

FREIGHT TRANSPORTATION FRAMEWORK STUDY

Examining Freight and Multimodal Opportunities in the Sun Corridor



Transportation Policy Committee
October 19, 2011

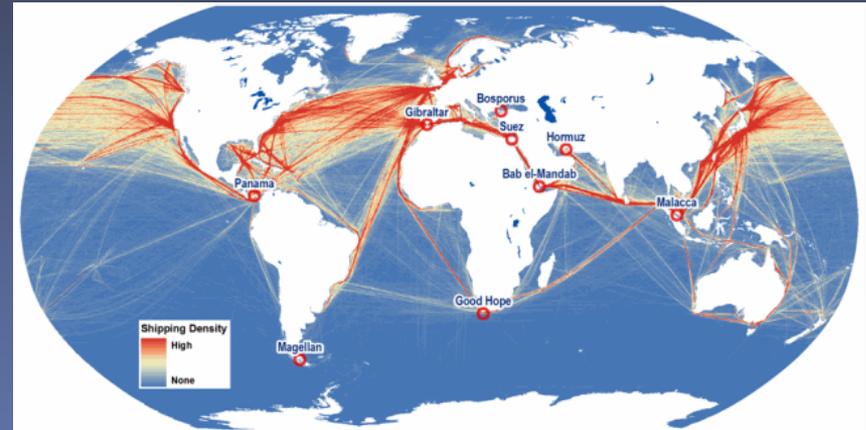
JOINT PLANNING ADVISORY COUNCIL
A Planning Partnership for the Arizona Sun Corridor

Freight Framework Study

Goal: Identify and develop freight related economic development opportunities

Objectives:

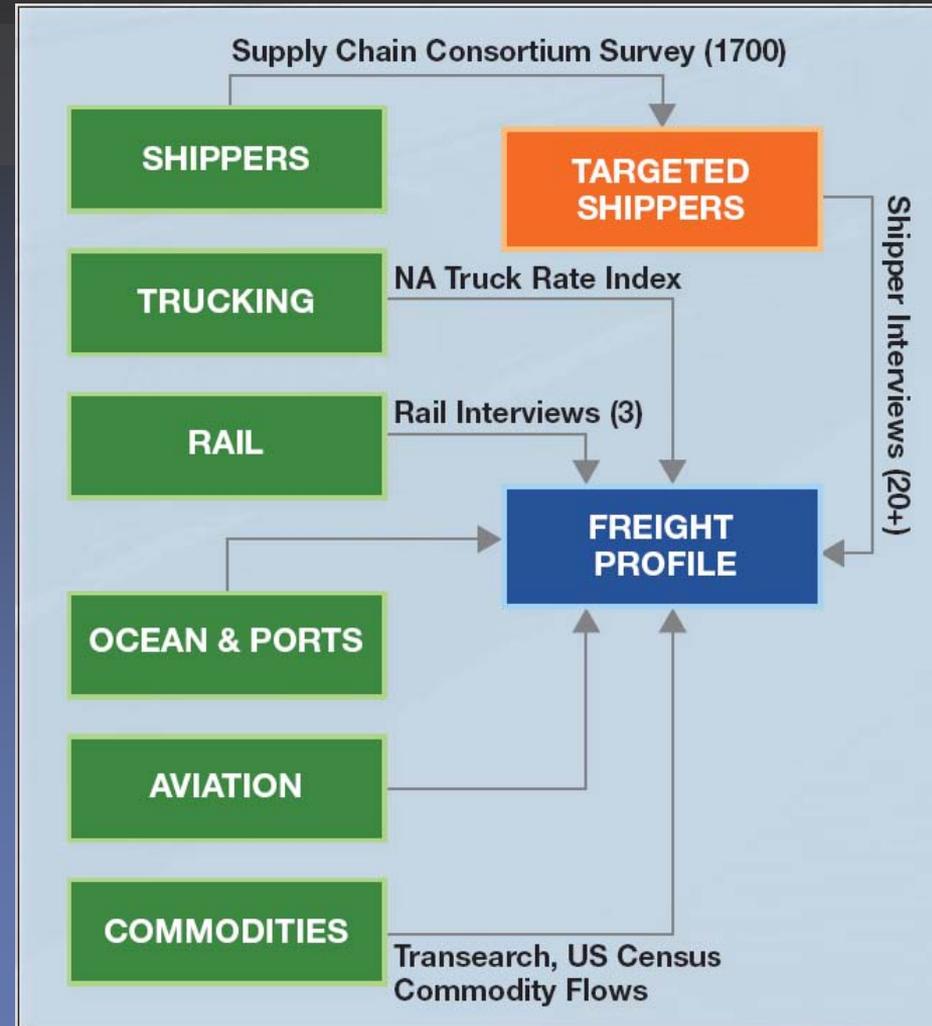
- Increase mobility and freight access
- Identify freight commodity profile.
- Identify border crossing opportunities
- Identify Inland Port opportunities.
- Identify funding options and sources
- Identify freight infrastructure improvements



