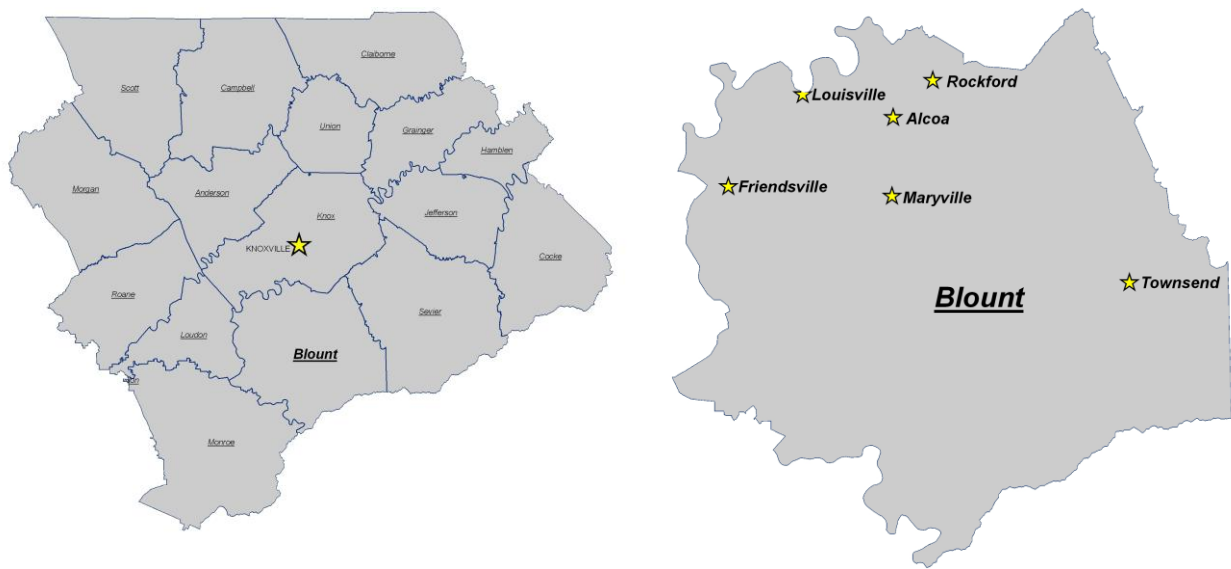
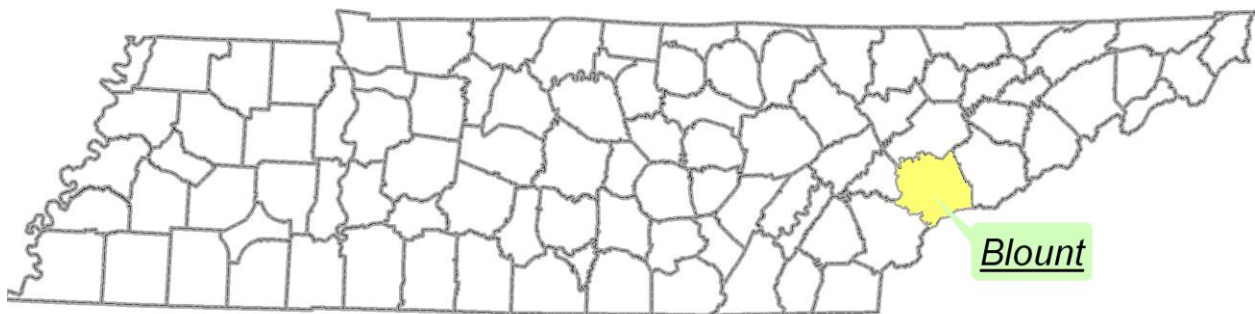


Blount County Land Use, Transportation and Policies Plan: 2010 to 2030

Introduction

Blount County is located at the eastern boundary of Tennessee, just south of Knoxville and Knox County, and is part of the 16 county East Tennessee Development District region. The county is also part of the urbanized, metropolitan area associated with the City of Knoxville and Knox County to the north. The county contains six cities – Alcoa, Friendsville, Louisville, Maryville, Rockford, and Townsend. Using 2008 US Census Bureau estimated population, Alcoa at 8,606 and Maryville at 27,156 were the two largest cities. The 2008 estimated populations of the other small cities were: Friendsville 921; Louisville 2,192; Rockford 814; and Townsend 272. The 2009 estimated population for the whole county was 122,784.



Blount County has many plans and planning studies, produced over the years to inform and guide decisions about the future of our community. The Planning Commission adopted a general Policies Plan in 1999 that covered a wide range of issues related to growth and development in the County. The Planning Commission also consulted, at various times, plans produced prior to 1999, including a School Facilities Plan (1997 with horizon year to 2010), a Mountain Area Plan (1997 with horizon year to 2010), and the Land Use and Policies Plan (1976 with horizon year to 1990). From 1999 to 2008, many other plans and studies were completed, including 1101 Growth Plan (1999 with final State approval 2001), Conceptual Land Use Plan (2000), Roadway Needs Study (2000 updated 2004), Water Quality Plan (2003), Parks and Recreation Master Plan (2005), and County Growth Strategy (2005). The Planning Commission adopted an updated Policies Plan in 2008 that considered previous plans and studies. After updating the Policies Plan, the Planning Commission undertook and adopted the Blount County Green Infrastructure Plan in 2009 and an updated Major Road Plan in 2010. In addition, the Planning Department produced an updated population analysis with projections in 2010.

Planning in Blount County has not proceeded along the traditional path of master plan or comprehensive plan production, but has addressed issues identified as most important from several planning processes conducted over more than twelve years. Not finding a unitary document that encompasses traditional and easily identifiable plan elements may cause some to conclude that our plans are incomplete. The State of Tennessee Three Star Program has as a benchmark for a minimum traditional plan in the following:

Land Use and Transportation Plan. An adopted Land Use and Transportation Plan, whether stand-alone or as part of a larger Comprehensive Plan, covering the current time period (ex. 2001-2011; 2000-2015), and approved by the local planning commission. Land Use plans may be prepared in various formats and using differing approaches, but the study at a minimum should include the following information: a description of the existing land uses in the jurisdiction and an analysis of past and present land use patterns; a description and analysis of the local physical environment; a description and analysis of current municipal and/or county public facilities and services; an analysis of past, present and future demographics, including population projections and ranges; a listing of community employment information including at a minimum a breakdown of employment by sector; an analysis of current and proposed transportation facilities and patterns; development goals, policies, and implementation action steps. (from Three Star program manual)

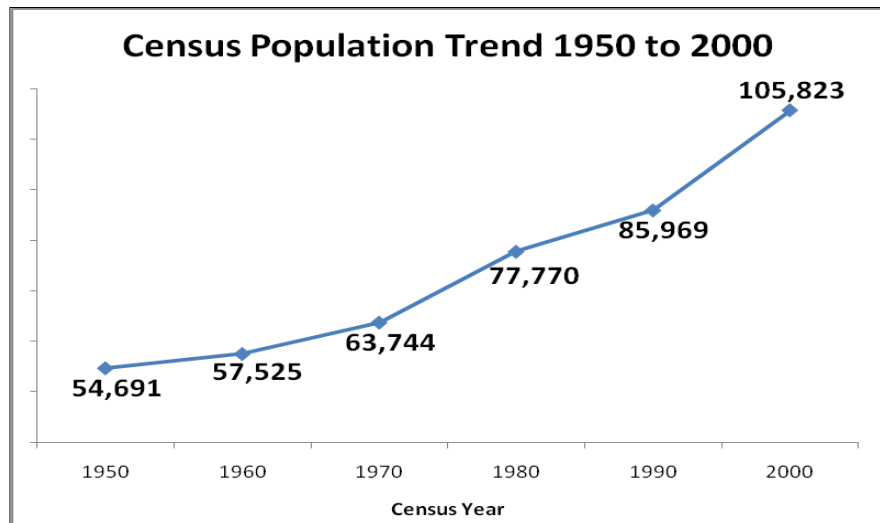
This plan is intended to meet the above benchmark format. For the most part, this plan will constitute a reformatting of previous plans, with addition of background information highlighting population growth and characteristics, households and housing, economy, physical characteristics of the land, and infrastructure supporting growth.

Plan Time Horizon.

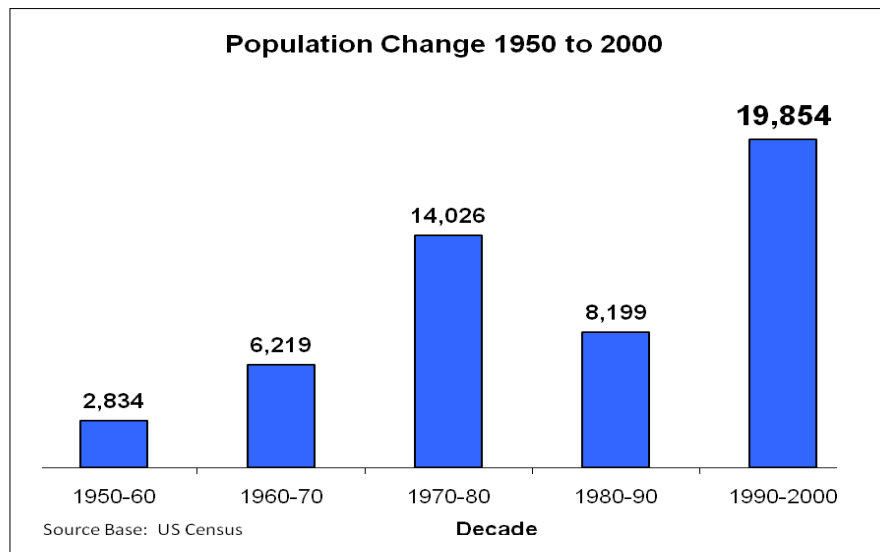
Each plan, being oriented to the future, has some explicit or implied time horizon. For plans and studies from 1995 to 2008, projections of population were to the year 2010 or 2020, thus establishing plan time horizons. The plans produced from 2009 to 2010 used projections to the year 2030. This plan uses projections to the year 2030, the time horizon for this plan.

Population Growth – Historical Trends.

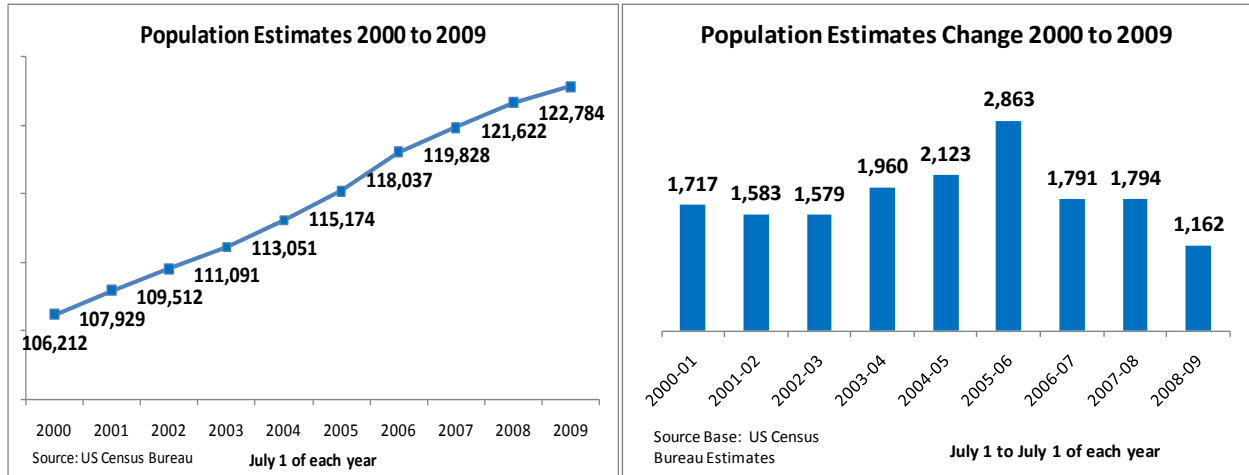
Our population is composed of people residing in Blount County. Counting people over time provides us with a trend of population growth. The US Census Bureau counts population every ten years. To the right is a graph of population trend, showing that county population grew continuously from 1950 to 2000.



