

Networking Across the Supply Chain: Transportation innovations in Driftless local and regional food systems.

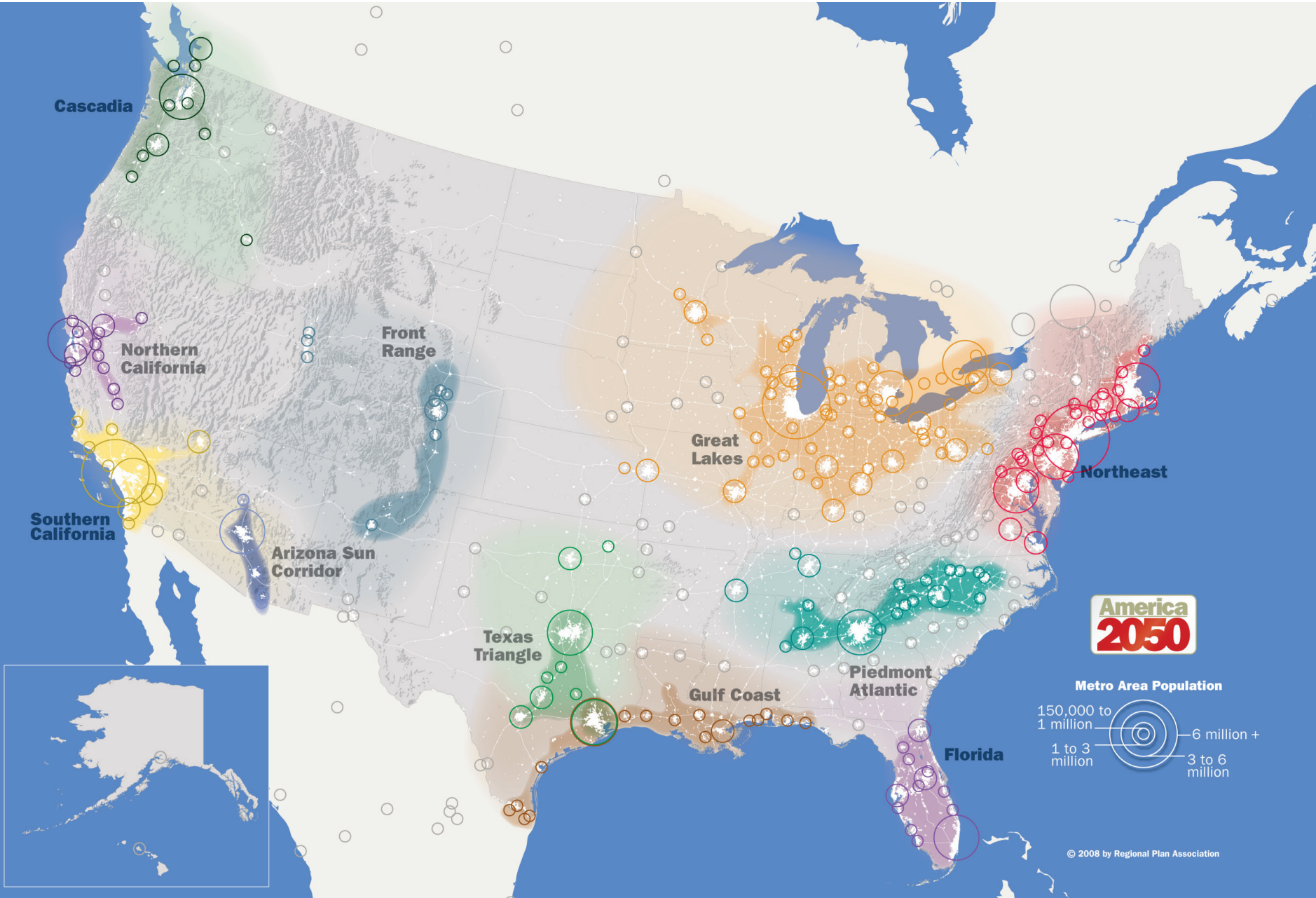
Michelle Miller, University of WI – Madison, Center for Integrated Agricultural Systems for
USDA-AMS Research Symposium, August 7, 2013

This Project is supported by Cooperative Agreement No. 12-25-A-5639 between the Agricultural Marketing Service/USDA and the Center for Integrated Agriculture at the University of Wisconsin-Madison.

