

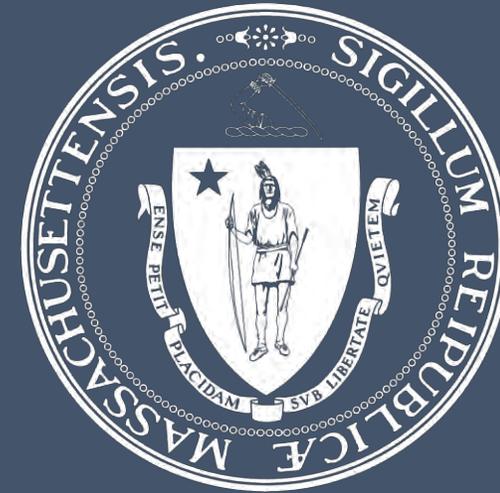
# Community Resiliency by Design

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# PROJECT OVERVIEW

Cape Cod Commission received a Planning Assistance Grant from MA Dept. of Energy and Environmental Affairs in 2018.



Competitive grants supporting municipalities' "efforts to plan, regulate (zone) and act to conserve and develop land consistent with Massachusetts' Sustainable Development Principles."

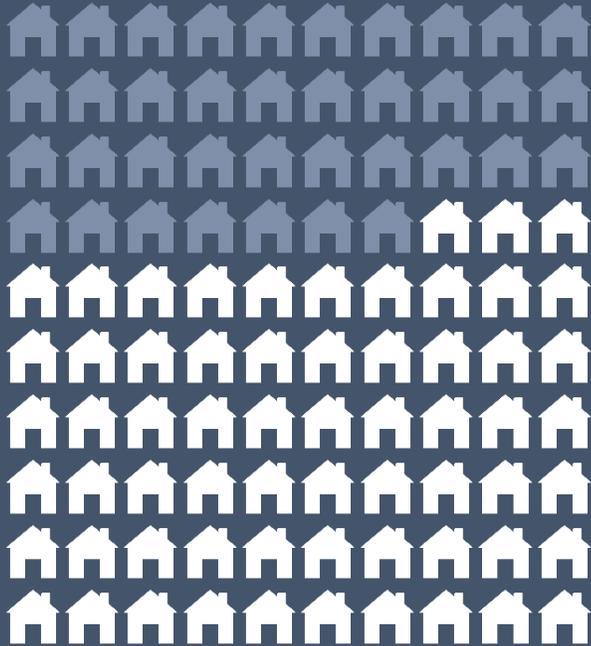


# Our Challenge

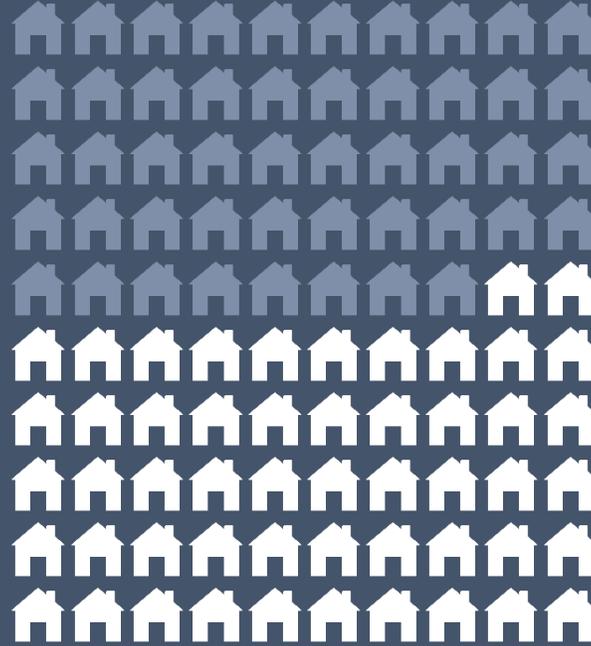
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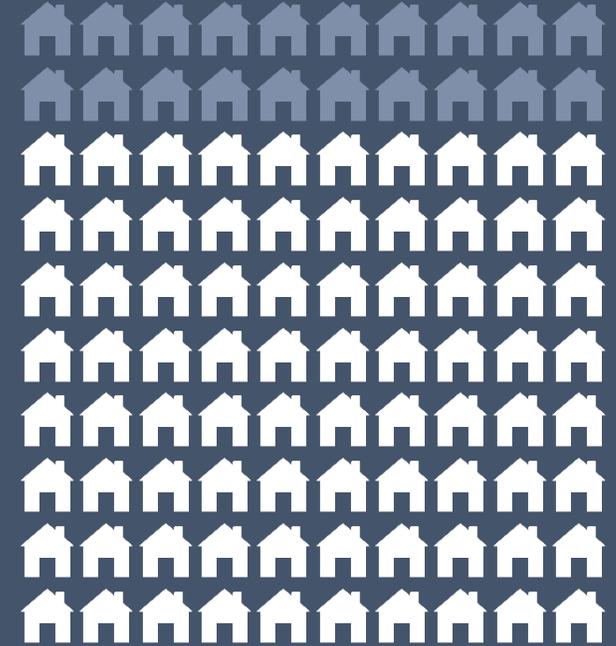
63%



