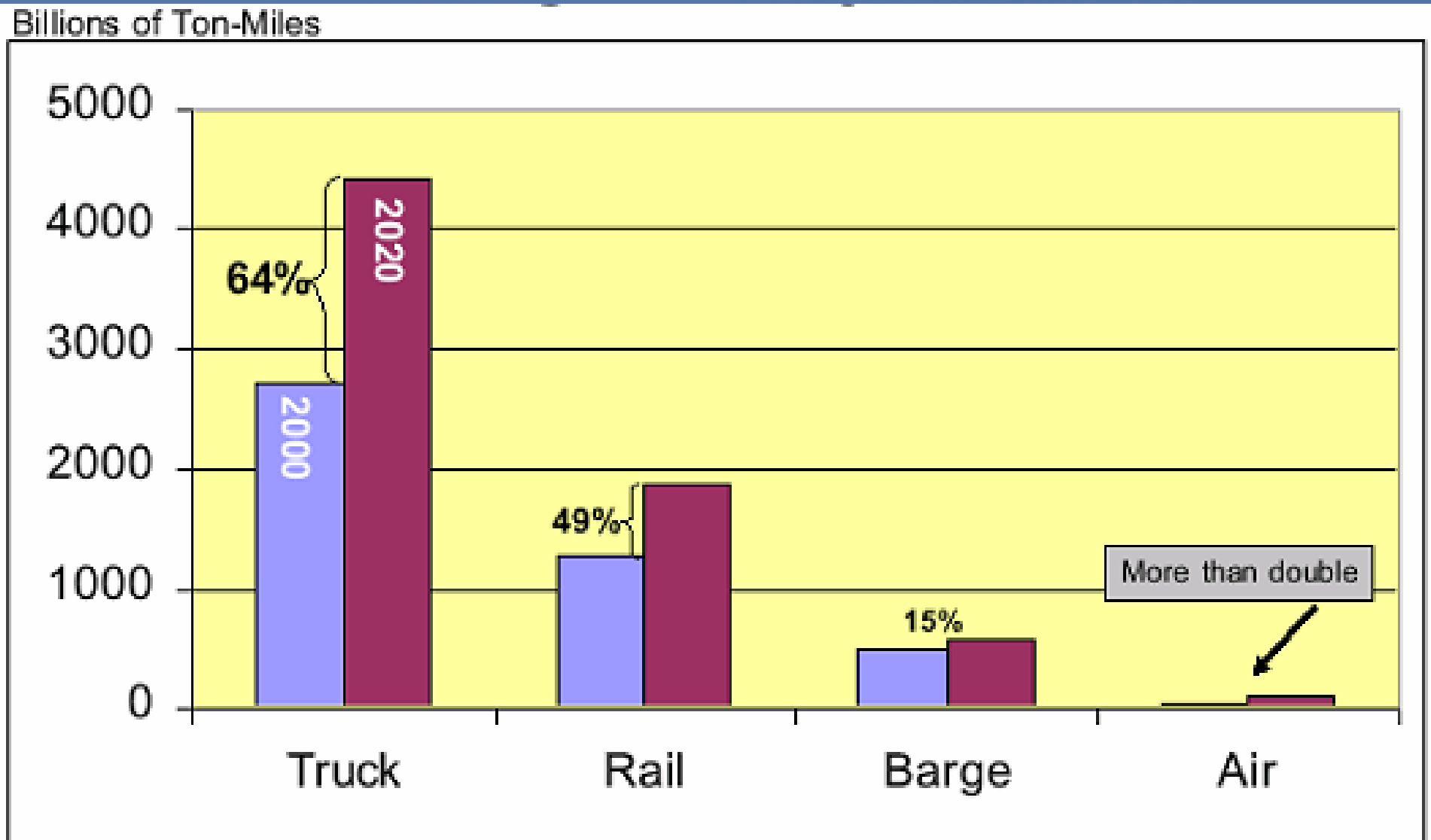
FREIGHT IN KENTUCKY

Bernadette Dupont, FHWA-KY

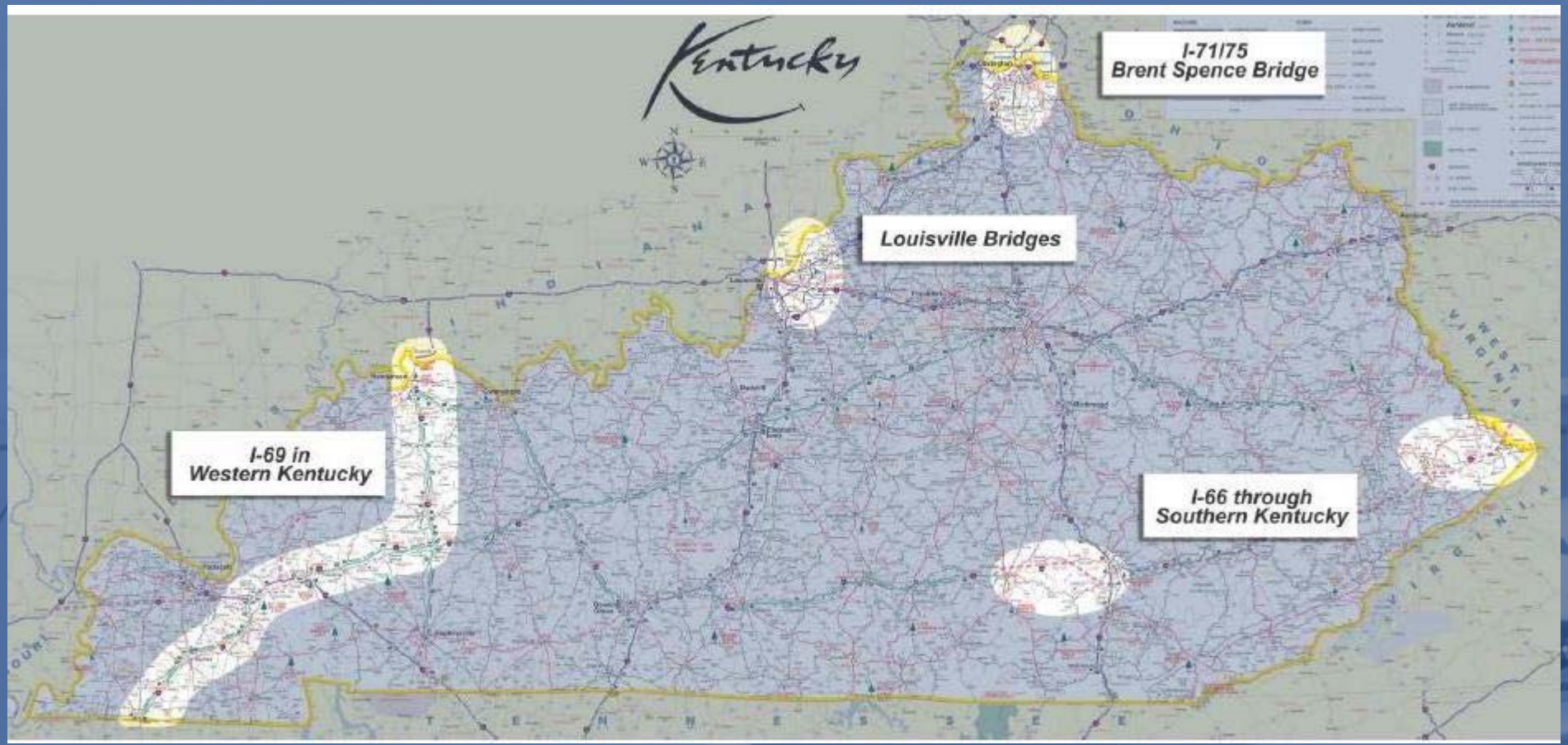
2007 Freight Conference, Frankfort, KY

May 15, 2007

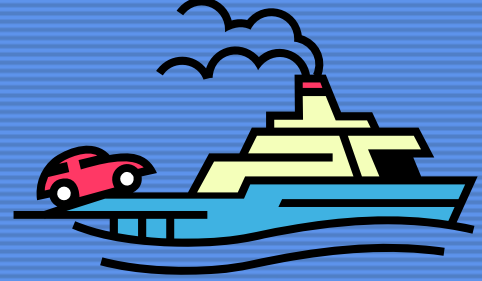
National Trends - By 2020



Mega Projects

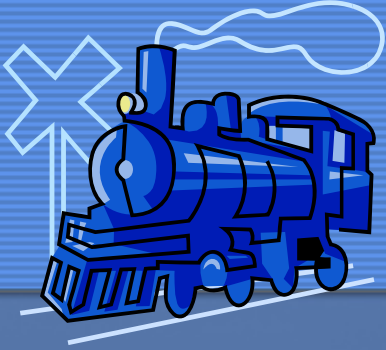


Integrating Freight into the Planning Process



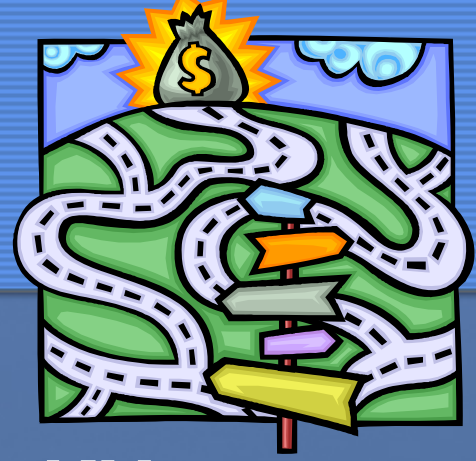
- State law says that State Road Funds have to be used only on State Roads.
- KY has no dedicated funding sources for rail, riverports or waterways
  - Freight projects go in with all other transportation projects and are prioritized.
  - Historically, they have not ranked high enough to be funded.

