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September 7, 2022

VIA E-FILING

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406, Port Authority of Kansas City, Missouri
– Construction and Operation Exemption–In Jackson and Clay Counties, MO

Dear Ms. Brown:

Enclosed for filing in the above referenced docket is a petition for the Port Authority of Kansas City, Missouri to construct and operate a line of railroad. The filing fee has been paid via pay.gov. Also enclosed is a petition for fee waiver.

If you have any questions related to this filing, please let me know.

Sincerely,

Justin J. Marks
Counsel to Port KC

Enclosure

FEE RECEIVED
September 7, 2022
SURFACE
TRANSPORTATION BOARD

FILED
September 7, 2022
SURFACE
TRANSPORTATION BOARD

Before the
SURFACE TRANSPORTATION BOARD

STB Docket No. FD 36406

PORT AUTHORITY OF KANSAS CITY, MISSOURI
– CONSTRUCTION AND OPERATION OF A LINE OF RAILROAD –
IN JACKSON AND CLAY COUNTIES, MO

PETITION FOR EXEMPTION UNDER
49 U.S.C. §10502 FROM THE REQUIREMENTS OF 49 U.S.C. §10901

(includes color images)

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Counsel for
Port Authority of Kansas City, Missouri

Dated: September 7, 2022

Before the
SURFACE TRANSPORTATION BOARD

STB Docket No. FD 36406

PORT AUTHORITY OF KANSAS CITY, MISSOURI
– CONSTRUCTION AND OPERATION OF A LINE OF RAILROAD –
IN JACKSON AND CLAY COUNTIES, MO

PETITION FOR EXEMPTION UNDER
49 U.S.C. §10502 FROM THE REQUIREMENTS OF 49 U.S.C. §10901

Pursuant to 49 U.S.C. §10502, the Port Authority of Kansas City, Missouri (“Port KC”), a political subdivision of the State of Missouri pursuant to MO. REV. STAT. §68.10 - 68.075, hereby petitions the Board for an exemption from the prior approval requirements of 49 U.S.C. §10901 to construct approximately 3.0 miles of new rail line on 415 acres of industrial property that Port KC acquired from AK Steel Corporation (“AK Steel”) located on the east side of Kansas City, MO. Port KC also seeks operating authority to operate across the new rail line and approximately 0.3 miles of existing non-common carrier industrial track.¹ A map showing the location of the Proposed Line is attached hereto as Exhibit A.

Port KC is utilizing the former AK Steel facility to develop an inland port known as the Missouri River Terminal (“MRT”). Once complete, the MRT will have access to the rail network, marine transportation via barge, and the interstate highway system via motor carriage. MRT will accommodate an intermodal container transfer facility, for interchanging double stacked container well cars, to facilitate expanded freight transportation capacity through Kansas City in anticipation of projected freight growth. The purpose of the Proposed Line is to provide common carrier freight rail service at MRT.

¹ Together herein referred to as the “Proposed Line”.

Port KC's Proposed Line is under environmental review by the Board's Office of Environmental Analysis.

This petition is supported by the Joint Verified Statement of Jon Stephens and Richard Grenville, attached hereto as Exhibit B.² This petition is also supported by federal, state, and local political leaders and industrial entities.³ See Exhibit C.

I. BACKGROUND, PURPOSE, AND NEED

Port KC proposes to construct and operate the Proposed Line in Jackson and Clay Counties, Missouri on the 415-acre site of the AK Steel facility extending from the interstate rail network to the Missouri River. Port KC is developing MRT to be a multimodal inland port with access to the rail network, marine transportation via barge, and the interstate highway system via motor carriage. MRT will accommodate an intermodal container transfer facility for interchanging double stacked container cars to facilitate expanded freight transportation capacity through Kansas City in anticipation of projected freight growth.

A. Port KC is a public entity with a mission to grow the economy of Kansas City through transportation, logistics and revitalization.

The City Council of Kansas City, Missouri petitioned the Missouri Highways and Transportation Commission to authorize the establishment of Port KC pursuant to MO. REV. STAT. §68.10 - 68.075 as a political subdivision of the State of Missouri. Port KC is governed by a volunteer Board of Commissioners that is appointed by the Mayor of Kansas City. Missouri law states that the purpose of every port authority is to “promote the general welfare, to promote development within the port district, to encourage private capital investment by fostering the

² Referred to herein as the “Stephens/Grenville VS”.

³ The support letters identify Port KC's proposed new construction as measuring approximately 2.8 miles. Through the development of the environmental document with OEA, Port KC now measures the length of new line to be constructed to be approximately 3.0 miles.

creation of industrial facilities and industrial parks within the port district and to endeavor to increase the volume of commerce.” MO. REV. STAT 68.020. Port KC works to fulfill its statutory responsibilities by advancing its stated mission to grow the economy of Kansas City through transportation, logistics, and revitalization. Stephens/Grenville VS at 2.

As part of its mission, Port KC currently operates the Woodswether Terminal, a 9-acre facility located on the Missouri River adjacent to the West Bottoms Industrial District of Kansas City, MO. Woodswether Terminal receives barge traffic from the Missouri River and has a rail connection to the Union Pacific Railroad Company (“UPRR”). *Id.*

In addition, Port KC, with its partner *49 Crossing*, manages a former air force base - the Richards-Gebaur Commerce Park - with more than 450,000 square feet leased Class C and D industrial space and 42,000 square feet of leased Class B office space. The facility is part of the 1,400-acre former Richards-Gebaur Air Force Base that Port KC acquired in 2007. The property offers tenants access to Kansas City Southern Railroad, major highways and interstates, and the benefits of being a foreign trade zone. Although, it does not have access to water transportation. *Id.* at 4.

Port KC’s portfolio of development includes the Berkley Riverfront. Prior to Port KC’s acquisition of this property, it hosted industrial uses and construction debris. Port KC remediated the property in coordination with the Missouri Department of Natural Resources. It now consists of the Union Berkley Riverfront residential building with 410 units. Port KC’s redevelopment of the Berkley Riverfront reactivated this portion of the Missouri River and its residents are the first to live this close to the Missouri River in Kansas City in 100 years or more. *Id.* at 3.

Port KC supports redevelopment in Kansas City through tools granted to it under Missouri statute to encourage local economic growth. Port KC finances its development activities – ports, industrial, residential, commercial, mixed-use, and recreation – through administration of development tools including: Port Improvement Districts; AIM Zones; and a Development Finance program to provide for real estate tax incentives through the private placement of conduit bond financing. *Id.* at 4.

B. The Proposed Line will connect the Missouri River Terminal project to the interstate rail system, the Missouri River, and the interstate highway system to meet anticipated freight traffic growth in the Kansas City region.

Port KC seeks to further its mission and statutory mandate through the redevelopment of the former AK Steel facility located on the Missouri River as a multimodal freight center to expand the region’s capacity for the movement of intermodal containers into and out of the Kansas City region. *Id.* at 5. Port KC conceived of MRT comprising of the Proposed Line connecting MRT to the interstate railroad system, the Missouri River, and the interstate highway system.

Port KC realized the need for MRT following a 2015 study commissioned by Port KC - with the assistance of the Federal Economic Development Agency - of the freight market in Kansas City. *Id.* at 5-6. Port KC developed the study to grow business at the Richards-Gebaur Commerce Park. The study found that Kansas City’s overall projected growth in the freight market would double by the year 2040, specifically intermodal freight. *Id.* The study notes that Port KC “is developed with land, facilities, equipment, and business” but that Port KC “is considered limited due to the lack of commercial waterway transportation on the Missouri River.” *Id.*

Port KC commenced the MRT project to meet the anticipated growth in the freight market identified by the study. Port KC acquired the AK Steel facility in 2018 and has been

conducting predevelopment work in anticipation of its redevelopment as a multimodal freight center. *Id.* at 5-6. In addition, Port KC is optimistic that the development of MRT on the former “AK Steel facility will provide economic opportunity for the local workforce impacted by the loss of industry in the area.” *Id.* at 4.

Port KC intends to develop MRT as a public private partnership (“P3”). In preparation of procuring a private development partner, Port KC commissioned KPMG LLP to conduct an additional study of the Kansas City freight market - *Kansas City Container Market Analysis and Intermodal Trade Forecast*, (“2022 Study”). *Id.* at 6. The 2022 Study forecasts a growth in container shipments through Kansas City and projects that the Proposed Line and MRT can potentially “capture 20% of the long-term market share of container freight moving through Kansas City” due to MRT’s location and connections to the interstate rail network, the Missouri River, and the interstate highway system. *Id.* at 6.

The 2022 Study demonstrates that containerized freight imports into Kansas City are growing. In 2021, the inbound intermodal rail volume of intact international containers grew 60,000 TEU from 2015 – from 175,000 TEU to 237,000 TEU. *Id.* at 6-7. This growth of imports, “exceeded the inbound volume growth rates achieved by the nation and within the Midwest in 2017, 2018, and 2020.” *Id.* at 7.

The 2022 Study also analyzed intermodal rail infrastructure currently serving the Kansas City market operated by BNSF Railway, Inc, Kansas City Southern Railway Company (“KCS”), UPRR, and Norfolk Southern Railway Company. The MRT rail facilities will be the 5th regional rail ramp and, according to the 2022 Study, will be the same rail profile as the others. However, MRT will have the advantage of being centrally located with direct Missouri River access. *Id.* at 7.

Port KC projects that it will be able to “capture 20% of the long-term container market share purely through natural market growth identified in the 2022 Study.” *Id.* at 8.

C. Port KC will develop MRT through a public private partnership.

Port KC intends to develop MRT and the Proposed Line through a P3 by partnering with one or more qualified partners to achieve Port KC’s objective for the former AK Steel facility. As stated in the Stephens/Grenville VS, “Port KC envisions creating a 50-year agreement that includes the comprehensive design/construction, financing, operations, and maintenance of a thriving MRT development.” *Id.* at 8-9. In May 2022, Port KC hosted potential partner developers at an industry day. Here, Port KC presented its process for engaging its private partner developer:

- Issuance of Request for Qualification
- Interested Parties to Submit Statements of Qualification to Port KC;
- Port KC to Announce Shortlisted Respondents;
- Port KC to Issue Request for Proposals;
- Prospective Concessionaires to Submit Proposals;

Port KC will then select its MRT partner. *Id.* at 8.

In advance of engaging with its development partner, Port KC is working through pre-development tasks. Port KC has been awarded federal funding - \$9.88 million through U.S. DOT’s Port Infrastructure Development Program - and state funding and has dedicated portions of its future revenue derived from industrial and incentive projects. *Id.*

ENVIRONMENTAL REVIEW

Port KC is working with the Board’s Office of Environmental Analysis (“OEA”) to comply with the Board’s obligations under NEPA. Port KC retained the third-party contractor ICF Jones & Stokes, Inc. to work under the direction and supervision of OEA. OEA is consulting with federal, state, tribal, and local agencies.

OEA is including the U.S. Maritime Administration (“MARAD”) to be a cooperating agency because of MARAD’s NEPA obligations relating to the Port Infrastructure Grant awarded to Port KC for the MRT project. In addition, OEA is including the Army Corps of Engineers (“ACE”) to participate in the NEPA process as a cooperating agency if the project has potential impacts on Waters of the United States.

Port KC is currently assisting OEA and OEA’s third-party contractor to conduct field work and gather environmental data to support preparation of the NEPA analysis.

II. DISCUSSION

A. DESCRIPTION OF THE PROJECT AND PLANNED OPERATIONS

Port KC proposes to construct approximately 3.0 miles of new common carrier railroad line in Jackson and Clay Counties, MO. Port KC also seeks operating authority to operate across the new rail line and approximately 0.3 miles of existing non-common carrier industrial track. The Proposed Line is shown on the map provided as Exhibit A. Port KC’s preferred option is for the Proposed Line to connect eastbound to Kansas City Terminal Railroad (“KCTL”) crossing a line owned by UPRR and utilizing existing industrial side track. Moving westbound, Port KC’s preferred option is to connect to KCTL either over or across UPRR and KCS lines. KCTL has connections with all of the Class I railroads that go through Kansas City. On the MRT Property, the Proposed Line will run from its connection to the interstate railroad system along the southern boundary heading in an eastward direction before turning northwest for its connection to the Missouri River.

When complete, Port KC envisions MRT to be an intermodal container rail terminal and river port terminal with freight transload capabilities and the potential to serve possible transport logistics functions on-site including retail distribution, warehousing, storage, e-commerce, and other industrial activities.

The Proposed Line will connect the rail and river port terminals with the interstate commerce system. Port KC also envisions its rail operations at MRT to include switching, rail storage, containerized cargo and/or truck transload transfer services. The Proposed Line will connect to the river terminal where Port KC intends to utilize existing dock infrastructure to accept and process container vessels, barge vessels, container-on-bar services and bulk services.

III. PORT KC'S PROPOSED RAIL LINE SATISFIES THE STANDARDS FOR EXEMPTION UNDER 49 U.S.C. §10502

Under 49 U.S.C. §10901, Board approval is required for the construction of a new common carrier railroad line. The Board is required to authorize the construction of a new rail line unless, the line is “inconsistent with the public convenience and necessity.” 49 U.S.C. §10901(c). The Board has recognized that “[t]his permissive licensing policy, introduced in the ICC Termination Act of 1995, establishes a clear presumption in favor of rail construction proposals, and conforms to the broader Congressional policies to ‘promote effective competition among rail carriers’ and to ‘reduce barriers to entry into ... the industry.’”⁴

The Board has determined that under 49 U.S.C. §10502, it must exempt a transaction from regulation when it finds that:

- (1) is not necessary to carry out the transportation policy of section 10101 of this title; and
- (2) either –
 - (A) the transaction or service is of limited scope; or
 - (B) the application in whole or in part of the provision is not needed to protect shippers from the abuse of market power.⁵

⁴ 49 U.S.C. [§]10104(4), (7).” *Midwest Generation, LLC – Exemption from 49 U.S.C. 10901 – For Construction in Will County, IL*, STB Finance Docket No. 34060, slip op. at 7-8 (served Mar. 21, 2002)(footnotes omitted)(“Midwest”).

⁵ *Port of Moses Lake – Construction Exemption – Moses Lake, Washington*, STB Finance Docket No. 34936, slip op. at 4 (served Aug. 27, 2009).

Port KC's Proposed Line is intended to serve customers shipping through MRT meets the statutory requirements for exemption. The Proposed Line is consistent with the Board's precedent for granting construction exemptions under section 10502.⁶ In addition, the statute only requires a party to satisfy either subpart (2)(A) or (2)(B). Here the proposed line satisfies both subparts.

1. *The Board has jurisdiction over the Proposed Line*

Port KC's Proposed Line is a "line of railroad" as the Board interprets that term and would require a license to construct and operate under 49 U.S.C. §10901. As the Board explains in *Midwest*, under 49 U.S.C. 10501(a)(1), the Board has jurisdiction over "transportation by rail carrier," and "rail carrier" is defined by 49 U.S.C. 10102(5) as "a person providing common carrier railroad transportation for compensation" *Midwest*, slip op at 6. In *Midwest*, the proposed line was deemed to be available to provide common carriage to other shippers besides the petitioner. *Id.* Here, Port KC will be constructing the Proposed Line to serve customers shipping through MRT. Petitioner seeks a residual common carrier obligation to enable its short line railroad contractor to "hold out" to provide rail service to the public at large.

2. *Application of 49 U.S.C. §10901 is not necessary to further the National Rail Transportation Policy of 49 U.S.C. §10101.*

The Board need not perform a detailed scrutiny of Port KC's Proposed Rail Line because compliance with the formal requirements of Section 10901 is not necessary to accomplish the transportation policies of 49 U.S.C. §10101 (the "RTP"). As applicable here, under the RTP, it is the policy of the United States Government:

⁶ *Texas Railway Exchange LLC – Construction and Operation Exemption – Galveston County, Tex.*, STB Finance Docket 36186 (served Jan. 17, 2020); *Palmetto Railways – Construction and Operation Exemption in Berkeley County, S.C.*, STB Finance Docket 36095 (served July 22, 2019); *Northwest Tennessee Regional Port Authority – Construction and Operation Exemption – In Lake County, Tenn.*, STB Finance Docket 35802 (served Apr. 21, 2016).

(2) to minimize the need for Federal regulatory control over the rail transportation system and to require fair and expeditious regulatory decisions when regulation is required; ...

(4) to ensure the development and continuation of a sound rail transportation system with effective competition among rail carriers and with other modes, to meet the needs of the public and the national defense; ...

(5) to foster sound economic conditions in transportation and to ensure effective competition and coordination between rail carriers and other modes; ...

(7) to reduce regulatory barriers to entry into and exit from the industry; ...

The Board should grant Port KC's petition because regulation of the Proposed Line is not necessary to accomplish the RTP as stated under RTP (2) and (7) since an exemption will minimize the need for federal regulatory control over the rail transportation system in Missouri and will reduce regulatory barriers to entry.

Further, the Board should grant Port KC's petition because it also meets the aims of the RTP under (4) and (5) by creating an additional option for customers shipping through Kansas City.

3. *This transaction is of limited scope.*

The Proposed Line satisfies the second element of the Board's section 10502 exemption analysis because the transaction is of limited scope since Port KC only proposes to construct and operate approximately 3.3 miles of new common carrier railroad line from its connection with KCTL, UPRR, and KCT to the terminus at the Missouri River. Port KC's Proposed Line and its operation of it through a contract carrier is intended to facilitate the movement of goods through MRT. Further, a decision finding the Proposed Line to be of limited scope would be consistent

with similar rail construction projects that the Board has exempted from the formal requirements of 49 U.S.C. §10901.⁷

4. Alternatively, application of 49 U.S.C. §10901 is not necessary to protect shippers from abuse of market power.

The Proposed line satisfies the alternative criteria in the second element of the Board's section 10502 exemption analysis because it is intended to expand the capacity of the Kansas City freight network by adding additional intermodal infrastructure in the region.⁸ Construction of the Proposed Line will not result in any harm to shippers because it will add and improve transportation options through Kansas City (with no reduction in service options). Therefore, application of section 10901 is not necessary to protect shippers from abuse of market power.

5. The Board should issue a Certificate of Public Convenience and Necessity

If the Board grants this exemption petition, Port KC respectfully requests that the Board revoke the exemption in order to summarily issue a certificate of public convenience and necessity ("PC&N") to the extent necessary to enable Port KC to pursue a crossing petition under 49 U.S.C. 10901(d) if Port KC is unable to negotiate crossing agreements with UPRR and KCS.

Port KC's MRT project abuts the UPRR Sedalia Subdivision line. Port KC seeks interchange with KCTL for MRT to leverage KCTL's connections to all of KCTL's Class I railroad owners, UPRR, BNSF Railway, Inc., Norfolk Southern Railway Company, Canadian Pacific Railway Company, and KCS. The former AK Steel facility connected to KCTL through

⁷ See *Northwest Tennessee Regional Port Authority – Construction and Operation Exemption – In Lake County, Tenn.*, STB Finance Docket 35802 (served Apr. 21, 2016)(5.5 miles); *Port of Moses Lake – Construction Exemption – Moses Lake, Washington*, STB Finance Docket 34936 (served Aug. 27, 2009) (11.5 miles); *Pemiscot County Port Authority – Construction of a Line of Railroad - In Pemiscot County, MO*, STB Finance Docket 34117 (STB served July 2, 2002)(5 miles).

⁸ See *Stephens/Grenville VS* at 6-7.

a tunnel that extended beneath the UPRR rail line. However, this tunnel is incapable of accommodating double stack intermodal containers and modifying it or constructing a new tunnel is likely cost prohibitive.

Port KC has approached UPRR and is working to engage KCS to enter into an agreement to access KCTL. Due to the geography of the area, Port KC requires crossing agreements for eastbound and westbound traffic. In order to access KCTL eastbound, MRT traffic will need to cross UPRR's Main 1 and Main 2. Moving Westbound, MRT traffic will need to move over UPRR Main 1 and a UPRR wye track and then will need to connect to a small segment of KCS line before entering KCTL owned and operated lines.

Port KC's Proposed line requires the at-grade crossing of these UPRR and KCS rail lines and property. However, if these railroads are unwilling to enter into a voluntary crossing agreement, Port KC will need to file a formal crossing petition with the Board. The Board will revoke a grant of exemption in part and issue a certificate under Section 10901 where necessary "to remove any possible room for doubt that the statutory requirements for the implementation of 49 U.S.C. 10901(d) are met." *Midwest*, slip op at 5. Port KC seeks a certificate of PC&N here to remove any ambiguity as to the requirement for such a certificate and respectfully requests that the Board issue a certificate of PC&N as part of its exemption petition decision.

CONCLUSION

In conclusion, Port KC respectfully requests that the Board grant this Petition and issue a decision exempting the construction and operation of the Proposed Line from the prior approval requirements of 49 U.S.C. §10901 and that the Board summarily issue a certificate of PC&N as part of this decision.

Respectfully submitted,



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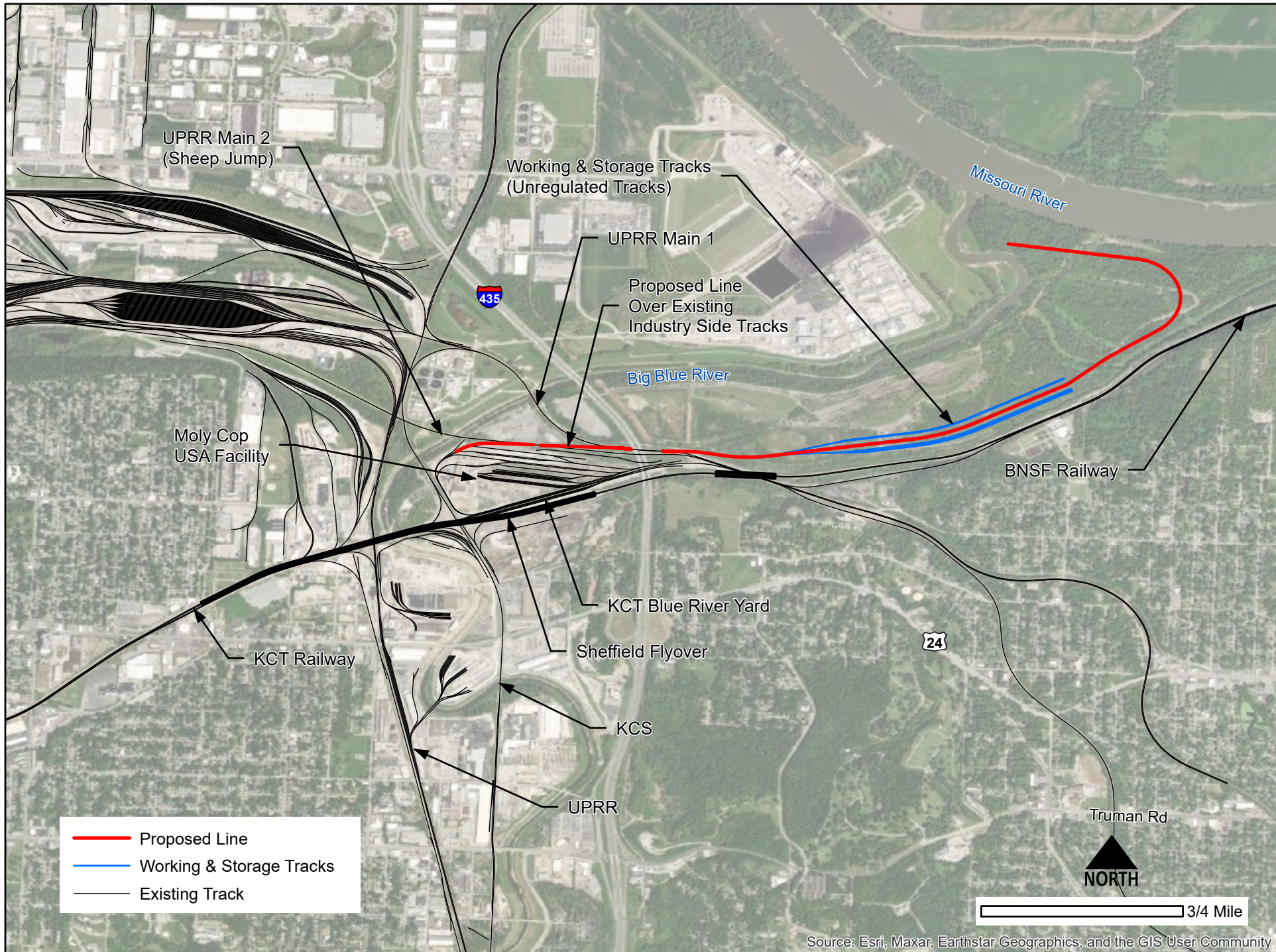
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*Counsel for Port Authority of Kansas City,
Missouri*

Dated: September 7, 2022

Exhibit A

Map



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Exhibit B

Joint Verified Statement

of

Jon Stephens

and

Richard Grenville

Before the
SURFACE TRANSPORTATION BOARD

STB Docket No. FD 36406

PORT AUTHORITY OF KANSAS CITY
– CONSTRUCTION AND OPERATION OF A LINE OF RAILROAD –
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PETITION FOR EXEMPTION UNDER
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JOINT VERIFIED STATEMENT OF JON STEPHENS AND RICHARD GRENVILLE

My name is Jon Stephens, I am President and CEO of the Port Authority of Kansas City, Missouri (Port KC). I have been in this role since 2018. I am an economic development professional and I was hired by Port KC’s Board of Commissioners to advance Port KC’s mission to grow the economy of Kansas City through transportation, logistics, and revitalization. Prior to joining Port KC, I was the Director of Economic Development for the Unified Government of Wyandotte County & Kansas City, Kansas and before that, I was the CEO of VisitKC. I obtained my Bachelor of Arts in Interdisciplinary Studies (Journalism, History and Political Science) from the University of Missouri.

My name is Richard Grenville, I am Vice President of Multimodal Logistics for Port KC. I am responsible for all of Port KC’s Terminal Operations and freight business development. I have 35 years of experience in the transportation and logistics industry. I am from London, England where I graduated from the Naval Training School “Arethusa” in Kent. I attended King Edward VII Nautical College (University of London) and Plymouth Polytechnic (Exeter University) earning a DOT Second Mates Certificate FG.

We are submitting this Verified Statement in support of Port KC's petition for exemption under 49 U.S.C. §10502 from the requirements of 49 U.S.C. §10901 filed in STB Docket No. 36406. The purpose of this statement is to provide the Board with background information on Port KC and outline Port KC's new proposed rail line that will serve the Missouri River Terminal ("MRT") Project.

About Port KC

The City Council of Kansas City, Missouri petitioned the Missouri Highways and Transportation Commission to create Port KC pursuant to MO. REV. STAT. §68.10 - 68.075 as a political subdivision of the State of Missouri. Port KC is governed by a Board of Commissioners working for no compensation and appointed by the Mayor of Kansas City. The Board of Commissioners currently comprises of Deb Hermann (Chairperson), Henok Tekeste (Vice Chair), Dr. Yolanda Cargile (Commissioner), Matthew Oates (Commissioner), Kevin O'Neill (Commissioner), Katheryn Shields (Commissioner), and Claire Terrebonne (Commissioner).

Under the Missouri statute, the purpose of every port authority is to "promote the general welfare, to promote development within the port district, to encourage private capital investment by fostering the creation of industrial facilities and industrial parks within the port district and to endeavor to increase the volume of commerce." MO. REV. STAT 68.020. Port KC seeks to accomplish this public purpose by advancing its stated mission to grow the economy of Kansas City through transportation, logistics, and revitalization.

Port KC currently operates the Woodswether Terminal, a 9-acre bulk goods terminal located on the Missouri River adjacent to the West Bottoms Industrial District of Kansas City, MO. The Woodswether Terminal consists of 900-feet of shoreline with enough docking infrastructure for 14 barges. Its primary commodities are fertilizer, mill scale, structured steel,

shredded scrap, and coal slag. In 2007, the Woodswether Terminal was closed to barge traffic due to a change in business model of the previous private operator and lack of infrastructure upkeep by both the operator and the city. In 2012, Port KC acquired and modernized the terminal by demolishing outdated and dangerous structures and preparing the site to transload inbound and outbound goods. In August of 2015, Port KC re-initiated barge operations. Expanding on this success, in 2017, Port KC developed a rail spur connecting Woodswether Terminal to a Union Pacific Railroad Company line creating a multimodal transport option in Kansas City. Other improvements include expanding the facility by purchasing the only available neighboring property, adding additional dry storage capacity by building another storage dome, and adding liquid containers in response to a request from a current customer.

Another Port KC project is the Berkley Riverfront. It is an example of Port KC's capacity to develop projects and to do so on environmentally challenged properties. On the Berkley Riverfront, the western portion of the property was the site of Laclede Gas Company operations and required environmental remediation. Port KC completed this remediation in 2003. The eastern portion of the site was used as a car tow lot and as a dumping ground for debris following the Kemper Arena roof collapsed in the late 1970s. Port KC completed the cleanup of this portion of the site in 2007. Port KC coordinated all environmental remediation activities in coordination with the Missouri Department of Natural Resources and as a result, the department issued to Port KC "No Further Action" letters for the property.

In addition to remediating the Berkley Riverfront site, the center of the property was in a FEMA flood plain. Port KC raised it out of the flood plain and the FEMA maps were amended prior to the construction of the Union Berkley Riverfront residential building with 410 units. Residents began occupying the property in the spring of 2018. As a result of Port KC's

development of the Berkley Riverfront to reactivate this area of Kansas City, these residents became the first to live this close to the Missouri River in over 100 years.

Port KC, with its partner 49 Crossing, also manages a former air force base, now known as the Richards-Gebaur Commerce Park with more than 450,000 square feet leased Class C and D industrial space and 42,000 square feet of leased Class B office space. The facility is part of the 1,400-acre former Richards-Gebaur Air Force Base that Port KC acquired in 2007 to redevelop while cooperating with the federal government's environmental monitoring activities. The property offers tenants access to Kansas City Southern Railroad ("KCS"), major highways and interstates, and the benefit of being a foreign trade zone, however it does not have access to water transportation.

Port KC further supports the revitalization of Kansas City through development tools granted to it under Missouri statute to encourage local economic growth. Port KC's statutory mandate allows it to develop, construct and maintain land in Kansas City for purposes that include residential, commercial, mixed-use, recreation, industrial and port facilities. Port KC finances these efforts through administration of development tools including: Port Improvement Districts; AIM Zones; and a Development Finance program to provide for real estate tax incentives through the private placement of conduit bond financing.

The Missouri River Terminal Project

Port KC seeks to fulfill its mission – to grow the economy of Kansas City through transportation, logistics, and revitalization through the development of MRT by revitalizing the former AK Steel facility located on the Missouri River within the Blue River Valley Industrial corridor as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market.

In addition, Port KC is optimistic that the redevelopment of the AK Steel facility will provide economic opportunity for the local workforce impacted by the loss of industry in the area.

Port KC is seeking approval from the Board to construct approximately 3.0 miles of new rail line and to operate over the new rail line and approximately 0.3 miles of existing non-common carrier industrial track connecting the Missouri River to the interstate rail system (the “Proposed Line”). The Proposed Line will run from its connection point with Kansas City Terminal Railroad across lines owned by Union Pacific Railroad Company (“UPRR”) (for traffic moving eastbound) and across lines owned by UPRR and KCS (for traffic moving westbound). Once on the MRT property it will follow the southern border of the property heading in an eastward direction before turning northwest where it will meet the Missouri River. Port KC intends to hire a short line rail operator to operate the Proposed Line and understands that it will hold the underlying common carrier obligation.

Once complete, the MRT will have access to the rail network, marine transportation via vessels, and the interstate highway system via motor carriage. MRT will accommodate an intermodal container transfer facility for interchanging double stacked container cars and other means of freight to facilitate expanded freight transportation capacity through Kansas City in anticipation of projected freight growth.

Port KC identified a need for a multimodal freight center following a 2015 study commissioned by Port KC - with the assistance of the Federal Economic Development Agency - of the freight market in Kansas City.¹ Port KC sought the study to understand how it could drive growth at Richards-Gebaur Commerce Park. The study found that Kansas City’s overall projected growth in the freight market would double by the year 2040, specifically intermodal

¹ Appendix 1.

freight.² In the course of analyzing and making recommendations to Port KC for the Richards-Gebaur Commerce Park, the study noted that Port KC “is developed with land, facilities, equipment, and business” but it also found that Port KC “is considered limited due to the lack of commercial waterway transportation on the Missouri River.”³ As a result of this analysis, Port KC determined that capacity at the Richards-Gebaur Commerce Park and Woodswether Terminal are limited and would not accommodate the anticipated freight growth capacity needs in Kansas City.

Port KC initiated the MRT project to address this anticipated growth in the freight market. In February 2018, Port KC acquired the AK Steel facility and has been preparing to redevelop it into MRT with the Proposed Line.

In anticipation of procuring a development partner to develop MRT as a public private partnership (“P3”), Port KC commissioned KPMG and its subconsultants to conduct an additional market analysis to further understand the Kansas City freight market. The study, *Kansas City Container Market Analysis and Intermodal Trade Forecast*, (“2022 Study”) forecasts increased container movements through Kansas City and projects that - due to MRT’s location and connectivity to the interstate rail network, the Missouri River, and the interstate highway system - the Proposed Line and MRT will have the capacity to capture 20% of the long-term market share of container freight moving through Kansas City.⁴

The 2022 Study shows that the volume of container freight imports coming to Kansas City increasing. In 2021, “Kansas City’s inbound intermodal rail volume of intact international containers totaled 237,000 TEU.”⁵ That represents an increase in container freight volume of

² Appendix 1 at 34, 37.

³ Appendix 1 at 56.

⁴ Appendix 2.

⁵ Appendix 2 at 7.

more than 60,000 TEU from the 2015 volume of 175,000 TEU.⁶ According to the 2022 Study, import gains in Kansas City “exceeded the inbound volume growth rates achieved by the nation and within the Midwest in 2017, 2018, and 2020.”⁷

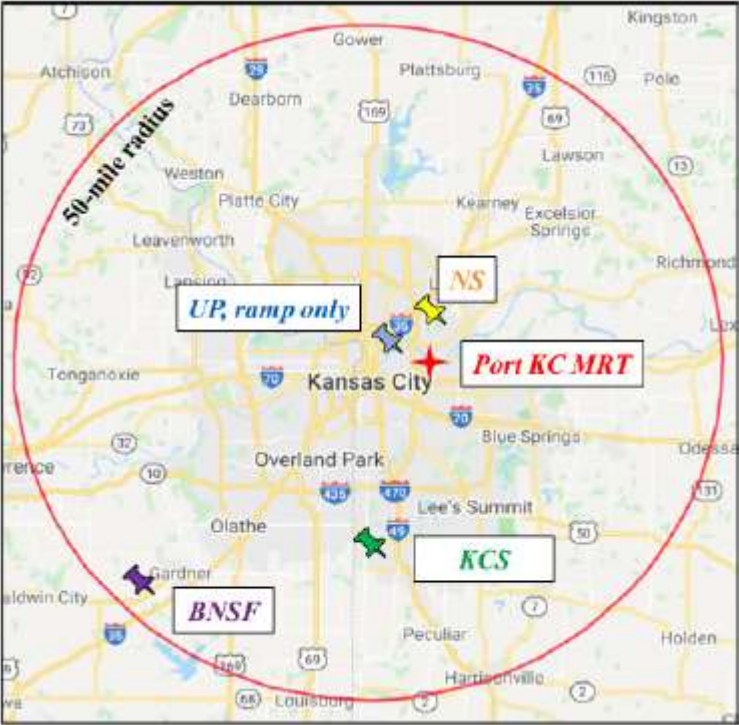
The 2022 Study then factored in currently available intermodal rail infrastructure. Currently, Kansas City is served by four intermodal rail hubs and ramps operated by BNSF Railway, Inc, Kansas City Southern Railway Company, Union Pacific Railroad Company, and Norfolk Southern Railway Company.⁸ The 2022 Study states “MRT would be the 5th regional rail ramp, and operating at full planned buildout, would be within the same size profile as the others.”⁹ The Proposed Line and MRT will be the only facility of the five that is centrally located in Kansas City and has direct access to the Missouri River, all five Class 1 railroads in the region and adjacent interstate access.

⁶ Appendix 2 at 8.

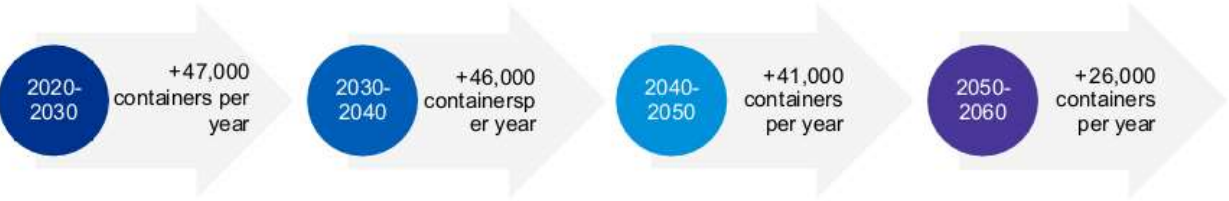
⁷ Appendix 2 at 8.

⁸ Appendix 2 at 6.

⁹ Appendix 2 at 35.



The 2022 Study concluded that “MRT would have the design potential to handle 20% (one-fifth) of the region’s intermodal rail business.”¹⁰ The 2022 Study creates a forecast of MRT’s incremental annual container lifts (converted from TEUs) to show that its average annual container lifts by decade¹¹ will be:



Source: KPMG and its sub-consultants; Datamyne historical statistics

At Port KC, we believe that MRT can capture 20% of the long-term container market share purely through natural market growth identified in the 2022 Study. Port KC believes the MRT project, with superior access to the water, rail and highway systems, will further catalyze Kansas

¹⁰ Appendix 2 at 35.
¹¹ Appendix 2 at 35.

City's growth trajectory suggesting that the 2022 Study may be conservative in our market expectations.

Funding the Development of MRT through a Public Private Partnership.

Port KC will develop the Proposed Line and MRT in partnership with a private developer. It intends to develop the MRT through a P3. However, in order to advance pre-development tasks, Port KC has been successful in obtaining federal and state funding as well as dedicating portions of Port KC future revenue derived from industrial and incentive projects for predevelopment activities. This includes a grant from U.S. DOT through the Port Infrastructure Development Program for \$9.88 million to accelerate the planning and early works construction activities required to advance MRT's progress to full site construction quickly after environmental approvals are received.

Port KC's concept for a private partnership is to engage one or more qualified private partners to take responsibility to design MRT using a financially feasible approach while achieving Port KC's objectives for the site. Port KC seeks to create a collaborative procurement and pre-development sequence to align long-term project feasibility and to create a sustainable market-based infrastructure footprint to maximize the revenue and demand bases. As a culmination of this collaboration, Port KC envisions creating a 50-year agreement that includes the comprehensive design/construction, financing, operations, and maintenance of a thriving MRT development.

On May 23, 2022, Port KC hosted an Industry Day to provide an overview of the MRT Project to potential partner developers. During its presentation, Port KC previewed its process for engaging its private partner developer:

- Issuance of Request for Qualification
- Interested Parties to Submit Statements of Qualification to Port KC;

- Port KC to Announce Shortlisted Respondents;
- Port KC to Issue Request for Proposals;
- Prospective Concessionaires to Submit Proposals;

The petition that Port KC is seeking for authority to construct and operate the Proposed Line is an aspect of the predevelopment activities that Port KC is pursuing. Although Port KC is seeking this authority from the Board, it intends its partnership to include an agreement with a Class III rail carrier for rail operations of MRT leaving Port KC with only a residual common carrier obligation.

APPENDIX A

Richards-Gebaur Commerce Park Freight Study

Richards-Gebaur Commerce Park Freight Study



EXPERIENCE | Transportation

Prepared for Port KC

Prepared by TranSystems
with GKSF Global Research

Date Submitted: June 17, 2015

EDA Project Number: 050605586

This Report was prepared under an Award from the U.S. Department of Commerce Economic Development Administration. This publication was prepared by Port KC. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the Economic Development Administration.

Executive Summary

Port KC engaged TranSystems, partnered with GKSF Global Research, to conduct the Richards-Gebaur Commerce Park Freight Study. The purpose of the study was to evaluate the potential for developing the former Richards-Gebaur Air Force Base into an inland, intermodal port facility. Port KC desires to more fully understand Kansas City's opportunity and ability to move domestic and global freight via rail, roadway, and waterborne commerce at multi-modal facilities like the Richards-Gebaur Commerce Park.

Port KC manages 450,000 square feet of leased Class C and D industrial space and 42,000 square feet of leased Class B office space at the Richards-Gebaur Commerce Park. This land is part of the 1,400 acre former Richards-Gebaur Air Force Base that was transferred to Port KC in 2007 for the purpose of handling environmental remediation and redevelopment. In 2007, 317 acres of the property were sold to CenterPoint Properties to redevelop for industrial, distribution, light manufacturing, and warehouse uses. This property is known as the CenterPoint Intermodal Center-Kansas City. In 2008, the Kansas City Southern (KCS) opened the International Freight Gateway, a 360-acre rail-truck intermodal facility on the former runway of the Air Force Base. CenterPoint Properties currently holds the option to purchase 569 additional acres of Port KC property. Port KC further owns 100 acres dedicated for above ground, future limestone mining operations.

The study included a freight market analysis and site assessment to drive the overall evaluation of the Richards-Gebaur Commerce Park. The freight market analysis used economic trends and freight volume and value data to develop a regional freight outlook. Data on cross border freight and a specific forecast of regional intermodal volumes was presented. Transportation industry professionals were interviewed. The existing condition of the Kansas City region's transportation system was reviewed with greater focus on infrastructure surrounding the Richards-Gebaur site. A limited Facility Condition Assessment was performed to serve as a physical inventory of the site assets and identify potential needs. A benchmark review of intermodal facilities provided insight on successful developments and business strategies, user types, and other characteristics. Finally, market and site development strategies were developed based on all information researched in the study.

The Kansas City Combined Statistical Area handled an estimated 119 million tons of inbound and outbound freight in 2012 as reported by the Freight Analysis Framework (FAF3) database released by the Federal Highway Administration. Truck is the largest transport mode with an estimated 56 percent share of shipments, followed by rail at 32 percent. Multiple modes, at 5.7 percent share, largely captures combined truck-rail moves (for example, intermodal rail). The projected average annual growth rate for total freight (combined inbound and outbound) moving by truck, rail and multiple modes is 1.5 percent over the next 40 years (with 2012 as the base year). Regional intermodal activity was an estimated 687,000 intermodal units in 2014 compared to an estimated 626,000 intermodal units in 2007. The Los Angeles lane is estimated to account for 40 to 50 percent of Kansas City's intermodal traffic, and other West Coast corridors another 15 percent. In general, the international overseas container trade will continue to be the principal driver of intermodal traffic for the Kansas City region.

Transportation industry professionals familiar with requirements and trends involving domestic and international supply-chains affecting the Kansas City area were interviewed. Respondents included commercial real estate experts, railroad operators, Third Party Logistics operators (3PL's), Distribution Center (DC) managers, manufacturers, and E-Commerce distribution managers. The general assessment was positive given Kansas City's large population center, close proximity to several Midwest markets, and widely available intermodal rail access, particularly intermodal rail access to Canada and Mexico. Kansas City was viewed as ranking high in common key site selection criteria, such as supporting access to a large customer/supplier base, access to transportation modes, an available and skilled labor force,

and a positive business environment. Respondents viewed Kansas City as a good location to distribute goods within a 350 to 500 mile radius depending on delivery time requirements.

Richards-Gebaur Commerce Park is located along Interstate 49 approximately five miles south of its junction with Interstate 435, Interstate 470, and U.S. Route 71. Over \$60 million in public roadway infrastructure improvements were made adjacent to the study area in the last five years. The Kansas City Southern main line travels north/south along the western edge of the Richards-Gebaur Commerce Park. Due to constraints at its previous intermodal facility in the Knoche Yard and opportunities with new traffic lanes, the Kansas City Southern moved their intermodal operations to the Study Area. The move increased opportunities for complimentary development for the CenterPoint Intermodal Center-Kansas City.

The results of the limited exterior, structural Facility Condition Assessment performed for the 35 buildings in the Richards-Gebaur Commerce Park showed that 14% of the buildings were in good condition, 49% of the buildings were in fair condition and 35% of the buildings were in poor condition. The assessment serves as a physical inventory of the site assets and identifies the need for maintenance, improvements, or major capital renewal of buildings at the Richards-Gebaur Commerce Park.

The Richards-Gebaur Commerce Park and CenterPoint Intermodal Center-Kansas City was compared to the four other intermodal facilities in the country. Overall, compared to the case studies, CenterPoint Intermodal Center-Kansas City has experienced a relatively slow start-up and remained tenantless for the first four years. CenterPoint was also developed with the assumption that congestion at West Coast ports would prompt shippers to start importing freight via the KCS-served Port of Lazaro Cardenas, Mexico. Overall, the length of time required to resolve property acquisition, environmental, political, and financial issues requires patience and staying power to drive the project to conclusion.

Some key findings of the study are:

- ▶ The current commercial real estate development marketing strategy favors spec building projects, as prospective clients can move quickly to open and operate new facilities.
- ▶ Rail facilities are an important feature of many supply chains and the KCS' International Freight Gateway is an attractive feature for shippers moving freight with KCS.
- ▶ The automotive and household appliance sectors were mentioned as potential beneficiaries of freight handling at the Study Area.
- ▶ Kansas City's easy highway access on major national east/west and north/south highways is an important DC site selection consideration.
- ▶ Kansas City is a good location for light manufacturing and product assemble.
- ▶ Respondents noted the positive perception of the Kansas City labor force, citing high quality, and availability characteristics.
- ▶ The presence of the big three parcel carriers, UPS, FedEx and DHL is a strong logistical advantage for Kansas City.
- ▶ Kansas City is a good location for an E-Commerce Fulfillment Center (EFC) due to three-day nationwide truck delivery capabilities, as well as access to air-cargo services offered by UPS, FedEx, and DHL.
- ▶ Many buildings at Richards-Gebaur Commerce Park have reached their serviceable life and renovation would not be cost-effective.

The freight market analysis, facility and site assessment, and interview survey raised several development concepts for the Richards-Gebaur Commerce Park. These are presented below under:

- ▶ **Leverage KCS International Freight Gateway and Transportation Access:** The general site location is viewed as having long-term value, particularly its location next to the KCS IFG. Kansas City was considered to be in a good position to capitalize on the growing trade with Mexico, and specifically the automotive and household appliance sectors were mentioned as possible opportunities.
- ▶ **Coordinate Richards-Gebaur Commerce Park and CenterPoint Intermodal Center Sites:** An agreement on the types and size of spec buildings for each site, or an updated master plan that considers both developments' access to highways, rail yards, utilities, over-weight corridors, etc., should be considered. The concept is that the combined Richards-Gebaur Commerce Park/CenterPoint Intermodal Center might be more attractive than the Richards-Gebaur Commerce Park on its own.
- ▶ **Develop Current Richards-Gebaur Commerce Park Buildings:** Existing buildings at Richards-Gebaur Commerce Park will need to be renovated eventually, regardless of future development plans. A mixed brownfield option for the Richards-Gebaur Commerce Park could either fully renovate buildings to meet modern DC or factory specifications, or demolish and replace with modern buildings. The Richards-Gebaur Commerce Park has a unique advantage in that the buildings on Hangar Road have direct adjacency to the KCS IFG allowing back or private gate service.
- ▶ **Build-to-Suit or Spec Buildings?:** The current commercial real-estate development marketing strategy favors spec building projects, as prospective clients can move quickly to open and operate new facilities. Spec building projects at Richards-Gebaur Commerce could cycle more quickly through the land acquisition, building, and marketing/deal phases, which frees up capital much sooner than the build to suit approach.
- ▶ **Sell or Develop? and Funding Options:** The site itself has value over the long-term, and is well positioned to take advantage of the growing trade with Mexico, which could potentially include automotive and other manufacturing opportunities. The project team recommends Port KC retain ownership of the land, but it should consider various own/lease site development arrangements that are compatible with the Port KC's charter. Assuming Port KC moves forward with some form of development, then various funding approaches should be considered that are consistent with Port KC's charter and bonding capabilities.

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Appendix A. Literature Review

Appendix B. Limited Facility Condition Assessment

Note: On May 1, 2015, the Port Authority of Kansas City, Missouri changed its name to Port KC.

Section I | Introduction

Port KC has engaged TranSystems, partnered with GKSF Global Research, to conduct the Richards-Gebaur Commerce Park Freight Study. The purpose of the study is to evaluate the potential for developing the former Richards-Gebaur Air Force Base into an inland, intermodal port facility. Port KC desires to more fully understand Kansas City's opportunity and ability to move domestic and global freight via rail, roadway, and waterborne commerce at multi-modal facilities like the Richards-Gebaur Commerce Park.

A freight market analysis and site assessment will drive the overall evaluation of the Richards-Gebaur Commerce Park. The market analysis will assess the current freight volumes in the Kansas City region to understand the likelihood for future growth in those volumes. The site assessment will review the condition of the existing facilities and benchmark the overall development with sites around the United States (U.S.). The study will review how any potential increase in traffic and long-term facility condition could impact growth at the Richards-Gebaur Commerce Park.

Background and Study Area

Port KC manages 450,000 square feet of leased Class C and D industrial space and 42,000 square feet of leased Class B office space at the Richards-Gebaur Commerce Park. This land is part of the 1,400 acre former Richards-Gebaur Air Force Base that was transferred to Port KC in 2007 for the purpose of handling environmental remediation and redevelopment. The property was originally constructed in 1941 as an auxiliary airport known as Grandview Airport and transferred to the United States government for use as a military facility in 1953. In 1976 it was deactivated as part of the Base Alignment and Closure (BRAC) process and transferred to the City of Kansas City, Missouri. The land was subsequently transferred to Port KC in 2007.

In 2007, 317 acres of the property were sold to CenterPoint Properties to redevelop for industrial, distribution, light manufacturing, and warehouse uses. This property is known as the CenterPoint Intermodal Center-Kansas City. In 2008, the Kansas City Southern (KCS) opened the International Freight Gateway, a 360-acre rail-truck intermodal facility on the former runway of the Air Force Base. CenterPoint Properties currently holds the option to purchase 569 additional acres of Port KC property. Port KC further owns 100 acres dedicated for above ground, future limestone mining operations.

For the purposes of the Richards-Gebaur Commerce Park Freight Study, the term Study Area will refer to the entire 1,400-acre former Air Force Base including the developed and undeveloped Port KC property, CenterPoint Intermodal Center, and the KCS's International Freight Gateway intermodal facility. The 168 acres of Port KC property within the Study Area that is currently developed will be referred to as the Richards-Gebaur Commerce Park throughout this study.

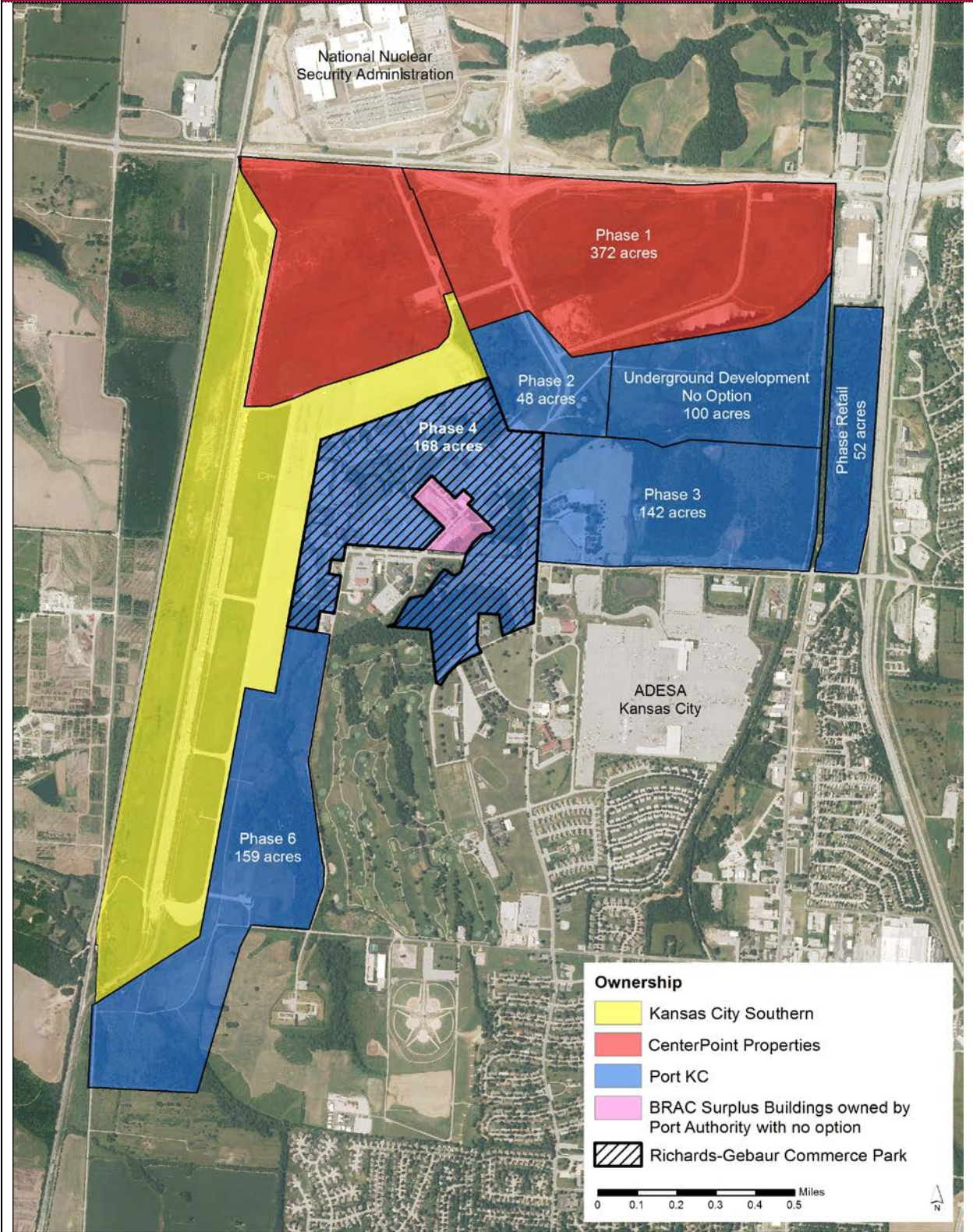
Figure I illustrates the Study Area and, specifically, the property considered as the Richards-Gebaur Commerce Park. In the figure, nearby developments that influence the Study Area, including the National Nuclear Security Administration facility north of MO-150 and ADESA Kansas City south of I55th Street, are labeled on the map.

Richards-Gebaur Commerce Park Freight Study

Port KC

Kansas City, Missouri

Figure 1 | Map of Study Area



Source: TranSystems

Past Studies

A series of federal, statewide, regional, and local documents were reviewed to understand existing national and regional policies, development efforts, and freight flows that could impact development of the Study Area. These documents provide a foundation for further analysis of the Study Area. Key highlights from the review of past studies are identified below with a detailed literature review of the documents in Appendix A.

