

CHAPTER ONE

Population and Demographics

Shawnee County is one of the largest and most dynamic counties in Kansas. This chapter presents a demographic snapshot of the county, analyzing its historic population, comparing it to comparable communities, reviewing demographic considerations, and projecting its potential future growth.

HISTORIC POPULATION GROWTH

For 50 years, Shawnee County has had steady growth, especially in unincorporated areas. The population of the County grew by 36,600 people between 1960 and 2010, averaging more than 5 percent each decade, despite a decrease in the 1970s. In 2010, the county reached nearly 178,000 residents. Topeka also experienced steady albeit slower growth over that same period.

Of the growth occurring in the county, Topeka grew by 8,000, the county's small cities grew by 2,600, while Shawnee County's unincorporated area grew by more than 26,000. Because of the growth in unincorporated areas, it now comprises over a quarter of the county's 2010 population, compared to comprising less than 15 percent in 1960.

Of the county's four smaller cities, most grew. Auburn developed during the 1960's to more than 1,200 people by 2010. Rossville expanded almost 14 percent to a population just over 1,100. Silver Lake more than tripled its population, reaching nearly 1,500 residents. However, Willard grew through the 1980's, but stabilized near its 1960's population due to home buy-outs following flooding. In total, these small cities comprise 2.2 percent of the county's population.

Not all areas of Shawnee County have grown equally. Soldier and Mission Townships grew the most since 1960, each by more than 8,000 residents. These are followed by Auburn, Monmouth, and Tecumseh with more than 2,000 new residents each. Soldier, Mission, and Tecumseh all border the City of Topeka.

Topeka Township is the only one to lose population, due mostly to annexations by the City of Topeka. Topeka annexed land from Mission, Soldier, Menoken, and Tecumseh Townships as well. Other townships gained between 300 and 1,400 residents since 1960. Note that Auburn, Dover, Rossville, and Silver Lake Townships contain the Cities of Auburn, Willard, Rossville, and Silver Lake respectively.

FIGURE 1.1: 1960-2010 Historic City Population

| | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 | 2000-2010 % CHANGE | 1960-2010 % CHANGE |
|----------------|---------|---------|---------|---------|---------|---------|--------------------|--------------------|
| Topeka | 119,484 | 125,011 | 115,266 | 119,883 | 122,377 | 127,473 | 4.2% | 6.7% |
| Auburn | - | 261 | 890 | 908 | 1,121 | 1,227 | 9.5% | NA |
| Rossville | 797 | 934 | 1,045 | 1,052 | 1,014 | 1,151 | 13.5% | 44.4% |
| Silver Lake | 392 | 811 | 1,350 | 1,390 | 1,358 | 1,439 | 6.0% | 267.1% |
| Willard | 94 | 124 | 128 | 110 | 86 | 92 | 7.0% | -2.1% |
| Unincorporated | 20,519 | 28,181 | 36,237 | 37,633 | 43,915 | 46,552 | 6.0% | 126.9% |
| Shawnee County | 141,286 | 155,322 | 154,916 | 160,976 | 169,871 | 177,934 | 4.7% | 25.9% |

Source: US Census Bureau

FIGURE 1.2: 1960-2010 Historic Township Populations and Topeka (In Order of Size)

| | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 | 2000-2010 % CHANGE | 1960-2010 % CHANGE |
|------------------|---------|---------|---------|---------|---------|---------|--------------------|--------------------|
| Topeka city | 119,484 | 125,011 | 115,266 | 119,883 | 122,377 | 127,473 | 4.2% | 6.7% |
| Soldier TWP | 5,592 | 7,225 | 11,017 | 11,491 | 12,867 | 14,732 | 14.5% | 163.4% |
| Mission TWP | 1,319 | 2,473 | 5,082 | 7,370 | 9,070 | 9,365 | 3.3% | 610.0% |
| Tecumseh TWP | 1,857 | 3,829 | 6,314 | 7,185 | 7,822 | 7,593 | -2.9% | 308.9% |
| Williamsport TWP | 3,627 | 7,812 | 1,924 | 3,829 | 4,023 | 4,000 | -0.6% | 10.3% |
| Auburn TWP | 825 | 1,066 | 1,885 | 2,157 | 2,787 | 3,147 | 12.9% | 281.5% |
| Monmouth TWP | 960 | 1,113 | 1,645 | 1,912 | 2,786 | 3,021 | 8.4% | 214.7% |
| Silver Lake TWP | 626 | 1,140 | 1,828 | 1,882 | 1,949 | 2,024 | 3.8% | 223.3% |
| Rossville TWP | 1280 | 1,376 | 1,596 | 1,581 | 1,681 | 1,907 | 13.4% | 49.0% |
| Menoken TWP | 800 | 912 | 987 | 1,203 | 1,371 | 1,535 | 12.0% | 91.9% |
| Dover TWP | 765 | 976 | 1,124 | 1,220 | 1,734 | 1,524 | -12.1% | 99.2% |
| Topeka TWP | 3,949 | 2,199 | 6,034 | 991 | 931 | 917 | -1.5% | -76.8% |
| Grove TWP | 202 | 190 | 214 | 272 | 473 | 696 | 47.1% | 244.6% |
| Shawnee County | 141,286 | 155,322 | 154,916 | 160,976 | 169,871 | 177,934 | 4.7% | 25.9% |

