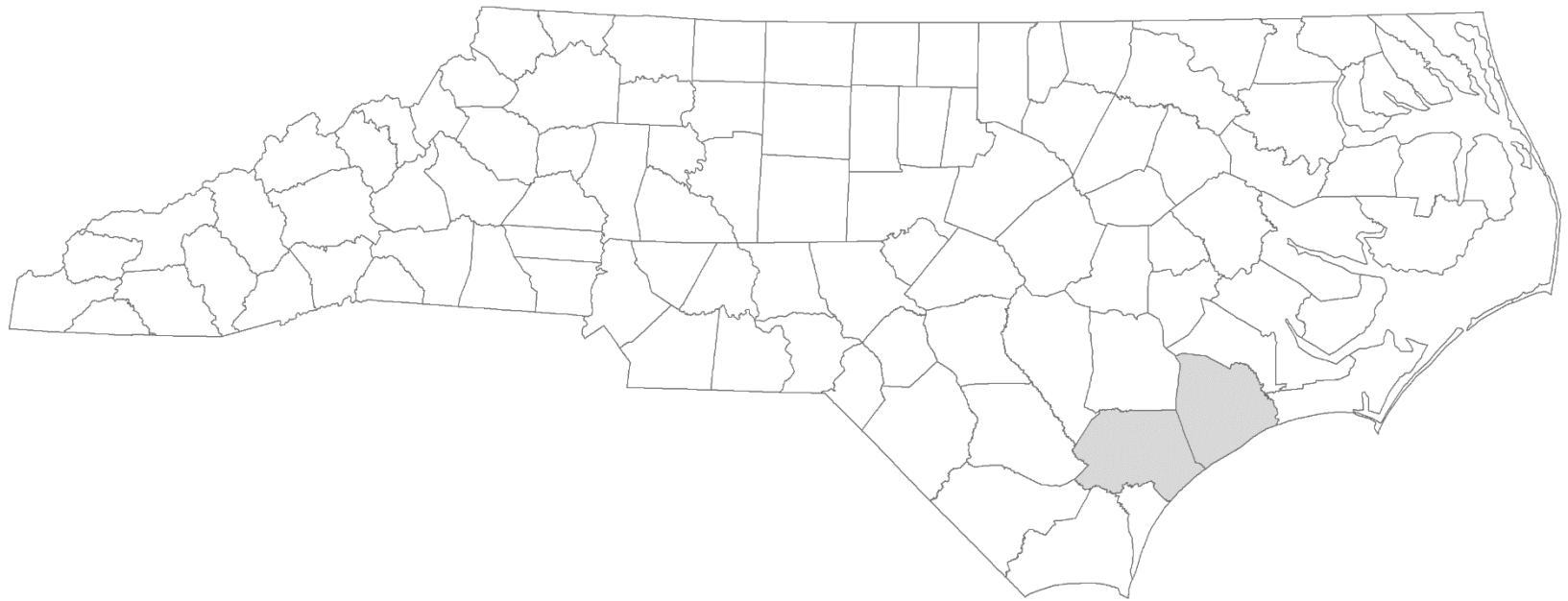


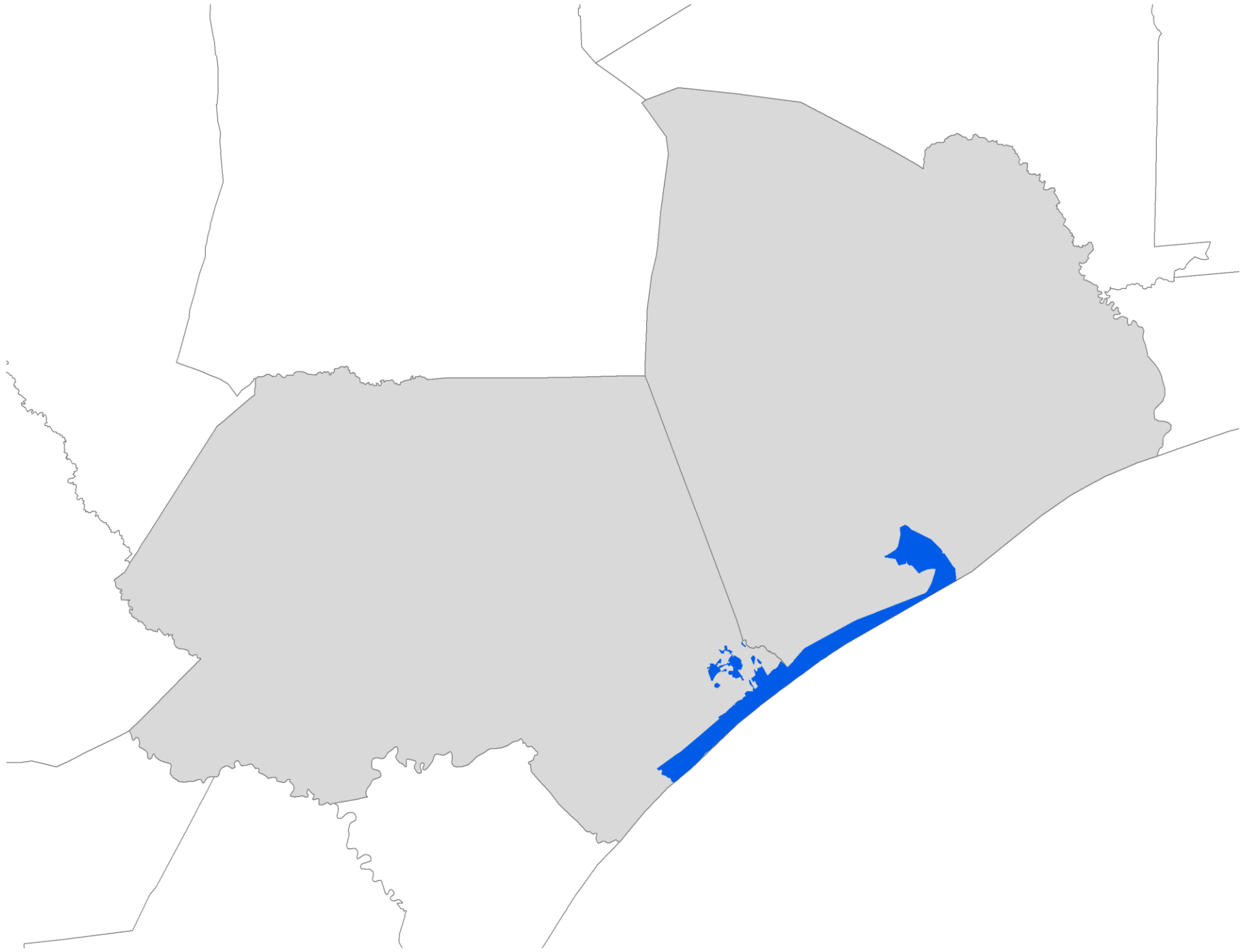


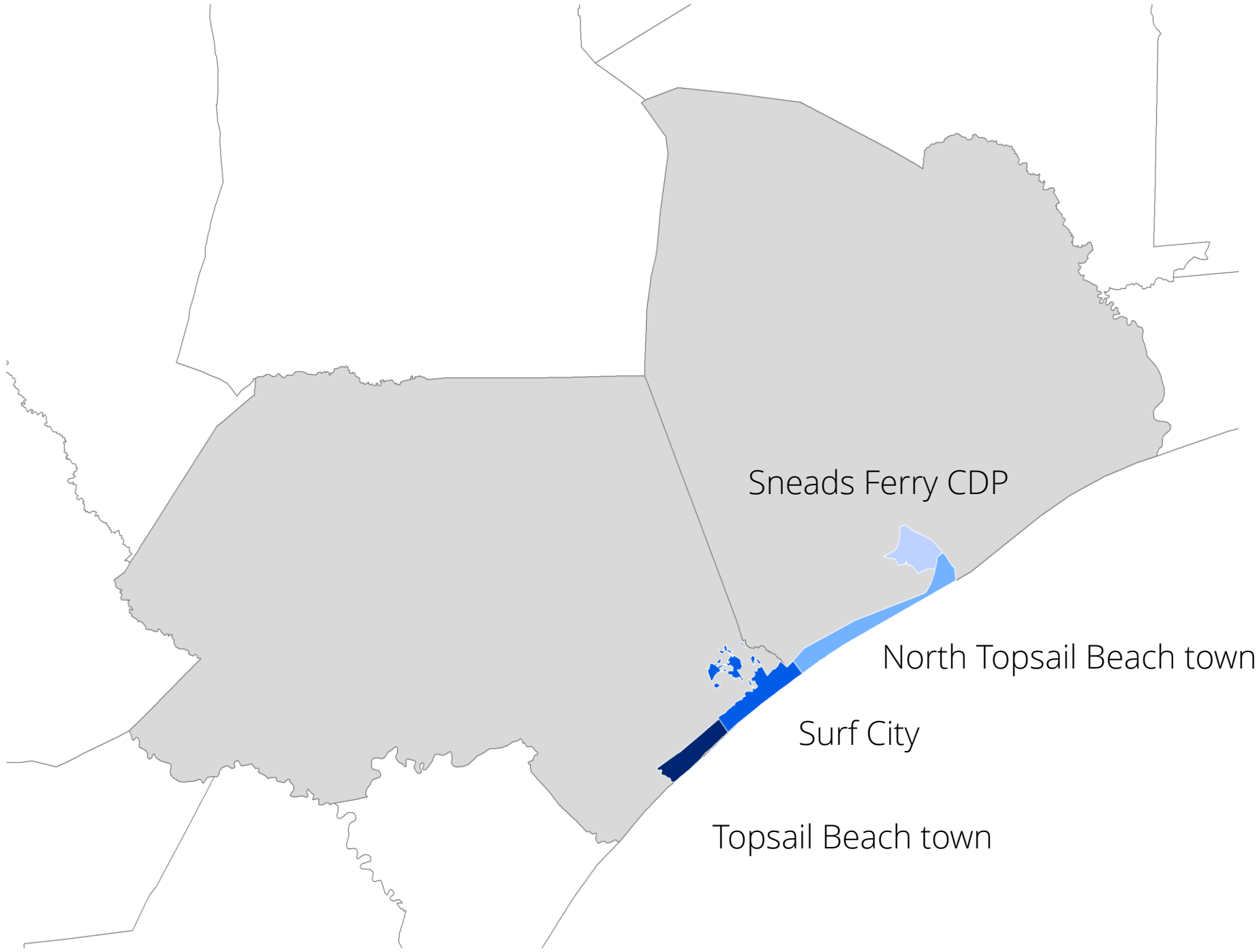
Seasonal Population Estimates: A Case Study