Federal Guidebooks: Two federal organizations share research and guidance for freight-related activities: the National Cooperative Freight Research Program (NCFRP) and the National Cooperative Highway Research Program (NCHRP). The resources provide guidance for policymaking that could inform decisions for the Richards-Gebaur Commerce Park, such as how policy can influence the location selection process. Key criteria for site selection include the ability to access key markets, interaction with the transportation network, modal choice, labor and workforce, and total cost environment. The federal guidebooks reviewed included:

- ▶ Guidebook for Understanding Urban Goods Movement, NCFRP Report 14 (2012)
- ▶ Freight Facility Location Selection: A Guide for Public Officials, NCFRP Report 13 (2011)
- ▶ Guidebook for Freight Policy, Planning, and Programming in Small- and Medium-Size Metropolitan Areas, NCHRP Report 570 (2007)

State Reports: The statewide rail and freight plans for both Missouri and Kansas were reviewed. The plans set the overall foundation and framework for making transportation investment decisions in their respective states. The Missouri documents particularly support intermodal connections between freight railroads and ports. The Kansas documents also recognize the impact the Richards-Gebaur Commerce Park and adjacent CenterPoint Intermodal Center/KCS International Freight Gateway may have on transportation infrastructure in Kansas. The state reports reviewed included:

- ▶ Missouri State Freight Plan (2014)
- ▶ Missouri State Rail Plan (2012)
- ▶ Kansas Statewide Freight Study (2009)
- ▶ Kansas Statewide Rail Plan (2011)

Regional Reports: Four regional reports provide greater insight to freight activities in the Kansas City region and, more specifically, the Richards-Gebaur Commerce Park. A few of the documents emphasize the BNSF Railway (BNSF) Intermodal Facility in Edgerton, Kansas and the impact the facility will have on land use changes and transportation improvements. The documents also acknowledge the CenterPoint Intermodal Center/KCS International Freight Gateway and the impact the site may have on rail and truck traffic and related warehouse development that affects the transportation system in the bi-state region. The Regional Freight Outlook, prepared by TranSystems for the Mid-America Regional Council and Kansas City SmartPort, also describes characteristics and assets of the CenterPoint Intermodal Center/KCS International Freight Gateway that may impact the Richards-Gebaur Commerce Park. The regional reports reviewed included:

- ▶ 5-County Regional Transportation Study (2013)
- ▶ Southwest Johnson County Area Plan (2013)
- ▶ Transportation Outlook 2040 (2010)
- ▶ Kansas City Regional Freight Outlook (2009)

Local Freight Evaluations: TranSystems previously completed freight evaluations for the Kansas City Southern Railway, the CenterPoint Intermodal Center/KCS International Freight Gateway, and Kansas City SmartPort. The evaluations typically included a freight flow analysis and highlighted competitive attributes the entity can leverage to support their goals. The studies utilized a methodology similar to

the process that is being used to analyze the Richards-Gebaur Commerce Park. The local freight evaluations reviewed included:

- ▶ KCS Market Research: Mexico Freight Flow Analysis and Interview Survey (2011)
- ▶ Kansas City SmartPort U.S.-Mexico Freight Flow Analysis (2010)
- ▶ CenterPoint Intermodal Center – Kansas City (2009)

Freight Study Outline

Section 2 of this study covers the freight market analysis. The freight market analysis uses economic trends and freight volume and value data to develop a regional freight outlook. Data on cross border freight is also presented. Intermodal trends are reviewed to develop a specific forecast of regional intermodal volumes.

Section 3 summarizes the interview surveys of industry professionals familiar with requirements and trends involving domestic and international supply-chains affecting the Kansas City area. The interview surveys help to define industry trends, distribution strategies, and competition for Kansas City.

Section 4 is an overview of the freight infrastructure and facilities serving the Study Area. Discussion of the transportation modes available in the Kansas City region along with specific assessment of the facilities in the Study Area is included.

Section 5 provides a benchmark of intermodal facilities that are operating in the U.S. This summary allows for comparison between what Kansas City has available to other competing regions around the country.

Section 6 details the market and site development strategies specific to the Richards-Gebaur Commerce Park and Port KC. Key findings from freight market analysis, facility and site assessment, and interview surveys were used to develop opportunities and marketing strategies for Port KC to consider as future decisions are made about properties in the Study Area.

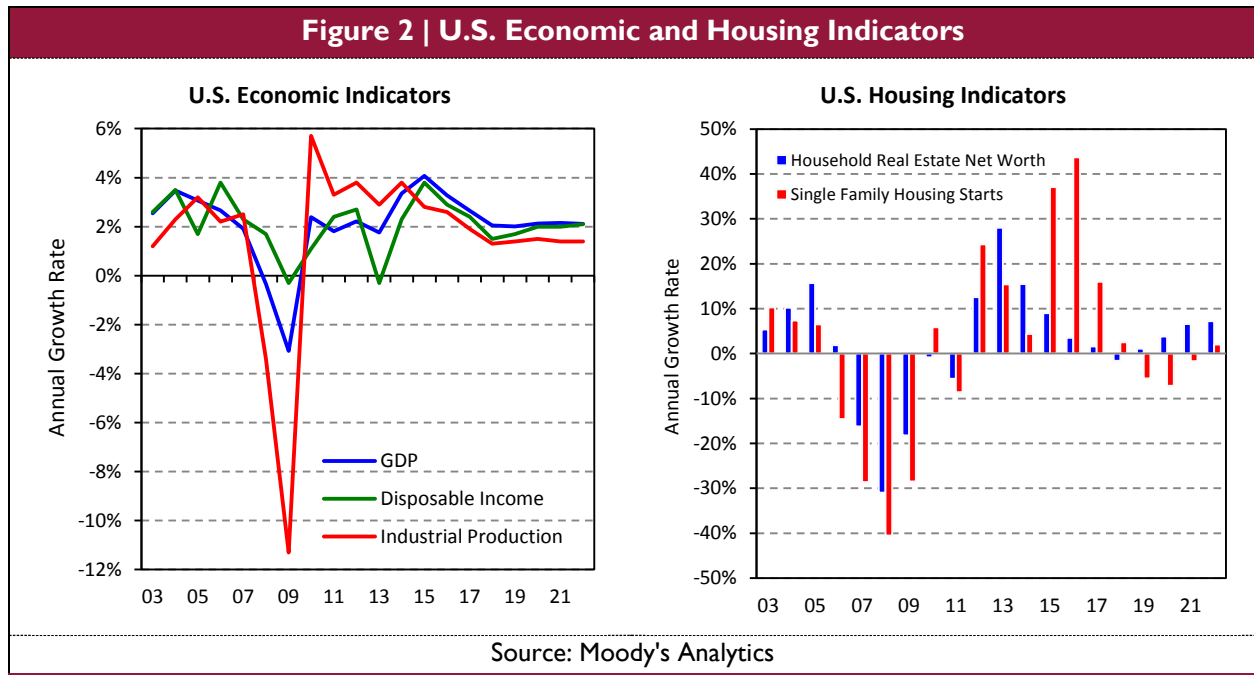
Section 2 | Freight Market Analysis

The freight market analysis uses economic trends and freight volume and value data to develop a regional freight outlook. Data on cross border freight is also presented. Intermodal trends are reviewed to develop a specific forecast of regional intermodal volumes.

Economic Trends

U.S. and Regional Economies

Economic activity has gradually recovered from the 2008/2009 recession and the U.S. economy is projected to have 2 to 4 percent annual growth of Gross Domestic Product (GDP) through 2016 and then 2 to 3 percent annual growth through 2022. Factors supporting growth include the expansion of disposable income and consumption, a healthier housing sector (relative to the collapse during the recession), and export activity. The gradual recovery in housing starts, linked to household formation and population growth, will continue to have a favorable impact on consumption and import activity. However, exports are coming under pressure from the stronger U.S. dollar and weak growth in overseas markets, and this could dampen export growth over the near-term. The near-term outlook for the U.S. Dollar relative to other currencies is for a continued moderate strengthening, which got underway in early 2014 and is likely to continue into 2016, after which it will decline gradually. Figure 2 shows the historical and projected growth trends for selected U.S. economic indicators – GDP, disposable income, industrial production, and the housing sector.

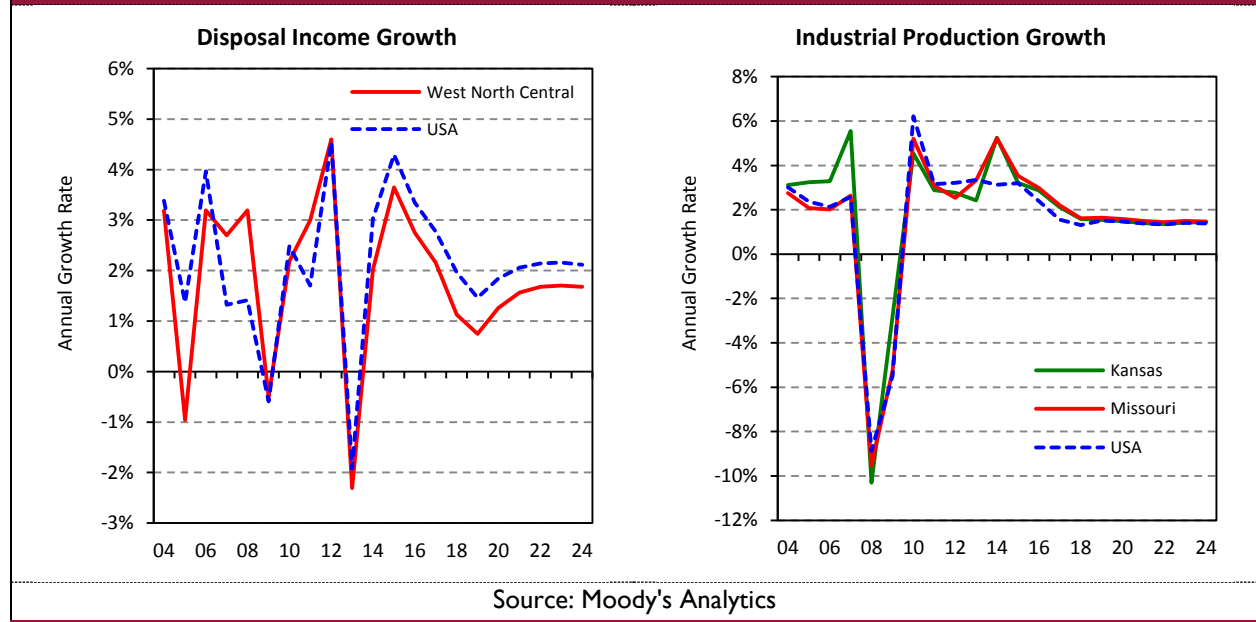


Major domestic destinations for freight moving outbound from the Kansas City Combined Statistical Area (CSA) are the states of Kansas and Missouri, and neighboring states in the West North Central census region¹ (see discussion of freight patterns later in Section 2). Economic activity in these regions

¹ The U.S. is divided into nine divisions by the Census Bureau and they are used in this report as the basis for regional trend analysis.

will have an impact on future Kansas City freight flows. Figure 3 presents economic indicators – disposable income growth and industrial production growth – for the West North Central region. Historically, the region has tracked the overall U.S. economy with annual divergences that reflect local economic patterns, including the influence of the agricultural sector. However, annual growth of disposable income is projected to be lower than the overall U.S. trend over the next five to ten years, and to grow more slowly than most other census divisions (see Figure 4). Causes include faster growing economies and populations in other regions, notably in the southern tier states. Industrial production growth in the West North Central region is projected to outperform the U.S. economy in the near-term and then align with U.S. growth in the longer term. This suggests that the West North Central freight industry could see faster growth in manufacturing and other industry-related freight relative to growth in consumer-related freight and distribution.

Figure 3 | Disposable Income and Manufacturing Growth in the West North Central Region

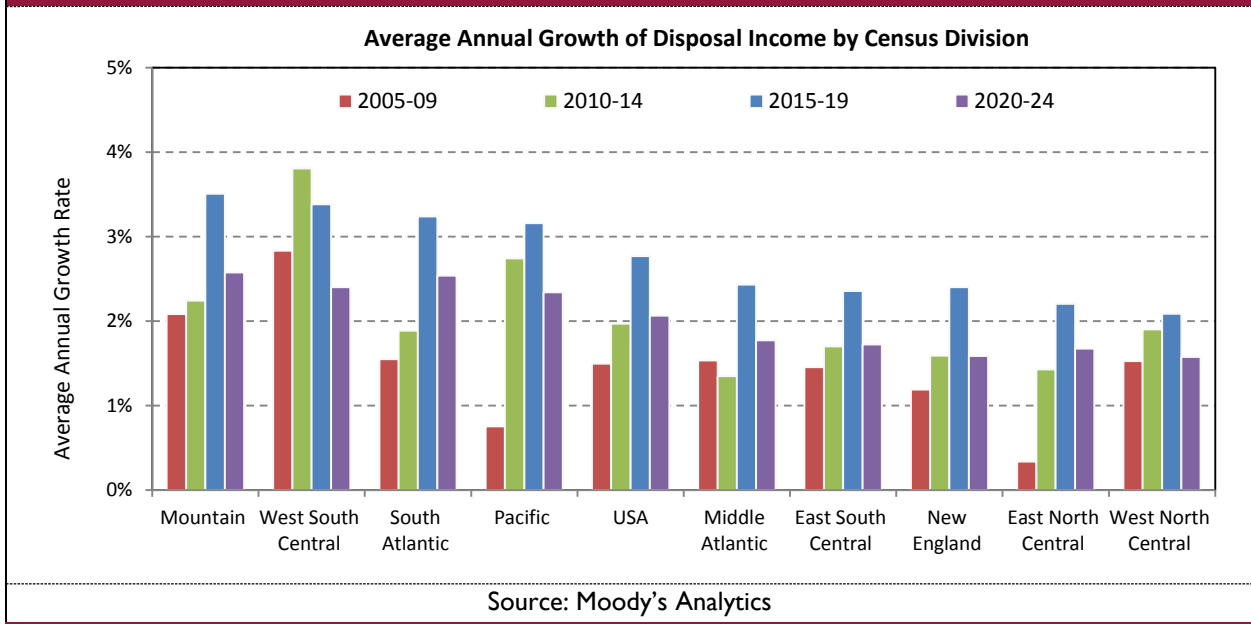


International Economies

Exports out of the Kansas City CSA, and the surrounding area, are tied to the North American Free Trade Agreement (NAFTA) market (Mexico and Canada) and markets in Northeast Asia. Other regions – Southeast Asia, Latin America (excluding Mexico), Europe and others are less prominent. Notable exports are shipments of agricultural commodities and food products.

The projected growth of GDP by region and country is presented in Figure 5. Global economic growth is projected to average 3.9 percent per year through 2019. With its economy heavily integrated with the U.S., Mexico manufacturing activity, and cross-border trade are impacted by the performance of the U.S. economy. The Mexican economy recovered strongly in 2010 as the U.S. emerged from recession and Mexico is projected to have average annual growth of nearly 4.0 percent through 2019. The country has emerged as one of the world's leading centers for automotive manufacturing and related component production, and investment continues in this sector. Additionally, investment continues in other manufacturing areas, including consumer-related products. Mexico will remain a prominent market for agricultural commodities and products imported from the U.S.

Figure 4 | Historical and Projected Disposable Income Growth by Census Division



The major economies of the European Union (EU) and Japan are projected to have weak growth. The outlook is favorable for markets in India and within the Association of Southeast Asian Nations (ASEAN). Latin America recovered well from the global recession, due to exports and healthy domestic demand. However, the Latin American commodity exports have been negatively impacted by slower growth in China and other markets. The medium-term outlook for Latin America’s major economies, notably Brazil, has been downgraded; the long-term outlook remains favorable due to population growth, rising income levels, and expanding middle classes.

Kansas City CSA

The Kansas City CSA recovery from the 2008/2009 recession has lagged the country as a whole since 2011, with a noticeable weakness in the recovery of manufacturing activity and employment (Figure 6). This contrasts with stronger performance of other regions over the last few years, notably in the Southeast (for example, South Carolina with its expanding automotive and aerospace sectors) and the energy producing states (for example, Texas). Looking forward, the Kansas City CSA faces challenges with declining productivity relative to the nation, a slight shrinking of the region’s market share of U.S. jobs and output, and real wage growth slower than the nation.²

² These were some of the findings contained in the report “Prosperity at a Crossroads – Targeting Drivers of Economic Growth for Greater Kansas City” published by the Mid-America Regional Council and the Brookings Metropolitan Policy Program in June 2014.

Figure 5 | Annual Growth of Real GDP by Country and Region to 2019

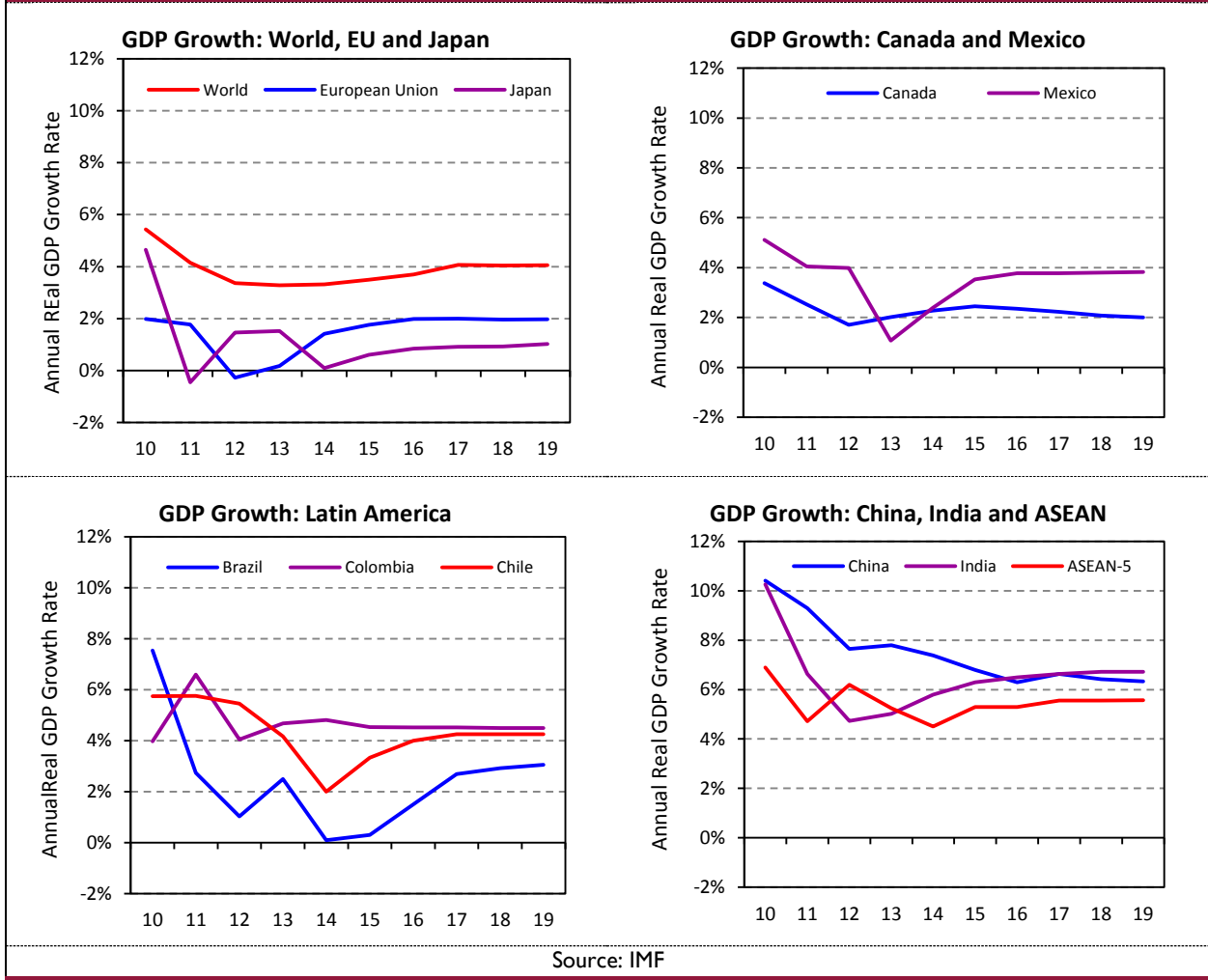
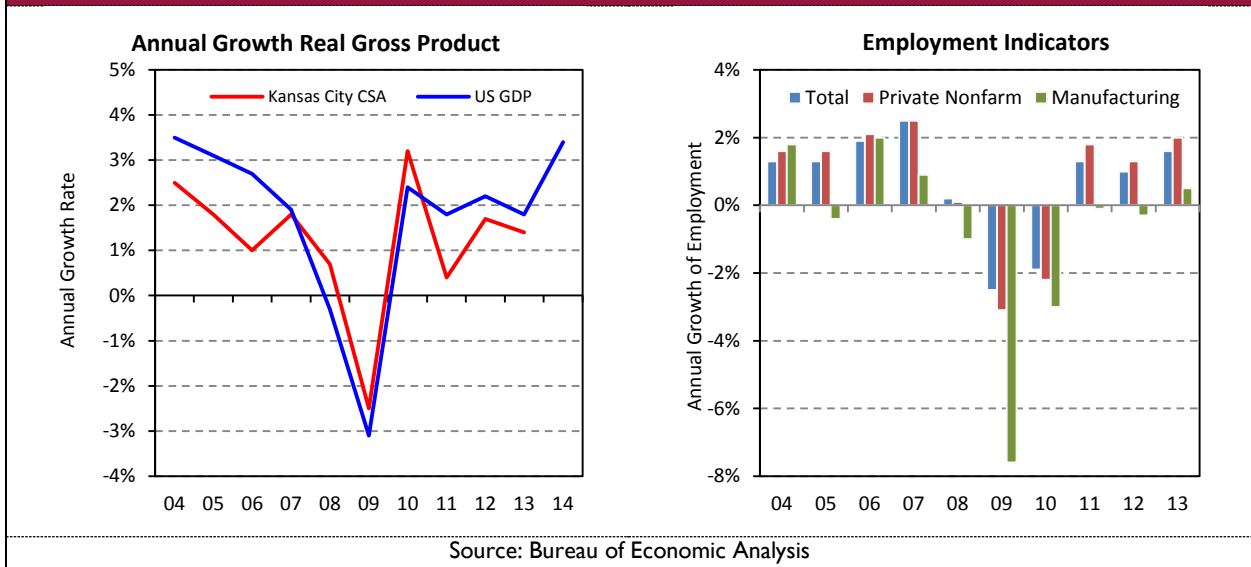


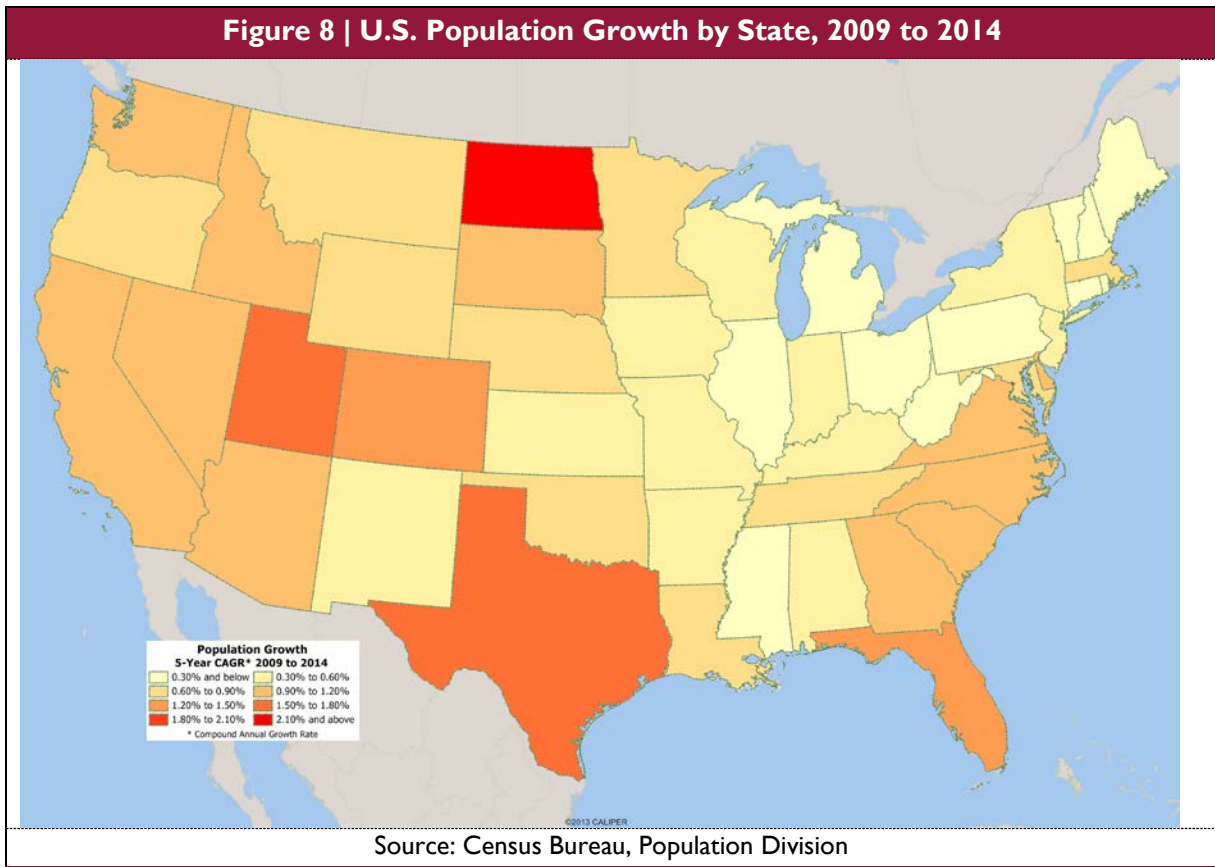
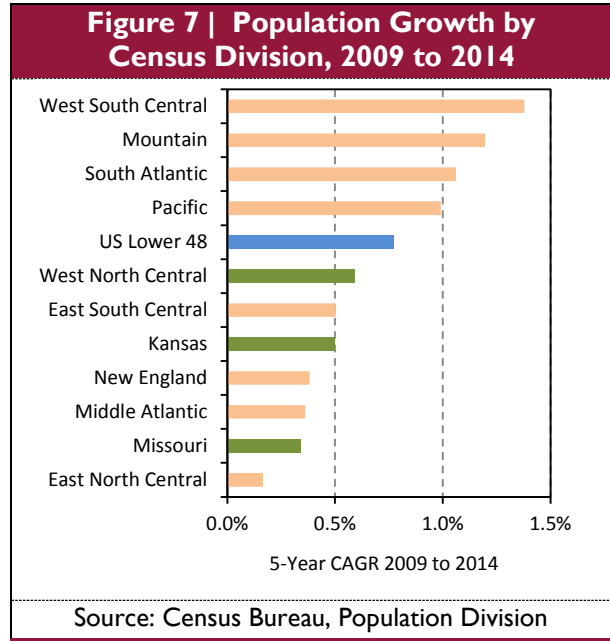
Figure 6 | Economic Indicators for the Kansas City CSA



Population Trends

A further challenge for the Kansas City CSA and its surrounding area is the slow growth of population relative to other regions of the country. As shown in Figure 7, population growth in the West North Central region has fallen below the national average over the past five years. The 5-year compound annual growth rates (CAGR) for the states of Kansas and Missouri were 0.5 percent and 0.3 percent respectively, compared to 0.8 percent for the nation. The population of the Kansas City CSA has been growing at a slightly faster rate (5-year CAGR of 0.6 percent) than the states of Kansas and Missouri, but still under the national growth rate.

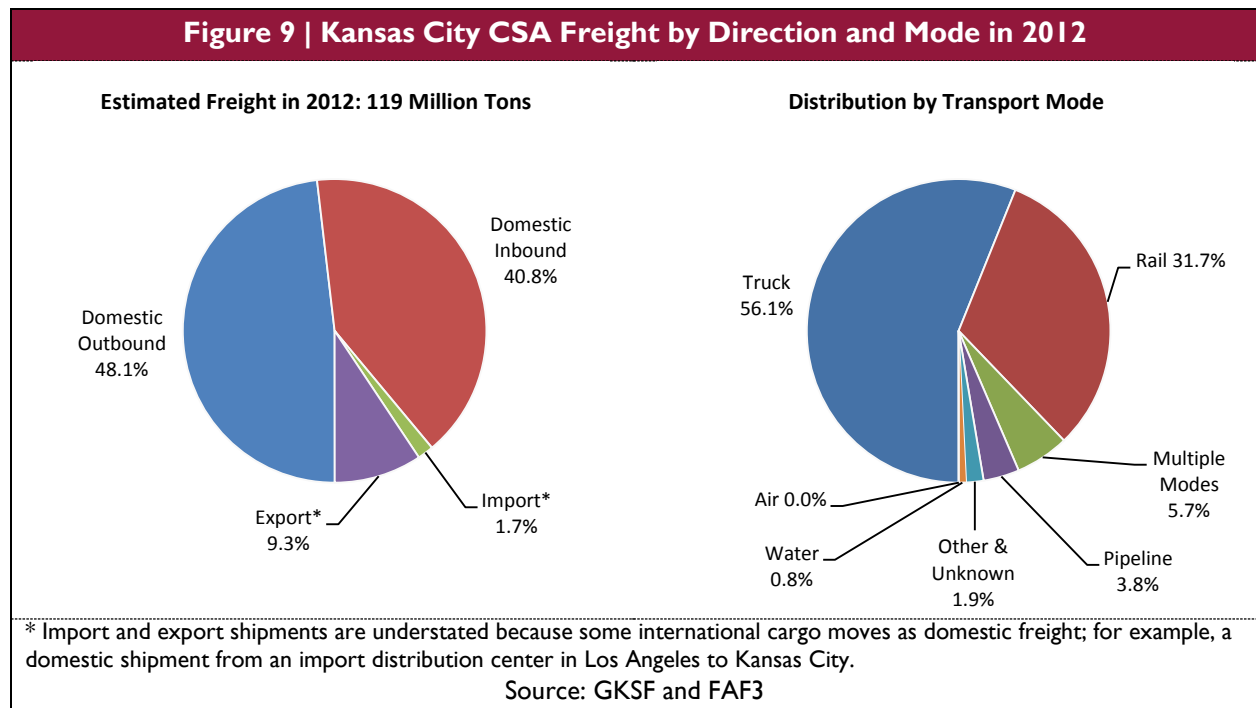
The expected continuation of these trends would tend to dampen the growth of consumer demand and the labor force in the region and, in turn, possibly dampen the growth of freight activity. The faster growing regions of the country are to the South, Southeast, and West and suggest the importance of transport connectivity to these markets for industry in the Kansas City area.



Regional Freight Trends and Forecast

Total Freight

The Kansas City CSA handled an estimated 119 million tons of inbound and outbound freight in 2012 as reported by the FAF3 database.³ The freight is moved by truck, rail, water, air, and pipeline, and also by multiple modes (for example, truck and rail). Freight moves in domestic outbound and inbound lanes, and international lanes. As shown in Figure 9, domestic outbound is the largest flow with an estimated 48 percent share of total freight volume. The shares attributed to import and export sectors, 1.7 percent and 9.3 percent respectively, are understated because many international shipments are captured as a domestic freight move. For example, consumer goods imported from Asia to a Los Angeles distribution center are then shipped as domestic freight into the Kansas City market. Truck is the largest transport mode with an estimated 56 percent share of shipments, followed by rail at 32 percent. Multiple modes, at 5.7 percent share, largely captures combined truck-rail moves (for example, intermodal rail).



³ The regional freight review draws on the Freight Analysis Framework (FAF3) database released by the Federal Highway Administration (FHWA). FAF3 integrates data from different sources to provide estimated historical freight activity and forecasts to 2040 on freight movements between metropolitan areas by transportation mode and commodity. FAF3 data is used for the Kansas City Combined Statistical Area (CSA). The latest available historical data is for 2012.

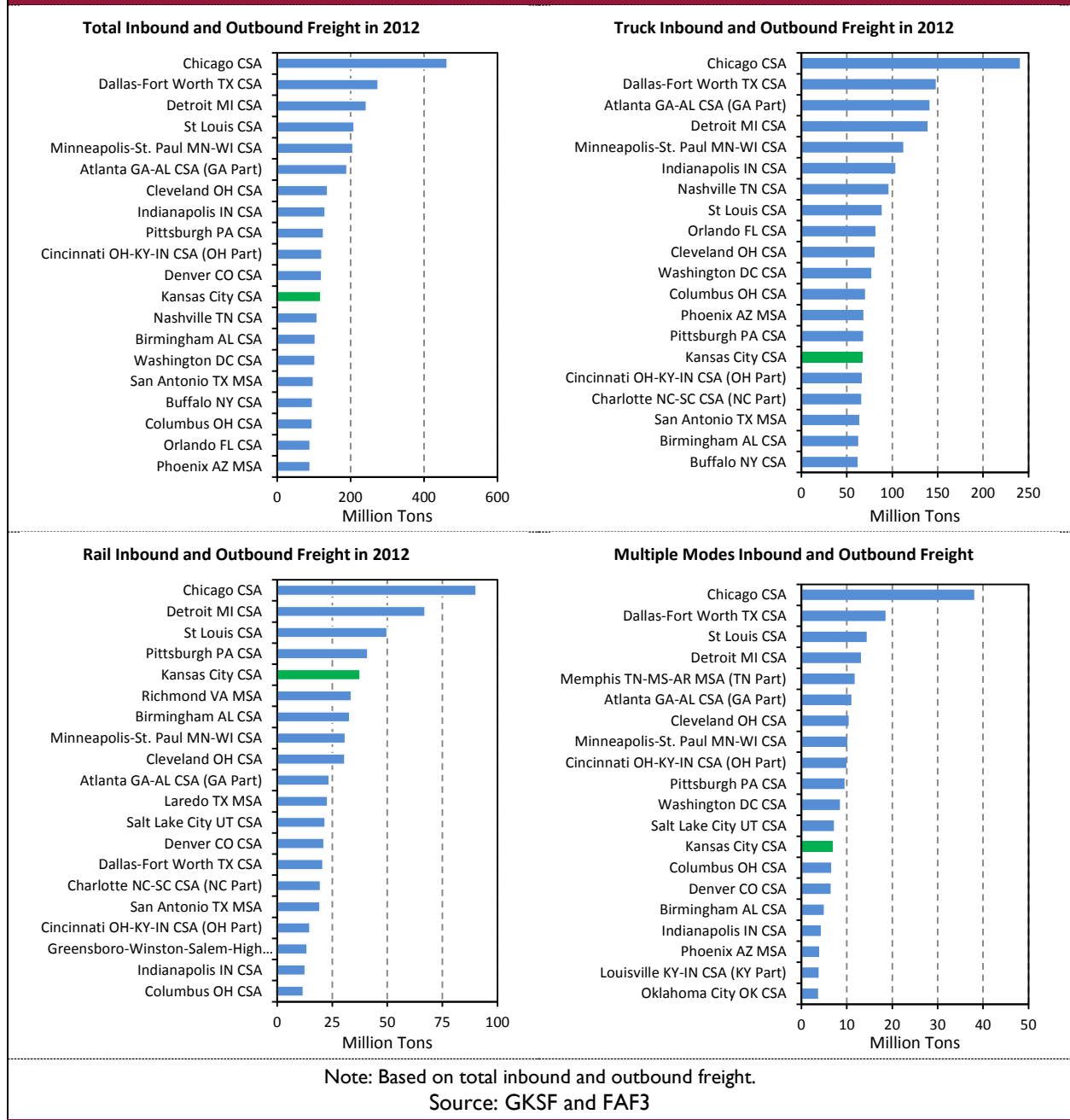
Richards-Gebaur Commerce Park Freight Study

Port KC

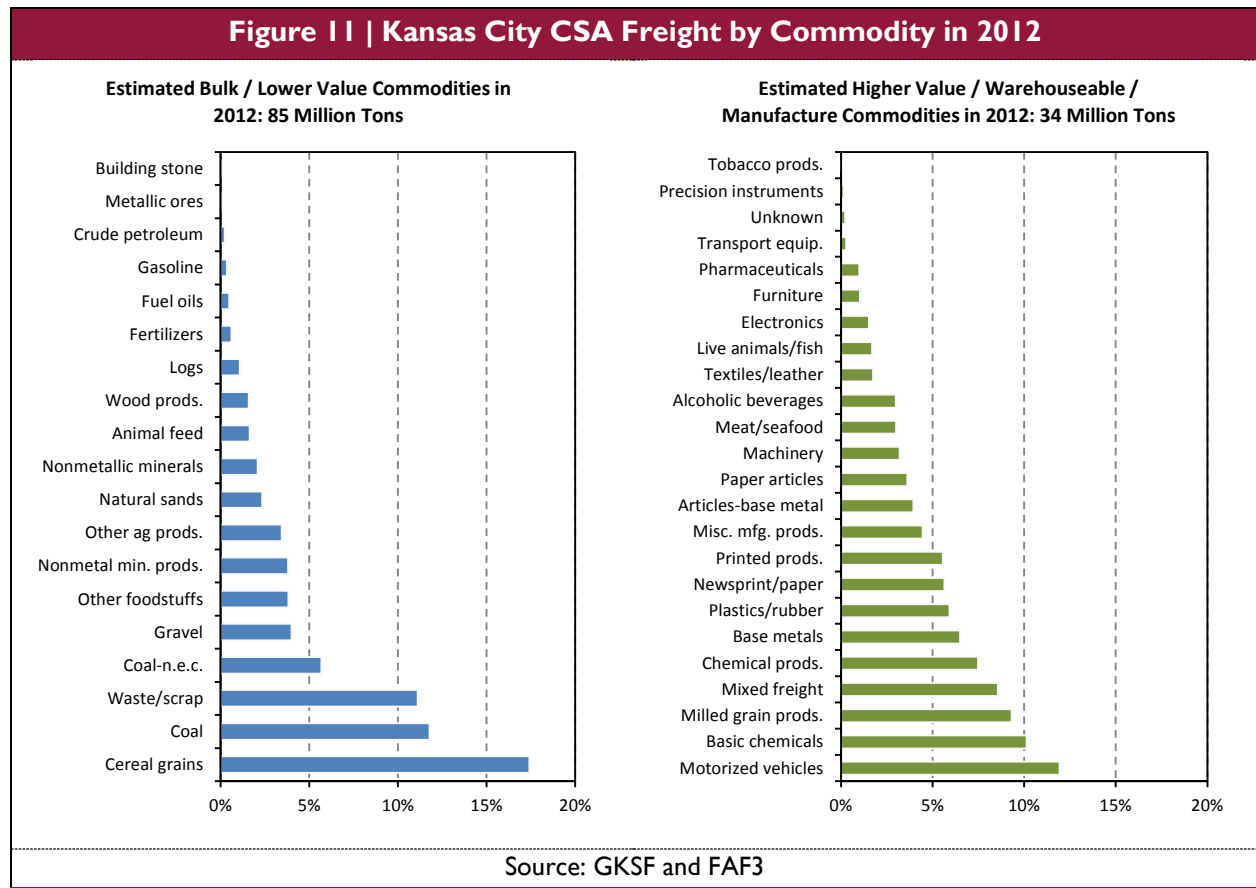
Kansas City, Missouri

Kansas City ranks as one of the nation’s major freight hubs, notably for rail freight, as shown in Figure 10. As a rail hub, Kansas City is served by BNSF and Union Pacific Railroad (UP) to the west, CSX Corporation (CSX) and Norfolk Southern Railway (NS) to the east, and KCS and Canadian Pacific (CP) the north/south corridor. The CP provides rail service that connects to it east/west corridors in Canada. These rail connections are an important, favorable attribute for Kansas City in its competition with other freight centers. This suggests that efficient access to rail infrastructure at Richards-Gebaur Commerce Park will play an important role in the future development of the Study Area.

Figure 10 | Kansas City CSA and Other Freight Centers – Freight Activity in 2012



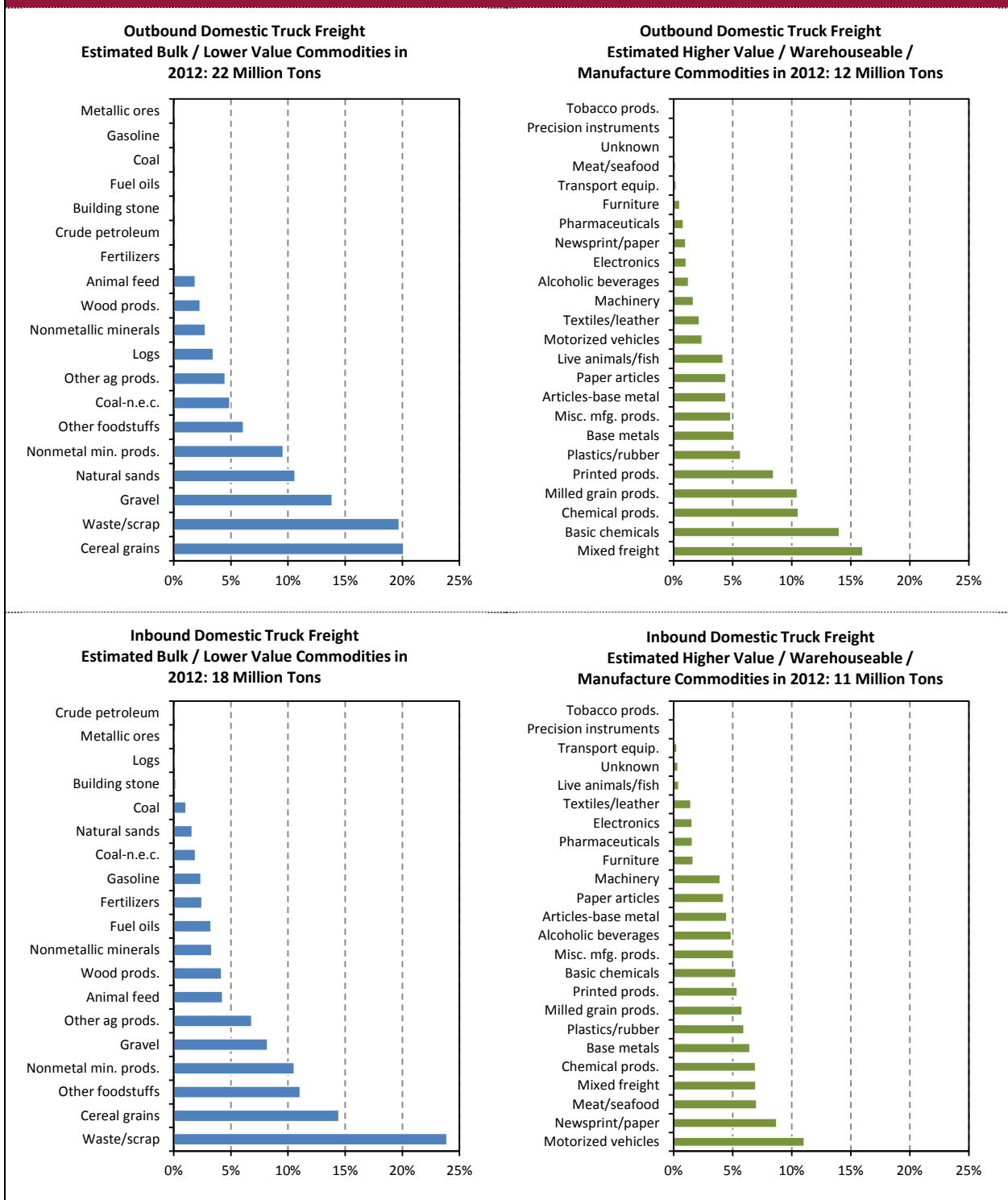
The commodity mix of Kansas City’s total freight is presented in Figure 11 and shows the heavy concentration in bulk/lower value commodities (for example, grain), which accounted for 72 percent of freight in 2012. When these types of commodities are filtered from the data, there are an estimated 34 million tons of what can be generally termed as higher value, warehouseable or manufactured-related commodities. Many of these commodities drive demand for warehousing, distribution, and manufacturing space in the Kansas City region and some (for example, mixed freight) move by containerized intermodal rail service.



Domestic Truck Freight

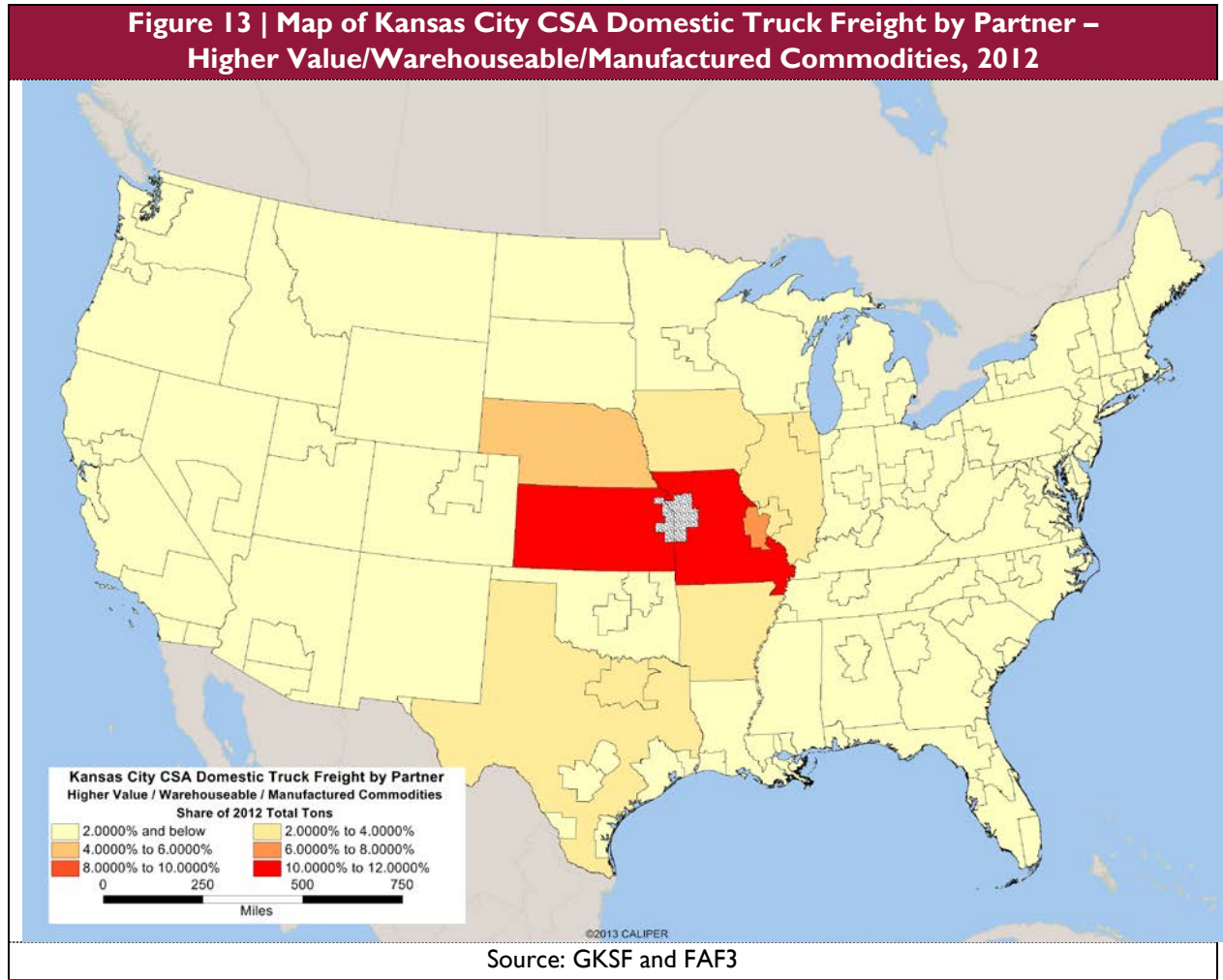
Truck is the principal freight transportation mode in and out of the Kansas City region. Total domestic truck freight amounted to an estimated 64 million tons in 2012 (out of total freight of 119 million tons); 35 million tons moving outbound and 29 million tons moving inbound. The commodity profile for inbound and outbound flows, split between bulk/lower value and higher value commodities, is presented in Figure 12. Of particular interest to this study is the higher value, warehouseable or manufactured-related commodities, which are handled by the types of facilities likely to be developed in the Study Area – warehousing/distribution and manufacturing plants. Additionally, while moving by truck, these types of commodities are also suited to movement by intermodal rail service, mainly in medium- to long-haul lanes (over 500 miles).

Figure 12 | Kansas City CSA Domestic Truck Freight by Commodity in 2012



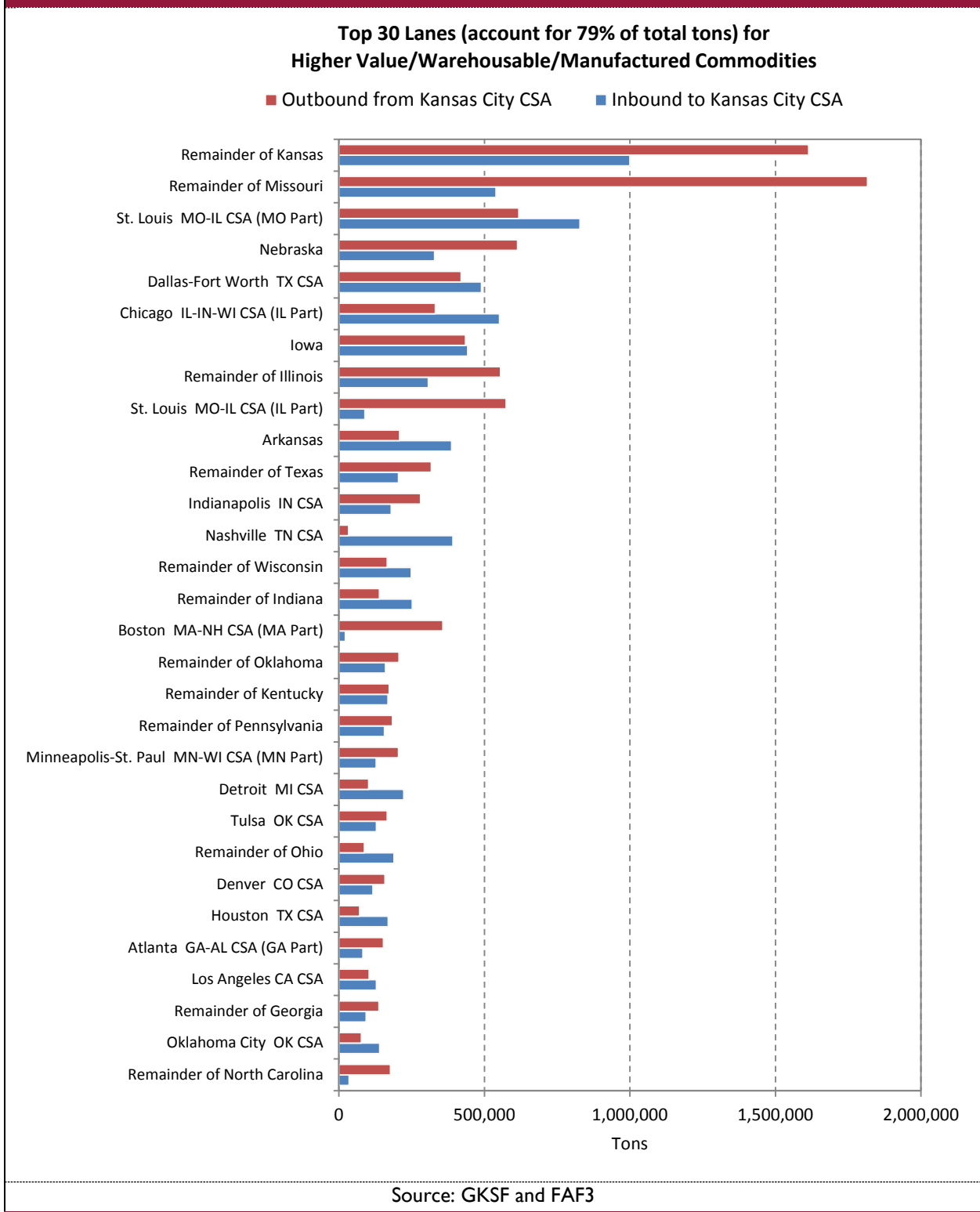
Source: GKSF and FAF3

Domestic truck freight is concentrated in short-haul corridors with the rest of Kansas and Missouri, and surrounding states (Figure 13). Kansas and Missouri (excluding the St. Louis CSA) accounted for 21 percent of inbound and outbound truck shipments of higher value commodities, and the St. Louis CSA an additional 9 percent. Other top partners included the major freight hubs of Chicago and Dallas. This geographic distribution of truck freight reflects several factors – Kansas City’s function as a distribution hub for surrounding areas, use of locations such as Chicago and Dallas as distribution hubs for Midwest locations (including Kansas City), and the prominence of truck in shorter haul corridors where it is more cost-effective than rail transport.



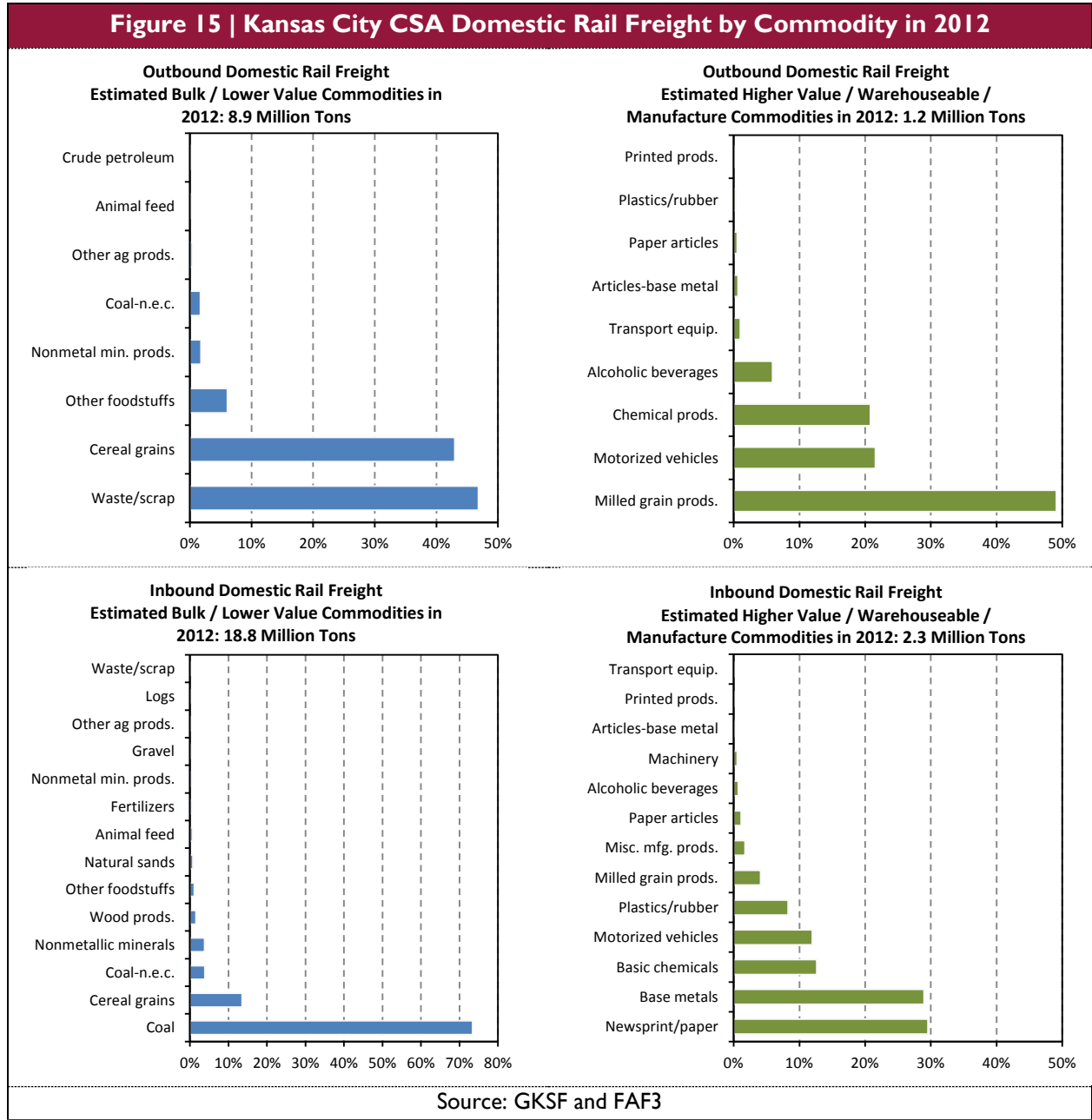
The above pattern is further illustrated by Figure 14, which shows inbound and outbound freight on the top 30 lanes that account for 79 percent of total tons. Kansas City’s function as a distribution hub for local and regional areas is demonstrated by the heavy excess of outbound over inbound truck freight with the rest of Kansas and Missouri. By contrast, inbound freight exceeds outbound freight in several longer haul lanes connecting to major freight hubs (for example, Chicago). The top 30 lanes include several border crossings and ports (for example, Los Angeles). As stated earlier, some of the domestic freight is international cargo that first moves through import distribution centers, export consolidation locations, and other facilities that process international cargo.

