

Analysis of Commuter Flows to and from the WILMAPCO Region 1990-2000

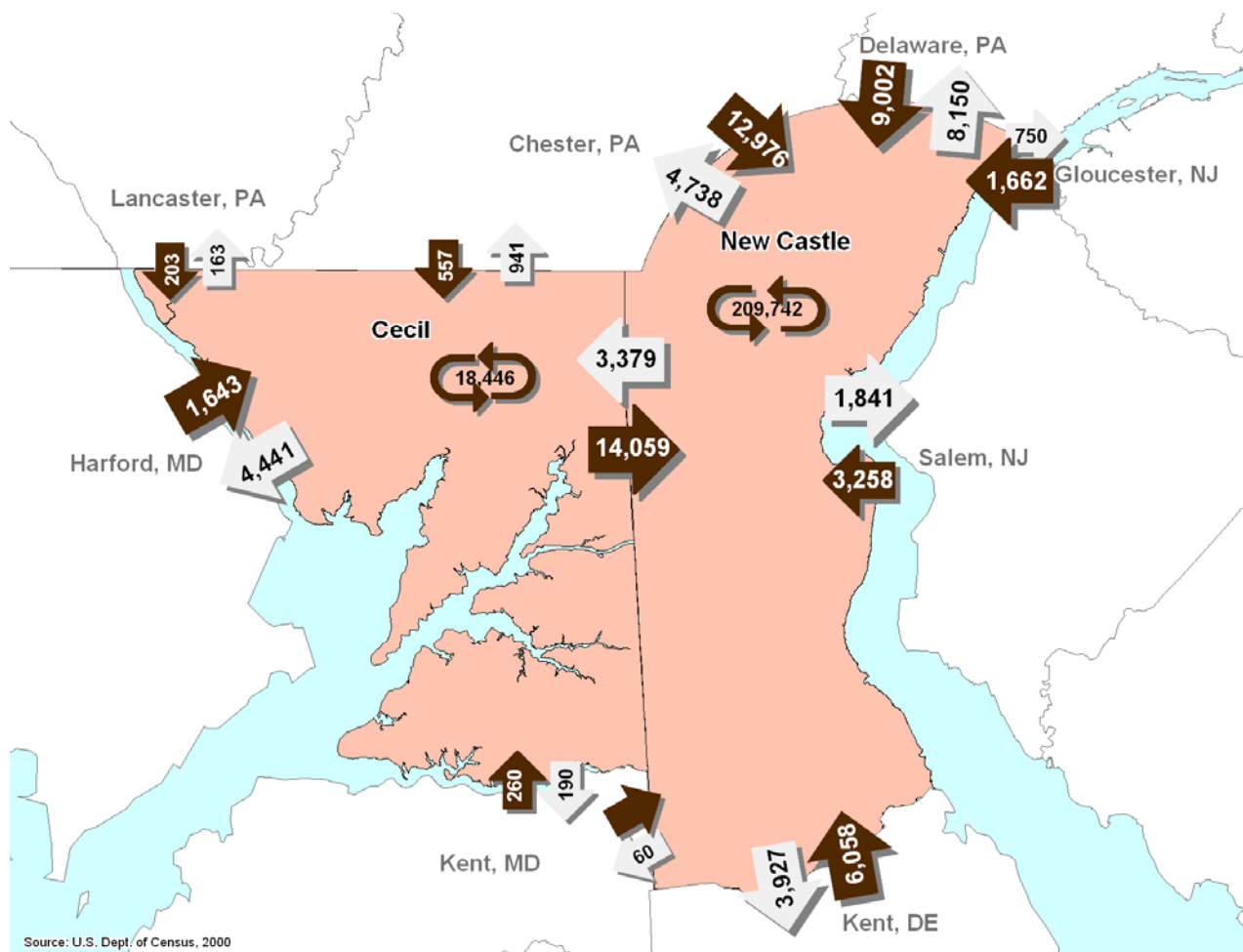
Commuting into New Castle County Grows 31% between 1990 and 2000

Across the nation, commuting to work has become increasingly longer in terms of time and distance. The WILMAPCO region is no exception to this trend. Data gathered from the Census Transportation Planning Package (CTPP) has captured an ever growing trend of cross-border commuting into (and out of) the WILMAPCO region. The reasons behind this are wide in scope ranging including school districts preferences, housing costs and locations, among other factors.

So, what does this mean for the WILMAPCO region? Understanding where citizens live and work is critical for making decisions on our transportation infrastructure. WILMAPCO Data Report #3 focuses on the county to county work flows from the 1990 and 2000 Census. In addition, data showing movement at the Planning Districts level of geography will also be displayed. For more documentation on the methodology used by the Census, please look at the back page of this data report. For reference, Below are a few facts and observations from a review of the CTPP data:

- Between 1990 and 2000, the total number of workers that commute into New Castle County on a daily basis has risen from 45,200 in 1990 to 59,500 in 2000. This is an increase of 31% over the decade.
- As of 2000, 22% of New Castle County's commuting workforce reside in counties other than New Castle.
- Between 1990 and 2000, the total number of workers that commute into New Castle County from Cecil County has increased from 10,761 in 1990 to 14,059 in 2000, an increase of nearly 31%.
- More than half (56.1%) of all Cecil County workers are employed in other counties, totaling just over 23,500 workers. This is up from 51% in 1990.

Figure 1: 2000 County to County Commuter Workflows



Source: U.S. Dept. of Census, 2000

Note: workers are defined as persons in the workforce over the age of 16.

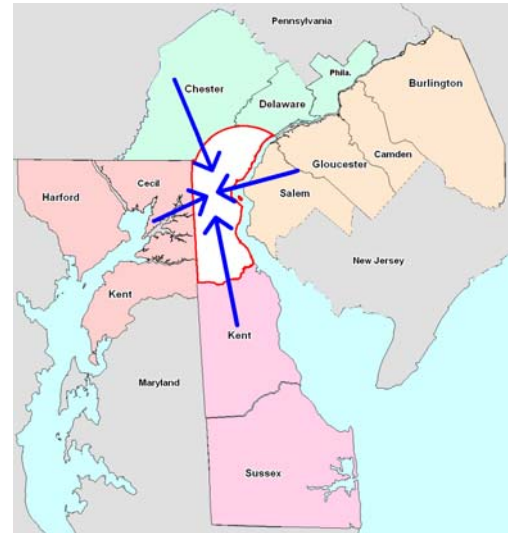
Origin of Workers in New Castle County

With many corporate company headquarters calling Delaware home, New Castle County has one of the largest employment bases in the region. However, the county experiences a relatively high number of “cross-county” commuters that live in counties other than New Castle. **Table 1** shows the breakdown of the New Castle County workforce and their county of residence. **Table 2** illustrates the changes that have occurred with the 12 highest counties. The map to the right gives a reference to the location of counties of high commuters flows into New Castle County.

Table 1: Origin of Commuters into New Castle County—2000

Residence of Workers Commuting into New Castle County	Total Commuters	% of Commuters into New Castle County
New Castle Co. DE	209,742	77.9%
Cecil Co. MD	14,059	5.2%
Chester Co. PA	12,976	4.8%
Delaware Co. PA	9,002	3.3%
Kent Co. DE	6,058	2.2%
Salem Co. NJ	3,258	1.2%
Philadelphia Co. PA	1,856	0.7%
Gloucester Co. NJ	1,662	0.6%
Camden Co. NJ	1,286	0.5%
Montgomery Co. PA	1,201	0.4%
Sussex Co. DE	1,119	0.4%
Harford Co. MD	1,003	0.4%
Burlington Co. NJ	597	0.2%
Kent Co. MD	566	0.2%

