



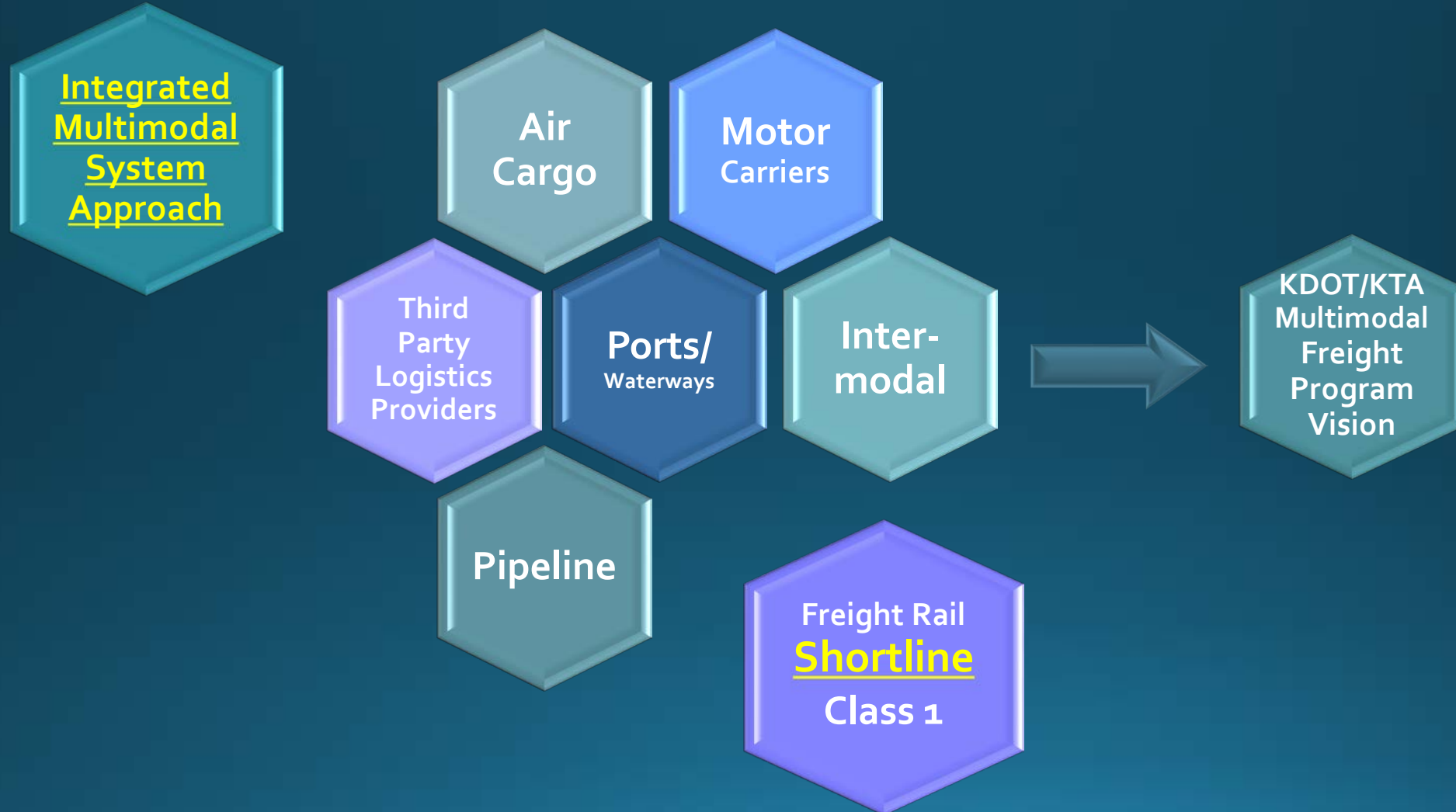
August 28, 2018 – Traverse City, Michigan

Technical Session 10
**KDOT Shortline Rail Programs
and Strategic Approaches**

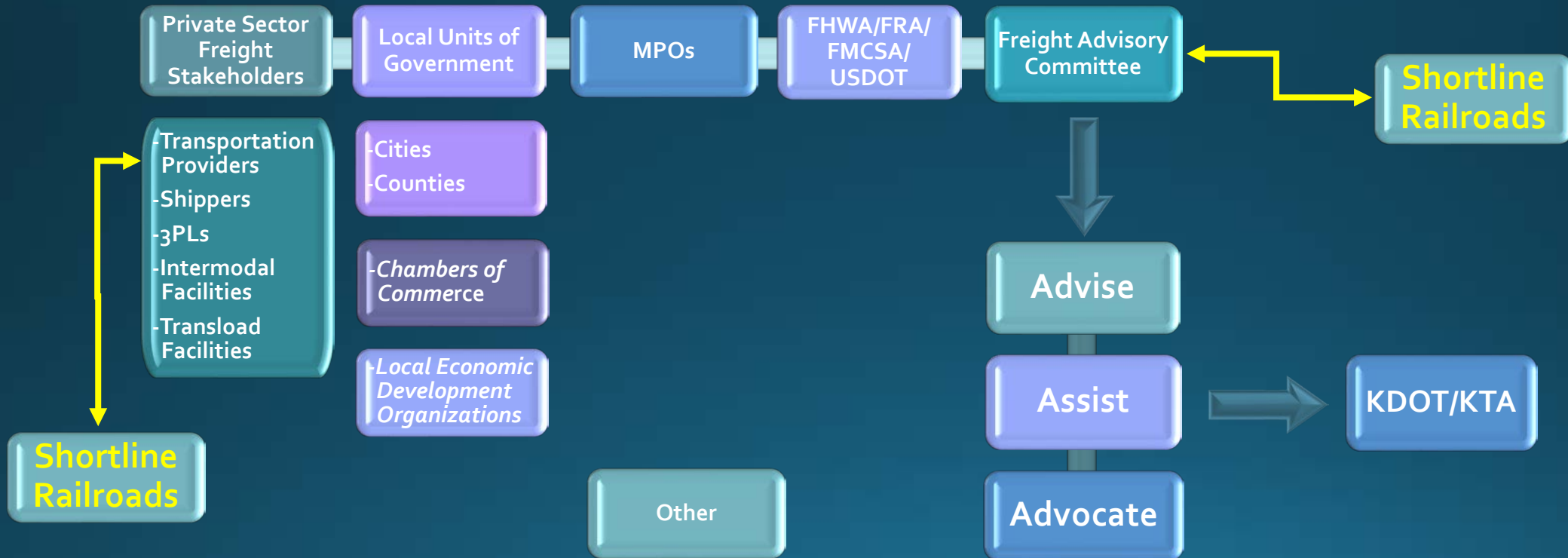
John W. Maddox, CPM
Freight and Rail Program Manager