Figure 14 | Kansas City CSA Domestic Truck Freight by Lane in 2012



Domestic Rail Freight

Kansas City is one of the nation’s key rail hubs with rail connections provided by BNSF and UP to the west, CSX and NS to the east, and KCS and CP in the north/south lane. Total domestic rail freight amounted to 31 million tons in 2012 (out of total freight of 119 million tons); 21 million tons inbound and 10 million tons outbound. As shown in Figure 15, shipments are dominated by bulk commodities including grain outbound and coal inbound. Shipments of higher value commodities are centered on vehicles and chemicals. The rail freight discussed here is primarily carload activity and higher value commodities that move by containerized intermodal rail service are largely captured under the Mixed Modes transportation category, discussed later in Section 2.



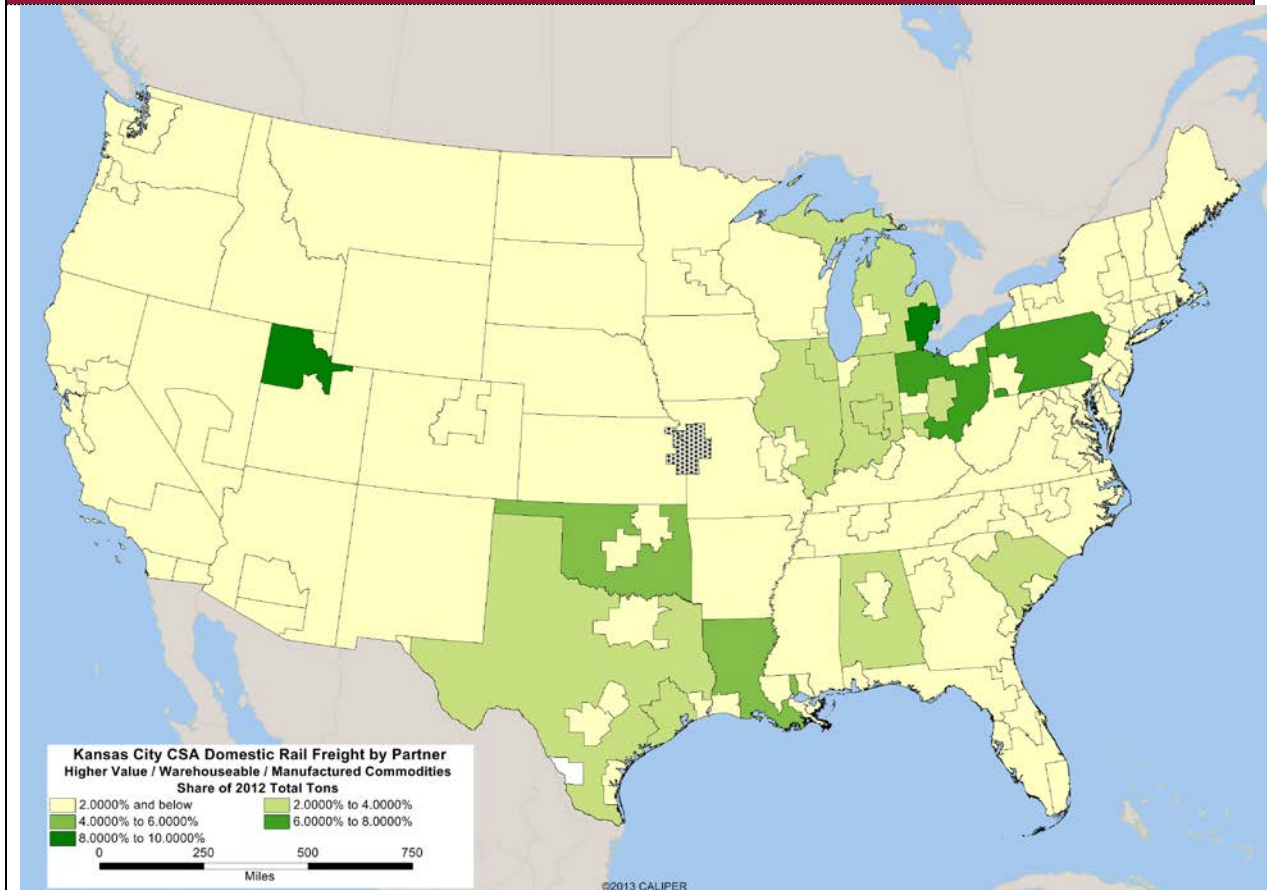
Richards–Gebaur Commerce Park Freight Study

Port KC

Kansas City, Missouri

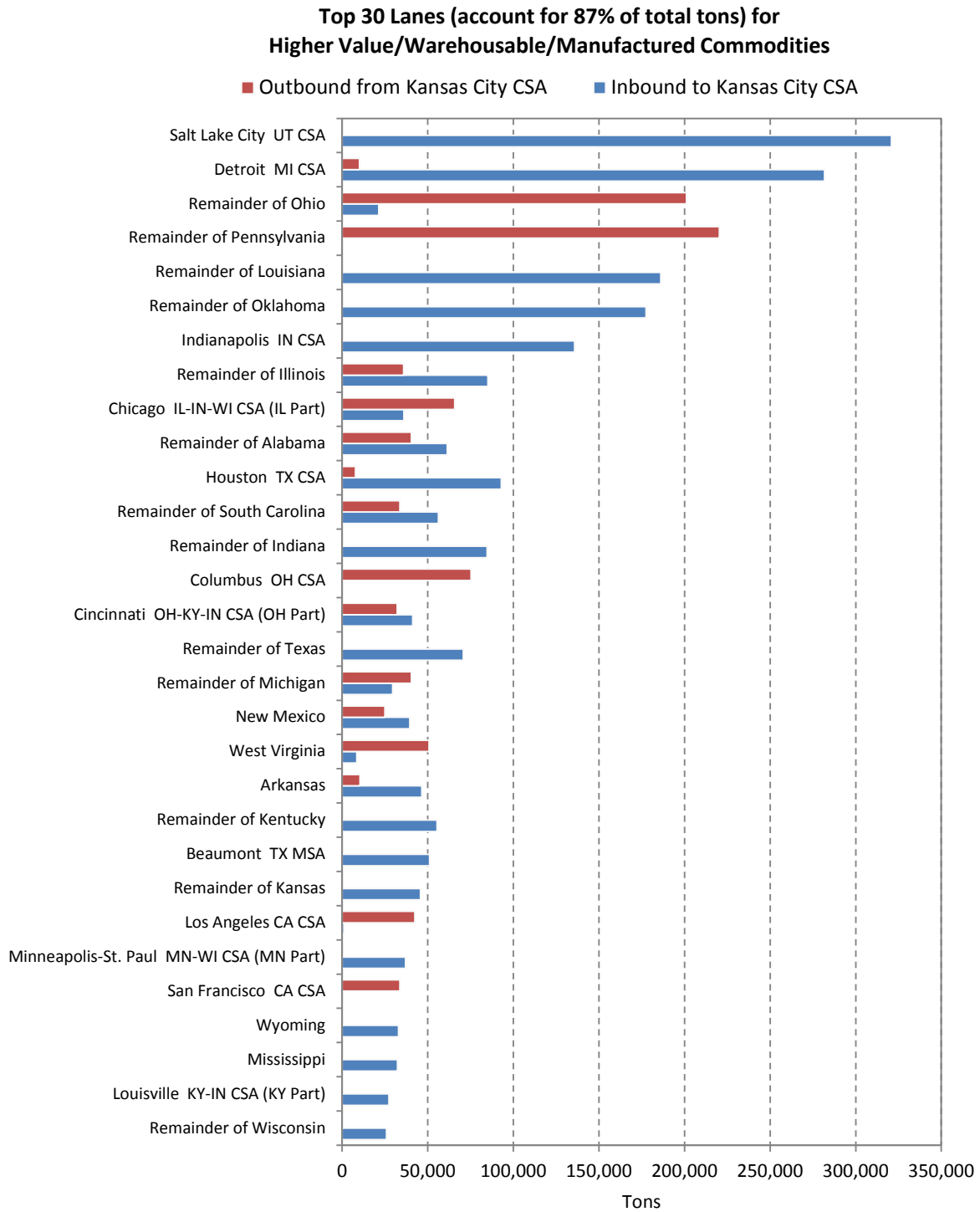
Domestic rail shipments (excluding multiple modes) of higher value commodities are concentrated in longer haul lanes with the Upper Midwest, Northeast, and South Central (Figure 16). As shown in Figure 17, there are significant imbalances between inbound and outbound traffic on individual lanes. The imbalance is partly explained by the concentration of freight in specific sectors (for example, inbound shipments of vehicles in the Detroit, MI lane) that are not matched by backhaul cargo opportunities.

Figure 16 | Map of Kansas City CSA Domestic Rail Freight by Partner – Higher Value/Warehouseable/Manufactured Commodities, 2012



Source: GKSF and FAF3

Figure 17 | Kansas City CSA Domestic Rail Freight by Lane in 2012



Source: GKSF and FAF3

Domestic Multiple Modes

Multiple modes are defined in the FAF3 database as truck-rail, truck-water, and rail-water shipments involving one or more end-to-end transfers of cargo between two different modes. Total domestic multiple modes freight amounted to 4.2 million tons in 2012 (out of total freight of 119 million tons), 2.8 million tons inbound and 1.4 million tons outbound. As shown in Figure 19, shipments are split between bulk commodities and higher value commodities, with a greater share of higher value commodities than domestic truck or domestic, mainly carload, rail. This difference reflects the presence of containerized intermodal shipments within the multiple modes category.

The geographic distribution of higher value freight moving by multiple modes is presented in Figure 18 and Figure 20. Top lanes include those with a concentration of vehicle shipments (for example, Detroit) and intermodal lanes (for example, Los Angeles). The latter lanes likely include import and export cargo classified as a domestic shipment.

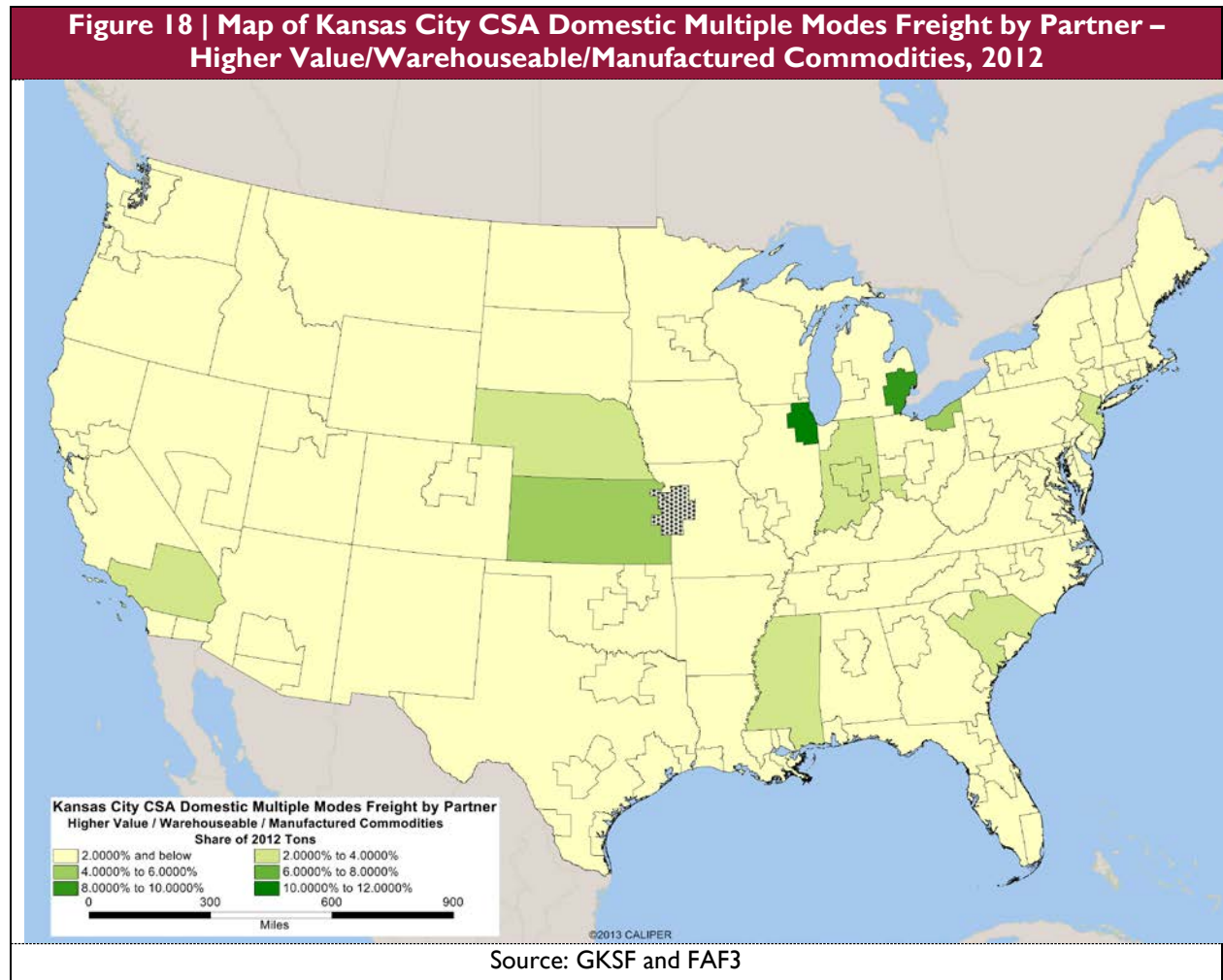
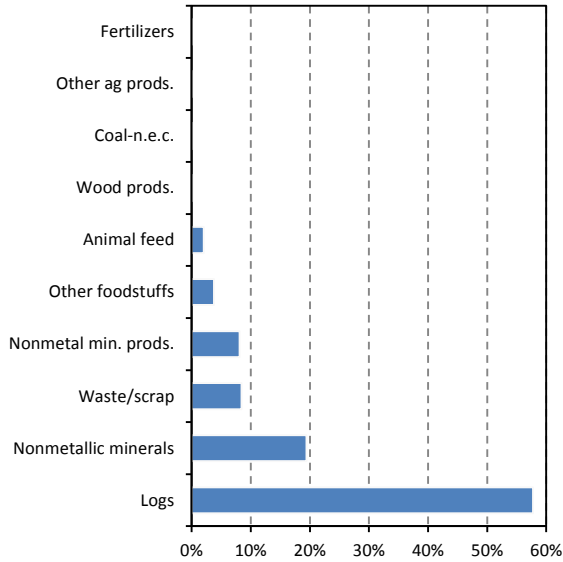
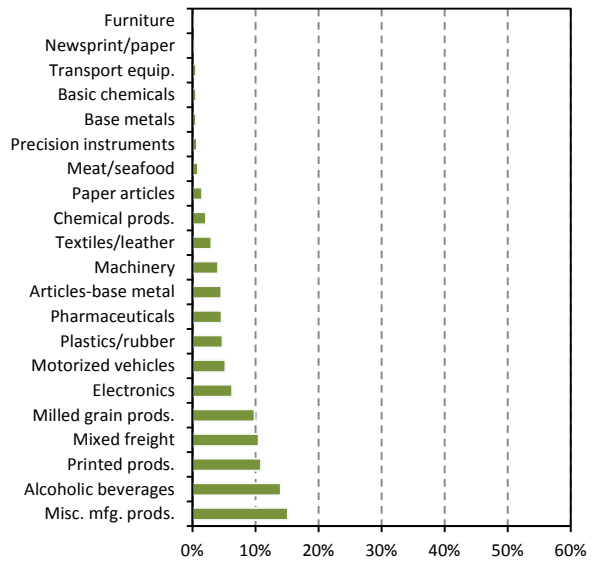


Figure 19 | Kansas City CSA Multiple Modes Freight by Commodity in 2012

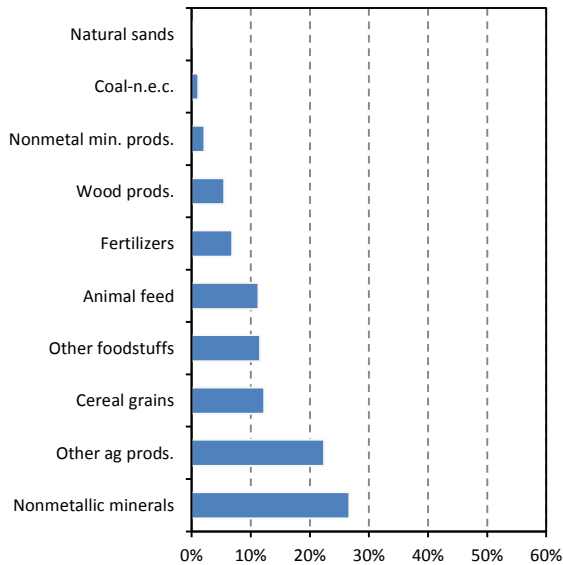
Outbound Domestic Multiple Modes Freight
Estimated Bulk / Lower Value Commodities in
2012: 0.67 Million Tons



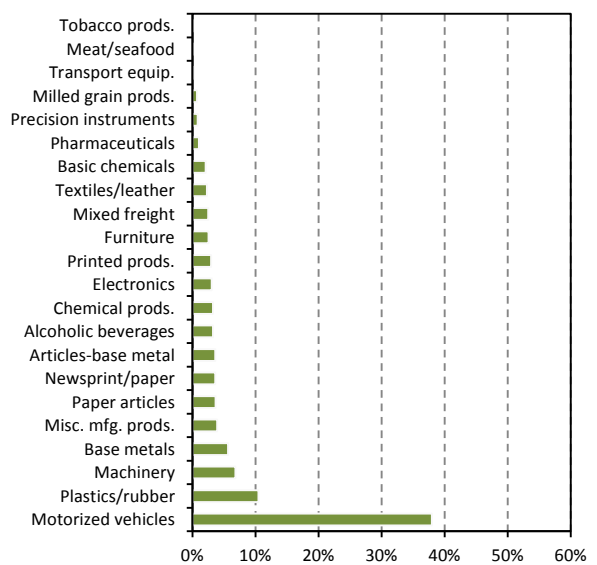
Outbound Multiple Modes Freight
Estimated Higher Value / Warehouseable /
Manufacture Commodities in 2012: 0.72 Million Tons



Inbound Multiple Modes Freight
Estimated Bulk / Lower Value Commodities in
2012: 1.42 Million Tons

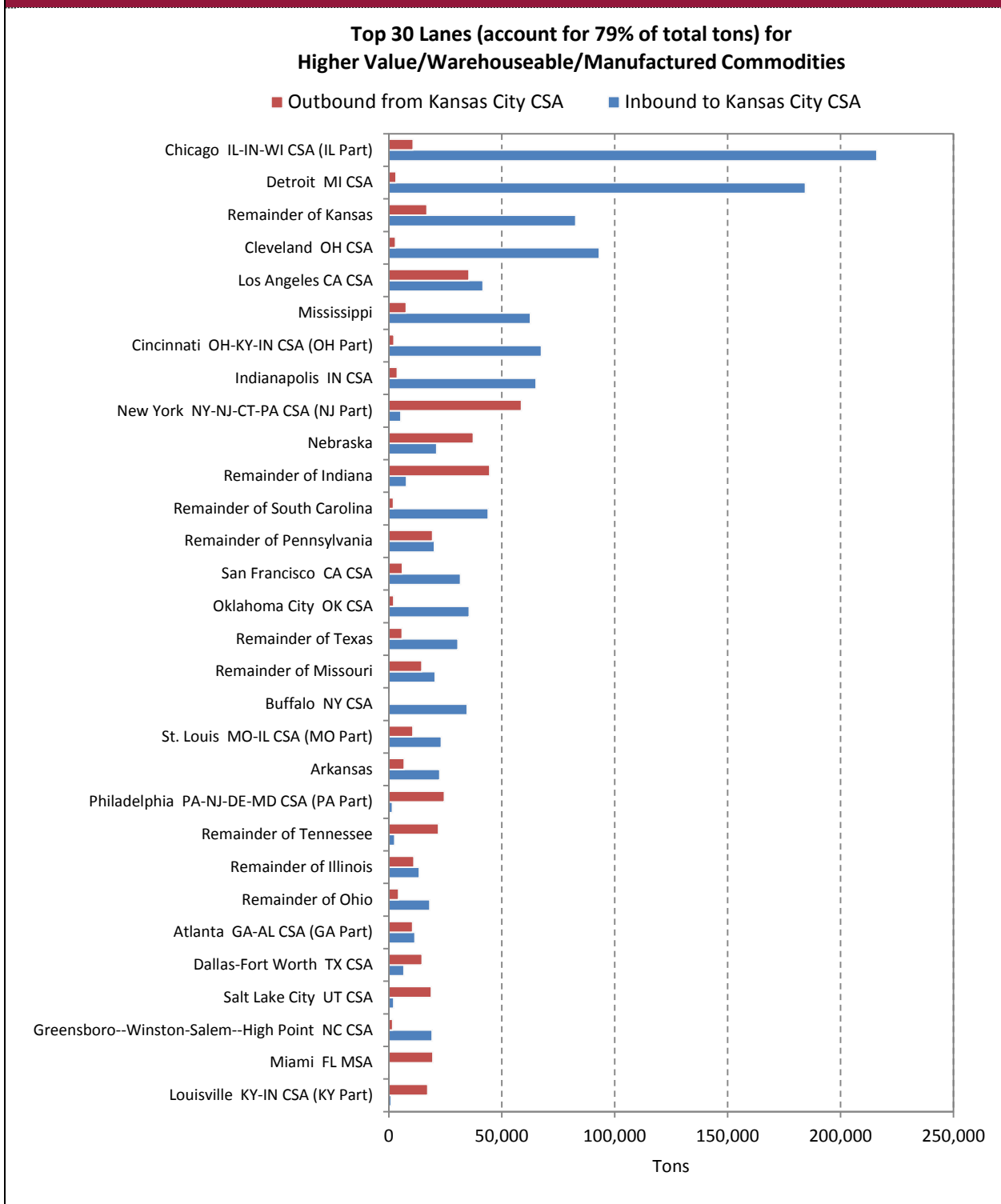


Inbound Multiple Modes Freight
Estimated Higher Value / Warehouseable /
Manufacture Commodities in 2012: 1.34 Million Tons



Source: GKSF and FAF3

Figure 20 | Kansas City CSA Domestic Multiple Modes Freight by Lane in 2012



Exports and Imports

Clearly identified exports and imports in the FAF3 database amounted to 13 million tons in 2012, 11 million tons of exports, and 2 million tons of imports. As indicated earlier, import and export shipments are understated because some international cargo is captured as domestic freight. Carload rail has a significant presence in the export and import traffic (Figure 21), notably on the export side in the movement of grains and other agricultural commodities. The strong presence of multiple modes on the export side also reflects agricultural commodities, including truck-barge and rail-barge shipments. On the import side, the large share moving by multiple modes is due to higher value commodities moving by containerized intermodal rail.

The commodity mix of exports and imports is shown in Figure 22. Bulk commodities are heavily concentrated in the agricultural sector, while higher value commodities are more diverse. Exports are concentrated amongst fewer commodities, notably on the bulk side (cereal grains at 70 percent).

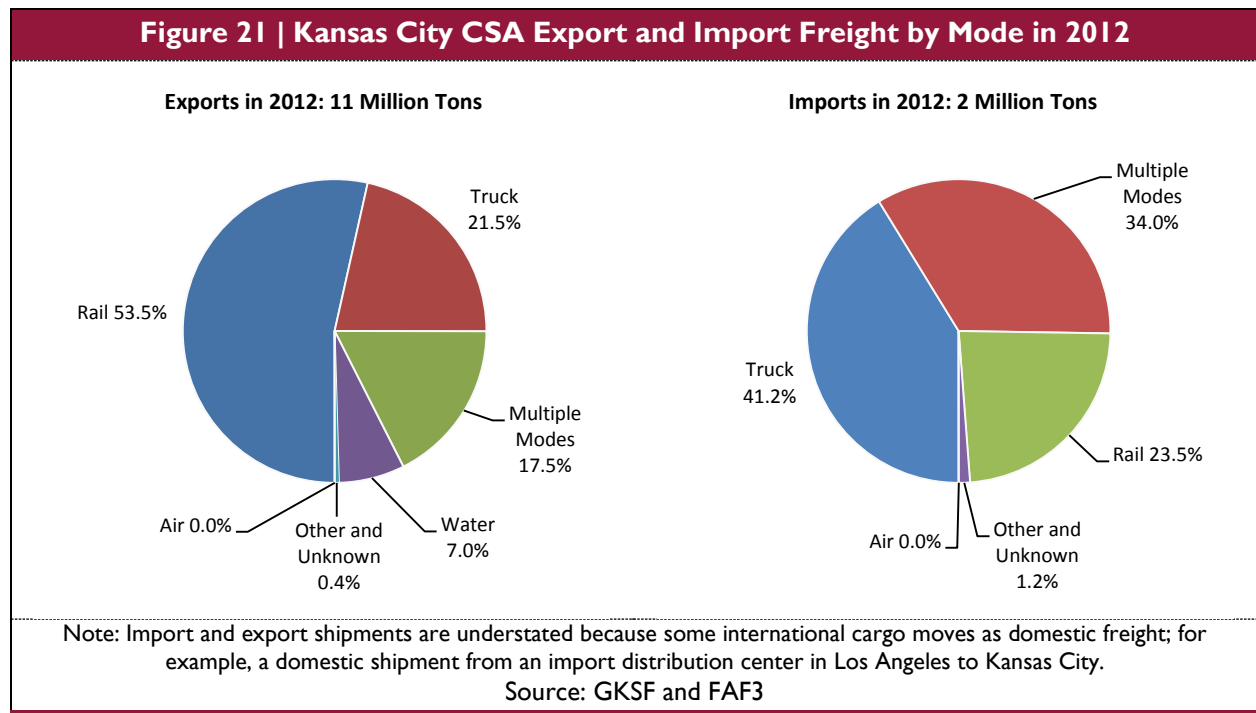
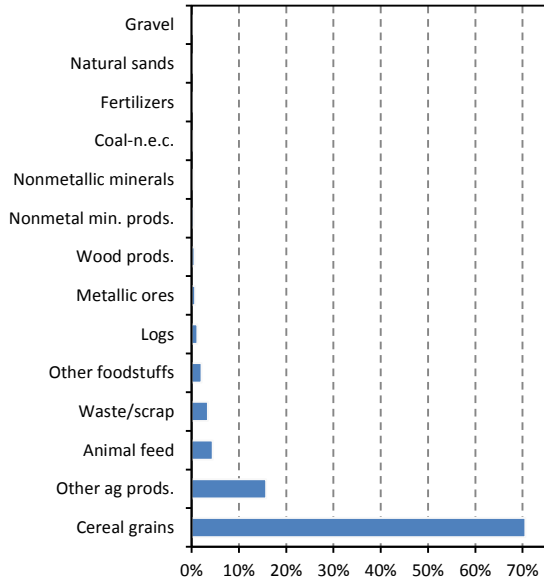
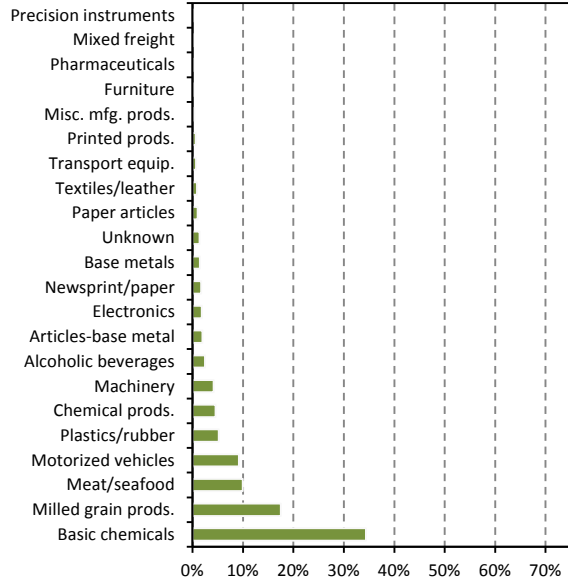


Figure 22 | Kansas City CSA Export and Import Freight by Commodity in 2012

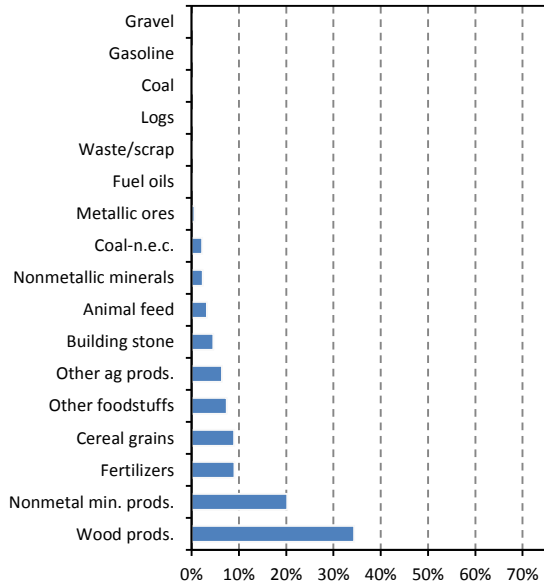
Exports of Bulk / Lower Value Commodities in 2012: 9.3 Million Tons



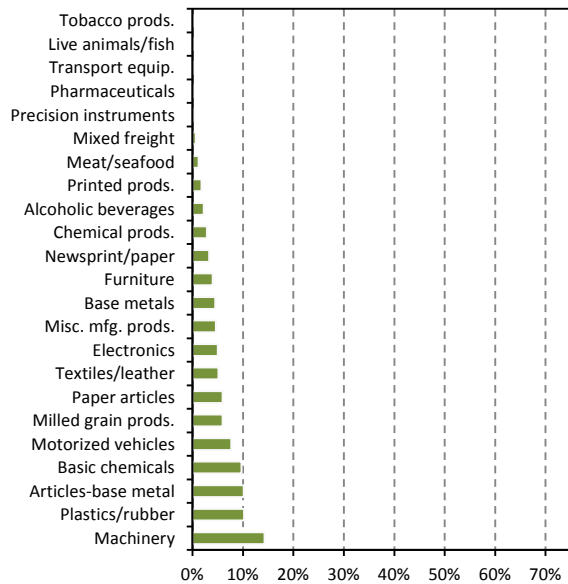
Exports of Higher Value / Warehouseable / Manufacture Commodities in 2012: 1.8 Million Tons



Imports of Bulk / Lower Value Commodities in 2012: 0.5 Million Tons



Imports of Higher Value / Warehouseable / Manufacture Commodities in 2012: 1.5 Million Tons



Note: Import and export shipments are understated because some international cargo moves as domestic freight; for example, a domestic shipment from an import distribution center in Los Angeles to Kansas City.

Source: GKSF and FAF3

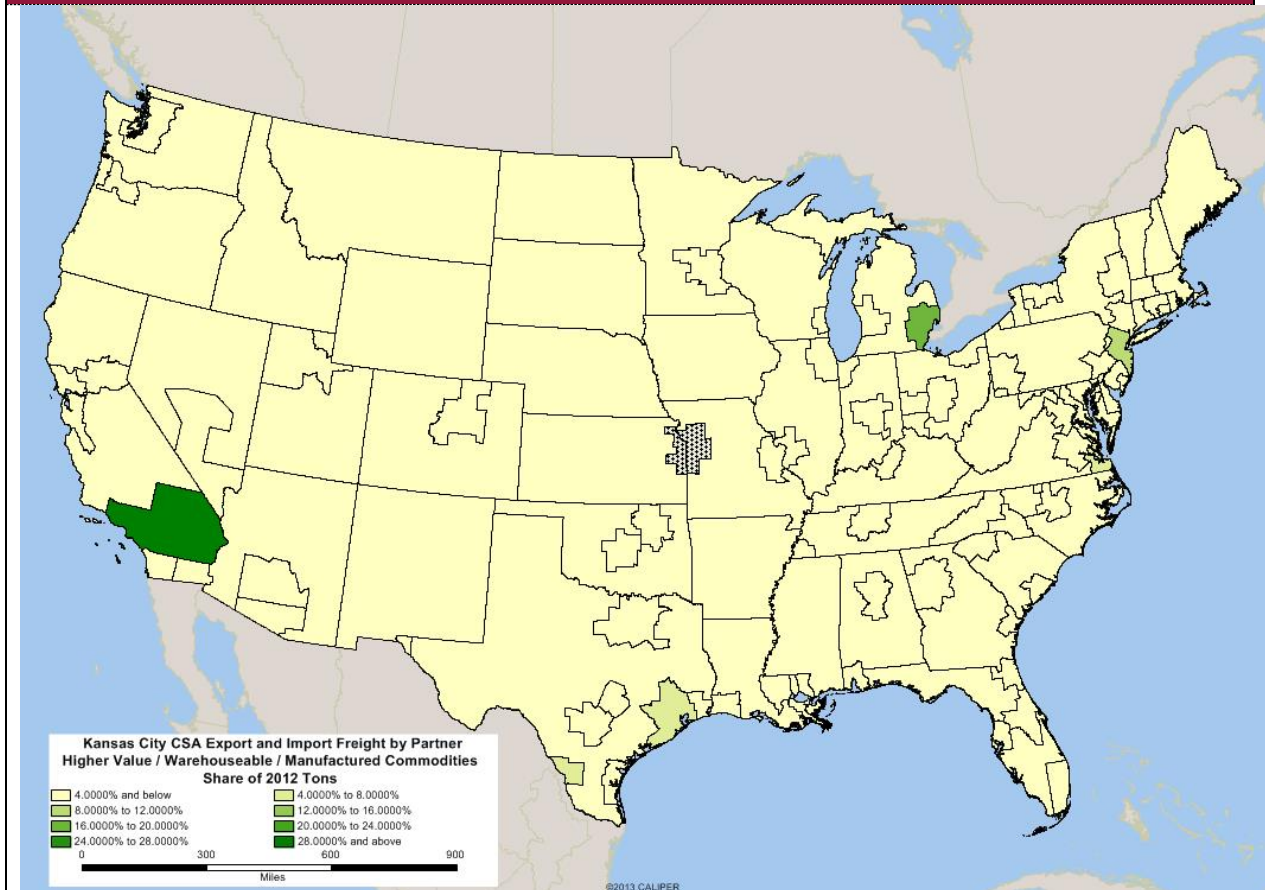
Richards–Gebaur Commerce Park Freight Study

Port KC

Kansas City, Missouri

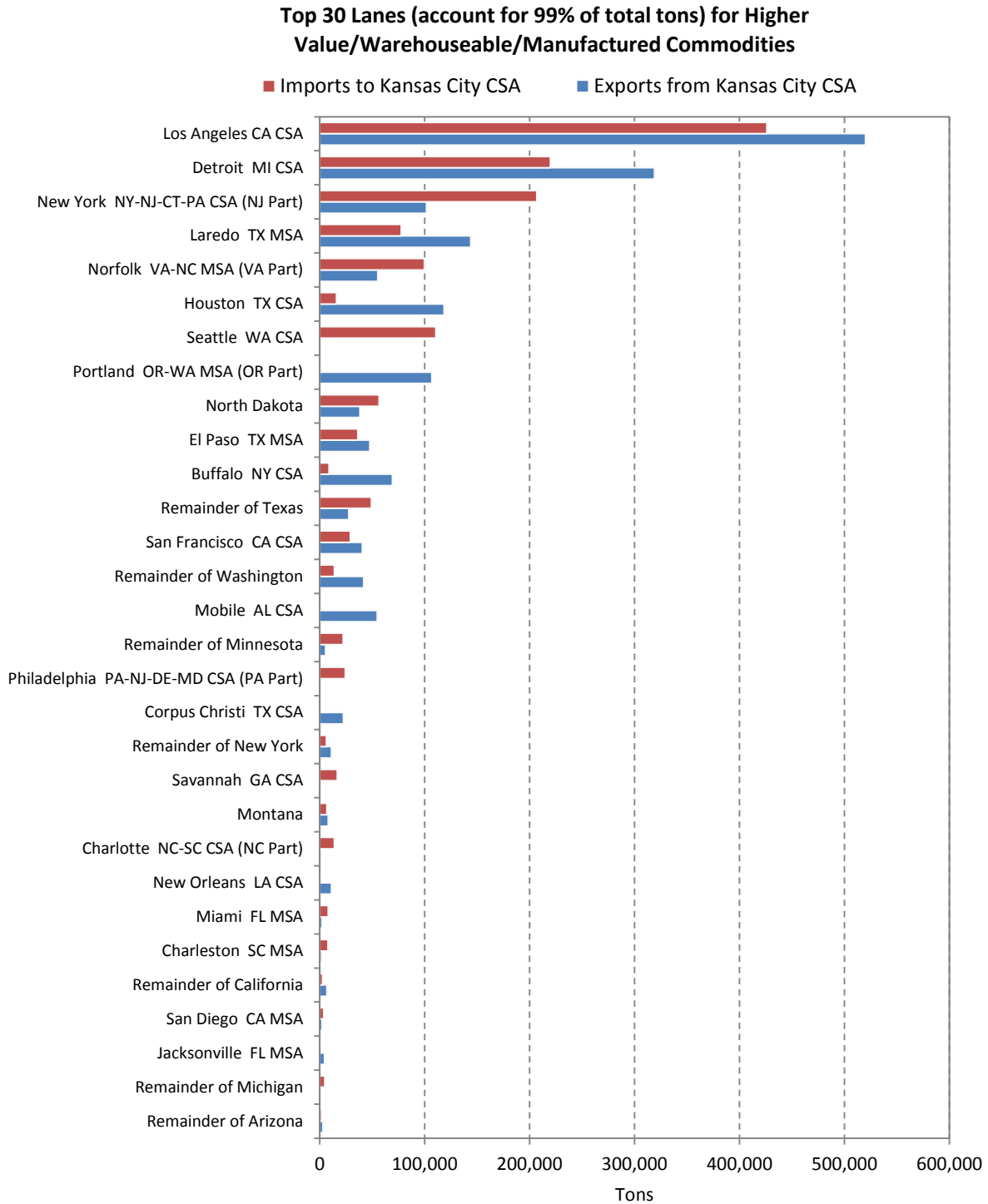
Export and import freight is heavily concentrated in a small number of lanes that connect with port gateways and border crossings. The top five lanes are Los Angeles (29.1 percent of tons), used primarily for Asian markets, Detroit (16.5 percent) for Canada, New York (9.5 percent) and Norfolk (4.8 percent) mainly for Europe and markets east of the Suez Canal, and Laredo (6.8 percent) for Mexico. The principal gateways and major lanes are shown in Figure 23 and Figure 24.

Figure 23 | Map of Kansas City CSA Export and Import Freight by Partner – Higher Value/Warehouseable/Manufactured Commodities, 2012



Source: GKSF and FAF3

Figure 24 | Kansas City CSA Export and Import Freight by Lane in 2012



Note: Import and export shipments are understated because some international cargo moves as domestic freight; for example, a domestic shipment from an import distribution center in Los Angeles to Kansas City.

Source: GKSF and FAF3

Regional Freight Outlook

The regional freight outlook is based on a review and adjustment of the FAF3 forecasts to 2040, extension of those forecasts to 2050, economic data related to the Kansas City CSA and partner regions, and the impacts from the economic and industry trends discussed elsewhere in the report. The outlook focuses on freight moving by truck, rail, and multiple modes, with an emphasis on the growth trend for higher value/warehouseable/manufacturing related commodities that drive demand for warehousing and manufacturing space in the Kansas City CSA. The regional freight outlook provides macro context for the forecasts of Kansas City intermodal traffic presented later in Section 2.

- ▶ The projected average annual growth rate for total freight (combined inbound and outbound) moving by truck, rail and multiple modes is 1.5 percent over the next 40 years (with 2012 as the base year). The principal drivers of growth over the next decade are economic expansion in the Kansas City CSA and its main domestic trade partners. However, the growth rate is dampened by the relative underperformance of the Kansas City CSA and regional economy relative to the rest of the country, as discussed earlier in the review of economic trends. A summary of the forecast growth rates by time period is provided below:

Compound Annual Growth Rates by Period					
	2012 - 20	2020 - 30	2030 - 40	2040 - 50	2012 - 50
Total Freight Tons (Inbound and Outbound moving by Truck, Rail and Multiple Modes)	1.0%	1.6%	1.7%	1.7%	1.5%
Bulk/Lower Value	0.3%	1.2%	1.5%	1.5%	1.2%
Higher Value/Warehouseable/Manufacturing	2.7%	2.4%	2.1%	2.0%	2.3%

- ▶ The higher value/warehouseable/manufacturing commodities are projected to grow at a faster rate than the lower value/bulk commodities – an average annual 2.3 percent versus 1.2 percent over the forecast horizon to 2050. This reflects growth of consumer demand and manufacturing, and supports the growth in demand for logistics and manufacturing facilities in the region.
- ▶ Truck freight is projected to grow at a faster rate than rail freight (excluding multiple modes) over the forecast period, an average annual 1.9 percent versus 0.3 percent. Multiple modes, which include intermodal rail shipments, is projected to have the highest growth rate – an average annual 2.5 percent. The divergence in growth rates by mode reflects several factors:
 - Bulk commodities shipped by rail are likely to grow at a slower rate than the truck and intermodal sectors, which will be supported by growth of local manufacturing activity and consumer demand.
 - Trucking dominates the short to medium haul freight market in and out of the Kansas City CSA, which accounts for the largest share of freight movement.
 - The projected growth of intermodal-friendly commodities is weighted toward medium and longer haul lanes.
 - Intermodal rail service is expected to have higher growth than truck in intermodal-friendly lanes due to its greater efficiency over longer distances, the higher growth of intermodal-friendly commodities, and continued conversion of truck to rail caused by the continued impact of factors that negatively impact the trucking industry (for example, truck driver recruitment and retention). Further assessment of the intermodal market and the outlook for intermodal freight in and out of the Kansas City CSA is provided later in Section 2.

- ▶ Outbound freight of higher value/warehouseable/manufacturing commodities is projected to grow at a slightly faster pace than inbound shipments during the first part of the forecast period. They are projected to have similar average annual growth rates over the 40-year time horizon. Overall, this suggests continued growth in demand for logistics facilities that can accommodate inbound shipments for local consumption and manufacturing, and outbound shipments for regional distribution and longer haul shipments to end markets. The respective inbound and outbound growth rates by time period are provided below:

Higher Value / Warehouseable / Manufacturing Commodities	Compound Annual Growth Rates by Period				
	2012 - 20	2020 - 30	2030 - 40	2040 - 50	2012 - 50
Inbound to Kansas City	2.6%	2.4%	2.1%	1.9%	2.2%
Outbound from Kansas City	2.9%	2.3%	2.1%	2.0%	2.3%
Total	2.7%	2.4%	2.1%	2.0%	2.3%

- ▶ Growth of the higher value/warehouseable/manufacturing commodities is likely to be relatively strong over the next decade, supported by local, regional, and national economic growth. However, challenges could include Kansas City’s apparent deterioration in competitiveness relative to other regions of the country, as discussed earlier in Economic Trends, and international pressures, including competition from sourcing in Mexico as its economy continues to move up the manufacturing value chain.
- ▶ The development of freight volume will be influenced by the types of industries that continue to grow or emerge in the Kansas City area. Additionally, the projected growth of freight volume in and out of the Kansas City CSA will generate demand for new sites for warehousing and manufacturing. The value of sites with a large acreage for development and access to adjacent and on-site multimodal capabilities – truck, rail, etc. – are likely to increase in value over time.
- ▶ A segregation of the higher value commodities between high growth and low growth, relative to the overall freight market, is provided in Table I.

Richards–Gebaur Commerce Park Freight Study

Port KC

Kansas City, Missouri

Table I | Higher Value / Warehouseable / Manufacturing Commodities by Growth

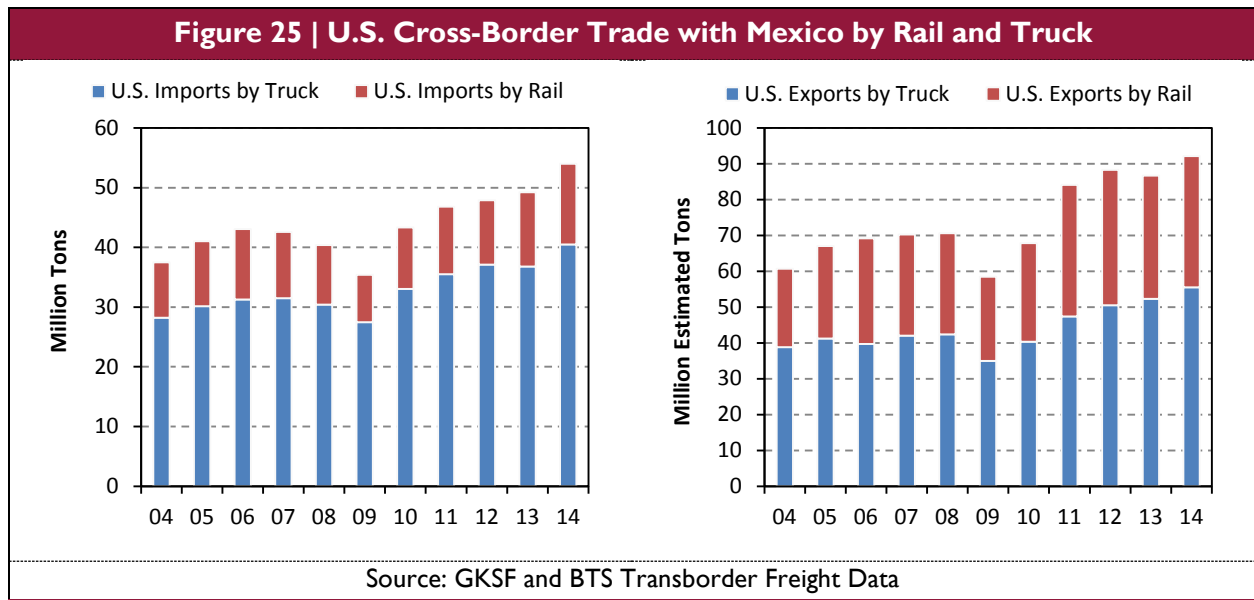
Inbound Freight to Kansas City CSA Outbound Freight from Kansas City CSA <i>(Forecast 2.6% Av. Annual Growth to 2020)</i> <i>(Forecast 2.9% Av. Annual Growth to 2020)</i>				
	A commodity is designated as high or low growth if its projected growth is higher or lower than the projected growth of total inbound or outbound freight.			
Mode	High Growth Commodities	Low Growth Commodities	High Growth Commodities	Low Growth Commodities
Truck	Precision instruments Machinery Misc. mfg. prods. Base metals Transport equip. Articles-base metal Plastics/rubber Milled grain prods. Textiles/leather Electronics Motorized vehicles Meat/seafood Furniture	Newsprint/paper Mixed freight Chemical prods. Alcoholic beverages Pharmaceuticals Basic chemicals Unknown Paper articles Printed prods. Tobacco prods.	Precision instruments Plastics/rubber Misc. mfg. prods. Textiles/leather Machinery Basic chemicals Electronics Motorized vehicles	Chemical prods. Milled grain prods. Mixed freight Meat/seafood Alcoholic beverages Articles-base metal Paper articles Printed prods. Tobacco prods. Base metals Transport equip. Pharmaceuticals Furniture Newsprint/paper
Rail	Machinery Furniture Transport equip. Chemical prods. Pharmaceuticals Textiles/leather Mixed freight Articles-base metal Electronics Basic chemicals Precision instruments Newsprint/paper Milled grain prods.	Motorized vehicles Paper articles Base metals Plastics/rubber Alcoholic beverages Printed prods. Misc. mfg. prods.	Misc. mfg. prods. Plastics/rubber Mixed freight Motorized vehicles Meat/seafood Base metals Basic chemicals Articles-base metal Printed prods. Transport equip. Alcoholic beverages Paper articles	Pharmaceuticals Chemical prods. Textiles/leather Machinery Precision instruments Milled grain prods. Newsprint/paper Furniture Electronics
Multiple Modes	Paper articles Precision instruments Machinery Base metals Transport equip. Misc. mfg. prods. Chemical prods. Textiles/leather Alcoholic beverages Pharmaceuticals Articles-base metal Basic chemicals Electronics	Milled grain prods. Mixed freight Motorized vehicles Plastics/rubber Tobacco prods. Furniture Newsprint/paper Meat/seafood Printed prods.	Motorized vehicles Precision instruments Misc. mfg. prods. Plastics/rubber Electronics Machinery Basic chemicals Chemical prods. Mixed freight Milled grain prods. Textiles/leather	Articles-base metal Alcoholic beverages Meat/seafood Paper articles Newsprint/paper Printed prods. Furniture Base metals Pharmaceuticals Transport equip.
Source: GKSF based on FAF3 Forecast				

Cross-Border Freight

The FAF3 database captures cross-border freight as a domestic move between the Kansas City CSA and border regions (for example, the Laredo Metropolitan Statistical Area (MSA) or the Detroit MSA). Additional visibility on cross-border freight activity and trends is provided here by drawing on the Transborder Freight Data (TFD) maintained by the Bureau of Transportation Statistics (BTS). TFD is reported at the state level and, therefore, the states of Kansas and Missouri are taken as representative of cross-border trade with the Kansas City CSA. Additionally, TFD reports import tons but only export value. Estimated tons for exports were calculated by applying value per ton estimates by commodity group to total export value by commodity group.

Mexico

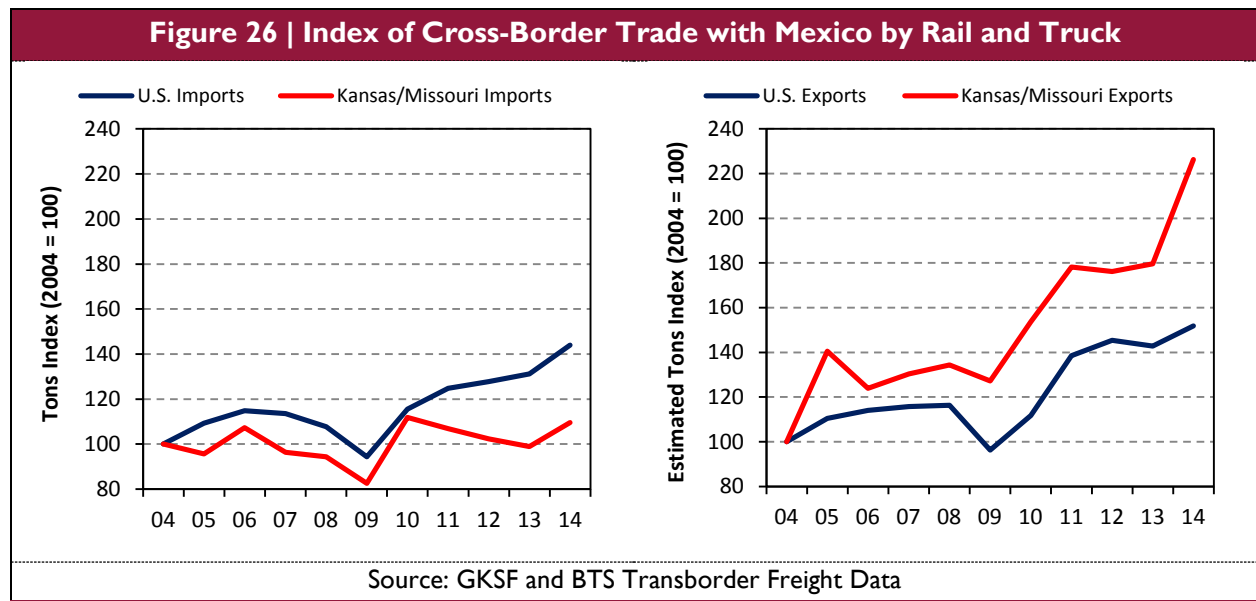
U.S. cross-border trade with Mexico recovered strongly after the recession of 2008/2009, and reached record levels in 2013 and again in 2014 (Figure 25). Growth has occurred in both the import and export trades; imports reached a record 54.0 million tons in 2014, while exports climbed to a record 55.7 million estimated tons. On the import side, important sectors for growth have been automotive vehicles and parts, agricultural commodities and food products, and consumer-related goods (electronics, etc.). Exports are more centered on lower value commodities and key growth areas have been mineral fuels, cereals, and other agricultural commodities. The outlook for U.S. cross-border trade is positive due to economic growth in the U.S. and Mexico, and further investment in Mexico in sectors that service the U.S. domestic market (for example, automotive).



Truck continues to be the dominant transport mode in U.S. cross-border trade, with a greater presence on the import side (75 percent of import tons in 2014) than on the export side (60 percent of estimated tons in 2014). The truck mode’s share has fluctuated close to 75 percent of import tons for the past decade, with a spike to 78 percent in 2009 as the recession negatively impacted rail-friendly commodities such as finished vehicle imports. Rail’s share recovered to 25 percent post-recession driven by resumption of growth in rail-friendly sectors. On the import side, rail’s market share is constrained by the high incidence of higher value truck-friendly commodities, the appeal (actual and perceived) of flexible door-to-door truck service, and the presence of larger truck-friendly markets in the U.S. trade (for example, the border states). Rail moves a larger share of the export trade due to the greater presence of rail-friendly bulk commodities in the export trade to Mexico. Trends in modal

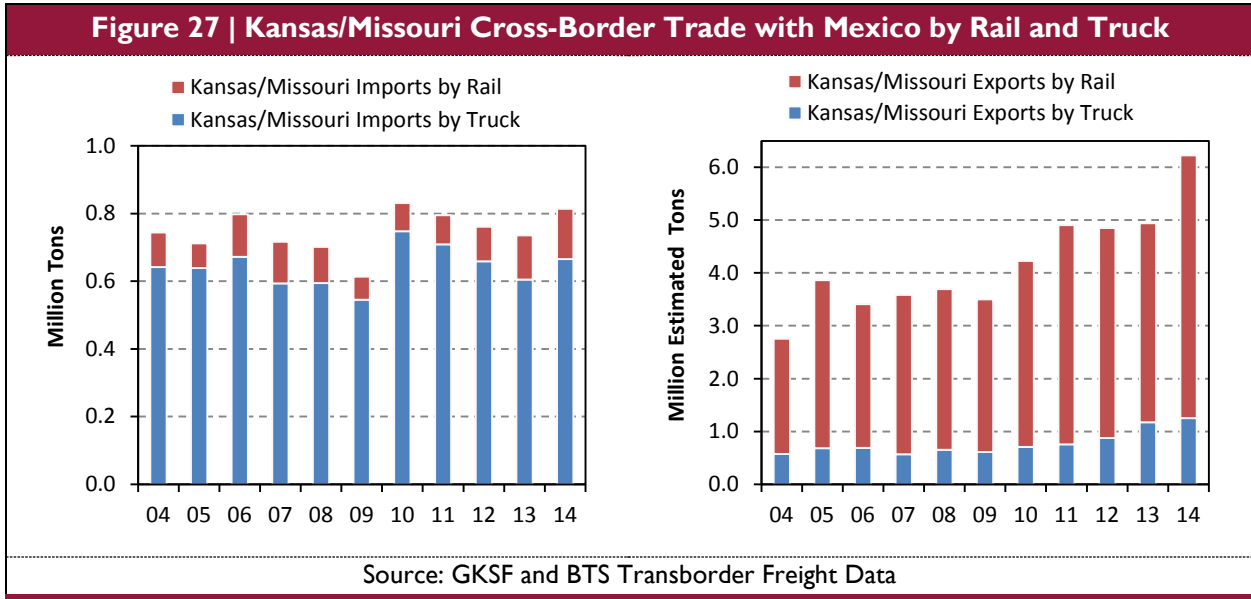
shares over the past decade indicate there has been limited conversion of truck freight to rail freight in the cross-border Mexico trade. This contrasts with the U.S. domestic freight market where domestic intermodal rail service has had success in attracting freight from truck to rail in medium and some short haul corridors.

