Baltimore Regional Transportation Board

Round 9 Forecasts

Aggregate to Disaggregate Household/Person Rosters

June 20, 2018

BMC

BRTB

Round9 Forecasts – Small Area

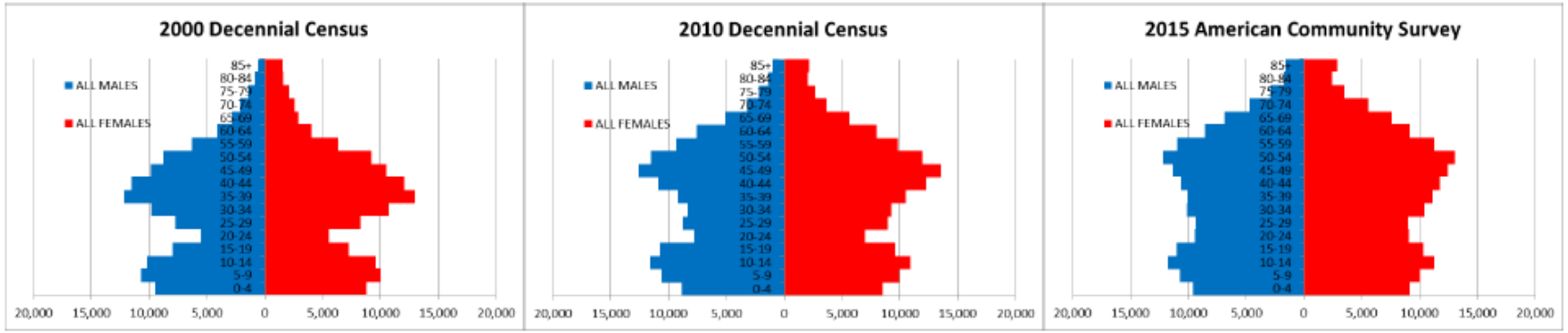
- **Cooperative Forecast Variables**
  - Total Population
  - Group Quarter Population
  - Households
  - Employment
- **PCensus**
  - Household Civilian Labor Force Ratio
  - Median Household Income
- **pOPTICS**
  - Sex (2) by Age Group (18)
  - Jurisdiction Household Civilian Labor Force

pOPTICS Age/Sex

Howard County

pOPTICS – (March, 2018)

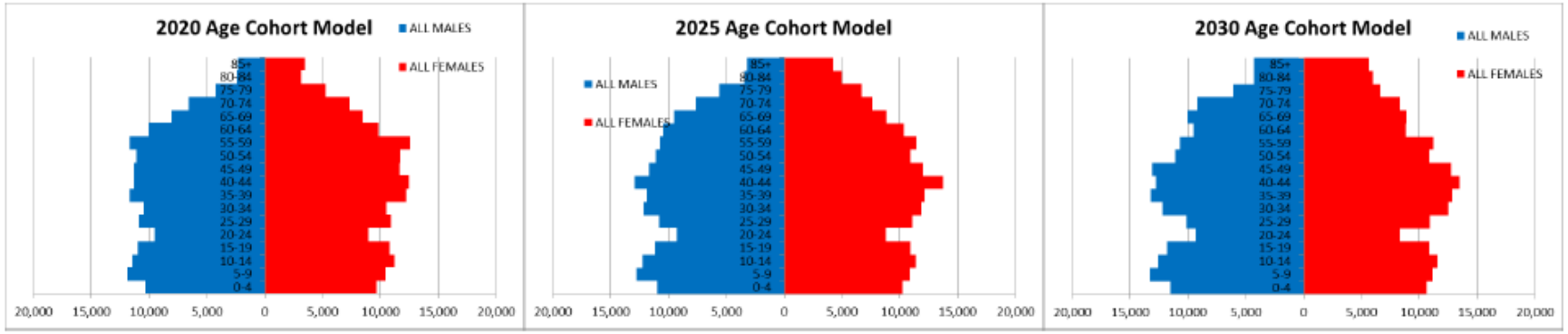
Round 9	247,842	287,085	313,359



Howard County

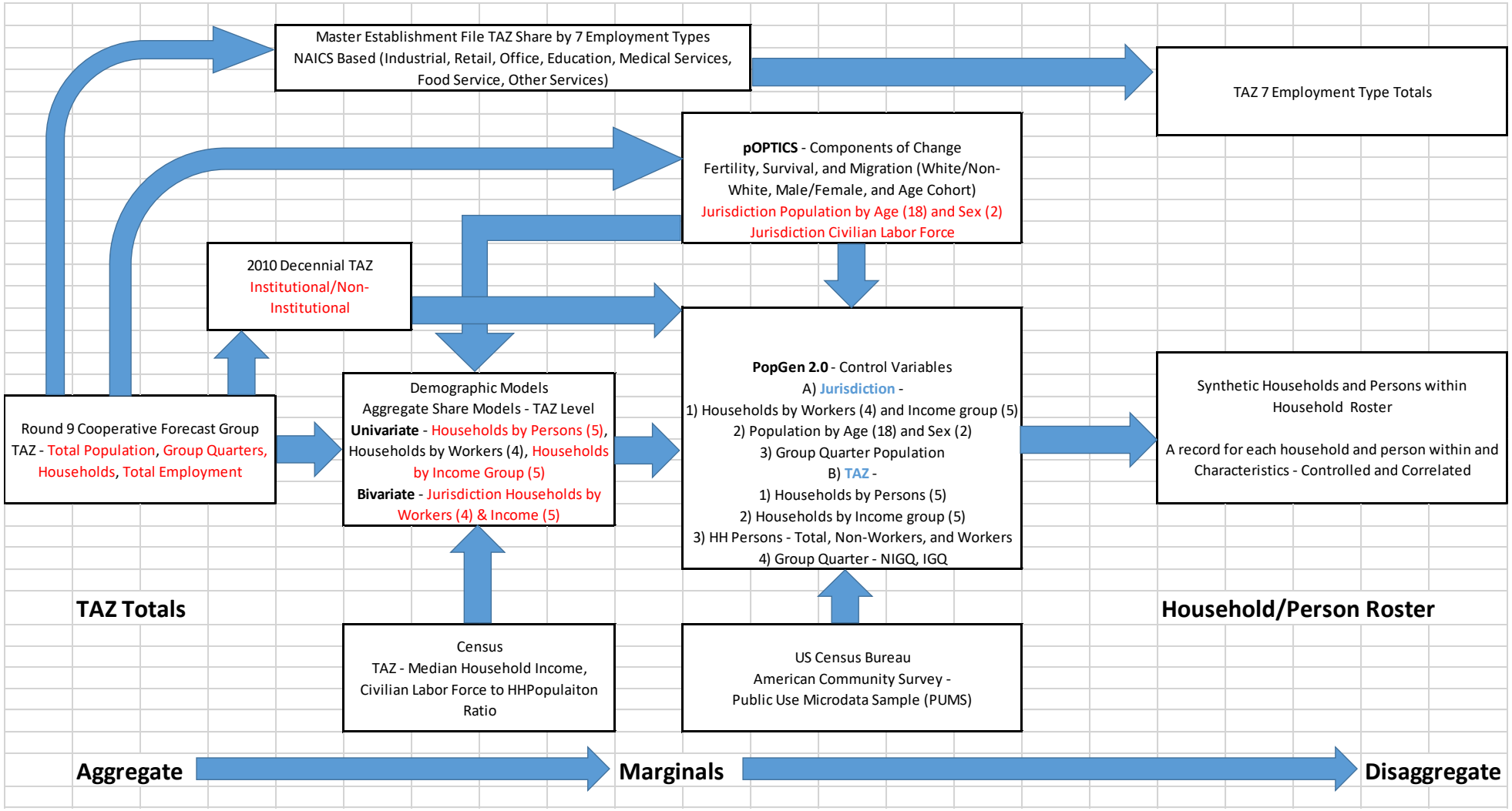
pOPTICS – (March, 2018)

Round 9	336,920	355,696	366,818



Thursday, April 12, 2018

Demographic Flow



TAZ 1232

TAZ Totals

Aggregate

Round 9 - 2015

TAZ	TotPopulation	Households	GroupQuarter	HH Civilian LF	Med Income
1232	1424	443	9	718	$113,191

Marginal

TAZ LEVEL

Demographic Models						
Average HH Size		3.2				
Median Income Ratio		1.5				
HH/Size	1	2	3	4	5+	Total
Households	41	128	95	105	74	443
Persons	41	256	285	420	414	1416

HH/Income GRP	1	2	3	4	5	Total
Households	9	17	34	122	261	443

	Non-workers	HH Civilian LF
Persons	697	718

Jurisdiction LEVEL

pOPTICS								
AGE GRP	0-4	5-9	10-14	....	75-79	80-84	85+	Total
Male	9,600	10,746	11,777		2,868	1,759	1,561	153,436
Female	9,100	10,061	11,217		3,485	2,426	2,906	159,919
							total	313,355