2017 Applied Demography Conference

Rebecca Tippett
Carolina Demography
Carolina Population Center
UNC-Chapel Hill







Sneads Ferry CDP

North Topsail Beach town

Surf City

Topsail Beach town

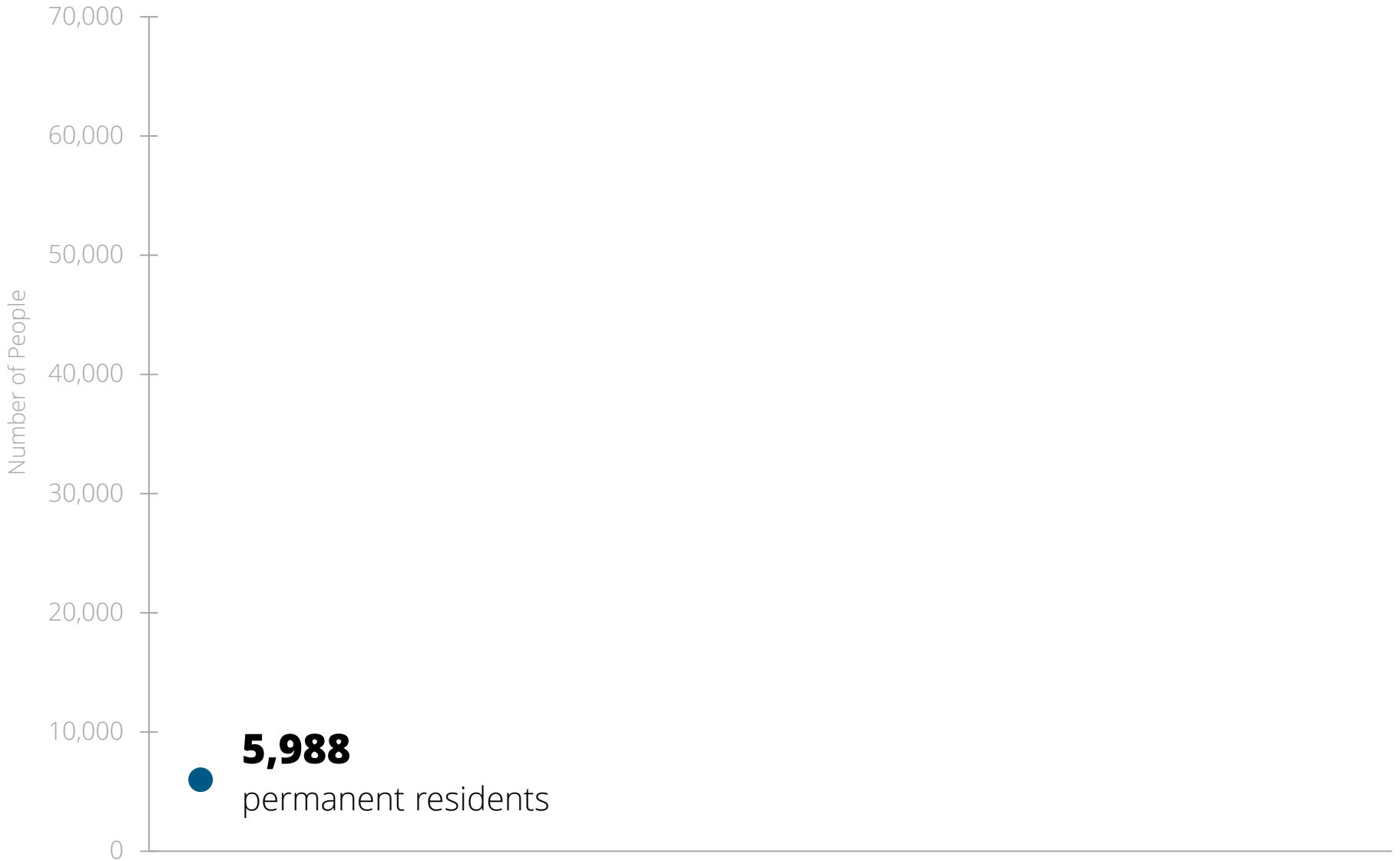
59%

Of regional housing is vacant
for **seasonal use**

65%

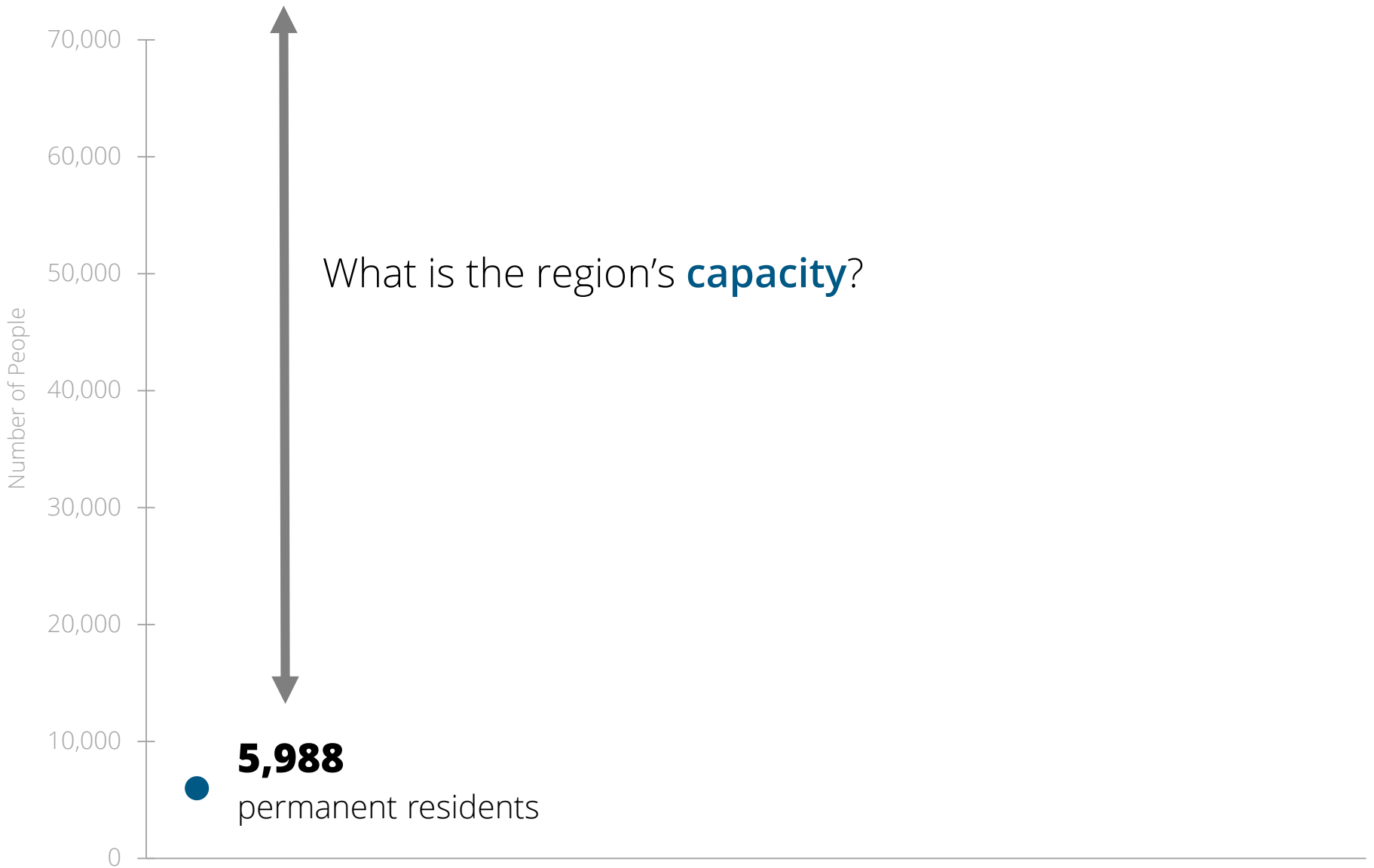
