



U.S. Department of  
Transportation

# *Agriculture Implications for Transportation and Highways*

**International Summit on Agricultural  
and Food Transportation  
Washington, D.C.**

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**December 2-3, 2008**



# To inform policy and investment, we need to understand

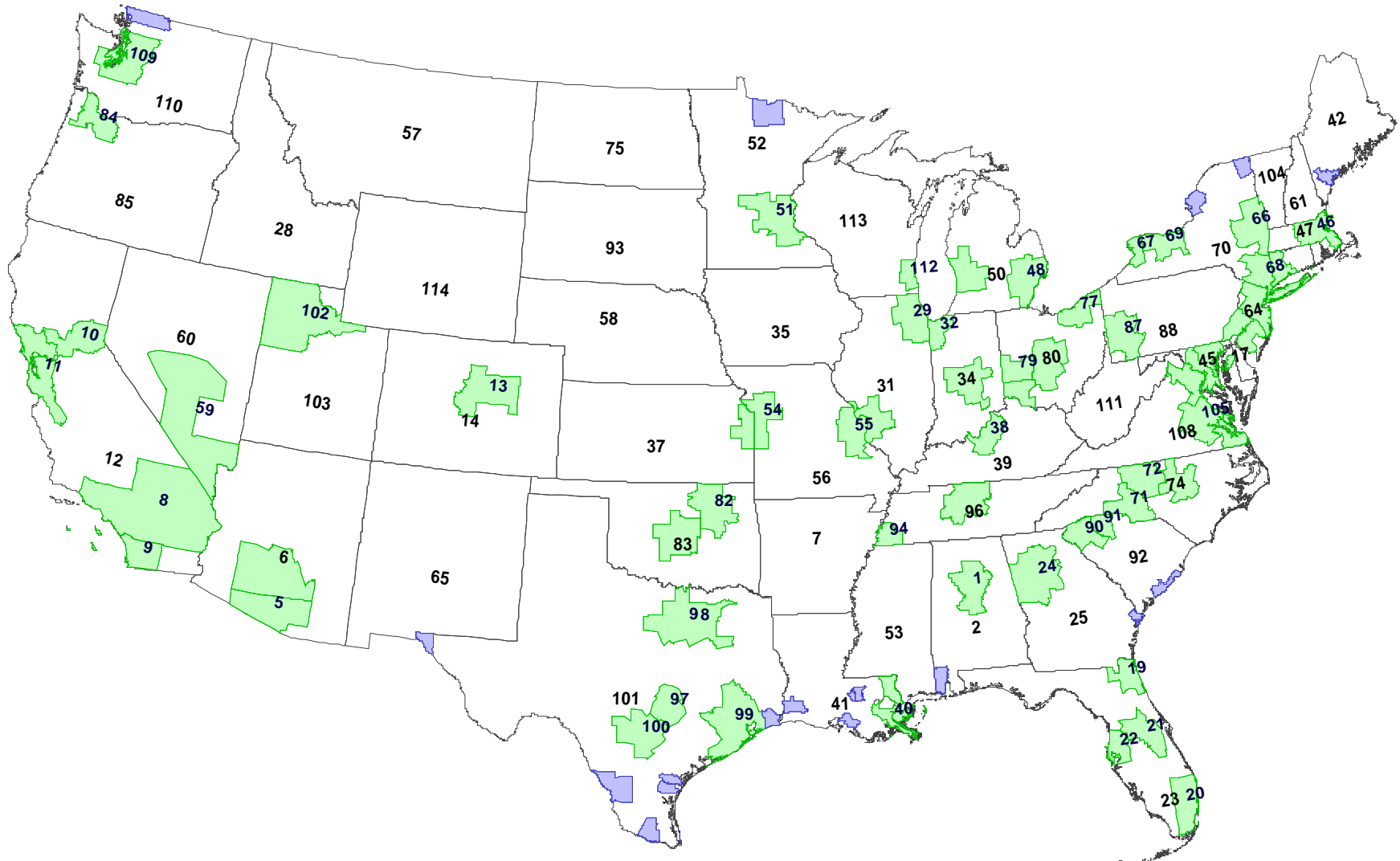
- **How does the movement of freight affect the transportation system?**
  - Contributions to congestion, infrastructure wear, safety, the environment, revenues
- **How does the transportation system affect freight movement?**
  - Expected and unexpected delay, costs
- **How does the economy adjust?**
  - Economic productivity, shifting economic activity among regions, global competitiveness



# To answer these questions, we need to understand

- **How much freight moves from place to place?**
  - Type of commodity
  - Weight
  - Value
- **How is the freight carried?**
  - Mode of transportation
  - Route used
- **When is the freight carried?**
  - Season
  - Time of day