Households							
Wrks/Inc. Group	1	2	3	4	5		
0 Worker	3,278	2,626	2,327	4,007	1,855		
1 Worker	1,194	2,510	5,077	16,038	12,114		
2 Workers	46	450	2,134	12,786	33,681		
3+ Workers	0	90	388	1,938	9,205		
						total	111,744

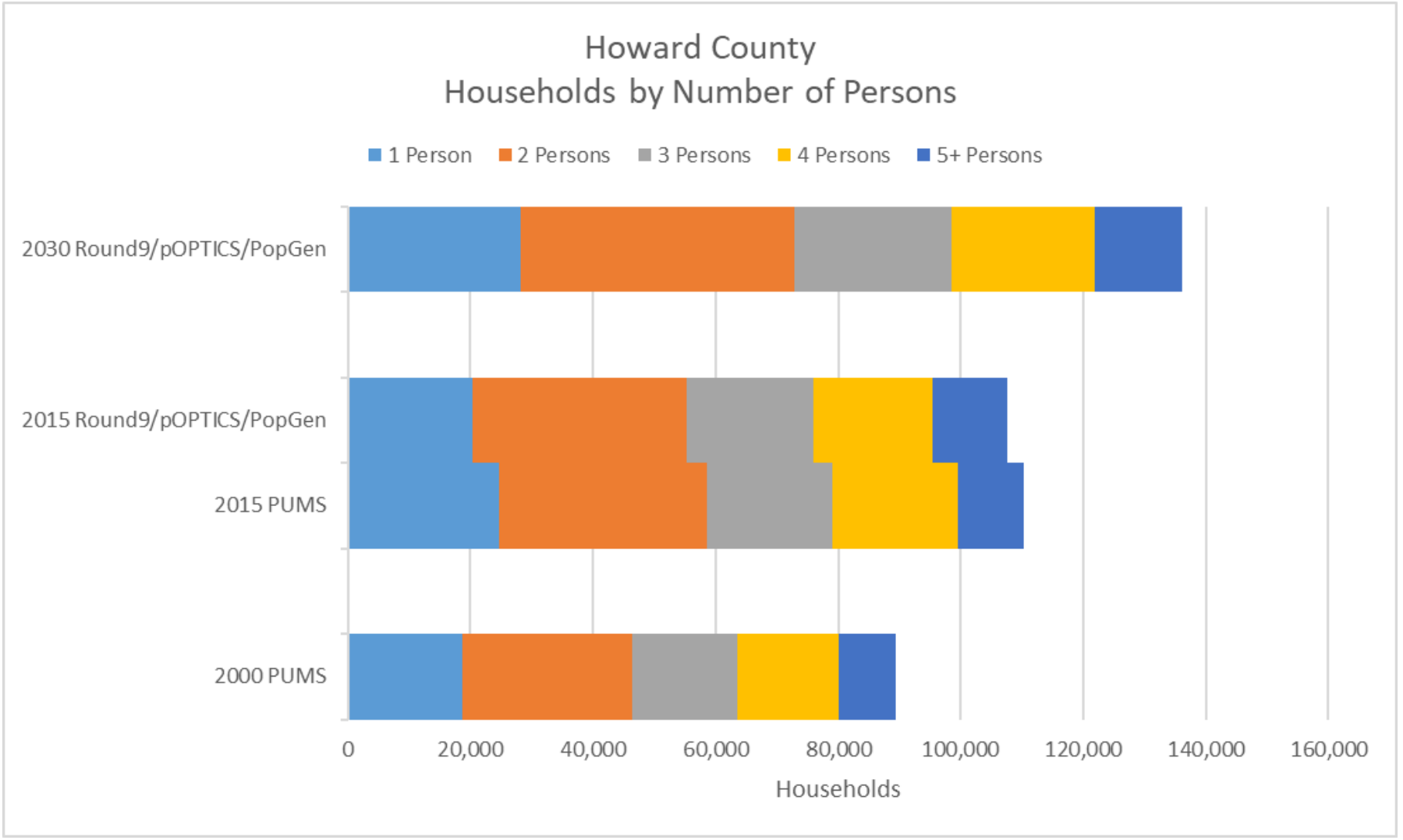
Disaggregate

Household/Person Roster

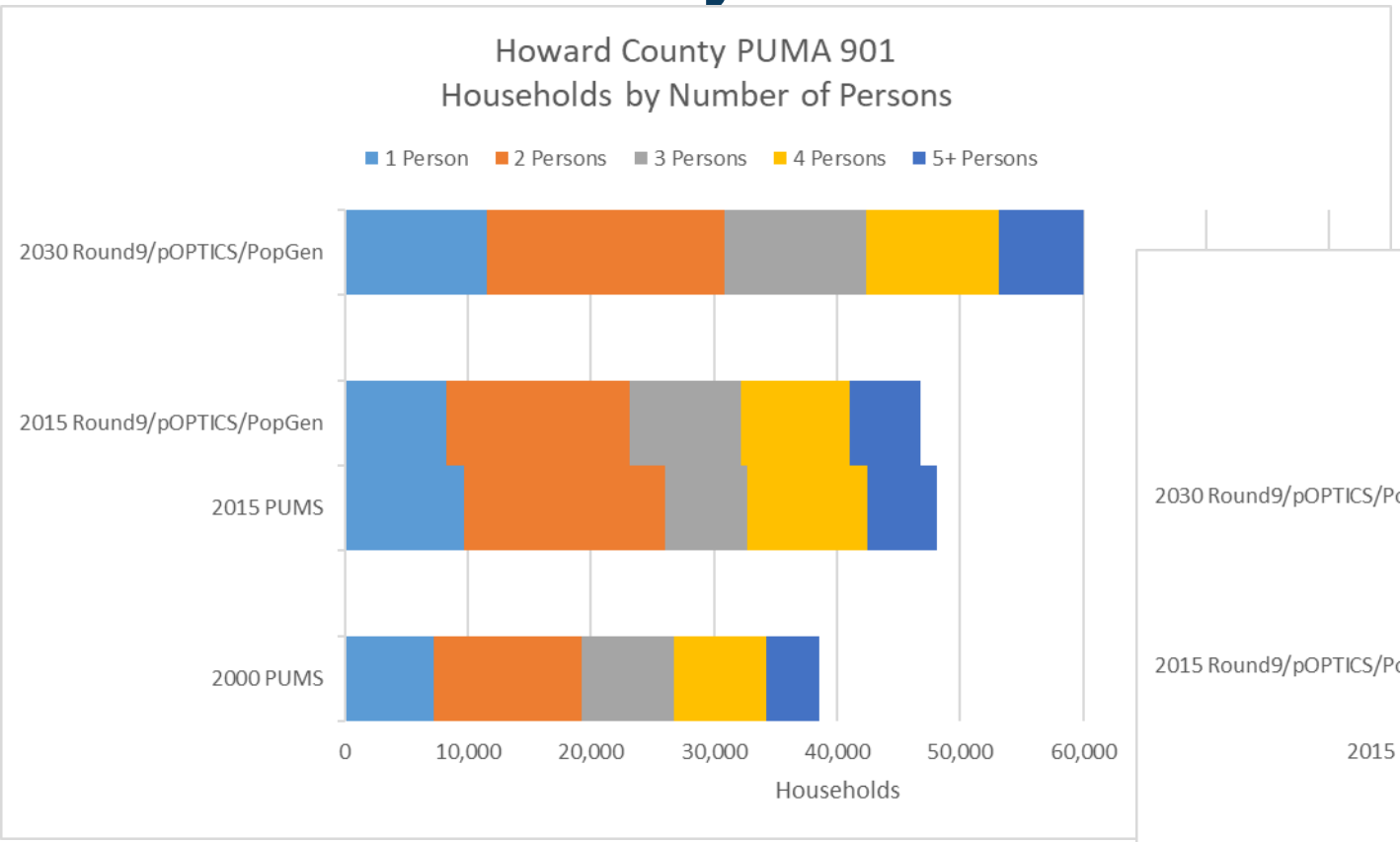
TAZ 1232

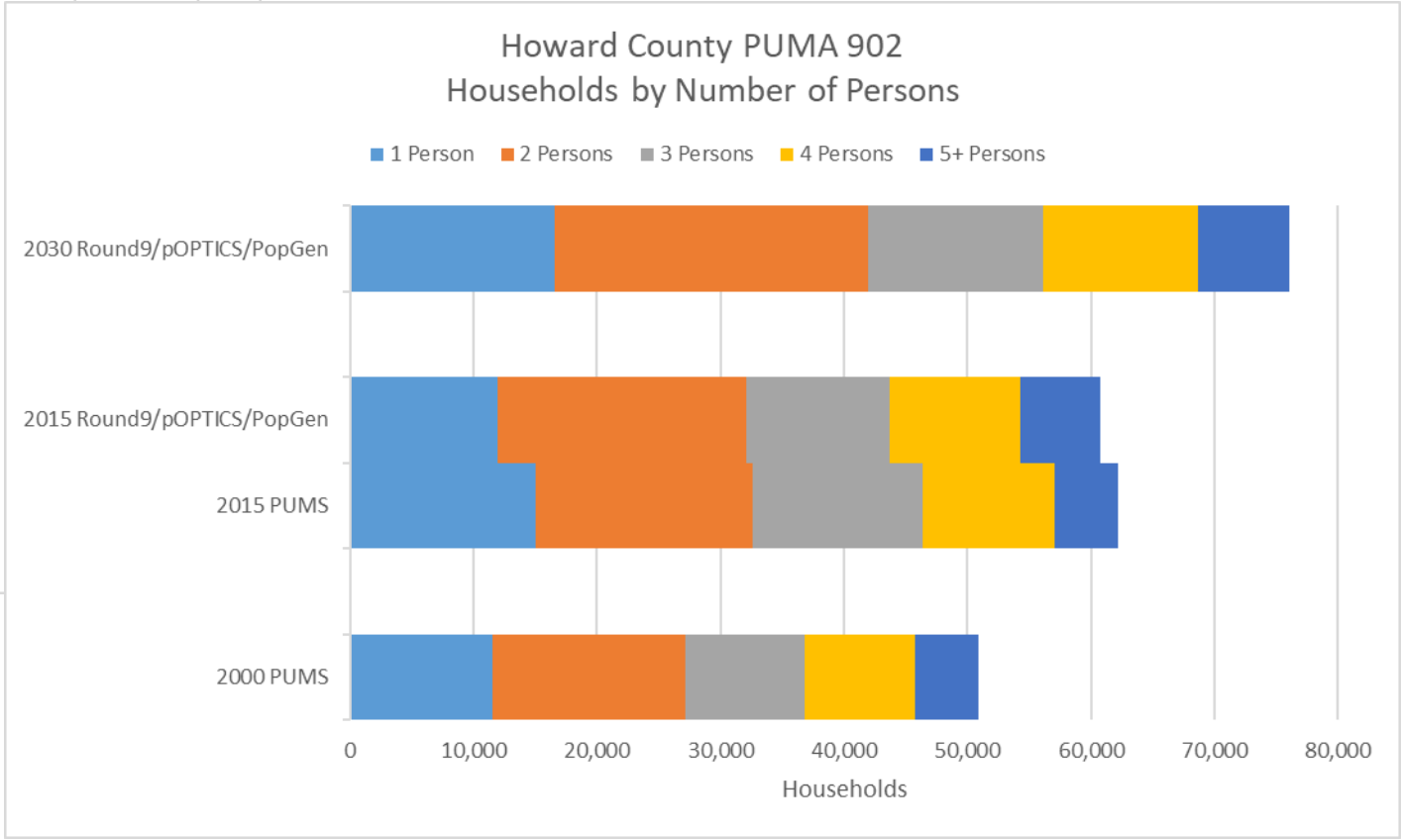
hhld	Income Group	size	adults	children	workers	Full-Time	Part-Time
996939	1	1	1	0	0	0	0
	person ID	Person Type	age	gender			
	2387749	Senior	87	Female			
hhld	Income Group	size	adults	children	workers	Full-Time	Part-Time
996882	2	3	1	2	1	0	1
	person ID	Person Type	age	gender			
	2387565	Part-Time	50	Female			
	2387566	Child2	10	Male			
	2387567	Child2	6	Male			
hhld	Income Group	size	adults	children	workers	Full-Time	Part-Time
996747	3	2	2	0	0	0	0
	person ID	person Type	age	gender			
	2387181	Senior	66	Female			
	2387182	Senior	70	Male			
hhld	Income Group	size	adults	children	workers	Full-Time	Part-Time
996740	4	5	2	3	1	1	0
	person ID	person Type	age	gender			
	2387163	Full-time	39	Male			
	2387164	Non-Working	40	Female			
	2387166	Child2	7	Female			
	2387167	Child2	7	Female			
	2387165	Child2	9	Female			
hhld	Income Group	size	adults	children	workers	Full-Time	Part-Time
997035	5	6	4	2	4	2	2
	person ID	person Type	age	gender			
	2388032	Full-time	40	Female			
	2388033	Full-time	37	Male			
	2388034	Part-Time	20	Female			
	2388035	Part-Time	20	Female			
	2388036	Child2	8	Female			
	2388037	Child2	8	Female			

