South Jersey Transportation Planning Organization

Regional Transportation Plan 2040

Technical Appendix #1: Demographic Forecast

SJTPO

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SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION

2040 DEMOGRAPHIC FORECAST

I. PURPOSE AND METHODOLOGY

Introduction and Purpose

The South Jersey Transportation Planning Organization (SJTPO) solicited proposals for population and employment forecasts in May of 2010. The *Center for Regional and Business Research* (*CRBR*) at Atlantic Cape Community College was awarded the contract in November 2010. Completion, originally scheduled for June 2011 was extended to July 2011. The *CRBR* performed the previous set of forecasts completed in 2006. The project proposal can be found in **APPENDIX A**.

The forecasts requested in the RFP, and later amended in Appendix 1 of the Scope of Services, serve as input to SJTPO Regional Transportation Plan, South Jersey Travel Demand Model, and the Environmental Justice Analysis that are used for regional transportation planning.

As compared to the 2006 projections, this project differed in two important ways. First, the availability of Census 2010 data brought some of the data elements up to the very recent past. In 2006, the most recent data was already six years old in most instances. In addition, the American Community Survey (ACS) was not yet well-developed. However, in the current set of projections, historical data from 1990 to 2010 could be found in both the ACS conducted in 2007 – 2009 and the first releases of the 2010 Census.

The second important difference is the timing of this project in the economic cycle that has now lasted from 2006 to 2011. Many of the data elements show distinctly different patterns from 1990 to 2005 and from 2006 to 2010. The onset of the 'Great Recession' caused many of the trends to reverse themselves in the latter period, especially compared to the extremely expansionary period of 1998 – 2006.

In short, in the field of economic forecasting it becomes necessary to decide whether or not the latter pattern is the long-term norm or if the older, higher growth period is more representative of the future. This is part of the justification for the use of a consensus forecast approach as will be explained in more detail below. The consultation with the projections of a number of third-party vendors gives a more balanced perspective than one done based solely on a past performance which is inconsistent. They have the ability to gather more input from a wider variety of stakeholders and focus on the bigger picture rather than an individual region or county.

Due to the large volume of both historical and forecast data, this report presents only a small fraction of the project's required information. The tables and graphs in this report are generally for the SJTPO Region or counties. The data report tables in their entirety were delivered to the SJTPO in electronic format, mostly in spreadsheet format.

Scope of Work Components

The forecasts presented in this report were prepared at the following geographic levels: SJTPO Region (which includes Atlantic, Cape May, Cumberland and Salem counties), county, municipal and, where needed, the Traffic Analysis Zone (TAZ) level. The time periods encompassed included historical data for 1990 to the latest date of availability, and forecasts for 2015 to 2040 in five-year increments.

The following tasks were included in the Scope of Work:

1. Core Data Requirements:

The core data elements were summarized in the worksheet found in **APPENDIX C**. These included data components from four general categories: employment, population, households and housing units to be forecast for the geographies and time periods mentioned above. Parts of the worksheet were amended in the course of the project to better match the model input requirements of the SJTPO and their consultants.

In addition, several of the data elements were required to be provided for year-round as well as summer seasonal periods. This information is important due to the very distinct seasonal transportation patterns in much of the SJTPO Region, especially in Atlantic and Cape May counties.

2. Data Collection Component:

The collection, sources and analysis of the data needed to be transparent to the SJTPO staff. Much of the baseline data is available from the New Jersey Department of Labor State Data Center found at: http://lwd.dol.state.nj.us/labor/lpa/LMI_index.html. This site has the data from Census 1990 to the current Census 2010 datasets as available. In addition, the results from the American Community Survey (data was used where Census 2010 was not yet available) are found on that website: http://lwd.dol.state.nj.us/labor/lpa/census/acs/acs_index.html.

Where more detailed reports were needed for income, data was found at the site of the Bureau of Economic Analysis: http://www.bea.gov/national/index.htm#personal. Finally, the wage and employment data is found at the site of the Bureau of Labor Statistics: http://www.bls.gov/bls/naics.htm.

In order to complete the seasonal components of the forecasts, information from the Economic Census 2007 was used. This is reported at the Bureau of the census website: http://www.census.gov/econ/census07. In addition, in order to estimate the number of visitors in the summer months the continuous volume traffic counts on a number of county roads were used to compare summer with winter volume. These counts also give weekday/weekend breakdowns. These counts are found at: http://www.state.nj.us/transportation/refdata/roadway/traffic_counts/.

3. Forecasting Component:

The forecasting methodology is explained in some detail in following sections. However, the principle method used for this project was a two-stage process. First, an overall forecast of county-level population and employment was chosen from a set of third-party projections from credible vendors with long track records in this area. These vendors produce model-based forecasts which are constrained and compatible with state and regional forecasts. The services

used for his project included: Moody's Economics, Woods & Poole Economics, and the New Jersey Department of Labor.

In the second stage, the data elements required for this project were projected to be consistent with the overall employment and population levels from the first stage. Where other data elements were included with the third-party product, growth rates relative to the overall employment or population growth rates were used to further assure consistence. Otherwise, the historical growth rates were used by the *CRBR* to make projections. Where disaggregation to the municipal or lower levels was required, the trends in their historical shares of county-level growth were used.

4. Reporting Component:

In Chapter 2 of this report are comprehensive profiles of the SJTPO Region and each county highlighting many of the final core data elements. However, the complete, detailed data at the municipal and TAZ levels is reported in electronic files with the exception of the base case employment and population projections which are reported in **APPENDIX E**.

The results of the project are also reported in two presentation formats:

- A set of brochures highlighted the demographic trends in the SJTPO Region and each county. These five brochures of four pages each are found in **APPENDIX F**.

- A Powerpoint presentation which is delivered in an electronic file and on a template which can be adapted for any given audience using charts, tables, text and maps from this report and/or the electronic files. The delivered presentation is a general introduction into the purpose, results and use of the projections.

In addition, members of the *CRBR* team have presented the results in front of the Technical Advisory Committee (TAC) on several occasions. Input and comments from this group were proactively gathered through email and at meetings. All concerns were addressed with data and or explanations. Several revisions were made to address the concerns of TAC members. The dates of meetings and the progress reports distributed to the TAC are found in **APPENDIX B**.

5. Mapping Component:

Deliverables to the SJTPO include a set of ArcGIS shapefiles that can accommodate the primary data elements. In addition, a set of shapefiles used to map TAZs and environmentally sensitive land were also developed. The profile in Chapter 2 as well as the brochures and Powerpoint presentation utilize maps with charts and graphs to illustrate the major trends developed in this project.

6. Scenario Building Component:

The development of low-growth and high-growth scenarios for this project followed the guidelines found in the *FHWA Scenario Planning Guidebook* made available in September of 2010 by the U.S. Department of Transportation. It can be found at: **http://www.fhwa.dot.gov/planning/scenplan/guidebook/**. The results of this component are reported in Chapter 3.

The process followed for this project included the following steps:

- Identification of stakeholders in the transportation system, both planners and users.
- Development of lead questions to be made available before the scenario planning session.
- Inviting potential participants and outlining their role and purpose in the process.
- Conducting the focus group exercise.
- Recording comments and ideas.
- Organizing the input for use in developing a set of scenario projections.

The materials used in this process and the list of attendees are found in **APPENDIX D** of this report.

7. Part B: Disaggregation:

The original list of required data elements called for the disaggregation of many of the data elements into either seasonal components and/or greater levels of geographic disaggregation into TAZs and census tracts. However, in some instances the transportation models were able to perform the disaggregation internally or they needed the data in a different level of reporting

rather than in greater geographic detail. For instance, the employment data disaggregated by NAICS proved more useful than the four category decomposition originally requested.

However, in order to divide municipal-level data into TAZ-level data, each TAZ was defined as a % of the land area of the municipality in which it is located. This equivalency table can be used with any of the required data elements.

The seasonal decompositions were done using monthly information where possible to identify seasonal patterns. This was done for population and employment. In the case of population, monthly data is not available. However, household occupancy for seasons is reported and this was used to estimate summer populations.

In addition, the number of daily visitors is important for transportation planning purposes. These were also estimated using Economic Census data on campgrounds, motels/hotels, marinas and commuting employees. Finally, daily trips were used by comparing the winter continuous volume counts on roadways with those from the summer months. This methodology proved useful for the coastal counties of Atlantic and Cape May. However, after local review and some attempted modifications, the estimates for Salem and Cumberland counties were too high. This was caused by traffic counts that most likely reflected trips by those passing through the counties on the way to the shore. Further analysis involving surveys of visitors and/or more traffic pattern information would be necessary to remedy this problem. **As a result, the seasonal visitor counts for these two counties are reported but acknowledged to need further study.**

For employment, quarterly data at the municipal level by NAICS is available on a very limited basis and soon will not be reported by the Bureau of Labor Statistics. However, using shares by industry by municipality in the years reported, the county numbers which are and will continue to be reported monthly were used to estimate the municipal levels in all years. Unless otherwise specified, the annual population and employment levels are the 12-month averages as distinct from seasonal data.

Methodology

The primary source of the forecasts, as stated above, is the compilation of three independent forecasts acquired from reputable, third-party entities. These included the New Jersey Department of Labor, Woods & Poole Economics, Inc. and Moody's Economy.com. All have been preparing forecasts at the county level for many years. The NJDOL forecast ended in 2028 and was extended using its trend growth rate.

Why are third party forecasts used for the basis of the county projections in this study? In reality, the economic patterns that are observed at the county-level are strongly influence by the performance of the state, regional and national economies. This is particularly true for primary and secondary industries that are not solely dependent on local spending. The models used at the macro-level constrain the county-level projections and prevent them from being unrealistic considering their economic ties to the external environment. In addition, these third-party vendors use industry-based models which allow areas dependent on growth industries to outperform those with stagnant or declining industries. This accounts for the differing growth rates between counties in the SJTPO region.

At the current time, there is no public institution in Southern New Jersey which has developed and maintained a model of the region. Such a model would allow for the development of projections based on local assumptions and scenarios. However, even these would need to be reconciled with baseline forecasts of the external economy.

These third-party forecasts were reviewed by the *CRBR* and compared to the latest available estimates to examine trends to date. Summaries of the population forecasts are given in **TABLE 1** below. As the table illustrates, there is a varying amount of disagreement from county to county in long-term trends. This is not surprising and offers a range for planning considerations. The forecast chosen as the baseline for this project is highlighted.

TABLE 1

SJTPO 2040 DEMOGRAPHIC FORECAST						
CONCENSUS FORECASTS, POPULATION						
CRBR, 2011						
Population						
	1990	2000	2010	2020	2030	2040
Atlantic County						
WOODS & P00LE	225,431	252,980	275,531	300,924	327,499	354,474
MOODY'S ECONOMICS	225,431	253,038	273,240	293,041	311,994	340,281
NJDOL	225,431	253,038	274,549	291,680	313,150	341,542
Cape May County						
WOODS & P00LE	95,368	102,308	97,919	108,723	119,954	131,338
MOODY'S ECONOMICS	95,368	102,307	97,265	98,433	100,485	101,541
NJDOL	95,368	102,307	97,265	93,920	95,329	96,330
Cumberland County						
WOODS & P00LE	138,366	146,351	157,753	163,052	168,993	175,106
MOODY'S ECONOMICS	138,366	146,362	158,945	168,471	177,631	188,607
NJDOL	138,366	146,362	156,898	168,080	177,532	188,503
Salem County						
WOODS & P00LE	65,383	64,216	66.856	70,717	74,856	79,078
MOODY'S ECONOMICS	65,383	64,213	66,804	71,678	76,425	82,741
NJDOL	65,383	64,213	66,083	67,440	70,535	76,364

Highlights of County Growth Patterns:

The rationale for each of the county forecasts chosen for this project is summarized below:

Atlantic County:

Once again, the timing of this project leaves much uncertainty between the relatively high growth in the 1990 – 2006 period and the slow or negative growth for much of the SJTPO Region in the recessionary years that now persist. This is particularly problematic in Atlantic County where the fate of one industry is considered the primary variable in projecting long-term population. In this case the mid-growth forecast of Moody's was chosen, again with local input. While the casino industry may return to solid financial health, there is not an expectation that it will expand its

employment substantially to spur population growth to the upper projection of 354,474. The Moody's estimate was used with and adjustment of the start point to the Census 2010 level.

In its May 2011 Atlantic City Metro Report (Atlantic County is designated as the Atlantic City Metropolitan Statistical Area), Moody's Analytics stated that:

> *Atlantic City's recovery will gradually pick up steam…and will accelerate in 2012 when the new Revel casino is expected to jump-start the gaming industry…..With few drivers outside of gaming, tourism, slow population growth, and an expensive cost structure, ATA's long-term expansion will trail the national average*

In Moody's index of living and business costs, the area was at 113% and 109% respectively of the national averages. The high costs cited included energy, the business tax burden, and unit labor costs.

Cape May County:

Of the four counties, it is interesting that the greatest variation is in the forecasts for Cape May County which had one of the lowest growth rates in the country in the 2000 – 2010 decade with an actual decline from 102,326 to 97,265. The high projection of 131,338 in 2040 from Woods & Poole implies a return of substantial growth. Using local input and past trends, the Moody's forecast was used with the expectation that the current decline would be reversed but growth would be minimal.

In its May 2011 Ocean City Metro Report (Cape May County is designated as the Ocean City Micropolitan Statistical Area), Moody's Analytics stated that:

> *Location amid densely populated urban areas will serve as a long-term driver for tourism, but leisure/hospitality will muster a pace of growth that is below the national average. OCE will benefit from an influx of retirees, supporting growth in healthcare. However, low industrial diversity and high relative business costs will restrict growth. OCE will be a below-average performer over the long-run.*

In Moody's index of living and business costs, the area was at 111% and 102% respectively of the national averages. The high costs cited included energy and the business tax burden. Energy costs exceeded 150% of the national average in 2009.

Cumberland County:

For Cumberland County, the forecast needed to reflect the growth possibilities that began to manifest themselves in the 1990 – 2010 period, especially in the five years prior to the recession. With the Moody's and NJDOL projections being very similar and incorporating modest growth to reflect this potential, the Moody's projection was used in this case also. The relatively low cost of land and an improving transportation system, particularly the development of a light-rail system as is now being studied, make the two southern counties of Cumberland and Salem possible growth areas for the Philadelphia to Wilmington employment area, including the Route 295 corridor.

In its May 2011 Vineland Metro Report (Cumberland County is designated as the Vineland Metropolitan Statistical Area), Moody's Analytics stated that:

> *The metro area's narrow industrial base leaves the economy vulnerable to major economic or financial shocks….VIN's above-average business costs, relatively low educational attainment, and lack of industrial diversity limits the area's ultimate growth potential. As a result, VIN will grow more slowly than the U.S. average over the long term.*

In Moody's index of living and business costs, the area was at 99% and 104% respectively of the national averages. While these are close to the national averages, in a relatively high-cost state like New Jersey, they present opportunities especially compared to larger urban areas with high land and labor costs. However, for some low value-added industries, the high business costs are expected to be detrimental as "outsourcing trends accelerate, eroding low-tech manufacturing payrolls."

Salem County:

The growth performance of lower Gloucester County in the last expansion and the availability of existing infrastructure in several of the municipalities along the Delaware River and in Salem City are the main reasons for the expectation of growth in Salem County that exceeds the current trend. This expectation is found in all three projections with the high of 82,741 in the Moody's projections. Given the past trends, the lower projections were considered more reasonable. In addition, local input tended to be more conservative. The Woods & Poole projection was used to

acknowledge the potential for growth in the regional economy as lower 295 is developed and growth in Gloucester County continues to put pressure on Salem County.

While the county is not a part of a Metropolitan Statistical Area, the expectation is that growth patterns in the Camden MSA (of which Gloucester County is a part) will influence its economic and demographic future. In its May 2011 Camden Metro Report, Moody's Analytics stated that:

> *Over the long run, CAM will attract new business from Philadelphia, but its concentration of high-value-added industries will remain smaller than the rest of New Jersey's. Therefore, income growth will trail the state's, and job growth will be merely average.*

In Moody's index of living and business costs, the area was at 109% and 91% respectively of the national averages. The low costs cited included labor and office/industrial space while energy costs and taxes remain a drag on business attraction.

The development of employment projections is based on the trends in the population data and the ratio of employment to population in the latest data. The overall employment projections are shown in **TABLE 2** below:

TABLE 2

SJTPO 2040 DEMOGRAPHIC FORECAST							
GROWTH TREND SUMMARY							
CRBR, 2011							
			1990-2000		2000-2010		2010-2040
	1990	2000	Growth %	2010	Growth %	2040	Avg. 10-Yr. Growth %
EMPLOYMENT PROJECTIONS							
SJTPO REGION	258,123	270,754	4.9%	259,782	-4.1%	315,141	7.1%
Atlantic County	135,692	144,875	6.8%	136,800	-5.6%	163,285	6.5%
Cape May County	38,833	42,733	10.0%	41,500	-2.9%	50,750	7.4%
Cumberland County	59,600	60,442	1.4%	59,330	-1.8%	71,055	6.6%
Salem County	23,998	22,704	-5.4%	22,152	-2.4%	30,052	11.9%

In general, the SJTPO Region is projected to have a 6.5% average 10-year growth in population from 2010 – 2040 and a corresponding 7.1% growth in employment. This reflects the region's out-migration of employees to the more densely populated areas in the Philadelphia area. For Atlantic, Cape May and Cumberland counties, the employment projections from Moody's were

used to match the population projection used. In the case of Cape May, this was adjusted downward somewhat due to the 2010 starting points not matching. The actual 2010 levels were used for this level.