52%



80%



SINGLE FAMILY HOMES

# CAPE-WIDE BUILDING PERMITS ISSUED FOR 2017

## SINGLE FAMILY



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## MULTIFAMILY

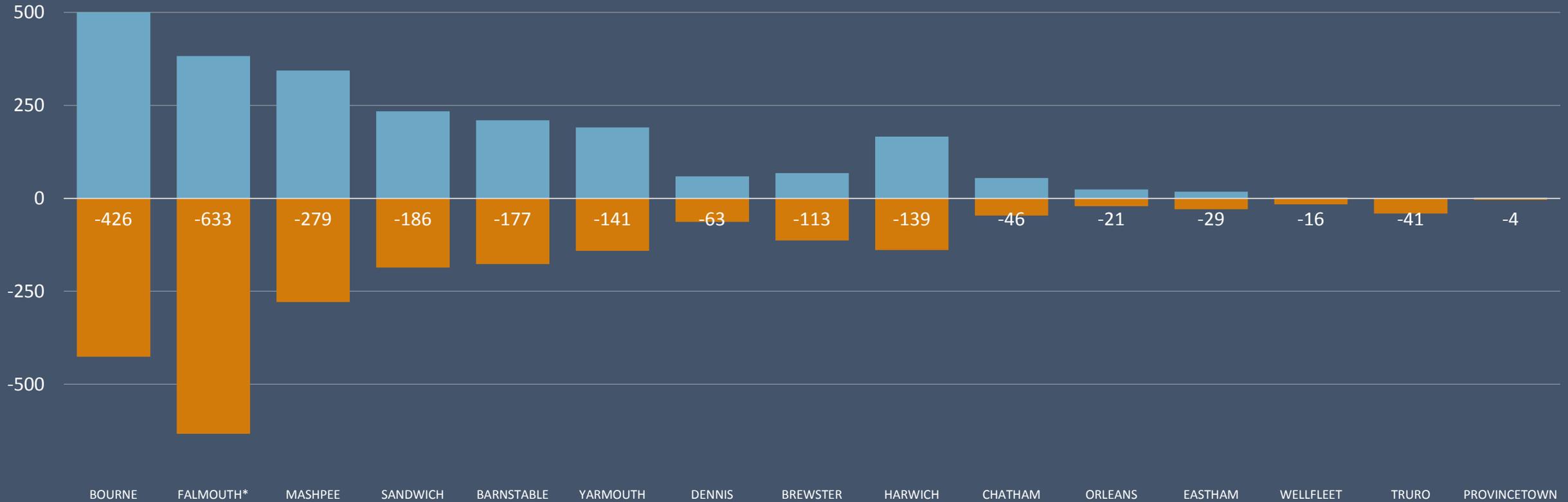
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# CONSEQUENCES OF SPRAWL



Dennis, MA

# CONSEQUENCES OF SPRAWL



Overall Forest Loss and Impervious Surface Gains

Net Forest Loss (Acres)

Impervious Surface Gain (Acres)

# 7,258

## Acres Potentially Developable in Special Flood Hazard Areas on Cape Cod

### Percentage of Each Town's Potentially Developable Land in Special Flood Hazard Areas

38%	Orleans*
29%	Sandwich *
22%	Chatham
21%	Wellfleet
15%	Brewster
14%	Bourne
20%	Eastham
11%	Dennis
11%	Falmouth
9%	Harwich
8%	Truro
7%	Barnstable
4%	Mashpee
3%	Yarmouth
1%	Provincetown

Orleans includes land within the Cape Cod National Seashore.  
Sandwich includes land that is considered protected.