Of regional housing is vacant
for **seasonal use** or for **rent**

Estimated Greater Topsail Area population



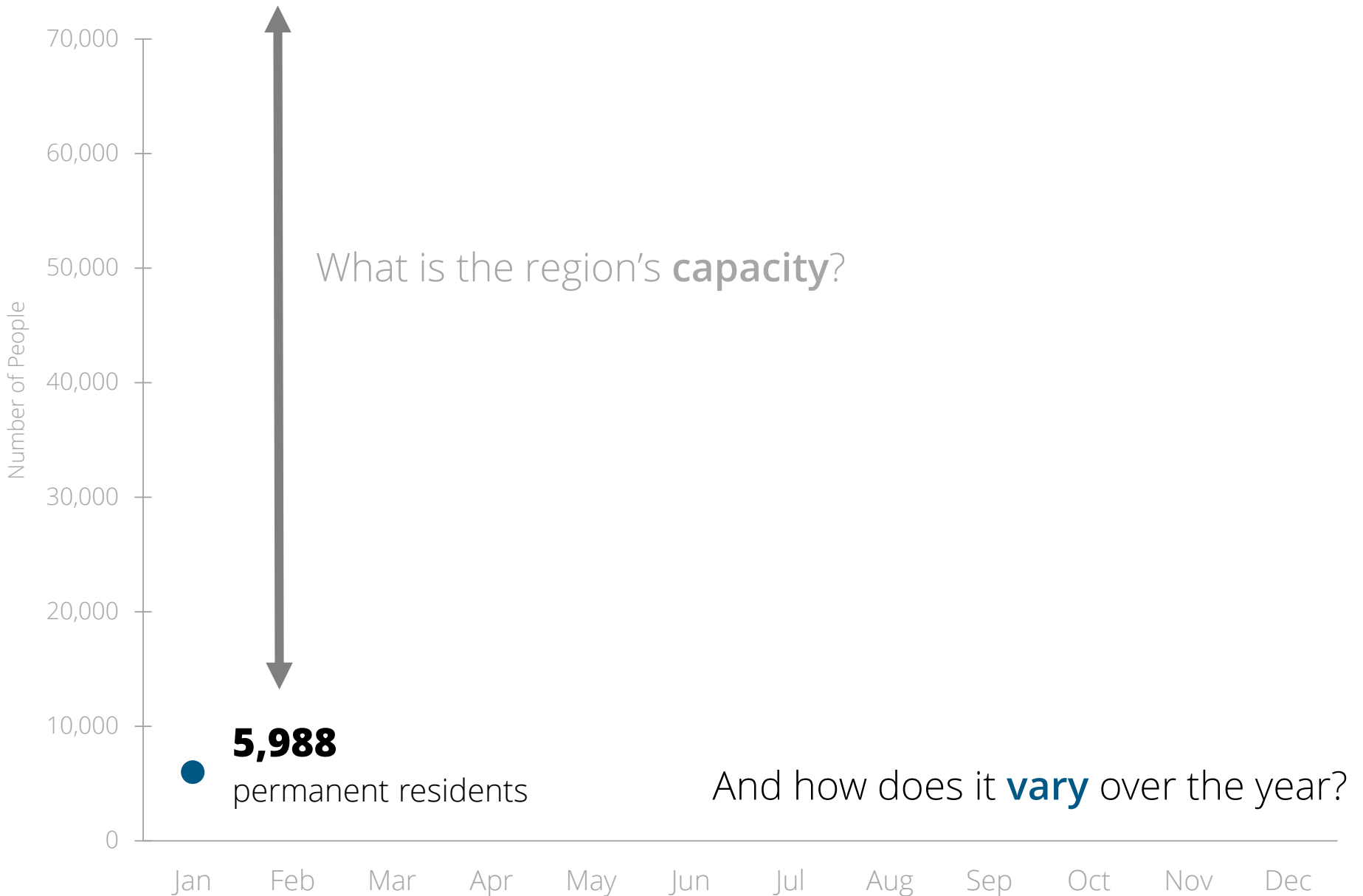
Data source: 2013 municipal population estimates from U.S. Census Bureau; Sneads Ferry CDP estimates were calculated using linear extrapolation of population change from 2000-2010.

