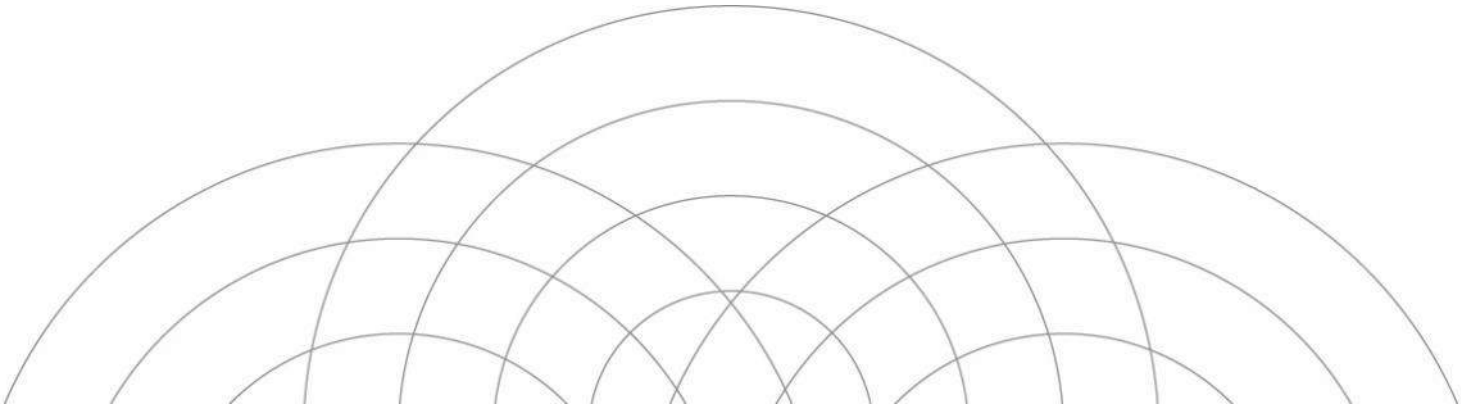




*South Sandwich Community Design*  
*Creative Approaches to Moderate Density*

*First Public Presentation*  
*Sandwich Town Hall*  
*June 17, 2019*



# *Project Introduction: South Sandwich Community Design*



## *Town of Sandwich*

*Planning & Development Department*

### *Ralph Vitacco*

*Director of Planning & Economic Development*

### *Leanne Drake*

*Assistant Town Planner*

- Development in Sandwich has been limited due to the lack of infrastructure;
- Town acceptance of the Water Infrastructure Investment Fund (WIIF) has the potential to unlock opportunities;
- The Route 130 Corridor has long been identified for possible development;
- Tonight represents a fresh approach in achieving our goal;
- Put forward appropriate zoning to support smart growth and economic development



# *Project Introduction: Community Resiliency by Design*

## *Cape Cod Commission*



*Heather Harper*

*Chief of Staff*

*Sarah Korjeff*

*Historic Preservation Specialist/Planner*

*Chloe Schaefer*

*Community Design Planner*

*Michele White*

*Special Projects Coordinator*



# SANDWICH

## DEMOGRAPHIC AND ECONOMIC FORECAST

### 1.7% population growth

---

Population is projected to grow to a total of 20,761 over the forecast period (2015-2025).

### 5.2% increase in employment

---

National, regional and local economic factors combine with projected population increases for this forecasted growth to a total of 9,936.

### 3.05% increase in households

---

Growth is faster than population since household size is projected to decrease.



# SINGLE FAMILY HOMES



63%



52%



80%



82%



US



MA



Cape Cod

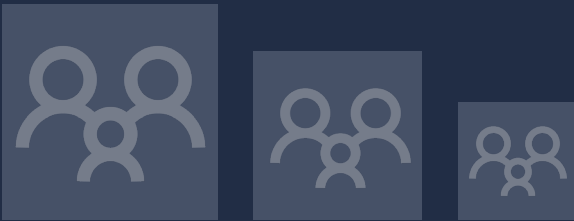


Sandwich





# RENTER-OCCUPIED UNITS



# Household Size

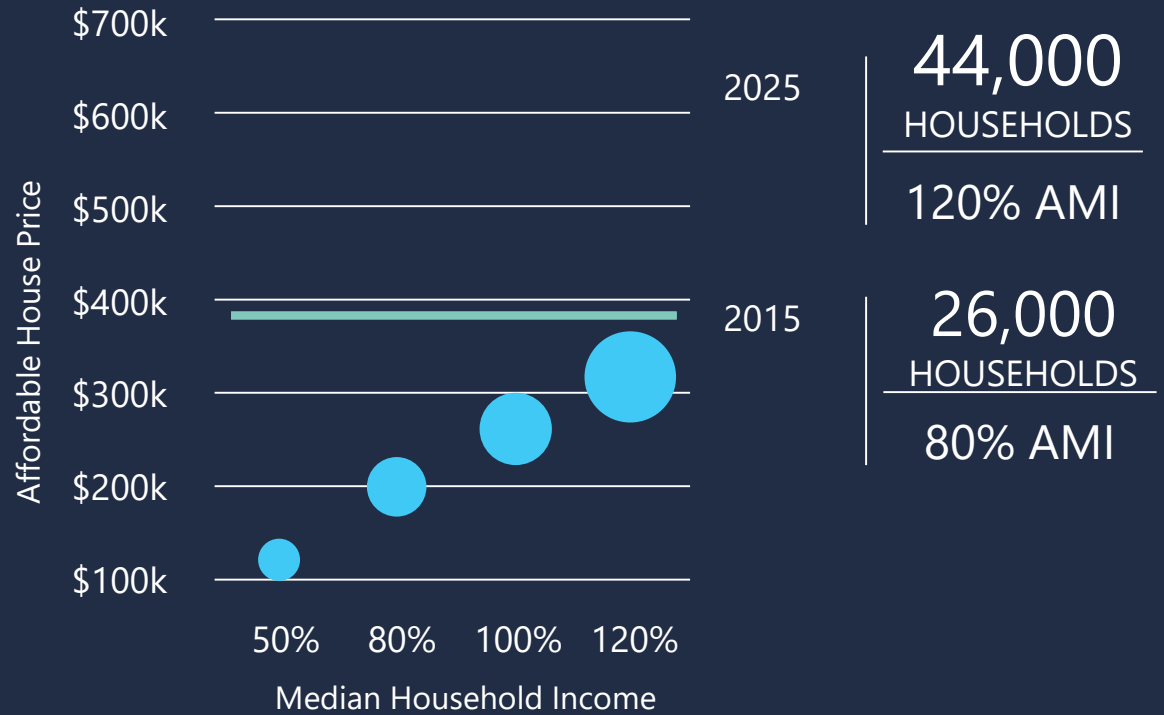


Household size is projected to further decrease within the region over the next 10 years (Crane, EPR)

US		2.64 persons/household
MA		2.54 persons/household
Cape Cod		2.24 persons/household
Sandwich		2.6 persons/household

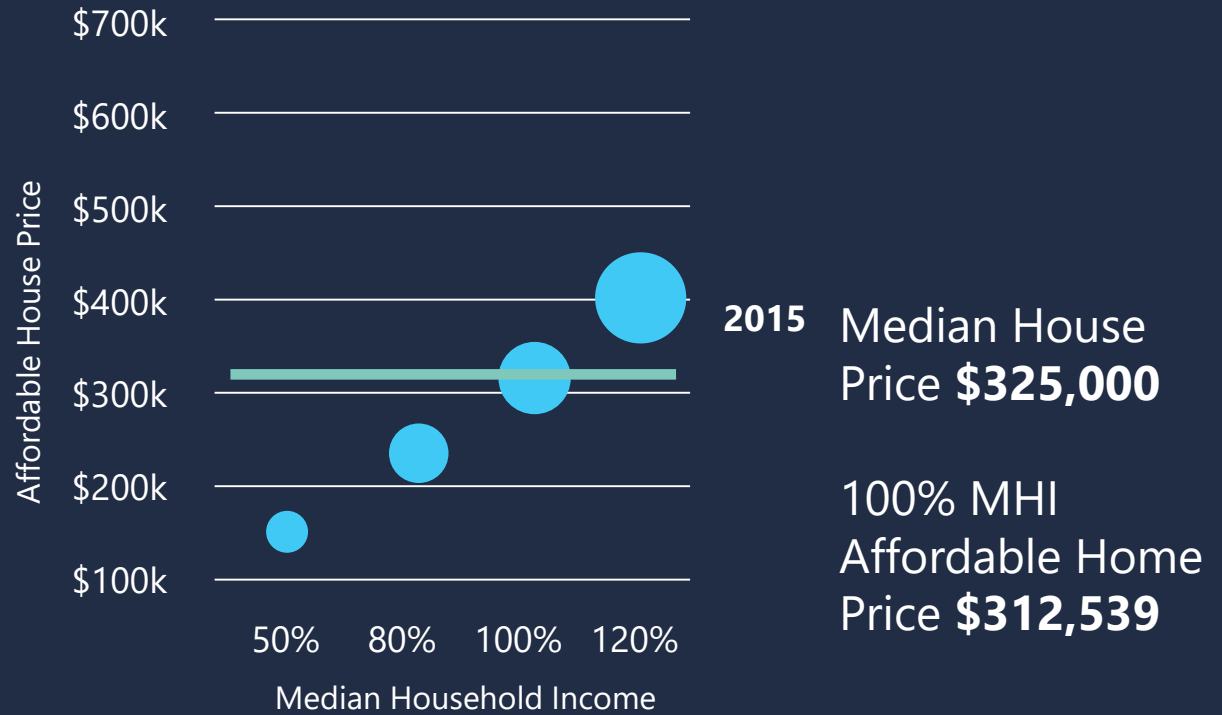
# BARNSTABLE COUNTY HOUSING STRESS

- Median home value
- Home wages can support



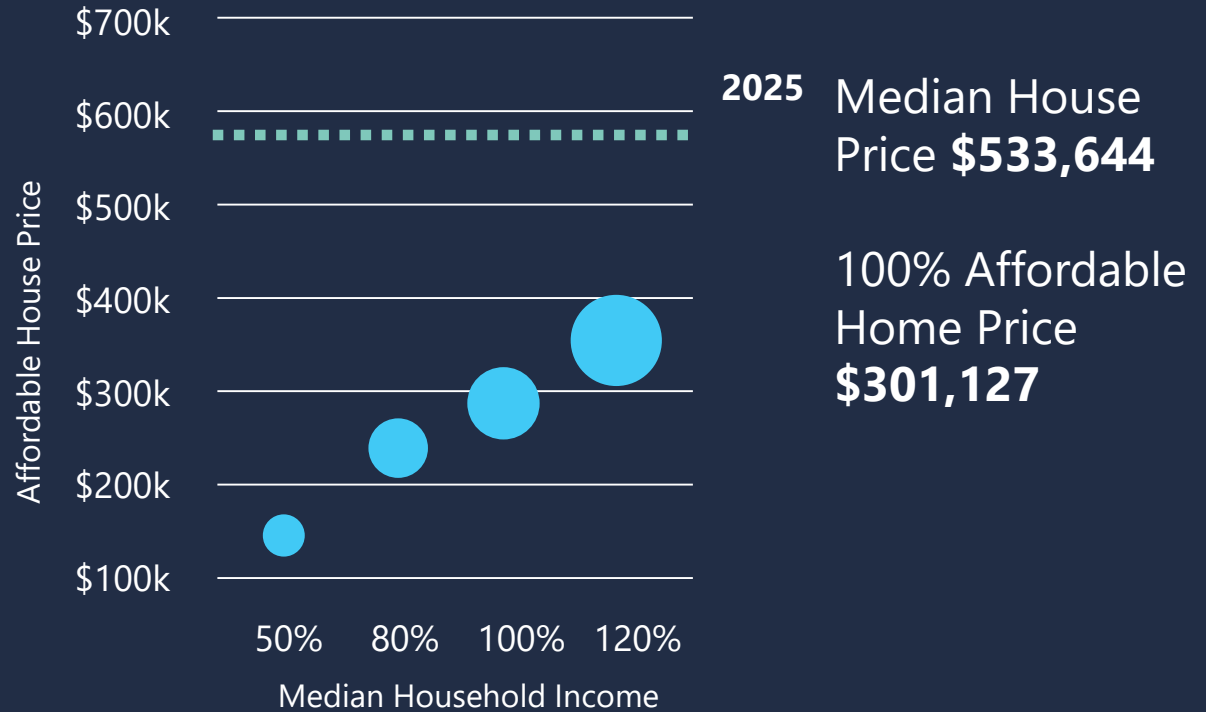
# SANDWICH HOUSING STRESS

- Median home value
- Home wages can support



# SANDWICH HOUSING STRESS

- ..... Median home value
- Home wages can support



# Outline

- *Introduction to Union Studio*
- *Why are we here?*
- *Demystifying Density and the Missing Middle*
  - *Visual Preferences*
- *Next Steps and Discussion*







*Union Studio* was founded in 2001 with one overriding goal: to use our skills as architects and urban designers to make a **civic contribution** to communities of all types.



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*To devote our skills as architects and community designers to the **creation and repair of neighborhoods** and communities of all types.*



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*Which includes the belief that renovating historic structures with care and a **new life** is crucial to maintaining our **architectural and cultural heritage**.*



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And that the **design** of new public places, neighborhoods and buildings must **resonate with the communities they serve** and **enhance our civic life**.