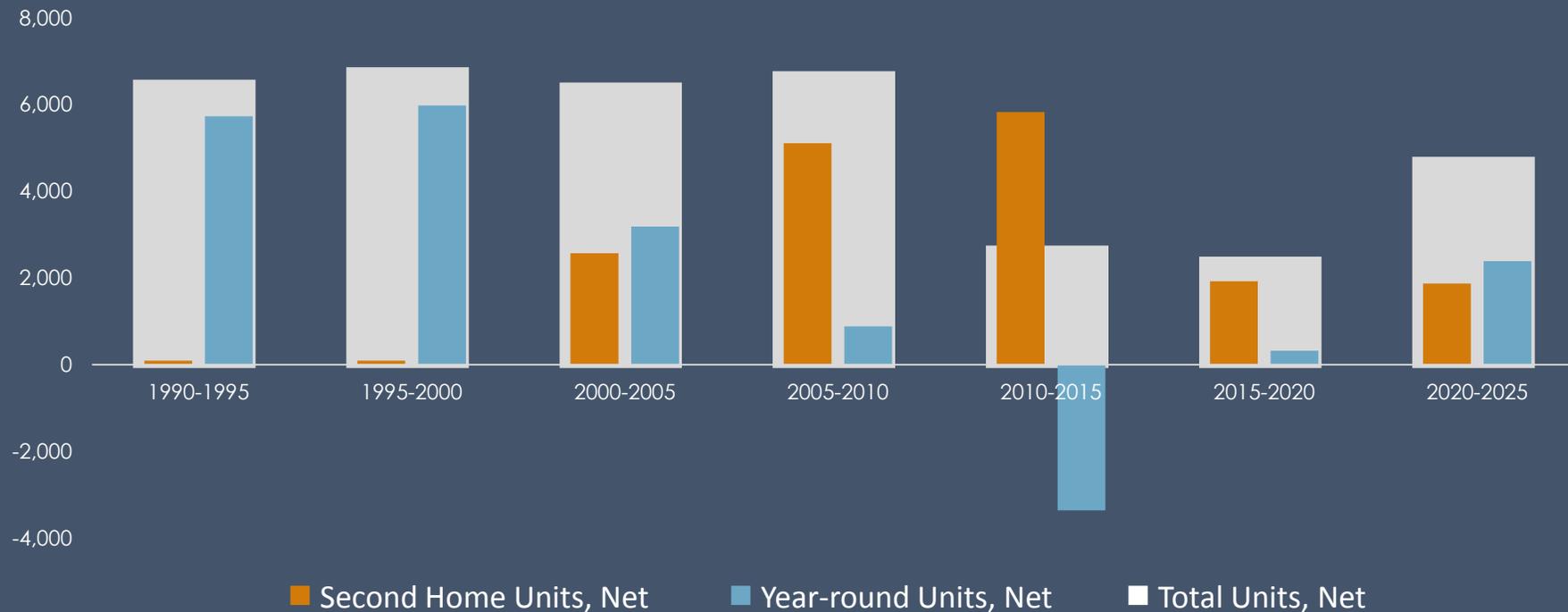


# Seasonal and Second Home Economies

On average, seasonal homes make up about **38%** of the Cape's housing stock.



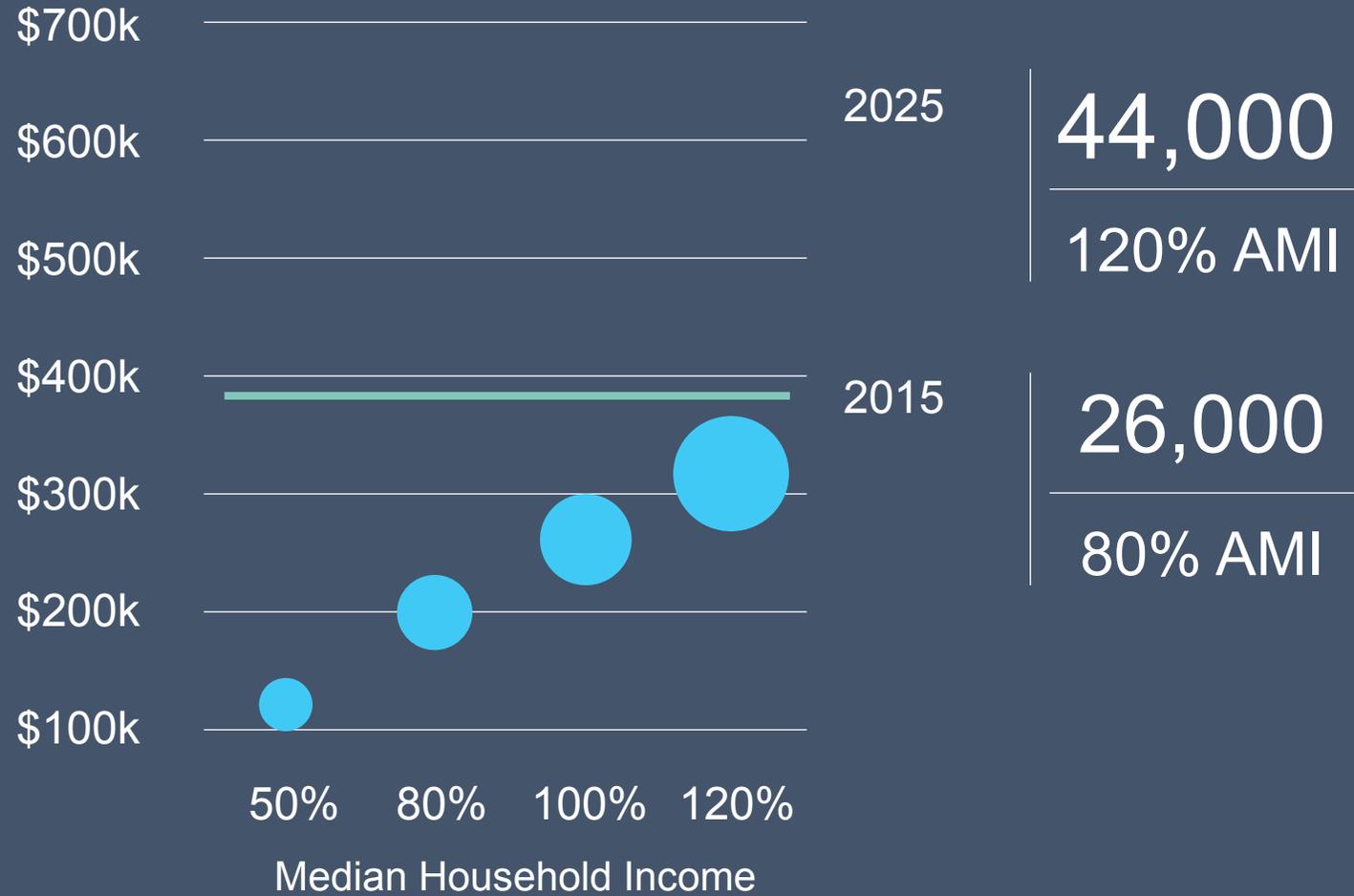
# Demand for Seasonal Homes is Here to Stay