The exception to matching population and employment projections was Salem County where the Woods & Poole population projection had an employment projection of 41,000 compared to the current level of just over 22,000. Given the fact that Moody's also expected employment growth to exceed the historical trends, this lower forecast was used. The employment level of 30, 052 in 2040 is an expected increase of 7,900 jobs over a thirty-year period. While local input was mixed between continued very slow growth and some modest growth, the forecast chosen both complements the non-trend levels of population growth and acknowledges the potential for growth given the overall patterns on the western part of the region.

Finally, the municipal level forecasts were based primarily on past trends and their shares of county growth. Local information about particular municipalities, especially potential build-outs and restrictions, was also incorporated. Once again, the difficulty of separating the patterns of the 1990 – 2005 period from the recessionary trends of 2006 -2010 made this task more difficult. Some municipalities that historically showed very slow growth accelerated in the last few years of the expansion. Whether this pattern will resume when modest growth returns to the regional economy is the dilemma.

The next chapter gives a brief summary of each of the more detailed data elements and how they were projected. However, it should be stated that performing a four-county forecast at the municipal level based on available economic and demographic data alone yields estimates that are inherently imprecise. The ability to accommodate the growth that is projected and the relative costs between municipalities change over time. To better project the data elements required for transportation modeling, it is recommended that more information is added to the process. This information would include physical, zoning and environmental factors.

This analysis is more involved and more expensive. However, the trade-off in terms of what it would add to the planning process needs to be considered. While these projections were

developed based on population growth and the ratio of employment and population shares from historical data, this analysis does not allow for new nodes of economic activity emerging in the forecast horizon. This is both a strength and weakness. The likelihood that some will emerge is real. The ability to predict where and for what purpose is difficult.

II. REGIONAL PROFILE

Introduction

This section is intended to give a profile of the SJTPO Region as well as each county. It is also meant to introduce the reader to some of the many data elements produced in the project. The county sections report some of the municipal-level data which is also available in **APPENDIX** E. While not all data elements are reported here, the complete datasets are available from the SJTPO. In addition, a brochure for the region as well as each county was produced and can be found in **APPENDIX F**.

SJTPO Regional Projections

The overall growth of the SJTPO Region is reported below in **TABLE 3**. The regional **population** growth is projected to be 6.5% per decade for the 2010 – 2040 period. Compared to the 8.2% growth experienced in the 1990 – 2000 decade, this represents a slowing of the trend experienced previous to the 2007 – 2009 recession. The 2000 – 2010 decade slowed to 5.2%, influenced heavily by the stagnation of the post-2006 recessionary years.

At the county level, this represents a slower growth trend for Atlantic County than the last twenty years as casino development and retirement homes moderate their growth patterns. Cape May County is expected to reverse its declining population very slowly with a 2.0% 10-year average. Cumberland County continues to grow at the trend of the past twenty years. However, it should be noted that growth in the middle part of the last decade was uncharacteristically high, reinforcing the projection for continued growth. Finally, Salem County is expected to continue to accelerate its growth to 6.6% per decade. The potential for the redevelopment of Pennsville and Salem City, the possibility of expanded employment due to new nuclear power plants, and

the access provided by both Rt. 295 and the NJ Turnpike put the county in the path of development in the next two or three growth cycles to occur over the forecast period.

TABLE 3

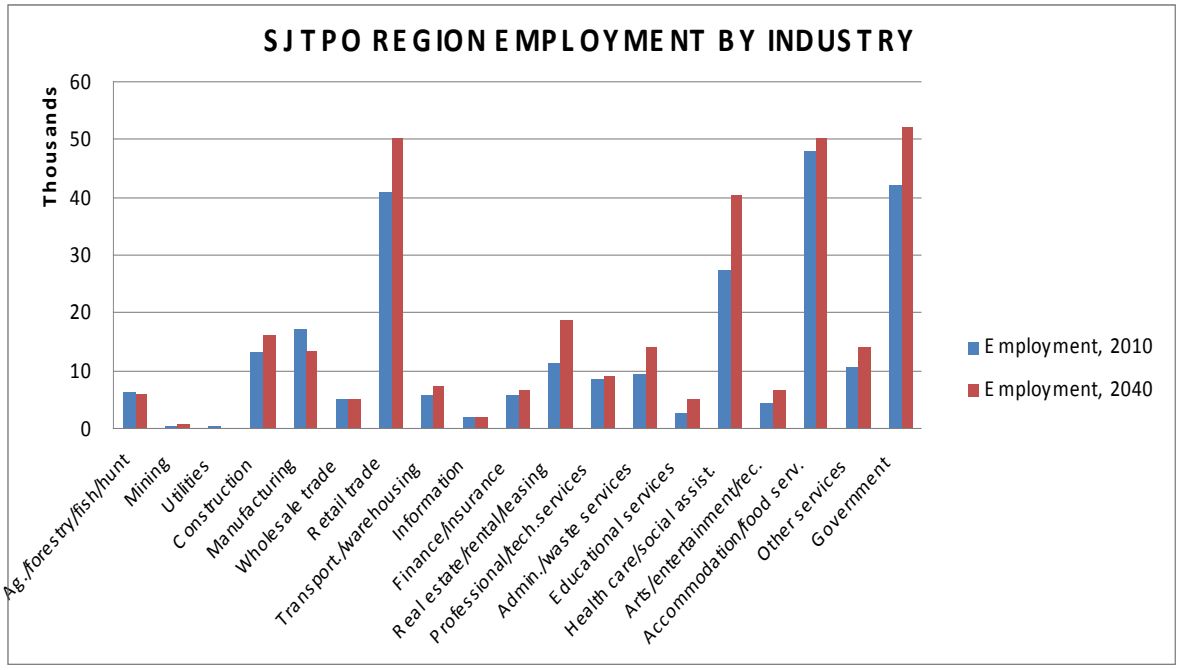
SJTPO 2040 DEMOGRAPHIC FORECAST							
GROWTH TREND SUMMARY							
CRBR, 2011							
			1990-2000		2000-2010		2010-2040
	1990	2000	Growth %	2010	Growth %	2040	Avg. 10-Yr. Growth %
EMPLOYMENT PROJECTIONS							
SJTPO REGION	258,123	270,754	4.9%	259,782	-4.1%	315,141	7.1%
Atlantic County	135,692	144,875	6.8%	136,800	-5.6%	163,285	6.5%
Cape May County	38,833	42,733	10.0%	41,500	-2.9%	50,750	7.4%
Cumberland County	59,600	60,442	1.4%	59,330	-1.8%	71,055	6.6%
Salem County	23,998	22,704	-5.4%	22,152	-2.4%	30,052	11.9%
POPULATION PROJECTIONS							
SJTPO REGION	522,763	565,601	8.2%	594,795	5.2%	710,254	6.5%
Atlantic County	224,327	252,552	12.6%	274,549	8.7%	341,915	8.2%
Cape May County	95,089	102,326	7.6%	97,265	-4.9%	103,083	2.0%
Cumberland County	138,053	146,438	6.1%	156,898	7.1%	186,178	6.2%
Salem County	65,294	64,285	-1.5%	66,083	2.8%	79,078	6.6%

The **employment** projections show an acceleration of trends as the region continues to present inexpensive land and an improving infrastructure to potential employees. Having access to major highways as well as rail and port facilities, the region's employment is expected to grow by 7.1%. While Cape May at 7.4% per decade and Salem at 11.9% have the highest growth rates, they also have fairly small bases to grow from. The majority of jobs are still expected to come from Atlantic and Cumberland counties.

The composition of the employment is illustrated in the chart on the next **CHART 1** below. This chart shows the growth by North American Industry Classification System (NAICS). The overall 21% growth in jobs from 2010 – 2040 will be accomplished by differential growth by sector. The current structure of employment shows dominance by the four sectors: retail trade at 15.6%; healthcare services at 10.4%; accommodations and food services at 18.2%; and, government at all levels at 16.0%. The large increases in share of jobs can be seen in real estate and healthcare.

However, the fastest growth in employment will be dominated by administrative services (49%), educational services (87%), real state (67%), healthcare (47%) and arts and entertainment (41%). For the definitions of these classifications, see:
http://www.census.gov/eos/www/naics/2007NAICS/2007_Definition_File.pdf

CHART 1



One set of new data elements required for this study was **seasonal variations** in population, households and employment. While there is no generally accepted method for these projections, they were produced using methodologies employed by Cape May County and the New Jersey Department of Labor over a number of years. Cape May has the largest seasonal variation in economic activity in the region (and state) while the NJDOL is required to estimate summer residents in shore communities for the purpose of indexing crime statistics.

The categories of seasonal population reported in **TABLE 4** indicate the different seasonal trends that are of interest to transportation planners. In addition, the variation in weekday and weekend demands on the transportation system is also of interest and estimated. The year-round household count is reported in the Census. This differs from the number of housing units in that

households are occupied units. The difference between the two leads to the vacancy rate. Finally, the total population differs from the household population by the number of residents reported in group homes. This difference is significant in a number of Cumberland County municipalities that host corrections facilities.

For this study, the summer households were estimated using reductions in the vacancy rate from the average to 75% occupancy of vacant units on summer weekdays and 93% (the state average) on weekends. The seasonal visitor counts included the addition of persons at campgrounds, marinas and motels/hotels, as well as in-commuting workers and day-trippers. While the number of campgrounds, marinas and motels are reported in the Economic Census every five years, their capacity is not. This was estimated using some averages from Cape May County which does surveys of these locations. The average seasonal employment variations are available for every year. Finally, the number of day-trippers was estimated from the continuous volume traffic counts available from the NJDOT. These give monthly and weekday/weekend counts, variations can be computed from this information.

TABLE 4

SJTPO 2040 DEMOGRAPHIC FORECAST
SEASONAL POPULATION SUMMARY
***CRBR*, 2011**

Area	Year	Total Population	Total Household Population	Summer Weekday Household Population	Summer Weekend Household Population	Summer Weekday Visitor + Household Populations	Summer Weekend Visitor + Household Populations
SJTPO Region	**2010**	594,795	570,557	965,201	1,011,674	1,287,480	1,648,293
	2040	710,254	677,144	1,145,636	1,196,366	1,418,291	1,845,678
Atlantic County	**2010**	274,549	267,901	446,579	460,184	570,041	767,337
	2040	341,915	332,777	567,936	585,071	658,363	914,979
Cape May County	**2010**	97,265	94,593	310,559	343,427	509,376	672,893
	2040	103,083	100,741	334,076	367,671	516,303	687,074
Cumberland County	**2010**	156,898	143,108	143,108	143,108	143,108	143,108
	2040	186,178	186,178	165,758	165,758	165,758	165,758
Salem County	**2010**	66,083	64,955	69,052	69,897	80,719	90,935
	2040	79,078	77,867	82,266	83,172	96,029	109,744

The table shows the range of variations in seasonal populations across the counties in the SJTPO Region. Cape May experiences the greatest increase in activity with its year-round population of 97,265 increasing to over 650,000 on summer weekends.

Seasonal variation in employment is estimated using monthly data that is reported on a regular basis. Year-round employment is that level reported in January while summer employment is from July levels. The estimation of summer weekend employments (not shown) was performed by removing employment from NAICS categories that would be unlikely to be operating on a weekend. Two examples are educational services and manufacturing.

The seasonal employments are reported in **TABLE 5**. In all four counties, the summer employment is estimated to exceed the year-round level. This reflects the large role that recreation and accommodations employment plays in the region.

TABLE 5

SJTPO 2040 DEMOGRAPHIC FORECAST										
SEASONAL EMPLOYMENT BY INDUSTRY GROUP										
CRBR , 2011										
						Summer				
	2010	Mfg	Retail	Office	Other	2010	Mfg	Retail	Office	Other
SJTPO REGION	**259,782**	**17,183**	**41,246**	**16,811**	**184,542**	**275,022**	**17,494**	**44,486**	**17,218**	**198,999**
Atlantic County	136,800	3,956	19,672	9,884	103,288	140,666	3,956	20,053	10,161	108,495
Cape May County	41,500	1,046	8,343	2,599	29,512	54,406	1,214	11,377	2,729	35,607
Cumberland County	59,330	9,019	10,092	3,193	37,026	58,214	9,125	9,959	3,193	39,459
Salem County	22,152	3,162	3,139	1,135	14,716	21,736	3,199	3,098	1,135	15,438
						Summer				
	2040	Mfg	Retail	Office	Other	2040	Mfg	Retail	Office	Other
SJTPO REGION	**315,141**	**13,671**	**50,487**	**20,831**	**230,152**	**335,095**	**13,892**	**54,209**	**21,385**	**247,582**
Atlantic County	163,285	3,082	27,168	11,498	121,537	167,899	3,082	27,694	11,820	127,794
Cape May County	50,750	932	9,297	4,621	35,900	66,654	1,040	12,678	4,852	42,990
Cumberland County	71,055	6,931	10,665	3,527	49,932	71,055	7,013	10,525	3,527	52,948
Salem County	30,052	2,726	3,357	1,185	22,784	29,487	2,758	3,313	1,185	23,850

The data elements in the household section are summarized in **TABLE 6**. Some of these elements have not yet been extended in the forecast due to the fact that the Census 2010 results in these areas have not been released as of the date of this report. They will be projected when available. However, for illustration and explanatory purposes, the data available from the

American Community Survey, 2007 – 2009 (ACS) is shown. This survey is replacing the Census long-form.

TABLE 6

SJTPO 2040 DEMOGRAPHIC FORECAST
HOUSEHOLD INFORMATION
***CRBR*, 2011**

2010 Geography	Total Households	Average Household Size	Median HH Income*	Low-Income HHs: *	Zero Vehicle HHs*	Zero Vehicle HH Population*
SJTPO Region	220,880	2.58		27,203	26,261	70,668
Atlantic County	102,847	2.60	$33,716	11,009	14,213	37,456
Cape May County	40,812	2.32	$30,435	4,626	3,969	9,970
Cumberland County	51,931	2.76	$29,985	8,027	5,775	16,920
Salem County	25,290	2.57	$33,155	3,541	2,304	6,322

* From 2009 American Community Survey. Census 2010 data due to be released in fall of 2011.

The definitions of these categories that were used are from the Environmental Justice guidelines. The median household income is reported regularly but tends to lag a number of years at the county-level. Low-income households are those below the federal poverty level. The four counties in the SJTPO Region have some of the lowest income and highest poverty rates of all New Jersey counties.

Zero vehicle households are reported in the ACS as those having no vehicles, being more common in urban areas. In addition, but not shown here, data for Limited English Proficiency households is included in the project's data elements. The numbers reported, and those to be projected when the Census 2010 results are available, are the households which answer the question on English proficiency with either "none at all" or "very limited". In 2000, this population was 19,375 in the 2000 Census for the region.

Finally, the data elements in the **housing units** section are summarized in **TABLE 7**. The Census regularly reports all of these data elements at the municipal level. As the table reports, the highest vacancy rate is in Cape May County which on the average has only 41% of its units occupied year-round. There is very little vacancy for any reason in two western counties.

However, in all four counties, the housing market is expected to become less seasonal as second-home owners move to permanent retirement and many establish residency in the region.

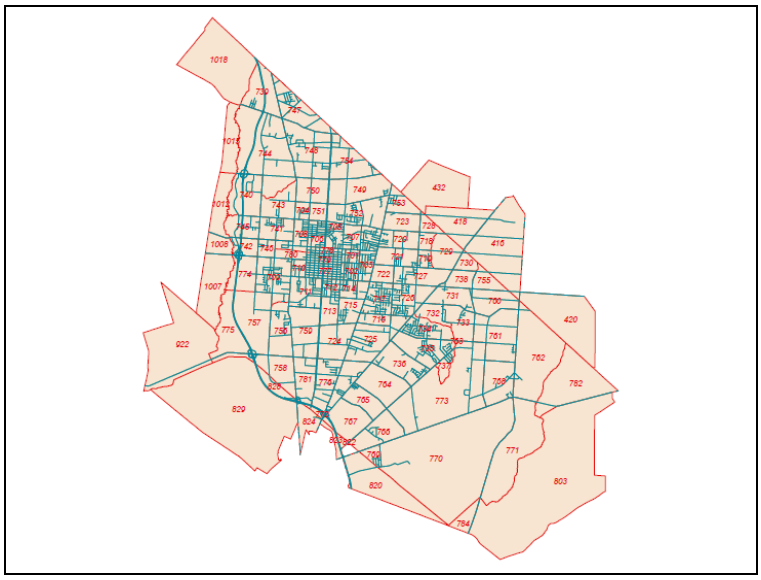
TABLE 7

SJTPO 2040 DEMOGRAPHIC FORECAST
HOUSING UNITS INFORMATION
***CRBR*, 2011**

Area	Year	Total Population	Total Housing Units	Total Occupied Housing Units	Total Vacant Housing Units	% Vacant
SJTPO Region	**2010**	594,795	308,207	220,880	87,327	28.3%
	2040	710,254	370,212	274,322	95,890	25.9%
	% Growth	19.4%	20.1%	24.2%	9.8%	-8.6%
Atlantic County	**2010**	274,549	126,647	102,847	23,800	18.8%
	2040	341,915	160,990	131,015	29,975	18.6%
	% Growth	24.5%	27.1%	27.4%	25.9%	-0.9%
Cape May County	**2010**	97,265	98,309	40,812	57,497	58.5%
	2040	103,083	104,983	46,215	58,768	56.0%
	% Growth	6.0%	6.8%	13.2%	2.2%	-4.3%
Cumberland County	**2010**	156,898	55,834	51,931	3,903	7.0%
	2040	186,178	69,381	64,798	4,583	6.6%
	% Growth	18.7%	24.3%	24.6%	20.6%	-3.0%
Salem County	**2010**	66,083	27,417	25,290	2,127	7.8%
	2040	79,078	34,836	32,395	2,440	7.0%
	% Growth	19.7%	27.1%	28.1%	14.7%	-9.7%

To complete the profile of the SJTPO Regions, two maps are included in this profile to illustrate some of the issues addressed in the project. The first is **MAP 1** which shows the boundaries of Traffic Analysis Zones (TAZs) in Vineland. These boundaries were mapped for every municipality. The TAZS are each confined to one municipality while each municipality may contain many TAZs. These are used at the smallest level of transportation planning.