Moving Freight – “MOVING THE ECONOMY”



Freight Movement is "ECONOMY IN MOTION"



Multimodal Freight Components

Shortline Railroads Are a Key Component in the Freight Logistics Process



Integrated Supply Chain Management

Intelligent Freight and Supply Chain Technologies

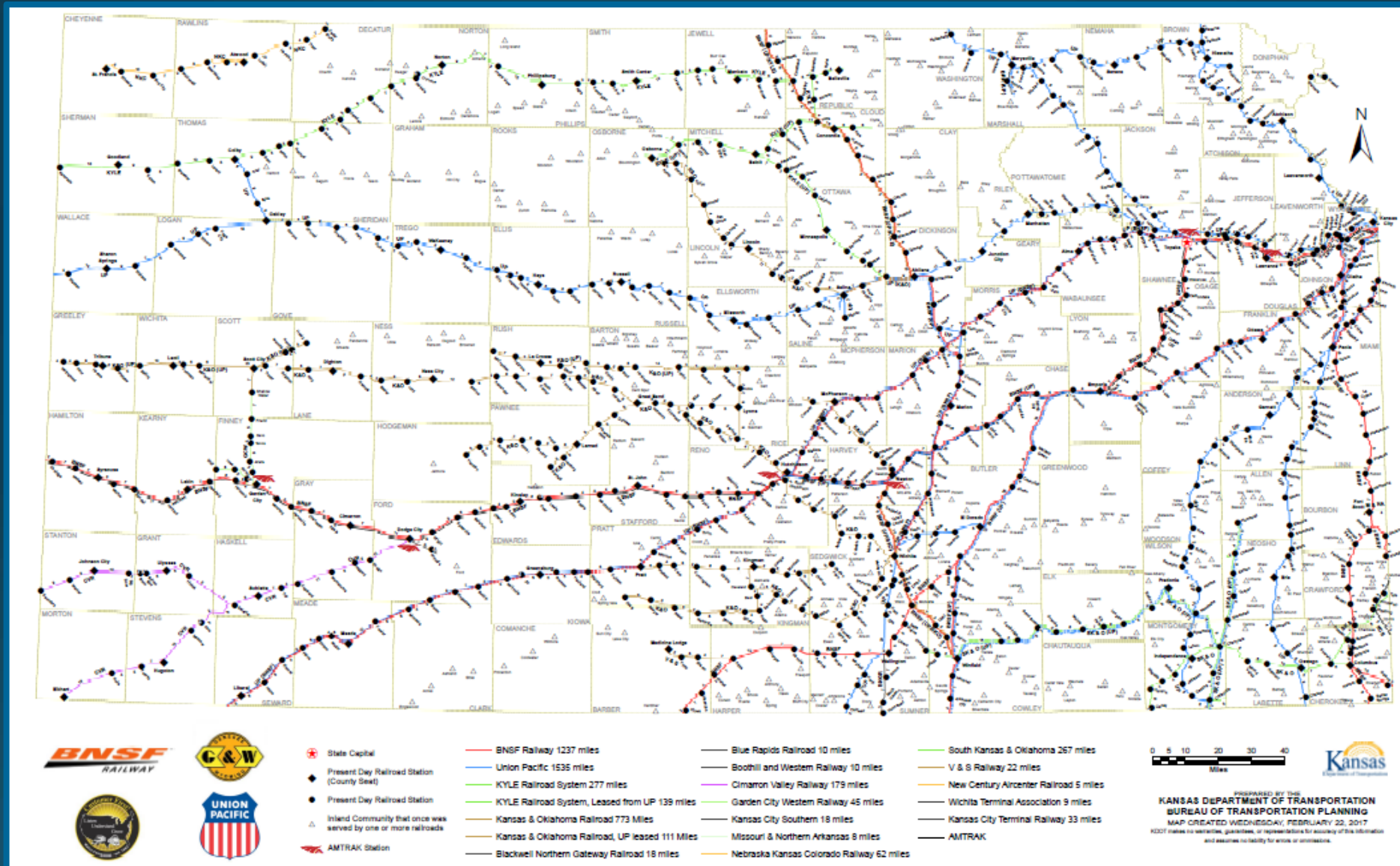


Effects ALL Modes including shortline railroads



Change and Evolution

Kansas Statewide Rail Network



Class 1 Route Miles in Kansas



Class I Carriers	Main Line Owned	Lines Leased to Class III	Miles Operated Excluding Trackage Rights*
BNSF	1,142	0	1,142
Kansas City Southern	18	0	18
Norfolk Southern*	0	0	0
Union Pacific	1,563	313	1,563
Class I Total	2,723	313	2,723