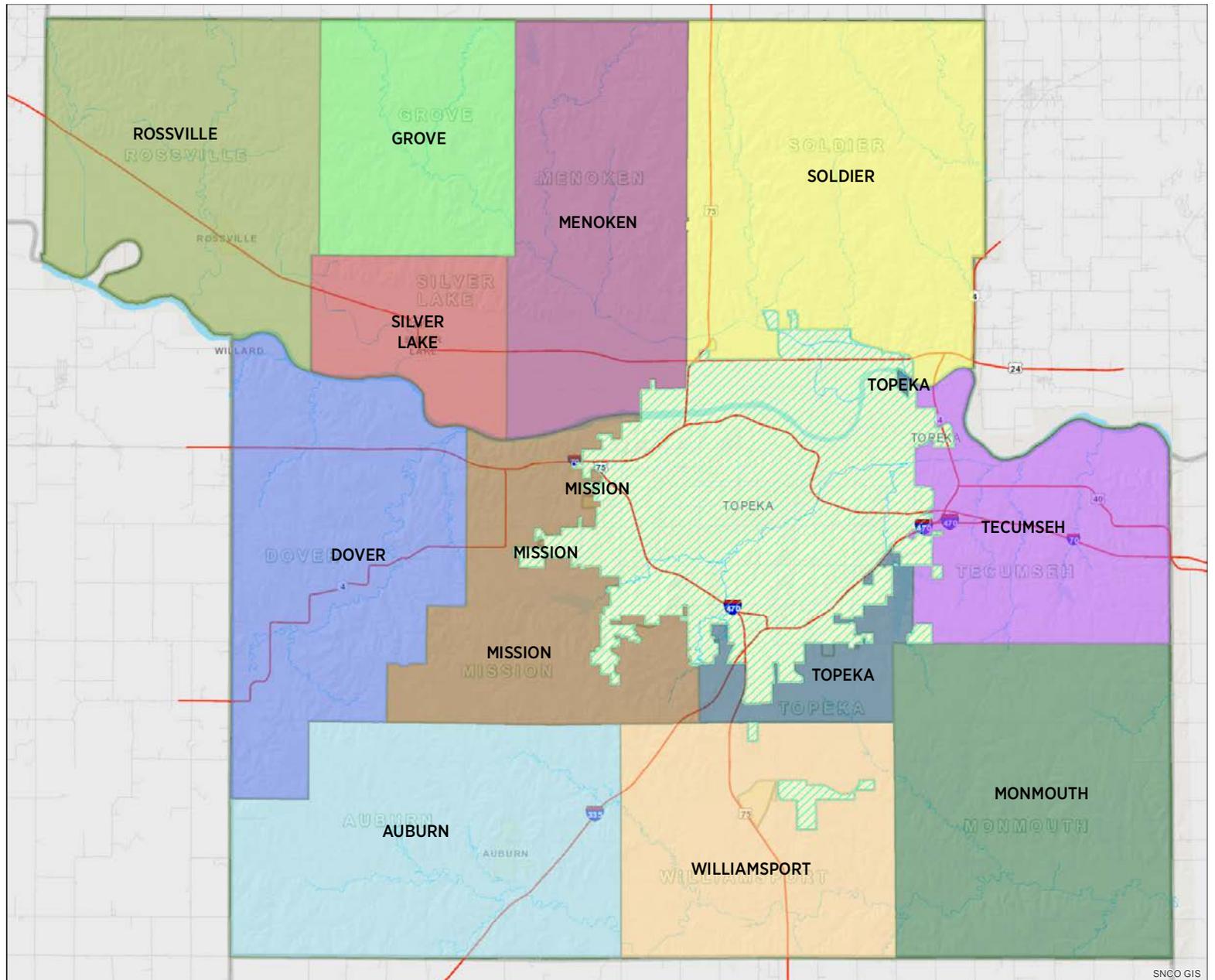
Source: US Census Bureau

Definition of EXURBAN: A semi-rural area beyond the suburbs of a city; characterized by large lots and ranchettes that typically lack some or all urban services.