Estimated Greater Topsail Area population



Data source: 2013 municipal population estimates from U.S. Census Bureau; Sneads Ferry CDP estimates were calculated using linear extrapolation of population change from 2000-2010.

Estimated Greater Topsail Area population



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Estimated Greater Topsail Area population



Data source: 2013 municipal population estimates from U.S. Census Bureau; Sneads Ferry CDP estimates were calculated using linear extrapolation of population change from 2000-2010.

5,988 permanent residents in 2013

+ _____ seasonal population

Seasonal Population

Individuals who are staying:

- in rental properties
- at hotels, motels, and B&Bs
- at campgrounds and RV parks
- with family or friends

Seasonal Population

Individuals who are staying:

- **in rental properties**
- at hotels, motels, and B&Bs
- at campgrounds and RV parks
- with family or friends

Step 1: Number of Rental Properties

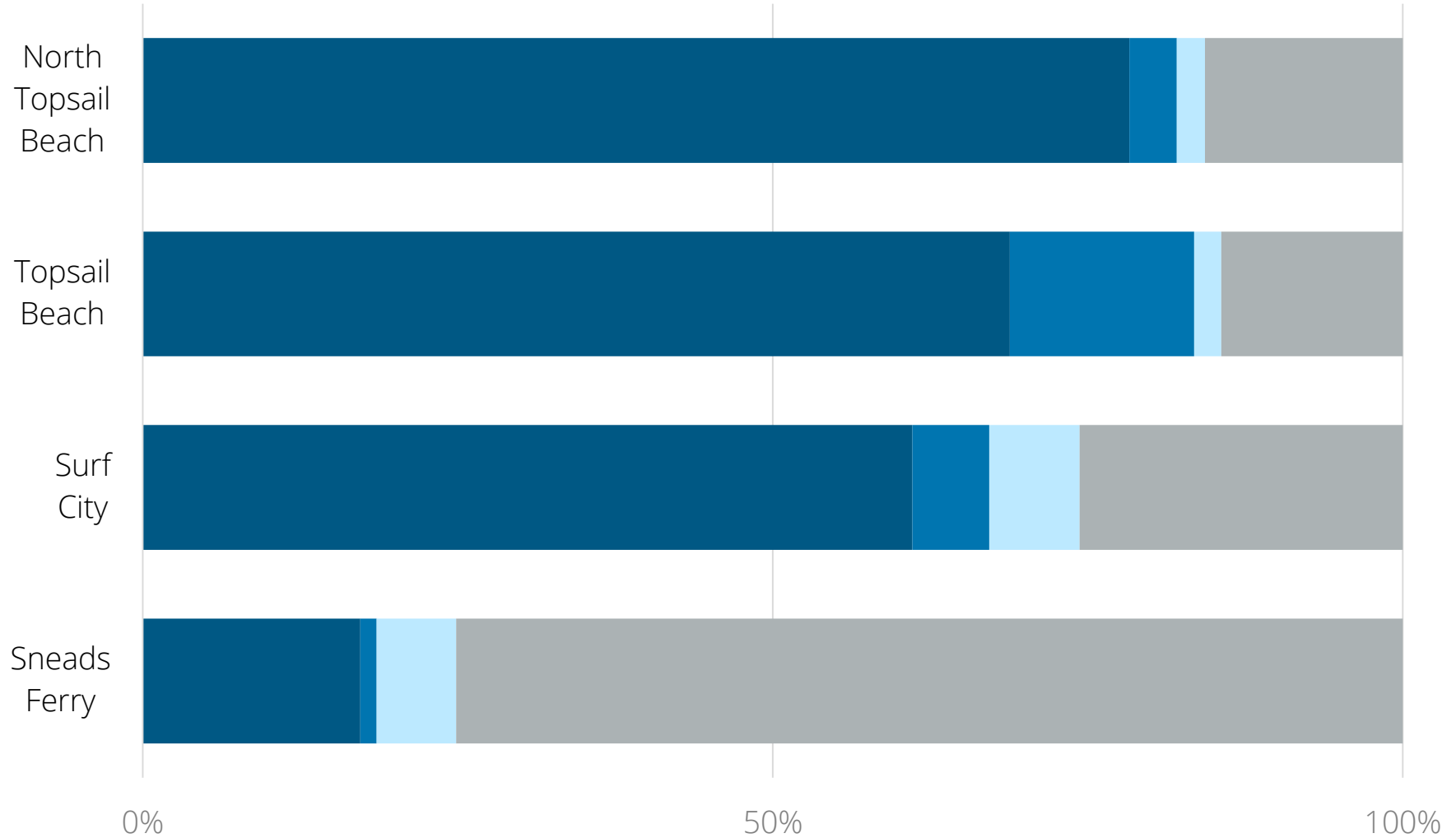
9,041

regional housing units in 2013

Data source: 2013 housing units were estimated by adding 2010-2012 building permits to 2010 Census counts. Sneads Ferry CDP was estimated by extrapolating 2000-10 housing unit growth.

Occupancy rates and vacancy status vary across region

■ Vacant - Seasonal ■ Vacant - For Rent ■ Vacant - Other ■ Occupied



Data source; 2010 Census

5,888

regional housing units available
for **seasonal use** or for **rent**

Data source: 2013 housing units were estimated by adding 2010-2012 building permits to 2010 Census counts. Sneads Ferry CDP was estimated by extrapolating 2000-10 housing unit growth.

Step 2: Rental Property Type

B25024

UNITS IN STRUCTURE Universe: Housing units ⓘ 2008-2012 American Community Survey 5-Year Estimates

Table View

Actions: [Modify Table](#) | [Add/Remove Geographies](#) | [Bookmark/Save](#) |

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates for states and counties.

