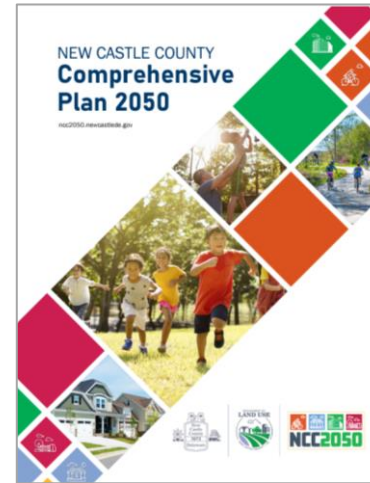
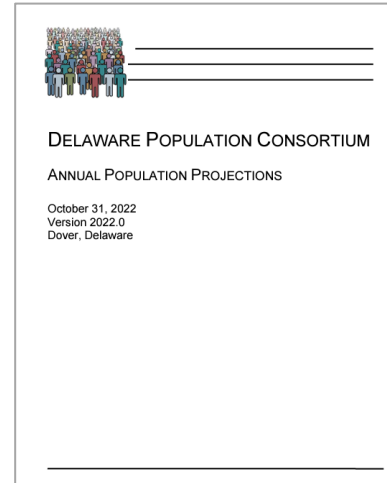
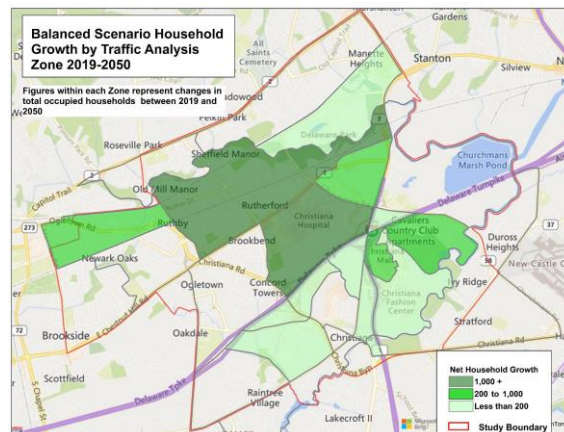


# Delaware Population Consortium: Current Structure and Applications

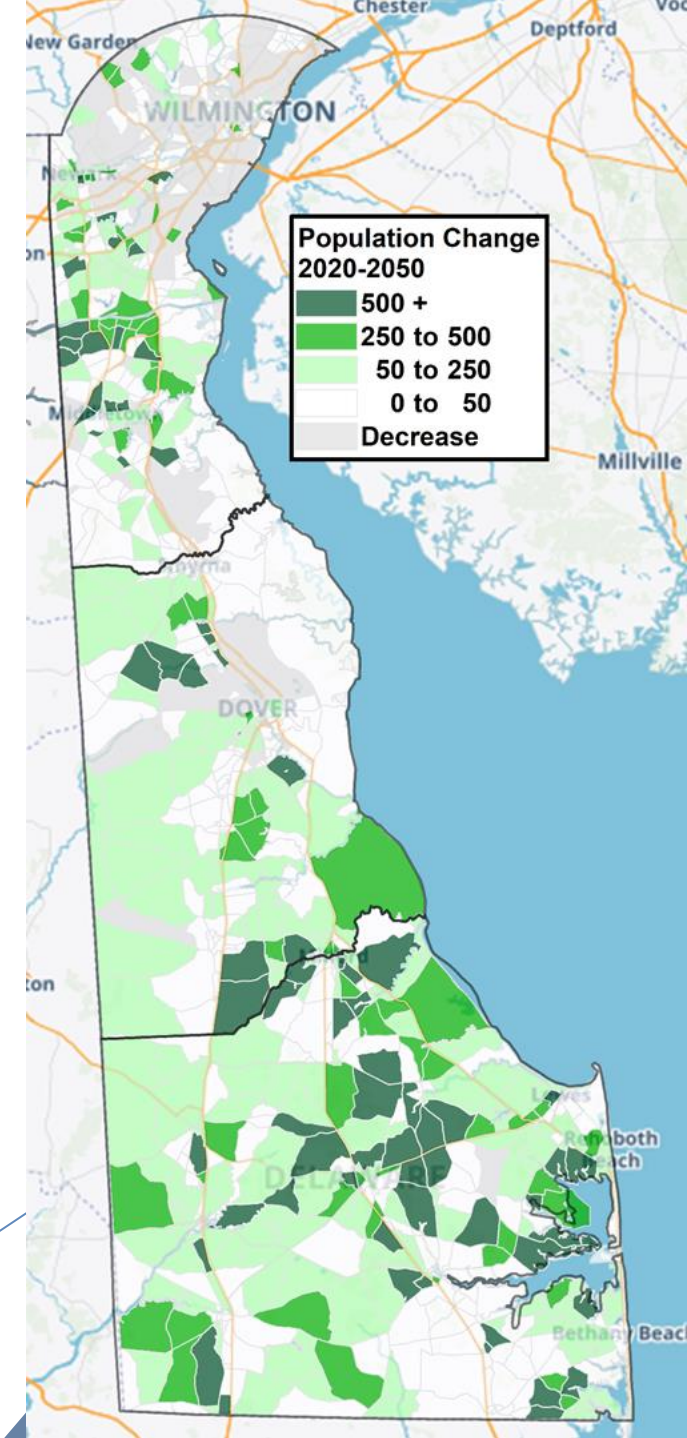
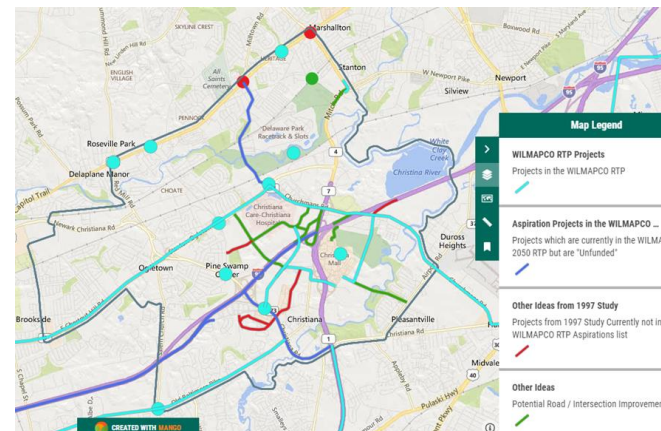
## Policy



## Scenarios



## Infrastructure Prioritization



# DPC Structure

- December 2019 Amendment to Chapter 91, Title 29 of the Delaware Code
- Formal creation of DPC and identifies membership and work products

## Membership Agencies

- Office of State Planning
- All 3 DE Counties
- All MPOs
- Municipalities over 20,000 (Wilmington, Newark, Dover, Middletown)
- League of Local Governments
- Sussex County Association of Towns

### State Departments of:

- Labor
- Education
- Transportation
- Health and Social Services
- Housing Authority
- Safety and Homeland Security

The screenshot shows the Delaware.gov website with the Delaware Population Consortium (DPC) section. The main heading is "The Delaware Population Consortium". Below it is a banner for "DRAFT Population Projections Ready for Review" with a "Learn More" button. Under the banner are three main sections: "Projections Information" (with a sub-link "Methodology/Notes/History"), "Tabular Data" (with a sub-link "Download spreadsheets of Projection Data"), and "DPC Meetings" (with a sub-link "Meeting Minutes"). A callout box on the left lists "Products: State & County, Municipal, Seasonal, 1 and 5 year age groups, Supplemental sub-area estimates". A callout box on the right states "Most meeting activity July - December". The URL <https://stateplanning.delaware.gov/demography/dpc.shtml> is displayed at the bottom.

**Products:**

- State & County
- Municipal
- Seasonal
- 1 and 5 year age groups
- Supplemental sub-area estimates

