

UNDERSTANDING THE ROLE OF MEGA-REGIONS IN ECONOMIC DEVELOPMENT AND TRANSPORTATION

Monday, February 27, 1:45 – 3:00 p.m.



NACo LEGISLATIVE CONFERENCE

NACo NATIONAL
ASSOCIATION
of COUNTIES

Washington, D.C. / February 25–March 1, 2017

Understanding the Role of Megaregions in Economic Development and Transportation

National Association of Counties Legislative Conference

February 27, 2017

Washington, DC

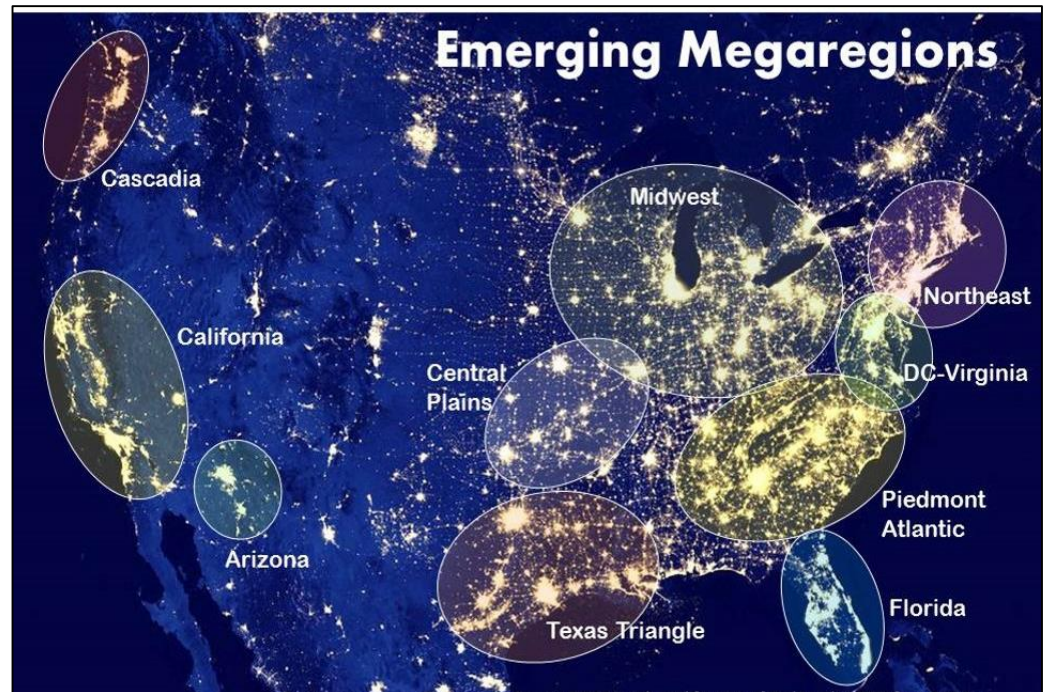
Efficiency through technology and collaboration



U.S. Department of Transportation
Federal Highway Administration

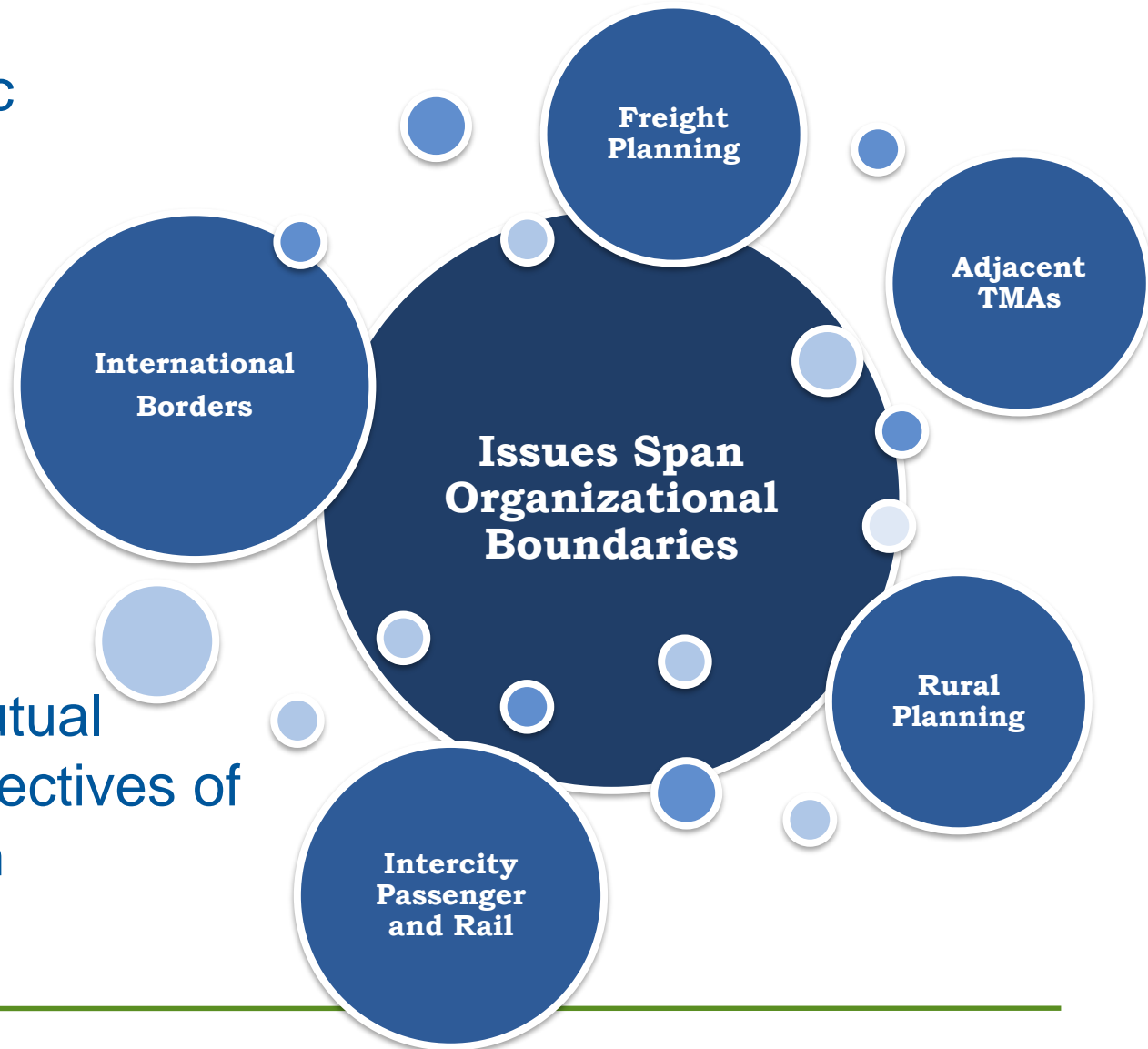
Overview

- Regional Models of Cooperation
- Visualizing Megaregions
- Summaries from Recent Efforts
- Resources



Regional Models of Cooperation

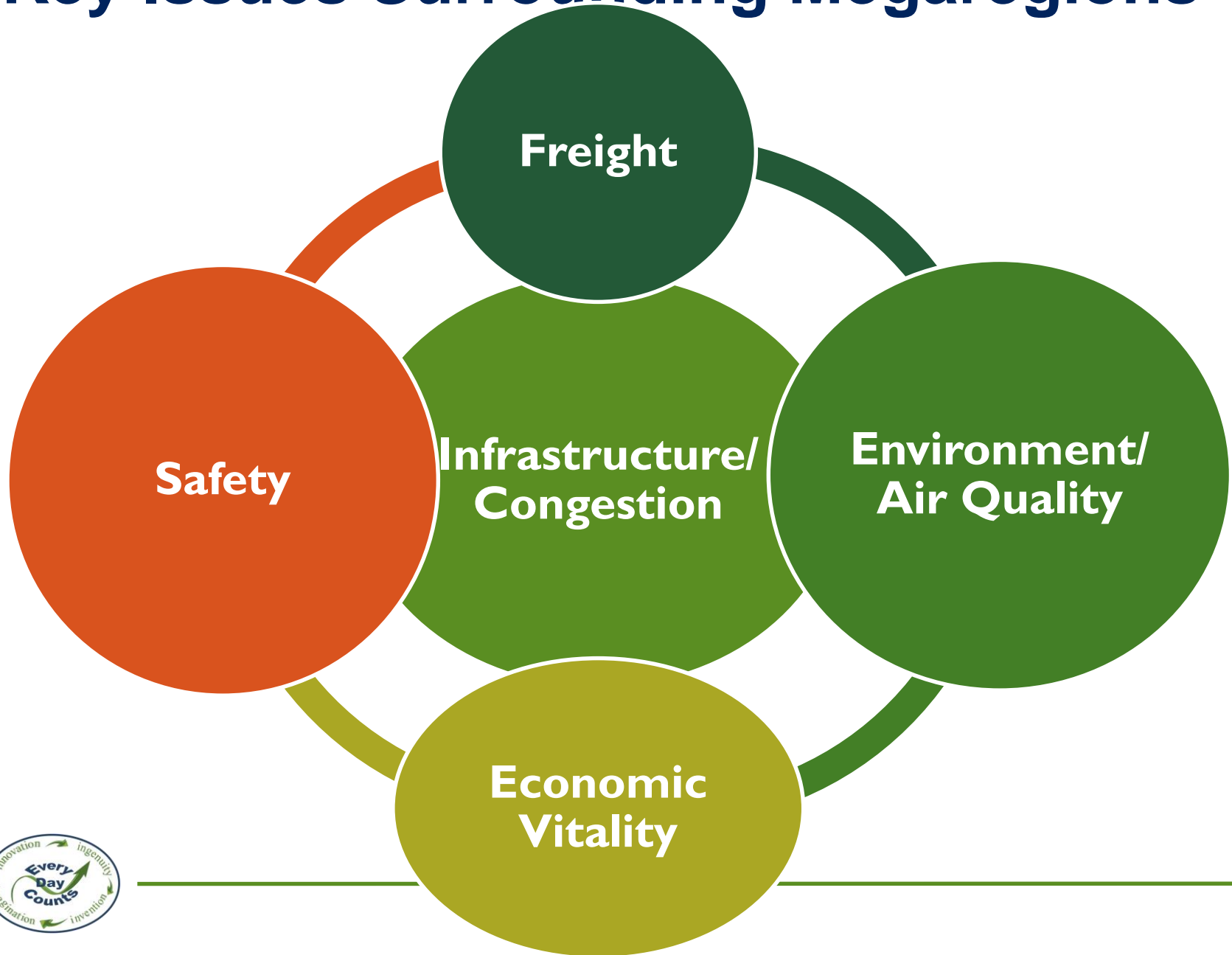
Enhancing Economic
Development and
Transportation...