* Norfolk Southern has 3 miles of trackage rights in Kansas

Shortline Route Miles in Kansas



Class III Railroads (Short Lines)	Main Line Owned	Lines Leased from Class I	Miles Operated Excluding Trackage Rights
Blackwell Northern Gateway Railroad	18		18
Blue Rapids Railroad	10		10
Boot Hill & Western Railroad	10		10
Cimarron Valley Railroad ✓	179		179
Garden City Western Railroad	45		45
Kansas & Oklahoma Railroad ✓	554	166	720
Kyle Railroad ✓	282	139	421
Missouri & Northern Arkansas		8	8
Nebraska, Kansas, Colorado Railway	62		62
South Kansas & Oklahoma ✓	267		267
V & S Railway	25		25
Switching and Terminal Railroads			
Kansas City Terminal (Switching service by KAW River Railroad)	27		27
New Century AirCenter Railway	5		5
Wichita Terminal Association and Wichita Union Terminal	9		9
Class III Total	1,493	313	1,806

Shortline railroads own 37% of the track miles in Kansas and operate over 51% of the track miles in the state

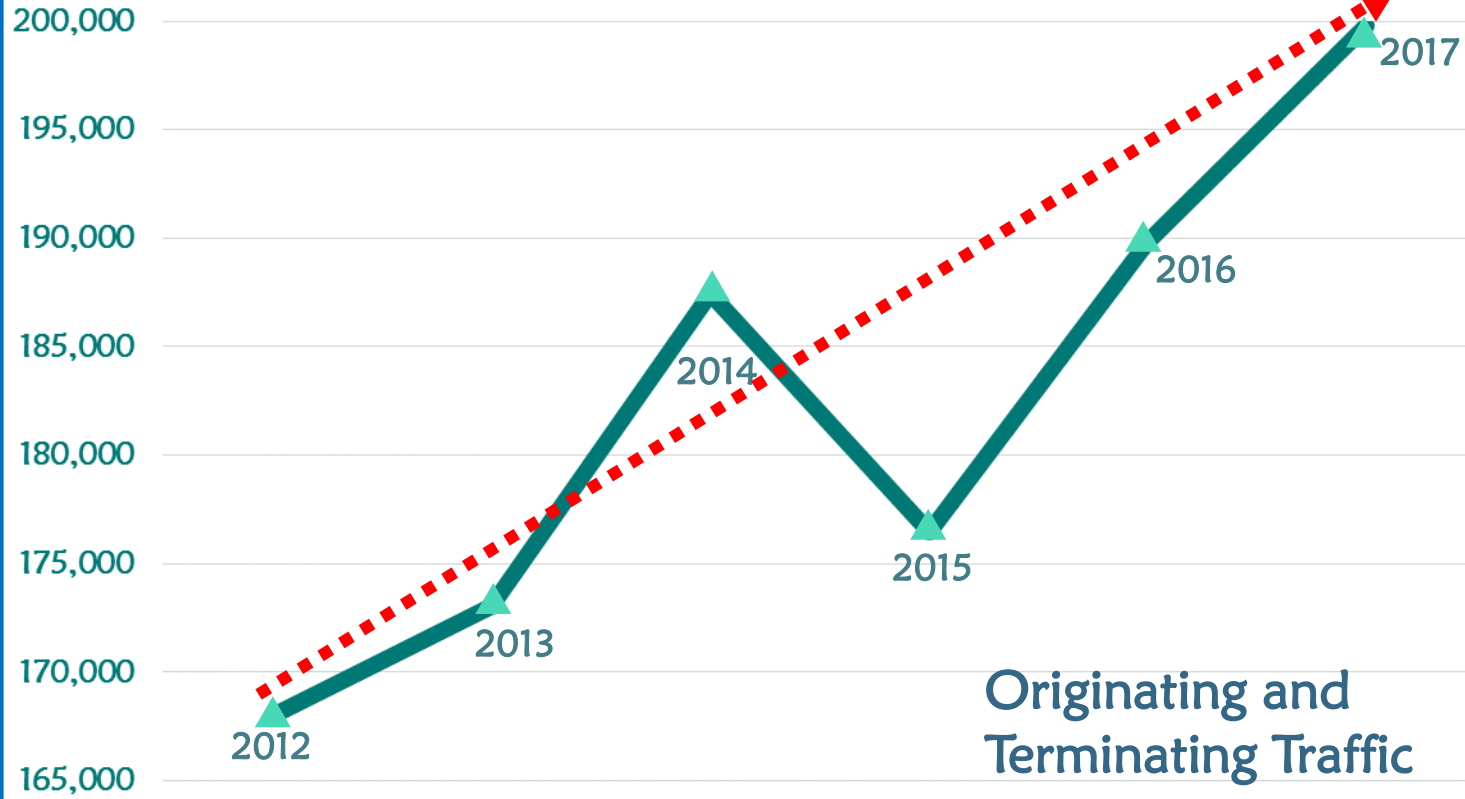
86% of the shortline system is owned and operated by 4 railroads

Kansas shortline railroads include those owned by the largest privately owned shortline holding company (WATCO) and the largest publicly owned shortline holding company (GWRR) in the United States