**The Delaware Population Consortium**

**DRAFT Population Projections Ready for Review** [Learn More](#)

**Projections Information**  
Methodology/Notes/History

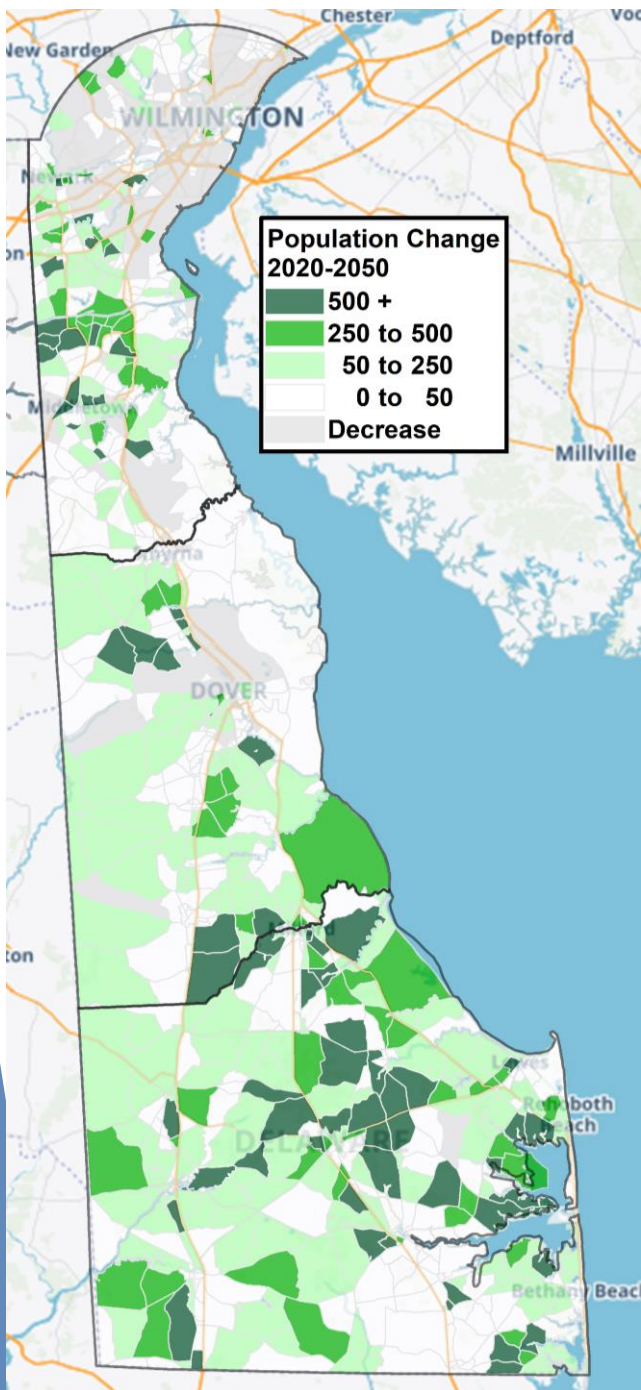
**Tabular Data**  
Download spreadsheets of Projection Data

**DPC Meetings**  
Meeting Minutes

Most meeting activity July - December

<https://stateplanning.delaware.gov/demography/dpc.shtml>





# DPC Data Applications

- Main tool: DeIDOT Peninsula Model
- Forecast by Traffic Analysis Zone (TAZ)
- 3 levels now used
- Data needed for a wide area
- Greater detail needed at lower levels
- All TAZs match DPC County totals



## Delaware Statewide TDM

### Model Characteristics

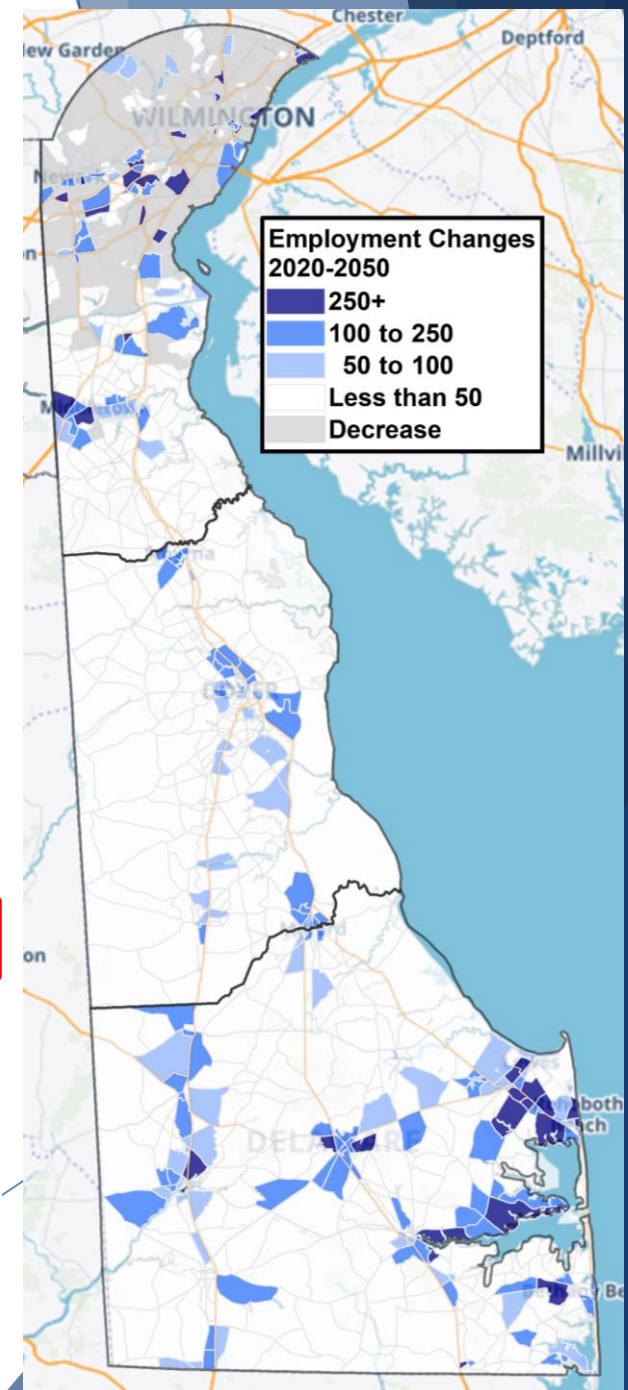
- Trip Based Model
- Calibrated based on DTMS
- Multimodal (private vehicle and transit)
- Toll captured as a mode
- Truck Model
- Time of Day Model (AM, MD, PM, NT)
- Macroscopic (Aggregate) assignment

#### Inputs

- Network (functional class, lanes, signals)
- Land Use (households, population, employment)
- External Demand

#### Outputs

- Zone P's and A's
- Trips by Mode between TAZs
- Loaded Auto and Truck Trips
- Estimated Congested Travel Time



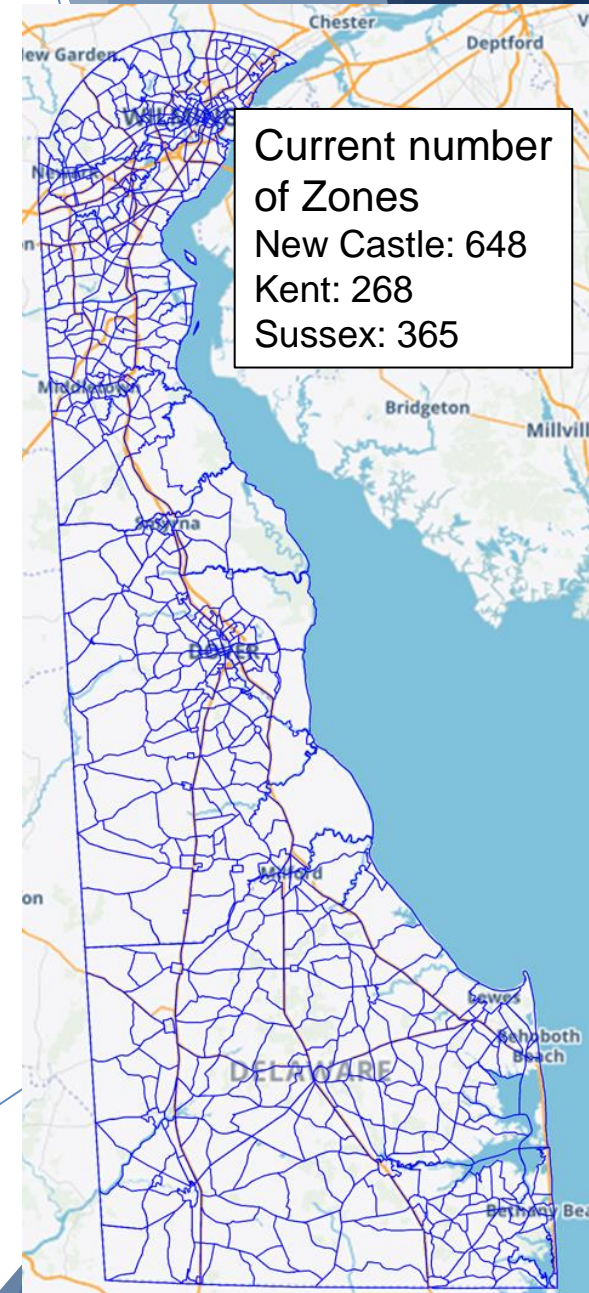
# Feeding the Beast: Attribute Data for each TAZ

## Current number of Zones

- New Castle: 648
- Kent: 268
- Sussex: 365

## TAZ Data inputs

	Field
General Information	Total Occupied Households
	Total Population
	Population per Household
	Total Workers/Workers per HH
	Total Vehicles/ Vehicles per HH
Employment by Sector	Natural Resources & Mining 11, 21 NAICS
	Construction 23 NAICS Supersector
	Manufacturing 31-33 NAICS Supersectors
	Wholesale & Retail Trade 42,44-45 NAICS
	Transportation & Utilities 22,48-49 NAICS
	Information 51 NAICS Supersector
	Finance, Insurance and Real Estate 52-53 NAICS
	Professional and Business Services 54-56 NAICS Supersectors
	Health and Education 61-62 NAICS Supersectors
	Leisure & Hospitality 71-72 NAICS Supersectors
	Other Services 81 NAICS Supersector
	Public Administration 91-93 NAICS Supersectors
Modal Splits	Total Institutional Group Quarter Population
	Total non-Institutional Group Quarter Population
	% of single occupant vehicles
	% of carpoolers
	% of public transit users
	% of walkers/bikers
	% of home workers
Socio-economic	% of zero car households
	% of populaiton over 65
	Median HH income