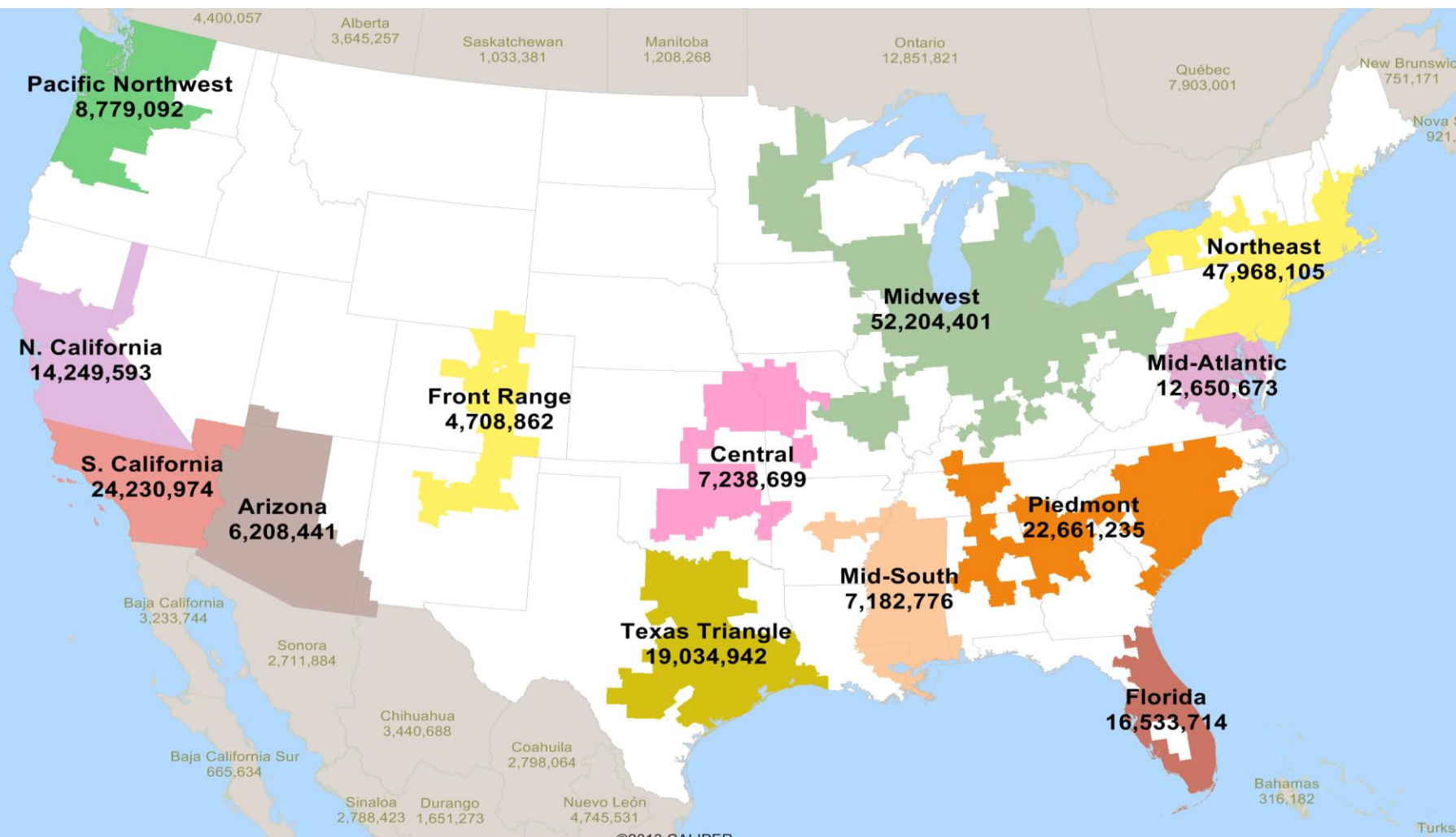
...and recognizing mutual
needs, goals, and objectives of
the geographic region
as a whole...



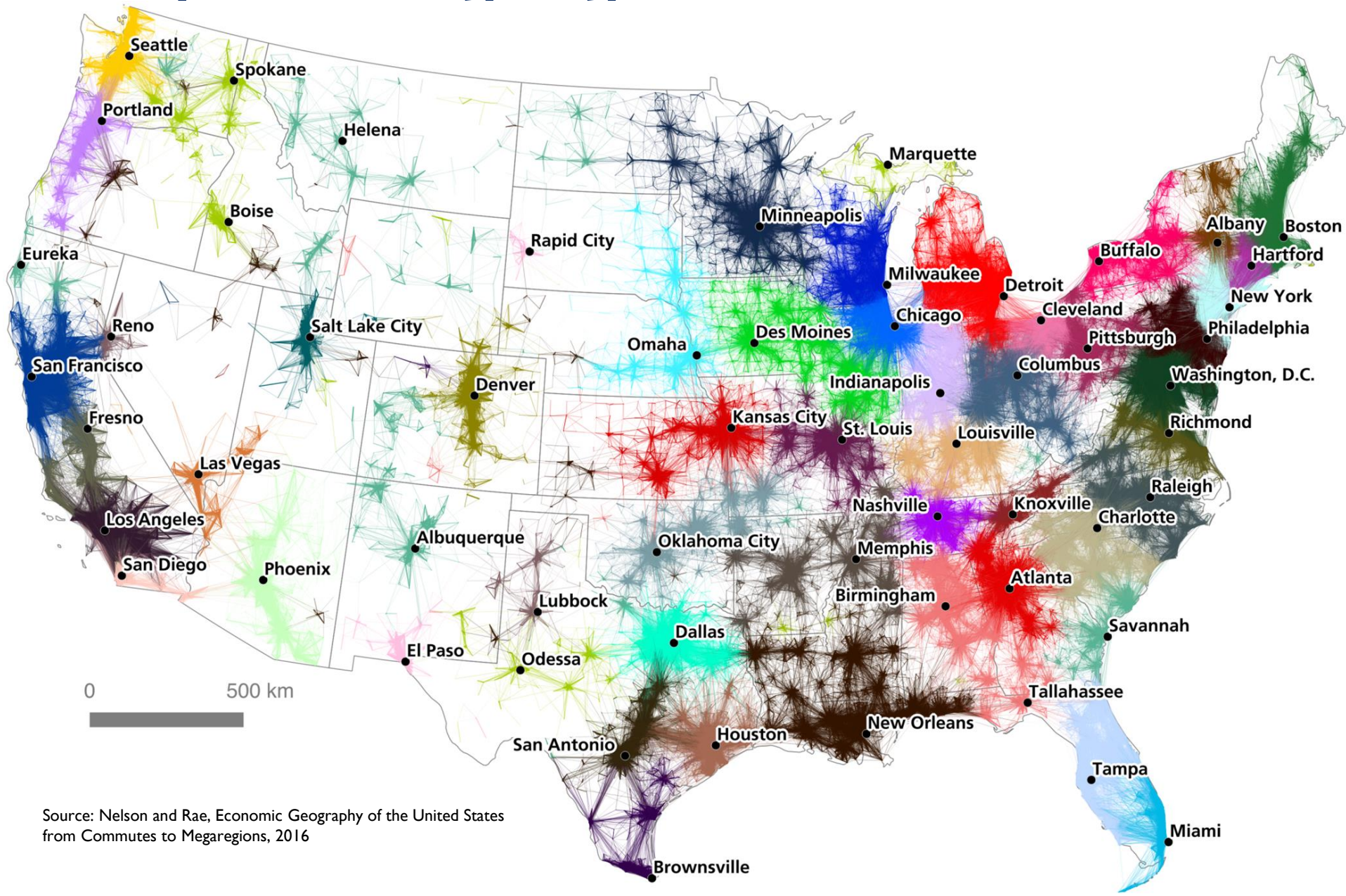
Key Issues Surrounding Megaregions



Megaregion Boundaries by Population



Metropolitan/Megaregional Clusters in the U.S.



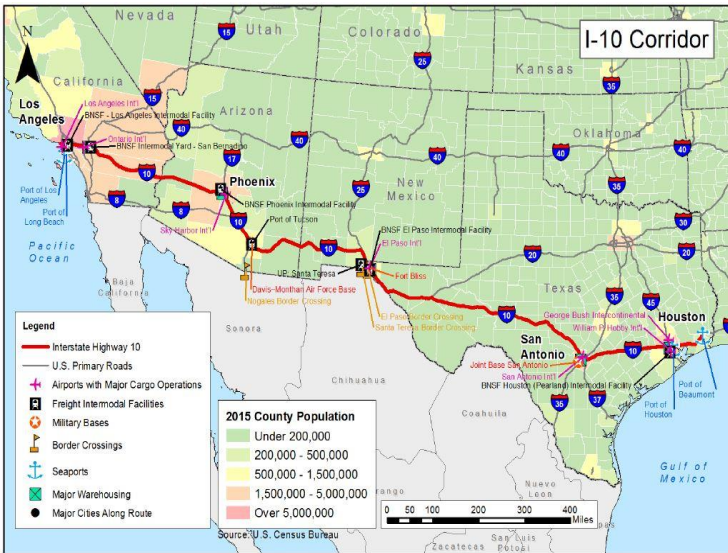
Different Boundaries...Same Concept



Source: Nelson and Rae, Economic Geography of the United States
from Commutes to Megaregions, 2016



I-10 Corridor Coalition Peer Exchange



Key Points

- A shared vision for the I-10 Corridor Coalition by the Chief Executive Officers from each of the four State DOTs
- Signature of the coalition charter by each of the four State DOT CEOs
- Identify elements of a Concept for Operations (ConOps)
- Action plan and next steps to sustain the coalition



Next Steps

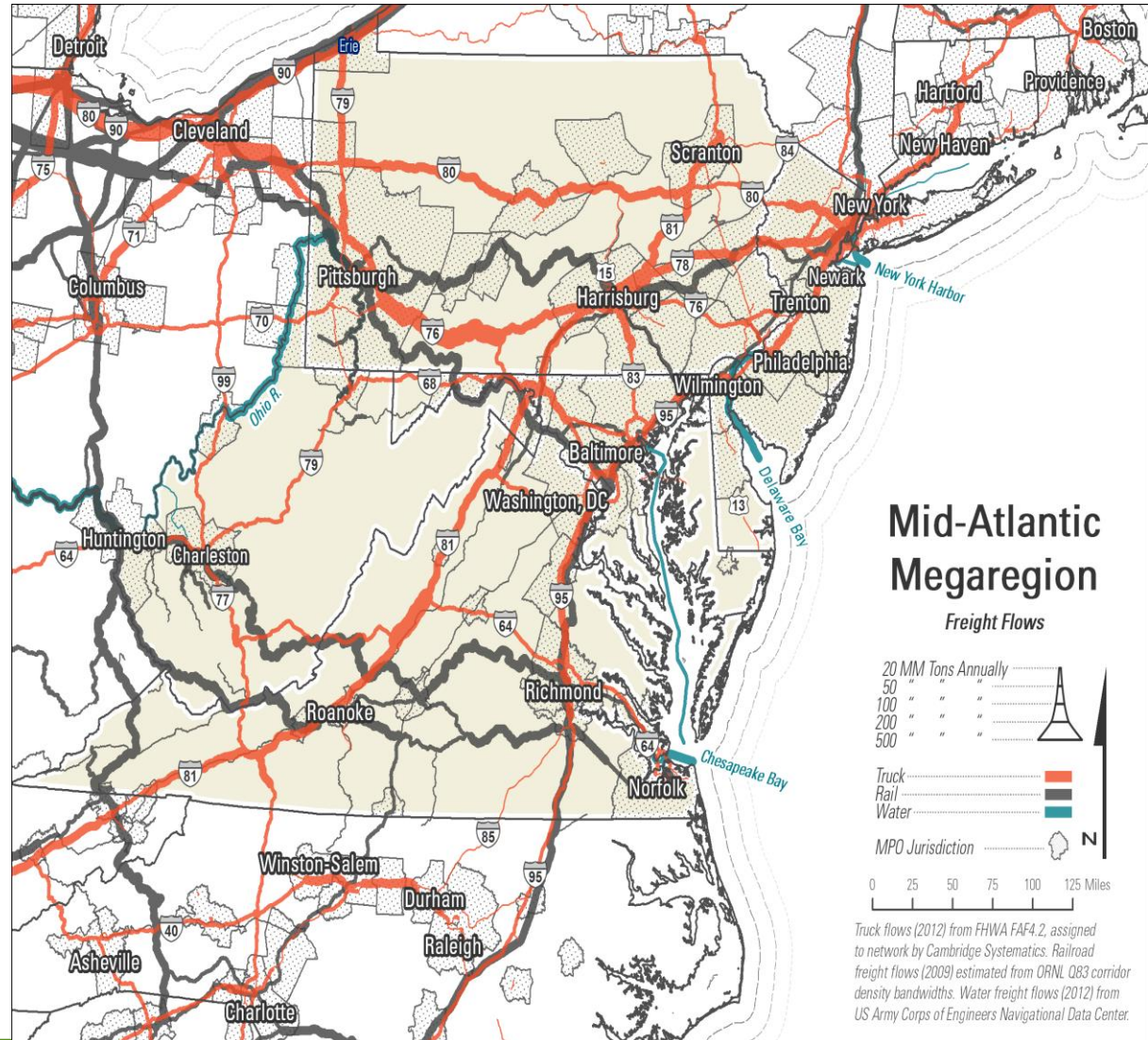
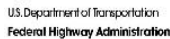
- On Going Dialogue and Coordination
- Follow Up Webinar in Early 2017



