

Freight in Megaregions: Metropolitan Area/Regional Perspective

Talking Freight Webinar – February 19, 2014

Research for the FHWA Office of Planning

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Research and Innovative Technology Administration
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FHWA introduction

- ❑ Atlanta Megaregions Peer Exchange
“Connected Places” Nov 2013
- ❑ Megaregion workgroup
- ❑ Megaregion research activities
- ❑ Megaregion webpage

Overview of Presentation

- ❑ Overview: FHWA research by the Volpe Center
 - FHWA Project Manager: Fred Bowers
 - Volpe Project Manager: Bill Lyons
- ❑ Focus:
 1. Why should MPOs be interested in Megaregions?
 2. How can MPOs contribute to planning for Megaregions?
 3. What are opportunities going forward?

Research and Related Efforts

- TRB
 - Workshop on Megaregions (2012)
 - TRB Paper on MPOs and Megaregions (2012)
 - 2011-12 panels
- TPCB peer exchanges
 - MPOs and Megaregions (Phoenix, 2012)
 - Megaregions and Freight Movement (Atlanta, 2013)
- White papers (2014)
 - MPOs and Planning for Megaregions
 - Rural/non-metro Planning Agencies and Megaregions
- FHWA Megaregions Research Group

Context for research

- ❑ National transportation policies and programs
 - MAP-21 planning framework for DOTs and MPOs
 - Funding programs
- ❑ Best practices: areas of flexibility, adaptation, and challenge
- ❑ Opportunities to encourage planning for megaregions
 - Technical assistance, data, tools, institutional roles/responsibilities
 - Areas of further research

To support engagement by MPOs and partners

Dual approach to megaregions

❑ Data driven approach

- Criteria: population, economic, land use, mobility forecasts
- Corridors and regions of opportunity
 - I.e., for global trade and economic development
 - All areas are not equal

❑ Flexible approach

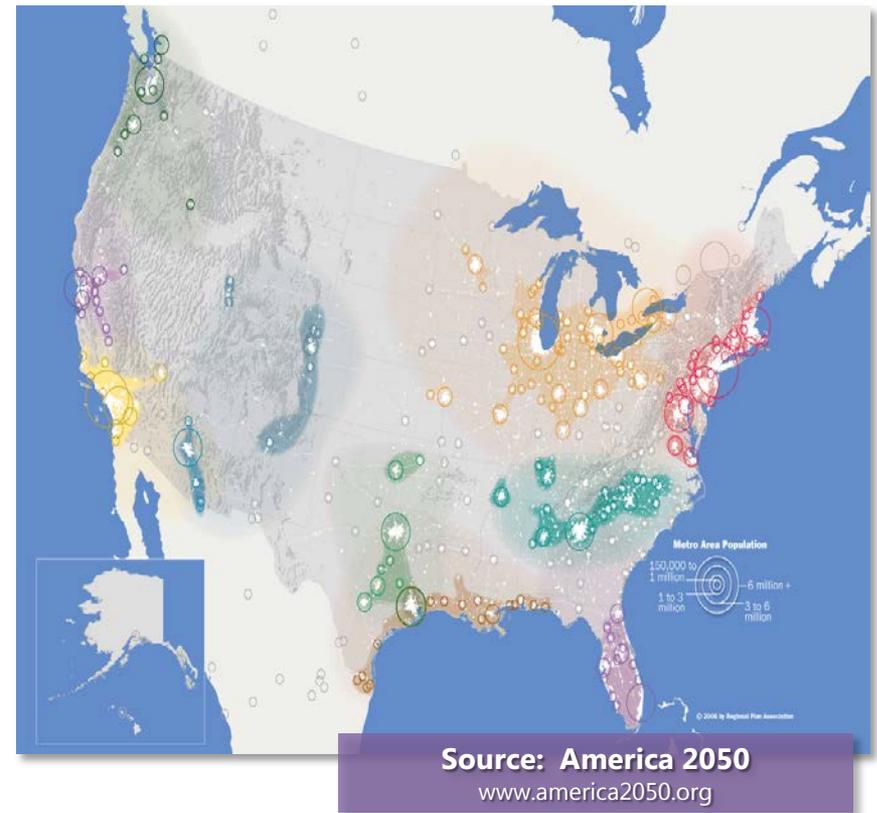
- Near term problems and opportunities are fluid
- Actions to support metro area goals and priorities
- Convergence of mutual interests with partners

Why are MPOs interested in Megaregions?

