

FREIGHT TRANSPORTATION FRAMEWORK STUDY

Examining Freight and Multimodal
Opportunities in the Sun Corridor

Regional Council
January 30, 2013

JOINT PLANNING ADVISORY COUNCIL

A Planning Partnership for the Arizona Sun Corridor



Today's Presentation

Overview

Part 1: Framework Findings

Global Supply Chain with the Sun Corridor

Part 2: Sun Corridor Supply Chain

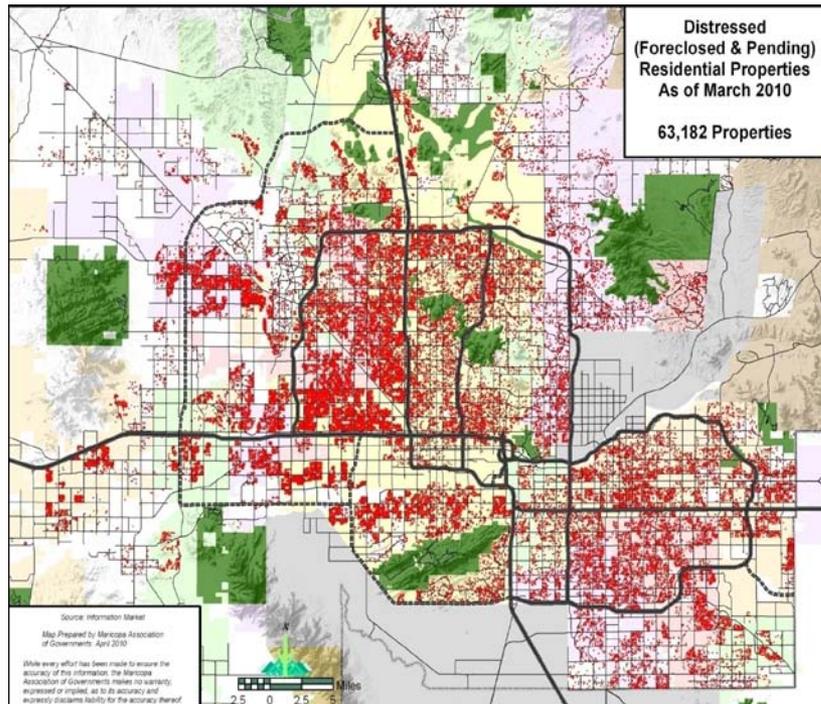
Opportunities

Part 3: Five-Point Plan

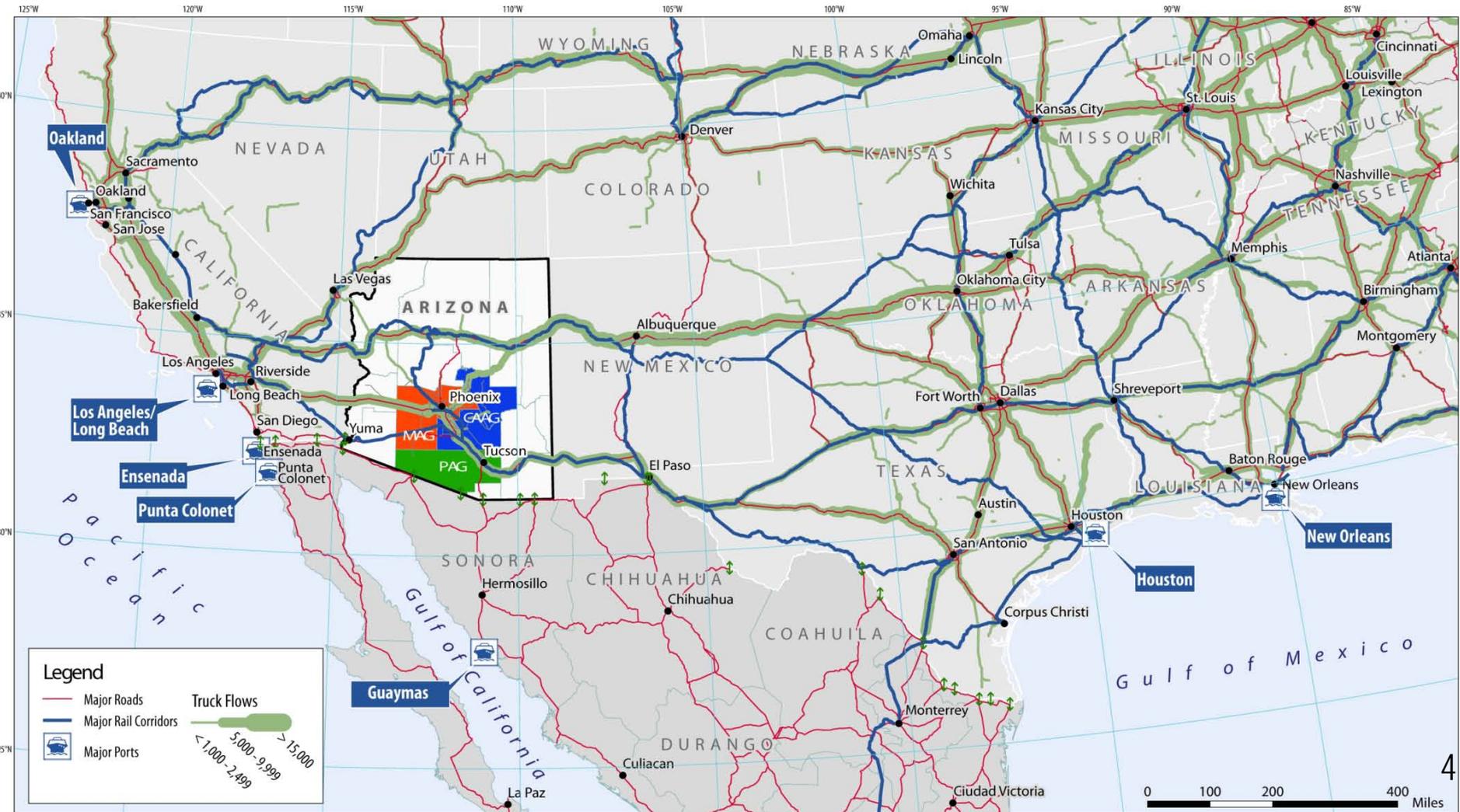
Realizing the Freight Framework

Background

- ❑ Housing Market Collapse
- ❑ Inland Port Opportunities

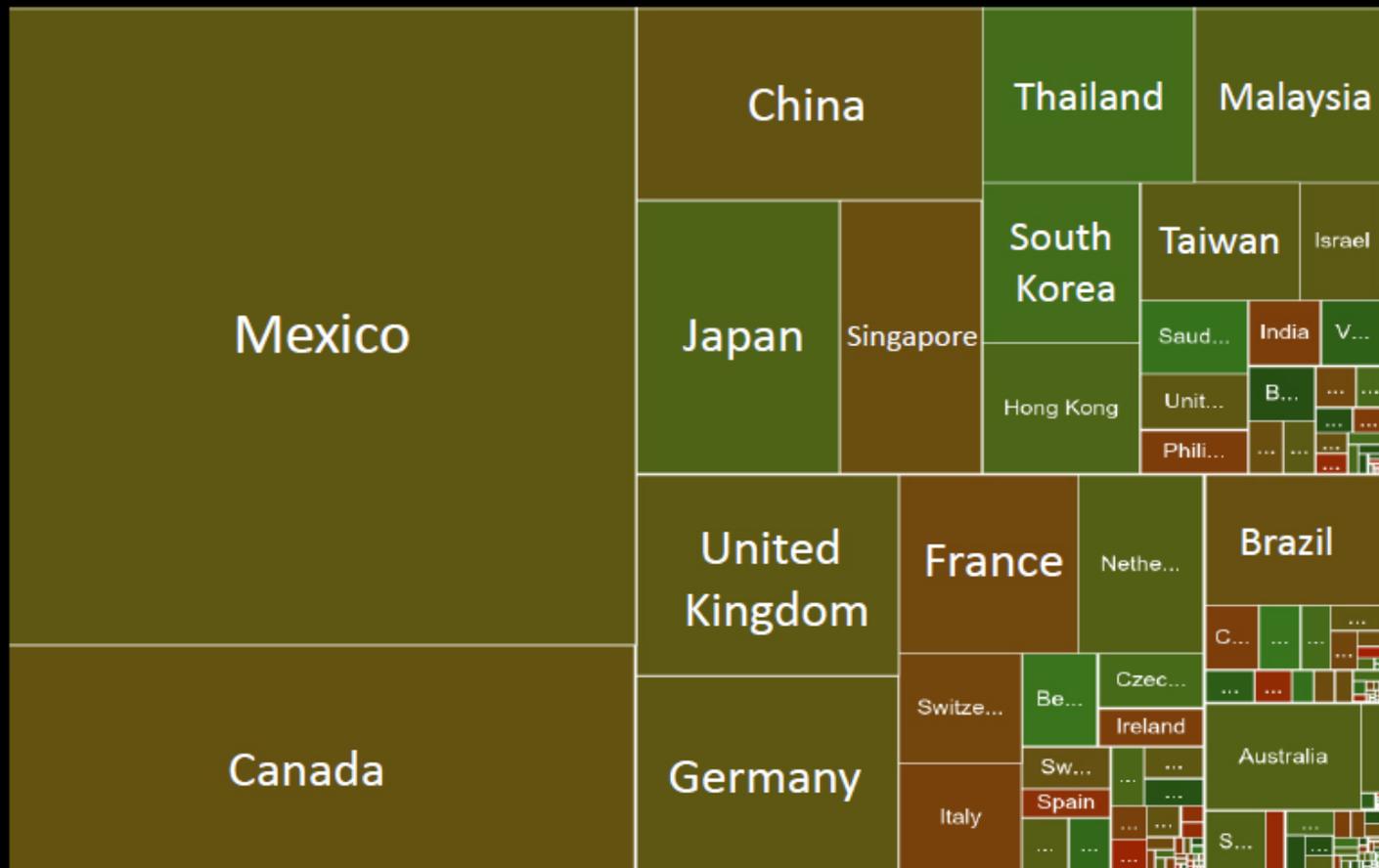


Background



Background

Composition of Arizona Exports



Source: Arizona State University

Color represents percentage change between 2009-11

Made in Mexico

74% of Arizona's trade with Mexico is within the State of Sonora

- Since 2007, Mexican Aerospace exports increased 140%.
- Mexico is the 9th largest supplier of Aerospace products to USA.
- **Sonora is 2nd Largest concentration of Aerospace companies in Mexico.**
- 50% of Aerospace manufacturing occurs in NW Mexico.
- Roughly 190 Aerospace Companies and Suppliers operating in Mexico.



Aerospace Industry within the Mexican States / Metros

Mexico's Aeronautical Industry 2011



Study Goal

Identify and develop
freight related economic
development opportunities



An aerial photograph of a city and industrial area. The city is built on a hillside in the upper left, with a large, flat, brownish area in the middle. In the foreground, there is a large industrial or commercial area with several large buildings, parking lots, and a road. A semi-transparent dark grey box is overlaid on the right side of the image, containing text.

Regional Objectives

Capitalize on **strategic position** relative to goods movement.

Identify **added value** for supply chain.

Diversify **regional economic** base.

Create jobs.