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Our passion for community design stems from our belief that many **time-tested principles** for creating healthy places **have been largely forgotten** over the past 50 years



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*And that through careful application of the principles of healthy neighborhood design, we can provide a **framework for revitalizing our streets and neighborhoods.***

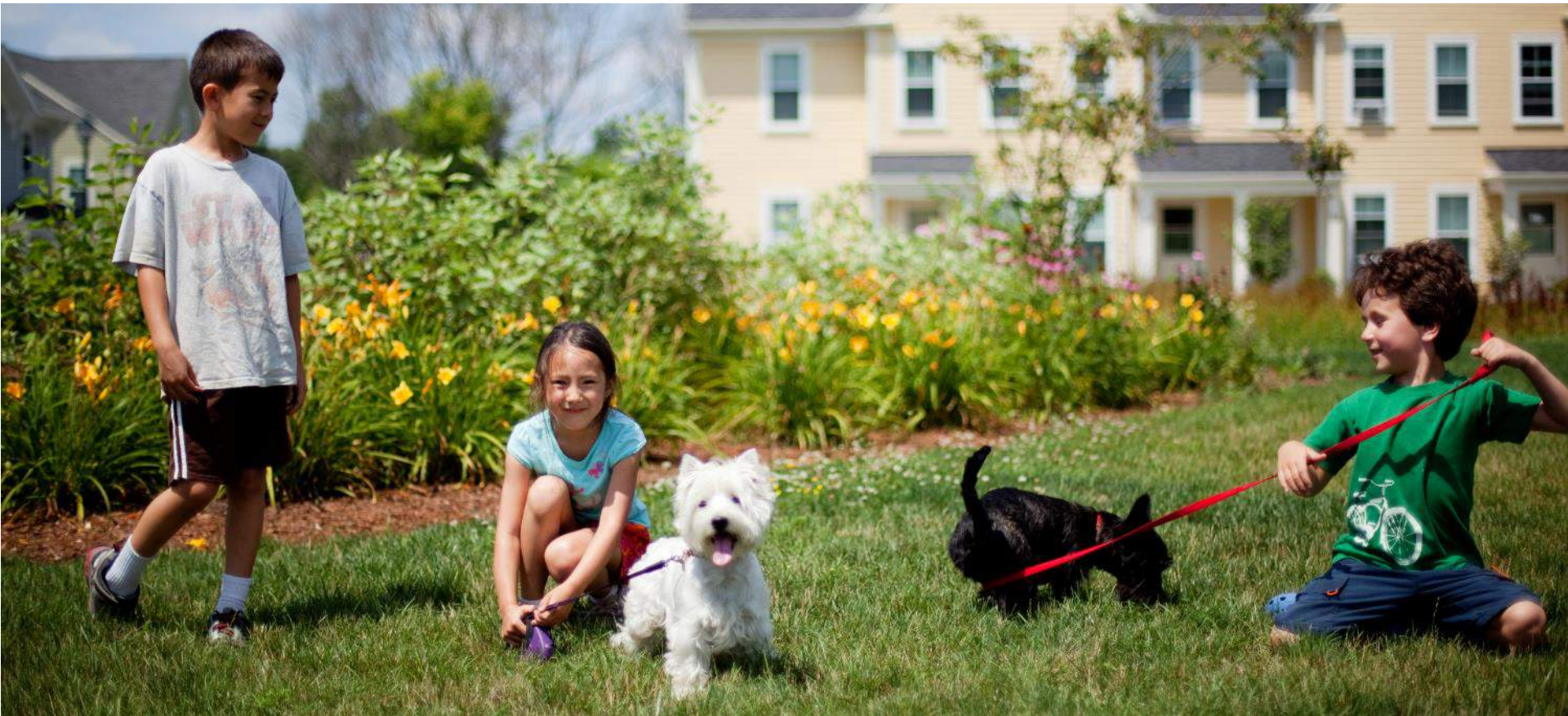


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## *Some principles of healthy communities*

- *Walkable and pedestrian friendly*
- *Mix of housing types that meets the broad needs of the community*
- *Public & private outdoor spaces and amenities*
- *Contextual architectural design and materials*
- *Equitable connection and access to community resources and amenities*





Integrated *mix of uses and types* are the building blocks of complete communities

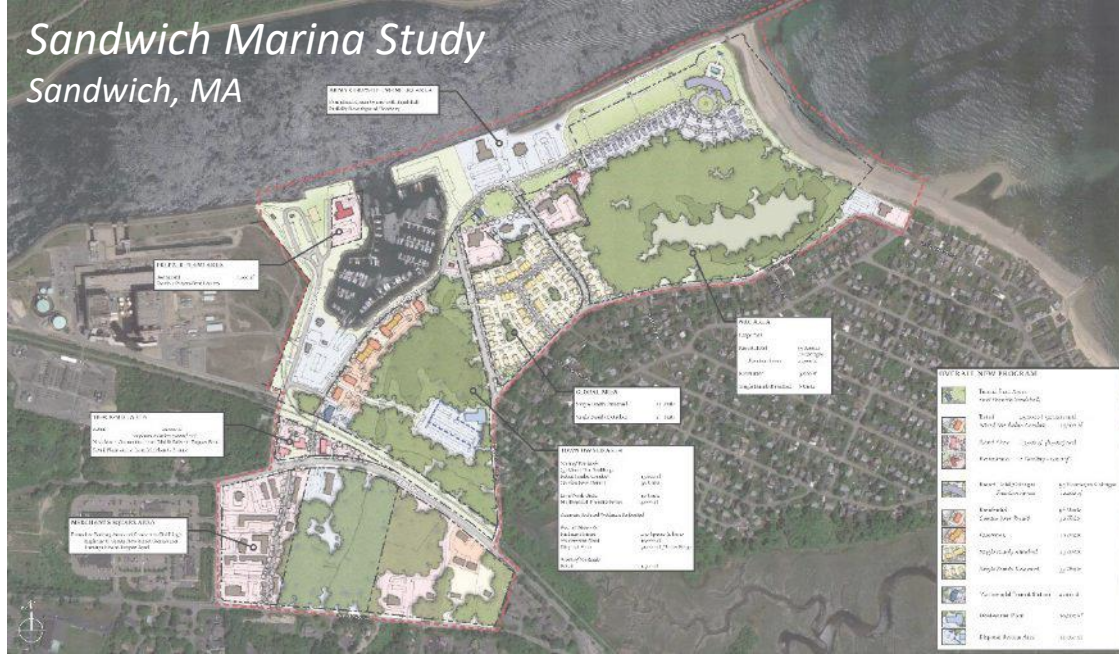






# Sandwich Marina Study

## Sandwich, MA



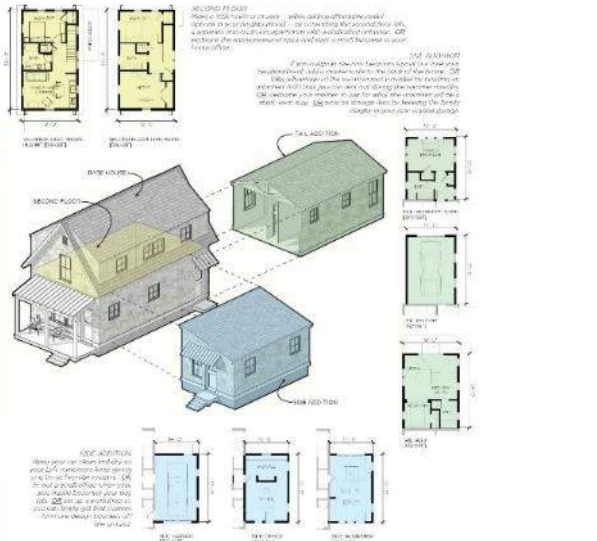
South  
Sandwich  
Village  
Sandwich, MA



### SIDE HUSTLE HOUSE

An affordable home that puts money in the bank

Quote: "This house is a 'side hustle' home, perfectly suited for those supplementing their primary job. Simple, efficient, and easy to live in."







*Heritage Sands*  
Dennisport, MA



*Brewster's Landing*  
Brewster, MA



*Sea Captain's Row*  
Hyannis, MA



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# Why are we here?



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



# Why are we here?



And to *get input* from all of you on ways to do this that will *enhance* and *support the character* of your communities (not detract from them)





# Process/Schedule

*Similar Effort in Falmouth, Orleans, Eastham, and Hyannis*

*May 2018 – March 2019*

*Review Existing Background Studies*

*April - May*

*First Public Presentation*

*June 17<sup>th</sup>*

*Online Visual Preference Survey*

*June - July*

[www.capecodcommission.org/survey](http://www.capecodcommission.org/survey)

*Second Public Presentation*

*Early September*

*Framework for Form-Based Regulation*

*Nearing Completion*

*Builder's Roundtable at OneCape*

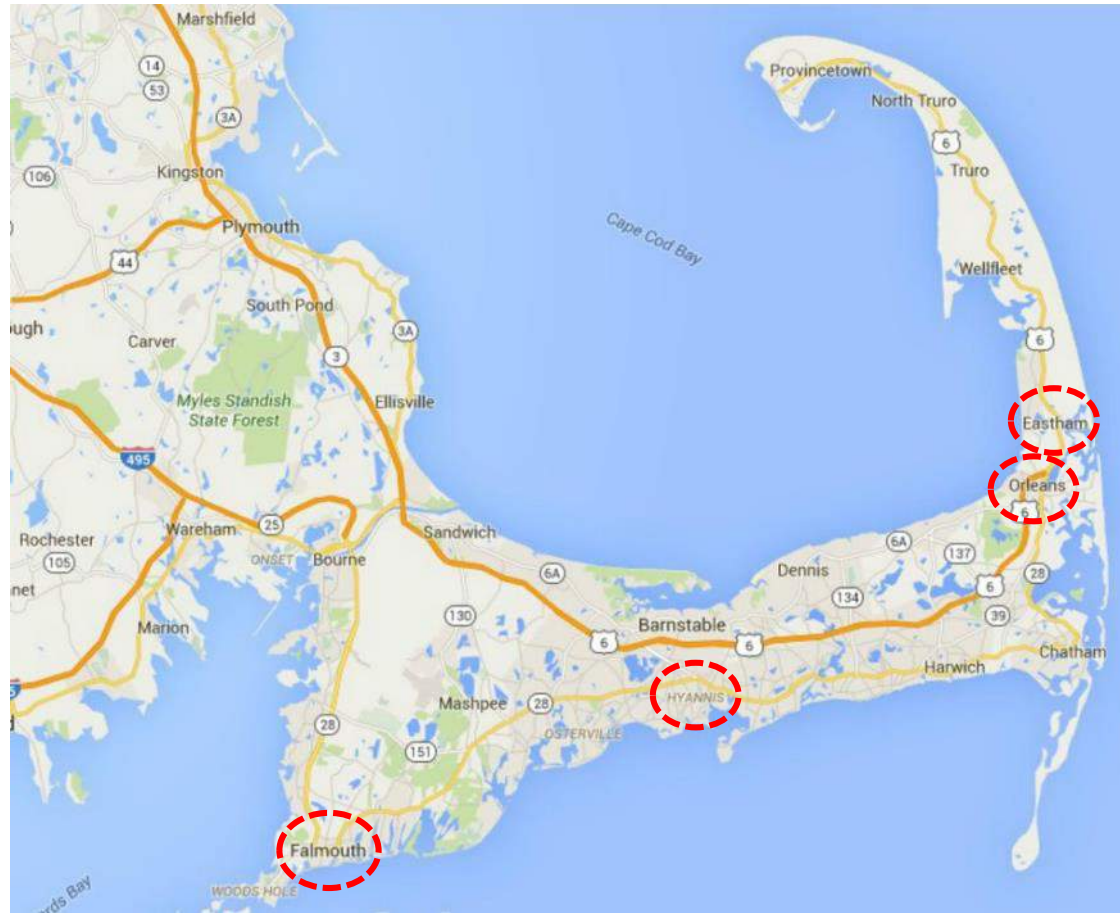
*July 30<sup>th</sup>, 2019*

*Additional Communities?*

*TBD*



# Where have we been



So far we've *worked with 4 communities* that have a cross section of conditions found elsewhere on Cape Cod.



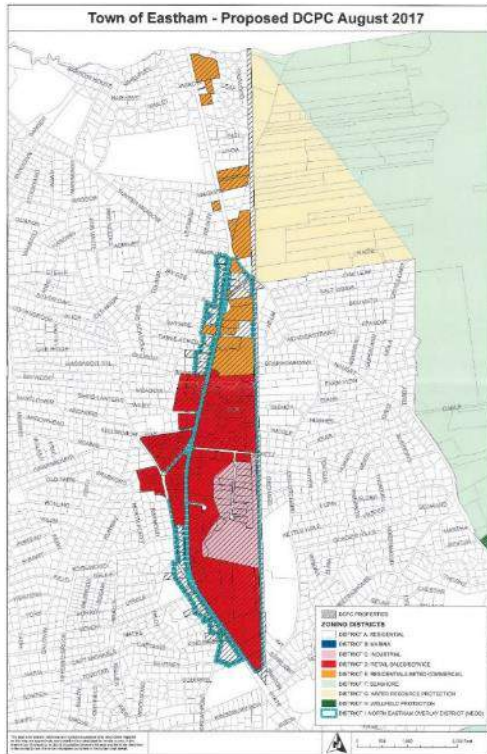
# Where have we been

Each community has recently completed studies that identify areas *where new housing types would be appropriate* and have either *adopted recent zoning changes in support of mixed-use communities* or are considering doing so.