Versions of this table are available for the following years:

- [2015](#)
- [2014](#)
- [2013](#)
- [2012](#) ▶
- [2011](#)
- [2010](#)
- [2009](#)

	Topsail Beach town, North Carolina	
	Estimate	Margin of Error
Total:	1,303	+/-26
1, detached	1,119	+/-52
1, attached	18	+/-16
2	78	+/-37
3 or 4	32	+/-25
5 to 9	36	+/-27
10 to 19	4	+/-6
20 to 49	3	+/-6
50 or more	0	+/-13
Mobile home	13	+/-15
Boat, RV, van, etc.	0	+/-13

Source: U.S. Census Bureau, 2008-2012 American Community Survey

B25032

TENURE BY UNITS IN STRUCTURE Universe: Occupied housing units ⓘ 2008-2012 American Community Survey 5-Year Estimates

Table View

Actions: [Modify Table](#) | [Add/Remove Geographies](#) | [Book](#)

Although the American Community Survey (ACS) produces population, demographic and housing units for states and counties.

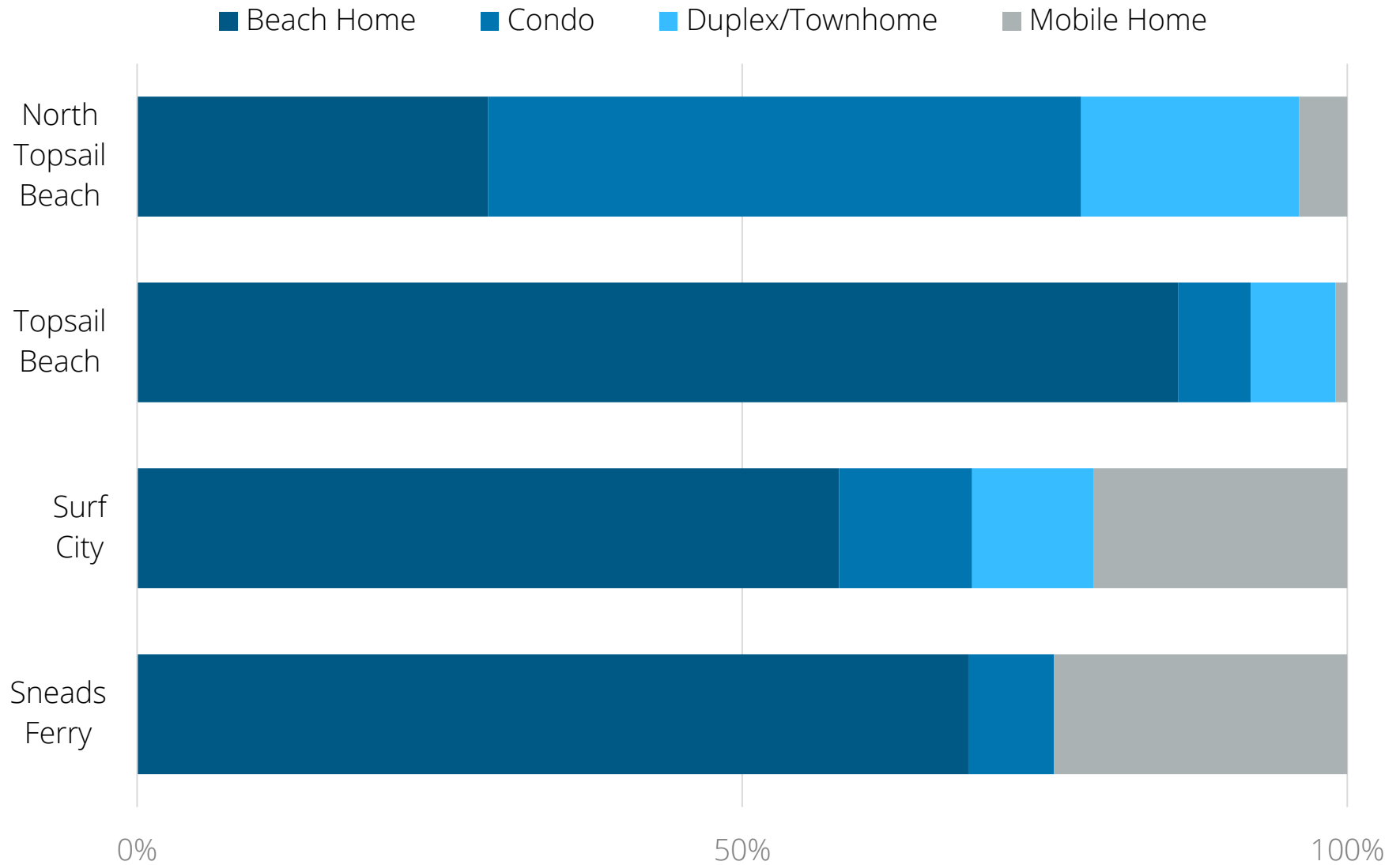
Versions of this table are available for the following years:

- [2015](#)
- [2014](#)
- [2013](#)
- [2012](#) ▶
- [2011](#)
- [2010](#)
- [2009](#)

	Topsail Beach	
	Estimate	
Total:	199	
Owner-occupied housing units:	163	
1, detached	152	
1, attached	11	
2	0	
3 or 4	0	
5 to 9	0	
10 to 19	0	
20 to 49	0	
50 or more	0	
Mobile home	0	
Boat, RV, van, etc.	0	
Renter-occupied housing units:	36	
1, detached	21	
1, attached	0	
2	9	
3 or 4	3	
5 to 9	0	

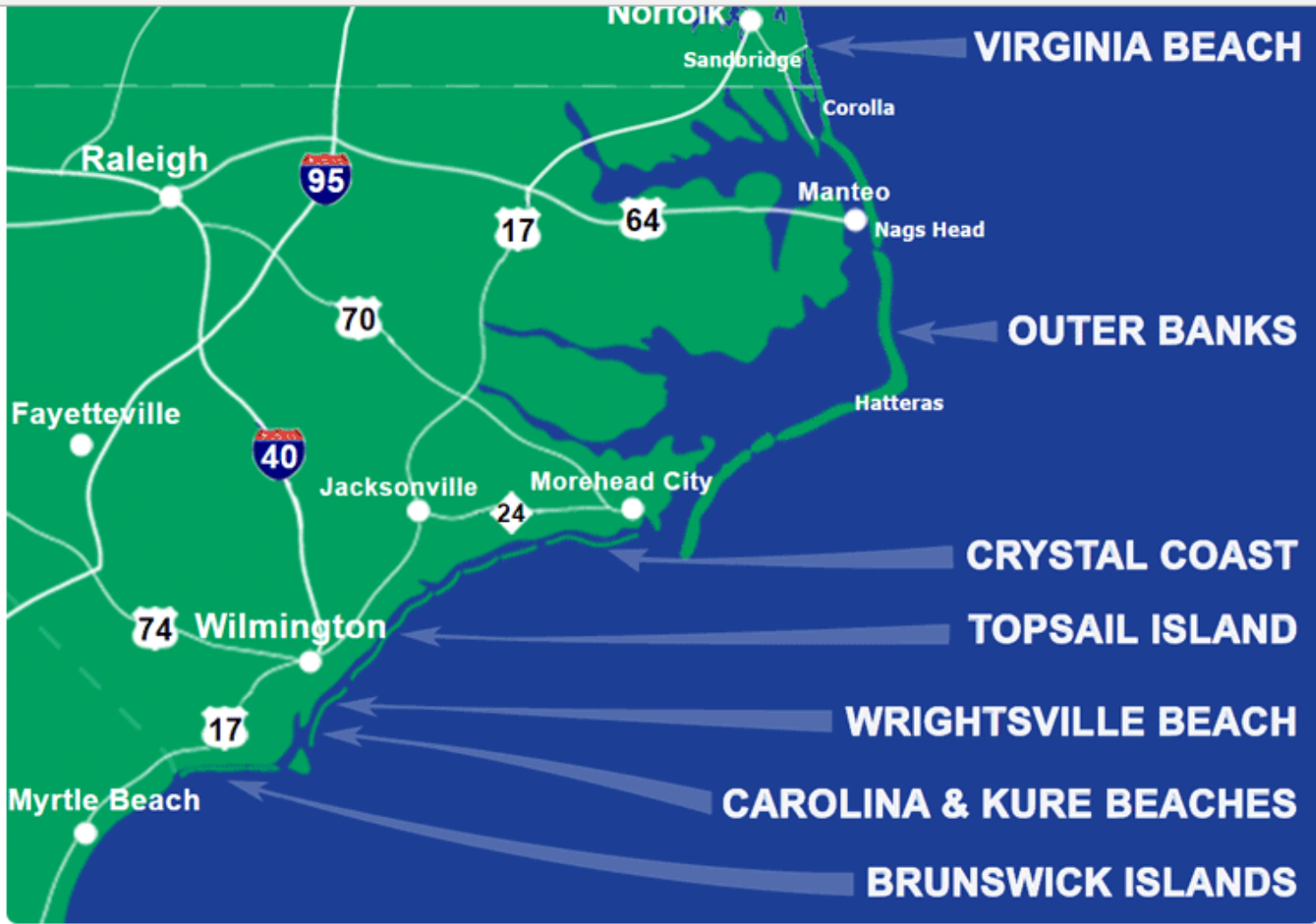
Back out estimates of type of vacant unit