Trade activity between Kansas/Missouri and Mexico has been mixed over the past decade, imports from Mexico lagging behind the broader U.S. trend and exports growing at a faster rate than total U.S. exports (see index of tons in Figure 26). The Kansas/Missouri share of U.S. import tons declined from 2.0 percent of import tons in 2004 to 1.5 percent in 2014. By contrast, the Kansas/Missouri share of U.S. export tons increased from 4.5 percent in 2004 to 6.8 percent in 2014. The divergence in performance between imports and exports reflects several factors. For imports, the concentration of trade flows with larger consumption markets (for example, California and Texas) and growth of trade in specific industries and lanes (for example, automotive parts moving between Mexico and manufacturing plants in Michigan). For exports, the growth in agricultural exports has benefitted Kansas and Missouri.



As shown in Figure 27, import volume has fluctuated between 0.6 million and 0.8 million tons over the past decade. Imports are centered on manufactured goods and largely move by truck (82 percent share in 2014). Rail’s share of imports has ranged from 10 percent to 18 percent over the past decade, falling as low as 10 percent in 2005 and again in 2010. Rail, including intermodal rail service, will continue to face challenges in growing market share of imports due to the truck-friendly factors discussed earlier and the low volume of import freight in the Kansas/Missouri trade lane. These import modal trends are consistent with the FAF3 data on freight flows between the Kansas City CSA and Laredo MSA, the leading Texas border crossing. For 2012, FAF3 reported that 12 percent of inbound tons from Laredo to the Kansas City CSA moved by rail (compared to the 13.5 percent rail share in cross-border import trade between Kansas/Missouri and Mexico).

Rail is the dominant transport mode for exports with an estimated 80 percent share in 2014 and largely due to the bulk commodities moving southbound that are suited to rail carload transport. However, the commodities are not suited to intermodal rail transport and so their growth has limited impact on the intermodal rail sector.



One potential upside to cross-border activity is the possible use of the Port of Lazaro Cardenas, on Mexico’s Pacific Coast, as a gateway for U.S. containerized trade with Asia and other regions. The latest labor problems, congestion, and short-term port closures on the U.S. West Coast have again focused attention on alternative gateways for U.S. containerized trade with Asia. Lazaro Cardenas is on the list of options; however, it is unproven and faces challenges. As discussed further in the interview findings presented in Section 3, these challenges include security concerns, equipment imbalances and shortages, and weak ocean carrier commitments to the port.

Canada

U.S. cross-border import trade with Canada recovered strongly after the recession of 2008/2009, but unlike the Mexican trade, still remains below the levels seen pre-recession (Figure 28). Exports have performed strongly and reached a record in 2014. The outlook for U.S. cross-border trade is positive due to economic growth in the U.S. and Canadian economies.

The relatively weaker import performance reflects the commodity mix of the import trade from Canada. Annual imports of wood and articles, the second largest import commodity, are still only 50 percent of their pre-recession peak largely due to the reduced activity in the U.S. housing market. Other construction related commodities (for example, wood pulp and paperboard) also remain below their pre-recession levels. The slow recovery of these commodities has been partly offset by strong growth in other sectors, including mineral fuels and vehicles.

In contrast to the Mexican cross-border trade, rail handles more than 50 percent of cross-border imports with Canada. The rail share of imports reached a record 59 percent in 2013 and was 58 percent in 2014; the pre-recession peak was 56 percent in 2008. Several major commodities are very suited to rail – mineral fuels (78 percent by rail in 2013), wood and articles (66 percent), fertilizers (89 percent), and inorganic chemicals (87 percent). Top commodities where truck is the leading mode are vehicles (58 percent) and iron and steel (58 percent). Some of the truck dominance in selected commodities is driven by the proximity between supplier and destination; for example, cross-border shipments into the Detroit area related to the automotive industry. Rail’s share of exports to Canada was an estimated 37 percent in 2014, a new record, due to growth of rail-friendly commodities.

Figure 28 | U.S. Cross-Border Trade with Canada by Rail and Truck

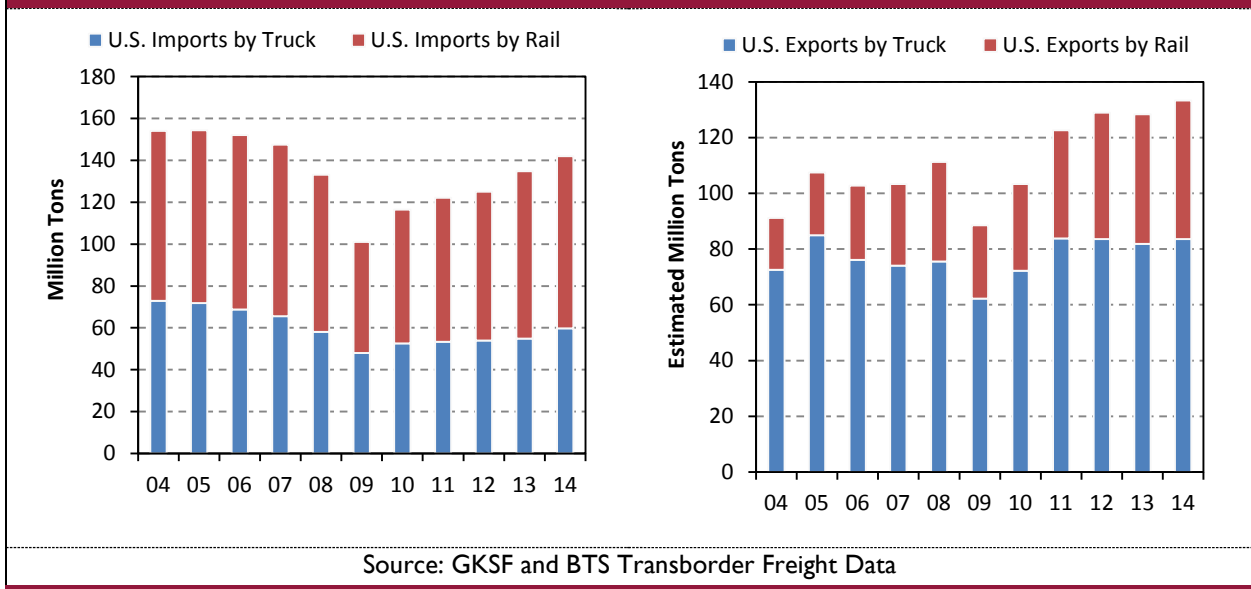
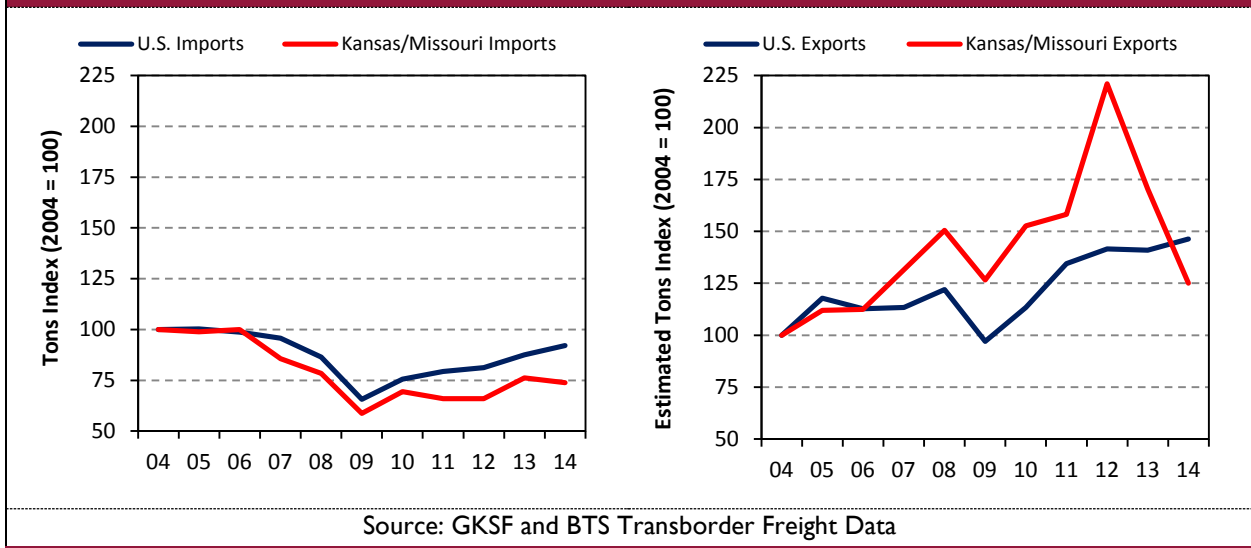


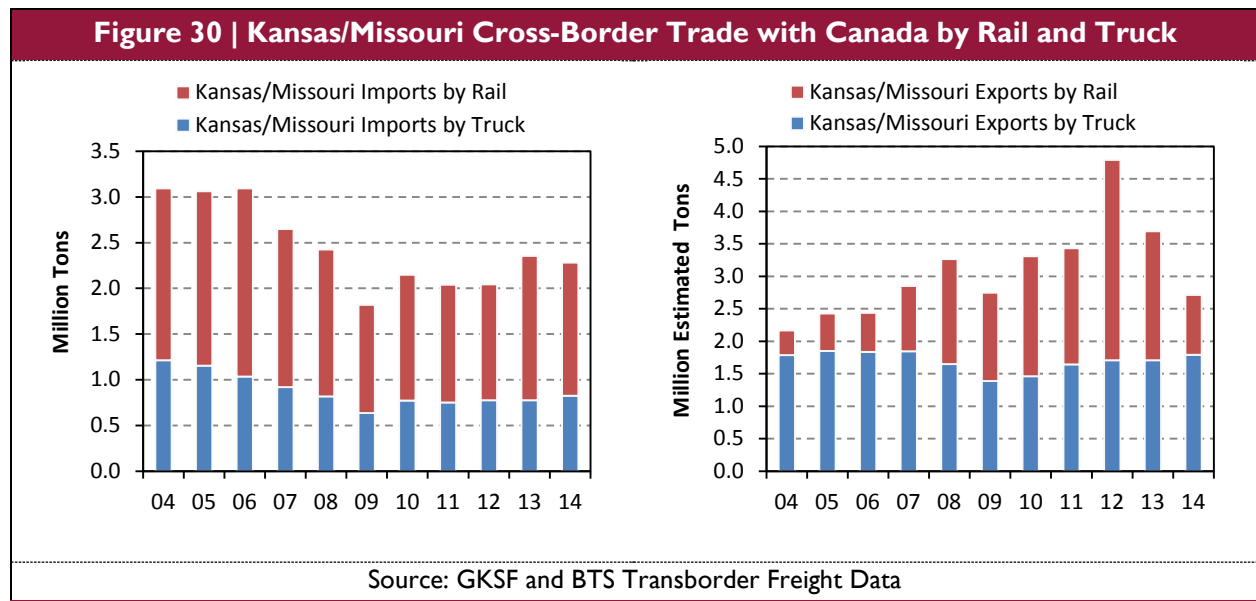
Figure 29 | Index of Cross-Border Trade with Canada by Rail and Truck



Surface trade generated by the states of Kansas and Missouri are taken as representative of cross-border trade between the Kansas City CSA and Canada. Kansas/Missouri trade with Canada has had a mixed performance over the past five years. As shown in Figure 29, imports from Canada have underperformed relative to total U.S. imports and remain well below pre-recession levels. In 2014, import volume was only 74 percent of volume in 2006. The collapse and limited recovery in construction related trade (forest products, etc.) has been the main driver of the weak import performance. Kansas/Missouri exports have been volatile over the past five years, surging post-recession at a faster rate than overall U.S. exports and then falling sharply in 2014. The volatility has largely occurred in a small number of commodities, including mineral fuels.

Import volume from Canada was 3.0 million tons pre-recession but then fell sharply to 1.8 million tons in 2009. There has been a slow recovery of volume to 2.3 million tons in 2014. Given the commodity mix, rail is the dominant transport mode with a 64 percent share of imports in 2014. Rail’s share is above 80 percent in four of the top five commodities – wood and articles, cereals, fertilizers and mineral fuels. This modal pattern is somewhat consistent with the FAF3 data on freight flows between the Kansas City CSA and Detroit MSA, one of the leading border crossings for trade with Canada. For 2012, FAF3 reported that 60 percent of inbound tons moved by rail.

On the export side, total volume climbed sharply post-recession to a high of 4.8 million estimated tons and then fell back to 2.7 million tons in 2014. The volatility was due to mineral fuel shipments. Excluding this commodity, export volume was reasonably stable at around 2.2 million estimated tons for the past five years.



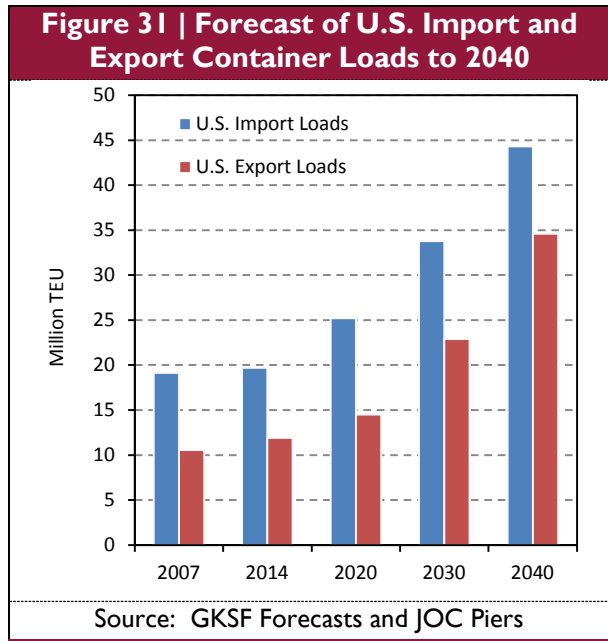
Intermodal Traffic Trends and Forecast

U.S. Containerized Trade

The outlook for U.S. international containerized seaborne trade is developed from a set of statistical, or econometric, models that relate import and export loads, measured in twenty-foot equivalent units (TEU), to a set of U.S. and World macro-economic variables. The models are a set of forecasting equations representing import and export commodity segments and separately-defined overseas origin and destination regions. Estimates of the statistical relationship between macro-economic variables and TEU are developed for each segment, and are the basis of TEU forecasts that are segment-specific. These forecasts are then aggregated into total TEU forecasts for U.S. imports and exports. The results are presented in Figure 31, and focus on the base year 2014, and the forecast years 2020, 2030, and 2040.

First looking at U.S. imports:

- ▶ Total import loads are forecast to increase from 19.7 million TEU in 2014 to 25.2 million in 2020, 33.8 million in 2030, and 44.3 million in 2040. Compound Annual Growth Rates (CAGRs) are 4.2 percent for 2014 to 2020, 3.0 percent for 2020 to 2030 and 3.1 percent for 2030 to 2040.
- ▶ In the early years, it is estimated that imports will benefit from the combination of somewhat faster growth of real disposable income (after negative/slow growth from 2007 to 2013) and a sharp increase in housing activity and the wealth effect from increases in residential real estate net worth. These factors are expected to finally push import loads beyond the previous 2007 peak by 2015.
- ▶ Beyond the surge in the early years of the forecast period, import growth is expected to slow, due to: (a) a deceleration of disposable income growth to a long-term CAGR of 2.1 to 2.3 percent; (b) the return of U.S. housing activity and growth of real estate wealth to normal rates; and (c) more import commodities reaching the limits of penetration into U.S. consumer and industrial use.



As for the Kansas City Region, over two-thirds of its overseas containerized imports are likely to continue to originate in Asia and move via intermodal service through U.S. West Coast port gateways, principally the Ports of Los Angeles and Long Beach. Despite the continued dominance of West Coast port gateways, a growing portion of Kansas City Region imports are moving via intermodal through East Coast ports (New York/New Jersey and Norfolk VA) – from Europe and, via the Suez Canal, from Asia. Commodity-wise, overseas imports into the Kansas City Region are about 60 percent consumer goods such as apparel, footwear, consumer electronics, and furniture; capital goods (for example, electrical equipment); and manufacturing/assembly inputs such as textiles, rubber products, auto components. Over time, the share of consumer goods is likely to gradually decline, especially as housing activity returns to more normal levels.

Turning to U.S. exports:

- ▶ Export loads are forecast to increase from 11.9 million TEU in 2014 to 14.5 million in 2020, 22.9 million in 2030 and 34.6 million in 2040. Forecast growth rates for exports are generally higher than for imports, especially beyond 2020: CAGRs are 3.4 percent for 2014 to 2020; 4.7 percent for 2020 to 2030; and 4.2 percent for 2030 to 2040.
- ▶ After stagnant growth due to a relatively strong U.S. Dollar from 2014 to 2016, exports are expected to sustain relatively high growth due to strong overseas growth rates, especially as strong Asian economic growth more than offsets weak European growth, and an eventual relatively low (although not falling) value of the U.S. Dollar.

Containerized exports from the Kansas City Region to overseas destinations are about 55 percent to Asia, 30 percent to Europe, and the remainder to the Americas, Africa and the Middle East. Over half of containerized exports are to Asia, and this percentage will likely increase to over 60 percent over the forecast period. Asia-destined cargo moves mostly via intermodal service through both West Coast ports (Los Angeles/Long Beach and Oakland) and East Coast ports (New York/New Jersey and Norfolk). Commodities include machinery, food products, industrial electronic products, recycling material (wastepaper and scrap metal), chemical and paper products, and a variety of miscellaneous manufactured products. Chemical products are likely to increase in importance in line with growing U.S. competitiveness in this industry.

Intermodal Traffic Trends

National intermodal traffic reached a record high of 16.3 intermodal units in 2014 and it was the fifth year of growth since the recession low in 2009 (Figure 32)⁴. The sustained growth of intermodal traffic has been driven by:

- ▶ Post-recession economic recovery and increased domestic and international cargo flows.
- ▶ Substitution of intermodal rail for over-the-road truck in medium and long haul corridors, and in some short haul corridors. This substitution is being driven by labor and capacity constraints facing the trucking industry, including driver retention and shortages, and regulations.
- ▶ Rapid growth in availability of 53-foot containers. These containers offer the same freight capacity as highway trailers and can be double-stacked for low-cost rail transport.

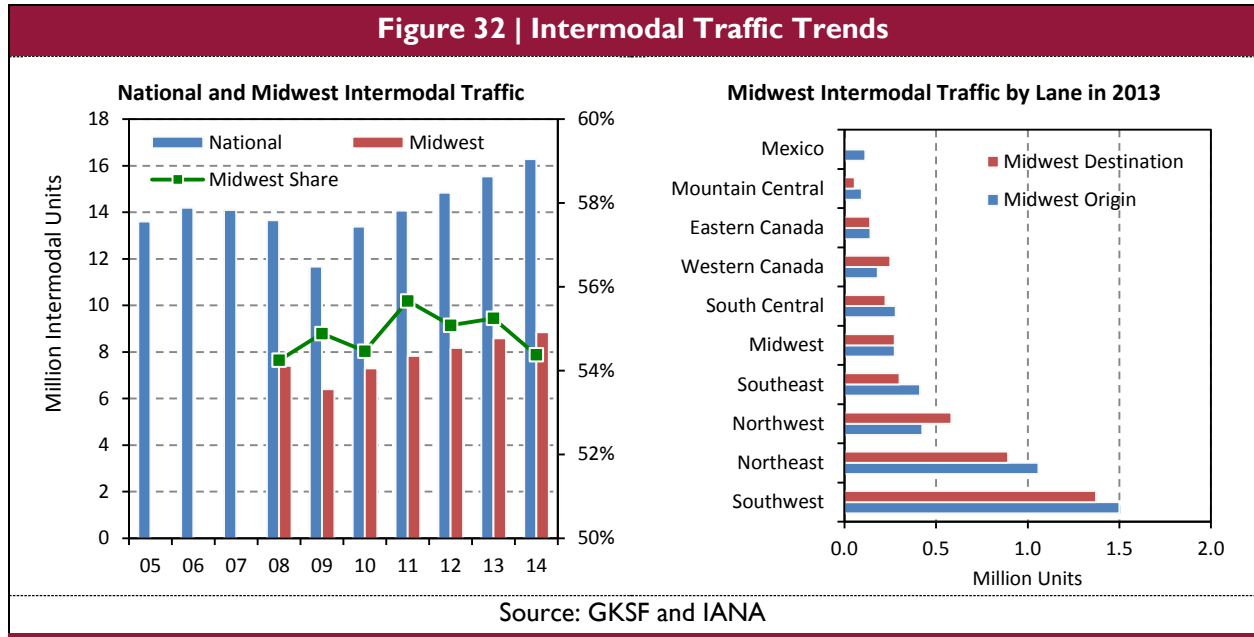
A further trend has been the continued expansion of transload activity of containerized import cargo from Intermodal Shipping/Storage (ISO) marine containers to domestic 53-foot containers for inland transport by intermodal rail. Transloading provides increased supply chain flexibility, line haul and drayage cost savings, and enhanced ISO fleet productivity (fewer inland moves) for ocean carriers. Transloading reduces the number of intermodal shipments (three 40-foot ISO containers go into two 53-foot containers). A downside of transloading is the constraint it places on the availability of ISO marine containers (20-foot and 40-foot) at inland locations for exporters in the Midwest.

The outlook for nationwide intermodal traffic is favorable due to continuation of the above trends – economic growth, international trade growth (including cross-border activity), and continued pressure on trucking, particularly in the 550 to 1,200 mile lanes.

Intermodal traffic in and out of the Midwest region was 8.9 million intermodal units in 2014, accounting for 54.4 percent of the national total. This share has been reasonably constant over the past seven years, ranging from 54.2 percent in 2008 to 55.7 percent in 2011. Midwest intermodal volume has also expanded year-over-year since 2009, and volume hit a new record in 2014. As shown in Figure 32, the two largest lanes are with the Southwest (including the port of Los Angeles/Long Beach) and the Northeast; their respective shares of Midwest intermodal traffic were 33.5 percent and 22.7 percent. Other key lanes are the Northwest (11.8 percent) and the Southeast (8.3 percent). Over the past five years, the fastest growing domestic lanes have been the Southeast and South Central. There has also been high growth of traffic with Western Canada and Mexico. Traffic in the Mexico lane is centered on Midwest locations (for example, Chicago and Detroit) other than Kansas City.

⁴ National and regional intermodal traffic data were obtained from the Intermodal Association of America (IANA). The Midwest region is defined by IANA as Illinois, Indiana, Iowa, Kentucky, Kansas, Missouri, Minnesota, Montana, Ohio and Wisconsin.

The Midwest has participated disproportionately in the usage of 53-foot containers and in the substitution of intermodal shipments in 53-foot containers for over-the-road truck shipments. For example, nationwide, between 2008 and 2014, the percentage of intermodal shipments moving in 53-foot containers increased from 26 percent to 40 percent. For Midwest intermodal shipments over the same period, the percentage of 53-foot container shipments increased from 36 percent to 52 percent.



Kansas City Intermodal Traffic Forecast

The above national trends have supported the growth of intermodal traffic in and out of the Kansas City area. Regional intermodal activity⁵ was an estimated 687,000 intermodal units in 2014 compared to an estimated 626,000 intermodal units in 2007 (Figure 33). Intermodal traffic has recorded positive annual growth since the recession in 2008/09. The principal intermodal lanes to and from Kansas City are with regions that incorporate major international container ports. The top five origin/destination locations are:

- ▶ Los Angeles, CA
- ▶ Oakland, CA
- ▶ New York, NY
- ▶ Other Midwest locations
- ▶ Seattle, WA

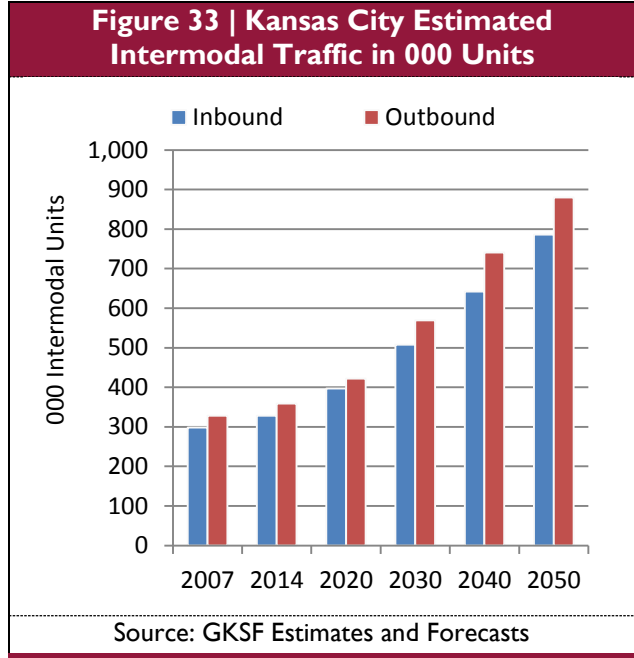
The Los Angeles lane is estimated to account for 40 to 50 percent of Kansas City’s intermodal traffic, and other West Coast corridors another 15 percent. Midwest corridors, including Chicago and Detroit, account for an estimated 15 to 20 percent of traffic. By contrast, there is an absence of significant intermodal traffic in the cross-border Mexico trade due to the limited volumes of intermodal-friendly commodities moving between Kansas/Missouri and Mexico.

⁵ Intermodal traffic in and out of the Kansas City region was estimated by drawing on several sources – data from the MARC Kansas City Regional Freight Study released in 2008, a review of the FAF3 data and the STB’s Public Waybill Sample, and input from interviews with railroads and shippers.

In general, the international overseas container trade will continue to be the principal driver of intermodal traffic for the Kansas City Region. This is evidenced by the top three lanes identified above (Los Angeles, Oakland, and New York). The growth of Kansas City’s intermodal containerized imports will eventually approach that of domestic freight as imports reach the limits of their penetration in the U.S. market. However, the long-run growth potential for its intermodal exports is more open-ended, as these reflect the higher growth potential of developing markets in Asia, Africa, the Middle East and Latin America.

A further shift in the geographic distribution of Kansas City’s intermodal containerized shipments is occurring and likely to continue due to changes in ocean carrier vessel deployments. In particular, U.S.-oriented deployments with Asia, the largest and fastest growing region, are increasingly favoring routings via the Suez Canal instead of transpacific routings. This means that East Coast port gateways are likely to continue increasing their share of Kansas City’s intermodal import/export traffic. As noted above, the Port of New York/New Jersey already has a significant share of this traffic, but over time, other East Coast ports such as Norfolk and Baltimore may also garner a higher share.

Finally, the shorter haul domestic intermodal lanes in and out of Kansas City may also experience relatively stronger growth due to the continued substitution of intermodal for over-the-road truck. These will be spearheaded by a growing supply of 53-foot domestic containers and increased double-stack railcar capacity. The affected lanes include links between Kansas City and points in the Midwest and South Central regions.



Section 3 | Industry Trends, Distribution Strategies, and Competition

The project team interviewed transportation industry professionals familiar with requirements and trends involving domestic and international supply-chains affecting the Kansas City area. Respondents included commercial real estate experts, railroad operators, Third Party Logistics operators (3PL’s), Distribution Center (DC) managers, manufacturers, and E-Commerce distribution managers.

Respondents were asked to assess the viability of the Study Area as a freight distribution hub or manufacturing center. The site was described as a multimodal facility capable of supporting cargo movements of domestic and global freight via rail and roadway networks. Interview participants were advised that the Study Area location was adjacent to the KCS International Freight Gateway intermodal facility in Kansas City.

The general assessment of the Study Area was positive given Kansas City’s large population center, close proximity to several Midwest markets, and widely available intermodal rail access, particularly intermodal rail access to Canada and Mexico. Kansas City was viewed as ranking high in common key site selection criteria, such as supporting access to a large customer/supplier base, access to transportation modes, an available and skilled labor force, and a positive business environment.

The following table summarizes respondent categories:

Table 2 Respondents by Category	
Category	Number of Interviews
3PL	4
Economic Development Organization	1
Manufacturer	4
Railroad	3
Real Estate Broker/Developer	4
Retailer	3
Grand Total	19

Source: GKSF

Site Selection Criteria

Respondents were asked to elaborate on logistics and distribution site selection criteria to serve as the basis of the interview discussion.

Shippers’ decisions to use truck or rail, or where to place a manufacturing plant or distribution center illustrate how transportation networks achieve delivery time and cost objectives. Respondents were asked to rank the following common selection criteria that affect network transit and cost capabilities in order of importance: labor force, quality, cost, availability; proximity to customers and suppliers; available transportation infrastructure and mode; and government programs and tax incentives.

In the Distribution Center (DC) supply chain model, all respondents ranked selection criteria as follows:

1. Proximity to customers/suppliers
2. Available transportation infrastructure and mode (for example, air, truck, rail, barge)
3. Labor force, quality, cost, availability

4. Government programs and tax incentives

Manufacturers ranked selection criteria slightly differently, elevating the importance of labor:

1. Labor force, quality, cost availability
2. Proximity to customers/suppliers
3. Available transportation infrastructure and mode
4. Government programs and tax incentives

Manufacturers, in most cases, are also concerned with the availability of raw materials, and the cost of utilities.

Proximity to customers, labor force considerations, and available transportation infrastructure selection criteria play the deciding roles in identifying an appropriate DC or manufacturing area, such as a county or city. Government programs and tax incentives were generally viewed as “tie-breakers” between competing sites in the general selection area. Once Kansas City meets the first three criteria, various sites in and around Kansas City would then compete by, for example, providing local government incentives and land deals.

Kansas City generally meets interviewees’ key site selection requirements in light of the abundance of available rail, truck, and barge services. The following section expands on how respondents factor site selection criteria into site selection decisions in North America.

Proximity to Customers and Suppliers (Different for Retail vs Manufacturers)

In many supply chains, particularly retail store supply chains, the trucking expense for the “last mile” of product delivery accounts for the largest portion of the transportation budget. Distribution centers are, therefore, located within the closest possible proximity to a majority of end customers. This reduces the overall distance that trucks have to travel, thereby, reducing the largest transportation cost component, the “last mile” expense. Supply chain managers refer to the analysis that selects DC site locations based on shortest overall distance to end customers as “network optimization”.

Manufacturers also benefit from locating near their customers, but access to a skilled, available, and wage-competitive labor force is often the deciding factor with respect to choosing a manufacturing location. Additionally, manufacturers’ access to suppliers and raw materials, in some cases, can outweigh proximity to customer considerations.

Availability of Transportation Modes

Both retailers and manufacturers alike depend on the availability of reliable modes of transportation to link to DCs, although the specific mode varies depending on the transportation strategy. Transportation cost, delivery time, and reliability requirements generally dictate the modal choice. The result is that areas that have air, rail, truck, parcel package shipper distribution hub capabilities (for example, DHL, UPS, FedEx, and USPS) are in the best position to meet the requirements of domestic supply chains.

Rail

Rail facilities are an important feature of many supply chains. DCs that are near to rail hubs make the most of cost savings and freight handling capabilities of the rail mode.

Freight that favor the rail mode are large and heavy items not suited for over-the-road transport, high volume bulk shipments, and intermodal container shipments. (For purposes of this report, intermodal rail are shipments moving in containers that interchange between the truck and rail modes.) On-site or near-site rail facilities eliminate or reduce transportation costs between DCs and rail hubs. Over-the-

road challenges associated with freight that is overweight or oversized are eliminated. KCS's intermodal facility within the Study Area is an attractive feature for many DC and manufacturing operations.

In addition to high volume and oversized freight logistical advantages, rail is also the lowest cost over-land mode. Supply chain managers have increasingly looked for ways to divert truck freight to rail, particularly intermodal rail, over the past several years to reduce transportation costs and to avoid delays caused by truck shortages (see Truck section below). Retail and manufacturing supply chain managers have worked to extend freight delivery lead time requirements into DCs to accommodate slower rail transits. The intermodal rail transit to Kansas City from Los Angeles, for example, is four to five days, but the same route can be served by truck in two days or less. Rail cost savings of twenty-five percent or more justify rail's slower delivery transits.

Kansas City is served by five Class I North American Railroads, but three were mentioned by respondents as playing major roles in freight transportation in the region: KCS, UP, and BNSF. The BNSF has just expanded their intermodal rail yard from 30 acres to 300 acres, and BNSF is expecting increased traffic with the West Coast. According to interviews, KCS is looking to increase international rail traffic with Canada and Mexico, which includes Kansas City as a key intermodal hub in their north/south rail network. Increased interest in the Mexican Port of Lazaro Cardenas may also create rail freight opportunities for Kansas City and, specifically, for the Study Area (see the Transportation Industry Trends section below for more detail regarding Lazaro Cardenas). The automotive sector in Mexico is growing and companies are expanding U.S. distribution supply chains for Mexico-sourced vehicles. Kansas City is viewed as an ideal Midwest distribution hub for vehicles sourced in Mexico. For example, Mexican-built Hondas are slated to be handled at the Kansas City Southern International Freight Gateway Intermodal Facility adjacent to Richards-Gebaur Commerce Park this year, and additional auto makers, such as BMW, Audi, and Mazda, will also likely consider the KCS facilities as distribution hubs for their Mexican-manufactured vehicles.

Inbound UP and BNSF rail service from the West Coast stops at Kansas City before Chicago. However, the published standard transits to Kansas City and Chicago from Los Angeles favor Chicago due to transcontinental transit time commitments in Chicago. The BNSF's published expedited intermodal rail transit from Los Angeles to Kansas City is 58 hours, compared to 66 hours to Chicago. Shippers that wish to avoid congestion in Chicago and want faster access to freight can use this service, but they will pay premium rail prices.

Truck

Trucking is the backbone of every supply chain and provides the greatest flexibility in terms of supporting infrastructure (highways), frequency of departure times, and, until recently, availability. Kansas City's location on major U.S. east/west and north/south highways is an important DC site selection consideration.

Driver shortages have plagued the industry in recent years due to several factors. A large share of truckers have been reaching retirement age, while driver recruitment has slowed and operating hours are less flexible due to stricter regulations. The 2011 Federal Motor Carrier Safety provisions restricted maximum daily drive-time hours and imposed stricter driver eligibility requirements. Persistent driver shortages have led to concerns over the reliability of the truck mode, as well as inflation of trucking costs. Truck rates have also been subject to highly volatile fuel prices, which have contributed to constant truck rate volatility.

In addition to availability and fuel cost factors, truck rates are driven by truck route freight balance. Routes with heavy inbound loads and light outbound loads generally have relatively lower outbound rates; truckers compete for scarce outbound cargo rather than returning empty. Kansas City is a “backhaul” market, meaning it has more outbound truckload freight than inbound, which can make inbound truck rates attractive.

Compressed Natural Gas (CNG) powered trucks are an emerging trend that has the potential to attract freight back to the truck mode from intermodal rail. An example of this is Celadon Trucking in Indianapolis that operates 5,000 CNG trucks. A noted constraint of these trucks is that CNG power does not generate enough torque to reliably climb mountain passes, such as those in the Rocky Mountains. CNG at \$1.90 per gallon compared to diesel ranging from \$2.80-\$3.90 per gallon in the past year positions CNG powered trucks as a potential cost effective alternative to rail and an alternative to diesel powered trucks at today’s fuel prices. Driver shortages remain an obstacle to wide-spread use of CNG trucks, but ongoing driver recruiting efforts, shorter hauls that eliminate overnight stays, and increasing driver pay could address the driver shortage over time. Interest in CNG has recently increased due to rail reliability issues. Logistics hubs that highlight CNG trucking fleets have the potential to offer a unique advantage, at least until other regions catch up to the CNG trend.

Parcel Package Shipping Companies (for example, DHL, FedEx, UPS, USPS)

Manufacturers and retailers are taking advantage of parcel shipping companies to distribute to residential and commercial destinations alike. Companies of any size can access sophisticated and far-reaching transportation networks without the need or expense of maintaining a fleet of trucks or a network of DCs. Parcel shipping companies offer network analytical services that aim to optimize shipper networks by reducing transit times and delivery costs. Shippers further utilize these parcel services by using a mix of truckload shipping and parcel shipping called “zone skipping”. Zone skipping is where a shipper delivers a truckload from Kansas City to a USPS collection center in Seattle, for example. USPS delivers packages the “last mile” to their final commercial and home delivery destinations in the Seattle area. Zone skipping allows shippers to achieve the lowest possible long haul costs, while leveraging USPS networks for last-mile deliveries. Parcel shipping companies are increasingly becoming a central requirement of many retail and manufacturing supply chain networks. A manufacturer respondent uses UPS to ship directly to over 40,000 retail outlets across the country from Kansas City and only uses truckloads for the occasional large order or for zone skip shipments.

Parcel shipping companies are also an important logistics partner to logistics site developers as incorporating the network strengths of parcel shipping services into marketing efforts further enhances the site’s logistical advantage.

Inland Waterway Barge

Barge transportation is comparable with and, in some cases, a lower cost alternative to rail. Large volume commodities, such as grains, aggregate, fertilizers, coal, and breakbulk items (for example, steel coils and other over-sized or heavy cargo), not suitable for over-the-road transportation favor barge. Inland waterway networks must support cargo origin and destination requirements; the combination of navigable rivers making up the U.S. Inland Waterway system provides coverage throughout the entire U.S. Midwest. Barge service reaches as far north as ports in Minnesota, and other Great Lakes ports via the Mississippi River; east to Pennsylvania on the Ohio River; into the Southeast via the Tennessee River; and, importantly, to the deep-sea port of New Orleans. Additionally, barge service can access, via New Orleans, the Gulf Intracoastal Waterway (GIWW) that extends west to Texas and east to Florida. Transshipment capabilities in New Orleans provide the link between barges and ocean going vessels, connecting Kansas City to international sea lanes and global markets.

The Study Area has the potential to benefit from barge traffic if raw materials, such as steel coils, or other commodities are used by on-site manufacturers. Kansas City barge availability is another vital piece of the many transportation modes that make the area an attractive transportation hub.

Air Cargo

Air cargo is preferred for goods that require expedited transit such as parts needed in a production line, fresh foods, emergency stock for sales promotions, or very high value commodities that can justify the additional cost of air transit. Local availability of air cargo services is not a requirement of most retail and manufacturing supply chain operations; lower cost truck and rail modes are either used exclusively or for the vast majority of shipments. In the words of a logistics manager commenting on air cargo services, “If I am using air, something has gone horribly wrong”, meaning that he only pays for air as a last resort if some unrecoverable error has occurred in his production, truck, or rail service schedules.

Air cargo carriers in Kansas City consist of the big three parcel carriers, DHL, FedEx and UPS, along with an air logistic provider, DB Schenker. North American supply chains are increasingly relying on parcel shipping companies which elevate the importance of these services in Kansas City.

Regularly scheduled major international air cargo carriers, such as Lufthansa, Evergreen, and Cathay Pacific, typically call at larger U.S. air cargo hubs, such as Chicago, Dallas, Los Angeles, or New York. Investments in cargo security equipment, established air cargo infrastructure, and personnel at these major hubs dissuade the expansion of services to additional airports in relatively smaller air cargo markets. International air cargo is generally trucked from one of the international air hubs into Kansas City if a direct charter cannot be arranged.

Labor

A region’s labor pool is evaluated based on quality, cost, and availability. In addition to labor cost, a DC operator looks for a moderately skilled labor force that is able to “flex up” to meet seasonal demand. An E-commerce facility might need to “flex-up” from 600 to over 2,000 workers during peak season according to an interviewee. Modern DC workers must have a mix of warehouse skills, such as an ability to operate warehouse equipment (for example, forklifts), but are increasingly expected to be capable of operating a computerized Warehouse Management System (WMS). A WMS is used to manage warehouse inventories and often provides information used to operate automated conveyor systems.

Manufacturers have a higher focus on labor skill levels and cost. In some cases, a local labor pool may be the primary reason to choose a site, such as an auto manufacturer’s choice of an area because of an existing skilled or cost-competitive labor force.

Interview survey respondents noted the positive perception of the Kansas City labor force, citing high quality and favorable worker characteristics. One former DC manager suggested that Kansas City offers a highly desirable labor force when compared to other areas, “I used to manage a large DC in California where we might have to flex up 1,000 workers in a week to meet Asian peak season import volume. Half of ‘em would fail the drug test. You don’t get that here.”

Right-to-work states are generally not sought out; as one developer offered, “If the site makes sense from a logistics point of view, right-to-work is not much of an issue.”

Kansas City Transportation Hub Summary

Respondents viewed Kansas City as a good location to distribute goods within a 350 to 500 mile radius depending on delivery time requirements. This depends on the various transportation modes supporting the delivery into and distribution in and out of Kansas City. The following bullets summarize Kansas City's and the Study Area's characteristics as a logistics hub, including transportation mode availability, based on the interview survey:

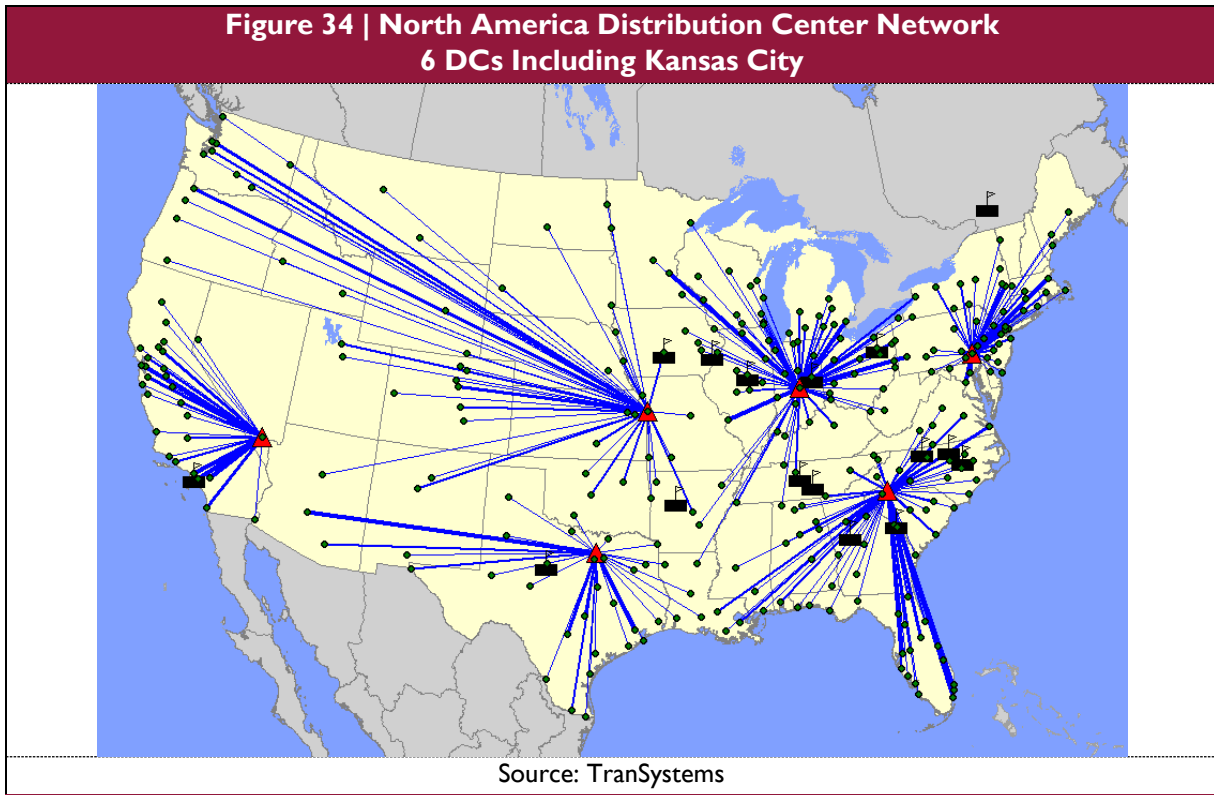
- ▶ Excellent parcel shipper presence (UPS, FedEx, DHL, USPS)
- ▶ Positive labor pool availability and work ethic reputation
- ▶ Railroad and highway connections within the Study Area
 - The Study Area has easy access to I-49.
 - KCS intermodal facility's proximity is a strong advantage for north/south rail shipments.
 - Intermodal capabilities could be of benefit to Mexico and Canada cross border trade.
 - Intermodal connections offer possibility for Midwest regional DC or a DC requiring a service area reach of 300 to 500 miles around Kansas City.
- ▶ Strong river barge service presence
- ▶ Kansas City versus Chicago:
 - Kansas City is not as congested and has fewer winter related delays.
 - Chicago has more east/west transcontinental rail interchange potential.
- ▶ Not a leading North America international air hub

Distribution Strategies

A typical DC delivery area is established based on a balance of delivery time requirements with the lowest cost of goods distribution. The number of DCs determines transit time capabilities and overall transportation costs. Increasing the number of DCs in strategic areas throughout the U.S. reduces the distance and transit time needed to reach the final destinations from each DC; however, increasing the number of DCs creates higher overall DC operating costs because labor, inventory, real estate, technology, etc. are duplicated, to varying degrees, with each additional facility. Therefore, the objective is to meet delivery time commitments using the fewest DCs possible. If, for example, a DC had a service requirement to reach anywhere in the U.S. within four days, a single DC in Kansas City would be appropriate because the four-day delivery requirement can be met using a combination of trucking and a small parcel delivery company. An E-Commerce Fulfillment Center (EFC) is a good example of a DC that often requires a three- to four-day delivery commitment (see the E-Commerce Fulfillment Center discussion later in this Section). Kansas City would be eligible for consideration as an EFC and a Midwest regional DC, a DC responsible for distributing goods within a two-day truck drive, including local Kansas City deliveries.

Retail Distribution Model Example

As mentioned, reducing the "last mile" trucking costs remains a key consideration of the DC network design process. Figure 34 illustrates a six DC retail goods network, including Kansas City, that is designed to distribute goods to retail stores throughout the U.S. It is important to note that Figure 34 is an actual network design that factors in retail locations of a specific company. It may not be applicable to companies with different retail store locations or different regional concentrations of retail stores. The blue lines represent truck routes to retail stores, which may include access points to USPS facilities or other small package delivery companies to make "last mile" residential deliveries. This DC network is capable of reaching 93 percent of the U.S. Population within 800 miles, or within a 15-hour truck drive.

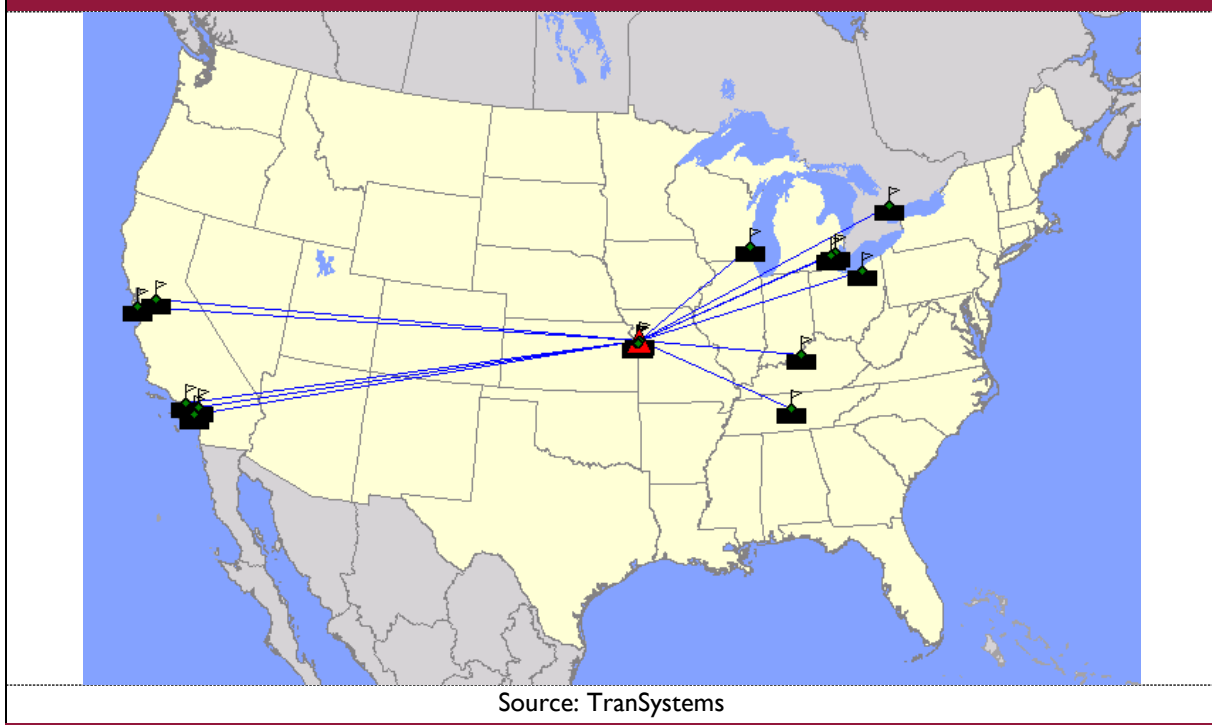


Manufacturing Distribution Model Example

Manufacturers’ distribution requirements for end customers are essentially the same as for retailers; however, as mentioned earlier, the availability of a skilled labor force or the need to be located near raw materials or production parts takes precedence over being in close proximity to customers. Manufacturers with local Kansas City suppliers (raw materials and production parts) benefit from low cost and expedited factory delivery capabilities; they also are able to take advantage of relatively low outbound truck rates and parcel delivery companies mentioned above.

Figure 35 illustrates an actual manufacturer’s distribution model based on a Kansas City location. A concentration of customers in the Midwest results in low delivery costs and average delivery transit times from a location in Kansas City. Similar to the retail distribution model, this model depends on the specific manufacturer’s distribution location needs. The average distance traveled in this network is 872 miles. 1,870 miles is the longest trucking leg to San Francisco, while the shortest legs are to Chicago and Louisville, each approximately 500 miles away.

Figure 35 | Manufacturer Distribution Network Example Centered on Kansas City



E-Commerce Fulfillment Center

E-commerce has quickly emerged as an integral component of domestic supply chains, given the growing popularity of online shopping. An EFC is essentially a DC that fulfills online orders for items destined for residential or retail stores throughout the country. Immediate access to the service network of a national or international parcel shipping company is necessary to maximize the efficiency of an EFC. Kansas City is viewed as a good candidate for EFCs because of its central U.S. location and the presence of nationwide parcel service to both residential and retail markets.

Both online companies (for example, Amazon.com) and traditional brick and mortar retailers (for example JCPenney, Target, Macy’s) offer E-commerce deliveries to their customers. Brick and mortar retailers often offer E-Commerce customers both a residential delivery and an in-store pick-up option, utilizing a combined network of EFCs and retail stores. A brick and mortar retailer typically maintains an EFC that is separate from its core DC network. One respondent noted that the proliferation of EFCs, in some cases, reduces the service area reach requirements of traditional DCs because EFC deliveries eliminate the need for far reaching DC coverage.

Online fulfillment delivery requirements range from overnight delivery to three- or four-day delivery options. A retailer or manufacturer can easily meet these commitments by shipping with a large parcel company. A Midwest EFC or manufacturing location in Kansas City is capable of achieving a three- or four-day delivery window to anywhere in the country using a single facility. Achieving the same service delivery time standard would be more expensive from points in the Eastern or Western regions because the use of air cargo service would likely increase in order meet service cross-country delivery commitments.

A Kansas City based EFC can also achieve lower cost parcel shipments to either coast by zone skipping, which involves loading all shipments destined for residential delivery to a given state in a single truckload and delivering it to a USPS drop site. The USPS then delivers the shipments to individual residences.

Actual EFC cost advantages depend on the parcel shipment companies' networks. UPS and FedEx each offer rates based on the strengths of their own networks. One parcel company may have an advantage in a particular route based on their traffic volume or partner trucking rates. It is important to work with the parcel shipping companies to identify their strongest service routes and how they fit with a retailer's or manufacturer's needs.

Transportation Industry Trends

The state of freight transportation in the U.S. has more or less been in constant flux for the past two decades; this was reflected in interview responses. Beginning in the mid-1990s, railroad infrastructure improvement work caused temporary track closures and slowed rail speeds. In 2002, the West Coast longshore labor disputes disrupted international trade. Volatile fuel prices and a shortage of rail engineers plagued U.S. domestic supply chains well into the 2000s. Around 2011, truck driver shortages began impacting shippers' ability to find truckers at reasonable prices due, in part, to disproportionately large numbers of truck drivers reaching retirement age and stricter truck driver hour-of-service standards imposed by the Federal Motor Carrier Safety Administration. In late 2013 and early 2014, severe snow storms coupled with chassis shortages on both coasts snarled freight shipments while, at the same time, railroad companies increased the volume of crude oil traveling by rail which crowded key corridors and slowed train speeds.

This persistent state of instability has caused logistics managers to continuously plan for contingencies designed to keep their goods moving. This year is no different, as respondents note ongoing truck shortages and delayed cargo caused by labor disruptions at West Coast ports. The following transportation trends and events raised during interviews are expected to have an impact on Kansas City and, in some cases, present opportunities for the Study Area.

West Coast Port Disruptions

Labor disruptions and slow-downs on the U.S. West Coast are causing logistics managers to look for alternative Asian import/export gateways. Ports such as Lazaro Cardenas in Mexico and Houston are being considered, but only if they prove to be reliable. The Study Area has the possibility of benefiting from a shift to the Mexican port because of the KCS rail network which connects Lazaro Cardenas to the KCS rail yard within the Study Area. The Port of Houston was also mentioned as a potential alternative to the West Coast, but rail service to and from Kansas City is circuitous and would need to be streamlined. Each of these gateways has the potential of highlighting Kansas City as a good option for accommodating Asian cargo moving along a north/south corridor rather than its current east/west route.

U.S. West Coast Longshore Labor Impact on Gateway Diversification

Alternative gateways are being considered which, if proven to be reliable, will potentially create additional and permanent options for shippers as they reduce dependence on West Coast ports. The current West Coast labor situation is causing shippers to assume that the International Longshore and Warehouse Union (ILWU) will continue to be a chronic cause of disruption. Labor negotiations at the time of interview survey were not perceived to be going well with many contentious points being raised. One issue is the contract time period. One option proposed was a three-year contract, rather than the six-year terms negotiated in the previous two contracts. This raised the likelihood that West Coast labor disruptions will be back in three years rather than six years. Some respondents were at a loss for

words when asked to comment on the effects of the shortened contract period. One respondent who could articulate a response said, “It doesn’t matter if it is three or six years at this point. We will remember this big time. We will plan a lot earlier, and some of our cargo is not coming back (to the West Coast)”. The final negotiated contract is for a five-year period and is due to be voted on by the ILWU in May. Regardless, supply chain managers are looking for long-term stability beyond a five-year window.

Another incentive for shippers to find permanent alternatives is the sense that problems at the Ports of Los Angeles and Long Beach (LA/LB) will linger beyond the conclusion of contract negotiations. Respondents were concerned that chassis shortages, huge ships, and heavy volume in general will continue to cause delays as the port strains to accommodate mounting operational challenges.

Negative perceptions of using West Coast gateways may provide a short window of opportunity for other ports and gateways to prove their effectiveness. Longer transits through alternative ports will be tolerated, but only if they are proved to be reliable.

Lazaro Cardenas

One alternative that has implications for the Study Area is the Mexican Pacific Coast port of Lazaro Cardenas. Lazaro Cardenas is served by the KCS North American rail network, which includes the KCS intermodal rail yard adjacent to the Study Site. Respondents indicated that Lazaro Cardenas is largely unproven; however, they would consider it if ocean carriers and railroads dedicate additional resources needed to improve the reliability of the Mexico-U.S. corridor. Still, respondents were skeptical as Mexico cargo security concerns, railroad equipment imbalance and shortages, the lack of a backhaul cargo, and weak ocean carrier commitments were all cited as issues in need of resolution. Initially, Midwest shippers might test a Lazaro Cardenas port call to gauge how longer transits and reliability fit current supply-chain delivery requirements as compared to the West Coast. Any continued or increased use of Lazaro Cardenas would depend on the reliability of the port.

The automotive sector in Mexico has the potential to improve service at Lazaro Cardenas. According to interview respondents, KIA and Hyundai plants will open near Monterrey in 2017 and they are expected to divert some Korean automotive parts coming through LA/LB to Lazaro Cardenas. Increased auto parts moving from Korea to Lazaro Cardenas will likely increase the number of regularly scheduled vessel calls, which could establish service levels and reliability needed for a viable Lazaro Cardenas-U.S. lane. In addition, a global ocean terminal operator, APM, will complete terminal expansion plans in Lazaro Cardenas some time in 2016. The port will then be capable of handling more cargo, in general, further adding to the possibility of increased terminal and rail equipment dedicated to the Lazaro Cardenas gateway.

