

Transportation Outlook For Agriculture

A stylized, light brown illustration of a plant with several leaves and a cluster of small, round fruits or berries, positioned on the left side of the slide.

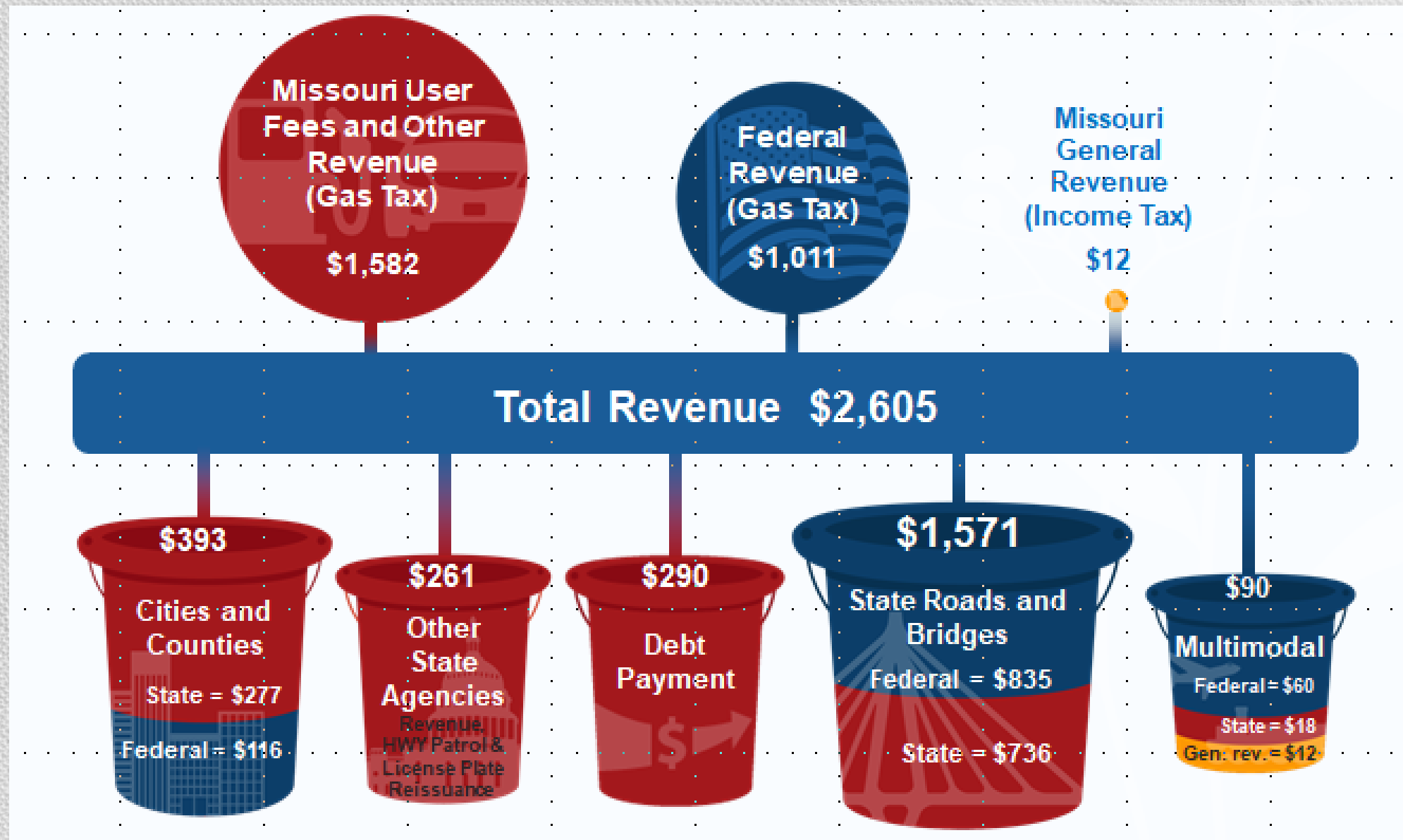
J. Chris Klenklen
Deputy Director
MO Dept. of Agriculture

