

Kentucky Statewide Travel Demand Model Overview

for the
2002 Annual TRB Meeting
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Multimodal Programs



Presentation Overview

- Model Types
- Model Usages
 - Especially the Statewide Model
- Other Related Model Activities
 - Model Contract
 - NPTS Add-On surveys
 - MUG
 - New Software

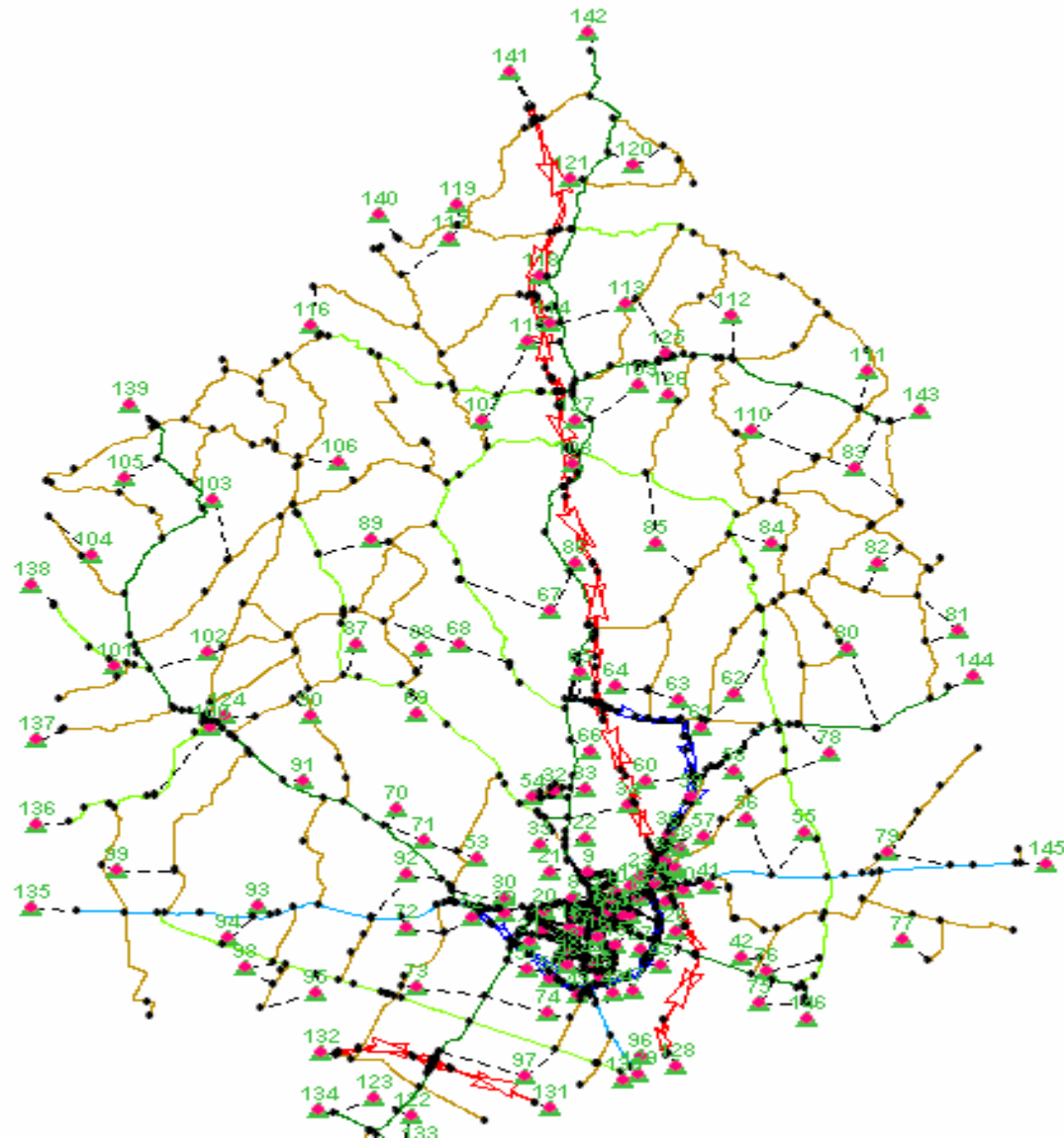
Traffic Models: Types

- Small Urban Area - 37 Areas/Cities in KY
- Air Quality County-level-
 - ~ 20 areas to do
 - 3 done
- MPO - 7 w/ models, 4 do their own modeling
- Special -
 - Sub-area models for special projects
 - Greater detail than full scale model
- Statewide - since 1975