Phase I

Phase I – Information Gathering and Issues Identification:

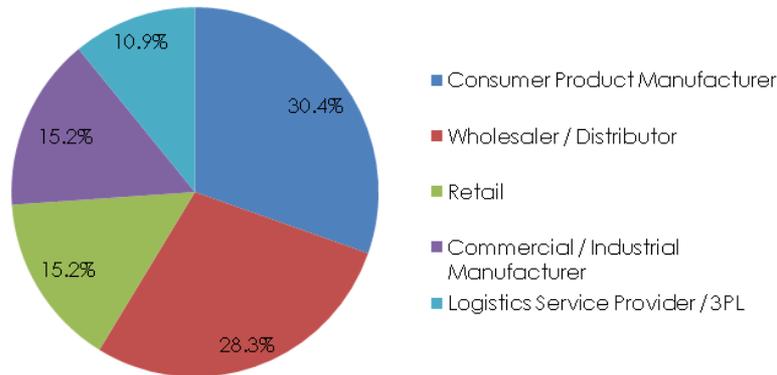
- Shipper Survey and Interviews
- Supply Chain Consortium Database
- Commodity Flow Analysis
- Facilities Inventory
- Stakeholder Outreach



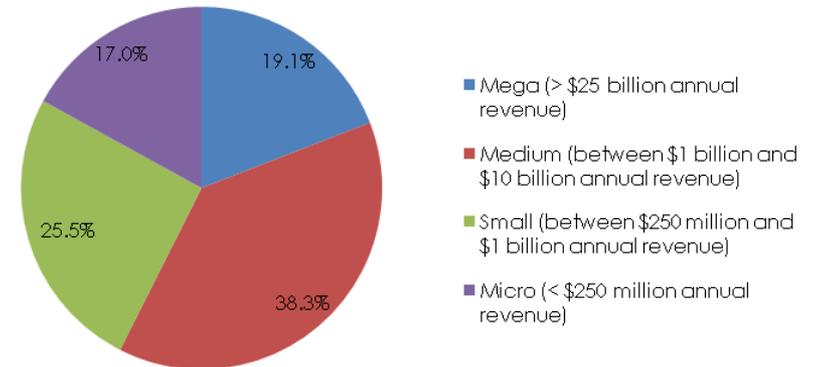
Internet Survey of Shippers and Carriers

- Internet survey sent to 4,500 individuals representing supply chain 2,500 firms
- Approximately 2% response rate
- Participants represent a balance of supply chain companies and company size

Company Category of Survey Participants



Company Size of Survey Participants



Interviews of Shippers and Carriers Operating in the Sun Corridor

- Interviews conducted with 25 shippers and transportation service providers (TSP) with operations in the Sun Corridor and/or Southern California
- Interviews of at least 30 minutes conducted in person or by telephone over a 4 week period
- Informal interviews followed outline guide



Shipper and Carrier Market Research Key Findings

- Significant imbalance between imports and exports to Sun Corridor
 - Affects shipping costs for inbound shipments to capture return trip
 - Indicates consumption based economy
- Opportunity exists for Sun Corridor to find ways to optimize supply chain
 - Vendors, suppliers and manufacturers identified as most needing optimization
 - Foreign trade zones and intermodal would optimize trade with Mexico through Sun Corridor