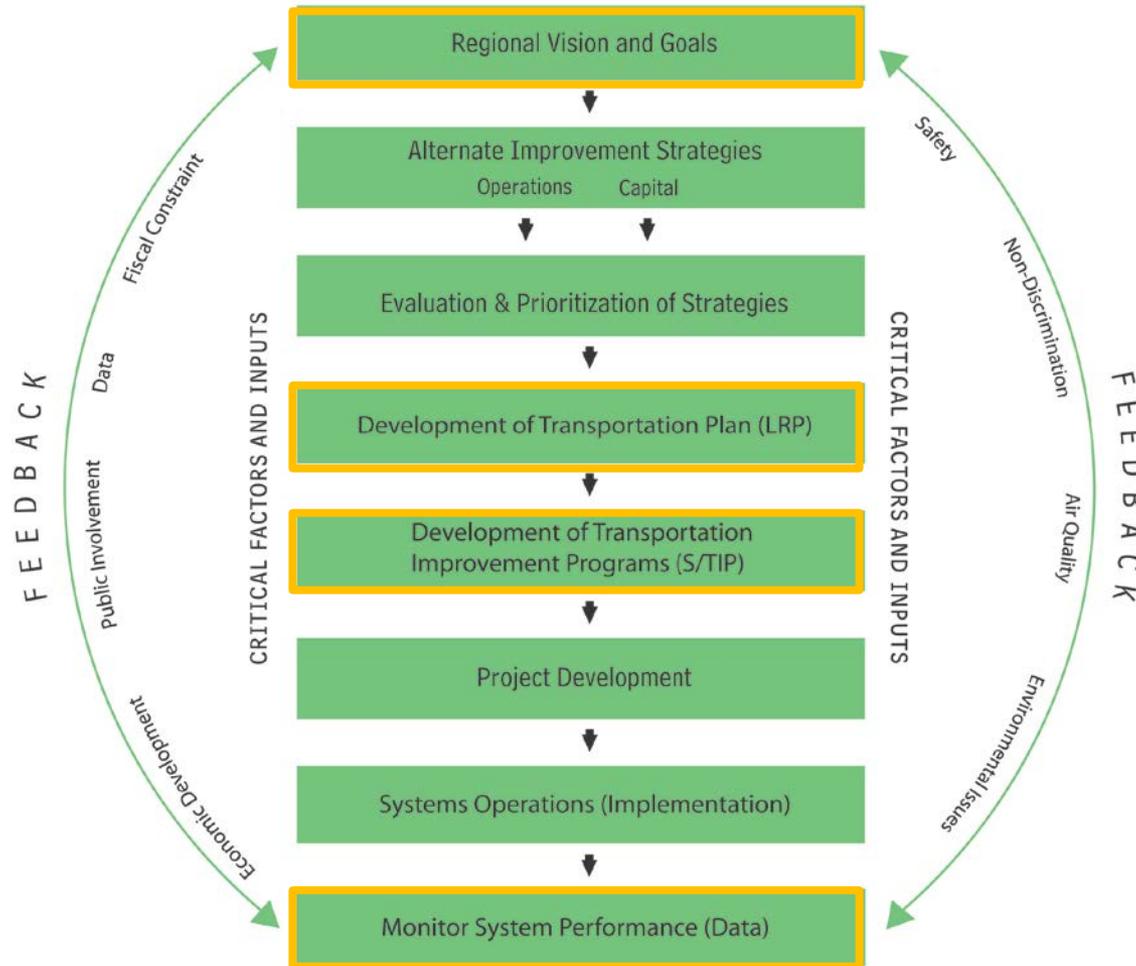
- ❑ Recognizes the large scale context in which urban and rural areas exist and interact
- ❑ Better adapted to deal with global economic and environmental issues
- ❑ Provides strategy to act globally, while providing a local focus on livability and sustainability
- ❑ Improves health, mobility and employment opportunities across regions
- ❑ Supports innovation

Case Study MPOs

- ❑ I-95 Corridor
- ❑ Front Range, Colorado
- ❑ Buffalo-Niagara-Toronto
- ❑ San Diego/Southern CA
- ❑ Piedmont Area
- ❑ Florida
- ❑ Arizona Sun Corridor



Where does planning for megaregions fit?