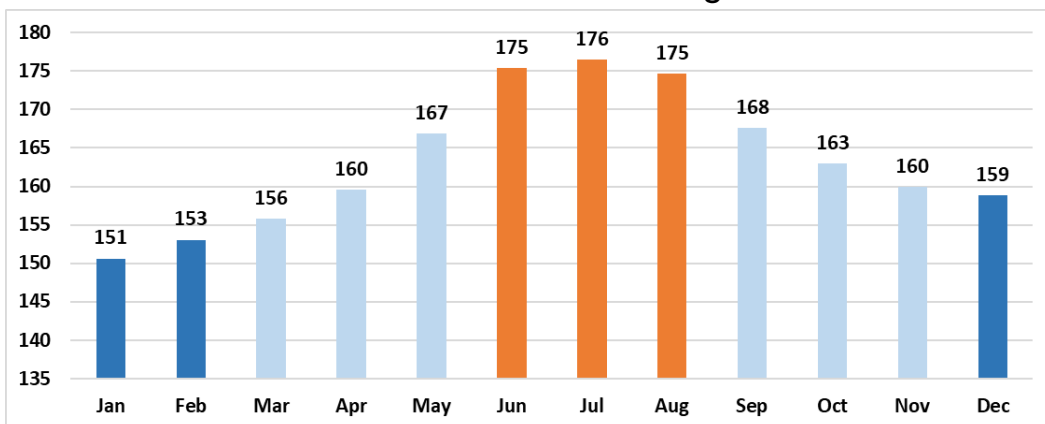




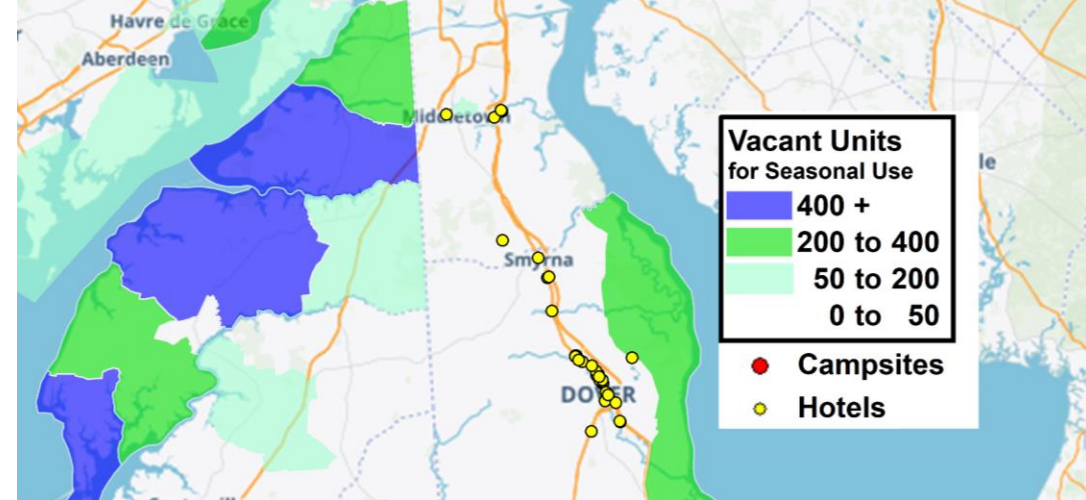
# Seasonal Projections

- Expansion of DPC countywide seasonal estimates
- Apply DPC methods to smaller geographies
- Addition to Peninsula model
  - Evacuation/disaster planning
  - Seasonal traffic planning
- Assign to Traffic Analysis Zones to year 2050

Total Non-Farm Employment Salisbury MD/DE Metro Area 2018-2019 Average



"Off Peak Employment (Dec - Feb.)	151,825	
"Peak" Employment (June-Aug.)	175,550	
Difference	23,725	16%



Hotel Rooms (DE): 3,941

- Total Vacant Units for Seasonal Use By Census Tract (ACS)

Total Seasonal Population Assumes:

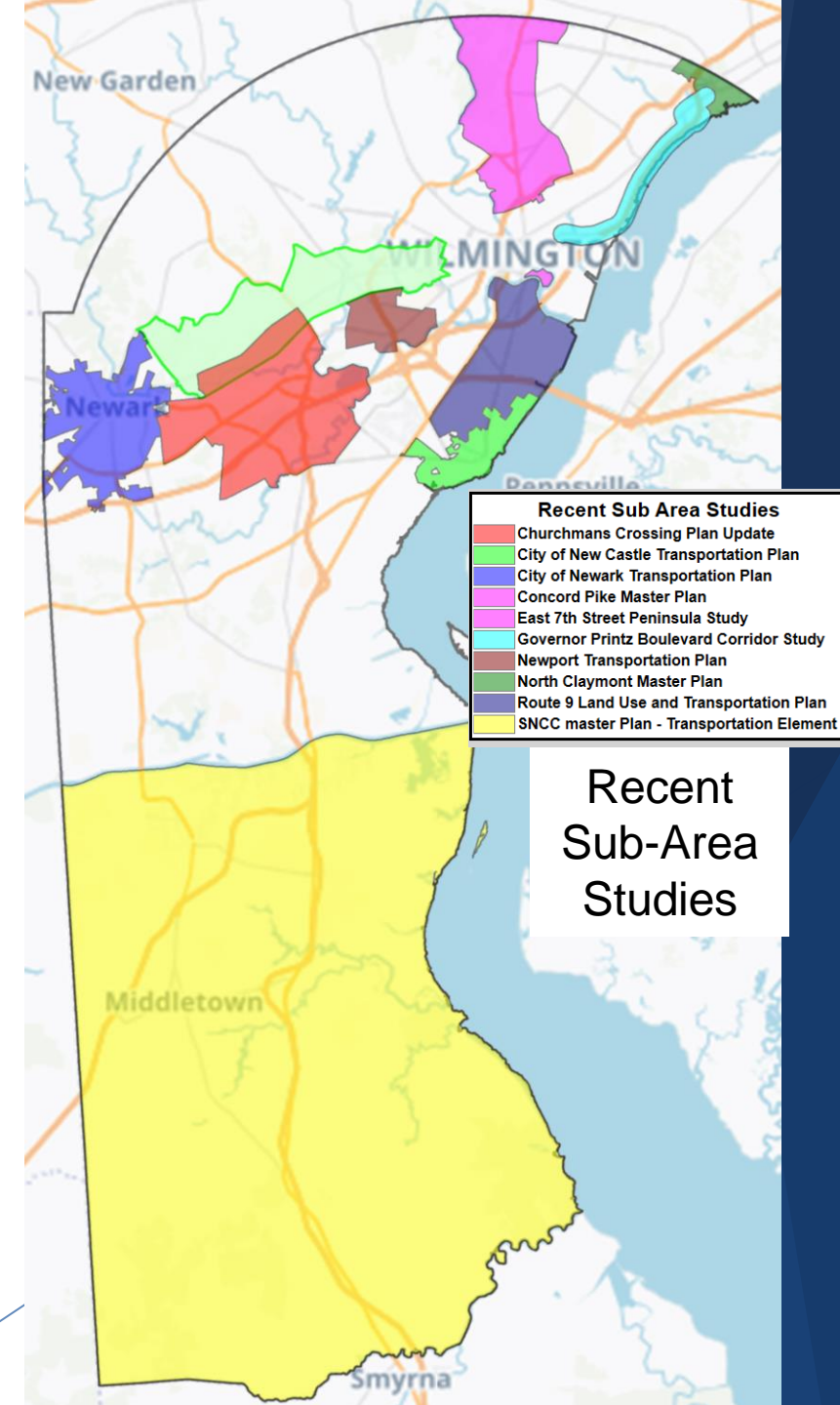
- 3.3 persons/HH per unit ("beachhouse")
- 2.64 persons/hotel room
- 2.64 persons/campsite

Hotel Rooms (MD): ???