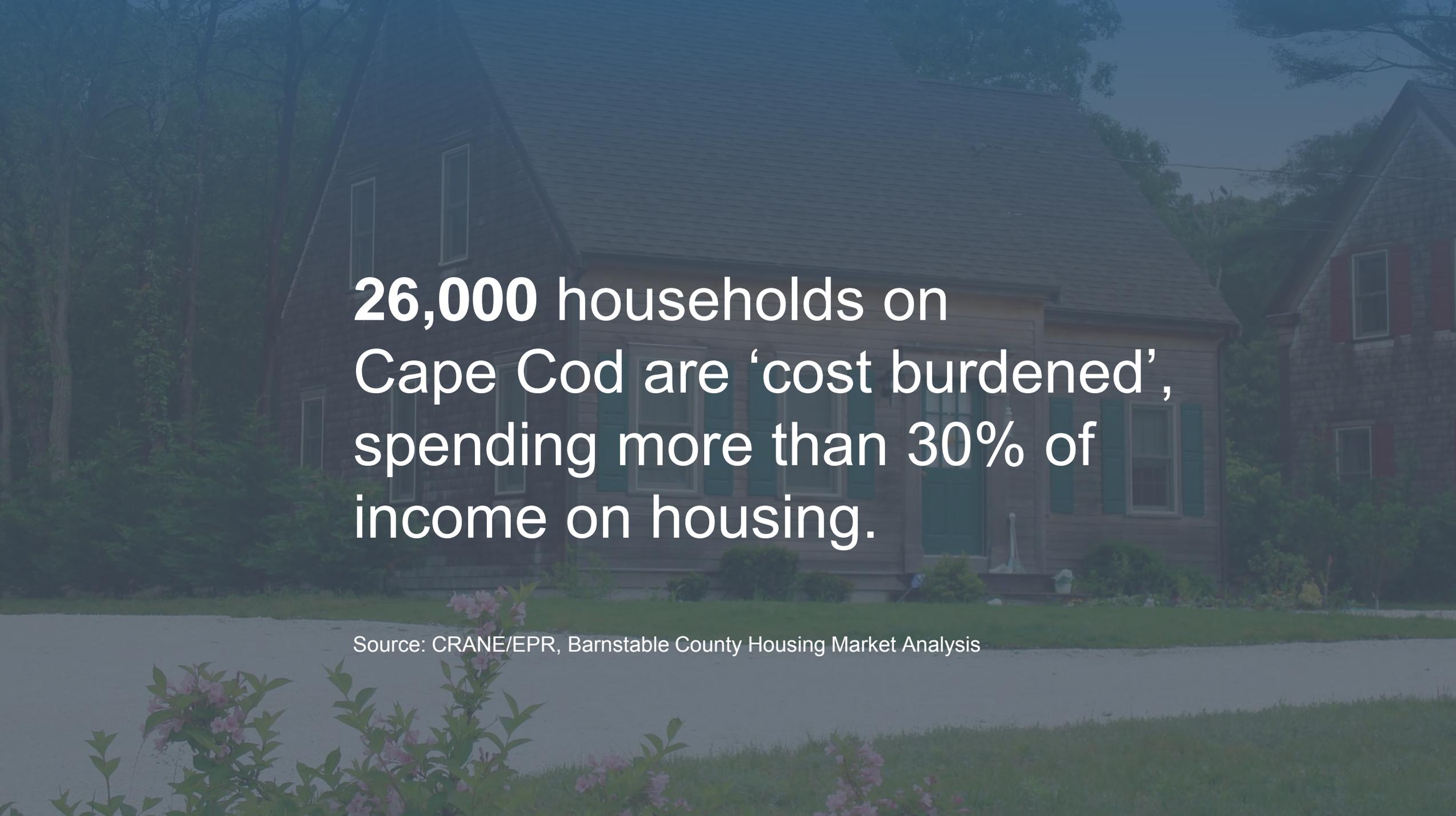


The impacts of the Great Recession caused a surge in second home demand. This will have a long lasting effect on Cape Cod's housing market.

# BARNSTABLE COUNTY MARKET DEMAND

- Median home value
- Home wages can support





**26,000** households on  
Cape Cod are ‘cost burdened’,  
spending more than 30% of  
income on housing.

Source: CRANE/EPR, Barnstable County Housing Market Analysis

# Impact on the Region's Economy



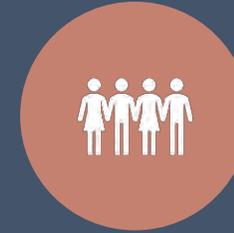
## SEASONAL WORKFORCE AVAILABILITY

LOW WAGES,  
LIMITED  
TRANSPORTATION  
OPTIONS, AND LACK  
OF AFFORDABLE  
SHORT-TERM  
RENTALS



## YEAR-ROUND WORKFORCE AVAILABILITY

SALARIES DON'T GO  
AS FAR AND  
HOUSING OPTIONS  
ARE NOT EQUAL TO  
HOUSING OPTIONS  
ELSEWHERE



## WORKFORCE DIVERSITY

LIMITED CHOICE IN  
HOUSING STOCK AND  
PRICE POINTS MAY  
ACT AS BARRIERS  
FOR ENTRY TO  
LOWER WAGE  
WORKERS AND  
OCCUPATIONS

# What Will it Take

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shifting market demands  
unlocking potential



FOCUS GROWTH IN  
EXISTING CENTERS  