Shawnee County Comprehensive Plan

Townships

-  City of Topeka
-  AUBURN
-  DOVER
-  GROVE
-  MENOKEN
-  MISSION
-  MONMOUTH
-  ROSSVILLE
-  SILVER LAKE
-  SOLDIER
-  TECUMSEH
-  TOPEKA
-  WILLIAMSPORT



SNCO GIS

Figure 1.3: Shawnee County Townships

Regional Context

Shawnee County is surrounded by Douglas, Jackson, Jefferson, Osage, Pottawatomie and Wabaunsee Counties. Examining these counties provides regional context. The Topeka Metropolitan Statistical Area (MSA) is comprised of five of these: Jackson, Jefferson, Osage, Wabaunsee, and Shawnee.

Notably, all counties surrounding Shawnee County experienced long term population growth over the past 50 years. Douglas County grew the most, largely due to the continued expansion of Lawrence, its largest city. The other counties also had their populations steadily increase, though Osage County lost population in the 2000's. Over that same period, the Topeka MSA also grew, though at a slower rate than Shawnee County alone. Thus, even while the City of Topeka's population growth slowed, the MSA and County both have performed well in terms of growth.

Comparative Context

Select urban counties provide an even broader context. While Shawnee County and the Topeka MSA experienced population growth, other highly-urbanized counties in northeast Kansas tended to grow at a faster rate. In addition, most growth in Kansas counties with large cities occurred in their major cities.

- Manhattan comprised an ever-increasing portion of Riley County's population, from 55 to nearly 75 percent, along with Fort Riley which makes up a major population in the county.
- Douglas County, in addition to its tremendous population growth, has seen Lawrence grow from 75 percent to 80 percent of its population, which roughly stayed there for the last 20 years.
- Wichita slightly increased as a proportion of Sedgwick County's population from 74 to 77 percent. However, most of the county's growth has occurred in its smaller incorporated cities.

Topeka is unique in losing its share of its county's total population. Between 1960 and 2010, Topeka decreased from 85 to 72 percent of the County's

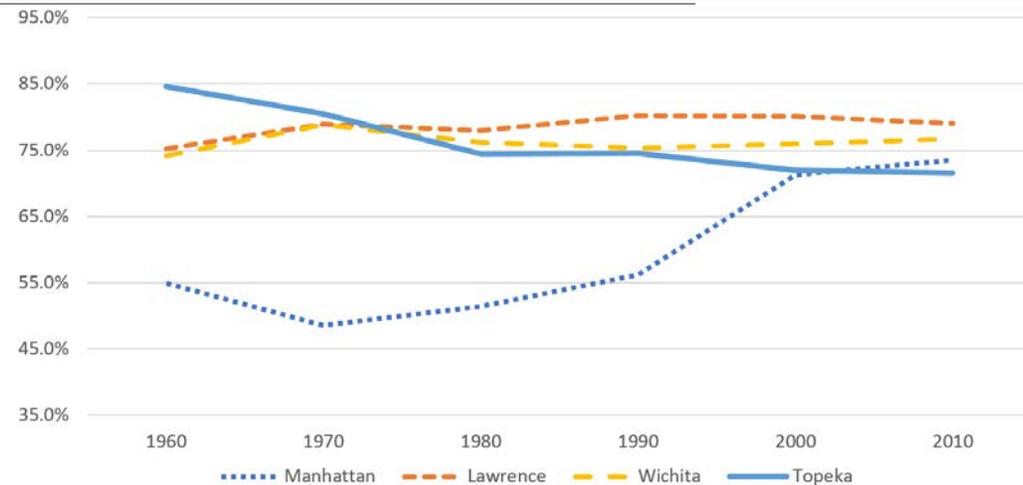
population. This contrasts most major cities in urbanized counties which remained relatively stable or increased as a proportion of the population.

