

The State of U.S. Transportation: Implications for the U.S Fruit & Vegetable Industries

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Overview

- ❖ **About TSB**
- ❖ **F&V Production, Exports & Imports**
- ❖ **Transportation Network Maps**
- ❖ **Transportation Issues**
- ❖ **Conclusions**
- ❖ **Q&A; Dialog with Members**



Transportation Services Branch (TSB) USDA's Agricultural Marketing Service

- ❖ **Our mission/vision is to provide insightful transportation information and analysis to help agricultural shippers move products to market.**
- ❖ **We inform, represent, and assist agricultural shippers and government policymakers through:**

**Market Reports
Regulatory Representation
Responding to Inquiries**

**Economic Analysis
Technical Assistance
Stakeholder Outreach**



Projected U.S. Production of Vegetables, Fruits, and Tree Nuts 2003-17

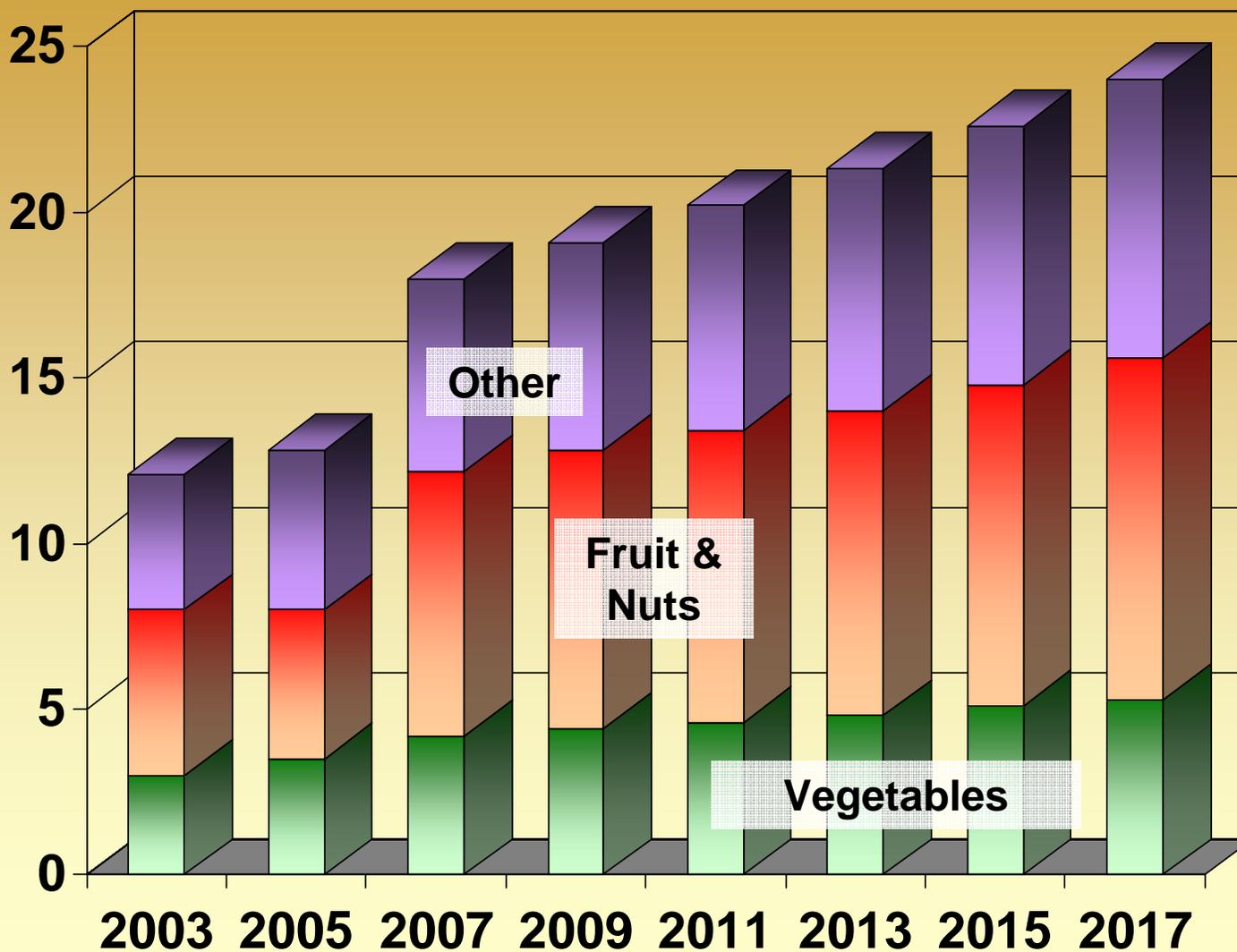
(in Billion Pounds)

Crop Group	2003	2005	2007	2009	2011	2013	2015	2017
Vegetables	132.2	132.8	138.7	139.3	142.0	144.8	147.7	150.6
Fruit & Nuts	73.3	68.8	64.6	70.1	72.0	74.1	76.1	77.8
Total	205.9	201.9	203.6	209.7	214.3	219.2	224.0	228.7

Source: Vegetables and Melons Outlook/VGS0324/December 18, 2007
Economic Research Service, USDA