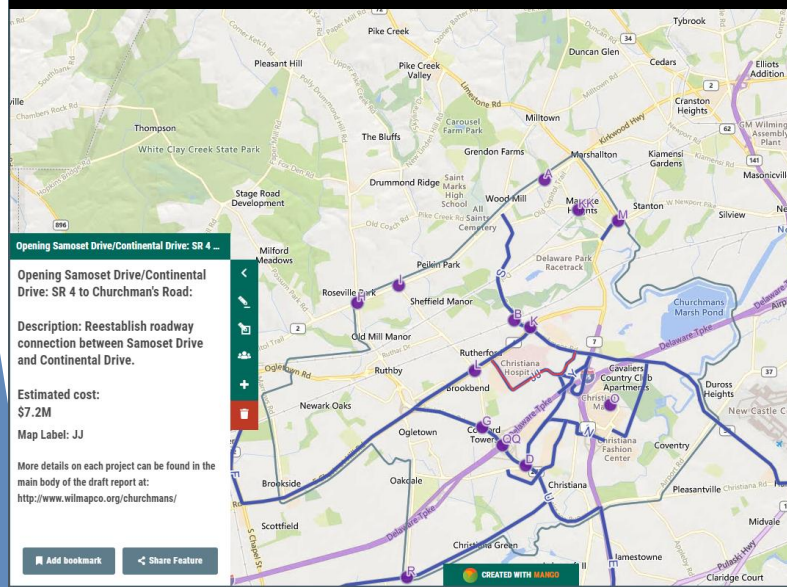
# Sub-Area Studies

## DPC forecasts used as key input:

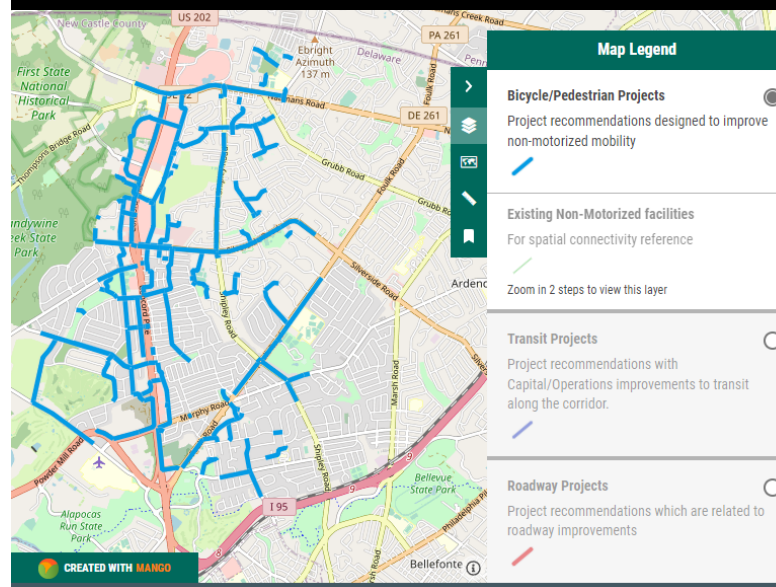
- Capture anticipated growth and traffic impacts
- Predict future infrastructure needs and costs
- Test land use options
- Evaluate Infrastructure needs (Benefit/cost)



## Churchman's Crossing Project Recommendations



## US 202 Crossing Pedestrian Network Recommendations



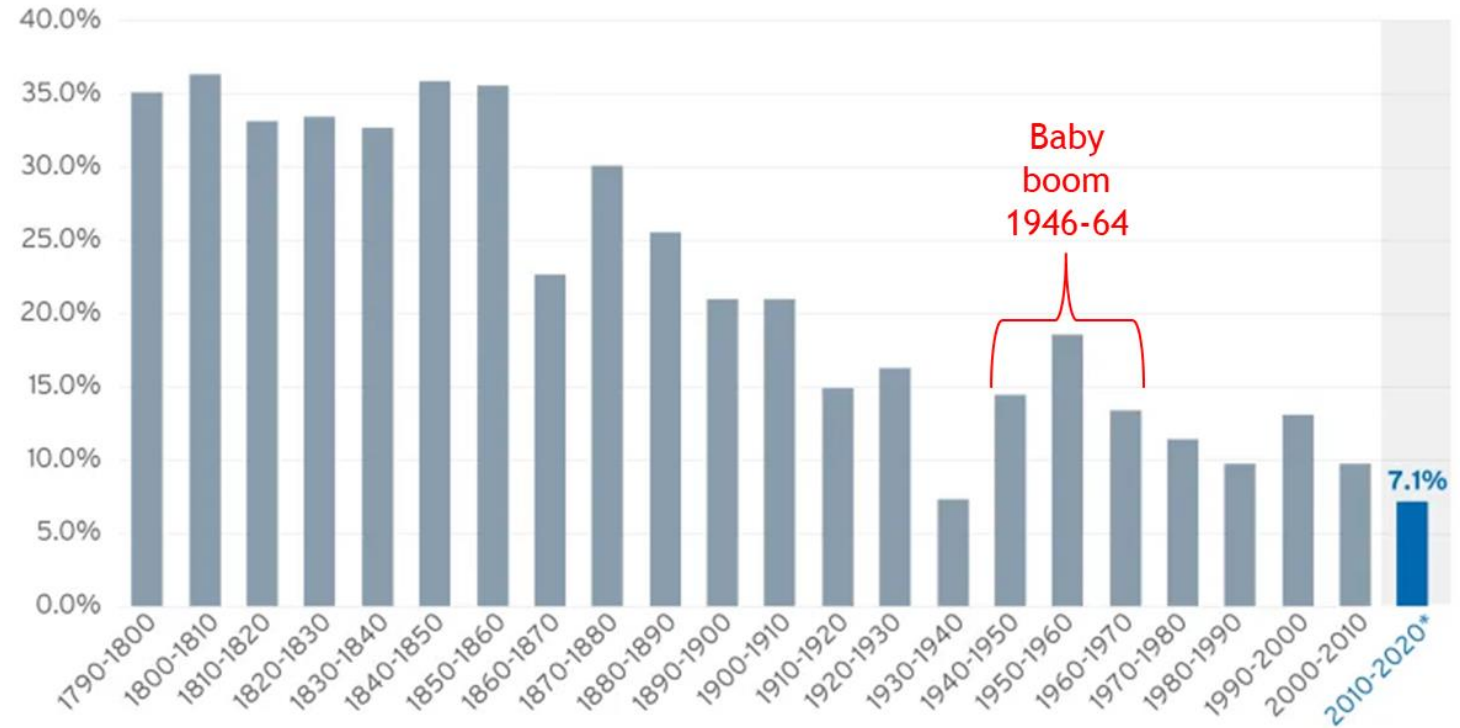
## Recent Sub-Area Studies



# National Snapshot

- U.S. is GROWING, but SLOWING
- Population continues to “gray”
- Deaths ~~catching~~ caught up to Births
- Immigration becoming larger part of growth, but uneven
- More states having more births than deaths

## Population Growth by Decade: 1790-2020



Source: Census, DPC

From 2018 to 2019: 4 States had more deaths than births

West Virginia	Maine	New Hampshire	Vermont
-4,928	-2,302	-539	-394

From 2021 to 2022, 24 States had more deaths than births\*

Florida	Pennsylvania	Ohio	Michigan	West Virginia	Tennessee	Alabama	Kentucky	South Carolina	Missouri	Maine	Oregon
-40,216	-23,021	-19,543	-12,482	-12,158	-9,213	-8,590	-8,358	-7,460	-5,994	-5,943	-5,089
Mississippi	New Mexico	Arkansas	Oklahoma	New Hampshire	Vermont	Wisconsin	Montana	Delaware	Arizona	Rhode Island	Wyoming
-4,954	-4,295	-3,936	-3,283	-2,030	-1,806	-1,758	-1,686	-718	-566	-566	-490

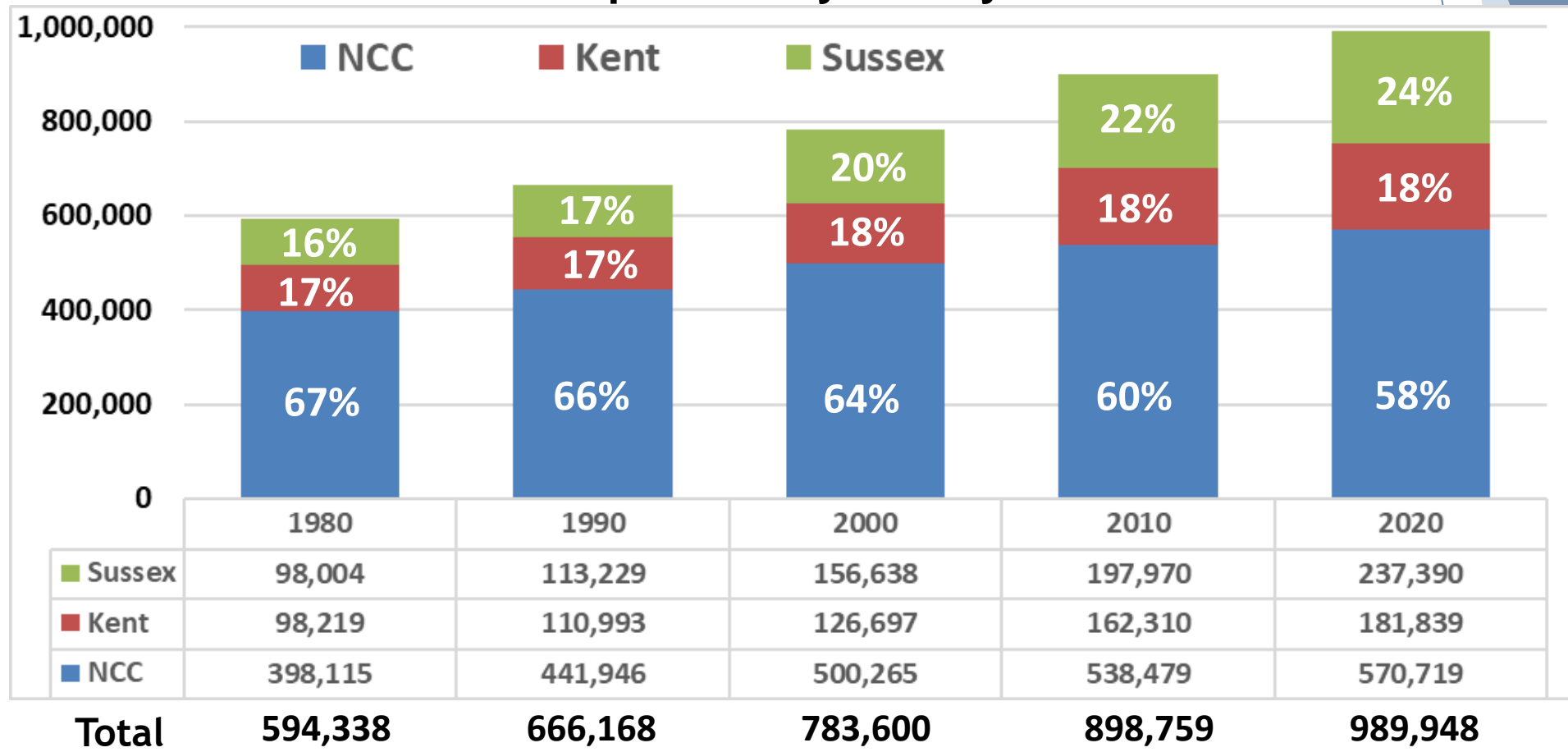
\* Impacted by COVID Source: Census, DPC Annual Change, July 1, 2021 to July 1, 2022