Houston, TX

The Port of Houston was mentioned as an alternative for DCs in the Texas area and even up to Kansas City if rail service is streamlined. Rail service is not currently considered a true option all the way to Kansas City, but shippers are willing to experiment in light of West Coast port labor issues.

Suez Canal

Perhaps the most likely alternative to the West Coast was the Suez Canal route transiting U.S. East Coast ports and connecting points as far inland as Columbus or Detroit with origins as far east as Vietnam or Indonesia and, in some cases, including South China ports. Kansas City would be at a disadvantage compared to other Midwest distribution hubs further east, such as Columbus or Memphis, that are closer to East Coast ports and offer a wider Midwest reach.

Initial re-routing away from West Coast ports may return over time as reliability returns, but shippers are vowing that some cargo will not return; “We’ve learned our lesson. We need to keep our options open”.

Modal Choice and Fuel Prices

Modal choice will continue to favor intermodal rail over truck, driven more recently by driver shortages more than the cost of trucking. Falling fuel prices have made the more flexible trucking option attractive, but “you can’t find any” available trucks. Beyond truck unavailability, shippers have integrated lower cost intermodal rail into their supply chains, and they did not express a desire to revert back to the truck mode.

Ocean Carriers and Fuel Prices

A possible impact of persistent lower fuel prices (which is not widely believed to be long-lasting according to respondents), is that the economic case for slow ship steaming will begin to unravel. Vessel cost per day will begin to overshadow diminishing slow steaming bunker cost savings per day, meaning that faster steaming will result in overall lower vessel voyage days and costs. This may also allow ocean carriers to reduce the number of vessels in a string, but provide the same level of service, particularly in some of their longer deployments.

Truck Rate Analysis

The truck rate analysis displayed in Table 3 compares Kansas City to four other key competing Midwest logistics hubs and their respective regional advantages based on rates. Rates in red designate the lowest rate and rates within \$50 of the lowest rate in each Origin/Destination pair. As illustrated by the shaded green area, Kansas City has a truck cost advantage to key Northwest Central Midwest, Mountain, and West destinations. Memphis has access to the lowest truck rates to key South Central Midwest and Southeast locations. Columbus is the lowest trucking cost options in the Northeast Central Midwest and Mid-Atlantic regions.

A shipper with a concentration of customers in Midwest and West markets would favor Kansas City as a distribution facility in light of its trucking cost advantages, which may also include points farther east if overall network delivery costs justify distribution from Kansas City (see earlier discussion of distribution strategies). Importantly, Kansas City has the lowest trucking rates of the distribution hubs displayed for cargo exported to Asia via the West Coast ports of Oakland, Long Beach (including Los Angeles), Portland and Seattle. Separate analysis shows that Kansas City also has more favorable rates than Chicago for imports from Asia over the West Coast. This is a critical advantage over Chicago rail for freight that cannot tolerate slower rail transits.

Richards–Gebaur Commerce Park Freight Study

Port KC

Kansas City, Missouri

Table 3 | Outbound Truck Rates from Select Midwest Distribution Hubs to Select U.S. Destinations (\$ per truckload)

Region	Destination	Origin Logistics Hub				
		Kansas City	Memphis	Columbus	Chicago	Indianapolis
West	Long Beach	2,998	3,045	3,891	3,427	3,554
West	Oakland	3,254	3,881	4,303	3,632	4,843
West	Portland	4,167	5,144	5,233	4,457	4,862
West	Seattle	4,108	5,254	4,738	4,579	4,162
Mountain	Albuquerque	2,209	2,315	3,888	2,934	3,324
Mountain	Denver	744	1,453	1,553	1,288	1,361
Mountain	Salt Lake City	1,508	2,353	2,233	2,057	2,382
NW Central	Kansas City	n/a	988	1,280	987	937
NW Central	St Louis	573	616	944	629	612
NW Central	Des Moines	518	1,233	1,162	777	966
NW Central	Milwaukee	992	1,129	1,003	475	853
NW Central	Minneapolis	799	1,751	1,409	851	1,154
So Central	Dallas	837	708	1,563	1,342	1,302
So Central	Houston	1,768	1,515	2,432	2,267	2,168
So Central	Memphis	1,043	n/a	1,218	997	914
So Central	Nashville	1,164	617	931	912	707
So Central	Oklahoma City	884	1,211	1,898	1,911	1,718
Southeast	Atlanta	1,626	857	1,178	1,589	1,163
Southeast	Charleston	2,361	1,454	1,334	1,985	1,532
Southeast	Miami	4,202	2,779	3,180	3,551	3,545
Southeast	New Orleans	2,030	1,000	2,126	1,910	1,580
Southeast	Norfolk	2,606	1,938	1,342	2,500	1,739
Southeast	Savannah	1,939	1,395	1,447	2,436	1,657
NE Central	Cincinnati	1,127	975	513	852	576
NE Central	Cleveland	1,626	1,416	562	880	828
NE Central	Columbus	1,300	1,105	n/a	731	626
NE Central	Detroit	1,509	1,516	502	819	747
NE Central	Indianapolis	990	1,004	584	520	n/a
NE Central	Toronto	3,057	2,740	1,096	1,133	949
NE Central	Chicago	1,100	1,013	883	n/a	600
Mid Atlantic	Harrisburg	2,586	2,110	1,065	1,831	1,484
Mid Atlantic	Baltimore	2,667	2,278	1,191	2,022	1,685
Mid Atlantic	Boston	3,483	3,523	2,215	2,714	2,645
Mid Atlantic	New York	3,061	2,687	1,635	2,246	2,015
Mid Atlantic	Philadelphia	2,661	2,261	1,425	2,040	1,800

Source: Truckloadrate.com as of 2/23/15 (Truck rates are subject to change)

Facility Conditions

Interview respondents who were familiar with the site noted that the buildings are old and in need of heavy maintenance within the next several years. The general consensus is that the current buildings are suited to the types of tenants currently operating at the Richards-Gebaur Commerce Park, but existing operations are relatively small and rental rates will likely command below-market rates in the Kansas City area. A manufacturer who was moving out of the Richards-Gebaur Commerce Park mentioned that although his company was leaving in order to be closer to its customers, they had long been concerned over the high building operating cost. The respondent noted paying a \$15,000 per month heating bill during winter. The respondent commented, “We had to do lots of upgrades to make this building work – lead paint, asbestos, no heating.” No tenants who responded to the interview survey noted any benefit from the KCS intermodal facility, and none mentioned any particularly advantageous site characteristics, other than an abundance of outside storage space.

Results of the limited external, structural Facility Condition Assessment (discussed in more depth in Section 4) of the buildings at Richards-Gebaur Commerce Park in March 2015 indicated that:

- ▶ 14.3 percent (5 of 34) of the inspected buildings were in good condition,
- ▶ 48.6 percent (17 of 34) of the inspected buildings were in fair condition, and
- ▶ 35.3 percent (12 of 34) of the inspected buildings were in poor condition.

Nearly half of the buildings are in fair condition and need minor maintenance and/or improvements. Over a third of the structures have exceeded their expected useful life and will require major replacements.

The CenterPoint Intermodal Center-Kansas City development was viewed as a distinct alternative to the Richards-Gebaur Commerce Park, particularly from the perspective of large DC operations. CenterPoint Intermodal Center-Kansas City was considered to be more likely to attract tenants that would be interested in leveraging area advantages, such as retailers or manufacturers that are looking to take advantage of Canada and Mexico trade possibilities by accessing KCS’s north/south rail network. CenterPoint is also a “greenfield” site, which provides prospective tenants with the flexibility to design a modern facility built to their specifications.

Section 4 | Freight Infrastructure and Facilities

Overview of Modes

The Kansas City region has a vast transportation network encompassing highways, railroads, airports, and the Missouri River system. These modes provide a strong base for supporting freight transportation infrastructure in the region. The existing condition of each mode is reviewed at a regional level as well as at the local level with greater focus on infrastructure surrounding the Richards-Gebaur site.

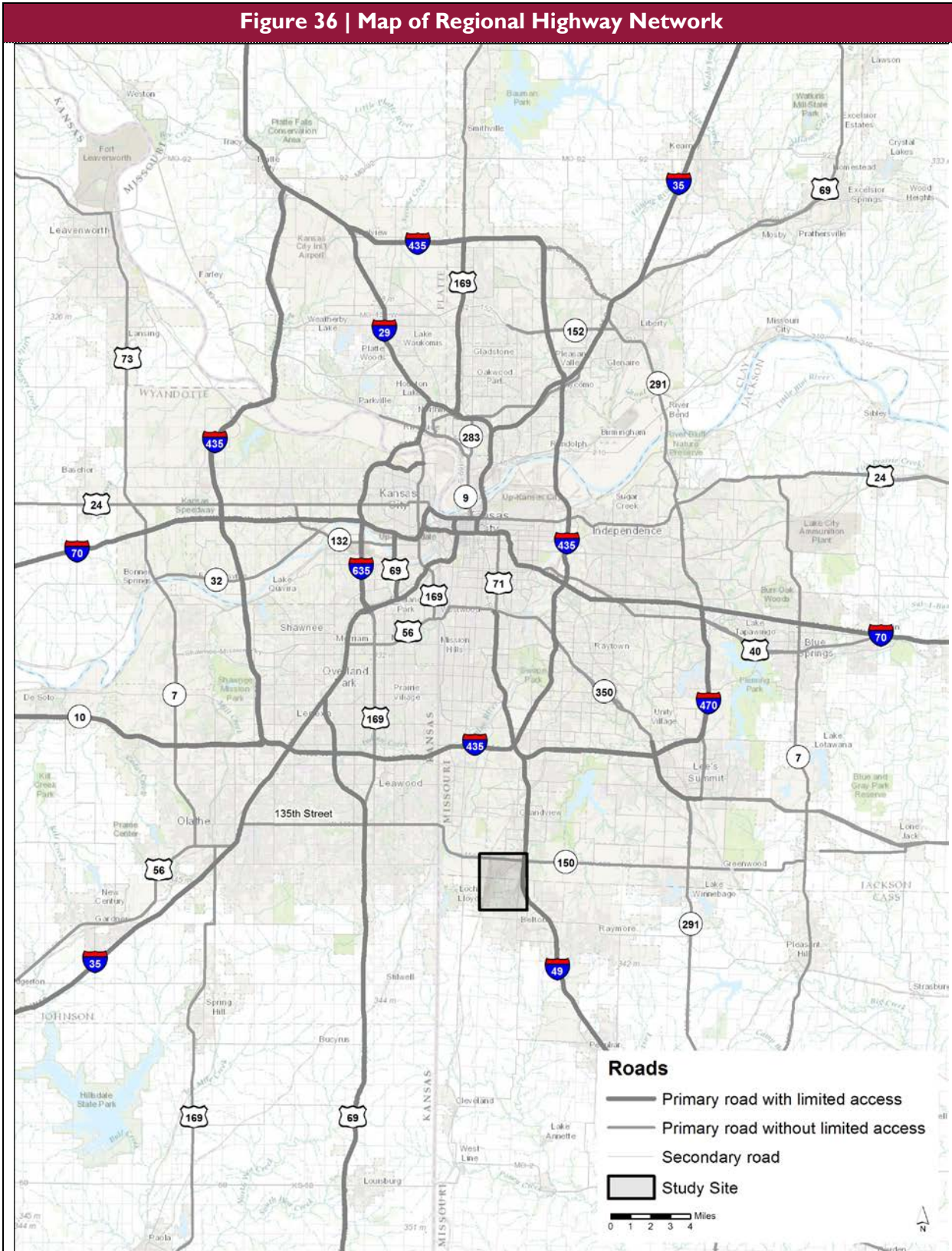
Highway

The Kansas City region's highway system, displayed in Figure 36, encompasses four interstate highways that transverse multiple states: Interstate 29, Interstate 35, Interstate 49, and Interstate 70. With this strategic interstate coverage, freight can travel radially from Kansas City in six different directions. Within the metropolitan area, interstate beltways or links include Interstate 435, Interstate 635, and Interstate 470. Several U.S. highways with several cross state and local routes provide direct access to industry. Generally, highway freight transportation volumes, represented by trucks, concentrate on the higher functional classification routes like interstate highways. However, the “last mile” to access facilities is just as important to overall efficiency and reliability of truck transportation.

Richards-Gebaur Commerce Park is located along Interstate 49 approximately five miles south of its junction with Interstate 435, Interstate 470, and U.S. Route 71. Along this corridor, Interstate 49 is a six-lane highway with approximately 80,000 average annual daily traffic and 13,750 average daily truck traffic. The Study Area has access to Interstate 49 via Missouri Route 150, which bounds CenterPoint Properties to the north. Missouri Route 150 is a divided four-lane highway with 10,000 to 15,000 average annual daily traffic. A grade-separated, diverging diamond interchange leads from Missouri Route 150 into the Study Area via Botts Road/151st Street about one mile west of Interstate 49. 151st Street is a four-lane road for approximately a half-mile through CenterPoint Properties until it reduces to a two-lane road as it nears the Richards Gebaur Commerce Park. Secondary access to Interstate 49 is available via 155th Street, which bisects a portion of the site. 155th Street is a two-lane road with occasional turn lanes in the Study Area and then expands to a four-lane road as it approaches Interstate 49.

Descriptions of recent transportation investments or planned improvements near the Study Area are outlined in Table 4 and illustrated in Figure 37. In general, multiple improvements have been implemented to provide access to the Study Area, particularly along Missouri Route 150. Improvements are planned south of Route 150 at 155th Street to enhance the second access point to Interstate 49. However, while improvements have been made to the perimeter of the Study Area, the internal street network within the Richards-Gebaur Commerce Park is generally in poor condition.

Figure 36 | Map of Regional Highway Network



Source: TranSystems

Richards–Gebaur Commerce Park Freight Study

Port KC

Kansas City, Missouri

Table 4 | Recent or Planned Transportation Improvements

Project	Description	Year	Cost
A	Route 150 & Thunderbird Rd	2012	\$3.6 million
B	Route 150 & Botts Road	2012	\$13.0 million
C	Interstate 49 & Route 150	2009	\$29.6 million
D	155th Street (East)	2016	\$6.0 million
E	Interstate 49 & 155th Street	2016	\$7.1 million
F	155th Street (West)	2016	\$3.3 million ¹

Source: Missouri Department of Transportation, Mid-America Regional Council and TranSystems

¹ Expected funding sources include ADESA and the Public Improvements Advisory Committee (PAIC 089B10-31)

Figure 37 | Map of Recent and Planned Transportation Improvements



Source: TranSystems

Railroad

Kansas City's rail system, displayed in Figure 38, consists of five Class I railroads and several regional or shortline carriers. The BNSF's Transcontinental Route runs diagonally through the region southwest to northeast. This route connects the Ports of Los Angeles and Long Beach to Chicago via Kansas City. This is a major intermodal route carrying between 80 and 90 trains per day. The UP's major coal route runs east/west through the region from Topeka, Kansas into Missouri where it parallels the Missouri River. This route carries upwards of 80 trains per day of loaded unit coal trains (a unit train is typically one mile long). The KCS's north/south route connects the region to Mexico at Laredo, Texas. The NS's east/west route ends in Kansas City. The Canadian Pacific's terminal in Kansas City, Missouri is the southernmost terminal of its system. From Kansas City, the route travels northeast across northern Missouri towards Davenport, Iowa with connections to the Chicago area. The extensive rail network throughout the region serves local industry, major intermodal yards, and provides connection to international markets.

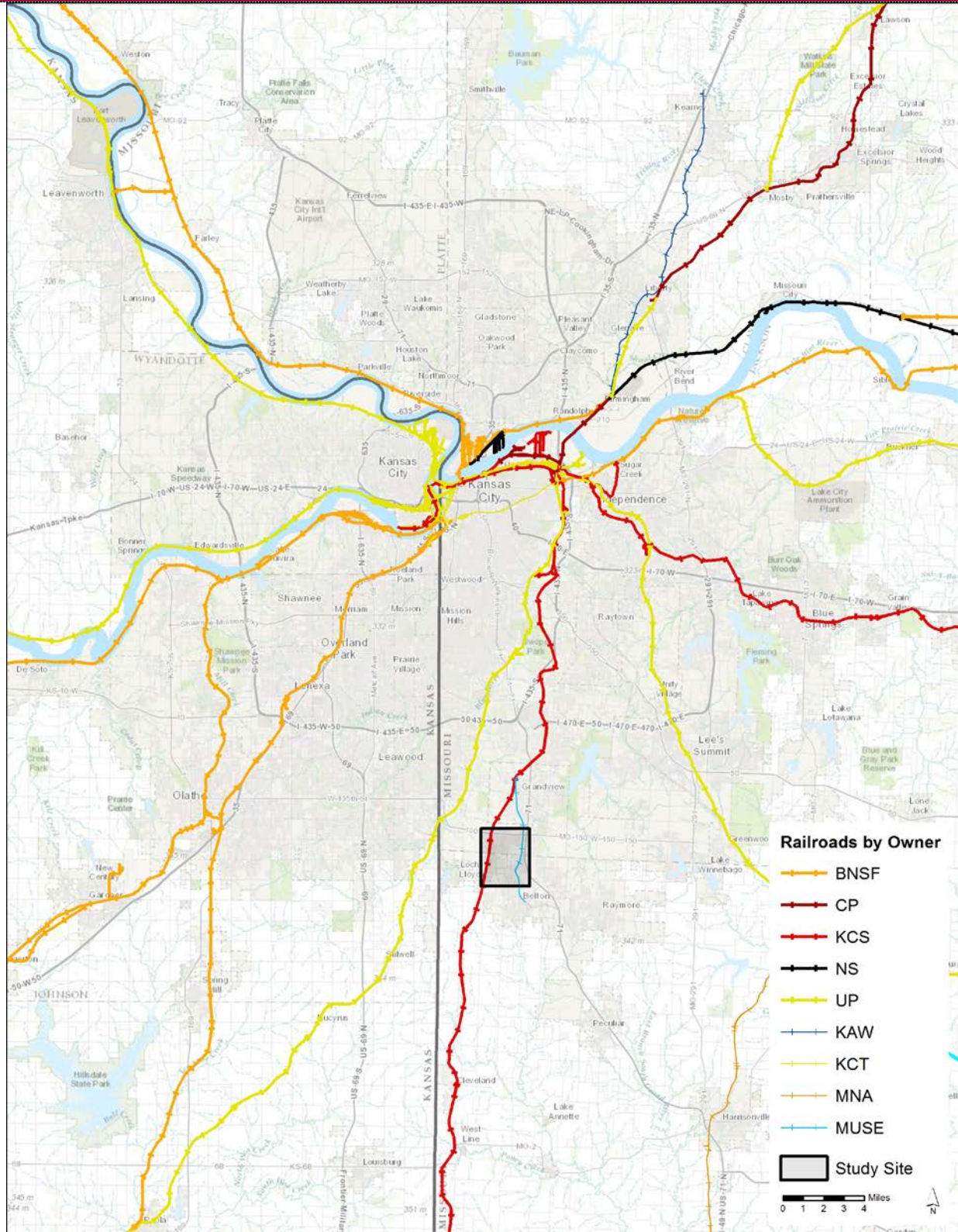
The Kansas City Southern main line travels north/south along the western edge of the Richards-Gebaur Commerce Park. Due to constraints at its previous intermodal facility in the Knoche Yard and opportunities with new traffic lanes, the Kansas City Southern moved their intermodal operations to the Study Area. The move increased opportunities for complimentary development for the CenterPoint Intermodal Center-Kansas City. Proximity to the intermodal facility is the most strategic aspect of this particular location, making it ideal for attracting cargo coming from and going to Mexico via the Kansas City Southern railroad. The location also provides an opportunity for attracting cargo coming through other port gateways on the east and west coasts and moving via intermodal rail to the Kansas City region. Approximately 24 trains travel the line near the Study Area daily.

A heritage railroad operated by the Belton, Grandview, and Kansas City Railroad Company travels north/south along the eastern edge of the Study Area. The line was previously a short section of the St. Louis and San Francisco's Blair Line. The heritage railroad, known as the Smoky Hill Railway, offers excursions on the line running south from Belton, Missouri on a five-mile round trip. The line was partially sold to the Kansas City Southern north of 155th Street, with the north line being used once a year when maintenance occurs.

Air

The Richards-Gebaur site is located approximately 38 miles from the Kansas City International Airport. The airport is the air cargo terminal in the region and the 37th busiest cargo airport in North America. Other airports in the region whose runways are of sufficient length and are capable of supporting large aircraft suitable for air cargo operations include the Charles B. Wheeler Downtown Airport, New Century Air Center, and Johnson County Executive Airport. Currently, these facilities do not handle air cargo. Some of these aviation facilities are supported by activities with Foreign Trade Zone designation.

Figure 38 | Map of Regional Rail Network



Source: TranSystems

Barge

The Port of Kansas City is approximately six acres located in downtown Kansas City east of the confluence of the Missouri River and Kansas River. Specifically, the port is located at Missouri River mile 367.1 along the designated Marine Highway M-70. The port includes approximately 900 linear feet of shoreline with serviceable fleet and transloading zones and provides a 50 to 100 ton capacity crane to aid in cargo transfer from truck to barge. The terminal is designed to handle more than 800,000 tons of cargo per season. Operated by Port KC, the port has excellent multimodal connections, paved access to Interstate 70, and nearby access to the Charles B. Wheeler Downtown Airport. By leveraging \$15 million in federal funds between 2007 and 2010, approximately \$110 million of private capital was generated in Missouri to fund port infrastructure projects.

The Port of Kansas City is developed with land, facilities, equipment, and business. However, the Port is considered limited due to the lack of commercial waterway transportation on the Missouri River. In general, the port's biggest need is waterway traffic rather than port development. The Missouri Department of Transportation's *Update of Missouri Port Authority Assessments* states that, "to stay in business, the port authorities are primarily focused on businesses that do not depend on waterways (and) without waterway traffic, they are more interested in funding landside development rather than waterside development. The only waterway related cargo in the last few years were too big or too heavy to move by other modes. Facilities are being used primarily for agriculture-related, land-based shipping. It is reported that shipments likely go to Tulsa, Oklahoma and the Arkansas River rather than the Missouri River."

In September 2014, the Port of Kansas City partnered with Kaw Valley Companies to serve as the operator of the Woodswether Terminal port facility, marking the reopening of the Port after seven years. Kaw Valley was founded as a sand and gravel mining distribution company but has diversified its operations into recycling, demolition, excavation, grading, and port operations. Kaw Valley hopes to grow a larger network of shippers, receivers, manufacturers, distributors, and agricultural suppliers presently served by on rail and road carriers. The Port of Kansas City has also re-established a partnership with River Marine Enterprises, who operated the movement of goods by barge on the Missouri River prior to the port closing in 2007. River Marine Enterprises will provide towing, fleet, and port services for inbound and outbound barge traffic. When reopened, the port will become one of the few operating public ports on the Missouri River that will provide an alternative freight corridor through the Midwest to the Gulf of Mexico.

Overview of Facilities

Three major property owners occupy the former Richards-Gebaur Air Force Base: the Kansas City Southern Railway, CenterPoint Properties, and the Port KC. Through a partnership between the Kansas City Southern and CenterPoint Properties, the former Richards-Gebaur Air Force Base now functions as the CenterPoint Intermodal Center/KCS International Freight Gateway. The Richards-Gebaur Commerce Park is owned and operated by the Port KC. These three properties, in addition to significant nearby developments, are discussed below.

Kansas City Southern International Freight Gateway Intermodal Facility

The 370-acre Kansas City Southern International Freight Gateway (KCS IFG) Intermodal Facility is located adjacent and directly west of the Richards-Gebaur Commerce Park. The facility launched operations in 2008 after moving from its previous location in the Knoche Yard. The facility provides direct rail linkage via the Kansas City Southern to the new Port of Lazaro Cardenas in Mexico — the largest cross-border gateway between Mexico and the United States.

The facility handles container, trailer, and automotive rail shipments. In 2014, a total of 52,809 intermodal lifts were completed. This represents a 20% growth from 2013 volumes (43,662 lifts). The facility has an annual lift capacity of 96,000 on its 8,000-foot working track. Expansion potential exists between the current intermodal track and chassis and automotive storage areas which occupy the former air force base apron area.

The intermodal facility can be accessed directly from Missouri Route 150 via the Thunderbird Road interchange. This interchange provides dedicated access to the terminal for trucks and employees. There is no public roadway access beyond the terminal ramps. Access is also provided to the nearby CenterPoint Intermodal Center-Kansas City via internal development roadways. Schneider National, a truckload, logistics and intermodal service provider, leases land at the Richards Gebaur Commerce Park with direct access to the intermodal facility through the internal roadway system.

CenterPoint Intermodal Center-Kansas City

Adjacent to the KCS IFG is the 940-acre CenterPoint Intermodal Center-Kansas City. CenterPoint Properties, an industrial and transportation-related property developer, is the master developer for the former Richards-Gebaur Air Force Base. CenterPoint's proximity to the Kansas City Southern makes the industrial park an ideal location for businesses looking for a strategically located distribution center. The industrial park's central location and proximity to interstates and highways also allows tenants to ship goods to 80 percent of the U.S. population within two days by truck. CenterPoint is in a Missouri Enhanced Enterprise Zone, a Foreign Trade Zone, and the transcontinental and NAFTA trade corridors.

Phase I of the CenterPoint Master Plan includes redevelopment of approximately 230 acres and five million square feet of warehousing and distribution space. Redevelopment activities include ground remediation, building demolition, and infrastructure installations to prepare the site for up to five million square feet of warehouse and distribution facilities. Phase I will feature fully-improved sites with "move-in ready" infrastructure, flexibility to build-to-suit for sale or lease, and fifteen buildings ranging in size from 100,000 to 1,000,000 square feet. The remaining components of the Master Plan include five additional phases, 100 acres of underground development, and 50 acres of retail development. The Richards-Gebaur Commerce Park operated by Port KC is identified as Phase 4 of the Master Plan. The Master Plan is displayed in Figure 39.

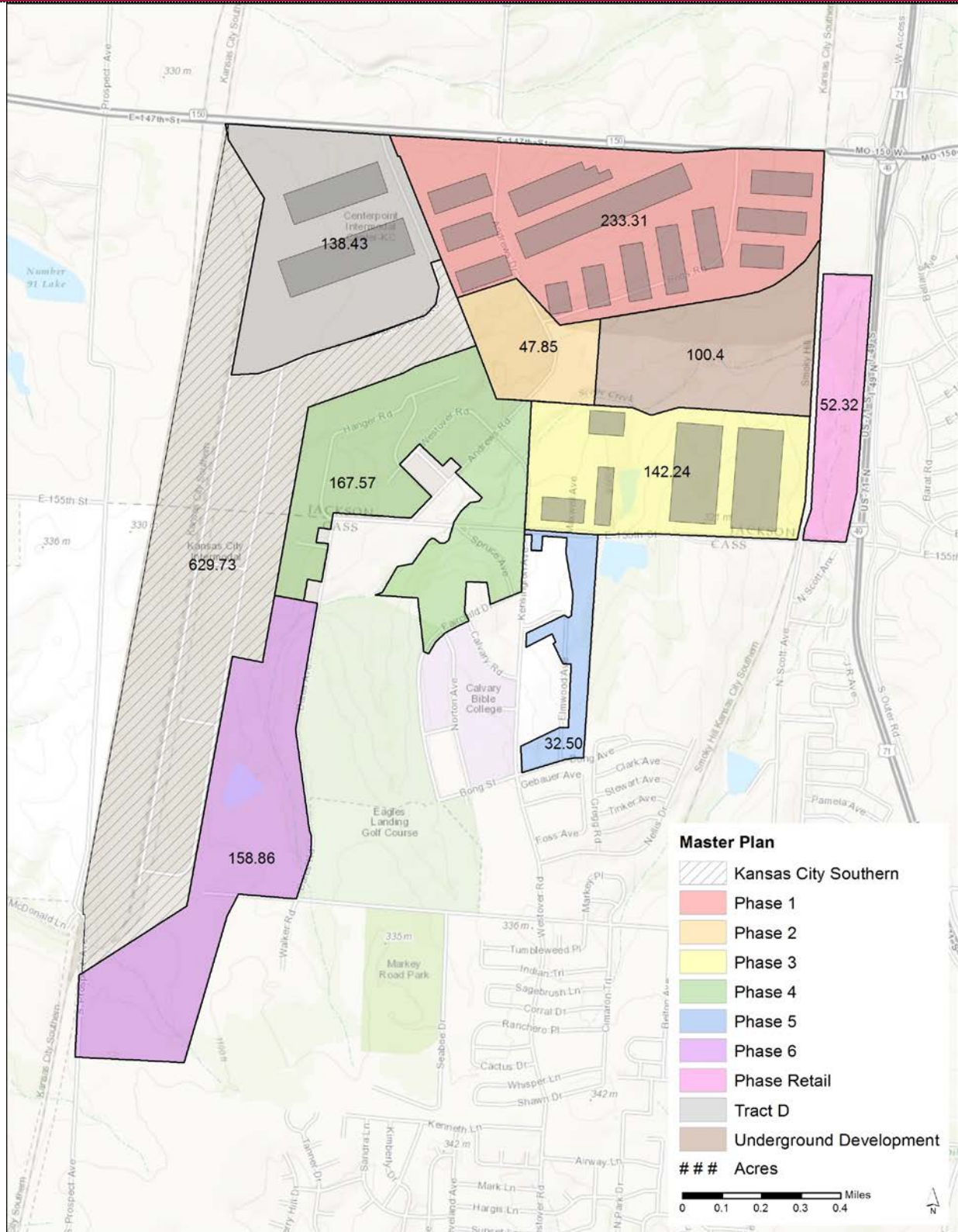
In December 2013, CenterPoint was awarded a 15-year lease for a U.S. Department of Agricultural (USDA) operation that is being relocated from the Bannister Federal Complex. The USDA Animal and Plant Health Inspection Service will move to a new 300,000 square-foot building on the property and will lease about 35 percent of the building. Really Good Stuff Inc. and UFP Harrisonville will occupy the remaining space. Really Good Stuff, Inc., a distributor of educational supplies, hopes to expand their supply chain by taking advantage of the connectivity the CenterPoint Intermodal Center-Kansas City provides to more than half of the United States in one day. UFP Harrisonville, a wood products manufacturer, hopes to enhance the company's distribution processes through its strategically located facility. The building, located on Thunderbird Road, was completed in February 2015. The site is fully improved with complete infrastructure and features 32-foot clear height, 60-foot speed bays, and 37-doors with four drive-in doors. CenterPoint has also recently announced the commencement of operations of Neovia, a third-party logistics provider to one of the Nation's largest retailers at CenterPoint Intermodal Center-Kansas City. As a result, currently four tenants have located in the park.

Richards–Gebaur Commerce Park Freight Study

Port KC

Kansas City, Missouri

Figure 39 | CenterPoint Intermodal Center-Kansas City Master Plan



Source: CenterPoint and TranSystems

Richards-Gebaur Commerce Park

The Richards-Gebaur Commerce Park consists of 35 buildings clustered along 155th Street, Hangar Road, Andrews Road, and Westover Road. Three parking lots are also used for outdoor storage. Port KC oversees and manages about 480,000 square feet of leased office and industrial building space at the Richards-Gebaur Commerce Park.

The majority of the buildings were constructed in the 1950s and 1960s for use by the U.S. Air Force. The buildings range in size from 1,000 to 100,000 square feet and are primarily intended for office, storage, warehouse, and hangar uses. The average building size is 18,349 square feet, but the median building size is 6,104 square feet. Exterior parking lots are also leased for storage purposes. Tenants currently occupy 20 of the 38 buildings and/or exterior lots — a 47.4 percent vacancy rate including the two buildings that have no viable use.

A limited Facility Condition Assessment was performed for the Richards-Gebaur Commerce Park in March 2015. A Facility Condition Assessment is the process of analyzing the condition of a group of facilities that may vary in terms of age, design, construction method, and materials. The purpose of the assessment is to serve as a physical inventory of the site assets and identify potential needs for maintenance, improvements, or major capital renewal. First, existing information was gathered for each facility on site. Then, the condition index outlined below was used to rate the exterior, structural condition of each building during an on-site, external visual inspection.

- ▶ **Good Condition:** The facility's structural exterior is in overall good physical condition with minimal maintenance and/or improvements needed.
- ▶ **Fair Condition:** The facility's structural exterior is in overall fair condition with minor maintenance and/or improvements needed.
- ▶ **Poor Condition:** The facility's structural exterior is in overall poor condition with major maintenance and/or replacements needed. The building has exceeded its expected useful life.

The result of the limited field assessment is a catalog of current performance based on the exterior, structural condition of the building and potential maintenance and/or capital improvements. While the assessment did not include a detailed examination of the interior space or building systems, the assessment provides an initial strategic tool to inform capital improvements and resource allocation decisions for the Richards-Gebaur Commerce Park. The building inventory and limited Facility Condition Assessment is summarized in Figure 40 and is provided in greater detail in Appendix B. Tables 5-8 below summarize the building inventory by size, use, and condition assessment.

Richards–Gebaur Commerce Park Freight Study

Port KC

Kansas City, Missouri

Table 5 | Richards-Gebaur Building Inventory

Building	Size (Square Feet)	Description	Year	Use	Tenant
105	5,700	One story block building	1954	Office	Vacant
106	32,064	One story brick building	Unknown	None	Vacant
601	10,500	One story concrete block with brick exterior walls	1991	Medical Office	Vacant
602	16,444	Two story concrete block	Unknown	Office/Storage	Vacant
605	15,866	One story tilt-up concrete with stucco exterior walls	1953	Office/Classroom	Metropolitan Community College; Vacant
606	4,450	One story tilt-up concrete with stucco exterior walls	1953	Office	Insko Industries
610	106,252	One story concrete block building	1953	Warehouse	R-G Development, LLC
611	22,000	One story block building	Unknown	Office	ISSCO
612	101,418	Four story concrete building	Unknown	Manufacturing	ISSCO
617	4,025	One story wood building	1960	Storage	Holiday Display Services, Inc.
619	8,124	One story concrete building with wood-framed roof	1950	Office/Warehouse	SigniaCo
620	4,020	One story steel building	1961	Warehouse/Storage	City Wide Snow Removal
801	5,425	One story wood building	1954	Office	Vacant
805	4,000	One story steel building	Unknown	Storage	Vacant
806	4,000	One story wood building	Unknown	Storage	Vacant
820	37,141	One story block hangar and one brick building	1991	Office/Manufacturing	DuraSeal
821	37,141	One story block hangar and one brick building	1991	Office/Manufacturing	DuraSeal
839	6,014	One story block building	Unknown	Storage	Vacant
900	1,2249	One story wood building	1954	Fire Station Facility	Vacant
901	5,742	One story wood building with seven levels of tower	1954	Office/Storage	Vacant
904	400	One story block building	Unknown	Storage	Vacant
918	50,000	One story wood/block double hangar	1957	Hangar	Vacant
925	3,454	One story wood building	1962	Storage	CapBros Motorsports
926	5,346	One story wood/brick building	1959	Office	Vacant
927	13,728	One story block building	1959	Office/Warehouse	American Catastrophe
930	14,695	One story block building	1961	Hangar/Warehouse	City Wide Snow Removal
936	960	One story steel building	Unknown	Storage	Vacant
937	640	One story block building	1954	Storage	Vacant
938	960	One story steel building	1976	Storage	Vacant

Richards–Gebaur Commerce Park Freight Study

Port KC

Kansas City, Missouri

Table 5 (continued) | Richards-Gebaur Building Inventory

Building	Size (Square Feet)	Description	Year	Use	Tenant
940	60,000	One story block/steel hangar	1955	Hangar	Gavilon
942	2,600	One story block building	Unknown	None	Vacant
948	7.00 acres	Three buildings demolished; Parcel with improvements	1963	Parking	Schneider
958	4,000	One story steel building	1963	Storage	PM Contracting, Inc.
965	19,020	One story steel hangar	1966	Hangar	PM Contracting, Inc.
966	22,339	One story steel hangar	1966	Hangar	INSCO Industries
971	1,500	One story block building	Unknown	Office	Vacant
Lot A	1.37 acres	Parking lot	Unknown	Storage	Jarden
Lot B	3.00 acres	Parking lot	Unknown	Storage	Jarden

Source: Port KC data and TranSystems

Table 6 | Buildings by Size¹

Size (Square Feet, SF)	Count	Percent
Under 1,000	4	11.4%
1,000 – 9,999	15	42.9%
10,000 – 24,999	9	25.7%
25,000 – 49,999	3	8.6%
50,000 – 74,999	2	5.7%
75,000 – 99,999	0	0.0%
100,000 or greater	2	5.7%

Source: Port KC and TranSystems

¹ Excludes parking lots for a total of 35 buildings

Table 7 | Buildings by Use¹

Size (Square Feet, SF)	Count	Percent
Storage	16	42.1%
Office	14	36.8%
Warehouse	5	13.2%
Hangar	5	13.2%
Manufacturing	3	7.9%
Other ²	2	5.3%
None ³	2	5.3%

Source: Port KC and TranSystems

¹ Includes parking lots for a total of 38 buildings; some buildings may have more than one use

² One building may be used as a classroom; one building may be used as a fire station facility

³ One building is a steam plant with no viable use; one building has contains mold and has no viable use

Table 8 | Buildings by Condition Assessment¹

Size (Square Feet, SF)	Count	Percent
Good (1)	5	14.3%
Fair (2)	17	48.6%
Poor (3)	12	35.3%

Source: Port KC and TranSystems

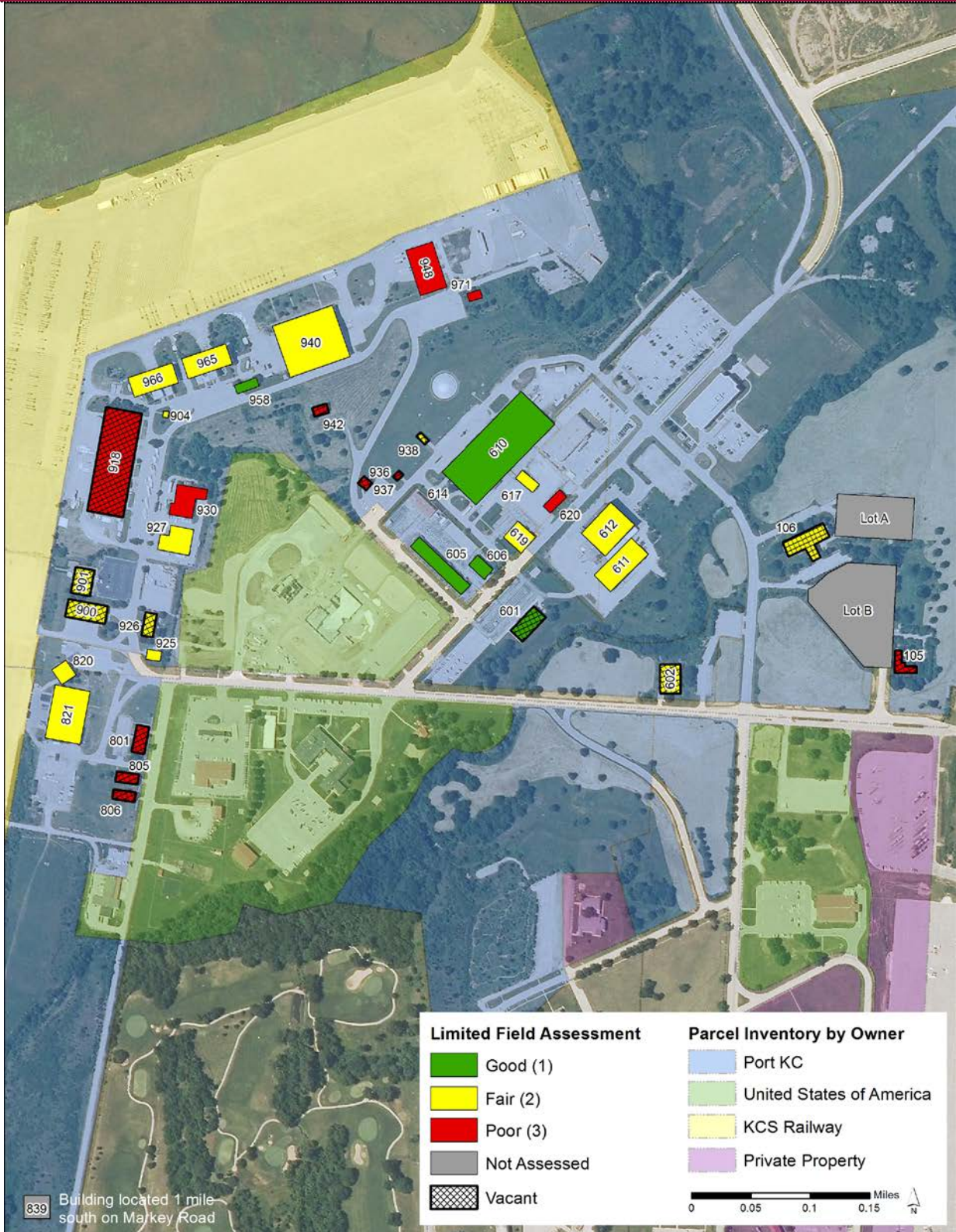
¹ Excludes parking lots for a total of 34 buildings; one building on Markey Road was unable to be accessed due to road closure

Richards–Gebaur Commerce Park Freight Study

Port KC

Kansas City, Missouri

Figure 40 | Map of Limited Facility Condition Assessment Results



Source: TranSystems

Nearby Developments

The National Nuclear Security Administration (NNSA) Kansas City Plant is located to the north of the Study Area with access to Missouri Route 150. The facility, managed by Honeywell as the National Security Campus, began relocating in 2012 to its current location from the Bannister Federal Complex. Established by the U.S. Congress in 2000, NNSA is a semi-autonomous agency within the U.S.

Department of Energy responsible for enhancing national security through the military application of nuclear science. The Kansas City Plant is specifically responsible for manufacturing and procuring nonnuclear components for weapons including electronic, mechanical, and engineered material components. The facility encompasses 1.5 million square feet of advanced manufacturing, office, and laboratory space for more than 2,500 employees. Organizations that have a relationship with the NNSA Kansas City Plant have previously leased space at the Richards-Gebaur Commerce Park to support their operations.

ADESA Kansas City is located southeast of the Study Area south of 155th Street. ADESA Kansas City's auctions provide registered dealers, brokers, automobile manufacturers, rental agencies, as well as corporate and government fleets with a complete vehicle marketing solution in the central United States. The site consists of ten sale lanes, a full service detail/mechanical/body shop, key service, and transportation services. ADESA has 22 national accounts including Chrysler, Enterprise, General Motors, Harley-Davidson, Honda, and Wells Fargo.

Section 5 | Intermodal Development Benchmarking

Intermodal facilities operating in the Kansas City area and around the U.S. provide insight on successful developments and business strategies, user types, and other characteristics. In addition to an overview of the CenterPoint Intermodal Center below, four operating intermodal projects were reviewed:

- ▶ Alliance Global Logistics Hub in Fort Worth, Texas
- ▶ CenterPoint Intermodal Center in Joliet, Illinois
- ▶ Rickenbacker Global Logistics Park in Columbus, Ohio
- ▶ Logistics Park Kansas City in Edgerton, Kansas

CenterPoint Intermodal Center-Kansas City | Kansas City, Missouri

CenterPoint Intermodal Center-Kansas City is a 940-acre master-planned industrial park in Kansas City, Missouri. The development is capable of handling up to five-million square feet of building space suited for distribution, light manufacturing, and warehousing. The developer, CenterPoint Properties, has the capability to offer buildings ranging from 100,000 to 1.5 million square feet. The development is located adjacent to the National Nuclear Security Administration and benefits from a designated enterprise and Foreign Trade Zone. The developer has invested \$300 million into the project.

CenterPoint Intermodal Center-Kansas City offers inland port transportation options via the 370-acre Kansas City Southern International Freight Gateway Intermodal Facility. The facility provides direct rail service from the Port of Lazaro Cardenas in Mexico - the largest cross-border gateway between Mexico and the United States - as well as transcontinental and NAFTA trade corridors.

In December 2013, CenterPoint Intermodal Center-Kansas City was awarded its first lease for a 300,000 square-foot building to house three tenants: USDA Animal and Plant Health Inspection Service, Really Good Stuff Inc., and Universal Forest Products Harrisonville. The building was completed in February 2015. CenterPoint also recently announced the commencement of operations of Neovia, a third-party logistics provider to one of the Nation's largest retailers at the Intermodal Center. As a result, currently four tenants have located in the park.

The 370-acre KCS IFG intermodal facility is located adjacent and directly west of CenterPoint Intermodal Center-Kansas City. The facility launched operations in 2008 after moving from its previous location in the Knoche Yard. The facility provides direct rail linkage via the KCS to the new Port of Lazaro Cardenas in Mexico — the largest cross-border gateway between Mexico and the United States. The facility handles container, trailer and automotive rail shipments. In 2014, a total of 52,809 intermodal lifts were completed. The facility has an annual lift capacity of 96,000 on its 8,000-foot working track.

Detailed information about the CenterPoint Intermodal Center-Kansas City and the KCS IFG is included in Table 9.

Alliance Global Logistics Hub | Fort Worth, Texas

AllianceTexas is an 18,000-acre master-planned, mixed-use community located in north Fort Worth, Texas. Anchored by the multimodal inland port, Alliance Global Logistics Hub, the development is home to more than 400 companies, over 40,000 employees, and offers integrated home options for any lifestyle. The developer, Hillwood—a Perot Company, manages over 60 properties covering 17.5 million square feet. Hillwood Construction Service also offers a building portfolio of office, industrial aviation, entertainment, and retail uses.

The Alliance Global Logistics Hub offers inland port transportation options via the BNSF Alliance Intermodal Facility, access to two Class I railroads (BNSF and Union Pacific), the industrial Fort Worth Alliance Airport, and the FedEx Southwest Regional Hub. The 9,600-acre Alliance Global Logistics Hub is comprised of a number of sectors. Alliance Gateway (2,400 acres) is developed for large-scale distribution, manufacturing, and industrial users. Alliance Center (2,600 acres) surrounds Fort Worth Alliance Airport and provides direct taxiway access. Westport at Alliance (3,500 acres) is suited for industrial and distribution facilities. Alliance Commercial Center (300 acres) is ideal for distribution, light manufacturing, high-tech, and aviation support firms. In addition, Alliance Crossing and Lone Star Crossing provide business services and retail options for Alliance-based companies. Foreign Trade Zone 196, the #1 general purpose zone in the U.S. three years in a row, is located within the development. Business activity is further enhanced by an enterprise zone, a world trade center, high-tech telecommunications facilities, and an inventory tax exemption.

AllianceTexas began operation as a public-private partnership between the Federal Aviation Administration (FAA), the City of Fort Worth, and Hillwood in 1989 with the groundbreaking of the Fort Worth Alliance Airport. In 1992, the BNSF Alliance Intermodal Facility began operation and the development welcomed its first industrial company with a 1.3 million square-foot distribution center in the Alliance Gateway phase. The first sectors to locate at AllianceTexas were transportation and distribution, followed by manufacturing in 1994. In 1994, the FedEx Southwest Region Sort Hub also began operation. Ten years after the initial groundbreaking, AllianceTexas had grown to 9,800 acres with 80 companies operating within 14.2 million square-feet. Twenty years after groundbreaking, the development included 17,000 acres with 200 companies operating within 29 million square-feet. By 2012, AllianceTexas was comprised of more than 280 companies operating within 32 million square-feet, over 30,000 employees, and thousands of single-family homes and apartments. The total private investment as of December 2013 is estimated to be \$7.6 billion with a total public investment of \$450 million.

Detailed information about the Alliance Global Logistics Hub and the BNSF Alliance Intermodal Facility is included in Table 9.

CenterPoint Intermodal Center | Joliet, IL

In operation since 2010, CenterPoint Intermodal Center (Joliet) is a master-planned development situated on 6,500 acres southwest of downtown Chicago in Joliet, Illinois. The development is capable of supporting building sizes up to 1.4 million square-feet. The developer, CenterPoint Properties, focuses on the development, acquisition, and transportation infrastructure that enhance business and government supply chain efficiency. CenterPoint Intermodal Center (Joliet) comprises of a variety of users from warehouse, distribution, and manufacturing facilities to container, trailer, and equipment management. The development is capable of supporting five-high container stacking and is located within Foreign Trade Zone #22.

CenterPoint Intermodal Center (Joliet) offers inland port transportation options via the BNSF Logistics Park – Chicago and the Union Pacific - Joliet Intermodal Terminal. The BNSF facility is one of the most active inland rail terminals with service to and from every major West Coast port and offers an on-site auto mixing facility. The UP facility serves as a critical hub for international and domestic intermodal rail shipments. The facility has a ten-lane automated gate system, the capacity to handle over 100 double-stack rail cars, and state-of-the-art security systems. In total, the UP invested \$367 million in the intermodal terminal. Both the BNSF and the UP facilities offer direct building carload service. Interline service for the NS and CSX is also readily available to every major East Coast port.

CenterPoint Intermodal Center (Joliet) is a public-private partnership that formed after the former Joliet Army Ammunition Plant ceased all operations in the early 1990s. In 1995, legislation enabled the property to be subdivided and transferred for public and private use. As a result, the Joliet Arsenal Development Authority was established to facilitate the creating quality job opportunities and foster economic development through redevelopment of the property. CenterPoint Properties began acquiring land in 1999 and initiated construction of the CenterPoint Intermodal Center (Joliet) in 2000. The BNSF Logistics Park - Chicago opened shortly after in 2002 with the Union Pacific - Joliet Intermodal Terminal opening in 2010. CenterPoint has invested an estimated \$3 billion into the CenterPoint Intermodal Center (Joliet) development. The Joliet Arsenal Development Authority continues its active involvement in transforming the former Army Ammunition Plant.

Detailed information about CenterPoint Intermodal Center (Joliet), the BNSF Logistics Park - Chicago, and the Union Pacific - Joliet Intermodal Terminal is included in Table 9.

Rickenbacker Global Logistics Park | Columbus, Ohio

Rickenbacker Global Logistics Park is a 1,576-acre master-planned logistics park in Columbus, Ohio. The development is capable of supporting 28 million square-feet of development to complement the existing 40 million square-feet of development in the area. The Rickenbacker International Airport offers two parallel, 12,000-foot runways suitable for any aircraft and all-weather landing capabilities. Rickenbacker Global Logistics Park is also supported by Foreign Trade Zone #138 and Rickenbacker Parkway, which is designed for containers loaded to maximum weight capacity. The developer, Duke Realty Corporation, specializes in the ownership, management, and development of office and industrial real estate.

Rickenbacker Global Logistics Park offers inland port transportation options via the 250-acre Norfolk Southern Intermodal Terminal. In conjunction with the Heartland Corridor Project, Norfolk Southern provides direct double-stack, next-day rail service to and from the Port of Virginia. The Heartland Corridor Project is a public-private partnership to expand rail capacity, improve service consistency, and reduce transit times. Rickenbacker Global Logistics Park is also serviced by CSX, which provides traditional rail service and transport of intermodal containers.

Rickenbacker Global Logistics Park was a public-private partnership that formed after the former Rickenbacker Air Force Base was repurposed as a freight facility with limited passenger activity in 1990. The Columbus Regional Airport Authority (CRAA) was the driving agency behind the relocation of the NS intermodal terminal, helping to generate interest to accelerate development of an integrated logistics center. Norfolk Southern began construction of the \$61 million intermodal terminal in 2006 and began operation in spring 2008. A total of \$112 million in funding was assembled from several sources for construction of the rail facility and access roads including \$33 million from Norfolk Southern, \$29 million in federal funding, \$14 million from the Columbus Regional Airport Authority, and funds from the state, City of Columbus, and other local districts. Public incentives include a 15-year, 100 percent real property tax abatement aimed at reducing overall cost of business.

Detailed information about Rickenbacker Global Logistics Park and Norfolk Southern Intermodal Terminal is included in Table 9.

Logistics Park Kansas City | Edgerton, Kansas

Logistics Park Kansas City is a 1,500-acre master-planned distribution and warehouse development located in Edgerton, Kansas. The development is capable of handling 17 million square feet of buildings, nearly three million of which will be direct-rail served. The developer, NorthPoint Development,

focuses on lowering total operational expenses for distribution centers and logistics-oriented companies. NorthPoint Development has the capability to offer Class A build-to-suit and speculative development for buildings ranging from 7,000 to 1.5 million square feet. Logistics Park Kansas City is also supported by a Foreign Trade Zone.

Logistics Park Kansas City offers inland port transportation options via the BNSF Kansas City Intermodal Facility. Other benefits of the intermodal facility include direct rail/carload service, surrounding support services, and transload services. Five all-electric wide-span cranes eliminate on-site emissions and reduce noise. The electric cranes also eliminate the use of standard diesel cranes for loading and unloading containers, reduce the number of yard hostlers, and decrease diesel locomotive use by reducing switching tracks. In addition to the five electric cranes that are currently used, three additional cranes will be added as demand increases. In total, BNSF invested nearly \$250 million in the intermodal facility and surrounding infrastructure.

The BNSF announced plans to build the new 443-acre intermodal facility in October 2010 and began construction in early 2011. The groundbreaking of Logistics Park Kansas City occurred shortly thereafter in spring 2011. In 2013, the BNSF Kansas City Intermodal Facility and the Logistics Park Kansas City began operation. Full build-out is expected to take ten to fifteen years. Partnership with the State of Kansas, Johnson County, and the City of Edgerton has created a policy environment that lowers development costs for Logistics Park Kansas City. The local zoning ordinance and master land permits are consistent with the unique attributes of the Logistics Park Kansas City to ensure quality development and protection from incompatible land uses. Average development time is 170 days from application to construction, and warehouse and distribution facilities are eligible for a 10-year, net-effective 50 percent property tax abatement. In addition, public sector planning has created a location with critical transportation assets such as construction of a Diverging Diamond Interchange at Interstate 35 and a heavy-haul corridor. About \$100 million in public infrastructure investment substantially lowered development costs at Logistics Park Kansas City.

Detailed information about Logistics Park Kansas City and the BNSF Kansas City Intermodal Facility is included in Table 9.

Success Factors of Intermodal Developments

Alliance Global Logistics Hub in Fort Worth, Texas

AllianceTexas began the trend toward synergistic development of business parks and intermodal terminals. The rail intermodal terminal was relocated from Dallas, Texas to Alliance and, therefore, had existing clientele. The developer, Hillwood, was highly interested in having an intermodal facility as an adjunct to the industrial park, actively markets the relationship, and has been an effective champion for the development.

CenterPoint Intermodal Center in Joliet, Illinois

While the primary objective of the redevelopment by the Joliet Arsenal Development Authority was to create economic benefits and job opportunities from the transformation of the property, the driving force for the logistics-based development was the developer, CenterPoint Properties. CenterPoint Properties led the effort to assemble land, overcome environmental issues, secure financing, and work with BNSF to develop its transportation facilities. Other key success factors are the development's location near the transportation hub of Chicago, a willing Class I railroad, adequate funding, and an understanding of the market opportunity. Even with these advantages, it took a decade of work from decommission to establishment of the inland port to open the CenterPoint Intermodal Center in 2002.