Integrating Freight into the Planning Process



- **However, General funds, Local funds, or the Secretary's Discretionary Fund have been used for some freight projects**
  - **State money has been used to fund the operation of 6 ferries**
  - **Secretary's Discretionary funds have been used to partially fund riverports and ferries**
- **Federal funds for railroad and ferries**
- **Federal funds for safety at rail crossing**

Integrating Freight into the Planning Process



- Developing relationships with KY Cabinet for Economic Development and Local Economic Development
- GIS Mapping of
  - Modal Maps in participant handbook
- New Intermodal Version of Project Identification Forms (PIF) in works
  - Expect a prioritized list of project to go into the unfunded needs list, which feeds into the State's Six-year Plan, which is used to develop the State STIP

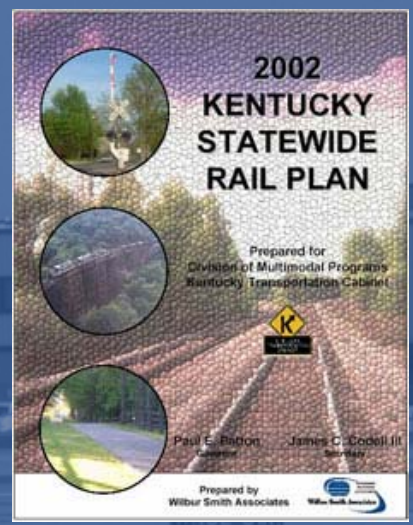
Freight Plans

2007

KENTUCKY STATEWIDE RIVERPORT PLAN

2006

KENTUCKY STATEWIDE INTERMODAL FREIGHT PLAN



2000

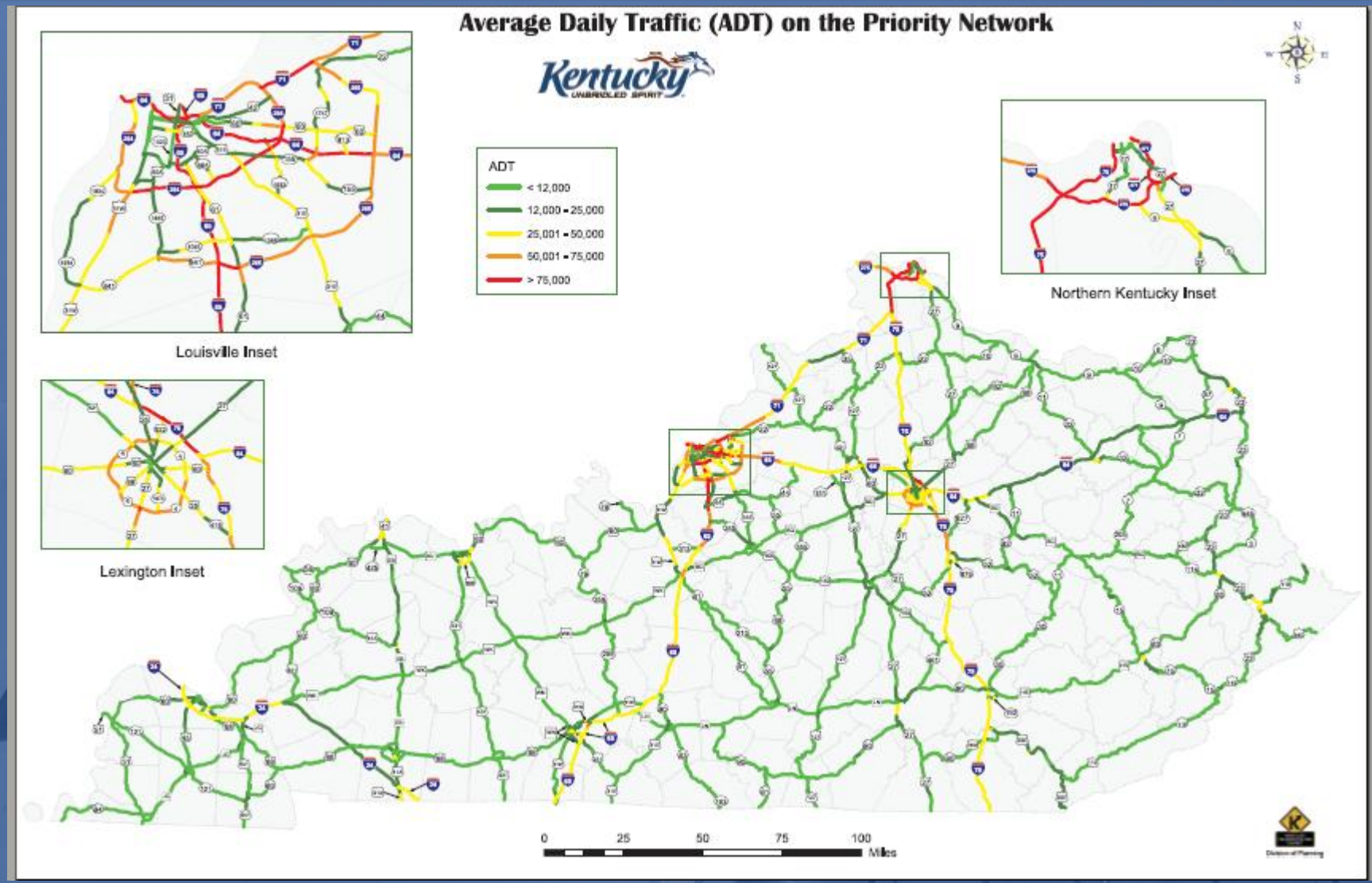
KENTUCKY STATEWIDE ITS

STATEGIC PLAN

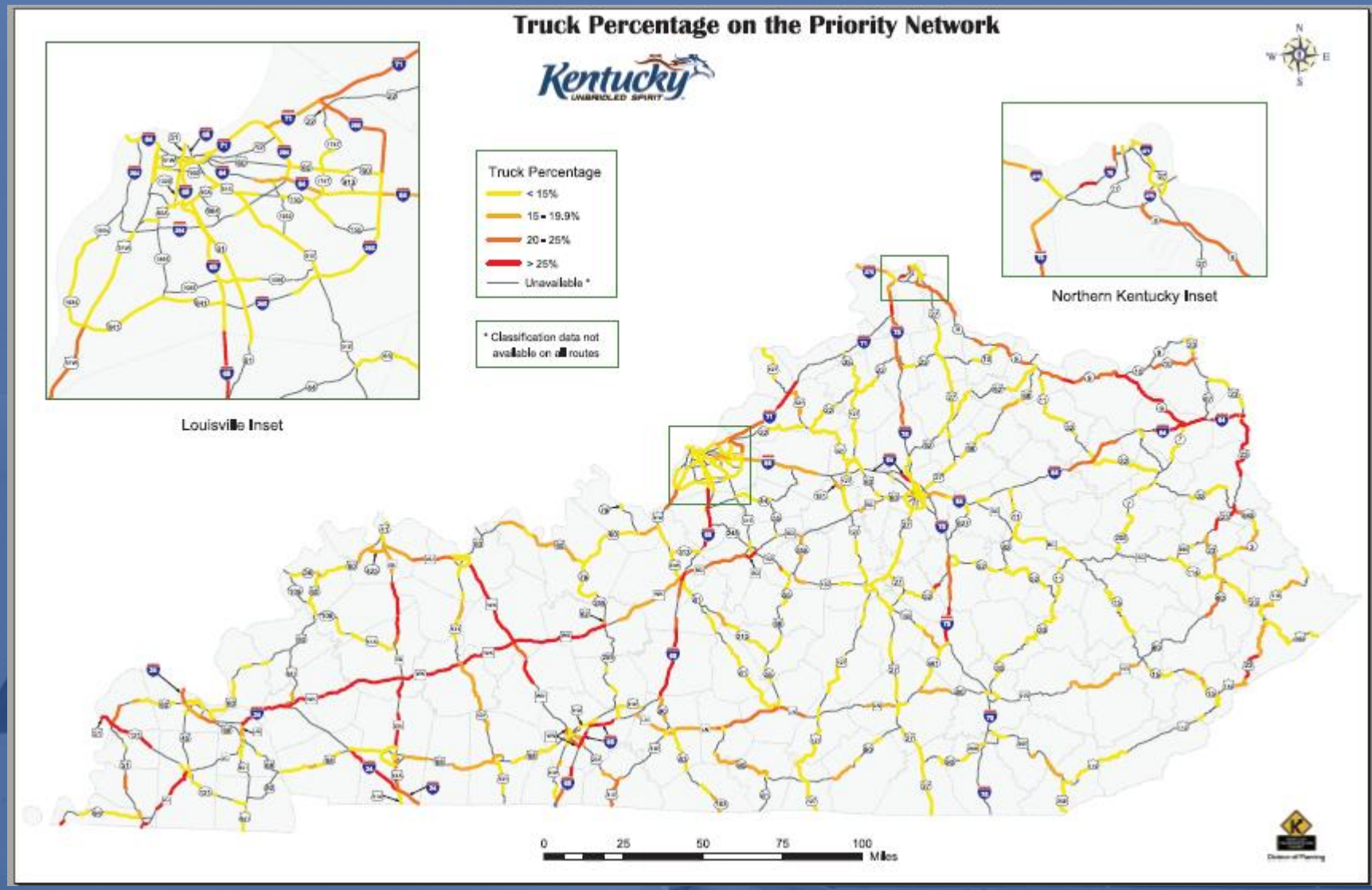
Integrating Freight into the Planning Process

- July 2006
  - Statewide Freight Plan
    - used to identify priority network
- August 2006
  - Added Freight Corridors to Priority Network
  - Extra points for freight corridors when prioritizing projects

