American Community Survey, the estimated number of Dukes County households participating in the state's Supplemental Nutrition Assistance Program (SNAP) increased by 119% between 2011 and 2021 (from 196 to 430), with about 95% of those households living down-Island. At the same time, Island Grown Initiative programs focusing on food equity have all grown significantly in the last four or five years, as shown below. For information about the programs, visit igimv.org.

SNAP participation by town (percent of households), 2012-2021

Island Food Pantry visits, 2019-20231

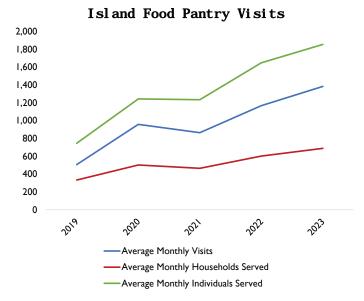
Source: American Community Survey 5-Year Estimates (S2201)

| | 2011 | 2016 | 2021 | Percentage point change 2011-2021 |
|------------|------|-------|-------|---|
| Aquinnah | 4.3% | 7.1% | 3.1% | +80% |
| Chilmark | 4% | 3.8% | 1% | -58% |
| Edgartown | 1.1% | 2.4% | 7.4% | +550% |
| Gosnold | 3.2% | 12.9% | 0% | -100% |
| Oak Bluffs | 2.6% | 4.2% | 7.4% | +254% |
| Tisbury | 9.7% | 1.7% | 9.2% | +39% |
| W. Tisbury | 0% | 2.7% | 0.9% | NA |
| County | 3.5% | 3.1% | 6.3% | +119% |
| State | 9.5% | 12.5% | 15.4% | +73% |



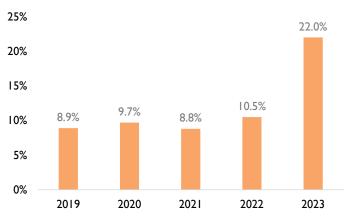
Source: Island Grown Initiative

| | 2019 | 2020 | 2021 | 2022 | 2023 |
|-------------------------------------|------|-------|-------|-------|-------|
| Average monthly visits | 507 | 958 | 865 | 1,169 | 1,385 |
| Average monthly households served2 | 333 | 503 | 466 | 603 | 689 |
| Average monthly individuals served3 | 747 | 1,244 | 1,236 | 1,650 | 1,856 |



IGI Mobile Market sales to people in assistance programs, 2019-2023⁴

Source: Island Grown Initiative



¹ Each time an individual comes to the pantry.

²Number of unique households.

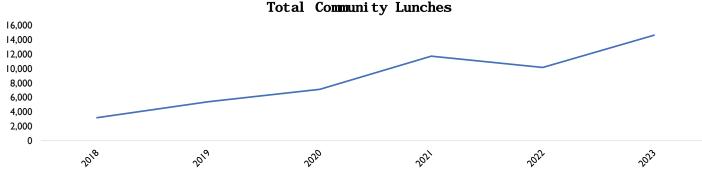
³Total number of people in each unique household.

⁴ Includes SNAP, Farmers Market Nutrition Program Coupons, and Fresh Connect cards.

IGI Community Lunch program: Lunches made, average sold per week, 2018-2023

Source: Island Grown Initiative

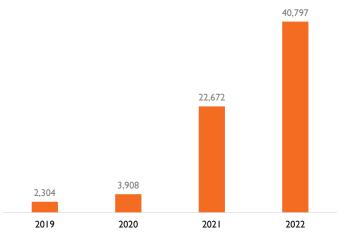




IGI Prepared Meals Program: Frozen meals made, 2019-2022'

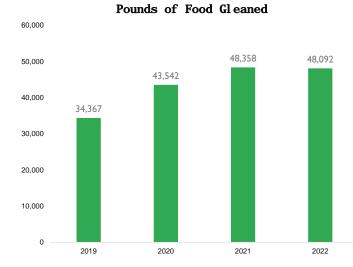
Source: Island Grown Initiative





IGI Gleaning Program: Pounds of food gleaned, 2019-2022²

Source: Island Grown Initiative



Food waste collected and composted in the IGI commercial composting program (tons), 2018-2022 Source: Woody Filley, MV Vision Fellowship Organic Manager

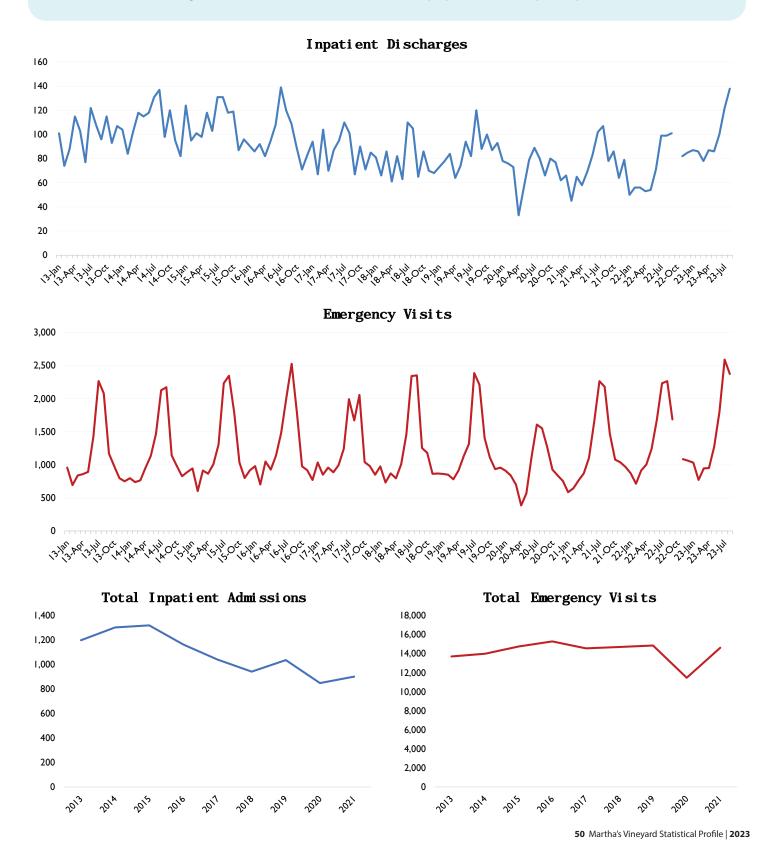
Tons of food waste collected Cubic yards of compost The IGI drum composter pilot projand composted produced ect was developed around 2018 in response to local food waste bans 2018 159.9 160 in Massachusetts and local efforts to divert more food waste on-Island. 2019 353.9 350 Bruno's Rolloff service currently picks 2020 221.7 220 up the food waste from commercial establishments and town transfer sta-2021 289.5 490 tions. The figures here do not include yard waste that is separately compost-2022 247 525* ed by Island farmers and landscapers. *Includes 250 tons of horse manure that was added.

¹ Meals made from scratch by IGI and distributed mostly through the Food Pantry, to individuals referred by health care agencies and Hospice of Martha's Vineyard, and to other Food Equity Partners including Councils on Aging and Island Elderly Housing. Meals include produce and protein from the IGI Gleaning Program. ² Generally surplus food that would not otherwise be sold. Collected from local farms, grocery stores, hunters, and fishermen.

Martha's Vineyard Hospital inpatient discharges* and emergency visits, 2013-2023

Source: Martha's Vineyard Hospital

Inpatient admissions and emergency visits to the hospital typically peak around August, although emergency visits show a more regular swing from season to season. Total emergency visits increased 1.6%, between 2011 and 2021 (the last full year of data available), from 14,394 to 14,623. Inpatient discharges decreased 25.1% percent in the same period, from 1,204 to 902. According to the hospital in 2019, the decrease reflects an industry-wide trend toward outpatient care, driven by technological and pharmaceutical advances, and the fact that those advances have a greater effect on sub-acute care, which makes up a portion of the hospital's inpatient business.



Martha's Vineyard Hospital Community Health Needs Assessment Report: Survey results, 2022

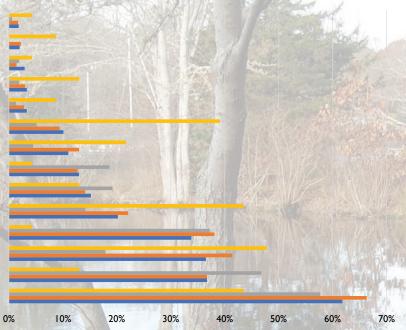
Source: Martha's Vineyard Hospital

The 2022 Community Health Assessment conducted by the Martha's Vineyard Hospital provides insight into how Island residents view their quality of life. A survey that winter collected data from 455 respondents, including 352 year-rounders, and interviews were conducted with 18 leaders of Island organizations. Top concerns among respondents included access to health care for mental health and substance use disorder, availability of affordable housing, and improved care for various conditions, including the availability of clinicians and staff on-Island, and for diverse communities and older adults. The information here is taken directly from the hospital's 2022 Community Health Needs Assessment Report.

Top health issues

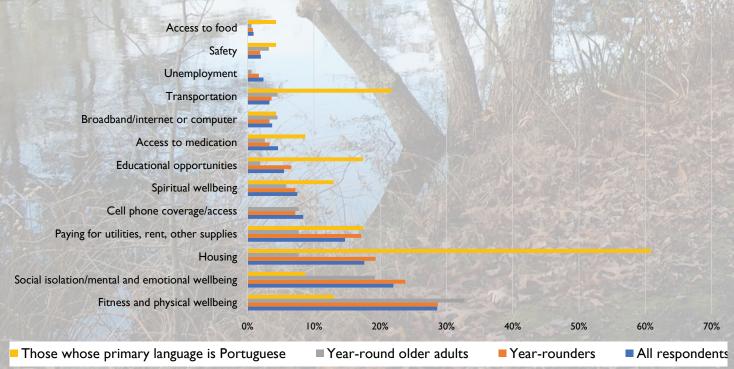
Top issues selected by survey respondents that hospitals should address to improve community health

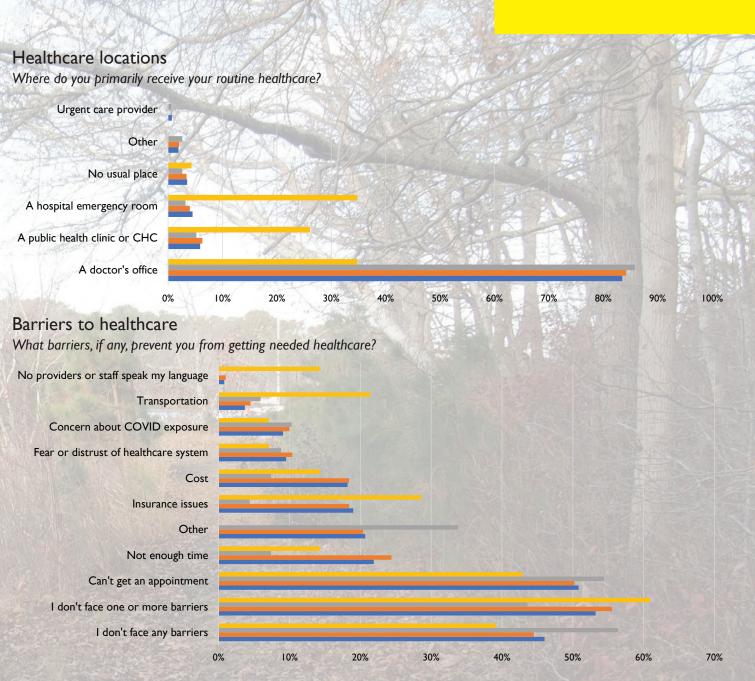




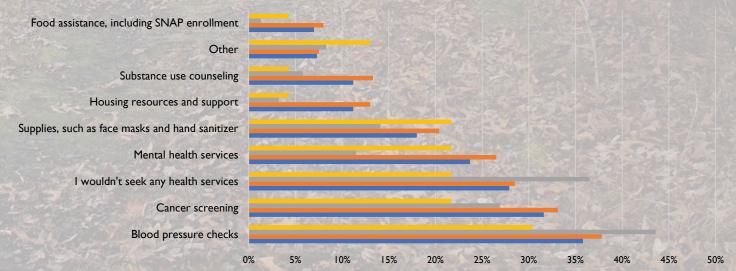
Main challenges

Main challenges in the lives of year-round residents who responded to the community survey





What types of healthcare services or resources would you seek for yourself or a family on a mobile health van in your community?*



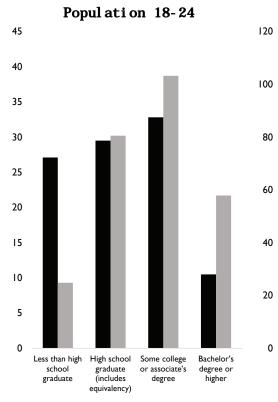
*It is not possible to know whether someone checked none of the categories because none apply or because they skipped the question. Thus, it is not possible to know the true number who answered the question.

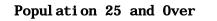
Educational attainment (percent of population) by town, 2021

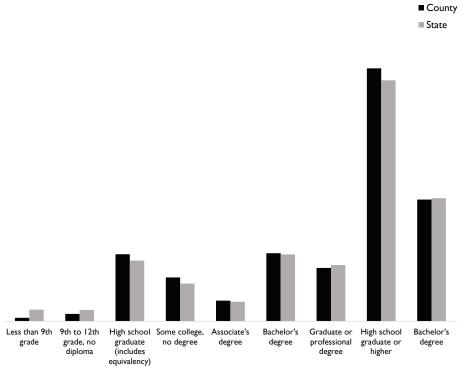
Source: American Community Survey 5-Year Estimates (\$1501)

According to the American Community Survey, Dukes County generally tracked the state in terms of educational attainment for people 25 and over. People ages 18-24 were less likely to have finished high school or completed higher education. It should be noted that much of this data (at the town, county, and state levels) has a wide margin of error.

| | Aqu. | Chil. | Edg. | Gos. | O.B. | Tis. | W.T | County | State |
|---|------|-------|-------|------|-------|-------|-------|--------|-----------|
| Population 18 to 24 | 30 | 93 | 457 | 0 | 190 | 184 | 129 | 1,083 | 698,602 |
| Less than high school graduate | 0 | 0 | 31.9 | 0 | 48.4 | 30.4 | 0.0 | 27.1 | 9.3 |
| High school graduate (includes equivalency) | 23.3 | 24.7 | 38.7 | 0 | 32.6 | 27.7 | 0.0 | 29.5 | 30.2 |
| Some college or associate's degree | 16.7 | 28 | 29.3 | 0 | 18.9 | 21.7 | 88.4 | 32.8 | 38.7 |
| Bachelor's degree or higher | 60 | 47.3 | 0 | 0 | 0.0 | 20.1 | 11.6 | 10.5 | 21.7 |
| | | | | | | | | | |
| Population 25 and over | 490 | 1,222 | 3,788 | 38 | 3,743 | 3,894 | 2,381 | 15,556 | 4,947,384 |
| Less than 9th grade | 0.6 | 0 | 3.9 | 7.9 | 0.0 | 1.5 | 0.0 | 1.3 | 4.4 |
| 9th to 12th grade, no diploma | 0.6 | 4.4 | 2.4 | 26.3 | 4.2 | 2.5 | 1.3 | 2.8 | 4.3 |
| High school graduate (includes equivalency) | 17.8 | 8.5 | 31 | 7.9 | 22.3 | 37.8 | 11.4 | 25.4 | 23.0 |
| Some college, no degree | 26.5 | 16.1 | 15 | 5.3 | 18.6 | 16.1 | 15.1 | 16.6 | 14.3 |
| Associate's degree | 2.7 | 7.3 | 10.3 | 5.3 | 10.8 | 2.9 | 8.7 | 7.8 | 7.4 |
| Bachelor's degree | 32.2 | 39 | 28.4 | 44.7 | 21.2 | 26.3 | 19.7 | 25.8 | 25.3 |
| Graduate or professional degree | 19.6 | 24.7 | 9 | 2.6 | 22.9 | 13.0 | 43.9 | 20.2 | 21.3 |
| High school graduate or higher | 98.8 | 95.6 | 93.7 | 65.8 | 95.8 | 96.0 | 98.7 | 95.8 | 91.3 |
| Bachelor's degree or higher | 51.8 | 63.7 | 37.4 | 47.4 | 44.2 | 39.3 | 63.5 | 46. I | 46.6 |
| | | | | | | | | | |





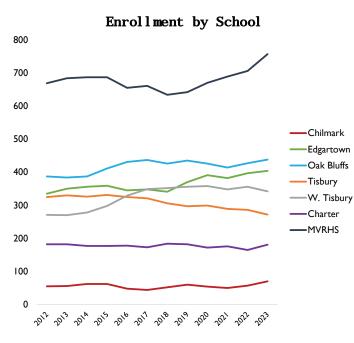


Enrollment by Island school, 2012-2023

Source: Massachusetts Department of Elementary and Secondary Education

Public school enrollment on the Vineyard increased about 8% between 2012 and 2022, compared to overall Island population growth of about 24% in the same period. The largest relative increase through 2023 was in Chilmark (27%), followed by West Tisbury (26%), Edgartown (21%), and Oak Bluffs the regional high school (both at 13%). The Tisbury School and Charter School saw declines of 16% and 1%, respectively.

| Year ending: | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Chilmark | 55 | 56 | 62 | 62 | 48 | 44 | 52 | 60 | 54 | 50 | 57 | 70 |
| Edgartown | 335 | 350 | 356 | 359 | 345 | 348 | 341 | 370 | 391 | 382 | 397 | 404 |
| Oak Bluffs | 387 | 384 | 387 | 411 | 43 I | 437 | 426 | 435 | 426 | 414 | 427 | 438 |
| Tisbury | 325 | 330 | 326 | 331 | 325 | 321 | 306 | 297 | 299 | 289 | 286 | 272 |
| W.Tisbury | 271 | 270 | 278 | 298 | 329 | 349 | 352 | 356 | 358 | 348 | 356 | 342 |
| Charter | 182 | 182 | 177 | 177 | 178 | 173 | 184 | 182 | 172 | 176 | 165 | 181 |
| MVRHS | 669 | 684 | 687 | 687 | 655 | 661 | 634 | 642 | 670 | 689 | 706 | 757 |
| Total | 2,224 | 2,256 | 2,273 | 2,325 | 2,311 | 2,333 | 2,295 | 2,342 | 2,370 | 2,348 | 2,394 | 2,464 |



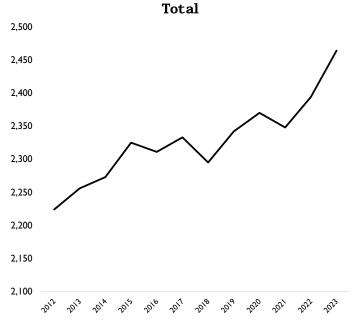




Photo by Kate Warner

Enrollment by gender (percent of school), 2023

Source: Massachusetts Department of Elementary and Secondary Education

| | Chilmark | Edg. | Oak Bluffs | Tisbury | W.Tisbury | MVRHS | Charter | Statewide |
|------------|----------|------|------------|---------|-----------|-------|---------|-----------|
| Female | 52.8 | 49.8 | 47.7 | 46.7 | 48.0 | 49.0 | 61.9 | 51.4 |
| Male | 47.1 | 50.2 | 52.3 | 53.3 | 52.0 | 50.9 | 38.1 | 48.4 |
| Non-binary | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.2 |

Selected student populations (percent of school), 2023

Source: Massachusetts Department of Elementary and Secondary Education

Compared to the Island at large, most of the seven public schools have a much higher proportion of Hispanic students, and show a more even distribution of Native American students among the towns. In Edgartown, Oak Bluffs, and Tisbury, the percentage of English language learners and students whose first language is not English also far exceeds the state average. These trends may reflect differences in reporting at schools compared to the general community, but they also suggest that the Island's racial and ethnic diversity is largely concentrated within a younger demographic. (See Population, page 3.)

| | Chilmark | Edgar- town | Oak Bluffs | Tisbury | W.Tis- bury | MVRHS | Charter | Mass. |
|-----------------------------------|----------|----------------|------------|---------|----------------|-------|---------|-------|
| First language not English | 0 | 40.8 | 33.1 | 56.6 | 11.4 | 29.1 | 4.4 | 25 |
| English language learner | 0 | 22.8 | 25.3 | 33.8 | 5 | 14.5 | 2.2 | 12.1 |
| Low-income | 22.9 | 54 | 41.3 | 56.6 | 31.3 | 40.2 | 43.I | 42.3 |
| Students with disabilities | 17.1 | 23.3 | 22.6 | 19.9 | 20.5 | 18.9 | 24.9 | 19.4 |
| High needs | 35.7 | 67.I | 61.9 | 71.7 | 46.2 | 56. I | 53.6 | 55.I |
| | | | | | | | | |
| Enrollment by race and ethnicity | | | | | | | | |
| African-American | 0 | 4.7 | 3.4 | 6.6 | 2 | 4.1 | 0.6 | 9.4 |
| Asian | 2.9 | 0.2 | 1.4 | 0.7 | 0.5 | 0.8 | 0.6 | 7.3 |
| Hispanic | 0 | 24.8 | 37.4 | 39 | 16.1 | 26.4 | 11.9 | 24.2 |
| White | 85.7 | 63.I | 51.8 | 47.8 | 71.9 | 62.4 | 76.I | 54.4 |
| Native American | 1.4 | 2.7 | 1.1 | 3.3 | 4.1 | 1.2 | 0.6 | 0.2 |
| Native Hawaiian, Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| Multi-Race, Non-Hispanic | 10 | 4.5 | 4.8 | 2.6 | 5.8 | 5.2 | 10.2 | 4.4 |
| | | | | | | | | |

Plans of high school graduates (percent of students), 2021-2022

Source: Massachusetts Department of Elementary and Secondary Education

| | MVRHS | Charter | Statewide |
|------------------------|-------|---------|-----------|
| 4-year private college | 32.4 | 14.3 | 27.9 |
| 4-year public college | 22.3 | 50 | 29.8 |
| 2-year private college | 0 | 7.1 | 0.5 |
| 2-year public college | 7.9 | 0 | 13.5 |
| Other post-secondary | 5.8 | 7.1 | 2.8 |
| Apprenticeship | 0.7 | 0 | 0.8 |
| Work | 28.1 | 14.3 | 14.4 |
| Military | 0.7 | 0 | 1.4 |
| Other | 0 | 7.1 | 2 |
| Unknown | 2.2 | 0 | 6.7 |



Photo by Liz Durkee

5. HOUSING AND REAL ESTATE

Dukes County at a Glance:

| Population (US Census, 2020): | 20,600 |
|--|-------------|
| Total Housing Units (US Census, 2020): | 17,530 |
| Occupied (Year-Round) Housing Units (US Census, 2020): | 8,932 |
| Median Household Income (American Community Survey, 2021): | \$77,392 |
| Median Family Income (Department of Housing and Community Development, 2022): ¹ | \$107,400 |
| Median Home Price (LINK MV, 2022):2 | \$1,485,560 |
| Median Single-Family Home Price (Banker & Tradesman, 2022): | \$1,295,000 |
| Housing Affordabilty Gap (Karen Sunnarborg Consulting): ³ | \$843,500 |

1For a family of four. 2Includes single- and multi-family homes, and condos. 3The difference between the median single-family home price according to Banker & Tradesman and what a median-income household can afford.

I

Total housing units, 1970-2020 Source: Decennial Census Counts, UMass Donahue Institute

| | 1970 | 1980 | 1990 | 2000 | 2010 | 2020 | Change 2010-2020 |
|------------|-------|-------|--------|--------|--------|--------|---------------------|
| Aquinnah | 183 | 306 | 329 | 463 | 503 | 478 | -5% |
| Chilmark | 631 | 831 | 1,178 | 1,409 | I,606 | 1,574 | -2% |
| Edgartown | 1,254 | 2,255 | 3,054 | 4,362 | 5,220 | 5,234 | 0.3% |
| Gosnold | 116 | 119 | 165 | 215 | 215 | 218 | 1.4% |
| Oak Bluffs | 1,535 | 2,306 | 3,172 | 3,822 | 4,346 | 4,429 | 1.9% |
| Tisbury | 1,330 | 2,089 | 2,386 | 2,719 | 3,094 | 3,226 | 4.3% |
| W.Tisbury | 461 | 913 | 1,321 | 1,846 | 2,204 | 2,371 | 7.6% |
| County | 5,510 | 8,819 | 11,605 | 16,836 | 17,188 | 17,530 | 2% |

Total Housing Units

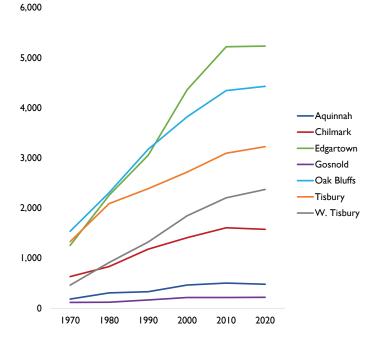




Photo by Rich Saltzberg

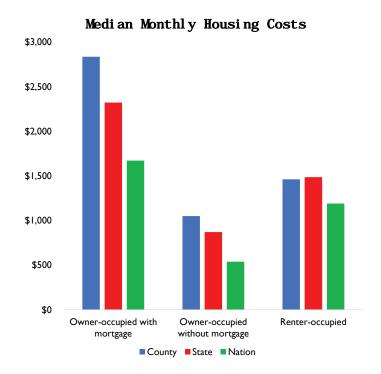


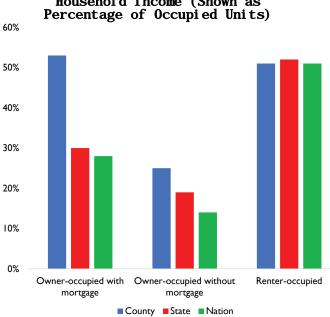
Island Housing Trust competed its Kuehn's Way affordable housing development in Tisbury in 2022. Photo courtesy of IHT.

Monthly housing costs for occupied units: County, state, nation, 2021

Source: American Community Survey 5-Year Estimates (DP04)

| | Median cost | Number of units where cost exceeds 30% of household income |
|---------------------------|--|--|
| OWNER-OCCUPIED | | |
| Units with a mortgage | \$2,836 / <mark>\$2,323</mark> / \$1,672 | 1,379 (53%) / 352,345 (30%) / 14,015,425 (28%) |
| Units without a mortgage | \$1,050 / <mark>\$871</mark> / \$539 | 610 (25%) / 107,235 (19%) / 4,411,588 (14%) |
| RENTER-OCCUPIED | | |
| All occupied rental units | \$1,462 / <mark>\$1,487</mark> / \$1,191 | 663 (51%) / 493,488 (52%) / 20,921,472 (51%) |
| TOTAL | NA | 2,652 (39%) / 953,068 (35%) / 39,348,485 (31%) |





Units Where Cost Exceeds 30% of Household Income (Shown as Percentage of Occupied Units) The American Community Survey considers a unit occupied if the residents will still be there at least two months from the survey date. Vacant units may be for rent, rented but not yet occupied, for sale, sold but not yet occupied, for seasonal/occasional/recreational use, for migrant workers, or vacant for other reasons. According to the ACS, the estimated number of occupied units in Dukes County increased slightly between 2011 and 2021, with the largest shifts in Gosnold and Aquinnah. According to the 2020 Census, about 49% of housing units in Dukes County are vacant for part of the year, marking an 8% decrease since 2010. In terms of occupied housing, Tisbury could be considered the most year-round community on the Island, followed by West Tisbury and Oak Bluffs.

Occupied housing units by town, 2011–2021

Source: American Community Survey 5-Year Estimates (DP04), DEC

| Occupied housing units (percent of total) 2011-2021 |
|---|
| Source:American Community Survey 5-Year Estimates (DP04), DEC |

| | 2011 | 2016 | 2021 | 2010 DEC | 2020 DEC |
|------------|-------|-------|-------|-------------|-------------|
| Aquinnah | 92 | 196 | 223 | 145 | 204 |
| Chilmark | 302 | 342 | 519 | 398 | 538 |
| Gosnold | 63 | 31 | 22 | 39 | 35 |
| Edgartown | 1,466 | 1,394 | 1,401 | 1,794 | 2,191 |
| Oak Bluffs | 1,429 | 1,849 | 1706 | 1,989 | 2,316 |
| Tisbury | 1,290 | 1,371 | 1,888 | 1,806 | 2,139 |
| W.Tisbury | 926 | 951 | 982 | 1,197 | 1,509 |
| County | 5,568 | 6,134 | 6,801 | 7,368 | 8,932 |

Owner vs. renter-occupied units by town, 2021

Source: American Community Survey 5-Year Estimates (DP04)

| | Owner- occupied | Renter- occupied |
|------------|--------------------|---------------------|
| Aquinnah* | 192 (86%) | 31 (14%) |
| Chilmark | 452 (87%) | 67 (13%) |
| Edgartown | I,030 (74%) | 371 (27%) |
| Gosnold | 13 (59%) | 9 (41%) |
| Oak Bluffs | I,276 (72%) | 490 (28%) |
| Tisbury | 1,162 (62%) | 726 (39%) |
| W.Tisbury | 862 (88%) | 120 (12%) |
| County | 4,987 (73%) | 1,814 (27%) |
| State | 1,742,436 (63%) | 1,016,582 (37%) |

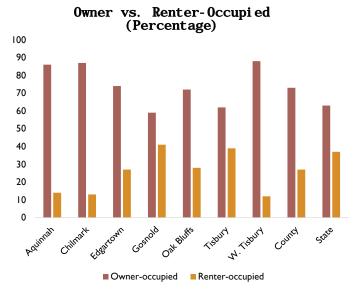
*Includes Wampanoag Tribal Housing.

