TRANSPORTATION

Appendix 21-A1

Florida Department of Transportation

Statewide Average K_{100}

peak travel season. In Florida's developed areas, the peak hour usually occurs in the late afternoon for most state roads. Thus, in developed areas of the state, the 100th highest hour of the year is representative of the typical "rush" hour during the peak traffic season.

The K_{100} factor is used to convert a peak hour volume to an AADT and vice-versa. The K_{100} factors used in the Generalized Tables (see Table 3-3) were obtained from unconstrained, continuous count stations throughout the state. Actual 100th highest hourly volumes and AADTs were used to determine the K_{100}s.

Table 3 – 3
STATEWIDE AVERAGE K_{100}S

	Urbanized	Transitioning/ Urban	Rural Developed	Rural Undeveloped
Freeways	9.3 & 9.7%*	10.0%	10.4%	10.4%
Highways	9.5%	9.6%	9.7%	9.8%
Arterials	9.5%	9.6%	9.7%	N.A.

**9.3% applies to Class IV freeways and 9.7% applies to other freeways.*

As volume increases, the peak period becomes longer, thus decreasing the K factor.

The K factor generally drops as an area becomes more urbanized and high traffic volumes are spread out over longer time periods. If adequate documentation is provided, FDOT would consider somewhat lower K factor values for urbanized areas than appear in the Generalized Tables.

K_{100} is not a peak to daily ratio.

The K_{100} factor is not a peak to daily ratio. A peak to daily ratio is usually determined by obtaining hourly traffic counts for a day and dividing by the measured daily volume. In the Florida professional community, peak to daily ratios are frequently used as K factors. In most cases, especially in urbanized areas, peak to daily ratios are lower than K factors. Whereas, a K factor relates to the whole year, a one-day peak to daily ratio only accounts for traffic variability in one day. Traffic volumes derived from FSUTMS or other UTPS type travel demand forecasting models are in terms of peak season weekday average daily traffic (PSWADT).

Calculating K_{100}

For a conceptual planning analysis, FDOT recommends calculating roadway specific K_{100} factors based on 3-day counts (i.e., a 72-hour consecutive count taken within the time frame of Monday afternoon through Friday morning) in urbanized, transitioning and urban areas, and 7-day counts in rural areas. The approach makes use of FDOT's seasonal factors for weekday traffic counts and peak to daily ratios. The first step is to obtain