Households By Persons

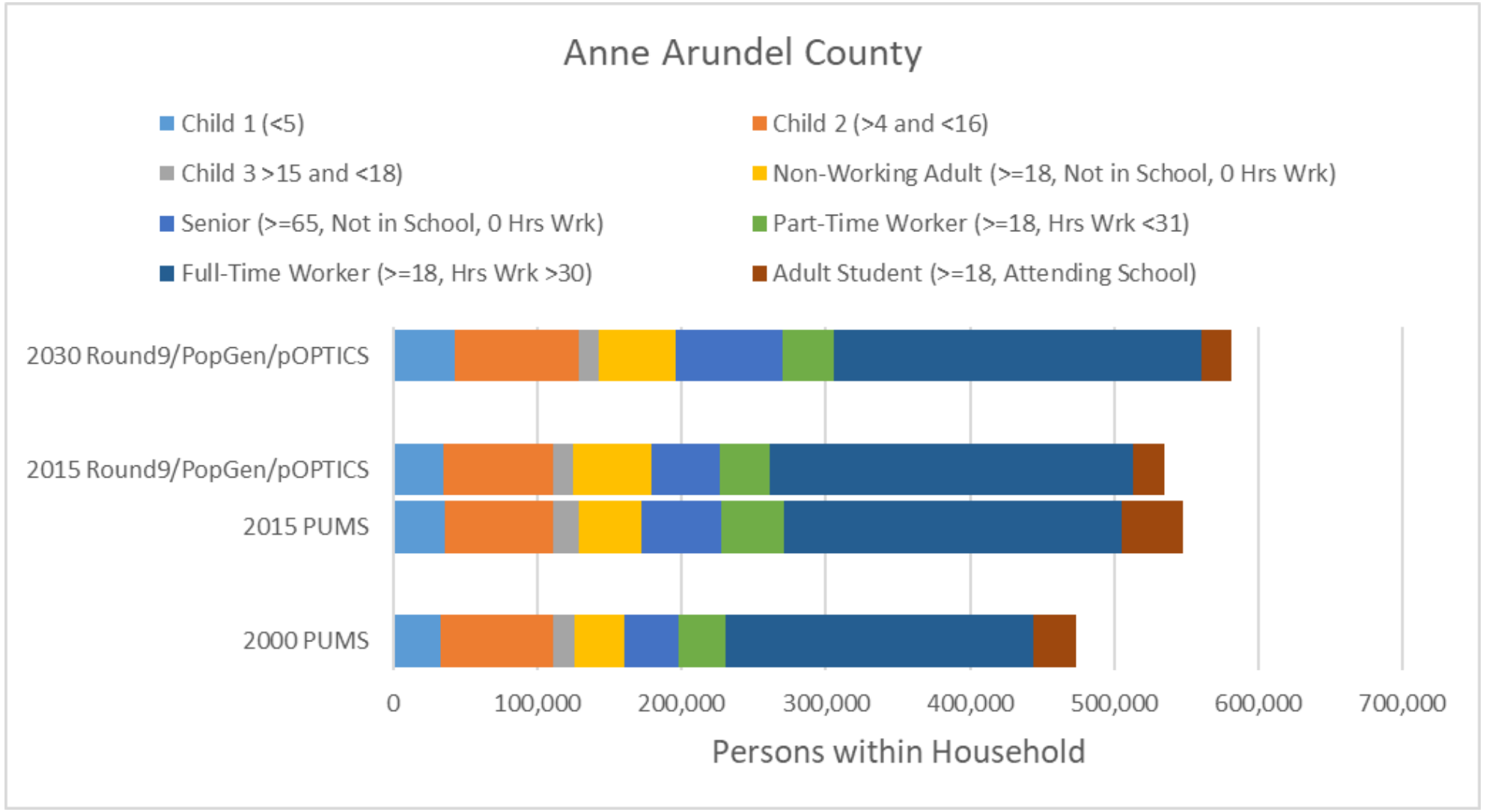


Households By Persons

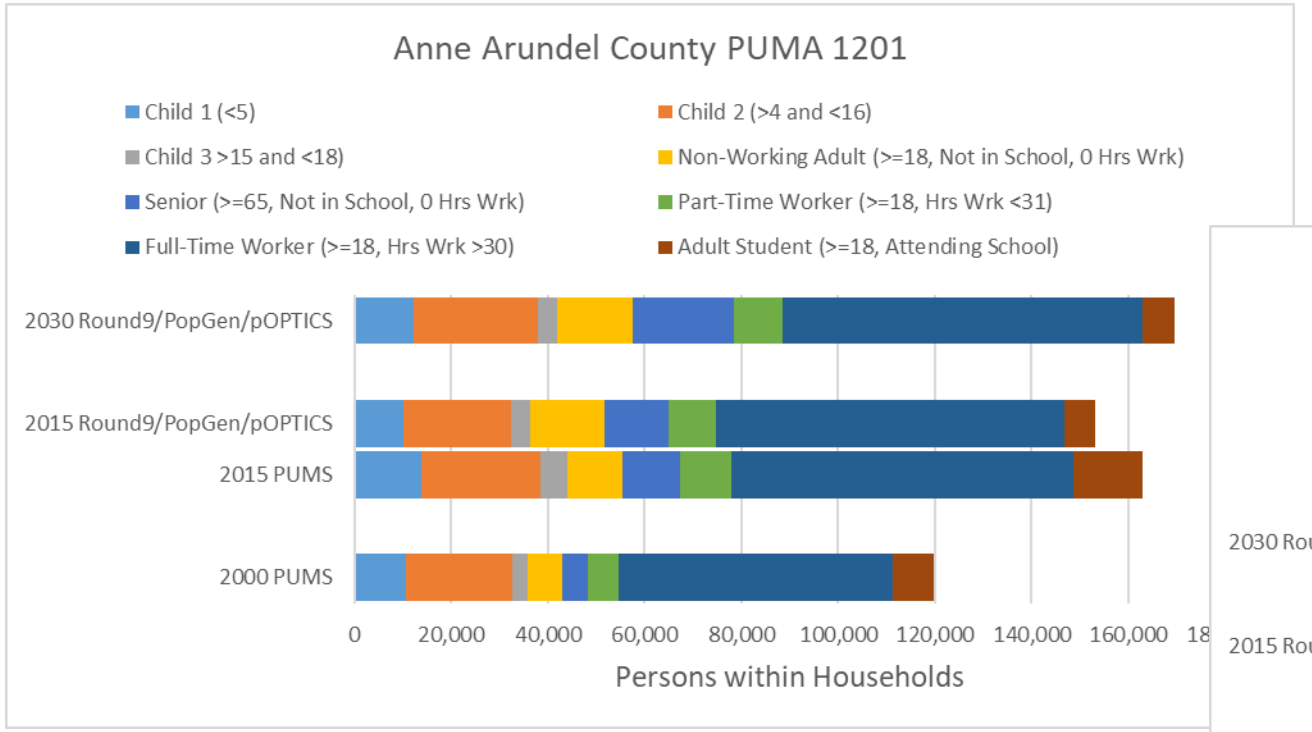


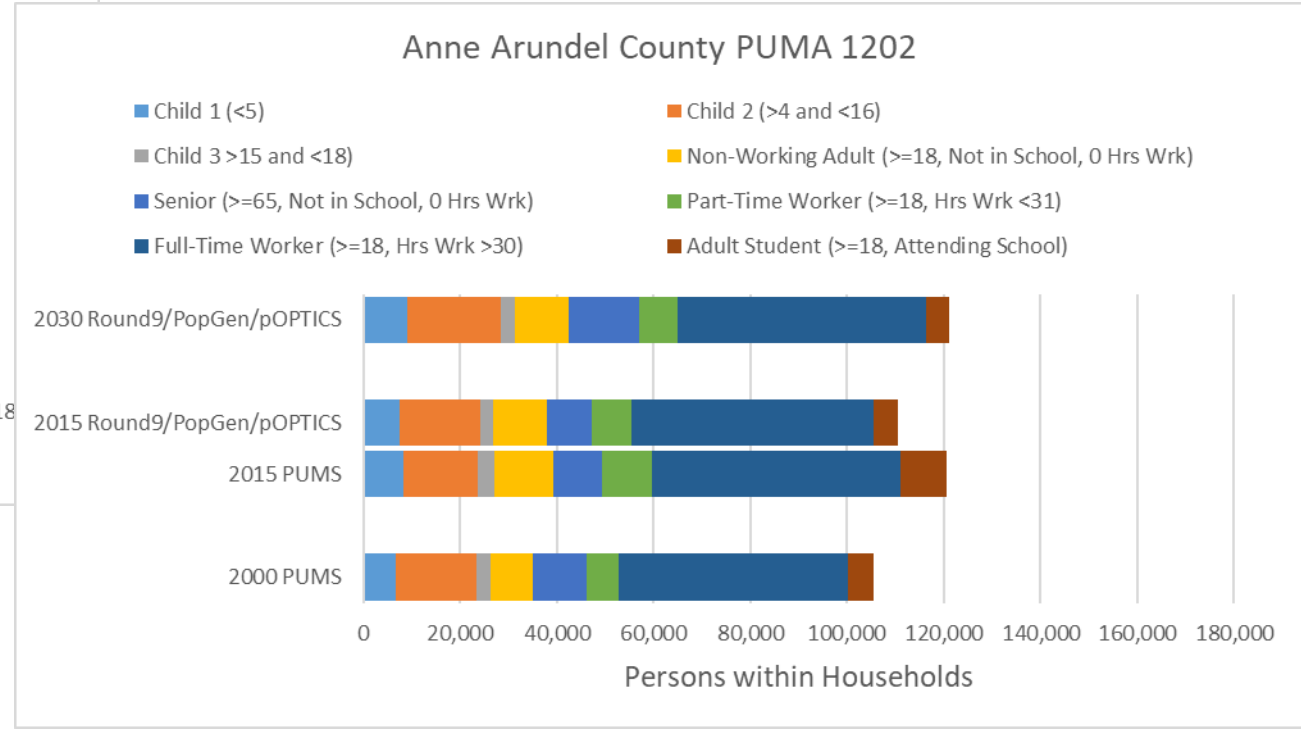


Person Type (8)