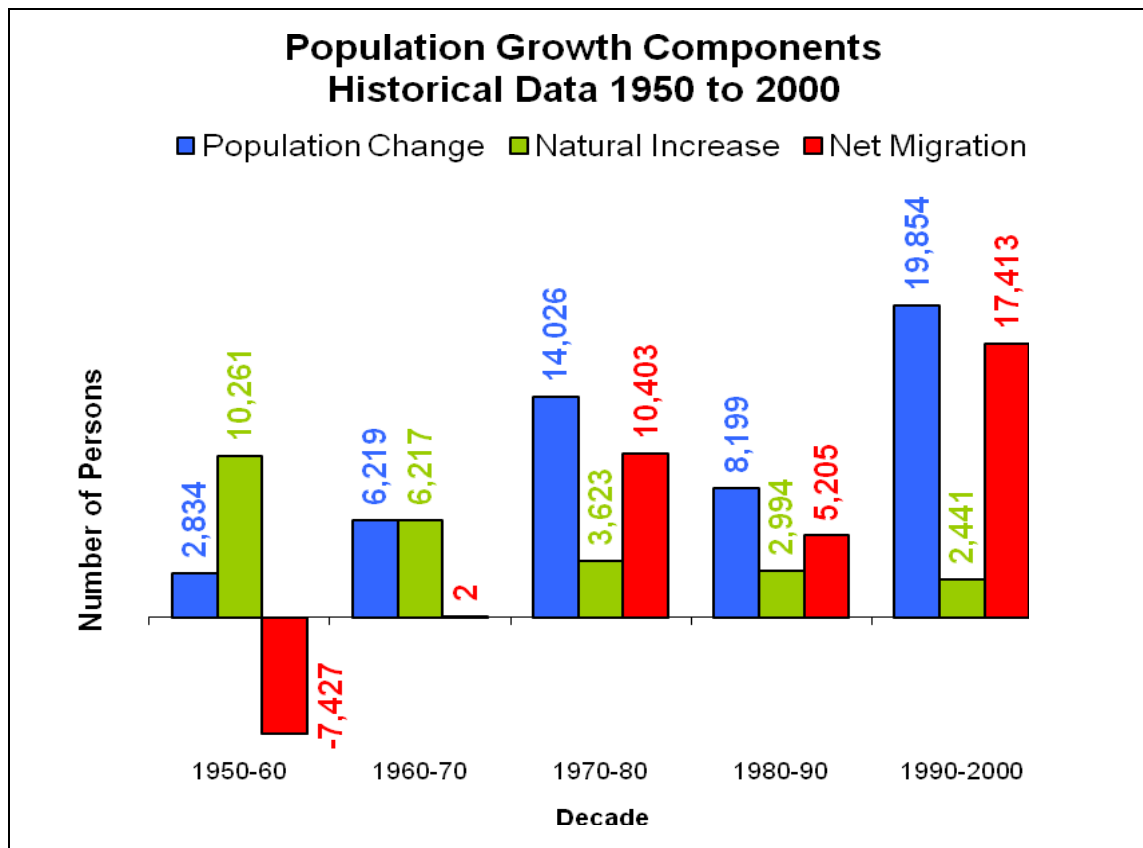
However, growth over the decades was uneven. To the right is a graph of population change by decade. Population increase was relatively low in the 1950's, increased through the 1960's, and showed peak in the 1970's. This was followed by a slow-down in the 1980's, and then a substantial increase to highest historical growth in the 1990's.



The US Census Bureau also publishes yearly estimates of population. Population estimates from 2000 to 2009 (graphs on next page) showed a continuation of population growth. Average yearly growth from 1990 to 2000 was 1,985 persons per year, and continued at a slightly lower estimated average of 1,841 persons per year to 2009.



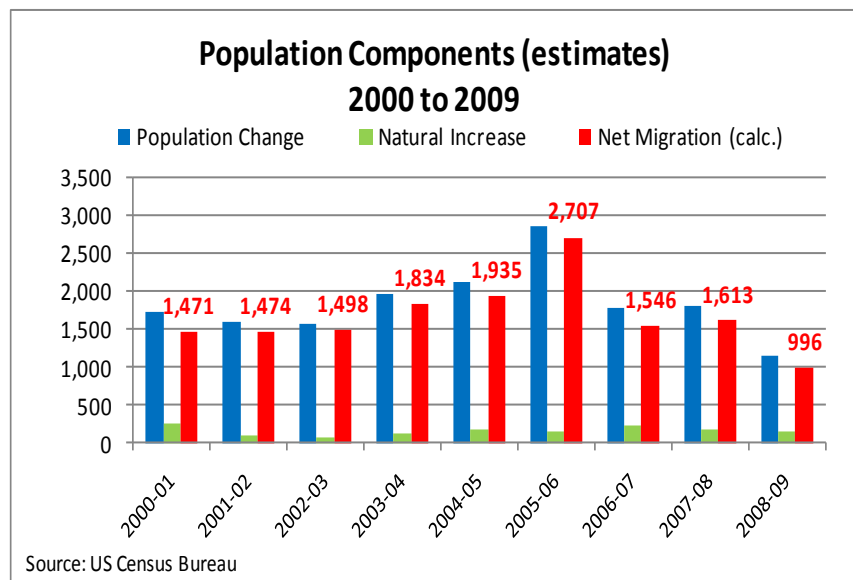
The components of population growth were the natural processes of births and deaths, and the movement of people into or out of the county. Births and deaths may be combined into a summary number called natural increase, calculated as births minus deaths. The movement of people into or out of the county can be summarized as net migration, and can be calculated as population change minus natural increase. The graph below presents in summary form the components of population growth from 1950 to 2000.



Natural increase showed a downward trend from peak in the 1950’s. The peak was due to the “baby boom” of higher birth rates, and consequent greater number of births that started shortly after World War II and lasted from 1946 to 1964. After that, the birth rate dropped and leveled out. In recent decades, births again began to climb, but this was due to an increasing population of parents and not any substantial increase in birth rate. For all the decades, deaths increased in a growing population, and this was fueled recently by aging of the “baby boom” into older years with higher death rates. The continual decline of natural increase was the result of deaths increasing faster than births in an increasing and aging population.

Net migration showed a more variable pattern. In the 1950’s, many people left the county, due mainly to limited job opportunities at the time. This out-migration began to shift in the 1960’s and transitioned to high in-migration in the 1970’s. The 1980’s saw a slow-down of net migration, which was followed by a jump again to historical high in-migration in the 1990’s. From 1970 to 2000, net in-migration dominated the population growth trend, and accounted for 89 percent of population growth in the 1990’s.

The trend of net in-migration dominance continued to 2009. The graph to the right, based on Census population estimates, illustrates this. Net migration continued at an average rate similar to the 1990’s and still dominated the growth trend, accounting for about 90 percent of estimated growth over the nine years.



Population Projections to 2030.

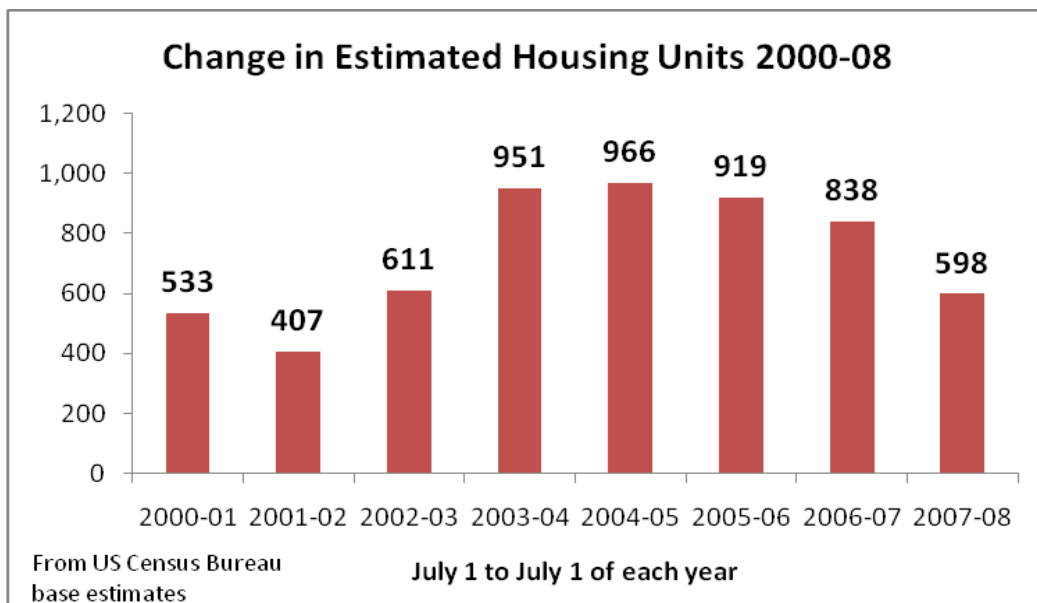
To make projections, we need to make assumptions about the components of population growth. The projection years will be 2010, 2020 and 2030. For the 2010 projections, we have at least partial information from population estimates provided by the Census Bureau to 2009 as shown above. In addition we also know that the last part of the 2000 to 2010 decade was characterized by a severe recession. We can use this information and clues from the past to get a more precise range for end of decade 2010 projections. Note that the 2010 census count of population was conducted as this plan was being written, and data that can confirm the 2010

projections will be available by the end of 2010, after adoption of this plan. Projections to 2020 and 2030 may need to be adjusted based on 2010 Census results.

Major changes have occurred recently that could affect the underlying trend in net migration to the end of decade and beyond. In particular, the national and local economy slowed into the worst recession since the great depression of the 1930's. The recession began in December of 2007, and indicators showed that it may have been technically over by early 2010. However, some predict that associated high unemployment may be slow to recover (see An Economic Report to the Governor of the State of Tennessee – The State's Economic Outlook, January 2010, by the University of Tennessee, Center for Business and Economic Research).