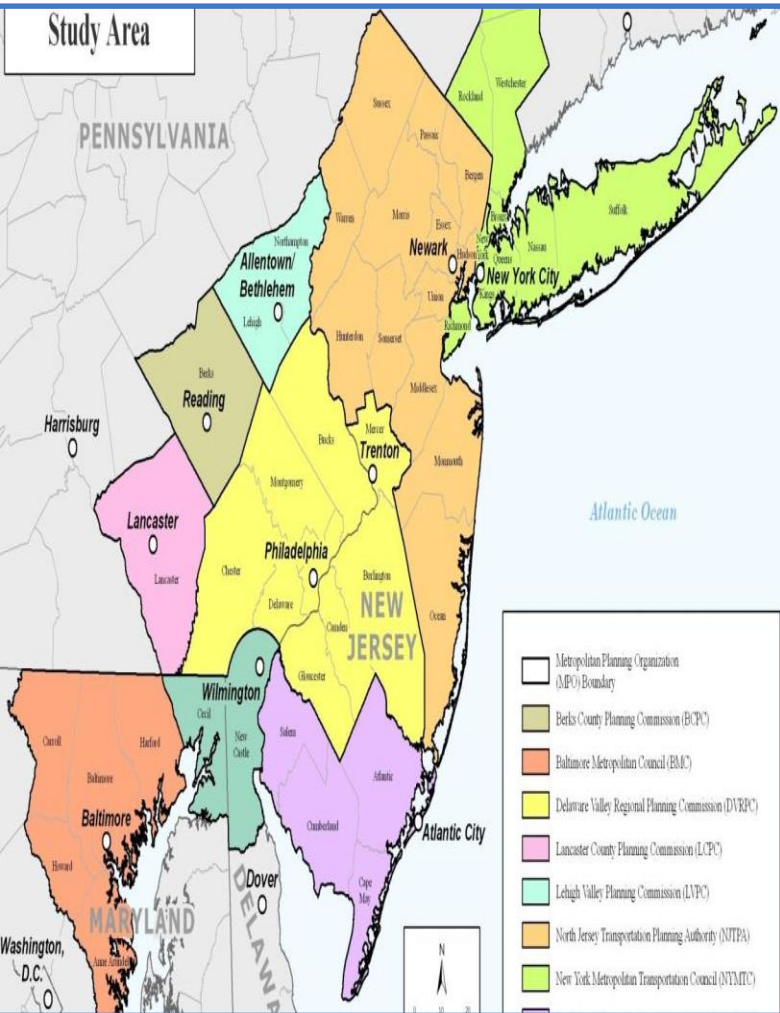
Megaregional Focus: Freight and Connected/Autonomous Vehicles



Mid-Atlantic MEGAREGION



Mid-Atlantic Megaregion: Key Points + Next Steps



Key Points

- Opportunities to Share Data and Resources
 - Truck Parking Access/Information
 - Autonomous Vehicles Technologies
- Freight Shipment Information
 - Goods O/D and Types of Goods Moving
- Impact of Autonomous Trucks on Freight Movement

Next Steps

- Identify Megaregion Champions
- Establish and Maintain Regular Communication Forums
- Coordinate Statewide Freight/Long Range Plans and Electronic Screening of Trucks

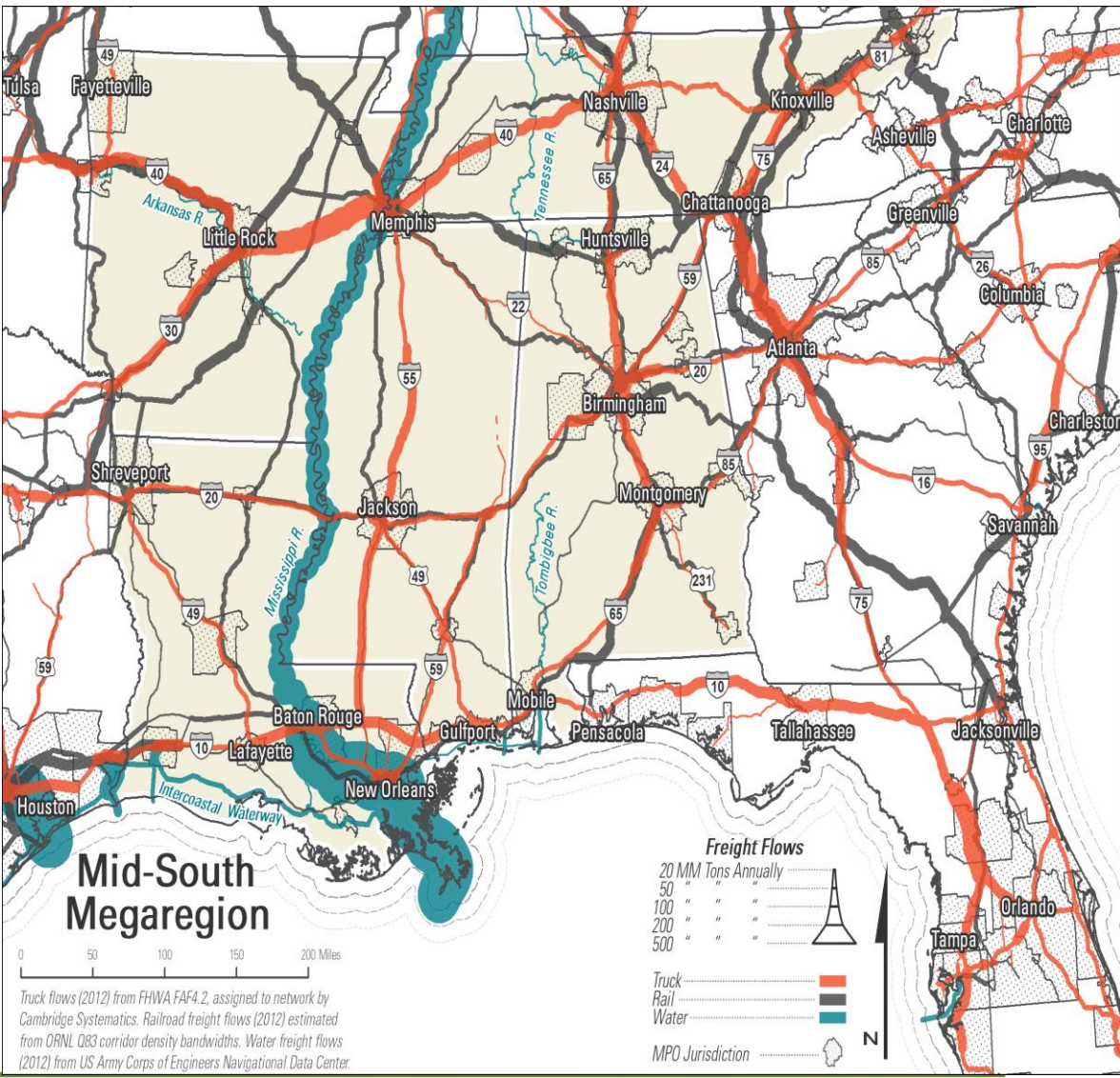


Megaregional Focus: Freight



Mid-South MEGAREGION

 U.S. Department of Transportation
Federal Highway Administration



Mid-South Megaregion: Key Points + Next Steps



Key Points

- Agreement among regions on large Federal Projects to increase Competitiveness
- Improving Collaboration between States and MPOs, and Freight Shipment Information
 - Goods O/D and Types of Goods Moving
- Understand various laws impacting technology

Next Steps

- Identify Megaregion Champions
- Establish/Maintain Regular Communication Forums
- Coordinate Statewide Freight/Long Range Plans and Electronic Screening of Trucks



Source: Georgia Tech CQGRD

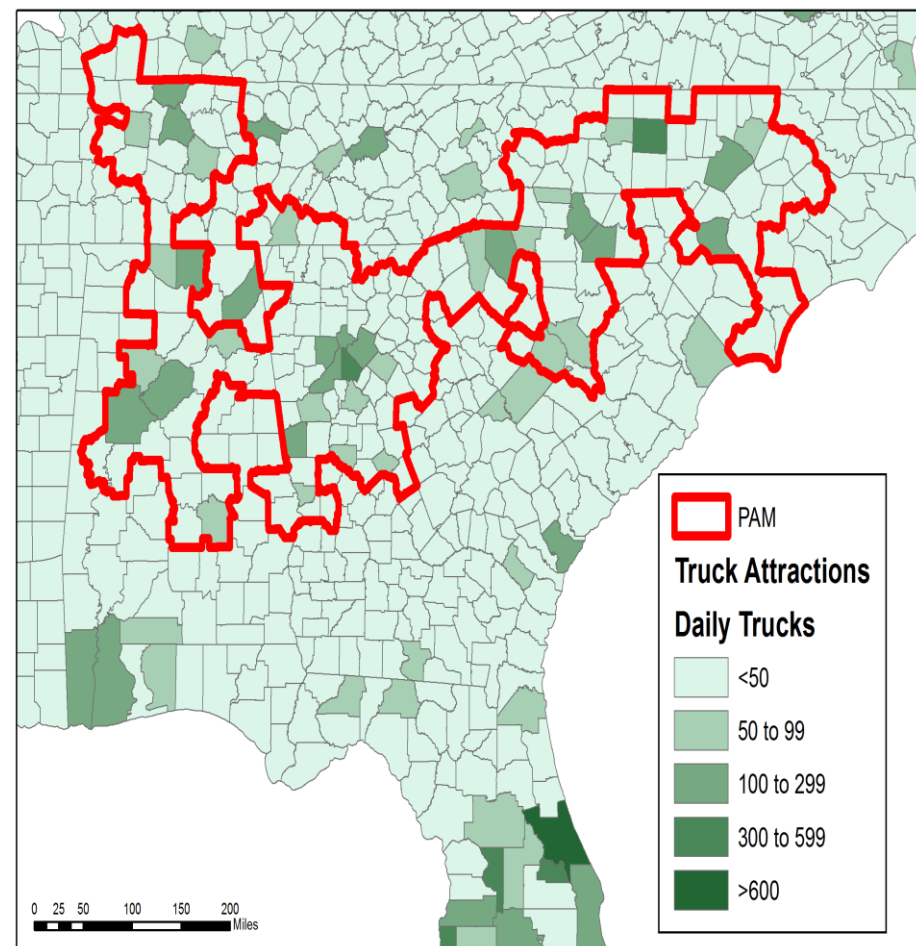
Piedmont Megaregion: Key Points + Next Steps