Person Type - PUMA





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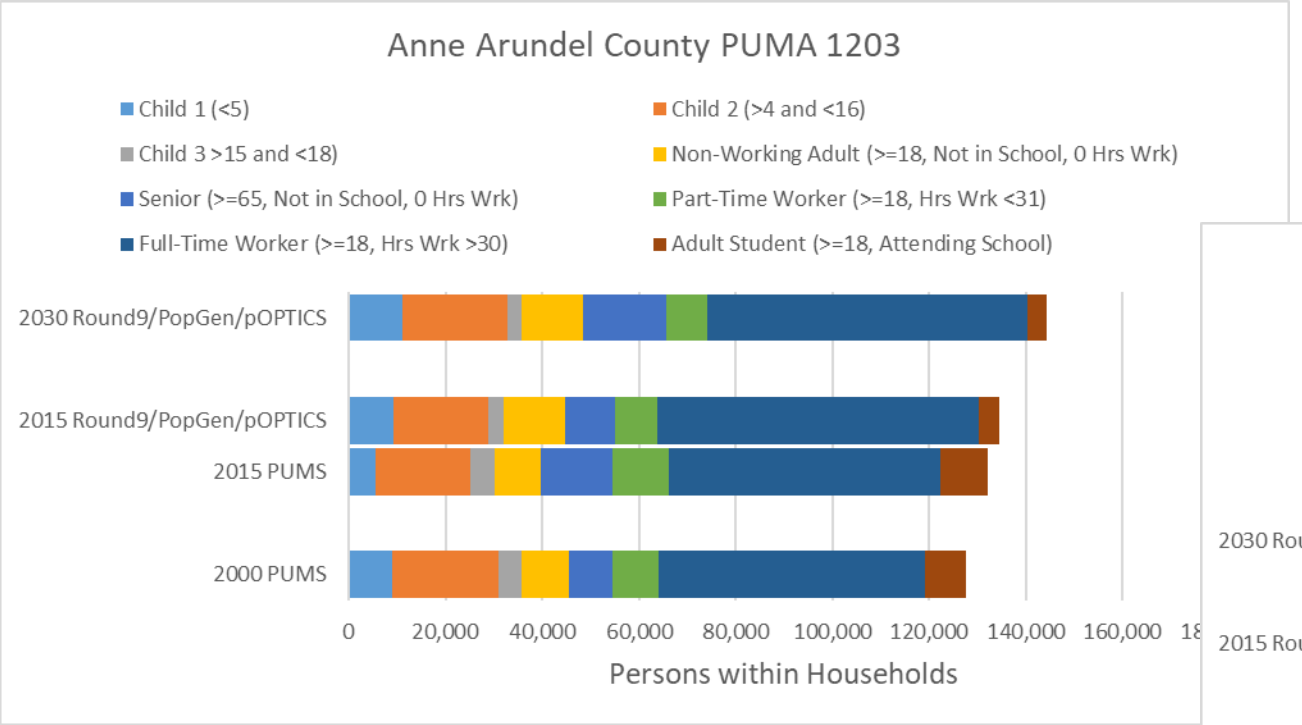
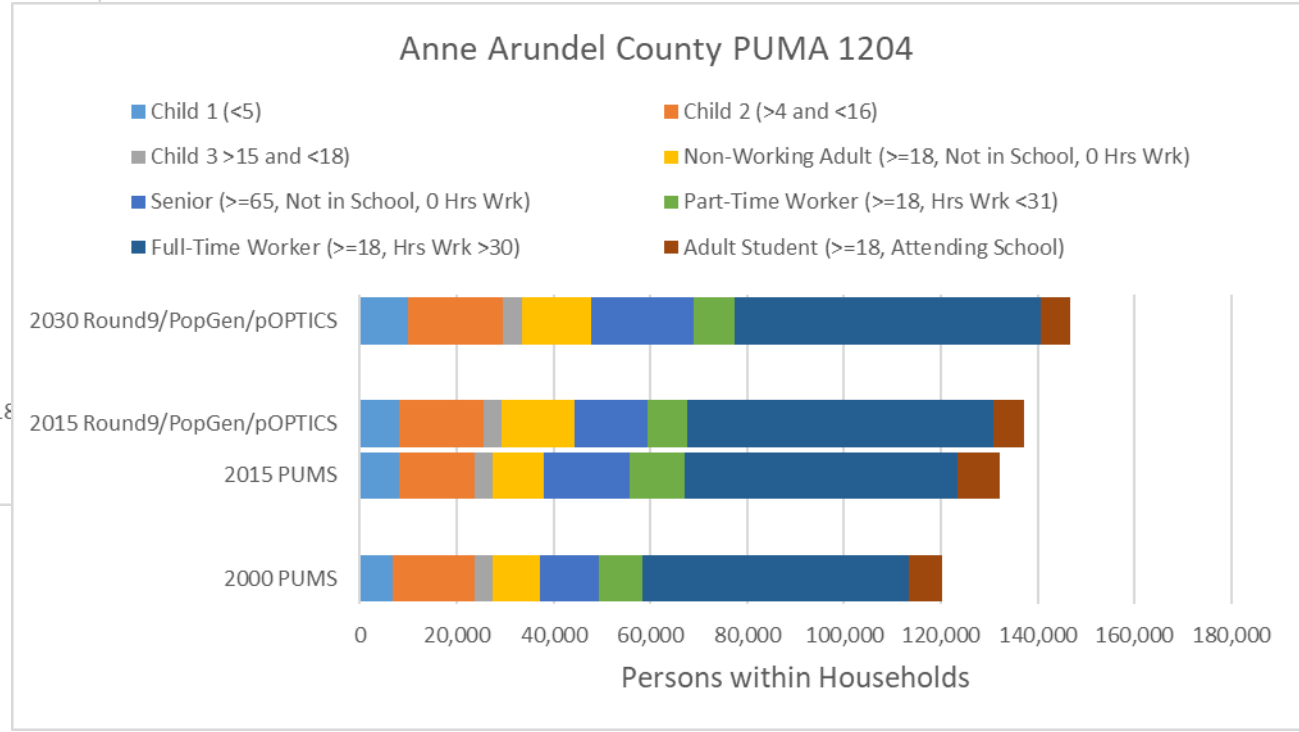
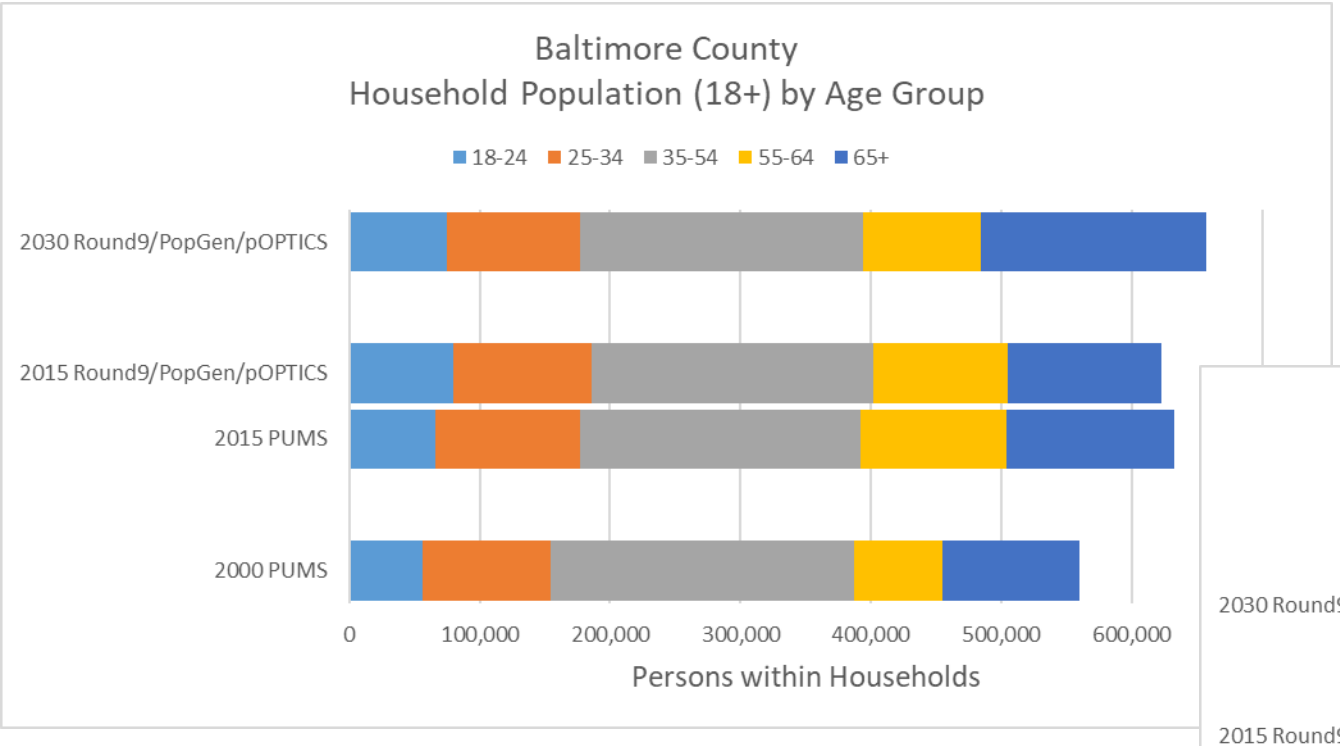
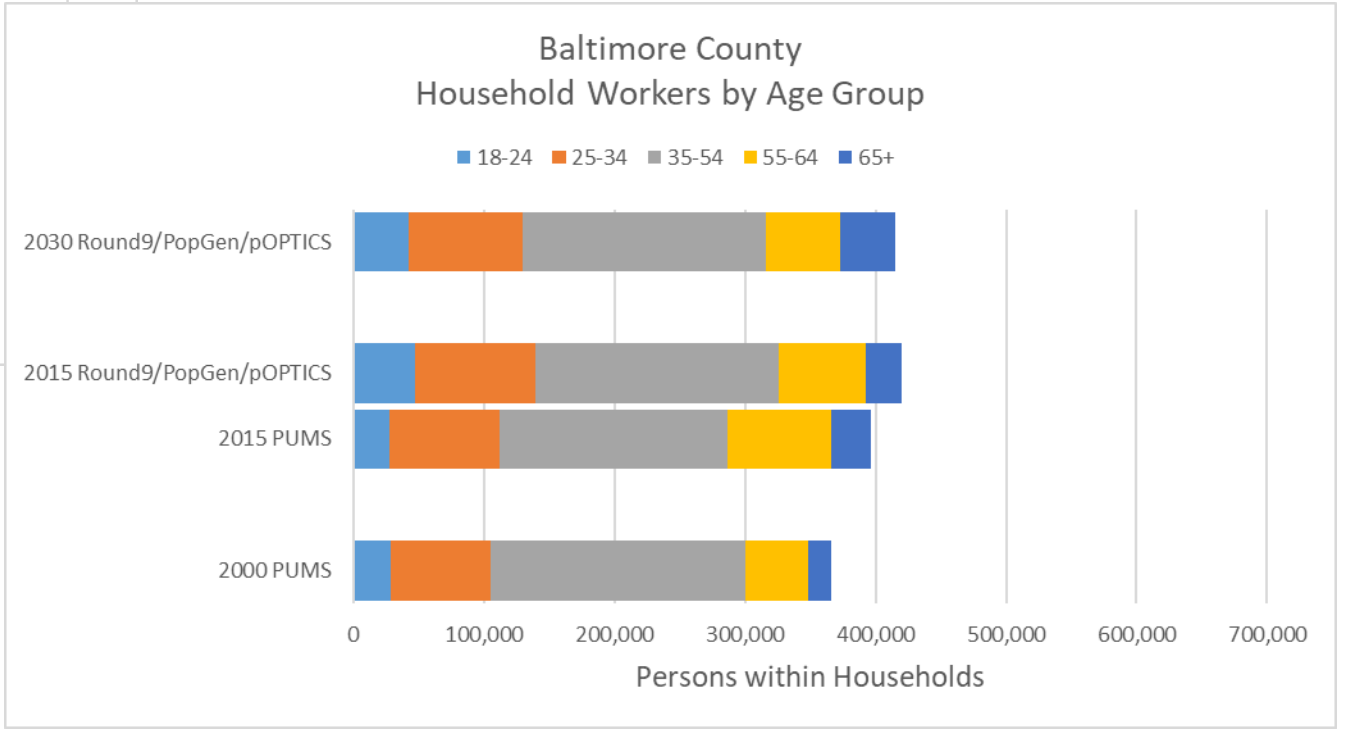