Cheryl Ball, IMPM
Waterways & Freight Administrator
MO Dept. of Transportation

Agenda

- Transportation Finance
- System Needs
- Future

Missouri Transportation Funding

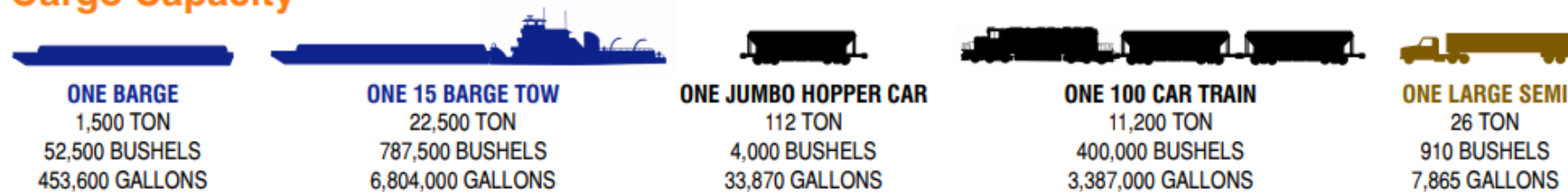




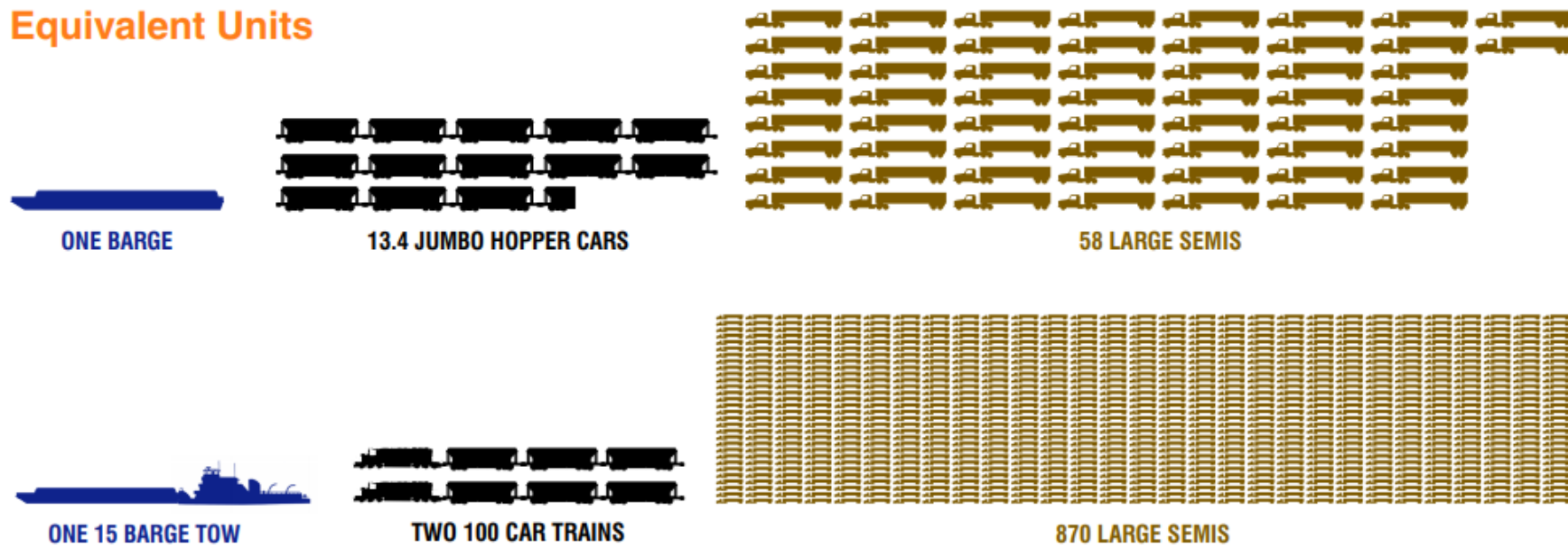
SYSTEM NEEDS

Compare...

