

**WAMPO Freight Plan**  
**Wichita Area Metropolitan Planning Organization**

**Stakeholder Meeting #1**

Tuesday, March 24, 2020

9:30 AM - 10:30 AM

WAMPO  
GoTo Virtual Meeting

**SUMMARY**

*Purpose: To gather input from a wide range of regional stakeholders to identify freight system needs, challenges, and opportunities*

Attendees

James Wagner, City of Wichita

Les Mangus, City of Andover

Karyn Page, Kansas Global Trade

Casey Harbour, WATCO Companies

Javier Ahumada, Federal Highway Administration (FHWA)

Adrienne Korson, Greater Wichita Partnership

John Maddox, Kansas Department of Transportation (KDOT) - Freight and Rail Unit

Heather Alexander, Spirit Aerosystems

Project Team

Sara Clark, TranSystems

Deanne Winkelmann, TranSystems

Slade Engstrom, TranSystems

Brett Letkowski, TranSystems

Elizabeth (Lizzie) Welch, Cambridge Systematics

Elaine McKenzie, Cambridge Systematics

WAMPO Staff

Chad Parasa, WAMPO

Chris Upchurch, WAMPO

Kristen Zimmerman, WAMPO

Bethany Phelps, WAMPO

**Introduction**

- Project Team and Webinar Instructions
  - Sara Clark (TranSystems) introduced the project team. Meeting attendees were asked to use the webinar chat function to document their name and employer/organization. She also provided an overview of the webinar tool functions for any attendees who may be unfamiliar with the GoTo Meeting format.
- Planning Process and Existing Documents
  - Sara Clark (TranSystems) explained the overall goal of the WAMPO Freight Plan update and the planning process, including anticipated public and stakeholder engagement activities. She also mentioned several existing documents and plans that were reviewed to track outstanding items and recommendations.

## Analysis

- Global and National Freight Trends
  - Lizzie Welch (Cambridge) provided an overview of existing and emerging trends related to supply chain logistics, truck parking, and freight data and monitoring.
- Infrastructure Analysis
  - Sara Clark (TranSystems) described key characteristics related to the infrastructure network in the Wichita region including highways, railroads, airports, pipelines, broadband, and freight facilities. She also highlighted high-level commodity statistics relevant to the region.
- Technology
  - Lizzie Welch (Cambridge) summarized new freight-related technology including smart infrastructure, dedicated truck lanes, and freight signal priority. The private sector is also exploring autonomous vehicles, platooning, fleet optimization, unmanned aerial vehicles, manufacturing opportunities, and other new and improved ways to move freight.

## Stakeholder Input

- Priority Areas and Interactive Activity
  - Sara Clark (TranSystems) provided an overview of eight priority areas that were identified: roadway and bridge infrastructure, congestion and bottlenecks, truck facilities, rail infrastructure, air infrastructure, land use, partnerships, and technology.
  - Deanne Winkelmann (TranSystems) directed attendees to the online IdeaFlip board to provide a collaborative tool for stakeholders to provide input. The project team pre-populated needs and potential action steps for each of the eight priority areas. Attendees were provided access to the IdeaFlip board and invited to use the tool to indicate if needs and action steps should be a high priority for the WAMPO Freight Plan. In addition, attendees could also add a new need or action step to the collaboration board.

IdeaFlip Link: <https://ideafliip.com/contrib/znkpfunep3qy/hN3rgHxZPiFq>

*The collaborative board was available for input for one week.*

*A summary of stakeholder input for the IdeaFlip Activity is included on page 3-4.*

## Questions

- What is ELD and how does it work (slide 10)? Is this causing more speeding by truck drivers?
  - An ELD is an Electronic Logging Device that tracks technical and performance specifications for a truck to ensure compliance with driver hours of service. Because the device automatically synchronizes with the vehicle engine to record driving statistics, speed can be tracked.
- What does PM indicate on the Freight Data slide (slide 11)?
  - PM indicates performance measures.
- Can you discuss how the north/south movement of goods in the WAMPO region is critical to the agricultural and aerospace sectors?
  - These two sectors rely on Wichita's location on the I-35 corridor and major Class I rail lines to move both inputs and final products to/from the WAMPO region.

## IdeaFlip Activity Summary

Sixteen (16) individuals, including the project team and WAMPO staff, accessed the online IdeaFlip board. Seven (7) members of the stakeholder committee contributed to the activity, including:

- Javier Ahumada, FHWA
- Adrienne Korson, Greater Wichita Partnership
- John Maddox, Kansas Department of Transportation - Freight and Rail Unit
- Les Mangus, City of Andover
- Karyn Page, Kansas Global Trade
- James Wagner, City of Wichita
- Kurt Yowell, MKEC Engineering Inc.

