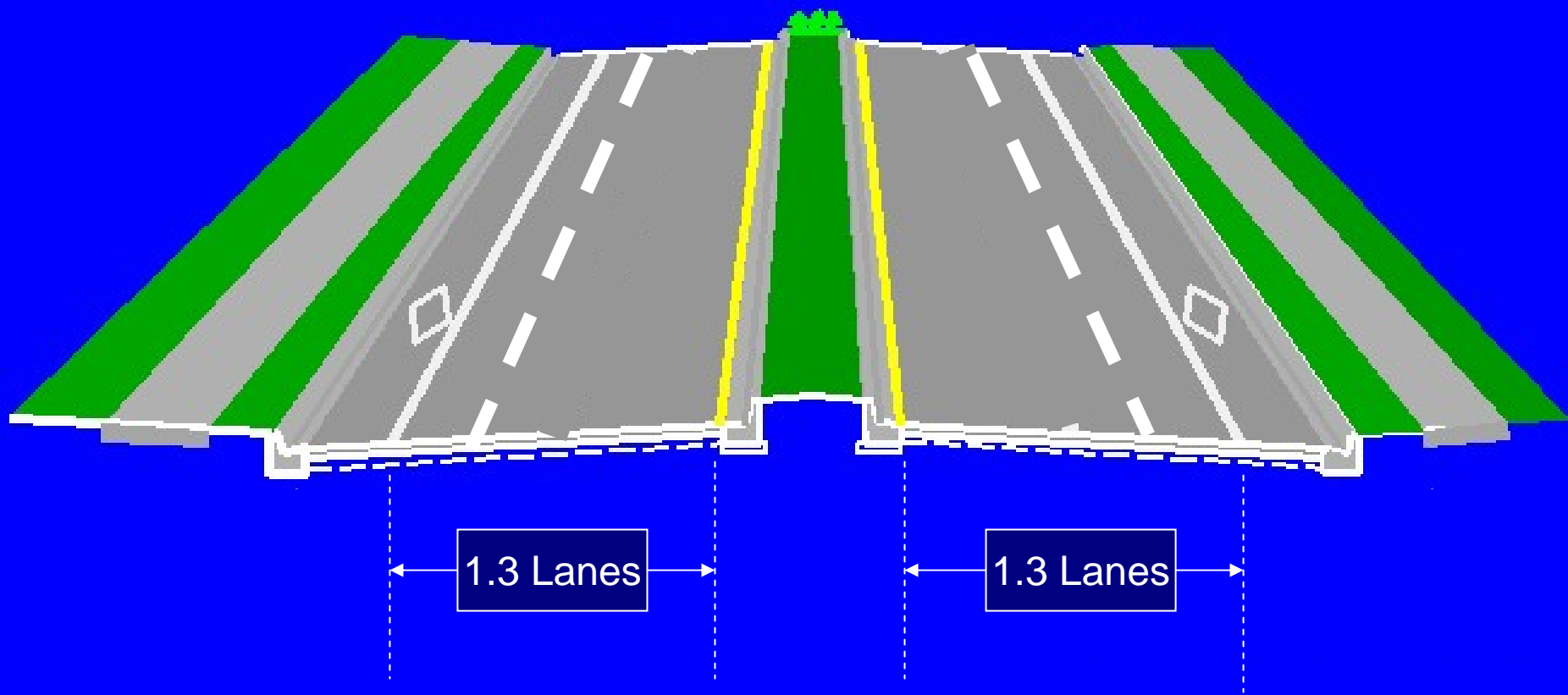


What tools ...








π

= 3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510...

The pursuing of tools and data must be driven by the practical needs of the program.