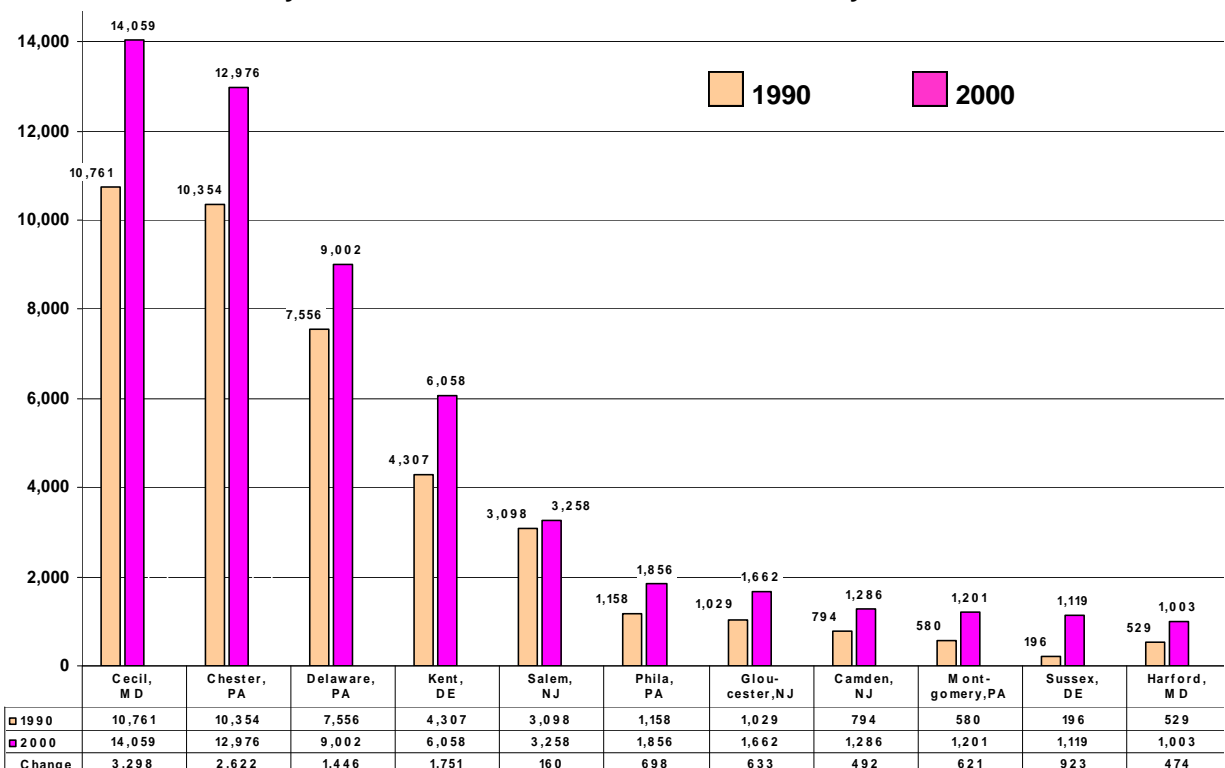
Worker Origin Summary	
Total New Castle County Workers:	269,264
Total commuters from remaining DE Counties	7,177
Total commuters from Pennsylvania	26,585
Total commuters from New Jersey	7,677
Total commuters from Maryland	16,781
Total commuters from other states	1,302
Total Workers from outside New Castle County	59,522
	22.1%



Some observations include:

- 22% of New Castle County's commuting workforce (59,522 workers) reside in counties other than New Castle.
- Of this 22%, 36,037 workers come from the three counties of Cecil County MD and Chester & Delaware counties in Pennsylvania. These counties account for just over 60% of the commuters from other counties.
- Since 1990, commuters from other counties has increased by roughly 14,200 commuters, a 31% increase.
- The counties of Cecil, MD and Chester, PA led the way in the increase of the absolute number of commuters between 1990 and 2000, with 3,298 and 2,622 additional commuters respectively.
- The three counties with the largest percentage changes since 1990 were Sussex, DE (470%), Montgomery, PA (107%) and Harford, MD (89%).

Table 2: Daily Commuter Volumes into New Castle County 1990 & 2000

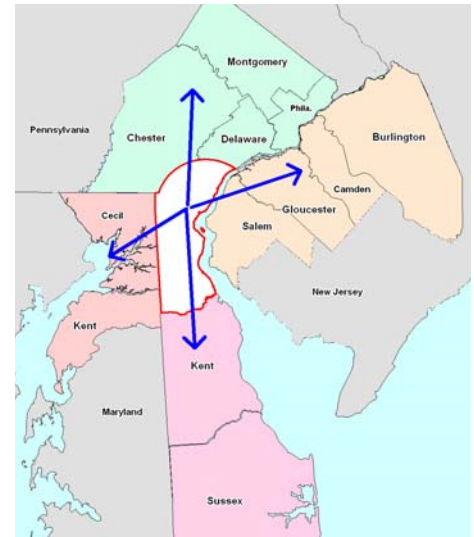


Workplace of New Castle County Residents

Most of the residents in New Castle are currently able to find jobs locally, with 85.6% of the residents working within the county. However, there is a significant number (35,392) of workers that work outside of the county. **Table 3** shows the top work destinations of New Castle County residents and the overall commuting destinations by state. **Table 4** illustrates the top 11 counties with changes in commuter volumes since 1990. The map to the right gives a reference to the location of counties of high commuters out of New Castle County.

Table 3: Workplace of Commuters out of New Castle County—2000

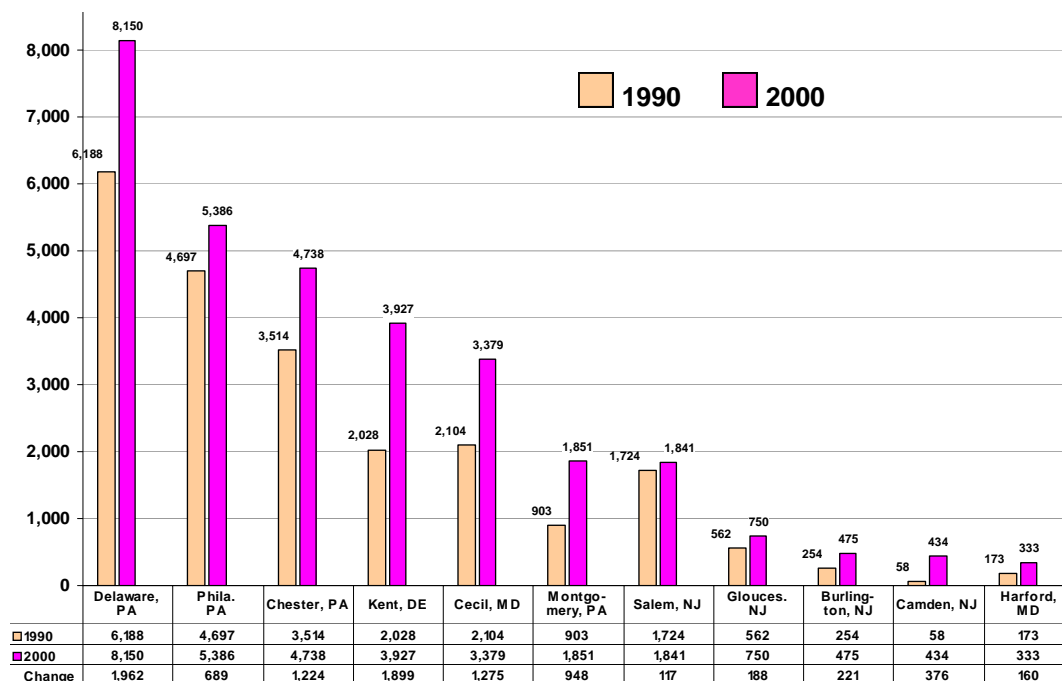
Workplace Destination for New Castle County Residents	Total Commuters	% of Commuters	Worker Destination Summary	
New Castle Co. DE	209,742	85.6%	Total New Castle County Resident that Work	245,134
Delaware Co. PA	8,150	3.3%	Total commuters to remaining DE Counties	4,246
Philadelphia Co. PA	5,386	2.2%	Total commuters to Pennsylvania	20,865
Chester Co. PA	4,738	1.9%	Total commuters to New Jersey	4,277
Kent Co. DE	3,927	1.6%	Total commuters to Maryland	4,450
Cecil Co. MD	3,379	1.4%	Total commuters to other states	1,554
Montgomery Co. PA	1,851	0.8%	Total residents that work outside New Castle County	35,392
Salem Co. NJ	1,841	0.8%		
Gloucester Co. NJ	750	0.3%		
Burlington Co. NJ	475	0.2%		
Camden Co. NJ	434	0.2%		
Harford Co. MD	333	0.1%		
Sussex Co. DE	319	0.1%		



Some other observations include:

- 14.4% of all New Castle County working residents are employed in counties other than New Castle.
- Of the 17,470 new working residents living in the county since 1990, roughly half (9,001) work outside of New Castle.
- Out of the 35,392 commuters who work outside of New Castle County, nearly 59% of them work in Pennsylvania. The bulk of which are going to Delaware and Chester Counties.
- Since 1990, the number of people commuting to other counties has increased by roughly 9,000 commuters, a 34% increase.
- Three counties have led the way in the largest absolute increase of commuters between 1990 and 2000. These were Cecil MD(1,275), Kent DE (1,899) and Delaware PA(1,962)
- The three counties with the largest percentage changes since 1990 were Camden, NJ (693%), Montgomery, PA (105%) and Kent, DE (93%).