Vacant units by town as percentage of total, 2011–2021

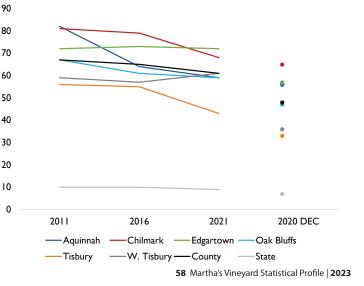
Source: American Community Survey 5-Year Estimates (DP04), 2020 DEC

| | 2011 | 2016 | 2021 | 2010 DEC | 2020 DEC |
|------------|------|------|------|-------------|-------------|
| Aquinnah | 82 | 64 | 59 | 71 | 57 |
| Chilmark | 81 | 79 | 68 | 75 | 66 |
| Gosnold | | | | 82 | 84 |
| Edgartown | 72 | 73 | 72 | 66 | 58 |
| Oak Bluffs | 67 | 61 | 59 | 54 | 48 |
| Tisbury | 56 | 55 | 43 | 58 | 34 |
| W.Tisbury | 59 | 57 | 61 | 46 | 37 |
| County | 67 | 65 | 61 | 57 | 49 |
| State | 10 | 10 | 9 | 9 | 8 |

| | 2011 | 2016 | 2021 | 2010 DEC | 2020 DEC |
|------------|------|------|------|-------------|-------------|
| Aquinnah | 18 | 36 | 41 | 28 | 43 |
| Chilmark | 19 | 21 | 32 | 25 | 34 |
| Gosnold | 26 | 15 | 11 | 18 | 16 |
| Edgartown | 28 | 27 | 28 | 34 | 42 |
| Oak Bluffs | 34 | 39 | 41 | 46 | 52 |
| Tisbury | 44 | 45 | 57 | 58 | 66 |
| W.Tisbury | 41 | 43 | 39 | 54 | 64 |
| County | 33 | 35 | 39 | 43 | 51 |
| State | 90 | 90 | 91 | 91 | 92 |



Vacant Units (Percentage)

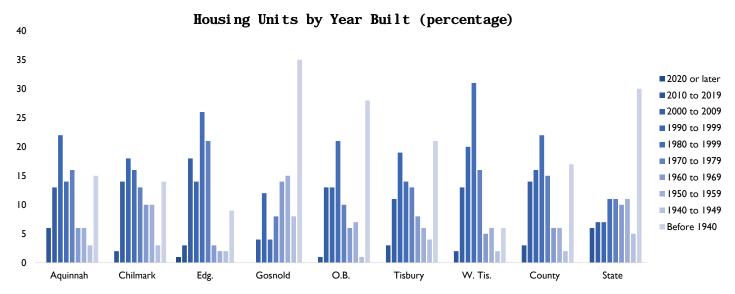


Percentage of total housing units by town and year built, 2021

Source: American Community Survey 5-Year Estimates (S2504)

Compared to the state, a much larger percentage of units in Dukes County were built between 1980 and 2009, a period of rapid population growth on the Island.

| | Aquinnah | Chilmark | Edg. | Gosnold | O.B. | Tisbury | W.Tis. | County | State |
|---------------|----------|----------|-------|---------|-------|---------|--------|--------|-----------|
| Total units | 538 | 1,634 | 5,068 | 196 | 4,301 | 3,294 | 2,498 | 17,529 | 3,017,772 |
| 2020 or later | 0 | 0 | I | 0 | 0 | 0 | 0 | 0 | 0 |
| 2010 to 2019 | 6 | 2 | 3 | 0 | I | 3 | 2 | 3 | 6 |
| 2000 to 2009 | 13 | 14 | 18 | 4 | 13 | 11 | 13 | 14 | 7 |
| 1990 to 1999 | 22 | 18 | 14 | 12 | 13 | 19 | 20 | 16 | 7 |
| 1980 to 1999 | 14 | 16 | 26 | 4 | 21 | 14 | 31 | 22 | 11 |
| 1970 to 1979 | 16 | 13 | 21 | 8 | 10 | 13 | 16 | 15 | 11 |
| 1960 to 1969 | 6 | 10 | 3 | 14 | 6 | 8 | 5 | 6 | 10 |
| 1950 to 1959 | 6 | 10 | 2 | 15 | 7 | 6 | 6 | 6 | 11 |
| 1940 to 1949 | 3 | 3 | 2 | 8 | I | 4 | 2 | 2 | 5 |
| Before 1940 | 15 | 14 | 9 | 35 | 28 | 21 | 6 | 17 | 30 |





Source: American Community Survey 5-Year Estimates (SII01, DP04)

Household size may change along with family size and housing costs, or as existing relatives (including older adults) or others move in and out of a house. Between 2011 and 2021, the average household size in Dukes County remained about the same.

| | 2011 | 2016 | 2021 |
|------------|--------------------|--------------------|---------------------------------|
| Aquinnah | 5.07 (5.92 / 4.75) | 3.04 (2.41 / 3.46) | 3.10 (5.84 / 2.66) |
| Chilmark | 2.62 (3.36 / 2.47) | 3.54 (2.51 / 3.79) | 2.79 (2.31 / 2.88) |
| Gosnold | 2.90 (1.59 / 4.45) | 1.71 (1.14 / 1.88) | I.73 (UA / 2.23) |
| Edgartown | 2.70 (3.58 / 2.51) | 2.99 (2.74 / 3.06) | 3.58 (4.09 / <mark>3.4</mark>) |
| Oak Bluffs | 3.05 (2.07 / 3.25) | 2.45 (1.71 / 2.66) | 2.94 (2.08 / 3.27) |
| Tisbury | 3.01 (2.21 / 3.31) | 2.94 (1.84 / 3.46) | 2.49 (2.16 / 2.69) |
| W.Tisbury | 2.69 (2.62 / 2.70) | 2.39 (3.31 / 2.23) | 3.00 (3.48 / 2.93) |
| County | 2.90 (2.68 / 2.95) | 2.75 (2.19 / 2.92) | 2.95 (2.68 / 3.04) |

Housing tenure by town (renter- vs. owner-occupied units), 2011–2021 Source: American Community Survey 5-Year Estimates (DP04)

| | (<i>)</i> | | |
|----------------------|------------|-----------|-----------|
| | 2011 | 2016 | 2021 |
| Aquinnah | | | |
| Total occupied units | 92 | 196 | 223 |
| Renters | 25 | 78 | 31 |
| Owners | 67 | 118 | 192 |
| Chilmark | | | |
| Total occupied units | 302 | 342 | 519 |
| Renters | 50 | 68 | 67 |
| Owners | 252 | 274 | 452 |
| Edgartown | | | |
| Total occupied units | I,466 | 1,394 | 1,401 |
| Renters | 265 | 1,091 | 371 |
| Owners | 1,201 | 303 | 1,030 |
| Gosnold | | | |
| Total occupied units | 63 | 31 | 22 |
| Renters | 34 | 7 | 9 |
| Owners | 29 | 24 | 13 |
| Oak Bluffs | | | |
| Total occupied units | 1,429 | 1,849 | 1,766 |
| Renters | 239 | 403 | 490 |
| Owners | 1,190 | 1,446 | 1,276 |
| Tisbury | | | |
| Total occupied units | 1,290 | 1,371 | 1,888 |
| Renters | 358 | 441 | 726 |
| Owners | 932 | 930 | 1,162 |
| W.Tisbury | | | |
| Total occupied units | 926 | 951 | 982 |
| Renters | 47 | 139 | 120 |
| Owners | 879 | 812 | 862 |
| County | | | |
| Total occupied units | 5,568 | 6,135 | 6,801 |
| Renters | 1,018 | 1,439 | 1,814 |
| Owners | 4,550 | 4,695 | 4,987 |
| State | | | |
| Total occupied units | 2,522,409 | 2,558,889 | 2,714,448 |
| Renters | 917,131 | 970,146 | 1,020,041 |
| Owners | 1,604473 | 1,588,743 | 1,694,407 |
| | | | |

| Housing type and age of householder by town (renter vs. owner-occupied units; percent of total): County, 2016/2021 |
|--|
| Source:American Community Survey 5-Year Estimates (\$2501) |

| | Total occupied units | Owner-occupied | Renter-occupied |
|---------------------------------------|----------------------|----------------|-----------------|
| Family households | 61.8 / 61.6 | 67.3 / 67.2 | 43.8 / 46.1 |
| Married-couple family | 51.3 / 48.3 | 57.4 / 55.8 | 31.3 / 27.6 |
| Householder 15–34 years | 4.3 / 2.1 | 1.5 / 0.5 | 13.4 / 6.5 |
| Householder 35–64 years | 31.8 / 25.8 | 37.4 / 28.5 | 13.5 / 18.2 |
| Householder 65 years and over | 15.2 / 20.4 | 18.6 / 26.8 | 4.4 / 2.9 |
| Other family | 10.5 / 13.2 | 9.9 / 11.3 | 12.6 / 18.5 |
| Male householder, no spouse present | I / 4.2 | 0.8 / 4.6 | 1.8 / 3.1 |
| Householder 15–34 years | 0 / 0.1 | 0 / 0.2 | 0 / 0 |
| Householder 35–64 years | 0.7 / 2.7 | 0.4 / 2.6 | 1.8 / 3.1 |
| Householder 65 years and over | 0.3 / 1.3 | 0.4 / 1.8 | 0 / 0 |
| Female householder, no spouse present | 9.5 / 9.1 | 9.1 / 6.8 | 10.8 / 15.4 |
| Householder 15–34 years | 1.1 / 0.1 | I / 0 | 1.1 / 0.4 |
| Householder 35–64 years | 7.3 / 6.1 | 6.6 / 3.4 | 9.7 / 13.5 |
| Householder 65 years and over | 1.1 / 2.9 | 1.4 / 3.3 | 0/1.5 |
| Non-family households | 38.2 / 38.4 | 32.7 / 32.8 | 56.2 / 53.9 |
| Householder living alone | 32.6 / 32.1 | 27.2 / 25.9 | 50 / 49.1 |
| Householder 15–34 years | 4.7 / 0.7 | 0.9 / 0.4 | 17.1 / 1.8 |
| Householder 35–64 years | 14.8 / 14.6 | 13.4 / 7.9 | 19.2 / 33 |
| Householder 65 years and over | 13.1 / 16.8 | 12.9 / 17.7 | 13.7 / 14.3 |
| Householder not living alone | 5.6 / 6.3 | 5.5 / 6.9 | 6.1 / 4.8 |
| Householder 15–34 years | 0.9 / 0.7 | 0.3 / 0 | 2.9 / 2.5 |
| Householder 35–64 years | 3.2 / 2.8 | 3.2 / 3.5 | 3.2 / 0.8 |
| Householder 65 years and over | 1.5 / 2.9 | 1.9 / 3.3 | 0/1.5 |

Household income (renter- vs. owner-occupied units; percent of total): County, 2016/2021 Source: American Community Survey 5-Year Estimates (S2503)

| | Occupied units | Owner-occupied | Renter-occupied |
|----------------------------------|---------------------|---------------------|---------------------|
| Total units (same as households) | 6,134 / 6,801 | 4,695 / 4,987 | 1,439 / 1,814 |
| Less than \$5,000 | 3.6 / 4 | 3.9 / 1.6 | 2.7 / 10.3 |
| \$5,000 to \$9,999 | 1.9 / 1.4 | 1.3 / 0.7 | 4.1 / 3.3 |
| \$10,000 to \$14,999 | 3.5 / 2.4 | 2.4 / 1.1 | 6.9 /6.1 |
| \$15,000 to \$19,999 | 4.2 / 2.4 | 3.8 / 1.2 | 5.6 / 5.7 |
| \$20,000 to \$24,999 | 2.4 / 2.3 | 2 / 3.1 | 3.6 / 0.2 |
| \$25,000 to \$34,999 | 12.3 / 6.9 | 12.8 / 5 | 10.6 / 12.2 |
| \$35,000 to \$49,999 | .7 / 0. | 8.4 / 8.5 | 22.6 / 14.7 |
| \$50,000 to \$74,999 | 15.2 / 18.7 | 13.9 / 18.9 | 19.3 / 18.1 |
| \$75,000 to \$99,999 | 13.1 / 10.3 | 15 / 11.6 | 6.9 / 7 |
| \$100,000 to \$149,999 | 18 / 16.9 | 18.7 / 19 | 15.7 / 11.2 |
| \$150,000 or more | 14.1 / 24.6 | 17.8 / 29.4 | 2 / 11.2 |
| Median household income | \$63,534 / \$77,392 | \$77,482 / \$95,684 | \$46,049 / \$44,560 |

Single-family building permits issued by year and town, 2015-2022¹

Source: Town building departments and town reports, MVC data

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|------------|------|------|------|------|------|------|------|------|
| Aquinnah | 2 | 3 | 8 | I | I | 4 | 2 | 4 |
| Chilmark | 17 | 16 | 16 | 11 | 15 | 11 | 13 | 9? |
| Edgartown | 67 | 42 | 56 | 55 | 61 | 40 | 71 | 68 |
| Oak Bluffs | 21 | 27 | 28 | 25 | 37 | 18 | 19 | 22 |
| Tisbury | 16 | 24 | 18 | 18 | 19 | 17 | 26 | 16 |
| W.Tisbury | 15 | 11 | 14 | 13 | 18 | 15 | 14 | 19 |

¹ Does not include alterations or additions

Affordable housing by town and type, 2023 (percentage of total housing stock shown in blue)

Source: MA Executive Office of Housing and Livable Communities

Affordable housing is generally defined as housing that does not cost more than 30% of a household's total income. The term also often applies to housing that affordable to low- or moderate-income households (earning up to 80% of the area median income as defined by the Department of Housing and Urban Development).²

The Subsidized Housing Inventory (SHI) is the state's official list of low- and moderate-income housing in an area, defined by the state as units that are deed-restricted as affordable to households earning less than 80% of the area median income (AMI). It is typically used for purposes related to Chapter 40B, the state's comprehensive permit law. As of 2023, the Vineyard had 383 SHI units on the list. Aquinnah had 33 SHI units (including tribal housing), which accounted for about 15% of its overall housing stock, making it the only town in Dukes County to meet the 10% SHI goal defined by Chapter 40B. It should be noted that the Island towns have additional deed-restricted inventory at AMI levels of 80-150%, which are not included in the official inventory.

| | Year-round housing units | State SHI | Percent of total housing stock |
|-------------|--------------------------|-----------|--------------------------------|
| Aquinnah | 215 | 33 | 15.35% |
| Chilmark | 592 | 0 | 0% |
| Edgartown | 2,440 | 73 | 2.99% |
| Gosnold | 39 | 0 | 0% |
| Oak Bluffs | 2,518 | 118 | 4.69% |
| Tisbury | 2,360 | 136 | 5.76% |
| W.Tisbury | 1,619 | 23 | 1.42% |
| County | 9,783 | 383 | 3.91 |
| State Total | 2,889,863 | 279,736 | 9.68% |



A new apartment at Kuehn's Way in Tisbury. Photo courtesy of Island Housing Trust.

² In 2005, under MGL Title 17, Section 38D, Dukes and Nantucket counties were provided allowance by the state to define "low and moderate" as up to 150% of AMI, which allowed town housing trusts and the Dukes County Regional Housing Authority to serve households with up to 150% AMI. However, this has not redefined state or Federal definitions of "low and moderate," which remain at up to 80% of AMI.

Median rent by town, 2011-2021 (adjusted for inflation)¹

Source: American Community Survey 5-Year Estimates (DP04)

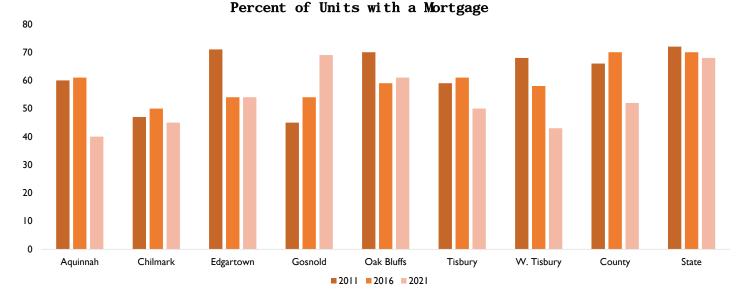
The figures below from the ACS have been adjusted for inflation based on the 2021 dollar value. As of 2021, the median rent in Dukes County was about equal to the statewide median. However, Dukes County has a lower vacancy rate than statewide (about 1.9% compared to 4% as of 2021), which increases the burden on renters.



Number and percent of occupied housing units with a mortgage, by town, 2011-2021

Source: American Community Survey 5-Year Estimates (DP04)

| | 2011 | 2016 | 2021 |
|------------|-----------------|-----------------|-----------------|
| Aquinnah | 40 (60%) | 72 (61%) | 76 (40%) |
| Chilmark | 118 (47%) | 137 (50%) | 205 (45%) |
| Edgartown | 848 (71%) | 586 (54%) | 557 (54%) |
| Gosnold | 13 (45%) | 13 (54%) | 9 (69%) |
| Oak Bluffs | 836 (70%) | 856 (59%) | 783 (61%) |
| Tisbury | 547 (59%) | 570 (61%) | 581 (50% |
| W.Tisbury | 594 (68%) | 468 (58%) | 368 (43%) |
| County | 2,996 (66%) | 2,702 (70%) | 2,579 (52%) |
| State | 1,157,325 (72%) | 1,115,649 (70%) | 1,159,423 (68%) |



Cost burden: Percent of Households paying 30% or more of income on housing, by town, 2021*

Source: American Community Survey 5-Year Estimates (S2503)

Black = Percent of all occupied units

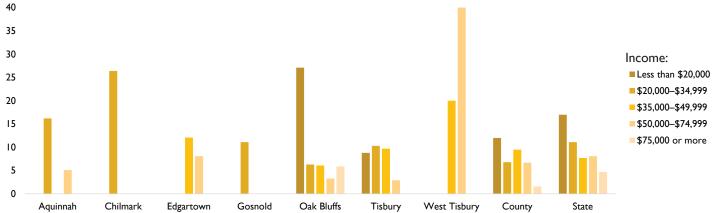
40

Blue = Percent of renter-occupied units

Orange = Percent of owner-occupied units

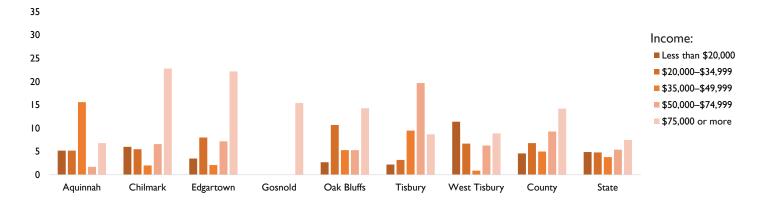
| Income: | Less than \$20,000 | \$20,000–\$34,999 | \$35,000–\$49,999 | \$50,000-\$74,999 | \$75,000 or more |
|------------------------------------|------------------------------|---------------------------------|-------------------|------------------------------------|-------------------|
| Aquinnah (223 occupied units) | 4.5 (0 / 5.2) | 2.2 (16.1 / 5.2) | 13.5 (0 / 15.6) | 8.5 (5.1 / 1.7) | 5.8 (0 / 6.8) |
| Chilmark (519 occupied units) | 5.2 (0 / 6) | 6.9 (16.4 / 5.5) | I.7 (0 / 2) | 5.8 (0 / 6.6) | 19.8 (0 / 22.8) |
| Edgartown (1,401 occupied units) | 4 (0 / 3.5) | 6.2 (0 / 8) | 4.8 (12.1 / 2.1) | 7.4 (8.1 / 7.2) | 16.3 (0 / 22.2) |
| Gosnold (22 occupied units) | 0 (0 / 0) | 4.5 (11.1 / 0) | 0 (0 / 0) | 0 (0 / 0) | 9.1 (0 / 15.4) |
| Oak Bluffs (1,766) occupied units) | 9.5 (27.1 / 2.7) | 9.5 (6.3 / 10.7) | 5.5 (6.1 / 5.3) | 4.7 (3.3 / 5.3) | 11.9 (5.9 / 14.3) |
| Tisbury (1,888 occupied units) | 4.7 (8.8 / 2.2) | 5.9 (10.3 / 3.2) | 9.7 (10.1 / 9.5) | I 3.2 (2.9 / 19.7) | 5.3 (0 / 8.7) |
| West Tisbury (982 occupied units) | 10 (0 / 11.4) | 5.9 (0 / 6.7) | 3.3 (20 / 0.9) | 10.4 (40 / 6.3) | 7.8 (0 / 8.9) |
| County (6,801 occupied units) | 6.6 (12 / 4.6) | 6.8 (<u>6.8</u> / <u>6.8</u>) | 6.2 (9.5 / 5) | 8.6 (6.7 / 9.3) | 10.8 (1.6 / 14.2) |
| State (2,759,018 occupied units) | 9.3 (17 / <mark>4</mark> .9) | 7.1 (11.1 / 4.8) | 5.2 (7.7 / 3.8) | 6.4 (8.1 / 5.4) | 6.5 (4.7 / 7.5) |

*Monthly housing cost as percentage of household income in last 12 months; applies only to occupied units.



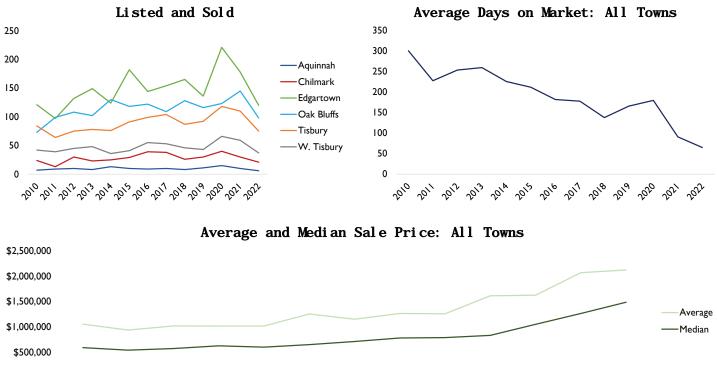
Percent of Cost-Burdened Households: Renter-Occupied





Home sales: Listings (sold), average and median price, days on market by town, 2010-2022* Source: LINK Martha's Vineyard

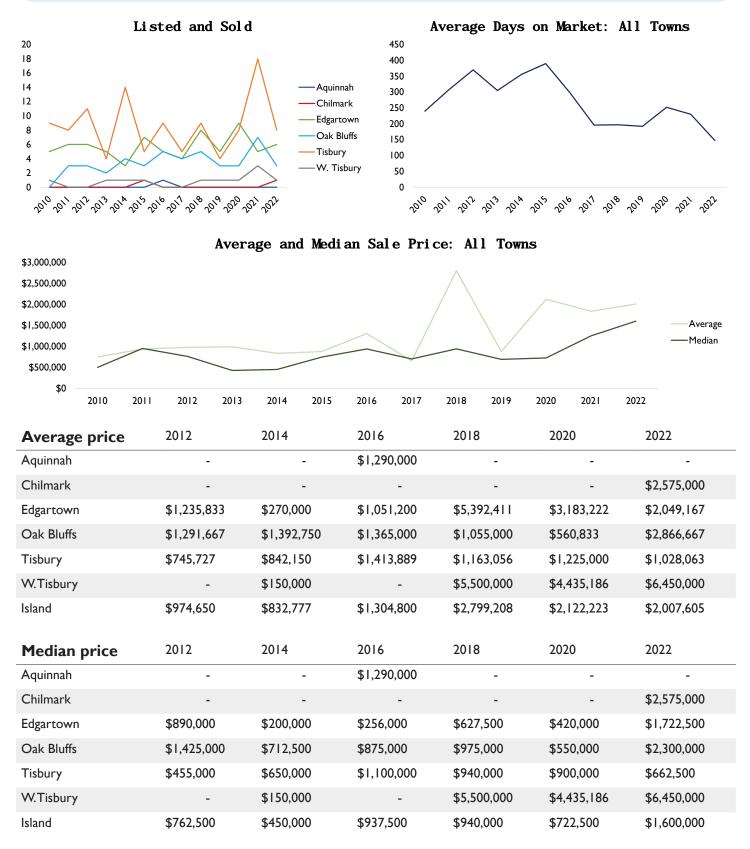
The Vineyard's housing market, already on an upswing, escalated even more during the Covid-19 pandemic. The number of home sales increased in every Island town in 2020 but has declined since then. The average home price has grown 69% since 2018, to about \$2.12 million; and the median home price about 88%, to \$1.49 million. Meanwhile, the average number of days on market has declined significantly since 2012, further indicating an increasing demand for residential properties.



| \$0 | | | | | | | | | | | | | | |
|------------|-------|------|----------|------|---------|------|---------|--------|--------------|-------|-------|--------|----------|-----|
| • - | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | |
| Average | price | | 2012 | | 2014 | | 2016 | | 2018 | | 202 | D | 2022 | |
| Aquinnah | | | \$1,023, | 890 | \$1,243 | ,038 | \$1,275 | 5,278 | \$1,59 | 3,894 | \$1,8 | 48,462 | \$1,770, | 000 |
| Chilmark | | | \$2,266, | 237 | \$1,598 | ,020 | \$2,637 | 7,955 | \$2,34 | 2,212 | \$2,3 | 03,427 | \$3,838, | 286 |
| Edgartown | | | \$1,292, | 778 | \$1,391 | ,212 | \$1,408 | 3,996 | \$1,69 | 3,705 | \$2,0 | 74,582 | \$2,560, | 319 |
| Oak Bluffs | | | \$482,9 | 5 | \$561,8 | 05 | \$653,4 | 429 | \$758, | 512 | \$98 | 3,344 | \$1,518, | 019 |
| Tisbury | | | \$649,86 | 58 | \$991,5 | 35 | \$804,2 | 259 | \$893, | ,141 | \$1,2 | 28,094 | \$1,578, | 133 |
| W.Tisbury | | | \$1,272, | 511 | \$986,7 | 43 | \$1,127 | 7,370 | \$1,09 | 9,592 | \$1,5 | 79,302 | \$2,466, | 689 |
| Island | | | \$1,017, | 576 | \$1,015 | ,966 | \$1,150 |),85 I | \$1,25 | 7,574 | \$1,6 | 25,768 | \$2,124, | 243 |
| Median p | orice | | 2012 | | 2014 | | 2016 | | 2018 | | 2020 | C | 2022 | |
| Aquinnah | | | \$749,45 | 50 | \$1,100 | ,000 | \$1,150 | 0,000 | \$1,32 | 8,075 | \$1,4 | 80,000 | \$1,187, | 500 |
| Chilmark | | | \$1,821, | 250 | \$1,460 | ,000 | \$1,550 | 0,000 | \$1,54 | 5,000 | \$1,6 | 88,313 | \$3,400, | 000 |
| Edgartown | | | \$736,75 | 50 | \$719,2 | 50 | \$910,7 | 750 | \$890, | ,000 | \$1,4 | 30,000 | \$1,675, | 000 |
| Oak Bluffs | | | \$362,60 | 00 | \$453,3 | 25 | \$550,5 | 500 | \$632 | ,498 | \$84 | 0,000 | \$1,124, | 500 |
| Tisbury | | | \$430,00 | 00 | \$586,5 | 00 | \$572,7 | 750 | \$680 | ,000 | \$82 | 2,500 | \$1,100, | 000 |
| W.Tisbury | | | \$965,00 | 00 | \$667,5 | 00 | \$779, | 500 | \$944 | ,500 | \$1,2 | 57,500 | \$1,750, | 000 |
| Island | | | \$572,50 | 00 | \$600,0 | 00 | \$711,0 | 000 | \$788 | ,500 | \$1,0 | 50,000 | \$1,485, | 560 |

Commercial real estate sales: Listings (sold), average and median price, days on market by town, 2010–2022 Source: LINK Martha's Vineyard

The number of commercial property sales on the Island is much smaller than the number of residential sales (the Island averages about 19 commercial sales per year), but both markets follow some similar trends. Total commercial sales, along with average and median sale prices, have increased in recent years, including an uptick during the Covid-19 pandemic, while the average number of days on market has declined.



6. TRANSPORTATION

Ferry travel: The number of vehicles traveling to and from the Vineyard on Steamship Authority (SSA) ferries has increased by about 19%, and the number of passengers by about 9%, in the last decade. During the Covid-19 pandemic in 2020, passenger, automobile, and truck traffic on SSA ferries declined by about 30%, 11%, and 10% respectively, compared to the previous year.