Worker Age Group





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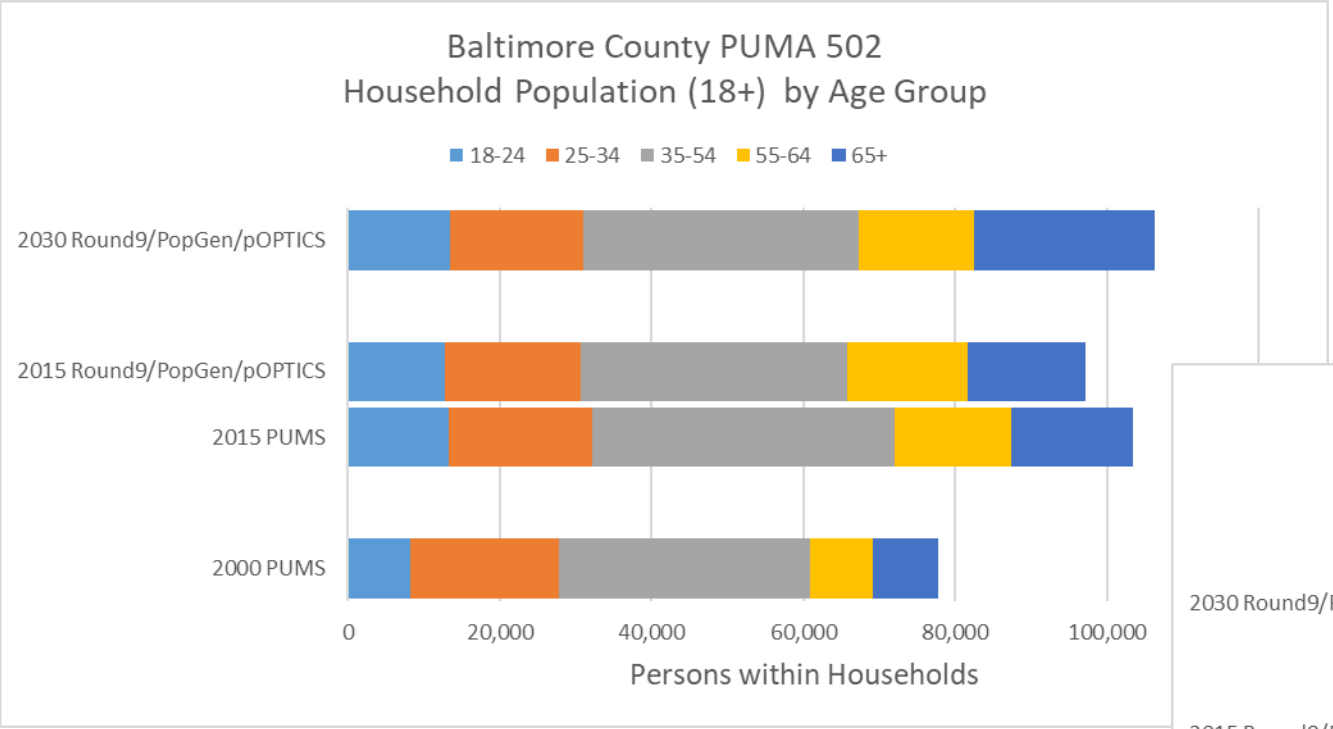

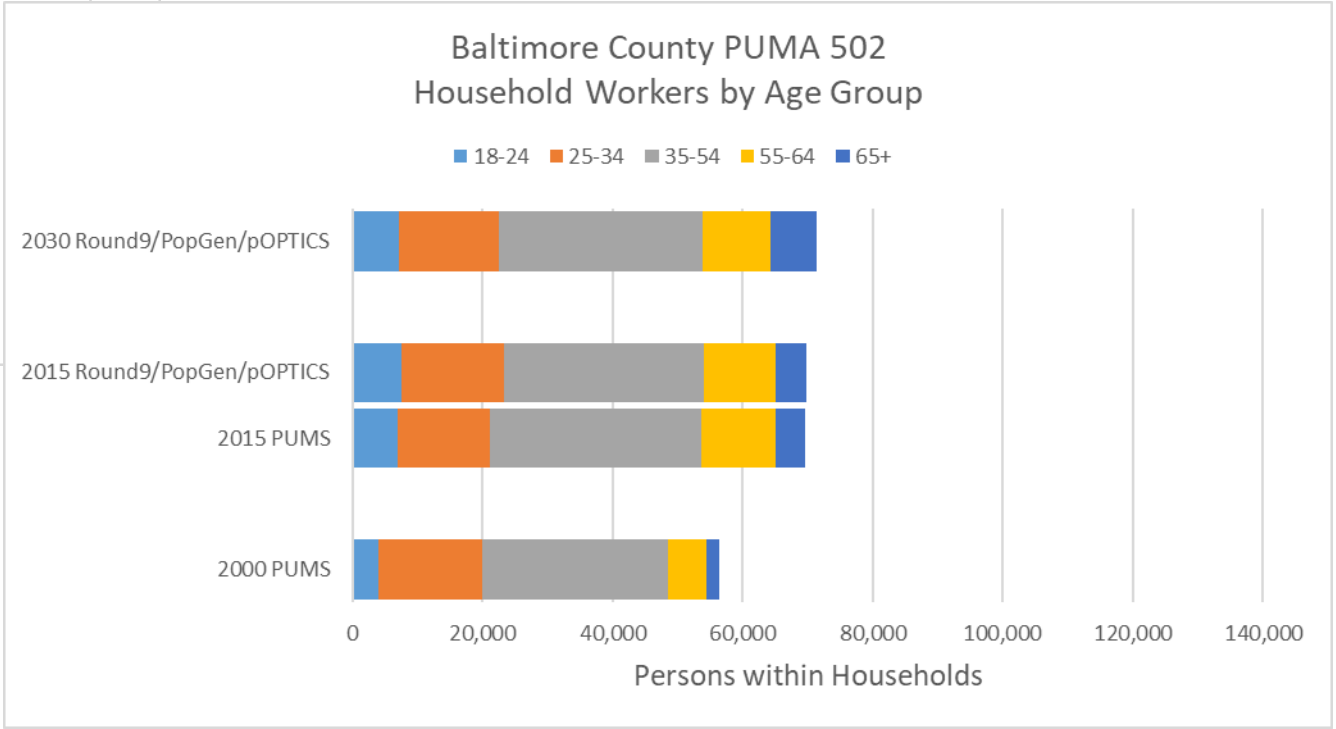

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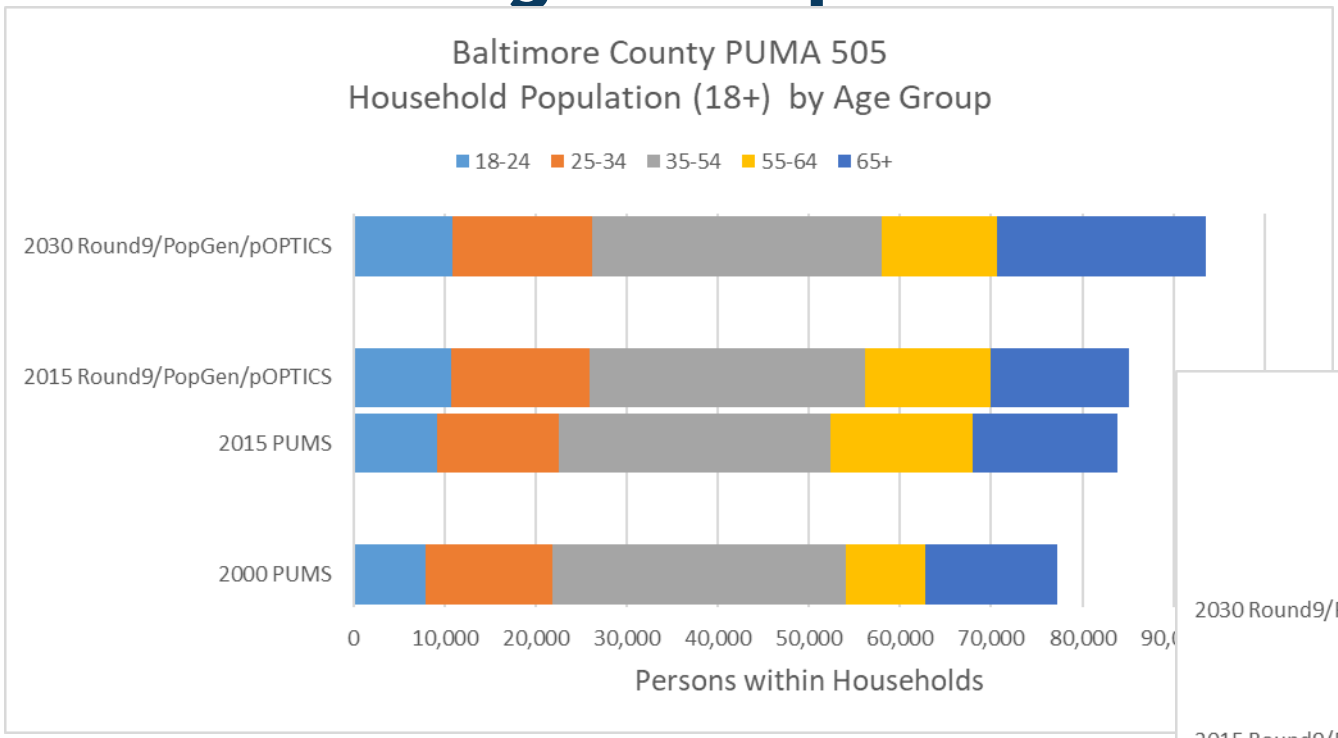