A positive vote (+1) indicates that a stakeholder selected the item as a high-priority item. A negative vote (-1) indicates that a stakeholder selected the item as a low-priority item.

	Need	Votes	Action Step	Votes
Roadway and Bridge Infrastructure	Weight restricted bridge on N Prairie Creek Road over I-35	2	Ensure freight benefits are accounted for in evaluation of project funding	3
	Rate of infrastructure decay with respect to freight movement	2	Explore new revenue sources	3
	Analysis of specific freight needs along Critical Urban Freight Corridors*	2	Maintain and preserve designated freight corridors	1
	Safety improvements on rural corridors with limited lanes or shoulders	1	Improve weight- and clearance-restricted bridges	1
	Improvements along US-54/400 (West Kellogg)	1	Studies to assess specific needs of goods dependent industry clusters*	1
	K-254 corridor improvements	1		
	Highway and arterial maintenance	0		
	Reduce truck-related crashes	0		
Congestion and Bottlenecks	Unsynchronized traffic signal timings on key corridors	3	Deploy ITS measures to facilitate traffic flow	3
	Congestion at I-35/K-254/K-96 (North Junction)	2	Improve highway interchanges to reduce bottlenecks	0
	Congestion on E. Kellogg and 143rd Street	2	Add or extend four-lane corridors with significant truck traffic	0
	Bottleneck at I-235 & US/54-400 interchange	1	Develop strategies to reduce peak hour goods movements	-1
	Congestion along K-96 from I-135 to Greenwich Road	1		
	Congestion on K-15 to southwest	0		

\* New item added by stakeholder

	Need	Votes	Action Step	Votes
Truck Facilities	Limited truck parking within Sedgwick County	2	Develop an inventory of local truck parking facilities	2
	Local last-mile delivery issues to destinations	2	Expand TPIMS solutions on I-35	2
	No TPIMS facilities within WAMPO region	0		
Rail Infrastructure	Challenging location of rail operations and transload facilities	2	Add transload facilities to accommodate transfers between rail and truck	3
	Weight limits on K&O Railroad track segments	1	Reduce conflicts at priority highway-rail crossings	1
	Crossing consolidation on K&O Railroad in northeast Wichita	1	Improve shortline rail track to 286,000 pound weight capacity	1
	Lack of grade-separated rail crossings on arterial roadways	0		
Air Infrastructure	Expansion of air cargo facilities and air cargo apron	2	Maintain and expand air cargo facilities	3
	Runway lengths of 6,300 feet and 7,300 feet at Eisenhower Airport	0	Consider runway extensions to facilitate larger aircraft	2
Land Use	Environmental impact of freight movement	1	Identify non-highway corridors near freight generators for last-mile improvements	2
	Safety and geometric issues on non-highway corridors	0	Continue to grow established industries while leveraging new opportunities	2
Partnerships	Lack of coordination among public and private organizations	4	Foster public-private partnerships to address institutional/infrastructure issues	1
	Lack of data to inform decision-making	3		
Technology	Support growth of e-commerce	4	Prepare for changes in industrial automation	2
	Lack of understanding of technology trends and impacts	2	Engage with state on CAV (Connected & Automated Vehicle) policy	0
	Increase broadband coverage	0	Support implementation of broadband infrastructure	0

\* New item added by stakeholder

## Meeting Chat Log

James Wagner 9:30 AM: James Wagner - City of Wichita

Chris Upchurch 9:30 AM: Chris Upchurch - WAMPO

Parasa, Chad S. 9:30 AM: Chad Parasa

Parasa, Chad S. 9:30 AM: WAMPO

John Maddox 9:30 AM: i dialed by phone and "all circuits are busy at this time." I'll plan on viewing the presentation and try to dial in again.

Les Mangus 9:30 AM: Les Mangus - City of Andover

Slade Engstrom 9:30 AM: Slade Engstrom - TranSystems

Kristen Zimmerman, WAMPO 9:31 AM: Kristen Zimmerman, WAMPO

Brett Letkowski 9:31 AM: Brett Letkowski, TranSystems

Lizzie Welch 9:32 AM: Lizzie Welch, Cambridge Systematics

Karyn Page 9:32 AM: Karyn Page, Kansas Global Trade

John Maddox 9:32 AM: that works. thanks!