Passengers, automobiles and trucks carried to and from Martha's Vineyard on SSA ferries, 2012-2022* Source: Steamship Authority monthly business reports

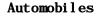
| | 2012 | 2014 | 2016 | 2018 | 2020 | 2022 |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Passengers | 2,244,441 | 2,287,999 | 2,466,757 | 2,435,308 | 1,687,833 | 2,327,346 |
| Automobiles | 455,894 | 466,900 | 496,785 | 502,117 | 449,380 | 510,862 |
| Trucks | 42,617 | 47,344 | 50,343 | 53,526 | 47,999 | 59,233 |
| Total vehicles | 498,511 | 514,244 | 547,128 | 555,643 | 497,379 | 570,095 |

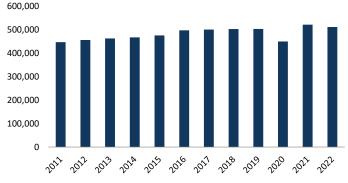




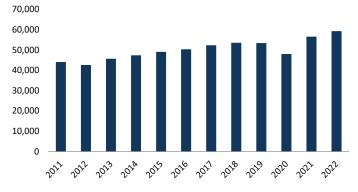
Passengers











*In 2009, the SSA no longer classified any non-commercial trucks of any length as automobiles. In 2021, the SSA began reclassifying trucks less than 20' as automobiles and restated all previous years to reflect the same. - SSA

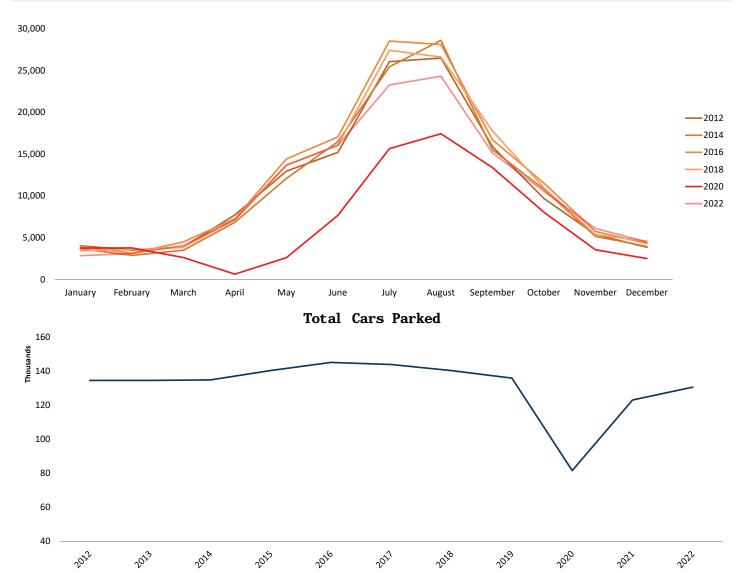
67 Martha's Vineyard Statistical Profile | 2023

Cars parked at the Woods Hole, Falmouth, and Cataumet lots (for Vineyard ferries), 2012-2022

Source: Steamship Authority monthly business reports

The number of vehicles parked at the Woods Hole, Falmouth, and Cataumet lots, which serve Vineyard travelers, declined significantly in 2020 due to the pandemic. Numbers have since rebounded, especially in the spring and fall, although summer parking in 2022 remained below 2019 levels.

| | 2012 | 2014 | 2016 | 2018 | 2020 | 2022 |
|---------------------|----------------|-----------------|-----------------|-----------------|----------------|-----------------|
| January | 4,030 | 3,667 | 3,944 | 3,418 | 3,753 | 2,844 |
| February | 3,487 | 2,883 | 3,130 | 3,577 | 3,765 | 3,092 |
| March | 3,865 | 3,489 | 4,482 | 3,844 | 2,615 | 4,059 |
| April | 7,726 | 6,842 | 7,274 | 7,158 | 628 | 7,125 |
| May | 12,952 | 12,078 | 14,418 | 13,640 | 2,600 | 13,696 |
| June | 15,207 | 16,476 | 17,043 | 16,073 | 7,668 | 16,028 |
| July | 26,056 | 25,439 | 28,519 | 27,410 | 15,644 | 23,263 |
| August | 26,479 | 28,607 | 28,094 | 26,602 | 17,425 | 24,302 |
| September | 15,899 | 15,514 | 16,710 | 17,761 | 13,378 | 15,132 |
| October | 9,683 | 10,794 | 11,519 | 10,970 | 8,038 | 10,535 |
| November | 5,384 | 5,149 | 5,740 | 5,352 | 3,547 | 6,095 |
| December | 3,836 | 3,941 | 4,304 | 4,568 | 2,496 | 4,485 |
| October November | 9,683 5,384 | 10,794 5,149 | 11,519 5,740 | 10,970 5,352 | 8,038 3,547 | 10,535 6,095 |



Number of excursion automobiles by month and year: Martha's Vineyard, 2012-2022

Source: Steamship Authority monthly business reports

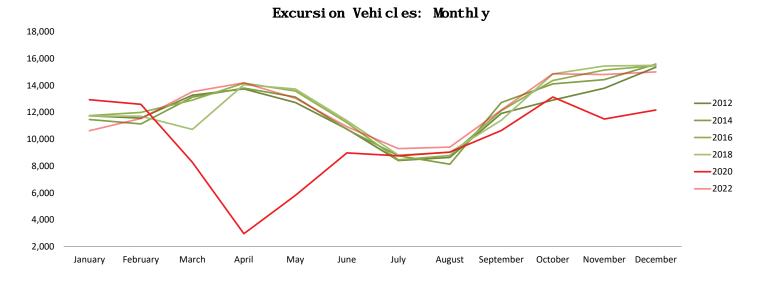
Excursion fares for vehicles are those purchased by Island residents for a discount. The rides must be round-trip and originate on the Island. The total number of excursion fares drops in summer, perhaps due to less space on the ferries or more residents being occupied with work on the Island, and peak in December. Excursion fares declined 24% in 2020, reaching a low of 2,962 in April, as a result of the pandemic. Annual excursion fares have since rebounded to pre-pandemic levels, including in the summer.

| | 2012 | 2014 | 2016 | 2018 | 2020 | 2022 |
|-----------|----------------------------|-----------------------------|-----------------------------|---------------|---------------|---------------|
| January | 11,745 | 11,467 | 11,756 | 11,736 | 12,942 | 10,635 |
| February | 11,567 | 11,136 | 11,994 | 11,713 | 12,595 | 11,540 |
| March | 13,275 | 13,133 | 12,912 | 10,727 | 8,279 | 13,539 |
| April | 13,745 | 13,801 | 14,172 | 14,063 | 2,962 | 14,195 |
| May | 12,728 | 13,143 | 13,590 | 13,737 | 5,817 | 13,055 |
| June | 10,758 | 10,736 | 11,235 | 11,384 | 8,978 | 10,933 |
| July | 8,415 | 8,768 | 8,464 | 8,815 | 8,763 | 9,297 |
| August | 8,647 | 8,136 | 8,787 | 9,022 | 9,039 | 9,408 |
| September | 11,923 | 12,730 | 12,125 | 11,414 | 10,649 | 12,175 |
| October | 12,913 | 14,118 | 14,370 | 4,86 | 13,143 | 14,870 |
| November | 13,795 | 14,433 | 15,154 | 15,446 | 11,503 | 14,818 |
| December | 15,363 | 15,592 | 15,477 | 15,503 | 12,176 | 15,011 |
| Total | 144,874 <mark>(29%)</mark> | 147,193 (<mark>32%)</mark> | 150,036 (<mark>30%)</mark> | 148,421 (30%) | 116,846 (26%) | 149,476 (29%) |

Blue = percent of total automobile trips

2027

2022



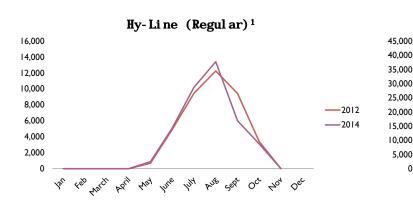
Total Excursion Vehicles

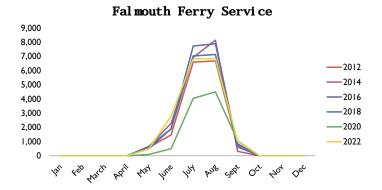


Other licensed ferries: Monthly passengers, 20012-2022 (2-year intervals)

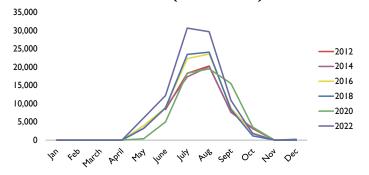
Source: Steamship Authority monthly business reports

In addition to the Steamship Authority, three other licensed ferry companies serve the Vineyard, but only for passengers, and typically not in the winter. Between 2012 and 2022, the Hy-Line high-speed ferry out of Hyannis saw the most growth in ridership (141%), followed by the SeaStreak New Bedford service (58%), and Falmouth Ferry Service (12%). SeaStreak also saw an 84% decline in ridership for its New York City service in the same period. Hy-Line, SeaStreak, and Falmouth Ferry saw considerable drops in service as a result of Covid-19 in 2020 (49%, 27%, and 53%, respectively). Ridership on all but the New York City route had rebounded as of 2022.

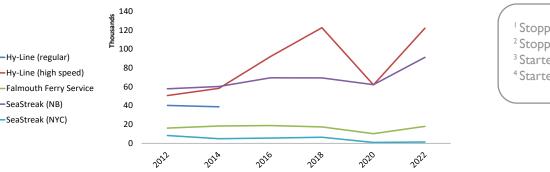




SeaStreak (New Bedford)³

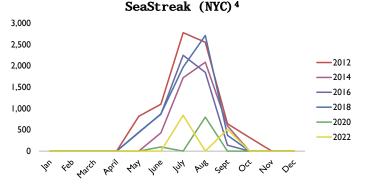


Annual Totals



40.000 35.000 -2012 30.000 25.000 -2016 20,000 ____2018 15.000 10.000 -2020 5.000 -2022 0 feb march Paril 4127 Hey Oec New England Fast Ferry² 4,500 4,000 3,500 3,000 2,500 2,000 -2012 1,500 1,000 500 0 her deg there, being they the hey trap case Oc Log Oc

Hy-Line (High-Speed)

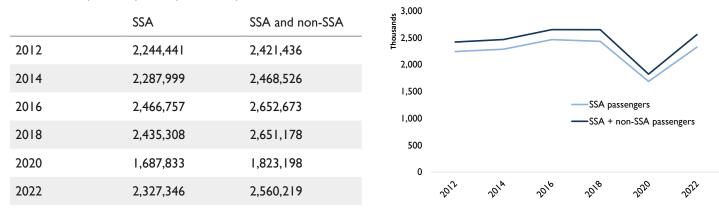




⁴Started running in 2010

Total ferry passengers (SSA and non-SSA), 2012-2022 (2-year intervals)

Source: Steamship Authority monthly business reports



Air travel: As with the Steamship Authority, the Martha's Vineyard Airport sees most of its travel business in the summer, with only Cape Air operating year-round. The total number of passenger boardings (enplanements) grew about 38% between 2012 and 2022, despite a significant decline during the pandemic. At the same time, the total number of takeoffs (operations) has declined by 37% in the last 22 years, reflecting a similar trend in the national aviation industry.

Enplanements by month, 2018-2022*

| | Source: Martha's Vineyard Airport | | | | | | | |
|-------|-----------------------------------|--------|-------|--------|--------|--|--|--|
| | 2018 | 2019 | 2020 | 2021 | 2022 | | | |
| Jan | 502 | 446 | 604 | 249 | 394 | | | |
| Feb | 534 | 360 | 583 | 204 | 456 | | | |
| March | 590 | 467 | 266 | 374 | 600 | | | |
| April | 679 | 473 | 26 | 542 | 781 | | | |
| May | 1,728 | 1,689 | 102 | 2,299 | 2,012 | | | |
| June | 5,502 | 5,239 | 718 | 9,405 | 10,876 | | | |
| July | 10,811 | 14,282 | 4,158 | 17,030 | 18,029 | | | |
| Aug | 10,884 | 17,043 | 4,406 | 19,390 | 23,530 | | | |
| Sept | 5,733 | 6,487 | 3,077 | 10,250 | 10,508 | | | |

2,559

693

613

1,056

370

291

4,702

928

619

3,857

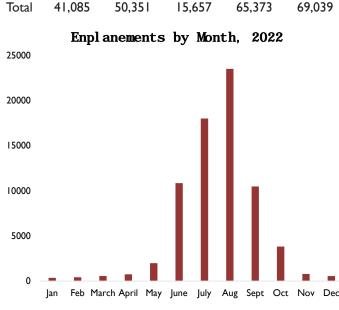
822

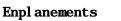
591

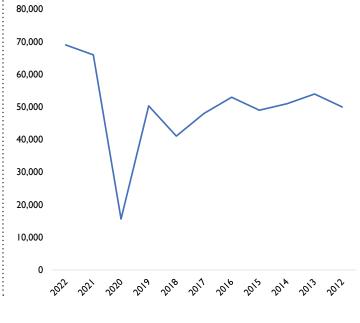
Annual passenger enplanements, 2012-2022*

| Source: | Martha's | Vineyard | Airport |
|----------|--------------|----------|---------|
| 0001.00. | i iui ciiu o | , meyare | , |

| Source. Martina's villeyard Airport | | |
|-------------------------------------|---------|-----------------------|
| 2022 | 69,039 | |
| 2021 | 65,992 | |
| 2020 | 15,657 | |
| 2019 | 50,35 I | |
| 2018 | 41,085 | |
| 2017 | 48,000 | |
| 2016 | 53,000 | |
| 2015 | 49,000 | |
| 2014 | 51,000 | |
| 2013 | 54,000 | |
| 2012 | 50,000 | |
| | | * Counted as one-way. |







71 Martha's Vineyard Statistical Profile | 2023

Oct

Nov

Dec

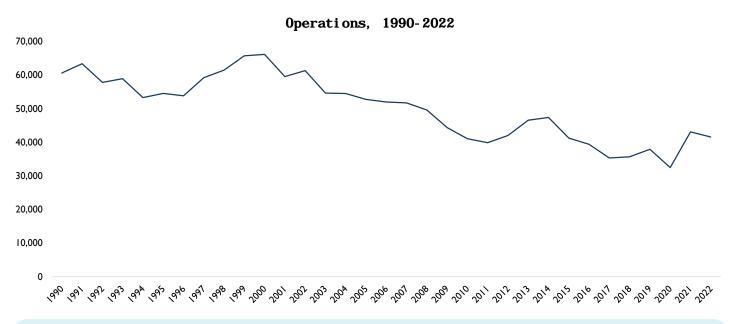
2,940

712

470

Airport operations, 1990-2022

Source: Federal Aviation Administration, Air Traffic Activity Systems

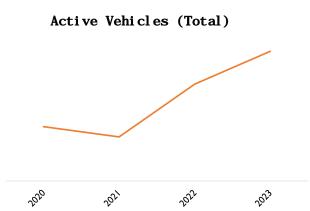


According to the Massachusetts Vehicle Census, the number of active electric vehicles on Martha's Vineyard has increased about 73% since 2020, compared to a 4% increase in the number of fossil fuel vehicles. This is similar to the statewide increase of about 70%, although the Vineyard has seen a sharper increase in plug-in hybrids and a softer increase in all-electric vehicles, and the number of fossil fuel vehicles now make up about 5% of the total in Dukes County.

Active vehicles by town and type, 2020-2023

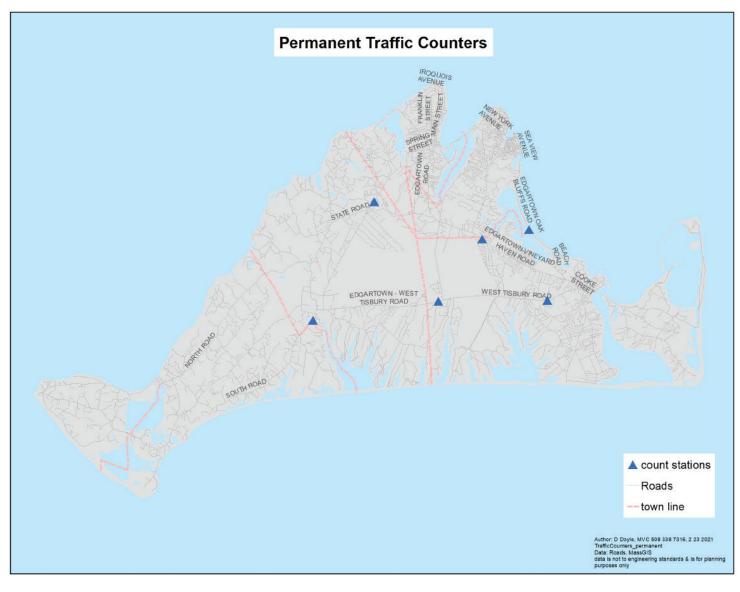
Source: MA Dept. of Transportation (Vehicle Census)

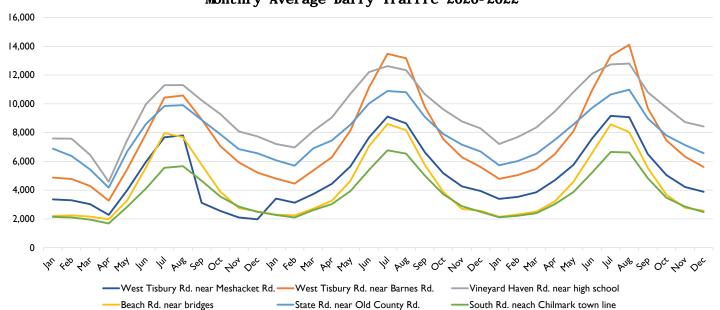
| | | `` | , | | |
|------------|--------|--------|--------|--------|--------|
| | 2020 | 2021 | 2022 | 2023 | 27,000 |
| Aquinnah | 504 | 502 | 503 | 554 | 26,500 |
| Chilmark | 1,697 | 1,758 | 1,860 | 1,886 | 26,000 |
| Edgartown | 6,920 | 6,825 | 7,213 | 7,396 | 25,500 |
| Gosnold | 43 | 32 | 37 | 39 | 25,000 |
| Oak Bluffs | 6,084 | 6,078 | 6,405 | 6,436 | , |
| Tisbury | 6,157 | 5,910 | 5,861 | 5,900 | 24,500 |
| W.Tisbury | 3,743 | 3,826 | 4,140 | 4,530 | 24,000 |
| Total | 25,148 | 24,931 | 26,046 | 26,741 | |
| | | | | | |



| | 2020 | 2021 | 2022 | 2023 | Percent change, 2020-2023 |
|---------------------------|--------|--------|--------|--------|------------------------------|
| Passenger | 23,466 | 23,285 | 24,279 | 24,870 | 6.0 |
| Truck | 987 | 961 | 1,034 | 1,094 | 10.8 |
| Motorcycle | 516 | 497 | 500 | 534 | 3.5 |
| Other | 179 | 188 | 233 | 243 | 35.8 |
| Total | 25,148 | 24,931 | 26,046 | 26,741 | 6.3 |
| Advanced type: | | | | | |
| Fossil fuel | 24,417 | 24,107 | 25,013 | 25,475 | 4.3 |
| Hybrid electric | 529 | 578 | 672 | 752 | 42.2 |
| Electric | 141 | 172 | 248 | 352 | 149.7 |
| Plug-in hybrid | 61 | 74 | 113 | 162 | 165.6 |
| Total hybrid and electric | 731 | 824 | 1033 | 1266 | 73.2 |

Traffic counts at six locations, 2020-2022 (quarterly) Source: MVC





Monthly Average Daily Traffic 2020-2022

73 Martha's Vineyard Statistical Profile | 2023

Vehicle crashes: County, 1992-2022

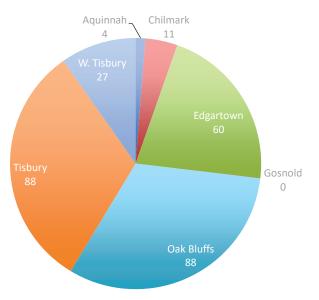
Source: Registry of Motor Vehicles: Accident Records System (1992–2001), Crash Data System (2002–2022)

Vehicle crashes on the Island were about 35% more common in 2022 than 2012, but have declined significantly from a high of 552 in 1994. Not surprisingly, most crashes have occurred down-Island, where there are more vehicles, roads, and busy intersections.

| | 1992 | 1997 | 2002 | 2007 | 2012 | 2017 | 2022 | Total |
|--------|------|------|------|------|------|------|------|-------|
| Aqu. | I | 3 | 7 | 5 | 2 | 2 | 4 | 24 |
| Chil. | 16 | 29 | 3 | 24 | 0 | 9 | 5 | 86 |
| Edg. | 91 | 4 | 75 | 24 | 39 | 42 | 43 | 455 |
| Gos. | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| O.B. | 109 | 147 | 112 | 83 | 74 | 71 | 38 | 634 |
| Tis. | 93 | 147 | 94 | 82 | 78 | 58 | 74 | 626 |
| W.Tis. | 26 | 25 | 14 | 12 | 35 | 42 | 5 | 159 |
| Total | 338 | 492 | 305 | 230 | 228 | 224 | 169 | 1,986 |



Average crashes by town, 1992-2022 Source: Registry of Motor Vehicles: Accident Records System (1992– 2001), Crash Data System (2002–2022)



Official road centerline mileage: All roads, 2017

Source: MassDOT Road Inventory Report, 2022, and MVC See map, page 127

MassDOT roads are maintained by the state, and town-accepted roads are maintained by the towns through which they run. "Other" in this case may refer to unaccepted, county, or federal roads.

| | MassDOT | Town- accepted | Other | Total centerline miles |
|------------|---------|-------------------|-------|------------------------------|
| Chilmark | 7.73 | 14.11 | 0 | 21.84 |
| Edgartown | 7.25 | 45.43v | 1.2 | 53.88 |
| Aquinnah | 4.1 | 8.36 | 1.51 | 13.97 |
| Gosnold | 0 | 2.01 | 0 | 2.01 |
| Oak Bluffs | 4.72 | 36.22 | 4.07 | 45.01 |
| Tisbury | 3.16 | 21.61 | 2.23 | 27 |
| W.Tisbury | 8.71 | 13.95 | 2.4 | 25.06 |
| Island | 35.67 | 141.69 | 11.41 | 188.77 |

Miles of VTA bus routes per town²

Source: MVC 2023 based on 2020 VTA route map.

See map, page 128

| Aquinnah | 6.53 |
|--------------|-------|
| Chilmark | 16.59 |
| Edgartown | 19.57 |
| Oak Bluffs | 17.1 |
| Tisbury | 10.74 |
| West Tisbury | 16.94 |
| County | 87.47 |

Miles of shared-use paths by town, 2023

Source: MVC

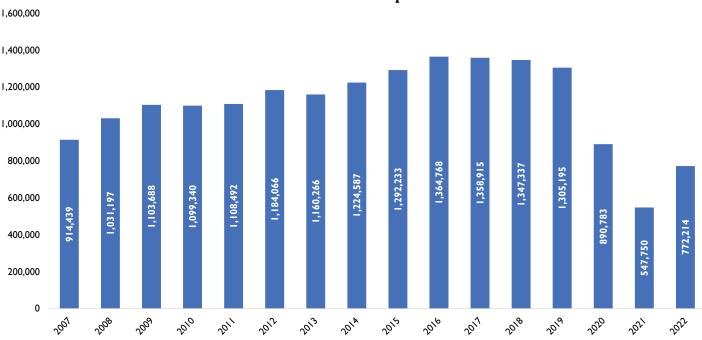
See map, page 128

| Chilmark | 0 |
|--------------|-------|
| Edgartown | 18.84 |
| Aquinnah | 0 |
| Gosnold | 0 |
| Oak Bluffs | 8.99 |
| Tisbury | 1.59 |
| West Tisbury | 7.47 |
| County | 36.89 |

Vineyard Transit Authority fixed-route ridership, FY2007–FY2022

Source: Vineyard Transit Authority

Between 2007 and 2019, ridership increased about 43%, with growth in all seasons but especially July and August. The Covid-19 pandemic, along with other factors, caused VTA ridership to drop about 32% in FY2020, from about 1.3 million to 894,000, and another 39% in FY2021, perhaps the largest decline of any transportation mode on the Island during the pandemic. Ridership grew 41% in FY2022, but was still about 41% less than in FY 2019.



VTA Fixed Route Ridership FY 2007-2022





One of the VTA's new electric e-JEST buses. Photo by Alex Elvin.

7. ENERGY AND ENVIRONMENT

The Vineyard's natural beauty and isolation from the mainland draw many visitors and residents to its shores. But that sets up a delicate balance. Among other things, the Island's sole-source aquifer gets its water entirely from rain, and the aquifer in turn supplies all the potable water to Island towns. Substances that enter the ground eventually find their way into coastal and freshwater ponds, which support shellfish and other sensitive species. Concerns surrounding the Island's natural environment have grown along with increasing development since the 1970s.

Floodplain area (land only; acres) by town, 2023

Source: MVC, based on FEMA Flood Zones

FEMA floodplains are areas designated by the federal government as having a certain risk of flooding (see definitions below). The floodplain area in each town in Dukes County roughly corresponds to the town's total land area, with the exception of Gosnold, which has 17% of the county's floodplain. Of all the buildings within a VE zone (highest risk area), Edgartown has the largest share (38%), followed by Oak Bluffs (29%), Tisbury (17%), and Chilmark (8%).

| | Total | Percent |
|--------------|-------|---------|
| Aquinnah | 655 | 6.77% |
| Chilmark | 1,497 | 15.47% |
| Edgartown | 3,908 | 40.38% |
| Gosnold | 1,648 | 17.03% |
| Oak Bluffs | 635 | 6.56% |
| Tisbury | 496 | 5.12% |
| West Tisbury | 840 | 8.68% |
| Total | 9,679 | 100% |

Buildings in FEMA floodplain and percent of total, 2023*

Source: MVC, based on FEMA Flood Zones; MassGIS (structures); assessors' data (status and use)

| AE | VE | 0.2% | AMFH |
|------------------------|---|---|---|
| 21 (2%) | 15 (5%) | 0 | 577 (3%) |
| 71 (8%) | 12 (4%) | 0 | 2,186 (11%) |
| 341 (38%) | 95 (34%) | 139 (54%) | 5,914 (30%) |
| 40 (4%) | 5 (2%) | 0 | 228 (1%) |
| 264 (29%) | 82 (29%) | 60 (23%) | 4,383 (22%) |
| 154 <mark>(17%)</mark> | 69 (25%) | 59 (23%) | 3,333 (17%) |
| 14 (2%) | 0 | 0 | 3,230 (17%) |
| 904 | 278 | 258 | 19,851 |
| | 21 (2%) 71 (8%) 341 (38%) 40 (4%) 264 (29%) 154 (17%) 14 (2%) | 21 (2%) 15 (5%) 71 (8%) 12 (4%) 341 (38%) 95 (34%) 40 (4%) 5 (2%) 264 (29%) 82 (29%) 154 (17%) 69 (25%) 14 (2%) 0 | 21 (2%) 15 (5%) 0 71 (8%) 12 (4%) 0 341 (38%) 95 (34%) 139 (54%) 40 (4%) 5 (2%) 0 264 (29%) 82 (29%) 60 (23%) 154 (17%) 69 (25%) 59 (23%) 14 (2%) 0 0 |

Any building with a roofprint greater than 400 square feet; could be a house, business, shed, barn, garage, etc.

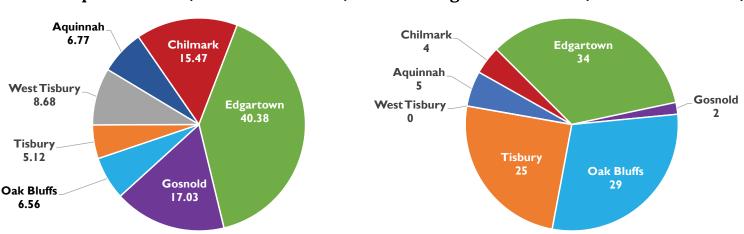
Flood zone codes

VE = 1-percent-annual-chance flood event (100-year floodplain; velocity zone)

AE = 1-percent-annual-chance flood event (100-year floodplain)

0.2% annual chance of flood hazard (500-year floodplain)

AMFH (area of minimum flood hazard) is outside the 100-year and 500-year floodplains and is not included in the total floodplain area here.



Floodplain Area (Percent of Total)

Buildings in VE Zone (Percent of Total)

Mean sea level (rising trend), 1932-2022*

Source: National Oceanic and Atmospheric Administration

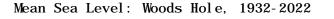
Mean sea level is calculated as the mean of hourly heights observed over the National Tidal Datum Epoch (1983–2001). Between 1932 and 2022, the mean sea level at Woods Hole increased an average of 3 mm per year more than Boston, but less than Nantucket.

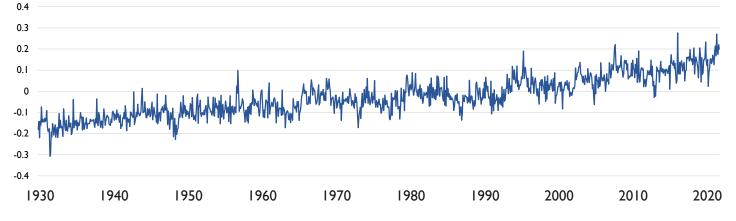
 Boston (1921–1922)
 2.89mm (+/-) 0.14

 Nantucket (1965–2022)
 3.88mm (+/-) 0.31mm

 Woods Hole (1932–2022)
 3.0mm/year (+/-) 0.16mm

* Increase per year in millimeters.

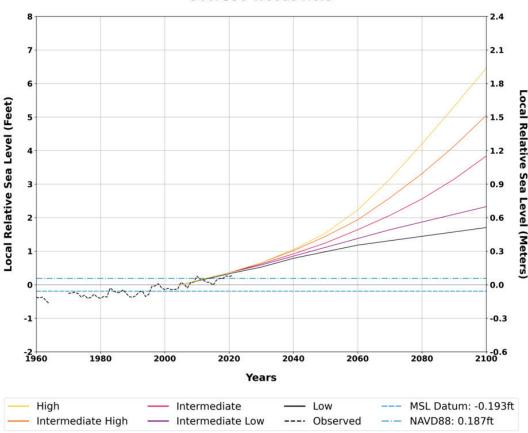




Annual relative sea level since 1960, and projections, 2022

Source: National Oceanic and Atmospheric Administration

The chart here shows annual mean sea-level at the Woods Hole station, as observed since 1960, and as projected to 2100. The projections include five possible scenarios, relative to a 2005 baseline, shown as zero. Also shown are the Mean Sea Level Datum (the mean of hourly heights observed over the National Tidal Datum Epoch of 1983-2001), and the relative position of the North American Vertical Datum of 1988 (NAVD88), which marks elevation zero on land. More detailed information is available in the 2022 NOAA report Global and Regional Sea Level Rise Scenarios for the United States.

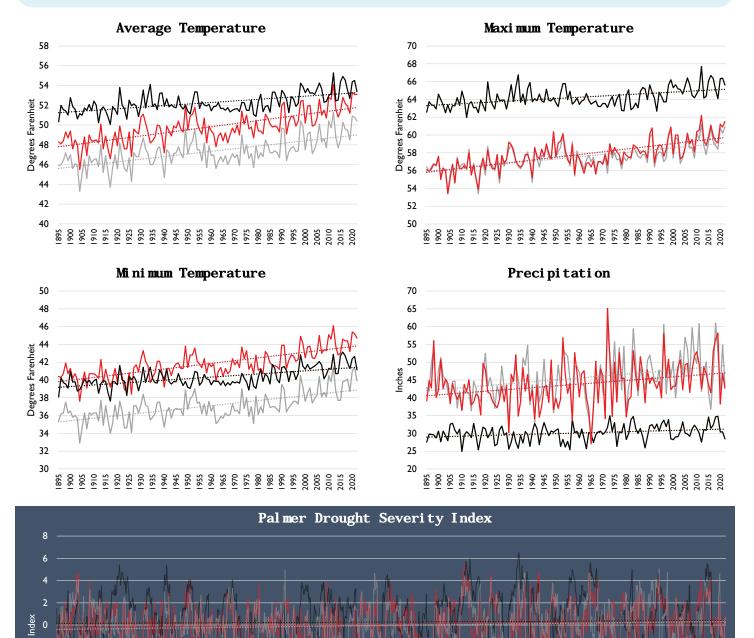


Annual Relative Sea Level Since 1960 and Projections 8447930 Woods Hole

Annual average, maximum, and minimum air temperatures; annual precipitation¹; monthly drought severity index²: Edgartown and Contiguous US, 1895-2022

Source: National Oceanic and Atmospheric Administration

In the last 127 years (the time frame for which certain weather data is available through NOAA), temperatures and precipitation in Dukes County have increased faster than those in the continental US as a whole. The northeast in general is warming faster than the rest of the country, due to its proximity to the warming Atlantic, and changing wind patterns that direct more ocean air toward the coast. The ocean also has a mitigating effect that accounts for warmer winters and slightly cooler summers compared to the mainland. The Vineyard experiences drought conditions for much of the year, but on average has maintained a balance of wet and dry conditions.



Maximum and minimum temperatures are the average of high or low temperatures over the course of a year.

-6 -8

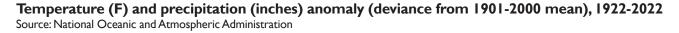
² An estimate of relative dryness, based on temperature and precipitation data, where negative values indicate drought conditions.

Countiguous US

Massachusetts

County

020



6 4 2 0 -2 1901-2000 mean County: 49.4 F State: 46.9 F -4 Contiguous US: 52.02 F -6 (922 Precipitation: Anomaly 21 16 П 6 I -4 1901-2000 mean -9 County: 42.92" -14 State: 44.65" -19 Contiguous US: 29.94" -24 (9²² ં (વે³¹ 19⁴⁰ (a) (a) (a) ر⁶3⁴ 2009 000 2012

Average Temperature: Anomaly

Air quality index: Island, 2012-2022

Source: Environmental Protection Agency

The EPA's air quality index (AQI) ranges from 0 to 500, where 100 generally indicates the threshold for unhealthy amounts of ozone and other pollutants in the air. EPA data for the Island is logged by the Wampanoag Environmental Laboratory and triangulated with other monitoring stations in Truro and Fairhaven.

