



P.O. Box 4036 / Ormond Beach, FL 32175-4036
Ph. 407-491-9477

TECHNICAL MEMORANDUM # 1

TO: File
FROM: Beth G. Lemke, AICP, PTP
DATE: May 1, 2009
RE: Traffic Forecasting Method
Taylor County EAR-based Amendment

Purpose

The purpose of this tech memo is to document the traffic forecasting process used to develop future-year volumes on the roadway network. Taylor County is a rural County of less than 20,000 people, including one incorporated City - Perry. The County is updating its currently adopted Comprehensive Plan, which currently has a future year horizon of 2015, to the new future year horizon of 2035. Further, a five-year planning horizon of 2015 will be developed for the purpose of establishing a 5-year capital improvements program. The long term planning horizon (2035) will incorporate changes to future land use map to incorporate the County's recently adopted Vision and to plan for the next 25 years of development.

Background

The following data sources were reviewed to obtain a general sense of historical growth and growth trends in the County:

- 2007 SIS Report, FDOT
- 2007 SHS Report, FDOT
- Florida Estimates of Population 2007, Bureau of Economic and Business Research, University of Florida
- Historical Census Counts for Florida and Its Counties 1830 through 2000, Bureau of Economic Business Research, University of Florida
- 2007 AADT Forecast, Transportation Statistics Office, FDOT
- Florida Traffic DVD, Historical Traffic Data, Transportation Statistics Office, FDOT

Historical Census Population Counts and Growth Rates

Year	Population Count	Annual Growth Rate (%)
1970	13,600	---
1980	16,500	0.80
1990	17,100	0.35
2000	19,300	1.14
2010*	22,900*	1.60
2015*	23,900*	0.84
30-Year Average Annual Growth	---	1.00
15-Year Average Annual Projection	---	1.29

*Projection

Traffic Counts

Available historical traffic count data from the Florida Department of Transportation was reviewed for 1993 to 2007. Some traffic count data was available for County roads; however, there was no historical data available (e.g., only one count date was available for each location).

Several conclusions can be drawn from review of this data:

- Taylor County has experienced relatively flat growth in the past 45 years. They have had substantial population gains in some decades, only to be lost in future decades.
- A 30-year history indicates an overall average annual *population growth* rate of 1.0%.
- The average annual *traffic growth* rate, system-wide on the FDOT roadways is 0.7%.
- It can be assumed that County roadways have generally experienced less annual average growth than the State roadways, due to the growth in through traffic (E-E trips passing through the County) on US routes that traverse the County.

Traffic Forecast

Based on the aforementioned conclusions, the methodology followed for the traffic forecast is outlined below:

1. 2010
 - a. FDOT Roads - Used FDOT Transportation Statistics Office AADT forecast numbers for each FDOT roadway.
 - b. County Roads - Used the FDOT system-wide average annual growth (0.7%) and applied it to all County roads from the base year of the count to 2010.
2. 2015
 - a. FDOT Roads - Used FDOT Transportation Statistics Office AADT forecast numbers for each FDOT roadway.
 - b. County Roads - Used the FDOT system-wide average annual growth (0.7%) and applied it to all County roads for the 5 years between 2010 and 2015.
3. 2035
 - a. FDOT Roads - Calculated growth rates for each FDOT roadway using FDOT Transportation Statistics Office AADT forecasts from 2010-2015. Applied individual growth rates to each roadway (range of 0.2% to 4.4% per year) for the 20 years between 2015 and 2035. Where roadway segments were forecast by FDOT to have 0.0% growth, historical data was used to develop a growth for these roadways.
 - b. County Roads - Used the FDOT system-wide average annual growth (0.7%) and applied it to all County roads for the 20 years between 2015 and 2035.

Conclusion

This methodology is anticipated to yield a reasonable, yet conservative, estimate of future background traffic volumes for Taylor County. These volumes will be the baseline to which the estimated trips generated by the Vision Plan 2060 will be added.

This method is conservative (will over-estimate traffic impacts) in that much of the forecasted background traffic is likely a result of development that can occur under the currently adopted Comprehensive Plan. In other words, an argument could be made that there would be no growth in traffic over the next 25 years without implementation of development contemplated in the Comprehensive Plan.