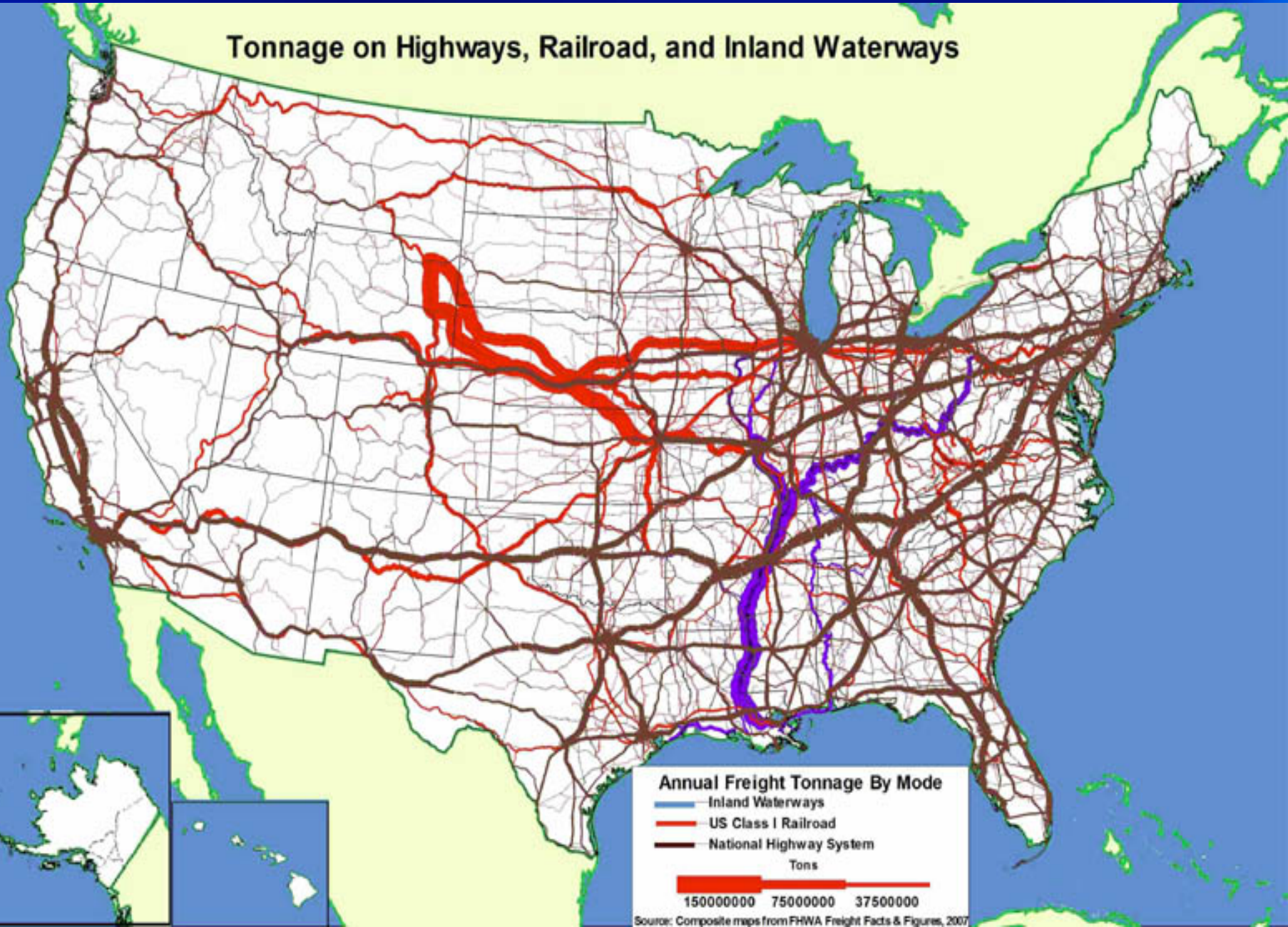


**Land Border Crossings:** Laredo, TX; Blain, WA, International Falls, MN; Champlain/Rouses Point, NY; Alexandria Bay, NY; El Paso, TX; Brownsville/Hidalgo, TX; **Ports:** Beaumont, TX; Charleston, SC; Portland, ME; Savannah, GA; Morgan City, LA; Corpus Christi, TX; Lake Charles, LA; Baton Rouge, LA; Mobile, AL; **Airport:** Anchorage, AK



# Freight Volumes: Truck, Rail, & Water

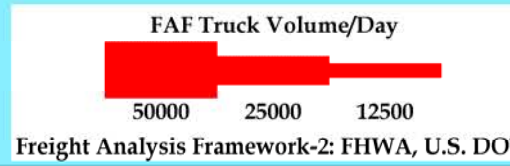
Tonnage on Highways, Railroad, and Inland Waterways



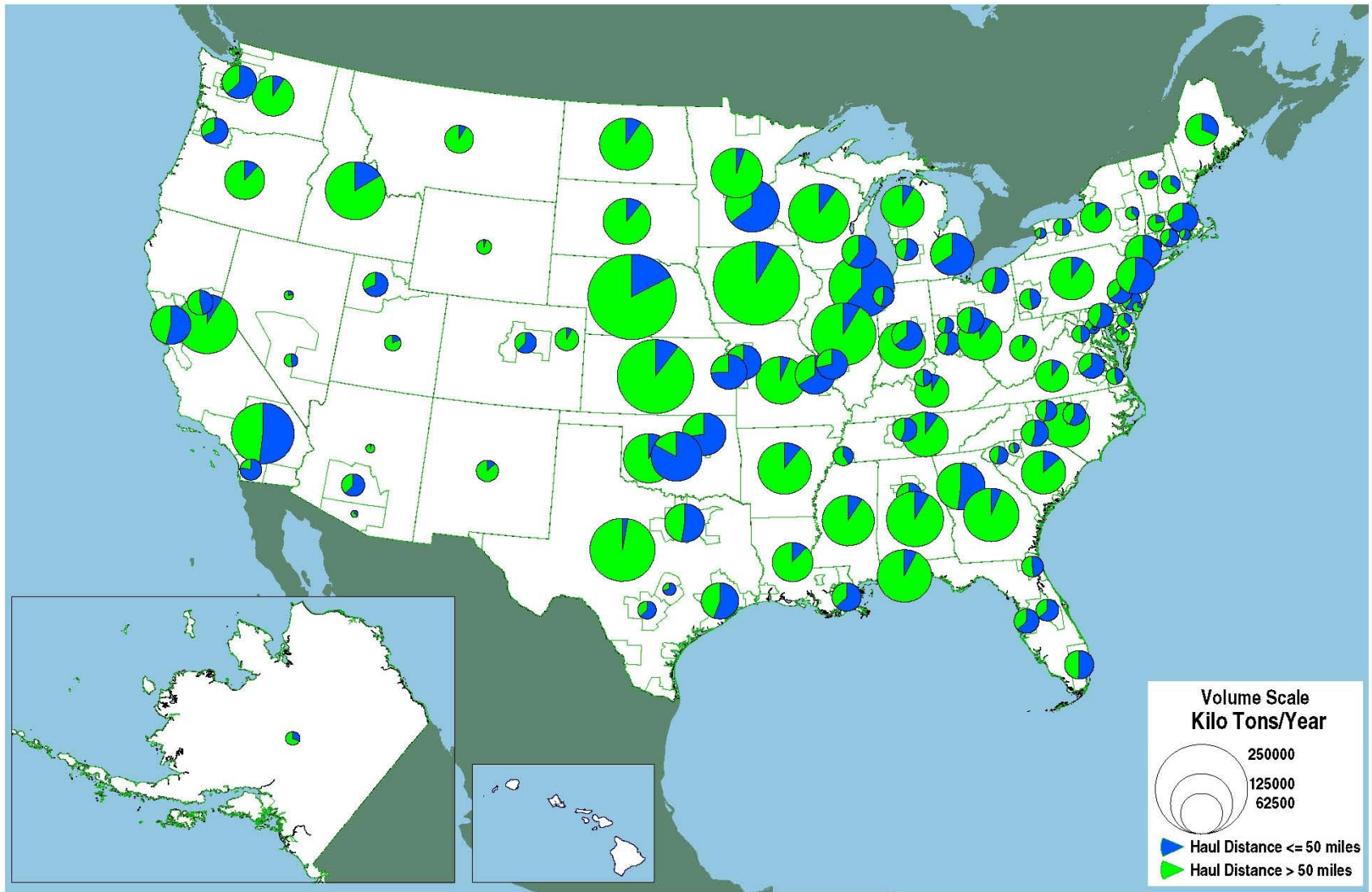
Source: Composite maps from FHWA Freight Facts & Figures, 2007