FIGURE 1.4: Comparative Historic Regional Population, 1960-2010

| | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 | 2000-2010 % CHANGE | 1960-2010 % CHANGE |
|----------------------|---------|---------|---------|---------|---------|---------|--------------------|--------------------|
| Douglas | 43,720 | 57,932 | 67,640 | 81,798 | 99,965 | 110,886 | 10.9% | 153.6% |
| Jackson* | 10,309 | 10,342 | 11,644 | 11,525 | 12,657 | 13,462 | 6.4% | 30.6% |
| Jefferson* | 11,252 | 11,945 | 15,207 | 15,905 | 18,426 | 19,126 | 3.8% | 70.0% |
| Osage* | 12,886 | 13,352 | 15,319 | 15,249 | 16,712 | 16,295 | -2.5% | 26.5% |
| Pottawatomie | 11,957 | 11,755 | 14,792 | 16,128 | 18,209 | 21,604 | 18.6% | 80.7% |
| Wabaunsee* | 6,648 | 6,397 | 6,867 | 6,603 | 6,885 | 7,053 | 2.4% | 6.1% |
| Shawnee County* | 141,286 | 13,462 | 154,916 | 160,976 | 169,871 | 177,934 | 4.7% | 25.9% |
| Topeka MSA | 182,381 | 197,358 | 203,953 | 210,258 | 224,551 | 233,870 | 4.2% | 28.2% |
| Shawnee County / MSA | 77.5% | 78.7% | 76.0% | 76.6% | 75.6% | 76.1% | 0.7% | -1.8% |

* Part of the Topeka MSA
Source: US Census Bureau

Figure 1.5: Major Kansas Cities as Proportions of their Counties' Populations



Source: US Census Bureau

Definition of METROPOLITAN STATISTICAL AREA: County or counties associated with at least one urbanized area of at least 50,000 population and having a high degree of social and economic integration with the core city.

AGE COMPOSITION

Examining the age distribution or cohorts of Shawnee County explains many demographic trends and ties into future population growth or decline in the county.

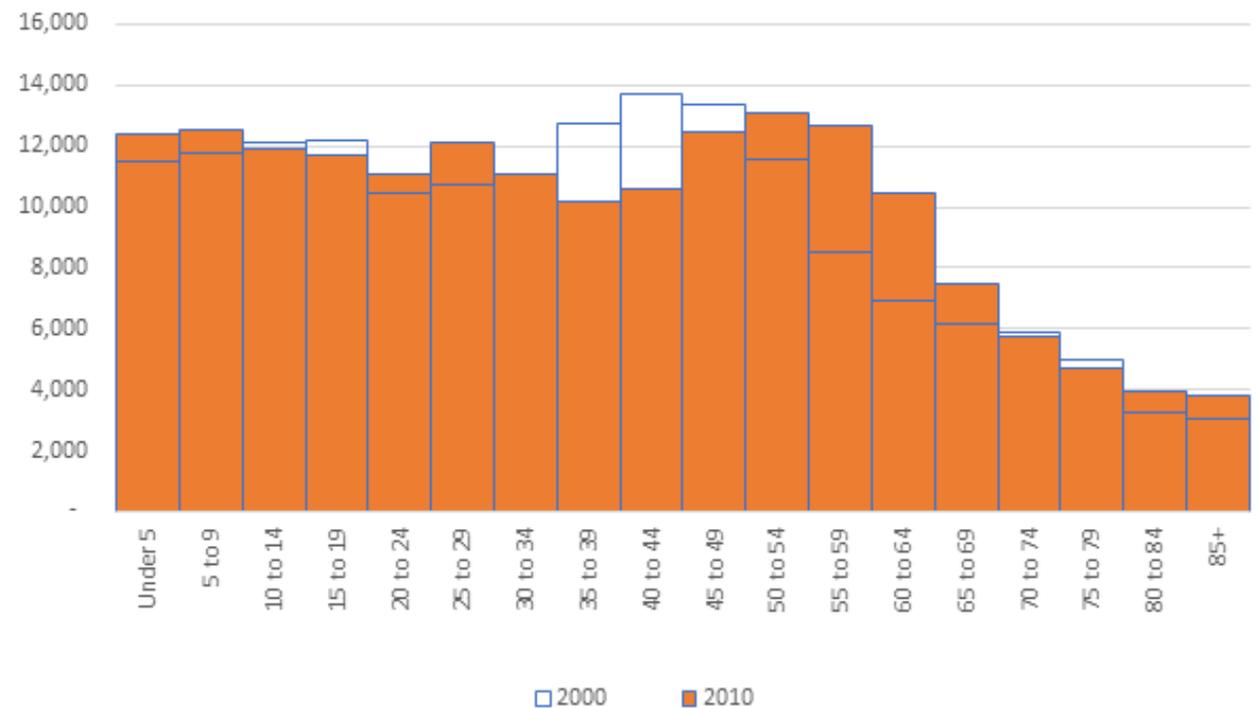
Over the last 20 years, Shawnee County’s population aged like much of the nation. In 2000, the Baby Boomer generation was ages 35 to 49, beginning their high-skill years in the workforce and just passing their prime child-bearing years. By 2010, Boomers were 45 to 59, reaching the peak of their careers and becoming empty nesters. As of 2015, Boomers began reaching retirement age.