Casey W. Harbour III 9:34 AM: Casey Harbour - WATCO Companies

John Maddox 9:35 AM: i'm connected via phone

Elaine McKenzie 9:35 AM: Elaine McKenzie, Cambridge Systematics

Javier Ahumada (FHWA KS Div) 9:35 AM: Javier Ahumada - FHWA

Adrienne Korson 9:35 AM: Adriene Korson - Greater Wichita Partnership

Bethany Phelps 9:50 AM: <https://ideafliip.com/contrib/znkpfunep3qy/hN3rgHxZPiFq>

John Maddox 10:11 AM: John Maddox, Kansas Department of Transportation - Freight and Rail Unit

James Wagner 10:12 AM: How long is this ideafliip available to edit?

Slade Engstrom 10:13 AM: We are planning on leaving the ideafliip up for one week.

Les Mangus 10:14 AM: I think I heard Karyn Page volunteer to chair

James Wagner 10:18 AM: Is the slide preservation available to download or share?

Slade Engstrom 10:19 AM: The slide presentation is available. We will send a link with the recording of the presentation and a link to the ideafliip after the presentation concludes.

James Wagner 10:21 AM: thanks Slade

Karyn Page 10:22 AM: great job

Heather 10:22 AM: Heather Alexander Spirit Aerosystems

Parasa, Chad S. 10:22 AM: Thanks



# WAMPO Freight Plan

Stakeholder Meeting #1  
March 2020



EXPERIENCE | Transportation



# Project Team

## **WAMPO**

- ▶ Chris Upchurch
- ▶ Chad Parasa
- ▶ Bethany Phelps
- ▶ Kristen Zimmerman

## **TranSystems**

- ▶ Slade Engstrom
- ▶ Sara Clark
- ▶ Deanne Winkelmann

## **Cambridge Systematics**

- ▶ Elizabeth Welch
- ▶ Elaine McKenzie

# Agenda

- ▶ Introduction
  - Project Team
  - Webinar Instructions
  - Planning Process
  - Existing Documents
- ▶ Infrastructure Analysis
- ▶ Stakeholder Input
  - Priority Areas
  - Needs
  - Potential Action Steps



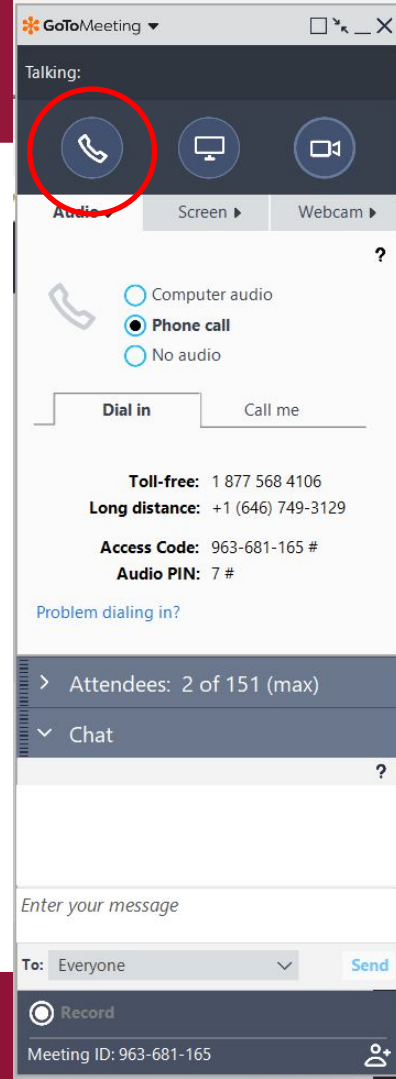
# Webinar Instructions

- ▶ Please mute your line
- ▶ Use the chat function to alert us to questions or comments
- ▶ Idea Flip Instructions

The screenshot displays the GoToMeeting interface. At the top, it says "Talking:" and has three circular icons for phone, screen, and webcam. Below these are tabs for "Audio", "Screen", and "Webcam". Under the "Audio" tab, there are three radio button options: "Computer audio", "Phone call" (which is selected), and "No audio". There are also "Dial in" and "Call me" buttons. Below these are contact details: "Toll-free: 1 877 568 4106", "Long distance: +1 (646) 749-3129", "Access Code: 963-681-165 #", and "Audio PIN: 7 #". A link for "Problem dialing in?" is also present. At the bottom, there are sections for "Attendees: 2 of 151 (max)", "Chat", and "Enter your message" with a "Send" button. The "Record" button is also visible, and the "Meeting ID: 963-681-165" is shown at the very bottom.