MAP 1: Vineland Traffic Analysis Zones



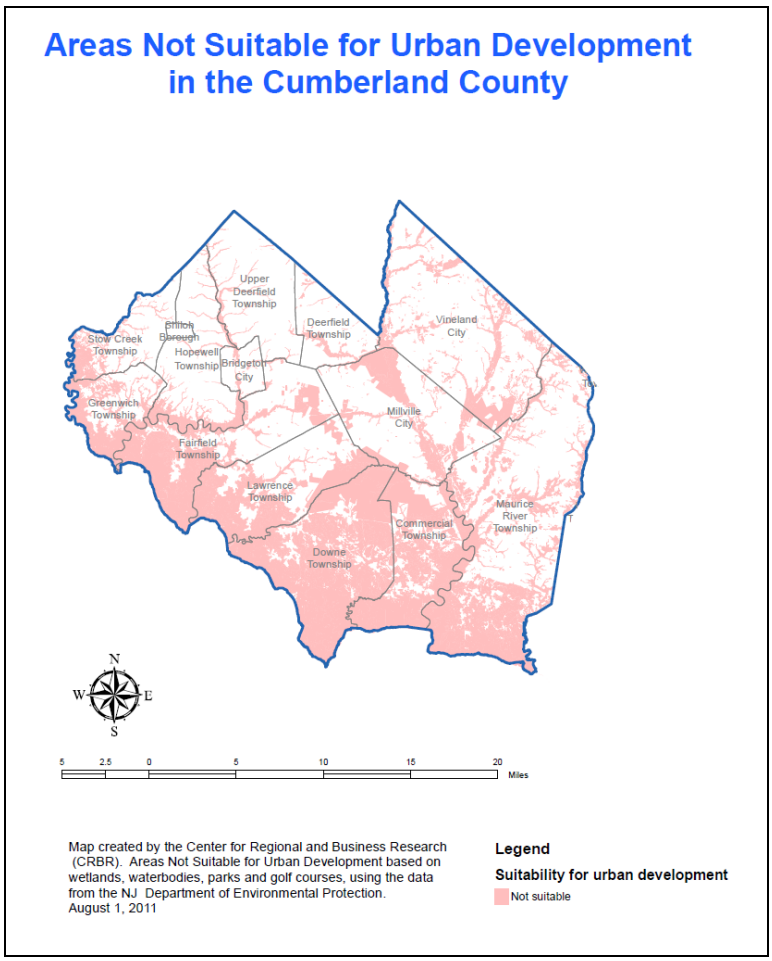
One of the categories of major constraints on growth as well as one of the prime determinants of where growth will be located over the next thirty years is environmentally sensitive land. **MAP 2** shows how these influence growth in Vineland. The defined land is that in parks, wetlands, golf courses and cemeteries:

This profile summarizes the major trends in the SJTPO Region. In the next chapter, some of the more disaggregated data is reported for each county. Summaries of this data are also found in the individual brochures found in **APPENDIX F.**

Atlantic County Projections

Of the four counties in the SJTPO region, Atlantic County has the potential for adding the most jobs and the most people. With a part of the county designated for high growth by the Pinelands Commission and several municipalities already have sufficient infrastructure for high growth, most notably Atlantic City, Pleasantville and Hammonton, the capacity for growth already exists to some extent.

MAP 2



The following illustrations highlight the overall population and employment trends for Atlantic County. The municipal-level data is shown to highlight the areas of growth in population and employment. As the county's transportation network is planned, the demands of high growth areas will need to be met.

TABLE 8

SJTPO 2040 DEMOGRAPHIC FORECAST								
MUNICIPAL POPULATION PROJECTIONS								
CRBR, 2011								
				Growth %		Growth %		Growth %
		1990	2000	1990-2000	2010	2000-2010	2040	2010-2040
Atlantic County		224,327	252,552	**13%**	274,549	**9%**	341,915	**25%**
Absecon city		7,298	7,638	**5%**	8,411	**10%**	9,910	**18%**
Atlantic City city		37,986	40,517	**7%**	39,558	**-2%**	41,153	**4%**
Brigantine city		11,354	12,594	**11%**	9,450	**-25%**	9,085	**-4%**
Buena borough		4,441	3,873	**-13%**	4,603	**19%**	6,204	**35%**
Buena Vista township		7,655	7,436	**-3%**	7,570	**2%**	7,800	**3%**
Corbin City city		412	468	**14%**	492	**5%**	535	**9%**
Egg Harbor township		24,544	30,726	**25%**	43,323	**41%**	66,491	**53%**
Egg Harbor City city		4,583	4,545	**-1%**	4,243	**-7%**	4,351	**3%**
Estell Manor city		1,404	1,585	**13%**	1,735	**9%**	2,023	**17%**
Folsom borough		2,181	1,972	**-10%**	1,885	**-4%**	1,948	**3%**
Galloway township		23,330	31,209	**34%**	37,349	**20%**	50,968	**36%**
Hamilton township		16,012	20,499	**28%**	26,503	**29%**	41,011	**55%**
Hammonton town		12,208	12,604	**3%**	14,791	**17%**	19,490	**32%**
Linwood city		6,866	7,172	**4%**	7,092	**-1%**	7,409	**4%**
Longport borough		1,224	1,054	**-14%**	895	**-15%**	891	**0%**
Margate City city		8,431	8,193	**-3%**	6,354	**-22%**	6,164	**-3%**
Mullica township		5,896	5,912	**0%**	6,147	**4%**	6,535	**6%**
Northfield city		7,305	7,725	**6%**	8,624	**12%**	10,406	**21%**
Pleasantville city		16,027	19,012	**19%**	20,249	**7%**	22,525	**11%**
Port Republic city		992	1,037	**5%**	1,115	**8%**	1,261	**13%**
Somers Point city		11,216	11,614	**4%**	10,795	**-7%**	11,054	**2%**
Ventnor City city		11,005	12,910	**17%**	10,650	**-18%**	10,516	**-1%**
Weymouth township		1,957	2,257	**15%**	2,715	**20%**	3,740	**38%**

The population of the county is projected to grow by 25% over the thirty-year forecast period. This exceeds the SJTPO Region's expected 19.4% increase. The three high-growth Pinelands townships of Egg Harbor, Galloway and Hamilton will continue to lead the growth with rates exceeding 35%. The shore towns will continue to exhibit slow growth with Ventnor and Margate losing population.

In term of employment, growth will be moderate at 19% compared to the SJTPO Region's 21% increase. At the municipal level, several of the towns in the western part of the county are expected to experience relatively higher growth.

Finally, the mix of industries is not expected to change drastically. Healthcare and retail are expected to gain share in the mix while the largest increases will be in educational services (63%), healthcare (46%) and real estate (41%).

TABLE 9

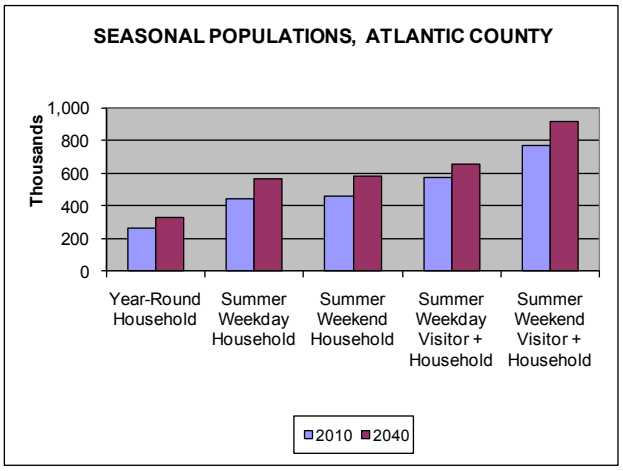
SJTPO 2040 DEMOGRAPHIC FORECAST MUNICIPAL EMPLOYMENT PROJECTIONS *CRBR*, 2011	1990	2000	Growth % 1990-2000	2010 (est.)	Growth % 2000-2010	2040	Growth % 2010-2040
Atlantic County	135,692	144,875	**7%**	136,800	**-6%**	163,285	**19%**
Absecon city	2,913	3,555	**22%**	3,670	**3%**	4,626	**26%**
Atlantic City city	73,855	61,004	**-17%**	56,627	**-8%**	65,353	**15%**
Brigantine city	1,166	1,925	**65%**	1,592	**-17%**	1,816	**14%**
Buena borough	1,523	1,486	**-2%**	1,260	**-15%**	1,438	**14%**
Buena Vista township	1,225	1,223	**0%**	1,350	**10%**	1,702	**26%**
Corbin City city	34	542	**1480%**	150	**-5%**	150	**0%**
Egg Harbor City city	1,352	3,751	**177%**	3,125	**-17%**	3,566	**14%**
Egg Harbor township	7,756	15,409	**99%**	14,404	**-7%**	17,499	**21%**
Estell Manor city	41	266	**549%**	239	**-10%**	272	**14%**
Folsom borough	728	906	**25%**	872	**-4%**	1,100	**26%**
Galloway township	5,793	7,672	**32%**	8,901	**16%**	11,221	**26%**
Hamilton township	8,378	11,379	**36%**	10,554	**-7%**	12,822	**21%**
Hammonton town	8,144	8,975	**10%**	8,838	**-2%**	11,142	**26%**
Linwood city	2,723	2,919	**7%**	2,803	**-4%**	3,199	**14%**
Longport borough	173	183	**6%**	160	**-13%**	182	**14%**
Margate City city	1,361	1,691	**24%**	1,680	**-1%**	2,118	**26%**
Mullica township	457	642	**40%**	615	**-4%**	702	**14%**
Northfield city	3,494	5,161	**48%**	4,077	**-21%**	4,652	**14%**
Pleasantville city	7,755	7,618	**-2%**	7,720	**1%**	9,732	**26%**
Port Republic city	86	90	**5%**	86	**-4%**	99	**14%**
Somers Point city	5,090	6,360	**25%**	6,137	**-4%**	7,699	**25%**
Ventnor City city	1,570	1,891	**20%**	1,733	**-8%**	1,978	**14%**
Weymouth township	74	228	**207%**	180	**-21%**	205	**14%**

TABLE 10

SJTPO 2040 DEMOGRAPHIC FORECAST EMPLOYMENT BY NAICS *CRBR*, 2011 **Atlantic County**	2010	% of TOTAL	2040	% of TOTAL
TOTAL	**137,409**		**165,177**	
Ag./forestry/fish/hunt	1,629	1.2%	1,906	1.2%
Mining	0	0.0%	0	0.0%
Utilities	491	0.4%	294	0.2%
Construction	7,098	5.2%	9,740	5.9%
Manufacturing	3,956	2.9%	3,082	1.9%
Wholesale trade	3,086	2.2%	2,723	1.6%
Retail trade	19,672	14.3%	27,168	16.4%
Transport./warehousing	2,864	2.1%	2,839	1.7%
Information	1,104	0.8%	1,121	0.7%
Finance/insurance	3,182	2.3%	3,563	2.2%
Real estate/rental/leasing	5,715	4.2%	8,069	4.9%
Professional/tech.services	5,534	4.0%	5,450	3.3%
Admin./waste services	4,868	3.5%	6,319	3.8%
Educational services	1,646	1.2%	2,684	1.6%
Health care/social assist.	13,509	9.8%	19,676	11.9%
Arts/entertainment/rec.	2,686	2.0%	3,795	2.3%
Accommodation/food serv.	38,755	28.2%	39,038	23.6%
Other services	5,654	4.1%	7,641	4.6%
Government	15,596	11.4%	20,070	12.2%

Finally, **CHART** 2 compares seasonal population estimates as explained in Chapter 1. Atlantic County will continue to exhibit a good deal of seasonality over the forecast period as shore towns and second homes remain a part of the growth pattern. While hotels and motels are used to determine visitor estimates, the casinos-hotel rooms were not used in this study. Because traffic counts are used and stays in Atlantic City are so short on average (less than two days), much double-counting will result. However, it is recognized that the present method is conservative and that the number of visitors is understated. However, given the data available, it is difficult to determine by what extent this influences the overall estimate of total visitors to the county.

CHART 2



Cape May County Projections

Judging from the forecasts provided by the three forecasting services used in this study, future population and employment growth in Cape May County has the greatest amount of uncertainty. The accelerated rate of decline in the 2000 – 2010 period raises questions about the future demographics of the population and whether or not employment will grow enough to attract younger residents.

The following illustrations highlight the overall population and employment trends for Cape May County. The municipal-level data is shown to highlight the areas of growth in population and employment. As the county's transportation network is planned, the demands of high growth areas will need to be met.

The population of the county is projected to grow by only 6% over the thirty-year forecast period. This is substantially less than the SJTPO Region's expected 19.4% increase. Most of the growth

is expected to occur in Middle and Upper townships. The barrier island communities will continue to experience negative growth, a consequence of high property values with West Wildwood being the exception. The lack of growth in population in many of the county's communities has had a large impact on the delivery of educational services.

TABLE 11

SJTPO 2040 DEMOGRAPHIC FORECAST MUNICIPAL POPULATION PROJECTIONS *CRBR*, 2011	1990	2000	Growth % 1990-2000	2010	Growth % 2000-2010	2040	Growth % 2010-2040
Cape May County	95,089	102,326	**8%**	97,265	**-5%**	103,083	**6%**
Avalon borough	1,809	2,143	**18%**	1,334	**-38%**	1,233	**-8%**
Cape May city	4,668	4,034	**-14%**	3,607	**-11%**	3,584	**-1%**
Cape May Point borough	248	241	**-3%**	291	**21%**	351	**21%**
Dennis township	5,574	6,492	**16%**	6,467	**0%**	6,594	**2%**
Lower township	20,820	22,945	**10%**	22,866	**0%**	23,317	**2%**
Middle township	14,771	16,405	**11%**	18,911	**15%**	23,419	**24%**
North Wildwood city	5,017	4,935	**-2%**	4,041	**-18%**	3,937	**-3%**
Ocean City city	15,512	15,378	**-1%**	11,701	**-24%**	11,228	**-4%**
Sea Isle City city	2,692	2,835	**5%**	2,114	**-25%**	2,020	**-4%**
Stone Harbor borough	1,025	1,128	**10%**	866	**-23%**	833	**-4%**
Upper township	10,681	12,115	**13%**	12,373	**2%**	13,732	**11%**
West Cape May borough	1,026	1,095	**7%**	1,024	**-6%**	1,028	**0%**
West Wildwood borough	453	448	**-1%**	603	**35%**	773	**28%**
Wildwood city	4,484	5,436	**21%**	5,325	**-2%**	5,407	**2%**
Wildwood Crest borough	3,631	3,980	**10%**	3,270	**-18%**	3,189	**-2%**
Woodbine borough	2,678	2,716	**1%**	2,472	**-9%**	2,466	**0%**

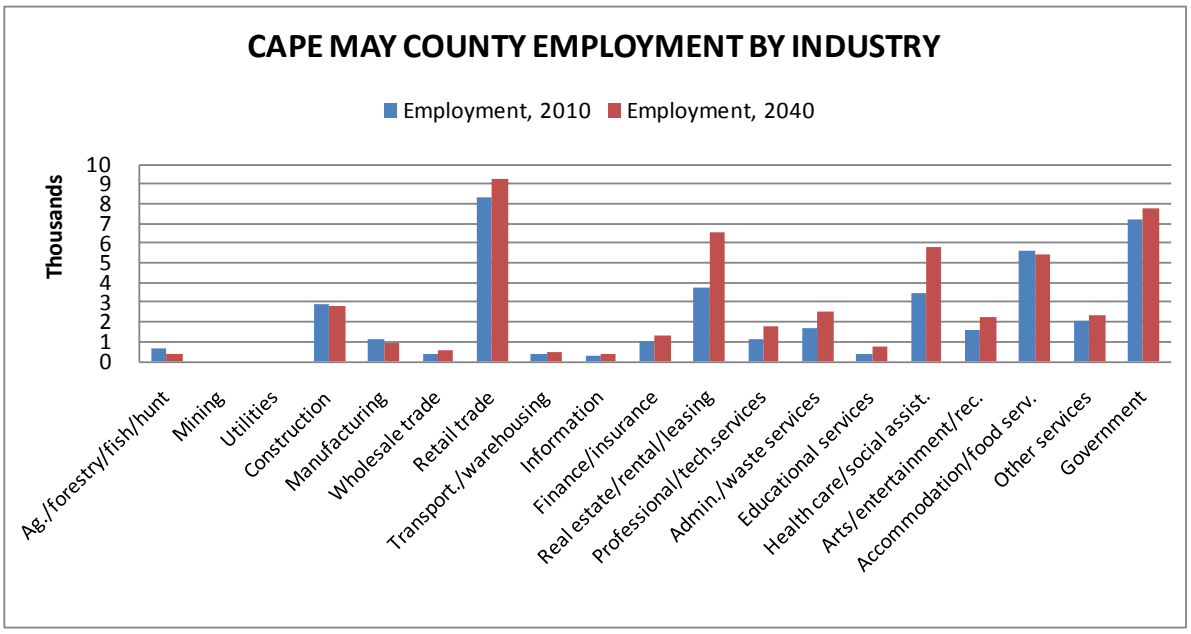
In term of employment, growth will be moderate at 22% compared to the SJTPO Region's 21% increase. This is based on a fairly low year-round level which increases substantially in the summer season. Cape May City, Middle Township and Woodbine Borough exhibit the highest expected employment growth rates.