KY's Priority Network



KY's Priority Network- Truck %



Traffic Modeling/ Forecasting

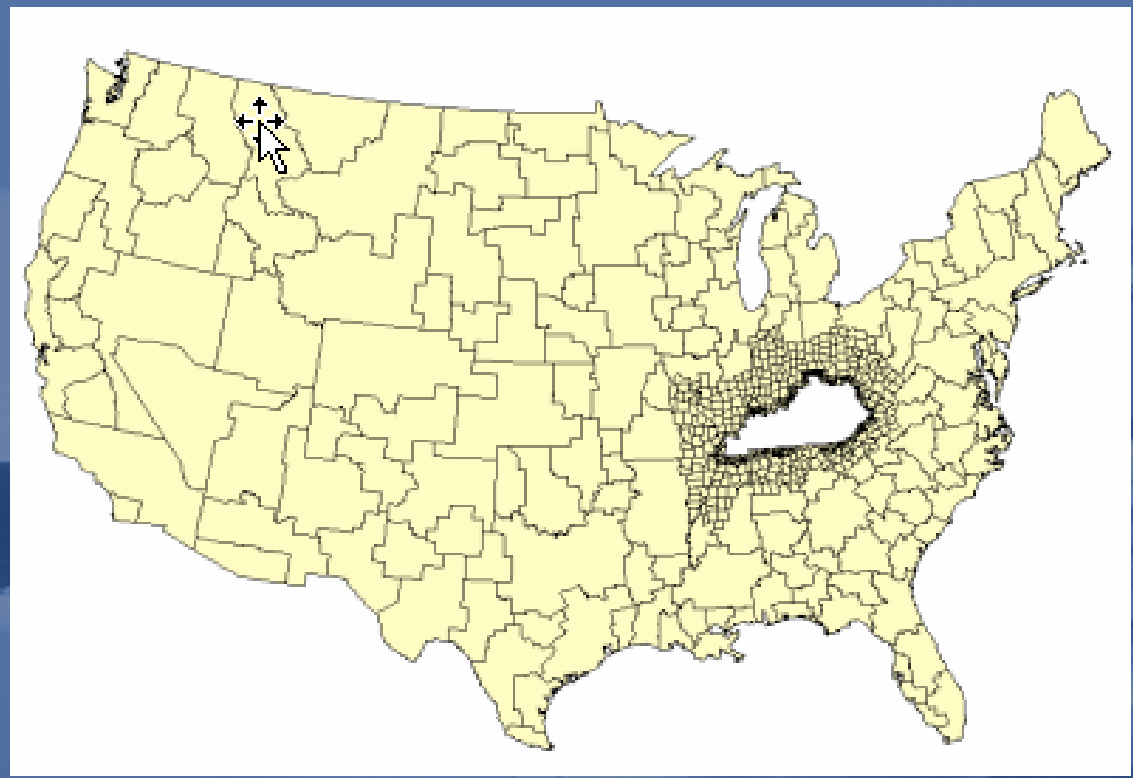
- Kentucky Statewide Traffic Model (KYSTM)
  - Used in 1997 for I-66 Corridor Study
  - Truck purpose
- KYCIMS – Commodity Information Management System
  - Under development 2007
- Combined Cincinnati-Dayton model
  - North-South Initiative (I-75 Corridor between greater Cincinnati and Dayton)
  - Analyzed truck lanes and other freight solutions
- Various models
  - Ashland
  - Bowling Green
  - Christian/Montgomery
  - Evansville/Henderson – Freight Component
  - Owensboro
  - Scott
  - Simpson County

TRANSPORTATION NORTH SOUTH INITIATIVE

- Used since1975, updated several times
- Now have:
  - More truck assignments
  - Intermodal hubs Identified
  - True GIS
  - Other new applications