Southern California to the Sun Corridor

Average Rate Per Mile

\$2.78

Average Flat Rate

\$721

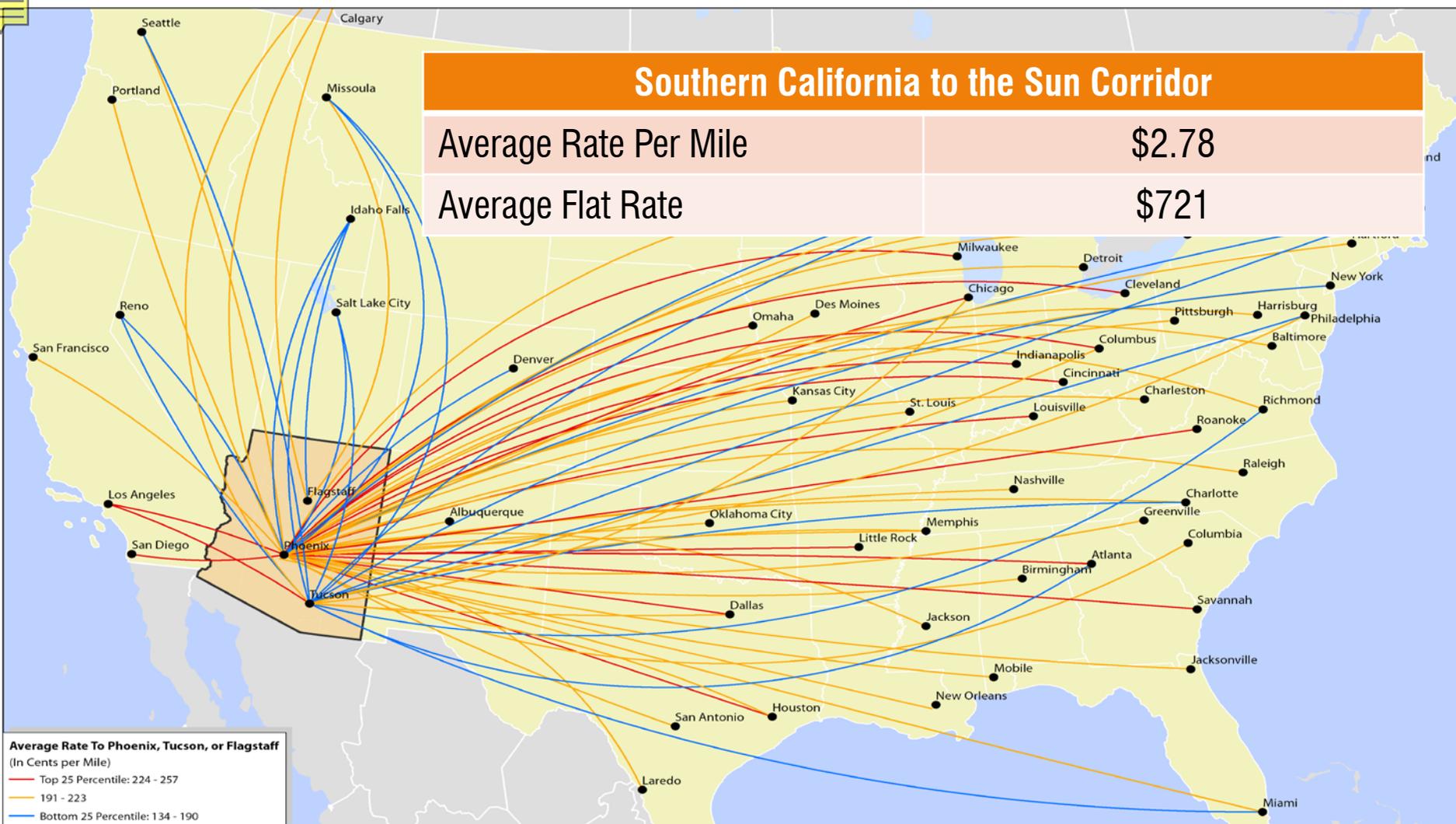
Average Rate To Phoenix, Tucson, or Flagstaff

(In Cents per Mile)