Shortline Annual Carloadings



Kansas Annual Shortline Carloadings: 2012 - 2017



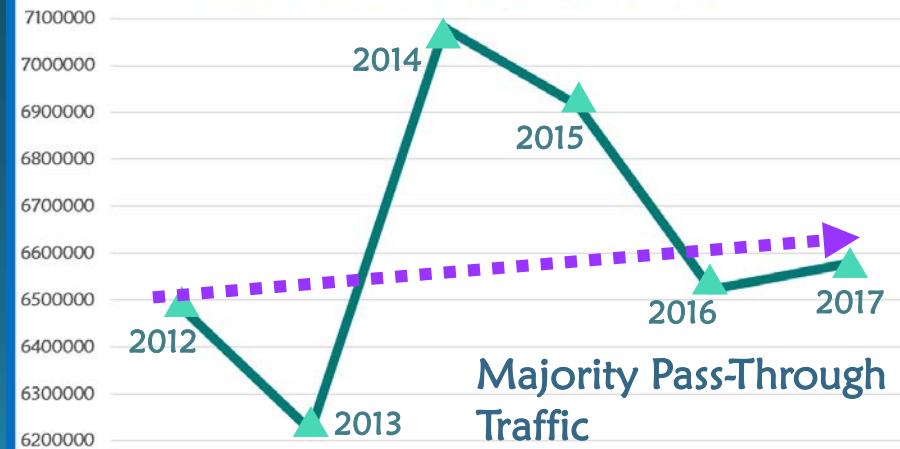
2012	168,032
2013	173,056
2014	187,436
2015	176,481
2016	189,803
2017	199,770

18% Increase

Originating and Terminating Traffic

Class 1 Annual Carloadings

Kansas Annual Class 1 Carloadings: 2012 - 2017

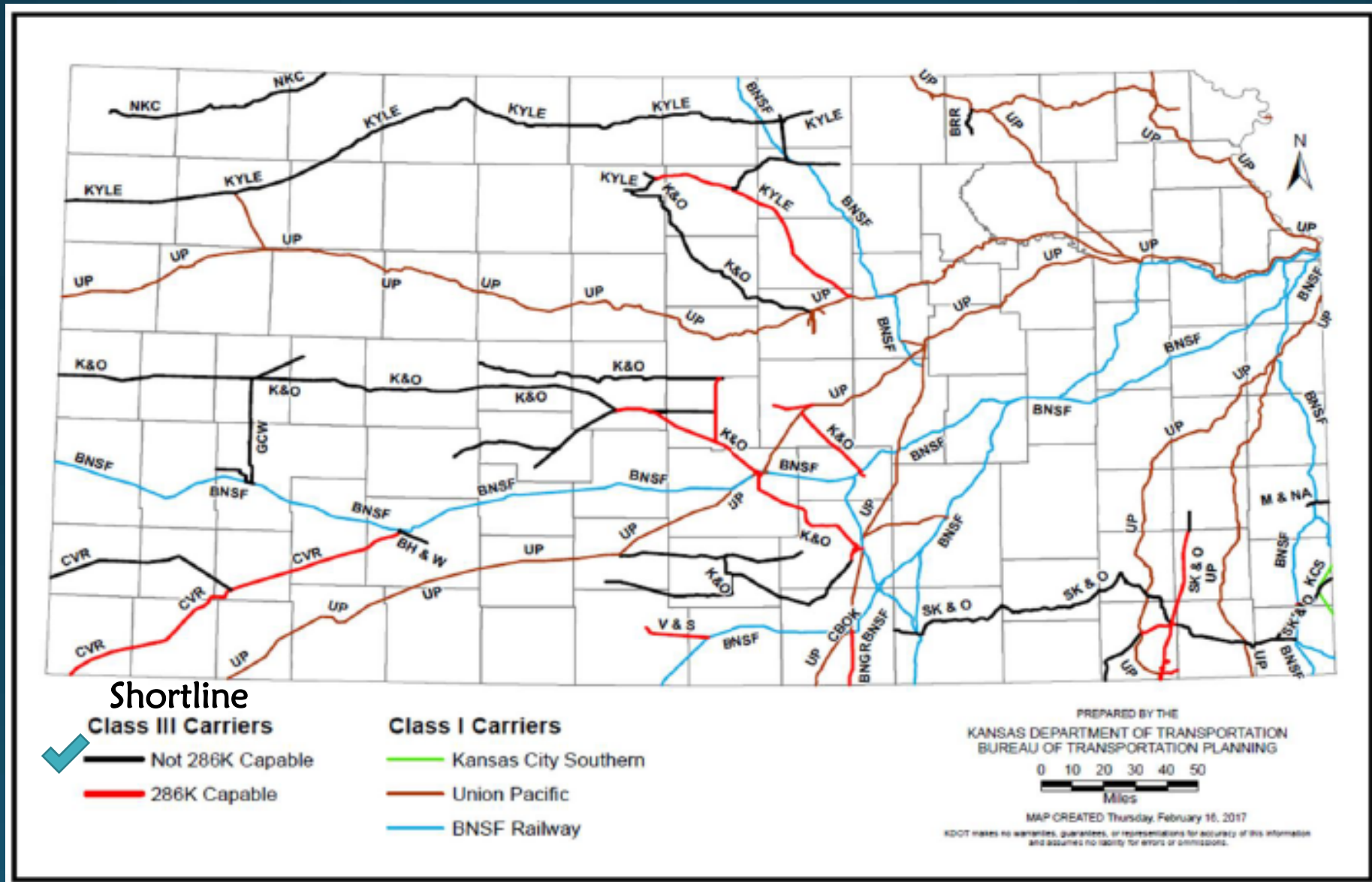


Majority Pass-Through Traffic

1% Increase

2012	6,489,074
2013	6,220,485
2014	7,077,516
2015	6,912,810
2016	6,520,689
2017	6,574,750

Freight Railroad 286K Compatibility



State Rail Service Improvement Fund (SRSIF)