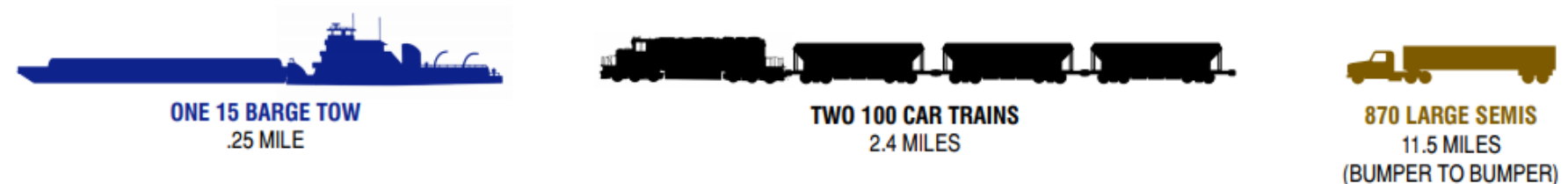
Cargo Capacity



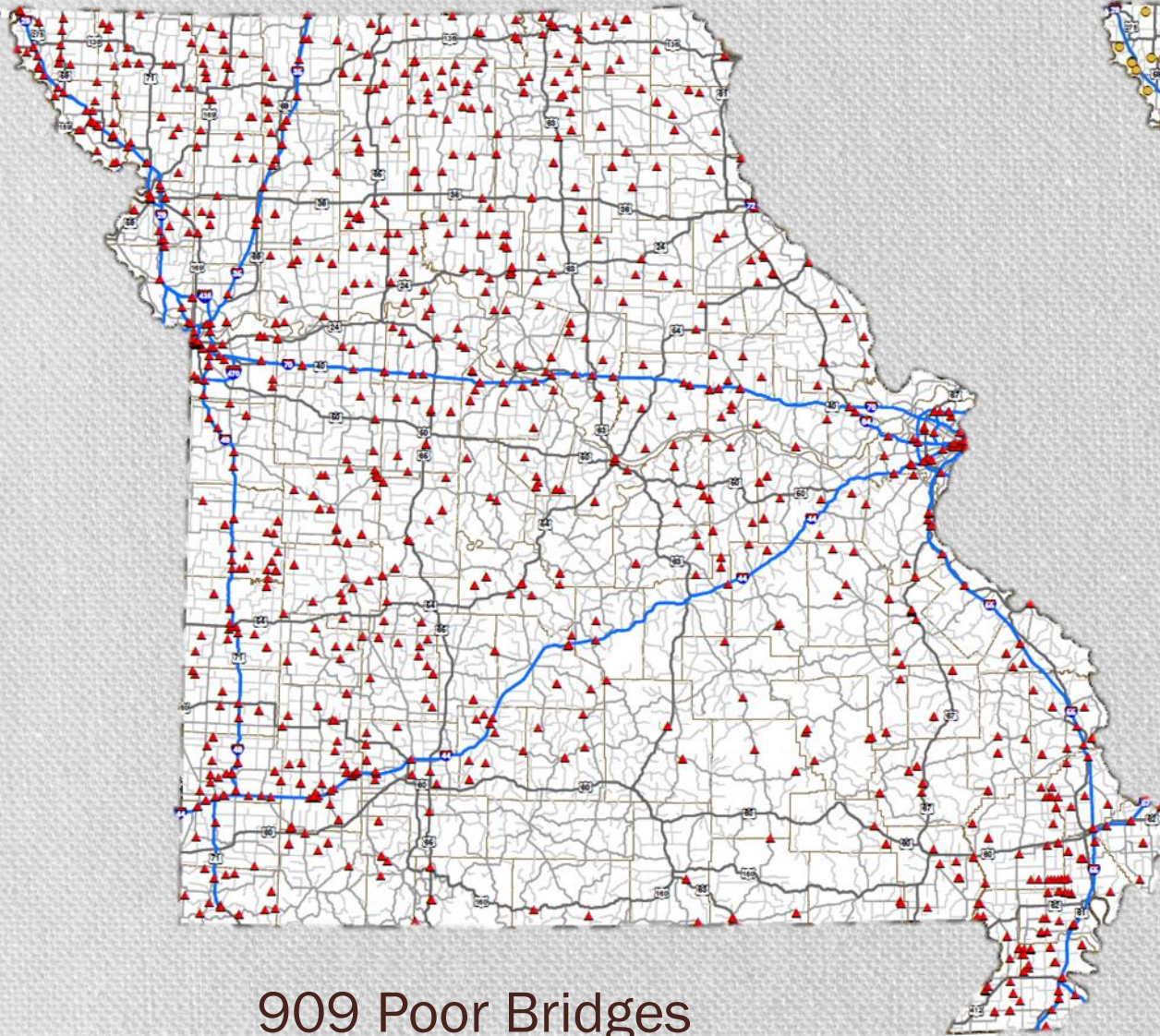
Equivalent Units



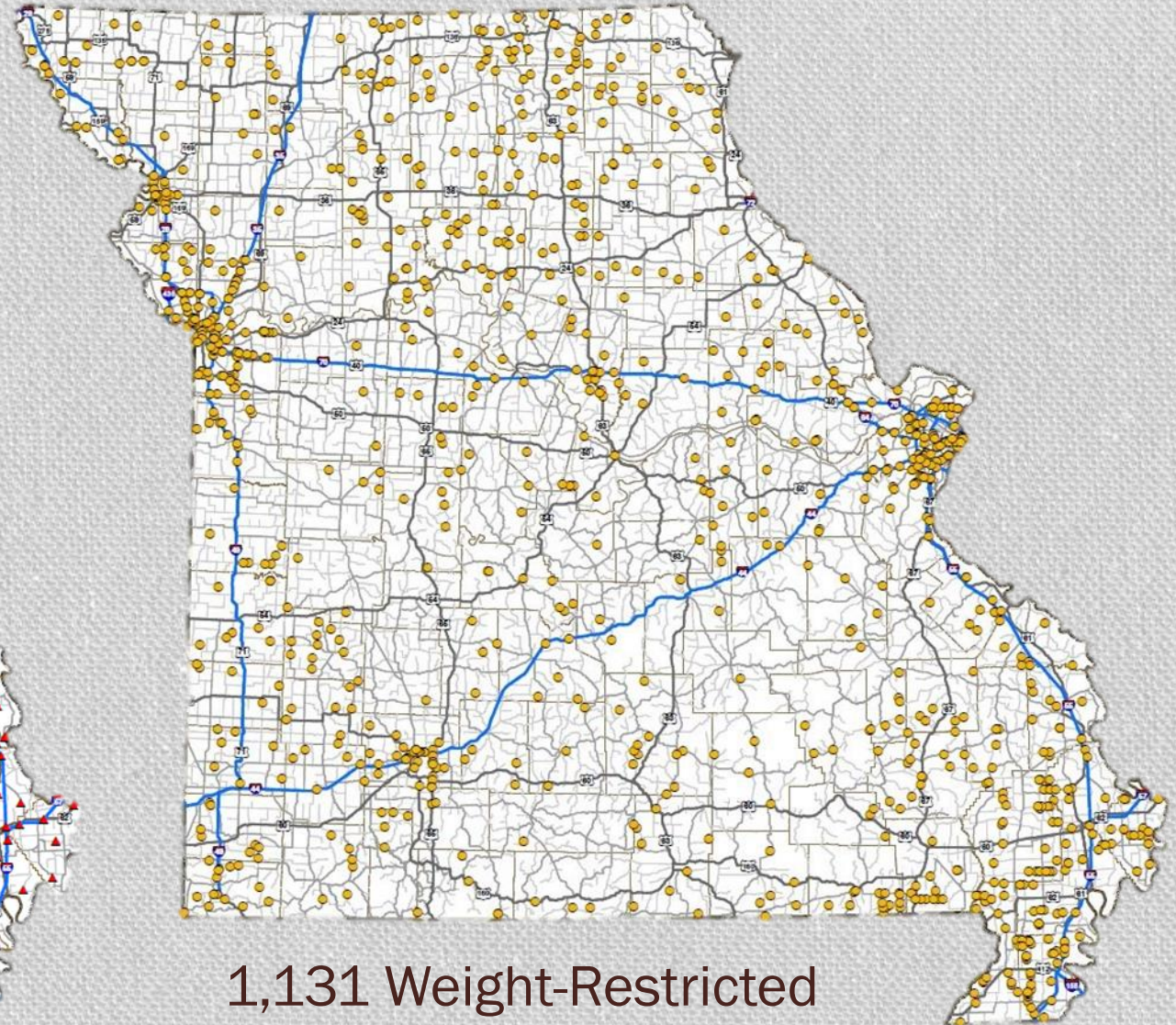