Finally, the mix of industries is not expected to change drastically. Healthcare and real estate are expected to gain share in the mix as well as exhibit the largest increases in growth of real estate (75%) and healthcare (67%).

TABLE 12

SJTPO 2040 DEMOGRAPHIC FORECAST MUNICIPAL EMPLOYMENT PROJECTIONS *CRBR*, 2011	1990	2000	Growth % 1990-2000	2010 (est.)	Growth % 2000-2010	2040	Growth % 2010-2040
Cape May County	38,833	42,733	**10%**	41,500	**-3%**	50,750	**22%**
Avalon borough	1,482	1,371	**-7%**	1,333	**-3%**	1,403	**5%**
Cape May city	4,383	4,905	**12%**	5,115	**4%**	7,217	**41%**
Cape May Point borough	114	230	**102%**	163	**-29%**	172	**5%**
Dennis township	1,307	2,085	**60%**	1,884	**-10%**	1,983	**5%**
Lower township	2,716	3,266	**20%**	3,012	**-8%**	3,516	**17%**
Middle township	8,797	10,602	**21%**	10,741	**1%**	15,155	**41%**
North Wildwood city	1,854	1,612	**-13%**	1,307	**-19%**	1,376	**5%**
Ocean City city	5,346	6,090	**14%**	5,717	**-6%**	6,018	**5%**
Sea Isle City city	1,115	1,304	**17%**	1,190	**-9%**	1,253	**5%**
Stone Harbor borough	1,180	1,074	**-9%**	924	**-14%**	973	**5%**
Upper township	2,677	3,656	**37%**	2,970	**-19%**	3,467	**17%**
West Cape May borough	123	298	**141%**	163	**-45%**	172	**5%**
West Wildwood borough	8	48	**495%**	56	**17%**	79	**41%**
Wildwood city	4,660	3,844	**-18%**	3,589	**-7%**	3,778	**5%**
Wildwood Crest borough	2,473	1,737	**-30%**	1,361	**-22%**	1,432	**5%**
Woodbine borough	599	611	**2%**	1,974	**223%**	2,785	**41%**

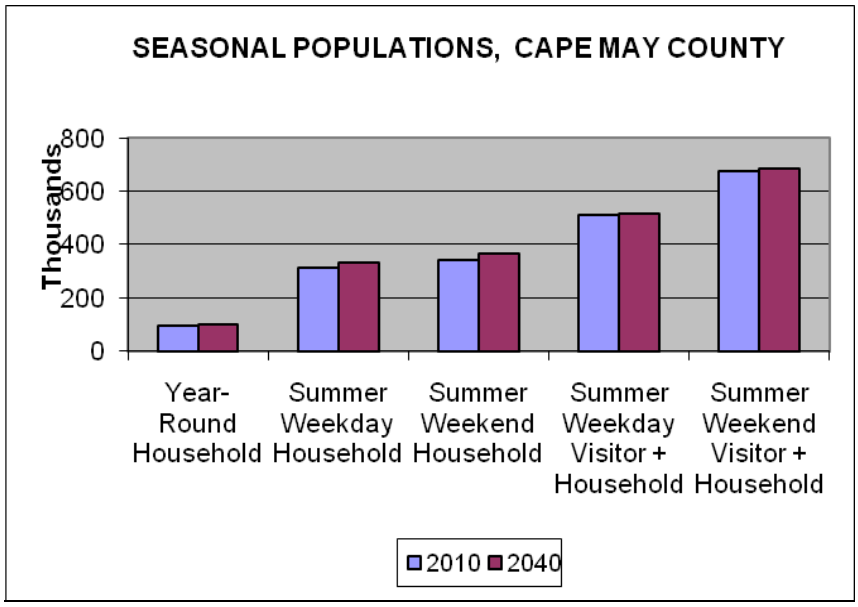
CHART 3



Finally, **CHART** 4 compares seasonal population estimates as explained in Chapter 1. Cape May County will continue to exhibit a great deal of seasonality over the forecast period as shore

towns and second homes remain a part of the growth pattern. By the end of the forecast period, the summer weekend population is expected to be seven times the year-round level.

CHART 4



Cumberland County Projections

The most recent population counts for Cumberland County indicate that growth has continued despite the recession of the past five years with population increasing by 7% in the past decade. However, the inability to expand its employment base has led to continued downward pressure on incomes in the county. In the past decade, employment growth has fallen by -2%.

The population of the county is projected to grow by 19% over the thirty-year forecast period. This matches the SJTPO Region's expected 19.4% increase. This growth is expected to be uneven with the urban areas of Bridgeton (29%) and Vineland (20%) providing the greatest number of new residents while Laurence Township (45%) continues its growth pattern on a much smaller base.

In term of employment, growth will be moderate at 20% compared to the SJTPO Region's 21% increase. At the municipal level, the growth will be fairly evenly distributed. The county will

need to work proactively to attract higher-wage jobs to alleviate the low-income levels that have hampered growth.

Finally, the mix of industries is not expected to change drastically. Healthcare, educational services and real estate are expected to gain share in the mix while the largest increases will be in educational services (147%), real estate (98%), administrative services (64%), and accommodations and food services (76%).

TABLE 13

SJTPO 2040 DEMOGRAPHIC FORECAST MUNICIPAL POPULATION PROJECTIONS *CRBR*, 2011							
			Growth %		Growth %		Growth %
	1990	2000	1990-2000	2010	2000-2010	2040	2010-2040
Cumberland County	138,053	146,438	**6%**	156,898	**7%**	186,178	**19%**
Bridgeton city	18,942	22,771	**20%**	25,349	**11%**	32,810	**29%**
Commercial township	5,026	5,259	**5%**	5,178	**-2%**	5,281	**2%**
Deerfield township	2,933	2,927	**0%**	3,119	**7%**	3,632	**16%**
Downe township	1,702	1,631	**-4%**	1,585	**-3%**	1,610	**2%**
Fairfield township	5,699	6,283	**10%**	6,295	**0%**	6,324	**0%**
Greenwich township	911	847	**-7%**	804	**-5%**	810	**1%**
Hopewell township	4,215	4,434	**5%**	4,571	**3%**	4,915	**8%**
Lawrence township	2,433	2,721	**12%**	3,290	**21%**	4,782	**45%**
Maurice River township	6,648	6,928	**4%**	7,976	**15%**	9,465	**19%**
Millville city	25,992	26,847	**3%**	28,400	**6%**	32,492	**14%**
Shiloh borough	408	534	**31%**	516	**-3%**	523	**1%**
Stow Creek township	1,437	1,429	**-1%**	1,431	**0%**	1,436	**0%**
Upper Deerfield township	6,927	7,556	**9%**	7,660	**1%**	7,914	**3%**
Vineland city	54,780	56,271	**3%**	60,724	**8%**	74,144	**22%**

As explained in the section on methodology in Part I. The seasonal estimates for visitors in Cumberland and Salem counties were found to be too high. The need to improve the methodology goes beyond this project.

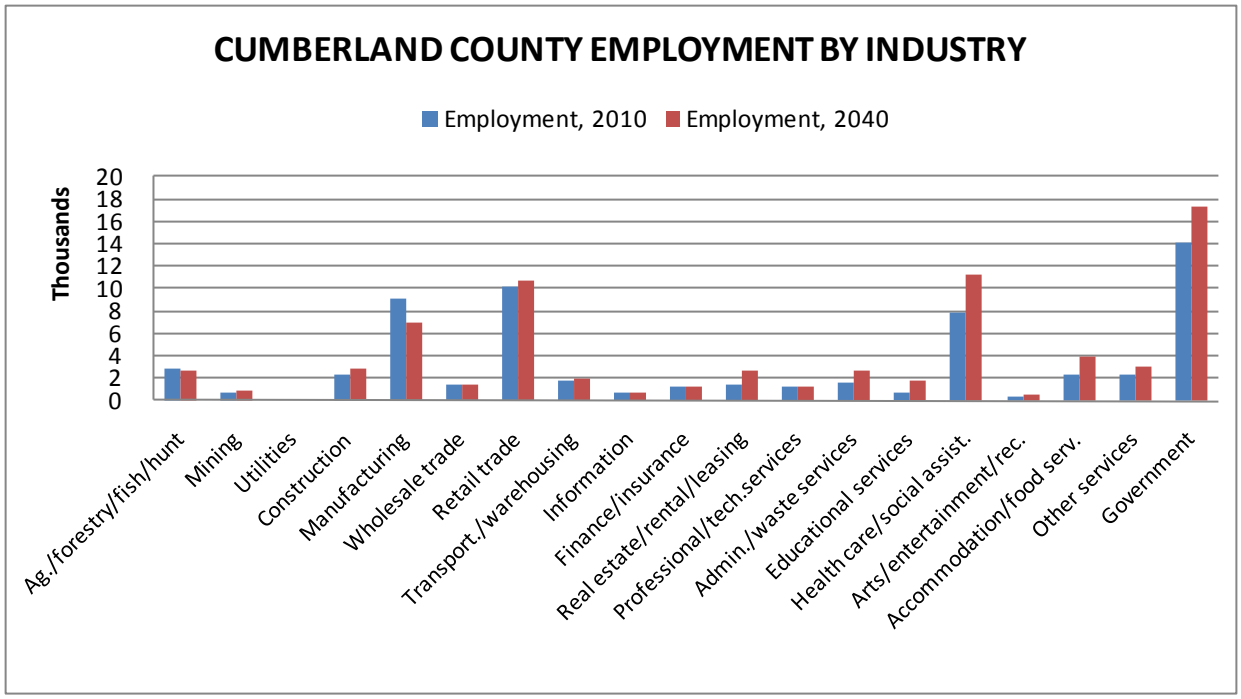
Salem County Projections

The projected growth patterns in Salem County indicate large changes in a county that has been stagnant for over 40 years. While the population growth is expected to finally begin to accelerate, the overall thirty-year increase is projected to be 13,000 residents. This growth forecast is based on expectations that growth will continue to move south from the Philadelphia

TABLE 14

SJTPO 2040 DEMOGRAPHIC FORECAST MUNICIPAL EMPLOYMENT PROJECTIONS *CRBR*, 2011	1990	2000	Growth % 1990-2000	2010 (est.)	Growth % 2000-2010	2040	Growth % 2010-2040
Cumberland County	59,600	60,442	**1%**	59,330	**-2%**	71,055	**20%**
Bridgeton city	11,694	10,260	**-12%**	10,235	**0%**	12,483	**22%**
Commercial township	360	547	**52%**	390	**-29%**	442	**14%**
Deerfield township	931	733	**-21%**	923	**26%**	1,143	**24%**
Downe township	53	375	**604%**	455	**22%**	564	**24%**
Fairfield township	764	1,617	**112%**	1,021	**-37%**	1,159	**14%**
Greenwich township	47	95	**102%**	60	**-37%**	68	**14%**
Hopewell township	264	166	**-37%**	105	**-37%**	119	**14%**
Lawrence township	669	1,088	**63%**	687	**-37%**	780	**14%**
Maurice River township	266	469	**76%**	2,544	**442%**	3,152	**24%**
Millville city	12,652	11,595	**-8%**	10,354	**-11%**	11,757	**14%**
Shiloh borough	48	175	**262%**	88	**-50%**	100	**14%**
Stow Creek township	51	516	**915%**	325	**-37%**	370	**14%**
Upper Deerfield township	1,537	2,050	**33%**	1,898	**-7%**	2,156	**14%**
Vineland city	30,263	30,755	**2%**	30,245	**-2%**	36,878	**22%**

CHART 5



area and that the Route 295 corridor will attract both residents that commute to the Wilmington and Philadelphia metro areas as well as new employment opportunities in the county.

The population of the county is projected to grow by 20% over the thirty-year forecast period. This slightly exceeds the SJTPO Region's expected 19.4% increase. The pattern of growth across municipalities will be uneven with Pittsgrove (28%) and Pennsville (29%) contributing the majority of the population growth.

In term of employment, growth will be moderate at 36% compared to the SJTPO Region's 21% increase. At the municipal level, Carney's Point (51%), Pennsville (28%) and Woodstown (49%) will be adding the majority of the new jobs while also having some of the highest growth rates. The moderate growth of employment does reverse trends experienced over the past two decades when population growth exceeded employment growth. However, as referenced in the summary of the long-term outlook from Moody's Analytics (see Chapter I), the western part of the region is expected to benefit from its relatively low business costs and attract businesses escaping the higher costs in the more urban areas of the Delaware Valley. Several of the scenario planning workshop participants supported this view.

Finally, the mix of industries is expected to change as manufacturing falls from 13.5% of the employment base in 2010 to 8.7% in 2040. Retail trade will also lose share but shows modest growth (7%). Transport/warehousing, real estate, administrative services, healthcare and accommodations/food services are all expected to gain share in the mix while the largest increases will be in transport/warehousing (139%), and real estate (217%). Administrative services will add nearly 1,400 jobs, doubling its number over the forecast period.

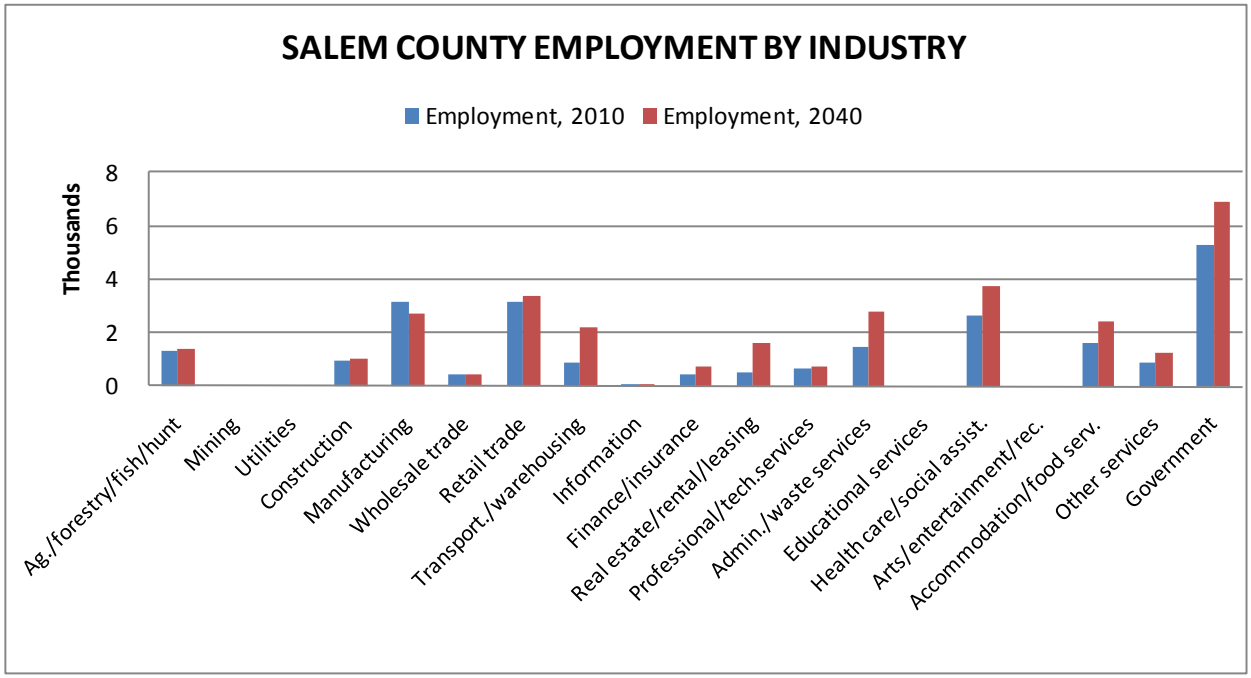
TABLE 15

SJTPO 2040 DEMOGRAPHIC FORECAST MUNICIPAL POPULATION PROJECTIONS *CRBR*, 2011	1990	2000	Growth % 1990-2000	2010	Growth % 2000-2010	2040	Growth % 2010-2040
Salem County	65,294	64,285	**-2%**	66,083	**3%**	79,078	**20%**
Alloway township	2,795	2,774	**-1%**	3,467	**25%**	4,987	**44%**
Carneys Point township	8,443	7,684	**-9%**	8,049	**5%**	9,957	**24%**
Elmer borough	1,571	1,384	**-12%**	1,395	**1%**	1,450	**4%**
Elsinboro township	1,170	1,092	**-7%**	1,036	**-5%**	1,035	**0%**
Lower Alloways Creek township	1,858	1,851	**0%**	1,770	**-4%**	1,786	**1%**
Mannington township	1,693	1,559	**-8%**	1,806	**16%**	2,277	**26%**
Oldmans township	1,683	1,798	**7%**	1,773	**-1%**	1,806	**2%**
Penns Grove borough	5,228	4,886	**-7%**	5,147	**5%**	6,077	**18%**
Pennsville township	13,794	13,194	**-4%**	13,409	**2%**	17,286	**29%**
Pilesgrove township	3,250	3,923	**21%**	4,016	**2%**	4,482	**12%**
Pittsgrove township	8,121	8,893	**10%**	9,393	**6%**	12,018	**28%**
Quinton township	2,511	2,786	**11%**	2,666	**-4%**	2,667	**0%**
Salem city	6,883	5,857	**-15%**	5,146	**-12%**	5,139	**0%**
Upper Pittsgrove township	3,140	3,468	**10%**	3,505	**1%**	3,813	**9%**
Woodstown borough	3,154	3,136	**-1%**	3,505	**12%**	4,333	**24%**