UW project team on transportation for local and regional food, 2008 to present

- ▶ Teresa Adams, PhD, & Ben Zeitlow, National Center for Freight & Infrastructure Research & Education
- ▶ Alfonso Morales, PhD, & David Nelson and Janice Soriano, Department of Urban and Regional Planning
- ▶ Michelle Miller, & Lindsey Day-Farnsworth and Peter Allen, UW Center for Integrated Agricultural Systems
- ▶ Past team members: Rosa Kozub, Anne Pfeiffer, Bob Gollnik, Jason Bittner, Brent McCown





**America
2050**

Metro Area Population



Driftless Area

Heart of the

Upper Mississippi River Basin

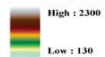


Legend

- Cities
- State Boundaries
- County Boundaries
- Driftless Area Boundary
- Major Lakes & Rivers

Elevation

Meters Above Sea Level



The Driftless Area is a unique region in the Upper Mississippi River Basin encompassing southeast Minnesota, southwest and west-central Wisconsin, northeast Iowa, and a part of northwest Illinois.

The glaciers that covered much of the Midwest bypassed the Driftless Area, giving rivers time to cut down into ancient bedrock and create distinctive landforms.

Many of the soils that cover the steep slopes are fragile, ecosystems are diverse, and most of the cold-water streams and rivers are recognized on a state and national basis for their economic, environmental, and recreational importance.

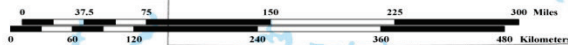
Regional Overview



Driftless Area Initiative

Cartographer:
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Eau Claire, WI 54601
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Projection:
Universal Transverse Mercator
Zone 17 North
North American Datum of 1983