OF ACTIVITY

PROTECT AND  
PRESERVE THE  
REGION'S  
RESOURCES

# CAPE COD PLACETYPES



NATURAL  
AREAS



RURAL  
DEVELOPMENT  
AREAS



SUBURBAN  
DEVELOPMENT  
AREAS



HISTORIC  
AREAS



MARITIME  
AREAS



COMMUNITY  
ACTIVITY  
CENTERS



INDUSTRIAL  
ACTIVITY  
CENTERS



MILITARY AND  
TRANSPORTATION  
AREAS

# Community Activity Centers

The vision for these areas is to accommodate mixed-use and multifamily residential development in a walkable, vibrant area, preserve historic buildings, and to provide diverse services, shopping, recreation, civic spaces, housing, and job opportunities at a scale of growth and development desired by the community, with adequate infrastructure and pedestrian amenities to support development.



# PROJECT OVERVIEW

- Collaboration with Union Studios and the Towns of Eastham, Orleans, Falmouth, Barnstable and Sandwich



# Community Resiliency by Design WORKSHOP SERIES

## Creative Approaches to Moderate Density: Filling the Missing Middle on Cape Cod

*Eastham, Orleans, Falmouth, Barnstable*



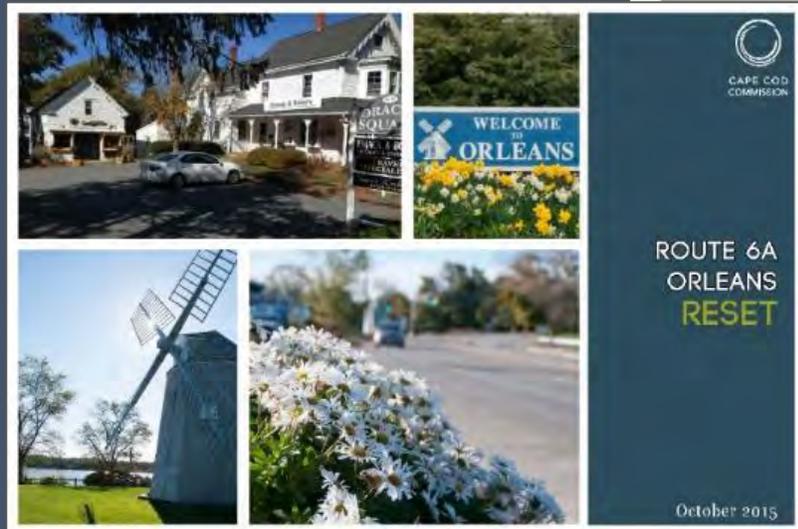
# Why?