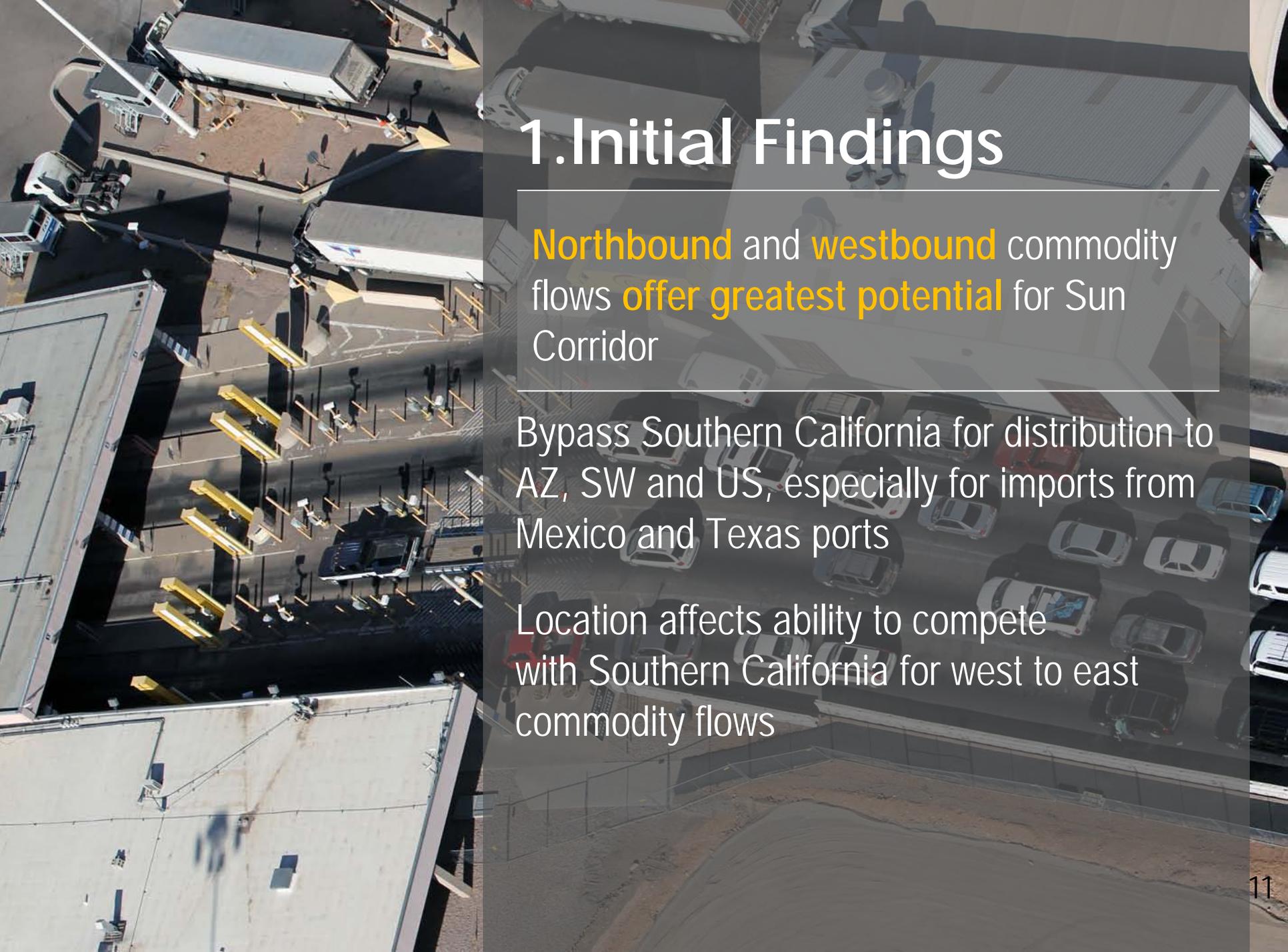


Initial Findings

Sun Corridor needs to better promote advantages of the region to supply chain

Land availability, lower costs, solid workforce and legislation are seen as favorable

There is a general lack of understanding regarding the benefits of the region as part of the supply chain