# Estimated Annual Average Daily FAF Truck Flow: 2035



## Share of Annual Tonnage of Domestic Agricultural Commodity by Haul Distance: 2002

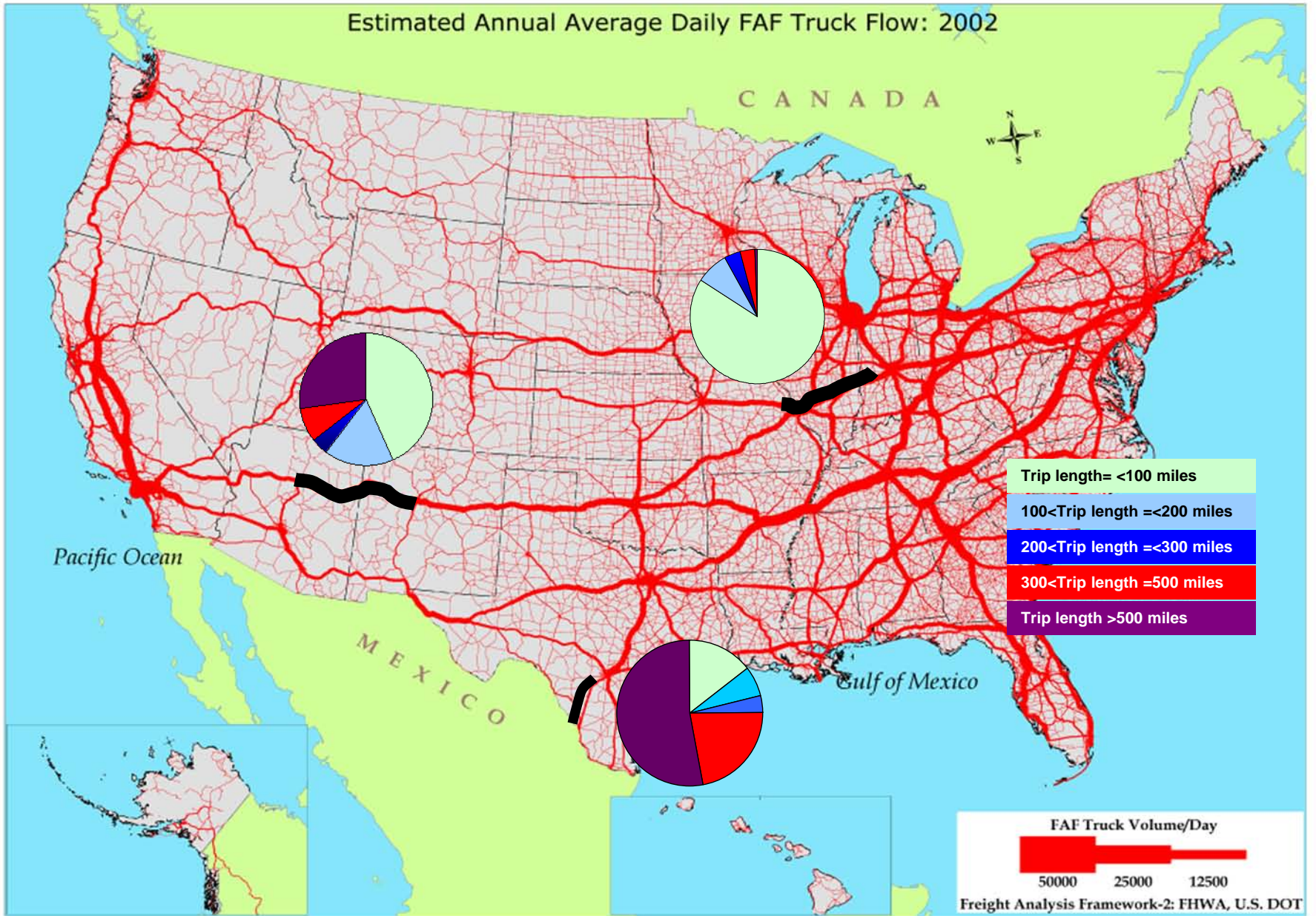


Note: The freight flow is based on the FAF-2 2 digit commodity code of 1 thru 7, and 25.

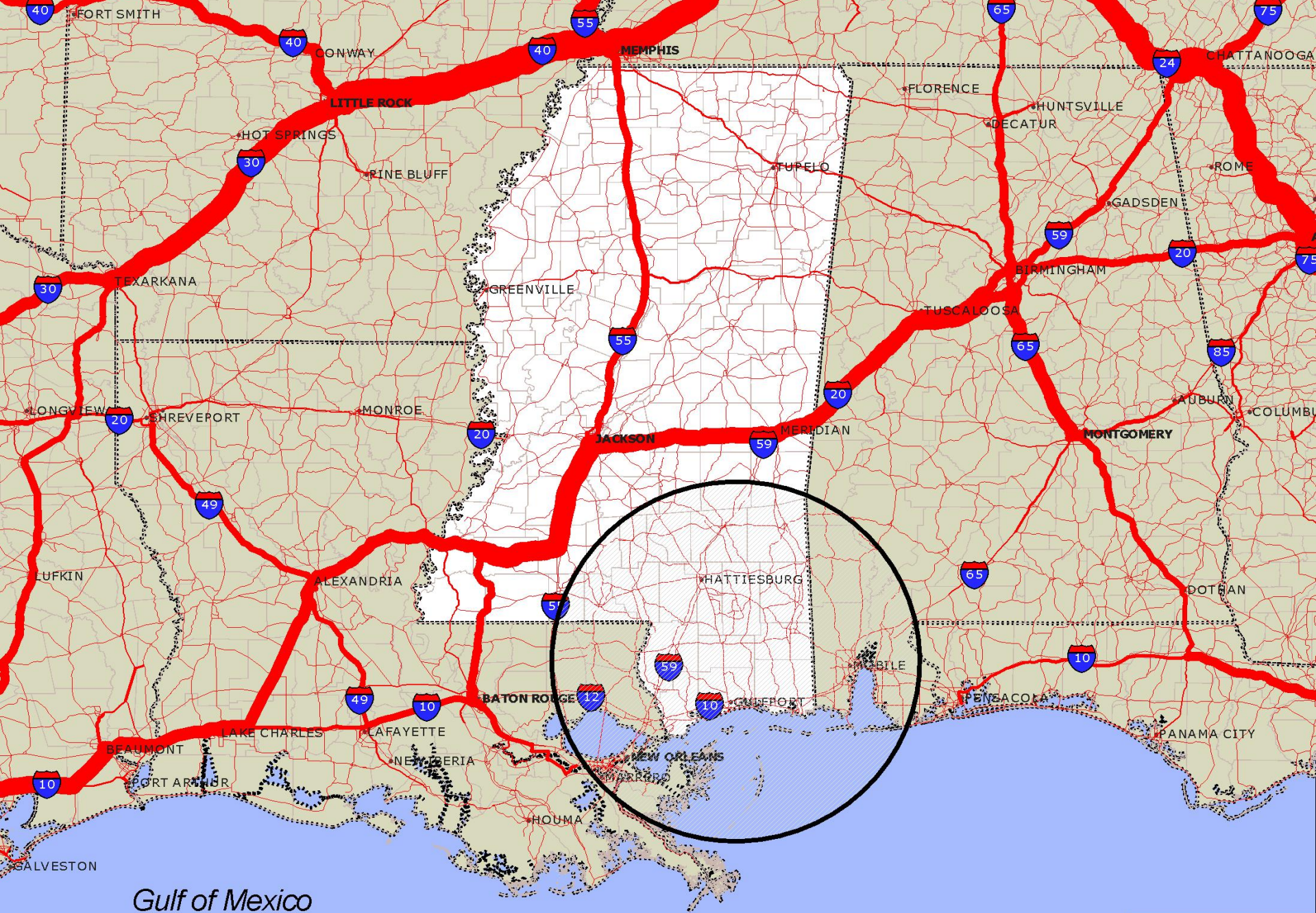
Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, 2008.