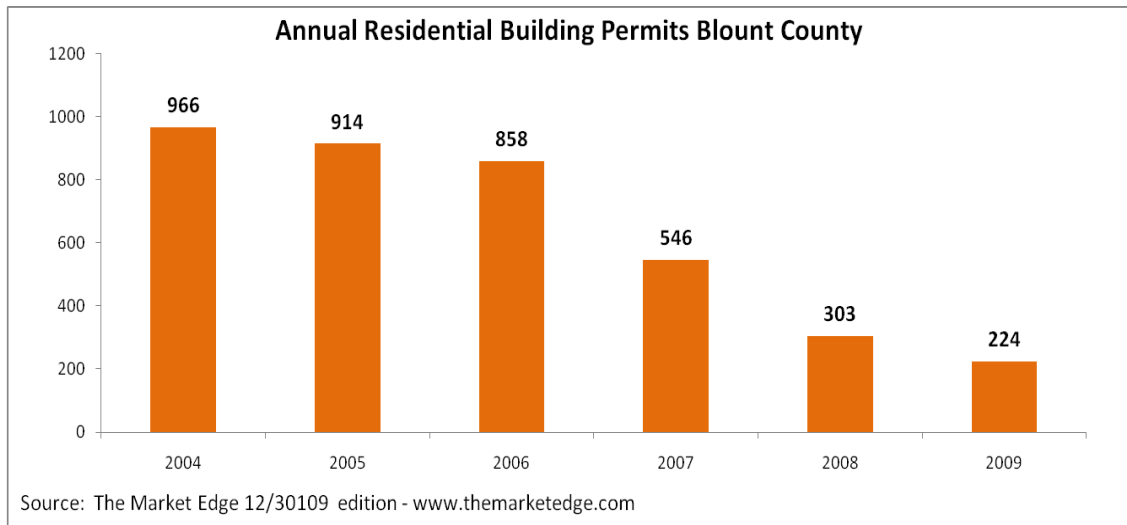
The level of net migration may be related to the economy, with restricted jobs leading to slowed in-migration or even out-migration. The most recent indicative decade would be 1980-1990 which saw a decrease of net-migration. A relatively prolonged recession with high unemployment occurred at the beginning of the 1980s. While the cause and effect relationship may not be rigorously proven, we can assume that restricted job prospects in the local economy related to recession may lead to a reduction of net migration.

In addition to other indicators showing a recession, trends in housing and residential building permits slowed considerably in the last years of the 2000-2010 decade. The graph below shows yearly increase in estimated housing units in the County from 2000 to 2008. Note the dip in 2001 to 2002, associated with a mild recession at the beginning of the decade. Note also the dip from 2007 to 2008 that could indicate a slowing in the first year of the most recent severe recession.



The graph on the next page shows trend in residential building permits for Blount County from 2004 to 2009. Note the substantial decrease in residential building permits beginning in 2007,

and intensifying in 2008 and 2009 as the recession deepened. The data were from a report compiled by The Market Edge (www.themarketedge.com).



From the indications of decline in housing growth, we may surmise that the demand for new housing units was declining toward the end of the decade. This in turn may be associated with a decline of net migration as we approach the end of the decade. If we assume this, we would need to adjust average yearly net migration downward from the 1,675 level of the first nine years of the decade. For the purposes of more realistic projections, we can assume a range of lesser net migration figures to capture probable futures.

To generate projections for future population, we will need to make assumptions about births, deaths and net migration – the main components of population growth.

Net Migration Assumptions. Net migration will probably continue to be the most important component defining population growth into the future. The table below presents the assumptions for net migration used in generating a range of population projections.

Net Migration Assumptions

Projection Decade	2000-2010	2010-2020	2020-2030
Very High Assumption	16,500	19,000	22,500
High Assumption	16,500	17,500	20,000
Moderate Assumption	16,000	16,000	17,500
Low Assumption	15,500	10,500	15,500
Very Low Assumption	15,500	5,500	12,500

For very high projections, the assumption is for quick recovery from effects of the recent recession, and boost of net migration during the succeeding two decades to a number greater than the 1990's historic high net in-migration of 17,413. The underlying assumption is that the recent recession will not affect net migration to a great degree, and that the local economy will rebound quickly to a higher level than pre-recession. This also assumes the strength of being part of a larger metropolitan regional economy, and the favorable place that Blount County holds in that regional economy.

For high projections, the assumption is for modest effect of the recent recession into the early 2010s, with recovery of net migration early in the decade. The recovery of net migration is assumed to be to historic 1990's level. For 2020-2030 the assumption is for a boost in net migration level to greater than the historic high of the 1990's. The underlying assumptions concerning local and regional economy are the same as above for very high projections.

For moderate projections, the assumption is for a greater and more prolonged effect of the recent recession into the decade 2010-2020, with recovery of net migration during the second quarter of the decade. The trend is assumed to be roughly a mirror image of the 2000-2010 decade, thus leading to essentially the same net migration for both decades. For 2020-2030 the assumption is for net migration to return to the same level as the historic high of the 1990's. The underlying assumption is that the most recent recession will have a substantial effect, but that the local economy is basically strong on its own and as part of a larger regional economy.

For low projections, the assumption is for a greater and more prolonged effect of the most recent recession, with addition of other factors, into the decade of 2010-2020. This is based on observation of the possible deeper effect of recession in the 1980's, though of lesser expression in net migration. For 2020-2030 the assumption is for a low level of net migration recovery, and assumes that the decade of the 1990's will not be a model for level of net migration during the term of the projections. The underlying assumption is that the local economy may be subject to other factors that could prolong a weaker job market. The other factors could be a succession of recessions, or closing of a large business.

To capture the most recent historic low of net migration in the 1980's we may assume an even more severe effect of economic conditions lasting nearly the whole decade from 2010 to 2020. We will call this scenario the very low assumption, and assume a level of net migration similar to the 1980's. The trend is assumed to improve only slightly in 2020-2030. The underlying assumption is the same as for low projections above, but with more severe effect of other factors.

Note that the moderate, high and very high assumptions indicate a level of optimism in this very important component of population growth. Even the low assumption does not approach

the low level of net migration during the 1980’s, and the very low assumption does not approach the negative net migration of the 1950’s. This optimism is based on observation that the economy of Blount County is basically strong, and more importantly is stronger by integration with a larger regional economy centered on the metropolitan hub of Knoxville and Knox County.

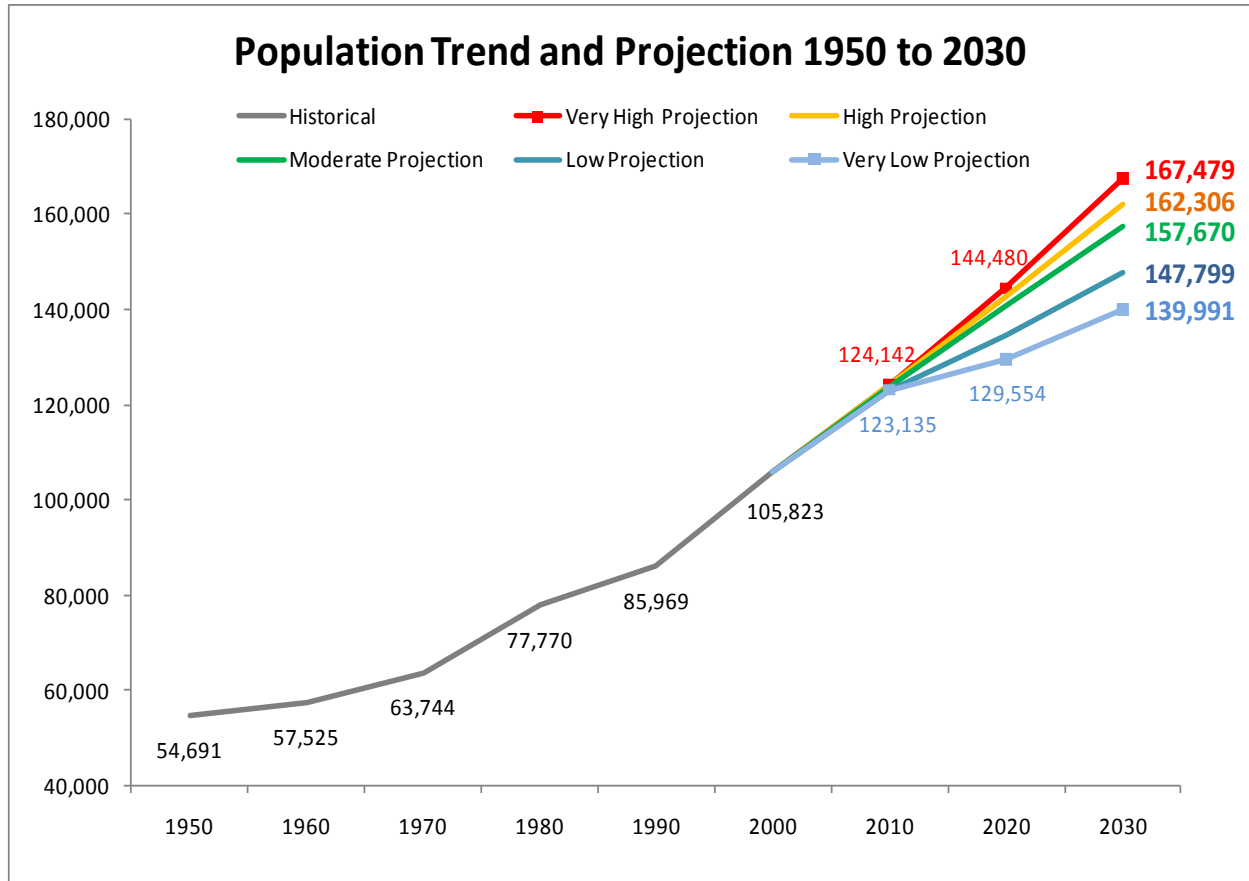
Birth Assumptions. The next most variable component of population growth historically has been births, and particularly birth rates. The “baby boom” of the 1950’s and early 1960’s defined much more than just the two decade growth trend of their birth, and we need to consider this in long term projections. The evidence shows a long term trend of decrease and levelling out of birth rates after the initial interruption of the “baby boom”. For the the five standard projection scenarios, we assume that crude birth rate (ratio of births to population 15 to 44) has levelled-out and will remain the same for the three projection decades.

Death or Survival Assumptions. Survival rates are the inverse of death rates, and indicate the proportion of a population or sub-population who are expected to survive from one decade to the next. The basic assumption is that survival rates will continue to improve in all projection scenarios, but at different marginal rates. The very high projections assume greatest improvement in survival rates, perpetuating the same rate of improvement shown in the 1990’s. The moderate and low projections assume least improvement, with assumed decreasing marginal improvement on the 1990’s base level. The decreasing marginal improvement scenario would perpetuate a trend noticeable in the last few decades.

Projections of Total Population. We can “plug” our assumptions into a simple cohort model to generate a set of population projections to the year 2030. Projections are shown in table below and the graph on the following page.