Beach homes and condos most common rental types



Data source: 2008-12 American Community Survey

Step 3: Rental Property Capacity



Shop and compare **over 11,000** beach houses and condos for rent on **North Carolina beaches**(*). Compare prices, amenities, location, and more! Check out the luxurious oceanfront beach mansions with private swimming pools, hot tubs, and theater rooms or a comfortable condo with great views of the ocean. Or try a traditional beach cottage for a back-to-basics family vacation. There's something for everyone on the North Carolina and Virginia coasts, and RentABeach will help you find the perfect vacation rental for you!

(*) Our selection now includes rental homes just over the NC/VA border in Sandbridge, Virginia Beach!

Browse by Town:

North Topsail Beach

726 rental homes

Surf City

570 rental homes

Topsail Beach

309 rental homes

Sneads Ferry

1 rental homes

Browse by Town:

North Topsail Beach

726 rental homes

NC & VA Beach Vacation Rentals > Topsail Island > North Topsail Beach

Browse by Property Type



Beach Houses

334 rental homes



Condos

240 rental homes



Duplexes & Townhomes

143 rental homes

Browse by Town:

North Topsail Beach

726 rental homes

NC & VA Beach Vacation Rentals > Topsail Island > North Topsail Beach

Browse by Property Type

NC & VA Beach Vacation Rentals > Topsail Island > North Topsail Beach > Beach Houses

Beach Houses on North Topsail Beach

Browse by number of people

Sleeps 40 people

1 rental home

Sleeps 36 people

1 rental home

Sleeps 31 people

1 rental home

Sleeps 29 people

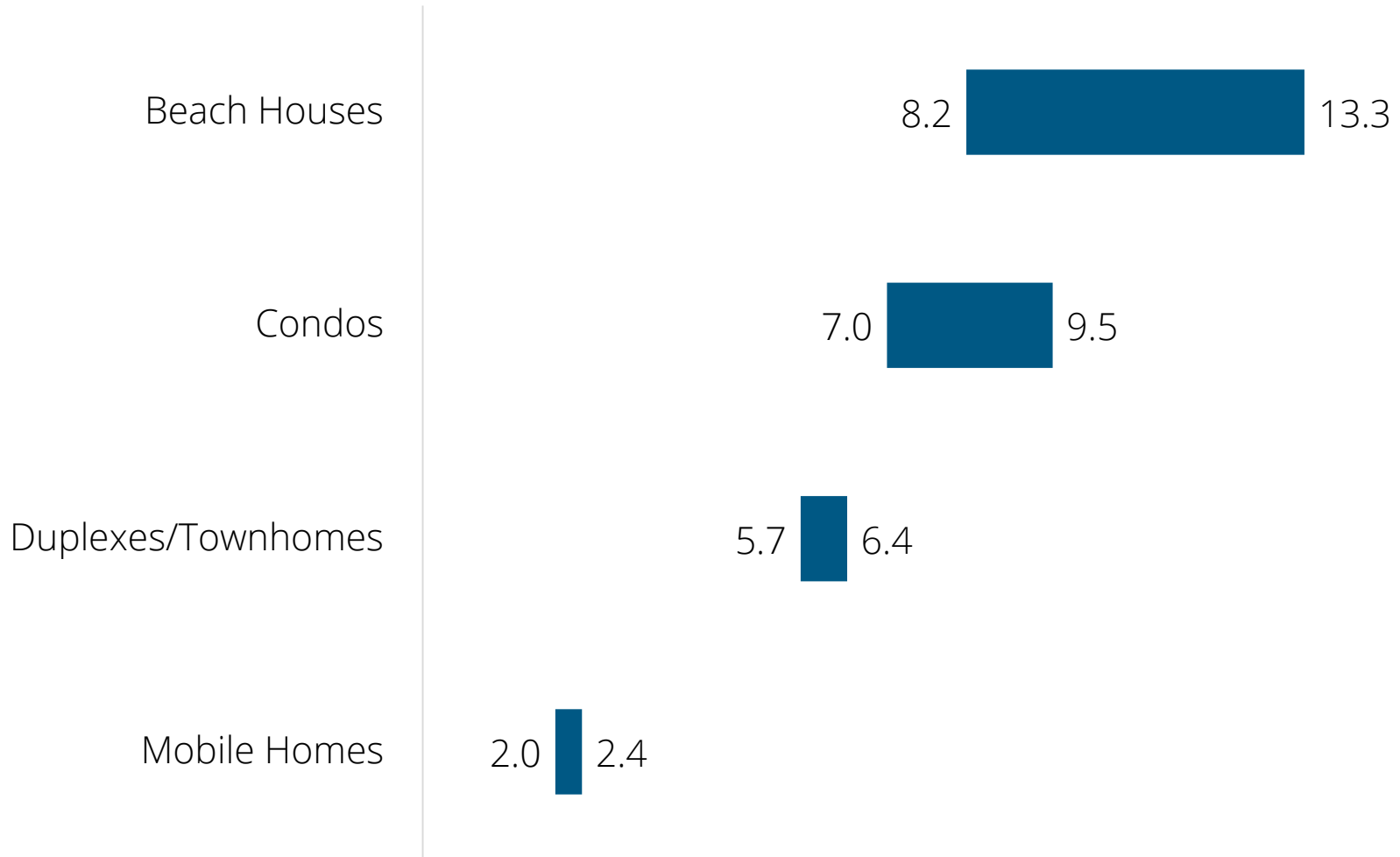
1 rental home

Sleeps 28 people

3 rental homes

Average max occupancy varies by unit type & location

In general, minimum occupancy is in Topsail Beach and maximum is in North Topsail Beach