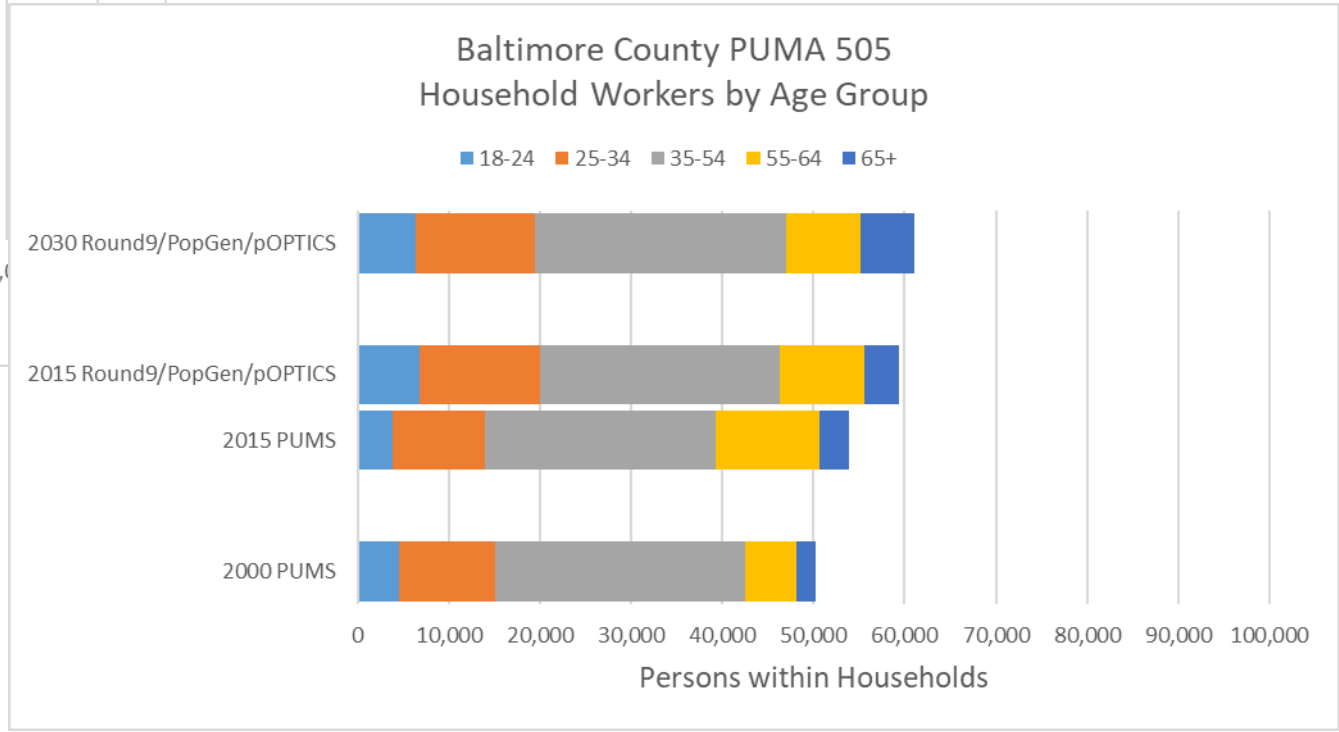

Scenario Planning

- **The Great Recession**
  - Decline in Employment
  - Decline in Investment Returns
  - Decline in Retirement Contributions
- **Boomers and Xers**
  - Stay in their Current Homes (Outward Migration at Historical Lows)
  - Work Past Normal Retirement Age

- **2030 Round9/pOPTICS/PopGen/ Assumptions –**
- **Harford County**
  - Household Population (266,699)
  - Households (104,801)

Scenario Planning

Base Scenario									
Persons Moving towards Retirement age									
						LF Participation Rate			LF
10,000		60%	Migrated	6,000					
		40%	Aged in Place	4,000		25%			1,000
Age in Place - Great Recession									
Persons Moving towards Retirement age									
						LF Participation Rate			LF
10,000		30%	Migrated	3,000					
		70%	Aged in Place	7,000		45%			3,150

pOPTICS – Migration Change

	2000		2005		2010		2015		2020		2025		2030		2035		2040		2045	
Net Migration																				
Non Hispanic White	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0-4									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5-9									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10-14									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
15-19									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20-24									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
25-29									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30-34									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
35-39									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40-44									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
45-49									-10%	-10%	-10%	-10%	0%	0%	0%	0%	0%	0%	0%	0%
50-54									-10%	-10%	-10%	-10%	0%	0%	0%	0%	0%	0%	0%	0%
55-59									-10%	-10%	-10%	-10%	0%	0%	0%	0%	0%	0%	0%	0%
60-64									-10%	-10%	-10%	-10%	0%	0%	0%	0%	0%	0%	0%	0%
65-69									-10%	-10%	-10%	-10%	0%	0%	0%	0%	0%	0%	0%	0%
70-74									-10%	-10%	-10%	-10%	0%	0%	0%	0%	0%	0%	0%	0%
75-79									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80-84									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
85+									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Enter a Positive Number to Increase Migration Rate and a Negative Number to Decrease Migration Rate

pOPTICS – Labor Force Participation

Labor Force																				
	2000		2005		2010		2015		2020		2025		2030		2035		2040		2045	
Labor Force																				
Non Hispanic White	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
16 to 19									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20 to 24									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
25 to 54									0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
55 to 64									15%	15%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%
65 to 69									15%	15%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%
70 and Over									15%	15%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%

TAZ 1232

TAZ Totals

Aggregate

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Disaggregate

Household/Person Roster

TAZ 1232

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996882	2	3	1	2	1	0	1
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	2387164	Non-Working	40	Female			
	2387166	Child2	7	Female			
	2387167	Child2	7	Female			
	2387165	Child2	9	Female			