FAF²

Freight Analysis Framework

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Federal Highway Administration

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phone: 202-366-2217





Presentation Outline

- 1) FAF Objective
 - 2) Approaches
 - 3) Key components and deliverables
 - 4) Non FHWA Usage of FAF
- 




FAF² - Objective

- 1) To analyze freight movements at corridor level
 - 2) To answer freight shipment modal questions
 - 3) To analyze national and regional significant projects and corridors
 - 4) To support various policy analysis
 - 5) Other derivative usages
- 




FAF² - Objective

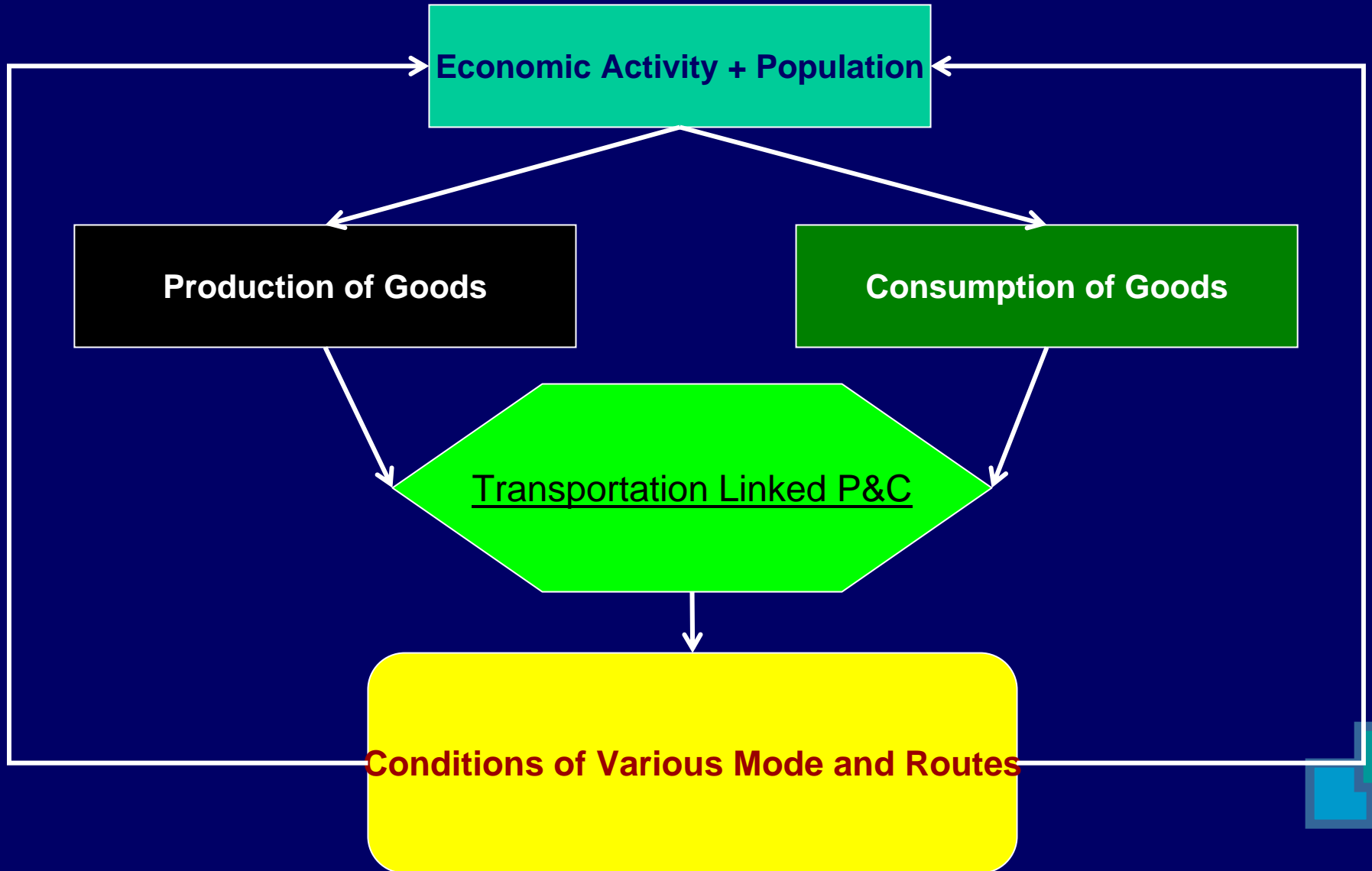
- 1) To analyze freight movements at corridor level
 - 1: National Overview
 - 2: FHWA/US DOT policy, investment, and legislative usages
 - 4) To support various policy analysis
 - 5) Other derivative usages
- 