Equivalent Lengths



State of Missouri's Bridges



909 Poor Bridges



1,131 Weight-Restricted
Bridges

Fixing Access to Rural Missouri

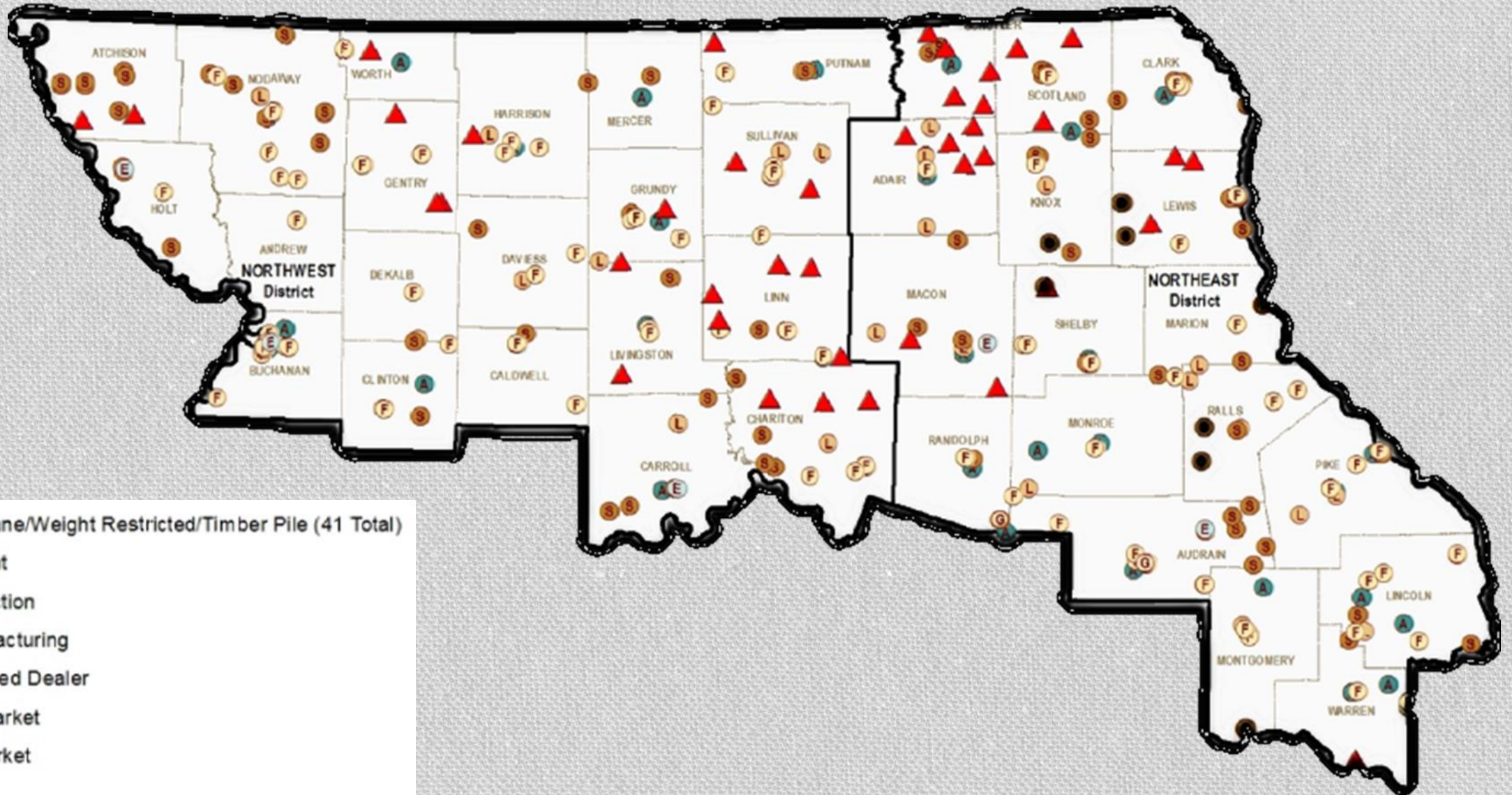
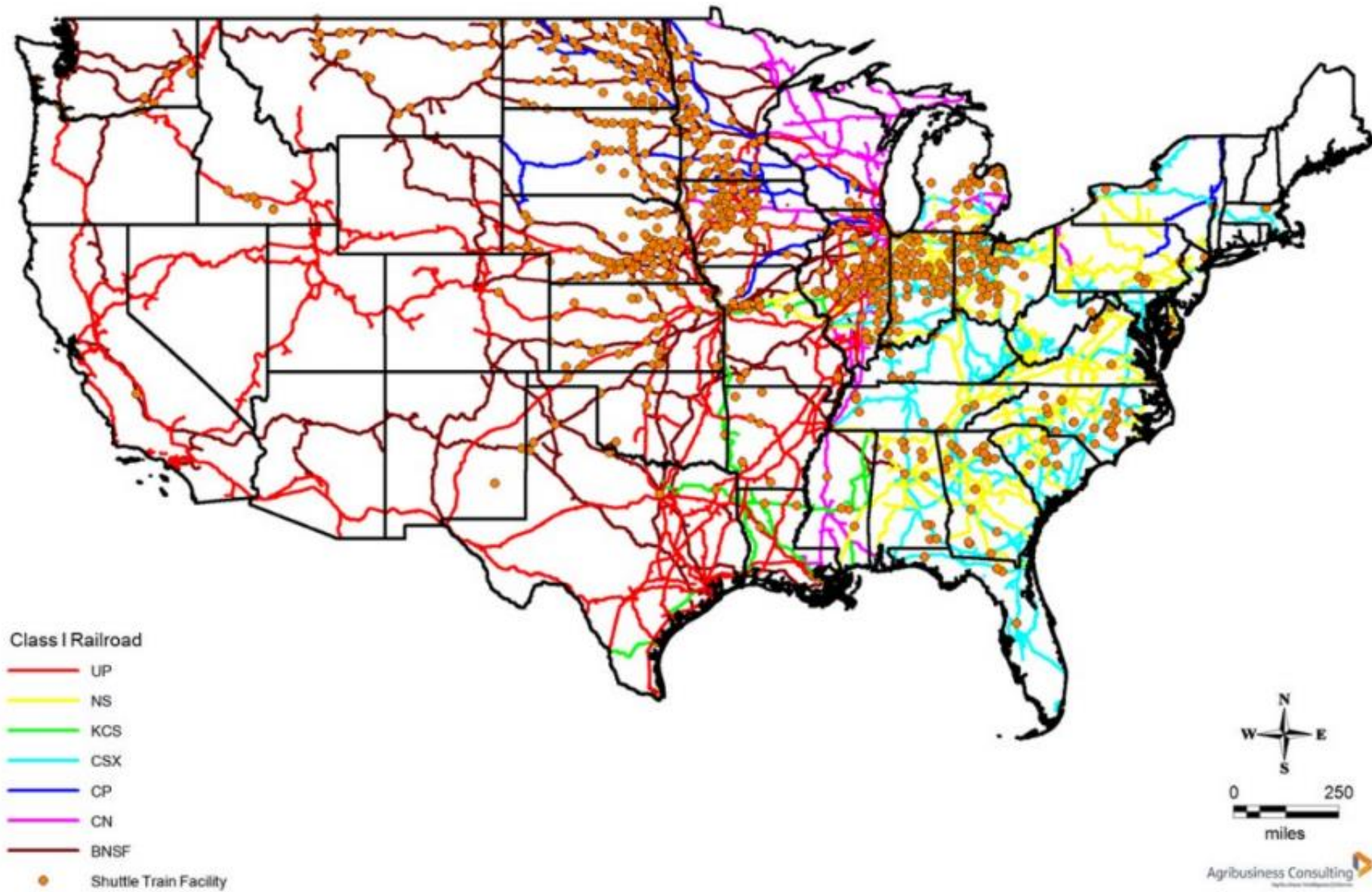
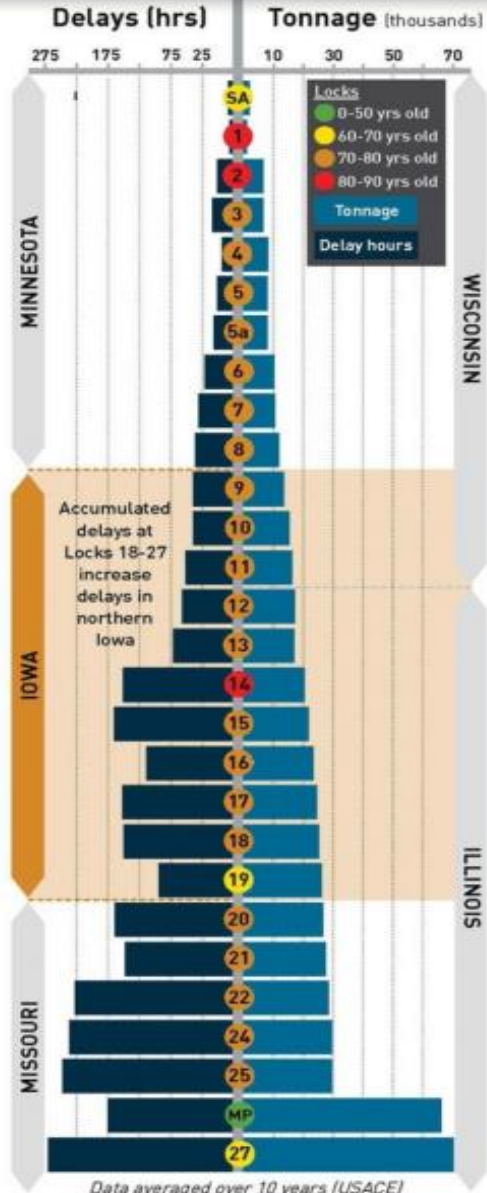