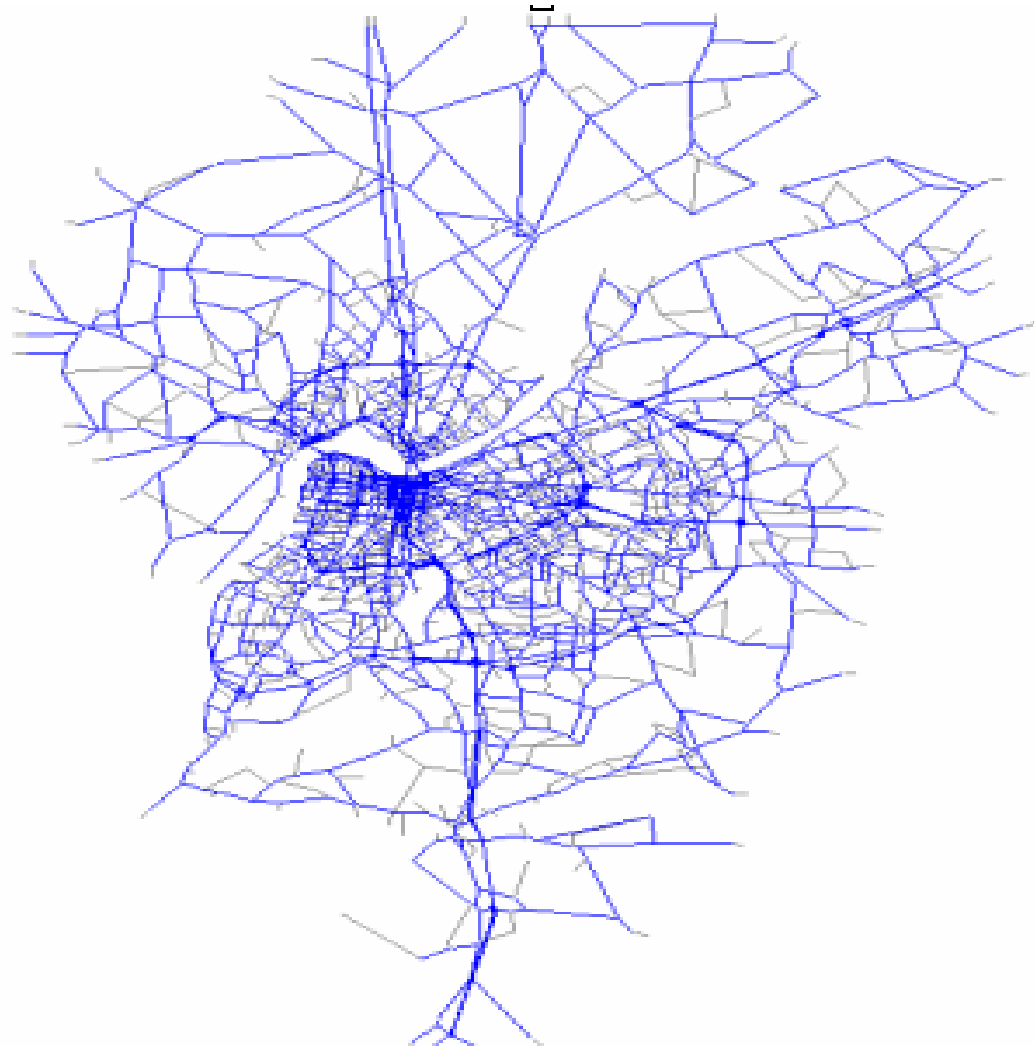
Traffic Models: Bowling Green Network



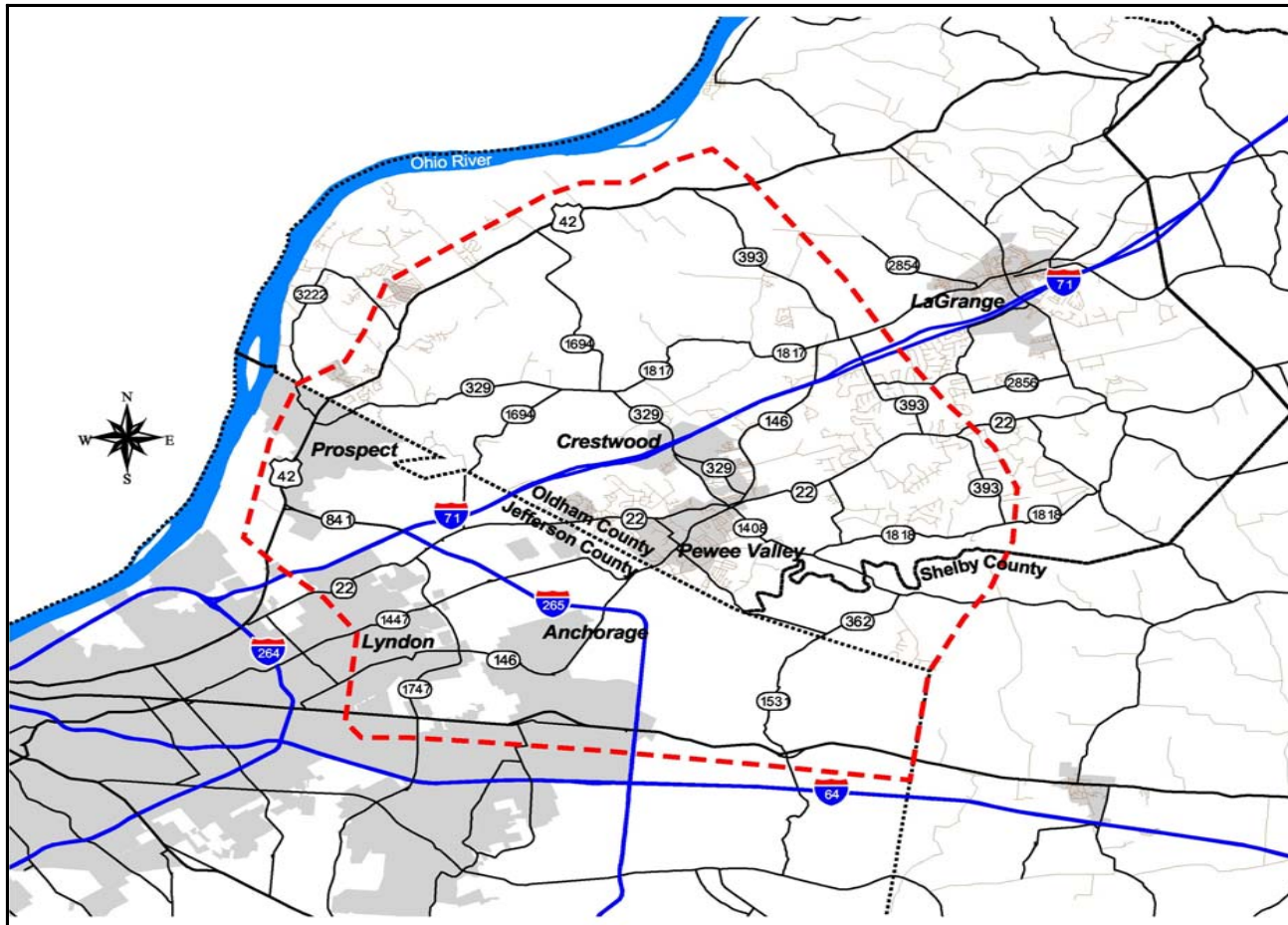
Scott County Model



Traffic Models: KIPDA (Louisville) Network

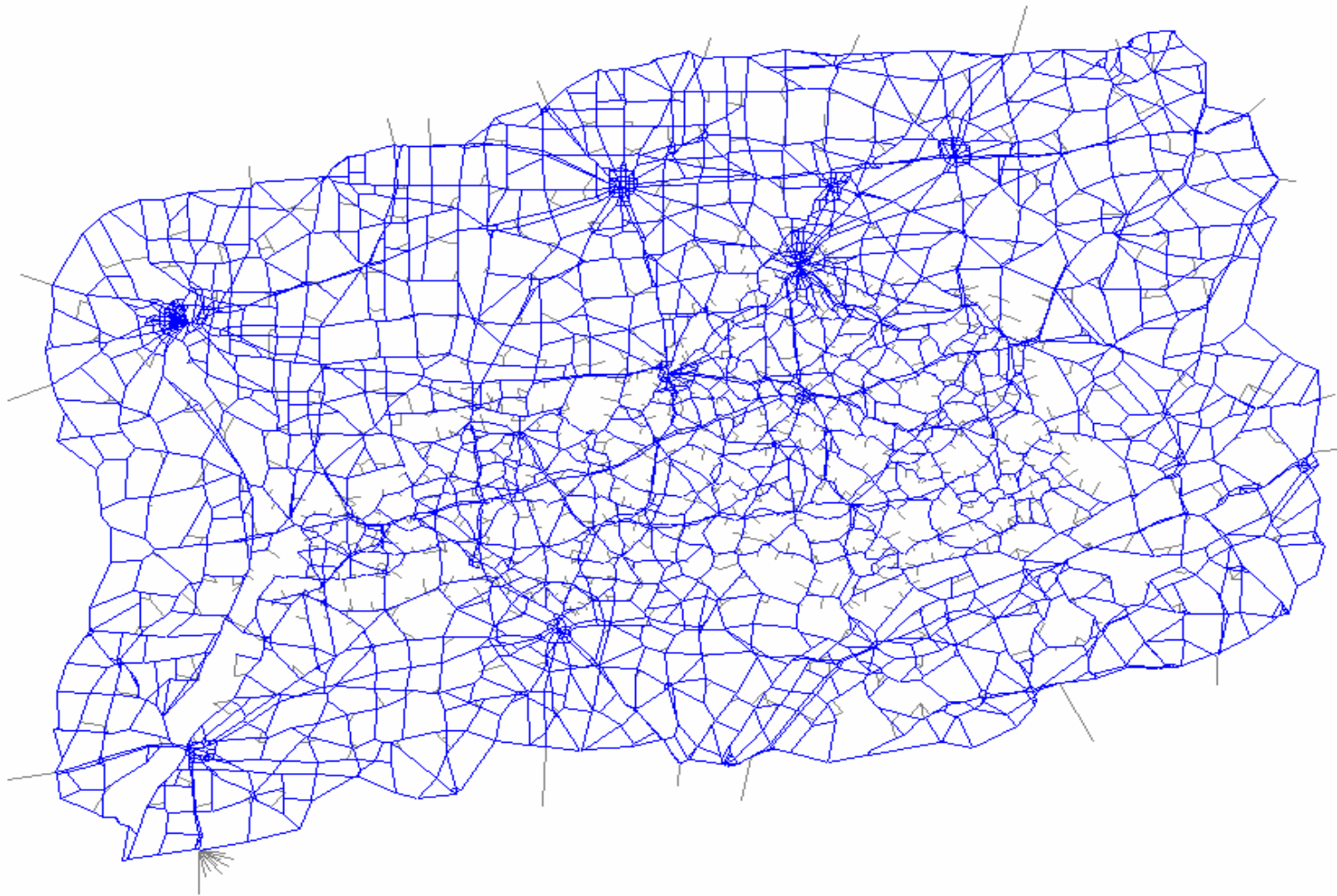


KIPDA Subarea Model



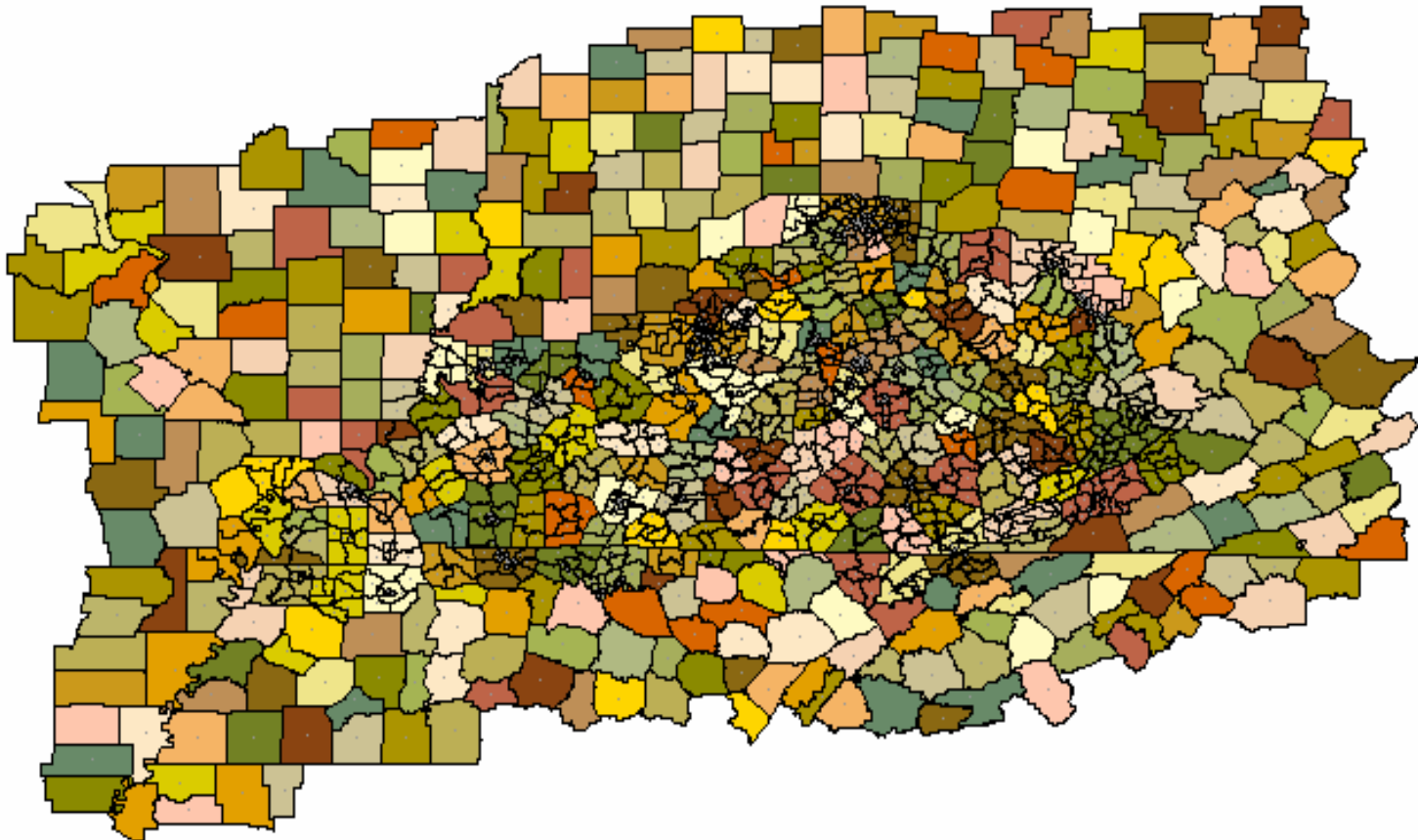
Traffic Models: KySTM