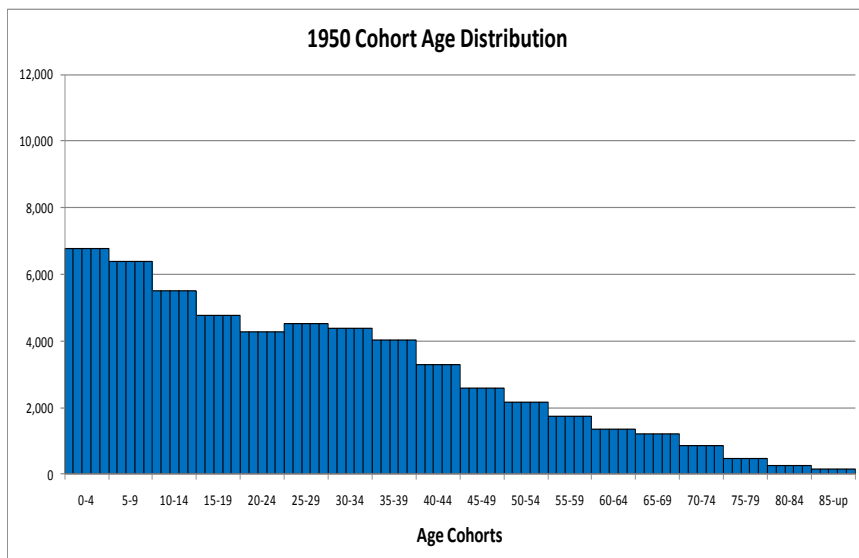
Population Projections to 2030

	Census 2000	2010	2020	2030
Very High Projection	105,823	124,142	144,480	167,479
High Projection	105,823	124,142	142,713	162,306
Moderate Projection	105,823	123,642	140,683	157,670
Low Projection	105,823	123,135	134,554	147,799
Very Low Projection	105,823	123,135	129,554	139,991

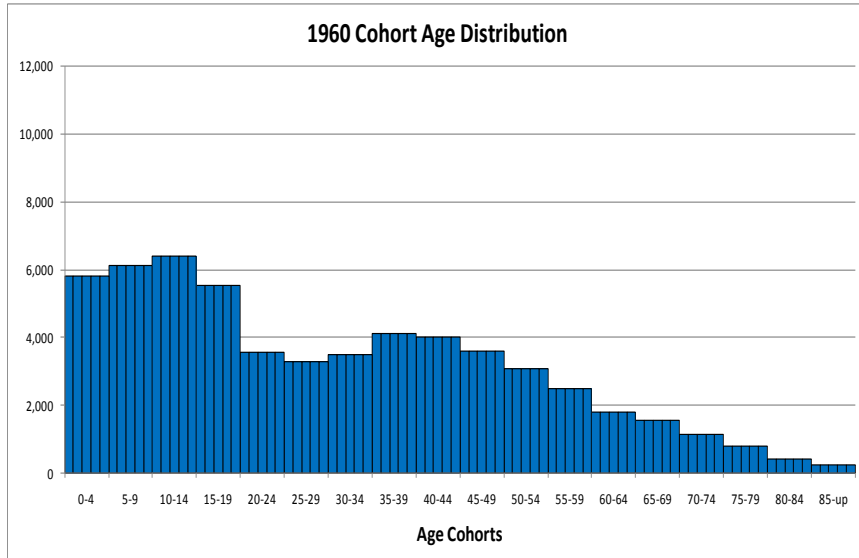


Population Characteristics – age, gender and race.

Age of the Population. Analysis of population distribution by different age groups within the population can provide insight into important changes and trends over time. The graphs below and on the following pages present population age distributions from 1950 to 2000 by decade, and projected to 2030. The cohorts represent arbitrary five year age categories containing people that grew older as a group over time. This concept will be important in understanding cohort net migration later. The 1950 age distribution looked like a pyramid laid on its side, with a large base of young people and a

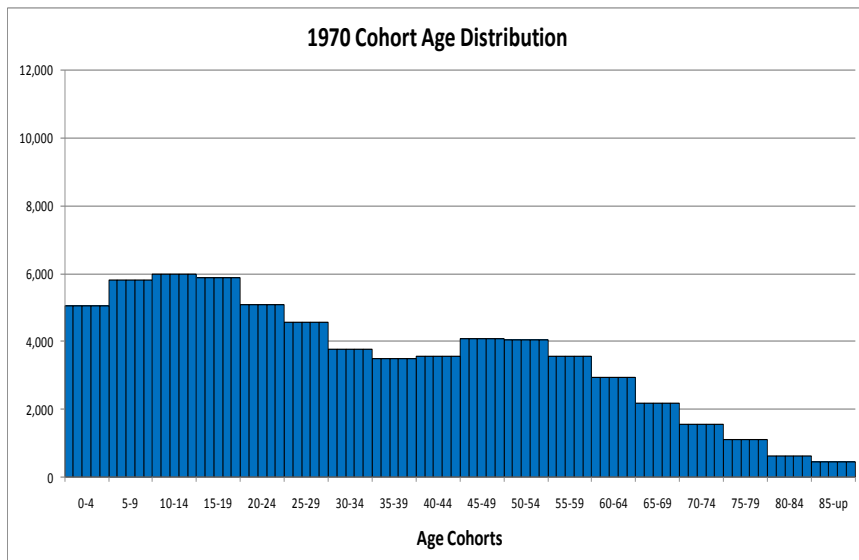


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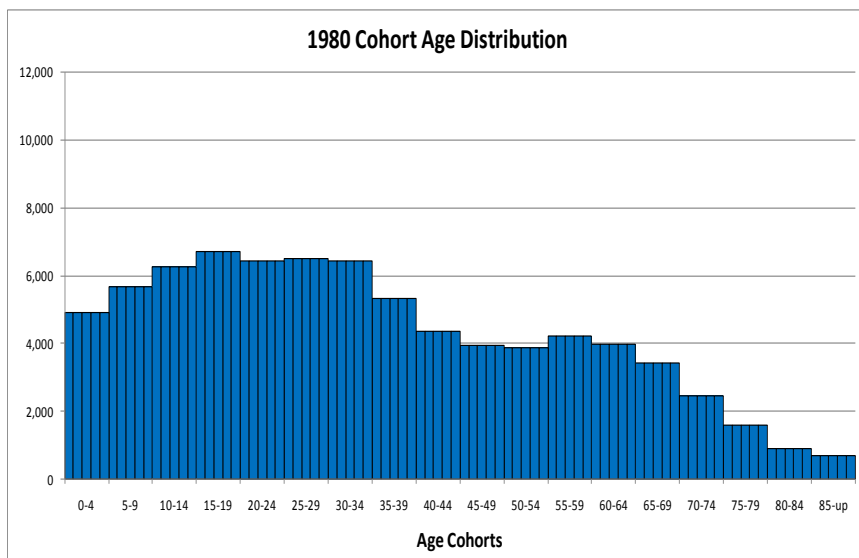


small tip of old people. The large base included the first four years of the “baby boom” born from 1946 to 1964.

The 1960 age distribution showed the large bulge of the “baby boom” to the left of the graph, and also showed a depression from ages 20 to 24. This depression was related to the high out-migration shown previously in the 1950’s.



The 1970 age distribution showed slight shifts of age cohort population when compared to 1960. The shifts occurred during the decade from 1960 to 1970, a decade with little overall net migration. However, there was shift in age specific migration which will be presented later.

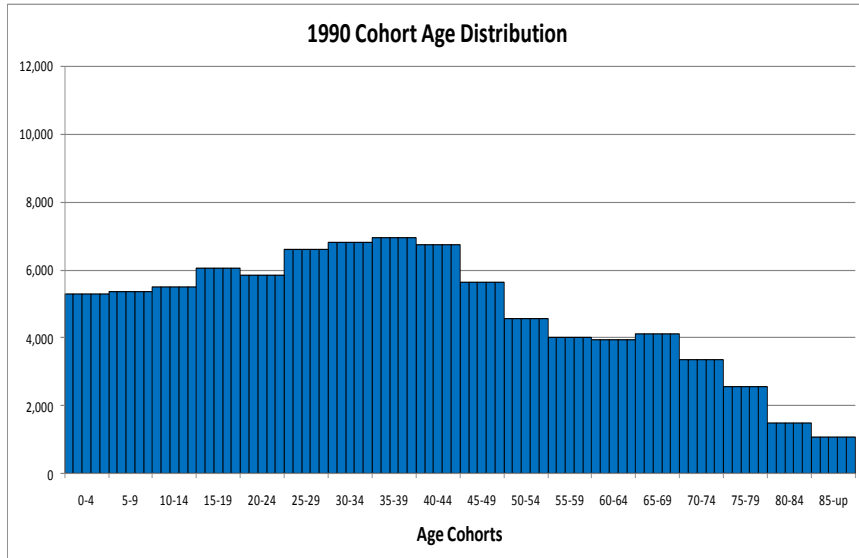


The “baby boom” bulge was prominent within ages 5 to 24. The distribution was beginning to show a decreasing base of young people. This was due to the decrease in the birth rate after the “baby boom”.

The decade from 1970 to 1980 showed a spike of in-

migration, and this was expressed as increases for most cohorts as they aged ten years from 1970 to 1980. The “baby boom” bulge was prominent within ages 15 to 34.

The “baby boom” aged ten years into the 1990 age distribution, showing increased prominence within ages 25 to 44. The decade from 1980 to 1990 showed a slowing of net migration, but



much of the in-migration was concentrated in the “baby boom” cohorts.

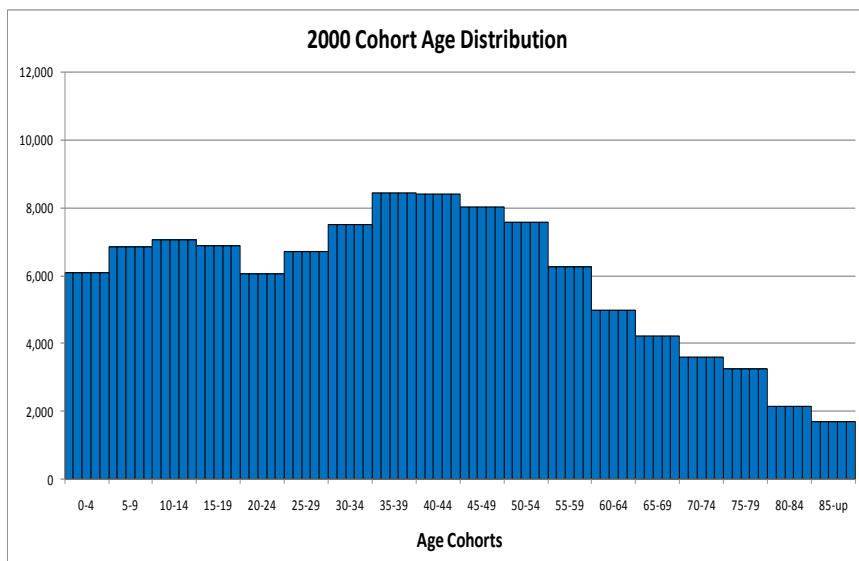
The 1990 to 2000 decade showed highest historical growth and net migration. The 2000 age distribution reflected this with

increases in most age cohorts. The “baby boom” was again prominent within ages 35 to 54.

Associated with increases in the “baby boom” cohorts were increases in cohorts of children that in-