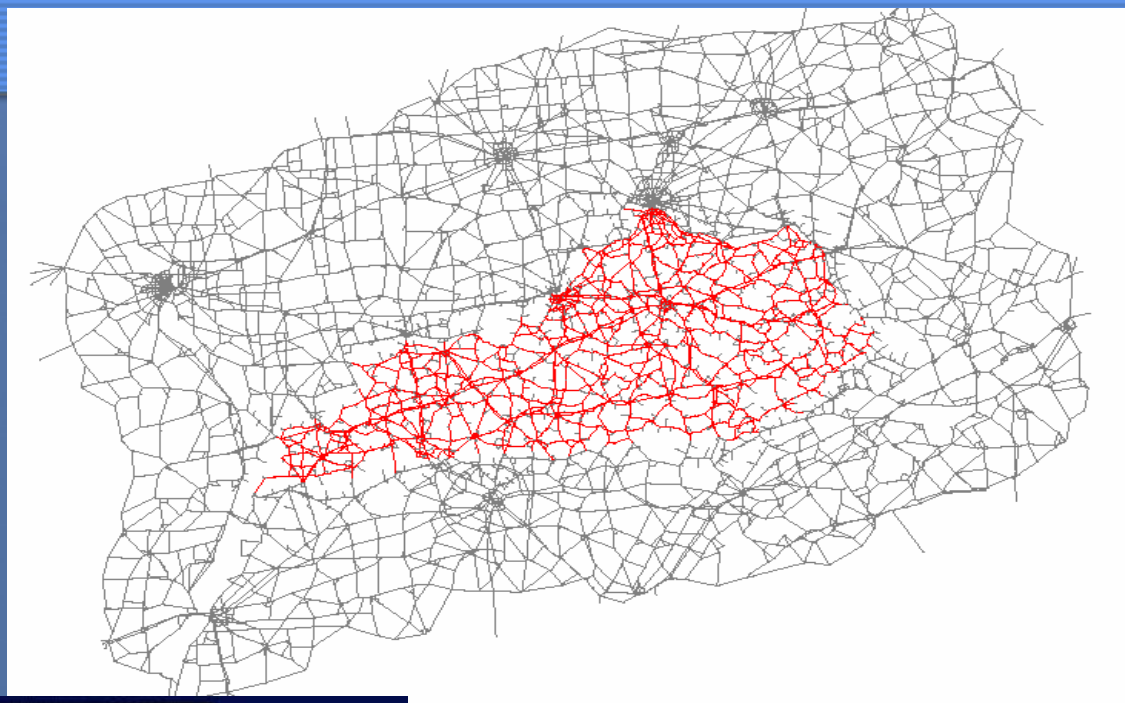
KENTUCKY STATEWIDE TRAFFIC MODEL

KYSTM



Kentucky's Statewide Traffic Model

- Used recently for I-66



Research

Completed Research

- Identification of Truck/Intermodal Facilities
- Evaluation of Extended Truck Weight Impacts
- Weigh-In-Motion (WIM) Technologies

Research

On-Going Research

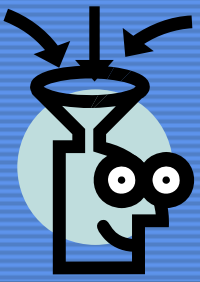
- Kentucky's First Virtual Weigh Station
- Commercial Vehicle Information Systems & Networks (CVISN) - 1996
- ARTIMIS & TRIMARC
- Multiple Safety Research Projects
- Facilitate automatic identification of commercial vehicles.

Research

New Research

- Commercial Vehicle Monitoring station (weigh station) optimization; used KYSTM to assess trips using weigh stations and make recommendations on where to place mid-state CVM locations
- Development of strategic plan for incident management
- Riverport Study

Freight Professional Development



1. Host a Regional Freight Conference once every two years with State.
   - May 15,2007, Frankfort, KY

2. Publish a Freight Newsletter
   - Freight Focus

3. Participate in Talking Freight Seminars on a monthly basis

Freight Professional Development

4. Have brought several **Freight Courses** to KY
   - Integrating Freight Into the Transportation Planning Process
   - Multimodal Freight Forecasting in Transportation Planning
   - Engaging the Private Sector in Freight Planning