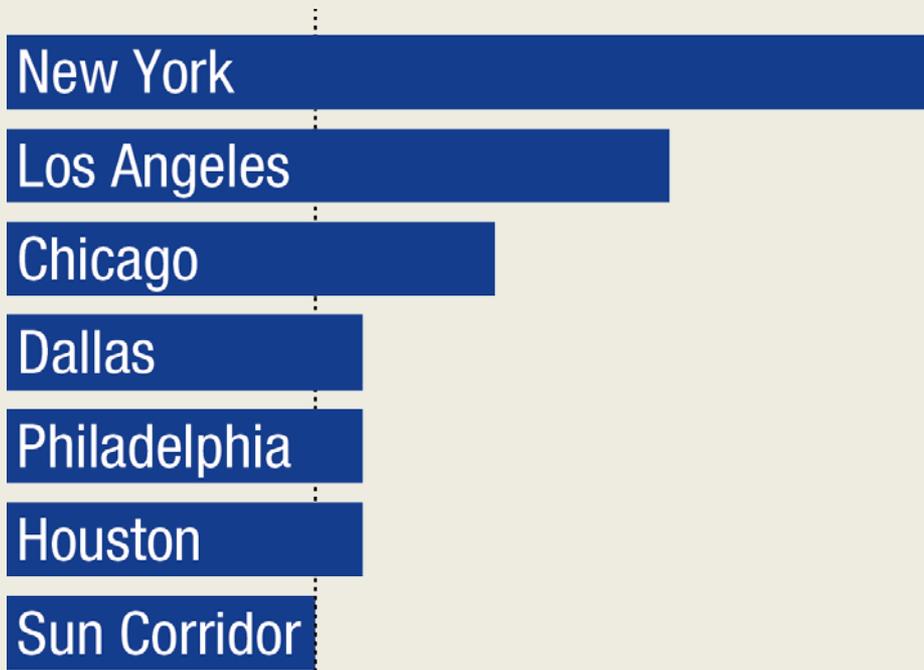
1. Initial Findings

Northbound and **westbound** commodity flows **offer greatest potential** for Sun Corridor

Bypass Southern California for distribution to AZ, SW and US, especially for imports from Mexico and Texas ports

Location affects ability to compete with Southern California for west to east commodity flows

2. Freight Framework 'Big Picture' Anchor Market



5M Population

Metropolitan Statistical Areas

Sun Corridor is **now a**
major **anchor market**

Top 10 population in U.S.
for combined MSAs

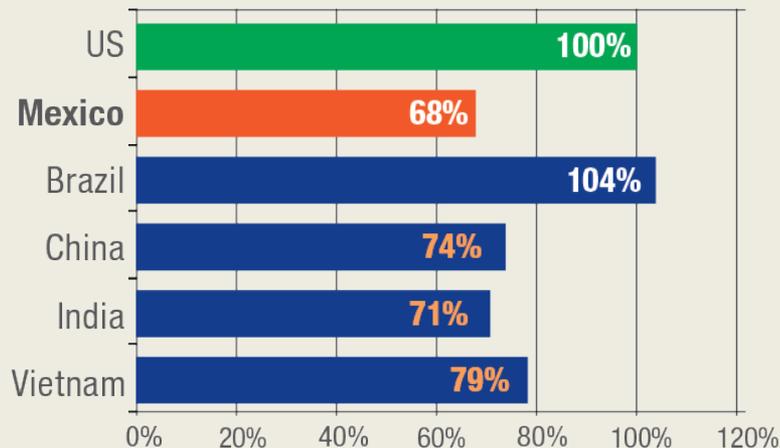
Only top market between
Texas and California

3. Freight Framework 'Big Picture'

Near-Shoring

Mexico is now the **lowest cost producer** for many goods
Many companies are now contemplating **near-shoring** to the Americas