The 4-state Driftless region

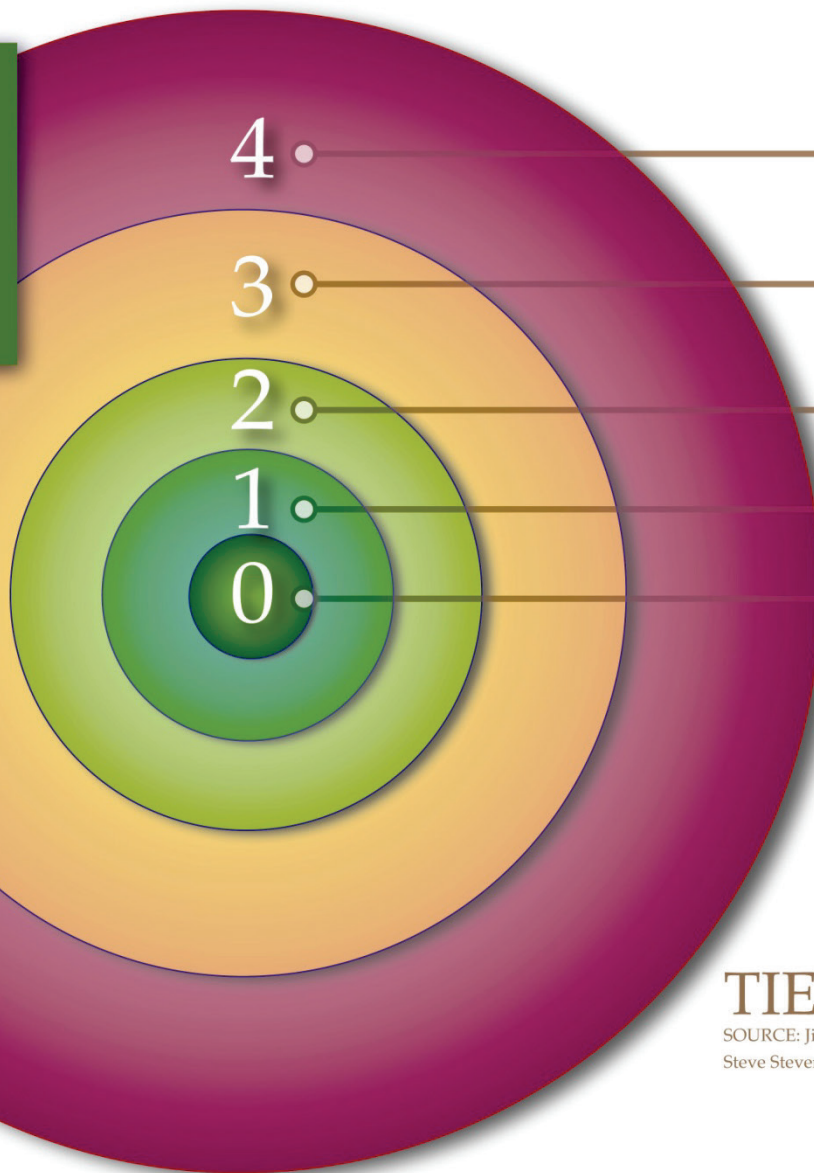


Planning team and sponsors

- ▶ Marina Denicoff, Transportation Services Division, Transportation and Marketing Programs, USDA-AMS
- ▶ Bryan Law, Mississippi River Regional Planning Commission
- ▶ Michelle Miller & Peter Allen, UW-Center for Integrated Agricultural Systems
- ▶ Food Resource and Agribusiness Network
- ▶ City Brewery, LaCrosse, Wisconsin



Good to
GROW:
Scaling Up a
Midwest
Regional
Food System



tier 4

**GLOBAL ANONYMOUS
AGGREGATION & DISTRIBUTION**
ADM, Unilever, Cargill, Ajinomoto

tier 3

**LARGE VOLUME
AGGREGATION & DISTRIBUTION**
Sysco, Goodness Greenness, Reinart

tier 2

**STRATEGIC PARTNERS
IN SUPPLY CHAIN RELATIONSHIPS**
Willy St. Co-op, Country Natural Beef,
Shepherd's Grain, Red Tomato

tier 1

**DIRECT PRODUCER
TO CONSUMER**
Farmers' Markets, Farm stands, CSAs, Direct mail order

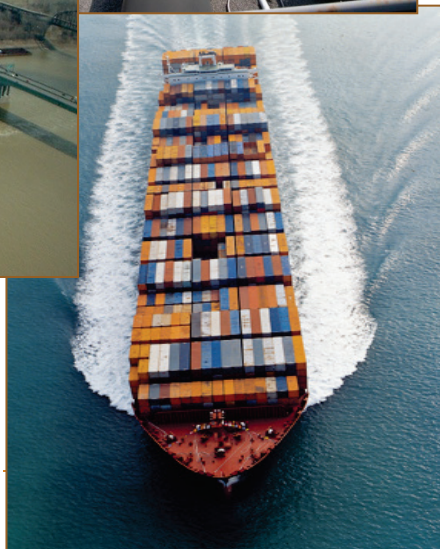
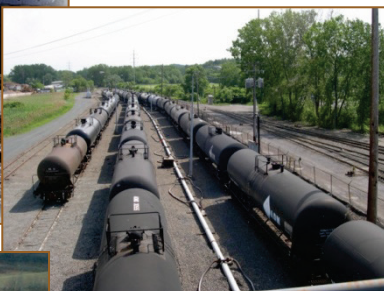
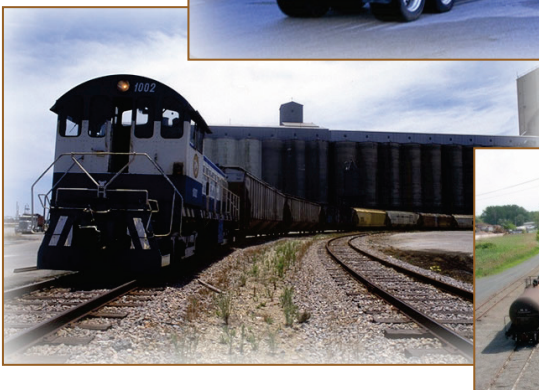
tier 0

**PERSONAL PRODUCTION
OF FOOD**
Backyard gardens, Community gardens, canning

TIERS of a FOOD SYSTEM

SOURCE: Jim Bower, Blue Planet Partners; Ron Doetch, Michael Fields Agricultural Institute;
Steve Stevenson, Center for Integrated Agricultural Systems—University of Wisconsin





Networking Across the Supply Chain

February 20-21, 2013

La Crosse, Wisconsin

Transportation Services Division
Agricultural Marketing Service
U.S. Department of Agriculture