TABLE 16

SJTPO 2040 DEMOGRAPHIC FORECAST MUNICIPAL EMPLOYMENT PROJECTIONS *CRBR*, 2011	1990	2000	Growth % 1990-2000	2010 (est.)	Growth % 2000-2010	2040	Growth % 2010-2040
Salem County	23,998	22,704	**-5%**	22,152	**-2%**	30,052	**36%**
Alloway township	318	646	**103%**	524	**-19%**	659	**26%**
Carneys Point township	1,487	2,274	**53%**	3,022	**33%**	4,562	**51%**
Elmer borough	1,777	1,593	**-10%**	1,594	**0%**	2,005	**26%**
Elsinboro township	67	106	**59%**	152	**44%**	226	**49%**
Lower Alloways Creek township	2,416	679	**-72%**	978	**44%**	1,454	**49%**
Mannington township	1,575	992	**-37%**	1,428	**44%**	2,124	**49%**
Oldmans township	996	726	**-27%**	525	**-28%**	660	**26%**
Penns Grove borough	1,200	1,138	**-5%**	1,119	**-2%**	1,407	**26%**
Pennsville township	6,873	4,121	**-40%**	3,526	**-14%**	4,497	**28%**
Pilesgrove township	330	1,042	**216%**	1,500	**44%**	2,231	**49%**
Pittsgrove township	800	3,178	**297%**	1,685	**-47%**	2,119	**26%**
Quinton township	137	150	**9%**	291	**95%**	433	**49%**
Salem city	3,919	3,329	**-15%**	3,164	**-5%**	3,979	**26%**
Upper Pittsgrove township	592	967	**63%**	688	**-29%**	865	**26%**
Woodstown borough	1,511	1,765	**17%**	1,886	**7%**	2,804	**49%**

CHART 6


SALEM COUNTY EMPLOYMENT BY INDUSTRY
Employment, 2010
Employment, 2040
Thousands
8
6
4
2
0
Ag./forestry/fish/hunt
Mining
Utilities
Construction
Manufacturing
Wholesale trade
Retail trade
Transport./warehousing
Information
Finance/insurance
Real estate/rental/leasing
Professional/tech.services
Admin./waste services
Educational services
Health care/social assist.
Arts/entertainment/rec.
Accommodation/food serv.
Other services
Government

III. GROWTH SCENARIOS

Introduction

The use of baseline forecasts over a 30 year period is usually insufficient for transportation planning purposes. Even if projections are updated every five years, there is the need to know why growth patterns might diverge from baseline predictions. Often the growth factors can be detected long before statistics are available to confirm high or low growth paths. This is especially true in period of rapid change. In addition, due to the large capital expense involved in infrastructure investment, it is necessary to consider alternatives when sizing projects so that the most efficient investment can be made.

The use of scenarios is recommended by the FHWA and its newly released guidebook was used to plan the focus group sessions held. The material supporting this process is provided in **APPENDIX** D. The *FHWA Scenario Planning* Guidebook can be found in its entirety at: http://www.fhwa.dot.gov/planning/scenplan/guidebook/.

Methodology

The process included the preparation of baseline forecast for the invitees to consider. An attempt was made to invite both planners and users of the transportation system as well as those familiar with the patterns of growth in the region. These included consultants, educators, newspaper editors, Chamber of Commerce representatives, utility managers and TAC members. The questions sent to the participants ahead of time asked them to consider:

1) Any real constraints that the baseline forecast may have not taken into account.
2) What factors may cause higher or lower growth trends than those represented by the baseline forecast?
3) What growth pattern would you envision as the "preferred" one considering your experience in with the transportation network.

4) What are the implications of your high and low growth scenarios for the transportation network? Would you plan differently for any of the three scenarios?

Two sessions were held in an attempt to offer a convenient time and place for as many participants as possible. This also allowed each session to concentrate on a two-county area. The list of attendees at each session is in **APPENDIX D**.

Scenario Building Workshop Results

The comments from each session are given below as they may imply different consequences to different readers. Names and any other sources of identification have been removed. The comments are summarized at the end of each session.

Comments from the Atlantic/Cape May group:

General regional comments:

- Retirement market . . . for NJ to compete, there will have to be a huge shift in taxes. It is expensive here and people who are looking to retire are now using cost as the main criteria rather than living near their children.
- People who come to SJ come from Blue Route area, Gloucester Co., people who know the area, come here as kids, etc.
- Retirement numbers may be growing, but people still have to sell their house before buying a retirement home.
- Baby boomers are a growing population.
- Next Gen?
- Governor's plan to make SJ family friendly—see any effect?
    - No comment
    - Perception of crime in the city
    - Enhanced restaurant/night club revenue
    - Growth of condo development
    - Reduced number of gaming houses—a minus in terms of employment

Atlantic Co.

- Hard pressed to find this county's numbers growing, specifically in Atlantic City. Looking as a decrease, actually.
- Thank you for doing this, we will use your numbers. Do we suspend belief in the last 5 yrs and look with a broader perspective? I'm not going to say we're going to decline, but I don't see the growth . . . vacancies, going out of business, no commercial building, etc. Who know when the existing supply will be used. So, what potential do we have? Need to branch out and bring other kinds of production (than existing supply) to the county to create jobs.

- Senior housing—any residential at all—has dried up completely. Nothing coming to the planning board.
- Malls having a problem attracting/keeping tenants.
- The Walk success . . . is it a result of people who are here for gaming or residents? Apparently, 80% of the people shopping there do not enter the casinos, and the thought is that the success will only increase when the parking lot is developed. It is considered tertiary to the casino business.
- The bottom is falling out of the expressway traffic.
- FAA Tech Center is a huge generator . . . yet, it will probably just grow slowly and will help the County numbers.
- School enrollments leveling off.
- A few things are up in the air in Galloway . . . nothing much else going on. Hoping that with new drug stores coming in (i.e., CVS), other businesses will, too.
- Hammonton has done better in the last few years.

What would create lows:

- Over regulation, particularly in the growth areas . . . it's killing us. No industry will come here for what DEP and Pinelands will put it through. This stuff keeps us from being competitive.
- Convenience gaming markets (i.e., PA), plus upcoming markets of Aqueduct and North Jersey
- Boardwalk Hall is too small of a venue and lose money with every event

What would create highs:

- Next Gen
- Stockton (in both Galloway and AC in the arts areas, diversity in post grad programs)
- Stress diversification (but hard to do with state regs)
- Housing in AC for doctors and other health care workers
- Casinos—change and come back strong (not soon, but later). Have to become a destination, really, it never did.

Cape May Co.

- Only one that had a loser, so it is difficult. Forecast will have modest growth.
- Number of affordable housing projects have been shot down.
- Not much being proposed.
- Sea Isle—commercial on first floor and housing above . . . . that's all we've seen.
- No huge employers here anymore . . . Superfresh going out of business now.
- School enrollments have dropped off.

What would create lows?

- Not much land left
- Not easily accessible

What would create highs?

- Bridge to Delaware!

- Industry at the airport
- Brand name hotel attached to the convention center
- Ecotourism? It doesn't pay the bills/taxes
- Canadian tourism? Exchange rate is good, and there's been an effort to charter flights into the airport, but there are no support services (i.e., car rental)
- Morey organization continues to expand
- Wildwood Convention Center was a huge bonus to the region, the Cape May convention center not so much.

Look at the geography of employment. Where would you reallocate employment? Is it in the right places now?

In Cape May Co.

- Rio Grande
- Cape May Courthouse
- Woodbine Developmental Center
- Some of the in infrastructure improvements will help these three areas.

In Atlantic Co.

- EHT, around FAA
- Race Track
- Direct connector from expressway to airport
- AC for gaming and retail for those who work in gaming
- Revitalization of select downtowns, i.e., Hammonton, Egg Harbor

Summary of Session 1:

Clearly, there is a bias toward low growth in the near-term. This is in stark contrast to the results from the 2006 forecasts where planning for growth was the main concern. The biggest question marks are around the casino industry and the future for retirees and their investment patterns. While slow growth is seen as the more probable pattern, the possibility of a return to higher growth was not ruled out.

Growth in both counties is preferred in areas with infrastructure, especially in Cape May where environmental constraints are very strict. The redevelopment of small cities – Hammonton, Sea Isle – is seen as preferred to take advantage of existing infrastructure. While improving the transportation network presents opportunities in both counties, it is clearly not the determining factor in future growth patterns.

Comments from the Cumberland/Salem group:

RE: Trends

- In ag industry in the area in past 10 to 15 yrs, there has been an increase in food processing plants and the establishment of the Rutgers Food Innovation Center in Cumberland Co.
- Many farmers in Cumberland Co. are going solar with their fields, this is the biggest trend toward solar farms. The incentives in NJ are better than any other state and that doesn't look like it is going to change any time soon.
- Affecting Salem Co., too. ACE is having infrastructure problems and have declined some requests for solar projects. Solar providers are extremely aggressive in the state right now because of the incentives in the state.
- Potential housing projects have gone the way of green acres . . . with the housing market down, solar farms are attractive to them. Another farm trend: going organic.
- Glass manufacturing is still hanging on here, spending money to upgrade/build furnaces.
- Recycling expanding, too.
- Distribution Centers, i.e., soymilk in Bridgeton, is a growth area.
- Increase in rentals vs. sales (residential market)
- Sustainability initiatives . . . getting hotter and hotter and will create drastic changes, i.e., more housing in walking distance to employment, increased brown fields

Initiatives that would affect . . .

. . . Highs:

- Bringing Light Rail to Glassboro would allow for more growth; it was debated whether or not it will be delayed or move forward
- Huge growth in the Spanish market/population in both Salem and Cumberland Counties.
- South Jersey Gas no longer charging developers for hook ups .
- Talk of UMDNJ making a teaching hospital at the old Newcomb Hospital site, but it is only 'talk' at this point

. . . Lows:

- Salem Co. is seeing an exodus to PA across the bridge, because of rising property taxes.
- Salem Co. will take a hit with the close of three UEZs.

Where do you see employment:

- Rt. 295 corridor, specifically trickling down from the far end of Gloucester Co.
- Rt. 130 corridor
- Bridgeton/Millville/Vineland
- Freezer warehousing expanding in Vineland
- Port Norris has oyster processing (like Atlantic City has clam processing); this port can handle big ships (albeit one at a time), but has the capacity; dry dock repair opportunity.
- Prison facility
- Upper Deerfield Twp.. Seabrooke: food processing expanding here and Clement Pappas upgrading its boilers

- New Rowan Blvd development, although more student than private housing-driven, it will positively affect the economy there. Anchor is not a big employer, but has some employment increases in its plans, yet small. Changing its product.
- Rebuilding rail from Swedesboro to downtown Salem. Involves three main clients.
- On the horizon, biggest thing is the collaboration for regional sewer with Gloucester Co. Idea is to close small treatment facilities and bring in a public/private partnership with DuPont. It is all about dollars…..Woolwich would be the primary beneficiary, Salem Co. would be secondary.
- Infrastructure at Exit 10 is going well, e.g., Goya foods, JE Berkowitz
- Farmland converting to solar farms . . . utility (ACE) is saying there is no venue to put excess energy from the solar arrays back into the grid; not sure this is true.
- Oldmans Twp could see some significant growth; Perry Farm has Ryan Homes going in, four to five lots at a time.
- Bailey Corner has low-income housing planned.
- Nuclear site at other side of the county is the other biggie . . . could be five to seven years away now with the Japanese disaster.
- Large homes are not the way of the future.
- Surprisingly, Pittsgrove and Pilesgrove seemed to have grown more than the numbers show.
- Salem downtown is progressing, Main St. program, a lot of investment, a new restaurant, but it's slow, a tough time.

In AC:

- Boutique casinos
- Sale of Trump Marina
- Revere gearing up again
- Stockton expansion – satellite campus in Hammonton
- Tech Center expansion
- Yet, don't really see a lot of employment growth here for the future
- Will people continue to retire here? There's a debate about this, as some forecasts point to people staying put

Summary of Session 2:

The second session was concerned primarily with the growth potential of Cumberland and Salem counties. While not completely upbeat, this group could see some cause for a growth pattern slightly more robust that in the past. This growth, however, is based on the expansion of the same industrial base of agriculture and manufacturing. There seems to be a move to push these industries into niche markets that can produce more value than the past mass market approach.

This group also looked to the continued development of areas with existing infrastructure. However, the conversion of farmland was also seen as a trend that was just beginning.

Growth Scenarios:

Using the input of the focus groups, the growth bands reported in **TABLE 17** were developed. These were then used to produce a set of population bandwidths for each municipality and a corresponding set of employment high growth and low growth scenarios.

TABLE 17

SJTPO 2040 DEMOGRAPHIC FORECAST					
POPULATION GROWTH SCENARIOS					
CRBR, 2011					
		2010	**Low-2040**	**Mid-2040**	**High-2040**
Atlantic County		274,549	316,589	341,915	393,284
Cape May County		97,265	100,752	103,083	107,600
Cumberland County		156,898	180,643	186,178	191,825
Salem County		66,083	74,683	79,078	83,642
SJTPO REGION		594,795	672,667	710,254	776,351

The growth bands for the SJTPO Region range from 13% growth in the low scenario to 19% in the mid-range one to 30% in the high-growth scenario. The spread is greatest in Atlantic County, primarily due to its role as an employment generator for most of the region over the past twenty years. The population growth ranges from 15% to 25% to 43% across the three scenarios for Atlantic County.

2040 DEMOGRAPHIC FORECAST

IV. RECOMMENDATIONS

Recommendations based on the development of the *2040 Demographic Forecast* are made below. They are principally concerned with the areas of process and the needs of the transportation models that use the outputs of this project.

The process issues include:

- The timing of the updates and the needs of the planning models should be considered. The review of the data elements and their projections takes a longer time when there are a greater number of them and when the future patterns are more uncertain.
- The TAC members need to have more time to not only to review the data but to work with the consultant on analytical methods that would yield greater certainty in the forecasts.
- The data items in some cases are either difficult to create given the available data or else do not have sufficient historical data to back them up. The most important case is the lack of reporting on NAICS-level employment data at the municipal level.

Modeling issues include:

- The transportation planning models demand a great deal of data that is in reality very 'thin'. That is, it is based on data that contains a number of non-reporting omissions as well as levels of disaggregation that cannot be supported by existing data. While TAZ-level data can be produced, it will always be an average of the tract or municipality that it resides in.
- Some of the data elements, while very important to the planning process, are not best estimated from an economic/demographic framework alone. Clearly, the seasonal estimates need to be supplemented by actual counts on the roads that are most used as well as by survey data. While the current methodologies can certainly point in the right

direction and may be sufficient for very broad estimates, other methodologies should be explored.

- Lastly, as was much discussed in the course of the project, a 30-year projection would benefit greatly from existing build-out studies for each municipality and a land-use component to better identify the locations of employment and population growth. It is recommended that this initiative is undertaken on a small scale as a pilot to identify tools that can help complete these tasks in a reasonable time and at a reasonable cost. New methods using advance GIS mapping tools, aerial photographs and infra-red censoring tools appear in the literature. The TAC should cooperate on a pilot project.

SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION

2040 DEMOGRAPHIC FORECAST

APPENDICES

APPENDIX A: **PROPOSAL**

APPENDIX B: **MEETING DATES, PROGRESS REPORTS AND MINUTES**

APPENDIX C: **REQUIRED DATA WORKSHEET**

APPENDIX D: **SCENARIO DEVELOPMENT -**

- **INVITATION**
- **QUESTIONNAIRE**
- **ATTENDANCE AND MINUTES**
- **REFERENCE: *FHWA Scenario Planning Guidebook,* U.S. Dept. of Transportation, Sept. 2010**

APPENDIX E: **FINAL EMPLOYMENT AND POPULATION PROJECTIONS BY MUNICIPALITY**

APPENDIX F: **BROCHURES**

APPENDIX A:

PROJECT PROPOSAL

PROPOSAL FOR:

SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION

YEAR 2040 DEMOGRAPHIC FORECAST

I. Technical Proposal

Technical Approach

PART A: Data Collection Component

The effort, tasks and products required to complete the project are detailed below:

- Data Collection: Core Data Requirements

Long-term forecasts are risky at best and normally depend upon a set of assumptions about the performance of the state, regional and national economies. While short-term trends can be based on moving averages or shares of local activity, projections through 2040 need to be part and parcel of larger modeling efforts. Therefore, in order to provide accurate and defensible growth forecasts for the four-county SJTPO region, a **consensus forecasting method** will be used. To accomplish this, independent, county-level forecasts of the main demographic variables will be obtained from: the New Jersey Department of Labor; Moody's Economics (http://www.economy.com/home/products/service_overview.asp?selVal=3&service=2&src=im-interested-in-uscounties); and, Woods and Poole Economics (http://www.woodsandpoole.com/main.php?cat=state). A consensus mid-range forecast will be established with a description of the rationale.

The Core Data Requirements will be developed from these data sets and the available historical trends from the 1990 and 2000 Census data as well as the annual American Community Survey files. Historical data is available at the county and municipal levels. The SJTPO regional level data will be the composite of the four component counties. The required historical information not contained in these reports for housing starts is available from the NJ Department of Labor's Data Center.

The employment and population data will be supplemented by information on commuting patterns and vehicle ownership contained in the U.S. Census Transportation Planning Package and the American Community Survey where available.

- Data Collection: Summer Demographics

The data required for both Summer Weekday (*SWD*) and Summer Weekend (*SWE)* is not directly available from other sources. While the definitions of visitors and population generally differ, there are some methodologies that can be followed to derive both. For instance, the Uniform Crime Reports (http://www.njsp.org/info/ucr2006/pdf/2006-sect-8.pdf) for New Jersey use a methodology prescribed in P.L. 1998, c. 50 to estimate a mean seasonal population for resort towns in coastal communities. This uses the vacancy rate for housing units and does not include motels, campgrounds, etc. On the other hand, the Cape May County visitor estimates referenced in the RFP do include day-trippers, campgrounds, motels, etc. The *CRBR* has estimated peak-summer and weekday summer populations for Atlantic County in the past.

This proposal recommends using a combined methodology that uses a percentage of occupied housing units for weekdays and a higher percentage for weekends to approximate populations by municipality for the historical years. Visitors will be estimated using the traffic counts to be reported by counties this summer. An off-season baseline will be established, and the seasonal numbers will be derived by changes in the traffic counts. These will yield county-level estimates. Municipal shares will be established based on both vacant housing units and number of hotels/motels from the latest available economic census.

Seasonal employment data exists at the municipal level (http://lwd.dol.state.nj.us/labor/lpa/employ/qcew/qcew_index.html) by place of employment and NAICS industry. This data will be used to set-up a baseline for the four employment components required.

- Data Collection: Comparison of SJTPO Regional Data to New Jersey Data

Because all of the sources to be used in the consensus forecast also provide state-level projections, this comparison will be straightforward.

PART A: Forecasting Component

- Forecasting: Preparing Forecasts

From the data collected as described above, many of the main county-level demographic and employment variables will be provided by the consensus forecast providers. These will form the basis for forecasting the remaining variables. This will be done in two steps:

1. The main demographic and employment variables will be forecast at the municipal level. This will be done by examining the trend in the municipal share of the county variable from 1990 to the last historical data point.

2. Variables not projected by the outside services (e.g. housing unit vacancy rates) will be projected using either the same method as above, a moving average of the historical shares, or by calculating from the available information (e.g., vacancy rates can be deduced from number of units and people per household in the non-seasonal population).

Forecasts for the summer employments, populations and visitors will be done by keeping the estimates between non-seasonal and seasonal populations in a consistent relationship over time.

- Forecasting: Preparing a Technical Report

The technical report will contain all data sources and methodologies. An overall approach will be described. In addition, a variable by variable matrix will be developed so that each forecasted variable can be duplicated from the source data.

- Forecasting: 2010 Census Spreadsheet

A Microsoft EXCEL worksheet will be developed which will automatically calculate projected values based on replacing the projected 2010 data with Census data. The spreadsheet will be constructed based on growth rates from the 2010 baseline and all formulas will be consistent with the matrix of calculations described above.

In addition, **all tables and maps for reporting purposes will be constructed with links to the revised baseline and projections** so that the final report can be easily revised when the 2010 Census data is available.

PART A: Reporting Component

- Reporting: Profile Report

Using tables, maps (described in the following section) and other visuals as well as a summary of the methods and findings, a 6-8 page profile report will be developed and provided in a digital format for easy viewing, printing, and linking to a website. The report will have sections by county and the SJTPO Region that are self-explanatory and can be printed separately.

- Reporting: Presentations

A presentation of the results of the study will be prepared that can be used by TAC, Board or other parties. It will contain a Powerpoint presentation, four poster-size presentation boards (for

the consultant presentation and digital file for others to use), and downloadable files of the Profile Report.

The entire team will be available for the presentation meetings to the TAC and the SJTPO Policy Board.

PART A: Mapping Component

- Mapping: Geospatial Files

The numerous shapefiles will be developed using a base map agreed upon with the SJTPO staff. Using ArcGIS 9.3.1, each shapefile will be accompanied with the source data in EXCEL format. The maps will be formatted from a template that can be used for presentation graphics if desired.

The geospatial maps will be catalogued and placed in a file structure that can easily be searched for a particular map. An index will be provided.

- Mapping: Visualization Techniques

Due to the large number of variables to be forecast, major trends will be identified in meetings with SJTPO staff for further illustration. Again, templates for charts, graphs and maps will be developed so that source data can be linked to them for display.

PART A: Scenario Building Component

- Scenarios: Building and Reporting

Recognizing that many of the techniques referenced on the FHWA website are beyond the budget for this proposal, the preferred method for this project would be focus groups with SJTPO staff members, county planners, and appropriate other agencies. These would be preceded by some general assumptions for low, medium, and high growth scenarios to be tested in the focus group meetings.

However, recognizing that the SJTPO would like to utilize scenario planning for its next RTP, a consultation on methods would be beneficial so that there would be some consistency and learning from one this project to the later one.

Once again, the use of templates for visualization techniques will allow the scenarios to be presented easily given the source data files.

PART B: Disaggregation to the TAZ and 2000 Census Tract Levels

The disaggregation of data to the census tract level will be performed much the same as the municipal data is constructed from the county-level data. Using shares from historical Census data, each tract in the four-county region will be assigned the data variables required.

The census tract data will be consistent with the municipal totals, which are consistent with the county totals.

APPENDIX B:

MEETING DATES, PROGRESS REPORTS AND MINUTES

Meeting Dates

The SJTPO awarded the *2040 Demographic Forecast* contract to the *CRBR* on October 25, 2010. Meetings were held at the offices of the SJTPO on:

Jan. 20, 2011
March 14, 2011
June 7, 2011
June 30, 2011
July 11, 2011
September 12, 2011

In addition, two Scenario Planning Workshops were held:

March 25, 2011 at Atlantic Cape Community College in Mays Landing, NJ
April 1, 2011 in Woodstown, NJ

Meeting Minutes and Progress Reports

Project: Year 2040 Demographic Forecasts

SUBJ: Kick Off Meeting at SJTPO office (South Jersey Transportation Planning Org.)
DATE: 1/20/11

In attendance for SJTPO (http://www.sjtpo.org):

1. Alan Huff, Transportation Planner
2. Bill Schiavi, CPA, Manager of Regional Planning
3. David Heller

For CRBR Team (Center for Regional & Business Research, ACCC):

1. Dr. Richard Perniciaro, Dean
2. Marie Holmdal, Marketing Communications
3. Luis Olivieri, Sr. Mgr. GIS

Meeting Notes:
Per Richard: What will we be given by the other consultant?
URS Consultants in Ft. Washington, PA, are the main modeling consultants. Luis needs a main contact . . . David will email it to him after the meeting.
The schedule. 4/29/11—Target end date.
TAC meets every second Monday of the month, if we wish to run by them anything for feedback. 2/14/11 is the next meeting. Scenarios (highs and lows were of most interest in the past, rather than the center lines) will not be done then, but we can provide some information (i.e. the steps in the process) either in person or via email per Richard.
Focus Groups should be put together from the TAC group, plus some other municipal and econ dev people. SJTPO will do a solicitation to gather a group. We will provide a recommended list of people outside TAC. Five or six people per group from each of the four southern counties. Hold them in Atlantic Co. and in Salem Co.
Who should send focus group invite letters? Richard to send SJTPO a letter and they will forward to Focus Group participants. Content of letter: Methodology and why we are doing it.
Third week of Feb., we should send them the highs and lows, only municipal data, and ask for input thru focus group around end of Feb./beginning of March.
We (this group) will present at TAC March mtg.
Marie to review profile. Luis to present TAZ data; he needs to determine how best to present the data. (David will give him older TAZ data to see what they looked like.)
Traffic analysis zones—we will receive a SHAPE file. The TAZs will be mapped, but we have to overlap the census track to them.
SJTPO has to keep an eye on its deadlines (in Spring) and work it into its calendar.
Profile Reports and Presentation Boards for SJTPO Staff Use (M&M Communications work):
Template file needed (built around the common information, i.e. population, housing units, whatever they choose) for data for maps and bar charts. All data would come from an Excel spreadsheets.
Want to show examples, e.g., here's what a TAZ is. Will do some **general content boards and some specific content boards.**
For instance, at a public meeting, they want the option to pull up a template to show on a screen, so will need a few **PowerPoint slides**.

Luis can provide maps they can show in various mapping software . . . .he suggests interactive rather than static.

Profile report (approx. 6 pgs) will be summary information that SJTPO will post to its website.

Key Dates Going Forward:

2/7/11—County projections due from Richard. Determine the locations of the Focus Groups at this time.

2/14/11—Meet with TAC briefly (re: County Level, Focus Groups). Pre- or Post-meeting we (this group) will meet to finalize the procedure, review potential focus group participants, and review/determine presentation materials (i.e. graphs, tables) required.

End of Feb—hold Focus Groups. Our group to review municipal, county and scenarios (hi/lo). At this point, we (this group) will know the final numbers (year 'round).

March 14—go to Tac meeting with results.

Draft report due a few days after this meeting . . . *3rd week in March.* *Take the next month to go through it and have the final at end of April (29th), during which time we will work on the presentation materials (M&M Communications).*

Economic, Marketing, Regional
& Workforce Studies

Richard C. Perniciaro, Ph.D.
Director

January 2011

To: W. Schiavi, SJTPO
Re: March 31, 2011 Update

The Center for Regional and Business Research (CRBR) has been contracted to develop the *2040 Demographic Projections* for the SJTPO. The kick-off meeting was held on January 20, 2011 at the SJTPO office. In the remainder of the first quarter of 2011, the following tasks were completed or begun:

1. Corresponded with URS on TAZ requirements and final forms.
2. Developed baseline county-level projections for employment and population for SJTPO review.
3. Developed baseline municipal-level projection for employment and population based on shares of each and recent trends.
4. Using 1995-2010 trends, developed both high-growth and low-growth scenarios for county and municipal population and employment projections through 2040.
5. Presented baseline and scenarios to the TAC on March 14, 2011 at meeting held at SJTPO. Collected input from members.
6. Following TAC meeting, developed Focus Group agendas and invitations to three focus group sessions to be held April 1 and April 8. Arranged sites and invited others from utilities, banks, media, and chambers.
7. Continued dialogue with TAZ consultants.
8. Began development of sectoral employment data based on Economic Census data. Also, finalized the methodology for seasonal employment data based on trends in peak to trough monthly employments at county and municipal levels.

Economic, Marketing, Regional
& Workforce Studies

Richard C. Perniciaro, Ph.D.
Director

March 7, 2011

RE: 2040 Demographics, Update

As requested, below is an update of project timelines and activities:

1. The baseline projections have been submitted to SJTPO for review. CRBR is working on the tract level projections as the Census 2010 data for population at that level is now available. The TAZ-level data will be entered on a preliminary basis using the existing boundaries, but GIS representation of the tract data will be completed by March 23rd.

   The standard high and low projections for population and employment will be submitted to SJTPO by March 10th for review and discussion of the methodology will be discussed with the TAC on March 14th. It is important that the TAC and SJTPO agrees with the base case mid-projections before reviewing the scenario projections.

   The scenario development sessions will be held on March 25th at ACCC and April 1st at either Cumberland or Salem planning office. Invites for these sessions will be distributed at the TAC meeting on March 14th with the base case high and low projections. Other potential attendees will be invited by e-mail.

   Following the finalization of the base case population and employment data, the remaining non-summer/year-round data items will be finalized in two weeks time (by March 28th). The housing data will be based on 2010 county unit counts but made updateable with the Census release in May.

   The summer dataset: methodology will be discussed March 10th with SJTPO, discussed with TAC on March 14th. The data items will also be delivered on March 28th. The TAZ data may be later depending on delivery of the boundary maps from the consultant.

   Following the April 1st scenario development workshop, adjustments to the base case high and low projections will be made and a “desired” growth scenario developed from focus group input. These will be mapped to compare to the base case projections.

CRBR and SJTPO should meet in the week of March 28th to review the projections to date and decide on the presentation material to be developed.

All products for review – including mock-ups of the presentation material and county summaries – by April 25th.

2. The letter to be sent to TAC is attached. It asks them to review the base case mid-projections for population and employment at the municipal level. In addition, we will brief them on the methodologies to be used for the low and high cases as well as the seasonal projections.

3. On March 9th I will email SJTPO the high and low growth scenarios for population and employment at the municipal levels. These are based on trend growth from 1990 to 2005 for the high case. The low case is based on 2005 to 2010 growth trends (those influenced by the recession). These will be used for a discussion on March 10th or 11th which will include a discussion on the seasonal methodology to be used.

Economic, Marketing, Regional
& Workforce Studies

Richard C. Perniciaro, Ph.D.
Director

SJTPO DEMOGRAPHIC PROJECTIONS, 2040
UPDATE AND REVIEW
JUNE 30, 2011

Activities to date:

- Initial TAC meeting, reviewed baseline employments and populations by county and municipality.
- Mapping of baseline data and wetlands.
- Refined TAZ definitions to % of municipality and census tracts.
- Held focus group meetings (3) for scenario development; constructed high and low growth scenarios.
- Collected available Census 2010 data on population, race, age and housing units. Also, built input file with historical data on requested variables.
- Completed projections and sent out data for second review.
- Developed brochure template for distribution; same template for powerpoint presentation describing the project.

Data developed:

- Employment down to TAZ level for total/industrial/office/other.
- Employment for same categories for municipalities through 2040; includes summer weekends and weekdays.
- Employment by NAICS by municipality through 2040, annual.
- Unemployment rates by municipality through 2040.
- Population by race and age, annual by municipality and just population byTAZ.
- Summer weekday and weekend for: residents (occupied/vacant housing units); and total in-town estimates using hotels/motels/campgrounds/marinas/in-commuting workers/ and, increased traffic counts for day-trippers.
- Assembled baseline historical data for 1990, 2000 for: zero-vehicle HHs and Limited English Proficiency (LEP) population – not yet available for 2010.
- Projected household and housing unit data, vacancy rates, PPHH and median HH income.

Comments received:

1) Overall Growth:

To take advantage of the models available to forecasting services and to retain consistency in the pieces , especially population/employment relationship, external forecasts are used. Three are considered, with the near-term being a large factor. The NJDOL, Woods & Poole and Moody's Economics projections were considered.

SJTPO - Prelim PROJECTIONS						
Population						
	1990	2000	2010	2025	2040	
ATL WP	225,431	252,980	275531	314,156	354,474	
ME	225,431	253,038	273,240	301,263	340,281	341,915
DOL	225,431	253,038	274,549	302,380	341,542	
CM WP	95,368	102,308	97,919	114,317	131,338	
ME	95,368	102,307	97,265	99,760	101,541	103,083
DOL	95,368	102,307	97,265	94640	96,330	
Cumb WP	138,366	146,351	157,753	165,997	175,106	
ME	138,366	146,362	158,945	172,836	188,607	186,178
DOL	138,366	146,362	156,898	172740	188,503	
Salem WP	65,383	64,216	66,083	72,775	79,078	
ME	65,383	64,213	66,804	74,069	82,741	79,078
DOL	65,383	64,213	66,083	68360	76,364	

2) Individual townships:

Build-outs are not known before projecting at the MCD level. There is the possibility that some municipalities will hit the wall somewhere in the projection time period. This requires county level input.