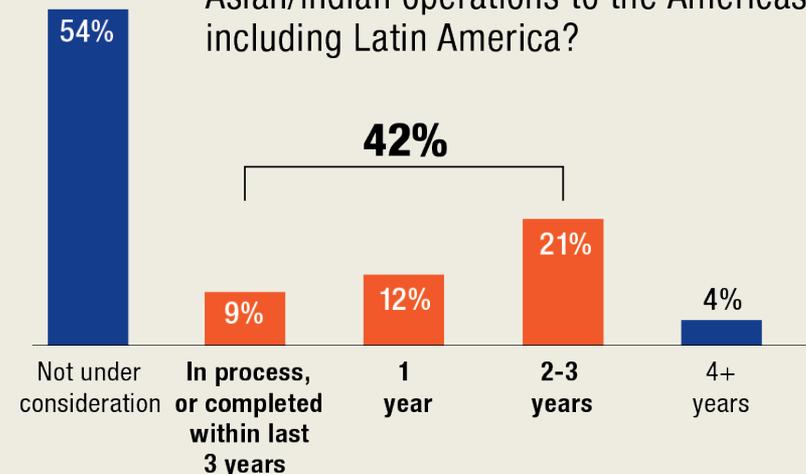
Index of U.S. Landed Costs as % of U.S. Manufacturing Cost by Country for Moderate Labor and Shipping Cost Product



Source: AlixPartners, July 2011

Timelines for Near-Shoring Plans

If near-shoring is a consideration, what is your time horizon for near-shoring Asian/Indian operations to the Americas, including Latin America?



Source: AlixPartners, July 2011

Freight Framework 'Big Picture' Leverage Strategic Location

Sun Corridor is now a logical hub for staging imports and distribution to West markets

Imports from Mexico, Gulf Coast ports and SE U.S. manufacturers

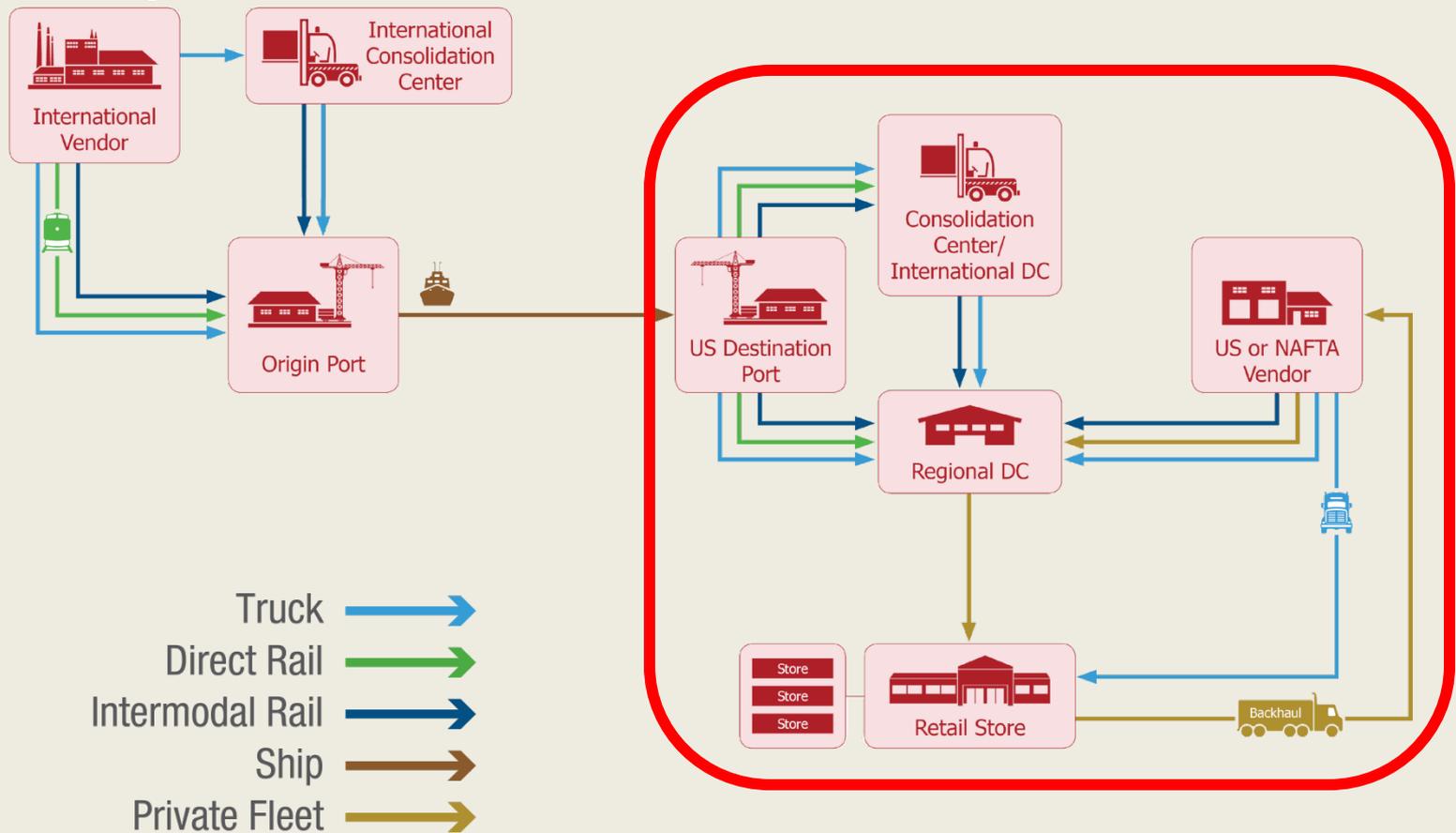
Distribution to local, California, and other West Coast markets