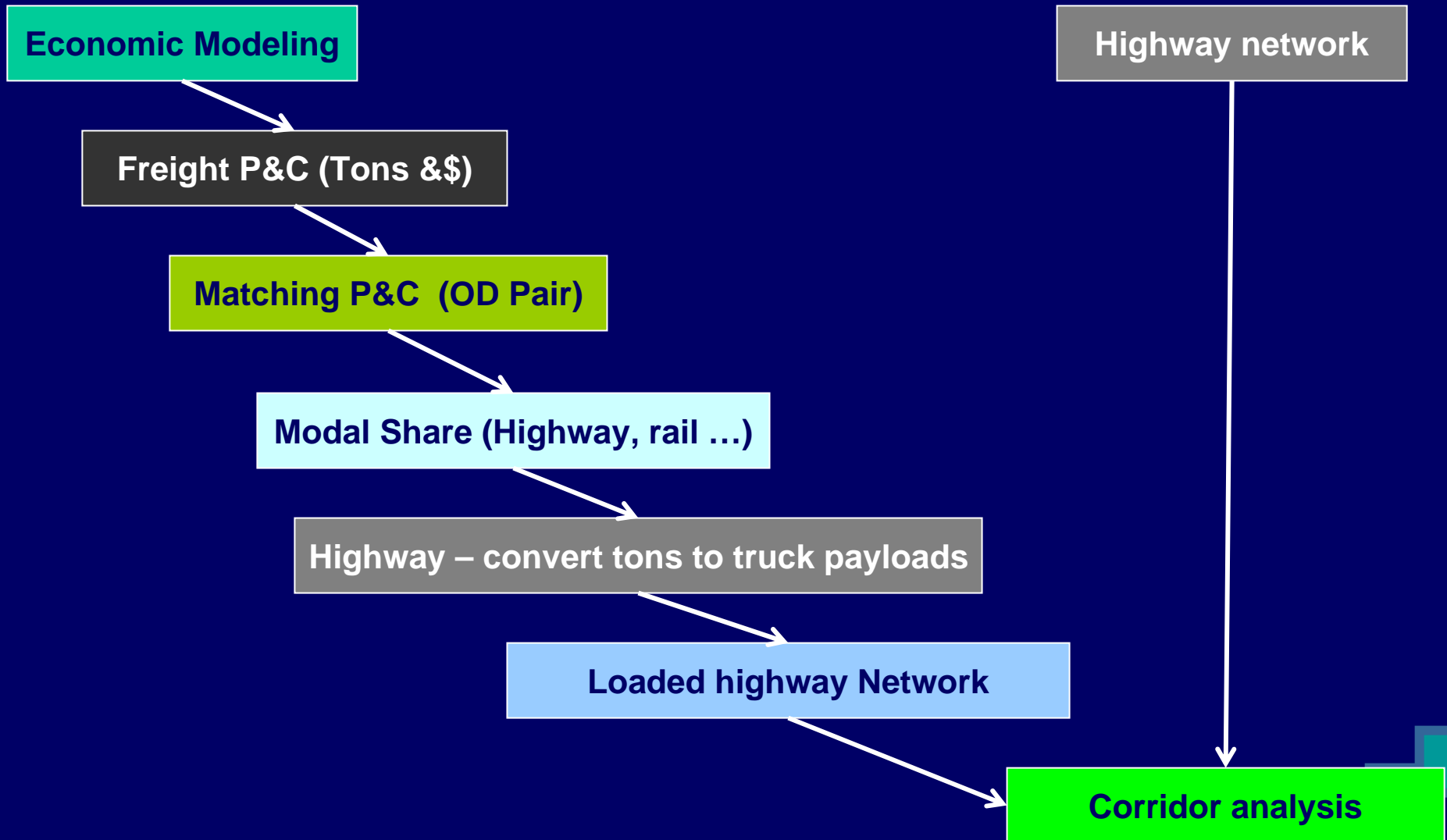
FAF² - Approach

- 1) Data Sources – public data
 - 2) Methods and Models – transparent and duplicable
 - 3) Deliverables – data, methods, and results are publicly available
- 