Kentucky Statewide Model Network



Traffic Models: KySTM TAZs

Traffic Analysis Zones










Traffic Models: Usages

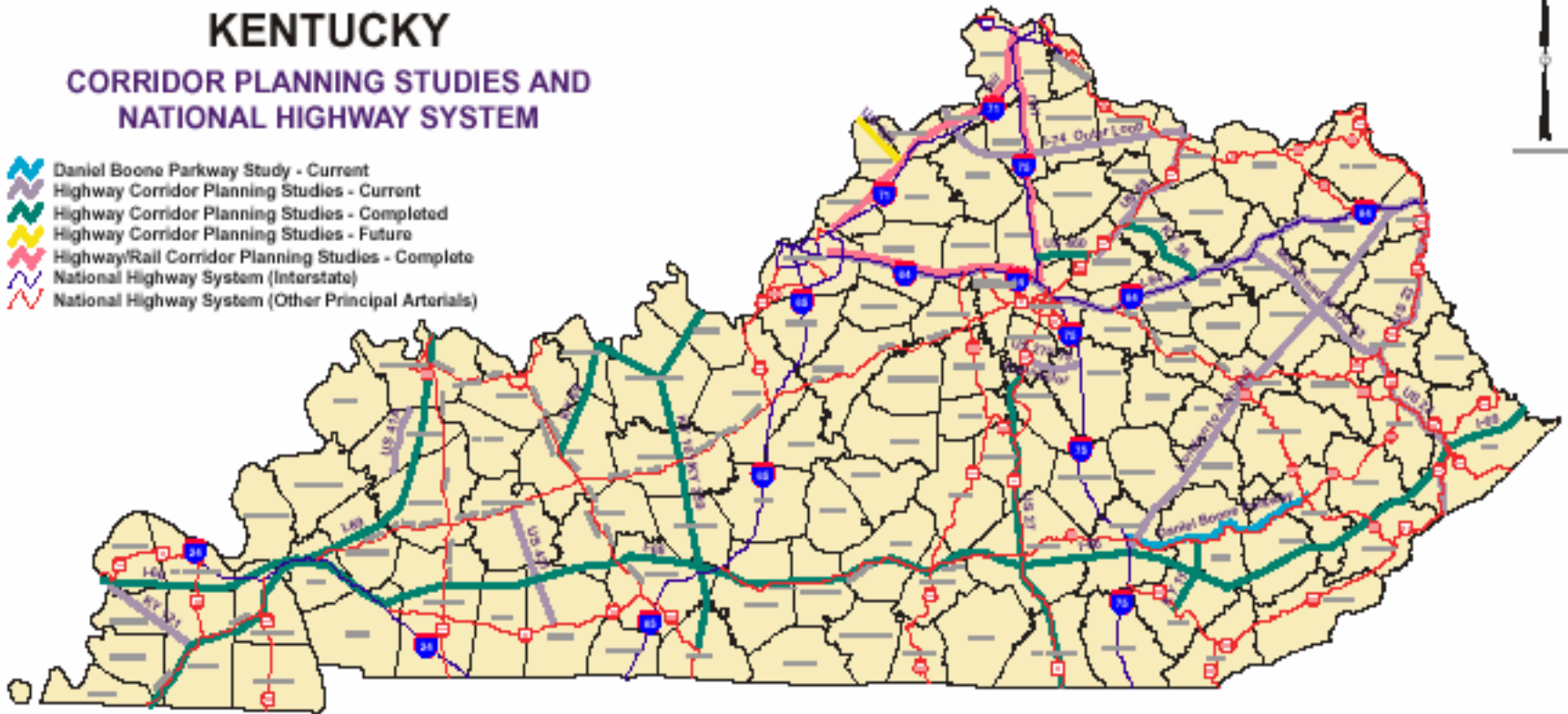
- **Forecasting** - especially new facilities
- **Air Quality** - VMT forecasting, Mobile 5.0b/6.0
- **Transportation Plans** - used for MPO and small urban area need analysis
- **Corridor studies** - I-66, I-69, Cincinnati-Dayton, and other major routes
- **Special** - CVM (Commercial Vehicle Monitoring) station optimization, User Cost Analysis, Detour Analysis

KYTC Corridor Studies

EXHIBIT 23 KENTUCKY

CORRIDOR PLANNING STUDIES AND NATIONAL HIGHWAY SYSTEM

-  Daniel Boone Parkway Study - Current
-  Highway Corridor Planning Studies - Current
-  Highway Corridor Planning Studies - Completed
-  Highway Corridor Planning Studies - Future
-  Highway/Rail Corridor Planning Studies - Complete
-  National Highway System (Interstate)
-  National Highway System (Other Principal Arterials)