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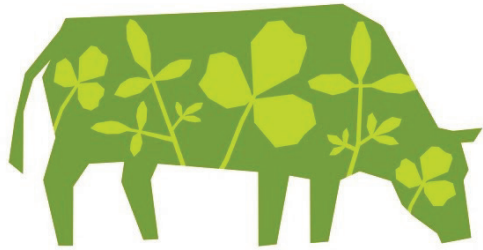


Market outlook

- ▶ Kymm Mutch, Regional Learning Lab, School Food FOCUS, Milwaukee
- ▶ Don Stanwick, Chartwells-Thompson Hospitality, Compass Group, Chicago
- ▶ Brad Smith, People's Coop, LaCrosse
- ▶ Brandon Scholz, Wisconsin Grocers Association



Connecting supply and demand



grass run farms

100% Grass Fed Beef

**Goodness
Greenness®**

Certified Organic Produce

**ORGANIC
VALLEY®**



Family of Farms



Supply perspective



Wisconsin Meadows™ Grass-fed Beef



Respondents

- ▶ Ken Meter, Crossroads Consulting
- ▶ Alfonso Morales, UW-Urban and Regional Planning
- ▶ Teresa Wiemerslage, Iowa State University Extension
- ▶ Craig Chase, Leopold Center, ISU
- ▶ Ernie Perry, UW-Center for Freight & Infrastructure Research and Education



Participant feedback n=42

- ▶ 2/3 made more than 5 new connections
 - ▶ 70% made new contacts useful to their businesses
 - ▶ 88% made connections useful for local foods development
- ▶ 79% learned useful innovations for transportation and logistics
- ▶ 92% were interested in attending similar events
- ▶ Comments:
 - ▶ Many respondents interested in more networking time
 - ▶ Key issues were finding existing capacity, software for regional routes, green transportation options, multi-modal opportunities



Rufus Haucke, Just Local Foods

- ▶ Q3: How could we best improve this event in the future?
 - ▶ More time for pure networking. That part felt a bit rushed as we moved on to the next scheduled event. Conversations just got started and it was time to move on. Lots of good people to talk to!
- ▶ Q4: Can you share one innovation or insight that you think is most helpful towards improving our local and regional food systems?
 - ▶ Discussions on how rail shipping works. Discussion on locations of existing food hubs and how to start linking them together to develop food routes.
- ▶ Q5: What are the most important transportation innovations to your business?
 - ▶ We need to figure out how to begin switching fuel sources. At least develop a plan for when the cost of fuel really spikes
- ▶ Q6: What is the largest barrier(s) you face to developing local and regional food systems?
 - ▶ Moving enough volume
- ▶ Q7: Do you have any other comments you think would be helpful to event planners and participants?
 - ▶ I would have liked to hear from more speakers that actually have trucks on the road. We heard from OV and Goodness Greenness. We need more companies and individuals who have trucks and are moving product share their advice.

-
- ▶ Conference proceedings will be available soon.

Definition of consumer interest

- ▶ Consumers are interested in:
 - ▶ Local
 - ▶ Sustainable
 - ▶ Authentic
 - ▶ Innovative
 - ▶ Organic
 - ▶ Healthy
 - ▶ Safe
- ▶ Proximity is a proxy for some or all of these attributes
- ▶ Consumers first notice local fruits and vegetables as an indicator of store quality