# Estimated Annual Average Daily FAF Truck Flow: 2002





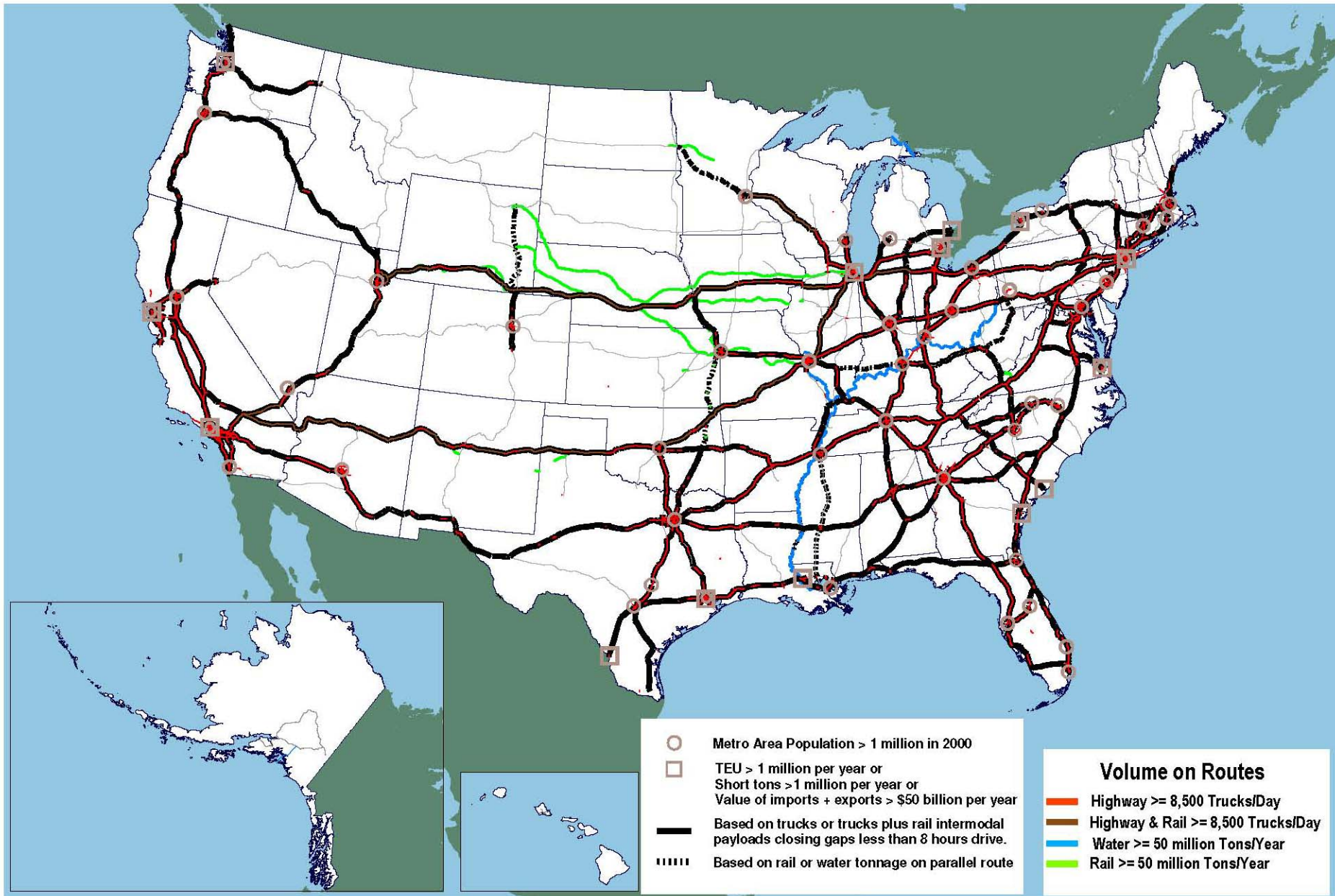


Gulf of Mexico





# Major Freight Corridors



Note: Highway & Rail is additional highway mileage with daily truck payload equivalents based on annual average daily truck traffic plus average daily intermodal service on parallel railroads. Average daily intermodal service is the annual tonnage moved by container-on-flatcar and trailer-on-flatcar service divided by 365 days per year and 16 tons per average truck payload.