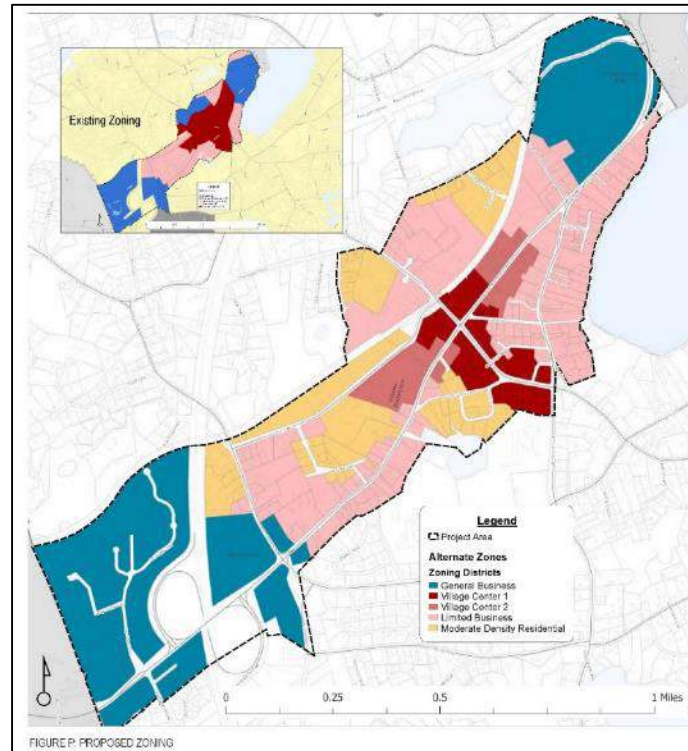




# Where have we been



**Eastham:**  
Route 6 / Brackett Rd Area



**Orleans:**  
Village Center

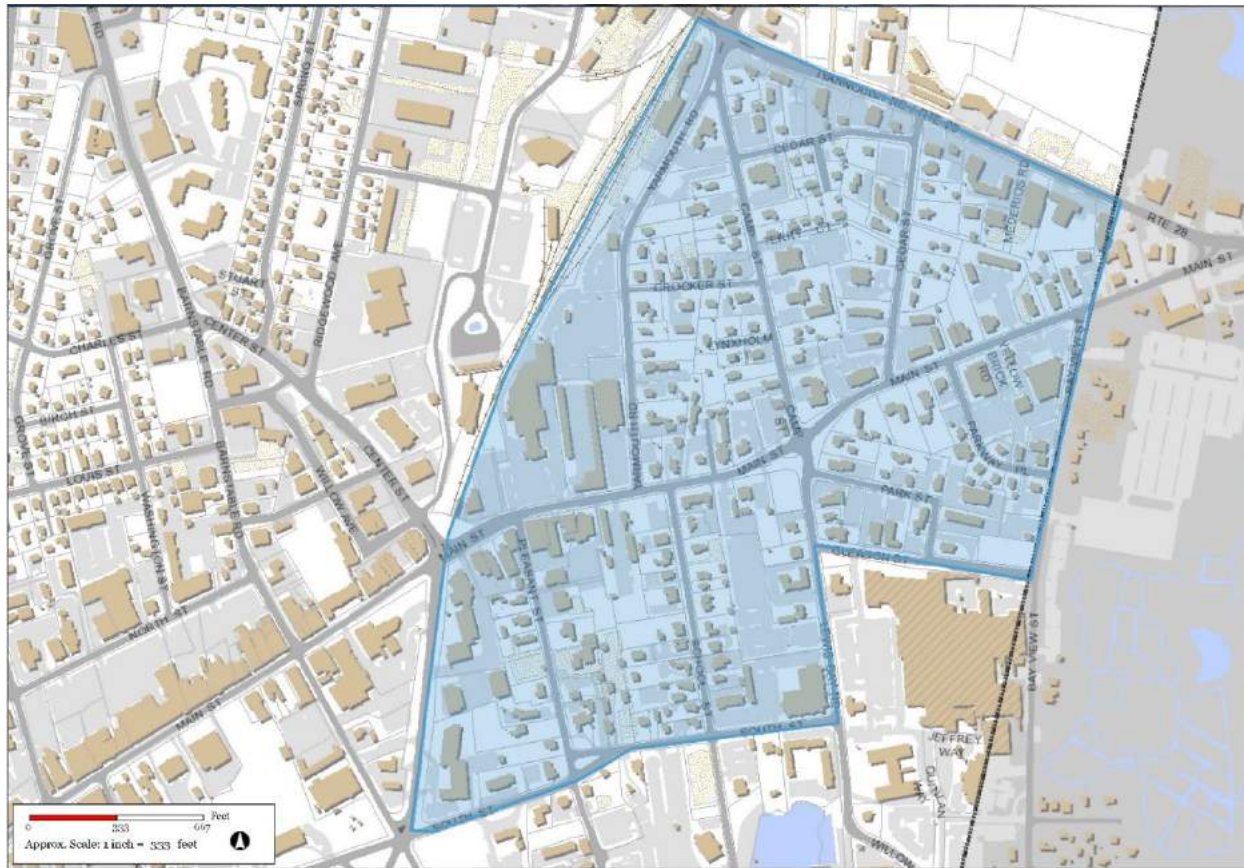


**Falmouth:**  
Davis Straits Area

The initial study areas focused on “main street” areas for each community – the “transitional” areas at the edge of single family districts...



# Where have we been



**Hyannis:**  
East End

... whereas in Hyannis the focus was on “**context appropriate infill**” in a historic residential district adjacent to “main street”.





# Where have we been

## First Public Presentations

Eastham/Orleans 6/19

Falmouth 6/20

## One Cape Summit

Harwich 8/17

## Cape Housing Institute

(Housing Assistance Corp. & Community Development Partners)

Harwich 10/31

Eastham 10/31

Yarmouth 11/1

Mashpee 11/1

## Second Public Presentations

Falmouth 10/23

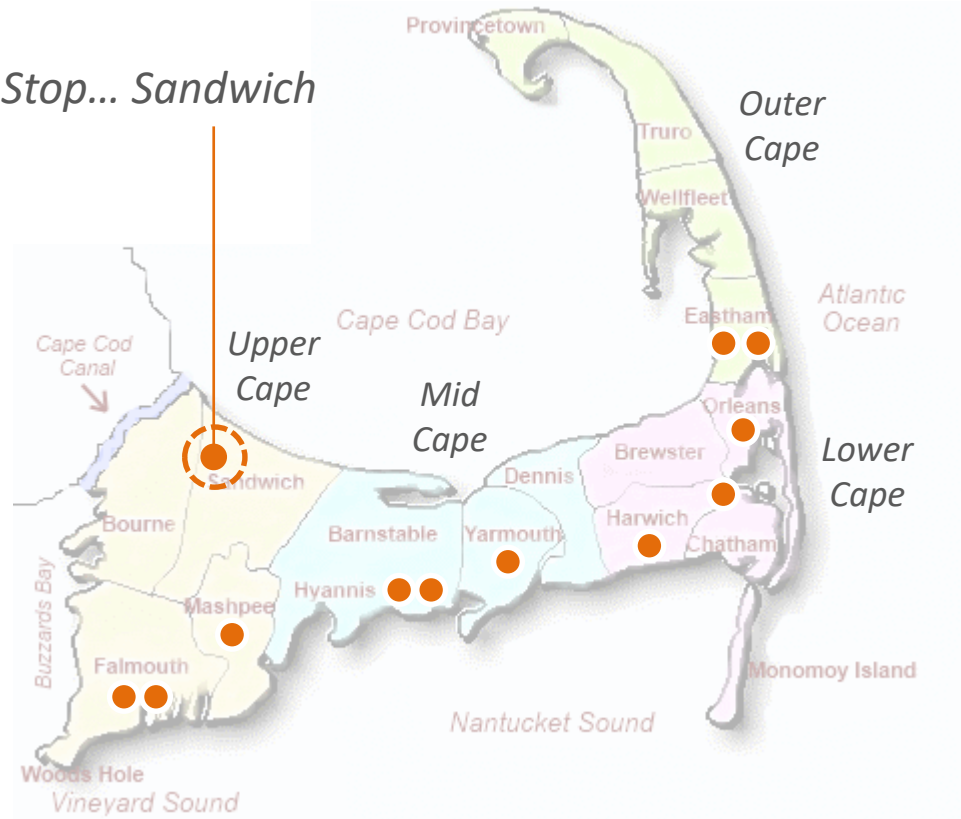
Orleans/Eastham 11/8

## Additional Communities - Hyannis

First Presentation 12/18

Second Presentation 2/19

## Next Stop... Sandwich





*The Housing Challenge....  
on Cape Cod*



REGIONAL HOUSING MARKET ANALYSIS  
AND 10-YEAR FORECAST OF HOUSING  
SUPPLY AND DEMAND

BARNSTABLE COUNTY, MASSACHUSETTS

JUNE 30<sup>TH</sup> 2017



Submitted to  
Barnstable County  
and the  
Cape Cod Commission



Prepared by



Burlington Vermont  
www.craneassociates.us

*Housing Market Analysis  
released earlier this year by  
the Cape Cod Commission  
highlights a **number of  
challenges as it relates to  
housing supply and demand  
in the next 10 years (and  
beyond).***

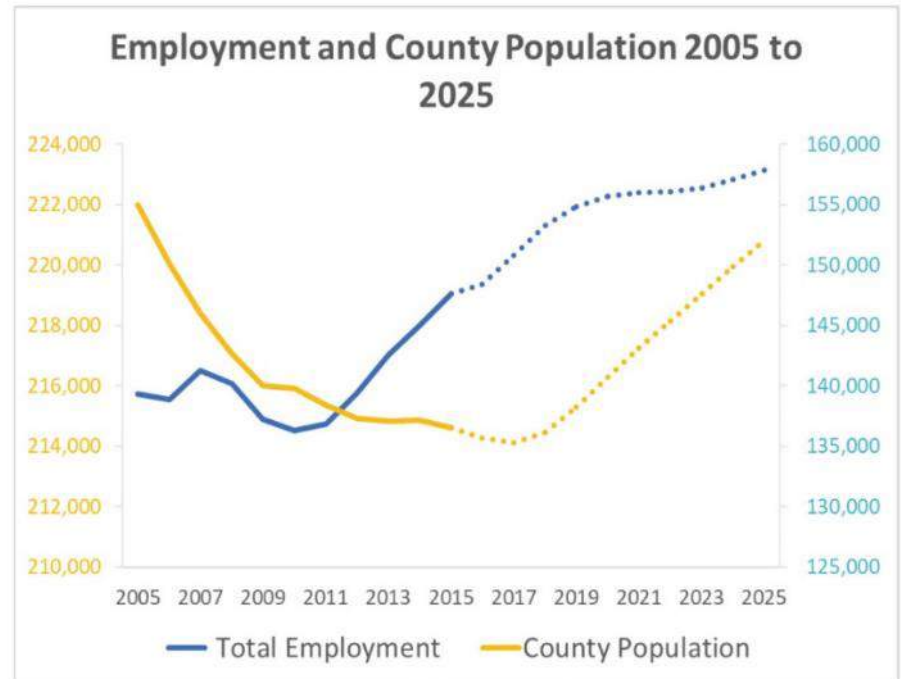
Barnstable County-Estimated Affordable Gap for Owner Units, 2015					
% of Median Household Income	50%	80%	100%	120%	>120%
Income (County Average)	\$36,125	\$57,799	\$72,249	\$86,699	
Affordable Price (County Average)	\$125,043	\$212,438	\$271,473	\$330,618	
Estimated Unit Demand	17,379	12,908	8,477	7,858	32,753
Estimated Unit Supply	3,041	5,322	10,557	12,521	47,934
Affordability Gap in Units (demand minus supply)	14,338	7,586	-2,080	-4,663	
<b>Cumulative Demand</b>	<b>17,379</b>	<b>30,287</b>	<b>38,764</b>	<b>46,622</b>	<b>79,375</b>
<b>Cumulative Supply</b>	<b>3,041</b>	<b>8,363</b>	<b>18,920</b>	<b>31,441</b>	<b>79,375</b>
<b>Cumulative Gap</b>	<b>14,338</b>	<b>21,924</b>	<b>19,844</b>	<b>15,181</b>	
Barnstable County-Estimated Affordable Gap for Renter Units, 2015					
% of Median Household Income	50%	80%	100%	120%	>120%
Income (County Average)	\$16,530	\$26,447	\$33,059	\$39,671	
Affordable Rent (County Average)	\$413	\$661	\$826	\$992	
Estimated Unit Demand	5,232	3,540	1,978	1,646	9,009
Estimated Unit Supply	2,363	1,969	1,807	2,407	12,858
Affordability Gap in Units (demand minus supply)	2,869	1,572	171	-761	
<b>Cumulative Demand</b>	<b>5,232</b>	<b>8,772</b>	<b>10,750</b>	<b>12,396</b>	<b>21,405</b>
<b>Cumulative Supply</b>	<b>2,363</b>	<b>4,332</b>	<b>6,139</b>	<b>8,546</b>	<b>21,405</b>
<b>Cumulative Gap</b>	<b>2,869</b>	<b>4,441</b>	<b>4,611</b>	<b>3,850</b>	

Source: U.S. Census Bureau, American Community Survey; EPR



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Employment growth is expected to add roughly *6,200 additional residents by 2025.*