AQI Breakpoints (EPA):

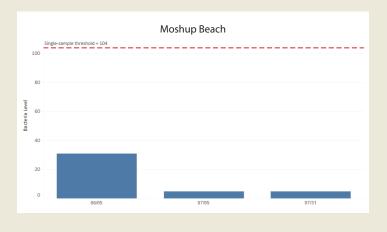
| | AQI value | 8-hour average (PPM) |
|--------------------------------|-----------|-------------------------|
| Good | 0–50 | 0–0.054 |
| Moderate | 51-100 | 0.055–0.07 |
| Unhealthy for sensitive groups | 101–150 | 0.071–0.085 |
| Unhealthy | 151-200 | 0.086-0.105 |
| Very unhealthy | 201–300 | 0.106–0.2 |
| Hazardous | 301-500 | |

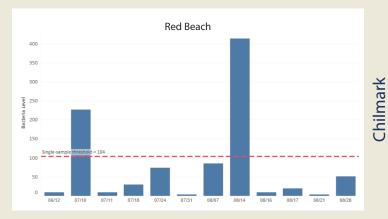
| | Days with AQI reported | | | Number | r of days | | |
|------|---------------------------|-----|----|--------|-----------|---|---|
| 2012 | 252 | 214 | 26 | 19 | 2 | - | - |
| 2013 | 317 | 290 | 25 | 2 | - | - | - |
| 2014 | 358 | 339 | 19 | - | - | - | - |
| 2015 | 260 | 242 | 16 | 2 | - | - | - |
| 2016 | 354 | 340 | 12 | 2 | - | - | - |
| 2017 | 359 | 341 | 14 | 2 | 2 | - | - |
| 2018 | 360 | 332 | 25 | 3 | - | - | - |
| 2019 | 352 | 331 | 17 | 4 | - | - | - |
| 2020 | 357 | 347 | 9 | I | - | - | - |
| 2021 | 356 | 336 | 20 | - | - | - | - |
| 2022 | 359 | 341 | 17 | I | - | - | - |

Enterococci levels by beach, various time ranges, 2023

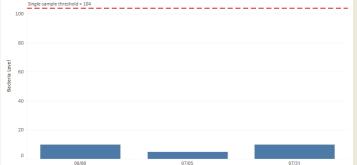
Source: Massachusetts Bureau of Environmental Health See map, page 119

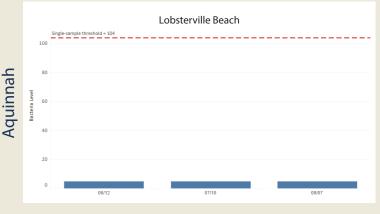
The presence of Enterococcus, a bacteria found in people's gastroinestinal tracts, is the federal standard for water quality at saltwater beaches. Enterococci levels are tested by collecting water samples, separating the bacteria and promoting its growth in a laboratory. If the resulting colonies exceed 104 "colony forming units" per 100 milliliters of water (the red line in the graphs below), the beach in question will be closed to swimmers. Because the levels in individual water samples may vary widely from day to day, beaches that exceed the limit are often retested and opened soon after the initial results.



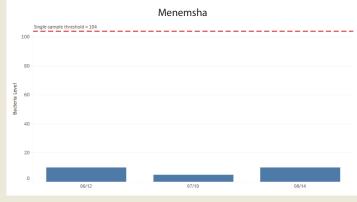


Ocean @ Chilmark Pond Preserve

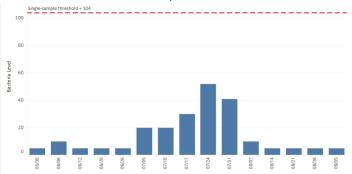




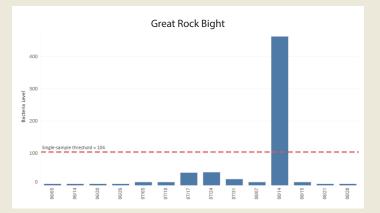
Philbin Beach

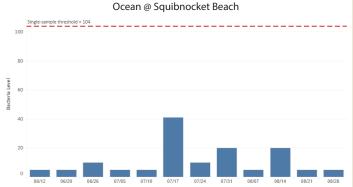


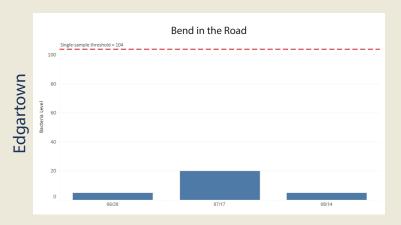
Ocean @ Lucy Vincent Beach

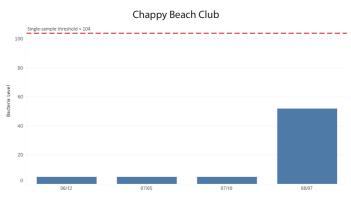


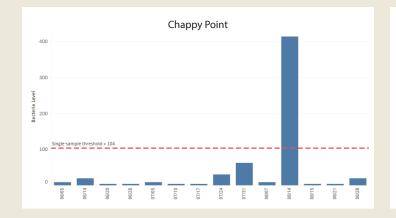
80 Martha's Vineyard Statistical Profile | 2018

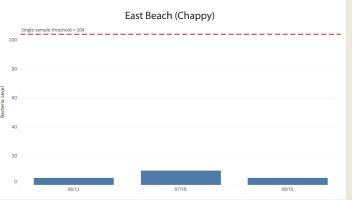


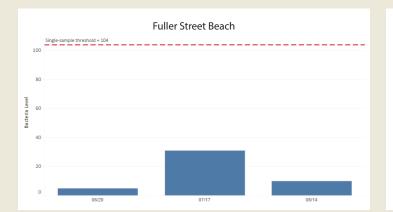


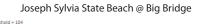


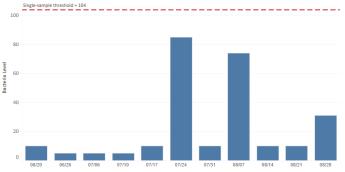


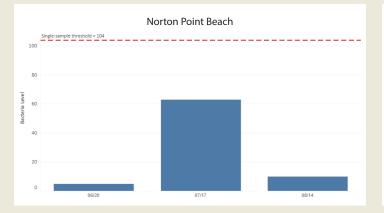


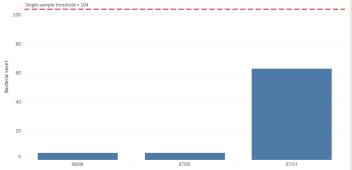




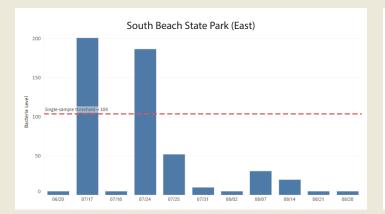


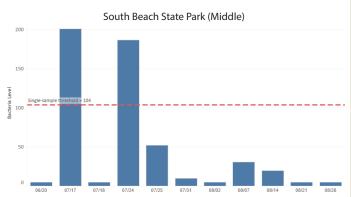


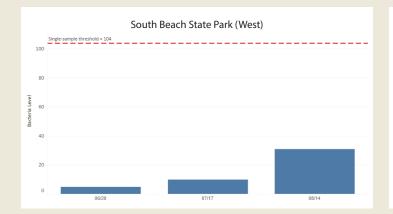




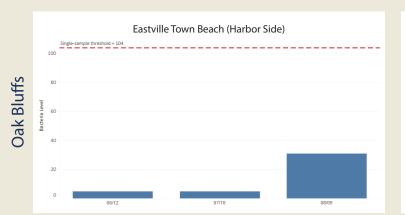
Ocean @ Edgartown Great Pond





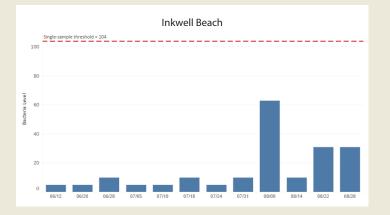




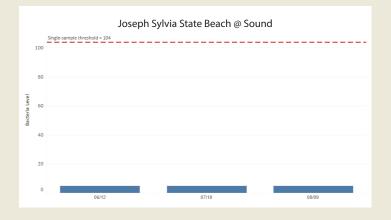


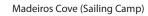
Eastville Town Beach (Lagoon Side)



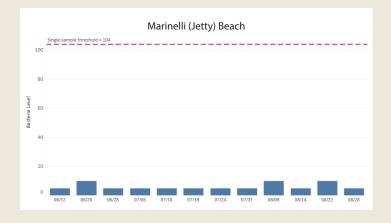


Joseph Sylvia State Beach @ Big Bridge

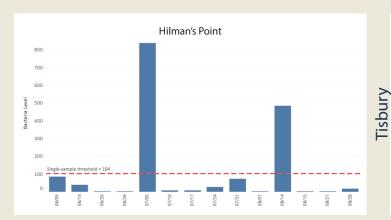


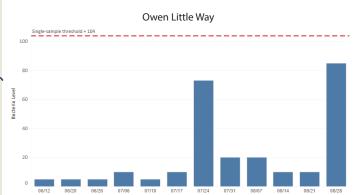




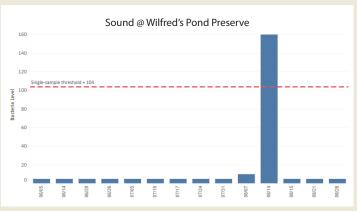


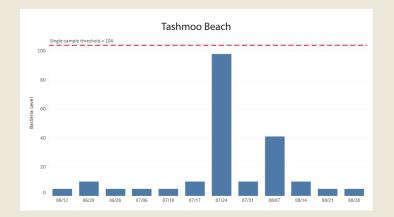


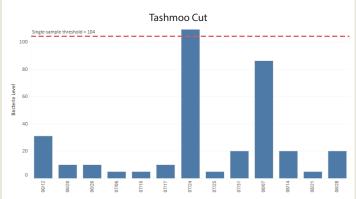


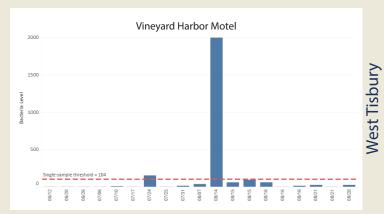


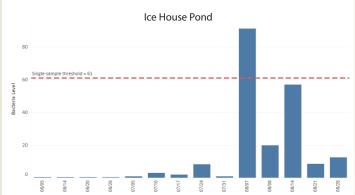


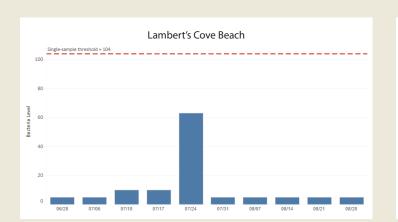


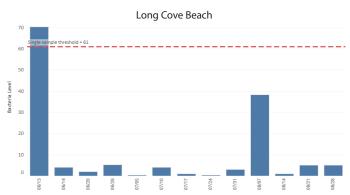


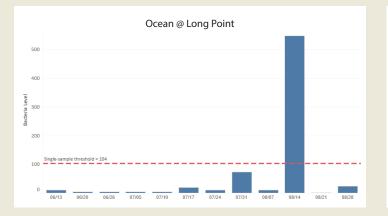




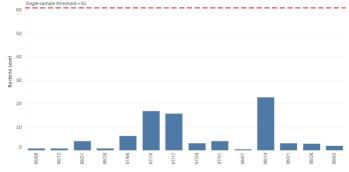








Seth's Pond @ FOCUS Property



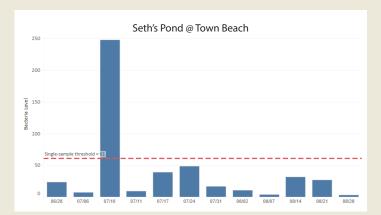
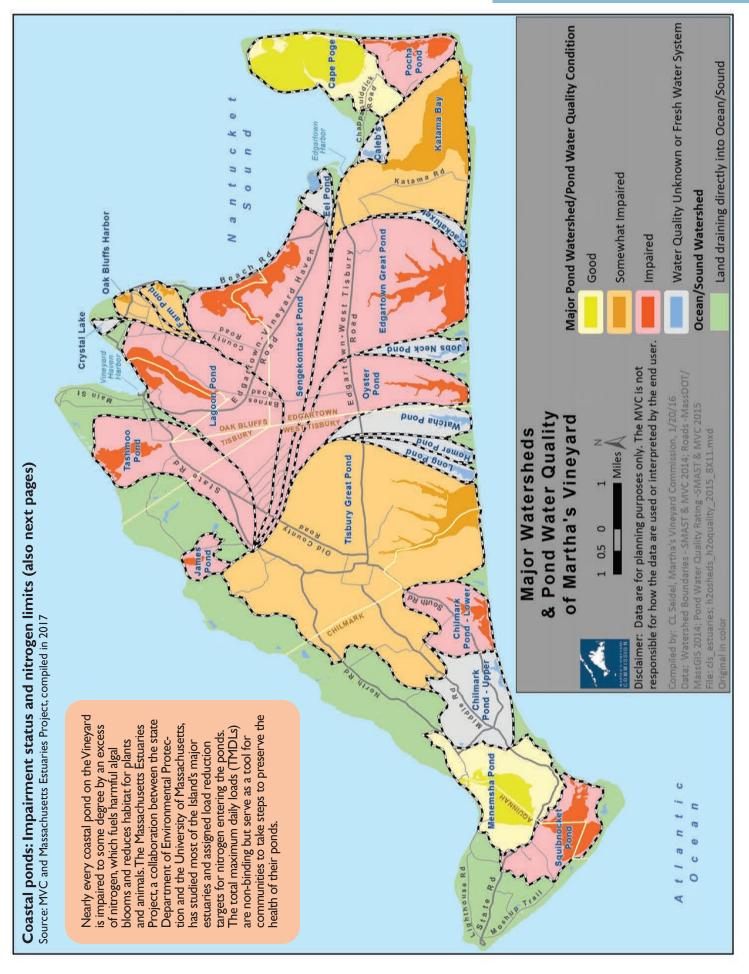






Photo by Lucy Morrison



| System | Pond area (acres) | Eelgrass condition | Rating | Nitrogen load limit (kg per year) |
|----------------------|-------------------|--------------------|---|--------------------------------------|
| Cape Pogue | 1,560 | Fair | Good | 45,500 |
| Chilmark Pond | 241 | None | Impaired | 5,653 |
| Edgartown Great Pond | 890 | Variable | Impaired | 7,686 |
| Farm Pond | 42 | Fair | Impaired | 1,604 |
| James Pond | 40 | Patchy | Impaired | 200 |
| Katama Bay | 1,700 | Patchy | Impaired | 54,700 |
| Lagoon Pond | 573 | Poor | Impaired | , 77 |
| Menemsha Pond | 670 | Good | Impaired (Nashaquitsa) | 31,600 |
| Oak Bluffs Harbor | 36.3 | None | Impaired (Sunset Lake) | 6,026 |
| Oyster Pond | 200 | None | Impaired | 1,800 |
| Pocha Pond | 115 | Patchy | Impaired | 5,680 |
| Sengekontacket Pond | 716 | Poor | Impaired (Major's Cove and Trapps Pond) | ,05 |
| Squibnocket Pond | 600 | None | Impaired | 3,400 |
| Tashmoo Pond | 269 | Poor to fair | Impaired | 6,244 |
| Tisbury Great Pond | 845 | None | Impaired | 13,578 |

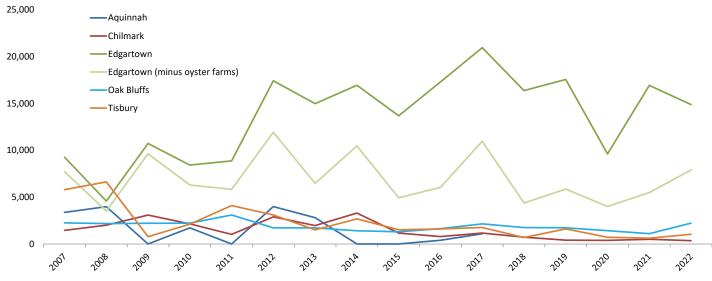
Annual shellfish harvests by town and type (commercial and recreational bushels), 2012-2022

Source: Town reports, town shellfish departments

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Aquinnah | 4,000 | 2,814 | 0 | 0 | 396 | 1,097 | UA | UA | UA | UA | UA |
| Chilmark | 2,892 | 1,971 | 3,302 | 1,167 | 798 | 1,172 | 727 | 410 | 393 | 505 | 353 |
| Edgartown | 17,427 | 14,978 | 16,948 | 13,688 | 17,294 | 20,966 | 18,344 | 20,043 | 11,915 | 20,210 | 14,884 |
| Edgartown minus oyster farms | 11,927 | 6,478 | 10,468 | 4,938 | 6,044 | 10,966 | 6,344 | 8,343 | 6,315 | 8,770 | 7,900 |
| Oak Bluffs | 1,727 | 1,725 | 1,414 | 1,307 | 1,638 | 2,150 | 1,758 | 1,729 | 1,422 | 1,108 | 2,221 |
| Tisbury | 3,105 | 1,505 | 2,688 | 1,525 | 1,607 | 1,761 | 683 | 1,616 | 717 | 619 | 1,037 |
| Total | 43,090 | 31,484 | 36,834 | 24,640 | 29,793 | 40,129 | 23,936 | 27,181 | 16,160 | 24,659 | 26,395 |

Minus Aquinnah





| Nitrogen load at time of MEP | Projected load | TMDL (kg per day) | Load reduction required |
|------------------------------|----------------|-------------------|-------------------------|
| 11,200 | 12,600 | UA | 0% |
| 6,241 | 6,389 | 15.5 | 22% (Chilmark east) |
| 11,053 | 17,763 | 46.06 | 18% |
| 2,179 | 2,610 | 4.13 | 26% |
| 600 | 1,050 | UA | 67% |
| 23,200 | 30,800 | UA | 0% |
| 17,081 | 24,062 | 74.07 | 35% |
| 12,950 | I 6,860 | 75.775 | 47% |
| 4,834 | 5,926 | 22.63 | 25% |
| 3,600 | 5,200 | UA | 50% |
| 2,500 | 3,300 | UA | 0% |
| 13,713 | 18,306 | 34.56 | 19.41% overall |
| 3,920 | 4,400 | 20.565 | 13% |
| 9,163 | 13,203 | 35.55 | 32% |
| 16,783 | 19,325 | 62.78 | 19% |

Between 2012 and 2022, total shellfish harvests declined across all species, except quahogs, which increased about 75%. (Note that the data for Aquinnah was not available for 2018-2022.)

| Reported species: | Quahogs | Oysters | Steamers | Mussels | Bay scallops |
|-------------------|---------|---------|----------|---------|--------------|
| Chilmark | Ŧ | Ŧ | Ŧ | Ŧ | Ŧ |
| Tisbury | Ŧ | | Ŧ | | |
| Oak Bluffs | | Ŧ | Ŧ | | |
| Edgartown | | Ŧ | Ŵ | | Ť |
| Aquinnah | - | | Ų | | Ť |

| | Quahogs | Oysters | Steamers | Mussels | Scallops |
|------|---------|---------|----------|---------|----------|
| 2013 | 2,740 | 9,420 | 656 | 232 | 9,945 |
| 2014 | 2,716 | 7,079 | 412 | 56 | 14,089 |
| 2015 | 2,543 | 9,340 | 226 | 0 | 5,578 |
| 2016 | 3,187 | 13,018 | 286 | 21 | 5,221 |
| 2017 | 2,925 | 11,805 | 309 | 15 | 12,093 |
| 2018 | 6,305 | 12,696 | 736 | 0 | 4,214 |
| 2019 | 6,412 | 14,402 | 526 | 0 | 5,802 |
| 2020 | 4,771 | 7,149 | 1,143 | 25 | 2,077 |
| 2021 | 5,847 | 12,890 | 1,080 | 28 | 4,324 |
| 2022 | 4,799 | 8,227 | 412 | 13 | 7,484 |

Minus Aquinnah

Shellfish Bushels by Type

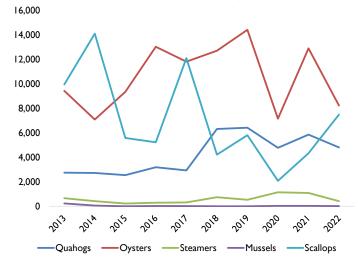


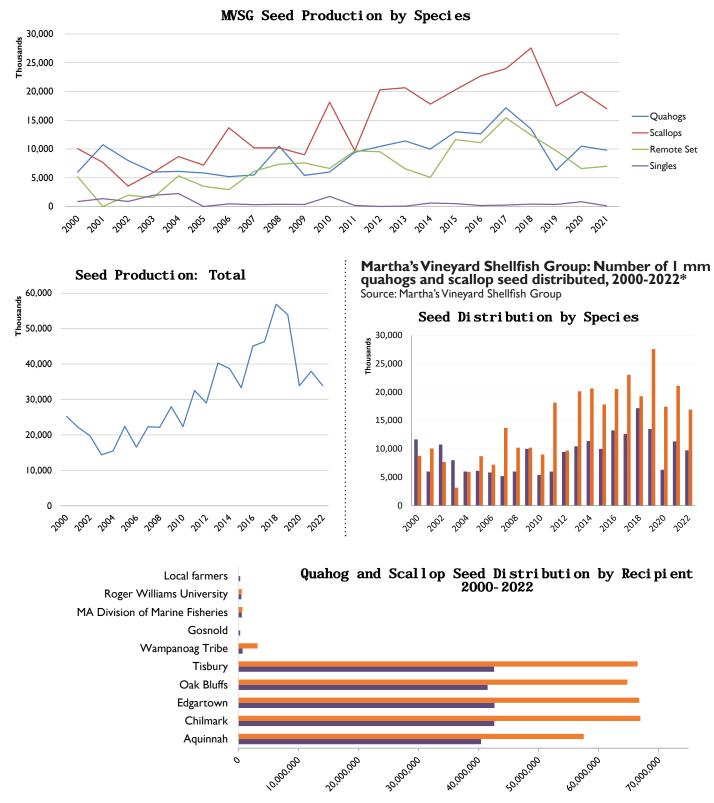


Photo by Alex Elvin

Martha's Vineyard Shellfish Group seed production and by town and species, 2000-2022*

Source: Martha's Vineyard Shellfish Group

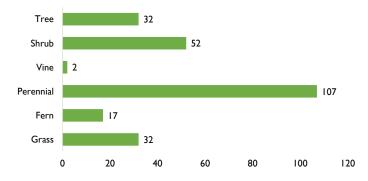
Martha's Vineyard Shellfish Group seed production grew about 17% between 2012 and 2022. A drop in production after 2018 is due to scallops being grown larger for better survival, algae outbreaks at the hatchery in 2020 and 2021, weather impacts on the natural oyster spawning period, and other factors. Excluding West Tisbury, which does not have a commercial harvest, each Island town typically receives the same number of 1mm quahogs and scallop seeds per year, with some variation as shown below. The MVSG also distributes several million oyster eggs and larvae to various locations each year, along with remote-sets (where oysters are seeded onto older shells), and singles (where the oysters are kept separate for the culinary market).



*Does not include eggs or larvae produced and distributed.

Native plants by type: Martha's Vineyard

Source: Polly Hill Arboretum



Water table elevations: Outwash plain aquifer, October 1991

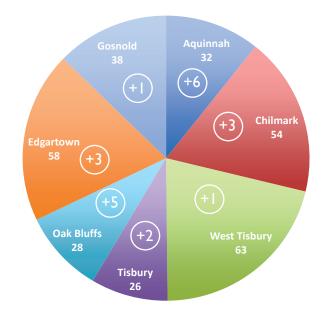
Source: United States Geological Survey, Effects of Simulated Ground-Water Pumping and Recharge on Ground-Water Flow in Cape Cod, Martha's Vineyard and Nantucket Island Basins, Massachusetts

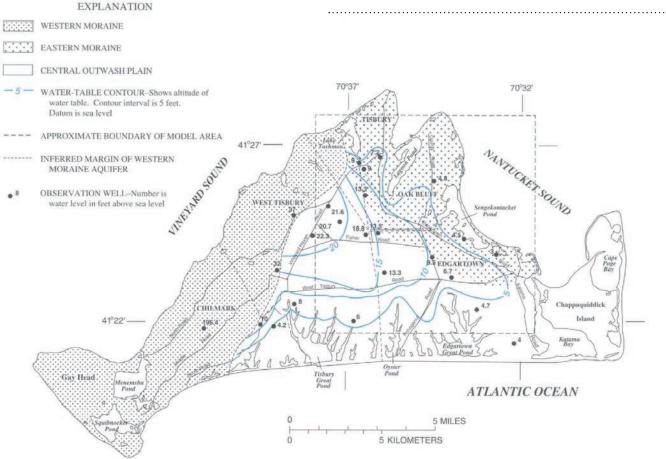
The Environmental Protection Agency designates Martha's Vineyard as a sole-source aquifer since its only source is rainfall. More accurately, the Island's western moraine includes countless small aquifers at varying depths, while the central outwash plain is more uniform. Water table elevations may vary by several feet over the course of a year, reaching their height in spring and early summer. Because of the slow rate of geologic change, the numbers here are likely still representative, although the effect of increasing rainfall and other factors over the years is unknown.

Rare species by town, 2023; and additions since 2019

Source: Natural Heritage and Endangered Species Program

The Natural Heritage and Endangered Species Program lists <u>432 native plant and animal species</u> across the state. Species may be classified as endangered, threatened, or of special concern. The distribution of rare species in Dukes County corresponds roughly to the amount of open space in each town, although Aquinnah has a proportionally higher number, which may relate to its quality and diversity of open space. The Island list has grown by 21 since 2019, as shown in the circles below.

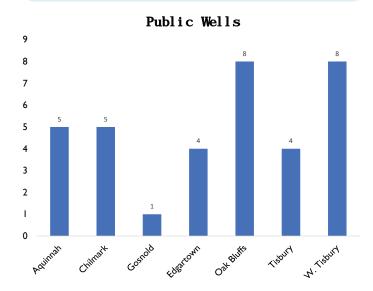




Public and private wells per town, 2023

MA Department of Environmental Protection See map, page 132

As defined by the state, public wells are those with at least 15 service connections, or an average of at least 25 customers for at least 60 days of the year. That may include wells operated by towns, schools, and other institutions. Public water sources on the Vineyard produced more than 1.1 billion gallons of water in 2022. (See following page.) The vast majority of private wells are located in Edgartown, West Tisbury, and Chilmark, where more dispersed development has precluded the establishment or expansion of public water systems. Much of the data here is from the DEP's Public Water Annual Statistical Reports and online <u>well database</u>.



Public water consumption (municipal and tribal only; million gallons), 2012-2022

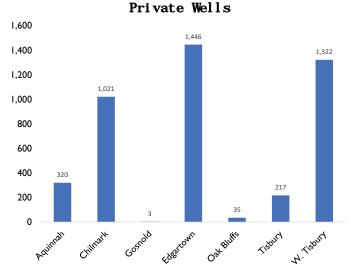
Source: Town water departments and Wampanoag Tribe

| | Edgar- town | Oak Bluffs² | Airport | Tisbury | Tribe ³ |
|------|----------------|----------------|-------------------|---------|--------------------|
| 2012 | 326.55 | UA | 3.55 | 250.86 | 1.1 |
| 2013 | 341.45 | UA | 3.92 | 254.23 | 1.1 |
| 2014 | 341.45 | 372.56 | 3.81 | 267.63 | 1.1 |
| 2015 | 398.96 | 418.01 | 6.49 ⁴ | 298.75 | 1.1 |
| 2016 | 370.28 | 409.43 | 3.93 | 307.73 | 1.1 |
| 2017 | 339.07 | 349.73 | 3.52 | 271.97 | 1.1 |
| 2018 | 358.76 | 383.2 | 3.99 | 282.27 | |
| 2019 | 334.88 | 369.0 | 3.79 | 247.31 | |
| 2020 | 359.40 | 395.5 | 2.755 | 295.84 | |
| 2021 | 355.28 | 383.3 | 3.52 | 268.43 | |
| 2022 | 402.00 | 411.7 | 3.90 | 280.65 | |

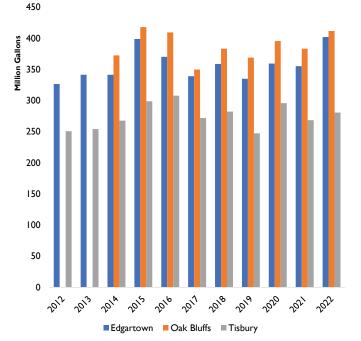
¹ Includes MVY Airport, which purchases its water from Oak Bluffs. ³ Estimated for 2012-2017.

| | Public | Private |
|------------|--------|---------|
| Aquinnah | 5 | 320 |
| Chilmark | 5 | 1,021 |
| Gosnold | I | 3 |
| Edgartown | 4 | 1,446 |
| Oak Bluffs | 8 | 35 |
| Tisbury | 4 | 217 |
| W.Tisbury | 8 | 1,322 |
| County | 35 | 4,364 |

 $^{\rm I}\,{\rm DEP}$ well drilling records minus public, monitoring, and test wells.



Public Water Consumption (Down-Island)



⁴ Increase due to temporary water leak. ⁵ Decrease due to reduced business and air travel during pandemic.

Public water connections and consumption (all reported systems; gallons), 2022 Source: MA Dept. of Environmental Protection, Wampanoag Tribe

| | <u>Connections</u> | <u>Consumption</u> | <u>Monthly High</u> | Monthly Low |
|---|--------------------|--------------------|---------------------|-----------------|
| 7A Foods (W.T.) | I | 68,736 | March: 3,385 | July: 9,365 |
| American Youth Hostel (W.T.) | I | 109,856 | Feb: 87 | July: 49,873 |
| Aquinnah Restaurant (Aqu.) | I | 1,940 | July: 465 | Oct-March: 0 |
| Beach Plum Inn (Chil.) | I | 1,568 | Sept-March: 0 | July: 356 |
| Chappy Beach Club (Edg.) | I | 544,832 | Oct-April: 0 | Sept: 167,054 |
| Chilmark Community Center (Chil.) | 2 | 135,336 | Aug: 29,252 | March: 750 |
| Chilmark School (Chil.) | I | 1,735 | May: 366 | Oct-March: 0 |
| Chilmark Tavern (Chil.) | 2 | 124,192 | Aug: 30,597 | Oct-Dec: 0 |
| Edgartown Water Department (Edg.) | 3,513 | 401,993,800 | Aug: 87,186,100 | Feb: 7,847,300 |
| FOCUS Study Center (W.T.) | 7 | 389,388 | Feb: 4,770 | July: 113,290 |
| Gosnold Water Department (Gos.) | 194 | 3,055,300 | July: 568,200 | Feb: 45,500 |
| Island Children's School (W.T.) | L | 14,505 | Aug-Dec: 0 | May: 3,109 |
| Kuehn's Way Affordable Housing (Tis.)* | 20 | 36,850 | Jan-Sept: 0 | Oct: 29,721 |
| Lambert's Cove Inn and Restaurant (W.T. |) I | 14,610 | Oct-March: 0 | Aug: 4,200 |
| Martha's Vineyard Airport (W.T) | 56 | 3,902,127 | Aug: 542,774 | Dec: 192,185 |
| Menemsha Inn (Chil.) | L | 1,449 | May: 366 | Sept-March: 0 |
| Menemsha Water Company (Chil.) | 95 | 7,346,220 | July: 1,019,280 | Dec: 200,700 |
| MV Public Charter School (W.T.) | I | 2,695 | June-Aug; Jan: 0 | April: 489 |
| Oak Bluffs Water District (O.B.) | 4,584 | 411,742,000 | Aug: 78,104,000 | Feb: 12,236,000 |
| Polly Hill Arboretum (W.T.) | 2 | 24,004 | Jan: 407 | Aug: 5,250 |
| Scott's Grove Affordable Housing (W.T.) | 4 | 336,760 | Feb: 18,363 | Aug: 39,707 |
| State Road Restaurant (W.T.) | I. | 159,000 | Jan-Feb: I | July: 25 |
| Tisbury Water Works (Tis.) | 2,777 | 281,495,120 | Aug: 50,857,472 | Feb: 10,399,848 |
| Tribal Housing (Aqu.) | 33 | 814,112 | UA | UA |
| West Tisbury Elementary School (W.T.) | I | 536,000 | Oct: 95,600 | July: 26,200 |
| West Tisbury Free Library (W.T.) | 2 | 446,400 | July: 180,500 | Jan: 1,400 |
| West Tisbury Town Hall (W.T.) | 3 | 59,220 | Oct: 9,160 | Feb: 2,610 |
| TOTAL | 11,306 | 1,113,357,755 | | |

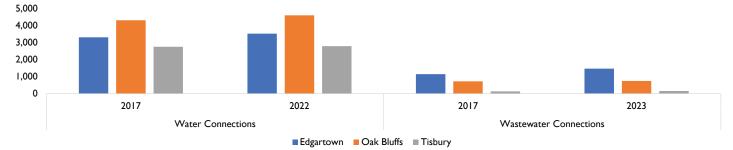
*Opened November 2022.