Where noted by county planners, these towns will be reviewed. However, unless there is a land-use or other known constraint, the projection will probably stand.

3) Seasonal estimates:

Take with a grain of sand. The methodology is solid, but the data is uneven and some estimates on occupancy levels are not from county-by-county surveys.

4) NAICS data will (has) been discontinued:

Municipal reporting of employment by place of work is going away. Reporting is at a much more general level (public, private, total). Therefore, modeling at this level will become very difficult. An example of the data used in this report is shown below:

ELMER									
	2192	1892	1839	1940	1978	2025	2079	2140	2235
Agriculture, forestry, fishing and hunting	414	300	245	250	244	239	234	230	230
Mining	0	0	0	0	0	0	0	0	0
Utilities	0	0	0	0	0	0	0	0	0
Construction	223	96	65	67	67	67	67	68	69
Manufacturing	0	16	12	12	12	11	11	11	10
Wholesale trade	113	56	71	71	68	65	63	60	59
Retail trade	0	300	309	313	317	320	324	327	331
Transportation and warehousing	84	52	75	89	101	115	131	148	171
Information	0	0	0	0	0	0	0	0	0
Finance and insurance	158	129	100	108	111	116	120	125	132
Real estate and rental and leasing	0	0	0	0	0	0	0	0	0
Professional and technical services	85	62	53	54	53	52	51	50	49
Management of companies and enterprises	0	0	0	0	0	0	0	0	0
Administrative and waste services	62	52	92	105	114	124	136	149	166
Educational services	0	0	0	0	0	0	0	0	0
Health care and social assistance	790	653	607	650	667	686	708	731	767
Arts, entertainment, and recreation	0	0	0	0	0	0	0	0	0
Accommodation and food services	124	85	117	126	129	133	137	142	149
Other services, except public administration	46	32	27	29	29	30	30	31	33
Unclassified entities	0	0	0	0	0	0	0	0	0
GOVT.	93	60	65	67	67	67	67	68	69

Economic, Marketing, Regional
& Workforce Studies

Richard C. Perniciaro, Ph.D.
Director

SJTPO DEMOGRAPHIC PROJECTIONS, 2040
RESPONSES TO TAC CONCERNS
July 8, 2011

Comments received:

1) Cumberland (B. Brewer)

- Bridgeton, Maurice River and Fairfield have significant prison populations. These will not grow and, hence, they should be separated from the civilian growth.

  Yes, they should be if we knew that the two – group and civilian – were divergent. This is not the case in Fairfield, as both were stable in 2000 – 2010 as is the forecast. In Bridgeton, the civilian population grew by 10% in the decade (18,311 to 20,139) and group pop. by 17%. The 2010-2020 projection is for overall 9.2% growth, more a reflection of the civilian pattern. In Maurice R. the group pop. Was 21% from 2000-2010 but civilian was also high at 9.1%. The next ten years show 12% growth, not too far from the last civilian rate.

  In short, with the prison populations growing with the civilian pop, in Maurice R. and Bridgeton and Fairfield both being flat, the projections should not be overly influenced by the projection of the totals. Not knowing the continued trends in the prison populations, changes would be better, but very small in overall results.

- Lawrence shows high growth for 2010 to 20120. Yes, but it grew over 20% in the past decade and in a slow-growing county it picks up growth in the next decade then moderates. Yes, could be a little slower, but would still be high relative to the rest of the county.

2) Vineland (K. Hicks)

- Vineland Dev. Ctr. will probably close.

Maybe. This is a timing problem. Not knowing the actual outcome, the projections will be completed prior to actual closing. While we could

subtract out the employment, we would have no history to go on for the impact on population, income, etc. This probability will be noted, but analyzing the overall impact would take more time and go beyond the term of the contract at this time.

- The summer visitor counts are too high (Cumberland and Salem (L. Joyce) counties.

Yes they are. In Salem and Cumberland counties the use of traffic counts as estimates for day-trippers has led to overestimates. In reality, this traffic is both passing through as well as bringing visitors to the counties. This problem is not nearly as severe in Cape May and Atlantic as they are generally destinations. While traffic counts were used where available, this will be corrected by using 50% of the traffic count seasonal increases vs. 100% in the original estimates.

3) Overall Growth in Salem County (L. Joyce)

- To take advantage of the models available to forecasting services and to retain consistency in the pieces, especially population/employment relationship, external forecasts are used. Three are considered, with the near-term being a large factor. The NJDOL, Woods & Poole and Moody's Economics projections were considered.

SJTPO - Prelim PROJECTIONS						
Population						
	1990	2000	2010	2025	2040	
ATL WP	225,431	252,980	275531	314,156	354,474	
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ME	65,383	64,213	66,804	74,069	82,741	79,078
DOL	65,383	64,213	66,083	68360	76,364	

As the table shows, the mid-estimate was used for Salem. In addition, all three services anticipate modest growth as the 295 corridor fills up over the next three decades. While the NJDOL forecast ends in 2028 and is interpolated to

2040, both W&P and Moody's show growth as a continuation of 1990 – 2010 trends that showed high growth moving to southern Gloucester County and continuing on where access to major highways is available.

4) Corbin City (J. Peterson)

- The veritable explosion of population by 43 people in 30 years may not be possible…but it fell off the radar screen.

- Employment reported in 2008 is too high, should be held at 150.

APPENDIX C:

REQUIRED DATA WORKSHEET

Required Data:

	Non-Summer/Year-Round (Census-Like)			Summer Weekday (SWD) and Summer Week End (SWE)		
	Historic	Current	Future	Historic	Current	Future
	(1990, 2000)	*(2000)*	*(2015, 2020, 2025, 2030, 2035, 2040)*	*(1990, 2000)*	*(2000)*	*(2015, 2020, 2025, 2030, 2035, 2040)*
Total Employment	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**
Industrial Employment	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**
Retail Employment	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**
Office Employment	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**
Other Employment	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**
Unemployment rate	**Complete**	**Complete**	**Complete**			
Total Population	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**
Population by five-year cohort	**Complete**	**Complete**	**Complete**			
Population, 65+	**Complete**	**Complete**	**Complete**			
Group-quarter population	**Complete**	**Complete**	**Complete**			
Total Household population	**Complete**	**Complete**	**Complete**			
Single-family	Not required					
Multi-family	Not required					
Zero-Vehicle Household Population	Complete	Complete	NA			
Median Household Income	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**
Population, One Race	**Complete**	**Complete**	**Complete**			
White	**Complete**	**Complete**	**Complete**			
Total of "Population, One Race" minus "White"	**Complete**	**Complete**	**Complete**			
Black or African American	**Complete**	**Complete**	**Complete**			
American Indian & Alaska Native	**Complete**	**Complete**	**Complete**			
Asian	**Complete**	**Complete**	**Complete**			
Native Hawaiian & Other Pac. Islander	**Complete**	**Complete**	**Complete**			
Some other race	**Complete**	**Complete**	**Complete**			
Population, Two or more races	**Complete**	**Complete**	**Complete**			
Population, Hispanic or Latino (of any race)	**Complete**	**Complete**	**Complete**			
Limited English Proficient (LEP) Population	**Complete**	**Complete**	NA			
Total Households	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**	**Complete**
Single-family Households	**Not required**					
Multi-family Households	Not Required					
Median Household Income	**Complete**	**Complete**	**Complete**	NA	NA	**NA**
Household size	**Complete**	**Complete**	**Complete**			
Single-famly	Not required					
Multi-family	**Not required**					
Low-Income Households	**Complete**	**Complete**	NA			
Zero-Vehicle Households	**Complete**	**Complete**	NA			
Total Housing Units	**Complete**	**Complete**	**Complete**			
Occupied Housing Units	**Complete**	**Complete**	**Complete**			
Owner-Occupied Units	Not required					
Renter-Occupied	Not required					
Vacant Housing Units	**Complete**	**Complete**	**Complete**			
Summer Season	**Complete**	**Complete**	**Complete**			
Off Season	**Complete**	**Complete**	**Complete**			
Housing starts	Not Required	Not required	Not required			

Not required =Not needed or needed in a different form for model.
NA =Census 2010 data not released at time of study.

APPENDIX D:

SCENARIO DEVELOPMENT:

- **INVITATION**
- **PREPARATION NOTICE**

Economic, Marketing, Regional
& Workforce Studies

Richard C. Perniciaro, Ph.D.
Director

March 7, 2011

TAC Member

Dear :

The Center for Regional and Business Research (CRBR) is currently working with the South Jersey Transportation Planning Organization (SJTPO) to update its *2040 Demographic Projections*. This information serves as inputs to its Travel Demand Model, the principal planning tool for the region's transportation system. As a decision-maker about and/or a user of our region's transportation network, we would like to have you participate in a short workshop designed to create scenarios of alternatives to the trend growth patterns.

This workshop will follow the general guidelines for scenario development as recommended by the U.S. Department of Transportation (see: http://www.fhwa.dot.gov/planning/scenplan/guidebook/). In preparation for this exercise, we will provide you with the trend growth patterns in terms of employment and population at the municipal level and the general assumptions that they are derived from prior to the workshop. We will then ask you to think about some of your own scenarios about lower and higher growth rates based on your knowledge of the area. Unlike past scenario planning, we will then extend this to allow you to envision a "preferred development pattern" scenario. These will be discussed at the workshop.

The insight that you provide in developing these scenarios will then be used to estimate alternative demographic projections and, a bit more creatively, some alternative geographic distributions of population and employment based on factors that you specify as the basis for your preferred development pattern. These factors could include such drivers as sustainability, environmental benefits, efficiency, and quality of life. We will then use GIS techniques to actually visualize these alternative patterns.

Interested? Please plan to join us at one of the two workshops we will hold. Your colleagues are welcome as well. The times and locations are shown on the attached sheet. If you have any questions or concerns, please feel free to call either Bill Schiavo at the SJTPO (856-xxx-xxxx) or myself (609-343-5670). We look forward to your participation and ideas.

Sincerely,

ATLANTIC CAPE COMMUNITY COLLEGE | The CENTER for REGIONAL & BUSINESS RESEARCH

YOU ARE INVITED
TO:

SCENARIO PLANNING WORKSHOP
FOR THE
FOUR-COUNTY SJTPO SERVICE AREA

We would like you to share your insights and expertise!

Let us know your vision for the future development of the region by attending one of the two workshops below. Bring or send a colleague. We will start and finish on time.

WORKSHOP EAST: Friday, March x, 2011 from 8:30 – 10:00 AM

Atlantic Cape Community College
5100 Black Horse Pike
Mays Landing, NJ
Room 245, J-Building (Administrative)

Or

WORKSHOP WEST: Friday, March x+7, 2011 from 8:30 – 10:00 AM

Cumberland County Planning Department
Rt. 49
Bridgeton, NJ
Room xxx, x-Building

Please RSVP by email with the names and titles of your representatives to:

crbr@atlantic.edu

Economic, Marketing, Regional
& Workforce Studies

Richard C. Perniciaro, Ph.D.
Director

March 2011

Focus Group Participants:

The Center for Regional and Business Research (CRBR) is currently working with the South Jersey Transportation Planning Organization (SJTPO) to update its *2040 Demographic Projections*. As a decision-maker about and/or a user of our region's transportation network, we appreciate your participation in this short workshop designed to create scenarios of alternatives to the trend growth patterns.

- This workshop will follow the general guidelines for scenario development as recommended by the U.S. Department of Transportation (see: http://www.fhwa.dot.gov/planning/scenplan/guidebook/).

- In preparation for this exercise, we are providing you with the preliminary growth patterns in terms of employment and population at the county and municipal levels. See the attached file: **FocusGroupData.xls.** Please review this data if you have time and/or share with colleagues for their comments.

- Finally, the questions below are for discussion in the focus group workshops:

1. Review the baseline projections for your area of concern. Are the county projections sensible given your knowledge of the area? How about the municipal projections?
2. Are there any real constraints that you know of that will NOT allow the growth to occur as projected such as zoning, environmental or regulatory realities.
3. After looking at the high and low scenarios county projections, do you think that either one is too low or high? If so, what factors would be in play for you to make that assessment?
4. Finally, let's use your insight to envision an alternative geographic distribution of population and employment which would lead to your **preferred development pattern**. These factors could include such drivers as sustainability, environmental benefits, efficiency, and quality of life.
5. What are the implications of these projections for the transportation network? How would the transportation network "look" if the preferred pattern was developed?

Thank you in advance for planning to join us at one of the two workshops; March 25th at Atlantic Cape Community College (Admin. Building, Room J-245); or April 1st at the Ware Agricultural Building in Woodstown. Both begin at 8:30 AM and end at 10:00 AM.

If you have any questions, please call either Bill Schiavi at SJTPO (856-794-1941) or me (609-343-5670). We look forward to your participation and ideas.

APPENDIX E:

FINAL EMPLOYMENT AND POPULATION PROJECTIONS BY MUNICIPALITY

SJTPO 2040 DEMOGRAPHIC FORECAST							
MUNICIPAL POPULATION PROJECTIONS							
CRBR, 2011							
			Growth %		Growth %		Growth %
	1990	2000	1990-2000	2010	2000-2010	2040	2010-2040
Atlantic County	224,327	252,552	**13%**	274,549	**9%**	341,915	**25%**
Absecon city	7,298	7,638	**5%**	8,411	**10%**	9,910	**18%**
Atlantic City city	37,986	40,517	**7%**	39,558	**-2%**	41,153	**4%**
Brigantine city	11,354	12,594	**11%**	9,450	**-25%**	9,085	**-4%**
Buena borough	4,441	3,873	**-13%**	4,603	**19%**	6,204	**35%**
Buena Vista township	7,655	7,436	**-3%**	7,570	**2%**	7,800	**3%**
Corbin City city	412	468	**14%**	492	**5%**	535	**9%**
Egg Harbor township	24,544	30,726	**25%**	43,323	**41%**	66,491	**53%**
Egg Harbor City city	4,583	4,545	**-1%**	4,243	**-7%**	4,351	**3%**
Estell Manor city	1,404	1,585	**13%**	1,735	**9%**	2,023	**17%**
Folsom borough	2,181	1,972	**-10%**	1,885	**-4%**	1,948	**3%**
Galloway township	23,330	31,209	**34%**	37,349	**20%**	50,968	**36%**
Hamilton township	16,012	20,499	**28%**	26,503	**29%**	41,011	**55%**
Hammonton town	12,208	12,604	**3%**	14,791	**17%**	19,490	**32%**
Linwood city	6,866	7,172	**4%**	7,092	**-1%**	7,409	**4%**
Longport borough	1,224	1,054	**-14%**	895	**-15%**	891	**0%**
Margate City city	8,431	8,193	**-3%**	6,354	**-22%**	6,164	**-3%**
Mullica township	5,896	5,912	**0%**	6,147	**4%**	6,535	**6%**
Northfield city	7,305	7,725	**6%**	8,624	**12%**	10,406	**21%**
Pleasantville city	16,027	19,012	**19%**	20,249	**7%**	22,525	**11%**
Port Republic city	992	1,037	**5%**	1,115	**8%**	1,261	**13%**
Somers Point city	11,216	11,614	**4%**	10,795	**-7%**	11,054	**2%**
Ventnor City city	11,005	12,910	**17%**	10,650	**-18%**	10,516	**-1%**
Weymouth township	1,957	2,257	**15%**	2,715	**20%**	3,740	**38%**

SJTPO 2040 DEMOGRAPHIC FORECAST							
MUNICIPAL POPULATION PROJECTIONS							
CRBR, 2011							
			Growth %		Growth %		Growth %
	1990	2000	1990-2000	2010	2000-2010	2040	2010-2040
Cape May County	95,089	102,326	**8%**	97,265	**-5%**	103,083	**6%**
Avalon borough	1,809	2,143	**18%**	1,334	**-38%**	1,233	**-8%**
Cape May city	4,668	4,034	**-14%**	3,607	**-11%**	3,584	**-1%**
Cape May Point borough	248	241	**-3%**	291	**21%**	351	**21%**
Dennis township	5,574	6,492	**16%**	6,467	**0%**	6,594	**2%**
Lower township	20,820	22,945	**10%**	22,866	**0%**	23,317	**2%**
Middle township	14,771	16,405	**11%**	18,911	**15%**	23,419	**24%**
North Wildwood city	5,017	4,935	**-2%**	4,041	**-18%**	3,937	**-3%**
Ocean City city	15,512	15,378	**-1%**	11,701	**-24%**	11,228	**-4%**
Sea Isle City city	2,692	2,835	**5%**	2,114	**-25%**	2,020	**-4%**
Stone Harbor borough	1,025	1,128	**10%**	866	**-23%**	833	**-4%**
Upper township	10,681	12,115	**13%**	12,373	**2%**	13,732	**11%**
West Cape May borough	1,026	1,095	**7%**	1,024	**-6%**	1,028	**0%**
West Wildwood borough	453	448	**-1%**	603	**35%**	773	**28%**
Wildwood city	4,484	5,436	**21%**	5,325	**-2%**	5,407	**2%**
Wildwood Crest borough	3,631	3,980	**10%**	3,270	**-18%**	3,189	**-2%**
Woodbine borough	2,678	2,716	**1%**	2,472	**-9%**	2,466	**0%**