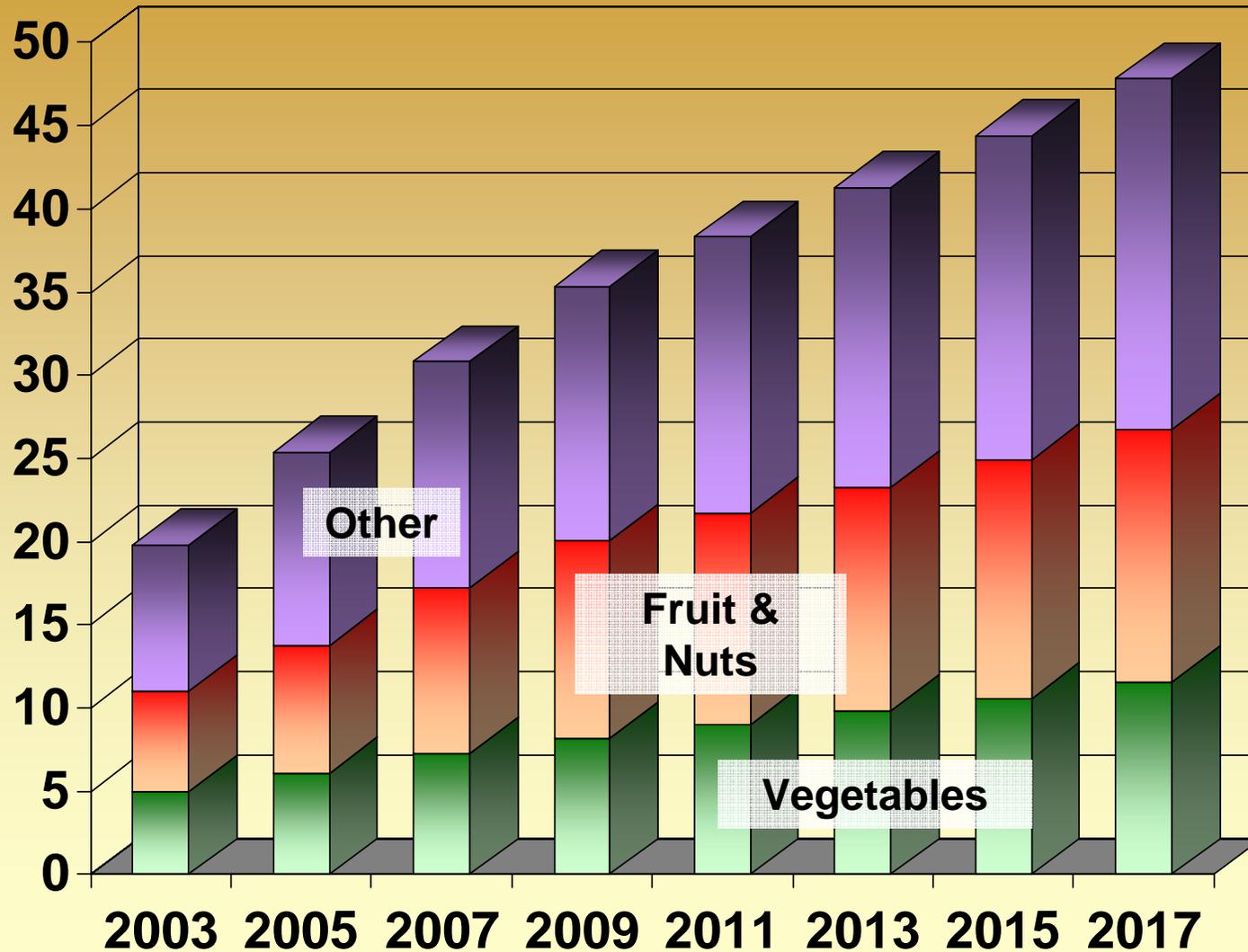


Projected Horticultural Exports 2003-17 (in Billion Dollars)



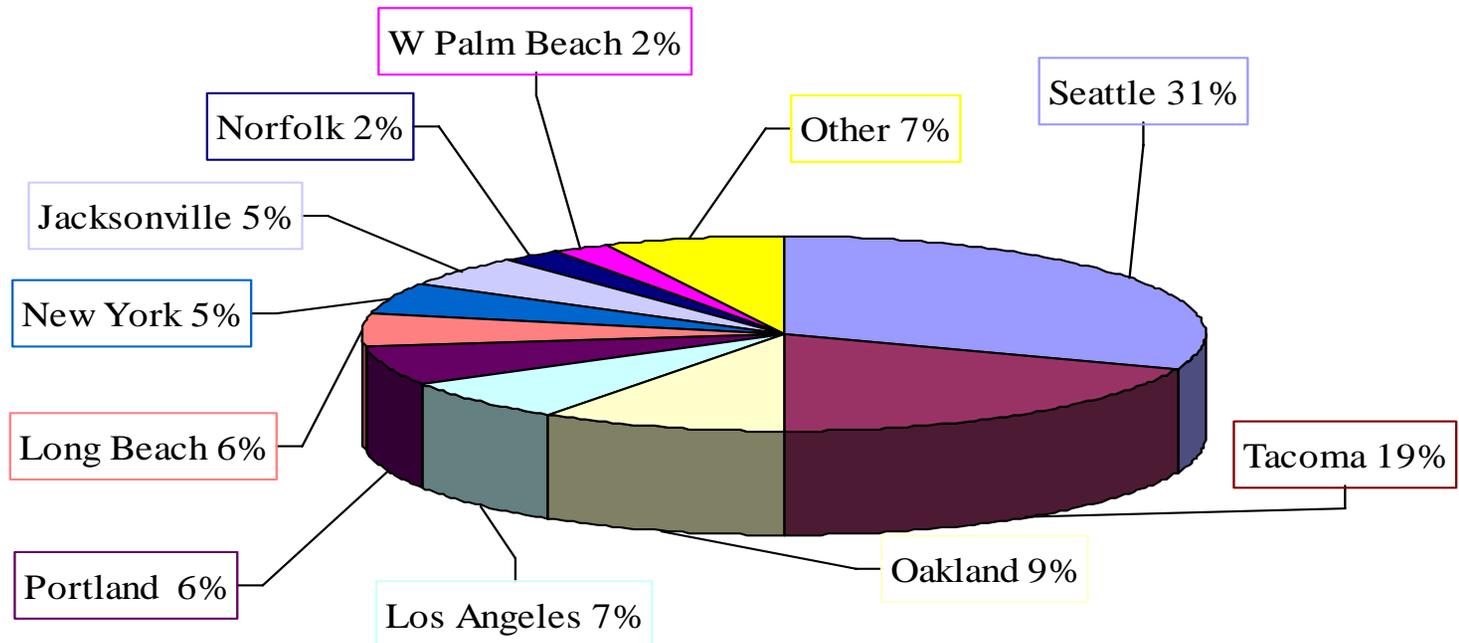


Projected Horticultural Imports 2003-17 (in Billion Dollars)





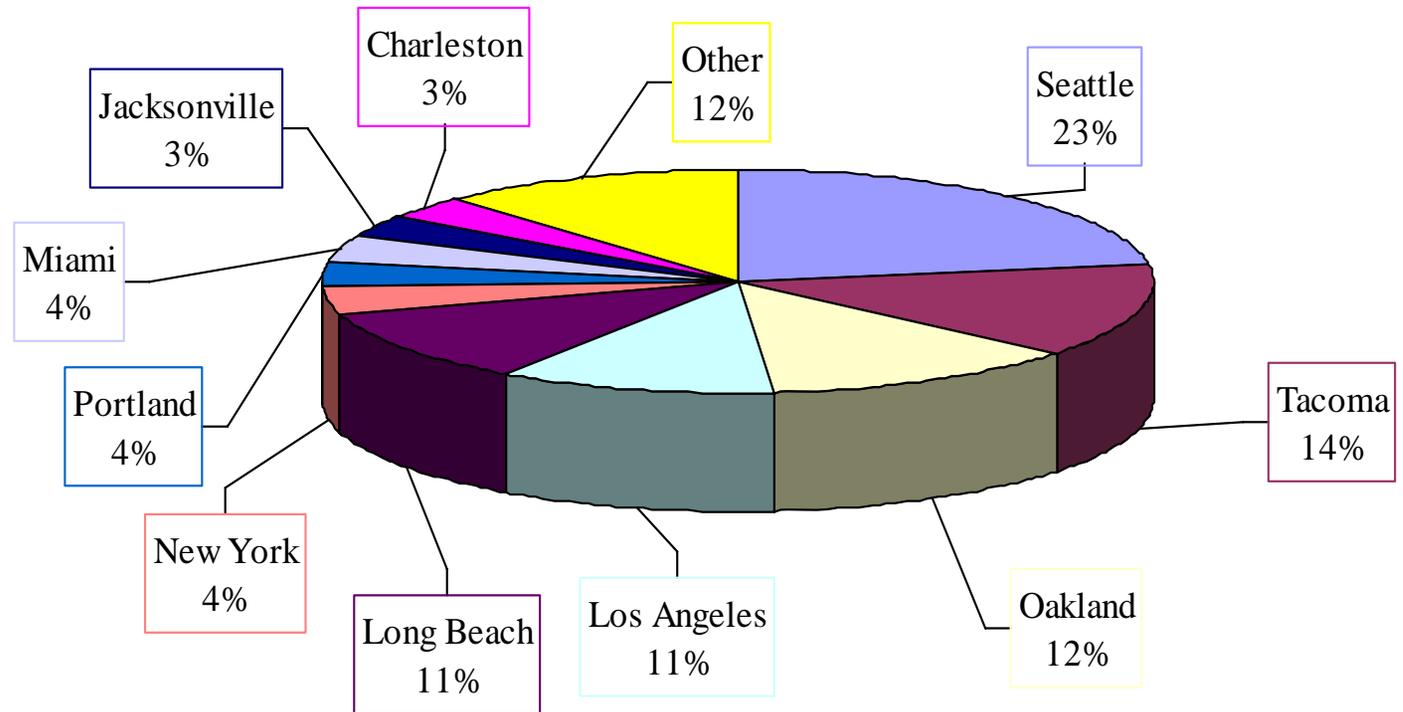
Top 10 U.S. Ports, Fresh Vegetable Exports Jan-Oct 2007 (PIERS)