Key Points

- Understanding Private Sector Needs on Goods Movement and the Impact on Transportation/Economic Development
- Focus on Corridors of Interest
- Implementing steps to Regional Coordination

Next Steps

- Establishing a Piedmont Megaregion Champion
- Using Scenario Planning across the Megaregion
- On-going involvement from the Federal government and continued dialogue



Source: Georgia Tech CQGRD



Planned Megaregions Workshops

- **Coming Soon**
 - **Northeast (PA, NY, NJ, CT, RI, MA, VT, NH, ME)**
 - Early June 2017; Location TBD: Topic TBD
 - **Central Plains/Midwest (IA, KS, MO, NE)**
 - Late June 2017; Kansas City, MO: Topic TBD
 - **Midwest (PA, OH, WV, MI)**
 - Summer 2017: Connected/Autonomous Vehicles
- **Additional Partnership Opportunities**
 - Great Lakes Region/Greater Chicago (Summer 2017)
 - Texas (Late Summer/Early Fall 2017)



Implementing Megaregions



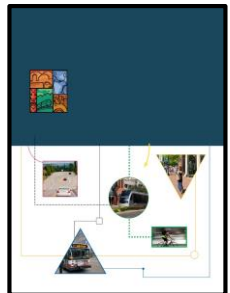
- Working through the Political, Economic, and Technical Issues to Advance Megaregions
- Identifying Champions and Field Leaders
- Filling Critical Research Gaps
 - Documentation and Implementation of Best Practices



Source: Georgia Tech CQGRD

FHWA Resources Available

- Megaregions Case Studies and Homepage
 - www.fhwa.dot.gov/planning/megaregions
- Regional Models of Cooperation Homepage
 - www.fhwa.dot.gov/planning/regional_models/
 - **Regional Models of Cooperation Handbook- NEW**
- Planning Capacity Building website
 - www.planning.dot.gov
- PlanWorks <https://fhwaapps.fhwa.dot.gov/planworks/>
- Briefing Book for Transportation Planning Officials
 - http://www.fhwa.dot.gov/planning/publications/briefing_book/fhwahep15048.pdf



Thank You For Your Attention

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www.fhwa.dot.gov/planning/megaregions





ST LOUIS REGIONAL FREIGHTWAY

Your Gateway to the World

Mary Lamie, Executive Director

St. Louis Regional Freightway

February 27, 2017

BACKGROUND

- Business unit of Bi-State Development
- Launched in September 2014
- Executive Director in July 2015
- Support from both sides of the river



BI-STATE DEVELOPMENT –FIVE BUSINESS ENTERPRISES



BI-STATE DEVELOPMENT
RESEARCH
INSTITUTE



- Established in 1949 through an interstate compact between Missouri & Illinois
- Can cross local, county and state boundaries to plan, construct, maintain, own and operate facilities and infrastructure
- Authorized to issue revenue bonds, collect fees and receive federal, state and private funds
- Long history as a regional development authority

MISSION AND GOALS

Mission To **optimize** the region's freight transportation network through public and private partnerships

Goals To produce results that **strengthen the St. Louis region** by increasing job growth through manufacturing and logistics, and improving the local economy

- **Regional Freight Needs Analysis and Development Plan** - Maximizing funding opportunities through public-private partnerships and improving multimodal capabilities
- **Develop and implement a Marketing Plan** – St. Louis Region is recognized as national and global premier freight hub.

Members include manufacturing, logistics, industrial real estate, workforce development, economic development organizations, academia, all modes of transportation both the IDOT and MoDOT and the East-West Gateway Council of Governments.

- **Needs Analysis and Freight Development Committee**

Terminal Rail Association of St. Louis – President Mike McCarthy

- **Marketing Committee**

America's Central Port - Executive Director Dennis Wilmsmeyer

- **Policy Committee**

*MO Baptist University Dean of Graduate Studies and MO State Highways Commissioner
Dr. Ed Hillhouse*

SUCCESSSES IN THE FIRST YEAR

- Public and private sector partnership to produce the multimodal list of projects. Improving the region's overall competitiveness. Supporting economic and new business development
- Launched Thefreightway.com website as the premier source of information and point of contact regarding regional logistics capabilities and site selection.
- Engaging potential partners throughout the Midwest and into the Gulf of Mexico
- Hosting regional meeting on critical freight and logistics opportunities including the USDOT FHA. He now describes our effort as a model for the country. The USDOT Federal Maritime Administration also reviewed our critical maritime assets.
- Gaining critical support from congressional delegations from IL and MO
- Developed marketing and advocacy plans for the regional effort

ECONOMIC IMPACT – MULTI-MODAL IMPACT - EFFICIENCY

Highest Priority

Merchants Rail Bridge Replacement

- 128-year old rail bridge that spans the Mississippi River
- Connections to six Class I railroads
- Currently carries more than 40 million gross tons annually
- Total estimated project cost = \$200 million
- FASTLane Application – MoDOT and Bi-State Development

Interstate 270 Mississippi River Bridge Replacement

- Replacement of two existing structures
- Construction of new structure to accommodate forecasted vehicle/freight flow
- Total estimated project cost = \$160 - \$175 million

ECONOMIC IMPACT – MULTI-MODAL IMPACT - EFFICIENCY

Highest Priority

Interstate 270 Improvements

- Increase capacity by widening to six lanes from Lilac Ave. to IL-111
- Corridor improvements between Lilac Ave. to Lindbergh Blvd.

North Riverfront Commerce Corridor Improvements

- Improve mobility and circulation issues in 3,000 acre multimodal logistics and business district

Relocate IL Route 3 in St. Clair County, Illinois

- New construction between East St. Louis and Sauget

Falling Springs Diversion Loop/IL Route 3 Railroad Bypass

- Construction of bypass loop from IL Route 3 over A&S railroad in Sauget to eliminate substantial through-traffic delays

FREIGHT DEVELOPMENT COMMITTEE

Primary criteria included the following:

- **Economic Impact** - How closely does the project align to the Freightway's goals? Improving the region's overall competitiveness. Supporting economic and new business development. Create jobs throughout the region.
- **Multimodal Impact** — What is the potential for the project to improve the flexibility, reliability, and connectivity of the region's freight network?
- **Efficiency Impact** — To what extent does the project increase the efficient use of the St. Louis region's freight assets? Increasing the speed of freight, lowering the cost to move freight and improved reliability within the system.

2016 FREIGHT DEVELOPMENT COMMITTEE ACCOMPLISHMENTS

- Project list was presented to the USDOT FHA Administrator Gregory Nadeau and highest priority projects were discussed with the Administrator and his staff
- Freight Development Committee's model continues to be promoted as a model for other region's to follow
- St. Louis Region included with the 24 USDOT Freight Economic Roundtables
- Freight Development Committee was responsible for letters of support for FASTLANE projects submitted by the region.

2016 FREIGHT DEVELOPMENT COMMITTEE ACCOMPLISHMENTS

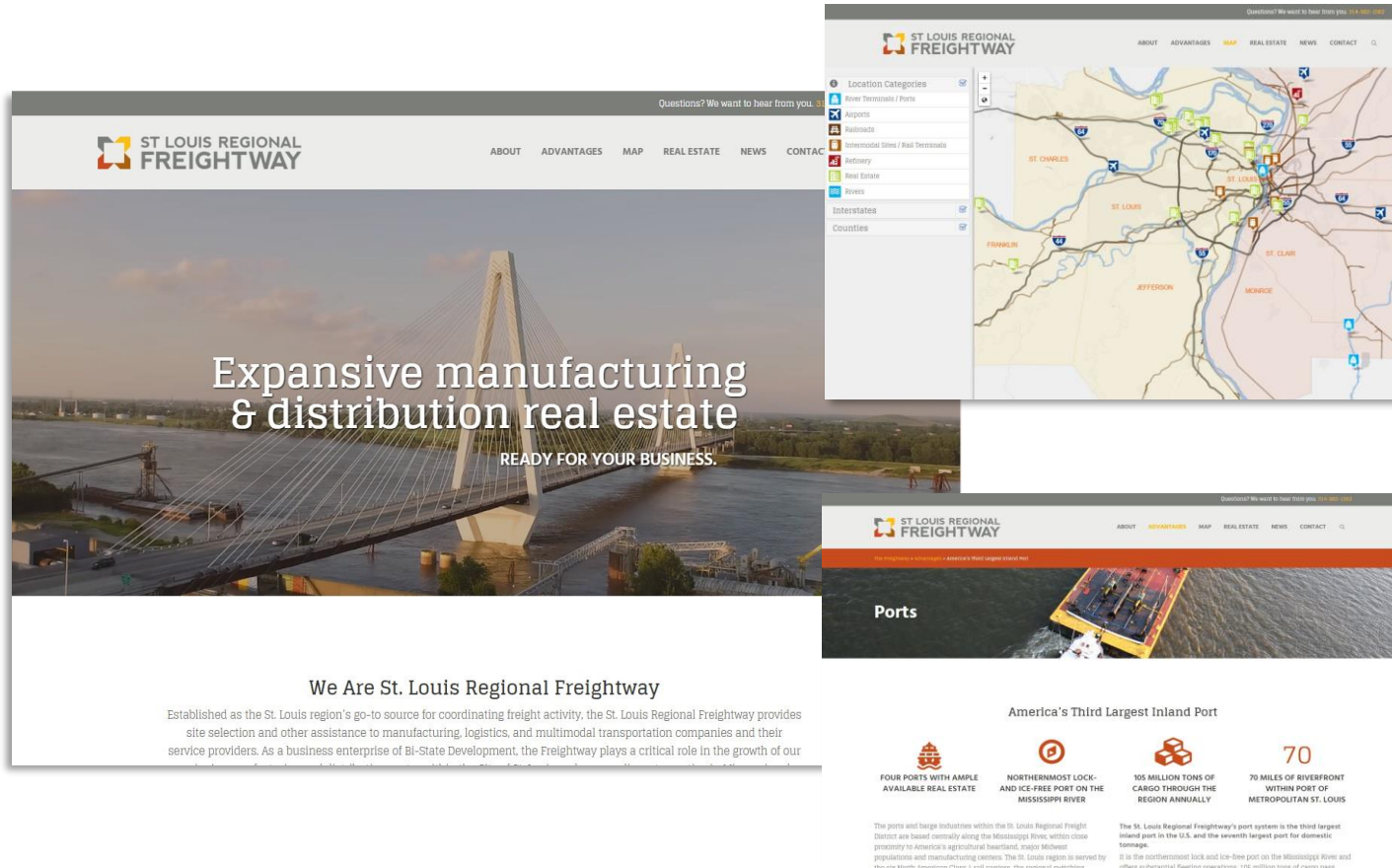
- Freight Development Project List presented, referenced and discussed during critical freight and logistic meeting with key decision makers – IDOT, MoDOT, elected leaders and business leaders
- MoDOT will incorporate MO projects with the MO State Freight Plan
- October 2016 Freight Development Project List was unanimously endorsed by the East-West Gateway Council of Governments

2016 MARKETING OVERVIEW

Developed and implemented a marketing campaign that gains national and global recognition as a premier freight hub.