# Where have we been?

Since 1980:

- Following similar national trends, with slightly faster pace
- 1990's fastest growing since WWII in NCC & Sussex
- 2000's for Kent (Smyrna area)
- Internal household changes shaping future growth 2020-2050

## Total DE Population by County: 1980-2020



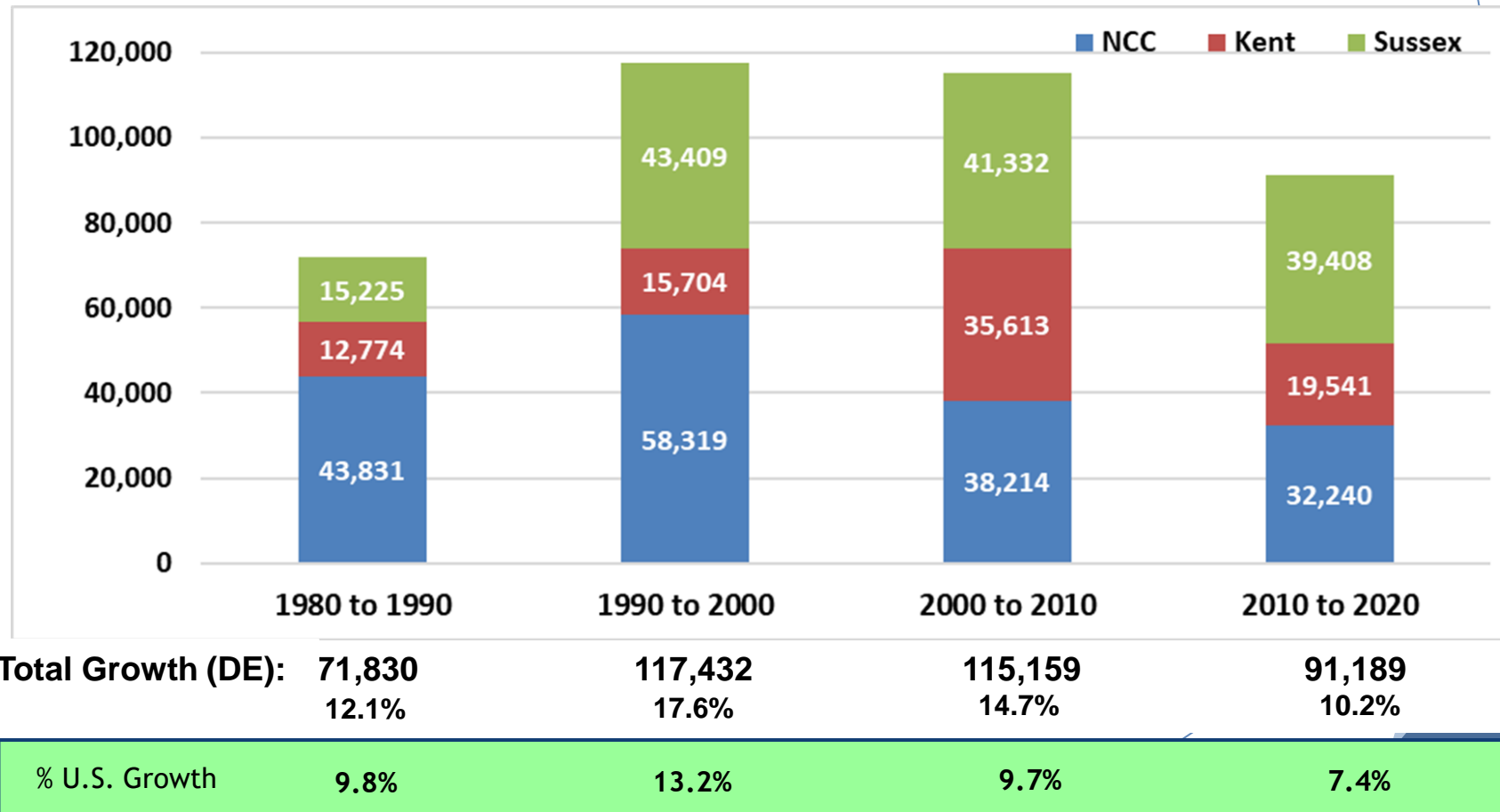


# Where have we been?

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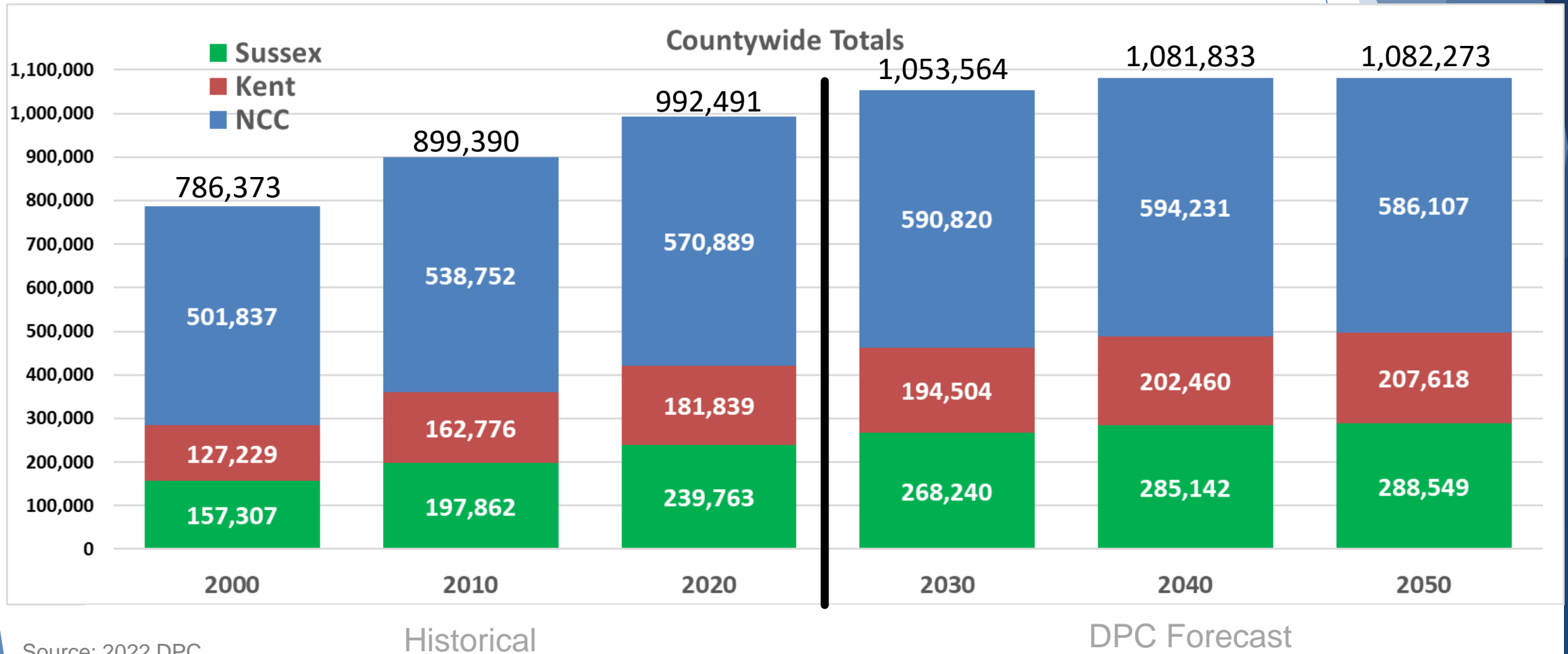
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## Total DE Population by County: 1980-2020