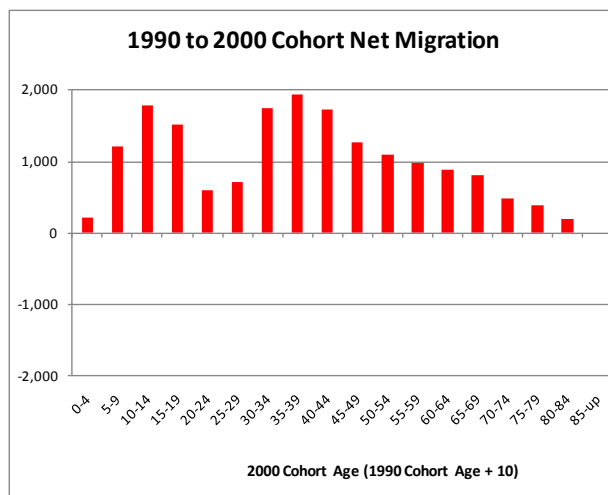
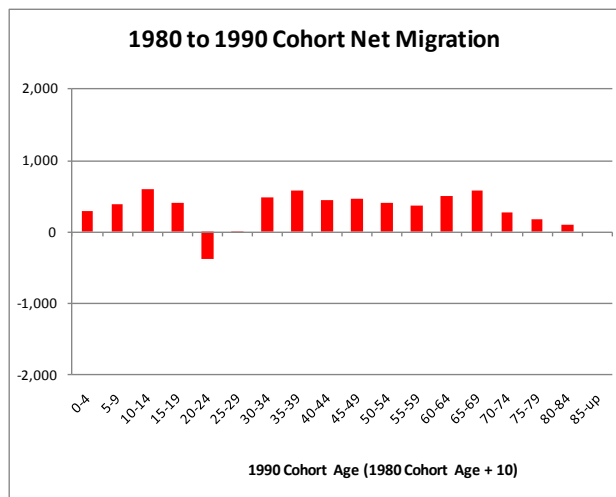
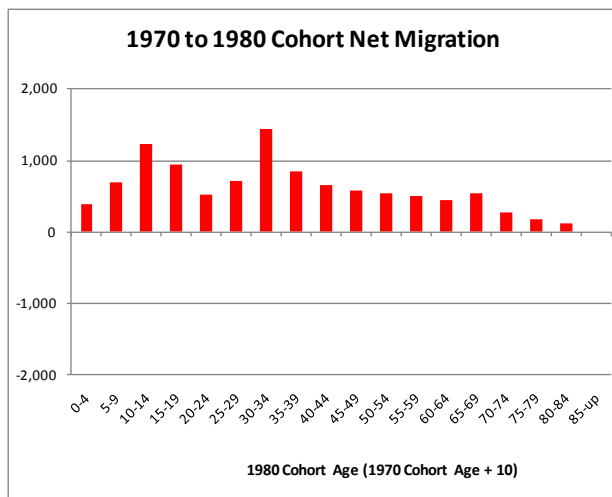
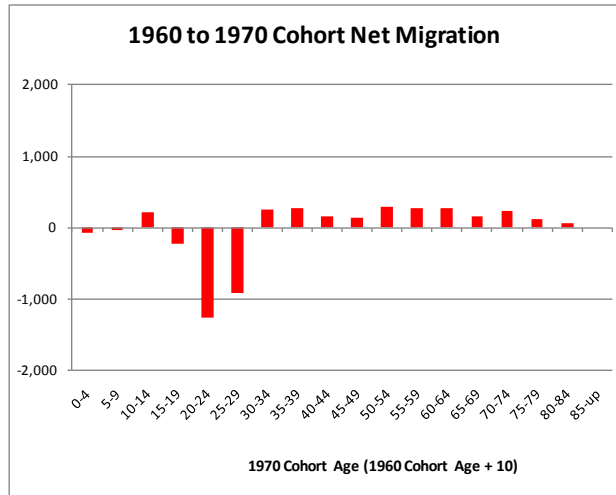
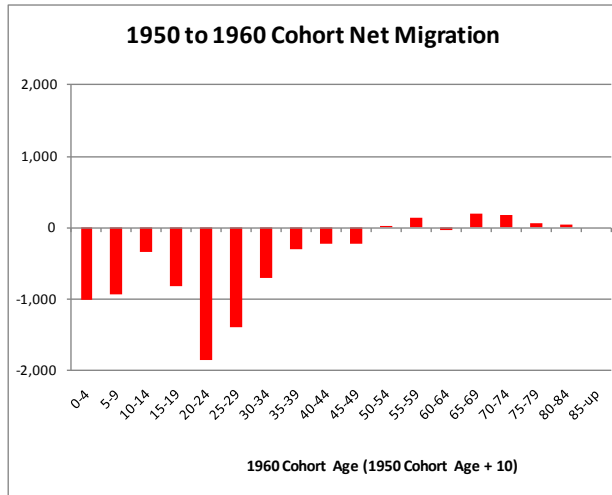
migrated with “baby boom” parents, resulting in a smaller second bulge within ages 5 to 19.

Compared to the 1950 age distribution, the 2000 age distribution no longer looked like a pyramid laid on its side. It showed the effects, over five decades,



of changes in births, deaths and net migration. The “baby boom” became evident in the 1950’s and early 1960’s, followed by reduction and leveling out of the birth rate. Thus the “baby boom” bulge aged over 40 to 50 years to 2000, leaving a smaller base in the younger years to the left of the graph. Survival rates improved over the decades, especially for the older population. This resulted in more people surviving each decade as they aged into the older age groups, reflected in larger numbers in the older age cohorts. The most variable component of population growth was net migration, and it would be informative to study this in more detail.

The graphs below show age cohort net migration by decade from 1950 to 2000. The graphs should be read as the number within an age cohort that net in-migrated (positive number) or net out-migrated (negative number) as they aged ten years from beginning of decade to end.



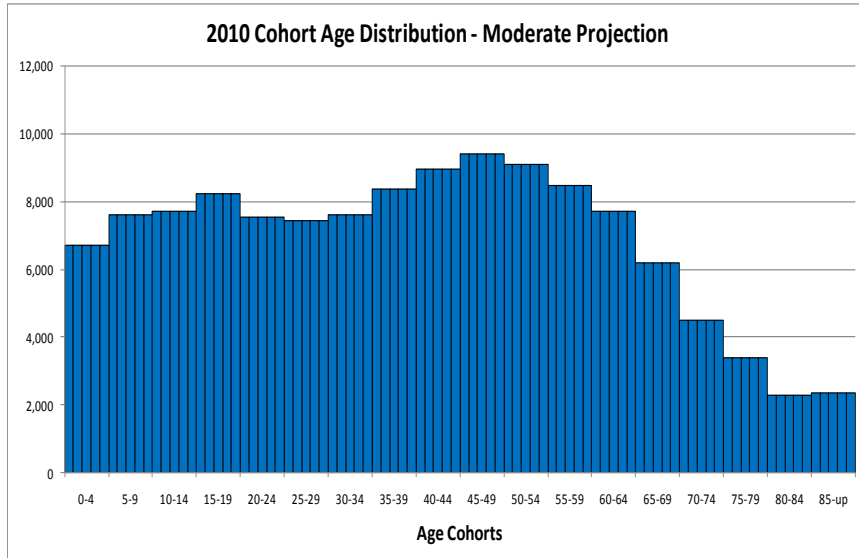
The graph for 1950 to 1960 (previous page) was for the same decade that had high out-migration. The out-migration cut across a wide range of age cohorts from 0 to 49 years old. There were distinct troughs (negative peaks) around the ages of 0 to 9 and 20 to 29 years old. The double troughs indicate movement of families out of the county, young parents with their children. This was associated with reductions in employment in both agriculture and manufacturing, and was probably related to limited job prospects during the decade. The limited job prospects most affected young adults entering the job market.

The graph for 1960 to 1970 was for the same decade that had almost no overall net migration. This did not mean there was no movement of people, just that the net flow was close to zero. There was continued out migration in the young adult age cohorts 20 to 29 years old, indicating a continued limitation in the job market. However, there was no second trough in the youngest cohorts. This lack of a second trough may have been due to the reversal to net in-migration in the age cohorts 30 to 39 years old, who may have been moving into the county with children as younger parents were moving out with children. The in-migration for the age cohorts 30 years old and older could indicate a transition to a more accommodating job market for experienced workers, and also could indicate retirement destination moves for ages 60 and older.

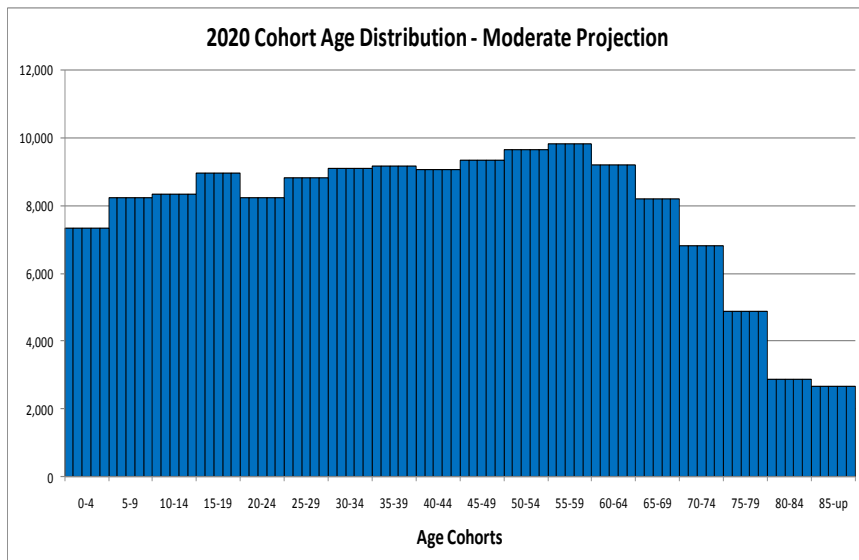
The graph for 1970 to 1980 was for the same decade that had a peak of high net in-migration. This high in-migration was expressed across all age cohorts, except the oldest. This would indicate a transition to an expansive job market, and possibly a quickening of retirement destination moves for ages 60 and older. There were two distinct peaks of in-migration, one around parent ages 30 to 34, and the other around children ages 10 to 14 years old. This would indicate a reversal and complete transition from 1950's *out-migration* of parents with their children, to 1970's *in-migration* of parents with their children.

The graph for 1980 to 1990 was for the same decade that had a decrease in net in-migration. This decreased was associated with reduced net in-migration for almost all age cohorts, with reversal to net out-migration shown for the young adult age cohort 20 to 24 years old. This may indicate a weaker job market for new entrants to the labor force, but could also indicate a newer phenomenon of greater numbers of young people leaving for higher education. The small peak at age 65 to 69 years old may indicate that retirement moves were independent of overall economic conditions.

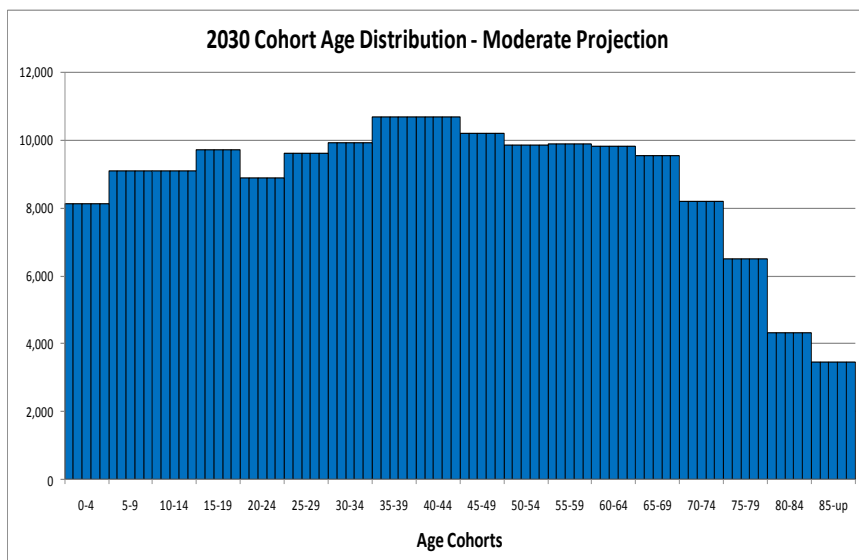
The graph for 1990 to 2000 was for the same decade that had highest net in-migration in the historical series. This peak of in-migration was again expressed across all age cohorts, except the oldest. There were again two peaks, indicating in-migration of parents with children. The breadth of in-migration across the age groups would indicate a very favorable job market in the county for the decade, and also an intensification of retirement destination moves for older age cohorts.



If we assume continuation of the 1990 to 2000 decade age cohort in-migration pattern, we can project the age distribution of the population to the years 2010, 2020 and 2030 as shown to the right. For this presentation, moderate projection assumptions were used.