- Building a brand and identity – Digital engagement campaign launched April 2016
- Becoming recognized as a premier multimodal freight hub – Local newspapers, KTRS six part freight series, national trade magazines
- Building ambassadors who can assist in promoting the region's manufacturing and logistics advantages
- Promoting awareness for freight-related economic growth
- Building partnerships with other regions – Port of New Orleans, USDOT FHA and MARAD, Chicago, KC and Minneapolis.

REGION'S DIGITAL PRESENCE – APRIL 2016

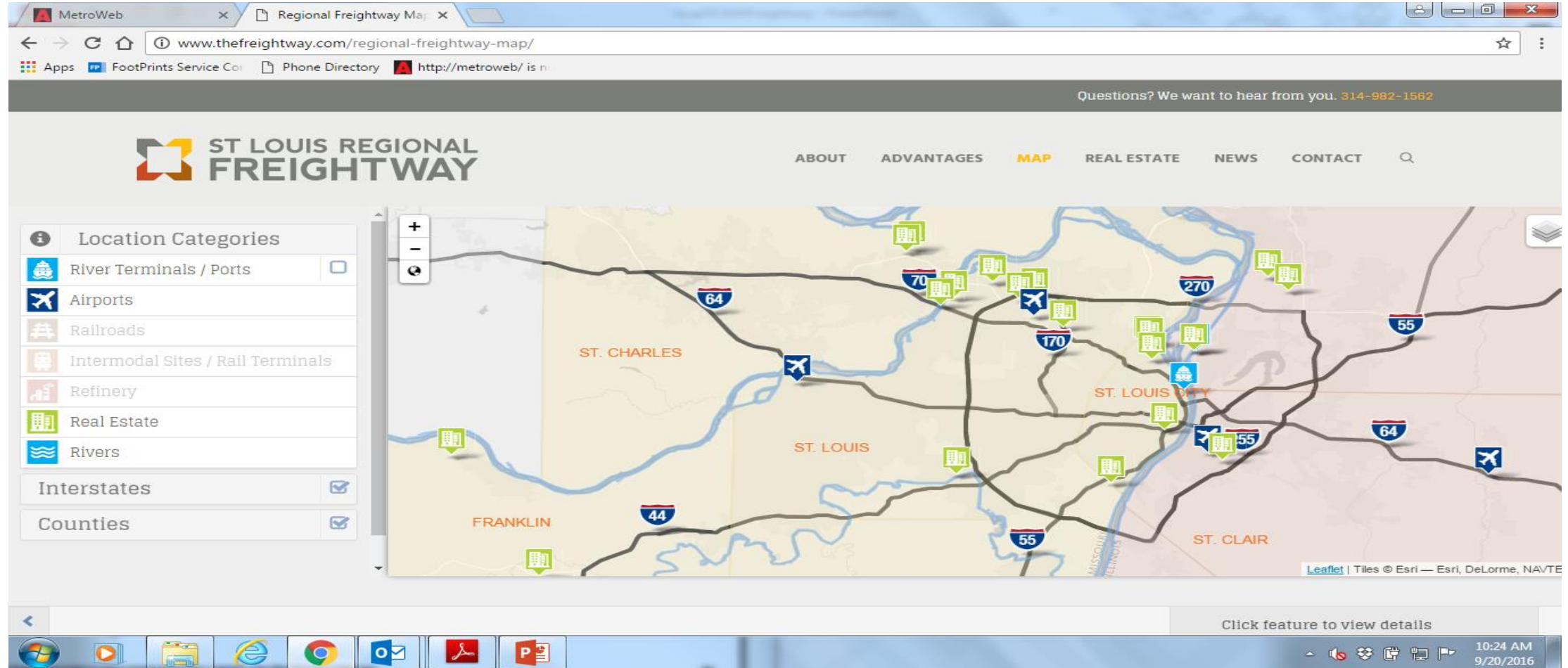


TheFreightway.com is our front door for attracting businesses, investors and real estate speculators to the region

The fact sheet and comprehensive real estate resource are **tools for the entire region**



TOP INDUSTRIAL USER REAL ESTATE SITES



APRIL 2016

April 27th 2016 – Freight Summit

Keynote speaker – Federal Highway Administration Administrator Gregory Nadeau

“I can’t think of any place in the country whose history is more closely linked with trade than St. Louis. That’s what we are talking about – trade. It’s about commerce. It’s about expanding economic opportunity,”

“Regionalism and this kind of smart strategic thinking. Are leveraging maximum benefits for the people we all serve and creates jobs and opportunities.” USDOT FHWA Administrator Gregory Nadeau – 2016 St. Louis Freight Summit.

SEPTEMBER 2016

September 12, 2016 – U.S.DOT Beyond Traffic Roundtable

Federal Highway Administration Administrator Gregory Nadeau

Maritime Administrator Paul Jaenichen

The St. Louis Region is key to nation's freight future. If anyone buys anything in the U.S., the odds are good it traveled through St. Louis. U.S.DOT FHWA Administrator Gregory Nadeau

St. Louis Post-Dispatch Editorial Sept. 18, 2016

MOVING FORWARD – CONTAINER ON BARGE

Expand commerce and trade through containerized cargo growth through intermodal rail and container on barge

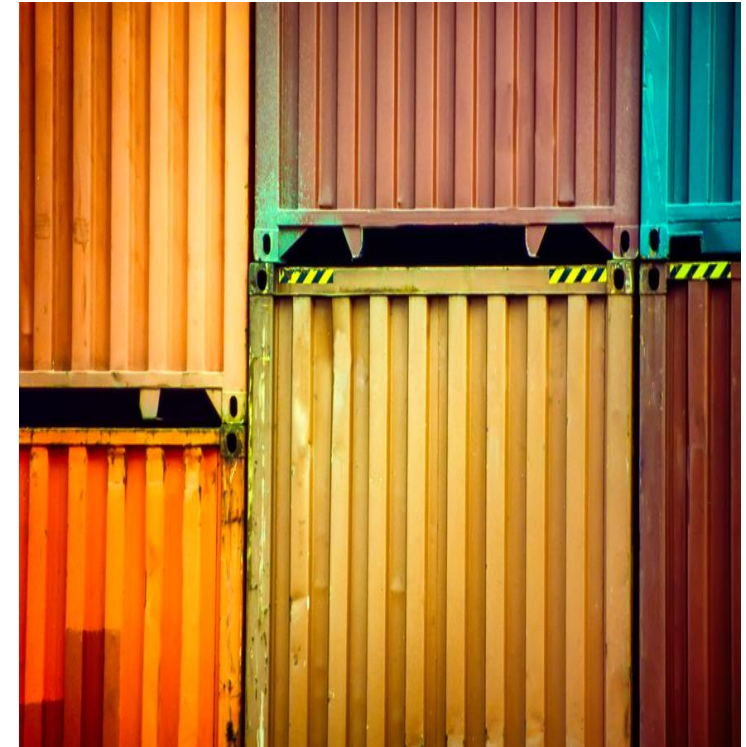
- Demonstrate COB service is feasible between inland cities in the Midwest and the Port of New Orleans via the Mississippi River system
- Promoting an alternative in the event of supply-chain disruption
- St. Louis Region has three ports with COB capacity
- Coordinate with intermodal logistic companies
 - Barge, 3 party logistic providers and rail and truck modes all need to be working together
 - Working with freight forwarders Unigroup, Ingram, SCF Marine, trucking companies and our shortline railroads -TRRA and Class I railroads.
- The St. Louis Region received two 2016 MARAD Grants to help jump start container on barge

CONTAINER ON BARGE IS A HOT TOPIC

Container on Barge is a hot topic at the Oct. 18, 2016

St. Louis meeting of the U.S. Maritime Transportation System National Advisory Committee (MTSNAC) and spotlighted the St. Louis Regional Freightway's public – private partnerships to advance COB operations along the inland waterways

- published by The Waterways Journal Weekly on Oct 2016



2017 REGIONAL MANUFACTURING/LOGISTICS SITE SELECTORS FAMILIARIZATION TOUR

Promote the St. Louis Region as a premier logistics and manufacturing hub with superior infrastructure and integrated supply chain advantages.

Theme/Takeaways: Create a business advantage seen in few peer region.

- Very few communities enjoy the depth of competitive advantages we do across multiple modes of transportation and with central access to markets
- The St. Louis Region offers distinct advantages for an integrated supply chain.
 - Infrastructure
 - Access to all modes of transportation
 - Workforce
- ***The region and its economic development and business groups are working collaboratively to further plan for the future and enhance the area for business.***



ST LOUIS REGIONAL FREIGHTWAY

Your Gateway to the World

McLamie@TheFreightway.com

TheFreightway.com

BI-STATE DEVELOPMENT

1949-1950	<ul style="list-style-type: none">▪ BSD ratified by Congress and signed into law by President Truman
1954	<ul style="list-style-type: none">▪ BSD completed a study of sewer problems that led to the Metropolitan Sewer District▪ BSD Regional coordinator of America's Central Port
1962	<ul style="list-style-type: none">▪ BSD and National Park District sign agreement for revenue bonds to design and build the Gateway Arch tram
1963	<ul style="list-style-type: none">▪ BSD acquired 15 private transit firms and operated the first St. Louis regional transit system
1964	<ul style="list-style-type: none">▪ BSD purchased the bankrupt Downtown St. Louis Airport and is now responsible for nearly \$600 mil in economic benefit and 3rd busiest airport in IL
1965	<ul style="list-style-type: none">▪ BSD primary force in founding East-West Gateway Coordinating Council of Governments
2001	<ul style="list-style-type: none">▪ BSD purchased the Gateway Arch Riverboats