*To begin community conversations around strategies and techniques for meeting the increasing demand for housing on cape cod...*



# Community Partners

*Each community has recently completed studies that identify areas where new housing types would be appropriate*





# *What do we hope to deliver?*

*To develop a series of moderate density prototypes –  
based on local precedent and community input...*



*...that could be used to address housing challenges in  
variety of places on the Cape and in each community.*



# What do we hope to deliver?

Develop the framework (starting point) for form based regulations to assist your town boards as they review new development proposals.

**THE LOT & THE BLOCK**

Annotations include:
 

- Clearance and parking setbacks on the front face of the site. Setbacks are often the least expensive way to make a good corner space in the heart of the block.
- The second row of setbacks is better to keep parking in the rear of the lot.
- Clear lots should be well defined on both sides with low, long, simple fences and landscaping.
- The building setback from the street is a key element in creating a sense of enclosure and defining the street.
- The building setback should be located at the front yard such that it is clearly visible from the street. Fences and screens can help create a transition zone between the street and the building.
- Landscaping and trees can help define the street facade.

2.1 The above diagram shows the proper zoning for the location of the lot, the building, parking and any setbacks.

2.2 There is a connection between the public space of the sidewalk and the private space of the front porch.

2.3 A successful corner lot creates a strong hierarchy along both the primary and secondary streets. It achieves this by creating a transition zone between the street and the building along the front and side setbacks.

**AVOID**

2.4 It is important to maintain the rhythm of the street when building on new lots in traditional neighborhoods. Houses that are too far back and do not align with the other houses on the street disrupt the continuity of the neighborhood.



2.5 Simple volumes such as cubes, hips and pyramids can be added to form three forms in a consistent, pleasing, simple and easy.

**BUILDING FUNCTION**

1. Residential	2. Office
3. Retail	4. Industrial
5. Public	6. Other

**BUILDING COMPLEXITY**

1. Single	2. Two	3. Three
4. Four	5. Five	6. Six
7. Seven	8. Eight	9. Nine
10. Ten	11. Eleven	12. Twelve

**SETBACKS - PRINCIPAL BLDG**

1. Front	2. Side	3. Rear
4. Corner	5. Other	6. Other

**SETBACKS - OUTBUILDING**

1. Front	2. Side	3. Rear
4. Corner	5. Other	6. Other

**PRIVATE FRONTAGE**

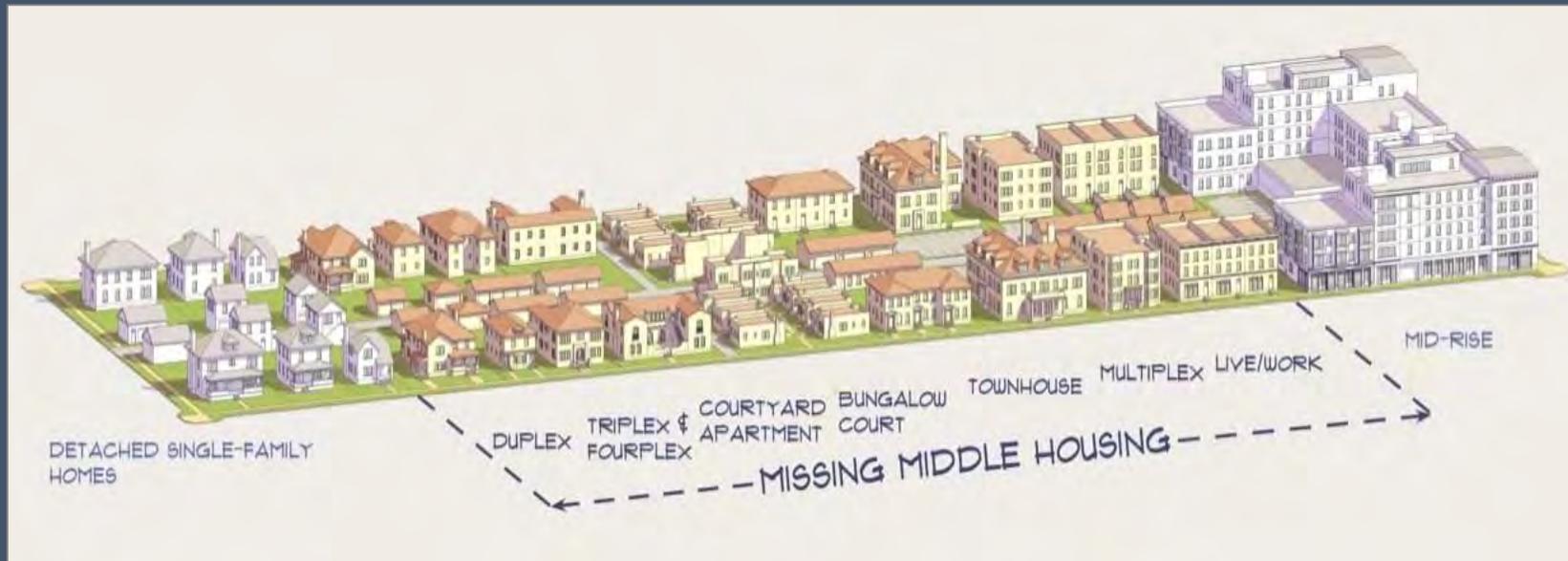
1. Front	2. Side	3. Rear
4. Corner	5. Other	6. Other