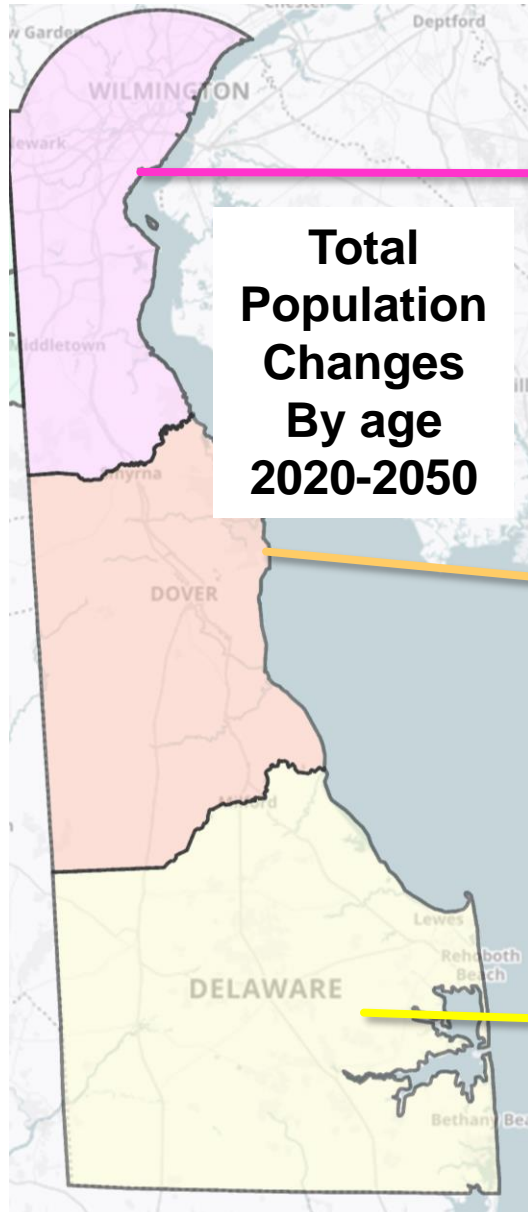
# Development of Small Area Projections

- Begins with DPC control totals set each year
- Use lower levels of geography data to fine-tune local characteristics





# Challenges and Considerations for small area projections



New Castle	2020	2030	2040	2050	2020 - 2050 Change
0 to 4	31,516	32,185	30,805	29,841	-1,675
5 to 17	89,030	85,626	85,750	82,184	-6,846
18 to 29	93,454	86,692	80,970	82,022	-11,433
30 to 64	263,497	262,190	262,405	256,538	-6,958
65 to 84	82,300	110,417	112,927	108,904	26,605
85 +	11,099	13,712	21,372	26,621	15,522
<b>Total</b>	<b>570,896</b>	<b>590,822</b>	<b>594,229</b>	<b>586,111</b>	<b>15,215</b>

Kent	2020	2030	2040	2050	2020 - 2050 Change
0 to 4	10,911	11,406	11,384	11,339	428
5 to 17	30,240	30,200	30,870	30,854	613
18 to 29	29,764	29,695	29,264	29,918	155
30 to 64	79,584	82,906	87,698	91,549	11,965
65 to 84	27,745	34,911	35,982	35,123	7,378
85 +	3,596	5,385	7,261	8,835	5,239
<b>Total</b>	<b>181,839</b>	<b>194,504</b>	<b>202,460</b>	<b>207,618</b>	<b>25,778</b>

Sussex County	2020	2030	2040	2050	2020 - 2050 Change
0 to 4	11,574	12,363	13,232	11,865	291
5 to 17	32,673	32,373	35,073	35,517	2,843
18 to 29	29,025	33,587	32,577	33,390	4,365
30 to 64	100,793	103,428	112,548	118,692	17,900
65 to 84	57,190	71,819	71,774	66,362	9,173
85 +	8,501	14,659	19,939	22,720	14,219
<b>Total</b>	<b>239,755</b>	<b>268,229</b>	<b>285,143</b>	<b>288,546</b>	<b>48,791</b>

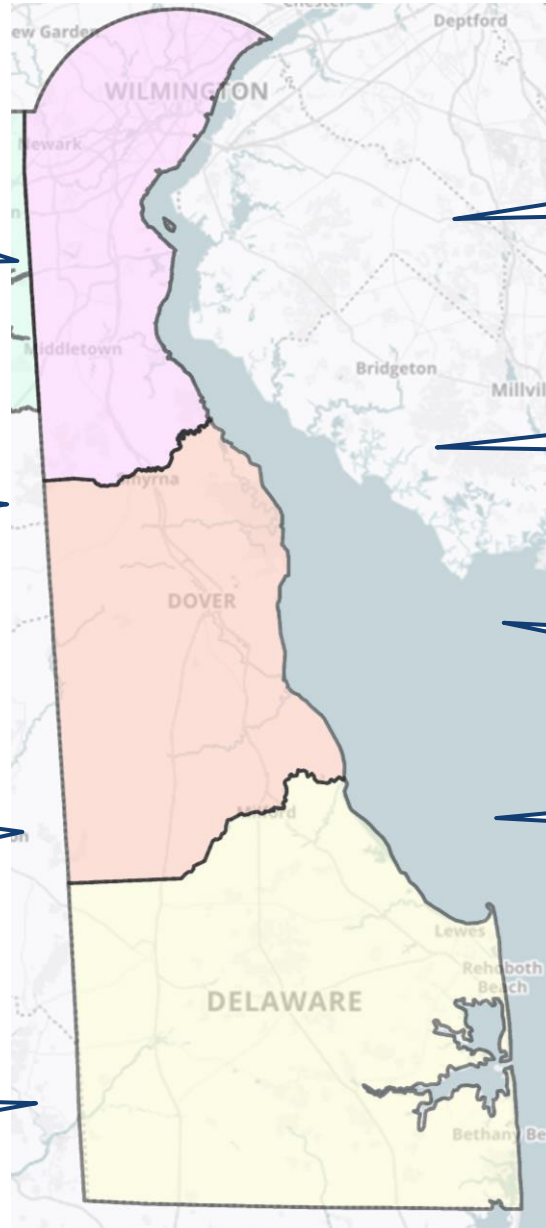
# Challenges and Considerations for small area projections

**How “old” are  
we getting?  
Where are we  
getting old?**

**How many people  
are owners/  
renters of their  
homes?**

**How many school-  
age children do we  
have?  
How many births  
each year?**

**How many people  
are in the labor  
force?**



**How many  
single-person  
households?**

**Will migration  
stay at its  
current level?**

**How are  
household sizes  
changing?**

**How many will  
be living in  
group quarters?**

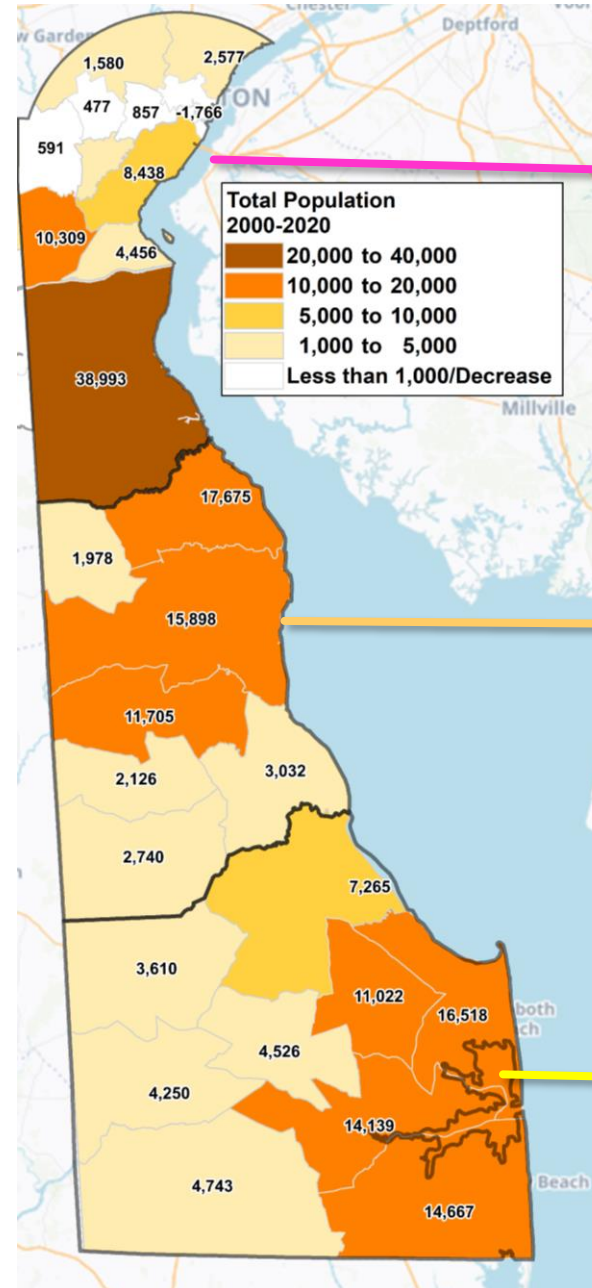
**How long do  
seniors stay in  
the workforce?**



# Total Population Changes 2000-2020

Notables:

- ½ of NCC growth in SNCC, with low or declining growth in NNCC
- 88% of NCC population still live North of C&D canal
- 70% of Sussex growth in resort area