ALAMEDA COUNTY TRANSPORTATION COMMISSION

Goods Movement in the Bay Area and the Megaregion



A presentation to the 2017 NACo Legislative Conference

Supervisor Scott Haggerty, Alameda CTC Commissioner

Arthur L. Dao, Alameda CTC Executive Director

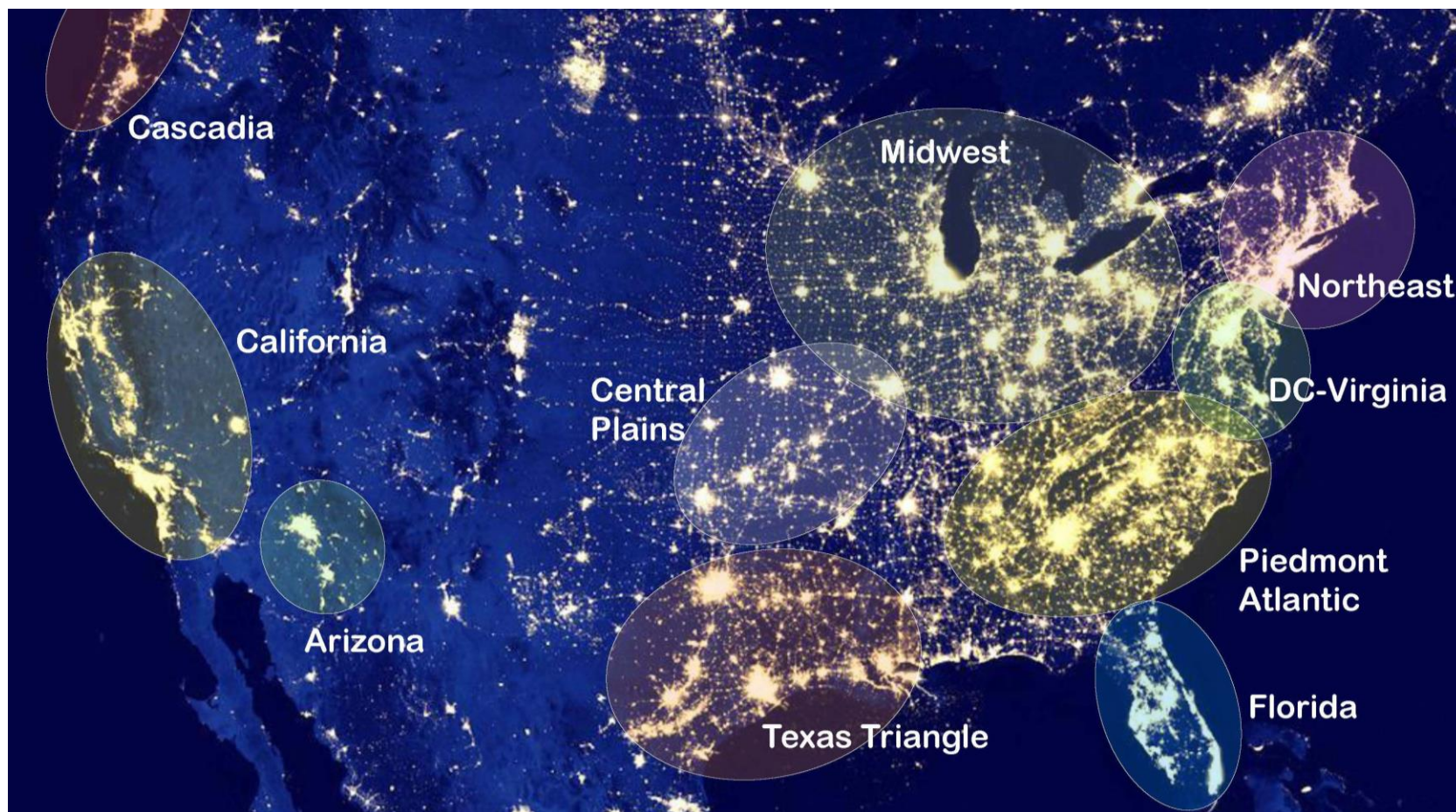
February 2017

Presentation Overview

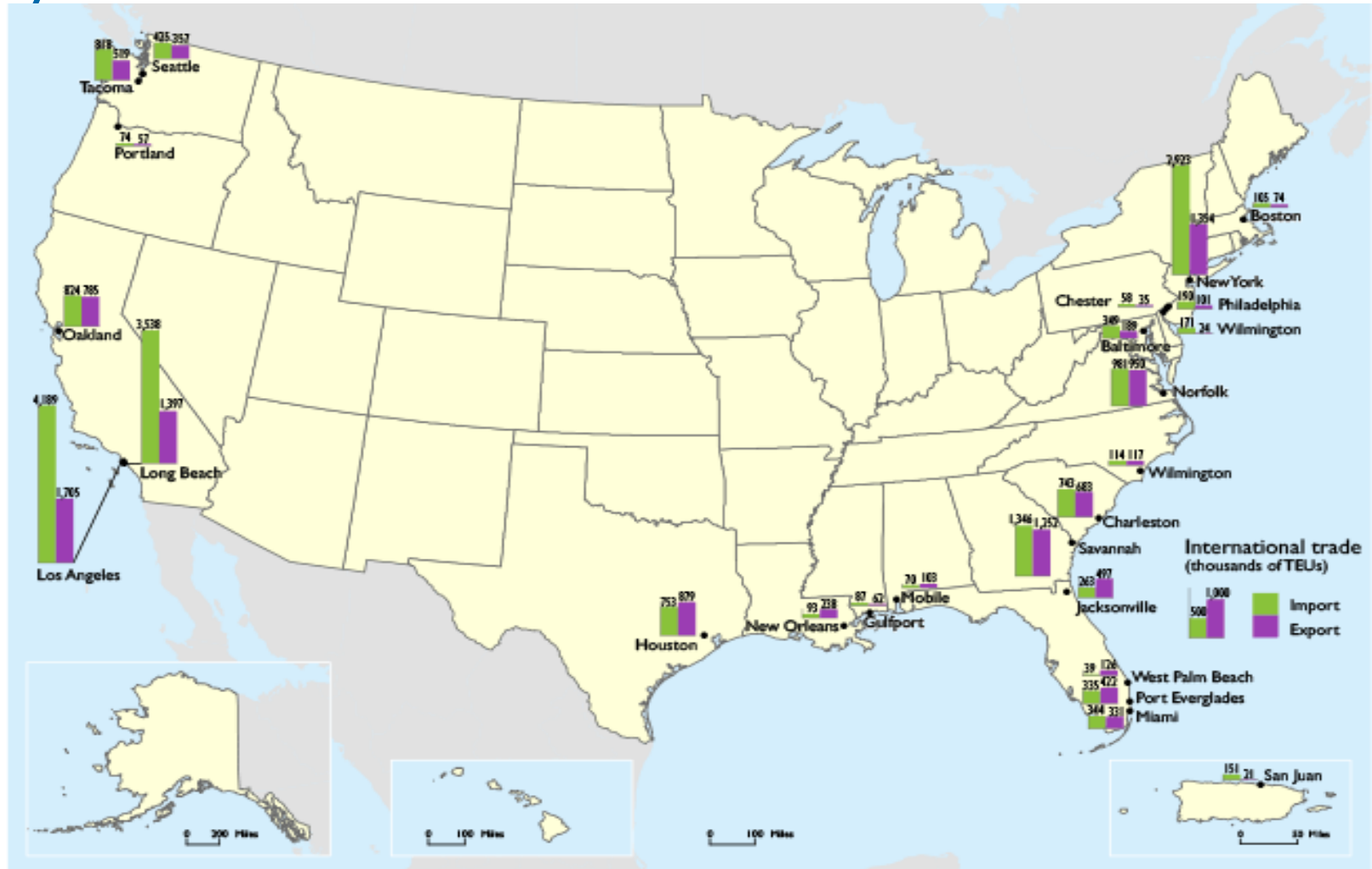
- Northern California Megaregion Goods Movement
- Goods Movement in the Bay Area
- Moving Forward



United States Emerging Megaregions



Major U.S. Ports Serving Megaregions by Volume



Source: U.S. DOT, Maritime Administration, U.S. Waterborne Container Trade by U.S. Custom Ports, available at www.marad.dot.gov/resources/data-statistics/ as of June 2015.

California and Goods Movement

- California's population: 39.25 million
- 6th largest world economy
- 3 major West Coast ports:
 - Port of Los Angeles
 - Port of Long Beach
 - Port of Oakland
 - Serves Northern California Megaregion
- Extensive National Primary Highway Freight System
- Class 1 Rail operators



Megaregional Challenges



- Housing, land use and jobs
 - Job growth concentrated in Bay Area
 - Housing affordability issues cause an inland population influx
- Transportation
 - Commuters crossing regional boundaries up by 78%
 - Labor market interconnectedness results in increased congestion on megaregional roadways
- Goods movement
 - Passenger rail and freight rail occupy the same tracks
 - Major truck traffic on same roads as commuter traffic

2016 Megaregional Study

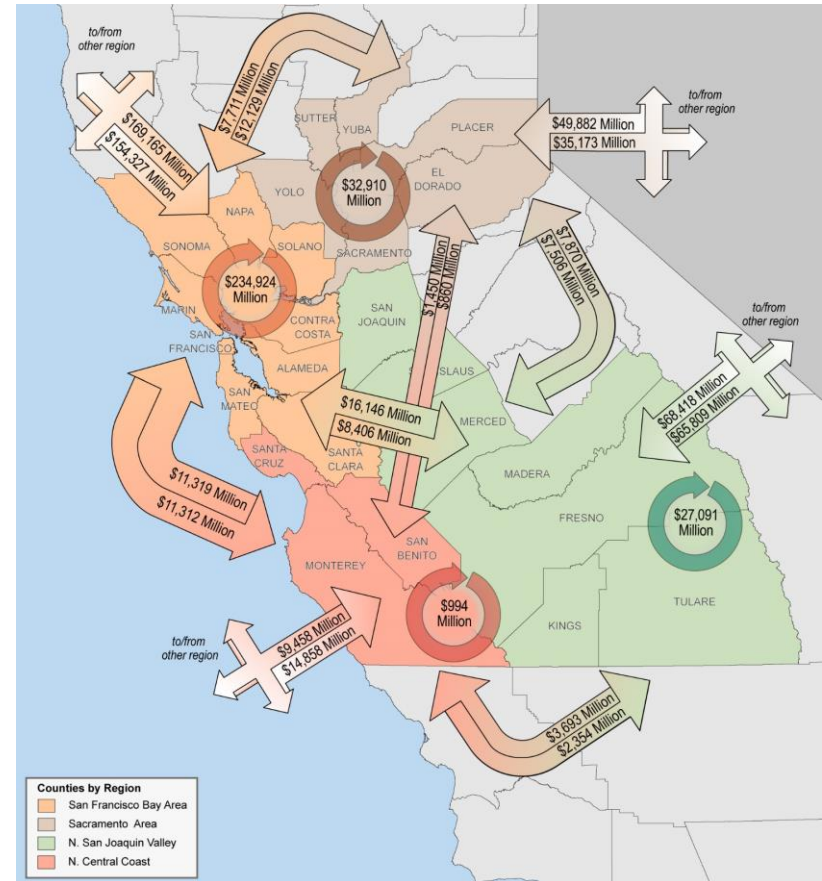
NORTHERN CALIFORNIA MEGAREGION

- Initiated from Tri-Valley Rising Study
 - 21 counties in the Northern California Megaregion
 - Bay Area
 - Sacramento
 - N. San Joaquin Valley
 - Monterey Bay Area
 - 12.2 million population representing 31.5% of California's total population
 - Three of the fastest-growing counties in the state