hhId	Income Group	size	adults	children	workers	Full-Time	Part-Time
997035	5	6	4	2	4	2	2
	person ID	person Type	age	gender			
	2388032	Full-time	40	Female			
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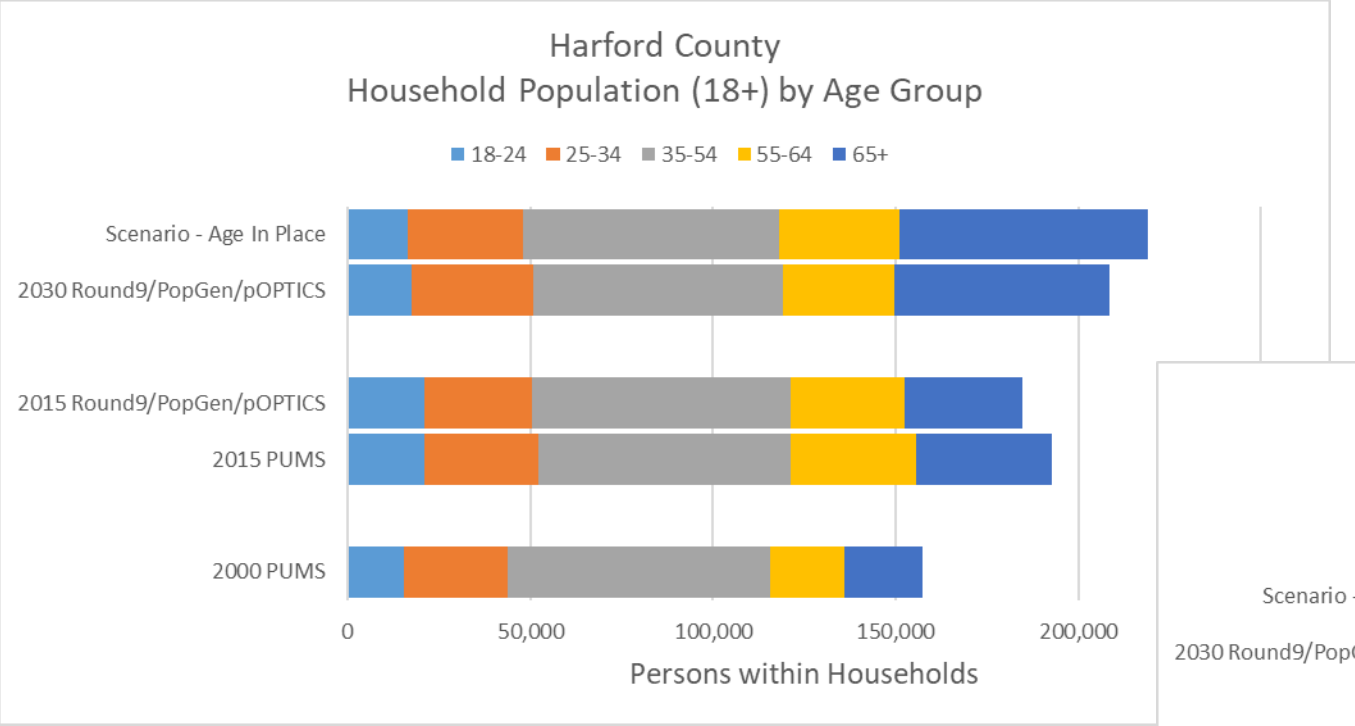
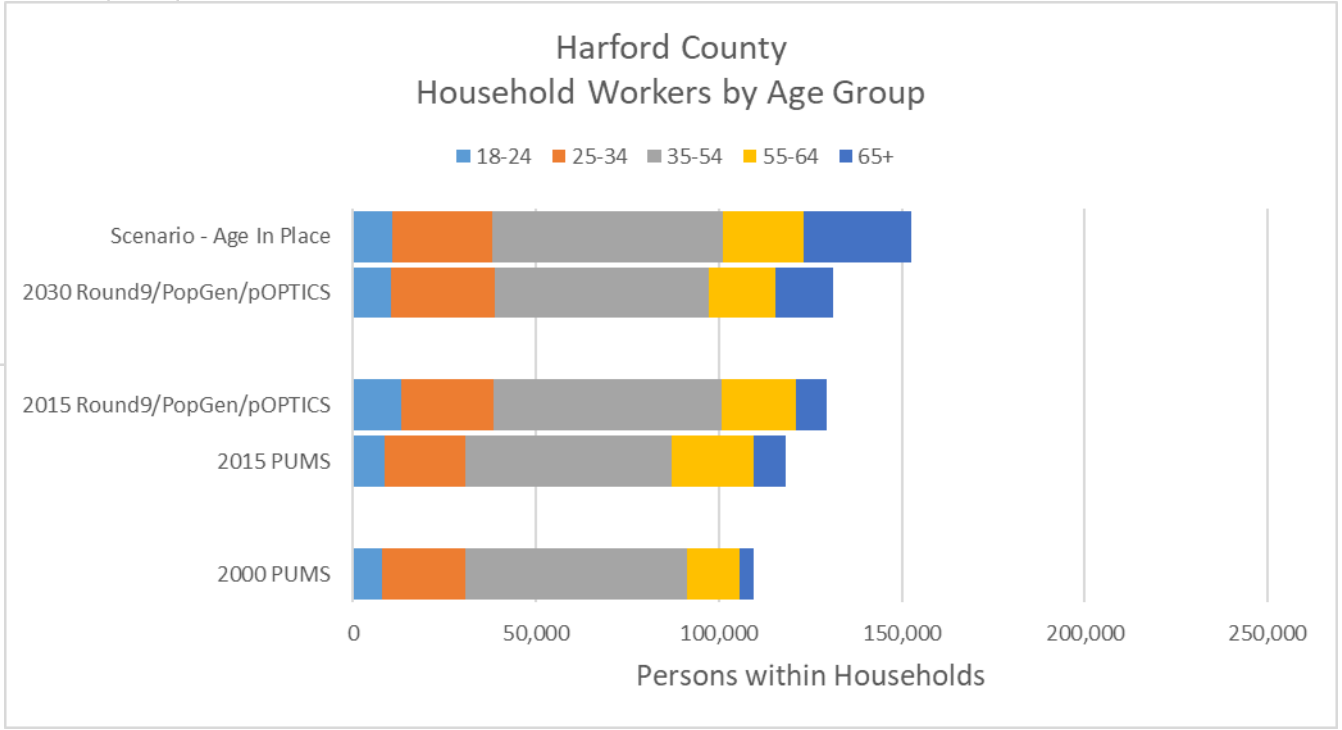
Scenario Planning – Age in Place





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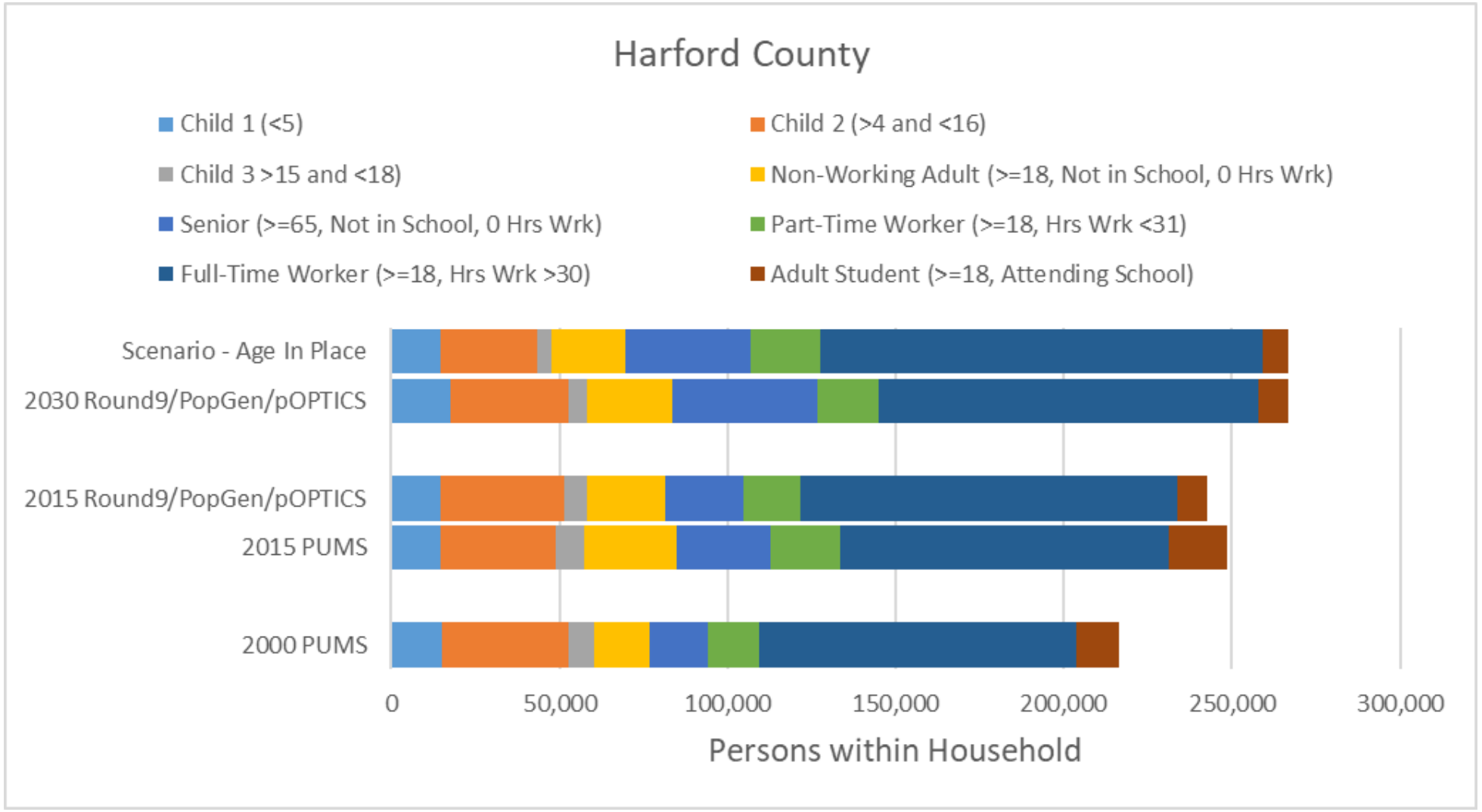

Discussion

- **Thoughts?**
- **Scenarios**
  - Identify county efforts/activities that benefit from Round9/pOPTICS/PopGen disaggregate data?
  - What demographic scenarios are you interested in?
- **Next Steps**

For More Information

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