Source: Port Import Export Reporting Service



Top 10 U.S. Ports, Fresh Fruit Exports Jan-Oct 2007 (PIERS)



Source: Port Import Export Reporting Service



Trade and Transportation Outlook FY 2008

- ❖ **Fresh fruit and vegetables**
 - **exports – \$4.9 billion**
 - **imports – \$10.4 billion**

- ❖ **Processed fruit and vegetables**
 - **exports – \$4.5 billion**
 - **imports – \$7.4 billion**

- ❖ **Tree nuts**
 - **exports – \$3.0 billion**
 - **imports – \$1.2 billion**

Source: Outlook for U.S. Agricultural Trade AES-56, November 30, 2007



Trade and Transportation Outlook FY 2008

- ❖ **Citrus exports – \$690 million**
 - **2.2 million ton California orange crop**

- ❖ **Continued strong demand for apples**
 - **values expected to remain high**

- ❖ **Strong dried fruit exports to Europe**

- ❖ **Frozen vegetable sales should rise to major markets**

Source: Outlook for U.S. Agricultural Trade AES-56, November 30, 2007



Trade and Transportation Outlook FY 2008

- ❖ **Fruit juice exports – \$1 billion**
 - **Imports – \$2 billion**

- ❖ **Increased imports of apple juice from China**

- ❖ **Florida orange crop – 7.6 million tons**
 - **reduced juice imports from Brazil, Mexico**

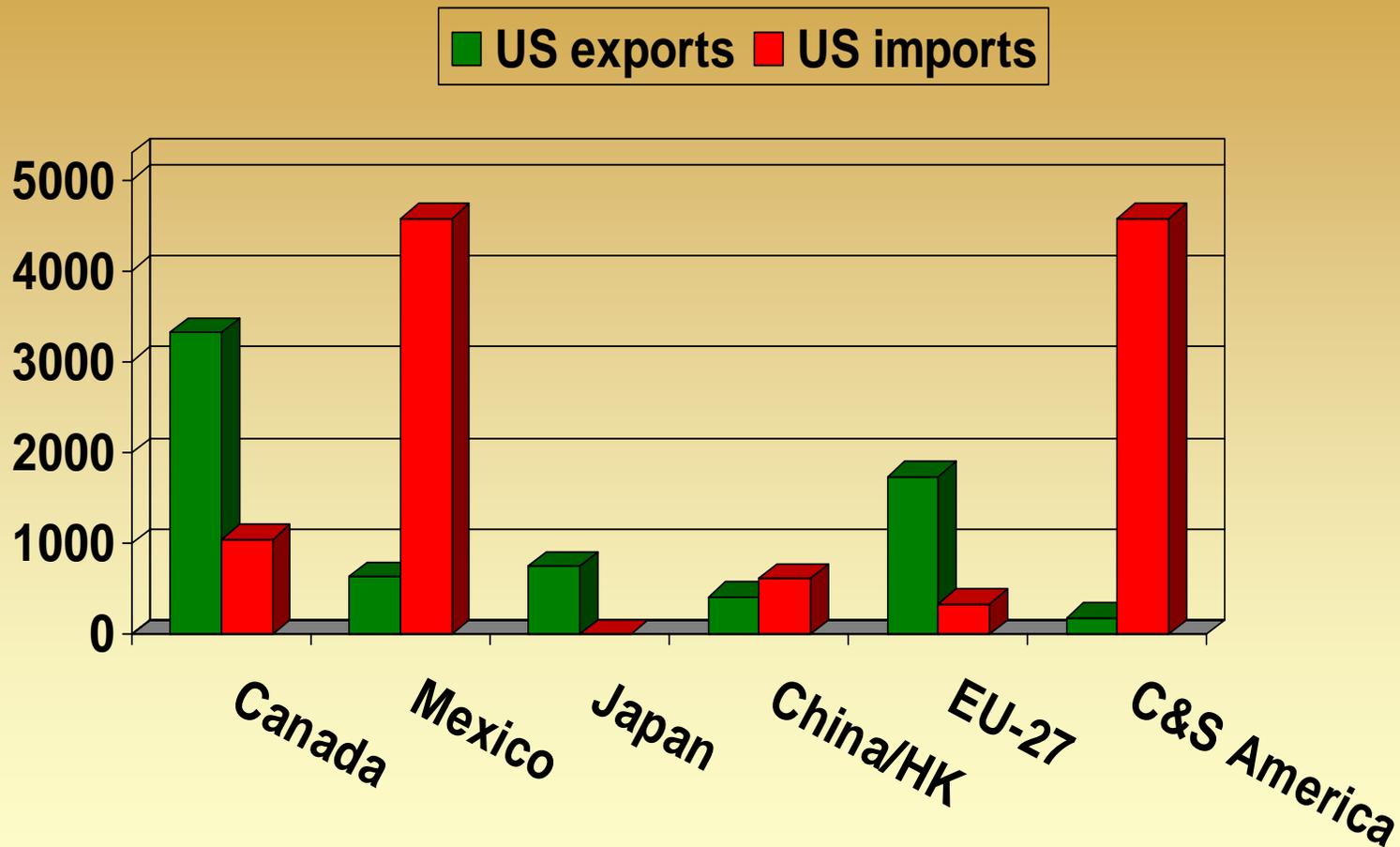
- ❖ **Fresh fruit and vegetable imports from Mexico expected to increase by \$400 million**