— Top 25 Percentile: 224 - 257

— 191 - 223

— Bottom 25 Percentile: 134 - 190



Southern California to the Sun Corridor

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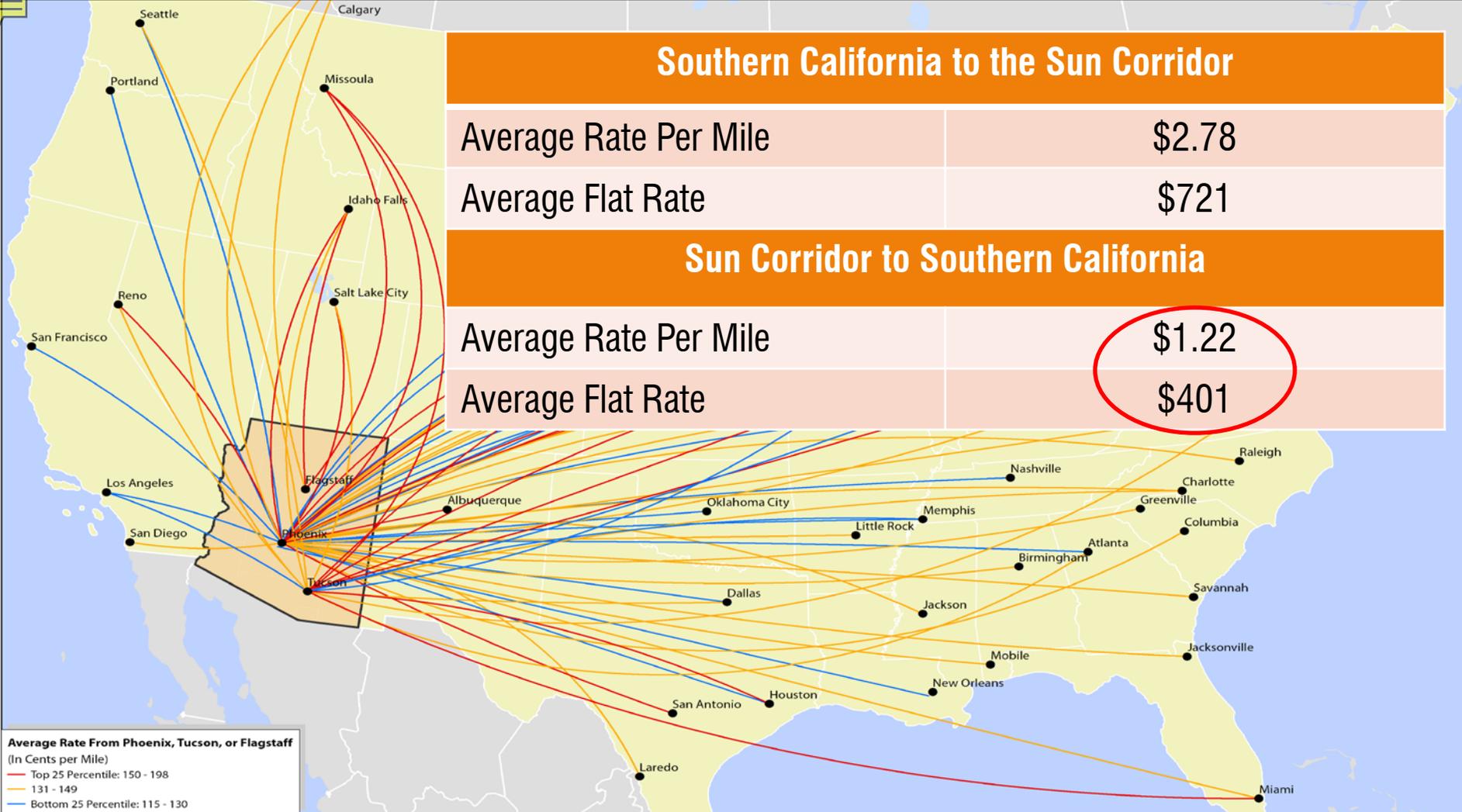
Sun Corridor to Southern California

Average Rate Per Mile

\$1.22

Average Flat Rate

\$401



Commodity Flow Profile

- Supplements understanding of goods movement in the Sun Corridor derived from market research
- Provides a high-level overview of commodity flows that involve the Sun Corridor.
- Indicates whether subsets of current commodity flows may offer economic development opportunities for the Sun Corridor



Commodity Flow Profile

TOP DOMESTIC COMMODITIES MOVED

- Transportation Equipment
- Pharmaceuticals
- **Electronics (Value)**
- Food and Beverage Products (Tons)

CROSS BORDER TRADE

- **Agriculture Products (Value and Tons)**
- Electronics
- Metallic Ores
- Machinery



Commodity Flow Findings

- North-south commodity flows offers greater development potential
 - Automotive supply chain, and transloading, distribution and redirection of consumer products and produce represent opportunities
- Less than 1% of imports of consumer goods passing through AZ ports of entry are destined for region
 - Potential for modifying supply chain and distribution network to bypass CA



Next Steps

- Project Schedule
- Stakeholder Outreach
- Phase 2 and 3
 - Low Level Commodity Flow Forecast
 - Future Infrastructure Needs
 - Funding Requirements and Opportunities



Freight Framework Study

For more information.....

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Border Crossing Issues and Opportunities

US Customs and Border Protection Staffing:

- 250 additional staff needed at Nogales POE's
- 500+ additional staff needed for entire POE System

Commercial Vehicle Wait Times:

- Peak produce season 4 to 8 hours

Rail Operations:

- 2+ hours processing of each train

Funding:

- Lack of dedicated funding for ports of entry

