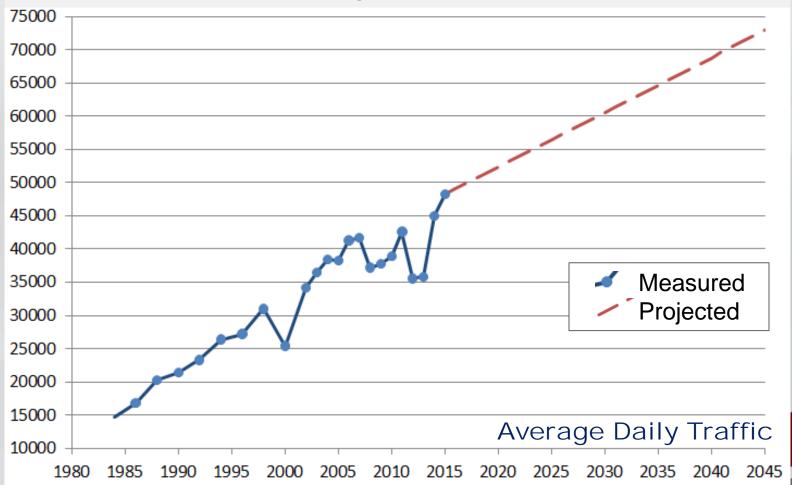
I-35 Traffic Projections

Ankeny to Ames





The Office of Systems Planning at the lowa Department of Transportation determined the base, program, and design year traffic forecasts. To establish a base year, historical data covering the extent of the study area was gathered from 2000 to 2015 lowa Department of Transportation Annual Traffic Book figures. Several sources were used to determine the program and design year traffic forecasts, including the Statewide Travel Demand Model, the Traffic Book figures, local planning authorities, and existing industrial/commercial sources of traffic, in-order to estimate a reasonable growth rate for the program and design years. The growth rate selected for the study area was a 1.99% per year until 2045

Number of Lanes and Level of Service

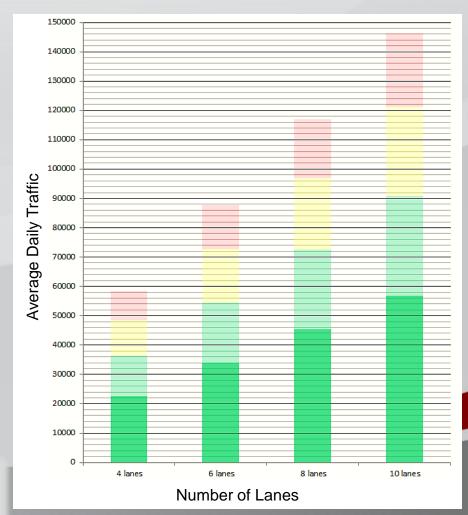
LEVEL OF SERVICE

LOS A

LOS B

LOS C

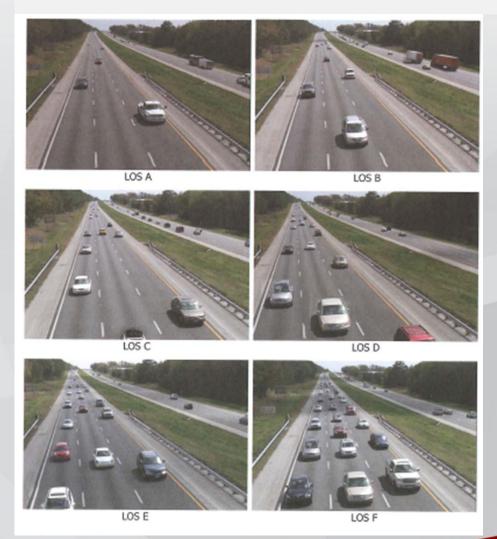
LOS D





Based on Highway Capacity Manual Methodologies using 20% Trucks and corridor specific traffic characteristics

Level of Service



The Highway Capacity Manual, 2010, defines Level of Service for a freeway on the basis of passenger car equivalents per lane mile, counting RV's and trucks as more than one car to reflect their size and performance.

The figure at left is presented in the Highway Capacity Manual to illustrate the defined levels for a freeway.

As the LOS degrades, speed may not be impacted, although the freedom to maneuver is. At LOS F, breakdown has occurred. Stop and go conditions are experienced.



Purpose and Need

Purpose:

The purpose of the improvements to the I-35 corridor from NE 36th Street in Ankeny to 13th Street in Ames is to provide a safe and desired mobility for current and future traffic. The improvements will provide for additional capacity to meet current and future demand, and update infrastructure which has reached the end of its useful life.

Need:

- Capacity Interstate 35 between Ames and Ankeny carries 48,000 vehicles per day, which is approaching saturation for a four lane interstate.
- Transportation Demand Traffic projections for segments in this corridor are estimated to more than double between years 2012 and 2045.
- Roadway Deficiencies This section of Interstate 35 was originally built in 1965 and is nearing the end of its useful life. It is in need of substantial repair or total reconstruction.