Exhibit 14: Rail Grain Shuttle Loading Facilities and Class I Railroad Network



UPPER MISSISSIPPI LOCKS & DAMS

Annual volume of trade vs. delays

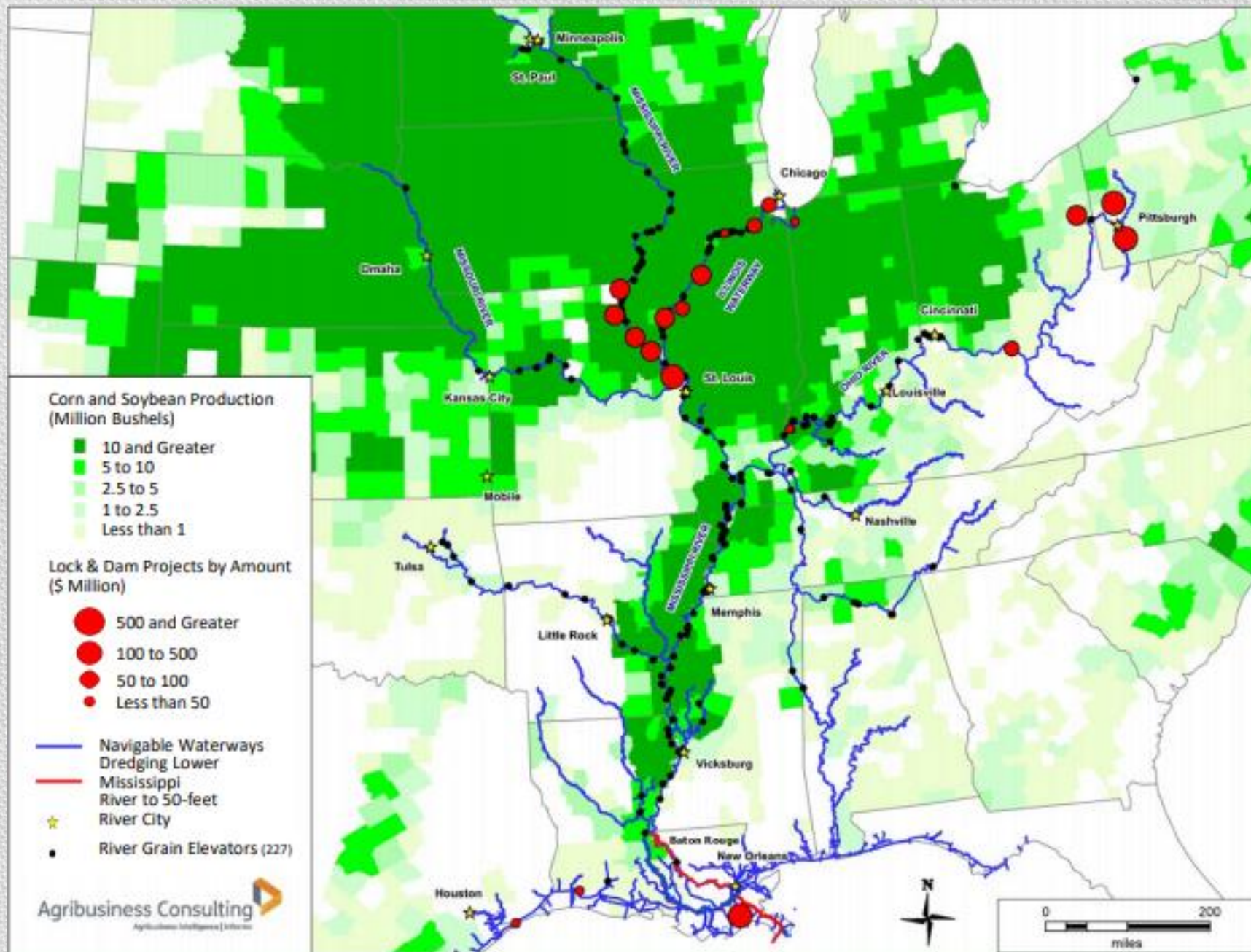


Upper Mississippi Locks & Dams

- 30+ yrs past design life
- 20-30 yrs past design life
- 10-20 yrs past design life
- Within 50 yr design life
- L&D USACE 'Priority Project'
- Length is sufficient for current tow configuration