Because of these factors, the median age of Shawnee County increased from 37.1 in 2000 to 38.6 in 2015. The aging of the population holds true through almost every township in Shawnee County over the past couple decades, with each having their share of the population under age 18 decline and share of residents age 65 and more increase. This is also evident in age distribution graphs as seen in Figure 1.6. In the past decade, the share of those age 65 and more increased from 13.7 to 14.4 percent of the population. Estimates for 2015 indicate that this pattern is accelerating, with about 16.5 percent at that time estimated age 65 and older.

The effect of the aging Boomers will be significant in the labor market over the coming years as they continue to retire and downsize, in addition to dramatic impacts on the types of services needed in the county. Birth rates can be expected to decrease and the higher number of seniors will affect the transportation system as people are no longer able to drive safely. Furthermore, additional repercussions will be felt in the healthcare system, residential market, schools, economy, and tax base. Looking at attracting younger populations to replace retirees and to form families will be an important consideration moving forward for the county, as it will be across much of the country.

Aging trends also differ in Topeka and rural Shawnee County. Topeka’s percentage of working age population was below that of the County’s in 2000, but the county’s population aged more rapidly. As a result, more of Topeka’s population is now in prime working years compared to the county. This suggests that the impacts of an aging population will be felt more in the county.

Figure 1.6: Age Distribution in Shawnee County, 2000 and 2010



Source: US Census Bureau

FUTURE POPULATION ESTIMATES

There are several ways to estimate future populations. Population projections are the simplest way to estimate the future by assuming past trends will continue. Another method is forecasting using a cohort-component model. This method uses natural population change and immigration, that is, the balance of births and deaths by age cohort and the balance of domestic and international in- and out-migrants. When there are more births than deaths, this is called natural population increase, while natural decrease is when there are more deaths than births, often seen in older communities. Natural increase and decrease and migration do not necessarily align, so areas with natural increase can still lose population overall through out-migration.

For Shawnee County, four population projections were used to estimate the county's future population in 2040, including two simple projections and two cohort-component models. All models use 2010 as their base year and previous Census counts for additional information. The following models were considered, in order of the final population numbers:

- 0.2 Percent Annual Growth Rate.** The low population estimate uses simple 0.2 percent annual growth rate model, chosen for being below historic growth trends, but above a flat population. This number acts as a low estimate for population growth in the County; it is also closest to the US Census's 2015 population estimate.
- Wichita State Cohort-Component.** This model was completed by Wichita State University's Center for Economic Development and Business Research. This cohort-component model was used to estimate populations for all counties in Kansas. Notably, this model shows Shawnee County's population rising through 2035, after which it slightly declines. However, it generally indicates population increase from 2015 to 2040.

- RDG Cohort-Component.** This model was completed by RDG Planning & Design using a cohort-component model. The model assumes a higher than average birth rate based on Shawnee County's historic birth rates, resulting in a natural increase for the County. However, it also assumes a one percent annual out-migration, similar to that from IRS records and Census migration estimates.
- 50-Year Decline Annual Growth Rate.** The final projection uses Shawnee County's 50-year historic growth rate, reflecting a steady decline. The model starts at 0.47 percent annual growth,

decreasing to 0.26 percent growth by 2040. This outcome acts as a high estimate for the county. This model's 2040 population estimate is similar to that estimated by RDG's cohort-component model if the effects of out-migration are excluded.