Table 4: Daily Commuter Volumes out of New Castle County 1990 & 2000

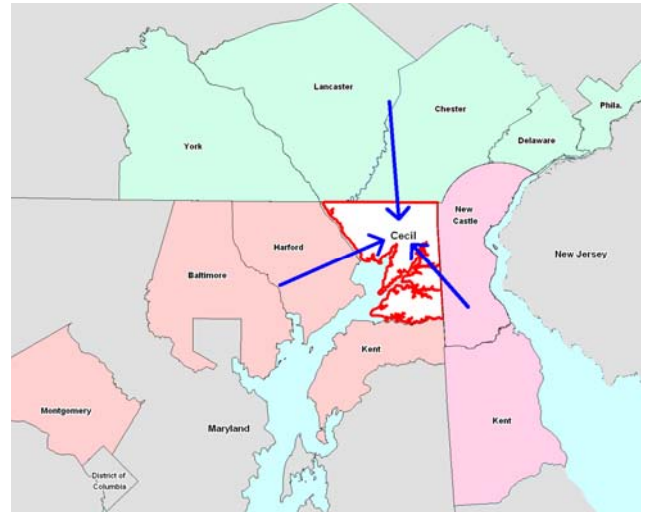


Origin of Workers in Cecil County

With a much smaller employment base, Cecil County sees less of an influx into the county on a daily basis than New Castle County does. However, some does occur. **Table 5** shows the number of workers that commute into Cecil on a daily basis and **Table 6** shows the changes in the top 11 counties between 1990 and 2000. As the map shows, Cecil draws its employees from more western counties than New Castle does, even from counties a considerable distance away.

Table 5: Residence of Workers in Cecil County—2000

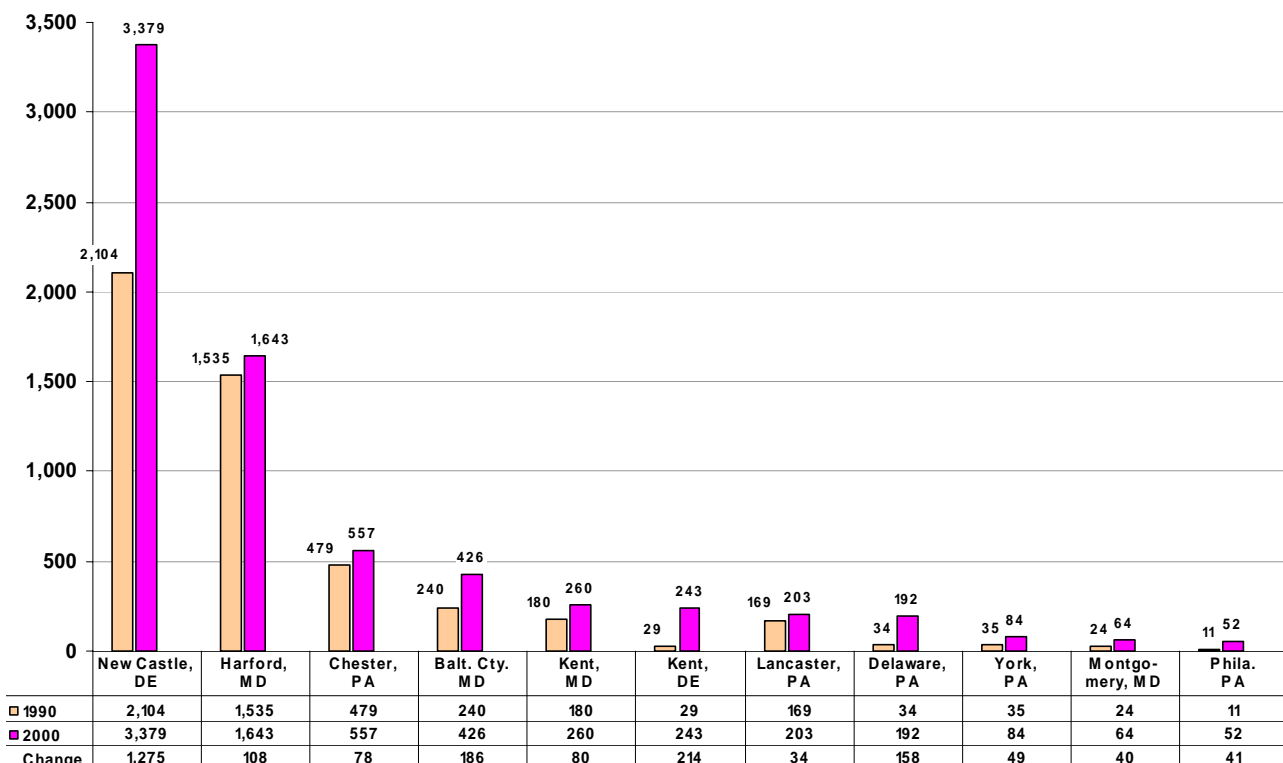
Residence of Workers Commuting into Cecil County	Total Commuters	% of Commuters into Cecil County	Worker Origin Summary	
Cecil, MD	18,446	70.4%	Total Workers:	26,184
New Castle, DE	3,379	12.9%	Total commuters from rest of Maryland	2,686
Harford, MD	1,643	6.3%	Total commuters from Pennsylvania	1,138
Chester, PA	557	2.1%	Total commuters from New Jersey	72
Balt. Cty., MD	426	1.6%	Total commuters from Delaware	3,664
Kent, MD	260	1.0%	Total commuters from other states	178
Kent, DE	243	0.9%	Total Workers from outside Cecil County	7,738
Lancaster, PA	203	0.8%		29.6%
Delaware, PA	192	0.7%		
York, PA	84	0.3%		
Montgomery, MD	64	0.2%		
Philadelphia, PA	52	0.2%		
Anne Arundel, MD	44	0.2%		
Sussex, DE	42	0.2%		



Some other observations include:

- Roughly 30% (7,388) of employment base in Cecil comes from counties other than Cecil.
- The bulk of the inflow into Cecil comes from New Castle and Harford counties, totaling just over 5,000 workers.
- Since 1990, commuters from New Castle County have increased by nearly 1,300, growing from 2,104 in 1990 to 3,379 in 2000. New Castle is also the largest absolute change in commuters since 1990.
- The counties having the largest percentage changes between 1990 and 2000 are Kent DE (737%), Delaware PA (464%) and Philadelphia PA (372%).

Table 6: Daily Commuter Volumes into Cecil County 1990 & 2000



Destination of Workers in Cecil County

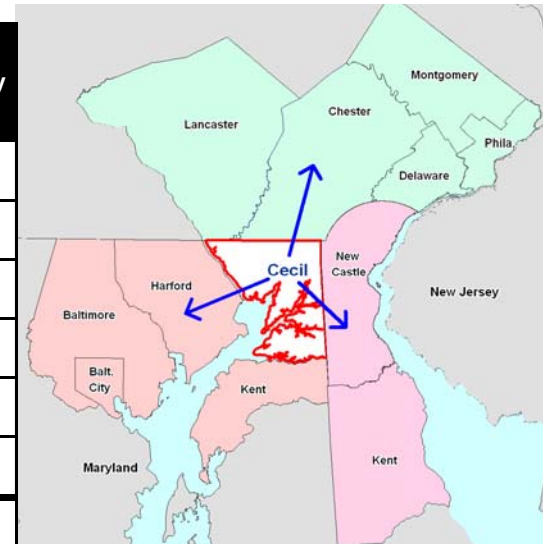
As discussed on page 1, more than half of the available workers that live in Cecil work elsewhere in the region. Fostered by its proximity to I-95 and its rural character, Cecil has seen an influx of residents who commute to jobs in other counties. **Table 7** shows the top work destinations of Cecil County residents and the overall commuting destinations by state. **Table 8** illustrates the changes in commuter volumes to the top 11 counties since 1990.