- K.S.A. 75-5047 – Establishment of Fund (Program) – 1991
- K.S.A. 75-5048 – Requirements, Restrictions and Funding
- K.S.A. 75-5049 – Loan Requirements
- K.S.A. 75-5051 – SRSIF Rules and Regulations
- K.A.R. 36-39-1 through 36-36-6 – SRSIF program guidelines

- Comprehensive Transportation Program (1999)
 - ✓ Signed into law by Governor Bill Graves (May 1999)
 - ✓ State funds for rail rehabilitation first authorized
 - ✓ \$3 million annual transfer from the State Highway Fund
 - ✓ Increased to \$5 million in 2008

- T-WORKS (2010)
 - ✓ Signed into Law by Governor Mark Parkinson (May 2010)
 - ✓ State funds for rail rehabilitation continue
 - ✓ Maintained \$5 million in state funding

State Rail Service Improvement Fund (SRSIF)



- Project Categories:
 - ✓ Major Rehabilitation
 - ✓ Capacity Improvement/Expansion
 - ✓ Economic Development
 - ✓ Equipment (Locomotives, railcars, etc.)
 - ✓ Loan (40%), Grant (30%) and Applicant Match (30%) – based on Project Cost
 - EXAMPLE: \$1,000,000 Project
 - Loan Amount: \$400,000 (2% interest, 10-year payback period - \$41,665 interest; TOTAL = \$441,665)
 - Reimbursable Grant: \$300,000
 - Recipient Match: \$300,000
 - Recipient reimbursed off invoices

State Rail Service Improvement Fund (SRSIF) Program Structure



- Applications:
 - ✓ Annual “Call for Applications” in April/May
 - ✓ Applications accepted year-round (based on fund availability)
 - ✓ Competitive Application Process – based on Cost-Benefit Analysis (CBA)
 - ✓ Cost-Benefit Ratio (CBR) = $1.0 >$ (statutory)
 - ✓ Project rankings based on CBR
 - ✓ Project agreement
 - ✓ Notice to Proceed
 - ✓ Minimum of four site visits: preconstruction, materials, construction, post-construction
 - ✓ Final inspection by FRA qualified inspector
 - ✓ Notice of Acceptance
 - ✓ Loan repayment begins

State Rail Service Improvement Fund (SRSIF)



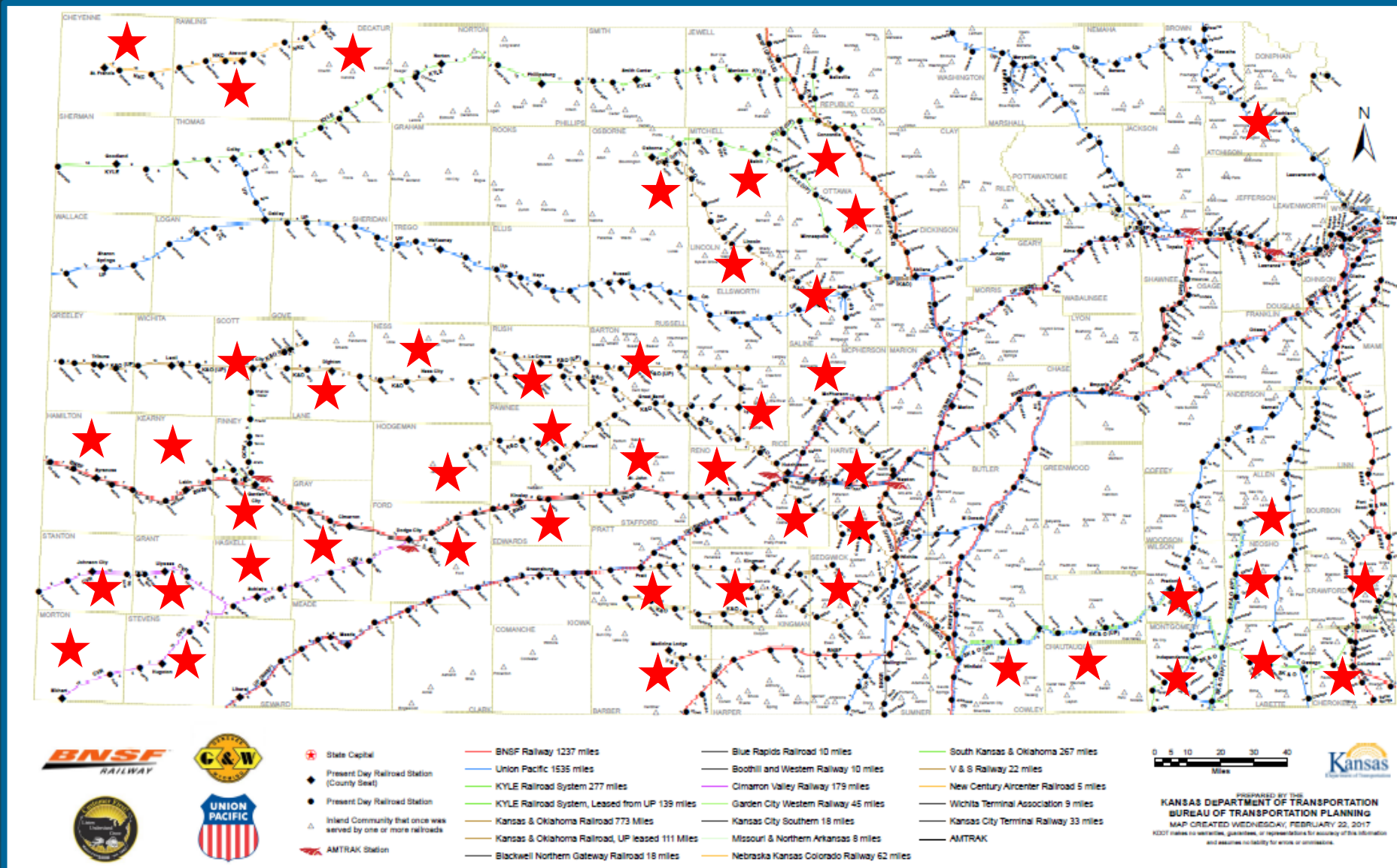
- State Rail Service Improvement Fund: 2000 - 2018
 - ✓ 71 Projects
 - ✓ 650,000 new crossties installed
 - ✓ 435,000 million tons of ballast installed
 - ✓ 8 million tons of rail replaced
 - ✓ 9 **shortline railroads**, 2 port authorities, 3 local units of government and 6 shippers
 - ✓ KDOT loans = \$27,850,000
 - ✓ KDOT grants = \$62,200,000
 - ✓ Recipient match = \$34,500,000
 - ✓ **TOTAL = \$124,500,000**
- SFY 2019 Projects – 3 (to date)