- ❖ **Record almond crop expected**

Source: Outlook for U.S. Agricultural Trade, AES-56, November 30, 2007



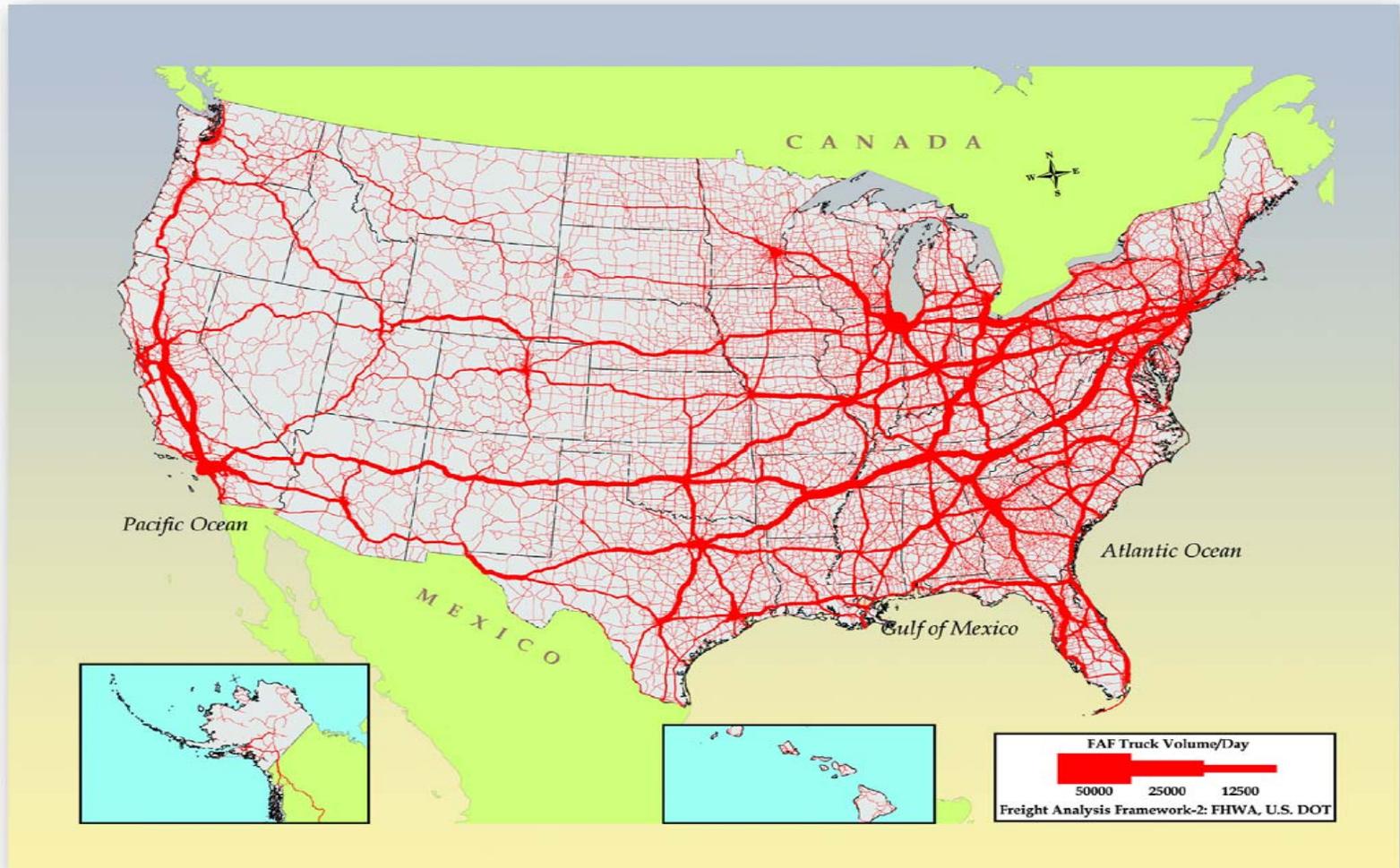
Top F&V Trading Partners in FY 2007 (In Millions of Dollars)



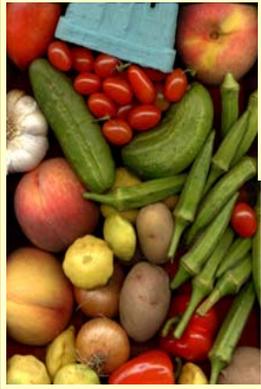
Source: U.S. Bureau of the Census Trade Data; Analysis by Commodity and Marketing Programs, FAS, USDA



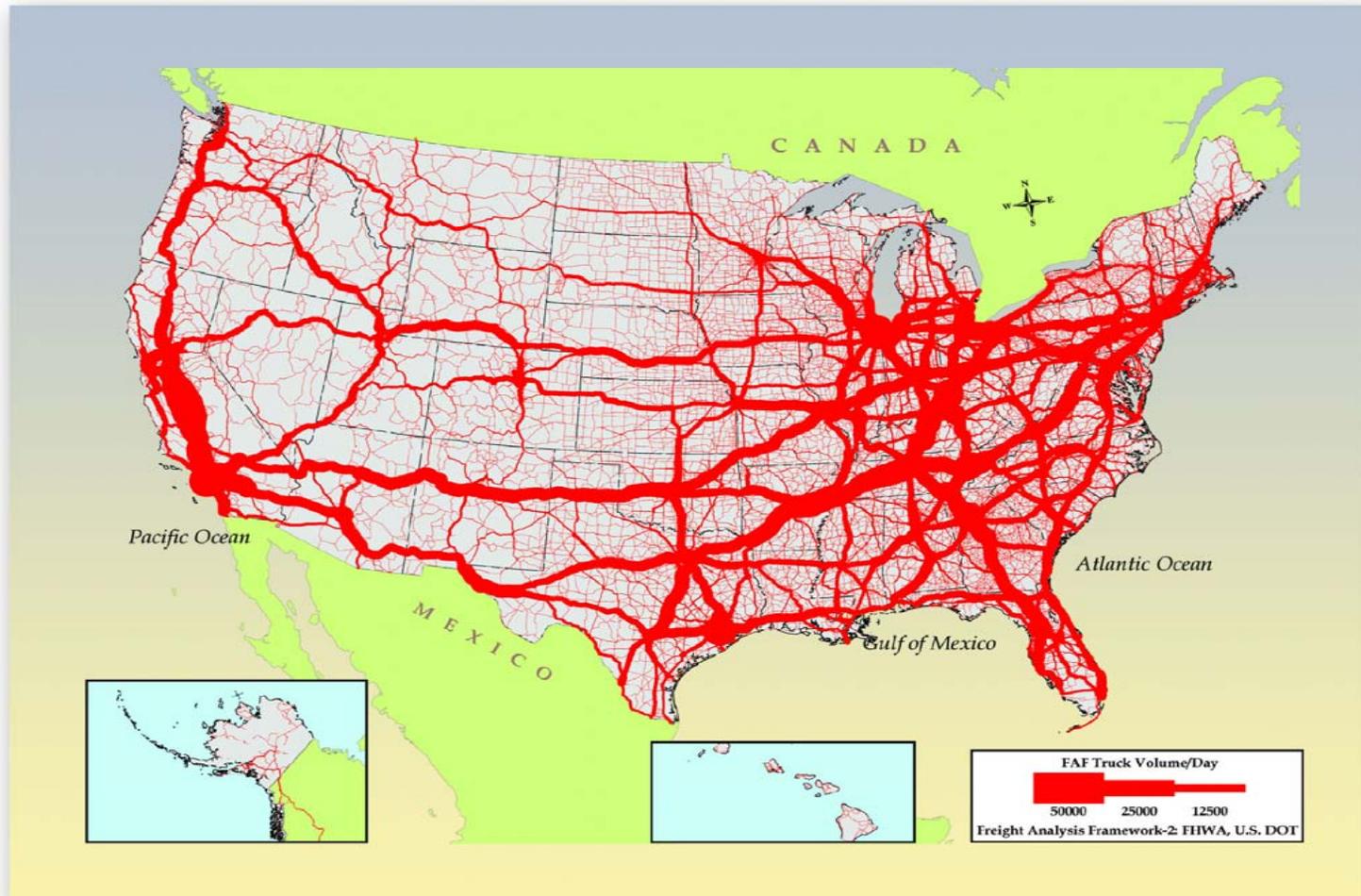
Estimated Average Daily Long-Haul Truck Traffic on the National Highway System in 2002



Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, Version 2.2, 2007



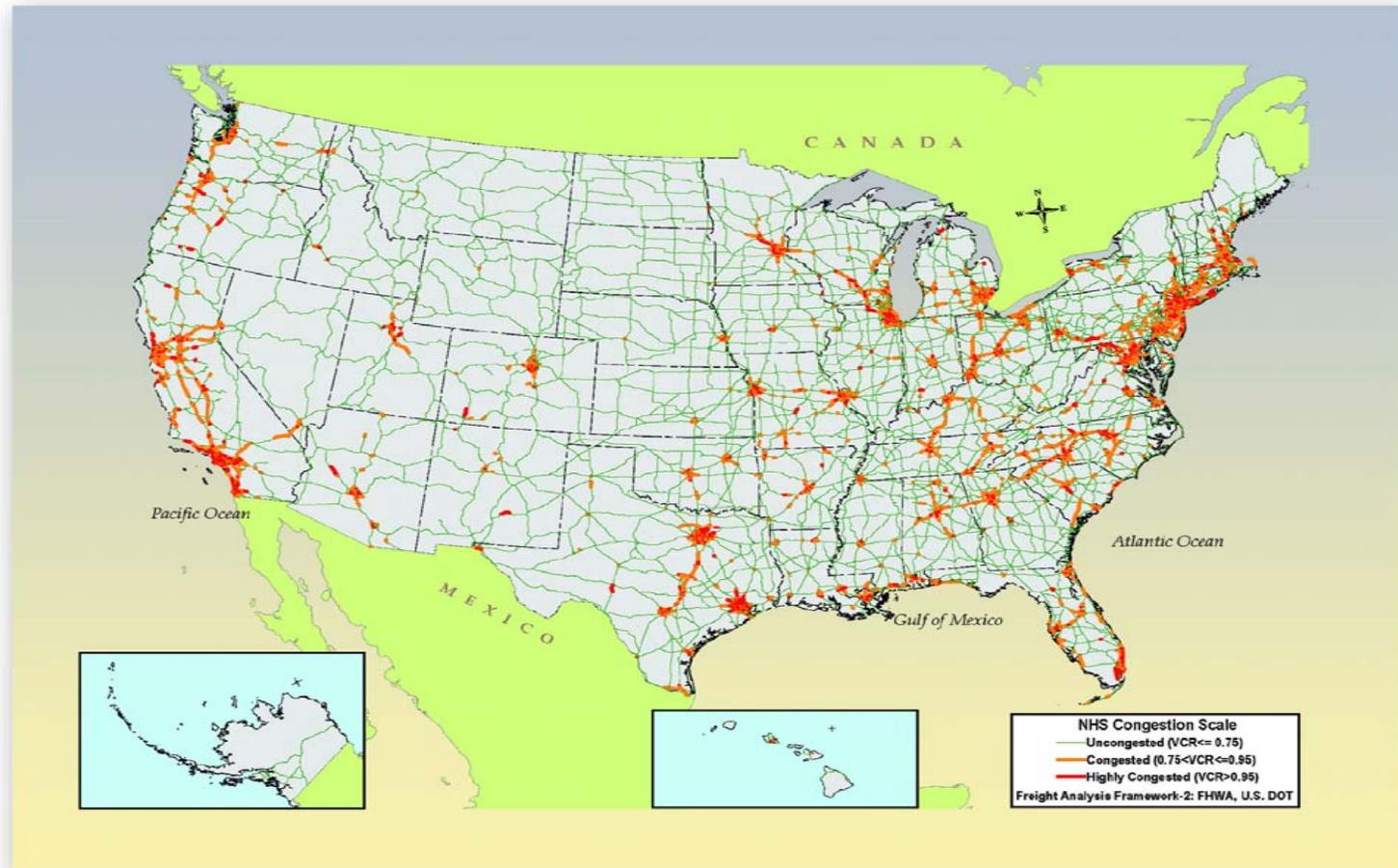
Estimated Average Daily Long-haul Truck Traffic on the National Highway System in 2035



Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, Version 2.2, 2007



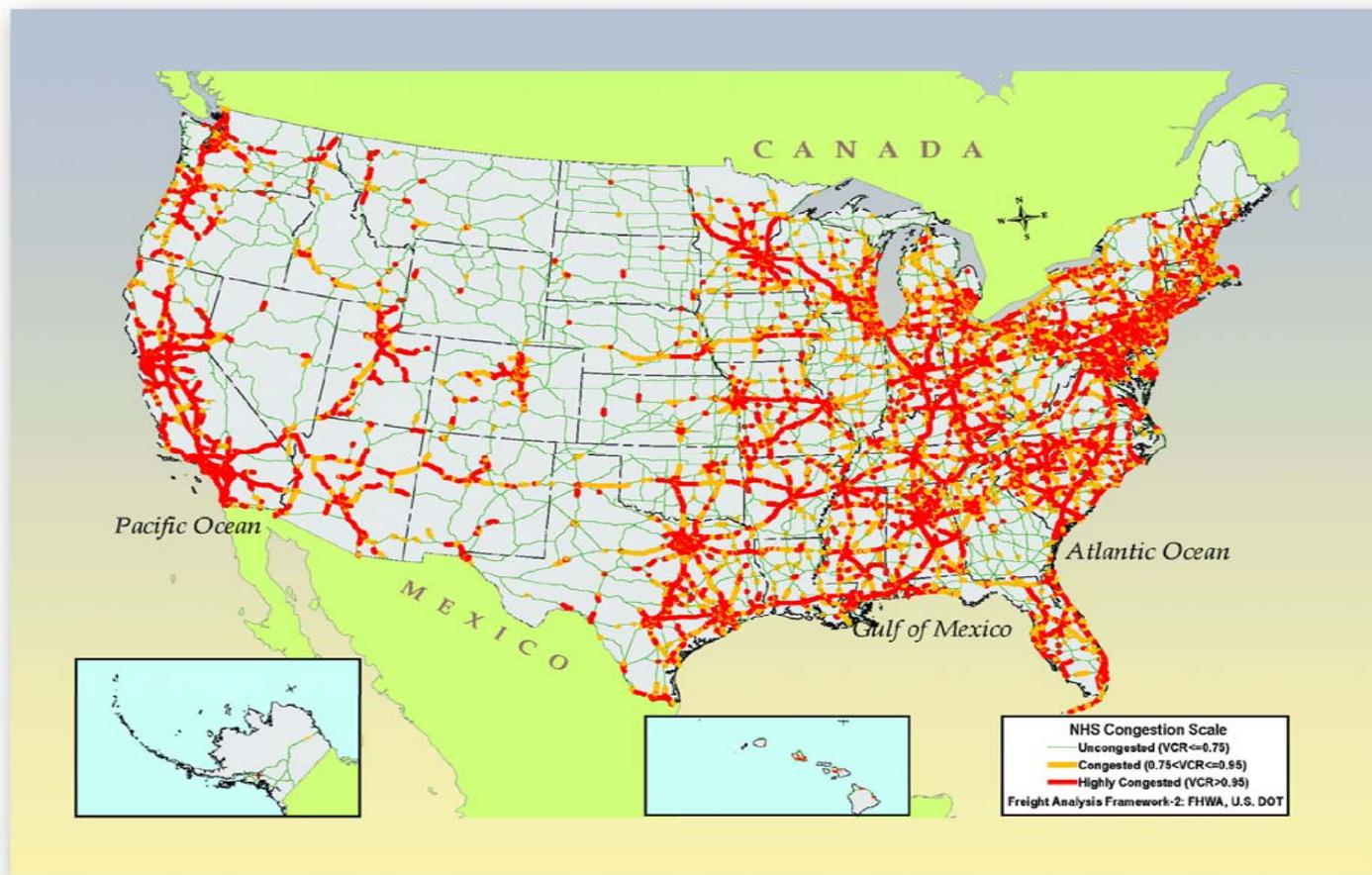
Peak-Period Congestion on the National Highway System in 2002



Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, Version 2.2, 2007



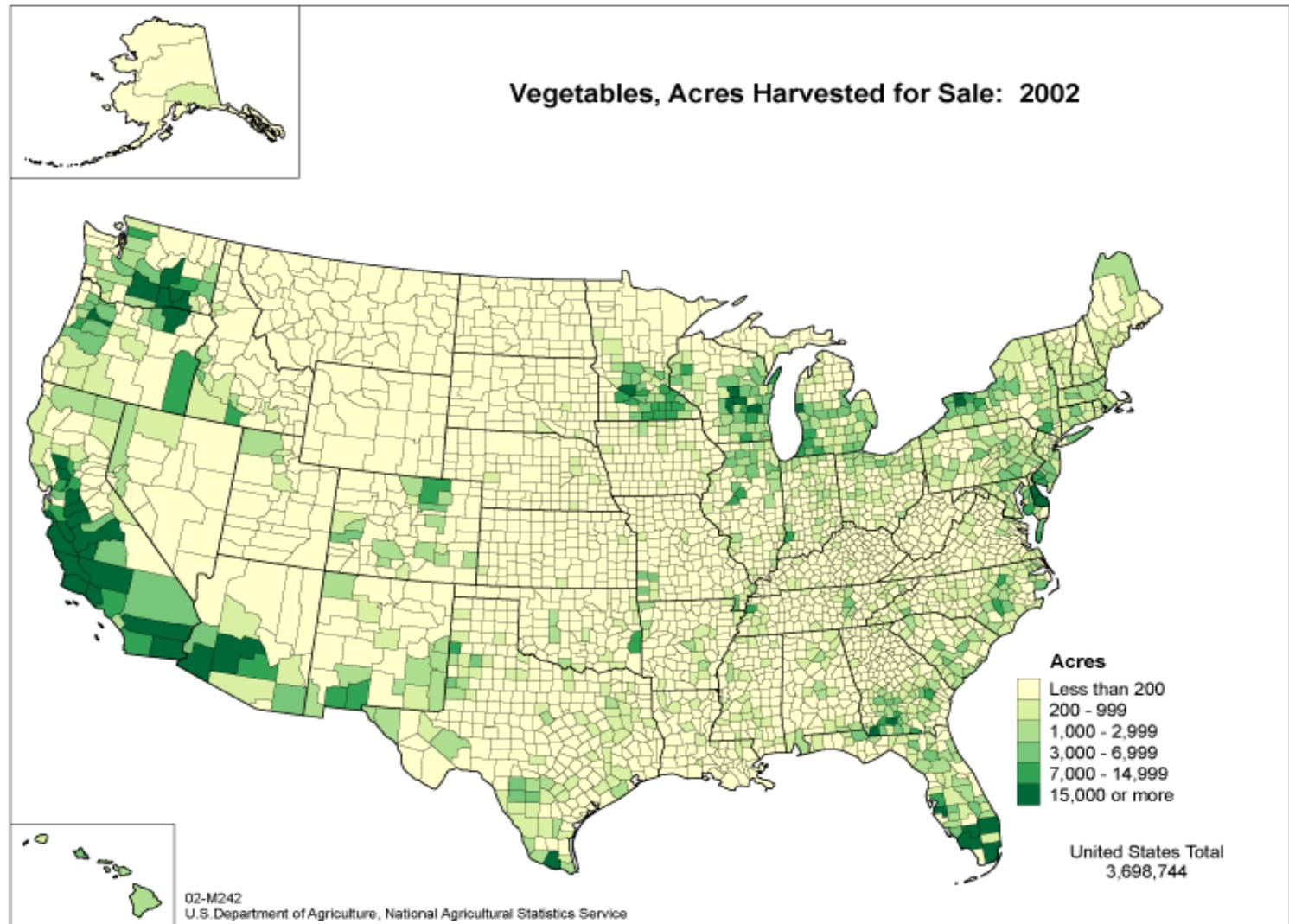
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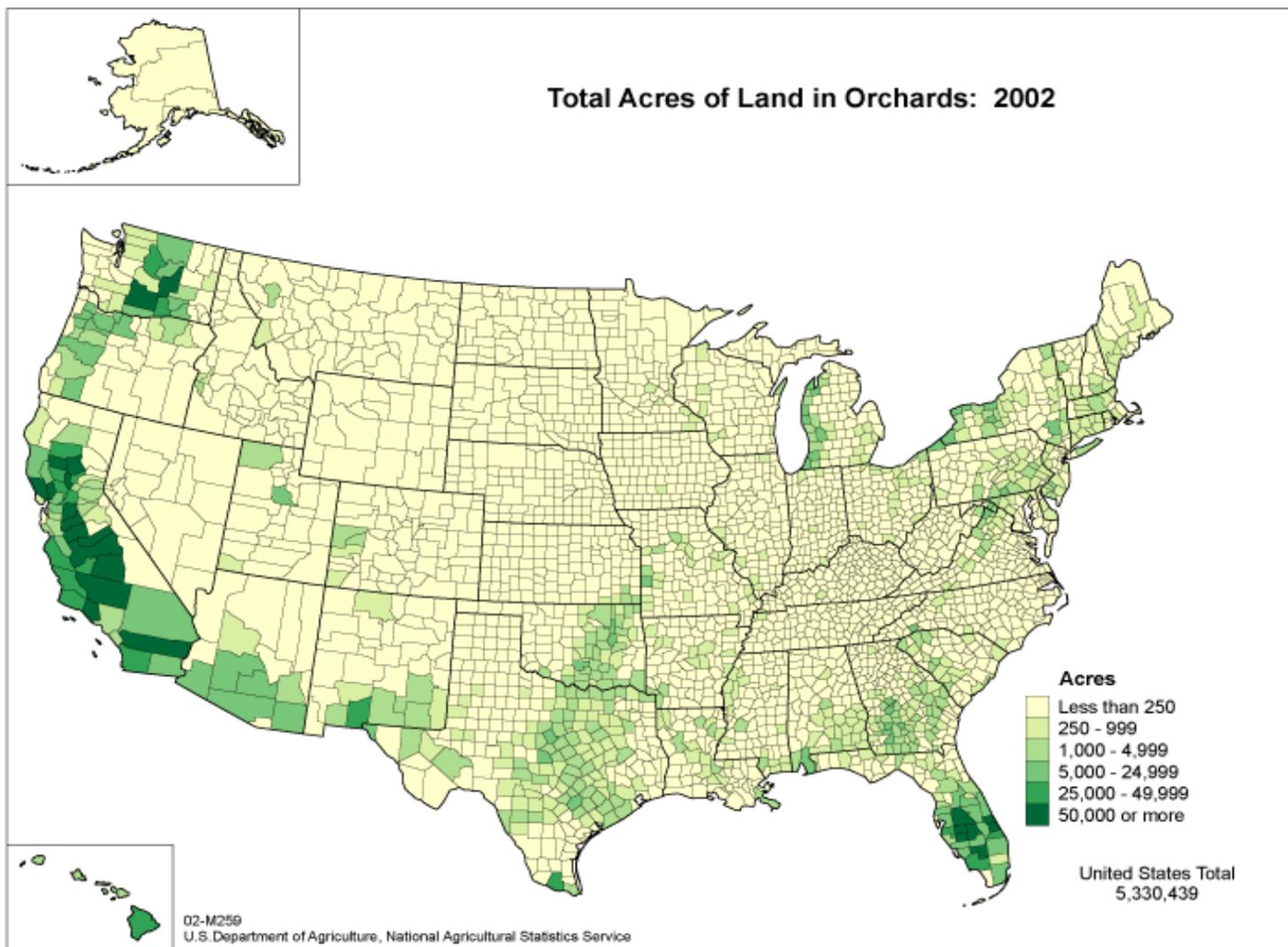


Vegetable Harvested Acres, 2002





U.S. Land in Orchards, 2002





“Ballpark” Illustration of Relative Annual Number of Truckloads

- ❖ All Freight = 10.7 Billion Tons in 2006 *
 - Assuming average of 20 tons per load, estimated equivalent number of truckloads ≈ 535 million
- ❖ Grain = 190 Million Tons in 2004 **
 - Assuming 26 tons per load, estimated number of truckloads ≈ 7.3 million
- ❖ Total F&V Production = 203.6 Billion Pounds in 2007 ***
 - Assuming 40,000 pounds per load, estimated equivalent number of truckloads ≈ 5 million