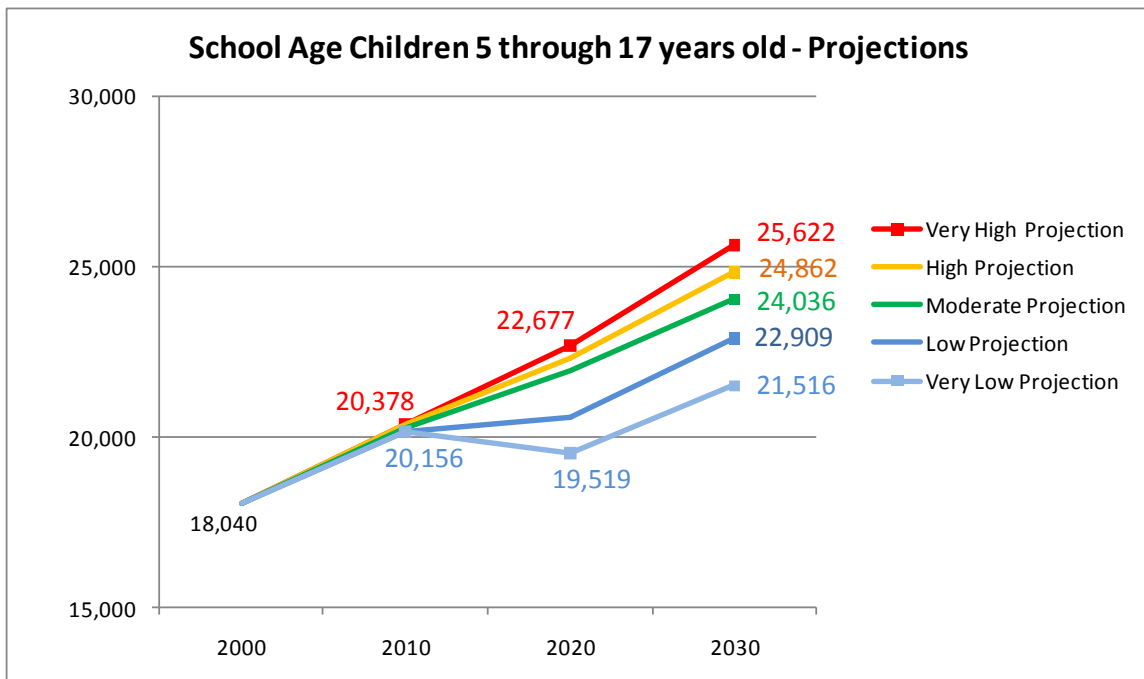
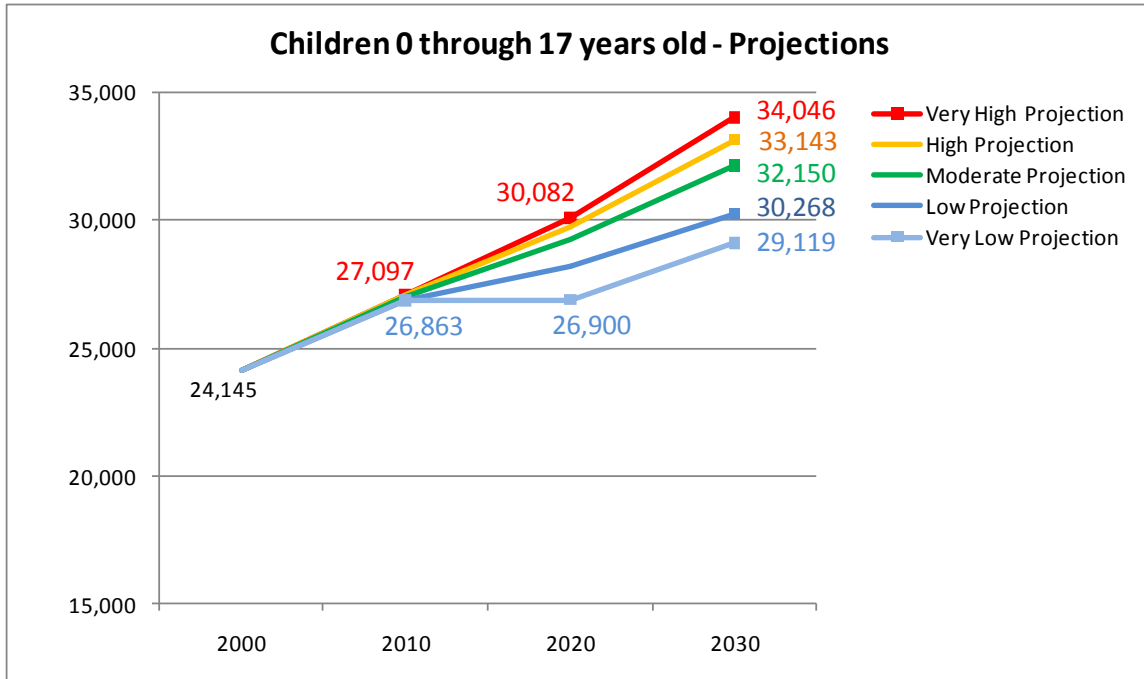
For the 2010 projection, the “baby boom” bulge will probably still be prominent within the ages 45 to 64 years old. The “baby boom” and preceding generations will be aging in greater numbers into the ages where greater deaths are expected. This will continue into the succeeding projections years and further reduce natural increase as a driver of population growth.



By 2020, the “baby boom” peak will begin to lose its prominence due to greater deaths, and increases in younger cohorts through continued net in-migration. By 2030, the age distribution of the population could look radically different than the

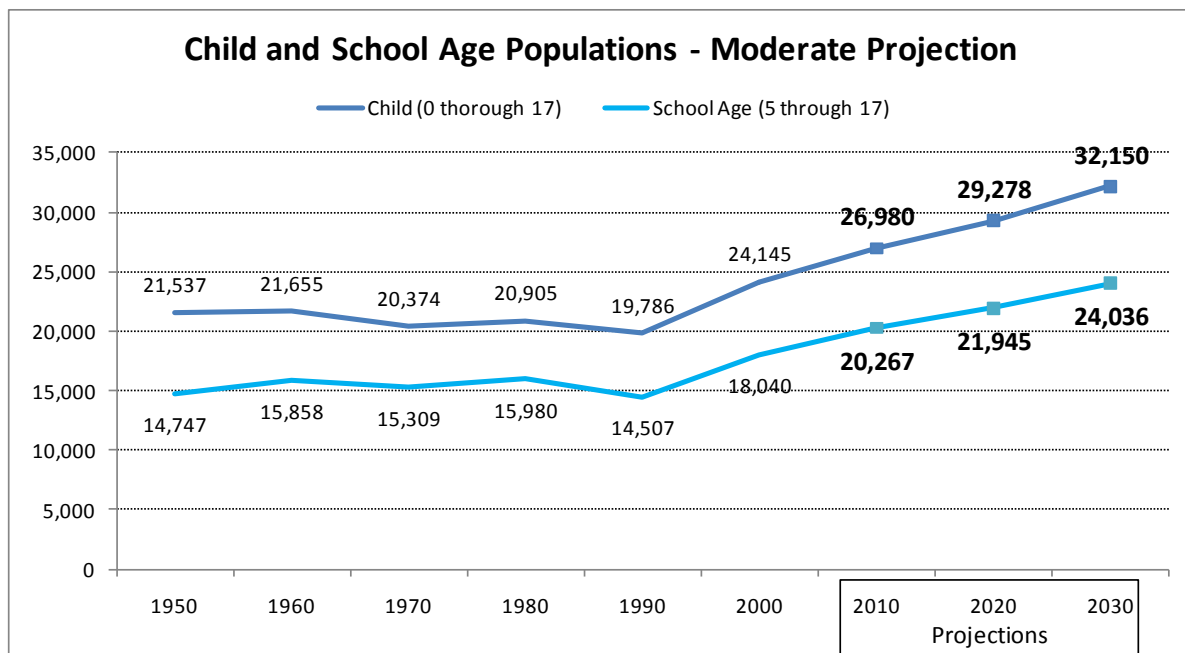
distributions in past decades, with greater evenness in the proportions of the population across most of the cohorts. We can now show projections for specific age groupings of interest.

Children. Below are projections for children ages 0 to 17 years old, and a subset of school age children ages 5 to 17. Projection of school age children may be of particular importance in planning for schools.

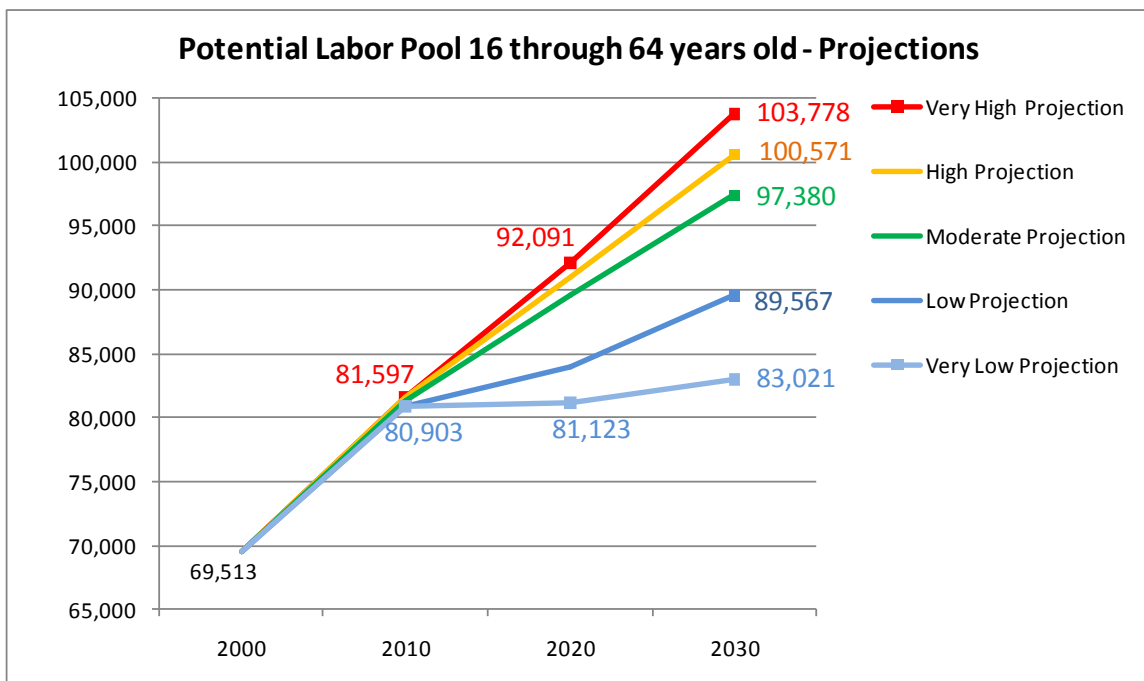


The projections on the preceding page for children and school age children show similar trend, and the following will focus on school age children. Note that for moderate to very high projections, the upward trend of projections is very similar. These projections have common assumption of continued strength in the local and regional economy that will continue to support in-migration of parents with children, similar to the pattern for the decade 1990-2000. The implication for schools for this kind of growth over the next 20 years is the need to accommodate between 4,000 to 5,000 new students between 2010 and 2030. The low and very low projections paint a different picture, with possibility of short term leveling-out or even decrease in school age population. This slowing of school age population growth would be related to the assumption of disruption in the local and regional economy that would lead to depressed in-migration of parents with children, or even out-migration. Keep in mind that both economic scenarios have been part of the past history of the county.

The graph below puts the moderate projection into historical perspective. Note that in the past, school age population has shown an erratic up and down trend, but in a relatively tight range of numbers. Note the increase from 1950 to 1960 as the “baby boom” aged into school years, followed by reduction from 1960 to 1970 with the waning of the “baby boom”. Note also the increase from 1970 to 1980 as net in-migration peaked, followed by reduction from 1980 to 1990 as in-migration waned for a decade. From 1990 to 2000, the historical high in-migration decade, and projected also to 2010, the trend shows dramatic and consistent increase of almost 6,000, followed by a projected increase of about 4,000 from 2010 to 2030. This could indicate that the need to accommodate students in schools may be reduced over the next 20 years compared to the last 20 years, but will probably remain substantial.