These four models provide a range of possible future outcomes. However, the RDG model is used for the remainder of the Comprehensive Plan as the primary population estimate, suggesting a population of 192,533 by 2040. This is an increase of approximately 14,599 or 8.2 percent.

Figure 1.7: Population Projections for Shawnee County

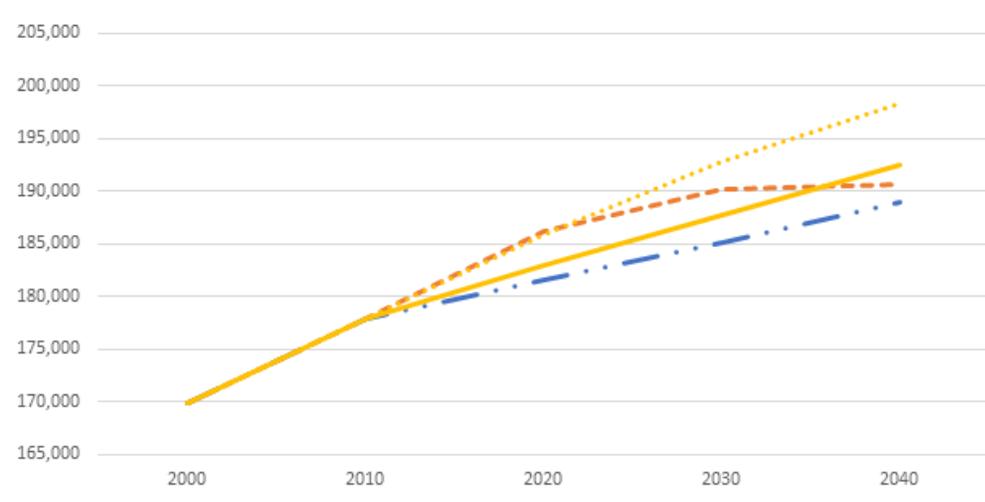


FIGURE 1.8: Population Projections for Shawnee County

| | 2010 | 2020 | 2030 | 2040 | 2010-2040 CHANGE | 2010-2040 % CHANGE |
|------------------------|---------|---------|---------|---------|------------------|--------------------|
| 0.2% Annual Growth | 177,934 | 181,525 | 185,188 | 188,926 | 10,992 | 6.2% |
| Wichita State Estimate | 177,934 | 186,148 | 190,211 | 190,626 | 12,692 | 7.1% |
| RDG Estimate | 177,934 | 182,945 | 187,703 | 192,533 | 14,599 | 8.2% |
| 50-Year Annual Growth | 177,934 | 185,972 | 192,830 | 198,353 | 20,419 | 11.5% |

Source: RDG Planning & Design, Wichita State Center for Economic Development and Business Research

Scenario 1: Historic Trend

Using RDG’s county-wide population projections, additional projections were prepared for different areas of Shawnee County and Topeka. These estimates are based on 50-year proportional population trends, that is, how each area increased or decreased as a proportion of the county. The six areas in this scenario are:

1. Northwest: Rossville, Silver Lake, and Grove Townships
2. North: Soldier and Menoken Townships
3. Topeka: City of Topeka
4. Southwest: Auburn and Dover Townships
5. South: Mission, Williamsport, and Topeka Townships
6. Southeast: Tecumseh and Monmouth Townships

The results of this model indicate slight growth for Topeka even as it still declines as a proportion of the county’s population. Most areas of the county see growth in this model, with most of accumulating to the north and south due to continued expected growth in Soldier and Mission Townships. Smaller gains would be expected to the southeast, southwest, or northwest. In this scenario, much of the population growth in Shawnee County would likely occur along section roads in unincorporated areas.

However, Topeka’s current land use policy, guided by the Land Use and Growth Management Plan 2040, will likely prevent the same pattern of development as new regulations guide development to infill locations and to Topeka’s Urban Growth Area (UGA). A new estimate accounting for Topeka’s desired population growth of 11,000 new residents was also generated.