New Castle	Population
2000	500,265
2020	570,719
Change	70,454
% Change	14%

Kent	Population
2000	126,697
2020	181,851
Change	55,154
% Change	44%

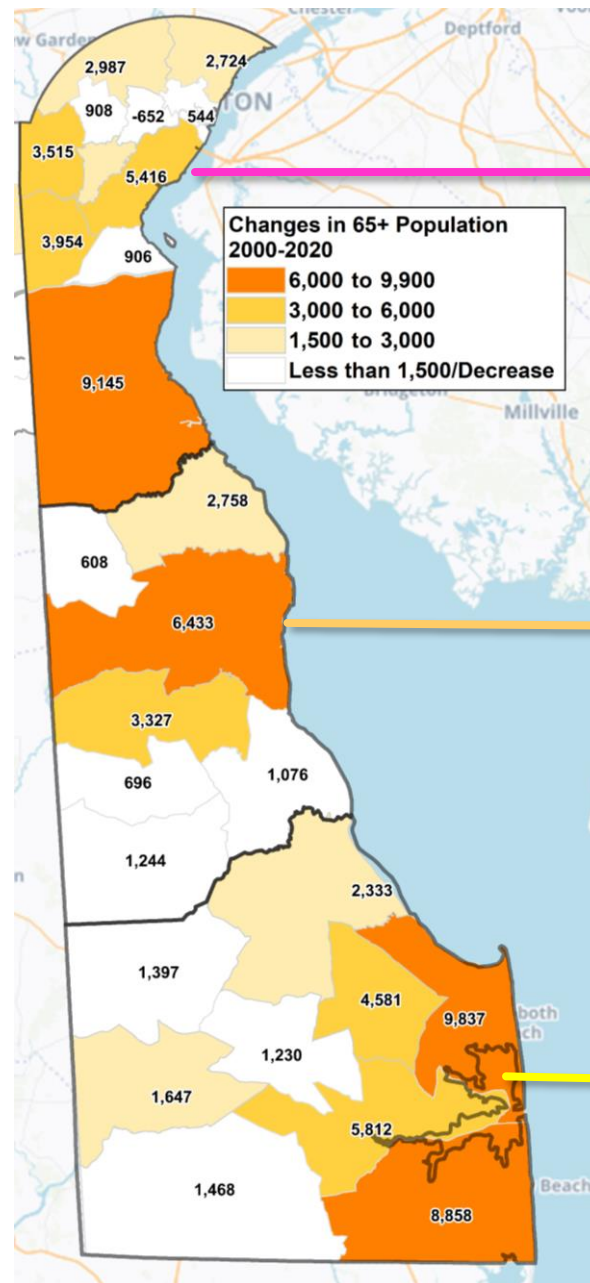
Sussex	Population
2000	156,638
2020	237,378
Change	80,740
% Change	52%

DE Statewide: + 206,000

# Total Population Changes Ages 65+ 2000-2020

## Notables:

District	2000	2021	Change	% Growth
Glasgow	1,352	5,306	3,954	292%
MOT	2,103	11,248	9,145	435%
New Castle	7,214	12,630	5,416	75%
Dover	7,770	14,203	6,433	83%
Lewes	5,784	15,621	9,837	170%
Milton	1,907	6,488	4,581	240%



New Castle 65+ Population	
2000	57,903
ACS 2021	89,247
Change	31,344
% Change	54%

Kent 65+ Population	
2000	14,801
ACS 2021	30,943
Change	16,142
% Change	109%

Sussex 65+ Population	
2000	29,022
ACS 2021	66,185
Change	37,163
% Change	128%

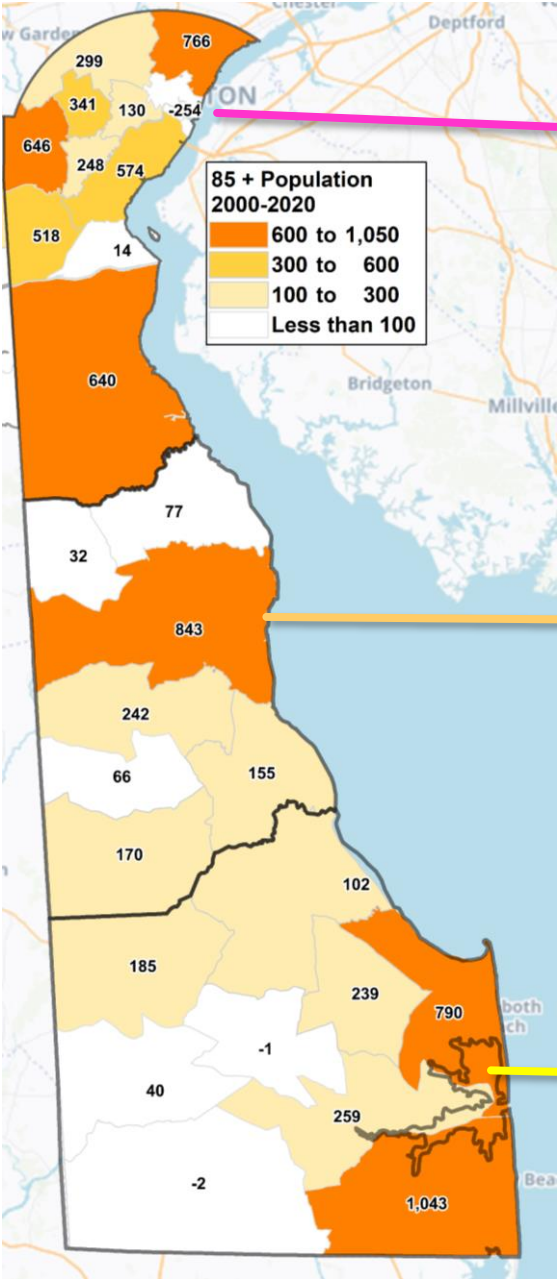


# Total Population Changes

## Ages 85+ 2000-2020

Notables:

- Aging in place?
- Partially dictated by Assisted living facilities construction



New Castle 85+ Population	
2000	6,443
ACS 2021	10,365
Change	3,922
% Change	61%

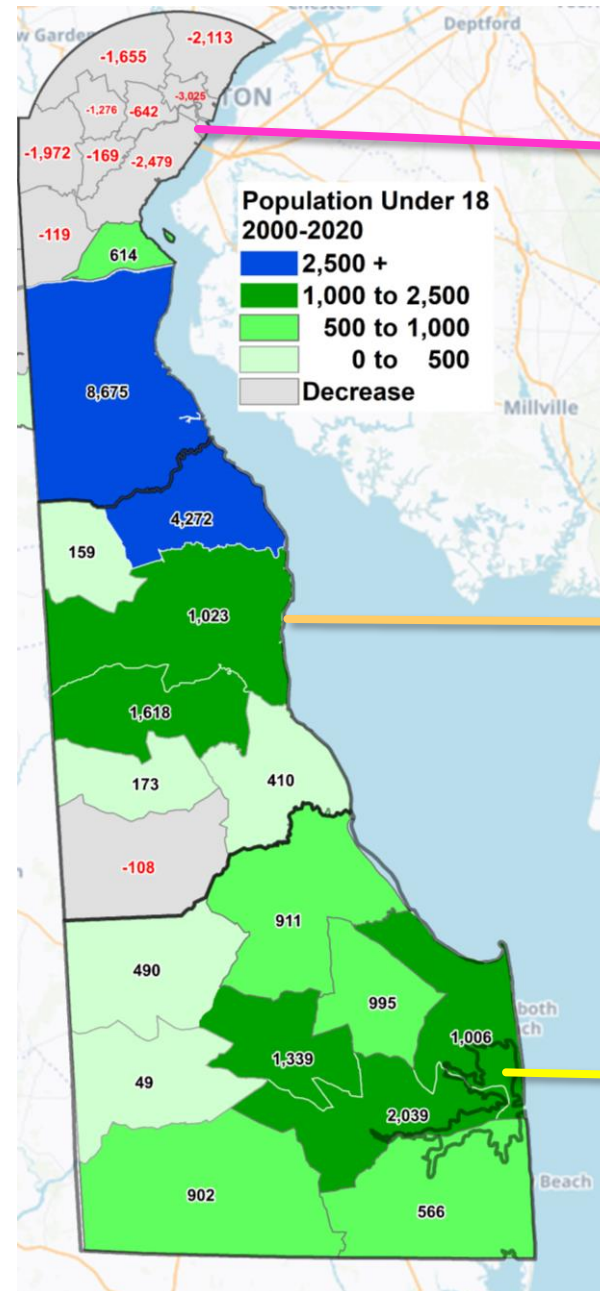
Kent 85+ Population	
2000	1,537
ACS 2021	3,122
Change	1,585
% Change	103%

Sussex 85+ Population	
2000	2,569
ACS 2021	5,224
Change	2,655
% Change	103%

# Total Population Changes Ages Under 18 2000-2020

Notables:

- Net loss of 9,200 North of C&D Canal
- MOT doubled in totals
- Most of Smyrna growth occurred between 2000-2010



New Castle	Under 18 Population
2000	124,244
2020	120,843
Change	-3,401
% Change	-3%