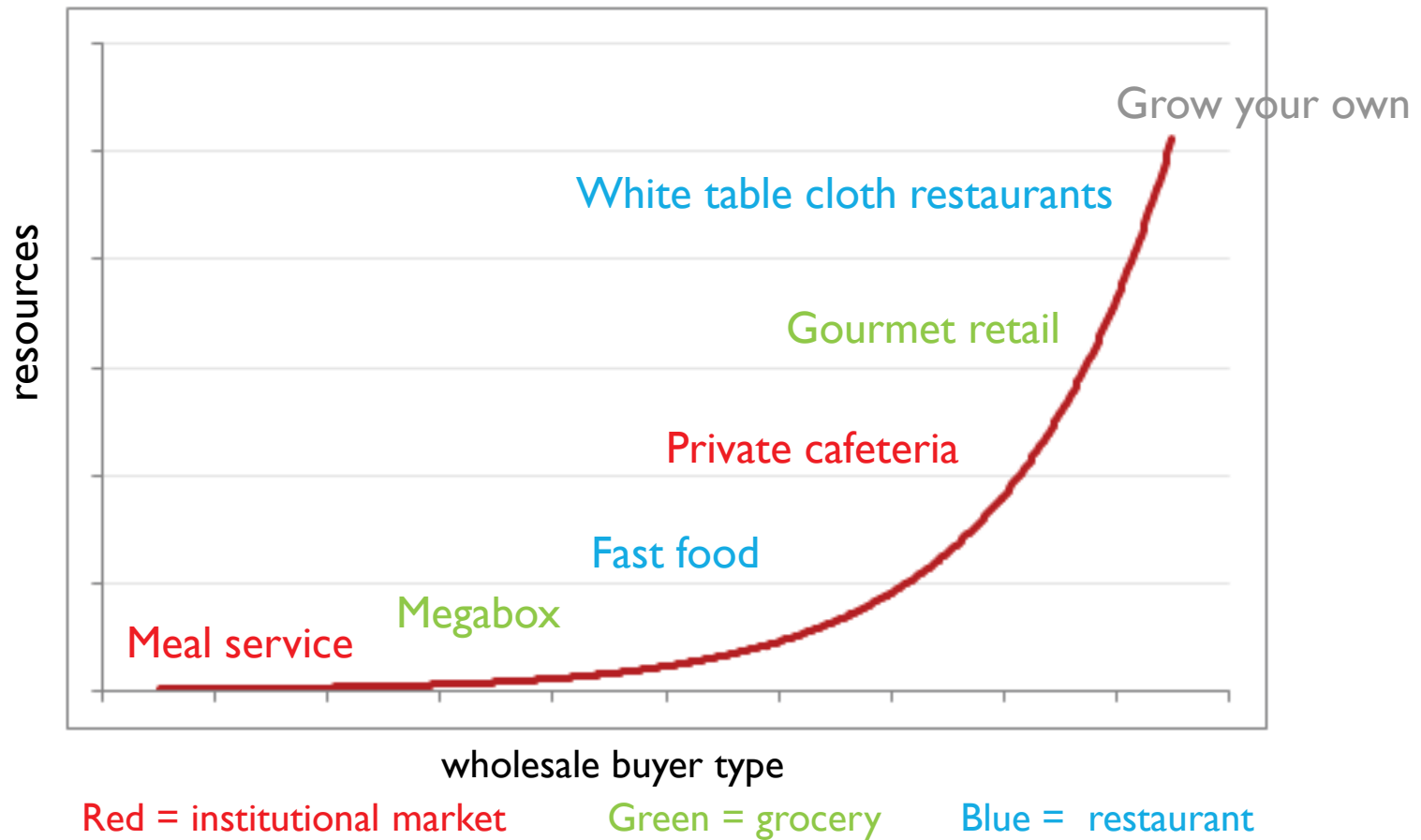


Wholesale market differentiation

- ▶ Which products and price points are appropriate for which markets?
- ▶ As the supply chain lengthens, it is a challenge to keep the farm story firmly attached to the product.
- ▶ There is a tension between consumer values and supply chain efficiencies.
- ▶ Available software for warehousing and logistics proving inadequate for regional distribution efforts.



Wholesale Market Segmentation



Maintaining product identity throughout longer supply chains

- ▶ QR codes
- ▶ Knowledgeable product representatives



Jepsen Family, Grass Run Farms



Rufus Hauke, Keewaydin Organics



Supply chain scale and ownership

- ▶ Independently-owned supply chain businesses better positioned to develop logistical relationships with regional producers than are vertically integrated companies.
- ▶ Each wholesale market segment has different scale requirements.
- ▶ Impact of trucking regulations on metro markets – Hours of Service.



First and last mile issues

▶ Aggregation at first mile

- ▶ Product aggregation must be both at sufficient quantities and meet quality standards to survive wholesaling.
- ▶ Easiest to start with products that are already regional commodities, then build capacity for other products.

▶ Dis-aggregation at last mile

- ▶ Key to improve urban congestion
- ▶ Pushback from independents on establishing distribution hubs
- ▶ Multi-model innovations



Logistics as a lynch pin for regional infrastructure development

- ▶ Product movement through the supply chain is dependent on good business relations.
 - ▶ Can I trust you to do as you said?
 - ▶ Are you loyal?
 - ▶ Will you give me good information?
- ▶ Good business relationships supersede other system efficiencies.
- ▶ Regional supply chains require more complex relationships to function than do mega-chains.
- ▶ Opportunities to develop regional relationships are lacking.
- ▶ Logistics drive infrastructure needs.