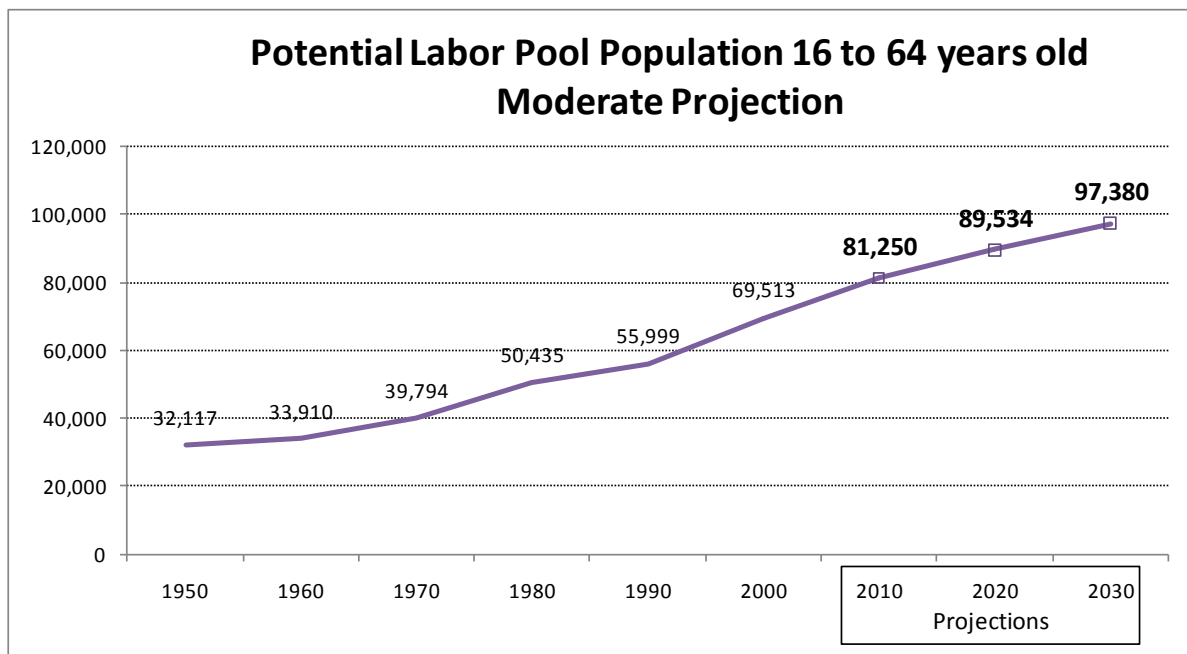
Labor Pool. In age progression, the next specific age grouping of interest can be termed the labor pool. The labor pool in this context is the population bounded by traditional employable ages, and does not constitute actual employment or number of employable people. Analysis of economic factors of growth follows in a separate section and will focus on actual employment in the population. Below are projections for the population age 16 to 64. The employable age break for the young end of the range was 14 years old in 1950, but was changed in 1960 to 16 years old and remained so since. The 16 year old age break was used for consistency in this analysis. The 64 year age break was based on traditional qualification for Social Security benefits at age 65. Note that the age span of this population overlaps slightly with both the children age group (0 to 17) presented above, and the senior citizen age group (60 and older) to be presented later. Projection of the potential labor pool age population may be of particular importance in analysis of economic strategies that can accommodate a growing population.



The graph above shows similar trend for the moderate to high projections. This is based on similar assumptions of continued strength in the local and regional economy that will continue to support in-migration across all ages in this population group, similar to the pattern of for the decade 1990 to 2000. The implication for the economy for this type of growth over the next 20 years is that jobs will need to continue to grow at an average of about 2.1 to 2.7 percent per year to accommodate entry into the job market of new workers through aging of younger cohorts and in-migration. The low and very low projections assume a more limited expansion of jobs in the economy that may be reflected in reduced in-migration into this age group, particularly for younger or less experienced new entrants into the job market, and thus a

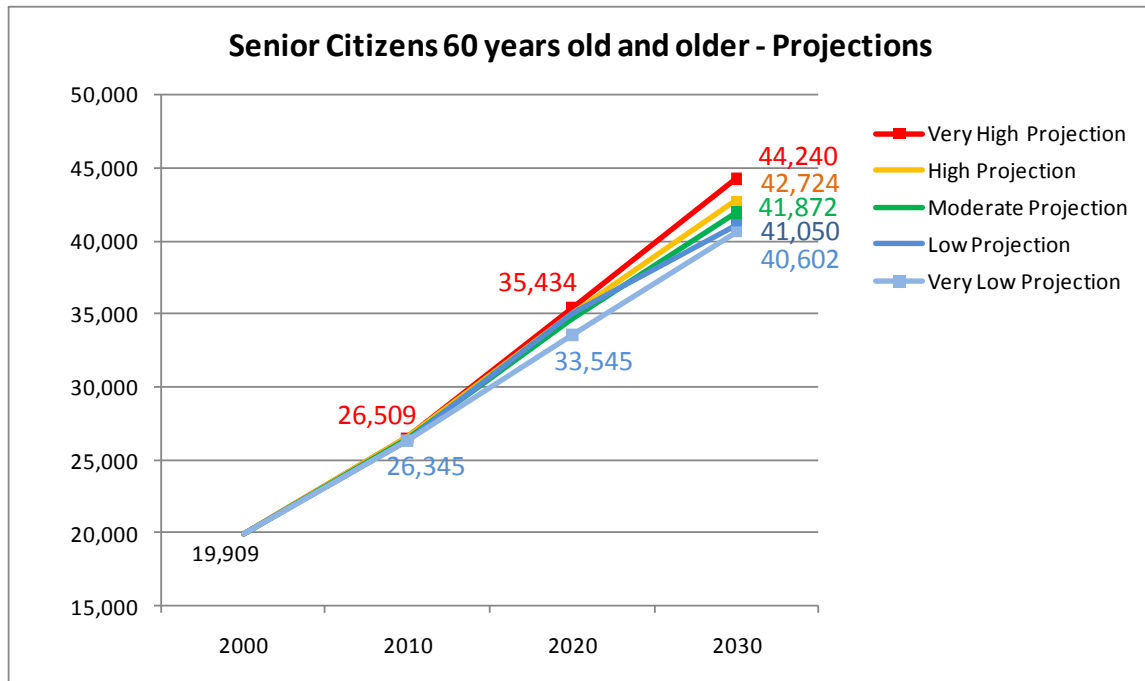
reduction or flattening-out in the pace of growth. Keep in mind that both economic scenarios have been part of the past history of the county.

The graph below puts the moderate projection into historical perspective. Note the low level of increase from 1950 to 1960 as a wide range of age cohorts within the potential labor pool out-migrated. This was followed by a quickening of increase from 1960 to 1970 and from 1970 to 1980 as the growth pattern was shaped by transition to increasing net in-migration into this age group. At the same time, the large “baby boom” bulge aged into this group. This was followed by a slowing of increase from 1980 to 1990 as in-migration waned for a decade and smaller post-“baby boom” cohorts aged into this group. From 1990 to 2000, the historical high in-migration decade, and projected also to 2010, the trend shows quickened increase based mainly on increased in-migration into this group. This is projected to be followed by a slight slowing of the pace of increase as the large “baby boom” bulge ages out of this group and into retirement years.



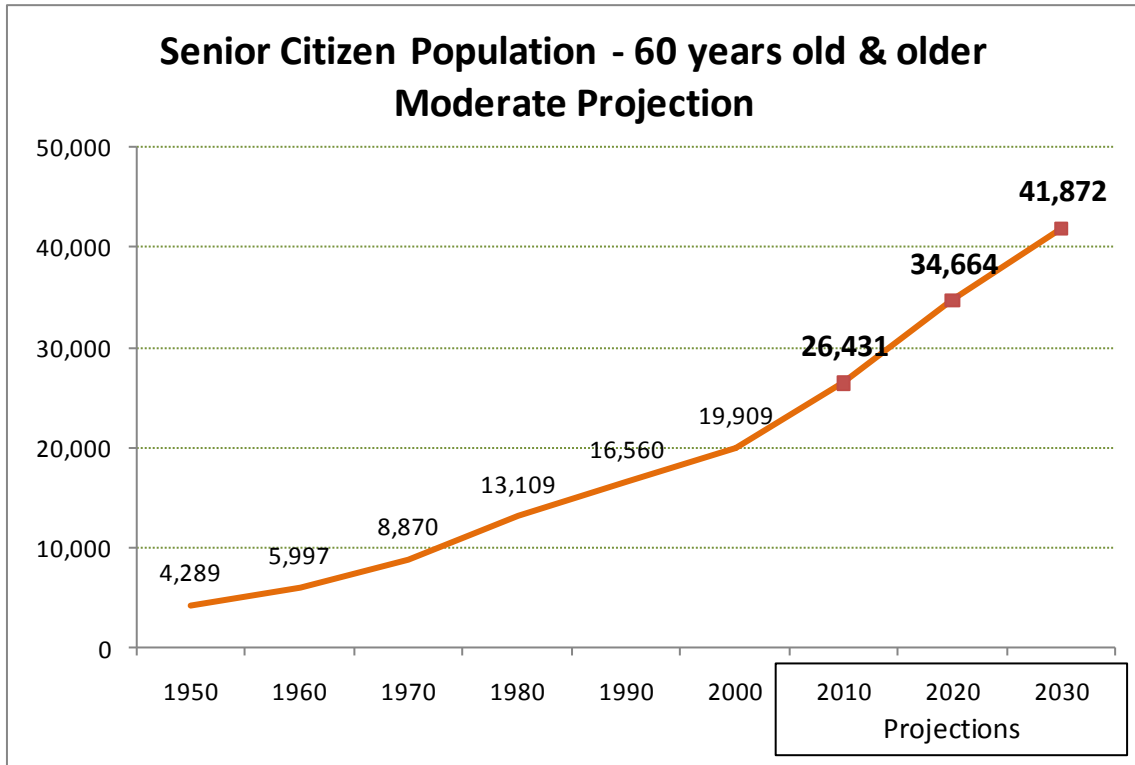
Senior Citizens. In age progression, the next specific age grouping of interest is senior citizens. The category of senior citizens can be defined by beginning age ranging from 60 to 65. The 65 year old beginning would coincide with traditional qualification for full Social Security coverage. However, others note that retirement often begins at ages less than 65, and that many qualify for early retirement or less traditional senior citizen benefits at age 60. For the purpose of this analysis, age 60 is the beginning point for the senior citizen age group. Note that this age group span of 60 and older overlaps with the previously discussed potential labor pool population. Projection of the senior citizen population may be of particular importance in addressing issues

of an aging population, and the wave of demand specific to senior citizens that may be forthcoming from aging of the large “baby boom” in the coming decades.