Location and transportation system gives Sun Corridor advantage for East to West commodity flow



Sun Corridor Supply Chain Opportunities

Sun Corridor can leverage core supply chain roles to capture 'Big Picture' opportunities

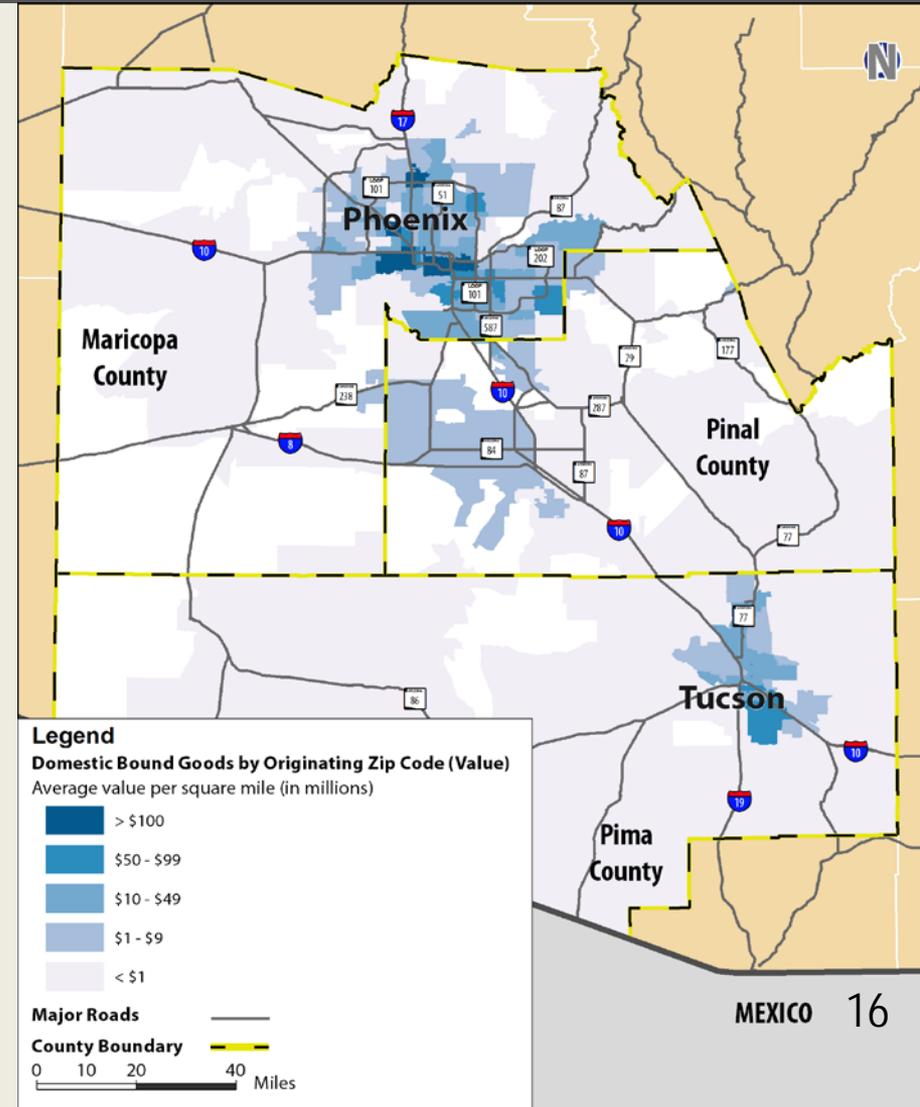


Supply Chain Process Linking to Sun Corridor

Linking supply chain opportunities to Sun Corridor locations

Sun Corridor analysis of commodity flow and major transportation infrastructure

Analysis formed basis for site selection



Freight Focus Area Identified by Study Partners

Focus Area evaluation helped identify freight typologies present in Sun Corridor

Maricopa

Phoenix Mesa Gateway

West Valley

Discovery Triangle

West Phoenix

Grand Avenue

Deer Valley

West Chandler

Surprise

Pinal

Pinal Airpark

La Palma

Eloy (Interstate 8 / Interstate 10)

Maricopa / Casa Grande

Magma Rail Road

Pima

Tucson International Airport

North Tucson

Marana



Four Focus Areas

Impo

Mix

Manu

Forward Distribution Center
WEST VALLEY FOCUS AREA

A study by the JOINT PLANNING ADVISORY COUNCIL
A planning partnership for the Arizona Sun Corridor

MARICOPA ASSOCIATION of GOVERNMENTS

PAG
Pima Association of Governments

CAG
Central Arizona Council of Governments
San Agustin • Rio Pinar

Recommendation #1

Coordinate regionally to position and market the Sun Corridor for freight related economic development

Coordinate freight transportation, land use, economic development and marketing to implement the regional freight framework

Emulate coordination and 'one-stop shop' approach successful in other regions

Build upon existing organizational frameworks

Clarify existing and future roles of related entities

Additional Recommendations

#2 Establish a Sun Corridor Freight Development Zone special land use designation.

#3 Implement strategic transportation improvements to support efficient freight distribution.

#4 Assist municipal governments with related amendments to public policy.

#5 Prepare conceptual business plans for specific freight related opportunities.



Freight Framework Next Steps