SJTPO 2040 DEMOGRAPHIC FORECAST							
MUNICIPAL POPULATION PROJECTIONS							
CRBR, 2011							
			Growth %		Growth %		Growth %
	1990	2000	1990-2000	2010	2000-2010	2040	2010-2040
Cumberland County	138,053	146,438	**6%**	156,898	**7%**	186,178	**19%**
Bridgeton city	18,942	22,771	**20%**	25,349	**11%**	32,810	**29%**
Commercial township	5,026	5,259	**5%**	5,178	**-2%**	5,281	**2%**
Deerfield township	2,933	2,927	**0%**	3,119	**7%**	3,632	**16%**
Downe township	1,702	1,631	**-4%**	1,585	**-3%**	1,610	**2%**
Fairfield township	5,699	6,283	**10%**	6,295	**0%**	6,324	**0%**
Greenwich township	911	847	**-7%**	804	**-5%**	810	**1%**
Hopewell township	4,215	4,434	**5%**	4,571	**3%**	4,915	**8%**
Lawrence township	2,433	2,721	**12%**	3,290	**21%**	4,782	**45%**
Maurice River township	6,648	6,928	**4%**	7,976	**15%**	9,465	**19%**
Millville city	25,992	26,847	**3%**	28,400	**6%**	32,492	**14%**
Shiloh borough	408	534	**31%**	516	**-3%**	523	**1%**
Stow Creek township	1,437	1,429	**-1%**	1,431	**0%**	1,436	**0%**
Upper Deerfield township	6,927	7,556	**9%**	7,660	**1%**	7,914	**3%**
Vineland city	54,780	56,271	**3%**	60,724	**8%**	74,144	**22%**

SJTPO 2040 DEMOGRAPHIC FORECAST							
MUNICIPAL POPULATION PROJECTIONS							
CRBR, 2011							
			Growth %		Growth %		Growth %
	1990	2000	1990-2000	2010	2000-2010	2040	2010-2040
Salem County	65,294	64,285	**-2%**	66,083	**3%**	79,078	**20%**
Alloway township	2,795	2,774	**-1%**	3,467	**25%**	4,987	**44%**
Carneys Point township	8,443	7,684	**-9%**	8,049	**5%**	9,957	**24%**
Elmer borough	1,571	1,384	**-12%**	1,395	**1%**	1,450	**4%**
Elsinboro township	1,170	1,092	**-7%**	1,036	**-5%**	1,035	**0%**
Lower Alloways Creek townsl	1,858	1,851	**0%**	1,770	**-4%**	1,786	**1%**
Mannington township	1,693	1,559	**-8%**	1,806	**16%**	2,277	**26%**
Oldmans township	1,683	1,798	**7%**	1,773	**-1%**	1,806	**2%**
Penns Grove borough	5,228	4,886	**-7%**	5,147	**5%**	6,077	**18%**
Pennsville township	13,794	13,194	**-4%**	13,409	**2%**	17,286	**29%**
Pilesgrove township	3,250	3,923	**21%**	4,016	**2%**	4,482	**12%**
Pittsgrove township	8,121	8,893	**10%**	9,393	**6%**	12,018	**28%**
Quinton township	2,511	2,786	**11%**	2,666	**-4%**	2,667	**0%**
Salem city	6,883	5,857	**-15%**	5,146	**-12%**	5,139	**0%**
Upper Pittsgrove township	3,140	3,468	**10%**	3,505	**1%**	3,813	**9%**
Woodstown borough	3,154	3,136	**-1%**	3,505	**12%**	4,333	**24%**

SJTPO 2040 DEMOGRAPHIC FORECAST							
MUNICIPAL EMPLOYMENT PROJECTIONS							
CRBR, 2011							
			Growth %		Growth %		Growth %
	1990	2000	1990-2000	2010 (est.)	2000-2010	2040	2010-2040
Atlantic County	135,692	144,875	**7%**	136,800	**-6%**	163,285	**19%**
Absecon city	2,913	3,555	**22%**	3,670	**3%**	4,626	**26%**
Atlantic City city	73,855	61,004	**-17%**	56,263	**-8%**	65,353	**16%**
Brigantine city	1,166	1,925	**65%**	1,592	**-17%**	1,816	**14%**
Buena borough	1,523	1,486	**-2%**	1,260	**-15%**	1,438	**14%**
Buena Vista township	1,225	1,223	**0%**	1,350	**10%**	1,702	**26%**
Corbin City city	34	542	**1480%**	150	**-5%**	150	**0%**
Egg Harbor City city	1,352	3,751	**177%**	3,125	**-17%**	3,566	**14%**
Egg Harbor township	7,756	15,409	**99%**	14,404	**-7%**	17,499	**21%**
Estell Manor city	41	266	**549%**	239	**-10%**	272	**14%**
Folsom borough	728	906	**25%**	872	**-4%**	1,100	**26%**
Galloway township	5,793	7,672	**32%**	8,901	**16%**	11,221	**26%**
Hamilton township	8,378	11,379	**36%**	10,554	**-7%**	12,822	**21%**
Hammonton town	8,144	8,975	**10%**	8,838	**-2%**	11,142	**26%**
Linwood city	2,723	2,919	**7%**	2,803	**-4%**	3,199	**14%**
Longport borough	173	183	**6%**	160	**-13%**	182	**14%**
Margate City city	1,361	1,691	**24%**	1,680	**-1%**	2,118	**26%**
Mullica township	457	642	**40%**	615	**-4%**	702	**14%**
Northfield city	3,494	5,161	**48%**	4,077	**-21%**	4,652	**14%**
Pleasantville city	7,755	7,618	**-2%**	7,720	**1%**	9,732	**26%**
Port Republic city	86	90	**5%**	86	**-4%**	99	**14%**
Somers Point city	5,090	6,360	**25%**	6,137	**-4%**	7,699	**25%**
Ventnor City city	1,570	1,891	**20%**	1,733	**-8%**	1,978	**14%**
Weymouth township	74	228	**207%**	180	**-21%**	205	**14%**

SJTPO 2040 DEMOGRAPHIC FORECAST							
MUNICIPAL EMPLOYMENT PROJECTIONS							
CRBR, 2011							
			Growth %		Growth %		Growth %
	1990	2000	1990-2000	2010 (est.)	2000-2010	2040	2010-2040
Cape May County	38,833	42,733	**10%**	41,500	**-3%**	50,750	**22%**
Avalon borough	1,482	1,371	**-7%**	1,333	**-3%**	1,403	**5%**
Cape May city	4,383	4,905	**12%**	5,115	**4%**	7,217	**41%**
Cape May Point borough	114	230	**102%**	163	**-29%**	172	**5%**
Dennis township	1,307	2,085	**60%**	1,884	**-10%**	1,983	**5%**
Lower township	2,716	3,266	**20%**	3,012	**-8%**	3,516	**17%**
Middle township	8,797	10,602	**21%**	10,741	**1%**	15,155	**41%**
North Wildwood city	1,854	1,612	**-13%**	1,307	**-19%**	1,376	**5%**
Ocean City city	5,346	6,090	**14%**	5,717	**-6%**	6,018	**5%**
Sea Isle City city	1,115	1,304	**17%**	1,190	**-9%**	1,253	**5%**
Stone Harbor borough	1,180	1,074	**-9%**	924	**-14%**	973	**5%**
Upper township	2,677	3,656	**37%**	2,970	**-19%**	3,467	**17%**
West Cape May borough	123	298	**141%**	163	**-45%**	172	**5%**
West Wildwood borough	8	48	**495%**	56	**17%**	79	**41%**
Wildwood city	4,660	3,844	**-18%**	3,589	**-7%**	3,778	**5%**
Wildwood Crest borough	2,473	1,737	**-30%**	1,361	**-22%**	1,432	**5%**
Woodbine borough	599	611	**2%**	1,974	**223%**	2,785	**41%**

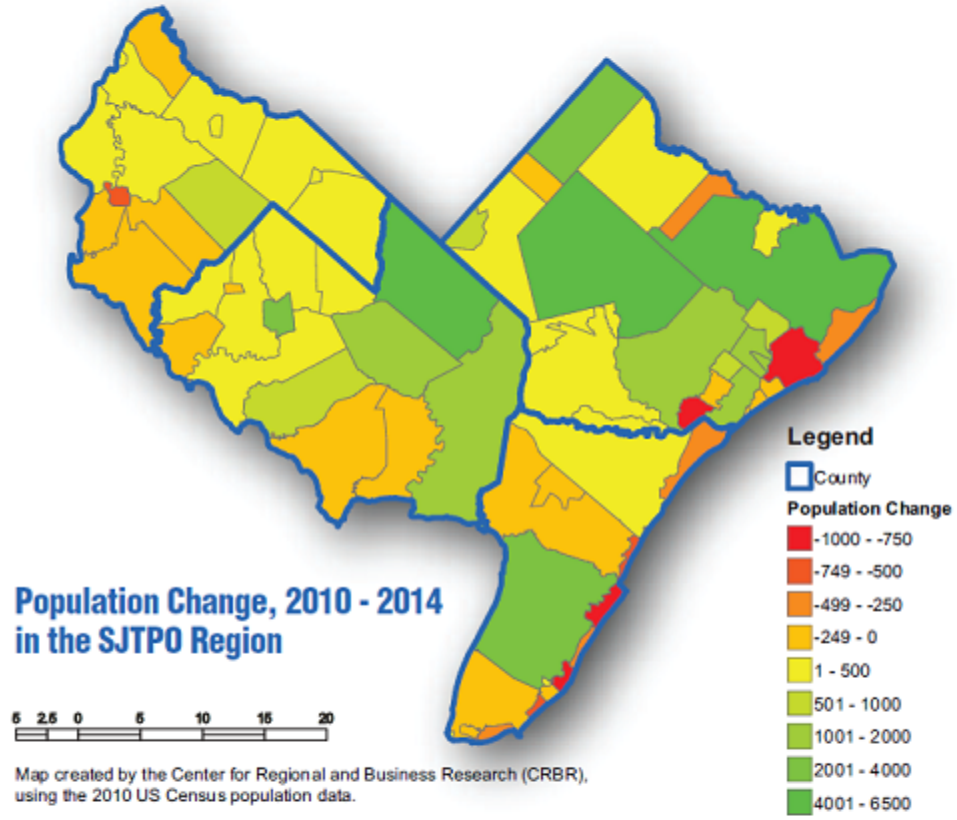
SJTPO 2040 DEMOGRAPHIC FORECAST							
MUNICIPAL EMPLOYMENT PROJECTIONS							
CRBR, 2011							
			Growth %		Growth %		Growth %
	1990	2000	1990-2000	2010 (est.)	2000-2010	2040	2010-2040
Cumberland County	59,600	60,442	**1%**	59,330	**-2%**	71,055	**20%**
Bridgeton city	11,694	10,260	**-12%**	10,235	**0%**	12,483	**22%**
Commercial township	360	547	**52%**	390	**-29%**	442	**14%**
Deerfield township	931	733	**-21%**	923	**26%**	1,143	**24%**
Downe township	53	375	**604%**	455	**22%**	564	**24%**
Fairfield township	764	1,617	**112%**	1,021	**-37%**	1,159	**14%**
Greenwich township	47	95	**102%**	60	**-37%**	68	**14%**
Hopewell township	264	166	**-37%**	105	**-37%**	119	**14%**
Lawrence township	669	1,088	**63%**	687	**-37%**	780	**14%**
Maurice River township	266	469	**76%**	2,544	**442%**	3,152	**24%**
Millville city	12,652	11,595	**-8%**	10,354	**-11%**	11,757	**14%**
Shiloh borough	48	175	**262%**	88	**-50%**	100	**14%**
Stow Creek township	51	516	**915%**	325	**-37%**	370	**14%**
Upper Deerfield township	1,537	2,050	**33%**	1,898	**-7%**	2,156	**14%**
Vineland city	30,263	30,755	**2%**	30,245	**-2%**	36,878	**22%**

SJTPO 2040 DEMOGRAPHIC FORECAST							
MUNICIPAL EMPLOYMENT PROJECTIONS							
CRBR, 2011							
			Growth %		Growth %		Growth %
	1990	2000	1990-2000	2010 (est.)	2000-2010	2040	2010-2040
Salem County	23,998	22,704	**-5%**	22,152	**-2%**	30,052	**36%**
Alloway township	318	646	**103%**	524	**-19%**	659	**26%**
Carneys Point township	1,487	2,274	**53%**	3,022	**33%**	4,562	**51%**
Elmer borough	1,777	1,593	**-10%**	1,594	**0%**	2,005	**26%**
Elsinboro township	67	106	**59%**	152	**44%**	226	**49%**
Lower Alloways Creek township	2,416	679	**-72%**	978	**44%**	1,454	**49%**
Mannington township	1,575	992	**-37%**	1,428	**44%**	2,124	**49%**
Oldmans township	996	726	**-27%**	525	**-28%**	660	**26%**
Penns Grove borough	1,200	1,138	**-5%**	1,119	**-2%**	1,407	**26%**
Pennsville township	6,873	4,121	**-40%**	3,526	**-14%**	4,497	**28%**
Pilesgrove township	330	1,042	**216%**	1,500	**44%**	2,231	**49%**
Pittsgrove township	800	3,178	**297%**	1,685	**-47%**	2,119	**26%**
Quinton township	137	150	**9%**	291	**95%**	433	**49%**
Salem city	3,919	3,329	**-15%**	3,164	**-5%**	3,979	**26%**
Upper Pittsgrove township	592	967	**63%**	688	**-29%**	865	**26%**
Woodstown borough	1,511	1,765	**17%**	1,886	**7%**	2,804	**49%**

APPENDIX F:

BROCHURES

South Jersey Transportation Planning Organization
2040 Demographic Forecast



Map created by the Center for Regional and Business Research (CRBR), using the 2010 US Census population data.

The 2040 Demographic Forecast represents an update to a forecast performed five years earlier. While the forecast period is lengthy – 30 years – transportation planning requires a long-term view of the growth patterns to occur in the region in order to invest public funds most efficiently. The forecasts provided in this update serve as input to SJTPO Regional Transportation Plan, South Jersey Travel Demand Model, and the Environmental Justice Analysis that are used for regional transportation planning in the four-county region of Atlantic, Cape May, Cumberland and Salem.

Due to the large volume of both historical and forecast data, this report presents only a small fraction of the project's required information. The tables and graphs in this report are the broadest set of information that would most likely interest the majority of readers. For the complete project report, visit the SJTPO's website at http://sjtpo.org/.

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FOUR COUNTY OVERVIEW

The overall growth of the SJTPO region is reported in the table below. The regional population growth is projected to be 6.5% per decade for the 2010-2040 period. Compared to the 8.2% growth experienced in the 1990-2000 decade, this represents a slowing of the most recent historical trend. The 2000-2010 decade slowed to 5.2%, influenced heavily by the stagnation of the post-2006 recessionary years.

At the county level, this represents a slower growth trend than the last 20 years for Atlantic County as casino development and retirement homes moderate growth patterns. Cape May County is expected to reverse its declining population very slowly with a 2% 10-year average. Cumberland County continues to grow at the trend of the past 20 years. However, it should be noted that growth in the middle part of the last decade was uncharacteristically high, reinforcing the projection for continued growth. Finally, Salem County is expected to continue to accelerate its growth to 6.6% per decade. The potential for the redevelopment of Pennsville and Salem City, the possibility of expanded employment due to new nuclear power plants, and the access provided by both Route 295 and the NJ Turnpike put the county in the path of development in the next two or three growth cycles to occur over the forecast period.

The employment projections show an acceleration of trends as the region continues to present inexpensive land and an improving infrastructure to potential employees. With access to major highways, rail and port facilities, the region's employment is expected to grow by 7.1%. While Cape May at 7.4% per decade and Salem at 11.9% have the highest growth rates, these counties also have fairly small bases from which to grow. The majority of jobs are still expected to come from Atlantic and Cumberland counties.

	1990	2000	1990-2000 Growth %	2010	2000-2010 Growth %	2040	2010-2040 Avg. 10-Yr. Growth %
EMPLOYMENT PROJECTIONS							
NON-FARM SJTPO REGION	**258,123**	**270,754**	**4.9%**	**259,782**	**-4.1%**	**315,141**	**7.1%**
Atlantic County	135,692	144,875	6.8%	136,800	-5.6%	163,285	6.5%
Cape May County	38,833	42,733	10.0%	41,500	-2.9%	50,750	7.4%
Cumberland County	59,600	60,442	1.4%	59,330	-1.8%	71,055	6.6%
Salem County	23,998	22,704	-5.4%	22,152	-2.4%	30,052	11.9%
POPULATION PROJECTIONS							
SJTPO REGION	**522,763**	**565,601**	**8.2%**	**594,795**	**5.2%**	**710,254**	**6.5%**
Atlantic County	224,327	252,552	12.6%	274,594	8.7%	341,915	8.2%
Cape May County	95,089	102,326	7.6%	97,265	-4.9%	103,083	2.0%
Cumberland County	138,053	146,438	6.1%	156,898	7.1%	186,178	6.2%
Salem County	65,294	64,285	-1.5%	66,083	2.8%	79,078	6.6%