FIGURE 1.9: Population Projections for Townships and Topeka, “Past Trends” Scenario

| | PROJECTION | | | | PERCENT OF COUNTY | | | |
|----------------|------------|---------|---------|---------|-------------------|-------|-------|-------|
| | 2010 | 2020 | 2030 | 2040 | 2010 | 2020 | 2030 | 2040 |
| Northwest | 4,627 | 4,873 | 5,122 | 5,376 | 2.6% | 2.7% | 2.8% | 2.8% |
| North | 16,267 | 17,440 | 18,630 | 19,856 | 9.2% | 9.5% | 9.9% | 10.3% |
| Topeka | 127,473 | 128,381 | 129,118 | 129,807 | 71.6% | 70.2% | 68.8% | 67.4% |
| Southwest | 4,671 | 5,179 | 5,698 | 6,234 | 2.7% | 2.8% | 3.0% | 3.3% |
| South | 14,282 | 15,743 | 17,081 | 18,458 | 8.0% | 8.6% | 9.1% | 9.6% |
| Southeast | 10,614 | 11,330 | 12,055 | 12,801 | 6.0% | 6.2% | 6.4% | 6.7% |
| Shawnee County | 177,934 | 182,945 | 187,703 | 192,533 | 100% | 100% | 100% | 100% |

Source: RDG Planning & Design

Scenario 2: 11,000 Residents to Topeka

Based on the assumption that Topeka will grow by the 11,000 new residents as their Land Use plan assumes, a different picture emerges. In this scenario, Topeka begins capturing a larger portion of the County's population, reaching more than 138,000 residents and 71.9 percent of the county's population by 2040.

However, as Topeka absorbs more of the county's new population, many of the outlying areas see much lower amounts of population growth. In this scenario, all areas still grow, but at a much slower pace due to shifts in where the population lives. Notably, the northwest area begins to lose population from 2030 to 2040, though it remains at a similar level as it was in 2010.

Alternatively, if Topeka increases its population by enticing in-commuters, a large portion of the city's workforce, to relocate to Topeka, this could boost its population without slowing growth in other areas of the county. Likely, such a scenario would result in higher levels of population growth than projected because it would break sharply with historic trends. Regardless, factors such as these should be taken into account as Shawnee County continues to grow and change and policy is made and negotiated.

FIGURE 1.10: Population Projections for Townships and Topeka, "Topeka Growth" Scenario

| | PROJECTION | | | | PERCENT OF COUNTY | | | |
|----------------|------------|---------|---------|---------|-------------------|-------|-------|-------|
| | 2010 | 2020 | 2030 | 2040 | 2010 | 2020 | 2030 | 2040 |
| Northwest | 4,627 | 4,694 | 4,747 | 4,629 | 2.6% | 2.6% | 2.5% | 2.4% |
| North | 16,267 | 16,515 | 16,785 | 17,028 | 9.1% | 9.0% | 8.9% | 8.8% |
| Topeka | 127,473 | 131,140 | 134,806 | 138,473 | 71.6% | 71.7% | 71.8% | 71.9% |
| Southwest | 4,671 | 4,868 | 5,086 | 5,456 | 2.6% | 2.7% | 2.7% | 2.8% |
| South | 14,282 | 14,951 | 15,428 | 15,871 | 8.0% | 8.2% | 8.2% | 8.2% |
| Southeast | 10,614 | 10,778 | 10,851 | 11,077 | 6.0% | 5.9% | 5.8% | 5.8% |
| Shawnee County | 177,934 | 182,945 | 187,703 | 192,533 | 100% | 100% | 100% | 100% |

Source: RDG Planning & Design

Discussion

Unincorporated Shawnee County grew by 127 percent from 1960 to 2010. Topeka grew by only 7 percent during the same time. After comparing four different future population scenarios, the County's population is expected to grow by 14,599 by the year 2040. The Topeka Land Use and Growth Management Plan anticipates that Topeka will grow by 11,000 people through 2040 through infill development, redevelopment, and annexation of the Urban Growth Areas (UGA). If successful, this means that Topeka would capture 72 percent of the county's total anticipated population at that time. The balance of Shawnee County would then be expected to capture 28 percent of the county's total population in 2040, which is 3,600 people. This is a reversal of the historic trend.

In addition, the population is aging, with aging occurring more rapidly in unincorporated areas. This indicates that the impacts of an aging population will likely affect the county more than the City.

Because much of the county's growth is expected to be annexed by the City of Topeka, coordinating with the City and other taxing jurisdictions will help reach the best outcomes for that growth. For that reason, it will be important to use this document as a policy statement to begin discussions with Topeka regarding the future of areas outside of its UGA but within its 3-mile jurisdiction. This process should result in set joint policy goals for the city which will delineate development approval responsibilities and minimize administrative burden for the City, County, and developers.