State Rail Service Improvement Fund (SRSIF)



- Additionally, SRSIF have been used to help with match funds to leverage federal TIGER VI and TIGER VII projects for improvements to the BNSF freight line that also serves as the host railroad for the AMTRAK SW Chief
- TIGER VI (City of Garden City, KS)
 - ✓ KDOT - \$3 million
 - ✓ BNSF - \$2 million
 - ✓ AMTRAK - \$4 million
 - ✓ Local Units of Government - \$300,000
 - ✓ Federal TIGER Grant - \$12,469,963
 - ✓ **PROEJCT TOTAL - \$21,769,93**
- TIGER VI (City of La Junta, CO)
 - ✓ KDOT - \$1 million
 - ✓ CDOT - \$1 million
 - ✓ NMDOT - \$1 million
 - ✓ BNSF - \$2 million
 - ✓ AMTRAK - \$4 million
 - ✓ Local Units of Government - \$176,000
 - ✓ Federal TIGER Grant - \$15,210,143
 - ✓ **PROEJCT TOTAL - \$24,386,143**

Kansas County Locations of SRSIF Projects



Rail Rehabilitation, expansion and capacity improvement projects in 47 of the 100 Kansas counties with rail lines

Transload Facility Initiative



- Kansas Freight Advisory Committee (KFAC) Recommendation
- Two year process (2016-2017)
- Call for applications
- 83 applications with 111 sites submitted
- Multiple analyses, economic assessments, screenings, scoring and ranking
- TFSA Advisory Committee
- TFSA Site Selection Committee
- 7 finalist
- 2 sites selected – Great Bend (**shortline**) and Garden City (Class 1)
- Both sites opened in 2017
- Commodities – wind energy components, aggregates, cement, liquid cattle feed supplements

Transload Facilities Site Selection Process, PE and Construction



- ✓ STEP 1: Call for sites that are right size, near rail, near roads (Questionnaire 1)
111 sites
- ✓ STEP 2: Assess sites for readiness (Questionnaire 2)
98 sites
- ✓ STEP 3: Gather input from railroads on ability and interest in serving sites
71 sites
- ✓ STEP 4: Further assess sites for readiness (Questionnaire 3)
41 sites
- ✓ STEP 5: Desktop analysis and limited multi-criteria analysis
7 sites
- ✓ STEP 6: Site presentations and detailed multi-criteria analysis
2 sites
- ✓ STEP 7: Final analysis/due diligence, PE, funding contributions, agreements
2 sites
- ✓ STEP 8: Construction 2 sites (multiple visits pre-construction, construction, post-construction)

Transload Facility Initiative



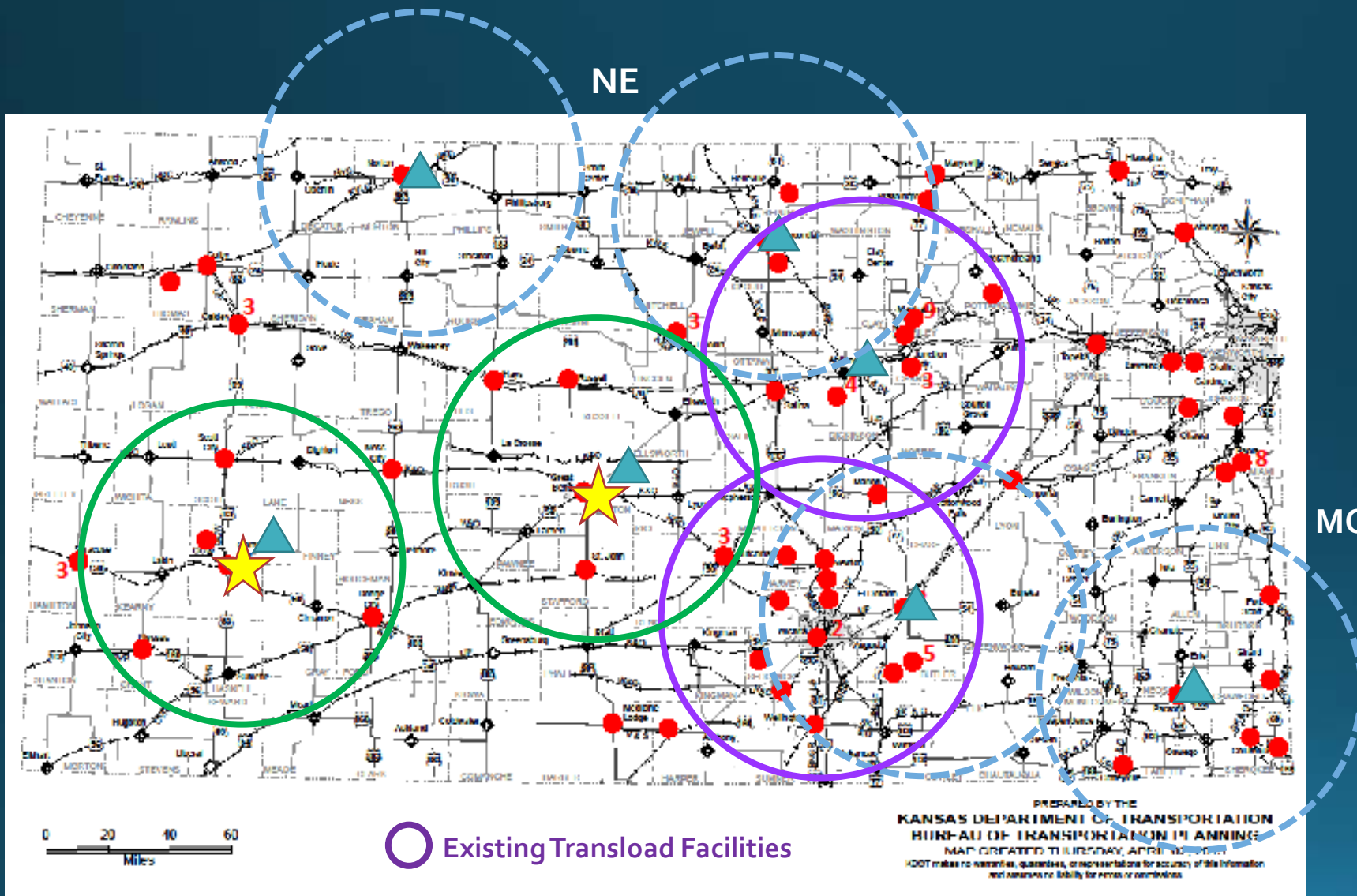
- Transload Facility Advisory Committee (TFAC)
 - Members of KFAC and other private sector freight stakeholders
 - Provide advice and recommendations
 - Listen to and understand any concerns, issues, trends and needs
 - Reflect input and comments during site assessment process as needed
 - Serve as a collaborative, interdisciplinary sounding board for the TFAC teams from KDOT and HDR
 - Provide insight and perspective on various siting criteria and priorities

