

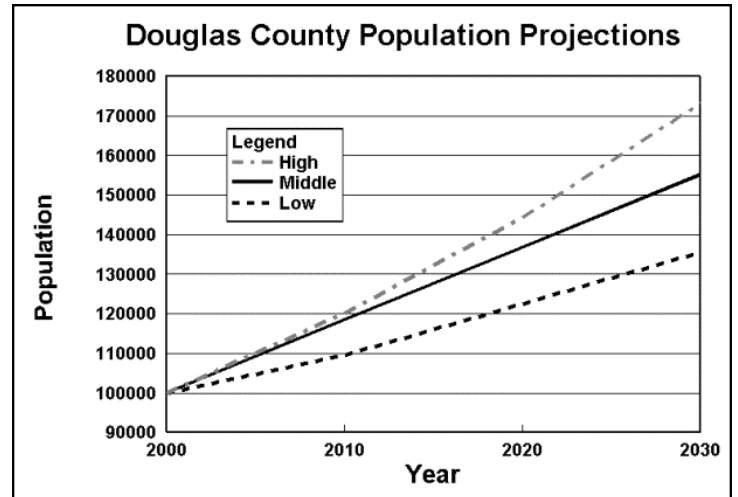
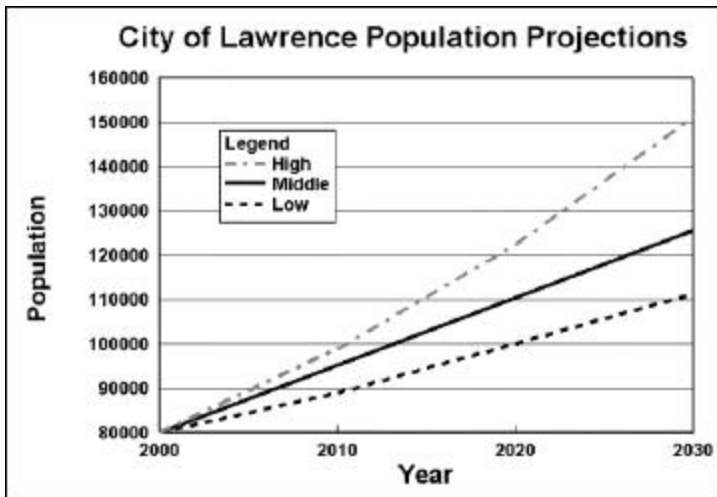
# PHASE II TRANSPORTATION 2025 ASSUMPTIONS

In order to forecast the future of Lawrence and Douglas County, Planning Staff and LSA Associates have made certain assumptions. These include assumptions for the growth patterns of Lawrence, the land use characteristics of Lawrence and Douglas County and the population estimates for the region.

## Population

These population estimates were prepared by Planning staff and include three series of estimates. The low estimate is based off the growth rate of the decennial census, 1950-2000. The middle estimate is based off the growth rate of Lawrence from 1990-1999. The high estimate is the average percentage change between each decennial census. For the purpose of the Transportation 2025 plan, the middle estimates have been taken as control totals.

These projections exist in Horizon 2020, the comprehensive long-range land use plan for Lawrence and Unincorporated Douglas County.



Year	2000*	2010	2020	2030
Low	80,098	88,961	100,076	111,191
Middle	80,098	95,178	110,406	125,635
High	80,098	99,013	122,394	151,296

Year	2000*	2010	2020	2030
Low	99,962	109,522	122,474	135,426
Middle	99,962	118,501	136,826	155,152
High	99,962	120,065	144,212	173,214

\*Census 2000 figures. Source: U.S. Census Bureau and Lawrence Douglas County Planning Department

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## Land Use

In order to facilitate the completion of the traffic demand model, it was necessary to complete a future land use composite. This future year land use projection assumes the continued growth of Lawrence and at least two of three major functions necessary for growth: sufficient infrastructure, sufficient water capacity and sufficient sewer capacity. This map may not be reflective of current or anticipated actual conditions. The map itself represents Planning staff's best estimates for the future land use of Lawrence and Douglas County.

This has been showed to the governing bodies and is solely a planning document **ONLY**. It has no legal standing, and is only a **DRAFT** document.

## Traffic Demand Modeling

The Lawrence Traffic Demand Model is a computer-based model using a software package called QRSII (Quick Response System II). This model estimates traffic generation and demand centers based upon TAZ's (Traffic Analysis Zones) Each zone represents an area where a set number of traffic is generated from – whether it be a small generator such as a residence or a large generator, such as a large employment center (i.e. the University of Kansas). These TAZ's occur throughout the community and Douglas County, usually separated by major or defined roadways, rivers and other logical, natural barriers. Land use composites are necessary in order to determine and validate what type of trip and the relative distance of the trip are occurring.

Home-based and non-home based trips from each TAZ are combined to form a series of trips that the computer then distributes through the road system. These computer estimations on the total number of trips generated and where they are occurring are validated versus existing traffic counts. In order to assure stable and consist counts, the Lawrence Traffic -Demand Model is based off 1998 data. Employment, land use and sociodemographic data are used to validate both existing (1998) and future year data.

Future year data, such as land use and population estimates are used as both guides to establishing future TAZ's and to show where future-year deficiencies exist. If the amount of traffic being generated exceeds the capacity of the road network in the model, it maybe necessary to explore alternative modes of transportation and/or expansion of existing roadway networks to handle anticipated congestion.

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