Table 9 | Intermodal Facilities

Location	Kansas City, MO	Fort Worth, TX	Joliet, IL		Columbus, OH	Edgerton, KS
Inland Port	CenterPoint Intermodal Center	Alliance Global Logistics Hub	CenterPoint Intermodal Center		Rickenbacker Global Logistics Park	Logistics Park Kansas City
Year ¹	2009	1992	2002		2008	2013
Area	940 acres	9,600 acres	6,500 acres		1,576 acres	1,500 acres
Existing Building Capacity	300,000 SF	25.6 million SF	18 million SF		N/A	3.2 million SF
Maximum Building Capacity	5 million SF	37 million SF	30 million SF		28 million SF	17 million SF
Intermodal Facility	KCS International Freight Gateway Intermodal Facility	BNSF Alliance Intermodal Facility	BNSF Logistics Park-Chicago	UP-Joliet Intermodal Terminal	Norfolk Southern Intermodal Terminal	BNSF Kansas City Intermodal Facility
Area	370 acres	735 acres	770 acres	835 acres	250 acres	443 acres
Existing Annual Lifts	52,000	600,000	800,000	500,000	300,000	500,000
Maximum Annual Unit/Lift Capacity	96,000	1.0 million	1.0 million	1.2 million	400,000	1.5 million
Tracks	1, 8,000 foot working track	N/A	4 tracks	4, 8,000-foot tracks	1, 12,000-foot support track	8, 8,000-foot tracks
Container Spaces	N/A	N/A	6,000	N/A	450	4,300
Parking Spaces	N/A	2,000	1,292	4,000	1,800	1,810

Source: Various and TranSystems

¹ Year facility began operation

Rickenbacker Global Logistics Park in Columbus, Ohio

The key to success in Columbus, Ohio has been the leadership exercised in both the public and private sector around shared economic development goals. The collaboration between Mid-Ohio Regional Planning Commission and the Greater Columbus Chamber of Commerce dates from the mid-1990s and has helped sustain a focus on regional freight planning issues. The biggest advantage is Rickenbacker’s location as a distribution center for both domestic and international air cargo. The city is also within a one-day truck drive of more than 50 percent of the population, employment, retail purchasing power, and manufacturing capacity of both the United States and Canada. Creating a Foreign Trade Zone in 1987 also contributed to the development’s success.

Logistics Park Kansas City in Edgerton, Kansas

Partnership with the State of Kansas, Johnson County, and the City of Edgerton has created a friendly policy environment for the development. Support from the public sector has provided access to pre-planned infrastructure, reduced development time, and other public incentives. The BNSF intermodal facility also uses state-of-the-art electric, wide-span cranes to increase efficiency and reduce emissions. Only in operation for about two years, full-build out of the development is expected to take ten to fifteen years.

Key Success Factors and Assessment of Study Area

Overall, the length of time required to resolve property acquisition, environmental, political, and financial issues requires patience and staying power to drive the project to conclusion. The success factors for the intermodal developments include:

- ▶ Marketplace access
- ▶ Interaction with the multimodal transportation network (road, rail, air)
- ▶ Committed public and private partners
- ▶ Access to pre-planned infrastructure
- ▶ Foreign Trade Zone status
- ▶ Build-to-suit flexibility and a range of available building sizes
- ▶ Efficient operation that increases driver productivity and reduces drayage rates
- ▶ Automated gate and security systems

An assessment of the Richards-Gebaur Commerce Park and CenterPoint Intermodal Center-Kansas City in comparison to the four case studies is provided below. Overall, compared to the case studies, CenterPoint Intermodal Center-Kansas City has experienced a relatively slow start-up and remained tenantless for the first four years. CenterPoint was also developed with the assumption that congestion at West Coast ports would prompt shippers to start importing freight via the KCS-served Port of Lazaro Cardenas, Mexico.

- ▶ *Marketplace access:* All sites are relatively suited for distribution, manufacturing, and industrial uses. However, the Alliance Texas development has expanded its focus to include a more mixed-use development with office, commercial, retail, and residential uses to create an entire community based around the logistics hub. All sites have good access to markets across the United States.
- ▶ *Interaction with the multimodal transportation network:* All sites are served by Class I railroads and have good access to the highway network. However, there is currently limited interaction between the KCS and tenants at Richards-Gebaur Commerce Park and CenterPoint. In contrast, developments at the other four case studies have strategic working relationships with the intermodal facilities. Existing capacity at the case study intermodal facilities range from 300,000 to 800,000 annual lifts while the KCS has significantly lower system-wide intermodal volume with about 50,000 annual lifts at the KCS IFG facility. Alliance Global Logistics Hub and Rickenbacker Global Logistics Park also have direct access to airports.
- ▶ *Committed public and private partners:* All sites, including CenterPoint Intermodal Center, are the result of public-private partnerships. While multiple partners are needed to implement a successful project, each case study typically had one lead “champion” committed to development and marketing of the project. CenterPoint Properties currently serves as the lead agency for development at CenterPoint Intermodal Center in Kansas City. However, the Port KC should consider the role they can play in development arrangements and be actively

involved in the process. It is also important to note that case study developments required patience and collaboration over a number of years to reach their present status.

- ▶ *Access to pre-planned infrastructure:* All sites are supported by some form of pre-planned infrastructure prioritized by local and state transportation investments. Richards-Gebaur Commerce Park and CenterPoint can take advantage of recent improvements, described previously in Section 4, that enhance access to Missouri Route 150 and Interstate 49. Improvements to 155th Street, which leads to another interchange with Interstate 49, are planned for 2016. However, there are currently no planned improvements further into the Richards-Gebaur Commerce Park past CenterPoint Phase I in the north and Kensington Road to the south.
- ▶ *Foreign Trade Zone status:* All sites have designated Foreign Trade Zone status.
- ▶ *Build-to-suit flexibility and a range of available building sizes:* Most buildings located at the case study sites range from 100,000 SF up to 1 million SF. In comparison, only two of the thirty-five buildings at Richards-Gebaur Commerce Park are over 100,000 SF. Similar to the study area, both CenterPoint Intermodal Center-Joliet and Rickenbacker Global Logistics Park in Columbus were also former armed forces bases and represent successful development transitions.
- ▶ *Efficient operation that increases driver productivity and reduces drayage rates:* As discussed with the interaction with multimodal transportation network, Richards-Gebaur Commerce Park and CenterPoint do not take advantage of their location near the KCS intermodal facility to reduce drayage. Richards Gebaur Commerce Park has the additional advantage of direct adjacency to the intermodal facility yet the existing buildings are not suited to the type of operations that would benefit from direct delivery.
- ▶ *Automated gate and security systems:* Automation is typically introduced in high volume operations where it is important to turn equipment quickly. The larger case study sites include automated entry/exit gates and higher technology yard cranes. Currently, neither Richards-Gebaur Commerce Park nor CenterPoint provide advanced gate or security systems.

Section 6 | Market and Site Development Strategies

The freight market analysis, facility and site assessment, and interview survey provided guidance on the types of opportunities available to the Study Area. Freight growth is projected for the Kansas City CSA over the next decade and faster growth is projected for the types of higher value commodities that generate demand for warehousing/distribution and manufacturing facilities. The intermodal rail sector is projected to grow, although currently intermodal volumes are concentrated on east/west corridors rather than on the north/south corridor that would favor the Study Area. Interview survey respondents generally offered a positive view of the Study Area in terms of logistical advantages; however, the current older buildings do present challenges. Some key findings for consideration in developing market and site development strategies are:

- ▶ The current commercial real estate development marketing strategy favors spec building projects, as prospective clients can move quickly to open and operate new facilities. Clients can more easily visualize how their operations might fit into existing structures, which a manufacturer suggested is a real advantage of spec building projects. Spec building projects are also thought to cycle more quickly through the land acquisition, building, and marketing/deal phases, which frees up capital much sooner than the build-to-suit approach.
- ▶ Rail facilities are an important feature of many supply chains. DCs that are in close proximity to rail hubs can make the most of cost savings and freight handling capabilities of the rail mode. The KCS IFG, located in the Study Area, is an attractive feature for shippers moving freight with KCS, including those involved in the north/south trade with Canada and Mexico. However, intermodal volume on these corridors is limited relative to the major east/west corridors and so this market segment could be relatively slow to develop. There appears to be adequate intermodal capacity at the KCS facility to accommodate intermodal volume growth for the foreseeable future.
- ▶ The automotive and household appliance sectors were mentioned as potential beneficiaries of freight handling at the Study Area. Marketing of the benefits of easy access to the north/south trade with Canada and Mexico made possible by the KCS rail network was strongly recommended. The north/south trade is expected to grow slowly, but should gradually add to the logistical advantage of the Study Area. Near term automotive prospects include Mexican built Honda imports to be handled at the KCS intermodal facility this year, with potential future Mexico import opportunities including Audi, Mazda, and BMW. Kansas City is viewed as being an ideal Midwest distribution hub for these vehicles imported from Mexico. The strong auto manufacturing history in the region also points to providing after-market modifications/manufacturing as a potential growth area.
- ▶ Kansas City's easy highway access on major national east/west and north/south highways is an important DC site selection consideration. Kansas City also has favorable truck rates to and from the West Coast as compared to other key regional hubs (for example, Columbus and Memphis).
- ▶ Kansas City is a good location for light manufacturing and product assemble. Connections to Canadian and Mexican markets via KCS are beneficial for shipment of components. Automotive and Household Appliances are potential sectors, particularly if Mexico components are used in manufacturing/assembly. Foreign Trade Zone status would be beneficial if foreign assembly or parts distribution is a requirement.

- ▶ Respondents noted the positive perception of the Kansas City labor force, citing high quality, and availability characteristics. DCs often need to “flex” labor upward to meet seasonal demand on short notice, and Kansas City was viewed as having a qualified labor force that is capable of meeting labor demand requirements.
- ▶ Parcel shipping companies are an important logistics partner, both to commercial real estate developers and logistics managers alike. Incorporating the network strengths of parcel shipping companies’ services into marketing efforts further enhances a site’s logistical advantage during site selection, or marketing efforts of a DC or manufacturing facility. The presence of the big three parcel carriers, UPS, FedEx and DHL is a strong logistical advantage for Kansas City.
- ▶ Kansas City is a good location for an E-Commerce Fulfillment Center (EFC) due to three-day nationwide truck delivery capabilities, as well as access to air-cargo services offered by UPS, FedEx, and DHL. The recent CenterPoint site selection by ReallyGoodStuff.com suggests that the general Study Area location is in a good position to take advantage of logistics services available in the area. Interviews suggest that recent EFC site selections tend to reinforce the viability of the site, elevating its visibility to other companies considering EFC site selections.
- ▶ An interviewee offered a strong recommendation to establish a coordination mechanism between Richards-Gebaur Commerce Park and CenterPoint Intermodal Center-Kansas City to leverage advantages that might emerge from a combined development. The concept is that the combined Richards-Gebaur Commerce Park/CenterPoint Intermodal Center-Kansas City site might be more attractive than the Richards-Gebaur Commerce Park site on its own.
- ▶ Existing buildings at Richards-Gebaur Commerce Park will need to be renovated eventually, regardless of future development plans. Tenants that might be attracted to existing Richards-Gebaur Commerce Park facilities will likely continue to be interested in finding low rent options.
- ▶ Many buildings at Richards-Gebaur Commerce Park have reached their serviceable life and renovation would not be cost-effective. Creating a Master Plan for the demolition of current structures that considers parcel size that meets modern development requirements would make the site more attractive and potential attract tenants willing to pay higher rents. Investigation into funding sources for demolition should consider brownfield grants for site remediation.

Opportunities Matrix and Site Selection Criteria

A summary of opportunities is provided in Table 10, drawn from the results of the freight market analysis, facility and site assessment, and interview survey. E-commerce, manufacturing, and warehousing opportunities are explained using key site selection criteria as identified in interviews.

Table 10 | Study Area Opportunities Matrix

Logistics Opportunity	Study Area Labor Force	Study Area Transportation Infrastructure	Study Area Proximity to Market
E-Commerce Fulfillment Center	Good reputation. Capable of flexing to meet seasonal demand. Study Area limited truck congestion can safely accommodate large workforce (1000 + employees)	Good highway and rail access in all directions. Local air cargo presence. Excellent parcel service delivery presence. Strongest parcel lanes identified in interviews are to the east.	Central location allows 3-day truck delivery to anywhere in U.S. Next-day accommodated by Air Service.
Distribution Center	Good reputation. Capable of flexing to meet seasonal demand.	Good highway and rail access in all directions. Rail favors north/south service. Kansas City has more favorable trucking rates to and from the West Coast vs competing regional hubs; an advantage for trade with Asia.	Ideal for Midwest distribution, favors deliveries within an area up to 400-500 mile radius, particularly in the south/southeast direction.
Manufacturing	Good reputation. Good technical ability due to automotive sector, and related manufacturing in the area.	Good highway and rail access in all directions. Rail favors north/south service. Kansas City has more favorable trucking rates to and from the U.S. West Coast vs competing regional hubs; an advantage for trade with Asia.	Central U.S. location. Access to Canadian and Mexican markets via KCS. Automotive and Household Appliances are potential sectors, particularly if Mexico components are used in manufacturing/assembly. Foreign Trade Zone would be beneficial if foreign assembly or parts distribution is a requirement.
Automotive Distribution (with after-market manufacturing)	Good reputation. Capable of flexing to meet seasonal demand. Study Area limited truck congestion can safely accommodate large workforce (1000 + employees)	Good highway and rail access in all directions. Local air cargo presence. Excellent parcel service delivery presence. Strongest parcel lanes identified in interviews are to the east. Ideal for Midwest distribution for autos manufactured in Mexico.	Central location allows 3-day truck delivery to anywhere in US. Next-day accommodated by Air

Source: GKSF and TranSystems

Development Ideas and Strategies

The freight market analysis, facility and site assessment, and interview survey raised several development concepts for the Richards-Gebaur Commerce Park. These are presented below:

- ▶ Leverage KCS International Freight Gateway and Transportation Access
- ▶ Coordinate Richards-Gebaur Commerce Park and CenterPoint Intermodal Center Sites
- ▶ Develop Current Richards-Gebaur Commerce Park Buildings
- ▶ Build-to-Suit or Spec Buildings?
- ▶ Sell or Develop? and Funding Options
- ▶ Financial Development Models (Lease, Own, Sell)
- ▶ Marketing Approaches

Leverage KCS International Freight Gateway and Transportation Access

The general site location is viewed as having long-term value, particularly its location next to the KCS IFG. Kansas City was considered to be in a good position to capitalize on the growing trade with Mexico, and specifically the automotive and household appliance sectors were mentioned as possible opportunities. As a trucker noted, “The KCS yard is the best reason to be there if you are dealing with Mexico, it’s a good place to be.”

A DC operator would save on trucking costs between the rail terminal and the DC. The automotive industry in particular was singled out as a sector that had been well promoted by Kansas City economic development organizations, and might be a good prospect for the Study Area given previous automotive operations at the KCS IFG. The Study Area’s distance from Kansas City east/west railway hubs, such as the BNSF and UP yards, was considered to be a slight constraint on full participation in handling goods moving to and from the West Coast, but it is reasonable to assume that the site might attract at least some of this traffic.

An interview respondent noted that operations with several hundred employees such as an EFC should avoid high truck traffic congestion locations, such as the BNSF and UP terminals in Kansas City, due to safety concerns. The Study Area may be attractive to these types of companies, given intermodal rail access without the high truck traffic that is a safety concern for their employees. The recent CenterPoint site selection by ReallyGoodStuff.com suggests that the general location of the Study Area is viewed as having good transportation access.

Coordinate Richards-Gebaur Commerce Park and CenterPoint Intermodal Center Sites

An interviewee offered a strong recommendation to establish a coordination mechanism between Richards-Gebaur Commerce Park and CenterPoint Intermodal Center, to leverage advantages that might emerge from a combined development. An agreement on the types and size of spec buildings for each site, or an updated master plan that reflects both developments’ access to highways, rail yards, utilities, over-weight corridors, etc., should be considered. For example, CenterPoint might not build DCs smaller than 100,000 square feet, which would allow Richards-Gebaur Commerce Park to market renovated existing buildings and, perhaps, build newer buildings to meet any demand for additional structures under 100,000 square feet. The concept is that the combined Richards-Gebaur Commerce Park/CenterPoint Intermodal Center might be more attractive than the Richards-Gebaur Commerce Park on its own.

The KCS IFG was viewed as a strong asset for both sites. An intermodal rail hub in close proximity to a DC or factory reduces truck drayage costs and is a competitive site advantage. Joint marketing of the benefits of easy access to the north/south trade with Canada and Mexico made possible by the KCS rail network was strongly recommended. Specific industries mentioned were the automotive and household

appliance sectors, as component part manufactured in Mexico might possibly be assembled, or distributed from a facility in the Study Area.

Develop Current Richards-Gebaur Commerce Park Buildings

Existing buildings at Richards-Gebaur Commerce Park will need to be renovated eventually, regardless of future development plans. Tenants that might be attracted to existing Richards-Gebaur Commerce Park facilities will likely continue to be interested in finding low rent options. It is conceivable that manufacturing clusters could form based on developments at the CenterPoint Intermodal Center. Small suppliers tied to larger manufactures at CenterPoint might be interested in the smaller Richards-Gebaur Commerce Park buildings if they are renovated. A respondent with experience in building renovation noted that renovations, such as utilities, heating and air conditioning requirements, and plumbing upgrades will probably depend on the requirements of the tenant. High power requirements of some manufacturing, for example, will require a more extensive renovation. The shape of the buildings (for example, narrow rectangular versus square shaped) will also be a consideration of perspective tenants, as production line procedures or easy access to DC items is a key consideration.

Another option for the Richards-Gebaur Commerce Park mentioned by respondents is a mixed “brownfield” approach, where buildings are either fully renovated to meet modern DC or factory specifications, or demolished and replaced with modern buildings. The Richards-Gebaur Commerce Park has a unique advantage in that the buildings on Hangar Road have direct adjacency to the KCS IFG. Possibilities exist for direct delivery from the intermodal trains to a modern facility built in these locations that would reduce drayage cost for the shipper. “Back or Private” gate service avoiding public road infrastructure is not available at many intermodal facilities but is a new trend that some shippers and rail carriers are implementing where this type of access is available, such as the land near Hangar Road.

Build-to-Suit or Spec Buildings?

Commercial real estate developers employ one of two basic strategies with respect to how to market new developments: build-to-suit or spec buildings. A build-to-suit developer markets an empty plot of land based on location and cost characteristics alone. A client, once found, provides building specifications that the developer then uses to construct the building. Speculative developers procure a site and immediately build facilities to general industry specifications without a specific tenant in mind. Finished buildings are placed on the commercial real estate market.

One respondent suggested that the current commercial real-estate development marketing strategy favors spec building projects, as prospective clients can move quickly to open and operate new facilities. Clients can more easily visualize how their operations might fit into existing structures, which a manufacturer suggested is a real advantage of spec projects. As a commercial developer said, “Marketing spec buildings is faster, easier, and less risky - it took us six years marketing a greenfield site, it took us six months to market our spec buildings.” A different developer suggested that greenfield sites exist “from Cleveland to Memphis, so you have to have a building.” Spec building projects are also thought to cycle more quickly through the land acquisition, building, and marketing/deal phases, which frees up capital much sooner than the build to suit approach.

Sell or Develop? and Funding Options

The question of whether to sell or to develop depends on the Port KC’s willingness to manage the development of the Richards-Gebaur Commerce Park. The site itself has value over the long-term, and is well positioned to take advantage of the growing trade with Mexico, which could potentially include automotive and other manufacturing opportunities. The site will most likely handle at least a portion of

domestic east/west cargo opportunities, even though sites closer to the UP and BNSF rail facilities are in better position to handle this cargo. Kansas City is a good choice for an E-Commerce Fulfillment Center, given its central location in the U.S., available and qualified labor supply, and the existence of strong parcel delivery services. Kansas City is also a good distribution site for Midwest distribution within a 300 – 400 mile radius of the city. Recent announcements of an EFC at the CenterPoint Intermodal Center re-enforce the area’s value. The project team recommends Port KC retain ownership of the land, but it should consider various own/lease site development arrangements that are compatible with the Port KC’s charter.

Two respondents suggest that the unknown renovation costs, including environmental and infrastructure upgrade expenses, could be prohibitive and should be well understood before any development decision is made.

Assuming Port KC moves forward with some form of development, then various funding approaches should be considered that are consistent with Port KC’s charter and bonding capabilities. Port KC has experience in structuring funding for large projects on land controlled by Port KC. A recent example, is the conduit financing proposed for infrastructure development and improvements to the Board of Trade Site at 4800 Main Street, Kansas City. Funding options for development of the Study Area include:

- ▶ Offering the site to a developer under a lease agreement,
- ▶ Offering bonds to raise funds necessary to renovate, and further develop the land,
- ▶ Funding conduits and tax inducements (in collaboration with a developer),
- ▶ Gradually leveraging lease revenues as development proceeds, or
- ▶ Some combination thereof.

Marketing Approaches

A summary of selected marketing approaches is provided in Table I I based on findings from the interview survey.

Table I I Selected Marketing Approaches from Interview Survey	
Coordinated Development with CenterPoint	Coordinate the types of development at each site, for example large buildings at CenterPoint, smaller buildings at RGCP. Update the Master Plan for all phases of the entire site to understand better any changes or new opportunities that have developed since the initial agreements were in place.
Market Strong Trade Lanes	Partner with KCS Railroad, parcel shipping companies to identify strongest routes, competitive lanes to highlight with prospective site tenants.
CNG Station	Providing a fuel savings edge could be attractive for truckers and shippers alike. Further research into CNG facilities and truck operators is recommended for the site. Sustained CNG prices that are cheaper than diesel prices would provide a unique cost savings advantage.
Source: GKSF	

Appendix A. Literature Review

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Synthesis of Existing Studies

Port KC manages nearly 500,000 square feet of leased office and industrial space in the Richards-Gebaur Commerce Park. The site is located in southern Kansas City, Missouri adjacent to Interstate 49. The site is adjacent to the CenterPoint Intermodal Center/Kansas City Southern Railway (KCS) International Freight Gateway (IFG), a rail-truck intermodal facility. While this area is the focus of the study, a broader review of trends and data is often necessary to understand the context of the information and its relationship to the Richards-Gebaur site. As a result, a series of federal, statewide, regional, and local documents were reviewed to inform the consultant team on existing policies, development efforts, and freight flows that may impact the site. The following pages summarize the documents that were examined during the information gathering efforts with key highlights identified below.

State Reports: The statewide rail and freight plans for both Missouri and Kansas were reviewed. The plans set the overall foundation and framework for making transportation investment decisions in their respective states. The Missouri documents particularly support intermodal connections between freight railroads and ports. The Kansas document also recognizes the impact the Richards-Gebaur site and adjacent CenterPoint Intermodal Center/KCS IFG may have on Kansas transportation infrastructure.

Regional Reports: Four regional reports provide greater insight to freight activities in the Kansas City region, and more specifically, the Richards-Gebaur site. A few of the documents emphasize the BNSF Intermodal Facility in Edgerton, Kansas and the impact the site will have on land use changes and transportation improvements. The documents also acknowledge the CenterPoint-KCS Intermodal Center and the impact the site may have on rail and truck traffic and related warehouse development that affects the transportation system in the bi-state region. The Regional Freight Outlook, prepared by TranSystems for the Mid-America Regional Council and SmartPort, also describes characteristics and assets of the CenterPoint/KCS IFG that may impact the Richards-Gebaur site.

Freight Evaluations: TranSystems previously completed freight evaluations for the Kansas City Southern Railway, the Centerpoint Intermodal Center/KCS IFG, and Kansas City SmartPort. The evaluations typically include a freight flow analysis and highlight competitive attributes the entity can leverage to support their goals. The studies utilized a methodology similar to the process that is being used to analyze the Richards-Gebaur site.

Federal Guidebooks and Related Research: Two federal organizations share research and guidance for freight-related activities—the National Cooperative Freight Research Program and the National Cooperative Highway Research Program. The resources provide guidance for policymaking that could inform decisions for the Richards-Gebaur site, such as how policy can influence the location selection process. Key criteria for location site selection include the ability to access key markets, interaction with the transportation network, modal choice, labor and workforce, and total cost environment.

The review of existing studies provides a foundation for the analysis of the Richards-Gebaur site.

State Reports

Missouri State Freight Plan

Missouri Department of Transportation, 2014

Missouri is a “connector” state with the majority of freight moving across the state’s transportation networks as truck- and rail-based pass-through traffic. Approximately half of Missouri’s economy is substantially affected by freight, either by being directly involved in the movement of freight or by being a user of freight services.

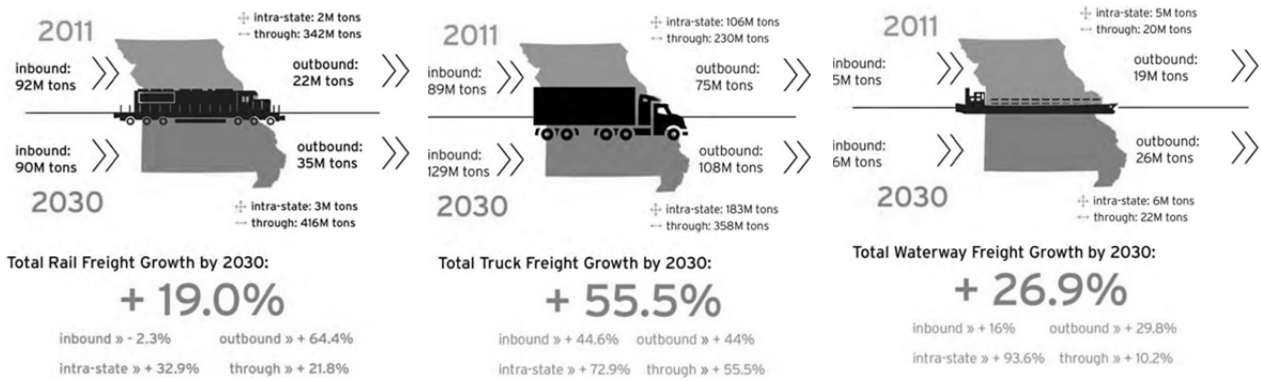
The plan’s recommendations include:

1. Maintain and improve the designated Missouri Freight Network to ensure the system continues to move forward toward achieving transportation goals identified in the Missouri Long Range Transportation Plan and the Missouri State Freight Plan.
2. Use MoDOT’s freight prioritization framework to help decision-makers prioritize future investments on the freight network.
3. Expand collaboration with the Missouri Department of Economic Development and other partners to address specific freight transportation needs of targeted individuals.
4. Develop supportive freight and land use guidance to facilitate the creation of freight supportive policies to ensure practical considerations are incorporated into local planning and design efforts.
5. Increase public awareness about freight.
6. Continue engaging statewide economic development partners.
7. Host an annual Freight and Economic Development roundtable to enhance the exchange of information and communicate about issues and opportunities.
8. Consider developing a rail public-private partnership program to improve rail infrastructure, rail terminals, and rail-to-truck intermodal facilities.
9. Identify and preserve critical multimodal freight-intensive development nodes and industrial land assets.
10. Partner with other agencies involved in the certified site program.

The Kansas City area has 48 intermodal facilities. Statewide, the majority of the intermodal facilities (73 percent) accommodate rail-truck commodity transfers followed by modal transfers at water ports (13 percent) and airports (9 percent). In 2011, port movements were 4.9 percent of freight movement by tonnage and 1.0 percent of freight movement by value, a small proportion relative to the dominant truck and rail modes. According to stakeholder outreach, there is a need to investigate ways to better use Missouri’s waterways, including taking advantage of Panama Canal expansion opportunities, through increased dredging, and updating locks and dams on the Mississippi River. In the Kansas City area, stakeholders identified waterway and port infrastructure and capacity improvements as a high priority. Designated marine highways, including the Missouri River from Kansas City to St. Louis, receive preferential treatment for federal assistance from the U.S. Maritime Administration (MARAD).

Based on the 2030 forecast, truck freight growth is expected to increase 55 percent, rail freight growth by 19 percent, waterway freight growth by 27 percent, and air freight growth by 90 percent. The figures below provide more detail about the forecasted projected freight flow in Missouri.

Analysis and Relevance to Study: As the statewide freight plan, the document sets the overall foundation and framework for making freight-related transportation investment decisions in Missouri. MoDOT’s freight project prioritization framework is the most important outcome of the planning process and provides a methodology to identify and fund projects. The final candidate list identifies 122 projects (76 highway, 28 port, 15 freight rail, and 3 aviation projects).



Missouri State Rail Plan

Missouri Department of Transportation, 2012

The State Rail Plan serves as the strategic framework for developing freight and passenger rail service in Missouri for the next twenty years. Kansas City and St. Louis are the second and third largest rail hubs, respectively, in the nation. More than two-thirds of the rail freight traffic in Missouri is pass-through traffic. Missouri ranks tenth in the United States in railroad miles and fourth in total tonnage of rail traffic originating, terminating, or passing through the state. The primary commodities originating in Missouri are food products, farm products, intermodal, chemicals, and motor vehicles and parts. Coal is the primary commodity terminating in Missouri. Over the next two decades, rail freight shipped through the state is projected to increase 40 percent and rail freight shipped out of the state is expected to grow 47 percent. The tables below describe the forecasted rail traffic by commodity.

The projects, priorities, and strategies regarding freight service that are recommended for implementation are as follows:

- ▶ **Promote the Efficient Movement of Freight:** This twenty year program will provide new freight programs to support economic development (expand the State Transportation Assistance revolving loan fund, develop a State Freight Rail Economic Development Grant Program, expand the Port Capital Improvement Program, and develop a Rail Asset Management Program)
- ▶ **Encourage Intermodal Connectivity:** The freight rail programs will support improved intermodal connections between freight railroads and ports.
- ▶ **Enhance State and Local Economic Development:** The new freight rail programs will support communities in improving rail access for industrial and commercial developments and provide rail infrastructure improvements to support specific economic development projects.
- ▶ **Promote an Environmental and Socially Responsible Rail Transportation Development:** The improvements supported by this program will allow for the more efficient movement of freight on the state’s rail lines.
- ▶ **Promote Safe and Secure Railroad Operations:** The program will continue the MoDOT program that funds upgrades to the highway-rail crossing warning devices.

The Kansas City Southern Railway (KCS) is one of six Class I railroads operating in the Kansas City region (CSX Transportation has trackage rights only).

Analysis and Relevance to Study: As the statewide rail plan, the document sets the overall foundation and framework for making rail-related transportation investment decisions in Missouri. The plan seeks to establish new programs to support freight service, particularly intermodal connections between freight railroads and ports.

Table 7: Imports to Missouri by Commodity Group (2011-2031) - Domestic and International Combined

Top Increasing/ Declining Flows	Commodity	Net Change in Tonnage	Compound Annual Growth Rate
Five Most Increasing Commodity Flows 2011-2031	Fabricated Metal Products	39,172	10.7%
	Miscellaneous Freight Shipments	192,267	10.1%
	Hazardous Materials	1,633,298	5.1%
	Electrical Machinery, Equipment, or Supplies	12,444	4.3%
	Containers, Carriers or Devices, Shipping, Returned Empty	33,637	4.1%
Five Most Decreasing Commodity Flows 2011-2031	Leather or Leather Products	(15)	-3.6%
	Apparel or Other Finished Textile Products	(983)	-1.9%
	Furniture or Fixtures	(276)	-1.2%
	Printed Matter	(143)	-0.9%
	Lumber or Wood Products, excluding Furniture	(100,811)	-0.6%
Other Flows	<i>All Other Commodities</i>	24,519,548	1.6%
Total Forecast Change	All Commodities	26,328,139	1.7%

Source: 2006 and 2009 STB Waybill (Extrapolated Based on IMPLAN and Moody's Forecast)

Table 8: Exports from Missouri by Commodity Group (2011-2031) - Domestic and International Combined

Top Increasing / Declining Flows	Commodity	Net Change in Tonnage	Compound Annual Growth Rate
Five Most Increasing Commodity Flows 2011-2031	Electrical Machinery, Equipment or Supplies	23,550	4.9%
	Containers, Carriers or Devices, Shipping, Returned Empty	29,969	3.8%
	Chemicals or Allied Products	538,892	3.8%
	Fabricated Metal Products	16,214	3.6%
	Transportation Equipment	3,348,605	3.6%
Five Most Decreasing Commodity Flows 2011-2031	Textile Mill Products	(13,094)	-2.6%
	Apparel or Other Finished Textile Products	(3,597)	-2.4%
	Furniture or Fixtures	(416)	-1.7%
	Lumber or Wood Products, excluding Furniture	(29,052)	-0.6%
	Pulp, Paper or Allied Products	(2,498)	-0.4%
Other Flows	<i>All Other Commodities</i>	4,676,485	1.4%
Total Forecast Change	All Commodities	8,585,060	1.9%

Source: 2006 and 2009 Waybill and EDR estimates extrapolated using IMPLAN data and Moody's forecasts

Kansas Statewide Freight Study

Kansas Department of Transportation, 2009

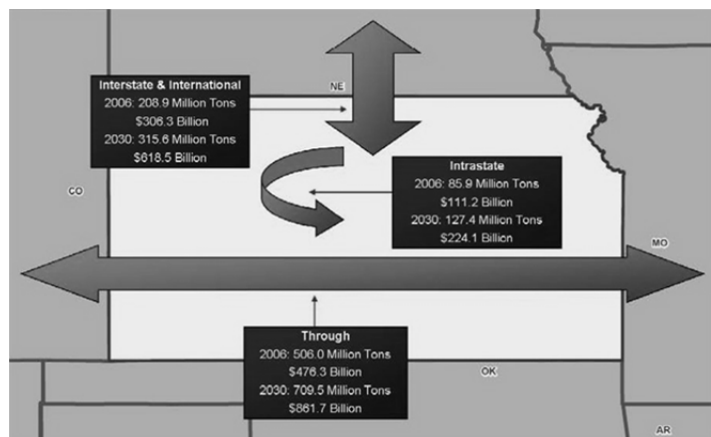
Major trade corridors in Kansas include Interstates 35 and 70, the Kansas Turnpike, the BNSF Trans-Continental line, and the Union Pacific mainline. A series of public and private ports on the Missouri River also connect Kansas with the inland waterway system via the Mississippi River in St. Louis. The study outlines the following recommendations:

- ▶ Integrate freight, mobility, and economic development goals and strategies
- ▶ Identify and designate key freight corridors and facilities of statewide or regional significance
- ▶ Address critical bottlenecks and link improvements strategies to economic benefits
- ▶ Develop freight performance measures that link to existing planning activities
- ▶ Enhance rail planning efforts
- ▶ Maintain good communications with the private sector freight community
- ▶ Address oversize/overweight policies and streamline the permitting process

Current (2006) and 2030 forecast values of Kansas freight flows by type of movement are illustrated in the figure below. Although the overall percentage of through movements is expected to decline slightly from 54 percent to 51 percent, the movements will still dominate overall movement in the state. Interstate movements are expected to grow significantly, making up 36 percent of total movements by 2030. The commodity mix is expected remain roughly the same through 2030.

The study specifically describes two intermodal terminals in and near Johnson County, Kansas. The BNSF Intermodal Terminal and Logistics Park Kansas City (in Edgerton, KS) has sparked a development boom in Johnson County and will likely continue to attract additional development. The facility is expected to handle about 400,000 20-foot equivalent units (TEU) annually and is expandable to one million TEUs. Most of this traffic will be east-west in nature, much of it originating at West Coast seaports and bound for consumer markets in the Eastern United States. In addition, the CenterPoint-KCS Intermodal Center, in Kansas City, Missouri, handles NAFTA-related traffic with a direct rail link to the Port of Lazaro Cardenas in Mexico and is situated to take advantage of growth along this trade corridor.

Analysis and Relevance to Study: As the statewide freight plan, the document sets the overall foundation and framework for making freight-related transportation investment decisions in Kansas. Although located in Missouri, the plan specifically mentions the CenterPoint-KCS Intermodal Center and its direct connection to the Port of Lazaro Cardenas in Mexico via the Kansas City Southern Railway. This freight gateway potentially offers an alternative port to bypass the congested Pacific West Coast ports and offer direct access to the logistics capability of the Kansas City region.



Kansas Statewide Rail Plan

Kansas Department of Transportation, 2011

Kansas is served by a comprehensive rail network comprising of over 4,700 miles of track. Most of the Class I rail traffic is through traffic progressing from the west coast to the Midwest or from coal fields in Wyoming to the south and southeast. Grain is the major commodity originating in Kansas and coal is the major commodity destined to Kansas, by tonnage. About 56 percent of the total rail tonnage in Kansas is coal. In 2008, the major commodities originating in Kansas included farm products (52 percent), food products (12 percent), and chemicals (11 percent). In 2008, the major commodities terminating in Kansas included coal (52 percent) and intermodal shipments (10 percent). Chapter 5 provides a detailed description of the Kansas Rail Traffic Profile. The tables below describe the forecasted rail traffic by traffic type and by commodity.

KCS operates 18 of its 3,226 miles of track in southeastern Kansas along the Missouri-Kansas border. The line is single-track and handles approximately 25 trains per day. The major yard in the system is in Kansas City, Missouri, processing an average of 1,923 cars per day. The primary rail freight traffic on this line is:

- ▶ Coal trains received at interchange from the Union Pacific Railroad (UP) and the BNSF Railway (BNSF) en route to utilities in Missouri, Arkansas, Oklahoma, Texas, and Louisiana
- ▶ Grain trains received at interchange from the Dakota, Minnesota and Eastern Railroad (DM&E) en route to animal feeders in Arkansas, Texas, and Oklahoma
- ▶ General carload freight, mostly forest products and chemicals originating in Mississippi and Louisiana

Analysis and Relevance to Study: As the statewide rail plan, the document sets the overall foundation and framework for making rail-related transportation investment decisions in Kansas. The plan briefly mentions the CenterPoint-KCS Intermodal Center, which is used by Kansas City Southern for the carrier's own service as well as part of a marketing agreement between Kansas City Southern and CSX Transportation.

Table 31: Forecasted Rail Traffic for Kansas by Traffic Type

Traffic Type	2007 Tonnage (millions)	2030 Tonnage (millions)	Change (%)	CAGR (%)
Interstate Inbound	29	35	20.60%	0.80%
Interstate Outbound	21	30	44.50%	1.60%
Intrastate	1	2	25.60%	1.00%
Overhead	293	404	37.50%	1.40%
Total=	345	470	36.50%	1.40%

Source: Prepared by Wilbur Smith Associates, based on STB Waybill Sample data and adjusted IHS Global Insight forecasts

Table 32: Forecasted Rail Traffic by Commodity

Commodity	2007 Tons	2007 Share	2030 Tons	2030 Share	CAGR (2007-2030)
Coal	192,683,655	55.9%	257,243,760	54.7%	1.3%
Farm products	38,042,129	11.0%	50,178,894	10.7%	1.2%
Food and kindred products	28,582,309	8.3%	33,535,770	7.1%	0.7%
Intermodal	27,261,168	7.9%	56,644,084	12.0%	3.2%
Flammable liquids	11,619,387	3.4%	16,416,025	3.5%	1.5%
Chemicals or allied products	11,297,371	3.3%	11,850,378	2.5%	0.2%
Transportation equipment	7,405,786	2.1%	9,874,296	2.1%	1.3%
Primary metal products	4,892,776	1.4%	6,349,709	1.4%	1.1%
Clay, concrete, glass, or stone products	4,044,630	1.2%	6,050,997	1.3%	1.8%
Nonmetallic ores, minerals, excluding fuels	3,988,374	1.2%	6,833,387	1.5%	2.4%
Lumber or wood products, excluding furniture	3,354,440	1.0%	3,264,107	0.7%	-0.1%
Pulp, paper, or allied products	2,952,260	0.9%	3,266,204	0.7%	0.4%
Petroleum or coal products	2,336,722	0.7%	2,864,313	0.6%	0.9%
Waste or scrap materials not identified by producing industry	2,288,104	0.7%	3,422,851	0.7%	1.8%
Other	3,768,158	1.1%	2,409,205	0.5%	2.0%
Total=	344,517,268	100.0%	470,203,980	100.0%	1.4%

Source: Prepared by Wilbur Smith Associates, based on STB Waybill Sample, adjusted IHS Global Insight forecasts

Regional Reports

5-County Regional Transportation Study

Kansas Department of Transportation, 2013

The study assesses changing needs in Douglas, Johnson, Leavenworth, Miami, and Wyandotte Counties in northeast Kansas. Phase I of the study identified significant developments underway or planned in the area to determine their impacts to the transportation system. The five-county area is recognized as a vital national freight hub and is one of the nation's top five trucking centers. Roadway improvements related to freight mobility are closely related to the performance of the overall highway system.

Recommendations to improve the movement of goods and sustain the region as a national freight hub are as follows:

- ▶ Address freight bottlenecks (includes conflicts between rail and vehicular traffic, low railroad overpasses that impeded truck traffic, inefficient rail spurs that need additional pull-off areas, and rails spurs at location that back up rail traffic and impeded vehicular traffic at crossings)
- ▶ Consider designated truck routes and routing trucks on a regional basis
- ▶ Investigate truck only lanes
- ▶ Continue to invest in Intelligent Transportation System (ITS) to improve the movement of freight and improve communication and information sharing for freight (truck/rail)
- ▶ Support advancing the SmartPort Customs Clearance Facilities
- ▶ Address the lack of truck parking facilities with air quality mitigation and adequate staging/parking area
- ▶ Further develop data and forecasting tools related to freight planning and analysis (includes freight counts, truck origin-destination data, truck movement data)

Phase 2 provides further analysis of key corridors and developed a transportation toolbox of strategies that emphasizes the movement of people and freight rather than vehicles. While truck volumes are growing throughout the region, the development of the BNSF intermodal facility north of I-35 in Edgerton is anticipated to be a major destination and generator of regional freight rail and truck traffic. The intermodal site alone is expected to generate 7,000 truck trips per day when full development with 85 percent of the trucks traveling northeast on I-35. Traffic studies completed for this development have forecasted combined intermodal and logistics activity to generate about 17,000 trips per day when fully development. A summary of the project and program recommendations is provided in the Executive Summary. Suggested improvements include:

- ▶ Widen 199th Street from a 2-lane to a 4-lane arterial street from US-56 to I-49/US-71
- ▶ Widen 175th Street from a 2-lane to a 4-lane arterial street from I-35 to I-49/US-71
- ▶ Widen US-69 to six lanes from 199th Street to 167th Street, includes interchange at 159th Street
- ▶ Active lane use control including “hard shoulder running” and potential HOT or HOV lane on I-435 E-W during peak hours from K10 to KS/MO state lane
- ▶ Potential outer loop connecting I-49 to I-35 to I-70 to K-92 in Leavenworth, Kansas

Commodity movement in Kansas is dominated by coal, which is 48 percent of the total freight movement by weight. Agriculture is next (11 percent), followed by nonmetallic minerals (eight percent), and food products (6 percent). The primary coal movement is from coal fields in Wyoming to power plants in the eastern United States. About 54 percent of the freight in the five-county region is passing through without any destinations in the area, and 65 percent of the freight weight is carried by trucks.

The BNSF and Union Pacific have rail facilities in both Kansas and Missouri. In Kansas, both railroads have rail yards in the vicinity of the intersection of I-70 and I-635. BNSF's Argentine rail yard is located south of the Kansas River and Union Pacific's Armourdale rail yard is north of the Kansas River. BNSF's

intermodal activities are located at the Argentine rail yard. Union Pacific's intermodal activities are located in Missouri at the Neff Rail Yards. A new 440-acre BNSF Kansas City Intermodal Facility (KCIMF) is being developed 30 miles southwest of Kansas City at Edgerton, KS in southwest Johnson County, near I-35 and US 56. Construction of the facility began in late 2011. The facility is expected to open in 2013. The Allen Group also plans to develop 560 adjacent acres for a separate Logistics Park that would accommodate approximately 7.1 million square feet of warehousing and supporting activities upon full build out. Zoning approval requests began in mid-2010. It has been estimated that the KCIMF and Logistics Park will create 8,000 jobs for the area.

On the Missouri side of the Kansas City area, both the Norfolk Southern (NS) and Kansas City Southern (KCS) Railroads have intermodal terminals. The NS has its main rail facility along M-210, east of I-435 in Missouri. The CenterPoint-KCS Intermodal Center (KCSI), which opened in March 2008, is located in Kansas City, MO on I-49/M-150. KCSI is used by KCS for the carriers' own service, as well as part of a KCS/CSX marketing agreement. KCSI provides direct rail linkage via the KCS to the new Port of Lazaro Cardenas in Mexico.

Analysis and Relevance to Study: The document assesses the changing transportation needs, significant planned developments and their impact on the system, and analysis of key corridors in northeast Kansas. The plan recognizes the regional as a vital freight hub and suggests improvements and tools to improve freight mobility. Emphasis is placed on the BNSF intermodal facility in Edgerton. While the CenterPoint Intermodal Facility is outside the five-county scope of this document, the plan acknowledges the impact rail and truck traffic from the facility and related warehouse development may have on the larger transportation system in the bi-state region. Combined, activity associated with the two intermodal facilities is expected to shape transportation improvements along I75th Street and I99th Street. The consultant is aware that facility names and developers may have changed since the completion of this study.

Kansas City Regional Freight Outlook (KCRFO)

Mid-America Regional Council and Kansas City SmartPort, 2009

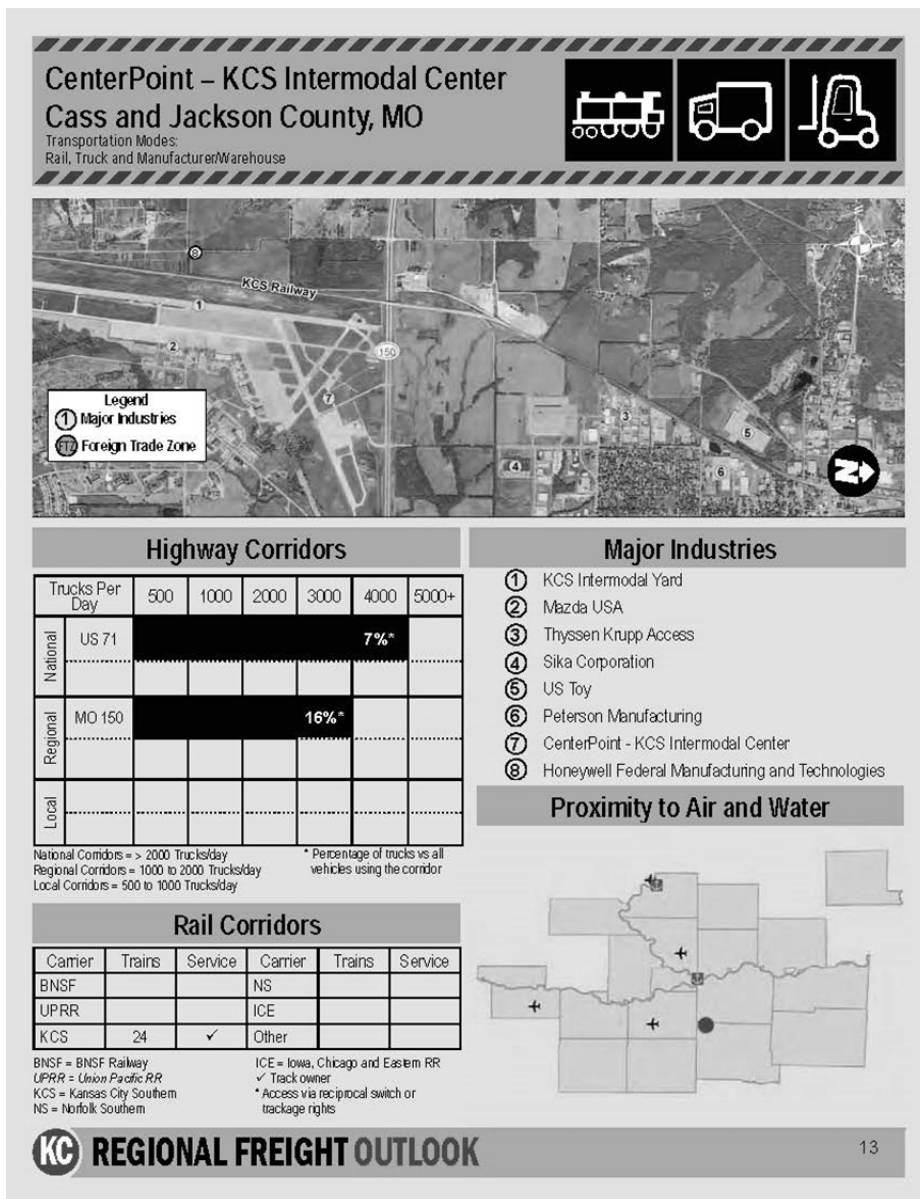
The overall vision for the Kansas City Region Freight Outlook (RFO) is to positively impact and accommodate the growth of freight transportation and logistics in the 18-county study area. The study provides a regional freight strategic plan that would allow the region to remain a vital national freight transportation hub and support expansion to the region's freight transportation economic well-being. The study provides a framework for coordination between public and private stakeholders, identified and prioritized regional initiatives, and developed capital and marketing strategies to maintain Kansas City as a national freight leader.

The Freight Directory, an inventory of the Kansas City region's forty freight zones, includes the CenterPoint – KCS Intermodal Center. The Freight Flow Analysis, with an emphasis on truck and rail freight flows, provides a forecast of regional flows. Profiles of freight flow are presented by mode, commodity type, and origin/destination. Total regional rail and truck freight is projected to increase from 246 million short tons in 2007 to 349 million short tons in 2027, a 20-year compound annual growth rate of 1.8 percent. The fastest growing freight flows over the 20-year period will be cross-border trades with Mexico and Canada, however domestic freight flows will remain dominant when measured by tonnage.

The Executive Summary that accompanies the report provides an overview of the regional freight infrastructure, freight activity in the region, and key findings and recommendations. Recommendations include:

- ▶ Focus on transportation-related projects to identify and highlight freight-related benefits
- ▶ Expand the use of existing technologies and tools to monitor freight specific data
- ▶ Recognize the corridors of freight significant and conduct regional assessments
- ▶ Focus on the attraction and retention of transportation and logistics businesses
- ▶ Innovate marketing efforts by emphasizing the competitive advantage of the region

Analysis and Relevance to Study: The Regional Freight Outlook, prepared by TranSystems for the Mid-America Regional Council and Kansas City SmartPort, provides detailed infrastructure and economic context as well as freight forecasts to support objectives, strategies, and tactics for the Kansas City region. The document identifies regional strengths and a comparative analysis to other major cities. The Freight Directory (image below) describes characteristics of the CenterPoint-KCS Intermodal Center.



Southwest Johnson County Area Plan

Kansas Department of Transportation; Johnson County, Kansas; City of Gardner, Kansas; City of Edgerton, Kansas; and Mid-America Regional Council; 2013

The plan identifies potential development scenarios and transportation system to support the newly constructed BNSF Kansas City Intermodal Facility (KCIMF) in southwest Johnson County. In addition to the 440-acre KCIMF, North Point Development is moving ahead with the development of the 560-acre Logistics Park Kansas City (LPKC). In addition to the seven million square feet of development within LPKC, market studies indicate the area could draw an additional five to nine million square feet of distribution centers and warehouse facilities once the KCIMF is operating at full capacity.

After developing four land use scenarios, stakeholders selected a preferred scenario to accommodate the industrial uses that will accompany the KCIMF while balancing the desires of the local, primarily residential, communities. Transportation elements were also analyzed using travel demand modeling to anticipate changes in travel patterns and suggest recommendations for future transportation decisions. Transportation recommendations were also based on opening day (2013), midway (2025), or full build-out (2040) conditions.

Analysis and Relevance to Study: The document was prepared to support development scenarios and transportation improvements associated with the construction of the BNSF Intermodal Facility. The analysis and scenarios may provide guidance for a similar analysis of freight flows and anticipated land use and transportation changes associated with the CenterPoint-KCS Intermodal Center and Richards-Gebaur site.

Transportation Outlook 2040

Mid America Regional Council, 2010

Chapter 9 of the Kansas City region's Long Range Transportation Plan discusses the existing conditions and future projects of freight in the region. The chapter presents much of the same information from the Kansas City Regional Freight Outlook but establishes goals that relate to broad Transportation Outlook 2040 policy goals:

- ▶ Invigorate dialogue with stakeholders
- ▶ Support organizations and initiatives that attract, retain, and assist transportation and logistics businesses
- ▶ Continue to invest in the Trade Data Exchange
- ▶ Develop plans for corridors of freight significance (CFOS)
- ▶ Integrate freight transportation and land use planning and the environment
- ▶ Implement projects with freight significance
- ▶ Support strategies to enhance commerce along the Missouri River system

Analysis and Relevance to Study: The Kansas City region's Long Range Transportation Plan with an outlook towards 2040 incorporates a freight analysis. Most of the information in this document is presented in the Regional Freight Outlook but offers broad policy goals within a larger scope of the entire transportation system.

Related Freight Evaluations

KCS Market Research: Mexico Freight Flow Analysis and Interview Survey

Kansas City Southern Railroad, 2011

Kansas City Southern Railroad (KCS) is a leading provider of rail services between the U.S. and Mexico. The study provides market research on cross-border flows with an emphasis on historical freight flows by direction, mode, commodity type, and border crossings as well as a focus on trade to and from the Midwest, Northeast, and Southeast.

Total U.S. surface trade with Mexico expanded at a compound annual growth rate of 2.5 percent between 2000 and 2010, with a stronger performance by exports (3.7 percent) compared to imports (1.9 percent). Total estimated export volume expanded by 25 percent from 2000 to 2008. Factors to support exports were Mexican economic growth and outsourced manufacturing, which drove demand for intermediate goods shipped to Mexico. Export growth came from agricultural commodities and products, plastics, chemicals and related products, and equipment and components. A similar pattern of growth occurred with U.S. imports from Mexico. Strong U.S. consumer spending, business investment, and construction demand supported growth of imports. Prominent sectors were agricultural commodities, food products and beverages, transportation equipment and components, and machinery.

The distribution of surface trade by transport mode shows significant change in the modal distribution of exports over the past decade. The truck share of estimated U.S. surface exports declined from 70 percent in 2000 to 43 percent in 2007 while rail's share increased to 43 percent. The review of trade data suggests the expansion of rail share was primarily driven by increased shipments of rail-friendly commodities to Mexico (grains and other lower value bulk products) rather than the conversion of truck freight to rail freight. However, findings from interviews with industry professionals indicate a willingness to explore ways to convert truck cargo to lower-cost rail. Truck's share of U.S imports has remained stable of the past decade, fluctuating around 75 percent. This reflects the nature of commodities in the import trade, the appeal of door-to-door truck service from many shippers, and the presence of truck-friendly markets in the border states.

Border crossings in Texas play a leading role in the movement of U.S. cross-border trade due to the major road and trail transportation corridors through the state. Three of the top five crossings for cross-border trade are in Texas —Laredo, El Paso, and Eagle Pass. Laredo is the main border crossings and accounted for 43 percent of surface trade MT in 2010.

Analysis and Relevance to Study: Prepared by TranSystems for the Kansas City Southern Railway, this document provides a freight flow analysis for trade from Mexico. The report notes increasing interest in lower-cost rail movement and highlights Laredo, Texas as the main border crossing from Mexico. The study utilized a methodology similar to the process that is being used to analyze the Richards-Gebaur site.

CenterPoint Intermodal Center – Kansas City

CenterPoint and Kansas City Southern (KCS) Railway, 2009

The report is a localized logistics study of the CenterPoint Intermodal Center – Kansas City property. The report reviews the site with the goal of determining what attributes it can leverage as they relate to modes of transport, industry segments, supply chain strategies, and other competitive factors.

Industry Trends: The site's proximity to an intermodal rail hub is of critical important in order to mitigate trucking expenses between the rail facility and the distribution center.

Key Attributes of Site: Important attributes of the site in comparison to market segments is the flexibility to react to a variety of scenarios, proximity to customers and suppliers, modal access, specialized logistics services, and available space that is “shovel ready.”

Site Overview: The proximity to the intermodal facility being developed by the KCS at the former Richards-Gebaur Airport is the most important strategic aspect of this particular location, making it ideal for attracting cargoes coming from and going to Mexico via the KCS railroad as well as for cargoes coming through other port gateways on the east and west coasts and then moving via intermodal rail to this region.

Market Coverage: While the local market is considered largely rural, the next day market has significant greater coverage, reaching over 25 million people in 10 million households.

Comparative Analysis: Kansas City compares favorably to other locations in the U.S. (Nashville, TN; Indianapolis, IN; Dallas, TX, and Columbus, OH) in terms of transportation costs, rail facilities, availability of labor, and low cost of living. A few areas where Kansas City could expand its competitiveness would be in the areas of lease rates and labor costs.