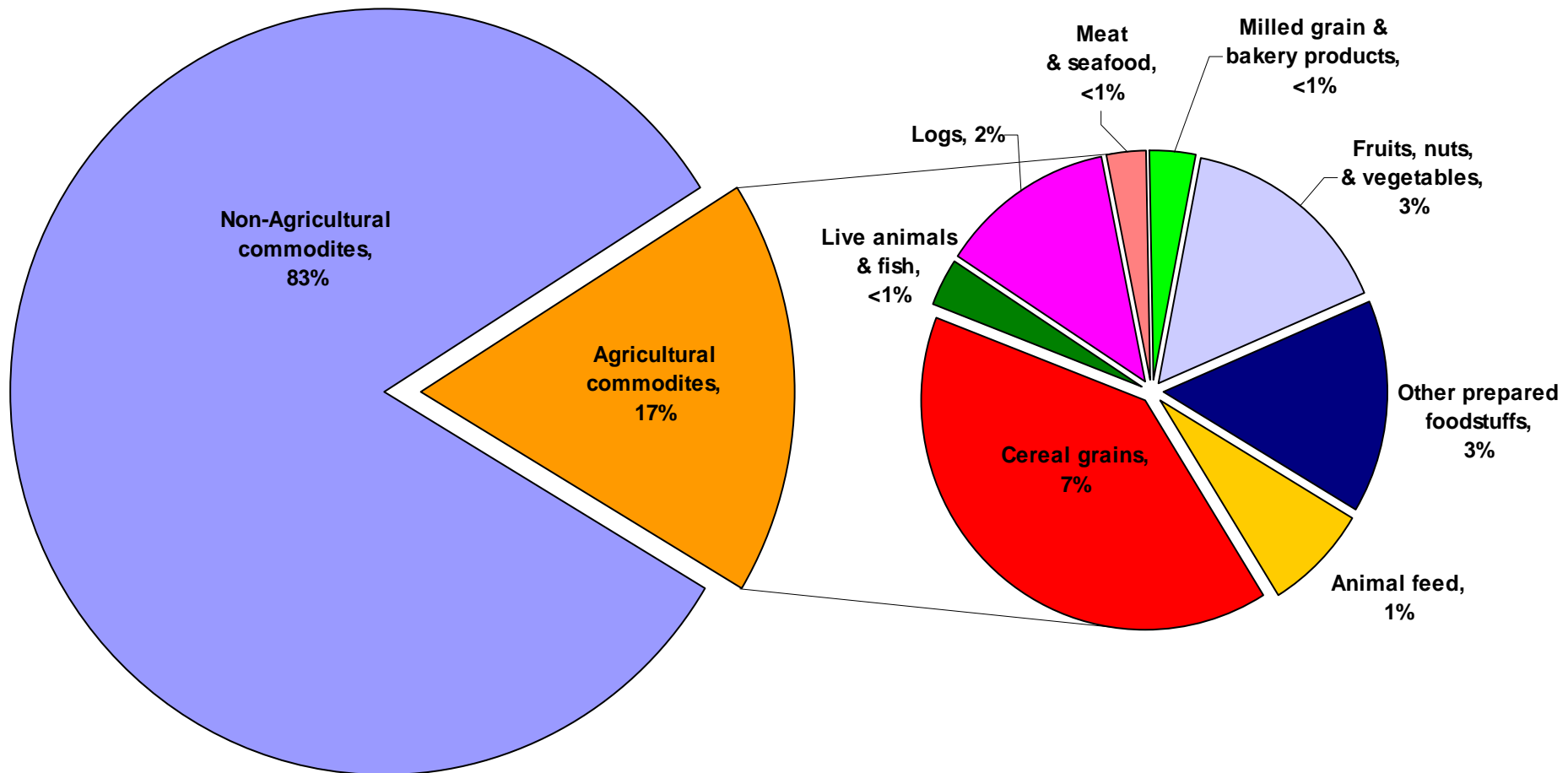


# Agricultural Commodity Classification

<u>SCTG</u>	<u>Description</u>
01	Live animals and fish
02	Cereal grains (incl. seed)
03	Fruits, nuts, vegetables, beans, seeds, & other agricultural products except animal feed
04	Animal feed and products of animal origin
05	Meat, fish, and seafood, and their preparations
06	Milled grain and bakery products and preparations
07	Other prepared food stuffs, and fats and oils (incl. dairy, processed foods, sugar, & other preparations)
25	Logs and other wood in the rough