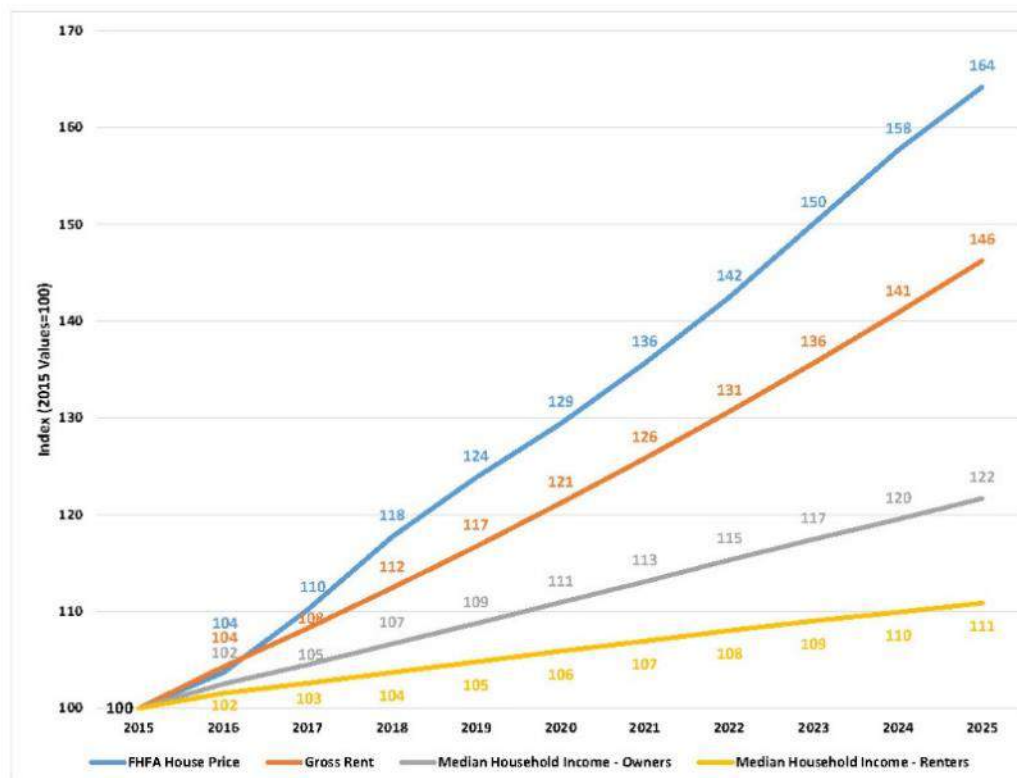


Year	Upper Cape	Mid Cape	Lower Cape	Outer Cape
2016	85,703	81,904	34,023	12,646
2020	86,176	83,094	34,217	12,807
2025	87,517	85,325	34,841	13,137

NET POPULATION GROWTH				
Year	Upper Cape	Mid Cape	Lower Cape	Outer Cape
2020	256	1,181	84	151
2025	1,598	3,412	708	481



But limited supply of housing is driving costs up at rates **greater rate** than household **incomes**. Providing limited market rate housing choices for large segments of the working population of Cape Cod



House prices increasing 5.1%/year

Rents increasing 3.9%/year

Owner income increasing 2.0%/year

Renter income increasing 1.0%/year



Existing housing stock AND new construction have been (and continue to be) largely *focused on* delivering stand-alone *single-family homes*



- *82% of homes on Cape Cod are single family (Compared to 60% nationally)*
- *Less than 20% rental*
- *Median home size on the Cape has increased faster than the region and the nation!*



Leaving the Cape very *out of balance* when it comes providing housing options to meet *diverse community needs*



The report concludes with a number of *recommendations* for closing the gap between housing supply and demand, *several of which may be addressed with what we are here to talk about today:*

- Adopt housing targets balanced between all 15 municipalities
- Increase the *diversity of senior housing*
- Increase the *diversity of multi-family housing*
- Accommodate life stages through *better urban design*



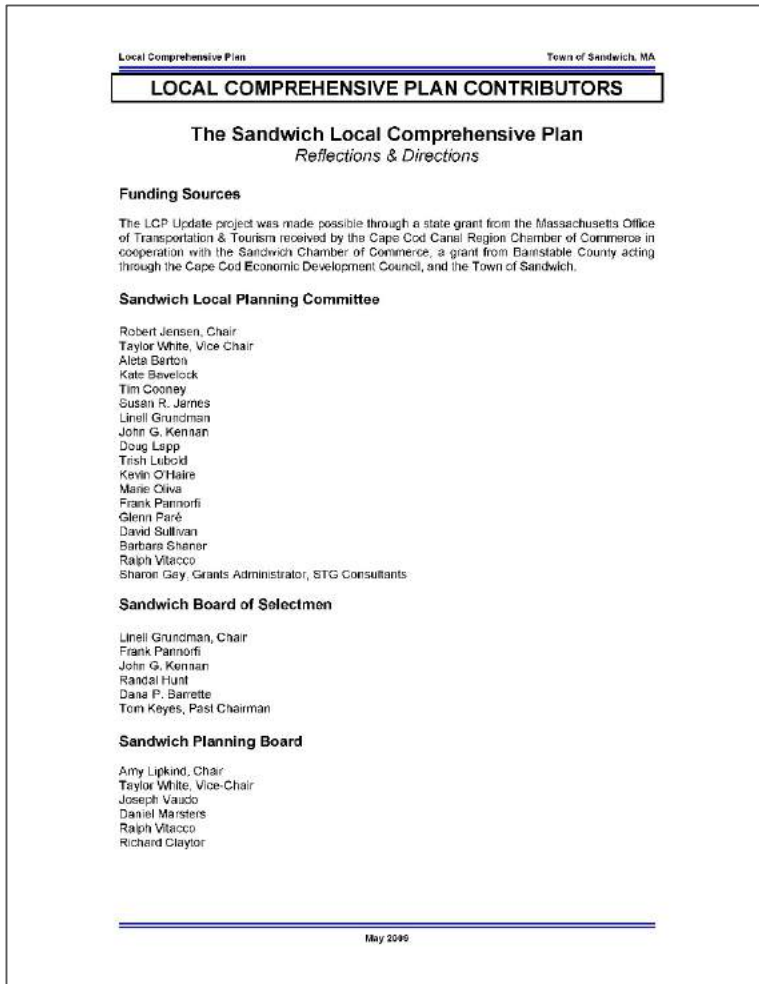


*... but what about South Sandwich?*





# Related Studies: Local Comprehensive Plan (2009)



Sandwich shall direct new commercial, industrial and **mixed-use development** to its Growth Centers: the Route 6A/Tupper Road/Town Marina Area; the **South Sandwich Village Center**; the Historic Village/Route 6A Area; and the **Sandwich Industrial Park** and **Zoning District along Route 130**.

- **Higher density, higher quality, and vertical mix of uses** are desired in the SSVC: retail, restaurant, professional offices and services, institutional and public uses, and **residential (varied types and income levels)**
- **New housing** (from market rate to basic work force) should be the **predominate upper floor use for new mixed-use** development as well as **moderate density residential uses** (i.e. townhouses, garden apartments and congregate housing) in the fringe areas of the SSVC



## Related Studies: Housing Production Plan (2010)

### TOWN OF SANDWICH HOUSING PRODUCTION PLAN



Prepared with technical assistance from Gregory M. Smith, Director of the Town of Sandwich's Planning and Development Office, and Paula Schnepf, Executive Director of the Sandwich Housing Authority

February 2010

Predominant type is expensive single-family detached homes, with limited rental housing and/or multifamily housing available.

Underlying goals to provide adequate and affordable housing for all Sandwich residents:

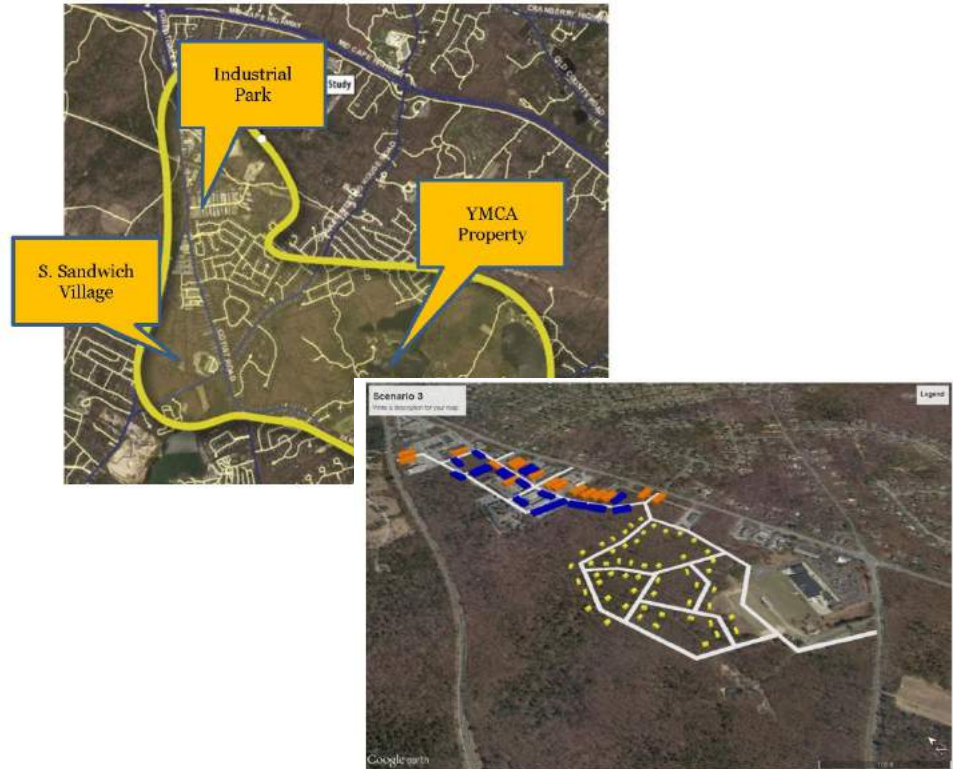
- To provide a wide range of housing alternatives to meet diverse housing needs
- To ensure that new housing creation is harmonious with the existing community
- To encourage the integration of smart growth principles in the development of housing



# Related Studies: Cape Cod Commission RESET and DLTA Studies (2015)



Overall goal was to provide development scenarios for the South Sandwich Village area.



Found the status quo (existing auto-oriented commercial pattern) is the least cost effective approach for the town whereas a **mixed-use village area** as called for in the LCP is the best case.