Data source: Calculations based on rental property capacity distributions listed on RentABeach.com

Step 4: Calculate

5,988 permanent residents in 2013

+ 48,507 in rental units

Seasonal Population

Individuals who are staying:

- in rental properties
- **at hotels, motels, and B&Bs**
- at campgrounds and RV parks
- with family or friends

Hotels, motels, and B&Bs

6 establishments

301 rooms

x **3** persons/room

903 person capacity

5,988 permanent residents in 2013

+ 48,507 in rental units

+ 903 in hotels, motels, and B&Bs

Seasonal Population

Individuals who are staying:

- in rental properties
- at hotels, motels, and B&Bs
- **at campgrounds and RV parks**
- with family or friends

Campgrounds & RV parks

4 establishments

943 campsites

x **4** persons/site

3,772 person capacity

5,988 permanent residents in 2013

+ 48,507 in rental units

+ 903 in hotels, motels, and B&Bs

+ 3,772 in campsites and RV parks

Seasonal Population

Individuals who are staying:

- in rental properties
- at hotels, motels, and B&Bs
- at campgrounds and RV parks
- **with family or friends**

With family and friends

5,988 permanent residents
x **0.25** visitor yield factor (Dare County)

1,497 potential visitors

5,988 permanent residents in 2013

+ 48,507 in rental units

+ 903 in hotels, motels, and B&Bs

+ 3,772 in campsites and RV parks

+ 1,497 with family and friends

5,988 permanent residents in 2013

+ 48,507 in rental units

+ 903 in hotels, motels, and B&Bs

+ 3,772 in campsites and RV parks

+ 1,497 with family and friends

= 60,667 peak seasonal population

Estimated Greater Topsail Area population



Monthly Variation

Two approaches:

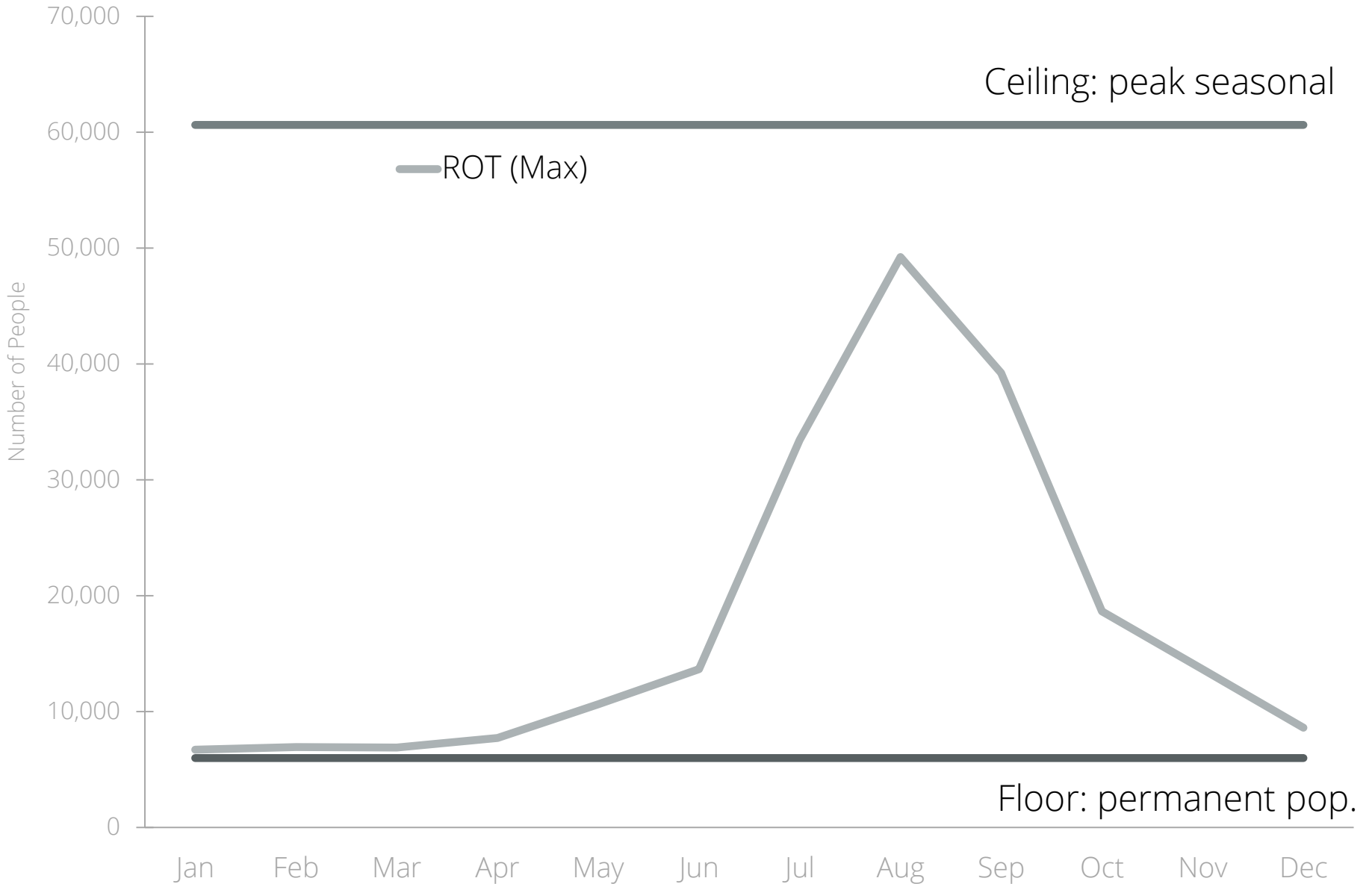
- **External data + rooms occupancy tax receipts (ROT)**