Public water and wastewater connections (municipal, tribal, and airport only), 2017, 2023

Source: MA Dept. of Environmental Protection, town wastewater departments, Wampanoag Tribe

| | Water Connections V | | Wastewater Connections | | |
|-----------------|---------------------|--------|------------------------|-------|--|
| | 2017 | 2022 | 2017 | 2023 | |
| Edgartown | 3,298 | 3,513 | 1,142 | 1,466 | |
| Oak Bluffs | 4,295 | 4,584 | 722 | 744 | |
| Tisbury | 2,745 | 2,777 | 132 | 156 | |
| MVY Airport | UA | 56 | UA | 50 | |
| Wampanoag Tribe | 33 | 33 | 33 | 34 | |
| Total | 10,371 | 10,963 | 2,029 | 2,450 | |

Down-Island Water and Wastewater Connections



Wastewater volume by system (million gallons), 2012-2022

Source: Island wastewater departments

Island wastewater departments treated a total of about 121.26 million gallons of wastewater in 2022, down from a peak of about 132.88 million gallons in 2019. The town wastewater departments and MVY Airport also ship a large amount of wastewater solids known as sludge or cake (measured in either dry or wet form) to various processing facilities on the mainland.

| | Edgar- town | Oak Bluffs | Tisbury | Airport | Tribe ¹ | |
|------|----------------|---------------|---------|---------|--------------------|--|
| 2012 | 75 | 30.2 | 10.32 | 3.83 | 1 | |
| 2013 | 74.89 | 30.3 | 12.13 | 3.26 | 1 | |
| 2014 | 70.37 | 30 | 13.71 | 3.91 | 1 | |
| 2015 | 73.28 | 39.84 | 14.22 | 4.12 | 1 | |
| 2016 | 71.1 | 35.02 | 13.02 | 3.28 | 1 | |
| 2017 | 72.4 | 31.68 | 16.94 | 3.56 | 1 | |
| 2018 | 79.63 | 31.07 | 18.00 | 2.91 | 1.27 | |
| 2019 | 92.49 | 29.23 | 22.12 | 3.23 | 1.47 | |
| 2020 | 69.92 | 21.80 | 17.96 | 2.62 | 1.45 | |
| 2021 | 71.92 | 25.70 | 16.93 | 3.01 | 0.86 ² | |
| 2022 | 75.23 | 26.70 | 15.21 | 3.31 | 0.81 | |

Wastewater sludge shipped off-Island, 2022

Source: Island wastewater departments, City of New Bedford

Sewage sludge is a biproduct of wastewater treatment, and is typically processed into dry form, known as cake. Most of the sludge on-Island is shipped to facilities in Woonsocket and Cranston, RI; and New Bedford, where it is processed or incinerated. Different agencies use different units of measurement, as indicated below.

| Origin | Amount | Units | Destination |
|---|----------------------|-------------|--------------------|
| Edg. Wastewater Treatment Facility | 840 | Wet tons | Woonsocket, RI |
| Tisbury Wastewater Treatment Facility | 37 | Wet tons | Woonsocket, RI |
| Oak Bluffs Wastewater Plant | 400,000 ³ | Gallons | Cranston, RI |
| Airport Wastewater Treatment Facility | 140,000 | Gallons | New Bedford, MA |
| Other (shipped by private haulers) ⁴ | 2,343,537 | Gallons | New Bedford, MA |

¹ Estimated for 2012-2017.

 2 Decrease possibly linked to pandemic (people visiting off-Island family, etc.). 3 Estimated.

⁴Trucks carry about 9,000 gallons each, which equates to about 240 truck trips per year for the private haulers, 45 for the Oak Bluffs Wastewater Plant, and 16 for the airport.

Solid waste volume (tons except where noted): Island, 2018-2022

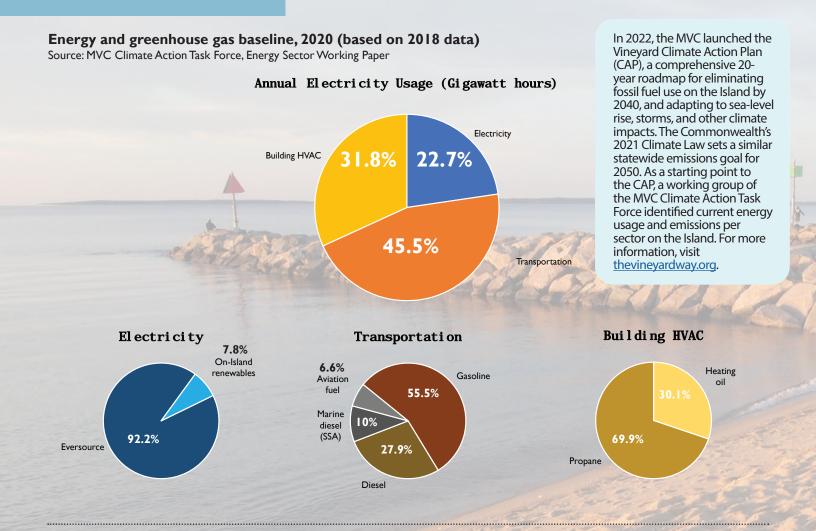
Source: Town reports, MV Refuse Disposal and Resource Recovery District, Oak Bluffs Highway Department, Tisbury Dept. of Public Works, Bruno's Rolloff Inc.

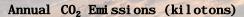
As of 2022, Vineyard trash and recycling went to a variety of facilities on the mainland. The Martha's Vineyard Refuse District, which includes Edgartown, West Tisbury, Chilmark, and Aquinnah, shipped its trash to Covanta (formerly SEMASS) in Rochester to be incinerated, and its recycling to several locations, including E.L. Harvey in Westborough for plastic cans, glass, paper, and cardboard; JR Vinagro in Johnston, RI for construction materials; and other locations for appliances, electronics, tires, and metal. The Oak Bluffs-Tisbury district sends its trash to Covanta and recycling to Zero Waste Solutions or Casella on the mainland.

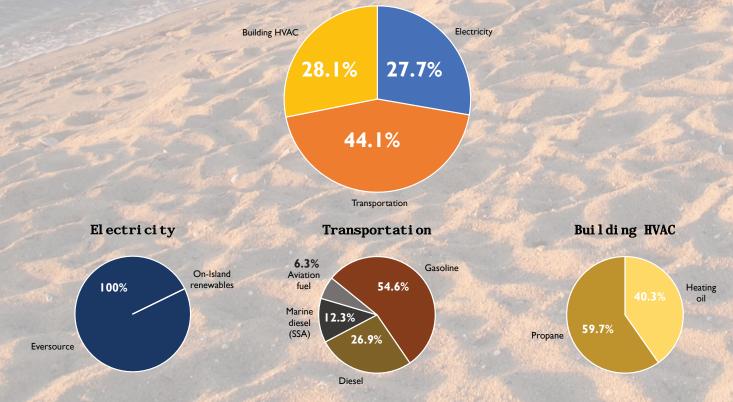
It should be noted that the district data below only account for reported material that passes through the town transfer stations or collection points, not all of the trash generated on the Island, much of which is taken away by private haulers including Bruno's Rolloff Inc., which also contracts with the districts. In part because Tisbury does not offer its own curbside pickup, many residents there hire a private hauler to bring their trash and recycling to Oak Bluffs, which is reflected in the lower numbers for Tisbury.

| MV Refuse District | | 2018 | 2019 | 2020 | 2021 | 2022 |
|-----------------------------------|---------------|-------|-------|----------------|--------|--------|
| Municipal solid waste | | 8,000 | 8,000 | 9,100 | 12,000 | 12,500 |
| Construction material | | 900 | 900 | 900 | 2,000 | 1,560 |
| Single-stream recycling | | 800 | 800 | 800 | 800 | 900 |
| Various metals | | 200 | 190 | 350 | 450 | 400 |
| Number of batteries | | 200 | 200 | 200 | 250 | 200 |
| Tires | | 13 | 13 | 13 | 20 | 20 |
| Leaves and brush | | 380 | 400 | 400 | 500 | 500 |
| Hazardous Waste Collection Days (| participants) | 500 | 500 | 500 | 600 | 600 |
| Food waste | | - | - | - | 20 | 40 |
| Oak Bluffs-Tisbury District | | 2018 | 2019 | 2020 | 2021 | 2022 |
| Oak Bluffs | | | | | | |
| Municipal solid waste | | 739.5 | 732 | 759.3 | 795 | 800 |
| Construction material | | 10.0 | 18.2 | 7.4 | 6.6 | 8.7 |
| Comingled recyclables | | 171.3 | 121.7 | 134.2 | 148.8 | 112 |
| Newspapers | | 61.6 | 74.6 | 43 | 43.9 | 41.9 |
| Cardboard | | 66 | 68 | 84.7 | 77.6 | 72 |
| Food waste | | - | 2.8 | 6.I | 10.4 | 8.2 |
| Tisbury | | | | | | |
| Municipal solid waste | | 163 | 186.5 | 200.2 | 145.5 | 155.7 |
| Recyclables | | 119.7 | 211.4 | 157.4 | 254.5 | 282.9 |
| Leaves and brush | | 215 | 210.9 | 484.2 | 1077.5 | 452.7 |
| Tires | | 1.6 | 1.5 | - | - | I |
| Various metals | | 13.2 | 20.2 | 22.2 | 9.5 | 4. |
| Food waste (gallons) | | - | - | 736 | 17 | 108 |
| Bruno's (2022) | | | | | | |
| Municipal solid waste | | | | | 13,41 | 4 |
| Construction material | | | | | 8,972 | |
| | | | | | | |
| Selected Totals, 2022 | | | | | | |
| Municipal solid waste | 26,870 | | Vai | ious metals | 414 | |
| Construction material | 10,541 | | Lea | ives and brush | 953 | |
| Recycling (all types) | 1,409 | | Tire | 25 | 21 | |

Total municipal solid waste and construction material: 37,411 tons







95 Martha's Vineyard Statistical Profile | 2023

New England Power Grid 2022-2023 Profile

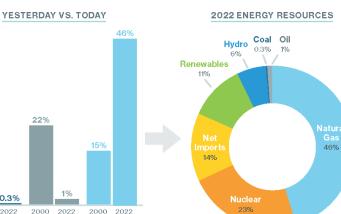
The region's wholesale electricity marketplace is securing reliable electricity at competitive prices and helping usher in a cleaner, greener grid.

A Major Energy Transformation Is Underway

Most of today's electricity comes from

lower-emitting energy resources.

New England has shifted away from older coal- and oil-fired generation to cleaner burning natural gas.



The region is transitioning to large-scale clean and renewable energy.

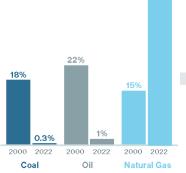
180

new england



Battery storage technologies are emerging at the customer and grid level: more than 11,000 MW proposed

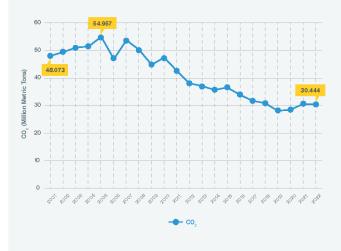
New transmission proposals would provide access to additional clean or renewable energy in New England or Eastern Canada



The amount of electricity produced by generators in New England and imported from other regions to satisfy all residential, commercial, and industrial customer demand in New England. This is called Net Energy for Load (NEL).

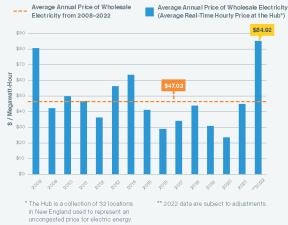
Emissions Over Time

CO2 emissions declined with shift from coal and oil to natural gas generation



Wholesale Prices Over Time

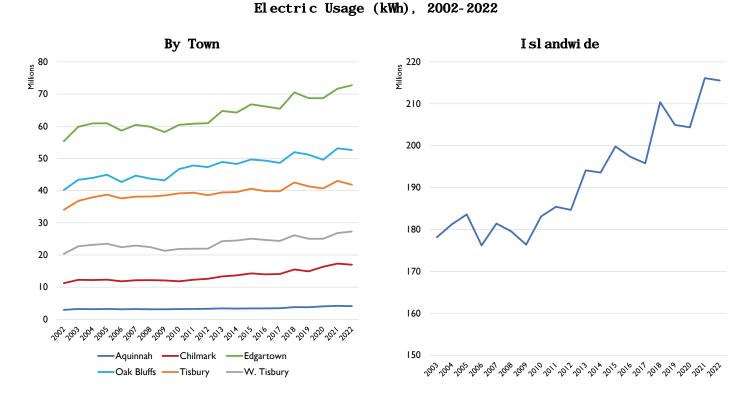
Wholesale electricity prices are higher in years when natural gas prices are high



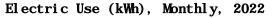
The Island and Commonwealth have set goals to reduce fossil fuel emissions to net zero by 2040 and 2050, respectively, which will require the widespread electrification of buildings and transportation.

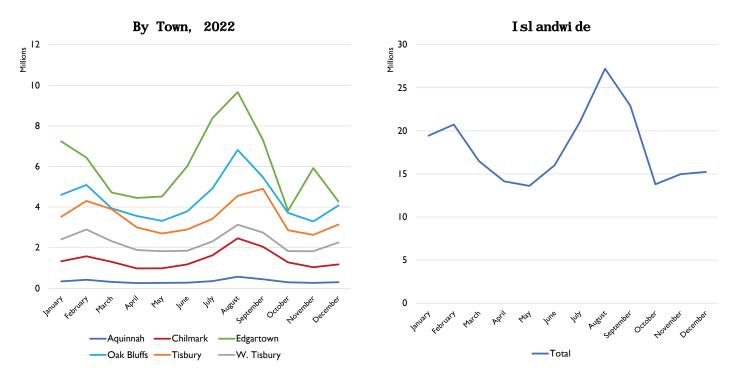
Electrical usage (kilowatt hours): Island towns, 2002-2022

Source: Cape Light Compact



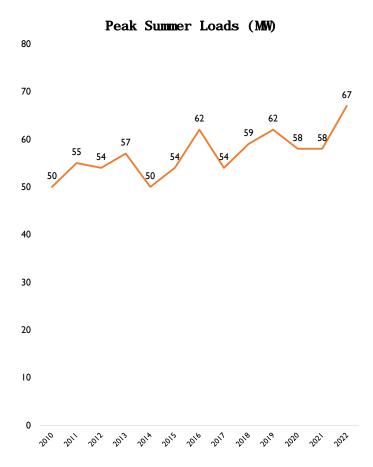
Electrical usage (kilowatt hours): Island towns, 2022 (monthly) Source: Cape Light Compact





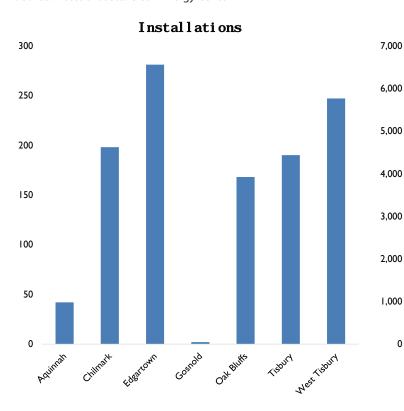
97 Martha's Vineyard Statistical Profile | 2023

Peak energy loads (MW): Island, 2010-2022 Source: Eversource Energy

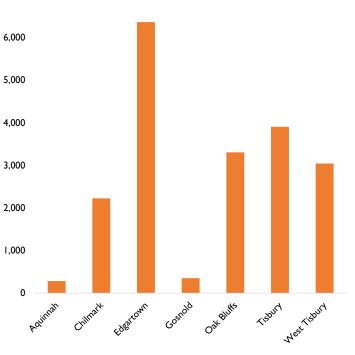




Solar installations and capacity (DC, KW) per town, 2021 Source: Massachusetts Clean Energy Center

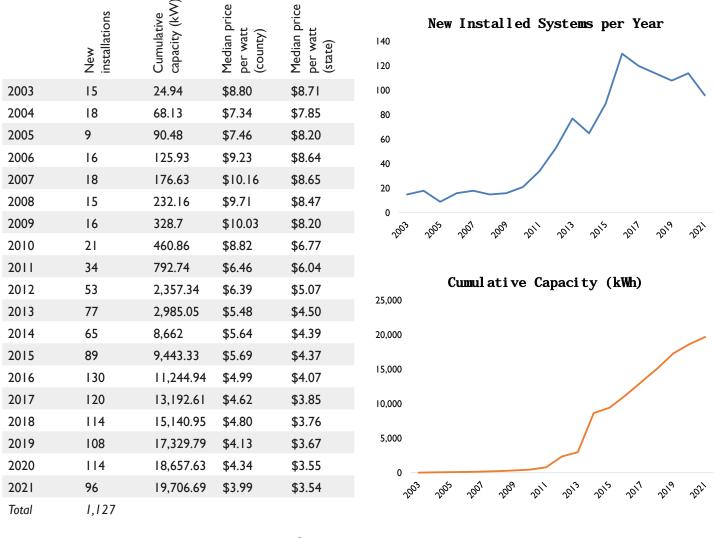


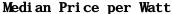
Capacity (kW)

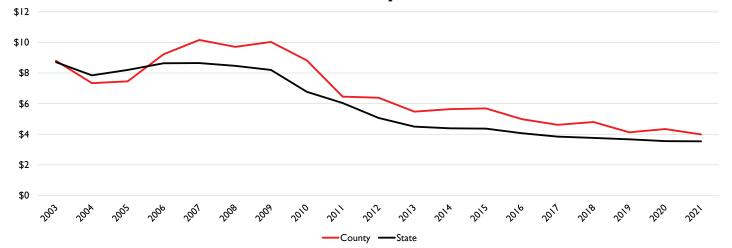


Solar installations per year, cumulative capacity (DC, KW), median price per watt: County, 2003–2021* Source: Massachusetts Clean Energy Center

Photovoltaic system capacity on the Vineyard has grown exponentially since 2003. Almost half of the solar units on the Island are in Edgartown and West Tisbury, with the largest portion (about 25%) in Edgartown. According to Eversource Energy, solar generation made up about 6% of total electricity consumption on the Island in 2022.





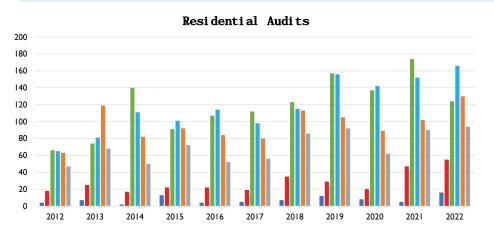


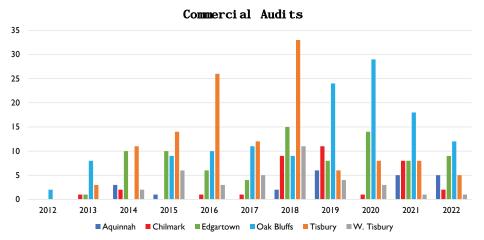
* Includes all residential, commercial, and municipal systems that are fully registered in the MassCEC Production Tracking System.

Residential and commercial energy audits per town, 2012-2022

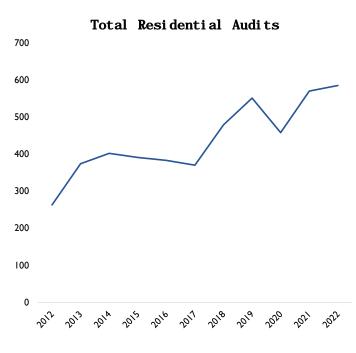
Source: Cape Light Compact

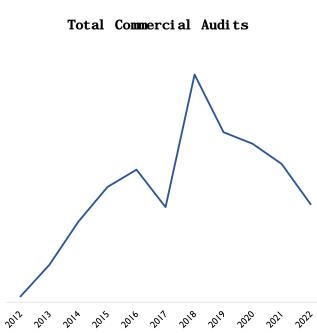
Among its various programs, Cape Light Compact (the energy service provider for the Cape and Vineyard) provides free energy assessments for residential Eversource customers and small businesses. The assessments help identify energy efficiency upgrades that can be implemented for free or with the aid of CLC or state incentive programs. Residential and commercial audits on the Island increased about 122% and 1,600%, respectively, between 2012 and 2022.





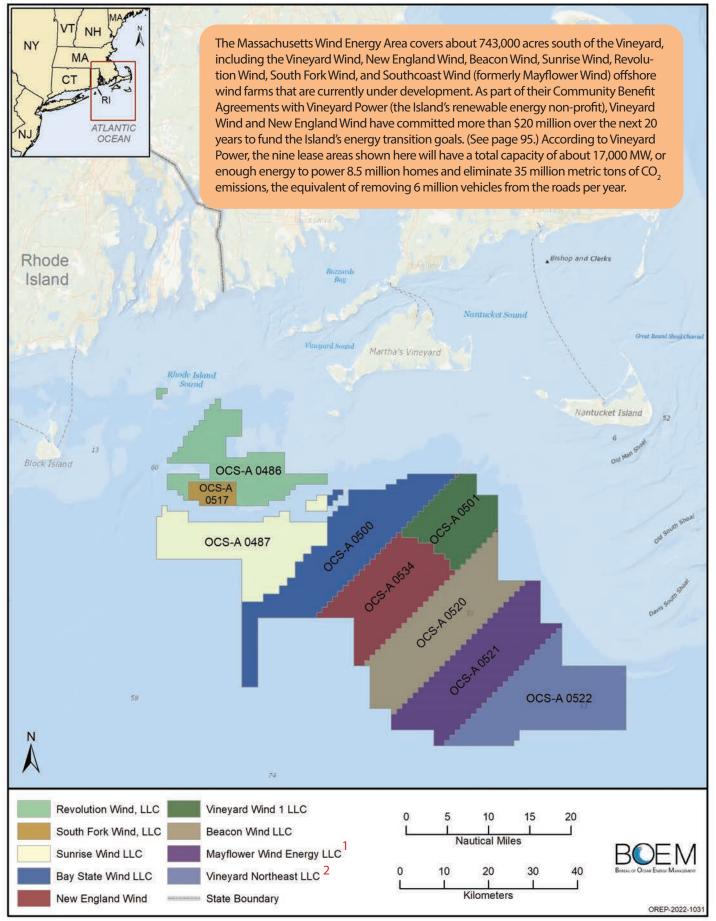
| | Residential audits | Commercial audits | Total |
|-------|-----------------------|-------------------|-------|
| 2012 | 263 | 2 | 265 |
| 2013 | 374 | 13 | 387 |
| 2014 | 402 | 28 | 430 |
| 2015 | 391 | 40 | 431 |
| 2016 | 383 | 46 | 429 |
| 2017 | 370 | 33 | 403 |
| 2018 | 479 | 79 | 558 |
| 2019 | 551 | 59 | 610 |
| 2020 | 458 | 55 | 513 |
| 2021 | 570 | 48 | 618 |
| 2022 | 585 | 34 | 619 |
| Total | 4,151 | 306 | 4,457 |





Leases in the Massachusetts Wind Energy Area, 2022

Source: Bureau of Ocean Energy Management



¹ Renamed South Coast Wind ² Renamed Vineyard Offshore

8. TAXES AND TOWN SERVICES

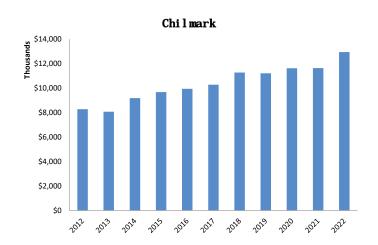
Total operating budgets by town, 2012-2022

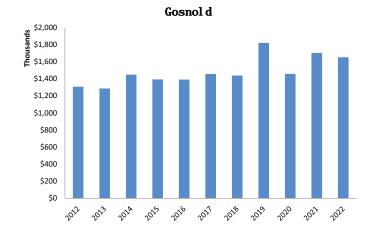
Source: Division of Local Services (operating budgets); American Community Survey 5-Year Estimates (population)

Dukes County towns have seen a mostly steady rise in their annual operating budgets since 2012, with growth ranging from 26% in Gosnold to 73% percent in Aquinnah. Unsurprisingly, operating budgets are higher down-Island. When considering town populations, the pattern usually reverses, with smaller towns having higher budgets per capita. However, the per-capita figure for Chilmark now surpasses that of Edgartown, owing in part to steeper budget increases in Chilmark, and (according to the ACS) faster population growth in Edgartown compared to the other down-Island towns. Budget growth in most towns leveled off or declined slightly in 2020-2021, which likely corresponds to changing needs during the pandemic.

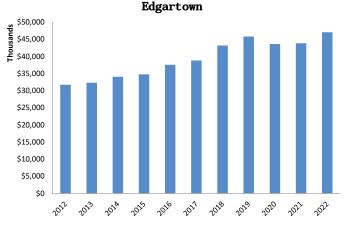
housands

| 2021 | Population | Operating Budget | Operating Budget per Capita |
|--------------|------------|---------------------|-----------------------------------|
| Aquinnah | 691 | \$5,705,65 l | \$8,257 |
| Chilmark | 1,460 | \$11,630,667 | \$7,966 |
| Edgartown | 5,084 | \$43,820,087 | \$8,619 |
| Gosnold | 38 | \$1,703,102 | \$44,818 |
| Oak Bluffs | 5,284 | \$33,739,076 | \$6,385 |
| Tisbury | 4,744 | \$34,407,284 | \$7,253 |
| West Tisbury | 2,976 | \$20,863,793 | \$7,011 |

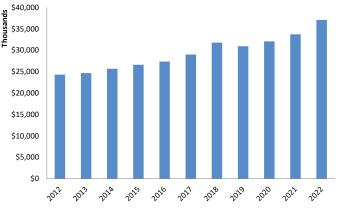


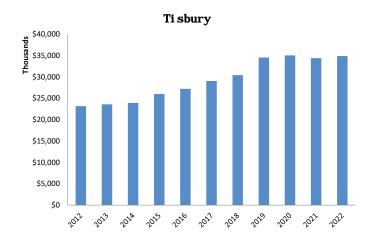


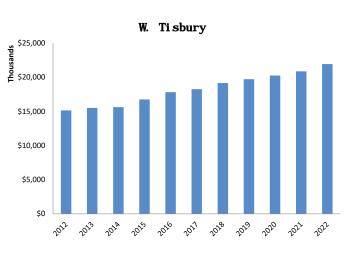
Aqui nnah \$7,000 \$6.000 \$5,000 \$4,000 \$3,000 \$2,000 \$1,000 \$0 2014 2015 2017 2018 2012 2013 2016 2019 2022 2020 2022



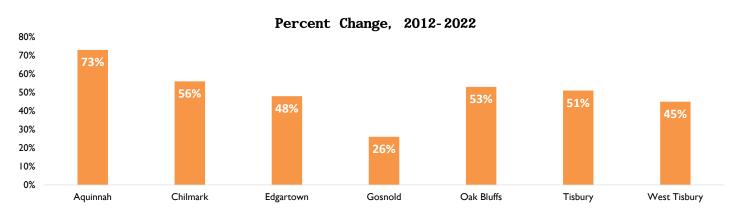








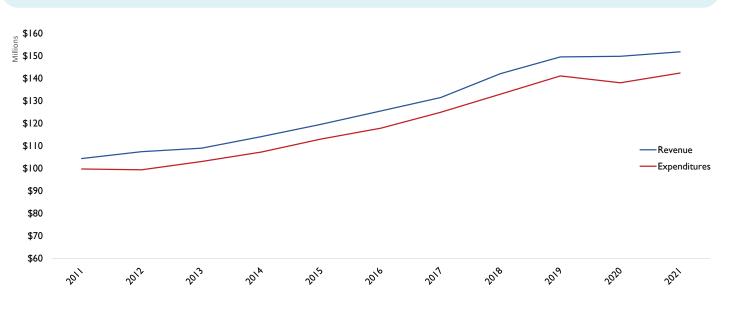
Total operating budgets by town: Percent change, 2012–2022 Source: Division of Local Services



General fund revenue and expenditures: County, 2011-2021

Source: Division of Local Services

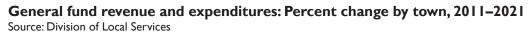
General fund revenue countywide grew 45% between 2011 and 2021, keeping a slight lead over expenditures, which grew 43%. At the town level, revenue growth outpaced expenditure growth in all but Aquinnah and Chilmark, which also saw the greatest relative increase in expenditures across the Island. A decrease in expenditures and slower revenue growth in 2020-2021, especially in Edgartown and Tisbury, was likely influenced by the pandemic. The numbers here not include Enterprise or Community Preservation Act funds, which are shown on page 106.