Freight Flows and Target Clients: The Kansas City area has extensive freight handling infrastructure and is very well suited as a regional transportation hub and cargo distribution location. Based on a review of key commodities, target clients include the electronics, food products, agricultural goods, furniture, apparel, and freight forwarding services industries.

Overall recommendations for the site include (1) further collaboration with the KCS Railway and Kansas City SmartPort, (2) a focus on Mexican trade, and (3) taking advantage of the transportation nexus of east/west and north/south rail services.

Analysis and Relevance to Study: Prepared by TranSystems for the CenterPoint Intermodal Facility and the Kansas City Southern Railway, the document highlights attributes the property can leverage. Attributes include modes of transportation, industry segments, supply chain strategies, and other competitive factors. Recommendations included further collaboration with KCS Railway and Kansas City SmartPort, a focus on Mexican trade, and taking advantage of the transportation nexus of rail services. Many of the attributes presented in this study, but with an updated analysis, will apply to the Richards-Gebaur site.

SmartPort U.S.-Mexico Freight Flow Analysis

Kansas City SmartPort, 2010

Kansas City SmartPort is a non-profit economic development organization dedicated to building Kansas City’s historic transportation hub status to make Kansas City a cutting-edge, high-tech inland port. In 2005, the Mid-America Regional Council initiated the International Corridor Integration Project in association with KC SmartPort to conduct international corridor planning, design, and testing for the development of a secure and controlled trade lane between Kansas City and Mexico. One objective of the corridor development efforts was to obtain and analyze data on freight flows moving by rail and truck between the U.S. and Mexico. This analysis is an update to the original 2006 study to provide a new long-term forecast, accounting for shifts in economic activity and trade flows since completion of the original study. The study area for the analysis was the Midwest region (North Dakota, South Dakota, Nebraska, Minnesota, Iowa, Kansas, Missouri, Wisconsin, Illinois, Michigan and Indiana).

Over the past decade, the study area benefitted from the expansion of economic ties between the U.S. and Mexico, and its surface trade with Mexico increased at a faster pace than total U.S. surface trade.

Exports from the study area expanded at nearly ten times the rate of total U.S. surface exports; the expansion of agricultural exports was an important factor. The 10-year forecast of the study area's surface trade with Mexico projects low to mid-single digit growth for exports and imports.

Rail is the principal transport mode for exports due to the presence of lower-value bulk commodities, which benefit from train service, notably the agricultural exports from Regions 1 (Kansas and Missouri) and 2 (North Dakota, South Dakota, Nebraska, Minnesota and Iowa). By contrast, truck and rail have similar shares of imports; this trade is characterized by a greater presence of more truck-friendly commodities (manufactured and intermediary products). Rail is projected to remain the dominant transport mode for exports and is projected to increase its share of imports due to the growth of rail-friendly import commodities.

The study area's exports by road are projected to increase with a 10-year compound annual growth rate of 3.2 percent. Although this is a lower growth rate than the 4.7 percent experience from 2000 to 2010, the lower projected growth rate still generates healthy increases in cargo tons moving by road. The study area's surface trade by road is focused more on the higher-value and more time-sensitive commodities. The opportunities for the conversion of truckload freight to rail will be driven by a variety of factors, including border transaction costs, fuel costs, rates, transit times, and origin-destination patterns.

The core element of the Midwest Secure Corridor is a pre-clearance facility located in Kansas City where goods being exported by rail to Mexico would be pre-cleared by the appropriate Mexican border agencies. The Customs facility would serve rail cargo originating primarily in the Midwest. Other markets for consideration in the business planning phase include: (1) conversion of existing truck freight to rail and (2) longer term expansion of the Customs facility's service offering to over-the-road truckload freight.

Analysis and Relevance to Study: Kansas City SmartPort is a non-profit economic development organization dedicated making Kansas City a cutting-edge inland port. After completing a U.S.-Mexico freight flow analysis and forecast, the study, prepared by TranSystems for SmartPort, presents a few key recommendations. The concepts include conversion of truck freight to rail and a pre-clearance Customs facility. We understand that institutional issues have nearly halted progress on a pre-clearance Customs facility but other advances in shipment tracking and transportation efficiency resulted from the research conducted.

Federal Guidebooks

Guidebook for Understanding Urban Goods Movement, Report 14

National Cooperative Freight Research Program (NCFRP), 2012

The report presents information and suggestions for improving public decisions affecting urban commercial motor vehicle movements for goods delivery. The guidebook and cases studies will help decision makers understand the potential impacts of their decisions on urban goods movements among the following categories: (1) transportation infrastructure and operations, (2) land use and site design, and (3) laws, regulations, and ordinances applicable to urban areas. Chapter 4 of the guidebook also includes an overview of freight data and its uses in a local planning context.

Analysis and Relevance to Study: The document presents information and suggestions for improving public decisions that affect urban commercial vehicle movements for goods delivery. By understanding the use of freight data and local regulations affecting urban goods movement, the public sector can evaluate and address freight impacts.

Freight Facility Location Selection: A Guide for Public Officials, Report 13

National Cooperative Freight Research Program (NCFRP), 2011

The report describes key criteria that the private sector considers when making decisions on where to build new logistics facilities. By providing insight on location decisions for freight facilities and suggesting best practices for transportation, land use, economic development, and regional partnerships, public sector agencies can benefit from a full understanding of the dynamics of freight movement and the factors affecting private sector location decisions. With this insight, public sector agencies may successfully plan for, attract, locate, and collaborate with freight-related activities in their jurisdiction.

The keys to successful implementation of a freight facility, particularly one that has public sector involvement, usually include:

- ▶ Understanding the supply chain, carriage requirements, and the flow of goods
- ▶ Providing connections to transportation infrastructure and operating networks (road, rail, port, etc.)
- ▶ Appreciating the competitive advantages and disadvantages among supply chains, freight carriers, and the facilities they use
- ▶ Examining how proposed developments can affect economic development and local conditions such as traffic flows, noise levels, or utility capacity
- ▶ Developing land use regulations that allow for development, efficient operation, and transportation connections while maintaining and promoting sustainability
- ▶ Building public willingness and support of these projects

The report also discusses the criteria for location site selection: the ability to access key markets, interaction with the transportation network, modal choice, labor and workforce, total cost environment, utilities, availability of suitable facilities, permitting and regulation, tax environment, public assistance and incentives, and climate and natural hazards. Typically, the first five criteria are more critical than the others with access to key markets as the single most important factor in determining the location of a freight facility. The remaining factors are often used to refine the site selection process to specific, and sometimes competing, sites. The table below outlines the site selection criteria by facility type.

Analysis and Relevance to Study: The document provides insight to private sector location decisions and how public policy can influence the location selection process. The key criteria for location site selection are the ability

to access key markets, interaction with the transportation network, modal choice, labor and workforce, and total cost environment.

LOCATION CRITERIA	TYPE OF LOGISTICS FACILITY						
	Distribution Center	Port	Intermodal Terminal	Transload Terminal	ILC	Hub Terminal	City Terminal
Ability to Access Key Markets or Customers	●	◐	●	●	●	◐	●
Interaction with Transportation Network	●	●	●	●	●	●	●
Labor and Workforce	◐	●	◐	◐	◐	◐	◐
Total Cost Environment	◐	●	◐	◐	◐	●	◐
Availability and Cost of Suitable Facilities	○	○	○	◐	○	◐	●
Utilities	○	○	○	○	◐	○	○
Permitting and Regulation	○	○	◐	◐	○	○	○
Tax Environment	○	◐	○	○	○	○	○
Public Sector Assistance and Incentives	○	○	○	○	◐	○	○
Climate and Natural Hazards	○	◐	○	○	○	◐	○

Key

Priority of Criteria: ● Primary Factor ◐ Important Factor ○ Lesser Factor

ILC = Integrated Logistics Center

Guidebook for Freight Policy, Planning, and Programming in Small- and Medium-Sized Metropolitan Areas, Report 570

National Cooperative Highway Research Program (NCHRP), 2007

The guidebook is specifically tailored to small- and medium-sized Metropolitan Planning Organizations (MPOs), as well as their state and federal partners, as they work to effectively integrate freight into local and regional transportation systems planning, priority programming, and project development planning activities. The guidebook suggests a number of activities to integrate freight into the planning process, including developing a regional freight profile, identifying needs and deficiencies, developing a freight element of a long range plan, identifying projects, identifying financing techniques, developing performance measures, and assessing project impacts.

Analysis and Relevance to Study: The document provides resources to undertake freight transportation planning activities in small- and medium-size metropolitan areas. Many of the suggested activities have been completed at a regional level through the Kansas City Regional Freight Outlook, but there is opportunity to apply some of the concepts locally on the Richards-Gebaur site.

Introduction	Module 1 – Using the Guidebook	Module 2 – Getting Started	
Provides users with a brief background on the importance of freight transportation policy, planning, and programming activities, and highlights the motivation for the Guidebook development	Provides instructions on how to effectively use the Guidebook	<p style="text-align: center;">Freight Self-Assessment An exercise to assess freight expertise relating to the region's freight system</p> <p style="text-align: center;">Definition of Freight Planning Program Stage Evaluates self-assessment and describes freight planning program as basic or intermediate/advanced</p> <p style="text-align: center;">Identification of Program Elements and Freight Planning Guidelines Identifies appropriate mix of activities to enhance an existing or develop a new freight planning program</p>	
Module 3 – Integrating Freight into MPO Activities			Module 4 – Putting It All Together
<p>Provides a range of specific guidelines to stimulate freight policy, planning, and programming activities within established MPO program functions</p>			<p>Provides a comprehensive list of sequential steps that could be taken to establish a freight transportation program</p> <ol style="list-style-type: none"> 1) Assign lead... 2) Establish goals... 3) Develop profile... 4) Engage partners... 5) Define needs... 6) Key decisions... 7) Refine goals... 8) Develop data... 9) Establish measures... 10) Identify projects... 11) Develop criteria... 12) Integrate into... 13) Fund and deploy... 14) Develop process...
Module 5 – Identifying Freight Resources			
<p>Provides references to available freight resources. It also includes a complete set of the case studies developed as part of this project Identifies available data, resources, and research that could be used by MPO staff to facilitate freight policy, planning, and programming activities</p> <div style="display: flex; justify-content: space-around; text-align: center;"> <div style="border: 1px solid black; padding: 2px;">Professional Development Resources</div> <div style="border: 1px solid black; padding: 2px;">Freight Related Databases</div> <div style="border: 1px solid black; padding: 2px;">Federal Funding Programs</div> <div style="border: 1px solid black; padding: 2px;">MPO Case Studies</div> <div style="border: 1px solid black; padding: 2px;">Freight Glossary References</div> </div>			

Appendix B. Facility Condition Assessment

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Facility Condition Assessment..... |

Facility Condition Assessment

A limited Facility Condition Assessment was performed for the Richards-Gebaur Commerce Park in March 2015. A Facility Condition Assessment is the process of analyzing the condition of a group of facilities that may vary in terms of age, design, construction method, and materials. The purpose of the assessment is to serve as a physical inventory of the site assets and identify potential needs for maintenance, improvements, or major capital renewal. First, existing information was gathered for each facility on site. Then, the condition index outlined below was used to rate the exterior, structural condition of each building during an on-site, external visual inspection.

- ▶ **Good Condition:** The facility's structural exterior is in overall good physical condition with minimal maintenance and/or improvements needed.
- ▶ **Fair Condition:** The facility's structural exterior is in overall fair condition with minor maintenance and/or improvements needed.
- ▶ **Poor Condition:** The facility's structural exterior is in overall poor condition with major maintenance and/or replacements needed. The building has exceeded its expected useful life.

The result of the limited field assessment is a catalog of current performance based on the exterior, structural condition of the building and potential maintenance and/or capital improvements. While the assessment did not include a detailed examination of the interior space or building systems, the assessment provides an initial strategic tool to inform capital improvements and resource allocation decisions for the Richards-Gebaur Commerce Park.

**Richards–Gebaur Commerce Park Freight Study
Facility Condition Assessment
Port KC**

Richards-Gebaur Commerce Park Building Inventory								
Building	Size (SF)	Description	Year	Use	Tenant	Condition	Notes	
105	5,700	One story block building	1954	Office	Vacant	Poor (3)		
106	32,064	One story brick building	Unknown	None	Vacant	Fair (2)	This building has a brick veneer cladding and the brick veneer looks to be in good condition and there was minimal cracks on the walls. The door on the side was damaged and there are signs of vandalism to the interior of the building.	
601	10,500	One story concrete block with brick exterior walls	1991	Medical Office	Vacant	Good (1)	The exterior of the building is mainly stucco, which is in good condition, including the brick cladding at the entrance areas.	
602	16,444	Two story concrete block	Unknown	Office Storage	Vacant	Fair (2)	This building looks like a two story block wall building with a concrete frame structure. The frame and the block wall look to be in good condition. There is some wood siding, which is damaged and needs replacement.	
605	15,866	One story tilt-up concrete with stucco exterior walls	1953	Office Classroom	Metropolitan Community College; Vacant	Good (1)	The exterior of the building of the building is mainly stucco, which is in good condition including the partial height brick cladding at the entrance areas. The windows and doors looked functional on the exterior. The fascia around the building at the eave height also looked good and had minimal damage to them.	
606	4,450	One story tilt-up concrete with stucco exterior walls	1953	Office	Insco Industries	Good (1)	Exterior condition is similar to Building 605.	
610	106,252	One story concrete block building	1953	Warehouse	R-G Development, LLC	Good (1)	The exterior wood siding is mostly in good conditional with repair done to the lower portion of the building with plywood boards. Additional repairs would be required on the wood siding to the lower 2 to 3 feet of the wall.	

**Richards–Gebaur Commerce Park Freight Study
Facility Condition Assessment
Port KC**

Building	Size (SF)	Description	Year	Use	Tenant	Condition	Notes
611	22,000	One story block building	Unknown	Office	ISSCO	Fair (2)	This building looks like a concrete wall building with concrete columns. The roof was not inspected. The walls need minor repair that includes sealing some minor cracks. There was a crack at the corner of the window, which looks like some attempt was made to patch it up.
612	101,418	Four story concrete building	Unknown	Manufacturing	ISSCO	Fair (2)	This building looks like a concrete wall structure with thickness of the wall unknown. There was minimal cracks on the walls on the building and was not painted. There is CMU wall on the side of the building over an overhead door which looks like it was repaired. Some water damaged was observed at the bottom of the parapet walls.
617	4,025	One story wood building	1960	Storage	Holiday Display Services, Inc.	Fair (2)	The building is a pre-engineered metal building which is used for storage. All the windows and doors will need replacement.
619	8,124	One story concrete building with wood-framed roof	1950	Office Warehouse	SigniaCo	Fair (2)	The concrete walls of the structure seem to be in good shape. The roof soffits and the fascias will need replacement. Some of the handrails at the doors need minor repair. The wood siding in general seems to be in good condition.
620	4,020	One story steel building	1961	Warehouse Storage	City Wide Snow Removal	Poor (3)	Roof and siding needs replacement. The interior condition of the roof may determine if structure would be classified as fair condition.
801	5,425	One story wood building	1954	Office	Vacant	Poor (3)	
805	4,000	One story steel building	Unknown	Storage	Vacant	Poor (3)	
806	4,000	One story wood building	Unknown	Storage	Vacant	Poor (3)	

**Richards–Gebaur Commerce Park Freight Study
Facility Condition Assessment
Port KC**

Building	Size (SF)	Description	Year	Use	Tenant	Condition	Notes
820	37,141	One story block hangar and one brick building	1991	Office Manufacturing	DuraSeal	Fair (2)	This is an existing building with a sliding hanger door on the front of the building. At the time of inspection the building was in use and the overall condition of the building was fair.
821	37,141	One story block hangar and one brick building	1991	Office Manufacturing	DuraSeal	Fair (2)	This building looks like brick veneer clad building and did not look like it was in use at the time of inspection. The overall exterior condition looked to be fair with minimal damage to the walls.
839	6,014	One story block building	Unknown	Storage	Vacant	N/A	Could not inspect building due to road closure.
900	1,2249	One story wood building	1954	Fire Station Facility	Vacant	Fair (2)	Building requires soffit and fascia repair. In general, the walls are in fair condition
901	5,742	One story wood building with seven levels of tower	1954	Office/Storage	Vacant	Fair (2)	This building has a control tower attached to it. One face of the control tower needs complete replacement. The adjacent structure is a one story structure with stucco walls which is in fair condition with minimal repairs.
904	400	One story block building	Unknown	Storage	Vacant	Fair (2)	This building would need a soffit and roof replacement. The walls seem to be in fair condition.
918	50,000	One story wood/block double hangar	1957	Hangar	Vacant	Poor (3)	
925	3,454	One story wood building	1962	Storage	CapBros Motorsports	Fair (2)	This looks like a pre-engineered building with walls and roof in fair condition.
926	5,346	One story wood/brick building	1959	Office	Vacant	Fair (2)	This building has exterior stucco walls with doors and windows in good condition. There are some minor damages to the fascia.
927	13,728	One story block building	1959	Office Warehouse	American Catastrophe	Fair (2)	This building has a 3 feet CMU wall with steel sheeting above. The CMU wall needs minor repair, while the steel above is in good condition .

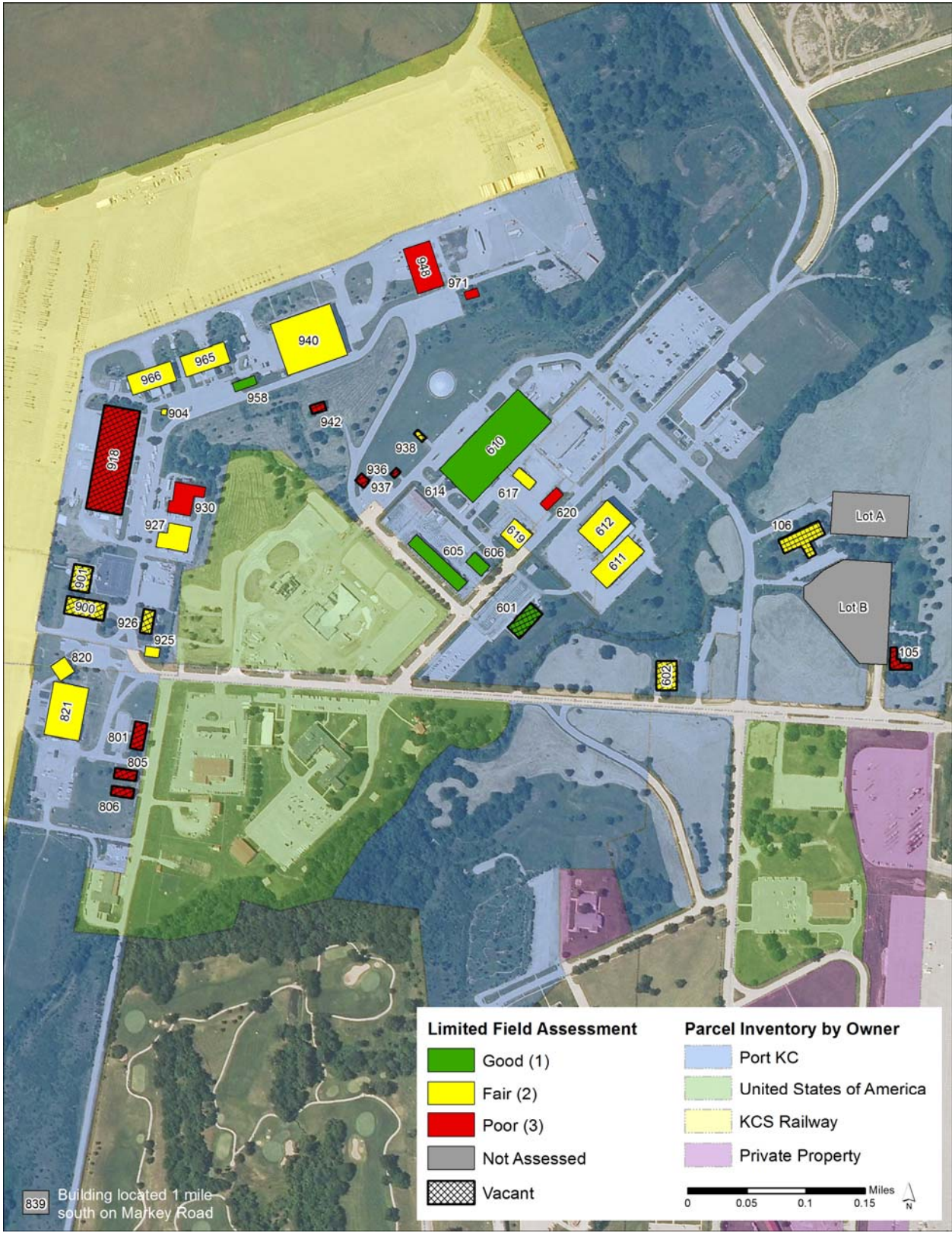
**Richards–Gebaur Commerce Park Freight Study
Facility Condition Assessment
Port KC**

Building	Size (SF)	Description	Year	Use	Tenant	Condition	Notes
930	14,695	One story block building	1961	Hangar Warehouse	City Wide Snow Removal	Poor (3)	This building has numerous cracks in the foundation and the interior appears to be in poor condition.
936	960	One story steel building	Unknown	Storage	Vacant	Poor (3)	
937	640	One story block building	1954	Storage	Vacant	Poor (3)	
938	960	One story steel building	1976	Storage	Vacant	Fair (2)	This is a one story CMU building with a concrete roof. The bottom half of the wall is in fair condition. The bottom of the roof and wall top has water damage and will most likely need roof replacement. All the windows will have to be replaced.
940	60,000	One story block/steel hangar	1955	Hangar	Gavilon	Fair (2)	This is an existing steel hanger building with sliding doors in front. The steel sheathing on the walls are in fair condition. Assessment of the roof could not be made at the time of visit. The functionality of the door was also not checked.
942	2,600	One story block building	Unknown	None	Vacant	Poor (3)	
948	7.00 acres	Three buildings demolished; Parcel with improvements	1963	Parking	Schneider	N/A	N/A
958	4,000	One story steel building	1963	Storage	PM Contracting, Inc.	Good (1)	This building is a pre-engineered metal building probably built by Butler. At the time of inspection, the building was in use and the exterior metal sheathing was in good shape except at the bottom of some panels. The roof and down spouts also looked to be in good condition. The doors and windows looked functional. The windows might have been replaced as they appeared newer.

**Richards–Gebaur Commerce Park Freight Study
Facility Condition Assessment
Port KC**

Building	Size (SF)	Description	Year	Use	Tenant	Condition	Notes
965	19,020	One story steel hangar	1966	Hangar	PM Contracting, Inc.	Fair (2)	This building is a steel hanger building with exposed steel columns supporting the roof. The exposed steel portion of the structure shows signs of rust that will require repair. The extent of the structural stability will have to be checked in future visits.
966	22,339	One story steel hangar	1966	Hangar	INSCO Industries	Fair (2)	This building is identical to Building 965.
971	1,500	One story block building	Unknown	Office	Vacant	Poor (3)	
Lot A	1.37 acres	Parking lot	Unknown	Storage	Jarden	N/A	N/A
Lot B	3.00 acres	Parking lot	Unknown	Storage	Jarden	N/A	N/A

**Richards–Gebaur Commerce Park Freight Study
Facility Condition Assessment
Port KC**



APPENDIX B

Kansas City Container Market Analysis and Intermodal Trade Forecast



Port KC

Kansas City Container Market Analysis and Intermodal Trade Forecast


May 2022 Update

Prepared for:



Prepared by: KPMG LLP and its sub-consultants





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I. Executive Summary

The global events of 2019-2022 have impacted American and foreign consumer and business behavior including the demand for, and supply of, international merchandise goods. Kansas City's container market prospects exceed the restrained performances for imports and exports witnessed recently. Some macroeconomic challenges remain but the region's underlying economic, demographic, and geographic attributes are core to expanding international trade.

Kansas City is primed for trade growth

The metropolitan area is an attractive commercial and residential location in America's Heartland with a rising population, high ranking in affordability and household income, and thriving industrial and manufacturing developments.

The region's economic strength is enhanced by an expansive transportation network supporting further opportunities for growth.

Kansas City has five Class I railroads

operating at four different inland intermodal terminals offering service with all major U.S. container ports including the important San Pedro Bay gateways in southern California. In the Midwest, only Chicago has a broader selection of intermodal options with seven Class I railroads.

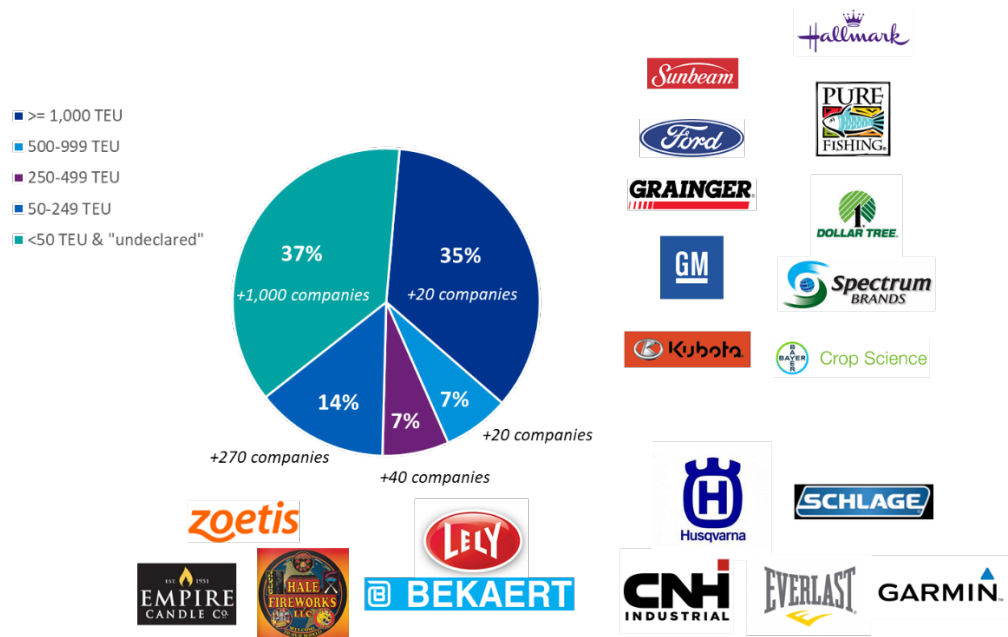
Kansas City is ranked 2nd in the Midwest and 4th in the nation for containerized imports having achieved an estimated inbound volume of 238,000 TEUs in 2021.

Kansas City's market desirability is widespread

as evidenced by statistics showing more than 355 area firms imported at least 50 TEU in 2019. It is worth noting that six of the area's businesses that imported 500 or more TEU are included in the Journal of Commerce's list of "U.S. Top 100 Container Importers for 2019".

This successful portfolio is drawing in international containerized imports of consumer merchandise, commercial machinery and equipment, and farming materials for local users as well as customers throughout neighboring areas of Missouri, Kansas, Iowa, and Nebraska.

Figure 1 Selected Kansas City Container Importers



Source: Datamyne, KPMG and its sub-consultants

¹ A TEU, or twenty-foot equivalent unit, is the industry standard for measuring container carrying capacity given the different sizes including international 20-footers (container length), 40-footers, 45-footers, and domestic 53-footers.

International trade depends on the two-way transit of containers. Kansas City has much to offer in loaded exports of regional products such as animal feeds, grains, and meats. The 2021 outbound rail volume is estimated at 190,000 loaded TEU. Consistent with America’s history to import more than it exports, and the need to balance rail car movements, Kansas City’s outbound intermodal trains handle a considerable number of empty containers in addition to export cargoes.

Looking ahead, Kansas City’s demographics and the expectation for continued economic gains is attracting industrial development of buildings and logistics parks for retail distribution, e-commerce, agricultural product transloading, and general manufacturing. These commercial expansions, and the consumer spending that fuels them, portends sustained growth in container imports. The forecast includes a compound annual average volume growth rate (CAGR) of 5.8% through 2030. This nearly matches the 6.0% CAGR achieved between 2016-2021 despite the depressing economic impact caused by the pandemic. The 2030-2040 outlook anticipates import gains averaging 3.9%.

Longer term, conservative planning is likely to be more useful than reasoned projections acknowledging how recent unprecedented external shocks to the global economy and its trade activity lowers forecasting confidence. For 30 years forward, an estimated CAGR of 1% to 2% for Kansas City’s economic performance and its parallel trade volume expectation is considered reasonable.

Figure 2 Kansas City Total Container Import Volume Forecast (all sizes in TEUs)



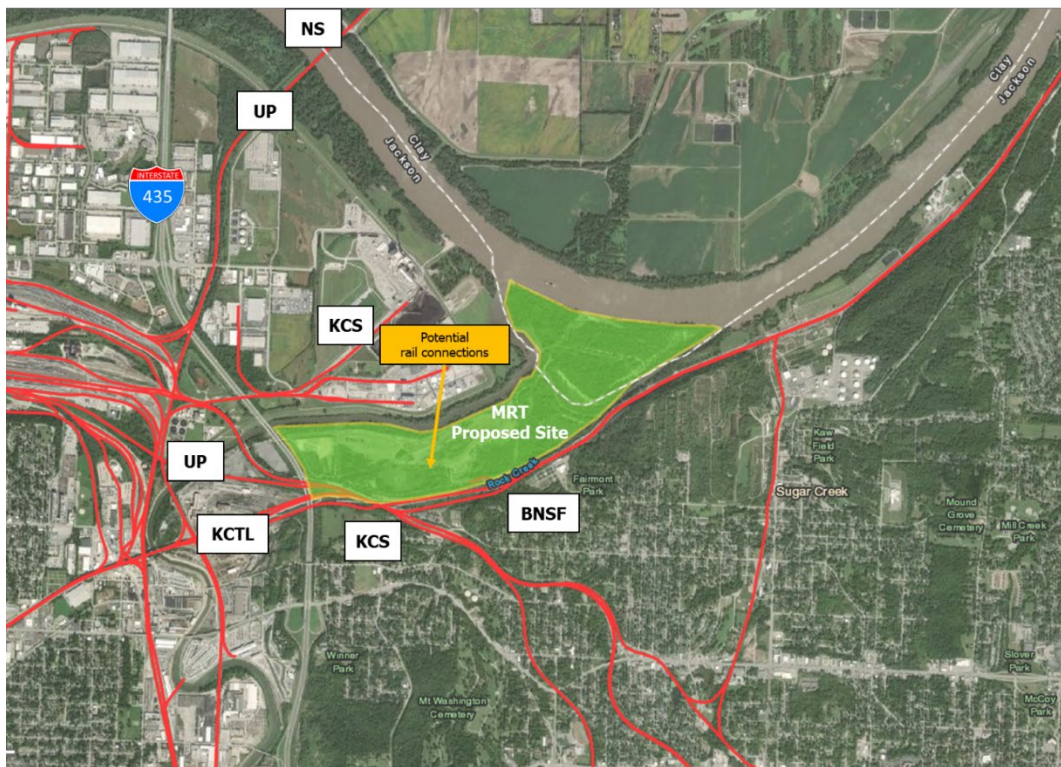
Source: KPMG and its sub-consultants

II. Report Background

Port KC is in the advanced planning stages for Missouri River Terminal (MRT) after purchasing the 415-acre site in 2018 from AK Steel Corporation. The facility is planned as an intermodal container rail terminal and river port terminal with freight transload capabilities and the potential to serve possible transport logistics functions including on-site including retail distribution, warehousing, storage, e-commerce, and other industrial activities.

Port KC plans to pursue the development of MRT as an advanced state-of-the-art intermodal development which will enhance the region's rail, water, and highway trade platform. The Project contemplates the development of an inland intermodal (water, highway, and rail) port and transportation hub with potential transport logistics functions on-site or proximate including retail distribution, warehousing, freight transloading, e-commerce, and light manufacturing.

Figure 3 Port KC Proposed Missouri River Terminal



Source: Port KC

To enable development of MRT, Port KC is looking to engage partner(s) through long-term master development agreement(s) to finance, construct and develop the capital investment, future operational management, and maintenance of the Project. To gain an understanding of the size, composition, and growth potential of the Kansas City market for international containerized trade, Port KC engaged KPMG to conduct a market analysis and to forecast annual trade volume for 2022-2070.

III. Analysis Focus

In 2021, U.S. ports handled 28 million import containers, measured as TEUs or twenty-foot equivalent unit boxes from over 200 countries². While ocean-going vessels called at more than 35 coastal ports to unload these containers, the consumers of the imported merchandise, known as beneficial cargo owners (BCOs), were spread across the country. The Kansas City Metropolitan Statistical Area (MSA) has 2.2 million consumers with an estimated \$58,000 per capita income³ which presents a favorable market opportunity. Additionally, a growing number of retailers find Kansas City's location beneficial as Midwest distribution and e-commerce hubs as do manufacturers as production or assembly sites.

This analysis examines important aspects of the Kansas City MSA's container import trade including volumes for the leading commodities, top buyers, overseas origins, and major ports of arrival. While less voluminous, container exports are profiled in the same manner in this study to reflect the importance of two-way trade flows to the inland transportation supply chain.

KPMG and its sub-consultants' trade forecast is included in this analysis building upon published projections for the regional economy from reputable sources such as the Federal Reserve Bank, commercial bank economists, and private forecasting firms.

MRT's access to the Missouri River offers the opportunity to construct a berth capable of handling container-on-barge (COB) or other container vessel traffic. Several studies (see Appendix I) have evaluated the competitiveness of a COB transport option connecting inland terminals on the Missouri, Mississippi, and Arkansas Rivers with Gulf Coast container ports. Not specific to COB, but potentially presenting additional export cargo prospects, research is included in this report on further conversion of the international transport of bulk commodities into containers.

² Data Source: www.datamyne.com

³ U.S. Census Bureau statistics

IV. Current Market Perspective

Recent Trade Flow Impacts from COVID-19 and Transport Supply Chain Congestion

Important drivers of import demand include population, economic activity, and consumer and business income; all of which contribute to spending. Transportation congestion and delays in 2021 showed that the buyer's location cannot be overlooked as impactful on cargo flows. About 40 percent of the U.S. population lives in coastal counties; close enough perhaps for normally routine transport of imported merchandise from ports. That means nearly 200 million inland consumers must rely on longer-haul trucking and intermodal rail in addition to efficient ocean transportation for timely delivery of their imported goods.

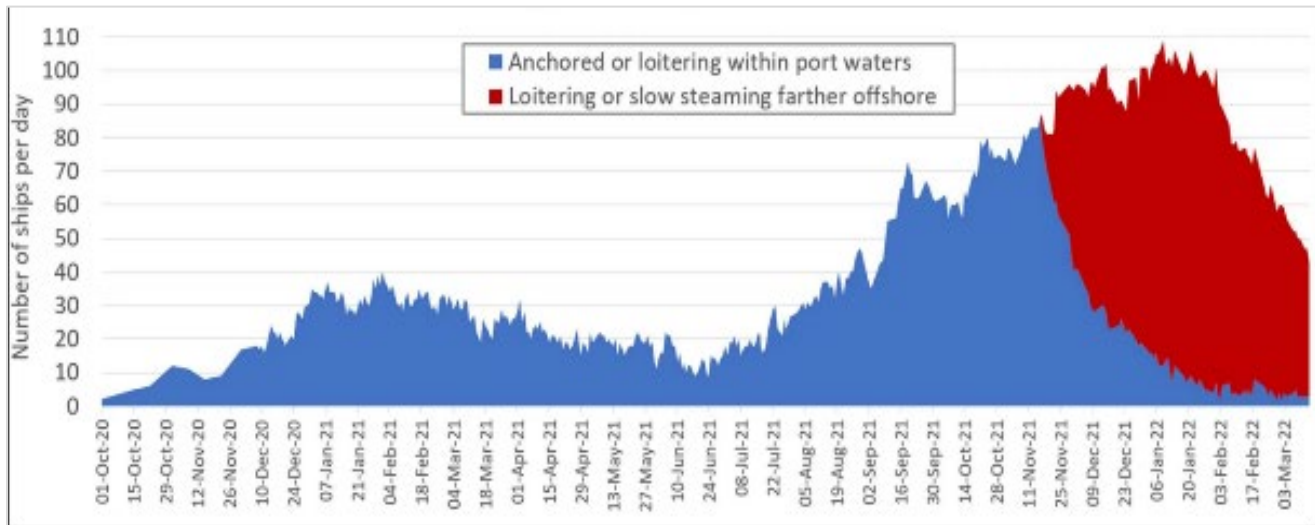
Near or far, all touchpoints in global container shipping were altered by the pandemic and the ripple effect on supply chains continues in 2022. At times, COVID-19 lockdowns reduced overseas workforces which caused erratic manufacturing and instability in the reliability of exports. Meanwhile, many home-bound Americans cautiously increased savings at the onset of the pandemic; eligible taxpayers received government stimulus checks; and those that lost jobs collected enhanced unemployment benefits. Gradually, consumers with pent up demand increased shopping behaviors, substituting e-commerce purchases for lost opportunities in retail shopping, dining out, and vacationing, among other public amenities.

As China and other "factories of the world" caught up with America's demand, the normally steady cross-ocean transport of imports could not keep pace. The ports of Los Angeles and Long Beach account for about 36% of American inbound containers and even more critical to trade destined for Kansas City. As shown below, the increase of cargo at Southern California ports exceeded their capacity to handle it forcing ships to queue up for a berth to unload. The peak of backlog of vessels reached over 100 in late 2021. In September, the Port of Los Angeles' Executive Director quantified the cascading effects of the inbound container backlog: box dwell times on terminals reached six days, the on-dock wait time for intermodal rail loading neared 12 days, and the chassis pools serving the port reported an average of over eight days delivery lag time until space opened at Southern California warehouses⁴.

While less severe, most U.S. container gateways experienced ship waiting periods and overwhelmed terminals as ocean carriers sought port alternatives to Los Angeles and Long Beach with deployment of larger vessels and more weekly services.

⁴ The port's Executive Director comments to FreightWaves publication as reported on September 30, 2021

Figure 4 Container ships waiting in Pacific for LA/LB berths



Source: www.freightwaves.com "American Shipper" publication based on data from Marine Exchange of Southern California

A retrospective analysis of the foregoing situation led to significant challenges in U.S. container transportation. The supply chain constraints did not stop at the global factories, the shipping industry, or the ports. Landside issues included a lack of truck chassis and drayage truck drivers, capacity constrained warehouses, curtailed throughput at rail yards due to extended container dwell times, a dislocation of empty containers for export reloading, and of course, weather. The Surface Transportation Board and Federal Maritime Commission continue to hold hearings and publish their findings and recommendations related to the transport logistics crisis.

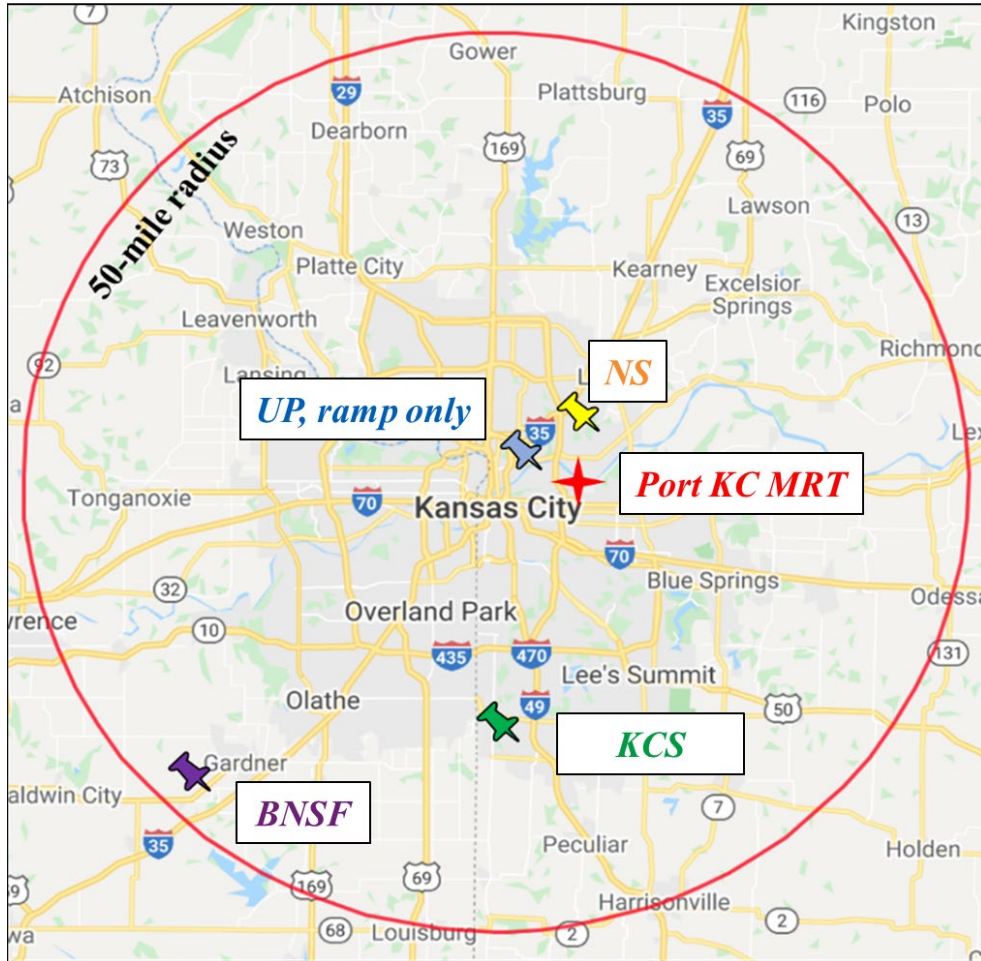
Imports

As noted above, the Kansas City MSA economic profile comprises a large consumer base with respectable earnings. In 2020, the Kansas City MSA Gross Domestic Product (real GDP, in \$2012) totaled \$124 billion, ranking the region 29th in the nation and 7th in the Midwest⁵. Kansas City's western location within the Midwest geography is also a positive for trade. As will be discussed further, China has earned the label "the world's factory" as it is the dominant source for most U.S. container imports. Pacific Rim trade predominantly enters the U.S. at West Coast ports positioning Kansas City as the first inbound rail hub in the Midwest with direct intermodal service from Southern California ports.

Kansas City currently is served by four intermodal rail hubs operated by Burlington Northern Santa Fe Railroad (BNSF), Kansas City Southern Railroad (KCS), Union Pacific Railroad (UP) and Norfolk Southern Railroad (NS). The fifth Class I railroad, Canadian Pacific also serves the broader Kansas City region.

⁵ U.S. Bureau of Economic Analysis, with the Midwest inclusive of Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Missouri, Nebraska, Ohio. Official 2021 statistics will not be released until December 2022.

Figure 5 Kansas City Area Intermodal Rail Ramps

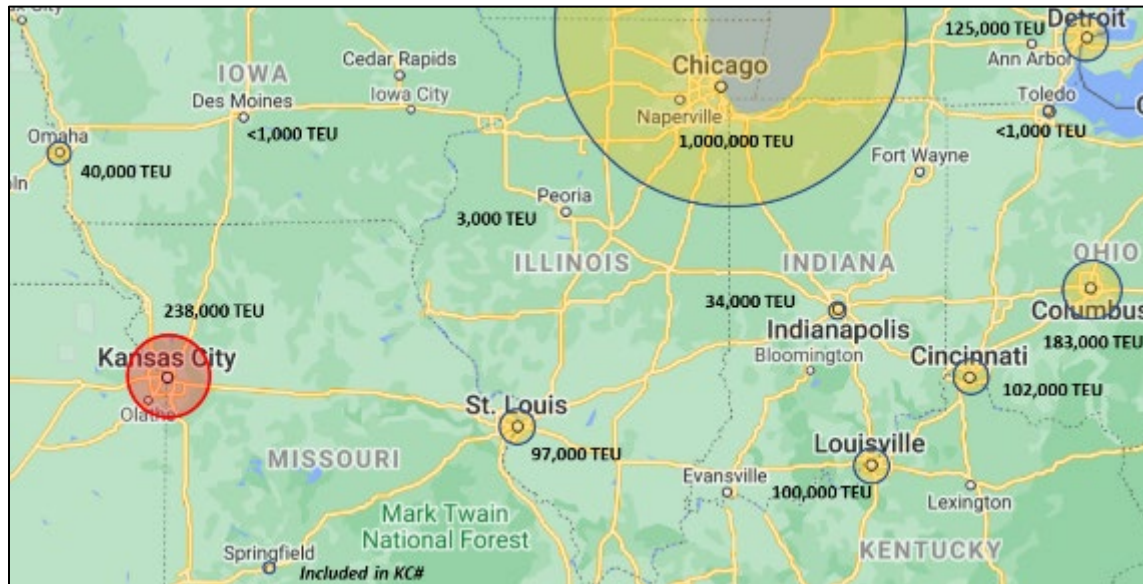


Source: KPMG and its sub-consultants

Kansas City’s inbound intermodal rail volume of intact international containers totaled 238,000 TEU in 2021 based on Datamyne statistics⁶. The Kansas City market is the 4th largest inbound inland gateway in the U.S. and 2nd largest in the Midwest. Chicago, the country’s third largest city by population, recorded over one million import TEU. Chicago has intermodal service by all seven Class I railroads.

⁶ Datamyne statistics are sourced from U.S. Customs vessel manifests and are referenced throughout this report. Springfield MO delivered imports are included with Kansas City as most ocean carriers contract for container yard delivery at a Kansas City rail ramp. Only BNSF has rail service in Springfield, and it is predominantly for domestic freight. As explained later in the report, details on shipments moving to inland rail ramps are only available for intact ocean-going containers that are predominantly sized in 20-foot, and 40-foot lengths. Once a container arrives at a U.S. port it is possible to transload its contents into a domestic-sized container that is predominantly 53-feet in length.

Figure 6 Leading Midwest Rail Ramps for Intact Containerized Imports, 2021



Source: KPMG and its sub-consultants; Google Maps

In recent years, Kansas City’s import performance has seen a total volume increase topping 60,000 TEU from 2015’s volume of 175,000 TEU. This is a compounded annual average growth of 5% (CAGR). Import gains exceeded the inbound volume growth rates achieved by the nation and within the Midwest in 2017, 2018 and 2020. This sustained success is due in large part to the significant expansion of industrial distribution and warehousing within the Kansas City MSA. The importance to trade of industrial space buildout for new or expanding tenants is discussed in more detail in the Trade Forecast Assumptions section of this report.

The 2021 import volume growth slowed compared to 2020 despite post-COVID-19 gains in the regional economy, employment, and continued expansion of occupied industrial warehousing. Container transport congestion curbed faster trade growth. A September 2021 [Bloomberg.com](https://www.bloomberg.com/news/articles/2021-09-23/containers-piling-up-at-u-s-rail-yards-add-to-port-strains) story entitled, “*Containers Piling Up at U.S. Rail Yards Add to Port Strains*”⁷ cited surging dwell times at most inland rail terminals. According to one ocean carrier, Kansas City rail terminal dwell time surpassed ten days in May and had only lessened to under nine days on average by September. The delays are not subsiding with an early April 2022 ocean carrier report stating Kansas City dwell time stood at over 12 days; twice the wait of Dallas and 14% higher than Chicago⁸. Typically, containers are picked up at the rail depot within 24-48 hours for truck drayage to the importer.

Another restraint on the flow of containers reaching Chicago and Kansas City was the correlated impact once their rail terminals were at capacity. Train dispatch was metered at origin ports to avoid further inland congestion. In a September 21, 2021 article, the [Journal of Commerce \(JOC\)](https://www.joc.com) included comments from the CEO of Norfolk Southern Railroad (NS) regarding intermodal congestion⁹:

⁷ www.bloomberg.com/news/articles/2021-09-23/containers-piling-up-at-u-s-rail-yards-add-to-port-strains

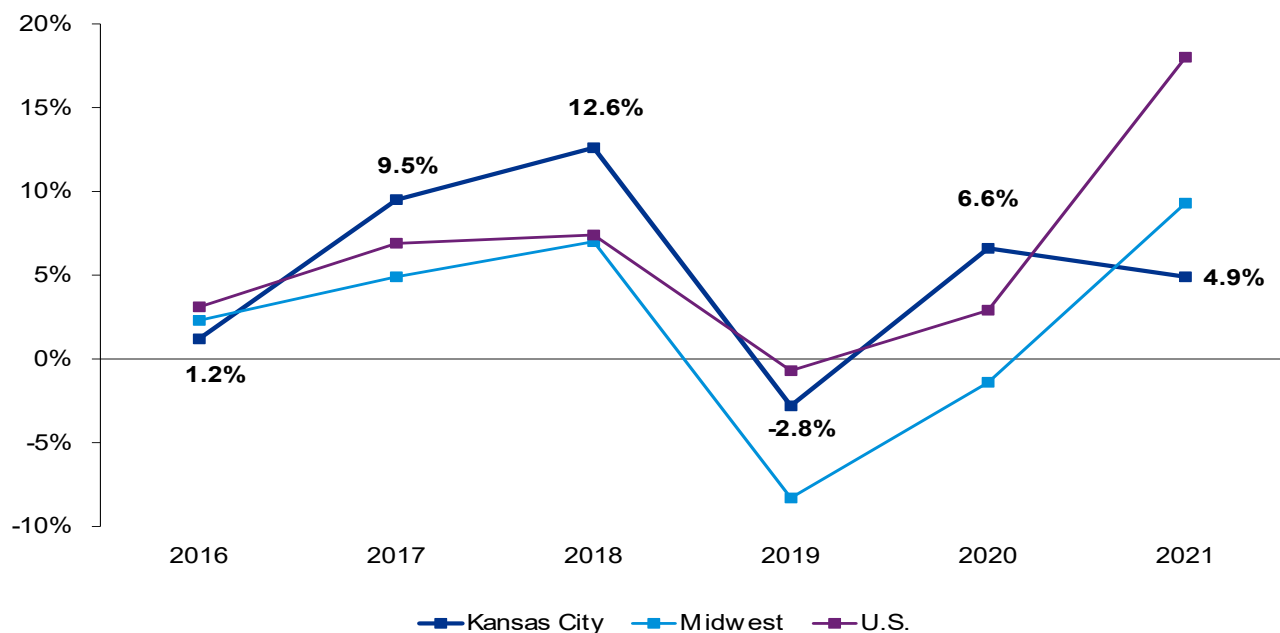
⁸ www.hapagloyd.com These statistics are specific to this carrier and may not be representative of all carriers.

⁹ www.joc.com

“Our terminals are not designed or intended for extended storage or warehousing. Delays in pulling containers from our terminals results in congestion, which impacts the fluidity of our operations and the level of service we are able to provide to our intermodal customers. To ease congestion at our international intermodal terminals, NS has taken measures such as metering traffic at origin to keep the flow of containers to inland destination terminals consistent with the ability of the drayage and warehouse communities to pull from those terminals, increasing the flow of inbound containers as “outgate” capacity improves.” – *Journal of Commerce, September 2021*

The JOC also noted that Union Pacific (UP) and Burlington Northern Santa Fe (BNSF) were also metering trains out of West Coast ports. With rail terminal congestion limiting local delivery earnings some truckers opted for better paying long-haul opportunities thereby cutting into the fleet available for container drayage. BCOs had little choice but to let boxes sit on chassis. Rapid turnover is key for all container transfers and fixing supply chain disruptions will require coordinated efforts. Logistical enhancements at ports and rail terminals are occurring although Kansas City’s trade volume is not forecast to resume a more normal growth pace until 2023.

Figure 7 Comparative Performance of U.S. Intact Container Imports by Destination, % change yearly



Source: Datamyne

China is the source for over half of Kansas City’s waterborne container imports. This share exceeds the country’s overall 37% dependence on China for inbound container merchandise and contributed to the region’s modest volume gain. China’s zero-tolerance of COVID-19 forced many factories to close or reduce operations for weeks at a time. Correspondingly, the country’s merchandise exports were limited, only to surge soon after. Despite China’s contribution to regional trade, Kansas City imports at least 100 TEU annually from 54 countries.

Figure 8 Kansas City Intact Container Imports by Origin Region, in TEU

Origin Region	2015	2016	2017	2018	2019	2020	2021	2021 % of total
NE ASIA	131,709	132,551	146,586	164,411	152,607	161,020	157,284	66%
<i>of which: China</i>	107,932	108,362	118,915	133,889	122,137	128,053	125,813	53%
EUROPE	24,171	23,987	26,932	30,805	31,271	32,914	35,806	15%
SE ASIA	8,211	8,139	8,477	9,516	12,809	15,647	21,946	9%
INDIA & SUBCONTINENT	6,736	7,609	7,942	8,895	10,106	10,585	14,219	6%
SOUTH AMERICA	2,422	2,874	2,363	2,637	3,016	3,390	4,513	2%
AUSTRALIA & NEW ZEALAND	690	926	586	819	1,033	1,112	1,077	0.5%
AFRICA	244	240	425	356	340	287	681	0.3%
CENTRAL AM & CARIBBEAN	297	359	311	327	323	365	515	0.2%
Others	338	424	524	790	917	1,151	1,509	1%
Total	174,817	177,109	194,145	218,557	212,422	226,472	237,551	100%
Annual % change		1.3%	9.6%	12.6%	-2.8%	6.6%	4.9%	

Source: Datamyne

U.S. regional reliance on any specific country can be explained by several factors including the type of commodities being supplied, retailers’ geographic preference for import distribution center sites, manufacturers’ plant locations, and government trade policy. As examples, two of the region’s largest importers – Grainger and Spectrum Brands – source 70% and 74% of their imports from China, respectively. Ford and GM purchase parts for their Kansas City assembly plants worldwide including Europe and South America. Over 94% of Kubota Tractor’s imports unloading at its Edgerton, KS distribution center originate in Japan¹⁰.

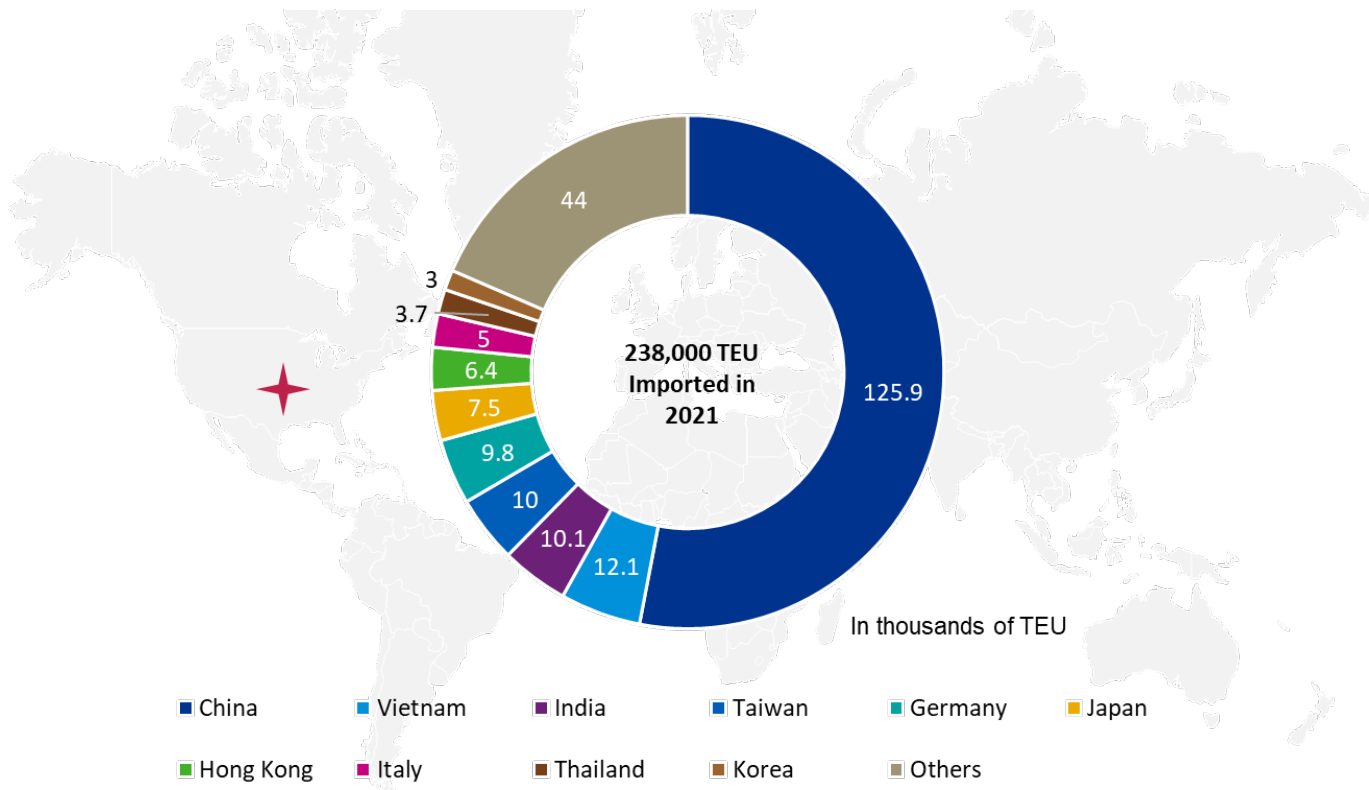
Europe accounts for about 15% of Kansas City’s inbound trade led by German industrial products including engines, auto parts, chemicals, and packaging materials. Southeast Asian nations are a growing source of import products. Businesses have migrated factories to this region seeking lower labor costs and its natural resources. Many of the imports are the same products as sourced in Northeast Asia with the exception being manufactures of natural rubber including medical gloves, tires, and industrial belts.