5. **Freight Distribution List**
   - Disseminate Information

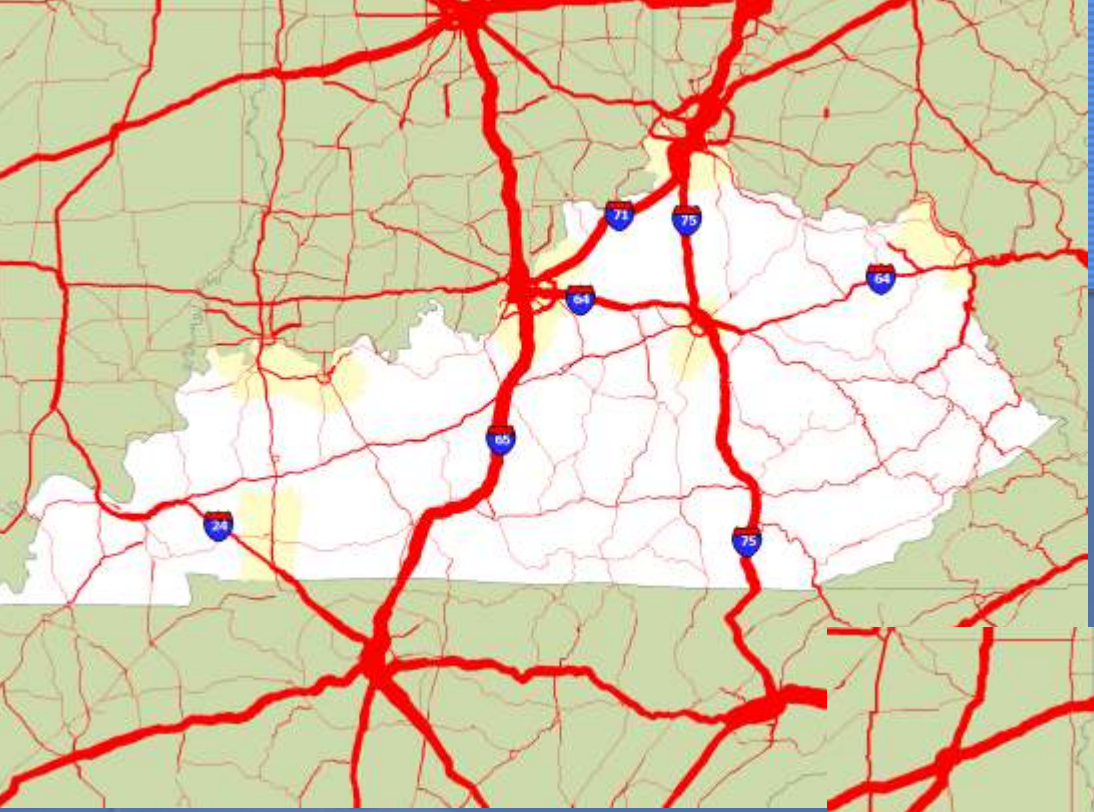
Freight Analysis

1. Utilize the **Freight Analysis Framework (FAF²)** to:
   - Determine commodity flows and related freight transportation activities,
   - Analyze system,
   - Measure system performance, and
   - Determine freight transportation improvements.

2. **Highway Economics Requirements System-State Version (HERS-ST)**
   - Engineering/economic analysis (EEA) tool that uses engineering standards to identify highway deficiencies

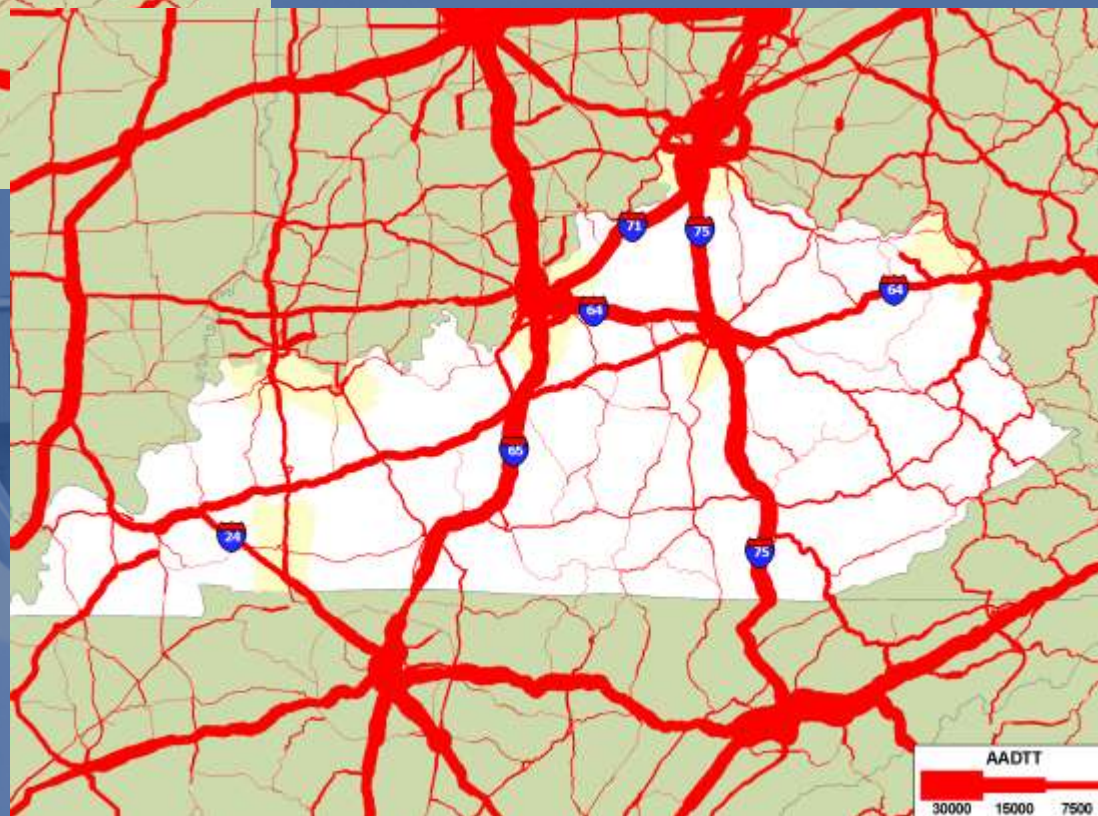
3. **GEOFREIGHT**
   - Intermodal Freight Decision Making Tool