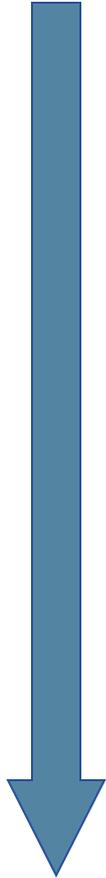


Source: FHWA/FTA Transportation Planning Process: Key Issues

Context: Relevance of MAP-21 Planning Elements

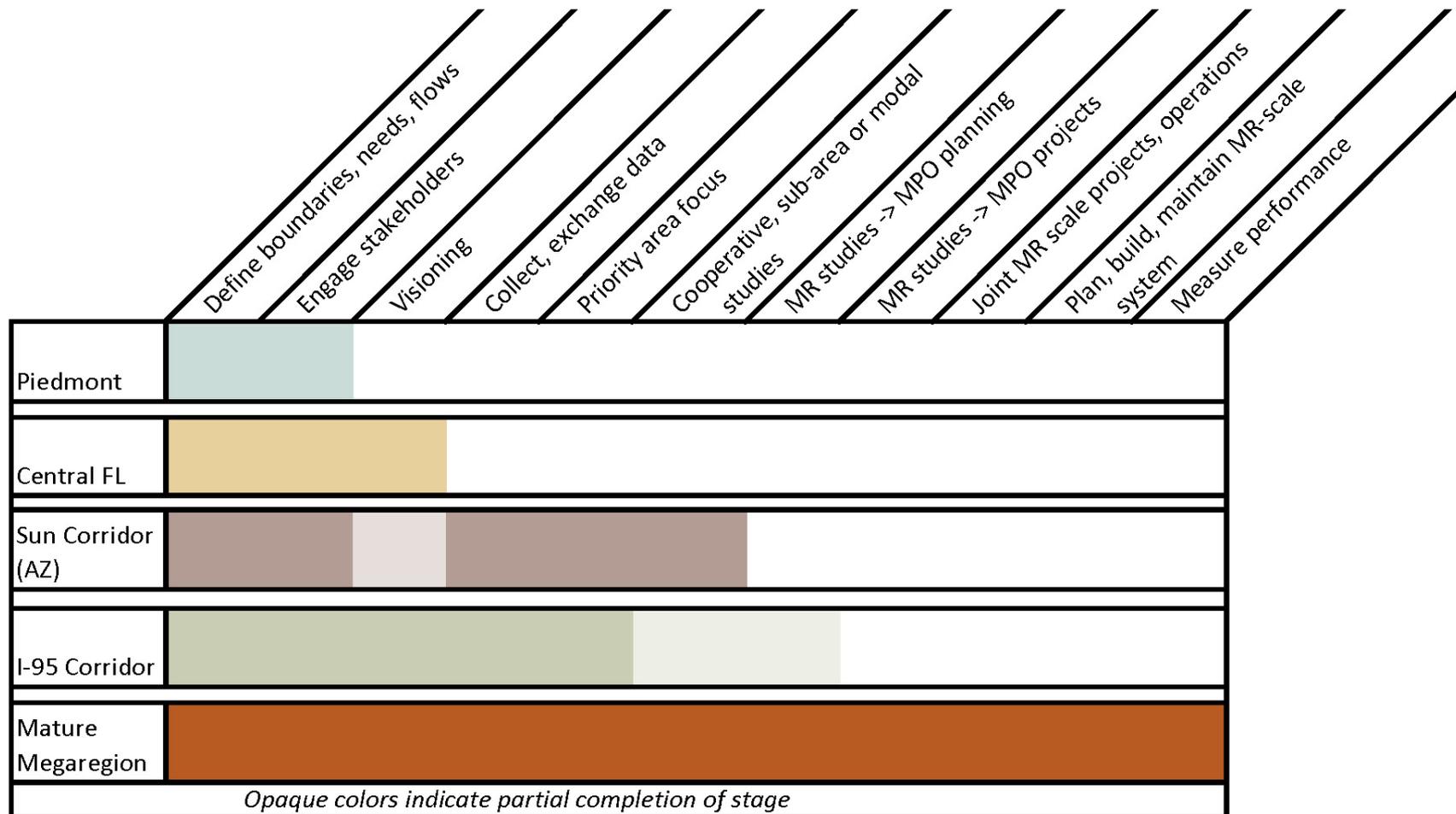
- MPO organization and roles
 - Board
 - Agreements
- Visioning and Scenario Plans
- Funding sources: STP, Enhancements, Planning, FTA Rural
- Planning Factors
- Unified Planning Work Program
- Congestion Management
- Stakeholder Collaboration (Freight, Tribes, Rural areas)
- Public Involvement
- Emphasis on Performance Based Planning
 - Potential to support successful planning for megaregions?