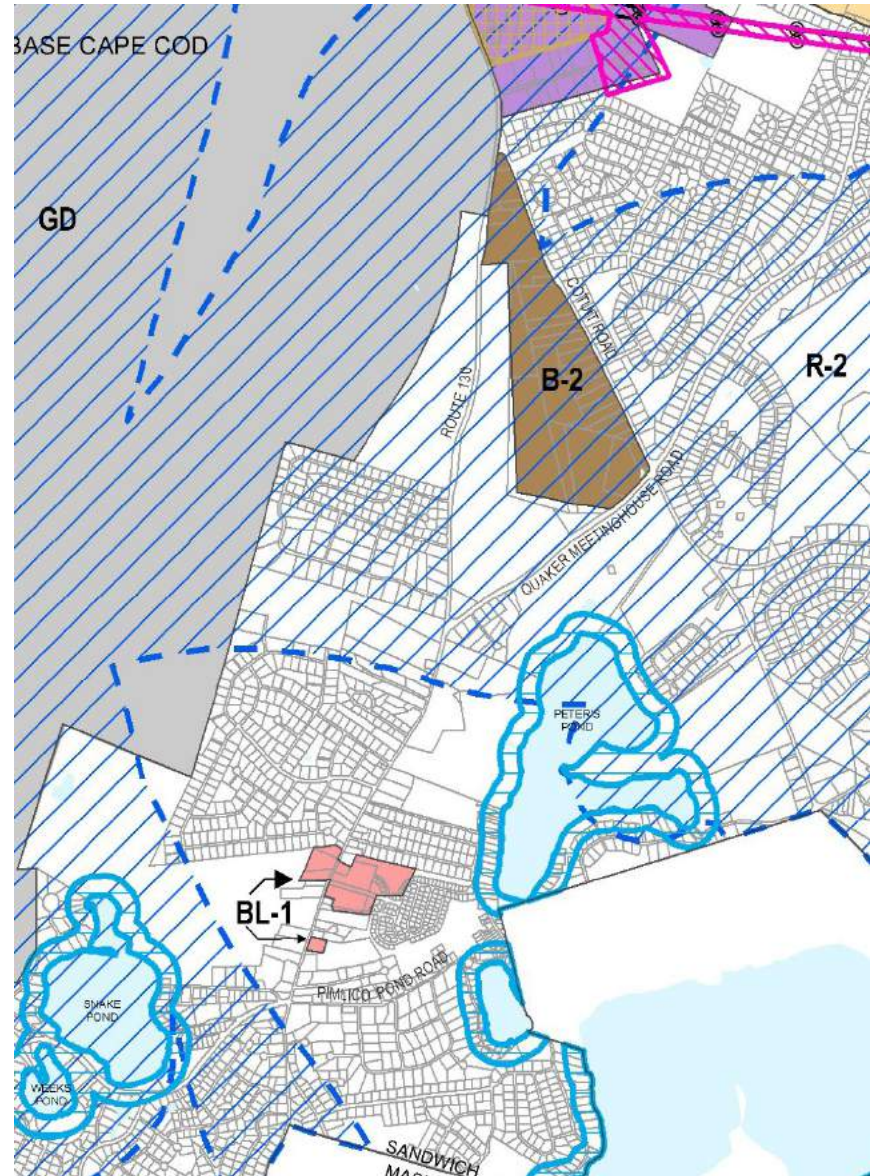




# Study Area: South Sandwich Community Design

## Comp Plan Growth Centers:

- Sandwich Industrial Park
- South Sandwich Village Center
- Along Route 130

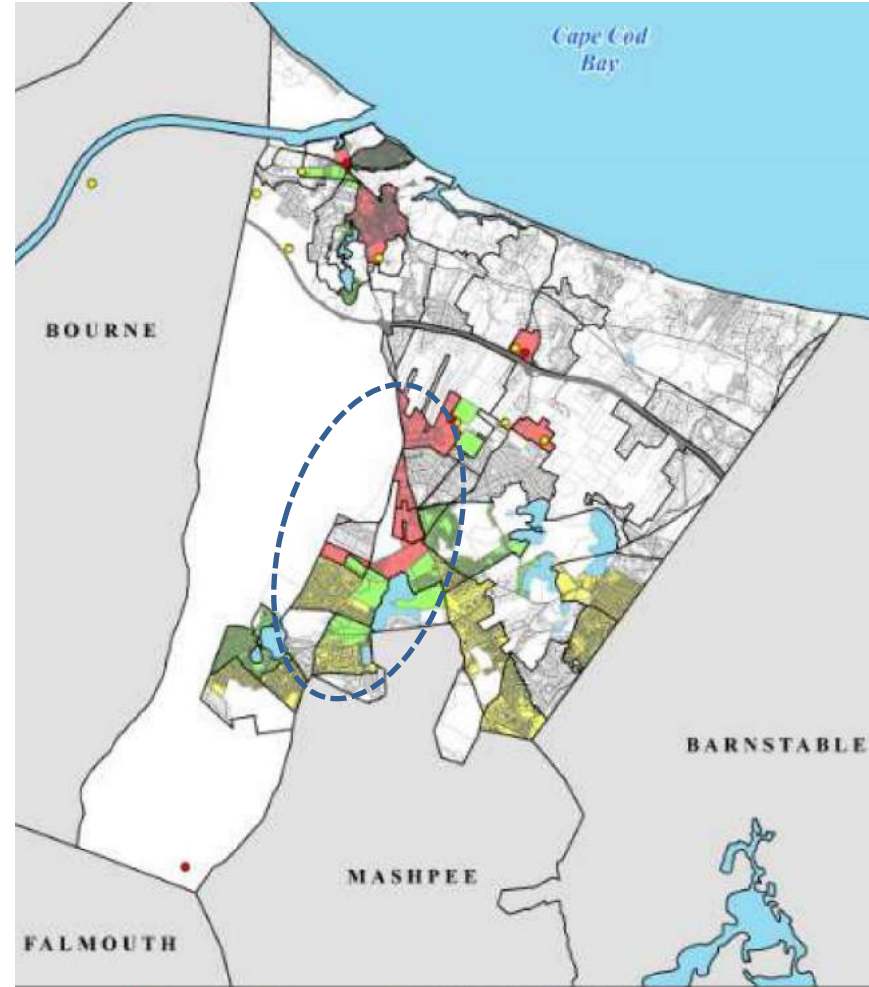




# Study Area: South Sandwich Community Design

## Comp Plan Growth Centers:

- Sandwich Industrial Park
- South Sandwich Village Center
- Along Route 130




# So what is all of this beginning to suggest?

REGIONAL HOUSING MARKET ANALYSIS  
AND 10-YEAR FORECAST OF HOUSING  
SUPPLY AND DEMAND





BARNSTABLE COUNTY, MASSACHUSETTS

JUNE 30<sup>th</sup> 2017




Submitted to  
Barnstable County  
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Prepared by

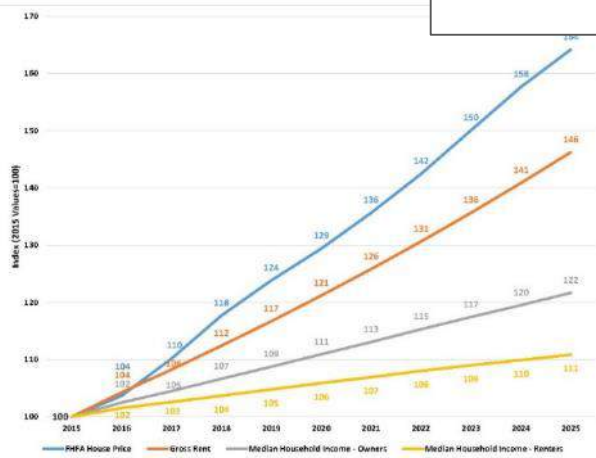
By: Eugene Yarnall  
www.meprinc.com

TOWN OF SANDWICH  
HOUSING PRODUCTION PLAN



Prepared with technical assistance from Gregory M. Smith, Director of the Town of Sandwich's Planning and Development Office, and Paula Schriber, Executive Director of the Sandwich Housing Authority

February 2010





*So what is all of this beginning to suggest?*



**DENSITY!!!**





*Is all density the same?*

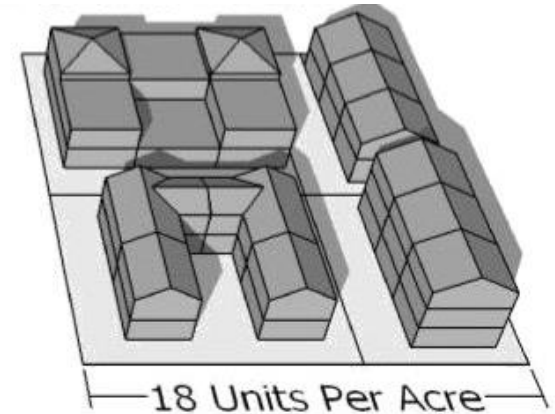
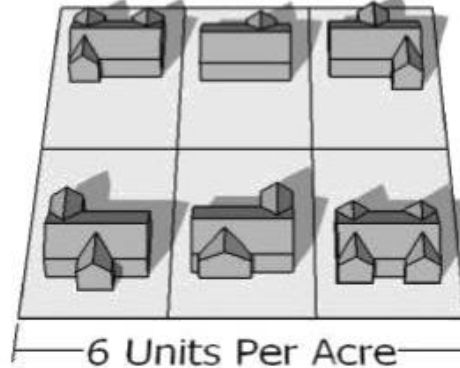
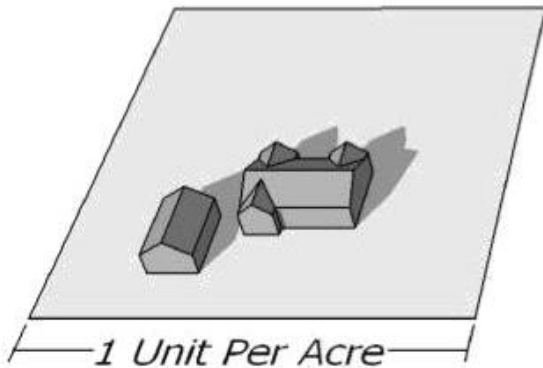
*Can we find options for density that feel  
“right” for the South Sandwich  
Community?*





## What is density?

When discussing housing, this is typically described in terms of how many *residential units* are included *per acre of land*.



*But density can take many forms...*



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*Which one has a higher density?*



*Which one has a higher density?*



## *Duplex*

*Pleasant Street, Sandwich*

*2 units on 0.12 acres =*

*16.5 du/ac*

## *Typical Single Family Home*

*Cape Cod*

*1 unit on 0.25 - 0.5 acre =*

*2 - 4 du/ac*





*Which one has a higher density?*



*Which one has a higher density?*



## *Duplex*

*Pleasant Street, Sandwich*

*2 units on 0.12 acres =*

*16.5 du/ac*

## *Manor House*

*Main Street, Sandwich*

*5 units on 0.27 acres =*

*18 du/ac*





*Which one has a higher density?*





*Which one has a higher density?*



## *Manor House*

*Pleasant Street, Sandwich*

*3 units on 0.29 acres =  
10 du/ac*

## *Manor House*

*Main Street, Sandwich*

*5 units on 0.27 acres =  
18 du/ac*



*Which one has a higher density?*





# Which one has a higher density?



## Stacked Flats

Glenwood Ave & Chancery Lane, Falmouth

8 units on 0.4 acres =  
20 du/ac

## Walk Up

South Street, Hyannis

11 units on 0.49 acres =  
22 du/ac





*What are some creative approaches to moderate/transitional density?*





*There are a whole range of building types that have been largely underutilized that scale between single family and the commercial core: what some have called the “Missing Middle”.*



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





*These types provided denser housing options in forms that were able to integrate into the primarily single family residential areas.*



MissingMiddleHousing.com is powered by Opticos Design.  
Illustration © 2015 Opticos Design, Inc.



# Why is the “missing middle” missing?



- Most *zoning ordinances* were written post-WWII and focused on the single family house and apartment complex as the two dominant housing types.
- As a result, *financing* is still largely structured based on those two forms.
- In addition, *local residents tend to resist “new” types of development*, even if those types are rooted in historical patterns.

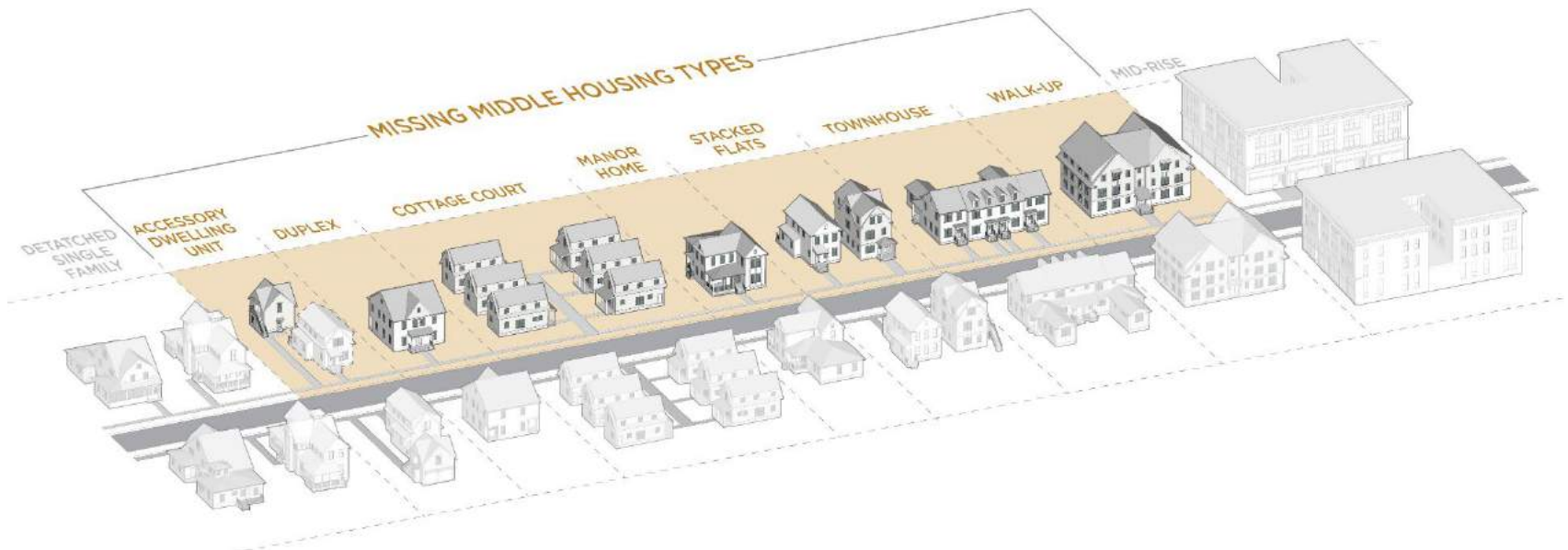


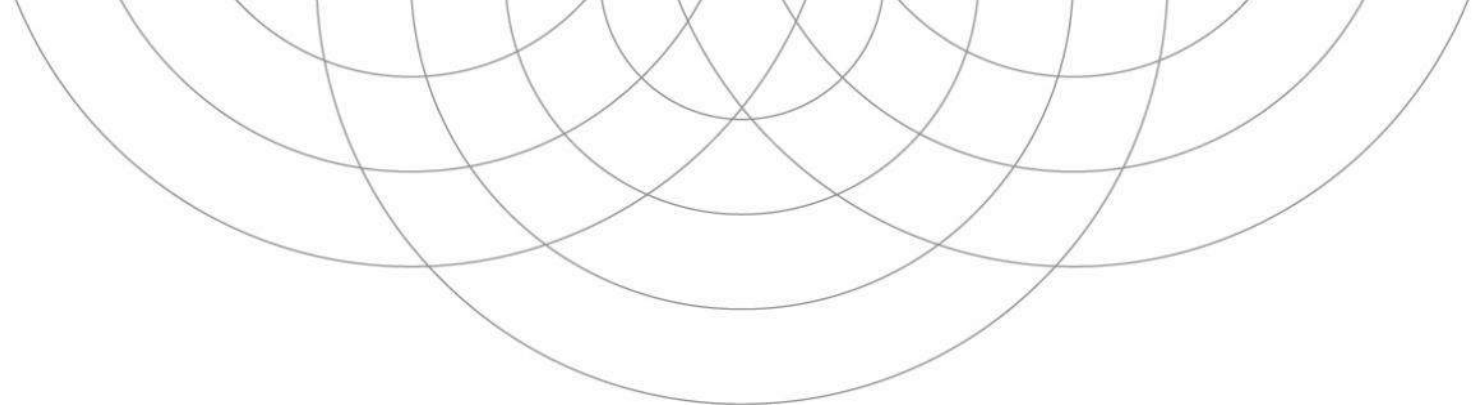


## So why is there a renewed interest now?

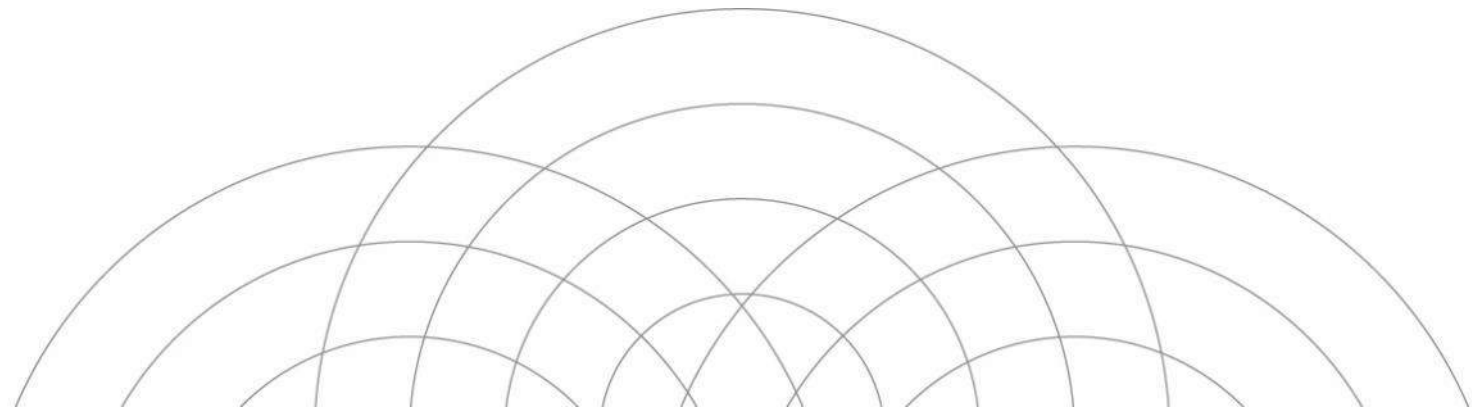
- Empty nesters and young professionals looking for options in *historic cores/mixed-use areas*
- Looking for new models to help provide *more affordable housing*
- Industry looking for new ways to develop in *smaller increments*
- Demographic shift to *“right-sized”* units and communal living