Table 7: Destination of Workers Living in Cecil County—2000

Workplace Destination for Cecil County Residents	Total Commuters	% of Commuters
Cecil, MD	18,446	43.9%
New Castle, DE	14,059	33.4%
Harford, MD	4,441	10.6%
Chester, PA	941	2.2%
Baltimore, MD	876	2.1%
Baltimore City, MD	546	1.3%
Delaware, PA	373	0.9%
Philadelphia, PA	254	0.6%
Kent, MD	190	0.5%
Kent, DE	186	0.4%
Montgomery, PA	176	0.4%
Lancaster, PA	163	0.4%

Worker Destination Summary

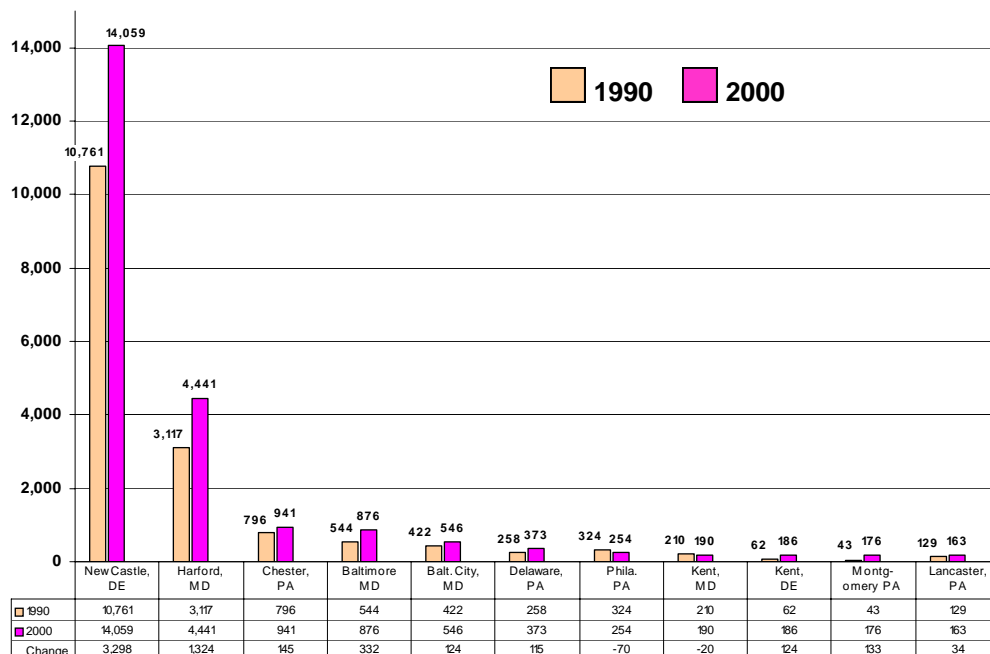
Total Workers:	42,055
Total commuters to rest of MD	6,499
Total commuters to PA	15.5%
Total commuters to NJ	2,149
Total commuters to DE	5.1%
Total commuters to other states	462
Total commuters out of Cecil County	1.1%
Total commuters to DE	14,278
Total commuters to other states	34.0%
Total commuters out of Cecil County	220
Total commuters out of Cecil County	0.5%
Total commuters out of Cecil County	23,608
Total commuters out of Cecil County	56.1%



Some other observations include:

- 56.1% of all Cecil County workers are employed in counties other than Cecil. Overall, the total commuters that work outside of Cecil grew 33% between 1990 and 2000, growing from 17,764 to 23,608 in 2000
- Cecil added roughly 7,300 working residents to the county between 1990 and 2000. Within that period, the number of workers who work outside of Cecil County grew by 5,800 workers.
- In 2000, of the 23,609 commuters who work outside of Cecil County, about 60% of them work in Delaware, the bulk of which are going to New Castle County.
- The counties of New Castle DE(14,059), Harford MD (4,441) and Chester County in PA (941) led the way in the largest absolute increase of commuters between 1990 and 2000.
- The three counties with the largest percentage changes since 1990 were Kent DE (200%), Montgomery, PA (309%) and Baltimore County MD (61%).

Table 8: Daily Commuter Volumes out of Cecil County 1990 & 2000



New Castle County Planning Districts

For regional planning purposes, it is important to have a good sense of daily commuter flows to help plan for additional transportation improvements. The CTPP allocates the work flow data to the planning district level, which allows for further detail in how commuters move about the county on a daily basis. **Table 9** contains a chart that shows the planning district-to-planning district work flows for New Castle County. It also shows some selected counties (shown in **yellow**) that have a significant amount of workers that enter New Castle. The **green** shaded blocks indicate the number of residents that live AND work in the same planning district.

Table 9: Daily Commuter Volumes by Planning District – New Castle County—2000

CCD to CCD Flows	Work Place	Wilmington	Brandywine	Lower Christina	Piedmont	Pike Creek	Greater Newark	Upper Christina	Greater New Castle	Cent. Pencader	Red Lion	MOT
Residence ↓												
Wilmington		12,597	3,546	1,517	1,063	598	1,738	1,438	3,096	285	60	161
Brandywine		7,027	12,704	1,713	1,227	454	1,435	1,338	2,663	254	96	110
Lower Christina		3,894	1,596	3,504	739	1,046	1,271	1,131	2,276	219	64	177
Piedmont		2,594	1,629	1,227	2,689	749	1,094	880	1,076	138	55	59
Pike Creek		4,014	1,774	2,545	1,104	2,917	2,260	1,877	2,233	940	173	162
Greater Newark		3,931	2,066	1,787	1,021	1,643	11,617	3,201	2,932	834	252	292
Upper Christina		1,750	1,053	1,003	298	519	2,236	2,209	1,940	333	78	123
New Castle		6,742	2,926	2,792	931	1,130	4,331	3,641	10,883	1,022	478	407
Cent. Pencader		2,164	1,356	1,079	342	451	2,953	1,889	2,515	1,440	50	232
Red Lion		287	223	145	31	94	314	260	515	71	280	71
MOT		1,553	825	831	207	310	1,551	1,170	1,789	461	299	2,655
County to CCD Flows		Wilmington	Brandywine	Lower Christina	Piedmont	Pike Creek	Greater Newark	Upper Christina	Greater New Castle	Cent. Pencader	Red Lion	MOT
Kent,DE		488	487	47	74	236	733	422	1,212	248	262	934
Sussex,DE		181	59	141	24	14	124	104	274	73	24	111
Chester,PA		2,587	2,887	1,261	423	365	1,698	1,048	1,033	318	44	144
Delaware,PA		1,943	3,004	589	344	188	496	716	940	68	68	82
Phila.PA		590	498	80	22	4	103	145	246	19	15	0
Cecil,MD		1,633	880	1,194	446	425	4,842	1,319	1,738	1,010	140	278
Camden, NJ		293	274	108	8	0	84	95	254	26	18	10

Looking more closely at the commuting patterns within the county, we can get a rough idea on the travel patterns of the county and how far people live from their places of employment. **Table 10** shows the percentage of working residents that live and work in the same planning district.



Table 10: Workers that Live and Work in the Same Planning District—2000

Planning District	Total Working Residents	% that live and work in the same planning district
Wilmington	29,077	43.3%
Greater Newark	33,574	34.6%
Brandywine	38,377	33.1%
New Castle	39,923	27.3%
Lower Christina	17,266	20.3%
Piedmont	13,845	19.4%
MOT	14,182	18.7%
Upper Christina	13,542	16.3%
Pike Creek	22,068	13.2%
Red Lion	2,763	10.1%
Cent. Pencader	17,158	8.4%

New Castle County Avg.
26.2%

Some observations include:

- About 63,500 (26%) of the working residents in New Castle County live and work within the same planning district.
- The more densely settled areas of Wilmington, Newark and Brandywine areas have a relatively high percentage of workers that live and work in the same district. All three have at least 1/3 of their working residents are employed in the same district.
- The districts of Central Pencader, Red Lion and Pike Creek have a much smaller percentage of workers that live in the same district.

Cecil County Planning Districts

While New Castle County has a relatively wide area of employment, with several planning districts having large amounts of jobs, Cecil County is more centralized. The districts of Elkton and North East hold nearly 2/3 of the total jobs in the county. **Table 11** shows the 2000 planning district-to-planning district work flows for Cecil County. It also shows some selected counties (shown in **yellow**) that have a significant amount of workers that enter Cecil. The **green** shaded blocks indicate the number of residents that live AND work in the same planning district.