Stages of Evolution for Megaregions Planning: Framework from FHWA-Volpe Research



- Define **boundaries**, identify **needs** and **flows**
- Engage **stakeholders**
- **Vision**: priorities, challenges, strategies
- Collect and exchange **data**
- Priority **area focus**
- Cooperative **sub-area or modal studies**
- Megaregion studies influence **MPO planning**
- Megaregion studies influence **MPO project selection**
- Joint megaregion scale **projects, operations**
- Plan, **build, maintain** mega-region scale system
- Focus on **performance** at all stages

Evolution of Case Study Regions



Case Study Examples

❑ Colorado Front Range

- Pikes Peak Area Council of Governments

❑ Buffalo-Niagara-Toronto

- Greater Buffalo Niagara Transportation Council

An Emerging Mega-Region Front Range Colorado

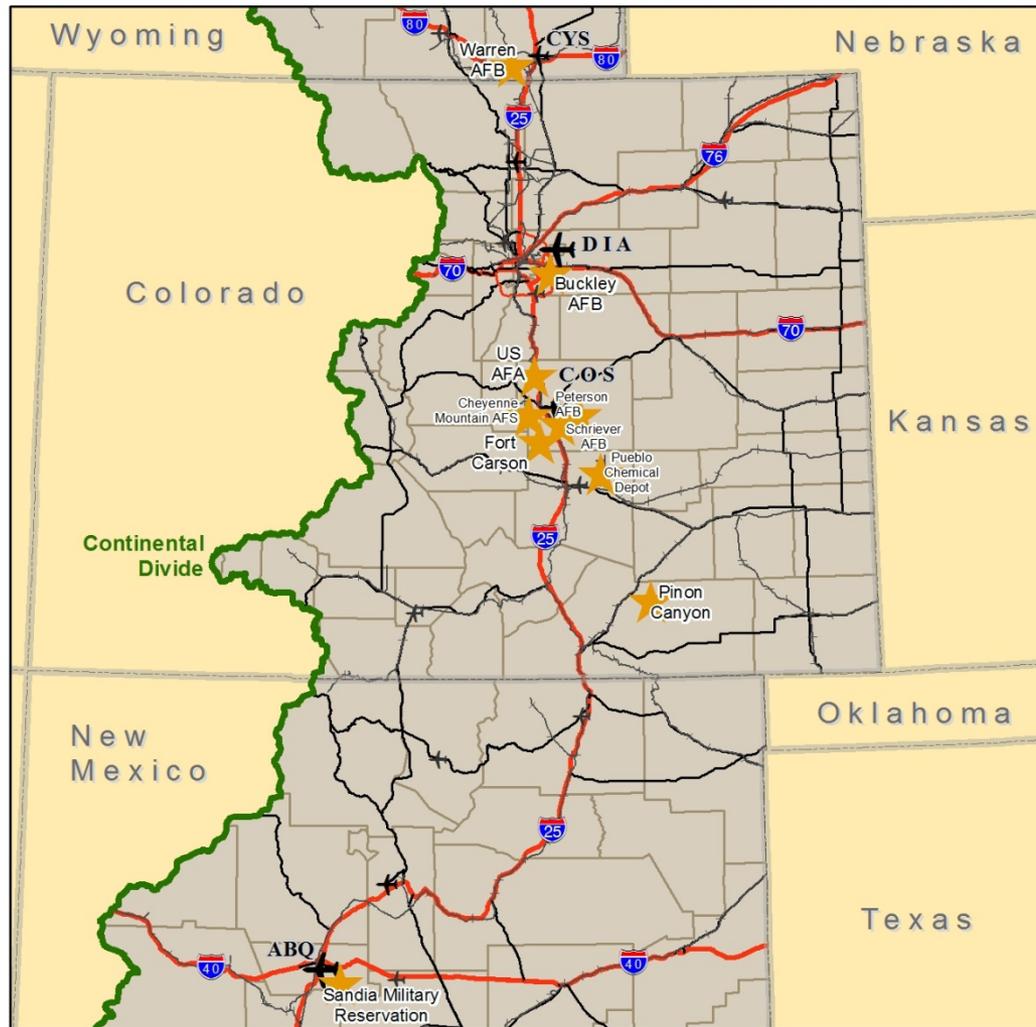
Working Together for a Shared Future



*Robert MacDonald, PE
Executive Director, PPACG
FHWA Peer Exchange at MAG
May 10, 2012*



Front Range (Pikes Peak Area COG)



Emerging Mega-Region of the Continental Divide

We are becoming a SINGLE Front Range Mega-region

- Our decisions should consider the impact on neighboring regions and states
- What ties our mega-region together
 - Geographical Features
 - Markets
 - Transportation Infrastructure
 - Military



Travel Patterns

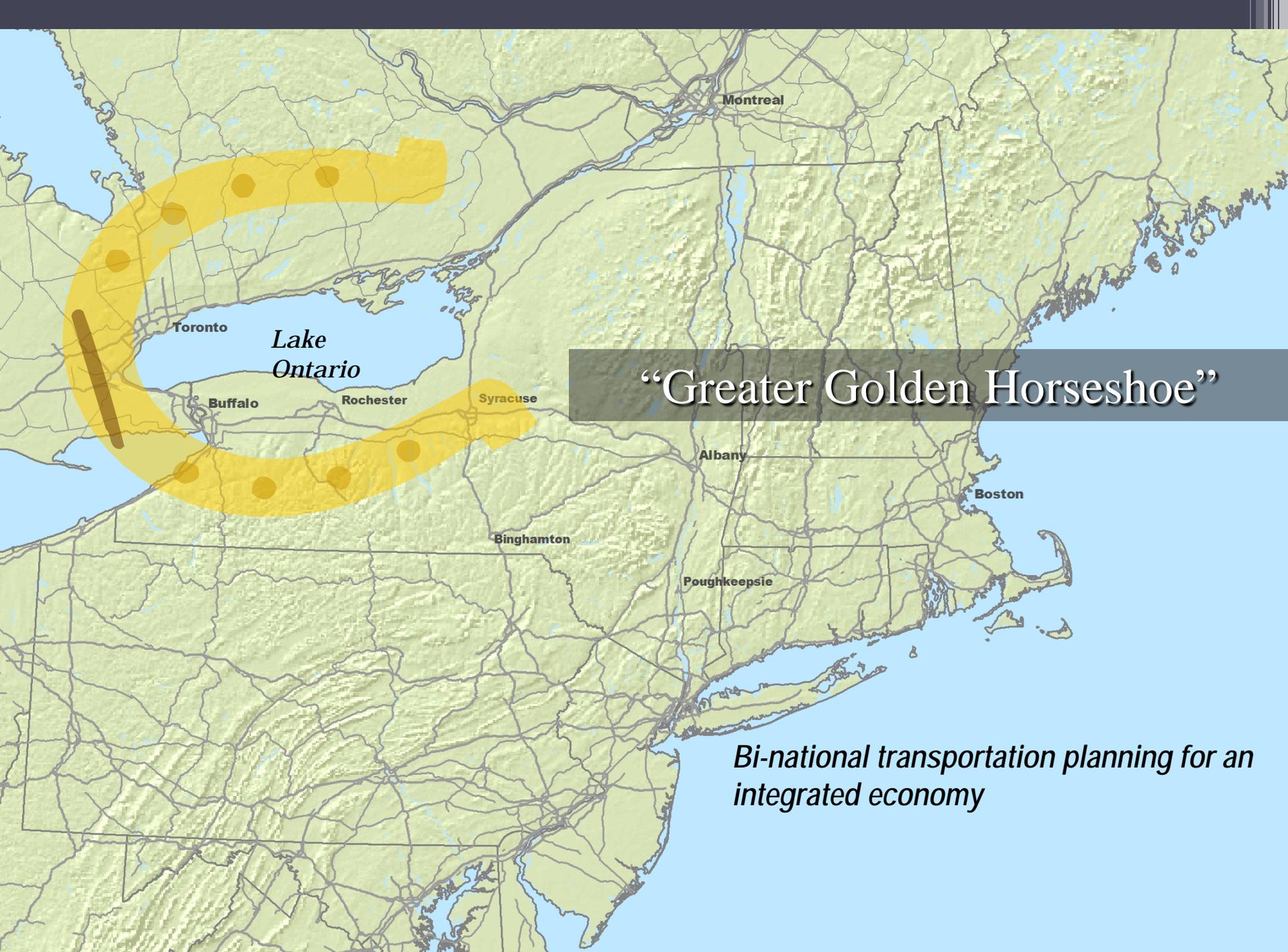
- Healthy economies are linked to efficient travel between Front Range areas
- Daily inter-regional travel for freight, work, shopping, and other attractions is growing.
- We are becoming a Front Range Region