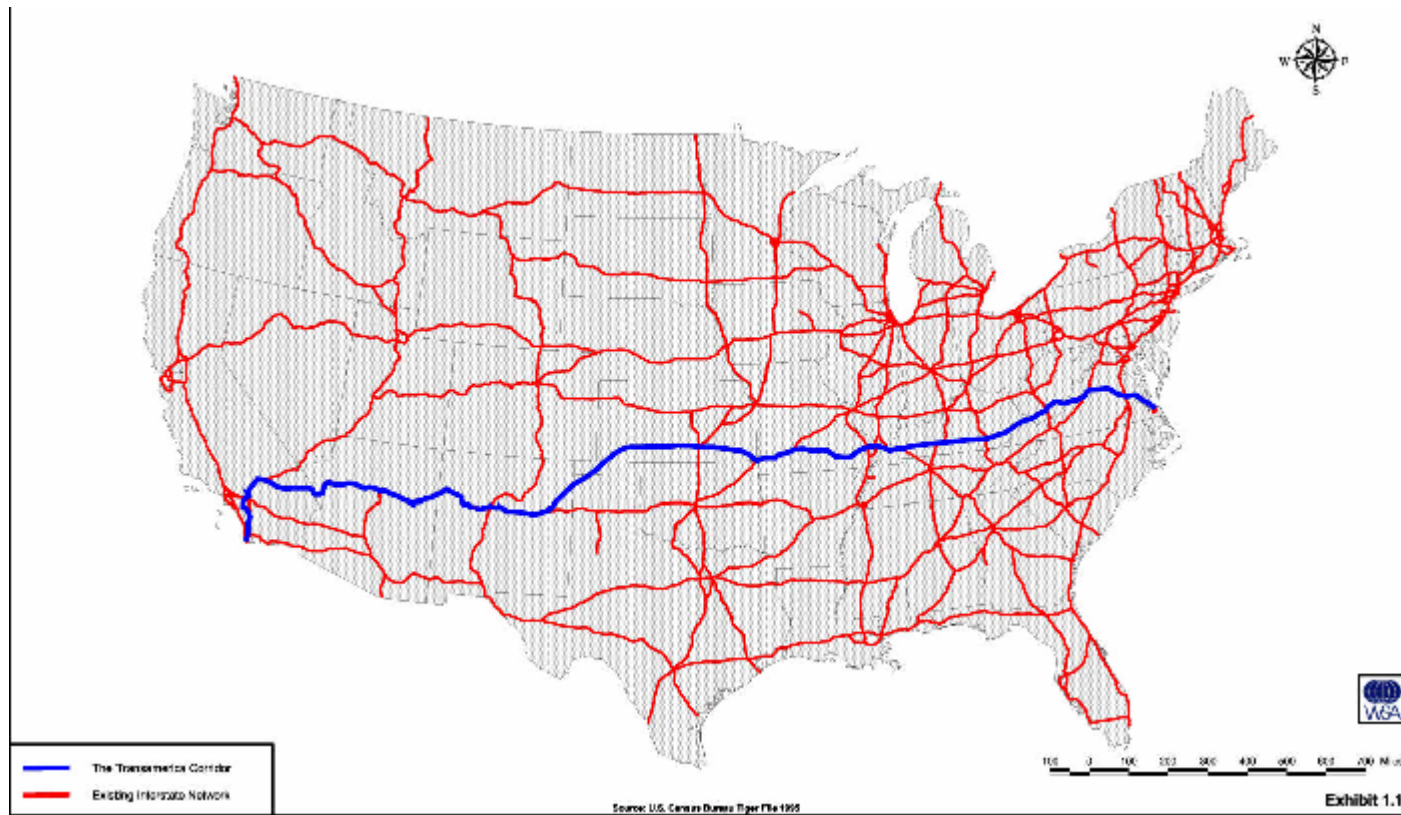


I-66

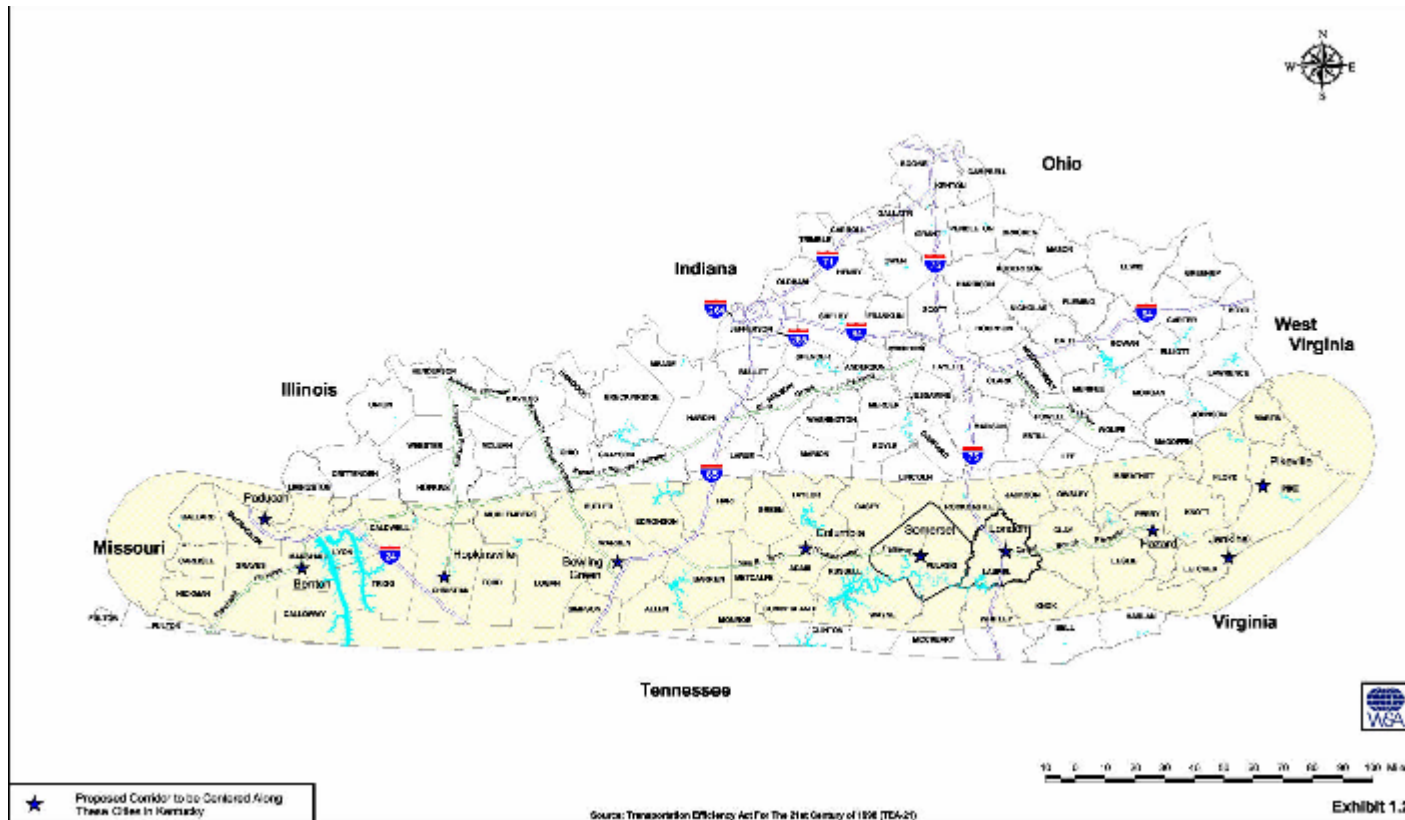
- TransAmerica Corridor
- Statewide Study
- Five Different Planning and Design Studies