Peak occupancy (PO) = Myrtle Beach PO

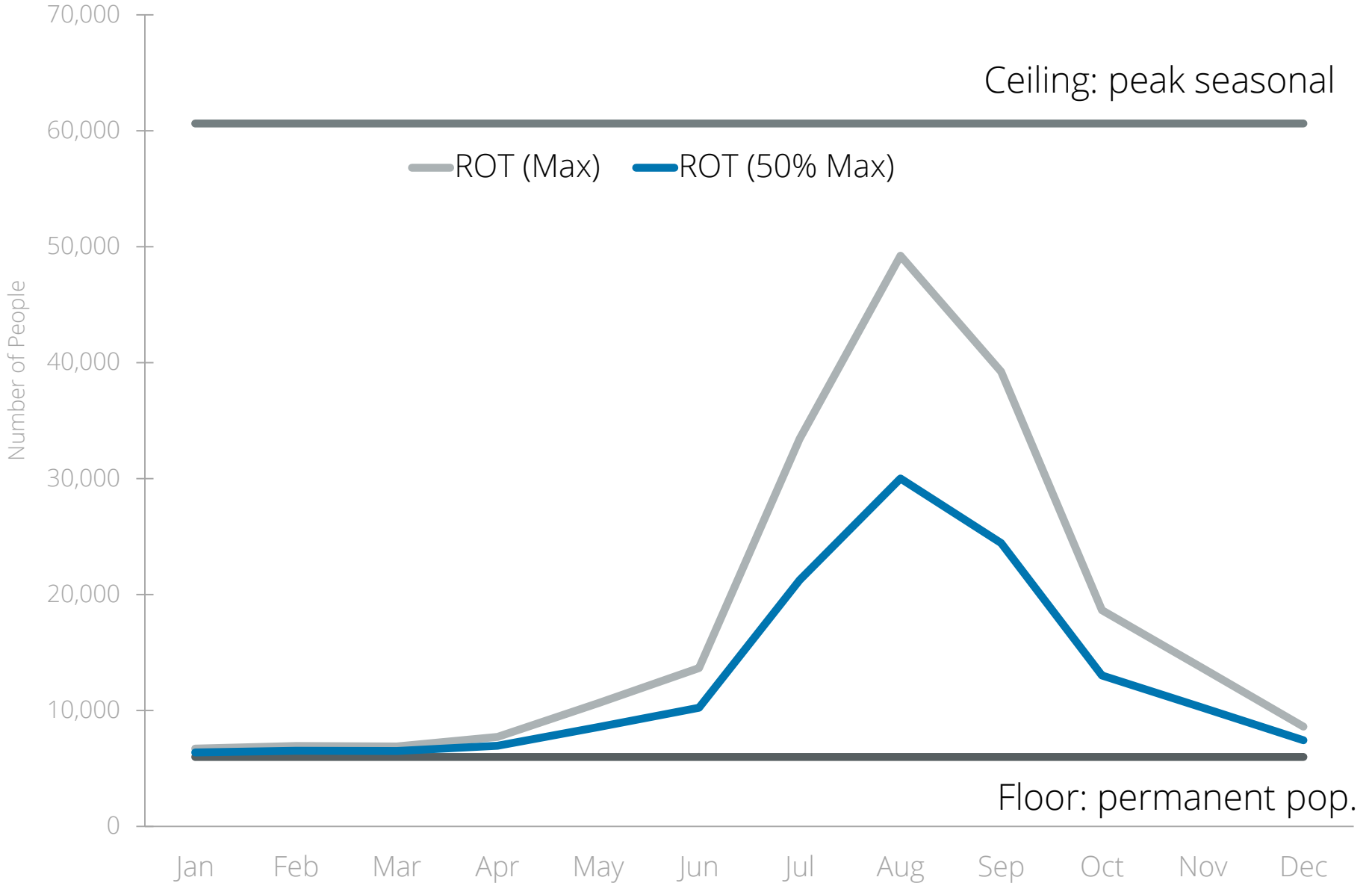
Proportionally adjust monthly occupancy rate based on ROT relative to peak

- Water usage data

Estimated Greater Topsail Area population



Estimated Greater Topsail Area population



Monthly Variation

Two approaches:

- External data + rooms occupancy tax receipts (ROT)

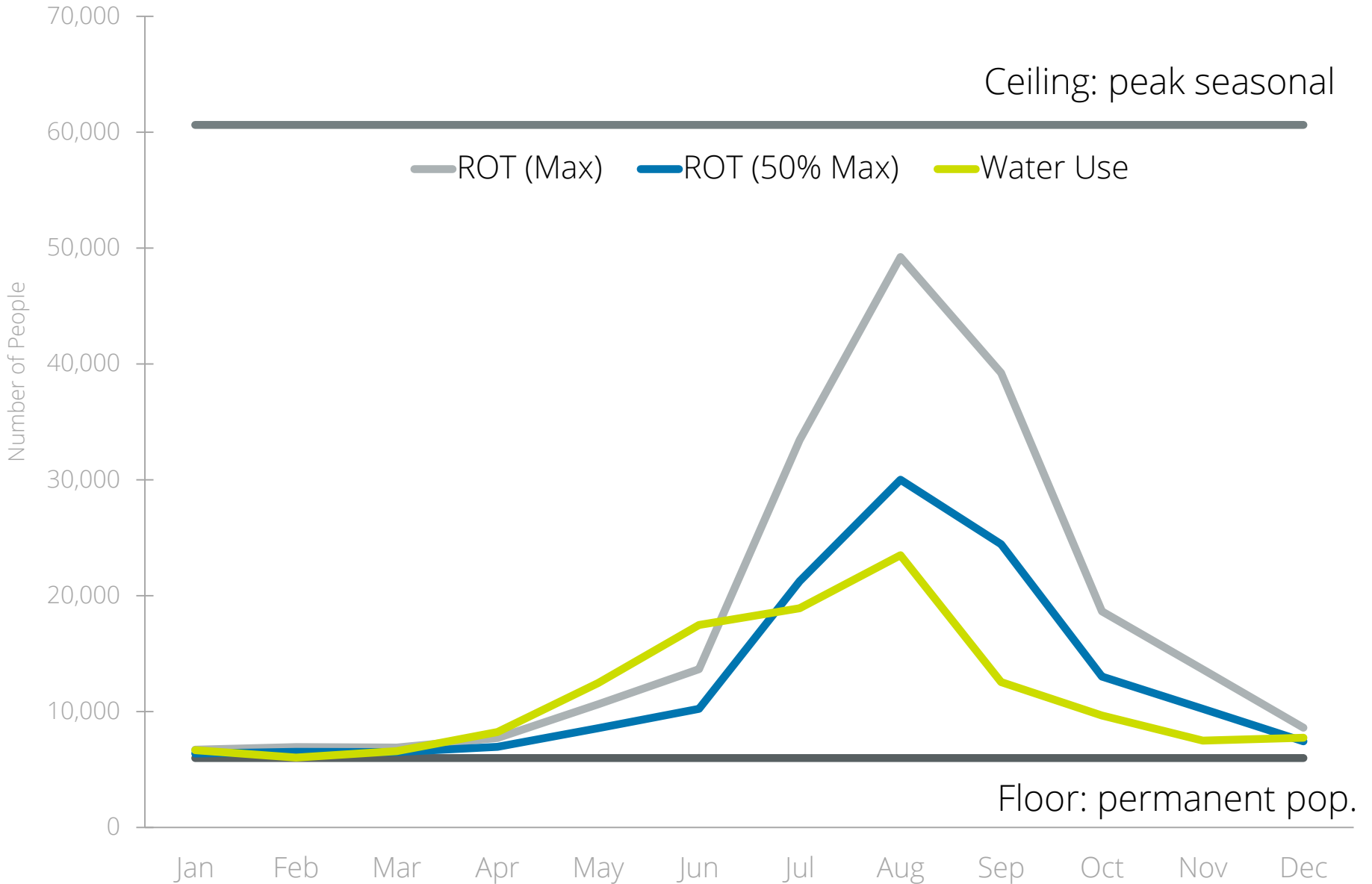
Peak occupancy (PO) = Myrtle Beach PO

Proportionally adjust monthly occupancy rate based on ROT relative to peak

- **Water usage data**

Proportionally adjust based on average gallons per day per person

Estimated Greater Topsail Area population



Thank You!

Rebecca Tippett

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<http://demography.cpc.unc.edu>



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