Reliable Inland
Waterways Needed



Reliable
Inland
Waterways
Needed

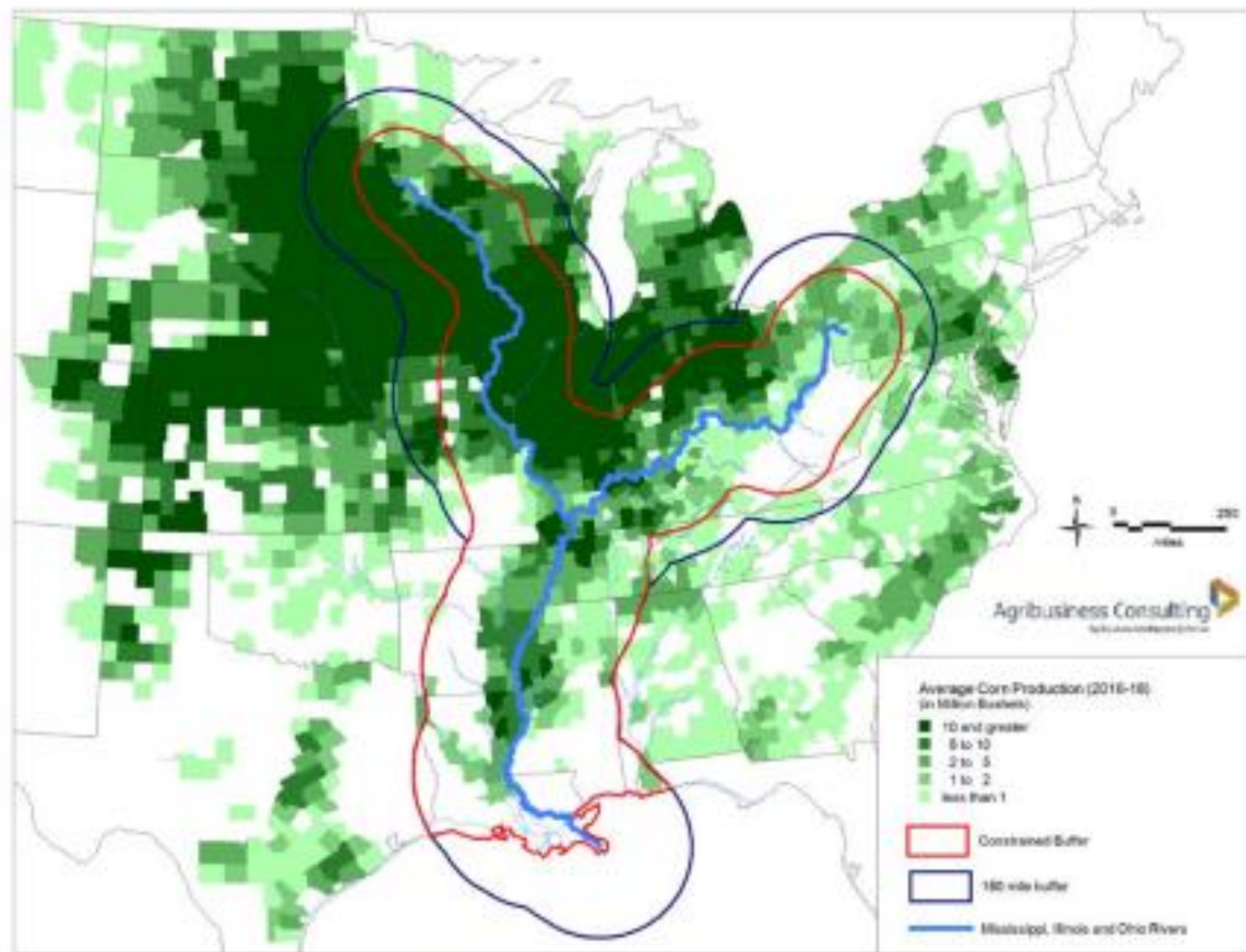
Delays

Exhibit 13: Percent of Lockages and Vessel Delay, Mississippi River

	Total Vessels	Total Lockages	Percent Commercial Lockages	Average Delay Minutes	Percent of Vessels Delayed
2000	231,145	160,640	69.9%	90.0	20.0%
2010	139,768	109,205	68.2%	81.0	19.0%
2017	118,647	113,014	79.9%	121.8	53.0%

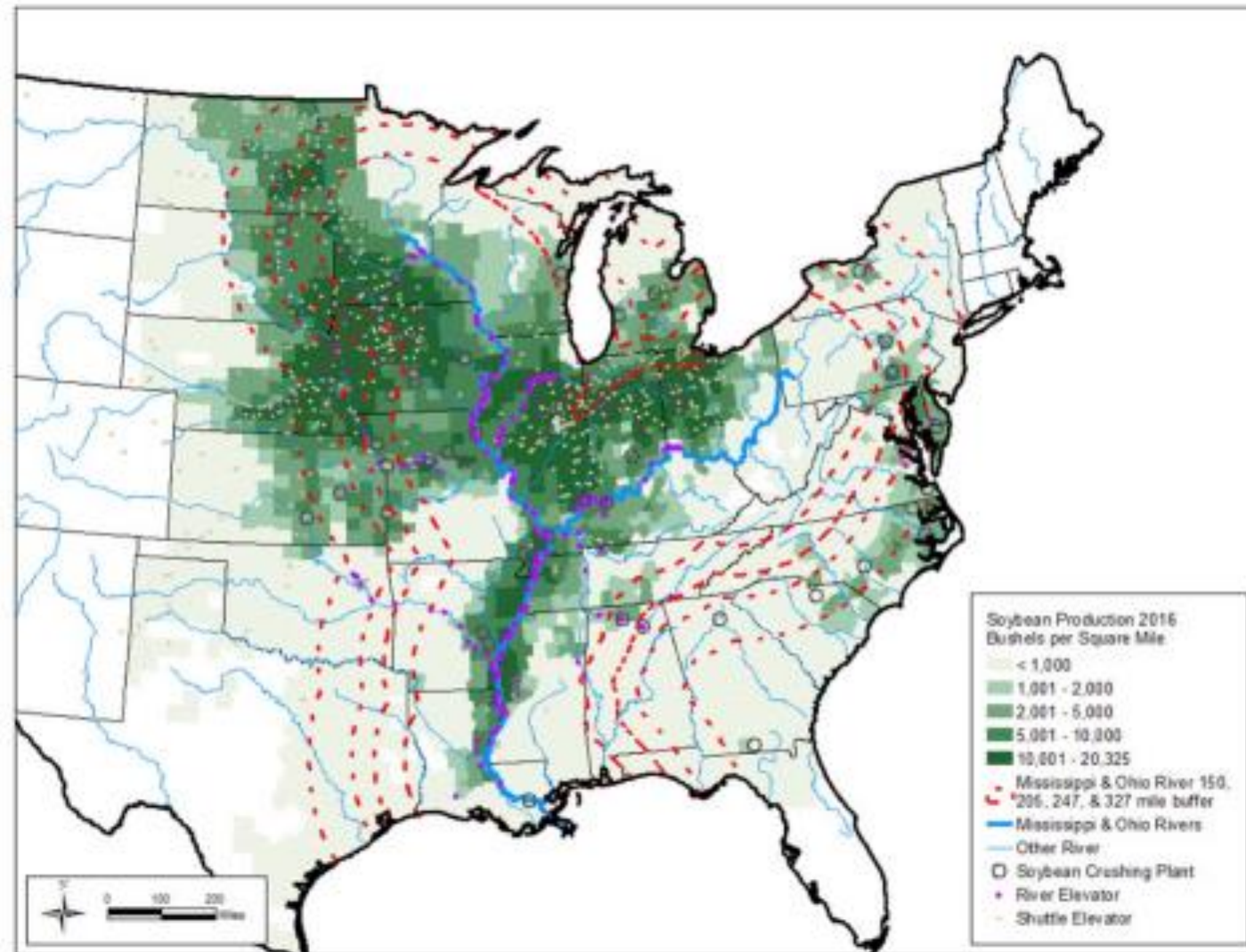
Source: U.S. Army Corps of Engineers

Exhibit 46: Reduced Corn Draw Area with Increased Barge Locking Delays on the Inland Waterways



Source: Agribusiness Intelligence

Exhibit 35: Extended Soybean Draw Area on the Inland Waterways with Dredging Lower Mississippi River to 50-Feet