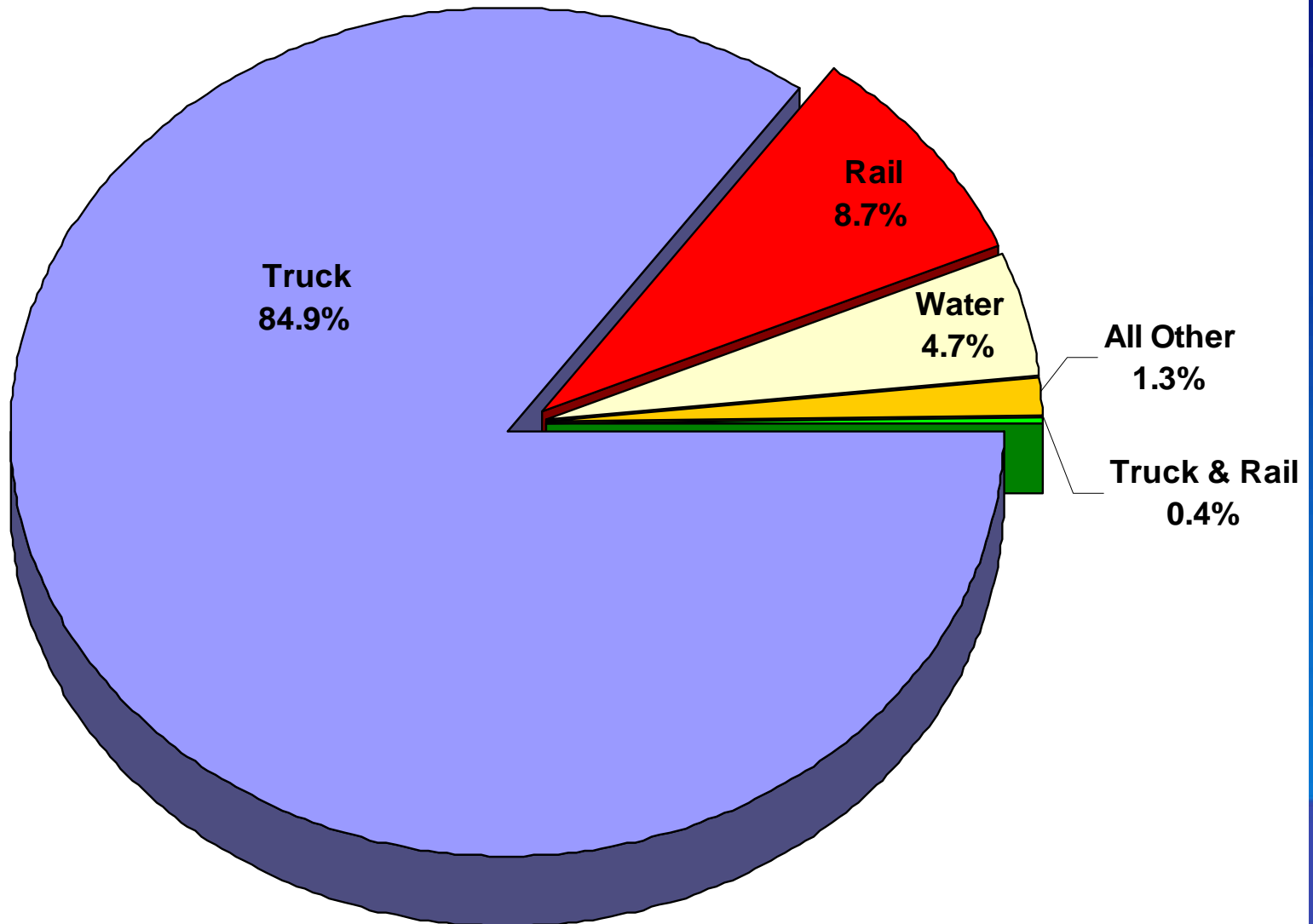


# Agricultural Product Tonnage as a Share of All Commodities Transported

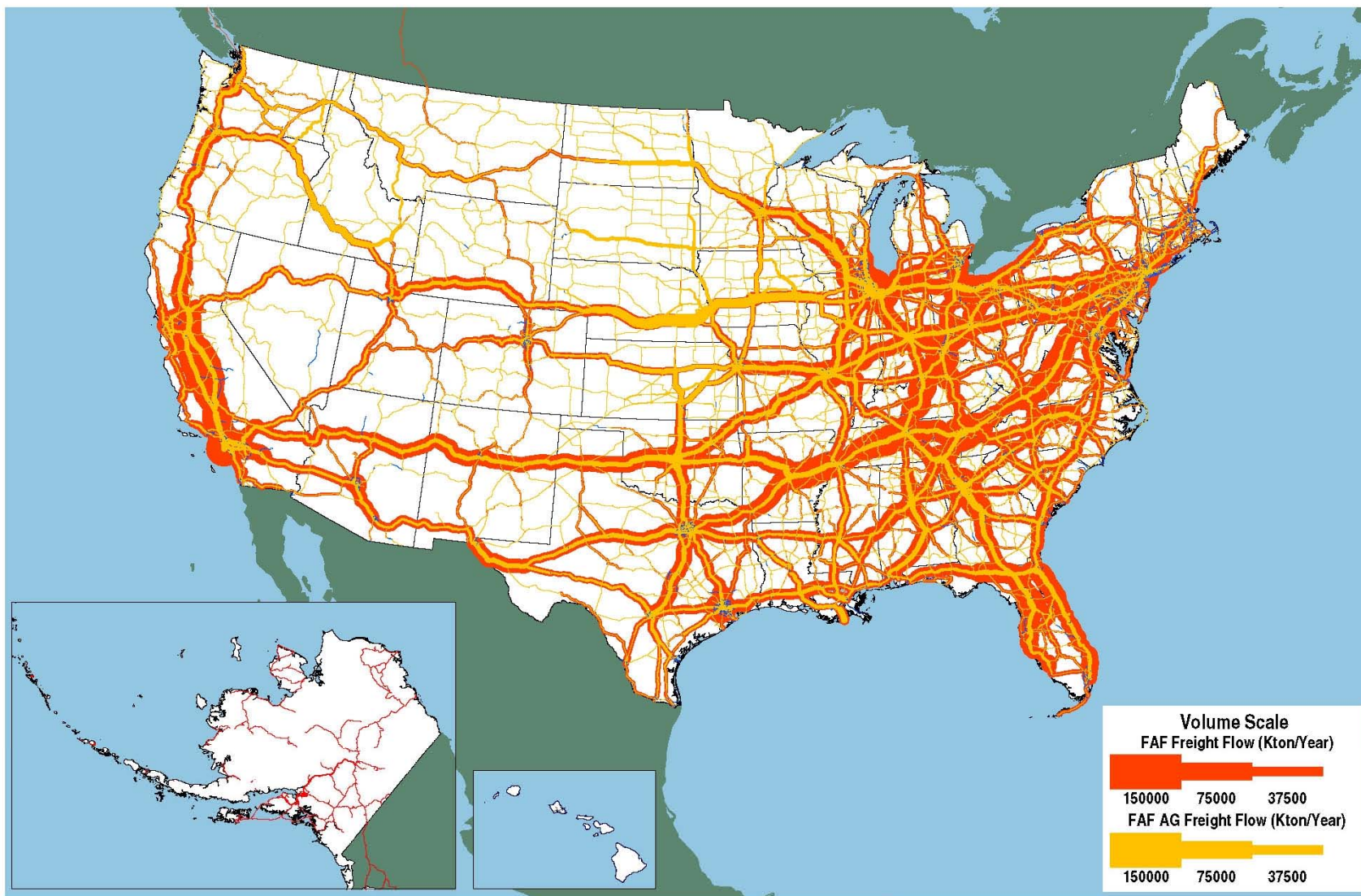




# Modal Share of Agricultural Commodity Tonnage



## Annual Tonnage of Agricultural Commodity Flows Compared with Total NHS Highway Flows: 2002

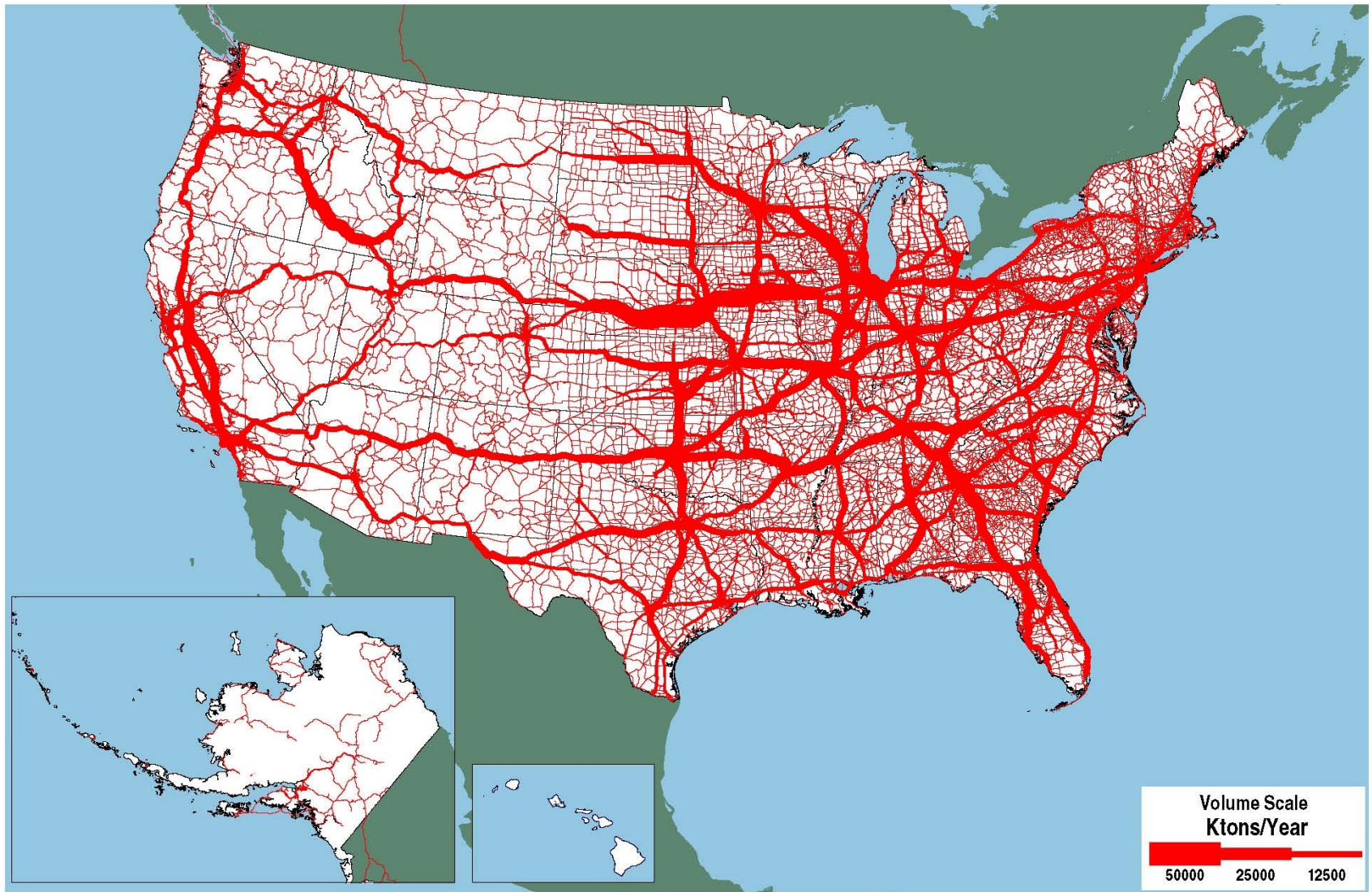