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The screenshot displays the GoToMeeting interface. At the top, the 'Talking:' section shows three icons: a phone icon (circled in red), a screen icon, and a webcam icon. Below this, the 'Audio' section is active, showing three radio button options: 'Computer audio' (unselected), 'Phone call' (selected), and 'No audio' (unselected). There are also 'Dial in' and 'Call me' buttons. Below the audio options, contact information is listed: Toll-free: 1 877 568 4106, Long distance: +1 (646) 749-3129, Access Code: 963-681-165 #, and Audio PIN: 7 #. A link for 'Problem dialing in?' is also present. The 'Attendees' section shows 'Attendees: 2 of 151 (max)'. The 'Chat' section is visible with a question mark icon. At the bottom, there is a 'Send' button and a 'Record' button. The Meeting ID is 963-681-165.

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The screenshot displays the GoToMeeting mobile application interface. At the top, the status bar shows 'GoToMeeting' and window control icons. Below this, a 'Talking:' section contains three circular icons for phone, screen, and webcam. The 'Audio' section is expanded, showing three radio button options: 'Computer audio', 'Phone call' (which is selected), and 'No audio'. Below the audio options are 'Dial in' and 'Call me' buttons. Further down, contact information is listed: 'Toll-free: 1 877 568 4106', 'Long distance: +1 (646) 749-3129', 'Access Code: 963-681-165 #', and 'Audio PIN: 7 #'. A link for 'Problem dialing in?' is also present. The 'Attendees: 2 of 151 (max)' section is visible, with the 'Chat' option circled in red. At the bottom, there is a 'Enter your message' input field, a 'To: Everyone' dropdown menu, and a 'Send' button. The 'Record' button and 'Meeting ID: 963-681-165' are also visible at the very bottom.

# Planning Process

## **Goal: Update WAMPO Freight Plan**

- ▶ Existing Infrastructure Conditions
- ▶ Priority Areas
- ▶ Needs Analysis and Action Steps

## **Public and Stakeholder Engagement**

- ▶ Stakeholder Meeting #1 in March
- ▶ Stakeholder Meeting #2 in May
- ▶ Transportation Policy Board (TPB) Meeting in July

# Existing Documents

## Freight-Related Documents

- ▶ WAMPO Freight Plan (2010)
- ▶ WAMPO Railroad Crossing Plan (2007)
- ▶ Wichita Railroad Master Plan (2013)
- ▶ Kansas Statewide Freight Plan (2017)
- ▶ Regional Export Plan (2017)
- ▶ Regional Growth Plan (2018)

# Network and Supply Chain Resilience

## Institutions

Emergency preparedness

Resilience planning

## Infrastructure

Hardening

Redundancy

## Supply Chains

Production

Transportation

Policy



Flooding on BNSF Arkansas City Subdivision  
May 2019

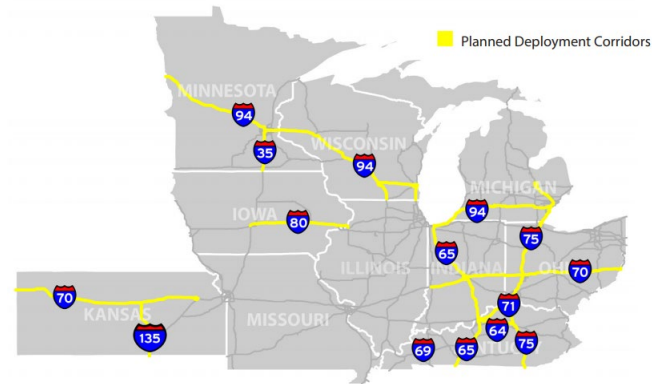
Resource: NCFRP 39: Freight Transportation Resilience in Response to Supply Chain Disruptions

<http://www.trb.org/Publications/Blurbs/179096.aspx>

# Truck Parking

- ▶ National shortage and more recent increased attention due to ELD mandate
- ▶ Areas with greatest demand can be difficult or expensive to develop
- ▶ Information can help: MAASTO TPIMS is a leading example nationwide
- ▶ Resources: ATRI, MAASTO, state DOT studies