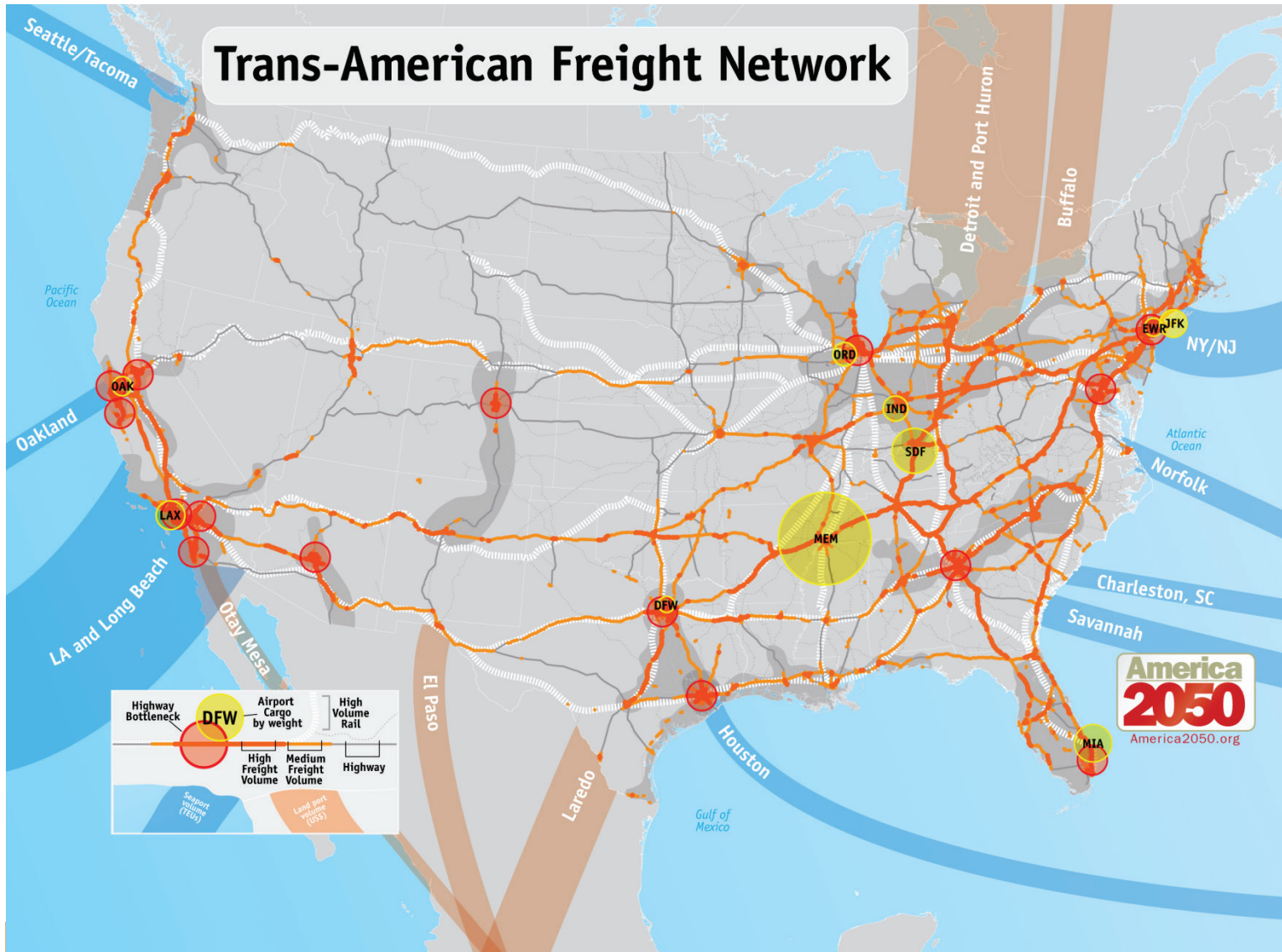


Logistical challenges in regions with high distributional capital

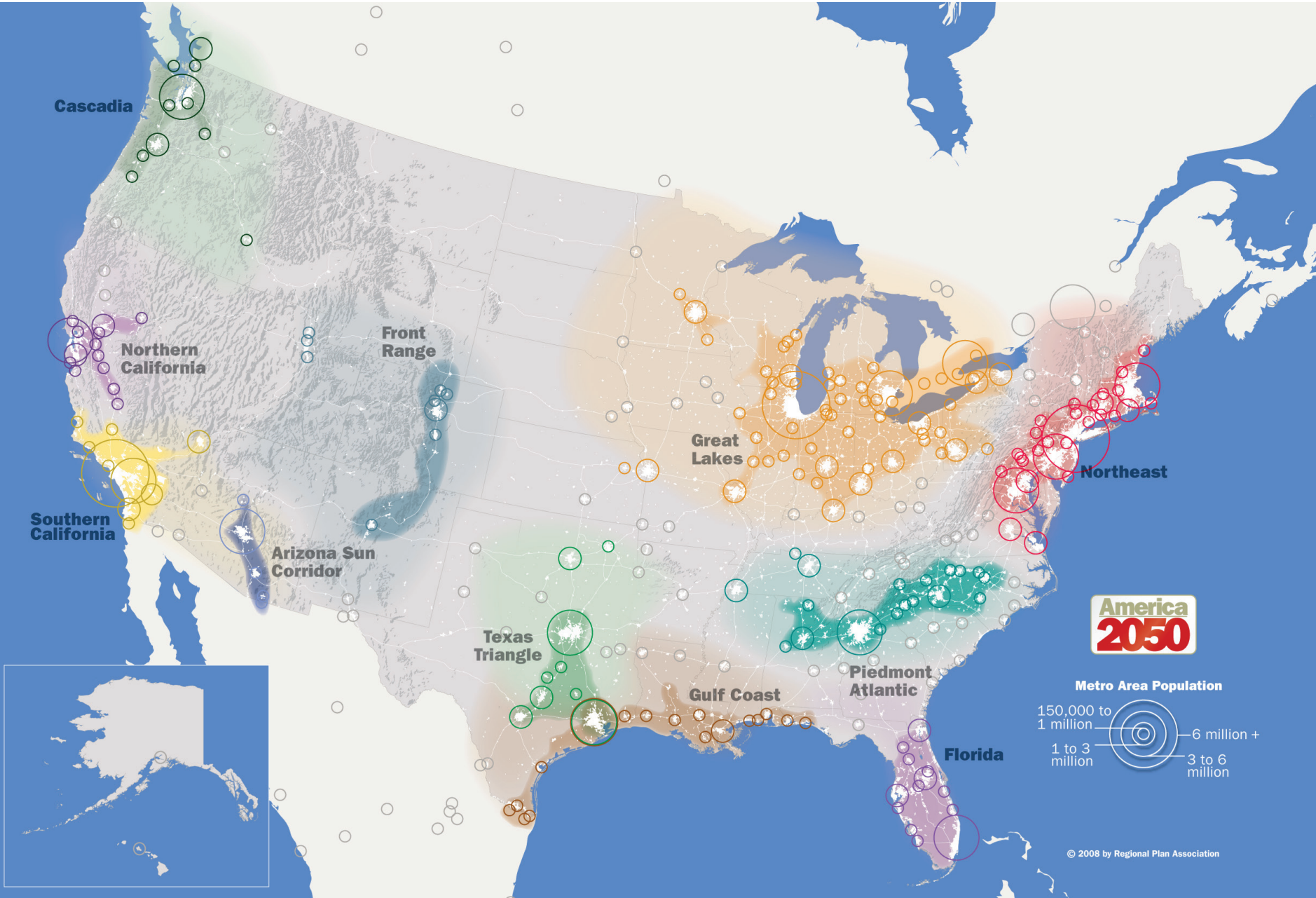
- ▶ Twin Cities have a strong distributional tie to the Driftless region, while Chicagoland does not.
- ▶ Chicagoland is one of four national logistical hubs for grocery and highly reliant on existing production regions and supply chains.
- ▶ As food production varies in response to extreme weather, larger distributional hubs are most vulnerable to disruption.



Implications







**America
2050**

Metro Area Population



Power dynamic

- ▶ City dwellers are the market.
- ▶ Rural landscapes and communities produce food.
- ▶ Is the relationship equitable?