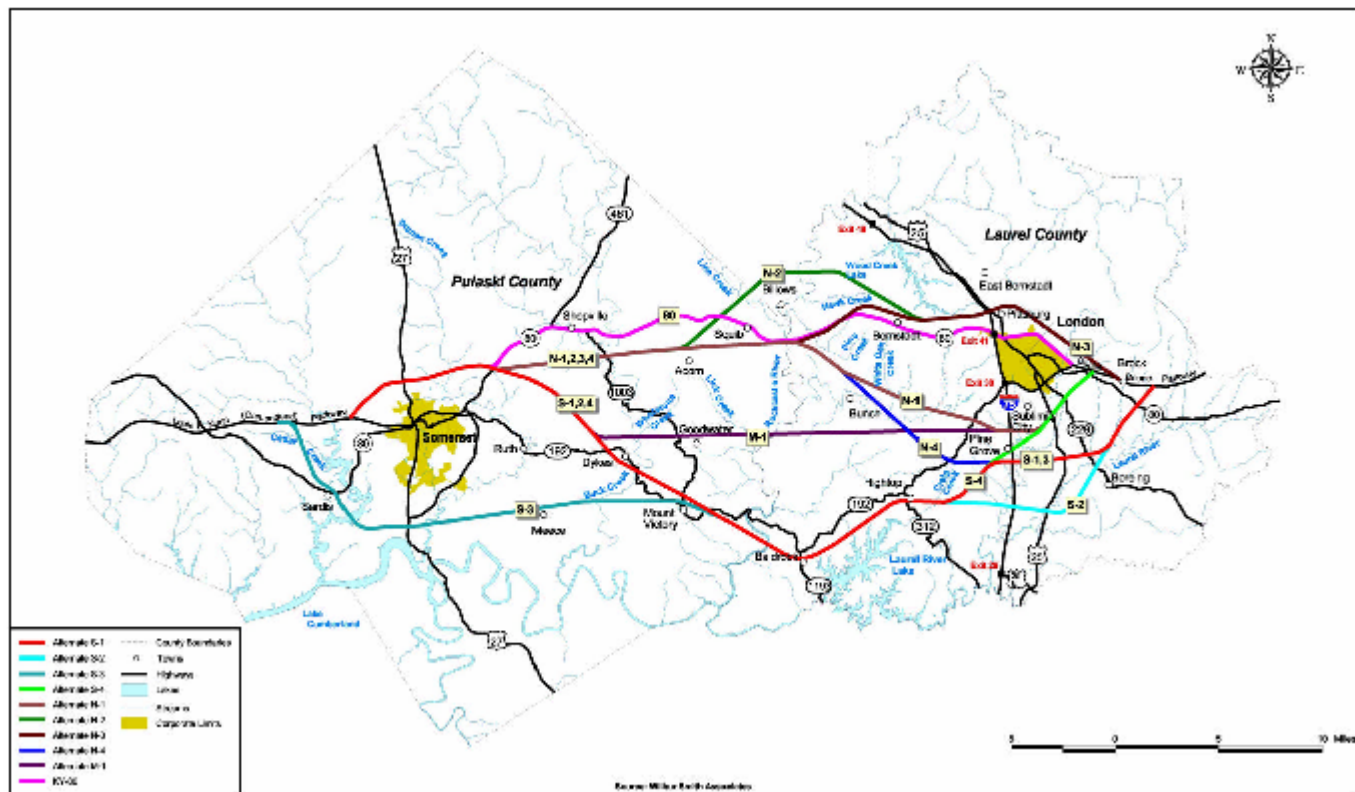
TransAmerica Corridor



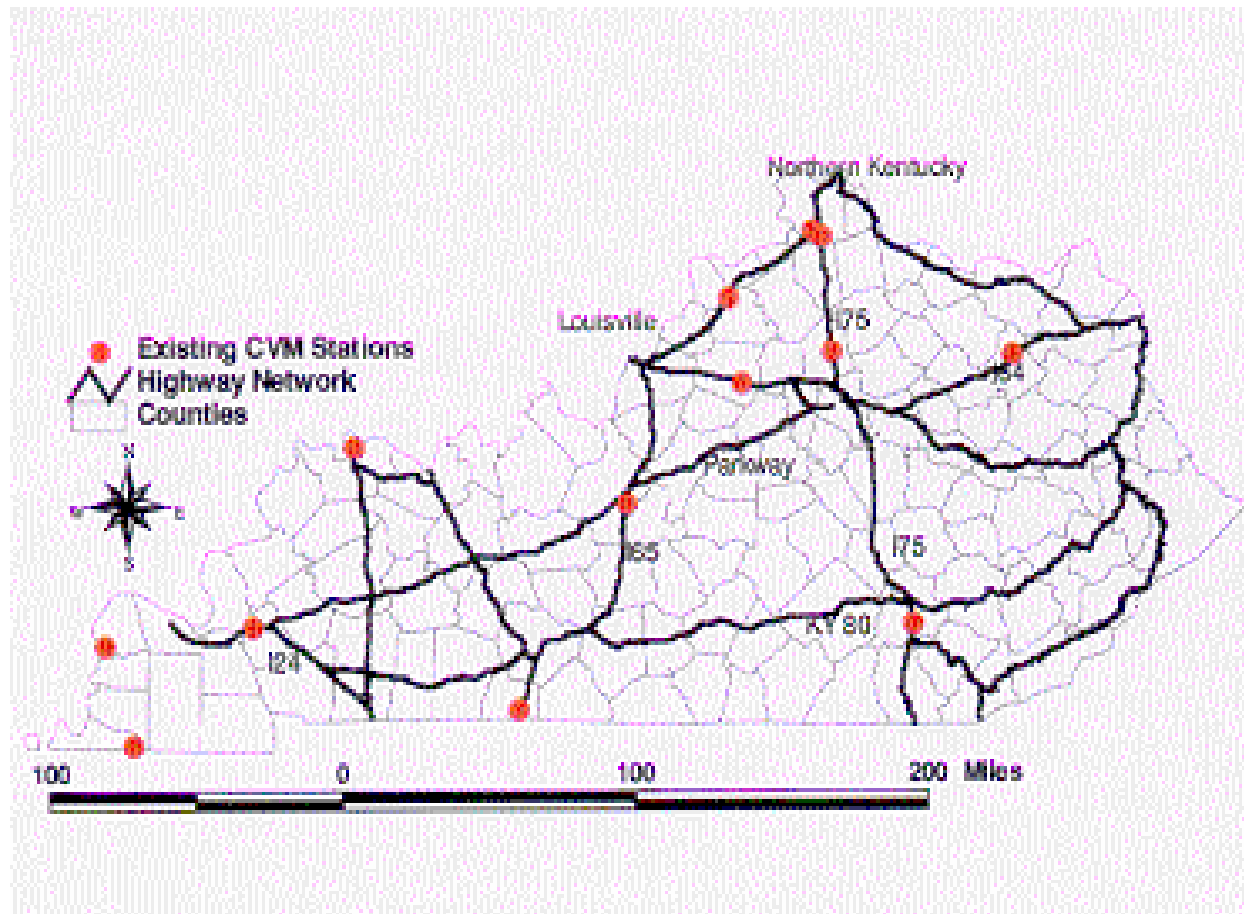
Statewide Study



Pulaski County Study



CVM Optimization



Other Traffic Model Related Activities

- Traffic Model Contract
- NHTS Add-on Surveys
- New Software
- Model Users Group
- TAZ-UP
- Research
- GIS Output for Public Meetings
- TMS Improvements

Traffic Model Contract

- Four Consultants on line
- Types of work: County-level, small urban, MPO subareas, statewide model, innovative model improvements
- Finance with projects, PL funds

NHTS Add-On Surveys

- Four Counties
 - Two w/ 400 samples
 - Two w/ 150 samples
- Use for updating KYSTM & small urban models
 - FFs
 - Trip length
 - EE/EI



National Household
Travel Survey

New Software

- Old: MinUTP & Viper
- Hybrid: MinUTP/Caliper
- New: TransCAD



Kentucky Traffic Demand Model Users Group

- Six years, meet quarterly, annual workshop
- Freight mini-workshop in April
- Web:
http://www.kytc.state.ky.us/Multimodal/KyTraffic_MUG.htm
- **Topics:** software, freight, air quality, traffic simulation, forecasting, TRANSIMS, projects, data
- **Participants:** State, local, consultants, MPO, academic, FHWA

Conclusion

⌚ Thank you for your attention!