Note: The AG freight flow is based on the FAF-2 2 digit commodity code of 1 thru 7, and 25.

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, 2008.



## Annual Domestic Tonnage of Agricultural Commodity Flows on the FAF Highway Network: 2002

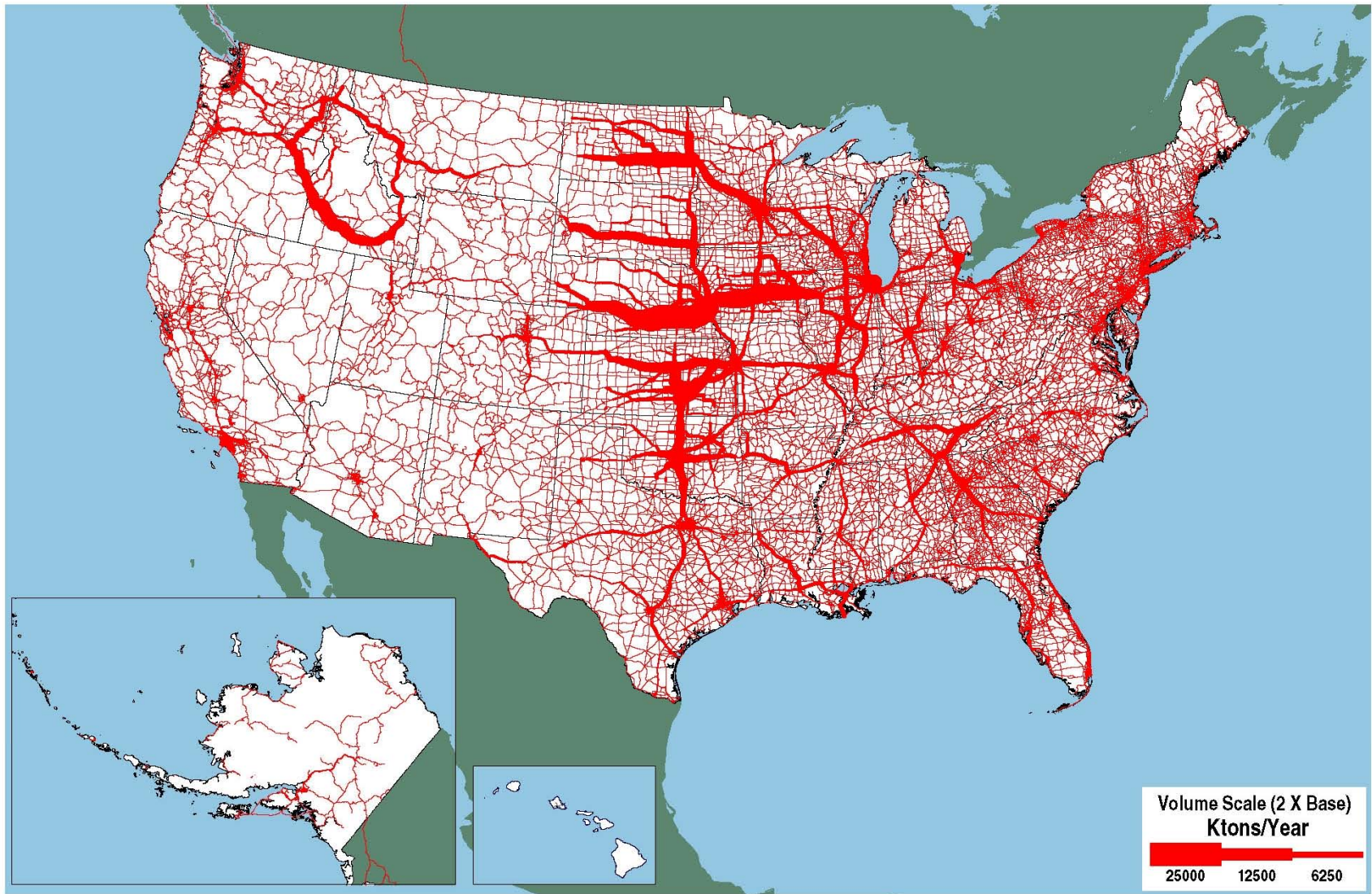


Note: The freight flow is based on the FAF-2 2 digit commodity code of 1 thru 7, and 25.

