

**Graves County Traffic Forecasts
KY 121 from 400' South of Harris Lane
to the KY 945 Intersection
Item # 1-8100.00**



Division of Multimodal Programs

October 12, 2004

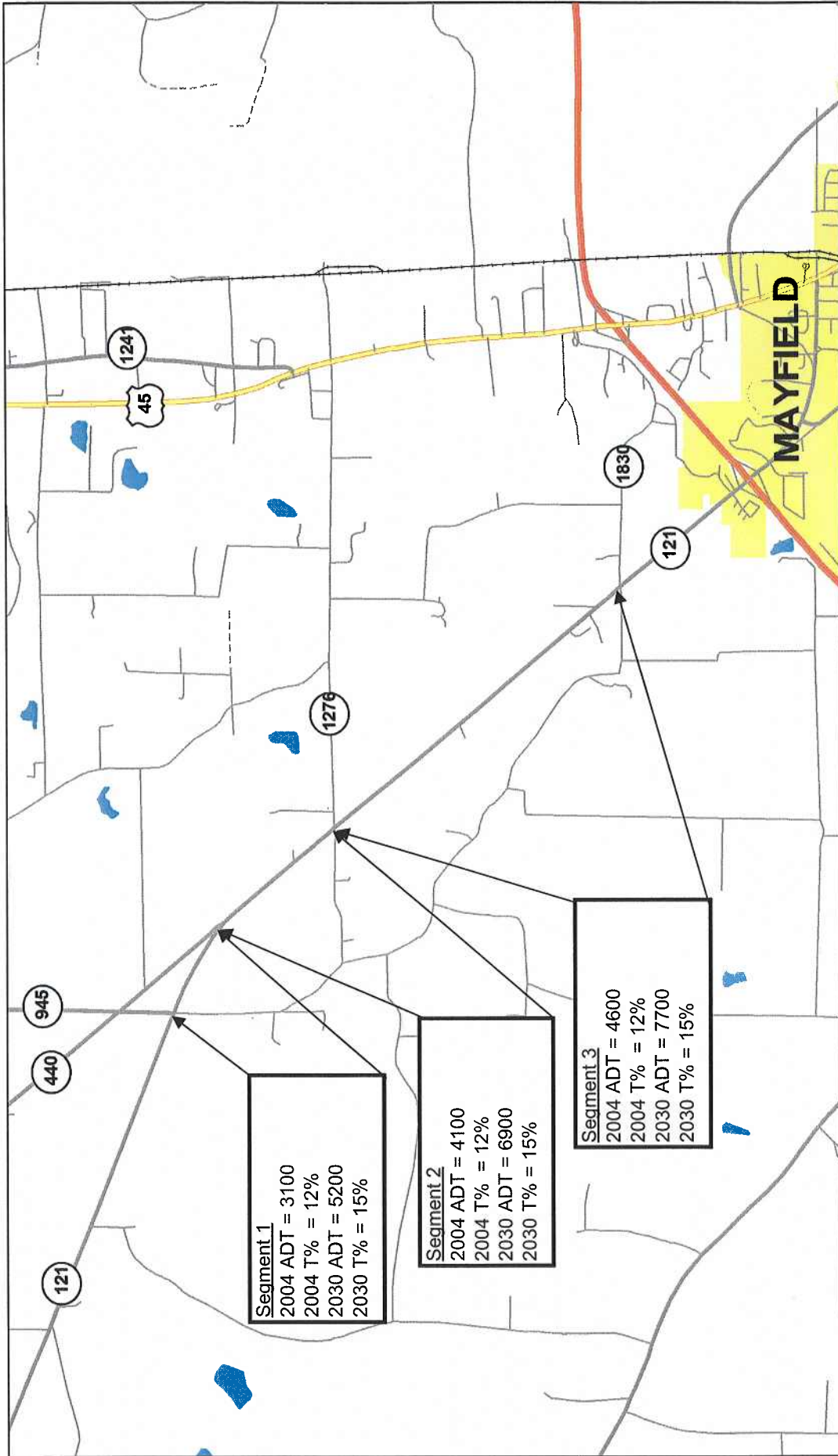
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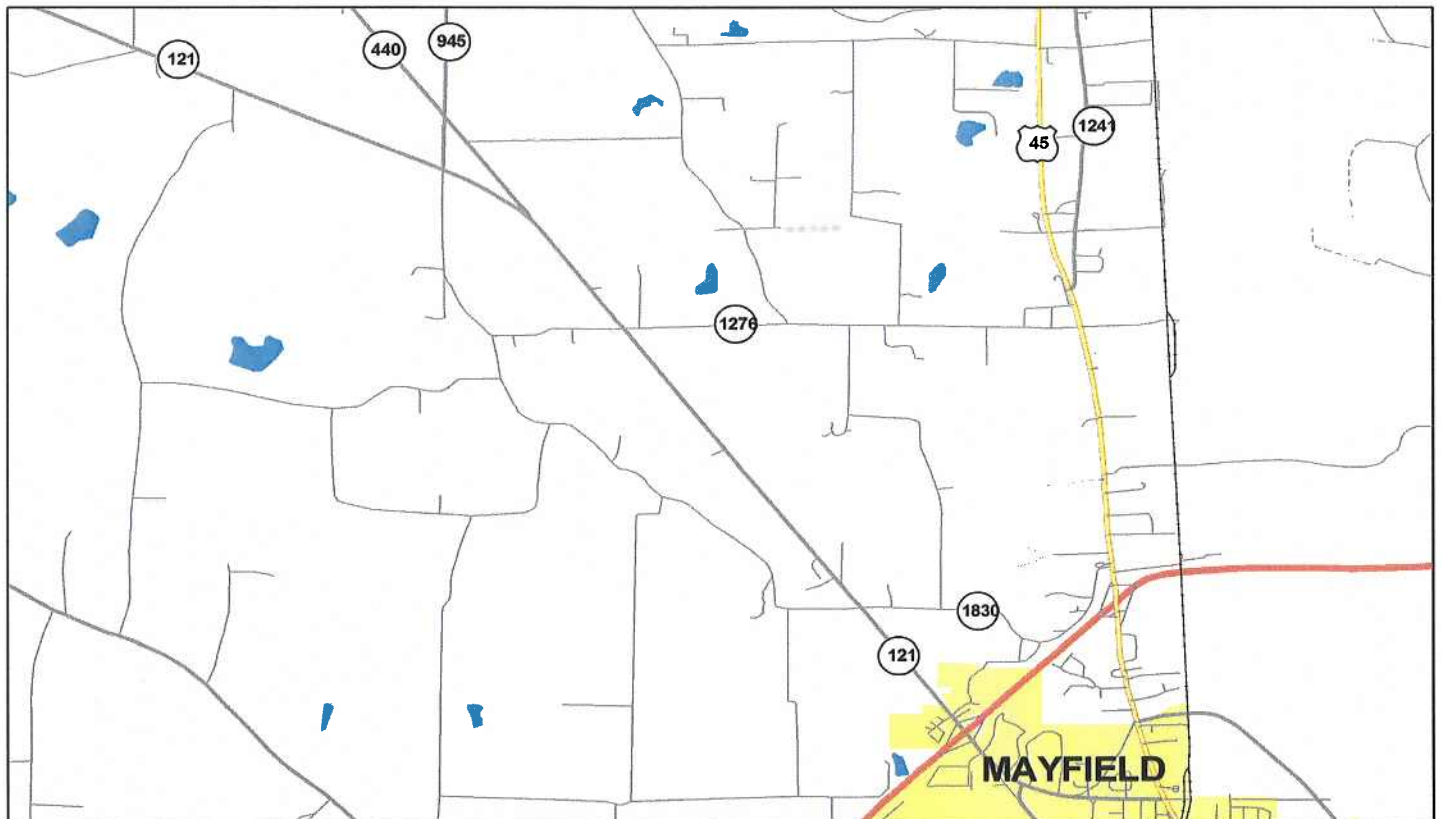
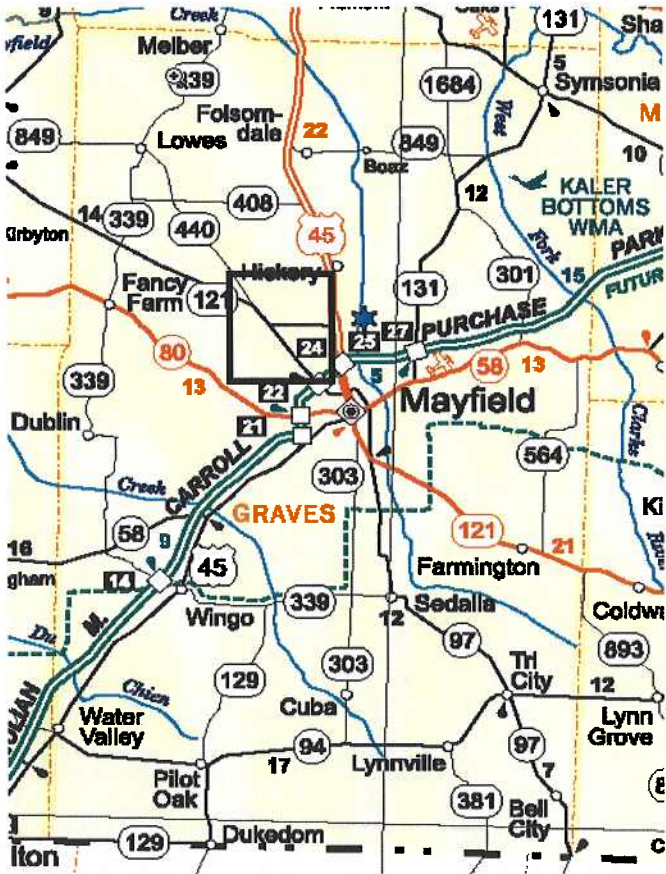