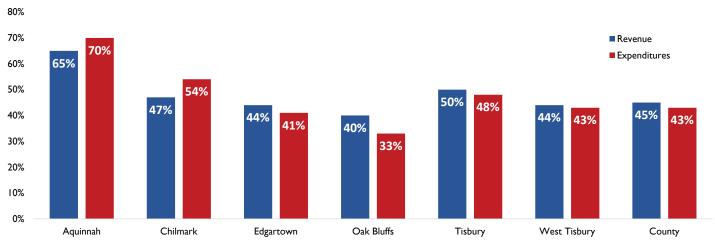


General fund revenue and expenditures by town, 2011-2021

Source: Division of Local Services

| Revenue | 2011 | 2013 | 2015 | 2017 | 2019 | 2021 |
|------------------------------|---------------------|--------------------|----------------------------------|----------------|---------------------|----------------|
| Aquinnah | \$3,464,606 | \$3,601,536 | \$4,452,565 | \$4,703,833 | \$5,530,604 | \$5,705,65 I |
| Chilmark | \$7,906,324 | \$8,066,769 | \$9,673,490 | \$10,273,481 | \$11,210,337 | \$11,630,667 |
| Edgartown | \$30,440,182 | \$32,301,068 | \$34,752,818 | \$38,803,164 | \$45,801,809 | \$43,820,087 |
| Gosnold | \$1,180,826 | \$1,285,997 | \$1,392,170 | \$1,457,020 | \$1,819,393 | \$1,703,102 |
| Oak Bluffs | \$24,156,773 | \$24,670,019 | \$26,630,709 | \$29,029,390 | \$30,970,338 | \$33,739,076 |
| Tisbury | \$22,871,379 | \$23,604,178 | \$26,014,383 | \$29,064,185 | \$34,554,903 | \$34,407,284 |
| W.Tisbury | \$14,441,388 | \$15,503,477 | \$16,743,015 | \$18,250,349 | \$19,713,429 | \$20,863,793 |
| Total | \$104,461,477 | \$109,033,044 | \$119,659,151 | \$131,581,421 | \$149,600,813 | \$151,869,661 |
| Expenditures | 2011 | 2013 | 2015 | 2017 | 2019 | 2021 |
| Aquinnah | \$3,251,221 | \$3,466,658 | \$4,179,506 | \$4,872,994 | \$5,349,750 | \$5,527,436 |
| Chilmark | \$7,576,464 | \$8,006,383 | \$9,441,312 | \$9,369,26I | \$10,913,389 | \$11,680,029 |
| Edgartown | \$28,729,048 | \$28,840,935 | \$32,144,701 | \$36,305,768 | \$42,899,055 | \$40,383,850 |
| Gosnold | NA | NA | NA | \$1,832,258 | \$1,166,103 | \$1,297,944 |
| Oak Bluffs | \$24,735,192 | \$24,669,771 | \$27,347,775 | \$30,501,469 | \$31,406,871 | \$32,918,798 |
| Tisbury | \$21,535,810 | \$23,049,520 | \$23,821,866 | \$26,298,187 | \$31,461,271 | \$31,854,224 |
| West Tisbury | \$14,000,097 | \$15,073,452 | \$16,163,714 | \$17,668,074 | \$19,129,657 | \$20,060,815 |
| Total | \$99,827,832 | \$103,106,719 | \$113,098,874 | \$125,015,753 | \$141,159,993 | \$142,425,152 |
| | Revenue | | | Exp | endi tures | |
| \$50 \$45 \$40 \$35 | | | \$50 - \$45 \$40 - \$35 | | | |
| \$30 | | | \$30 | | | |
| \$25 | | | \$25 | | | |
| \$20 \$15 | | | \$20 \$15 | | | |
| \$10 | | | \$10 | | | |
| \$5 | | | \$5 | | | |
| \$0 | | | \$0 | | | |
| 2011 2012 2013 | 2014 2015 2016 2017 | 2010 2019 2020 202 | | 2012 2013 2014 | 1015 2016 2017 2018 | 2019 2020 2021 |
| Y Y Y | Aquinnah | | rtown —Oak Bluffs | | st Tisbury | , , v |





General fund revenue by town: Breakdown for 2021

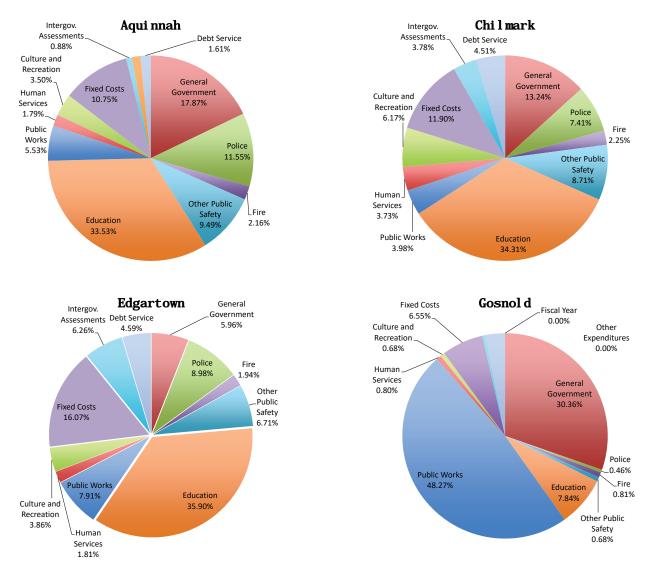
Source: Division of Local Services

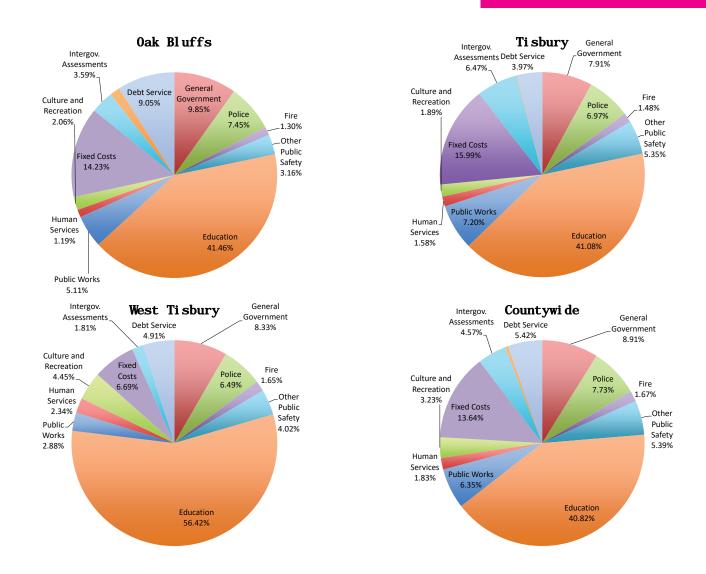
| | Taxes | Service charges | Licenses and permits | Federal revenue | State revenue | Revenue from other govern- ments | Special assess- ments | Fines and forfeitures | Miscella- neous | Other financing sources | Transfers |
|------------|---------------|--------------------|----------------------------|--------------------|------------------|---|-----------------------------|-----------------------|--------------------|-------------------------------|-------------|
| Chilmark | \$, 6,8 | \$750,681 | \$136,360 | \$0 | \$4,562 | \$0 | \$0 | \$4,133 | \$31,395 | \$869,727 | \$48,558 |
| Edgartown | \$36,466,055 | \$3,321,528 | \$955,458 | \$0 | \$2,547,496 | \$5,136 | \$26,777 | \$68,769 | \$515,154 | \$3,501 | \$1,683,715 |
| Aquinnah | \$5,033,849 | \$334,729 | \$27,939 | \$0 | \$0 | \$0 | \$0 | \$20,415 | \$31,249 | \$0 | \$85,000 |
| Gosnold | \$568,493 | \$881,206 | \$6,511 | \$27 | \$25,043 | \$4,144 | \$0 | \$0 | \$85,714 | \$0 | \$0 |
| Oak Bluffs | \$30,062,926 | \$472,033 | \$418,382 | \$0 | \$1,413,093 | \$6,340 | \$0 | \$0 | \$1,228,294 | \$0 | \$1,289,739 |
| Tisbury | \$29,643,174 | \$477,171 | \$427,492 | \$0 | \$1,086,033 | \$9,056 | \$0 | \$129,400 | \$354,744 | \$594,000 | \$43,445 |
| W.Tisbury | \$18,695,099 | \$484,091 | \$146,056 | \$0 | \$1,067,509 | \$183,883 | \$0 | \$5,237 | \$30,991 | \$0 | \$25,227 |
| Total | \$131,586,407 | \$6,721,439 | \$2,118,198 | \$27 | \$6,143,736 | \$208,559 | \$26,777 | \$227,954 | \$2,277,541 | \$1,467,228 | \$3,175,684 |
| | | | | | | | | | | | |

General fund expenditures by town: Breakdown for 2021

Source: Division of Local Services

Education makes up the largest portion of general fund expenditures in Dukes County, except in Gosnold, where public works account for 48% of the total. Gosnold also differs in terms of town revenue, with more than half coming from local receipts in 2021, compared to other towns which relied mostly on the tax levy.

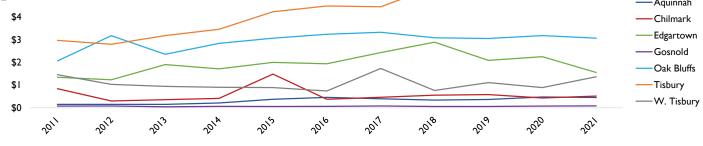


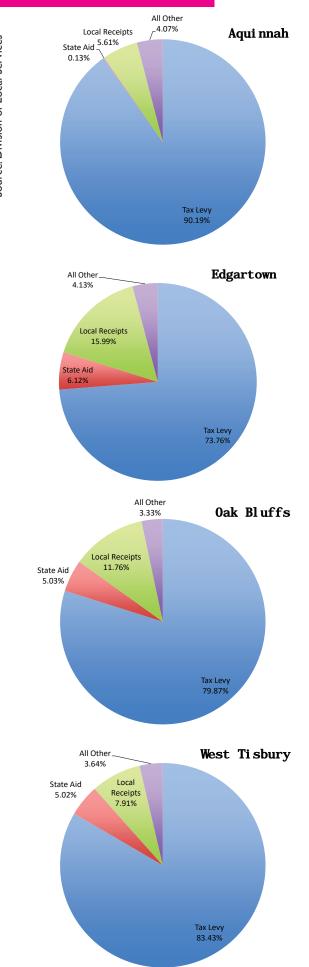


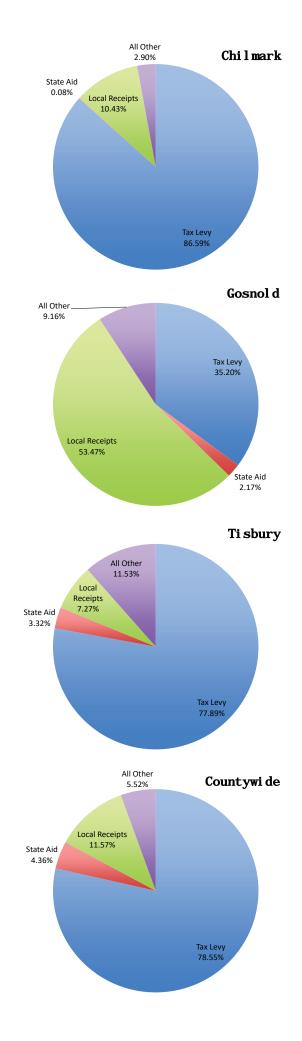
Enterprise and Community Preservation Act Fund Revenue (millions), 2011-2021

Source: Division of Local Services

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-----------------|----------|----------|----------|----------|-----------|-----------|-----------|-------------|-----------|-----------|-----------|
| Aquinnah | \$0.150M | \$0.150M | \$0.150M | \$0.213M | \$0.376M | \$0.461M | \$0.400M | \$0.341M | \$0.368M | \$0.477M | \$0.456M |
| Chilmark | \$0.841M | \$0.302M | \$0.359M | \$0.415M | \$1.487M | \$0.376M | \$0.464M | \$0.556M | \$0.584M | \$0.431M | \$0.518M |
| Edgartown | \$1.347M | \$1.237M | \$1.907M | \$1.714M | \$2.004M | \$1.940M | \$2.433M | \$2.892M | \$2.092M | \$2.255M | \$1.557M |
| Gosnold | \$0.074M | \$0.080M | \$0.043M | \$0.064M | \$0.057M | \$0.061M | \$0.081M | \$0.058M | \$0.058M | \$0.077M | \$0.085M |
| Oak Bluffs | \$2.064M | \$3.178M | \$2.361M | \$2.842M | \$3.071M | \$3.240M | \$3.330M | \$3.085M | \$3.057M | \$3.184M | \$3.068M |
| Tisbury | \$2.975M | \$2.800M | \$3.186M | \$3.464M | \$4.234M | \$4.491M | \$4.453M | \$5.325M | \$4.839M | \$5.012M | \$5.056M |
| W.Tisbury | \$1.461M | \$1.031M | \$0.943M | \$0.905M | \$0.892M | \$0.743M | \$1.734M | \$0.763M | \$1.114M | \$0.893M | \$1.368M |
| Total | \$8.912M | \$8.778M | \$8.948M | \$9.617M | \$12.121M | \$11.312M | \$12.895M | \$\$13.020M | \$12.112M | \$12.329M | \$12.108M |
| suoillii \$5 | | | | | | | | | | | -Aquinnah |







Bond ratings by town and agency, 2011-2021

Source: Division of Local Services

| | Rating Agency | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|
| Chilmark | Standard and Poor's | AA+ | AA+ | - | AAA | AAA | - | AAA | - | AAA | AAA | AAA |
| Oak Bluffs | Standard and Poor's | AA- | AA- | - | AA- | AA- | - | AA+ | - | AA+ | AA+ | AA+ |
| Tisbury | Standard and Poor's | AA | AA | - | AA | AA | - | AA+ | - | AA+ | AA+ | AA+ |
| W. Tisbury | Standard and Poor's | AA | AA | - | AA+ | AA+ | - | AA+ | - | AA+ | AA+ | AA+ |
| Edgartown | Moody's | Aa2 | Aa2 | Aa2 | Aa2 | Aa2 | - | Aa2 | - | Aa2 | Aa2 | Aa2 |
| W. Tisbury | Moody's | Aa2 | Aa2 | Aa2 | Aa2 | - | - | - | - | - | - | - |

Assessed value by town and class, 2023

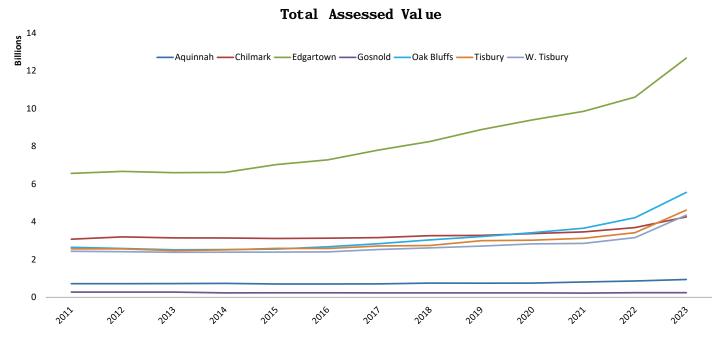
Source: Division of Local Services

Edgartown far surpasses other towns in Dukes County, and the state average, in terms of total assessed value, with Chilmark, Oak Bluffs, Tisbury, and West Tisbury all in the neighborhood of about \$4-5 billion. Though still trailing Edgartown, Tisbury and Oak Bluffs have higher commercial values, and West Tisbury has a higher industrial value, relative to other Island towns. Countywide, total values increased about 48% between 2019 and 2023, including a 25% increase in 2023.

| | Residential | Open Space | Commercial | Industrial | Personal Property | Total |
|---------------|------------------|------------|-----------------|---------------|----------------------|-------------------------|
| Chilmark | \$4,168,266,761 | \$0 | \$34,260,809 | \$879,200 | \$54,673,270 | \$4,258,080,040 |
| Edgartown | \$11,800,249,143 | \$0 | \$605,993,921 | \$8,141,200 | \$260,424,039 | \$12,674,808,303 |
| Aquinnah | \$922,507,225 | \$0 | \$9,525,628 | \$234,400 | \$7,861,035 | \$940, I 28, 288 |
| Gosnold | \$228,495,670 | \$0 | \$7,949,000 | \$476,800 | \$977,735 | \$237,899,205 |
| Oak Bluffs | \$5,255,002,886 | \$0 | \$242,355,889 | \$7,180,055 | \$50,548,740 | \$5,555,087,570 |
| Tisbury | \$4,210,004,229 | \$0 | \$317,513,739 | \$7,340,100 | \$84,003,227 | \$4,618,861,295 |
| W.Tisbury | \$4,174,786,283 | \$0 | \$118,009,852 | \$16,763,135 | \$44,899,800 | \$4,354,459,070 |
| Total | \$30,759,312,197 | \$0 | \$1,335,608,838 | \$41,014,890 | \$503,387,846 | \$32,639,323,77I |
| State average | \$3,868,838,412 | \$58,673 | \$519,197,813 | \$164,386,076 | \$142,664,097 | \$4,695,145,071 |

Total assessed value by town, 2011-2023

Source: Division of Local Services

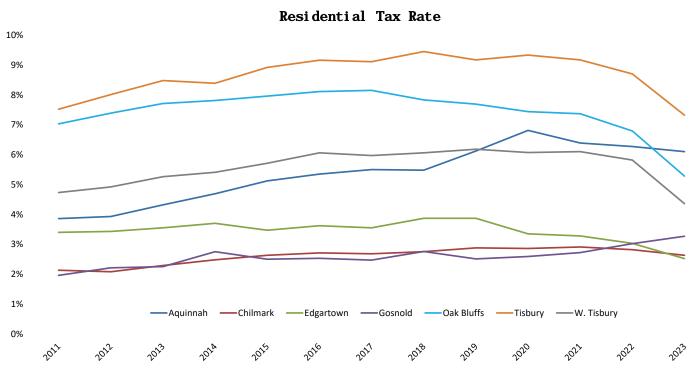


Tax rate by town and class (per thousand of assessed Residential Tax Rate 14% value), 2023 Source: Division of Local Services Personal property 12% Commercial Open space Residential Industrial 10% 6. I 0 6.I 6. I Aquinnah 6.I 8% Chilmark 2.63 0 2.63 2.63 2.63 Edgartown 2.52 0 2.52 2.52 2.52 6% Gosnold (2017) 3.27 0 3.27 3.27 3.27 4% Oak Bluffs 5.28* 0 5.21 5.21 5.21 7.32* 0 6.72 6.72 6.72 Tisbury 2% West Tisbury 4.36 0 4.36 4.36 4.36 State average 13.2 0.52 16.26 16.26 16.21 0% West Tisbury OatBuffs State average Gosnold Tisbury Chilmark Edgartown Aquinna

*Tisbury and Oak Bluffs have adopted the residential exemption, which shifts some of the property tax burden onto non-resident homeowners.

Personal property, commercial and industrial tax rates (per thousand of assessed value), 2011-2023 Source: Division of Local Services

Tax rates in all but Gosnold have declined in recent years, especially in 2023, due largely to an increase in property values since the start of the Covid-19 pandemic. The sharpest decrease since 2020 was in Oak Bluffs (-29%), followed by West Tisbury (-28%), Edgartown (-25%), Tisbury (-22%), Aquinnah (-10%), and Chilmark (-8%). Gosnold saw the opposite trend, with its tax rate increasing 26%. Still, average single-family tax bills have continued to rise, due largely to the high property values. (See next page.)

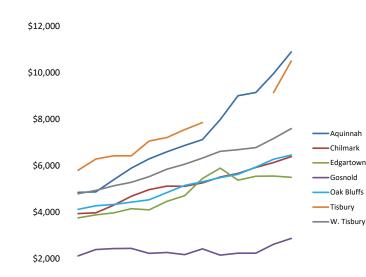


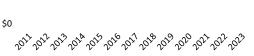
Average single-family tax bill per town, 2011-2023

Source: Division of Local Services; Tisbury town treasurer

Average single-family tax bills vary according to property values, the amount of other tax revenue in town, the influence of local-option tax receipts, and other factors. The average single-family tax bill in Dukes County grew about 57% between 2013 and 2023 (from \$4,565 to \$7,175), compared to the state average, which grew about 45% (from \$4,718 to \$6,822). The sharpest increase was in Aquinnah (102%), followed by Tisbury (64%), Chilmark and Oak Bluffs (49% each), West Tisbury (48%), Edgartown (39%), and Gosnold (18%).

| | Aquinnah | Chilmark | Edgartown | Gosnold | Oak Bluffs | Tisbury | W.Tisbury |
|------|----------|----------|-----------|---------|------------|----------|-----------|
| 2011 | \$4,849 | \$3,938 | \$3,751 | \$2,115 | \$4,118 | \$5,80I | \$4,793 |
| 2013 | \$5,387 | \$4,294 | \$3,964 | \$2,428 | \$4,329 | \$6,423 | \$5,131 |
| 2015 | \$6,294 | \$4,968 | \$4,096 | \$2,222 | \$4,532 | \$7,060 | \$5,526 |
| 2017 | \$6,869 | \$5,110 | \$4,707 | \$2,170 | \$5,150 | \$7,554 | \$6,06 I |
| 2019 | \$7,985 | \$5,513 | \$5,895 | \$2,146 | \$5,484 | UA | \$6,619 |
| 2021 | \$9,152 | \$5,924 | \$5,546 | \$2,230 | \$5,939 | UA | \$6,780 |
| 2023 | \$10,901 | \$6,389 | \$5,499 | \$2,868 | \$6,457 | \$10,511 | \$7,598 |





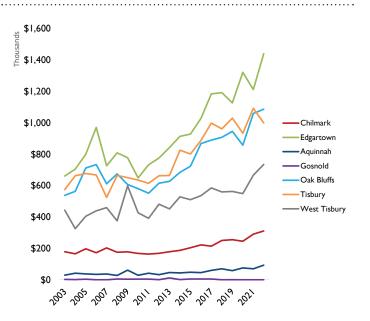
Vehicle excise collections by town, 2006-2022 Source: Division of Local Services

| | 2006 | 2012 | 2017 | 2022 |
|------------|-------------|-------------|-------------|-------------|
| Aquinnah | \$34,338 | \$32,513 | \$59,918 | \$92,748 |
| Chilmark | \$172,060 | \$168,618 | \$213,875 | \$311,119 |
| Edgartown | \$970,580 | \$775,939 | \$1,184,358 | \$1,440,812 |
| Gosnold | \$28 | \$147 | \$4,995 | \$0 |
| Oak Bluffs | \$733,761 | \$615,427 | \$890,023 | \$1,087,177 |
| Tisbury | \$667,729 | \$662,795 | \$998,441 | \$999,340 |
| W.Tisbury | \$438,909 | \$481,328 | \$585,372 | \$734,769 |
| Total | \$3,017,405 | \$2,736,767 | \$3,936,982 | \$4,665,965 |

Average single-family tax bill and ranking, 2023

Source: Division of Local Services

| | Tax bill | Rank/351 (1 is highest) |
|------------|----------|----------------------------|
| Aquinnah | \$10,901 | 37 |
| Chilmark | \$6,389 | 155 |
| Edgartown | \$5,499 | 200 |
| Gosnold | \$2,868 | 343 |
| Oak Bluffs | \$6,457 | 150 |
| Tisbury | \$10,511 | 40 |
| W.Tisbury | \$7,598 | 97 |
| State | \$6,822 | - |

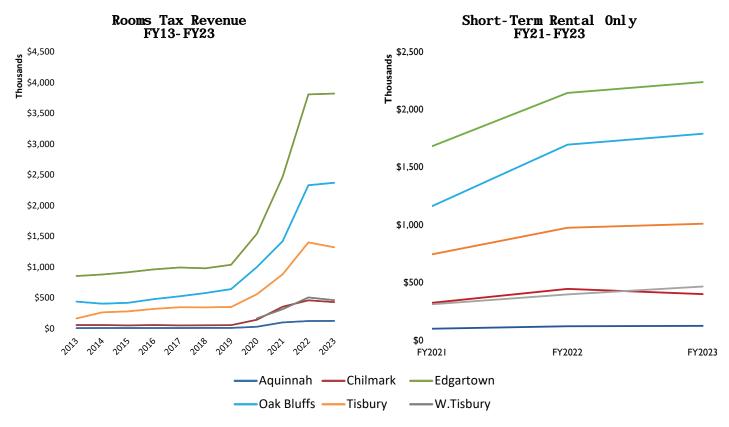


Local option rooms tax by town, 2014-2023

Source: MA Dept. of Revenue; Division of Local Services

Massachusetts charges a 6.25% tax on restaurant meals, and a 5.7% tax on room rentals of 90 days or less, which includes shortterm rentals of 31 days or less. In addition, cities and towns may charge their own local meals, rooms, marijuana, and short-term rental taxes. Oak Bluffs and Tisbury have opted into the local meals tax, each charging a rate of 0.75%. Oak Bluffs, Tisbury, and West Tisbury also charge a 6% tax on rooms, while Edgartown, Chilmark, and Aquinnah charge 4%. Tisbury and West Tisbury charge a 3% tax on marijuana products, which they began collecting in FY2022. Rooms tax revenue has increased exponentially in Island towns since around 2019, due largely to short-term rentals.

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Aquinnah | \$8,775 | \$9,736 | \$9,544 | \$9,535 | \$10,658 | \$10,466 | \$30,568 | \$100,635 | \$123,328 | \$124,070 |
| Chilmark | \$57,965 | \$53,347 | \$56,740 | \$53,067 | \$53,716 | \$55,286 | \$144,044 | \$355,080 | \$458,990 | \$431,040 |
| Edgartown | \$879,189 | \$915,918 | \$962,115 | \$992,619 | \$980,507 | \$1,038,410 | \$1,543,428 | \$2,468,569 | \$3,809,007 | \$3,822,128 |
| Oak Bluffs | \$405,152 | \$420,142 | \$479,220 | \$525,639 | \$578,436 | \$642,162 | \$1,000,869 | \$1,420,537 | \$2,332,000 | \$2,370,590 |
| Tisbury | \$264,242 | \$280,900 | \$320,388 | \$347,011 | \$346,687 | \$350,156 | \$559,197 | \$883,159 | \$1,401,200 | \$1,321,417 |
| W. Tisbury | - | - | - | - | - | - | \$165,874 | \$316,046 | \$506,675 | \$462,961 |
| Total | \$1,615,323 | \$1,680,043 | \$1,828,007 | \$1,927,871 | \$1,970,004 | \$2,096,480 | \$3,443,980 | \$5,544,026 | \$8,631,200 | \$8,532,206 |



Local option marijuana tax by town, 2022 Source: Division of Local Services

Local option meals tax by town, 2013-2023 Source: Division of Local Services

| | 2022 | _ | 2013 | 2018 | 2023 |
|--------------|----------|------------|-----------|-----------|-----------|
| Tisbury | \$11,382 | Oak Bluffs | \$234,152 | \$332,844 | \$483,683 |
| West Tisbury | \$13,163 | Tisbury | - | \$171,820 | \$213,116 |
| Total | \$24,545 | Total | \$234,152 | \$504,664 | \$696,799 |

Total outstanding long-term debt by town, 2013-2022 Source: Division of Local Services

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------------|
| Aquinnah | \$97,000 | \$68,000 | \$39,000 | \$10,000 | \$0 | \$72,000 | \$48,000 | \$24,000 | \$0 | ND |
| Chilmark | \$4,835,000 | \$4,235,000 | \$4,245,000 | \$3,625,000 | \$3,005,000 | \$2,395,000 | \$1,810,000 | \$1,370,000 | \$935,000 | \$500,000 |
| Edgartown | \$21,289,337 | \$19,519,360 | \$16,099,160 | \$18,753,450 | \$17,612,935 | \$15,775,009 | \$13,934,494 | \$12,088,667 | \$10,252,387 | \$8,565,636 |
| Gosnold | ND | ND | ND | \$247,000 | \$247,000 | \$247,000 | \$0 | ND | \$0 | ND |
| Oak Bluffs | \$18,089,566 | \$16,062,409 | \$14,311,293 | \$21,622,616 | \$19,399,294 | \$17,138,578 | \$15,089,848 | \$21,333,339 | \$33,669,427 | \$29,973,919 |
| Tisbury | \$14,544,102 | \$14,103,319 | \$14,111,318 | \$12,504,545 | \$10,862,691 | \$9,255,755 | \$7,768,465 | \$6,474,094 | \$6,153,742 | \$4,936,408 |
| W.Tisbury | \$4,656,000 | \$9,977,000 | \$9,113,000 | \$8,429,000 | \$7,785,000 | \$7,165,000 | \$6,545,000 | \$5,925,000 | \$5,310,000 | \$4,695,000 |
| \$40 suoilli \$35 | | | | | | | | | | |
| \$30 \$35 | | | | | | | / | | | — Aquinnah — Chilmark |
| \$25 \$20 | | | | | | | | | - | |
| \$15 | | | | | | \sim | | | - | Gosnold Oak Bluffs |

Debt service as percent of town budget, 2013-2022

2015

2016

2017

2014

Source: Division of Local Services

2013

\$10

\$5 \$0

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Aquinnah | 2.52% | 0.51% | 0.48% | 0.46% | 0.38% | 0.88% | 1.53% | 1.65% | 1.56% | ND |
| Chilmark | 6.92% | 5.59% | 5.31% | 4.70% | 4.67% | 4.50% | 4.34% | 4.15% | 4.13% | 3.56% |
| Edgartown | 6.82% | 5.62% | 5.23% | 4.99% | 5.29% | 4.58% | 4.15% | 4.21% | 4.02% | 3.70% |
| Gosnold | ND | ND | ND | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 2.35% | ND |
| Oak Bluffs | 9.83% | 9.58% | 7.85% | 8.14% | 9.83% | 8.82% | 8.20% | 7.55% | 8.77% | 9.24% |
| Tisbury | 6.70% | 5.24% | 5.25% | 5.55% | 5.34% | 5.98% | 3.96% | 3.58% | 3.48% | 3.43% |
| W.Tisbury | 5.68% | 6.11% | 6.49% | 4.99% | 4.83% | 4.94% | 5.22% | 5.02% | 4.72% | 4.24% |

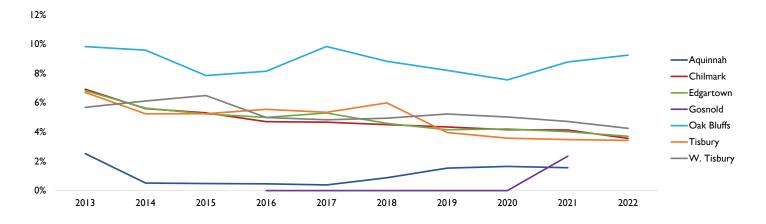
2018

2019

2020

2021

2022



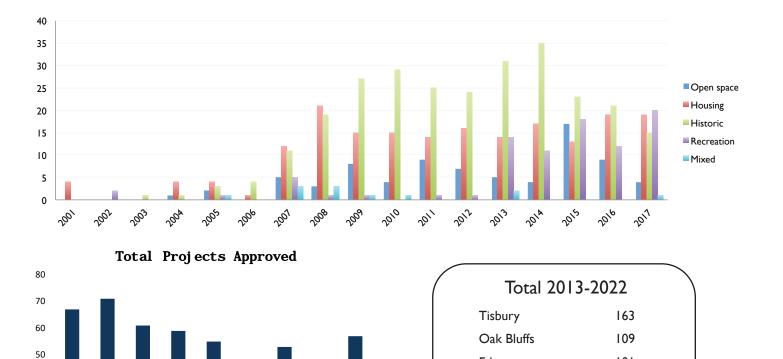
-Tisbury

-W. Tisbury

Community Preservation Act: Approved projects by category, 2001–2017

Source: Community Preservation Coalition

The number of approved CPA projects in Dukes County has multiplied many times over since the early 2000s when towns began adopting the law, which allows them to collect a property-tax surcharge of up to 3%. The state also contributes a portion of funds to participating towns every year. CPA funds may be spent on open space, housing, historic preservation, recreation, or a mix of those things. The largest portion of approved projects in Dukes County since 2001 has focused on historic preservation, followed by housing. Recreation projects on the Island have increased significantly since 2012.