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, 2008.



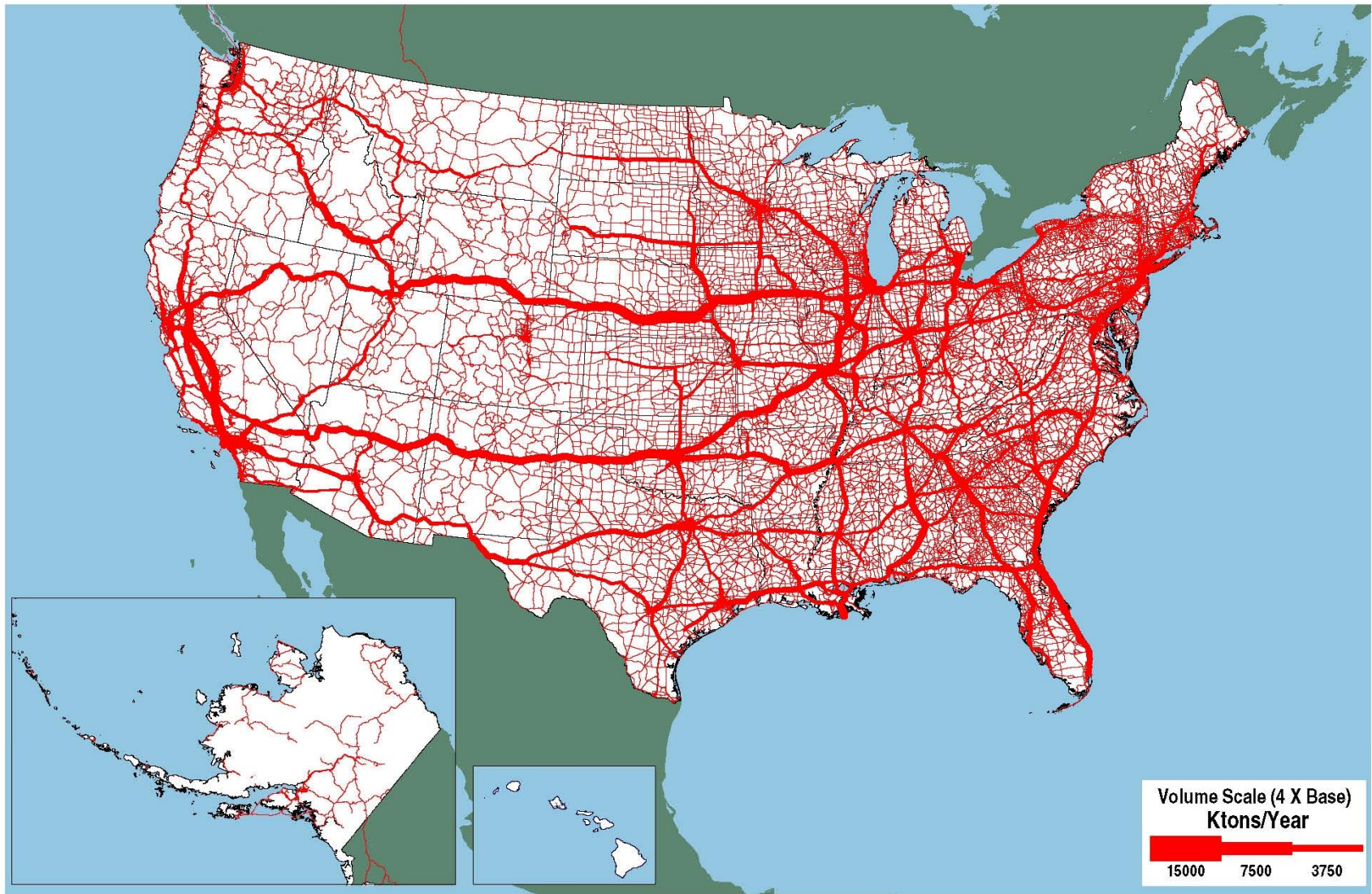
## Annual Tonnage of Cereal Grain Flows on the FAF Highway Network: 2002



Note: The freight flow is based on the FAF-2 2 digit commodity code of 2. The flow scale is magnified two times of total Agricultural Tonnage  
Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, 2008.



## Annual Tonnage of Fruit, Nut, and Vegetable Flows on the FAF Highway Network: 2002



Note: The freight flow is based on the FAF-2 2 digit commodity code of 3. The flow scale is magnified four times of total Agricultural Tonnage  
Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, 2008.

# Agricultural Transportation Issues

- **Impacts of Renewable and Bio-Fuels**
  - Changes in Agricultural/food production patterns and product movements
  - Investment in equipment/facilities to ship/move alternative fuels
- **Multimodal Freight System Efficiency**
  - Modal shifts, rail access and traffic pattern changes
  - Environmental and air quality issues
- **Impacts on the Rural Road Highway Infrastructure**
  - Investment/maintenance of rural road planning/finance
  - capacity
  - management





# Themes GAO Identified in Reauthorization Proposals



- Define a federal role in freight goods movement
- Incorporate performance & accountability
- Promote better management / utilization of existing assets
- Use multiple funding sources
- Link transportation policy & funding to environment and energy sectors





# Moving Forward



- Engage with the public sector (State and Local)
- Expand to regional thinking
- Make sure the public sector understands your needs and you understand their processes



# How Would You Rate Your Level of Capacity to Understand & Address Freight Transportation Needs?

	2005			2006/07			
	Capacity			Capacity			
	Moderate	High	Very High	Moderate	High	Very High	
State	62	13	7	48	25	9	82
MPO	No Data			45	27	11	83
FHWA	22	19	0	56	20	2	78



# How High a Priority is Freight Transportation in Your Organization?

	2005		2006/07		
	Priority		Priority		
	Somewhat	Extremely	Somewhat	Extremely	
State	41	41	55	23	<b>78</b>
MPO	No Data		50	25	<b>75</b>
FHWA	20	2	59	23	<b>82</b>





# THANK YOU

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