MAASTO Regional TPIMS Corridors for Deployment

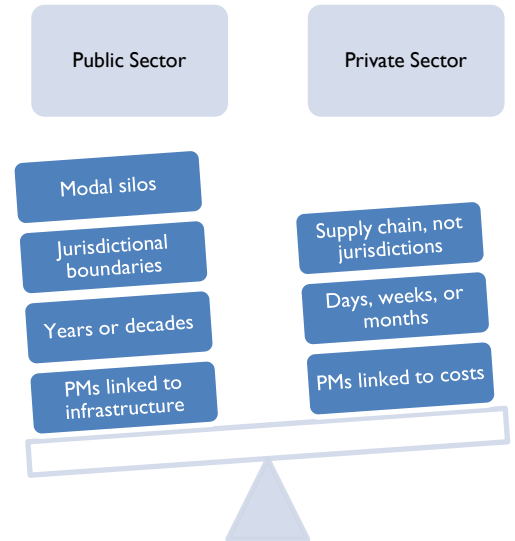


Source: MAASTO TPIMS Executive Summary



# Freight Data

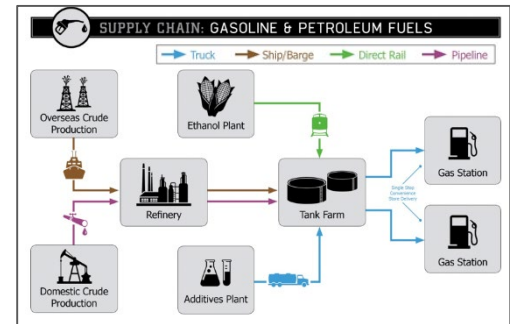
- ▶ Ongoing need to align public and private data for better decision making
- ▶ Innovative data uses
  - Linking across modes and sources
  - FHWA Freight Fluidity Program
- ▶ Real-time data
  - Incident management centers
  - Truck parking availability



# FHWA Freight Fluidity Program

- ▶ Defining supply chains through interviews with producers
- ▶ Assess costs by mode at different points of specific supply chains
- ▶ Shifts focus from traditional measures to system-level cost
  - Monitor cost/performance nationally

Representative Retail Supply Chain  
Consumer Goods—Ports of LA/Long Beach and Seattle/Tacoma via Chicago to Metro NYC



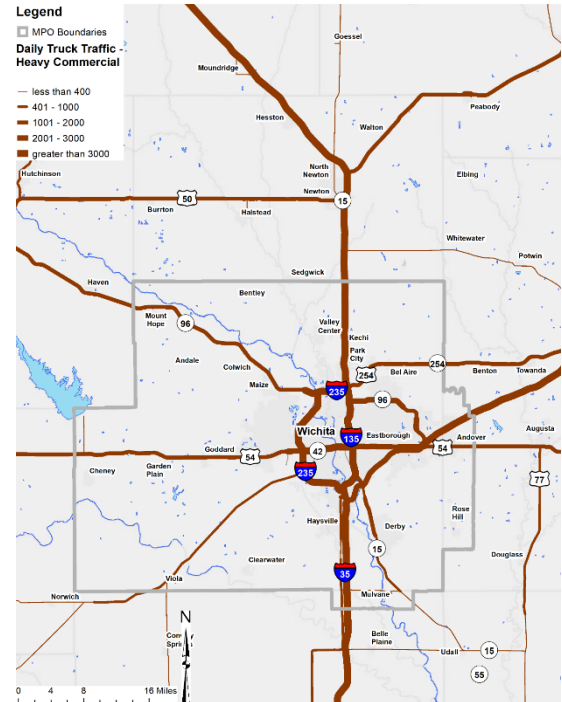
Resource: I-95 Coalition  
<https://i95coalition.org/projects/freight-fluidity/>

# Infrastructure Analysis

# Highway

## Key Characteristics

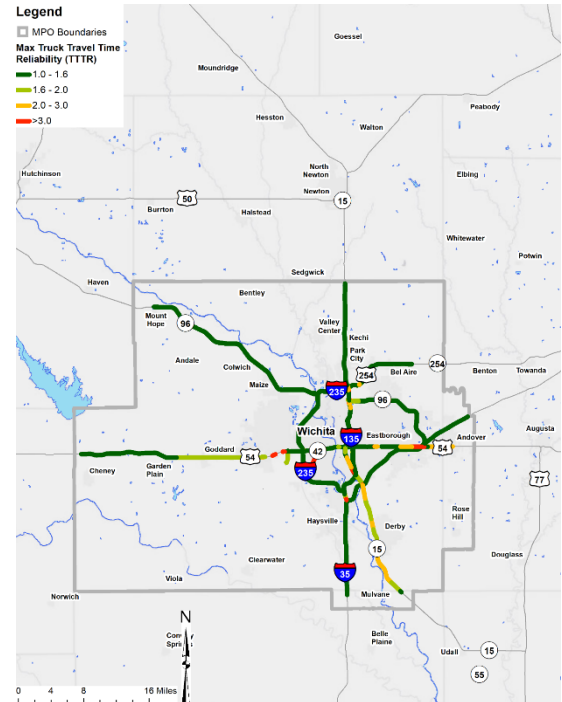
- ▶ 440 miles on regional freight network
- ▶ 90% of regional freight movement in, out, and through region by truck
- ▶ I-35 carries most over-size/over-weight traffic in Kansas