To help guide new development in ways that support the character of our community.



# WHAT HAVE WE LEARNED?

## MISSING MIDDLE HOUSING



*These housing types were common in pre-1940's walkable neighborhoods*



# GENTLE DENSITY





H  
17



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# Visual Preference Survey

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Initial Feedback

*Do you think a building of this **scale** would be a good fit within the study area?*

Shortest ← -----> Tallest

*Single  
Family*



*Townhouse*



*Multi-  
Family*



Do you think a building of this *scale* would be a good fit within the study area?



Question 2	Falmouth (261)	Orleans (84)	Eastham (105)	Hyannis (143)
Definitely a good fit	13%	8%	31%	26%
Could be a good fit	26%	<b>32%</b>	<b>43%</b>	<b>38%</b>
Probably not a good fit	<b>31%</b>	<b>32%</b>	15%	21%
Definitely not a good fit	<b>31%</b>	27%	12%	15%



Question 3	Falmouth (254)	Orleans (84)	Eastham (105)	Hyannis (138)
Definitely a good fit	20%	26%	41%	<b>45%</b>
Could be a good fit	<b>47%</b>	<b>46%</b>	<b>46%</b>	36%
Probably not a good fit	19%	13%	8%	12%
Definitely not a good fit	14%	14%	6%	7%



*Do you think a building of this **scale** would be a good fit within the study area?*



Question 14	Falmouth (235)	Orleans (76)	Eastham (102)	Hyannis (134)
Definitely a good fit	6%	3%	7%	9%
Could be a good fit	22%	22%	19%	28%
Probably not a good fit	30%	33%	21%	29%
Definitely not a good fit	42%	42%	54%	34%



Question 13	Falmouth (236)	Orleans (78)	Eastham (100)	Hyannis (136)
Definitely a good fit	7%	3%	2%	8%
Could be a good fit	14%	18%	5%	22%
Probably not a good fit	33%	33%	18%	35%
Definitely not a good fit	46%	46%	75%	35%



*Do you think a building of this **style** would be a good fit within the study area?*

*Traditional* ←-----→ *Contemporary*

*Single  
Family*



*Townhouse*



*Multi-  
Family*



Do you think a building of this *style* would be a good fit within the study area?



Question 27	Falmouth (227)	Orleans (74)	Eastham (96)	Hyannis (128)
Definitely a good fit	14%	12%	17%	16%
Could be a good fit	<b>28%</b>	<b>47%</b>	<b>63%</b>	<b>45%</b>
Probably not a good fit	<b>29%</b>	24%	9%	23%
Definitely not a good fit	<b>29%</b>	16%	11%	16%



Question 21	Falmouth (227)	Orleans (75)	Eastham (96)	Hyannis (126)
Definitely a good fit	34%	35%	44%	<b>49%</b>
Could be a good fit	<b>47%</b>	<b>49%</b>	<b>51%</b>	42%
Probably not a good fit	13%	13%	1%	6%
Definitely not a good fit	6%	3%	4%	3%



*Do you think a building of this **style** would be a good fit within the study area?*



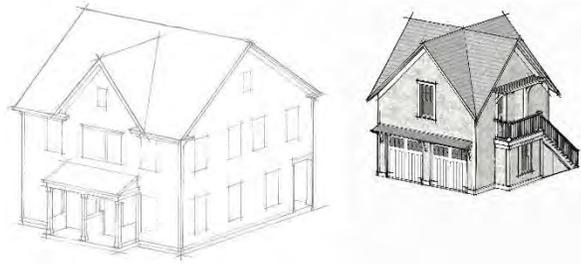
Question 22	Falmouth (225)	Orleans (74)	Eastham (96)	Hyannis (127)
Definitely a good fit	3%	3%	1%	1%
Could be a good fit	21%	20%	21%	20%
Probably not a good fit	34%	27%	22%	37%
Definitely not a good fit	42%	50%	56%	42%