All of which the *Missing Middle* can help address





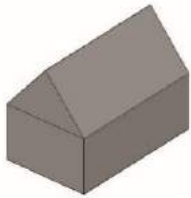
## *Missing Middle Building Types*



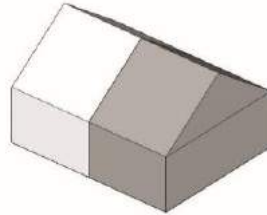


What do we mean by “*building types*”?

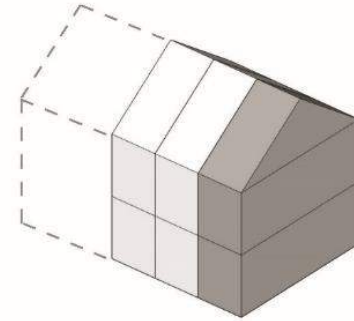
Basically a means of categorizing units of a similar scale, arrangement, and disposition.



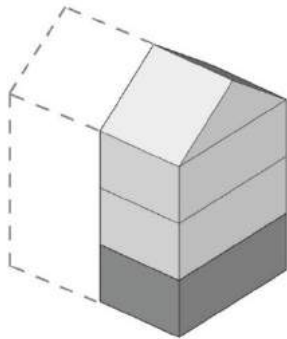
*Cottage*



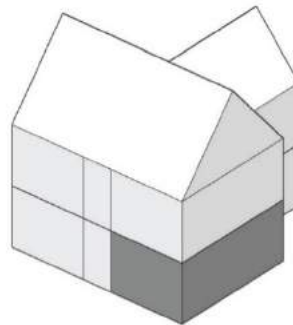
*Duplex*



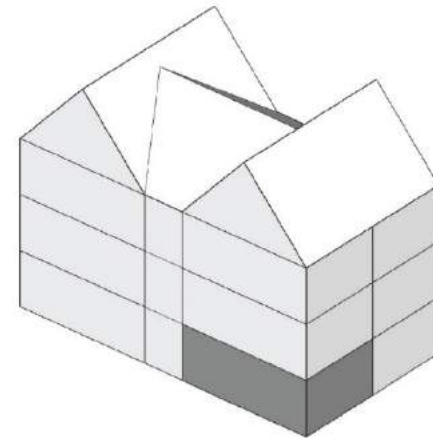
*Townhouse*



*Double Decker*



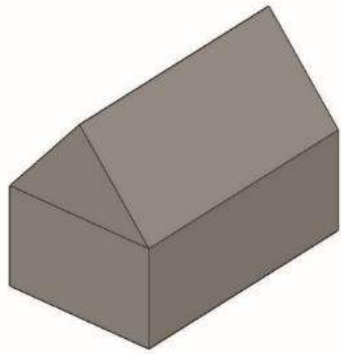
*Manor House*



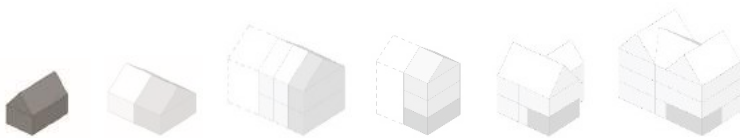
*Walk-ups*



## *Cottages: 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*



# *Cottages: Small scale single family detached units*

## *Chases Ocean Grove*

*Old Wharf Road, Dennisport*

*55 units on 3.6 acres =*

*15 du/ac*





# *Cottages: Small scale single family detached units*

## *Heritage Sands*

*Old Wharf Road, Dennisport*

*64 units (+ Community Building) on 8 acres =  
8 du/ac*





# *Cottages: Small scale single family detached units*



*Pleasant Street, Sandwich*



*Summer Street, Sandwich*



*Canary Street, Sandwich*



*State Street, Sandwich*





# *Cottages: Small scale single family detached units*



*Pine Grove Cottages,  
Sandwich*



*Ploughed Neck Road,  
Sandwich*





*Cottages: Small scale single family detached units*



*Which image feels more appropriate here?*



*Cottages: Small scale single family detached units*

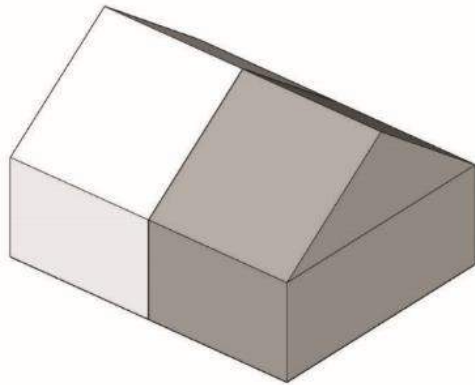


*Which image feels more appropriate here?*

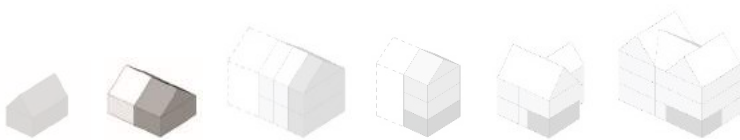




## *Duplexes: Single family semi-detached units*



- *Typically 1 – 2 stories*
- *Two single family homes that share a common “party wall”*
- *5 – 10 dwelling units per acre*



# *Duplexes: Single family semi-detached units*

## *148-150 Main Street*

*Main Street, Sandwich*

*Built in 1857*

*2 units on 0.6 acres (0.24 if both small lot size) =*

*3.5 du/ac (8 du/ac)*





## *Duplexes: Single family semi-detached units*

### *10 Pleasant Street*

*Pleasant Street, Sandwich*

*Built in 1849*

*2 units on 0.12 acres =*

*16.5 du/ac*





# *Duplexes: Single family semi-detached units*



*Bourne, MA*



*Eastham, MA*



*Tiverton, RI*



*Brewster, MA*



*Sweetbriar, RI*



*West Falmouth, MA*



*Duplexes: Single family semi-detached units*



*Which image feels more appropriate here?*



*Duplexes: Single family semi-detached units*

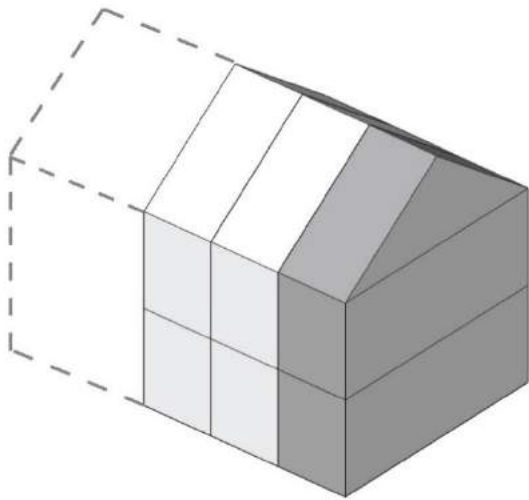


*Which image feels more appropriate here?*

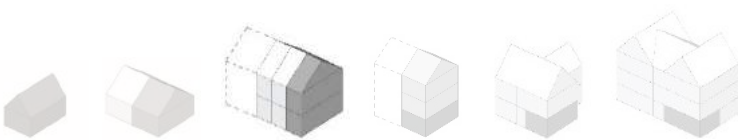




## *Townhouses: Single family attached units*



- *Typically 1.5 – 2 stories*
- *Series of single family homes that share multiple common “party walls”*
- *Can be designed to look like individual units or as a single larger building*
- *10 – 15 dwelling units per acre*