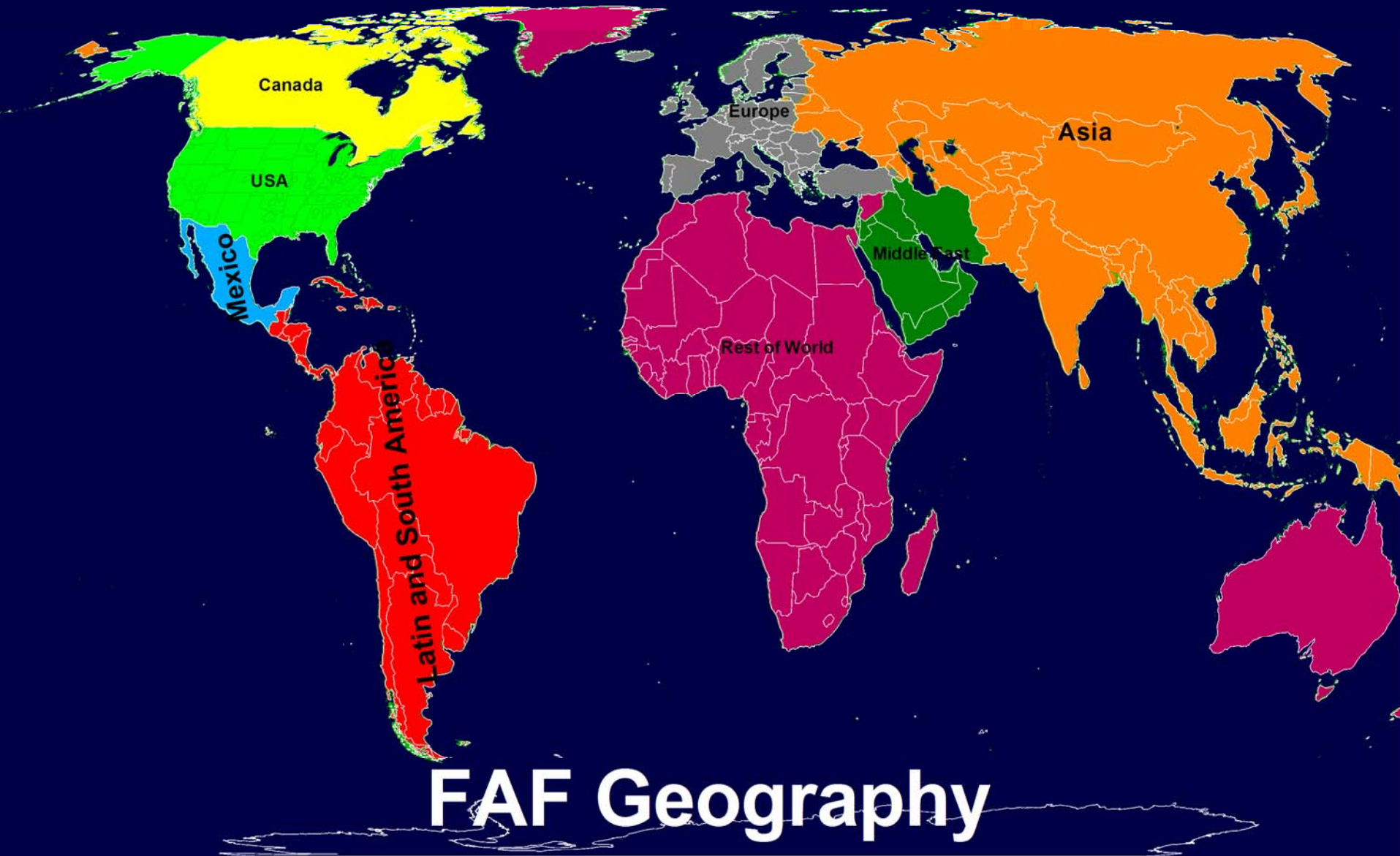
FAF² – Flow Diagram



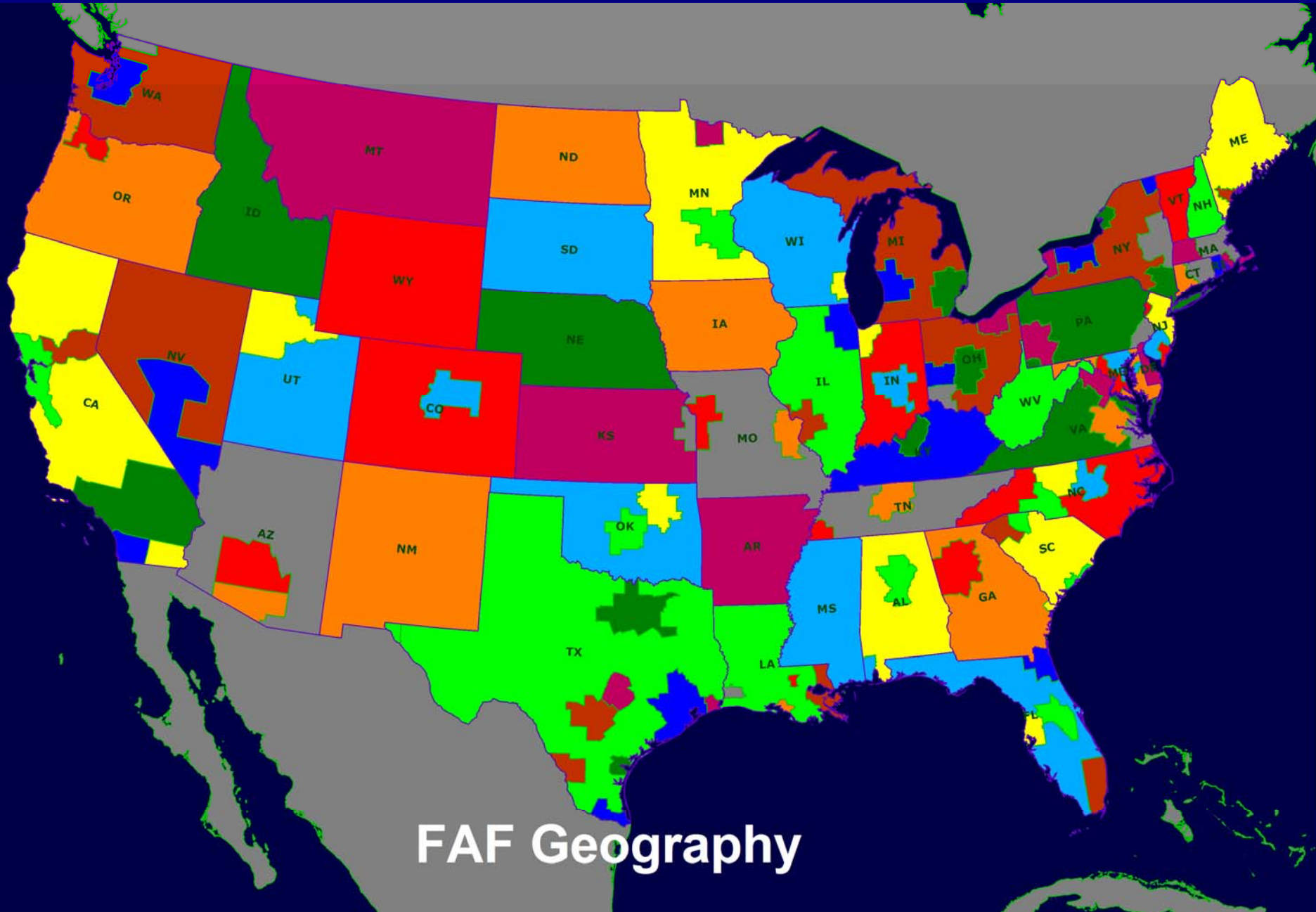
FAF² – Flow Diagram



FAF Geography Coverage and Resolution



FAF Geography Coverage and Resolution





FAF Commodity

A total of 43 commodity types under the two digits of Standard Classification for Transported goods (SCTG) system





FAF Mode

A Total of Severn Modes

Truck
Rail
Water
Air, air & truck
Truck & rail
Other intermodal ¹
Pipeline & unknown ²





FAF² – Future Goods Movement

Future good movements are based on international, national and regional economic growth projections for years between 2010 and 2035 with a 5 year interval.