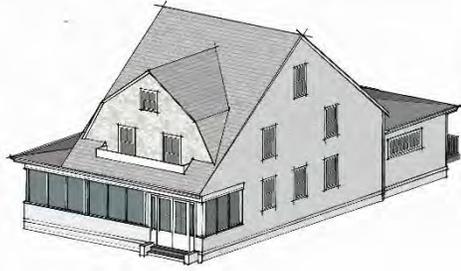
Question 28	Falmouth (227)	Orleans (74)	Eastham (95)	Hyannis (126)
Definitely a good fit	2%	0%	0%	1%
Could be a good fit	7%	8%	2%	5%
Probably not a good fit	20%	16%	18%	21%
Definitely not a good fit	71%	76%	80%	73%



# *Proposed Building Types*



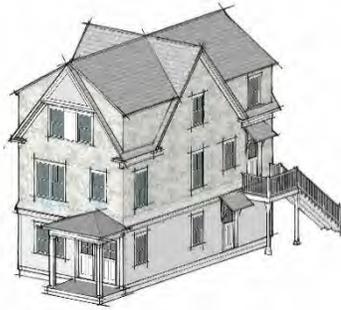
*Accessory Dwelling Unit*



*Micro-units*



*Townhouse*



*Double Decker*



*Manor House*



*Walk-ups*



*Cottages: Clustered small-scale single family detached units*



- *Typically 1 – 2 Stories*
- *May be attached, but typically detached*
- *Density achieved by arranging cottages in clusters, or “cottage courts”*
- *8 – 15 dwelling units per acre*



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*Walk-up: Mid-scale multifamily with single circulation core*

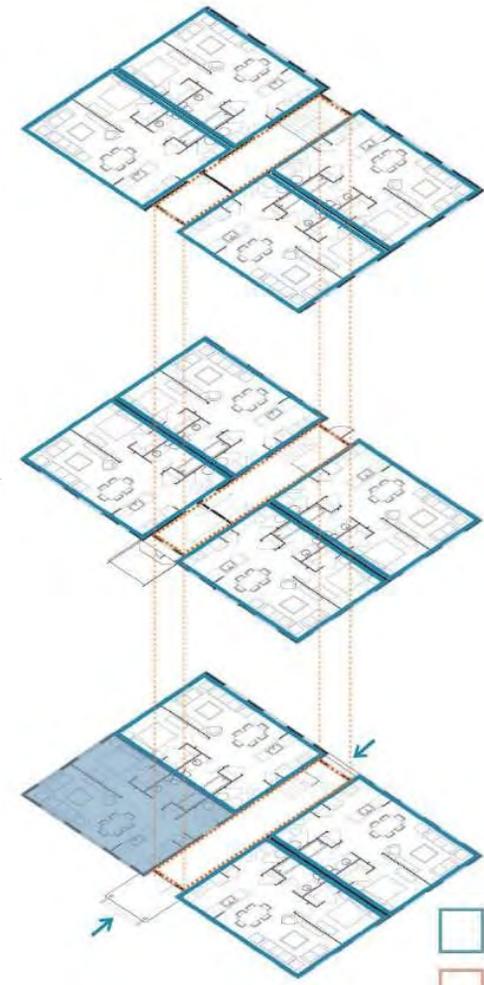


- *Typically 2 – 3 stories*
- *Typically 8 – 12 units per building*
- *Series of flats with single, central circulation core*
- *15 – 25 dwelling units per acre*



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*Walk-up: Mid-scale multifamily with single circulation core*



-  SINGLE LEVEL RESIDENCE
-  MULTI-LEVEL RESIDENCE
-  CIRCULATION



*Walk-up: Mid-scale multifamily with single circulation core*



## Illustrative Case Studies: Falmouth



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## Illustrative Case Studies: Falmouth



*Illustrative Case Studies: Falmouth*



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## Illustrative Case Studies: Eastham



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## Illustrative Case Studies: Eastham – Commercial on Route 6



## Illustrative Case Studies: Eastham – Mixed Use on Route 6



## Illustrative Case Studies: Eastham – Residential on Route 6



*Illustrative Case Studies: Eastham*



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## Illustrative Case Studies: Orleans



*Illustrative Case Studies: Orleans*



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## Illustrative Case Studies: Density Comparison



20 du/acre



14 du/acre



10 du/acre



# Next Steps

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# Community Resiliency by Design

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<http://www.capecodcommission.org/crbd>

<http://www.capecodcommission.org/rpp>

## Thank You!