Transload Facility Initiative



- TFAC Site Selection Committee
 - 11 members: real estate; banking, marketing, agriculture, accounting, energy, technology, legal, education and transportation
 - *State agencies served in an advisory role only*
 - Upper level management
 - 7 presentations over one and one-half days
 - 45 minute presentation by each Tier 1 finalist including questions/answers
 - Representatives from the four serving railroads (2 Class 1 and 2 **shortlines**) answered committee questions regarding rail service, car supply, etc.
 - Deliberation and decision

Transload Initiative Facilities in Kansas



Selected Sites: Great Bend (KO – WATCO - **shortline**); Garden City (BNSF - Class 1)



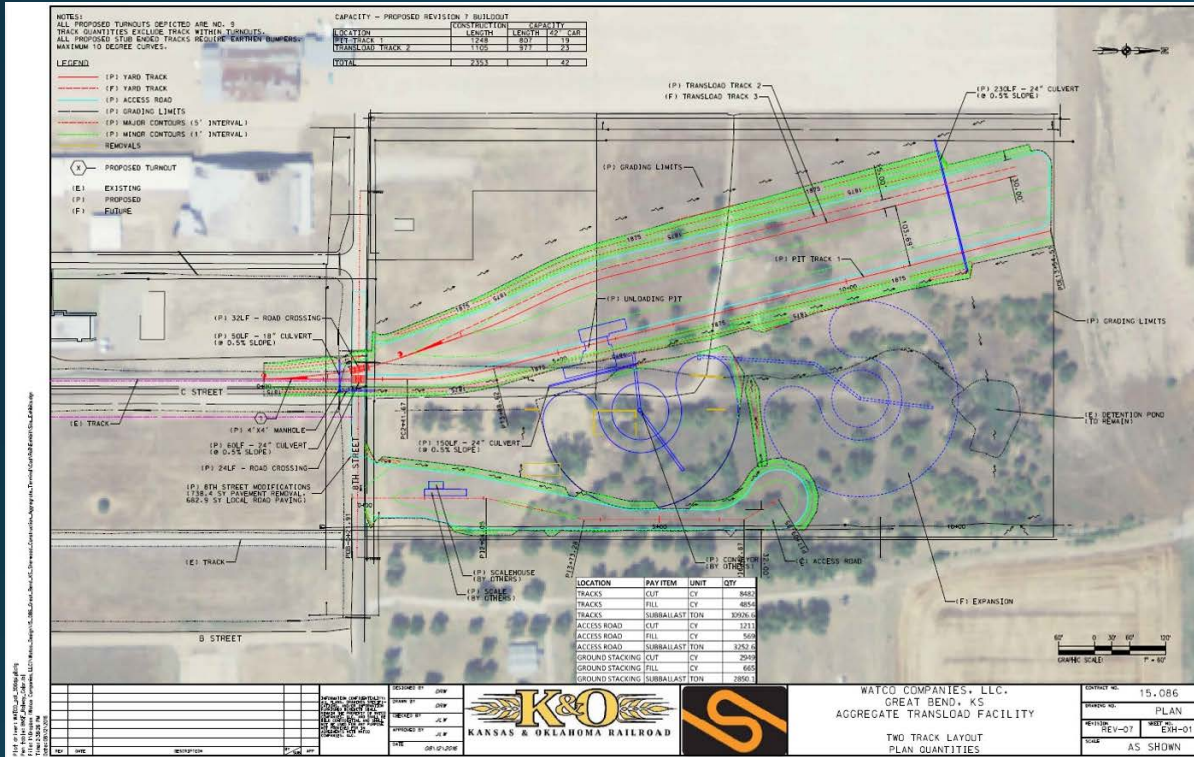
Tier 1 Finalists: Concordia, Norton, Abilene, Parsons, El Dorado, Great Bend, Garden City