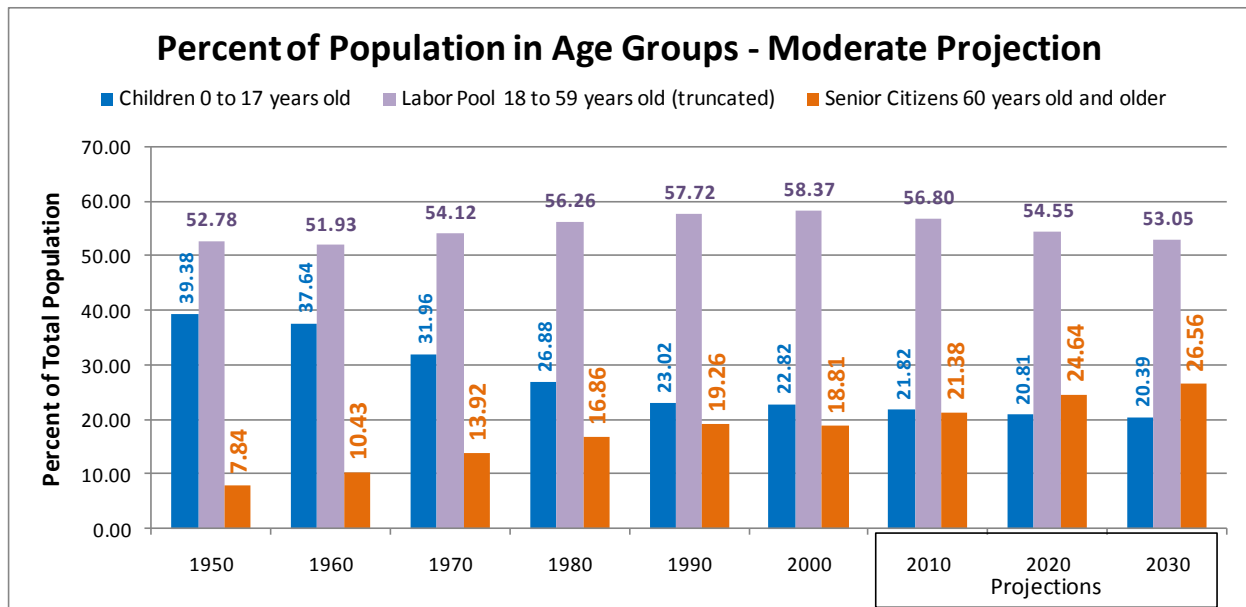


The graph above shows similar trend for all assumption scenarios, and shows much less spread in the projections when compared to the other age groups discussed earlier. For the most part, younger cohorts respond to economic conditions with migration much more than the older cohorts included in the senior citizen age group. Thus, the assumptions about migration show little effect in this older age group. In addition, some of the spread in projections for senior citizens is related to assumptions about marginal improvement in survival rates, with high projections assuming greater marginal improvement than low projections. The assumptions about survival rates have greater expression in the older age groups where survival expectation changes more between five-year cohorts over the decade.

The graph on the following page puts the moderate projection into historical perspective. Note that the trend line and projection line form a smoother curve than for the other age groups, and that the curve shows generally increasing slope over the decades. This is due to two factors. First, the curve is smoother due to the lesser effect of shifts in net migration between decades for the senior citizen population. Second is the natural progression of larger precedent cohorts over the decades, aging from younger cohorts into the senior citizen age group. This will be particularly noticeable as the “baby boom” ages into senior citizen status in from 2000 to 2030, showing on the graph as a noticeable increase in the slope of the projection line from past trend line.



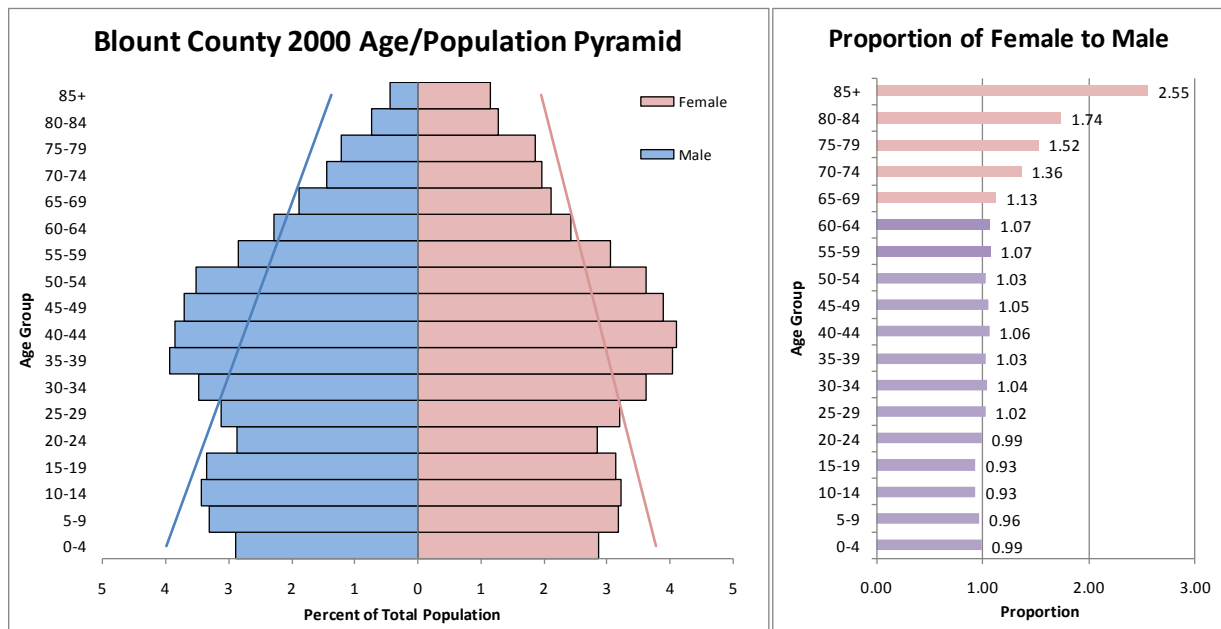
Percent of Population by Age Group. Comparing the moderate trends and projections for all three age groups as proportion of total population illustrates the concept of an aging population over time. For consistency in comparison to total population, the labor pool population was truncated at 18 instead of 16 years old for beginning of age span, and was truncated at 59 instead of 64 years old for end of age span. The children and senior citizen age spans remained the same. See graphic comparisons below.



The graph on the preceding page shows that the percent of total population accounted to the senior citizen age group increased substantially from 1950 to 2000, and is projected to continue increase to 2030. Comparing 2010 and 2030 projections shows that the senior citizen age group is expected to increase from about 1 in 5 of total population in 2010, to 1 in 4 in 2030.

This aging of the population is due to several factors over the span of trend and projection years. From 1950 to 1960, the population of children was expanded by the “baby boom”, the labor pool was reduced by out-migration, and senior citizens increased by aging of larger precedent cohorts in a period of improved survival rates. From 1960 to 2000, the population of children decreased in percent of total population after the “baby boom” aged out and birth rates fell and remained at lower rates. At the same time, the labor pool showed increased representation as the “baby boom” aged in and as in-migration swelled this group. Senior citizens continued proportional increase by aging of larger cohorts and improved survival rates. Note also that previous in-migration into labor pool cohorts in earlier decades was expressed several decades later with increase in the percent of population accounted to senior citizens as the larger precedent cohorts aged into senior citizen status. The projection years show a relatively stable percent of populaton in the children group, and a decrease in the percent representation in the labor pool group. The decrease in the percent of population in the labor pool group is due to aging out of the “baby boom”. Consequently, much of the increase in the percent of population in the senior citizens group is due to aging in of the now in-migration augmented “baby boom” in the projection years.

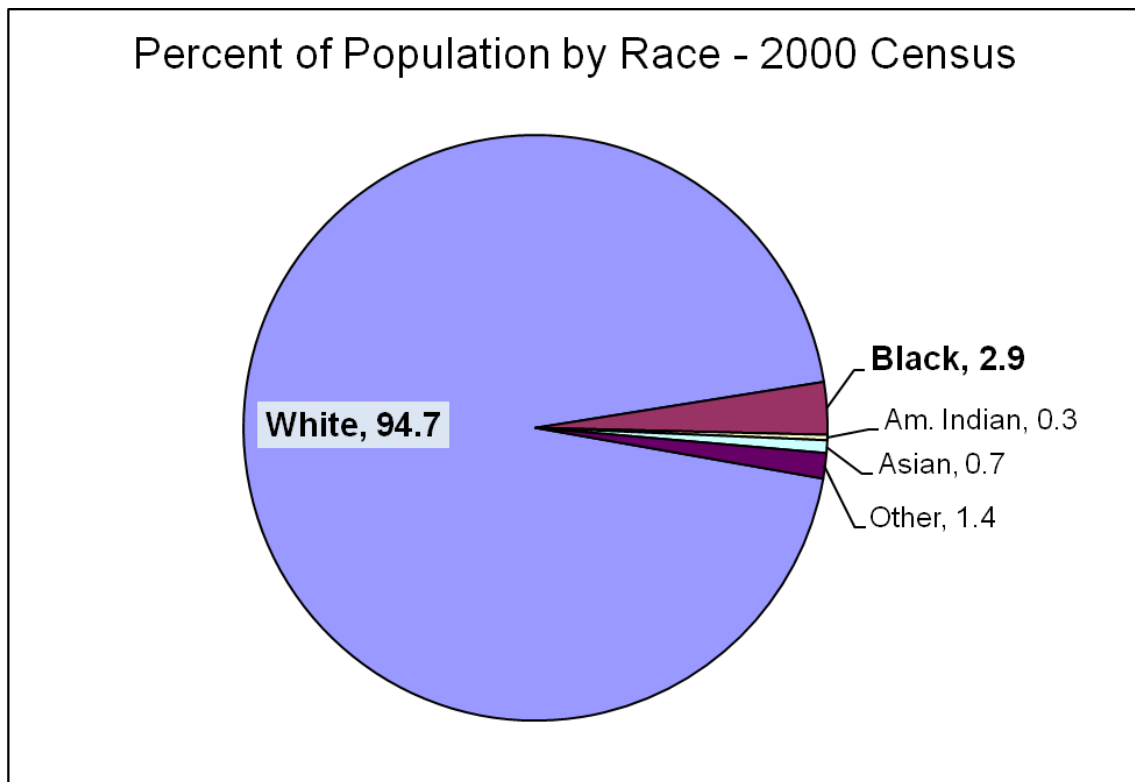
Gender of the Population – Male and Female. Turning now to the latest Census count, we can look at one aspect of gender that has an effect on how a population grows. Below is a standard population pyramid of percent of total population by age and gender for 2000.



The “Population Pyramid” graph on the preceding page shows two lines that would indicate how a true pyramid might look if the population was distributed more like the 1950 distribution, with a wide base of young people and a smaller top of older people. The divergence from the lines was the result of past changes in the basic components of population growth – births, deaths and net migration – as they shifted and changed over the previous decades. The “baby boom” bulge was evident in the 35 to 54 year old age groups. The secondary bulge in the 5 to 19 year old age groups was due to net in-migration with parents. The smaller base was due to continued relatively low birth rate after the “baby boom” peak in the 1950s and early 1960s. The smaller tip in the older age groups was due to progressively reduced survival rates for older age cohorts.

Of interest is the proportion of female to male in comparing the age cohorts. The younger cohorts showed roughly equal distribution of male and female, with 1.00 being equal. However, at around age 65, females began to substantially outnumber males, reaching a ratio of 2.55 females for each male surviving to age 85 and older. This was due to a long term trend of females having higher survival rates in old age than males. Thus, not only was the whole population aging, the aging was proportionately more concentrated in the female population.

Race of the Population – White, Black and Other. Population growth dynamics, and the major components of births, deaths and migration, can be different for different races in the population. The percent of total population by race for 2000 is shown graphically below.



The population was predominantly white. Only 2.9 percent of the population was black, and all other races accounted for much less of the total population. Given the small representation of black and other races in the population, a separate analysis of population growth based on race was not undertaken for this plan.