Edgartown

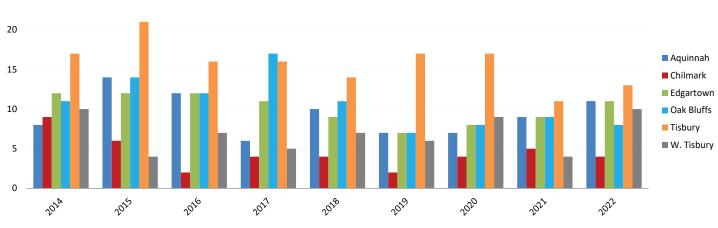
Aquinnah

W.Tisbury

Chilmark

Total





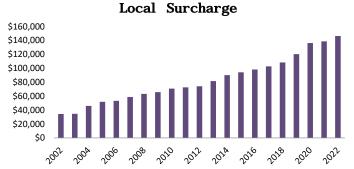
¹¹³ Martha's Vineyard Statistical Profile | 2023

Community Preservation Act: Local surcharge and state match (percent) per town, 2002–2022

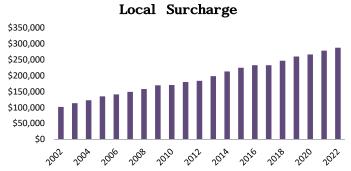
Source: Community Preservation Coalition

State matches for all towns except Gosnold, which joined later in the game, started out at 100%, then declined in some cases by more than 75% over the years. The state matches for Aquinnah and Chilmark remained intact for longer, at least partly because those towns were among the first in the state to adopt the CPA. The state match in every Island town has increased since 2018. More information about the distribution formula is available <u>here</u>.

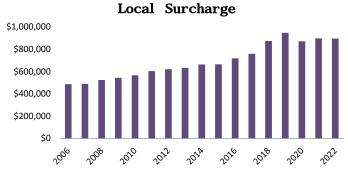
Aquinnah



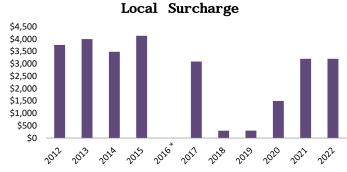
Chilmark

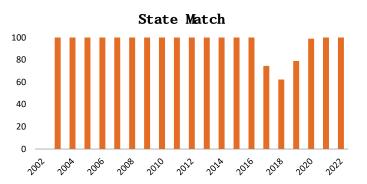


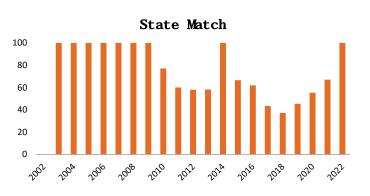
Edgartown



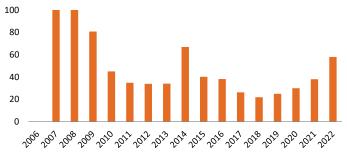
Gosnold







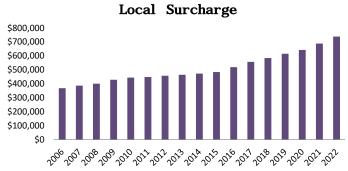
State Match



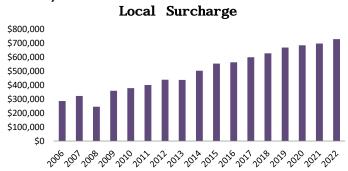
State Match



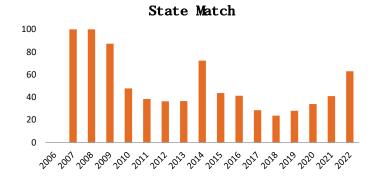
Oak Bluffs



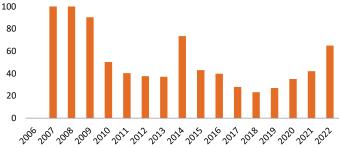
Tisbury

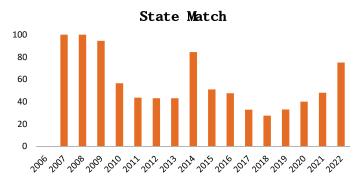


West Tisbury Local Surcharge



State Match

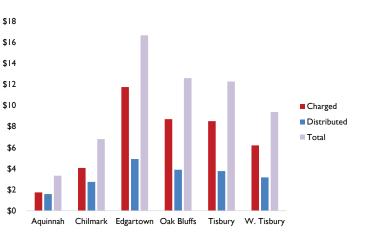




Community Preservation Act: Total amounts charged by town and distributed by state as of 2022

Source: Community Preservation Coalition

| | Charged | Distributed | Total | Millions |
|------------|--------------|-------------|--------------|----------|
| Aquinnah | \$1,742,282 | \$1,588,348 | \$3,330,630 | |
| Chilmark | \$4,066,954 | \$2,745,320 | \$6,812,274 | 4 |
| Edgartown | \$11,755,978 | \$4,914,412 | \$16,670,390 | \$ |
| Gosnold | \$26,958 | \$9,788 | \$36,746 | |
| Oak Bluffs | \$8,701,151 | \$3,899,775 | \$12,600,926 | |
| Tisbury | \$8,514,715 | \$3,771,827 | \$12,286,542 | |
| W.Tisbury | \$6,212,728 | \$3,172,228 | \$9,384,956 | |



Community Development Block Grant awards 2006–2021

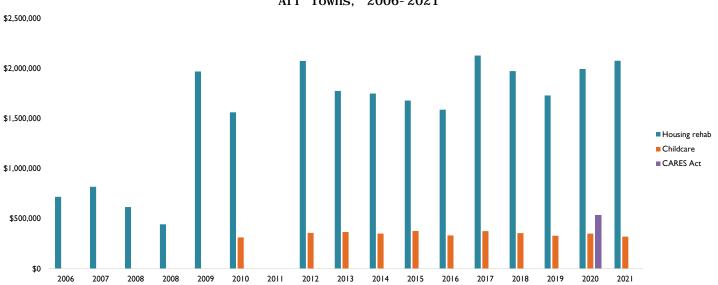
Source: Bailey Boyd Associates

Community Development Block Grants aim to support local development needs such as affordable housing, infrastructure, and public social services. From FY09-FY19, Oak Bluffs applied jointly with Tisbury; and Edgartown with West Tisbury, Chilmark, Aquinnah, and Gosnold, although the mix has varied. In FY20 Chilmark joined the Oak Bluffs and Tisbury Group. The funds typically support housing rehabilitation and childcare services, and vary from year to year. Additional microenterprise and homeless assistance funds through the CARES Act during Covid-19 were granted to the six Island towns.

| | Housing rehab | Childcare | Microenterprise loans | Homeless assistance |
|-------------------|---------------|-------------|-----------------------|---------------------|
| 2006 | \$717,506 | \$0 | - | - |
| 2007 | \$817,768 | \$0 | - | - |
| 2008 | \$615,909 | \$0 | - | - |
| 2008' | \$443,654 | \$0 | - | - |
| 2009 | \$1,969,180 | \$0 | - | - |
| 2010 | \$1,561,414 | \$312,283 | - | - |
| 2011 ² | \$0 | \$0 | - | - |
| 2012 | \$2,073,952 | \$357,820 | - | - |
| 2013 | \$1,775,414 | \$366,995 | - | - |
| 2014 | \$1,749,350 | \$350,940 | - | - |
| 2015 | \$1,679,167 | \$376,200 | - | - |
| 2016 | \$1,588,209 | \$332,480 | - | - |
| 2017 | \$2,128,161 | \$375,725 | - | - |
| 2018 | \$1,973,253 | \$355,500 | - | - |
| 2019 | \$1,729,500 | \$330,000 | - | - |
| 2020 | \$1,994,203 | \$351,000 | \$468,274 | \$67,410 |
| 2021 | \$2,076,200 | \$321,000 | - | - |
| Total | \$24,892,840 | \$3,829,943 | \$468,274 | \$67,410 |

¹ Funding for the Oak Bluffs Public Library conversion, awarded through the state Housing Development Support Program.

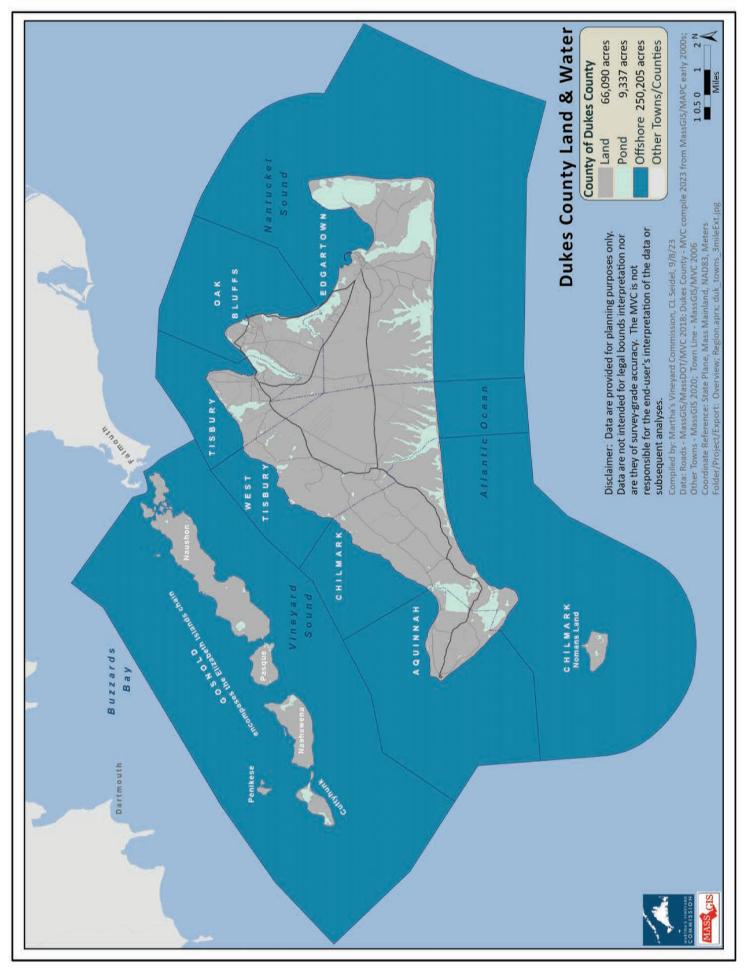
² Martha's Vineyard was disqualified in 2011 due to a technicality; a legal ad for a public hearing did not include the word "regional."

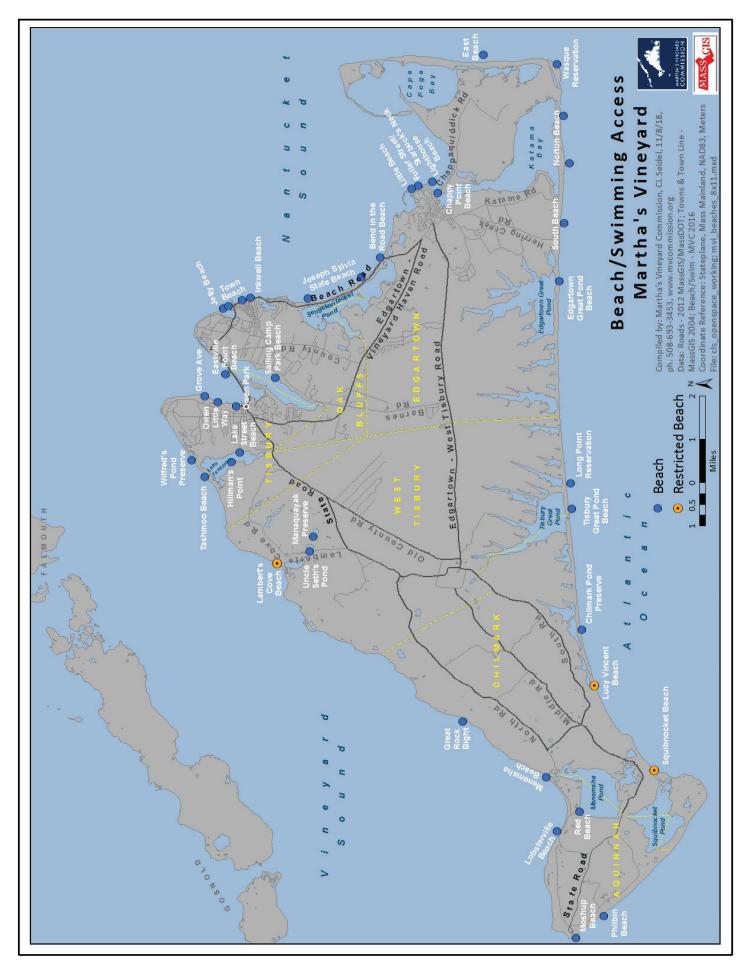


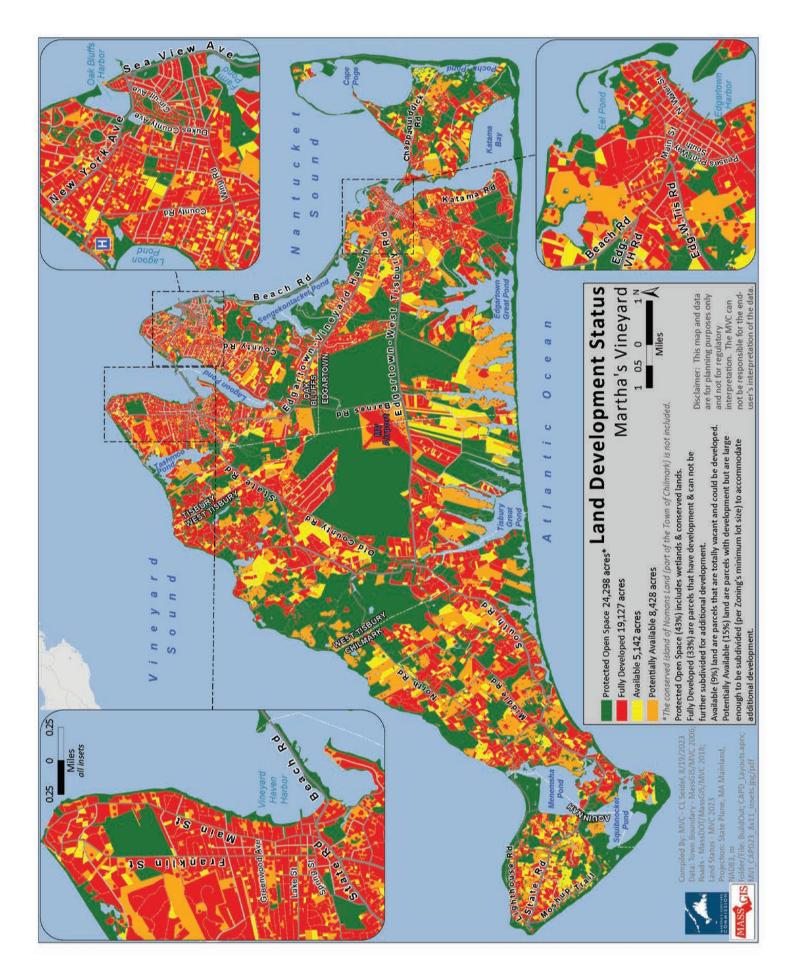
All Towns, 2006-2021

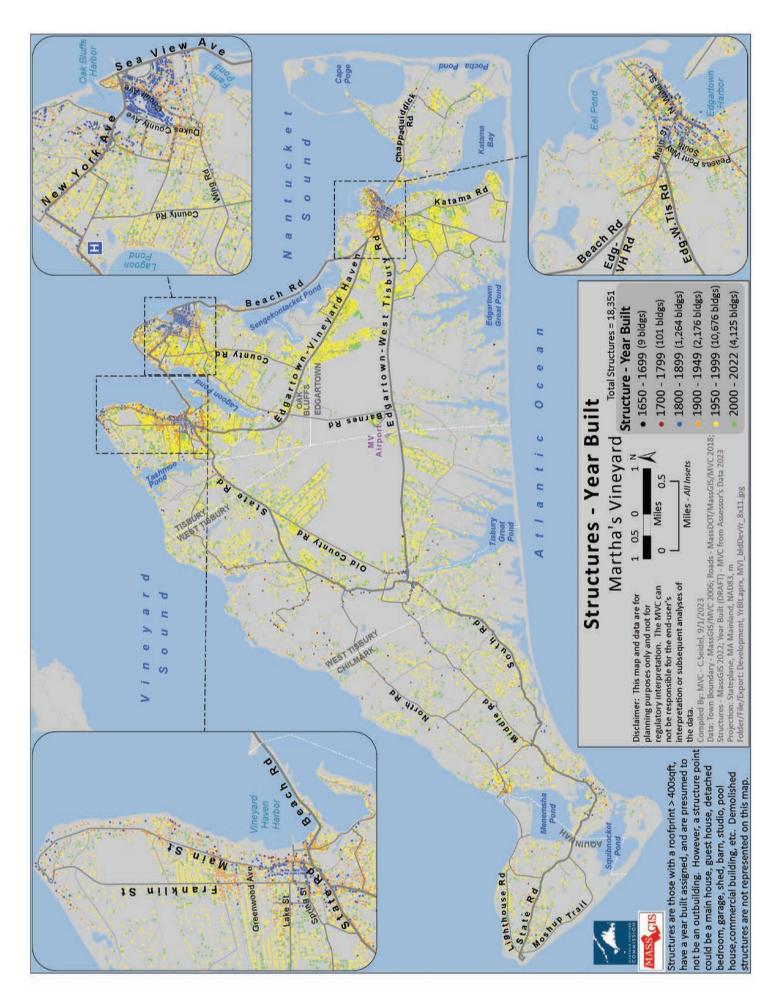
MAPS

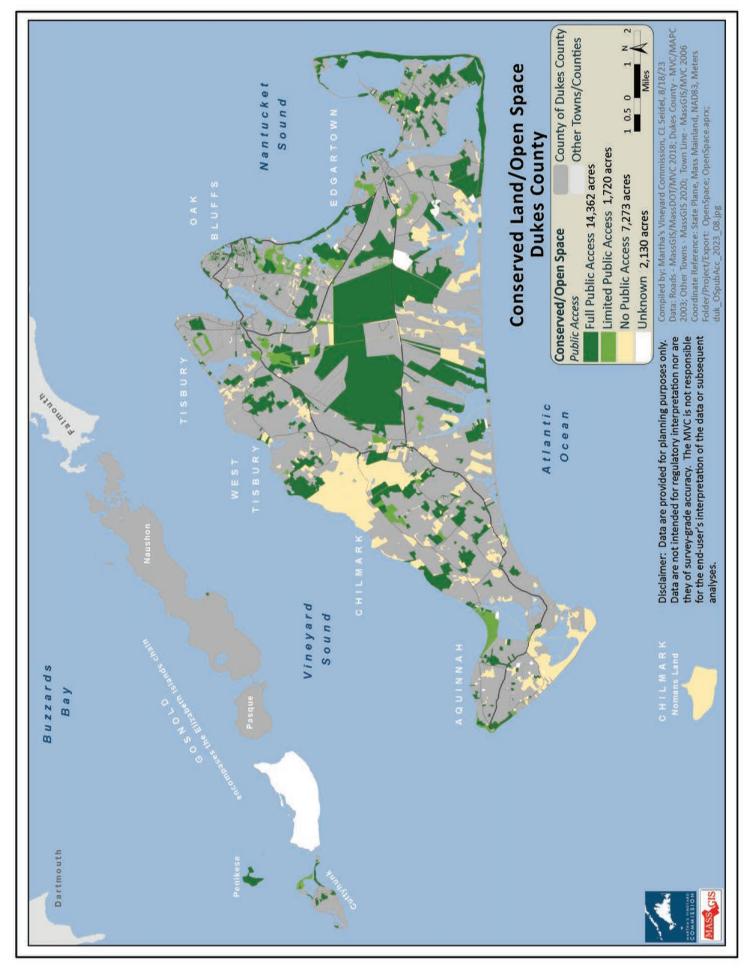
| Dukes County Land and Water 118 |
|---|
| Beaches/Swimming Access 119 |
| Land Development Status 120 |
| Structures - Year Built 121 |
| Conserved Land/Open Space 122 |
| MassHistoric Commission Inventory 123 |
| Flood Zones and Affected Buildings 124 |
| Major Watersheds 125 |
| Major Watersheds and Pond Water Quality 126 |
| Official Road Centerline Miles 127 |
| Bus and Shared-Use Path Network 128 |
| Special Ways 129 |
| Trail Network 130 |
| Waste Disposal Locations 131 |
| Drinking Water Resources 132 |
| Water Table Elevations: Central Outwash Plain |