Source: Agribusiness Consulting and IEG Vantage

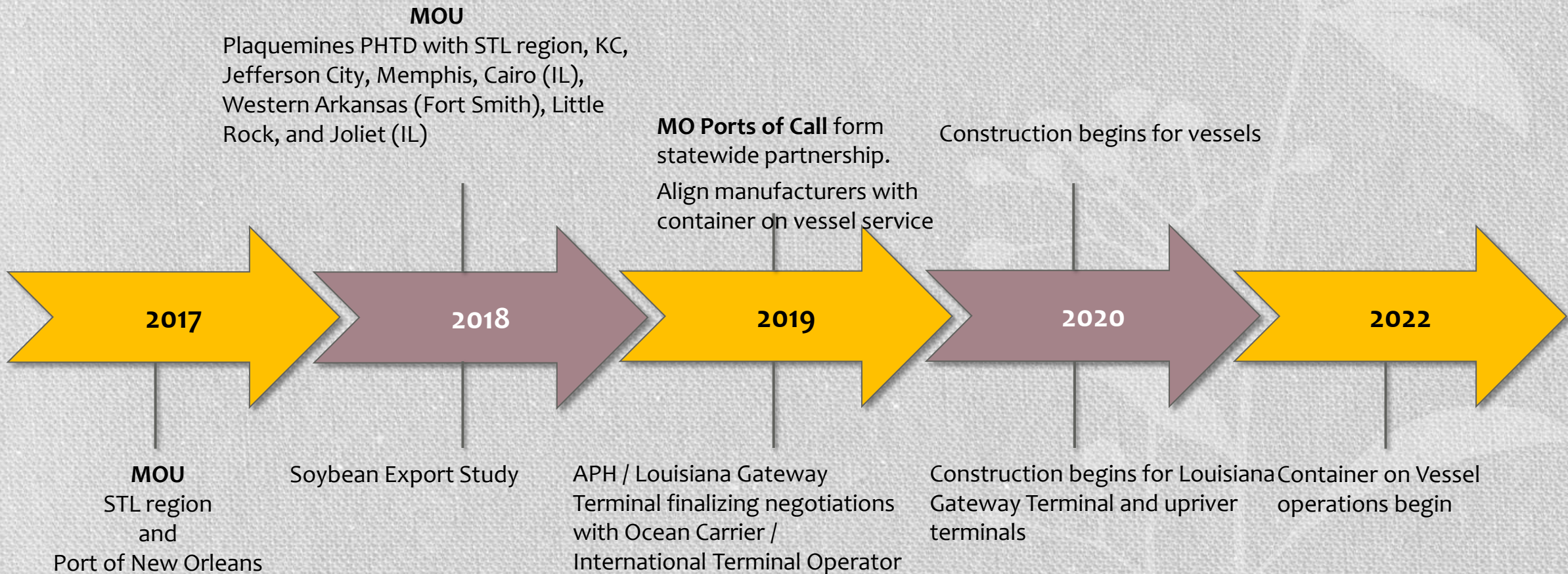


FUTURE

APH's Innovative / Patented / Efficient Container Vessels



Project Delivery: Container on Vessel



Federal Funding

- FAST Act Reauthorization in 2020
 - Safety
 - Resilience
 - Freight
 - Rural Community Access
- WRDA Reauthorization in 2020
 - Inland Waterways Trust Fund
 - Corps Projects

Exhibit 33: Projects Awaiting Construction and Rehabilitation

Potential Investments	River State	River Mile	Amount (\$Million)
NAVIGATION & ECOSYSTEM SUSTAINABILITY PROGRAM (NESP) PROJECTS - AWAITING CONSTRUCTION			
LaGrange Lock	Illinois River/IL	80	\$361.30
Peoria Lock	Illinois River/IL	158	\$362.50
Upper Mississippi River Lock and Dam 20	Mississippi River/MO	343	\$326.30
Upper Mississippi River Lock and Dam 21	Mississippi River/MO	325	\$454.20
Upper Mississippi River Lock and Dam 22	Mississippi River/MO	301	\$376.60
Upper Mississippi River Lock and Dam 24	Mississippi River/MO	273	\$438.30
Upper Mississippi River Lock and Dam 25	Mississippi River/MO	241	\$548.50
PROJECTS AWAITING CONSTRUCTION			
Brazos High Island	Gulf Intracoastal Waterway/TX		\$17.60
Brazos River to Port O'Connor	Gulf Intracoastal Waterway/TX		\$22.20
Calcasieu Lock	Gulf Intracoastal Waterway/TX	63	\$16.90
Dashields Lock	Ohio River/PA	13	\$808.70
Dredging Lower-Mississippi River to 50ft	Mississippi River/LA		\$159.10
Emsworth Lock	Ohio River/PA	6	\$744.40
Inner Harbor Navigation Canal Lock	Mississippi River/LA	63	\$1,009.90
Montgomery Lock	Ohio River/PA	32	\$362.50
MAJOR REHABILITATION PROJECTS			
Brandon Road Lock	Illinois River/IL	286	\$69.20
Dresden Island	Illinois River/IL	271.5	\$50.50
Greenup Lock	Ohio River/OH & KY	341	\$55.00
J.T. Myers Lock	Ohio River/IN & KY	846	\$45.20
Starved Rock	Illinois River/IL	231	\$30.30
TJ O'Brien	Illinois River/IL	327	\$47.00
TOTAL			\$6,306

Source: National Waterways Foundation and INLAND WATERWAYS USERS BOARD 30th ANNUAL REPORT, December 2017

Questions?

A stylized, light brown illustration of a plant with a central stem, several leaves, and a cluster of small, round fruits or berries at the top left.

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