# *Townhouses: Single family attached units*

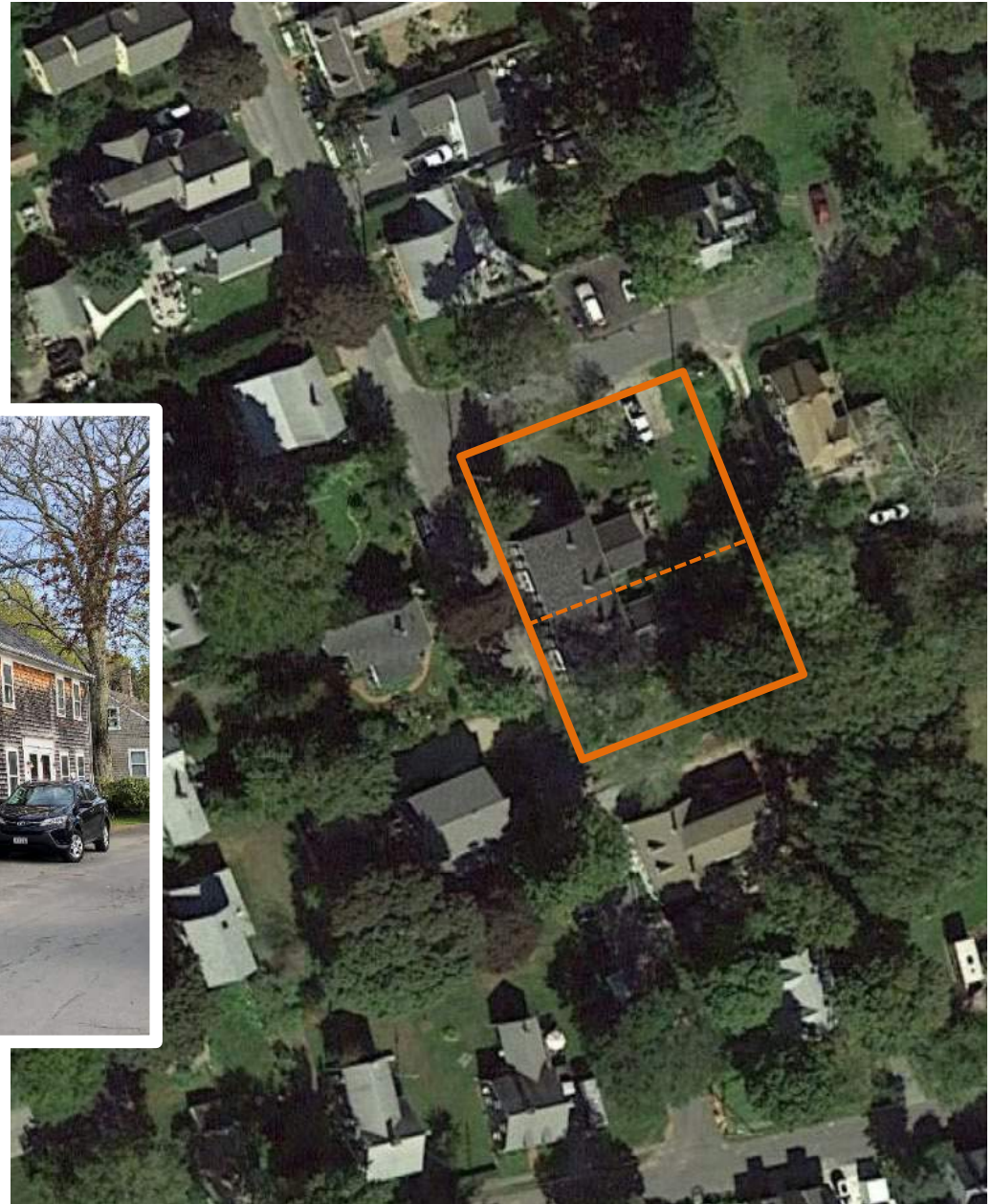
## *2-4 State Street*

*State Street, Sandwich*

*Built 1835, 1850*

*4 units on 0.34 acres =*

*12 du/ac*





# *Townhouses: Single family attached units*

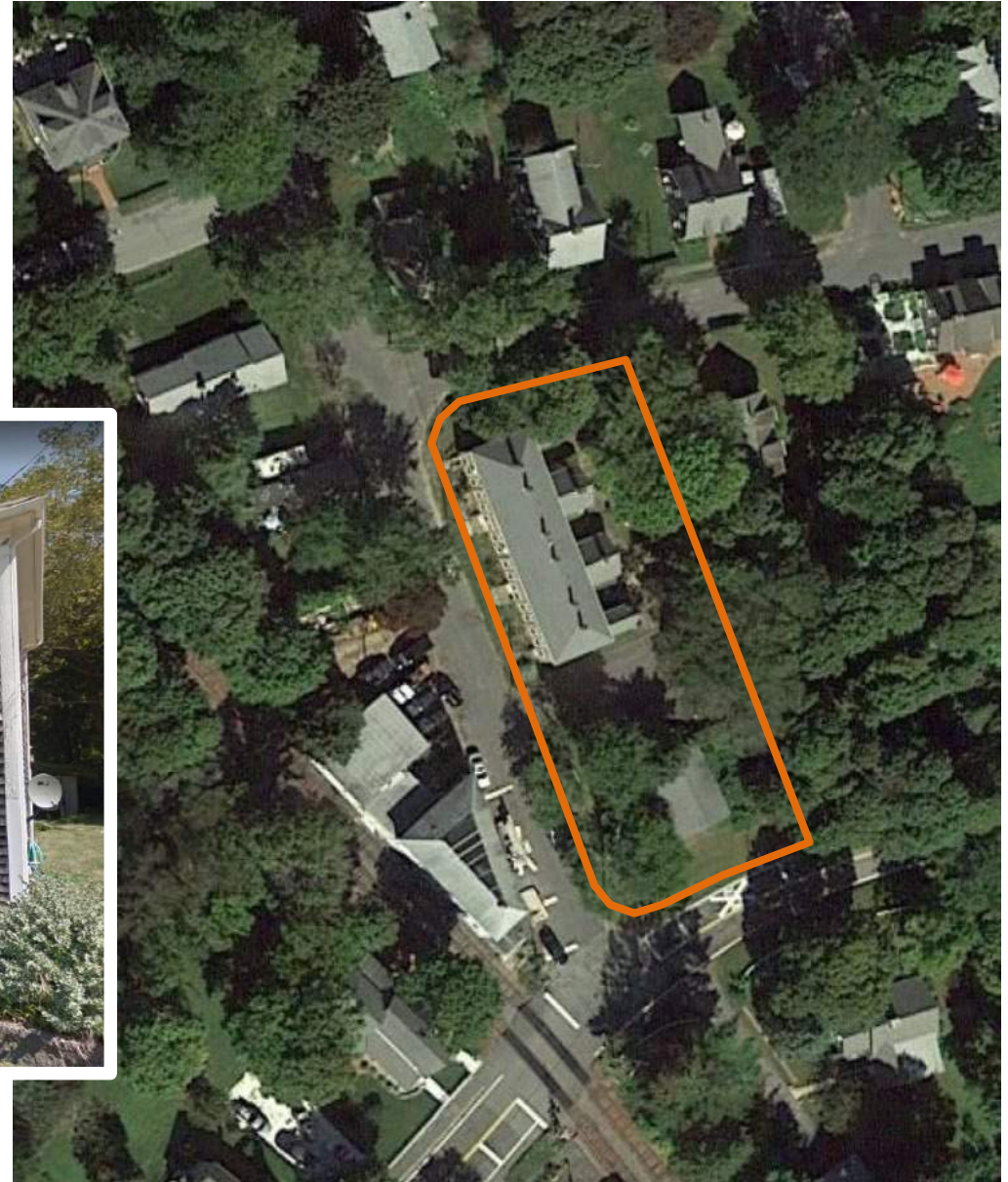
## *2-12 Church Street*

*Church Street, Sandwich*

*Built ca. 1860*

*6 units on 0.45 acres =*

*13 du/ac*





# *Townhouses: Single family attached units*



*Providence, RI*



*Sandywoods Farm, RI*



*Falmouth, MA*



*Wellesley, MA*



*Providence, RI*





*Townhouses: Single family attached units*



*Which image feels more appropriate here?*

*Townhouses: Single family attached units*

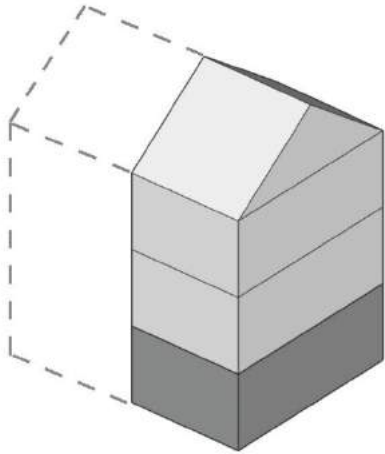


*Which image feels more appropriate here?*

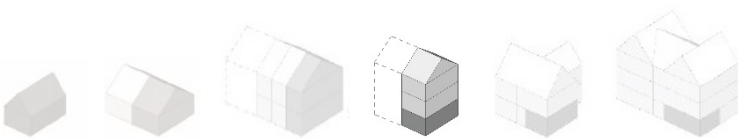




## *Double Decker: Stacked Duplex*



- *Typically 2 or 3 stories*
- *First floor flat with single story flat or two story townhouse above*
- *Can be designed with individual entries*
- *10 – 15 dwelling units per acre*



# Double Decker: Stacked Duplex

## Stacked Flats

Glenwood Ave & Chancery Lane, Falmouth

8 units on 0.4 acres =

20 du/ac (15 du/ac if 6 units)





# Double Decker: Stacked Duplex



*Sandwich, MA*



*Provincetown, MA*



*Providence, RI*



*Provincetown, MA*



*Providence, RI*



*Provincetown, MA*





## *Double Decker: Stacked Duplex*



*Which image feels more appropriate here?*





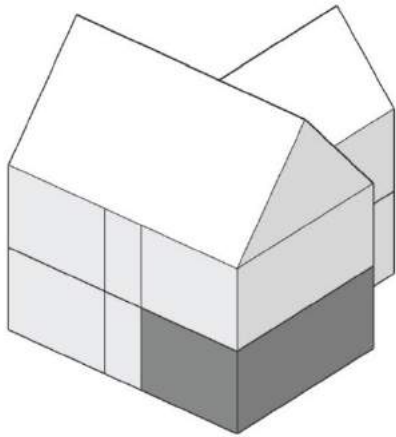
## *Double Decker: Stacked Duplex*



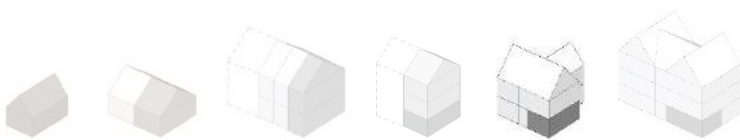
*Which image feels more appropriate here?*



## *Manor House: Small-scale multifamily that looks like a large home*



- *Typically 2 – 3 stories*
- *Typically 4 – 6 units per building*
- *Designed to look like a single large home*
- *10 – 20 dwelling units per acre*





# *Manor House: Small-scale multifamily that looks like a large home*

## *12 Pleasant Street*

*Pleasant Street, Sandwich*

*Built 1850*

*3 units on 0.29 acres =*

*10 du/ac*



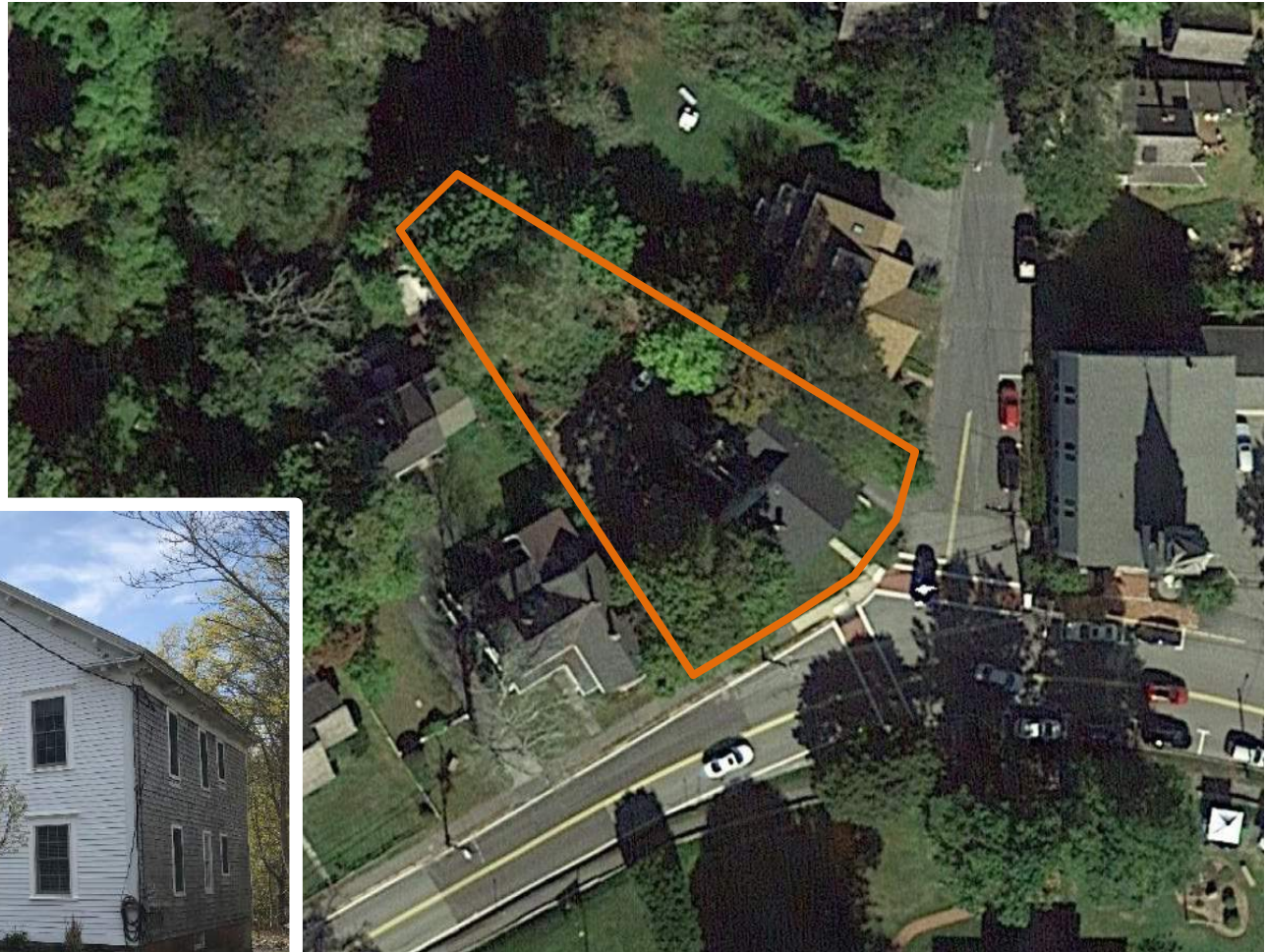


# *Manor House: Small-scale multifamily that looks like a large home*

## *141 Main Street*

*Main Street, Sandwich  
Built 1857*

*5 units on 0.27 acres =  
18 du/ac*





*Manor House: Small-scale multifamily that looks like a large home*



*Hyannis, MA*



*Providence, RI*



*West Falmouth, MA*



*Bourne, MA*



*Tiverton, RI*



*Manor House: Small-scale multifamily that looks like a large home*



*Which image feels more appropriate here?*





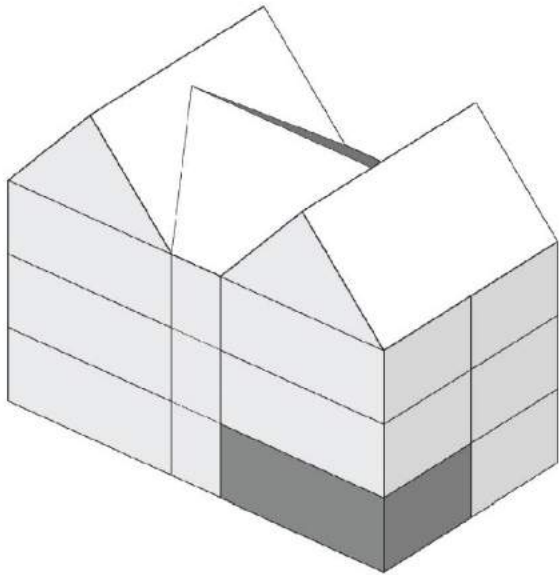
*Manor House: Small-scale multifamily that looks like a large home*



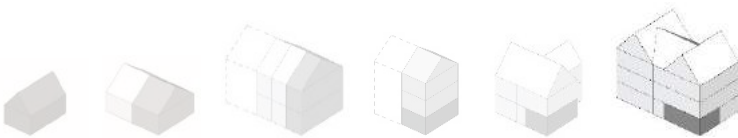
*Which image feels more appropriate here?*



*Walk-ups: Small scale multifamily, typically with shared circulation*



- *Typically 2 – 3 stories*
- *Typically 4 – 12 units per building*
- *Series of flats with shared circulation*
- *May be a stand-alone building or combined*
- *15 – 25 dwelling units per acre*