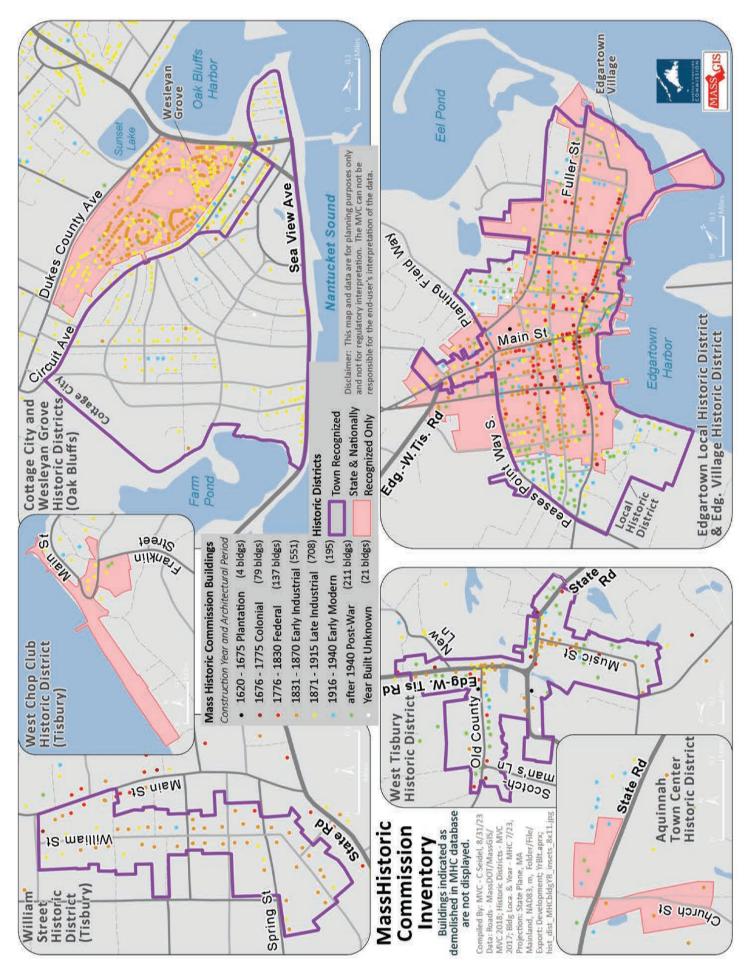


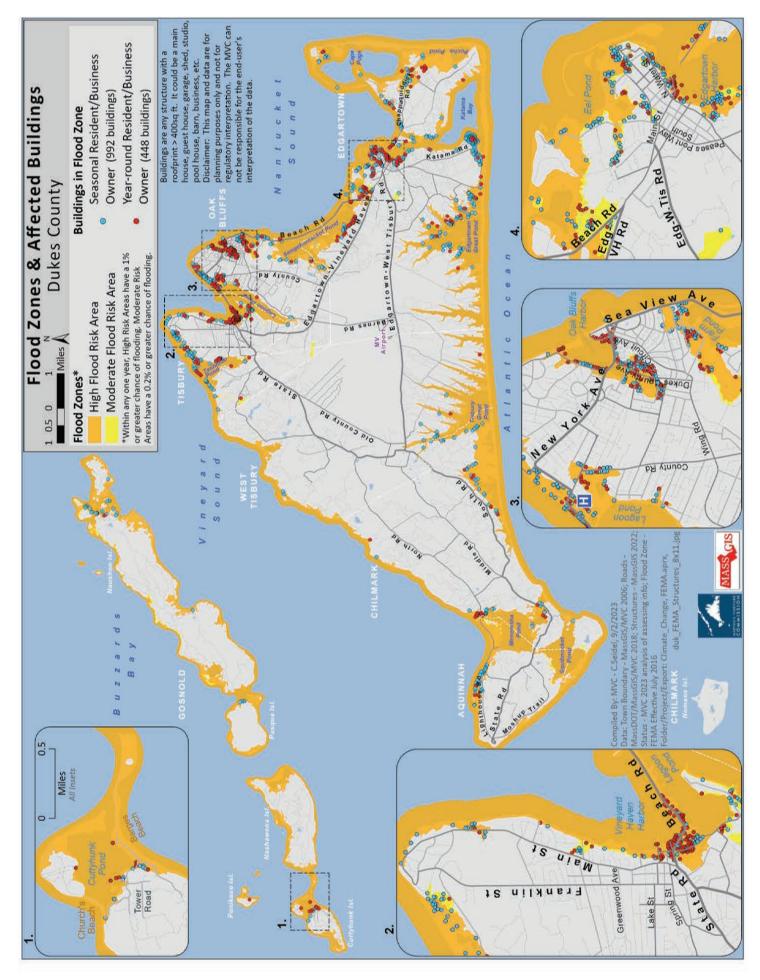


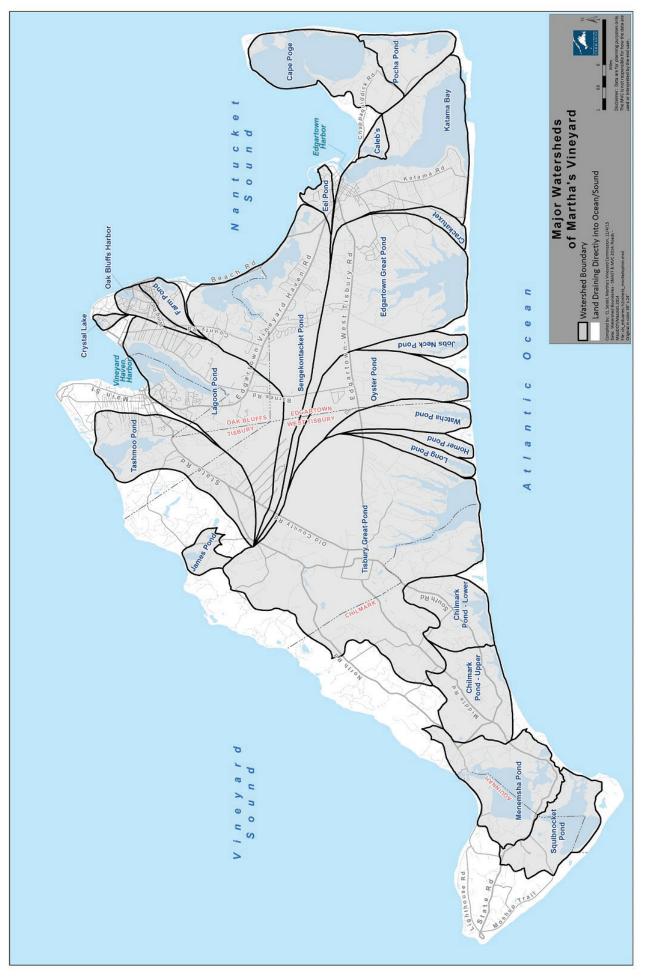


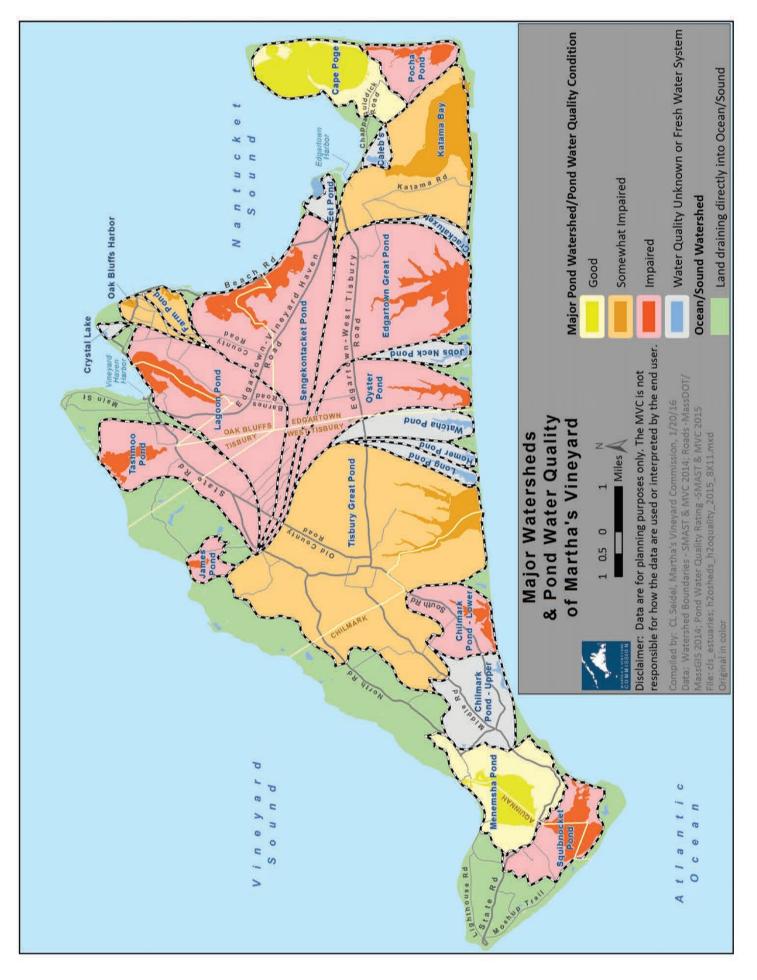


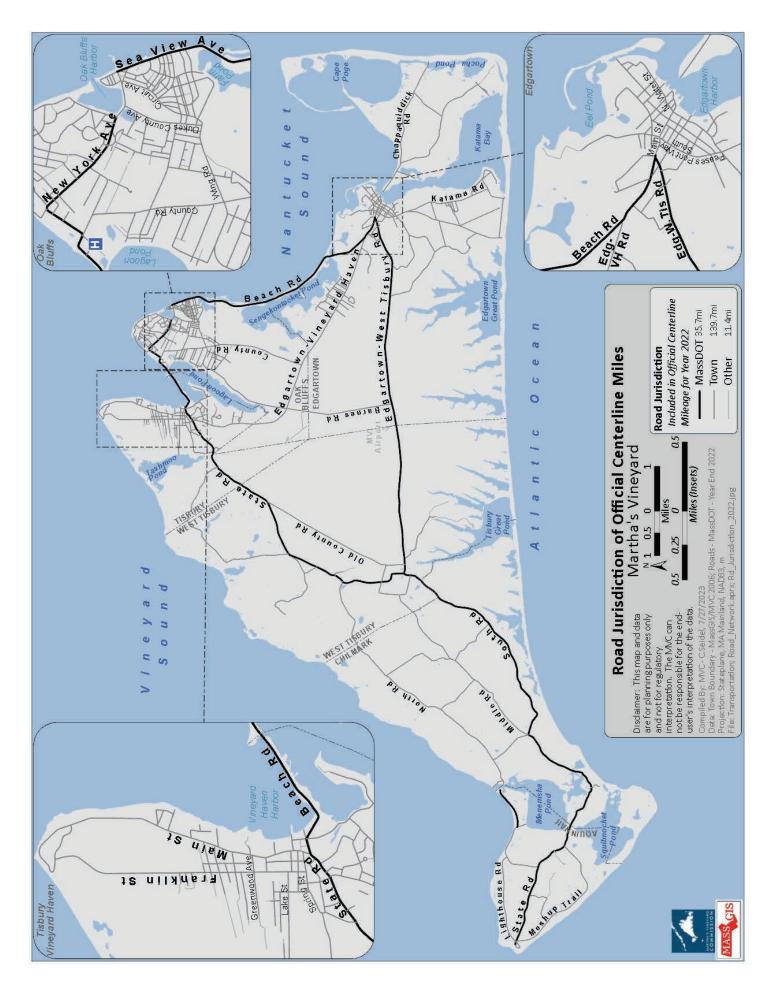


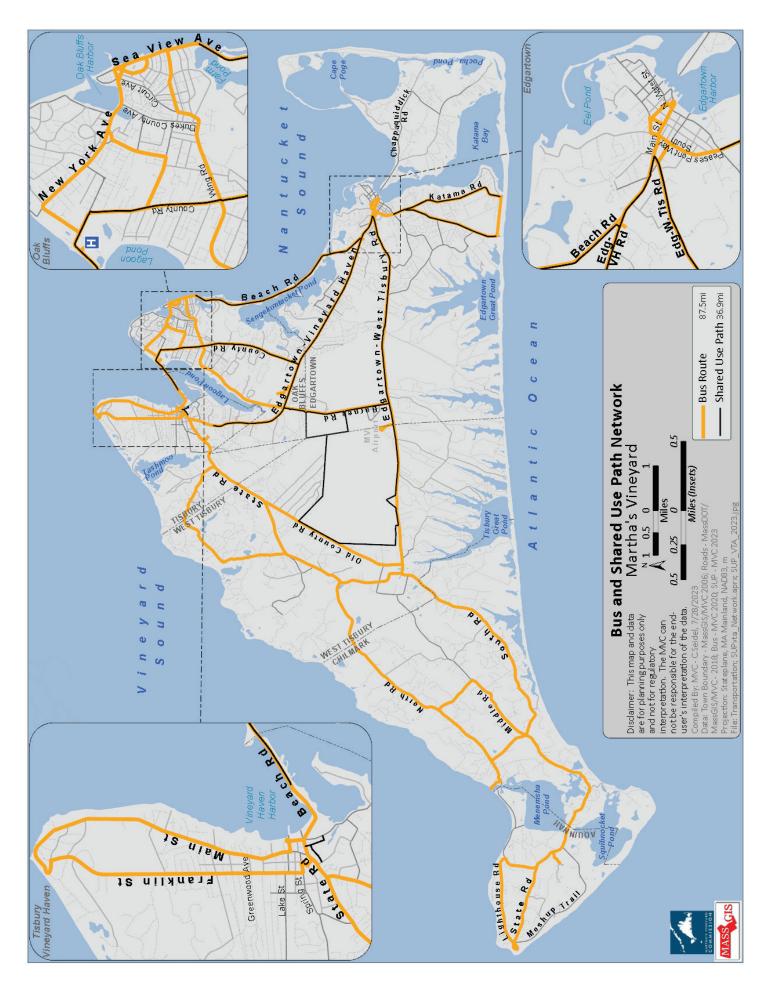


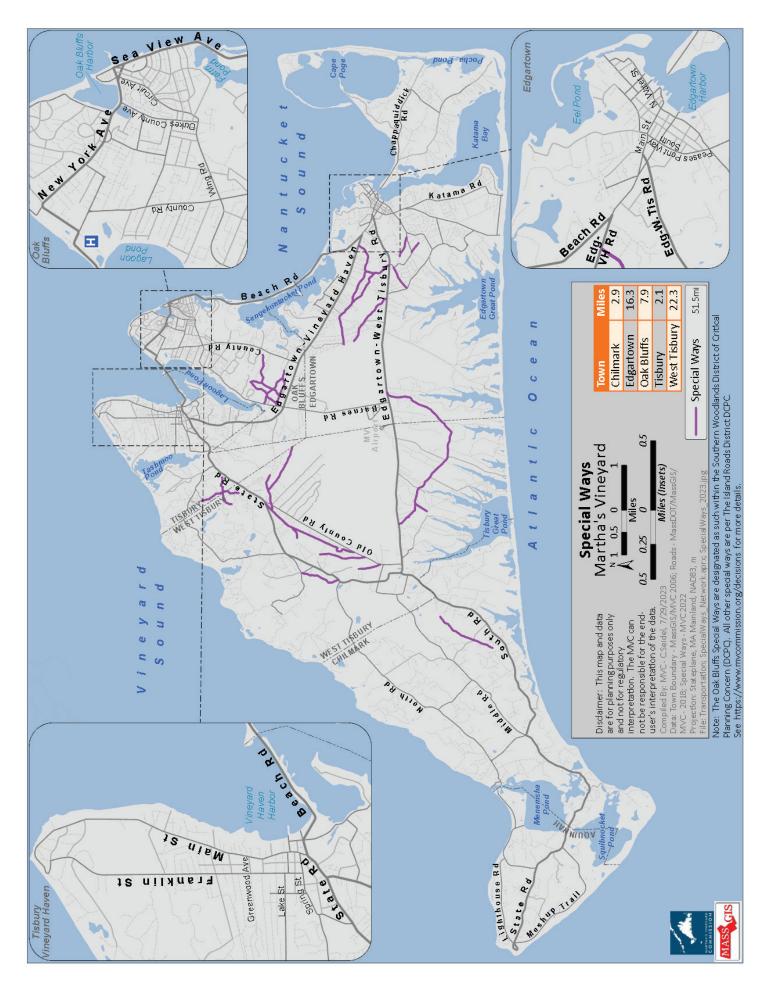


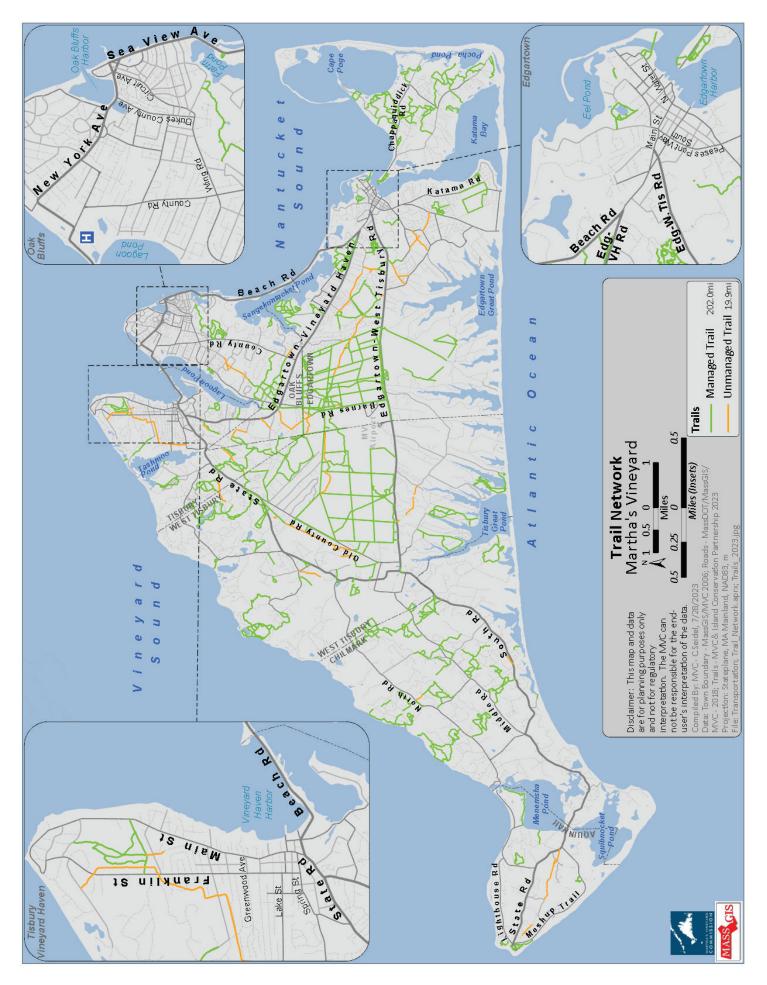


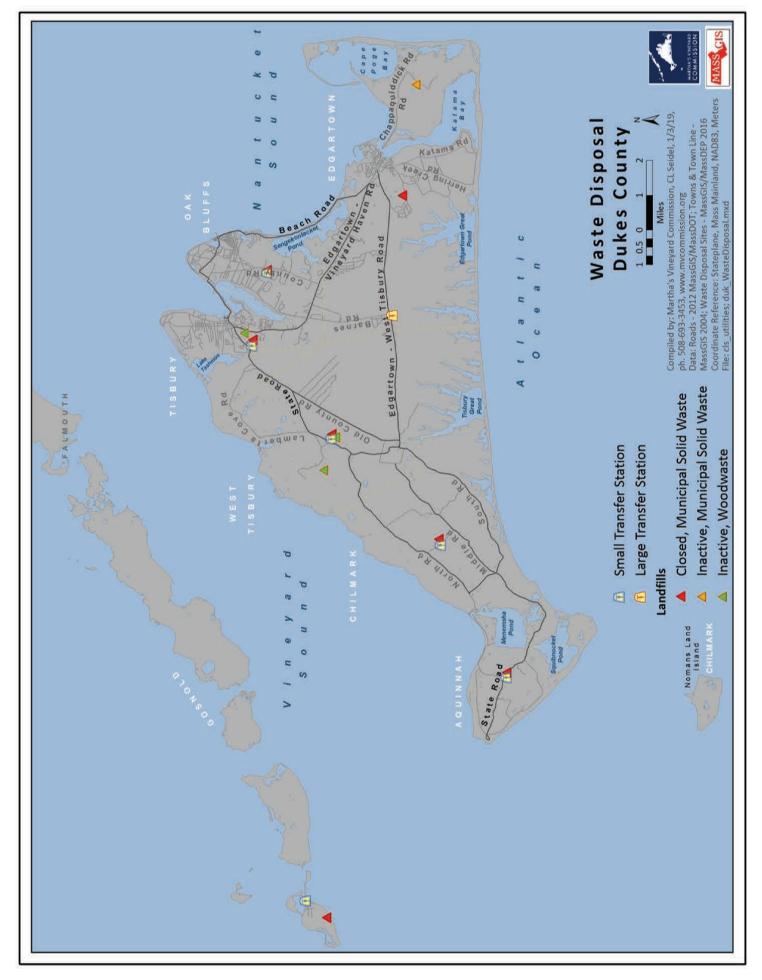


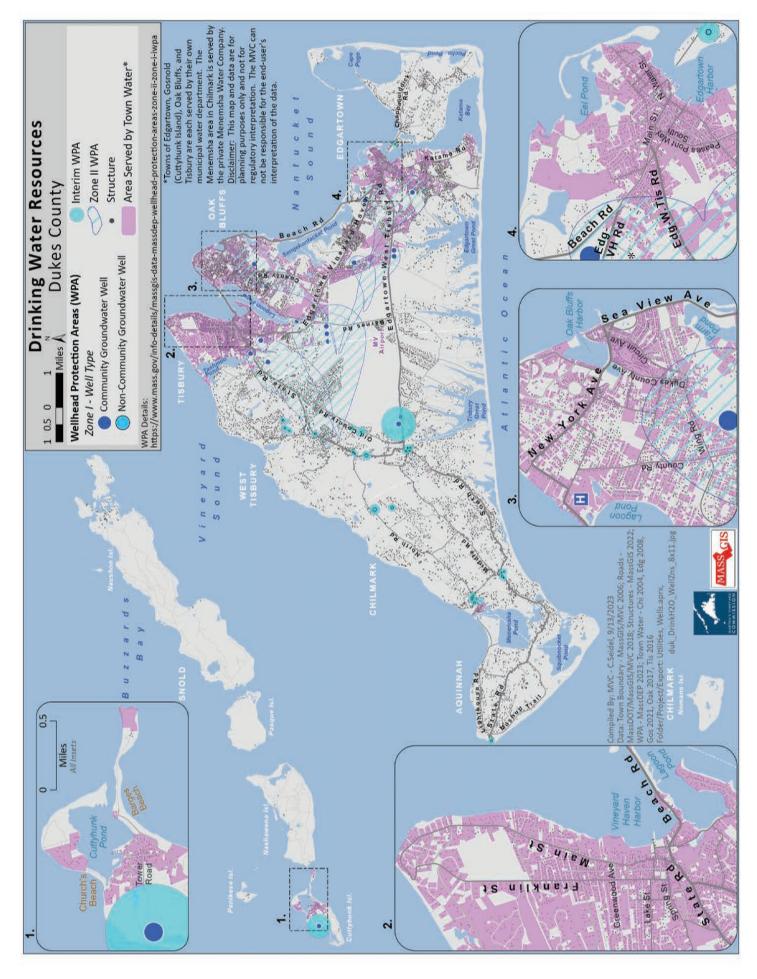


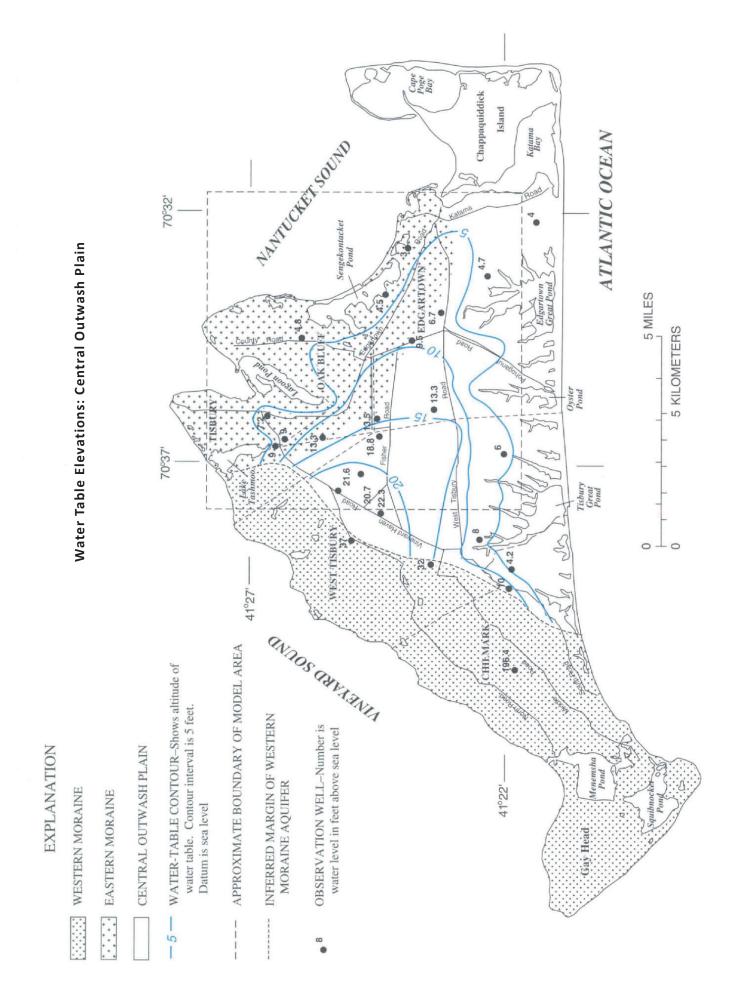












GLOSSARY

Accessory apartment: Also known as an in-law or guest apartment; an individual living unit meant to serve as an accessory to a residential dwelling. In most cases on the Vineyard it may be located within or apart from the residential dwelling.

Affordable housing: Housing that does not cost more than one third of a household's total income. May also apply to housing that is affordable (as defined here) to households earning 80 percent of the area median income as established by the federal Department of Housing and Urban Development.

Aircraft operation: The landing or takeoff of an aircraft.

Aquifer: A body of porous material that contains groundwater. The US Environmental Protection Agency has designated Martha's Vineyard as a sole-source aquifer, the only source being rainfall.

Bedrooms per unit: A measure of density. On the Vineyard and elsewhere, on-site sewage disposal systems must be designed to handle certain daily flows, in many cases based on the number of bedrooms per unit..

Binomial filter: A smoothing technique often used in climate analysis to reveal underlying trends in data. In this case, four data points on either side of a value are averaged, with decreasing weights further from the center, to create a smoothed value.

Blue economy: That portion of the economy (jobs, services, etc.) that depends directly (dark blue) or indirectly (medium blue) on the water.

Cape Light Compact: An energy services organization (also known as a Community Choice Aggregation or CCA) that is operated by towns in Barnstable and Dukes counties. Works to deliver energy efficiency programs and renewable electricity, and conducts consumer advocacy.

Central outwash plain: Sand and gravel deposits that extend south from Tisbury and comprise most of the south shore. Contains the Island's main aquifer, which supplies most of the potable water for Edgartown, Oak Bluffs and Tisbury.

Co-mingled (single-stream) recycling: A process where recyclables are collected and processed in a single waste stream, then separated at a materials recovery facility.

Coastal pond: A saltwater or brackish pond that periodically opens to the sea, either naturally or by mechanical means for the sake of supporting shellfish populations and pond health. Martha's Vineyard has 27 coastal ponds.

Community Development Block Grant: A competitive grant program administered by the federal Department of Housing and Urban Development that aims to support local community development needs such as affordable housing, infrastructure and public social services. Any community may apply. **Community housing:** Year-round rental or ownership housing that is permanently deed-restricted for households earning between 81 and 150 percent of the area median income.

Community water system: As defined by the Massachusetts Drinking Water Regulations, a public water system that provides at least 15 year-round residential service connections, or supplies at least 25 year-round residents.

Community Preservation Act: Massachusetts General Law Chapter 44B, passed in 2000, which allows participating communities to raise funds through a property tax surcharge of up to three percent. Funds may be spent on open space and historic preservation, affordable housing and outdoor recreational facilities. The state's Community Preservation Trust Fund distributes additional funds annually to participating communities.

Cost of living: The cost of maintaining a certain standard of living, as determined through comparison to an index measuring certain items or services.

Cost-of-living index: A number that measures the average cost of living over time, or compared to an average that is equal to 100. The index of 133.3 in this report is relative to the national average, meaning that the cost of maintaining a national standard of living is 33.3 percent higher on the Vineyard than nationally.

County Health Rankings and Roadmaps: A collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute that measures vital health factors in counties across the United States.

Covanta (formerly SEMASS [Southeast Massachusetts Resource Recovery Facility]): A municipal waste disposal and recycling facility in Rochester that converts waste to electricity via incineration. Opened in 1988 following the US Environmental Protection Agency's mandate to close outdated landfills in the state.

Crude death rate: The annual number of deaths in an area, divided by the population, multiplied by 100,000.

Eelgrass: A flowering aquatic plant that grows in coastal ponds. In part because it supports many organisms and requires clear water to photosynthesize, eelgrass is a primary indicator of pond health. Eelgrass meadows have declined significantly on the Vineyard since the 1950s and have largely disappeared on the Cape.

Eligible class-I renewable generation unit: An electricity-generating unit built on or after Jan. 1, 1998 that meets the Massachusetts Renewable Energy Portfolio Standard Class-I regulations.

Enplanement: The boarding of an airplane by an individual.

Establishment: A physical location where business is conducted, or where services or industrial operations are performed. Indicates the number of locations with paid employees at a given time. Excursion vehicle: Martha's Vineyard residents whose names appear on their town's street list are eligible for a Steamship Authority discount known as an excursion fare. The discount applies to vehicles that originate on Martha's Vineyard and return within 31 days. A general measure of resident traffic to and from the Island.

FEMA floodplain: An area designated by the Federal Emergency Management Agency as having a certain risk of flooding. Different flood zone designations are included in an area's Flood Insurance Rate Map.

Finfish: A bony or cartilaginous fish with fins, as opposed to shellfish or aquatic invertebrates.

Five-hundred-year flood: A flood event that has a 0.2-percent chance of occurring or being exceeded in a given year. Areas in the 500-year floodplain have a minimal risk of flooding, according to FEMA.

Food security: A person's access throughout the year to food that meets his or her dietary needs and preferences and supports a healthy lifestyle.

General fund: In this case, a town's primary operating fund, which accounts for revenues and expenditures not accounted for in other funds. Revenue comes primarily from property taxes, licenses, permits and other sources.

Geographic mobility: The movement of people from one place to another. In this case, the percentage of people who lived in the same house the previous year.

Gini Index: A measure of income inequality. The index ranges from 0 to 1, where 0 equals perfect equality (everyone has the same income) and 1 equals perfect inequality (all the income goes to a single person or group).

Gross regional product: Also known as regional GDP; the market value of all goods and services produced in a region over a given period of time. One measure of the size, income, and productivity of an economy.

Groundfish: A bottom-dwelling fish, typically with a commercial value.

Health behavior: An action that affects someone's health. Health behaviors considered in this report include tobacco use, diet and exercise, alcohol and drug use, and sexual activity.

Health factor: Factors that influence people's health. The data related to health factors in this report consider health behaviors, clinical care (access and quality), social and economic factors, and physical environment.

Health outcome: The result of health care interventions, investments, etc. The data for health outcomes in this report relate to length and quality of life.

Homelessness: The state of being without a permanent place to reside; includes people living in vehicles, shelters, transitional housing, abandoned buildings and other places not meant for human habitation.

Housing cost burden: Applies to households paying more than 30 percent of their annual income on rent or mortgage costs.

Income inequality: The extent to which income is distributed unevenly in a population.

Invertebrates (aquatic): Water-dwelling animals without backbones.

IRS Form 990: An official form that is filed with IRS each year and provides a public accounting of a nonprofit's finances, mission and programs. Includes varying levels of detail depending on the type of nonprofit. Faith-based organizations are exempt from filing.

Labor force: According to the US Census Bureau, all people classified as employed or unemployed in the civilian labor force, including those on active duty in the US Armed Forces.

Landfill cap: Layers of earth, plastic and other materials installed over a closed landfill to help prevent rain from leaching through the waste and into the ground.

Landfill liner: Layers of earth, plastic and other materials installed beneath a landfill to prevent liquids from leaching into the ground. Liners are required of new and expanded landfills in the state, but many older landfills, including those on the Vineyard, were constructed without them.

Managed trail: A walking trail maintained by a town or conservation group.

Martha's Vineyard Shellfish Group: A consortium of the six Vineyard shellfish departments that among other things operates a shellfish hatchery and supplies quahog, scallop, and oyster seed annually to each town.

Massachusetts Enterococci Bacterial Standard: The US Environmental Protection Agency requires the monitoring of enterococci in the water along beaches during bathing season. Testing is done by separating the bacteria and feeding it nutrients and chemicals that promote its growth. If the resulting colonies exceed 104 "colony forming units" per 100 milliliters of water, the beach will be closed to swimmers. Beaches that exceed the threshold are often retested and opened soon after.

Mean maximum temperature: The average of the highest temperature recorded every day over a given period of time.

Mean minimum temperature: The average of the lowest temperature recorded every day over a given period of time.

Mean sea level: The average level of the surface of the ocean; calculated here as the mean of hourly heights observed over the National Tidal Datum Epoch (1983–2001).

Mean temperature: The average air temperature over a given period of time.

North American Industry Classification System (NAICS): A standard system used by federal statistical agencies to classify establishments into industries based on their production processes. Covers all economic activities in the United States.

Name-plate capacity: Also "installed capacity;" the intended sustained output of an energy facility operating under ideal conditions. Usually measured in megawatts.

Natural Heritage and Endangered Species Program rare species: Species threatened by changes in the environment, primarily habitat loss and degradation, and protected under the Massachusetts Endangered Species Act. Species are classified as endangered, threatened or of special concern, and protected accordingly.

Non-community groundwater system: As defined by the Massachusetts Drinking Water Regulations, a public water system that serves at least 25 of the same people about four days a week or more, for more than 180 days per year; or one that serves 25 different people at least 60 days of the year.

Nonprofit organization: An organization that devotes its surplus revenue to furthering a specific cause, rather than distributing it to its shareholders, staff or members. Nonprofits registered under 501(c)(3) of the Internal Revenue Code, among others, are exempt from paying income tax on the money they receive.

Occupied housing unit: In this case, a housing unit occupied as a primary residence at the time of the US Census or American Community Survey 5-year estimates. This number is considered the same as the number of households in an area.

One-hundred-year flood: A flood event that has a one-percent chance of occurring or being exceeded in a given year.

Open space: In this case, land that is either wetland; permanently protected, term-limited or conserved; or vacant townowned land with an unknown level of protection.

Operating budget: The proposed expenditures for personnel, supplies and other expenses in a town or city for the coming fiscal year.

Opioid overdose death: As counted by the Massachusetts Department of Public Health, a confirmed death (unintentional or otherwise) related to heroin, opioid-based prescription painkillers, or other unspecified opioids.

Outwash plain aquifer: A unified aquifer occupying about 40 square miles in the middle of the Island, including the Manuel F. Correllus State Forest and extending to the south shore between Chilmark and Chappaquiddick. Supplies the majority of public water to Edgartown, Oak Bluffs and Tisbury.

Ozone Air Quality Index (AQI): A measure of air quality with

values ranging from 0 to 500, where 100 generally indicates the threshold for unhealthy amounts of ozone in the air—an average of about 0.07 parts per million over eight hours.

Payroll: All forms of compensation, including salary, wages, commissions, dismissal pay, bonuses, paid vacations and sick leave and in-kind compensation, prior to deductions. Excludes payments to proprietors and partners of unincorporated businesses.

Point-in-Time count: An annual count of sheltered and unsheltered homeless people, conducted on a single night in January. Mandated and funded by the federal department of Housing and Urban Development. Counts to not include people living in hotels or sheltering with family and friends.

Population density: The number of residents per square mile.

Potentially available land: Land that is 1) not developed with a structure, 2) not in conservation or other form of permanent restriction so that it can not be developed, or 3) not in wetlands or water courses. Also includes parcels that have some existing development but are large enough to be subdivided under current zoning laws.

Private water supply: As defined by the Massachusetts Department of Environmental Protection, a water supply that provides water for human consumption, with fewer than 15 service connections; and that serves fewer than 15 people, or an average of 25 or more people for less than 60 days of the year. Private water supplies are regulated primarily by the local boards of health.

Private well: Typically, a well that provides drinking water for a single-family dwelling.

Public water system (public well): As defined by the Massachusetts Drinking Water Regulations, a system that provides public water for human consumption, with at least 15 service connections, or an average of at least 25 customers for at least 60 days of the year. Includes community and non-community water systems.

Quality of life: A measure of health in a population. In this case, a combination of overall, physical and mental health; and the percentage of babies born with a low birthweight.

Road centerline mileage: The total length of a road regardless of the number of lanes.

Shared-use path: A constructed path that supports multiple means of transportation such as walking, biking and wheel-chairs. Most often separated from the general roadway.

Shellfish seed: Cultivated shellfish that are less than market size. Typically grown in a hatchery and distributed to communities to enhance shellfish resources.

Special Flood Hazard Area (SFHA): The flood hazard areas identified in a Flood Insurance Rate Map as being within the 100-year floodplain.)

Special way: A public or private road that the Martha's Vineyard Commission has designated as having exceptional historical, cultural or symbolic importance. A special way extends 20 feet on either side of its centerline, and is protected from alterations that would destroy its essential character.

Subsidence: The downward settling of land relative to sea level. Coastal Massachusetts is subsiding at a rate of about 1.5 mm per year.

Subsidized housing inventory (SHI): A list compiled by the state Department of Housing and Community Development that counts the number of low- and moderate-income housing units in a municipality. Used for purposes related to Chapter 40B, the state's comprehensive permit law.

Total maximum daily load (TMDL): A regulatory term that defines the maximum amount of a pollutant a water body can withstand while still meeting and maintaining water quality standards. The TMDL sets a target for reduced pollution in a given body of water, and allocates the necessary load reductions.

Town operating budget: The costs of maintaining town personnel, programs, debt service and facilities, not including capital improvements. Each town adopts an operating budget, usually at its annual town meeting.

Transfer station: In this case, a designated site for the temporary storage of garbage, recycling and other materials, which are later hauled off-Island.

Travel expenditure: Money paid by a traveler in exchange for an activity related to his or her trip.

Travel-generated employment: The number of full- and parttime jobs generated by traveler spending.

Travel-generated payroll: Wage and salary income paid to employees who directly serve travelers.

UA: Indicates data points that were unavailable.

Unemployment rate: The percentage of unemployed workers in a labor force.

Unmanaged trail: A trail that is used by the public but does not receive regular maintenance.

Vacant housing unit: In general, a dwelling unit that is not occupied when the US Census conducts its interviews, unless the occupants are temporarily absent. Includes units whose occupants have their usual residence elsewhere.

Velocity zone: Areas designated by FEMA as having at least a one-percent annual chance of flooding (a 26-percent annual chance over the life of a 30-year mortgage) and the additional risk of storm waves.

Water table: The upper surface of an aquifer, where pores and fractures in the ground are filled with water.

Watershed: An area of land that drains to a given body of water.

Wellhead Protection Area (Zone I): As defined in the Massachusetts Drinking Water Regulations, a protective radius of 400 feet surrounding public wells or wellfields with yields of 100,000 gallons per day or more. For tubular wellfields, the radius is 250 feet, and for all other public water systems, the radius is calculated using the formula r = (150 x log of pumping rate in gallons per day) – 350. May not be less than 100 feet.

Wellhead Protection Area (Zone II): As defined in the Massachusetts Drinking Water Regulations, the area of an aquifer that contributes water to a well under the most extreme recharge and withdrawal conditions. Zones II extend up-gradient from the well.

Western moraine: The rocks and other glacial deposits that form the western part of the Vineyard, from Tisbury to Aquinnah. Complex layers of silt, sand and gravel create many small aquifers at varying depths.

Zone of influence: The area of groundwater where changes in the water table resulting from the pumping of water from a well can be detected.



Martha's Vineyard Commission P.O. Box 1447 Oak Bluffs, MA 02557 (508) 693-3453 www.mvcommission.org

dir. 1