Graves County

KY 121 from 400' South of Harris Lane to the KY 945 Intersection

Item # 1-8100.00

Vicinity Map



Executive Summary

Project Description

The purpose of this project is to conduct a planning study on KY 121 from 400' South of Harris Lane to the KY 945 intersection in Graves County.

Volumes

The current year volumes for this forecast were taken from CTS program.

Growth Rate

Growth Rate Used = 2.0%

- Trend Line Analysis showed an average of 1.1% for this section of KY 121.
- Population data from the Census and population estimates made by the State Data Center are reliable indicators of travel growth. The Graves County population growth rate projected 1% per year. Since the average population growth for Kentucky is 0.72%, it is reasonable to expect a higher growth rate than the trend line analysis rate of 1.1%.

Area	1990 (Census)	2000 (Census)	90-00 GR	2030 (Est.)	00-30 GR
KY	3,686,891	4,041,769	0.96%/year	5,006,885	0.72%/year
Graves	33,550	37,028	1%/year	50,203	1%/year

Truck Percentages

Truck Percentage Used = 12%

The truck percentage was based on the aggregate class average.

I-69 and I-66 Impacts

- The Kentucky Statewide Model with I-69 showed there is no traffic impact on KY 121.
- The Kentucky Statewide Model with both I-69 and I-66 also showed there is no traffic impact on KY 121.

Industrial Park Impacts

- An assumption was made that 1000 jobs and 2000 jobs will be created for current year 2004 and future year 2030 respectively. A trip generation rate of 3.34 trips per employee in land use type of industrial park was utilized based on the Trip Generation Handbook published by Institute of Transportation Engineers. Therefore, 3340 trips and 6680 trips are generated for the current year and the future year respectively. This resulted in an additional 100 trips on KY 121 for the current year, and an additional 200 trips for the future year.
- The Mayfield model was used to verify the above assumptions. An additional 2000 industrial jobs was added to a Traffic Analysis Zone. After executing the model, the assignments showed a slight increase in traffic volumes on KY 121.