Proposed Sites

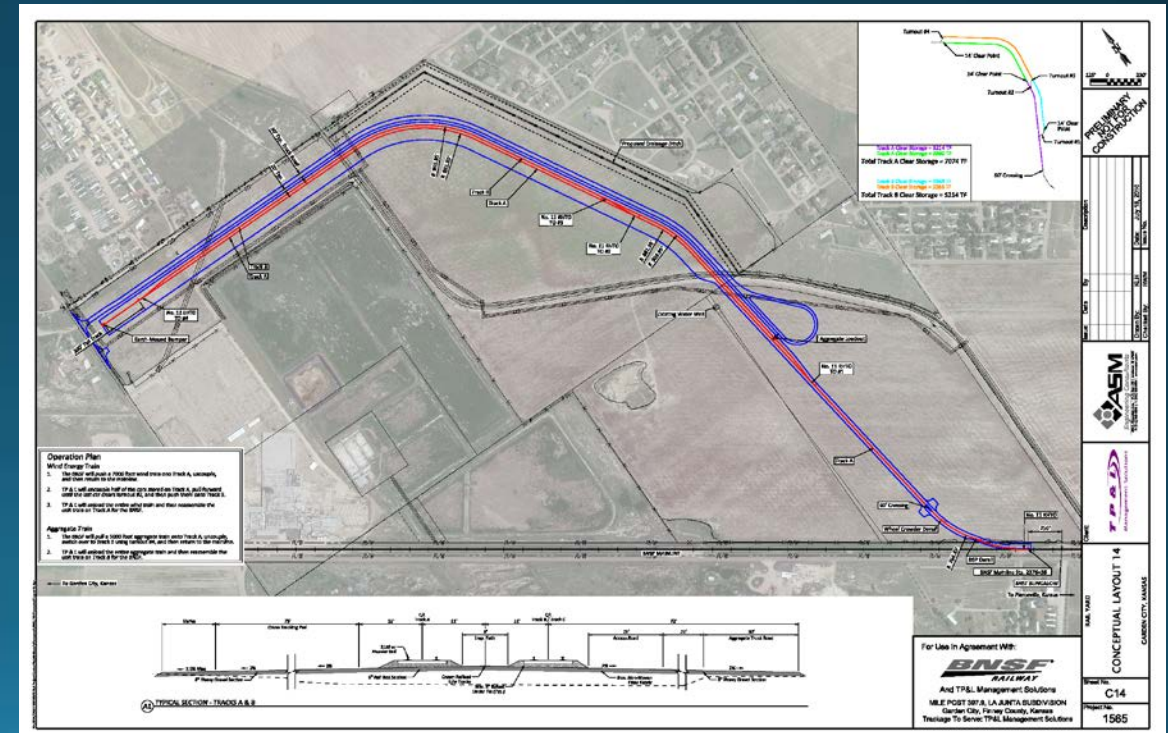
Great Bend Transload Facility

Kansas and Oklahoma Railroad (**shortline**)



Garden City Transload Facility

BNSF Railway



Perspectives on Freight



Freight Initiatives in Kansas

- **Multimodal**
 - Motor Carrier (Class 8 and OSOW)
 - Rail (Class 1 and **Shortline**)
 - Air Cargo, Waterways and Pipeline
- **2017 Statewide Multimodal Freight Plan**
 - Completed in November 2017
 - FAST Act Compliant - APPROVED
- **2017 Statewide **Rail** Plan**
 - Completed in November 2017
 - PRIIA Compliant - APPROVED
- **Kansas Freight Advisory Committee**
 - Established in 2014
 - Representatives from all modes, industry organizations, FHWA, MPOs, ECODEVO organizations and state agencies
 - Helped develop highway and rail (Class 1 and **Shortline**) Freight Corridors of significance
 - Recommended Transload Facilities Initiative
 - Provided input for Statewide Multimodal Freight and **Rail** Plans
 - Provide input and insight regarding multimodal freight challenges and opportunities

Freight Initiatives in Kansas









- Kansas Freight Advisory Committee (KFAC)
 - Ongoing
 - Two major **shortline** railroads (GWRR and WATCO) are members
- Kansas Freight Rail Summit – All Class 1, **Shortline** and Switching Railroads Operating in Kansas
 - September 2018 – Agenda being developed
- Kansas Multimodal Freight Summit
 - May 2019

Multimodal Freight Summit



Multimodal
Freight
Analysis and
Summit



Activity	Duration Months	Start Date	Completion Date																							
				<table border="1"> <tr> <td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td> </tr> </table>	J	A	S	O	N	D	J	F	M	A	M	1	2	3	4	5	6	7	8	9	10	11
J	A	S	O	N	D	J	F	M	A	M																
1	2	3	4	5	6	7	8	9	10	11																
RFP	1	July 2018	July 2018																							
Consultant Letters of Interest	1	July 2018	July 2018																							
Review Consultant Proposals	1	August 2018	August 2018																							
Consultant Interviews and Selection	1	August 2018	August 2018																							
Contract Negotiation	2	August 2018	August 2018																							
Analysis and Freight Summit Plannig	9	August 2018	April 2019																							
Freight Summit	1	May 2019	May 2019																							
TOTAL DURATION	11																									

Multimodal Freight Technologies



➔ Current State

➔ Emerging State

➔ Future State

Technology Drives Local, National,
Regional and Global Trade

All Modes - Including
Shortline Railroads



Thanks!



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