Table 11: Daily Commuter Volumes by Planning District – Cecil County—2000

CCD to CCD Flows	Work Place	Cecilton	Chesapeake City	Elkton	Fair Hill	Calvert	North East	Port Deposit	Rising Sun	Oakwood
Residence ↓										
Cecilton		335	120	260	4	0	105	29	40	0
Chesapeake City		85	420	470	45	4	125	4	25	0
Elkton		54	115	3,439	245	90	574	123	145	0
Fair Hill		15	0	675	335	40	144	49	20	0
Calvert		10	40	570	80	220	140	80	90	0
NorthEast		50	95	1,715	160	130	1,910	340	210	10
Port Deposit		14	20	400	90	29	335	730	95	14
Rising Sun		20	25	455	79	110	259	220	775	25
Oakwood		0	0	170	40	35	60	90	125	200
County to CCD Flows										
		Cecilton	Chesapeake City	Elkton	Fair Hill	Calvert	North East	Port Deposit	Rising Sun	Oakwood
New Castle, DE		75	113	2,055	395	18	361	166	111	0
Kent, DE		26	33	40	4	0	71	38	25	0
Harford, MD		20	0	454	18	24	325	635	4	18
Kent, MD		43	45	109	32	0	25	4	123	0
Baltimore, MD		5	0	87	0	0	128	161	18	0
Baltimore City, MD		4	0	10	0	0	0	10	0	10
Chester, PA		8	28	233	47	4	78	62	68	4

Looking more closely at the commuting patterns within the county, Cecil has a lower percentage of residents that live and work in the same district than New Castle. **Table 12** shows the percentage of working residents that live and work in the same planning district.

Table 12: Workers that Live and Work in the Same Planning District—2000

Planning District	Total Working Residents	% that live and work in the same planning district
Elkton	10,833	31.7%
NorthEast	9,291	20.6%
Cecilton	1,808	18.5%
Rising Sun	4,502	17.2%
Chesapeake City	2,539	16.5%
Port Deposit	4,870	15.0%
Oakwood	1,761	11.4%
Calvert	2,098	10.5%
Fair Hill	4,035	8.3%

Cecil County Avg. 20%

Some other observations include:

- About 8,360 (20%) of the working residents in Cecil County live and work within the same planning district.
- The Elkton and Northeast planning districts have both the two largest absolute and percentage totals for residents who live and work in the same planning district.

Daily commuter flows For Key Areas in the WILMAPCO region

CCD Flows to Wilmington—The City of Wilmington is the largest concentration of employment in the region. Its large and diverse job base brings workers from areas well beyond its boundaries. **Table 13** illustrates the residence of workers that commute to Wilmington on a daily basis. **Figure 2** is a graphic of these locations.

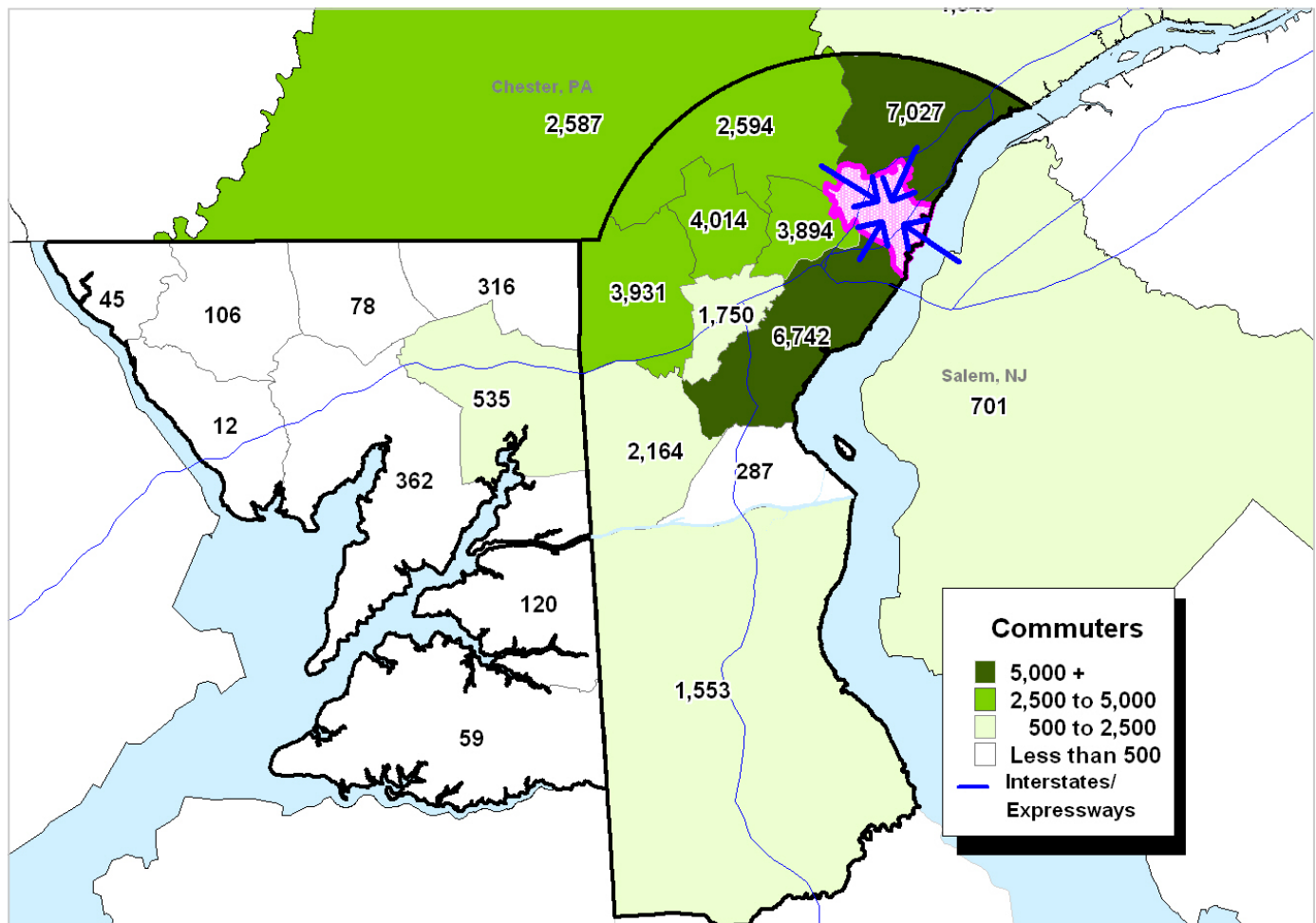
Some observations include:

- About 53% of workers in Wilmington come from the four districts of Brandywine, Pike Creek, New Castle and Wilmington.
- Roughly 5,900 workers commute to Wilmington from the state of Pennsylvania, or about 10% of its workers. Of the 5,900, 3/4 come from Chester and Delaware Counties
- A total of 1,633 workers go from Cecil County to Wilmington daily. Roughly 1/3 come from the Elkton planning district.
- Since 1990, the number of commuters that live and work within Wilmington has fallen from 16,688 (24% of the workers to 12,597 (22% of the workers)

Table 13: Daily Commuter Volumes by to Wilmington—2000

Planning District / County of Residence	Workers	% of Commuters to Wilmington
Wilmington CCD	12,597	22.0%
Brandywine CCD	7,027	12.3%
New Castle CCD	6,742	11.8%
Pike Creek CCD	4,014	7.0%
Greater Newark CCD	3,931	6.9%
Lower Christina CCD	3,894	6.8%
Piedmont CCD	2,594	4.5%
Chester Cty, PA	2,587	4.5%
Cent. Pencader CCD	2,164	3.8%
Delaware Cty, PA	1,943	3.4%
Upper Christina CCD	1,750	3.1%
MOT CCD	1,553	2.7%
Salem Cty, NJ	701	1.2%
Elkton CCD	535	0.9%
Red Lion CCD	287	0.5%
Others	4,828	8.4%

Figure 2: Origin of Workers to Wilmington—2000



CCD Flows from Cecil County— Between 1990 and 2000, Cecil County has experienced a boom in household and population growth. As discussed before, in 2000 about 23,600 of its roughly 42,000 working residents employed outside of the county. This total represents an increase of about 25% in cross border workers since 1990 (18,600 workers who workers outside of Cecil County) . So, where specifically are they heading? **Table 14** illustrates the destination of residents that commute out of Cecil County on a daily basis. **Figure 3** is a graphic of these locations.