# Highway

## Key Characteristics

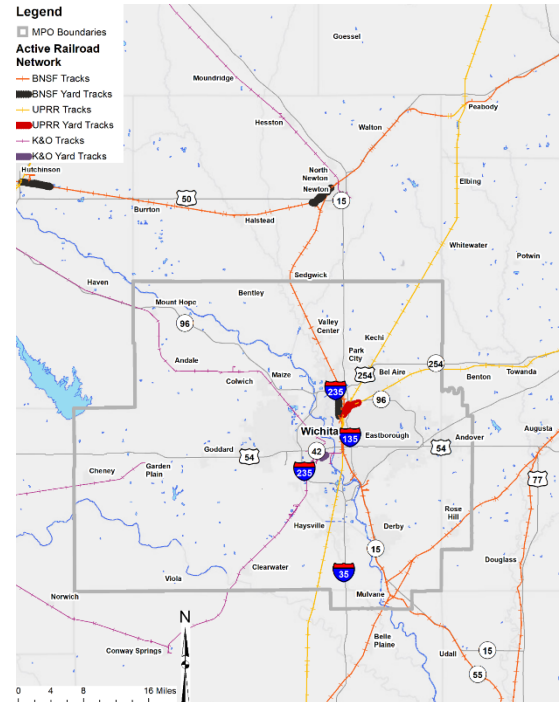
- ▶ 85% of highways operate uncongested during peak
- ▶ One weight restricted bridge over I-35 at N Prairie Creek Road
- ▶ Nearest TPIMS truck parking location on I-135 in Harvey County



# Railroad

## Key Characteristics

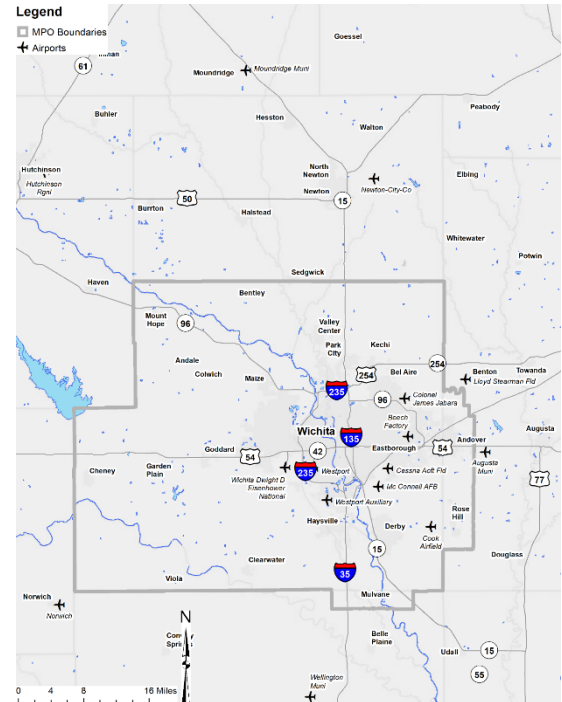
- ▶ Four railroads operate 175 miles of track
- ▶ K&O recommended for weight capacity upgrade
- ▶ Candidates for grade separation, crossing consolidation, and warning device upgrades



# Airports

## Key Characteristics

- ▶ Eight public airports and one military airfield
- ▶ ICT only facility equipped to handle substantial freight volumes
- ▶ McConnell AFB primarily refueling and airlift operations