Goods Movement Impact in the Northern California Megaregion

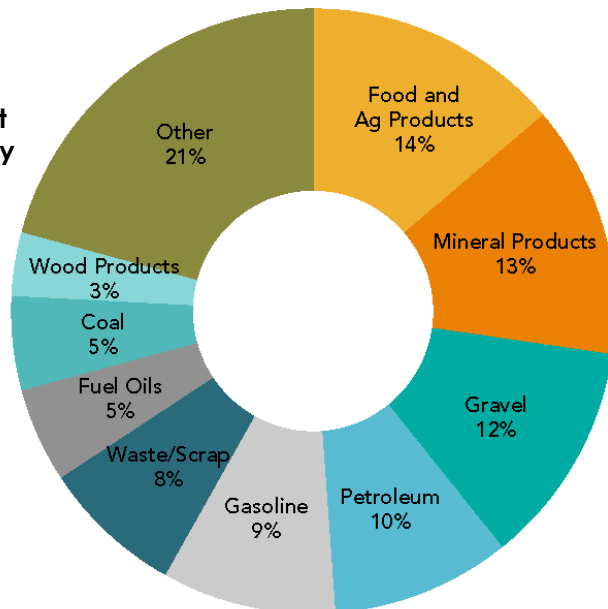
- Nearly \$1 trillion in freight flows moving to, from, within and through the megaregion
- Expected to grow to \$2.6 trillion by 2040
- Roughly 40% moves entirely within the megaregion
- Each sub region has distinct characteristics and comparative advantages



How Megaregional Freight Flows Are Transported

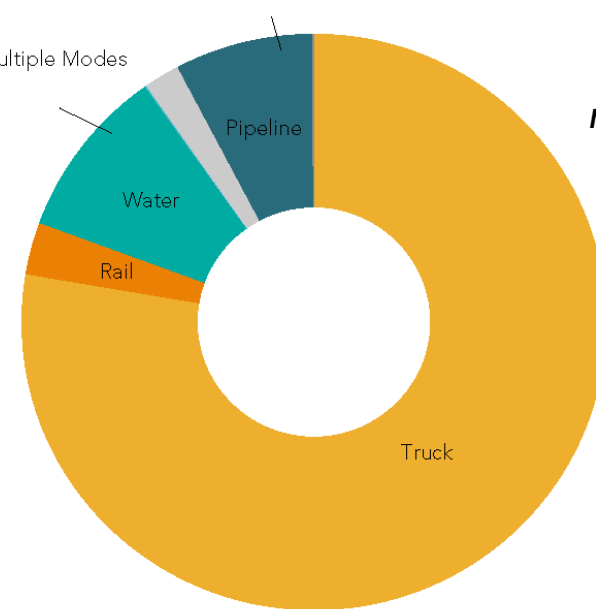
- Megaregional traffic impacted by congestion
 - Trucks operating at peak commute hours
- Increases in rail use are focal point of goods movement infrastructure changes
 - Bay Area and Port of Oakland efforts are driving change

Megaregion Freight Flows by Commodity
2015 Estimates
Based on Weight



Multiple Modes

Megaregion Freight Flows by Mode
2015 Estimates
Based on Weight



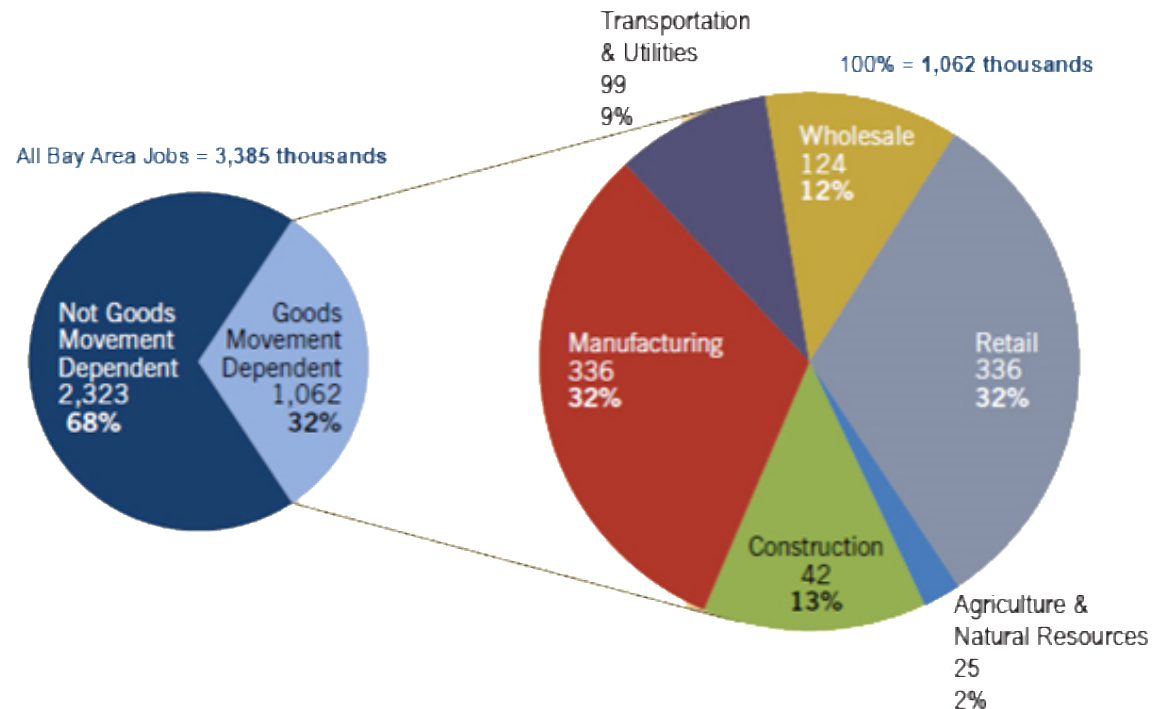
Megaregional Study Findings

- Increase economic prosperity
 - Expand economic development efforts across the megaregion
 - Link higher education and national laboratories across the megaregion
- Improve connectivity
 - Increase opportunities for rail passenger services
 - Increase statewide stakeholder engagement across the megaregion for infrastructure funding
 - Expand housing by streamlining development
- Restructure goods movement
 - Create structure for passenger and freight rail to work together
 - Support investments to limit environmental impacts
 - Coordinate advocacy for goods movement funding

Goods Movement and the Bay Area Economy

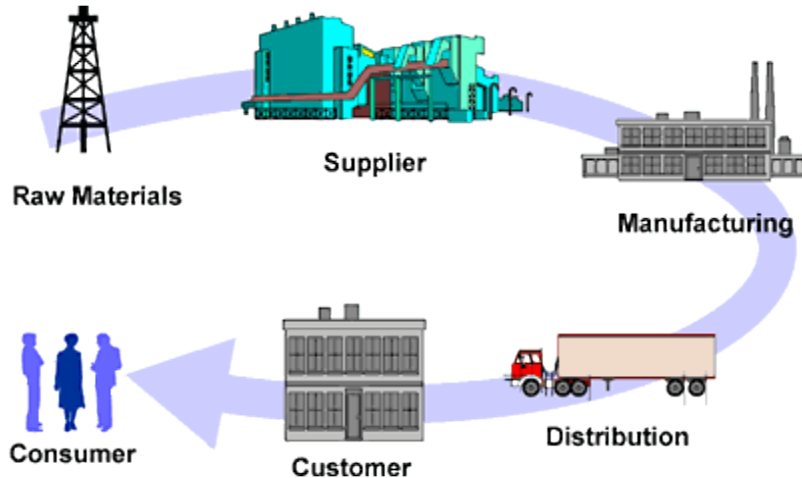
- Goods movement-dependent industries account for:
 - 1/3 of all regional jobs
 - 1/2 of regional output
- Middle-wage jobs with low barriers to entry

Employment in Goods Movement-Dependent Industries in the Bay Area



Goods Movement in the Bay Area

- 3rd largest container port on the West Coast; two major cargo airports, four other seaports
- Roughly 1/3 of the region's jobs are in goods movement-dependent industries
- Two Class I railroads, six National Primary Freight Network routes
- Critical West Coast gateway, providing access to world markets for high-tech manufacturing, high-value agriculture and more



- Supports larger Northern California megaregion
- More than \$953 billion in freight flows in Northern California; anticipated 168% growth to \$2.6 trillion in value by 2040¹
- Bay Area provides only access to world markets for some MPOs/RTPAs

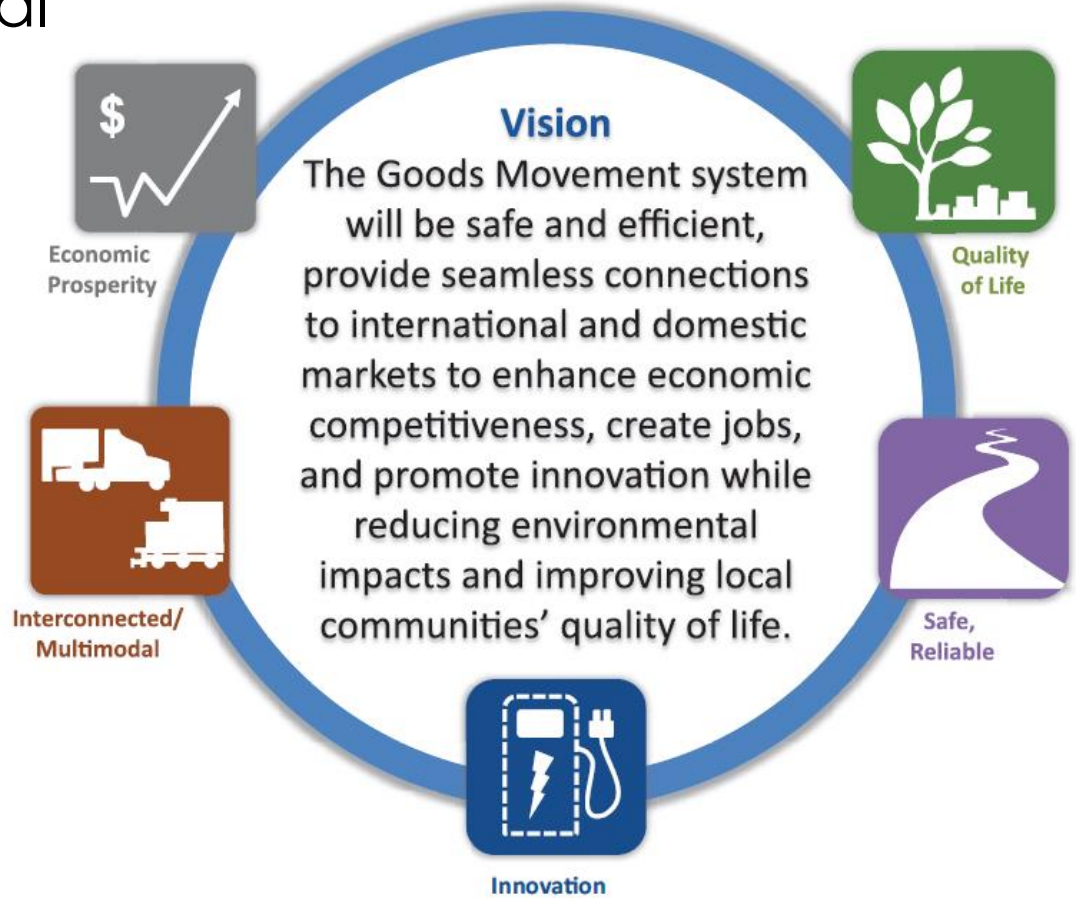
Alameda County: Hub of Bay Area Goods Movement

- 21% of Bay Area's population;
33% of employment in freight
transportation and warehousing
- Critical economic and job
diversity in high cost-of-
living region
- Most of region's critical goods
movement infrastructure is in
Alameda County
- Dedicated self-help funds
for freight