Deliverables



Commodity O-D Related

Covering


2002, 2010 to 2035 with a 5-year interval





Deliverables

FAF2 Highway Network Related

- 1) Nationwide topologically connected highway network
 - 2) Link AADT, AADTT, FAF_TRUCK data for 2002 and 2035
- 



Deliverables

Provisional FAF2 Commodity Origin Destination

2006 Commodity Origin Destination data





Deliverables

FAF2 Commodity Origin Destination GIS Data

**Both TransCad and ArchGIS Data
Files**





Deliverables

Disaggregating FAF2 Commodity Origin Destination

**Tools and Pilot Studies with FL, NJ,
and AL State DOTs**





State DOT and MPO Use of FAF

- 1: Highway network
- 2: Highway link AADT, AADTT, and other data

To provide preliminary illustration of congestion and flow conditions





State DOT and MPO Use of FAF

- 1: FAF Commodity Origin Destination Data
- 2: FAF Commodity GIS data

To provide illustrations of freight in terms of dollars and tonnage of goods.

A: how much are produced by whom and where do they go?

B: how much are consumed and where do they get?

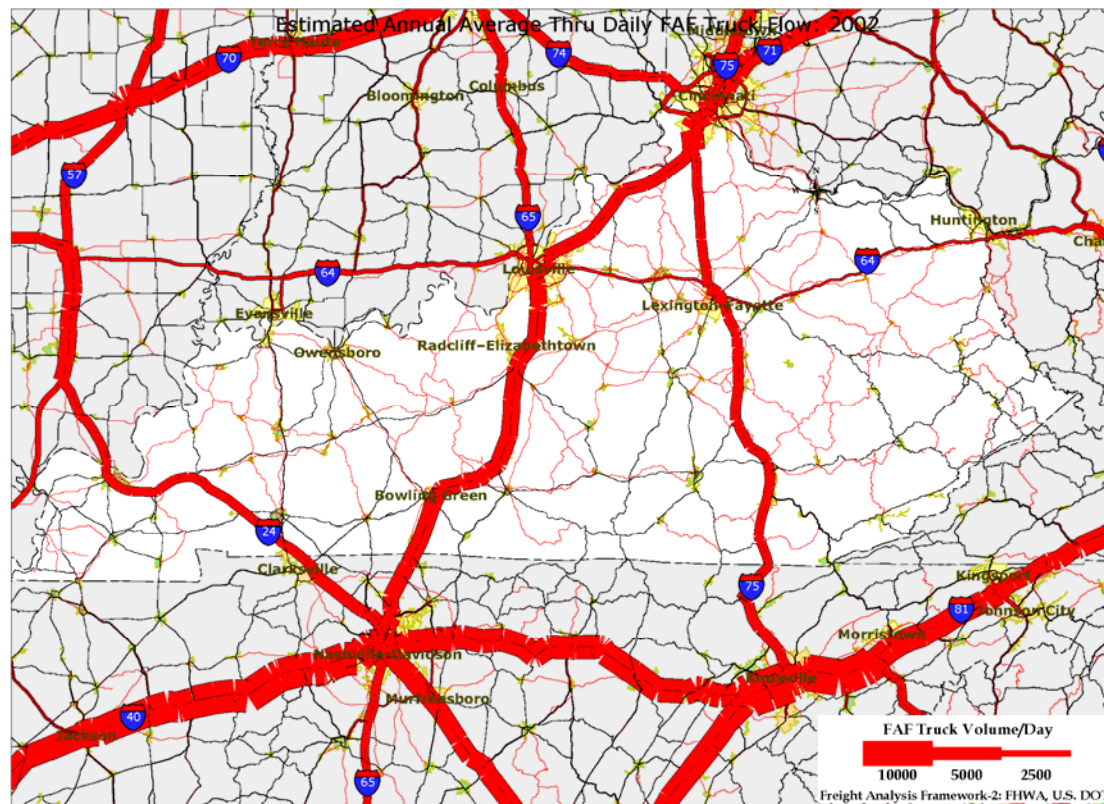
C: trading partners

D: Commodity changes – affect truck load

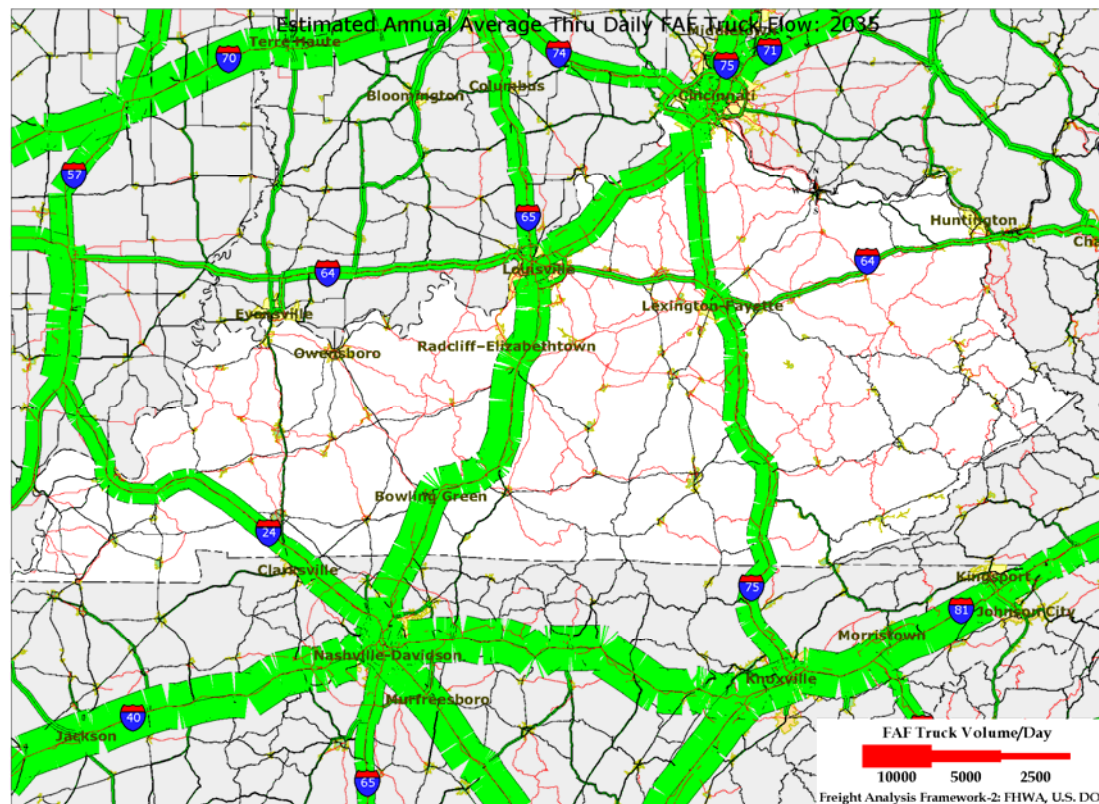
E: Import/Export



State DOT and MPO Use of FAF – through trucks in KY (2002)



State DOT and MPO Use of FAF – projected through trucks in KY (2035)



FAF2 Contributors

**Future Commodity O-D
2010-2035**

Global Insight

**FAF2 Highway
Network**

FHWA

**Base Case
Commodity O-D
2002**

ORNL, BTS and MacroSys

**Assigned FAF2
Network**

BATTELLE



FAF2 Website

www.ops.fhwa.dot.gov/freight/freight_analysis/faf/index.htm





That's all. Thank You!