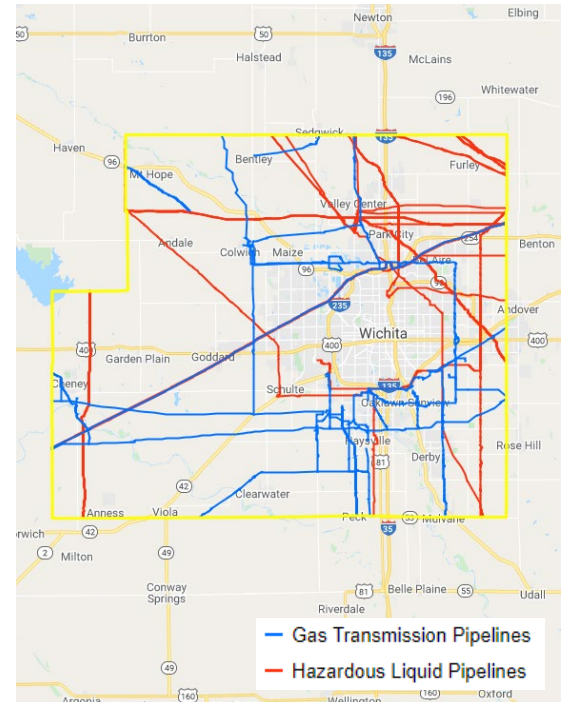




# Pipelines

## Key Characteristics

- ▶ Few pipelines with limited commodity movement
- ▶ Existing pipelines primarily provide fuel to McConnell AFB

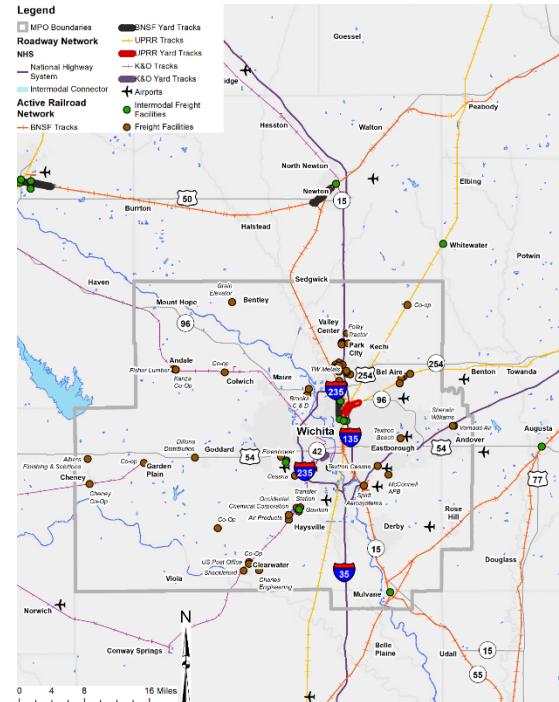




# Freight Facilities

## Key Characteristics

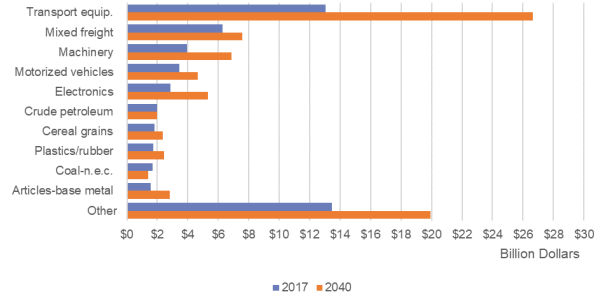
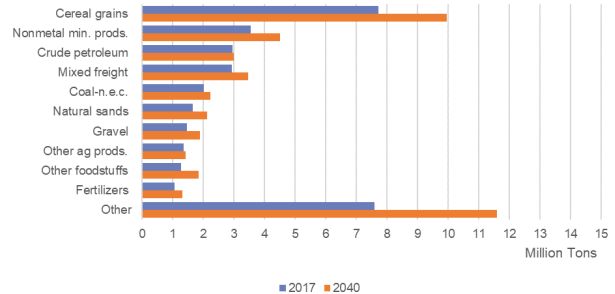
- ▶ Aerospace and agricultural sectors are critical
- ▶ 53% of manufacturing employment related to aviation/aerospace
- ▶ Two of the largest privately-held agriculture businesses



# Commodities

## Key Characteristics

- ▶ In 2017, 34 million tons of freight valued at \$52 billion moved
- ▶ By 2040, 43 million tons valued at \$82 billion is expected.
- ▶ This is an increase of 29 percent by tonnage and 58 percent by value.



# Stakeholder Input

# Priority Areas

Roadway and Bridge Infrastructure	Needs	Action Steps
Congestion and Bottlenecks		
Truck Facilities		
Rail Infrastructure		
Air Infrastructure		
Land Use		
Partnerships		
Technology		

# Priority Areas

The logo for IDEA FLIP, featuring the word "IDEA" in black and "FLIP" in white on a black background, all contained within a yellow rectangular box.