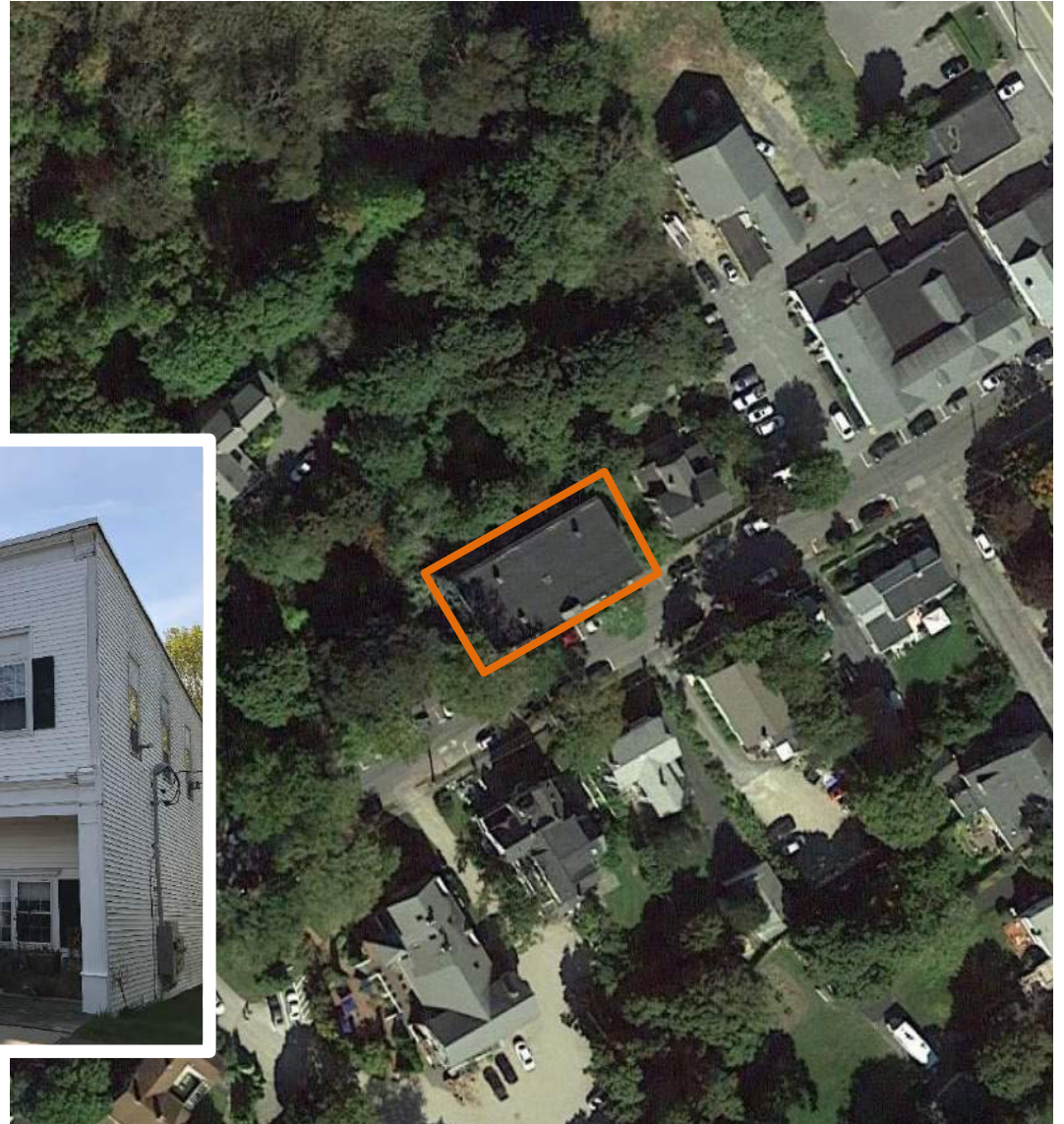


*Walk-ups: Small scale multifamily, typically with shared circulation*

## *The 1883 Block*

*Jarves Street, Sandwich  
Built 1883*

*12 units on 0.18 acres =  
66 (!) du/ac*





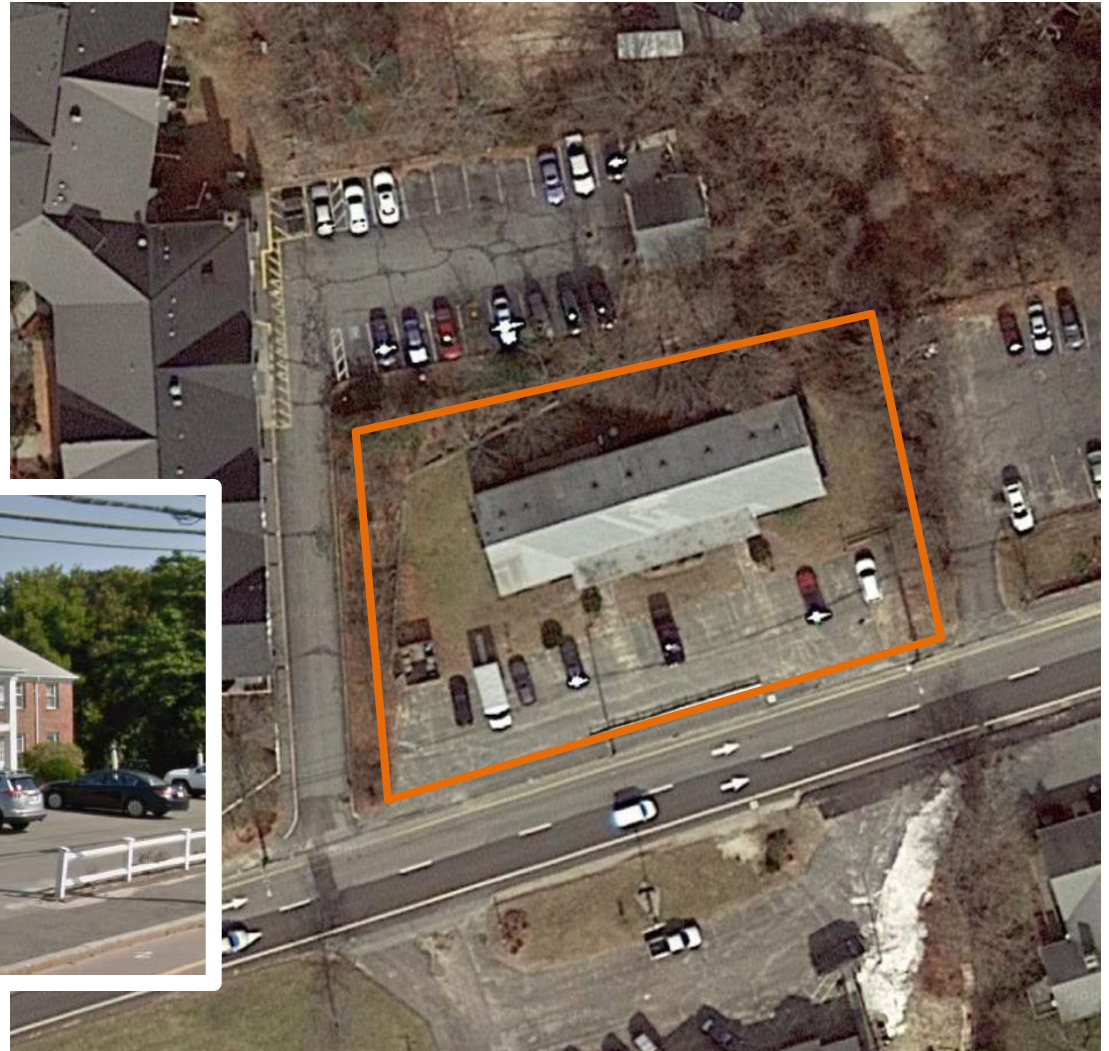
*Walk-ups: Small scale multifamily, typically with shared circulation*

## *Harbor House*

*South Street, Hyannis*

*11 units on 0.49 acres =*

*22 du/ac*





*Walk-ups: Small scale multifamily, typically with shared circulation*



*Harwich Port, MA*



*Provincetown, MA*



*Bristol, RI*



*Providence, RI*



*Walk-ups: Small scale multifamily, typically with shared circulation*



*Which image feels more appropriate here?*





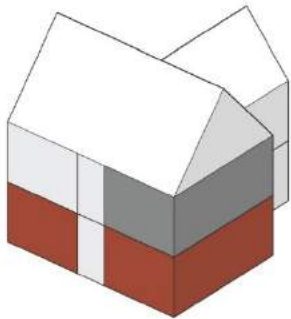
*Walk-ups: Small scale multifamily, typically with shared circulation*



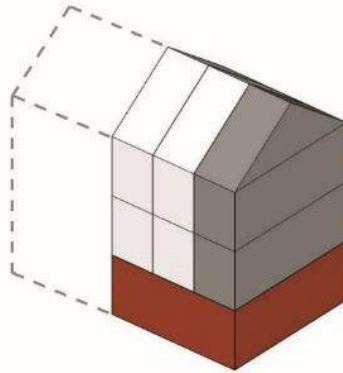
*Which image feels more appropriate here?*



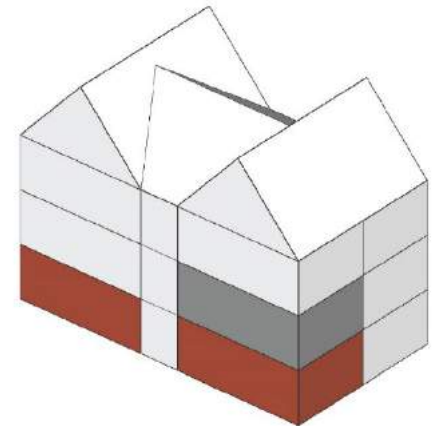
## *Mixed-Use: Variations that include commercial on first floor*



*Manor House  
with Commercial*



*Townhouses  
with Commercial*



*Walk-ups  
with Commercial*

*These forms can host a variety of uses.*

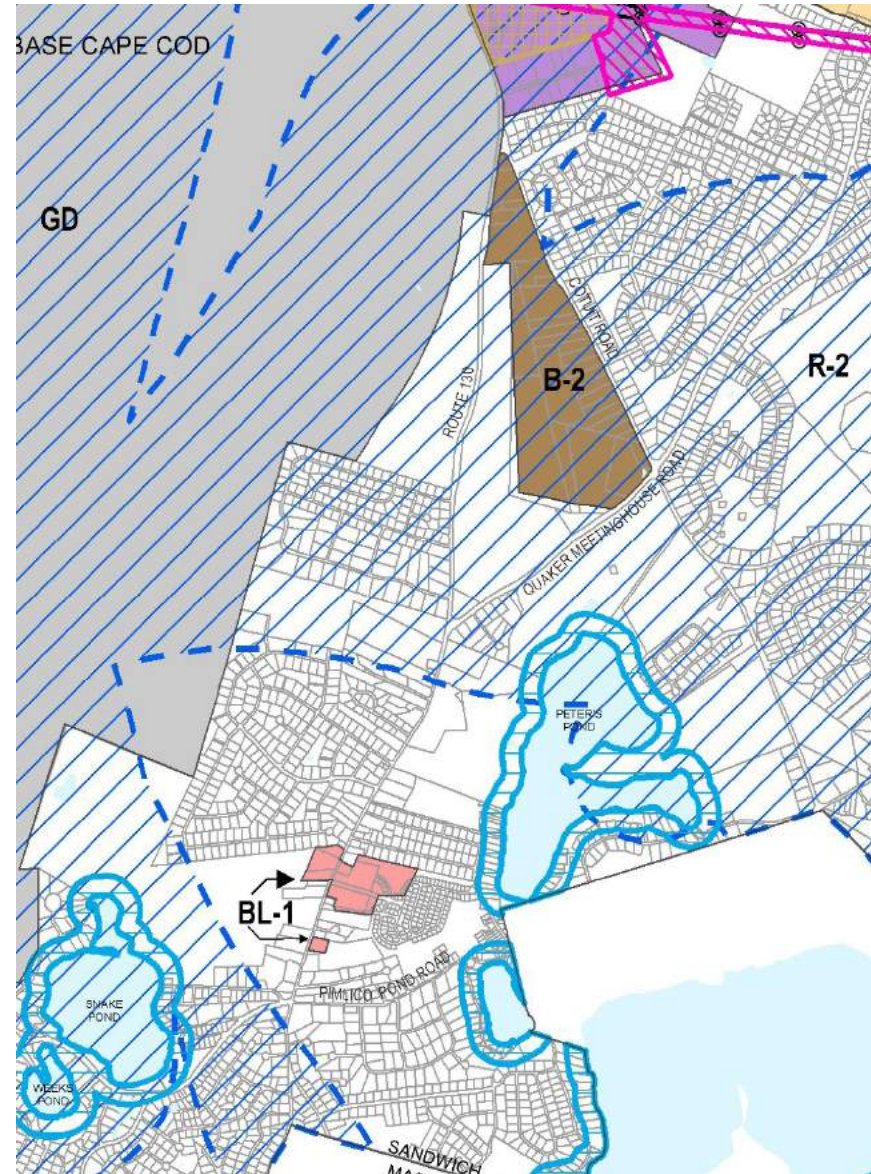




Which brings us to the ultimate question: when thinking about how best to incorporate moderate forms of density in the South Sandwich Community...

**Comp Plan Growth Centers:**

- Sandwich Industrial Park
- South Sandwich Village Center
- Along Route 130





*... could any (or all) of these options fit in to your community?*



*Cottage*



*Duplex*



*Townhouse*



*Double Decker*



*Manor House*



*Walk-ups*





## Next Steps

South Sandwich Community Design

Visual Preference Survey

[www.capecodcommission.org/survey](http://www.capecodcommission.org/survey)

Second Public Presentation

Early September

Form-based Code Framework



Developers' Roundtable  
At OneCape



[www.capecodcommission.org/crbd](http://www.capecodcommission.org/crbd)