Greater Buffalo Niagara Transportation Council: The MPO

- Partnership of Governments and Agencies with forty year history in Buffalo Niagara
- Performance and Project Delivery Focus
- Substantial engagement of business community, developmental agencies, interest groups
- History of BiNational planning at the border and the greater Megaregion





“Greater Golden Horseshoe”

Bi-national transportation planning for an integrated economy

Some Representative Urbanized Concentrations In North America

20.4 Million

- **New York-New Jersey-Long Island**

16.2 Million

- **Los Angeles-Riverside-Orange County**

9.0 Million

- **Toronto-Hamilton- Niagara Falls- Buffalo-Rochester-Syracuse**

8.9 Million

- **Chicago-Gary-Kenosha**

7.4 Million

- **Washington-Baltimore**

Multistate Reach of Cross Border Freight Flow



Transportation Infrastructure at the International Border in Megaregion



Four (4) International Motor Vehicle Bridges



QEW and Interstate I-90 (Major Connectors)



Two (2) Railway Bridges



Four (4) Major Railways



Rail Passenger Service VIA and AMTRAK



Commuter Rail – GO Train



Inter-City Bus Services



Four (4) Major Airports



Welland Canal (St. Lawrence Seaway), Several Ports

BiNational Transportation Strategy Considerations

- Existing and future transportation - related to border crossing problems and needed improvements
- Connectivity to population, economic and recreational centers in both counties
- Availability of transportation mode choice
- Sufficient network redundancy or capacity to accommodate periods of stress on specific links
- An implementation strategy that includes clear roles, responsibilities and timing

Megaregions and MPOs: Insights and Themes

- ❑ Megaregion boundaries are flexible but data based
- ❑ Key Goal: Enhancing Regional Competitiveness is a Key Goal
- ❑ Key Concern: Improved Transportation of Freight
- ❑ **Establish New Governance without Creating New Government**
- ❑ Partnerships Develop out of Necessity and Opportunity
- ❑ Important role for MPOs: but may not be logical long-term leaders
- ❑ **Megaregions Need a Champion**
- ❑ **Alternative Transportation Modes Play an Important Role**
- ❑ Link Megaregion Planning to Land Use and Transit
- ❑ Megaregion Partnerships can address more than Transportation



Relevance of Diverse Goals

- ❑ Priorities
 - Freight, global trade, and economic development
- ❑ Best practices: relevance of other priority goals:
 - In combination or in addition to freight and trade
 - Sustainability, Livability
 - Healthy communities
 - Climate Resilience
- ❑ Challenges, issues and opportunities going forward
 - Where are the opportunities or barriers?

Focus on planning for Megaregions

Is the glass half full or half empty?



Contact Information

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 - William M. Lyons, Volpe Center project manager: william.lyons@dot.gov
- ❑ FHWA Megaregions and Multi-Jurisdictional Planning:
<https://www.fhwa.dot.gov/planning/megaregions/>
 - MAG Megaregions Peer Exchange Proceedings
 - ARC Megaregions Peer Exchange Proceedings and Video
 - FHWA Megaregions Research Coordination Group
 - “Evolving Role of MPOs in Transportation Planning for Megaregions,”
 - TRB Transportation Research Record
<http://trb.metapress.com/content/17674855gx65q500/>
- ❑ FHWA and FTA Transportation Planning Capacity Building Program <http://planning.dot.gov/>