IDEA FLIP

Open a browser window and enter:

<https://ideafliip.com/contrib/znkpfunep3qy/hN3rgHxZPiFq>

Link was sent via email from Sara Clark, TranSystems  
on 3/23/2020 at 5:00pm





Follow instructions within IdeaFlip Board



# IdeaFlip Instructions

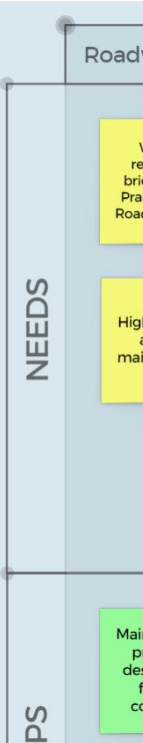
**INSTRUCTIONS**

Welcome to the WAMPO Freight Stakeholder Meeting collaboration board!  
Please use the Stationary tab to the right to provide input.

-  Indicate an item is a higher priority
-  Indicate an item is a lower priority
-  **NEED** Add a new "Need" to the board
-  **ACTION STEP** Add a new "Action Step" to the board

**OTHER USEFUL TIPS**

- Pan: Click+Drag
- Zoom: Mousewheel or Ctrl+Click+Drag (touchpad)
- Edit Text: Double-click on new note
- Delete: Drag item to red box at bottom of matrix



The image shows a partial view of a matrix board. The board has two main columns: 'NEEDS' and 'TIPS'. The 'NEEDS' column contains two yellow notes: 'We rest bridge Prairie Road c' and 'High art maint'. The 'TIPS' column contains one green note: 'Maint pre design fre corr'. The top of the board is labeled 'Roadw'.

# Priority Areas

Roadway and Bridge Infrastructure	Needs	Action Steps
Congestion and Bottlenecks		
Truck Facilities		
Rail Infrastructure		
Air Infrastructure		
Land Use		
Partnerships		
Technology		

# Smart and Dedicated Infrastructure

- ▶ **Smart Infrastructure (CV, IOT):** Share information about conditions, vehicles, and infrastructure
  - Kansas: KDOT has an internal Truck Platooning Committee
  - Wyoming: CV Pilot Deployment on I-80. 75 Roadside Units (RSUs); 400 equipped vehicles with on-board units (OBUs)
- ▶ **Dedicated Truck Lanes (DTLs):** Separate commercial vehicles from passenger vehicles
  - Missouri: examined dedicated truck lane concepts
  - MAASTO: conducted feasibility study on I-70
- ▶ **Freight Signal Priority (FSP):** Prioritize movement of trucks at intersections
  - Similar strategy as Transit Signal Priority
  - Florida: SR-838 is a 10.2-mile corridor

# Private Sector Vehicle Technologies

- ▶ **Autonomous Vehicles:** Reduce driver involvement for safety and mobility
  - Freightliner in NV and VA: the first road-approved truck for autonomous operation
  - Many predictions, but drivers likely to stay in the vehicle for now
- ▶ **Platooning:** Connect two or more trucks in convoy for efficient travel
  - Reduced following distance means lower emissions, better utilization of space
  - 18 states fully authorizing platooning and 8 additional states allowing testing or limited deployments.
- ▶ **New/Improved Ways to Move:** Develop new modes or improve existing
  - The Freight Shuttle System (FSS): Uses efficient, linear-induction motors and autonomous operation
  - Alternative fuels: Biodiesel, electric, natural gas

# Private Sector Technology Efficiencies

- ▶ **Route/Fleet Optimization:** Deliver goods on time and in the most efficient manner
  - Private software algorithms
  - Load matching or peer-to-peer systems (Uber)
- ▶ **Unmanned Aerial Vehicles (Drones):** Avoid congestion during first and last mile delivery
  - Kansas Non-Line of Sight Capability
  - Ohio SkyVision System
- ▶ **Manufacturing Opportunities:** Reduce waste and cost associated with manufacturing
  - 3D printing: ability to print on-site or “mobile manufacturing hubs”
  - Automation: different workforce requirements

# Priority Areas

Roadway and Bridge Infrastructure	Needs	Action Steps
Congestion and Bottlenecks		
Truck Facilities		
Rail Infrastructure		
Air Infrastructure		
Land Use		
Partnerships		
Technology		