Note: Assumptions provided for illustration purposes only as rough idea of relative magnitudes; not intended for use as an actual estimate

* Source of Tonnage Figure: 2007-2008 American Trucking Trends, ATA

** Source: Transportation of U.S. Grains – A Modal Share Analysis, 1978-2004, Oct. 2006, AMS

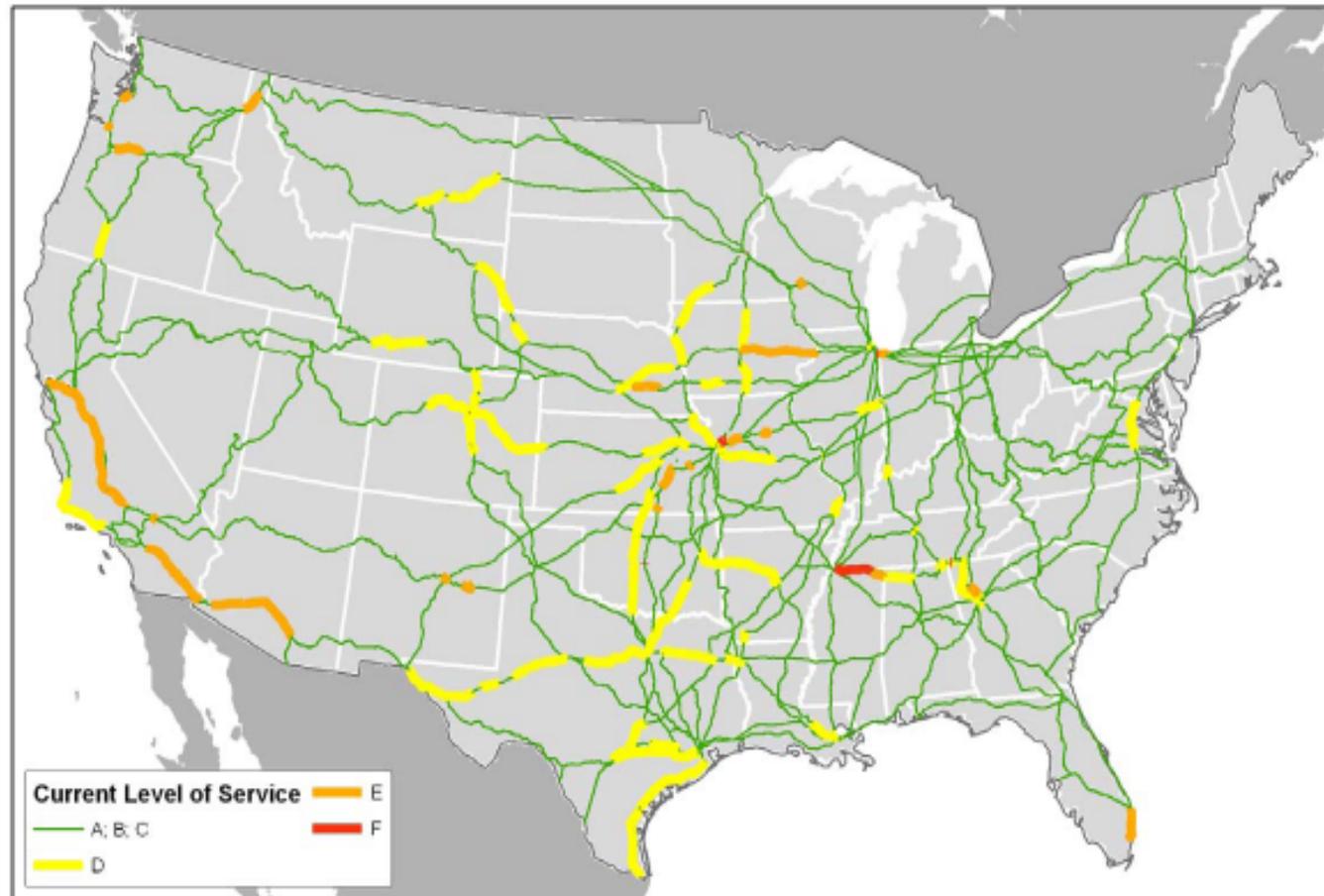
*** Source of Tonnage Figure: Vegetables and Melons Outlook, VGS0324/12-18-07, ERS



F&V Modal Share?

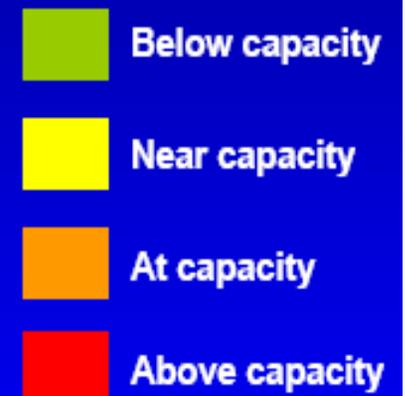
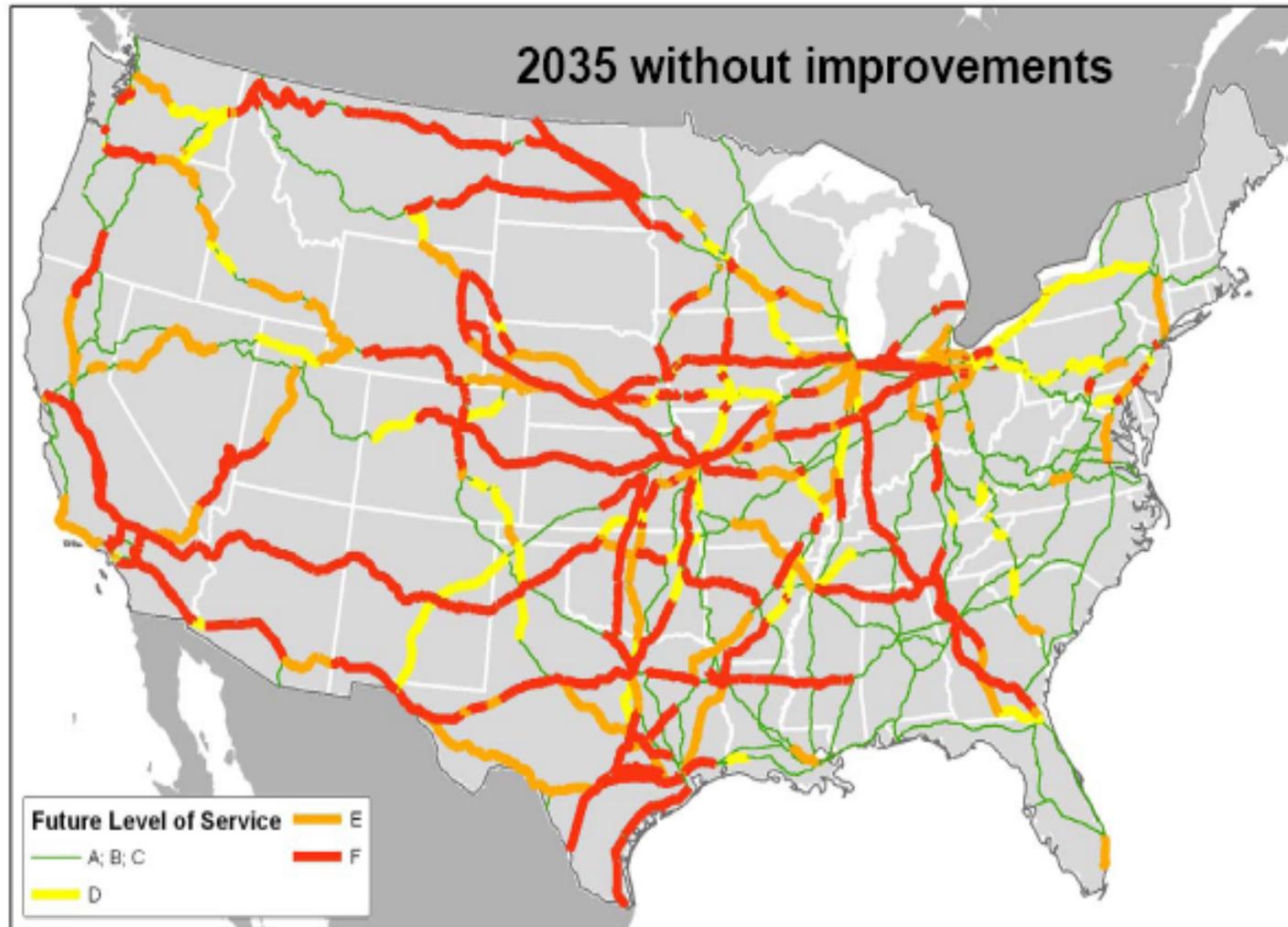
- ❖ **Almost entirely by truck – perhaps greater than 95 percent (exact level is unknown)**
- ❖ **A small amount of F&V's are shipped by refrigerated railcars and piggyback trailers or containers – 1.429 billion pounds reported in 2007**
- ❖ **An even smaller amount are shipped by air cargo**
- ❖ **We do not have complete data available to calculate the modal share**