1998



Freight By Truck

2020



KY Freight - Water

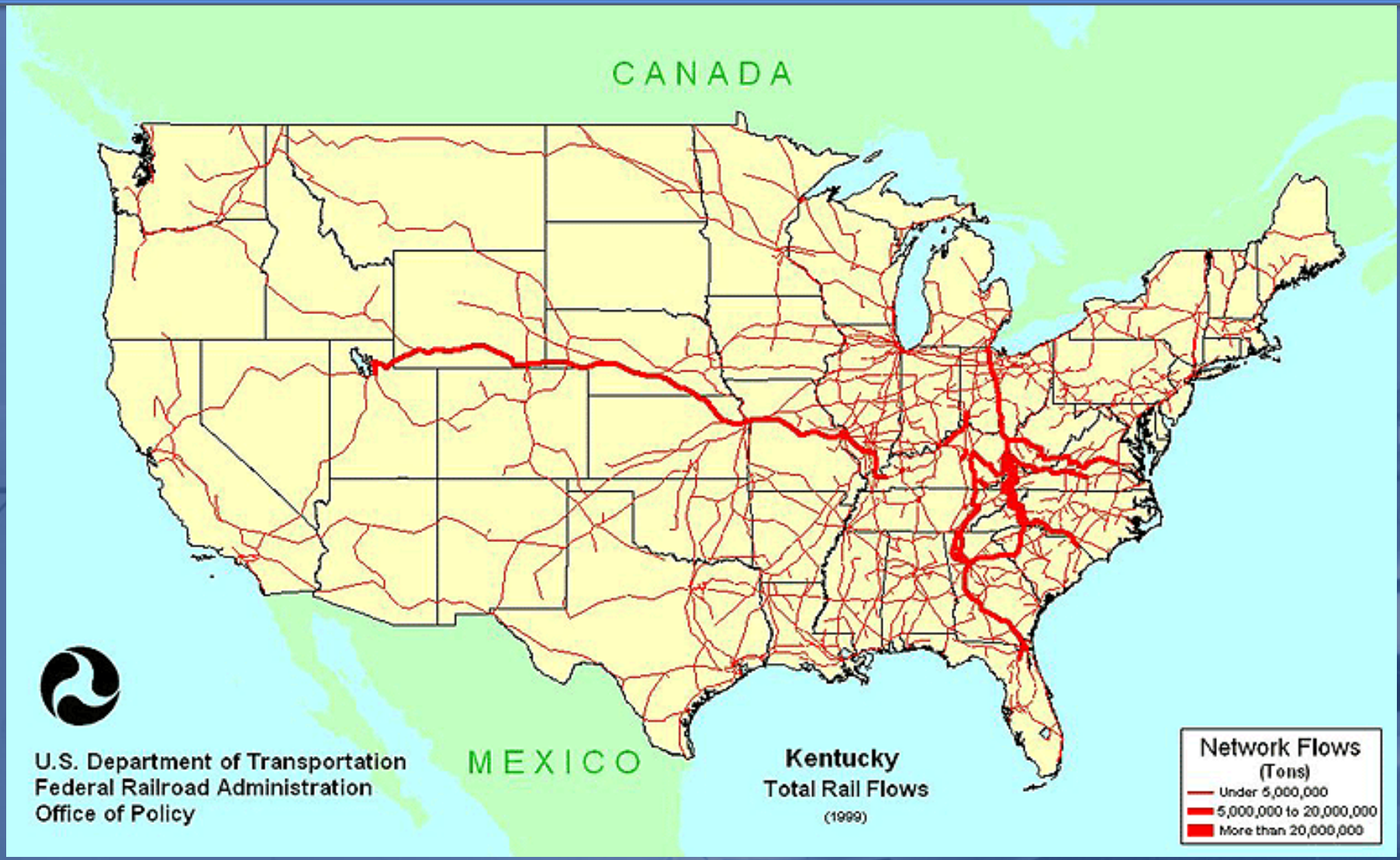
KENTUCKY

Total Domestic Water Flows
(1998)

Network Flows
(Tons)
- 0 to 3,500,000
- 3,500,001 to 7,000,000
- 7,000,000 to 10,500,000
- 10,500,000 to 14,000,000
- More than 14,000,000

State to State Flows
(Tons)
- 0 to 250,000
- 250,001 to 500,000
- 500,001 to 1,000,000
- More than 1,000,000

KY Freight - Rail



Intermodal Freight Technology

Conduct operational tests of intelligent transportation system (ITS) technologies

- **TRIMARC**
- **ARTIMIS**
- **TOC**

TRIMARC

- Louisville/Southern Indiana
- 60 miles of interstate
- Interactive Website
- Auto Incident Recording System (AIRS) monitoring
  - 8-sec recording

ARTIMIS

- Advanced Regional Traffic Interactive Management and Information System
- Cincinnati/Northern Kentucky
- 88 miles of interstate traffic

TOC

- Statewide Traffic Operations Center
- Located in Frankfort, KY
- Cumberland Gap Tunnel, Clays Ferry Bridges (Homeland Security)
- I-75 Laurel and Whitley Counties, Lexington, TRIMARC, and ARTIMIS areas
- Expanding with 6 new Dynamic Message Boards: Clark, Madison, Scott, and Woodford Counties

Vehicle Size and Weight

- **Certifies state compliance with Federal standards and provides information on state enforcement activities, reporting requirements, and contacts.**
- **Develop an annual plan.**

QUESTIONS?

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