Kent	Under 18 Population
2000	34,499
2020	42,046
Change	7,547
% Change	22%

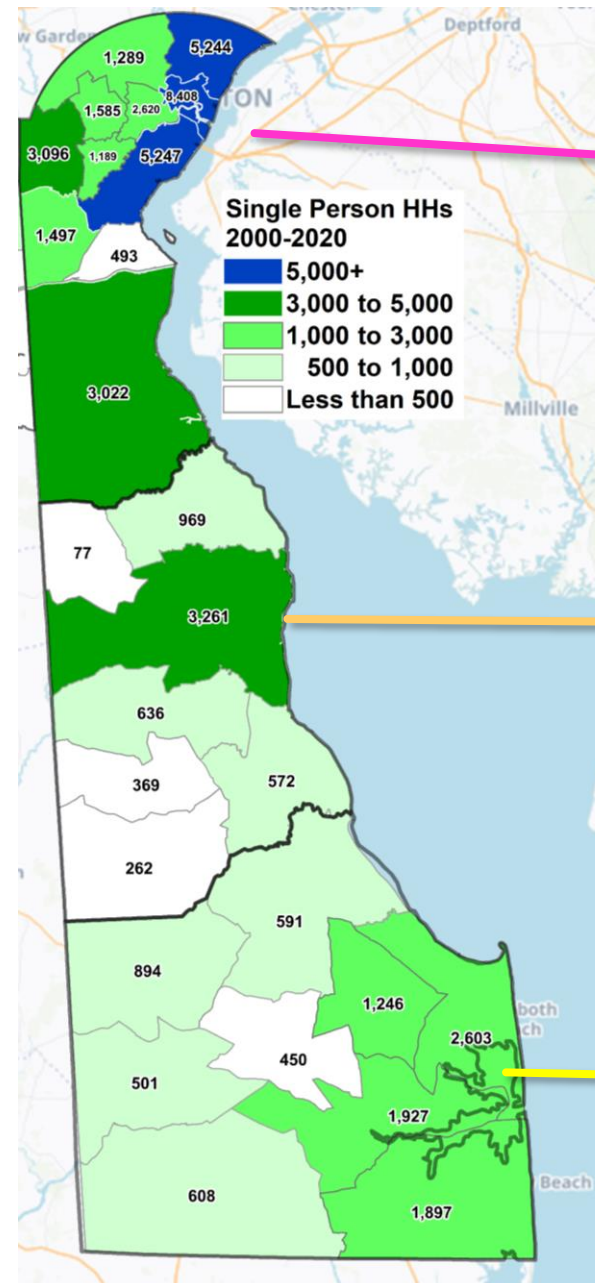
Sussex	Under 18 Population
2000	35,219
2020	43,516
Change	8,297
% Change	24%



# Single Person Households 2000-2020

Notables:

- **NCC: More than doubled**
- **NCC: 55% of growth occurred in Brandywine, Wilmington and New Castle**



New Castle	Single Person HHs (all Ages)
2000	32,381
2021 ACS	66,071
Change	33,690
% Change	104%

Kent	Single Person HHs
2000	10,841
2021 ACS	16,987
Change	6,146
% Change	57%

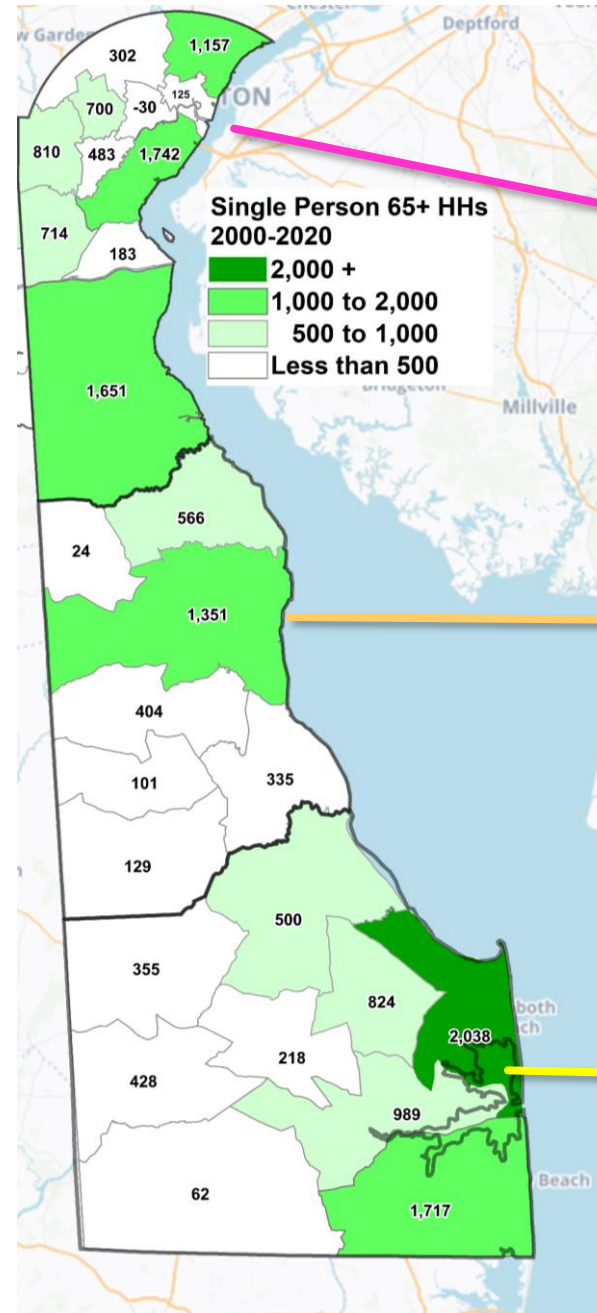
Sussex	Single Person HHs
2000	15,235
2021 ACS	25,952
Change	10,717
% Change	70%

# Single Person Households Age 65 & Over 2000-2020

Notables:

- Mobility Impacts:**  
**Decline in zero-car households**

	Zero Car Households		Households with 3+ Vehicles	
	2000	2021	2000	2021
NCC	8.8%	6.7%	15.4%	18.8%
Kent	7.8%	6.7%	18.2%	23.0%
Sussex	5.8%	3.4%	17.9%	23.4%



New Castle 65+ Single Person HHs	
2000	16,138
2021 ACS	23,975
Change	7,837
% Change	49%

Kent 65+ Single Person HHs	
2000	3,962
2021 ACS	6,872
Change	2,910
% Change	73%

Sussex 65+ Single Person HHs	
2000	6,971
2021 ACS	14,102
Change	7,131
% Change	102%

# Family / Non-Family Households 2000-2020

## Avg. Household Sizes:

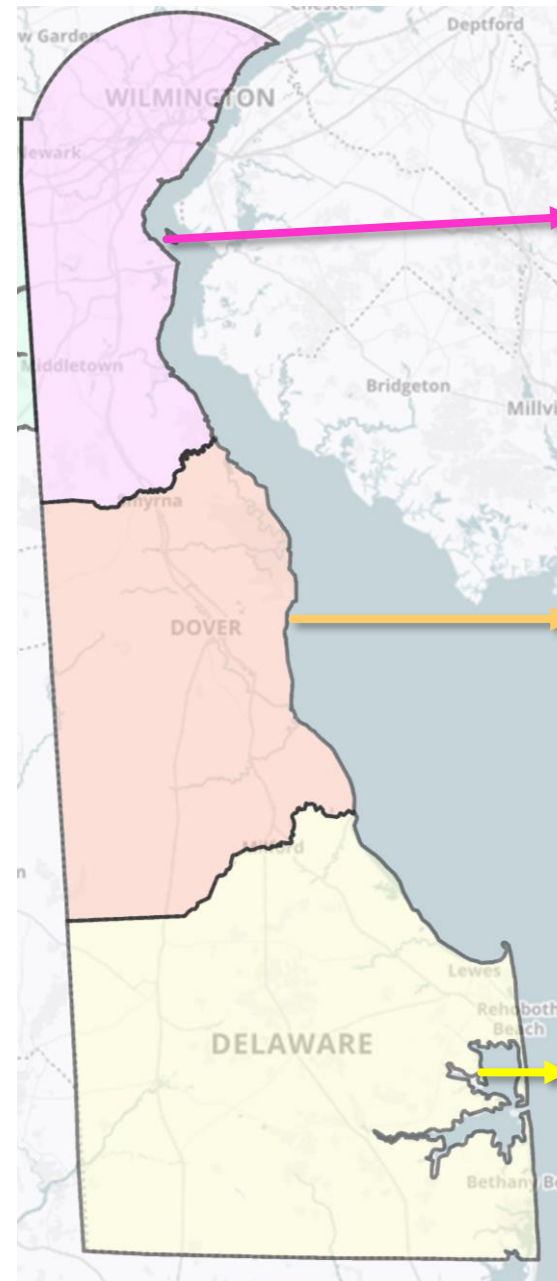
	Family		Non-Family	
	2000	2021	2000	2021
NCC	3.52	3.27	1.29	1.27
Kent	3.61	3.24	1.26	1.31
Sussex	4.06	2.96	1.24	1.21

- NCC: 2/3 of net new Households are non-family

## Census definitions

A nonfamily household consists of a householder living alone (a one-person household) or where the householder shares the home exclusively with people to whom he/she is not related.

A family is a group of two people or more (one of whom is the householder) related by birth, marriage, or adoption and residing together



New Castle	Family	Non-Family
2000	127,106	61,829
2021 ACS	136,967	81,035
Change	9,861	19,206
% Change	8%	31%

Kent	Family	Non-Family
2000	33,615	13,609
2021 ACS	45,514	21,206
Change	11,899	7,597
% Change	35%	56%

Sussex	Family	Non-Family
2000	43,869	18,708
2021 ACS	65,553	30,822
Change	21,684	12,114
% Change	49%	65%



# **Thank You!**

Dan Blevins  
Principal Planner, WILMAPCO  
dblevins@wilmapco.org

## **DPC Website**

**<https://stateplanning.delaware.gov/demography/dpc.shtml>**