Overall Rail Volumes Compared to Capacity in 2005



Source: http://www.aar.org/PubCommon/Documents/natl_freight_capacity_study.pdf

AAR Estimated Future Volumes – Needed Investment = \$148 billion over 28 years





Freight Projections are Pre-Ethanol!

- ❖ **Truck freight is forecast to almost double from 2002 to 2020**
 - **while driver shortages are projected to reach 111,000 by 2014**
 - **calculated before ethanol production expansion**
- ❖ **Rail freight is forecast to increase from 1,879 million tons in 2002 to 3,525 million tons by 2035**
 - **an increase of nearly 88 percent**
 - **calculated before ethanol production expansion**

Freight Forecast Source: U.S. DOT – Freight Analysis Framework, 2002 and 2006; Driver Shortage Source: Global Insight, Inc., May 2005



Rail Transportation Issues

- ❖ **Closing of intermodal ramps in rural areas**
 - **Ocean and rail carrier consolidation**
 - **focus on higher value imports**
 - **Shippers must pay more to have containers delivered by truck over longer distances**
- ❖ **Various media periodically report on railcar and intermodal alternatives**
- ❖ **Shipments are reported by AMS Market News Service**
- ❖ **Diesel fuel costs & surcharges have challenged growers, shippers, carriers, independent drivers, and receivers**



Rail Transportation Services

Railex	4 weekly 55-car unit trains between Wallula, WA and Rotterdam, NY – 5 day transit time
Union Pacific	3,500 50-ft & 1,600 64-ft railcars, including the Railex, Express Lane, and produce transload programs
WA Produce Rail Car Pool	up to 50 50-ft railcars
Alliance Shippers	1,360 53-ft and 48-ft trailers
Cryo-Trans	875 64-ft and 72-ft railcars
BNSF	1,000 50-ft, 1,000 72-ft railcars, with partnerships with intermodal marketing companies
Tropicana	514 railcars, available for backhauls



Transportation Issues – Labor Negotiations

- ❖ **International Longshore and Warehouse Union contract expires July 2008 – negotiations to start soon**
- ❖ **Los Angeles/Long Beach Port Lockout, 2002**
- ❖ **Major disruptions of shipments in October, backlog continued through December**
- ❖ **Lost sales for U.S. farmers – loss of product or decreased quality of perishable products left on the docks, increased storage costs**
- ❖ **Estimated loss of \$500 million per week for U.S. agricultural exports**



ATRI's Top 10 List of Critical Issues in the Trucking Industry - 2007

- 1. Hours-of-Service**
- 2. Driver Shortage**
- 3. Fuel Issues**
- 4. Congestion**
- 5. Government Regulation**
- 6. Tolls/Highway Funding**
- 7. Tort Reform/Legal Issues**
- 8. Driver Training/Education**
- 9. Environmental Issues**
- 10. On-Board Truck Technology**

Source: American Transportation Research Institute



Truck Transportation Issues

❖ Truck Availability

- **AMS's Weekly *Fruit and Vegetable Truck Rate Report* lists recurring shortages & surpluses of trucks for a variety of commodities and regions**

❖ Driver Issues

- **Overall freight traffic has declined in 2007 (economy)**
- **Concerns about Driver shortages, Hours of service, and a reduced number of refrigerated trailers remain**
- ❖ **Comments on the interim final rule on allowing an 11th hour of driving and a 34-hour rest period to restart the work week are due on Feb. 15**

Link to Truck Rate Report: <http://www.ams.usda.gov/fv/mncs/truck.pdf>



Truck Transportation Issues

❖ Driver Issues

- Shortages
- Delays in loading & unloading
- Compensation & respect

❖ Industry efforts to make produce a “load of choice” – PMA *Truck Transportation Best Practices for the Produce Industry*

❖ DRC *Transportation Standards – updated August 2007*

❖ TCA *Voluntary Guide to Good Business Practices for Shippers, Receivers, Carriers and Drivers*



Truck Transportation Issues

- ❖ **Availability of refrigerated trucks**
 - **California & CA Port regulations to reduce diesel emissions may affect the cost and availability**

- ❖ **Costs of retrofits to reduce emissions**
 - **Older truck tractors, mechanical refrigeration units, and auxiliary power units for idling are to be phased out, or retrofitted, or replaced at great cost over the next 7 years**

- ❖ **Requirements may catch on elsewhere**
 - **The Ports of Seattle and Tacoma, 14 other states are interested in implementing similar diesel emissions and idling regulations**

- ❖ **EPA waivers from the Clean Air Act are required**



Truck Transportation Issues

- ❖ **Port truck drivers must obtain a Transportation Worker Identification Credential (TWIC) in 2008 to access secure areas in the ports**

- ❖ **As of January 22, 2008:**
 - **nearly 59,000 workers are enrolled in the program**
 - **nearly 123,000 workers are pre-enrolled**
 - **more than 26,000 cards have been printed**
 - **almost 13,000 cards have been activated**

- ❖ **The Transportation Security Administration estimates 1 million individuals will need a TWIC card to access secure marine facilities and vessels after September 25, 2008**



Conclusions

- ❖ F&V production, exports and imports are projected to increase steadily into 2017
- ❖ All modes are currently close if not at capacity
- ❖ Without changes, congestion is expected to worsen and cause increasing problems into 2035
- ❖ National & global influences greater than F&V industry are at play and will influence infrastructure decisions
- ❖ There is no shortage of regulatory issues facing trucks; there can be spillover issues for transporting F&Vs
- ❖ Increasing challenges require greater communication and collaboration for creative solutions (e.g. shippers & carriers, between modes, etc.)



Input from the F&V Advisory Committee

Q: What issues or focus areas in transportation would be most helpful to F&V industries?

- **Potential new areas for transportation related research for F&V?**
 - e.g. past coop agreement with UC-Davis on perishable products transport?
- **Areas of heightened focus?**
- **Enhanced reporting in existing reports (e.g. RTQ)?**
- **New reporting?**



Thank You!

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