Develop topical white papers to further investigate and elaborate on key recommendations

Better understand existing organization structures, framework, opportunities and limitations

Evaluate best practices

Provide **specific recommendations for action**

Regional Workshop/ Retreat

Discuss White Papers
Determine Next Steps

March 6, 2013



Recommendation #2

Establish a Sun Corridor Freight Development Zone special land use designation

Strengthens general plan designations to establish **consistent region-wide protection** for key areas

Land use/zoning overlays can address current limitations and ensure adequate preservation for land in key areas

Incentives and other benefits can be **tied to zones**

Recommendation #3

Implement strategic transportation improvements to support efficient freight distribution

Update and expand regional and statewide plans to enhance infrastructure for freight movements

Define **truck route networks** to be **inclusive**

Prioritize investment on transportation infrastructure that accommodates goods movement, particularly in freight focus areas

Continue to **invest in border** crossing facilities, technology and staffing to maximize efficiency and safety at Arizona crossings



Recommendation #4

Assist municipal governments with related amendments to public policy

Provide **guidance** to municipalities during the development of general plans and capital improvement programs

Preserve areas most appropriate and advantageous for freight uses

Seek strategies to **better integrate** freight related land uses and transportation

Support the **repurposing** of existing unutilized and underutilized buildings to serve supply chain purposes

Recommendation #5

Prepare conceptual business plans for specific freight related opportunities

Identify **specific sites** with Freight Focus Areas, including new development and redevelopment

Identify Focus Area **market opportunities** within the context of the regional framework

Ensure **highest and best use** based on market analysis

Determine **economic gap**, if one exists, to better understand needs for incentives and funding contributions