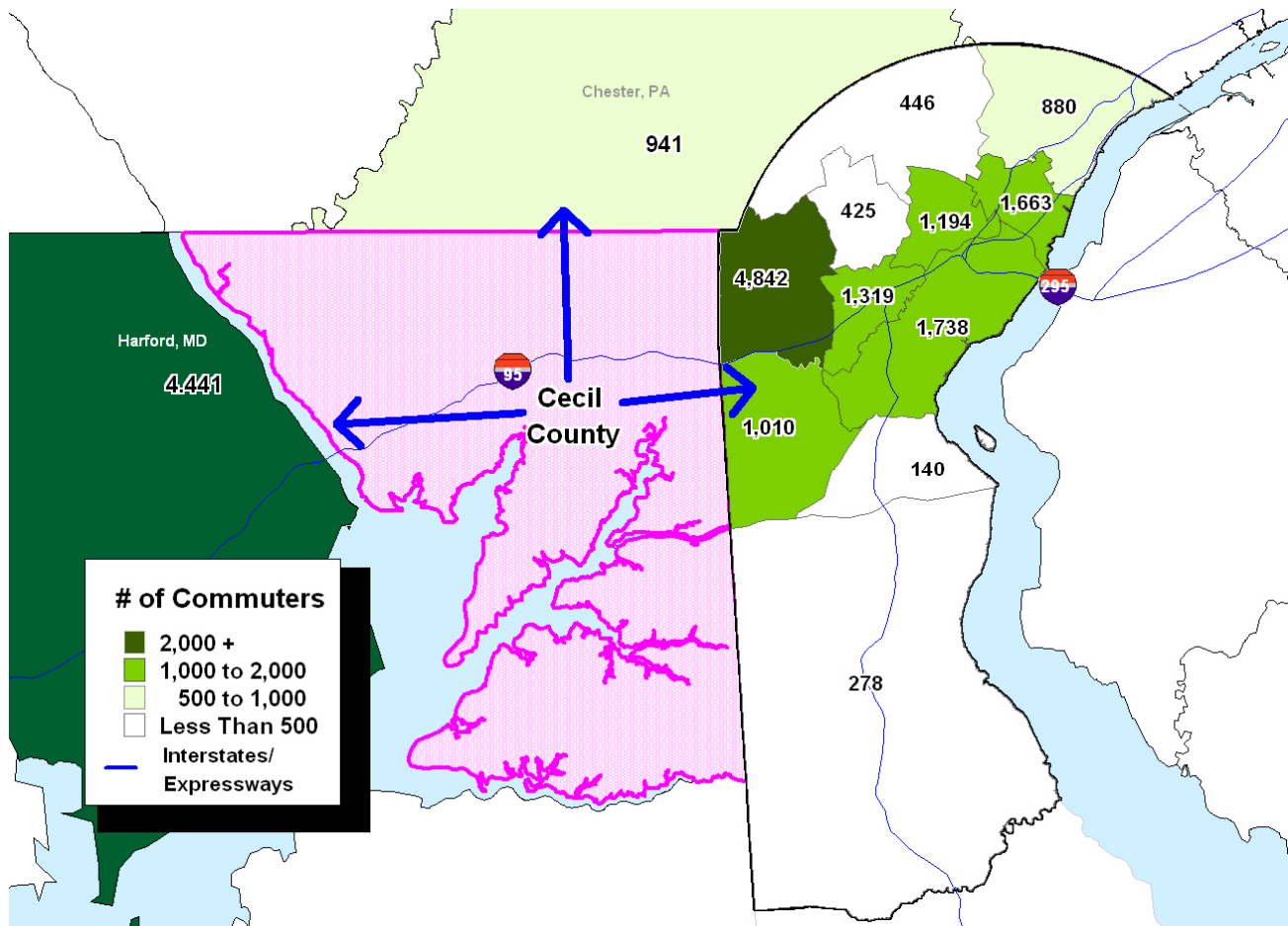
Some observations include:

- Of the over 23,600 residents that work out of the county, about 9,300 (40%) of them go to two areas; the Newark planning district and Harford County, MD
- The remaining areas in Delaware that attract significant amounts of Cecil residents include the planning districts of Wilmington, Lower & Upper Christina, New Castle and Central Pencader These comprise about 30% of the workers leave Cecil on a daily basis.
- Since 1990, the greatest increases from Cecil County have occurred in flows to Harford County (3,117 in 1990 to 4,441 in 2000) and Greater Newark (3,984 in 1990 4,842 to in 2000)
- The Central Pencader district grew the largest in terms of percentage, growing from 193 workers in 1990 to 1,010 in 2000, an 81% increase.

Table 14: Daily Commuter Volumes from Cecil County—2000

Planning District / County Destination	Total Workers	% of workers that work outside of Cecil County
Greater Newark CCD	4,842	20.5%
Harford, MD	4,441	18.8%
New Castle CCD	1,738	7.4%
Wilmington CCD	1,663	7.0%
Upper Christina CCD	1,319	5.6%
Lower Christina CCD	1,194	5.1%
Cent. Pencader CCD	1,010	4.3%
Chester Cty, PA	941	4.0%
Brandywine CCD	880	3.7%
Baltimore Cty, MD	876	3.7%
Baltimore City, MD	546	2.3%
Piedmont CCD	446	1.9%
Pike Creek CCD	425	1.8%
MOT CCD	278	1.2%
Red Lion CCD	140	0.6%
Others	2,870	12.2%

Figure 3: Destination



CCD Flows to Newark— This is another large center of employment in New Castle County. With major employers such as the University of Delaware, Daimler-Chrysler and MBNA, it also attracts a wide variety of workers. **Table 15** illustrates the destination of residents that commute into the Newark planning district on a daily basis. **Figure 4** is a graphic of these locations.

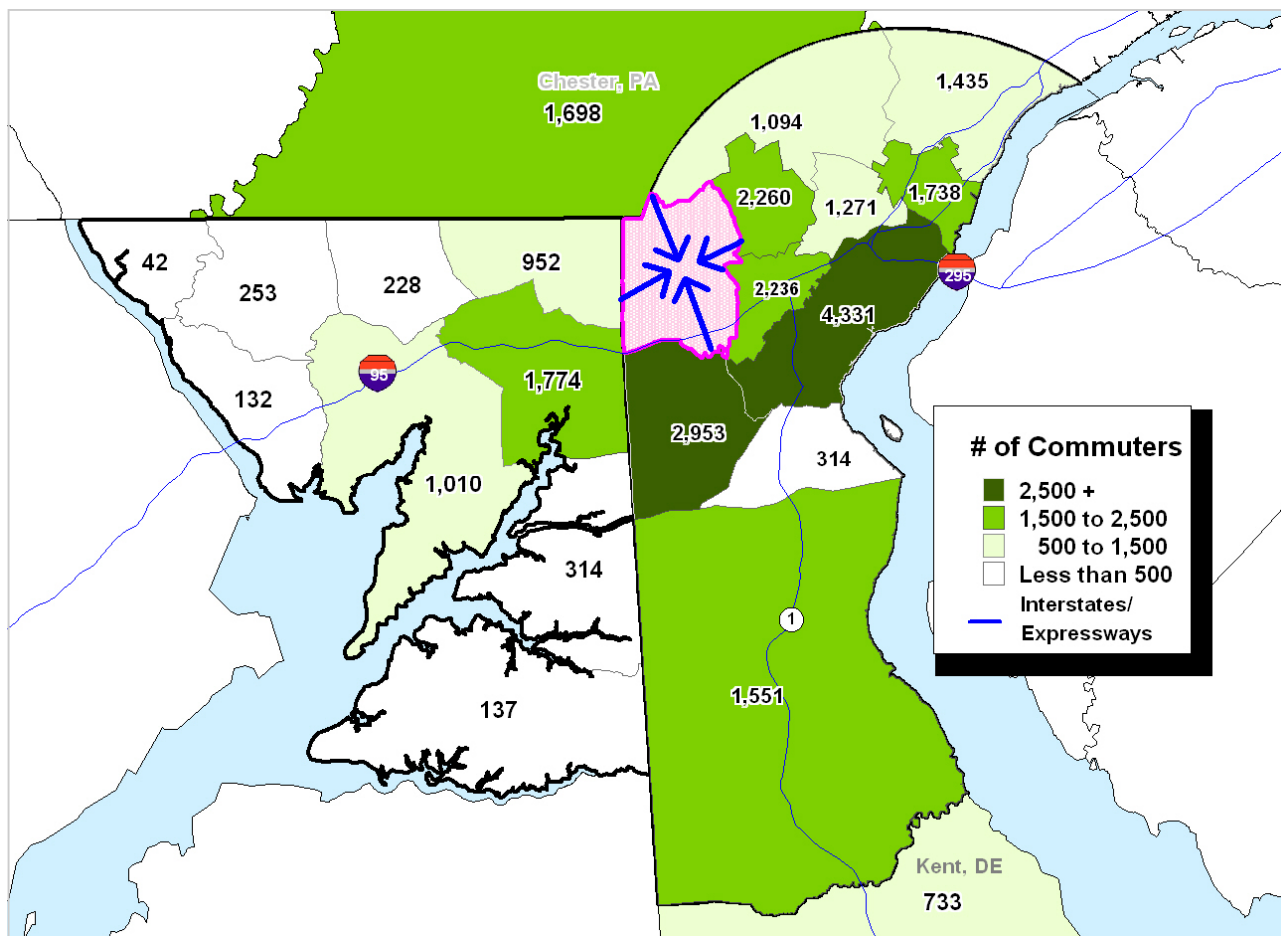
Some observations include:

- Outside of having a large percentage of workers living within the planning district (28.8%), the rest of the nearly 28,700 workers are spread throughout several planning districts in the region.
- About 4,800 (12%) of the workers in Newark come from Cecil County, with about 1/2 of them coming from the Elkton and Fair Hill planning districts.
- A total of 2,400 workers commute to Newark from the remainder of Delaware south of the C&D Canal, including the MOT Planning District, Kent and Sussex Counties. This represents about 6% of the districts workers.
- Since 1990, the area with the largest increase in commuters to Newark is the New Castle planning district, growing from 2,886 commuters in 1990 to over 4,300 in 2000.

Table 15: Daily Commuter Volumes by to Newark—2000

Planning District / County of Residence	Workers	% of Commuters to the Newark Planning District
Greater Newark CCD	11,617	28.8%
New Castle CCD	4,331	10.7%
Cent. Pencader CCD	2,953	7.3%
Pike Creek CCD	2,260	5.6%
Upper Christina CCD	2,236	5.5%
Elkton, MD CCD	1,774	4.4%
Wilmington CCD	1,738	4.3%
Chester Cty, PA	1,698	4.2%
MOT CCD	1,551	3.8%
Brandywine CCD	1,435	3.6%
Lower Christina CCD	1,271	3.2%
Piedmont CCD	1,094	2.7%
Northeast, MD CCD	1,010	2.5%
Fair Hill, MD CCD	952	2.4%
Kent Cty, DE	733	1.8%
Red Lion CCD	314	0.8%
Others	3,337	8.3%

Figure 4: Origin of Workers to Newark Planning District—2000



CCD Flows from Chester County, PA— Over the past several years, the lower townships of Chester County, Pennsylvania have become a popular location for workers in New Castle County to purchase housing. According to the Census, commuting from Chester County into the WILMAPCO region has increased by 25% from 10,800 in 1990 to 13,553 in 2000. **Table 16** illustrates the destination of residents that commute into the Newark planning district on a daily basis. **Figure 5** is a graphic of these locations.

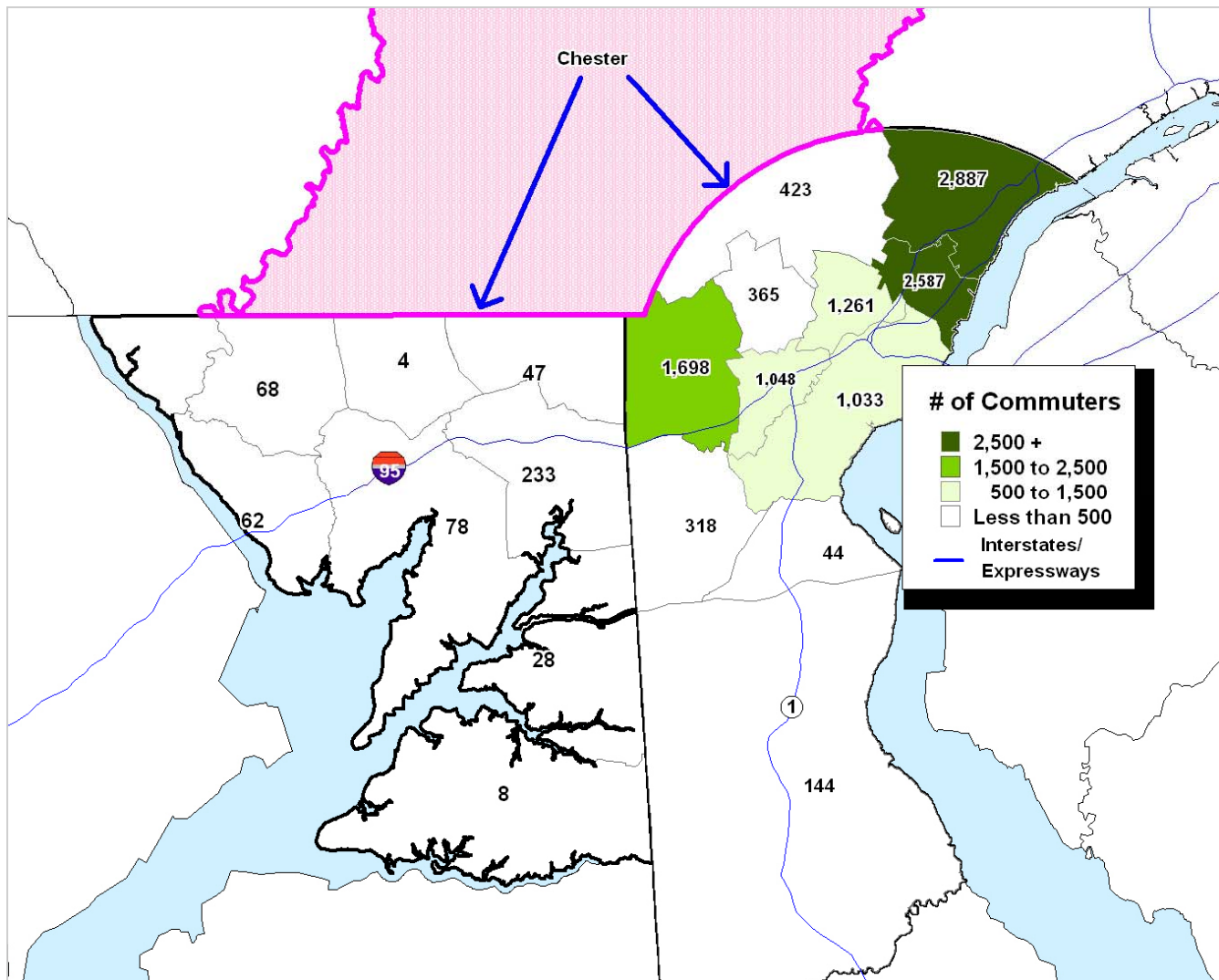
Some observations include:

- The planning districts of Wilmington and Brandywine see the bulk to the Chester County commuters, seeing around 5,474 (42%) commuters daily.
- Since 1990, the number of commuters from Chester County to Wilmington has fallen from 3,168 in 1990 to 2,587 in 2000.
- Since 1990, the number of commuters to Brandywine has increased from 2,290 in 1990 to 2,887 in 2000.
- About 89% of the commuters from Chester County work in the 6 planning districts of Wilmington, Brandywine, Newark, Upper & Lower Christina and New Castle.

Table 16: Daily Commuter Volumes from Chester County—2000

Planning District Destination	Total Workers	% of workers that work in the WILMAPCO Region
Brandywine CCD	2,887	22.4%
Wilmington CCD	2,587	20.1%
Greater Newark CCD	1,698	13.2%
Piedmont CCD	1,513	11.7%
Lower Christina CCD	1,261	9.8%
Upper Christina CCD	1,048	8.1%
New Castle CCD	1,033	8.0%
Pike Creek CCD	365	2.8%
Cent. Pencader CCD	318	2.5%
Elkton, MD CCD	233	1.8%
MOT CCD	144	1.1%

Figure 5: Destination of Workers from Chester County—2000



CCD Flows from MOT

With the high rate of current and future residential growth in the MOT area, it is very important to be aware of where the residents are working. Between 1990 and 2000, the total number of workers in the MOT planning district has risen 71% from 8,300 to over 14,000. It is helpful to have an understanding of the common destinations surrounding our region can help shape future roadway/transit improvements. **Table 17** illustrates the destination of residents that commute out of the MOT planning district on a daily basis. **Figure 6** is a graphic of these locations.