Goods Movement Plans | BAY AREA AND COUNTY PLAN OVERVIEW

- Coordinated regional and county goods movement plans
- Performance-based technical analysis
- Key projects and programs to improve freight efficiencies



Bay Area and County Goods Movement Plans

THREE OPPORTUNITY CATEGORIES

Sustainable Global Competitiveness

- Port of Oakland warehousing, rail terminal capacity and internal circulation improvements
- Regional rail access capacity and grade-crossing improvements
- Emissions reduction, community benefit, workforce development programs

Smart Operations and Deliveries

- Port night/weekend gates and downtown off-peak delivery programs
- Port truck appointment system
- ITS and Integrated Corridor Mobility projects
- Zero-emission truck demonstrations

Modernized Infrastructure

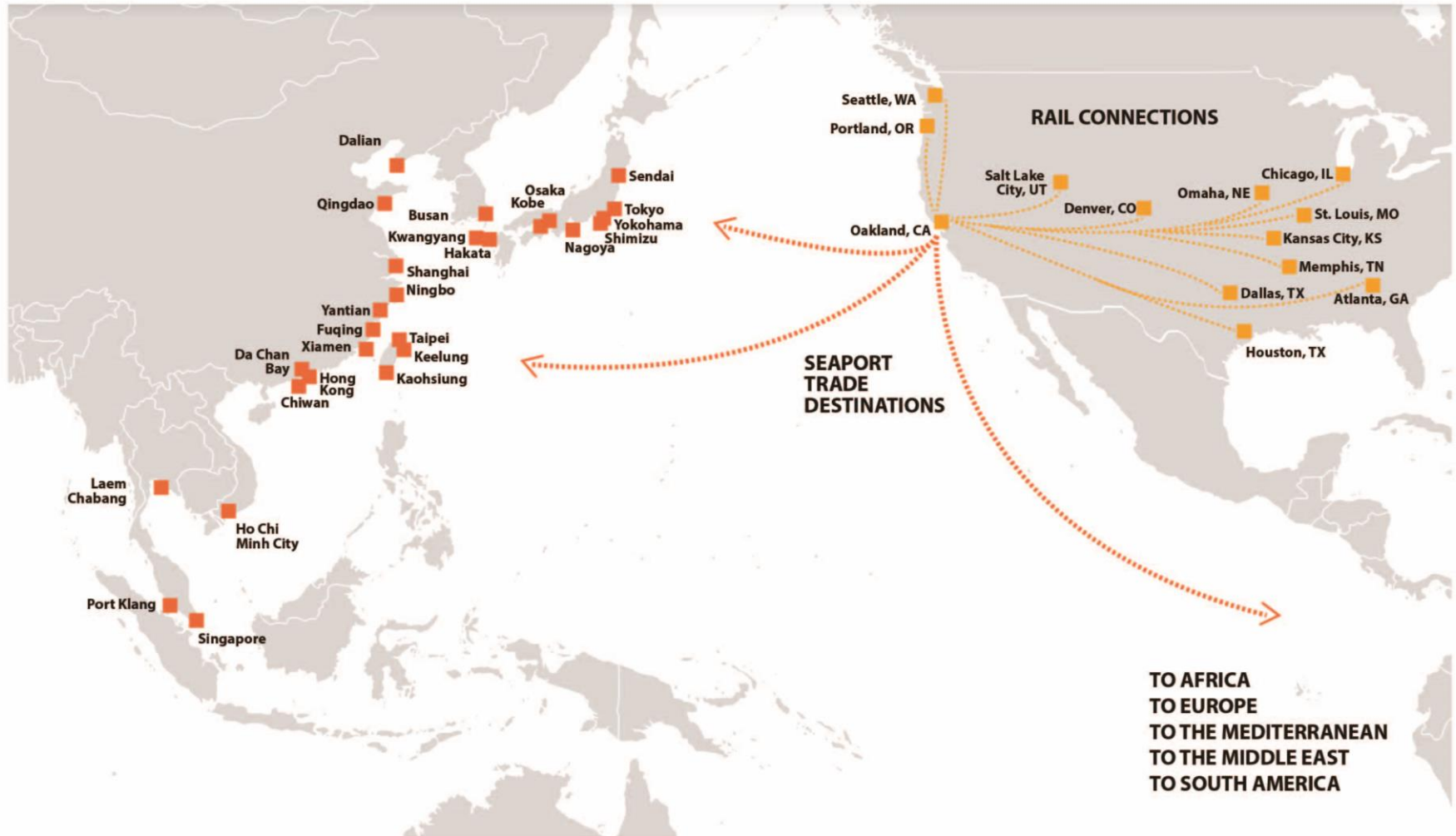
- Interchange improvement projects
- Industrial rail spurs
- Truck parking

Port of Oakland | OAKLAND ARMY BASE



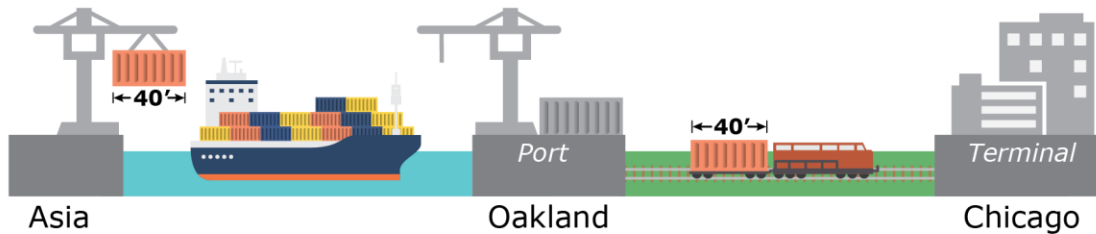
Source: City of Oakland, Prologis development rendering.

Port of Oakland | INTERNATIONAL TRADE MOVEMENT



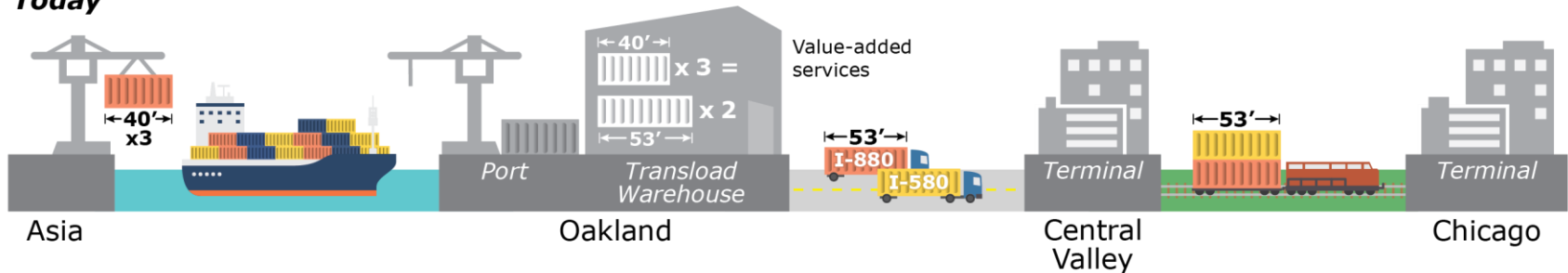
New Approach to Rail/Port Operation: Transloading and Rail in Oakland

IPI Import

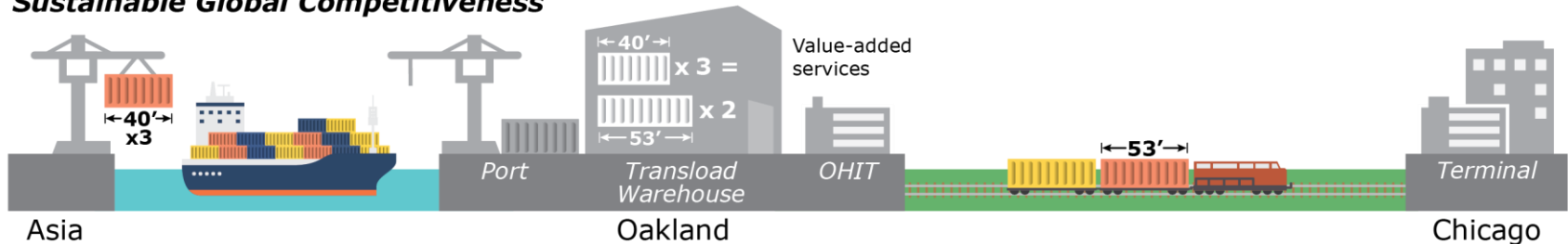


Overall strategy to
eliminate 1,280
truck trips per day
on I-580 and I-880

Transload Import Today



Transload Import *Sustainable Global Competitiveness*



Freight Funding Opportunities

Existing sources

- FAST Act
 - National Highway Freight Program (formula program): CA share approximately \$582 million over five years
 - FASTLANE Program (competitive program): \$4.5 billion nationwide over five years
- County Sales Taxes (e.g., Alameda County Measure BB)
 - Voter-approved \$250 million per year with specific goods movement category

Potential new sources

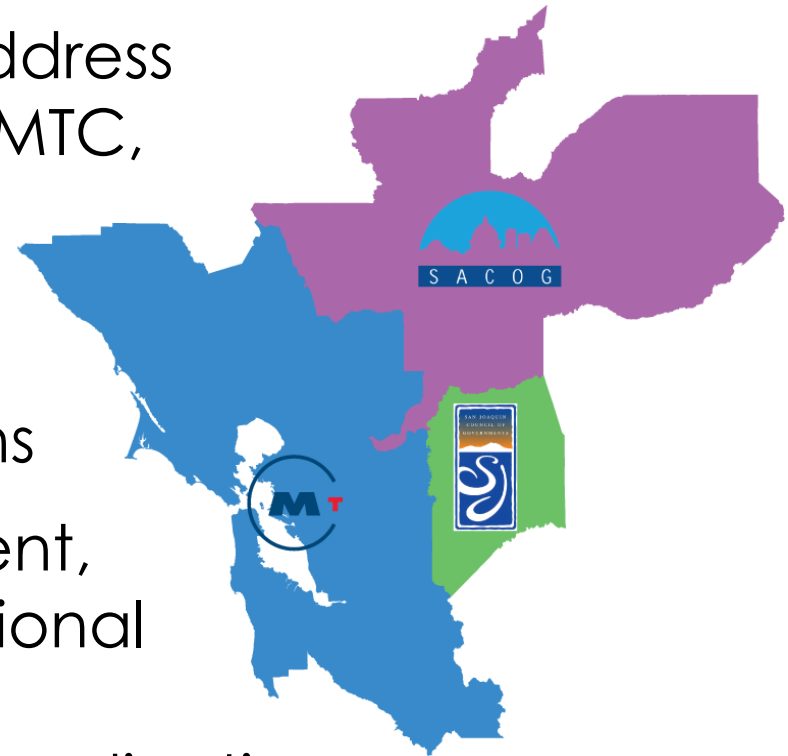
- Cap and Trade
- County sales taxes
- New state funding packages
- Potential future bridge tolls

Moving Forward



Moving Forward: Northern California Megaregional Working Group

- Advisory council formed to address common policy issues across MTC, Sacramento Area Council of Governments (SACOG), and San Joaquin Council of Governments (SJCOC) regions
- Issues include goods movement, jobs/housing imbalances, regional passenger rail, economic development and RTP/SCS coordination
- Study timeline: summer 2016 through summer 2018





Thank You