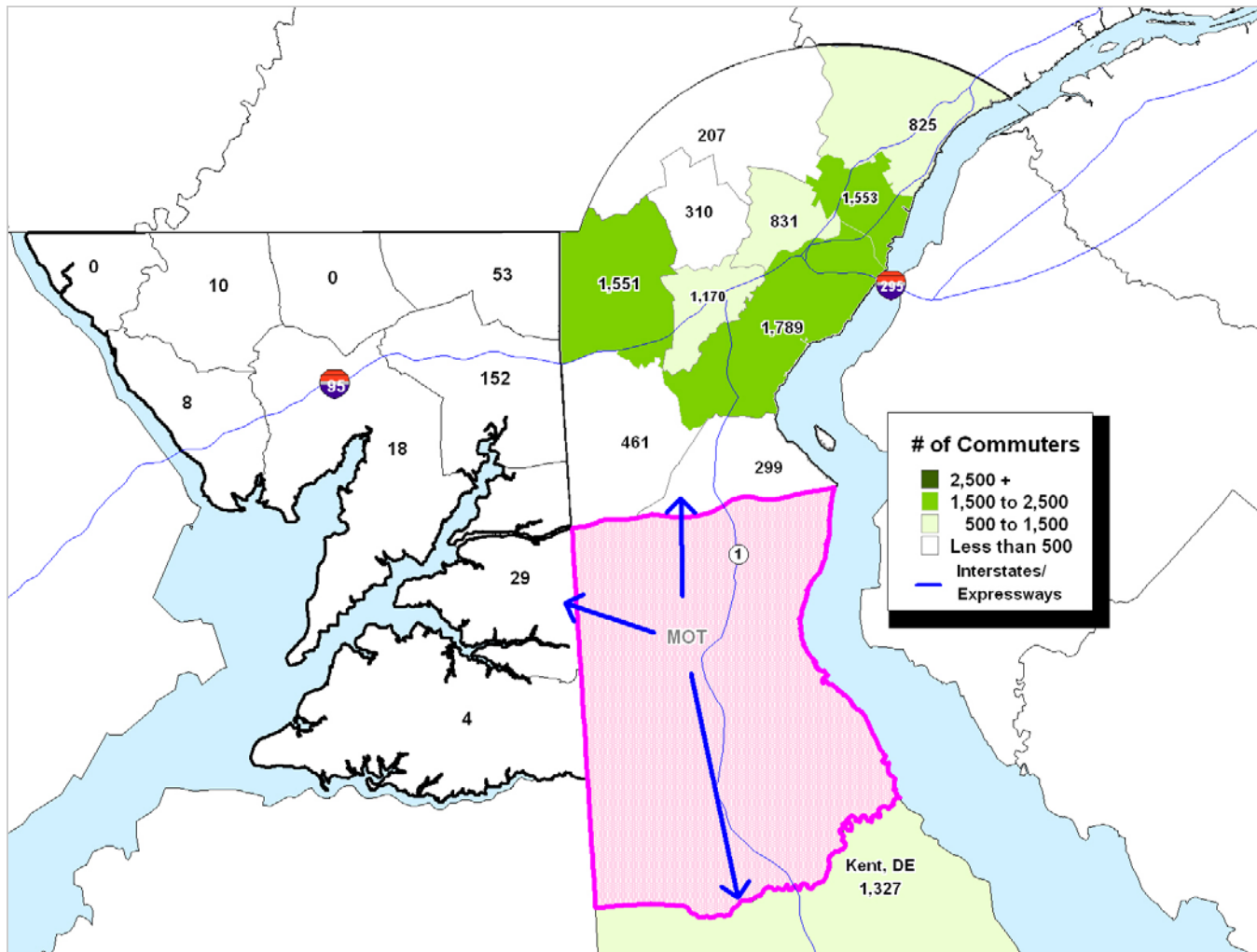
Some observations include:

- The destinations of commuters from the MOT planning district are somewhat diverse, with no real concentration of commuters to a specific destination
- The number of commuters traveling to the Wilmington and New Castle planning districts have both doubled since 1990, rising from roughly 1,600 in 1990 to over 3,300 daily commuters in 2000.

Table 17: Daily Commuter Volumes from MOT—2000

Planning District Destination	Total Workers	% of workers that work in the WILMAPCO Region
MOT CCD	2,665	18.8%
New Castle CCD	1,789	12.6%
Wilmington CCD	1,553	11.0%
Greater Newark CCD	1,551	10.9%
Kent Cty, DE	1,327	9.4%
Upper Christina CCD	1,170	8.2%
Lower Christina CCD	831	5.9%
Brandywine CCD	825	5.8%
Cent. Pencader CCD	461	3.3%
Pike Creek CCD	310	2.2%
Red Lion CCD	299	2.1%
Piedmont CCD	207	1.5%
Elkton, MD CCD	152	1.1%

Figure 6: Destination of Workers from Chester County—2000



Methodology

The CTPP data used in this report was collected during the 2000 Census. Those who received the long form were asked more detailed questions including "How did this person usually get to Work last week". All data was processed and packaged into the Census Transportation Planning package.

Other Notes regarding the CTPP:

1) Rounding - The estimates of workers in this special tabulation have been rounded. Values from 1 through 7 have been rounded to 4. Values of 8 or greater have been rounded to the nearest multiple of 5, unless the estimate already ended in 5 or 0, in which case it was not changed. As a result, estimates derived from these files may not be identical to comparable figures contained in other census products. The greater the number of records from these files that are summed for comparison purposes, the more rounding error there may be and the greater the difference between the estimates from different sources may be. Due to rounding countywide commuter flows may not equal total flows at lower levels of geography

2) Workers - In this tabulation, workers are defined as people 16 years and older who were employed and at work during the Census reference week. This is the week prior to when the questionnaire was filled out, for most people the last week of March 2000. Workers include both civilians and people in the Armed Forces, and part-time workers as well as full-time. The concept of a worker excludes people who had a job but did not work during the reference week. Examples of people in the excluded category would be those who didn't work during the reference week because they were sick, on vacation, laid off, or otherwise absent from work for the week. Nationwide, about 2 percent of employed persons fell into this category.

3) Place of work (POW) allocation - Allocation refers to the processes we use to impute or assign data in cases where data are missing. The POW allocation system used in Census 2000 assigns state, county, and place codes to every worker, but does not always assign a tract code. An extended POW allocation system, designed to impute additional workers to the tract and block level, was developed for the Census Transportation Planning Package 2000. STP64 includes the extended allocation results, but some workers could still not be allocated to a particular census tract. They show up in STP64 as working in tract 999999. They should be considered to be working in the state, county, and place indicated in the record, but their particular tract of work could not be determined nor allocated reliably. It is also important to note that the sub-county codes assigned during regular census processing were sometimes changed by the extended allocation system, in order to place the worker in an appropriate tract. This means that the number of workers working in some places and minor civil divisions derived from the STP64 files may not agree with comparable estimates from other census sources. Lastly, users are advised to examine the number of workers in each flow that were allocated to that particular tract of work (chars. 47-52). Where that number is a large proportion of the total in the flow, users should exercise caution and realize that the allocated data are less accurate and more likely to deviate from actual facts than the directly geocoded data.

Additional information:

Questions about STP64 or requests for additional information should be referred to the Journey to Work and Migration Statistics Branch at (301) 763-2454.

The Wilmington Area Planning Council (WILMAPCO) is a Metropolitan Planning Organization serving New Castle County, DE and Cecil County, MD. Our mission is to serve the citizens and stakeholders of the region by carrying out a comprehensive, continuing and cooperative regional transportation planning process consistent with federal transportation legislation. This series of data reports is designed to summarize various data and information about our region to allow decision makers and members of the public to better understand the changes within our region. This document was created by the WILMAPCO Demographics and Data Subcommittee. For more information on this and other data reports, please visit our website at <http://www.wilmapco.org/data/index.htm>

Other WILMAPCO Data Reports:

Report #1: Regional Population Changes:
1980-2000, September 2004

Report #2: Changes in Regional Population &
Household Characteristics 1980-2000



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