Vietnam is the 2nd largest supplier of container goods nationwide as well as to Kansas City. It is the region’s fastest growing supplier with volume jumping 64% in 2021. Vietnam is a significant manufacturer of furniture and footwear for companies such as Flexsteel, Nebraska Furniture Mart, and Adidas.

South America is a relatively small source of imported merchandise. Brazil accounts for 73% of volume and is comprised of agricultural chemicals, granite, and animal feed ingredients.

¹⁰ As reported by Datamyne for 2020; sourcing can vary year to year

Figure 9 Kansas City’s Intact Container Imports by Top Countries, 2021



Source: Datamyne

In late 2018, President Trump imposed a 10% tariff on numerous Chinese products, including furniture. That rate jumped to 25% a year later. Many home furnishing companies acknowledged that the higher Chinese tariffs forced more production to Vietnam. For example, Flexsteel’s Edgerton, KS distribution center saw Vietnamese-sourced furniture increase six-fold between 2018-2020. In March 2022, the Biden Administration reinstated Chinese tariff exclusions which included some furniture categories.

The overall import commodity mix for Kansas City is diverse and includes finished consumer goods as well as parts and equipment for local manufacturers and farmers. The top four import commodities for Kansas City mirror the nation’s profile in terms of the commodity groups and their combined 37% of total inbound trade. Of course, there are multiple products in these broad 2-digit harmonized codes. For example, machinery for Kansas City is farm tractors and agricultural equipment, while nationally it is white goods such as refrigerators, washers, dryers, and air conditioners.

Figure 10 Kansas City's Top-15 Intact Container Import Commodities, 2021 in TEUs

HS-2	TEU	% of trade	HS General Category Description	Examples
84	30,631	13%	Machinery & equipment, including parts	Farm tractors, sprayers, milking equipment
94	20,815	9%	Household furnishings	Cabinets & parts, sofas, chairs, lamps
85	19,317	8%	Electrical equipment & electronics	Solar panels, slow cookers, coffee makers, home goods
95	16,434	7%	Toys, games & sports equipment	Playground sets & components, fishing equipment
87	15,392	6%	Vehicles, parts & accessories	Tractor & auto parts, wheel assemblies, doors
39	14,673	6%	Plastics & articles thereof	POF shrink film, plastic bottles, sprayers, gloves, decorations
73	10,907	5%	Articles of iron or steel	Metal furniture, toolboxes, fittings, springs
29	6,701	3%	Organic chemicals	Herbicides, insecticides
40	6,695	3%	Rubber and articles thereof	Tires, hoses, gloves
63	5,998	3%	Textile articles	Tents, towels, gazebos, canopies
83	5,919	2%	Misc. base metal products	Door components, locksets, casters, hardware, faucets
44	5,217	2%	Wood & articles thereof	Lumber, plywood, cedar, boards
48	5,069	2%	Paper & paperboard	Egg trays, cartons, cups, boxes
36	5,058	2%	Explosives & pyrotechnics	Fireworks
70	4,580	2%	Glass & glassware	Glass bottles
Others	64,145	27%		
Total	237,551	100%		

Source: Datamyne; HS-2 is the international Harmonized Commodity Description and Coding System at the two-digit level

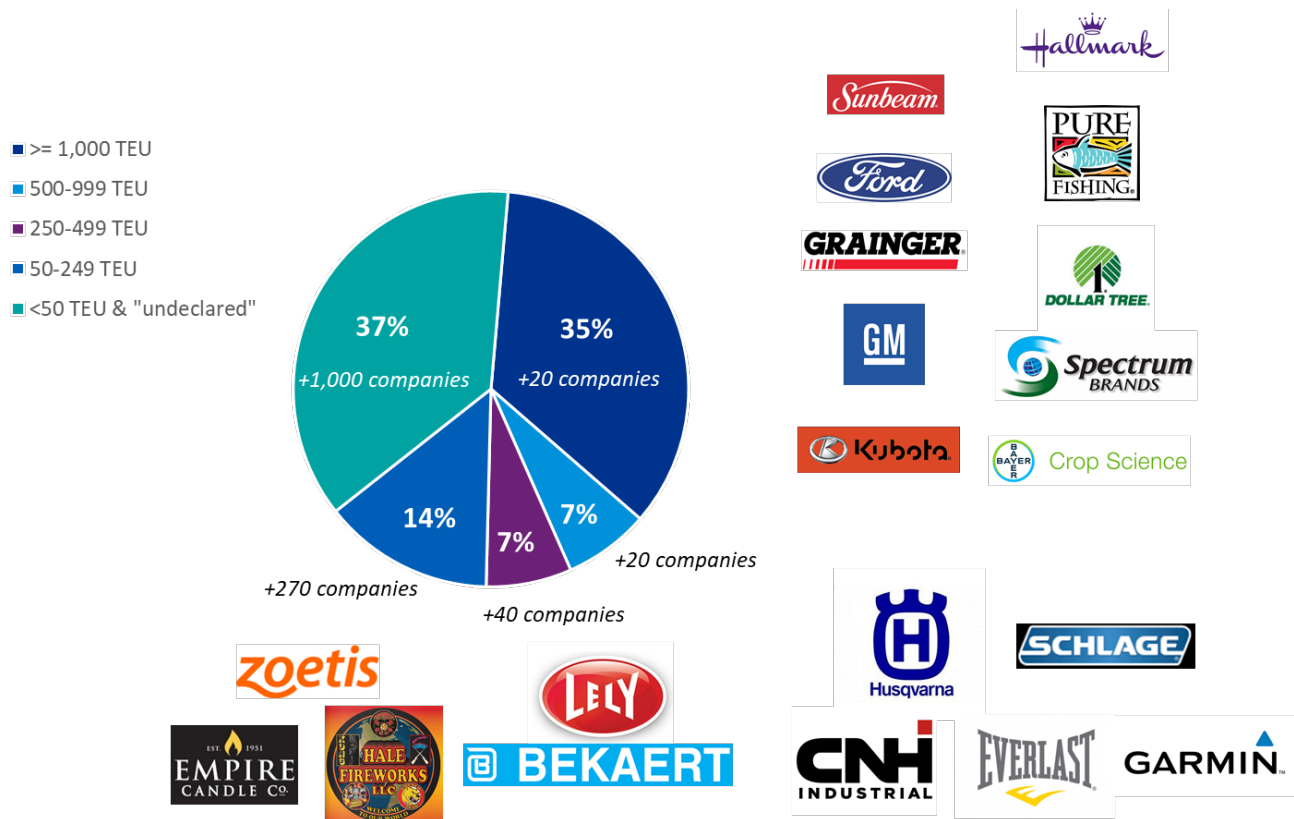
As noted earlier, a region’s success in attracting select retail distribution centers impacts its commodity mix. Kansas City-based companies such as Pure Fishing and Leisure Time Products (Backyard Discovery) are specialists in their product offerings. Both companies have distribution activities within the Kansas City MSA and were regional top-10 importers in 2019.

Using available statistics that include company names, there were 270 firms in the Kansas City market that imported at least 50 TEU in 2019 (14% of total)¹¹. It is worth noting that 6 of the region’s BCOs that imported 500 or more TEU are included in the Journal of Commerce’s “Top 100 Importers” national listing¹². Over 20 companies with individual volume of at least 1,000 TEU accounted for 35% of Kansas City’s total imports. The next tier of over 20 companies with 500-999 TEU is responsible for 7% of trade. The full list of Top 100 Importers in Kansas City in 2019 is shown in Appendix V.

¹¹ U.S. Customs permits companies to have their names restricted from publicly available vessel manifest data. Additionally, more freight forwarders are considered the client for the ocean carrier, and hence the actual BCO will not be listed on shipping documents as the consignee of record. This has been more prevalent in 2020-2021. Therefore, to be as accurate as possible, the authors used 2019 data for this BCO analysis. Many well-known businesses including Wal-Mart, Home Depot, Target, and Amazon are not detailed by name in Datamyne’s database. However, all other shipment details for these companies are available including commodity descriptions, and port and country locations.

¹² Journal of Commerce, Top 100 US Importer and Exporter Rankings

Figure 11 Selected Kansas City Leading Importers



Source: Datamyne

The San Pedro Bay California ports of Los Angeles and Long Beach handle three-fourths of all container imports destined by intermodal rail for Kansas City. BNSF and UP railroads provide direct service from these ocean gateways with an average rail transit time of 4-5 days¹³. This is not surprising given the importance of Asian trade to the Kansas City MSA and the propensity of container carriers to make San Pedro Bay ports their first inbound vessel call.

BlueWater Reporting Service statistics show there are now 34 weekly container strings calling at San Pedro Bay from Asia: an increase from 25 services at the close of 2020. Correspondingly, these service additions spawned a 40% increase in ship deployments and a 60% surge in weekly TEU capacity¹⁴.

Many inland market BCOs including Kansas City importers worked with their ocean carriers to find alternatives to cargo discharge at Los Angeles and Long Beach. Volume to Kansas City from southern California ports dropped 7% in 2021. The ports of Oakland and the Pacific Northwest experienced an uptake in volume as carriers diverted services and added strings to these gateways. As examples, CMA CGM, Matson, MSC, and Wan Hai all launched first-in port call services from Asia to Oakland in 2021.

¹³ Based on samples of carrier bills of lading pre-pandemic and related transport delays in 2021. It only includes the rail transit time not the port or rail ramp unload/load time.

¹⁴ www.bluewaterreporting.com

Figure 12 U.S. Port of Arrival for Intact Container Imports Headed to Kansas City, in TEUs

U.S. Port of Arrival	2015	2016	2017	2018	2019	2020	2021	2021 % of total
SAN PEDRO BAY, CA	135,391	136,534	149,096	166,764	160,479	171,832	160,213	76%
<i>Los Angeles</i>	66,533	69,981	74,825	84,066	85,276	92,606	86,816	41%
<i>Long Beach</i>	68,858	66,552	74,271	82,697	75,203	79,226	73,397	35%
NEW YORK/ NEW JERSEY	24,146	22,417	26,546	32,239	30,468	34,829	35,222	15%
NORFOLK, VA	9,422	12,279	11,007	10,904	14,313	12,726	22,609	6%
SEATTLE/TACOMA, WA	5,077	5,412	6,801	7,901	6,768	5,568	9,972	2%
OAKLAND, CA	72	25	34	12	22	4	8,286	0%
Others	708	441	660	737	372	1,513	1,250	0.7%
Total	174,817	177,109	194,145	218,557	212,422	226,472	237,551	100%
% change		1.3%	9.6%	12.6%	-2.8%	6.6%	4.9%	

Source: Datamyne

New York/New Jersey and Norfolk, VA, with rail service by NS, are the predominant ports for European, Indian subcontinent, and South American trade. The continued growth in manufacturing in Southeast Asia and the Indian subcontinent has fostered more cargo shipments via the Suez Canal. As examples, New York/New Jersey has ten weekly services that can carry Indian cargo either direct or transshipped via the Suez Canal route. Norfolk, VA has five first-in services: two each with Europe and Asia, one with the Indian subcontinent. Slightly more than 90% of Kansas City imports from India were discharged at New York/New Jersey or Norfolk, VA. Container carriers rarely use Gulf Coast ports for serving Kansas City as the volume from the short-haul Central America and Caribbean routes is minimal.

Exports and Outbound Empty Containers

The U.S. is a wealthy nation of consumers which results in more buying than selling with most of our trade partners. This is especially true for oceangoing goods transported in containers. Datamyne reported that total U.S. export loaded container counts in 2020 were only 45% of the import totals. This imbalance worsened during the 2021 transport supply chain challenges sliding further to a 36% ratio of exports to imports. Due to the two-way nature of trade, this forces ocean carriers to load out a significant number of empty containers for eventual reuse overseas.

Historically, Kansas City’s container balance is slightly more balanced than the national average reflecting a strong agricultural export cargo base. This outbound performance had been maintained since 2015. The imbalance which occurred in 2021 was particularly worse for inland markets. Importers kept loaded inbound containers longer due to warehouse space limitations. This delayed carriers’ ability to reload boxes for export. As a result, carriers rushed empties overseas for quicker turns on imports¹⁵. According to exporters, including those members of the Agricultural Transport Coalition (AgTC), U.S. government policies should consider ocean shipping reforms to better ensure the ability of American companies to export their products.

¹⁵ KPMG and its subcontractors’ research shows that the Kansas City export loaded volume may be undercounted by as much as 15%. Regardless, this underreporting does not significantly change the region’s imbalance exhibiting a greater volume of imports compared to exports.

On March 31, 2022, the U.S. Senate passed the ‘Ocean Shipping Reform Act of 2022’ to address similar issues. The legislation (S.3580) was passed to the House of Representative on April 4th, 2022. This bill revises requirements governing ocean shipping to increase the authority of the Federal Maritime Commission (FMC) to promote the growth and development of U.S. exports through an ocean transportation system that is competitive, efficient, and economical¹⁶.

“Right now we are finding through our AgTC survey that of the actual foreign sales — not projected targets, but actual sales under contract — that we are unable to perform 20% of those because we could not get our cargo on ships, could not get it delivered timely and because of price assessments by ocean carriers rendering the product unaffordable for delivery overseas. That is a phenomenal loss of export cargo and export revenue.” – *Agricultural Transport Coalition, 2022*

Exports in the Kansas City MSA and nearby states may move either by truck or rail as bulk or breakbulk cargo that is transloaded into containers at the gateway port. U.S. Customs records these container exports as originating at the U.S. port of load. This is especially true for agricultural products. KPMG and its sub-consultants’ research estimates potentially 20% - 25% of Kansas City’s total container exports are under-reported.

For example, export shipping documents (the bill of lading contract between the shipping line and the BCO) may not name the inland rail ramp where the cargo is originally containerized. In 2021, Datamyne’s statistics from shipping documents for the Delong Company, the largest identified exporter for Kansas City, do not identify 40% of the company’s total national TEUs as to “place of receipt”. Other exporters’ unidentified shipment origins are also likely contributing to an undercount of outbound containers originating at Kansas City area rail ramps. Transport may be listed under the account of the exporter’s logistics provider, cooperative, trading company, or distributor without reference to cargo origin; or U.S. Customs may not publish the cargo owner’s name due to privacy.

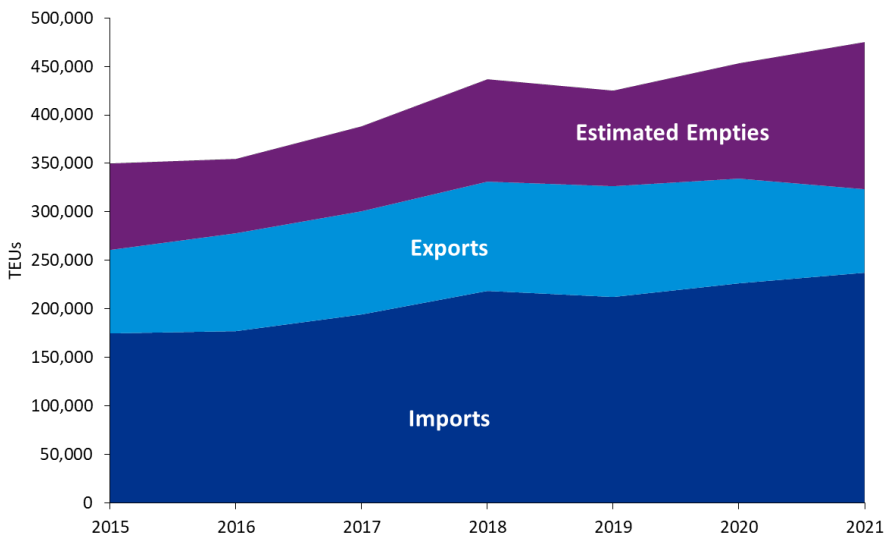
These shortfalls are insufficient to impact the trade imbalance favoring imports, and not likely to affect the region’s commodity mix or shares of outbound trade by port or overseas buying pattern. Additionally, the overall Kansas City container trade forecast is unaffected as to the combined volume of imports, export loads, and empty exports.

The following export analysis and profiles are restricted to the information available in Datamyne for the shipment of intact international containers originating at Kansas City rail ramps.

In 2021, the Kansas City market exported approximately 86,000 TEU of intact international containers via U.S. ports compared to import volume of 238,000 TEU. This implies that about 152,000 TEU of empty containers were repositioned overseas. Assuming outbound loads and empties match back to the number of loaded imports, Kansas City rail ramps handled over 475,000 TEU in 2021 of intact international containers.

¹⁶ <https://www.congress.gov/>

Figure 13 Kansas City's Intact International Container Trade Balance, 2015-2021



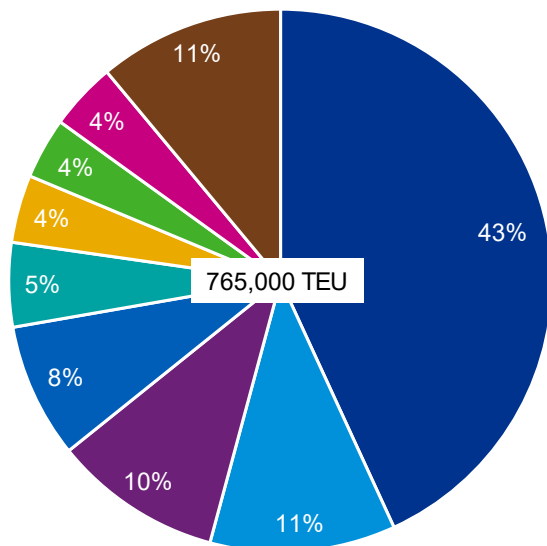
Within the Midwest, Kansas City is the 2nd largest container export load center with an 11% share. As is the case with imports, Chicago dominates the Midwest container export market with about 330,000 loaded TEU annually.

Source: Datamyne; KPMG and its sub-consultants

Figure 14 Midwest Intact International Container Exports by Rail Gateway, 2021

Export performance since 2015 has been inconsistent with key factors impacting performance including the trade war with China; container transport share of select commodities; and the COVID-19

- CHICAGO
- KANSAS CITY
- COLUMBUS
- DETROIT
- CLEVELAND
- LOUISVILLE
- CINCINNATI
- ST. LOUIS
- Others



pandemic's effect on global economies. The 2021-2022 transport supply chain situation has become another inhibitor of consistent performance. In the aggregate, Kansas City's export volume increased steadily until 2020. This masks the fact that container exports to China, the largest buyer, declined every year except 2020. In 2015, China accounted for 40% of Kansas City container exports. These volumes dropped to a low of 8% in 2019 and finished in 2021 with a 20% market share of outbound trade.

Source: Datamyne

Figure 15 Kansas City's Intact International Container Exports by Destination Region, in TEUs

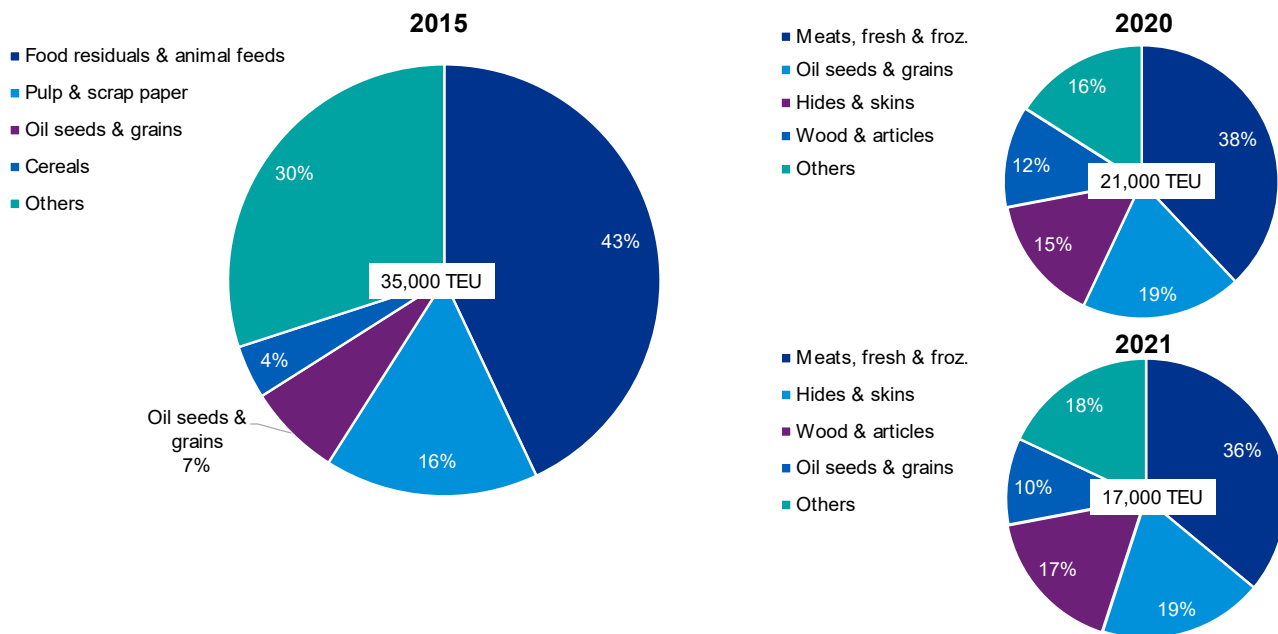
Destination Region	2015	2016	2017	2018	2019	2020	2021	2021 % of total
NORTHEAST ASIA	46,054	41,772	46,416	37,353	30,349	38,327	27,774	32%
<i>of which: China</i>	<i>34,876</i>	<i>26,347</i>	<i>26,297</i>	<i>15,570</i>	<i>9,594</i>	<i>20,987</i>	<i>17,330</i>	20%
SOUTHEAST ASIA	12,379	23,297	24,208	33,170	34,799	32,810	24,855	29%
EUROPE	11,925	13,293	14,661	16,425	16,548	14,314	16,078	19%
SOUTH AMERICA	5,931	5,564	7,179	9,503	10,435	8,333	4,497	5%
INDIAN & SUBCONTINENT	2,967	8,578	6,697	6,381	7,607	5,124	3,148	4%
MIDDLE EAST	1,676	1,599	1,897	2,183	2,715	2,011	2,939	3%
AUSTRALIA & NEW ZEALAND	1,150	1,268	1,320	2,459	1,794	2,185	2,798	3%
AFRICA	1,041	873	1,327	1,334	1,566	1,950	2,133	2%
CENTRAL AM & CARIBBEAN	1,034	1,327	1,191	1,905	1,316	1,035	1,027	1%
UNIDENTIFIED & MISC.	1,914	3,097	1,490	1,905	7,101	1,557	419	0%
Total	86,071	100,668	106,386	112,617	114,229	107,645	85,667	100%
% change		17.0%	5.7%	5.9%	1.4%	-5.8%	-25.0%	

Source: Datamyne

In 2016, China imposed anti-dumping and anti-subsidy tariffs totaling almost 65% on U.S. exports of distillers dried grains (DDGs) citing potential damage to domestic producers. At that time DDGs and other animal feeds accounted for 40% of Kansas City's exports to China. By 2019, any of this region's DDG exports to China only moved via bulk vessels. In 2020, a small percentage increase in DDG trade reemerged including transport in containers. This did not move the needle on total TEU exports to China. The 2020 uptick resulted from the "Phase One" trade deal between the U.S. and China by which they agreed to purchase an additional \$200 billion of American goods and services between 2020-2021 (over their 2017 level). For Kansas City, the gains benefited sales of soybeans, beef, and hides.

The COVID-19 pandemic forced China to restrict access to entire cities, regions, and ports at various times in 2021. As a result, Kansas City's exports fell by 18%. Unfortunately, as of this report publication date, a COVID-19 resurgence has forced China to reimpose lockdowns. People in the manufacturing-heavy provinces of Jilin and Guangdong and the Shanghai Municipality are currently homebound affecting personal consumption of goods as well as reduced factory production.

Figure 16 Kansas City’s Leading Intact International Container Export Commodities to China, 2015 versus 2020-2021



Source: Datamyne

Outside of China, Kansas City containerized exports had performed well; excepting the 2020-2021 downturns that can generally be accounted for by economies weakened by the global pandemic, followed by the impact from transportation congestion. The leading buyers include most countries in Southeast Asia. According to U.S. Census data, one in every three metric tons of U.S. export DDGs goes to Vietnam, Indonesia, Thailand, and the Philippines. This is the same profile shares for Kansas City. Containerization has gained favor in transport due to smaller-scale ports in these countries and the ability to direct deliver containers to more moderate sized farms.

Two of Kansas City’s trade partner regions are stronger in export volume than imports. Besides Southeast Asia, South America’s significant farm base consumes American made chemicals, fertilizers, DDGs, and agricultural equipment. Livestock products, grains, and related byproducts account for over half of container exports at Kansas City rail ramps. The adjacent four states that primarily export container goods via Kansas City rail ramps rank highly based on U.S. Department of Agriculture (USDA) 2020 statistics on total cash receipts for all farm commodities: Iowa is 2nd; Nebraska is 3rd; Kansas 5th; and Missouri is 12th ¹⁷.

¹⁷ www.data.ers.usda.gov/reports.aspx?ID=17844

Figure 17 Kansas City's Top-15 Intact International Container Export Commodities, 2021 in TEUs

HS-2	TEU	% of trade	HS General Category Description	Examples
23	17,297	20%	Food residuals & animal feeds	DDGs, animal feeds
2	9,443	11%	Meats, fresh & frozen	Frozen pork & beef
41	9,168	11%	Hides & skins	Cow hides
12	8,546	10%	Oil seeds & grains	Soybeans
84	6,916	8%	Machinery & equipment	Irrigation, agriculture & construction equip.
44	5,020	6%	Wood & articles	Hardwood lumber
39	2,567	3%	Plastics & articles	Bio-based plastics
4	2,030	2%	Dairy products	Milk powder
76	1,959	2%	Aluminum & articles	Aluminum waste & scrap
21	1,750	2%	Edible preparations	Foodstuffs, glutens, spices
87	1,604	2%	Vehicles & parts	Storage tanks, tractor parts
72	1,336	2%	Iron & steel	Mixed metal scrap, waste motors
74	1,027	1%	Copper & articles	Recycled cooper scrap
38	988	1%	Chemicals, miscellaneous	Herbicides
5	930	1%	Animal products	Bone meal & chips
Others	15,087	18%		
Total	85,667	100%		

Source: Datamyne; HS-2 is the international Harmonized Commodity Description and Coding System at the two-digit level

The port profile for Kansas City’s container exports is comparable with its inbound trade with slightly higher participation for New York and Norfolk versus San Pedro ports. The Suez Canal route and Southeast Asia’s larger export market explain the shift. There are six weekly services at New York that transit roundtrip with South Asia countries via the Suez Canal. There are an additional four services that route eastbound imports from Asia to the U.S. East Coast via the Panama Canal and return to the Far East via the Suez Canal carrying exports. This provides additional export ocean transport capacity at the U.S. East Coast. Additionally, there are four Suez services that turn in India and do not extend into Southeast Asian ports.

As a result, 20% of Kansas City’s Southeast Asia exports exit through New York-New Jersey/Norfolk, VA versus 3% for imports. Since exports headed to Southeast Asia are primarily lower-valued, less time-sensitive agricultural goods, they can tolerate the longer transit time via the Suez Canal.

Figure 18 U.S. Port of Departure for Intact International Container Exports Leaving Kansas City, in TEUs

U.S. Port of Departure	2015	2016	2017	2018	2019	2020	2021	2021 % of total
SAN PEDRO BAY, CA	57,475	67,901	74,477	66,352	63,827	65,330	44,033	35%
<i>Long Beach</i>	22,726	34,290	34,777	30,565	36,940	39,425	30,237	35%
<i>Los Angeles</i>	34,749	33,611	39,700	35,787	26,887	25,905	13,796	16%
NORFOLK, VA	10,760	14,336	11,767	16,126	18,179	15,984	20,710	24%
NEW YORK/ NEW JERSEY	14,517	10,813	19,208	23,739	28,131	24,386	19,571	23%
SEATTLE/TACOMA, WA	20	301	52	735	2,101	960	899	1%



Others	3,299	7,318	882	5,666	1,993	985	454	1%
Total	86,071	100,668	106,386	112,617	114,229	107,645	85,667	100%
% change		17.0%	5.7%	5.9%	1.4%	-5.8%	-25.0%	

Source: Datamyne

The following schematic depicts some of the region’s significant export rail users. The full list of Top 100 Exporters in Kansas City in 2020 is shown in Appendix VI. This list does not reflect complete source document information due to US Customs data collection processes and aggregation of international companies. It is recommended that further information be obtained on key participants in the export supply chain through commodity associations such as the U.S. Grains Council and the National Cattlemen’s Beef Association.

Figure 19 Leading Intact International Container Exporters Using Kansas City Rail Ramps



Source: Datamyne

Domestic Transloads of International Cargo

This market analysis and trade forecast is directed at Kansas City’s involvement in international container trade and overseas partners with sources for market intelligence as Datamyne compiled from U.S. Customs ship documents showing imports and exports of intact ocean containers. Throughout the U.S. port network and especially at the San Pedro, CA ocean gateways, transloading of cargoes from 20-foot and 40-foot international containers into domestic 53-foot containers for inland routing is a process commonly utilized by shippers and carriers. Carriers benefit by having import containers remain local thereby hastening their return overseas. BCOs potentially benefit by reducing inland rail and truck costs. In general, imported goods in three international 40-foot containers can be transloaded into two domestic 53-footers, based on typical weight and cubic measurement.

Figure 20 Example of Various Container Sizes Used in Intermodal Rail

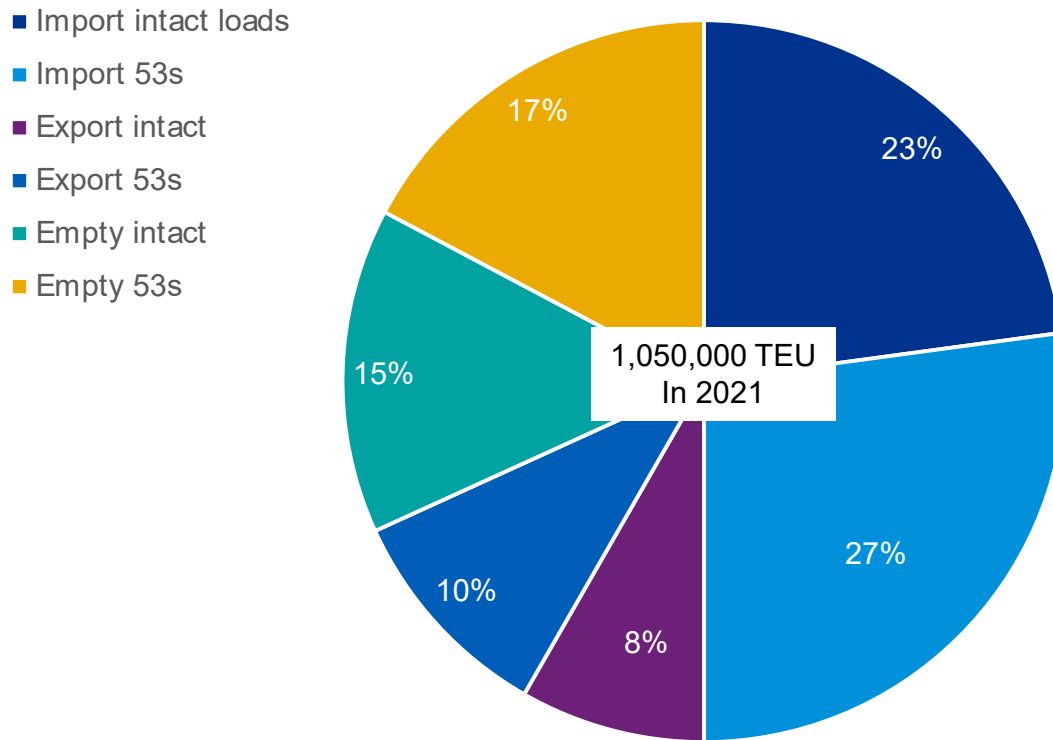


Source: Google Images

Kansas City rail ramps also handle international imports that have been transloaded at the U.S. port of arrival into 53-foot domestic containers. These boxes are not included in Datamyne but are relevant to quantifying market size. Research by the University of California at Berkeley estimated that at the ports of Los Angeles and Long Beach, 21% of all imports remain local to fulfill home-grown demand; 37% are railed or trucked inland as intact ocean containers; and 42% of international boxes are transloaded to 53-foot domestic containers¹⁸. There are numerous BCOs and ocean carrier transport providers; as a result transloading does not impact the participation mix profile for importers or commodities. To account for U.S. port transloading and for Canadian port traffic with Kansas City, KPMG and its subcontractors has assessed these components at a combined 20% higher level than intact containers. The Kansas City volume of internationally traded containers is estimated to have totaled just over one million TEU in 2021. The following figures depict total container lifts for Kansas City in 2021, as well as historic container lifts from 2016-2021.

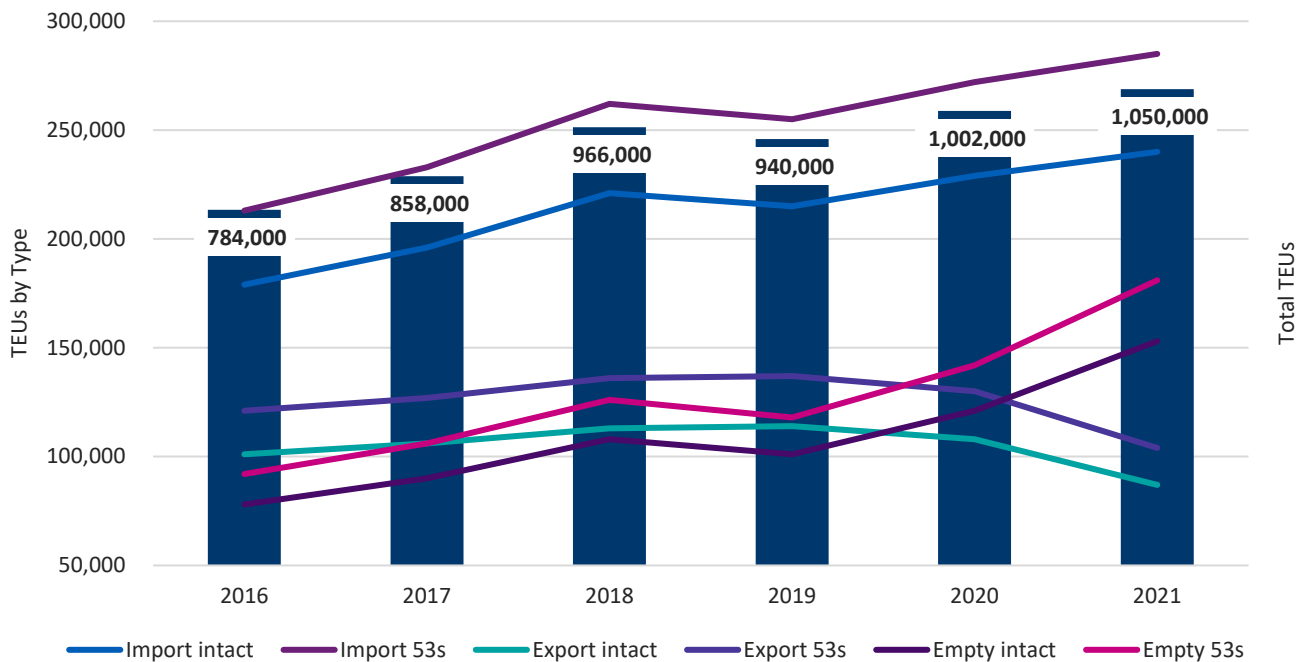
¹⁸ https://ieor.berkeley.edu/wp-content/uploads/2019/10/RCL-LA-Basin-Initiatives-Jan_13_2017.pdf

Figure 21 Total Container Lifts for Kansas City, 2021 in TEUs



Source: Datamyne; IANA

Figure 22 Total Container Lifts for Kansas City, 2016-2021 in TEUs



Source: Datamyne; IANA

V. Trade Forecast Assumptions

As this market analysis demonstrates, the demand for inbound international and domestic containerized goods arriving in Kansas City by intermodal rail is driven by the growth in the region's consumption of a cross section of retail merchandise, manufacturing materials and agricultural supplies. Examples include imports of Sunbeam appliances; Ford and Kubota auto and tractor parts; and Grainer industrial equipment.

An aggregate measure of this consumer and business demand is the region's total economic performance in terms of real (inflation-adjusted) gross domestic product (GDP). This statistic is calculated by the U.S. Bureau of Economic Analysis (BEA). The region's economy advances through population growth, expanded business activity, job creation and the ensuing increase in wages, business investment and consumer spending. Cumulatively, such improvements will be reflected in the rise in regional GDP.

The COVID-19 pandemic's impact on the economy in 2020 and 2021 was unprecedented and resulted in significant government intervention to prevent potential downturns. For 2020, the U.S. Bureau of Economic Analysis reported the national GDP declined -3.5%. To help stimulate the economy, President Biden signed the American Rescue Plan (ARP) in April 2021 which targeted spending of \$1 trillion. Financial packages were designed to assist various pillars of the economy: the Homeowners Assistance Program; Economic Impact Payments for taxpayers; businesses' Paycheck Protection Program; and the State and Local Fiscal Recovery Funds, among other assistance plans¹⁹.

The Kansas City regional GDP fell -2.3% in 2020, outperforming the national average as well as the state of Missouri (-3.6%). For 2021, Moody's Analytics estimates Kansas City's GDP advanced 3.25% which is below the country's gain of 5.7% but nevertheless resilient following 2020's more moderate downturn²⁰. Moody's also noted that the region's cost of doing business remained 3.0% lower than the national average which kept and attracted business. In turn, it boosted the job market recovery. Fannie Mae noted the importance of job growth in the Kansas City metropolitan area²¹:

"The Kansas City metro area has been able to mitigate the severe impacts of COVID-19. The pandemic may have also created a new economic crutch for the Kansas City local economy: the logistics sector. According to Moody's Analytics, there is an above-average concentration of Logistics/Transportation payrolls (5%) in the metro. Furthermore, as the virus shifted consumer behavior and made e-commerce more essential, Kansas City's central location bodes well for the future of e-commerce." – **Fannie Mae, 2021**

¹⁹ <https://home.treasury.gov/system/files/136/American-Rescue-Plan-Six-Month-Report.pdf>

²⁰ The BEA will release the 2021 official GDP for the Kansas City MSA in December 2022

²¹ <https://multifamily.fanniemae.com/media/8556/display#:~:text=The%20Kansas%20City%20metro%20is,continue%20to%20be%20through%202025>

The Federal Reserve, in its March 2022 “Beige Book”²², cited several current conditions for the Kansas City District both positive and negative that arise in their most recent survey. The service and manufacturing sectors are rebounding as the pandemic wanes. Retail sales are still strong although some consumer spending is showing signs of saturation. Rising commodity prices are benefiting agriculture and energy activities, although wage pressure is mounting in tandem. Business procurement costs are on the rise which is forcing companies to seek new suppliers. Capital spending is mixed with some trepidation related to higher costs and rising interest rates. Shipping delays and cost increases are crimping goods (inventory and retail) and service (restaurant) sectors. Overall, the economy is described as expanding at a modest pace being held in check by the spread of inflation.

The nation’s and Kansas City’s immediate 2022-2023 economic outlook remains uncertain due to ongoing impacts of the COVID-19 pandemic, the outbreak of war in Ukraine in February 2022, and the Federal Reserve’s decision to increase interest rates in March 2022 which may continue through 2022. Many banks and private forecasters forewarn that more interest rate hikes are anticipated in 2022-2023; additionally, commodity shortages and higher than normal inflationary trends have required analysts to revisit prior economic projections. As an example, Reuters reported the following on April 8, 2022²³:

“The macro-economic picture is deteriorating fast and could push the U.S. economy into recession as the Federal Reserve tightens its monetary policy to tame surging inflation, Bank of America strategists warned in a weekly research note. ‘Inflation shock’ worsening, ‘rates shock’ just beginning, ‘recession shock’ coming.” – *Reuters, 2022*

Deutsche Bank speculated that a short, mild recession could materialize in late 2023-early 2024. The economic drivers for the 2022-2023 trade forecast are based on a Moody’s Analytics late March 2022 modeling which estimates U.S. GDP growth between 2% and 2.6%.

Longer term this trade forecast is built upon a conservative expectation that GDP growth in the Kansas City MSA will average between 1.2% and 2.4% annually in 2030-2070. This appears reasonable as real GDP growth averaged 1.4%, compounded annually for 20 years through 2019. Additionally, put into perspective, the Congressional Budget Office’s Long-Term Outlook for the nation (published March 2021) bases its projections on real GDP growth averaging between 2.2% (in the 2020s) to a low of 1.5% (2040s)²⁴.

To ascertain the relationship between the Kansas City regional economic performance and demand for inbound container goods an intermediate step is required to determine the physical locations where merchandise is warehoused before distribution to consumers through retail channels; or the locations where manufacturers directly use purchased materials.

²² https://www.federalreserve.gov/monetarypolicy/files/BeigeBook_20210303.pdf

²³ <https://www.reuters.com>

²⁴ <https://www.cbo.gov/publication/56977>; the 2022 Long Term Outlook publication has been delayed until May

A reliable gauge of the storage supply and expansion requirements is the region's industrial building inventory. This includes manufacturing sites, as well. Real estate service companies and regional government economic development organizations report on such properties including location, ownership, leasing, current inventory (in square footage) and new additions, vacancy rates and rents. Colliers International statistics on total industrial square footage and building counts by sizes form the basis for this analysis²⁵.

The forecast quantifies how the increase in the volume of inbound intermodal containers can be attributed to the growth in regional economic activity as explained by the expansion in square footage of occupied industrial buildings. For example, in 2016 Spectrum Brands a consumer products company announced the future occupancy of a nine hundred thousand square-foot distribution center at the Logistics Park next to BNSF's rail ramp in Edgerton, KS just outside of Kansas City. This site was to replace multiple warehouses the company operated in other states. Spectrum's Kansas City import volume jumped from zero in 2016 to nearly 7,000 TEU in 2020 (as reported by Datamyne).

Colliers International summarized the impact of industrial property growth on the trade outlook for Kansas City in their "2021 Commercial Real Estate Forecast Report":

"The Kansas City market continues to be a thriving industrial market based on its ideal centralized location. A growing reliance on e-commerce retailers for basic goods throughout the pandemic, continues to fuel demand for industrial big box product as supply chains continue to become right-sized, shifting away from "lean" inventory strategies that proved sound in the past. As growing needs continue to materialize for warehouse and distribution space, markets such as Kansas City, with established infrastructure, allows occupiers the ability to streamline their supply chain operations, which lowers costs, and more importantly, delivers goods to the end user in a faster and more efficient way throughout the country." – *Colliers, 2021*

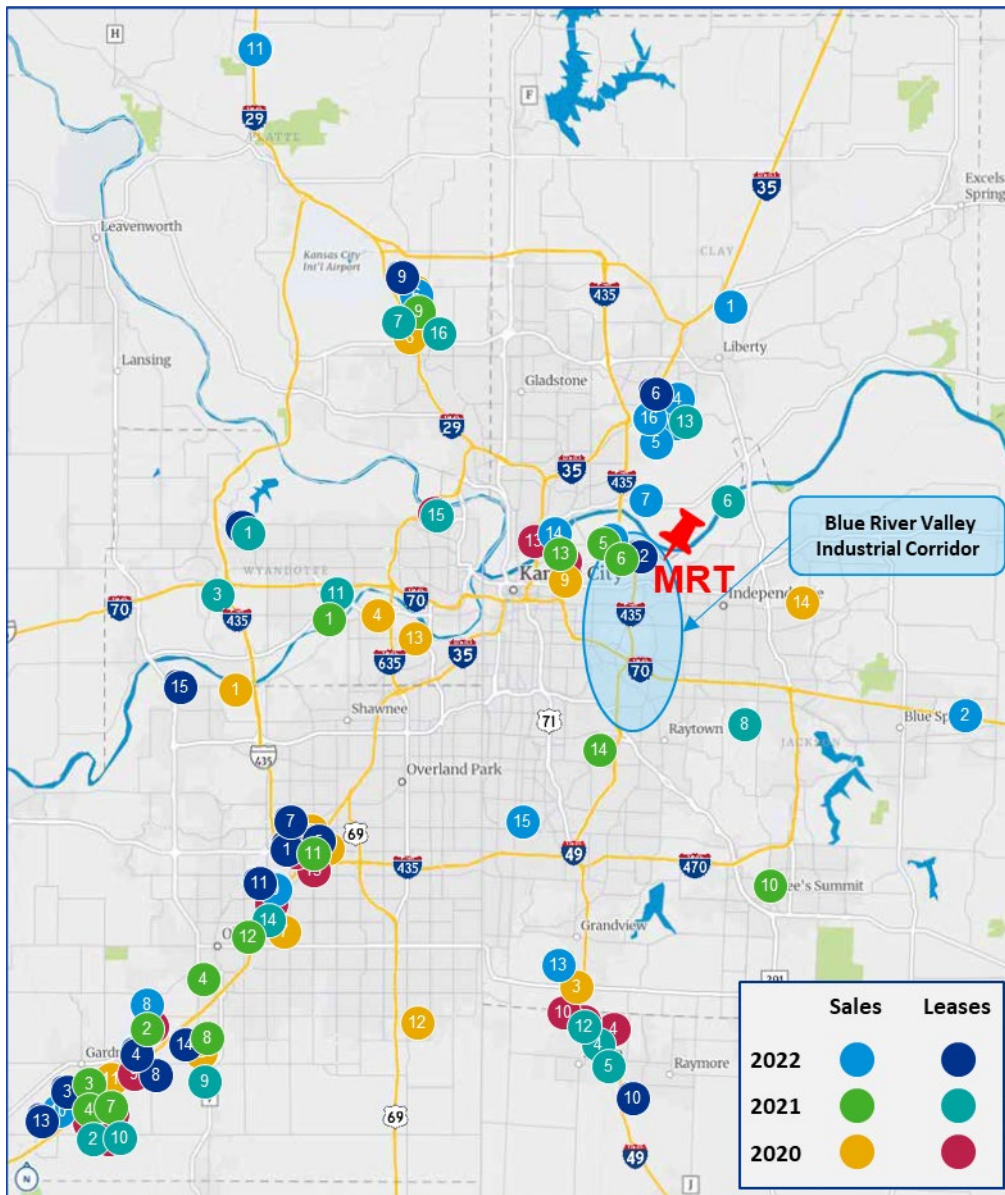
Following up in their 2022 Outlook, Colliers noted further opportunity for Kansas City:

"Driven by rapid e-commerce growth, the industrial market is poised for another active year. Big-box omnichannel retailers, third-party logistics providers and food and beverage manufacturers that support e-commerce and fulfillment activity continue massive expansion efforts both locally and nationally to keep pace with growing e-commerce demands. Looking ahead to 2022, solid market fundamentals will drive a strong industrial market for the foreseeable future." – *Colliers, 2022*

²⁵ <https://www.colliers.com/en/research/kansas-city/>

According to Colliers, over the past four years, there were 55 leases (new, renewed, or expanded) of industrial sites of at least 200,000 square feet spread across five counties throughout the Kansas City MSA. The full list of the industrial buildout of space in Kansas City since 2018 is shown in Appendix II. The following map shows Collier’s summary of lease and sale activity from 2020-2022.

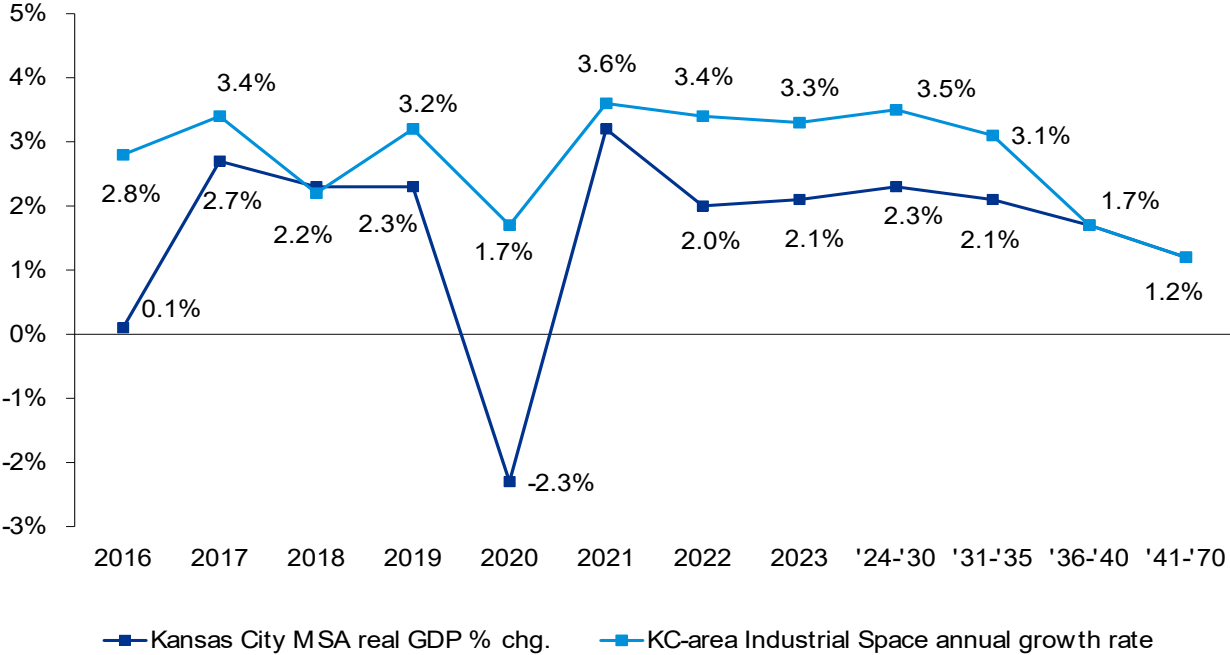
Figure 23 Colliers International Top Industrial Leases in Kansas City, 2020-2022



Source: Colliers

Throughout this decade, Kansas City MSA industrial space square footage is projected to continue its upturn with a total gain of 35% through 2030 owing to the accelerated expansion in e-commerce. Thereafter, as e-commerce distribution center needs begin to level out, overall industrial space buildout is forecasted to moderate in line with real GDP gains averaging 1.2% to 3%. The expectation is that occupied industrial space will double by the early 2040s reaching over 500 million square feet: a good indicator of future gains in container trade.

Figure 24 Forecast of Kansas City Regional GDP and Industrial Space Expansion, as annual % changes



Source: KPMG and its sub-consultants; Historical data from U.S. Bureau of Economic Analysis (BEA) and Colliers

VI. Trade Projections 2022-2070 for the Kansas City MSA

In 2017 and 2019 Kansas City's imports were able to quickly bounce back from off years. The current economic climate is impacted as the COVID-19 pandemic wanes only to be replaced by increased inflation, higher interest rates, and the likelihood that international and domestic transportation bottlenecks may persist throughout 2022. Despite these challenges on a global and national scale, as noted, Kansas City's economy has exceeded the national growth rates and the continued resilience in regional industrial warehousing is generating multiplier benefits to construction, jobs, and wages throughout the Kansas City MSA. It is expected that the 2022 import gain for the Kansas City MSA is moderately projected at a 4.4% growth rate.

It is anticipated that inbound trade momentum will pick up in 2023 to address unmet consumer demand which could exhibit a volume gain over 8%. Such an elevated long-term growth rate is not justifiable once the economy rebalances and adjusts to higher inflation. The expectation is a return to a more normal equilibrium in spending between goods and services, as well as an economic growth rate at a more moderate, albeit sustainable levels.

By the 2nd half of this decade, the annual import growth rate is forecast to average 5% to 5.5%. Import volume in 2030 is projected at 873,000 TEU (inclusive of all inbound box sizes including intact ocean containers and 53-foot domestic transloads); a 66% volume advance compared to 2021's 525,000 TEU. Adding in the continued match back of exports and empties to import volumes positions Kansas City rail ramps to handle 1.75 million annual TEU entering the next decade.

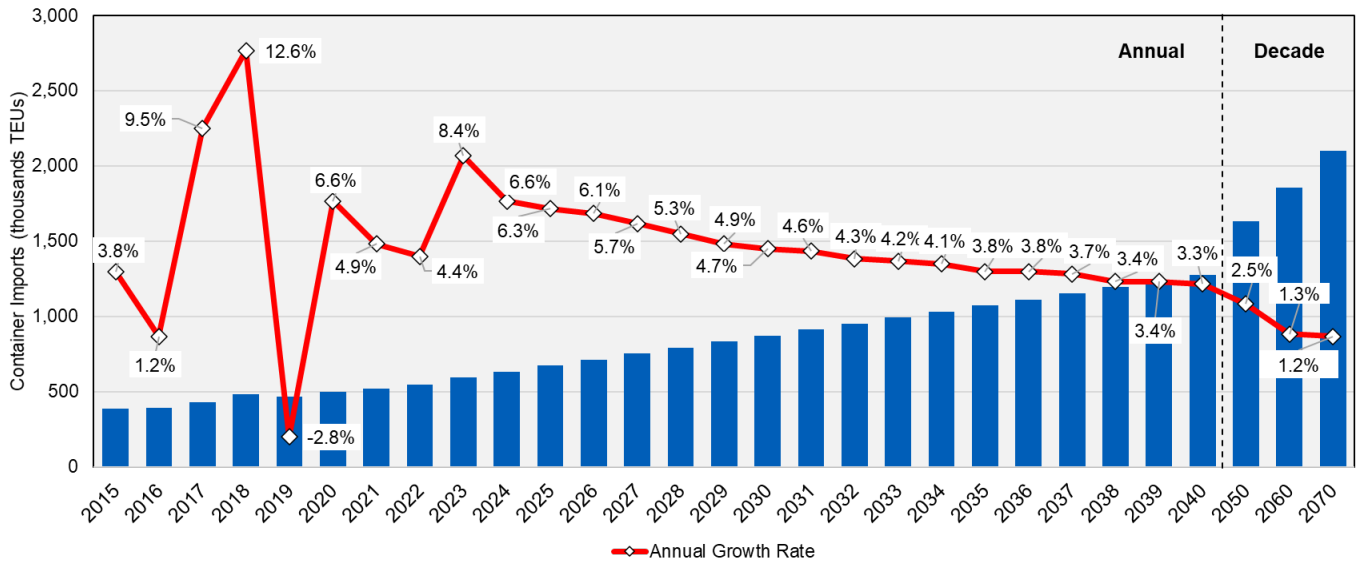
Several external factors can influence global economics and trade performance rather quickly; therefore, it is challenging to develop long-term forecasts (20 or more years) beyond more than a reasoned forecast. This trade forecast "flattens out" long-term growth rates, averaging the likelihood of future cyclical performance without attempting to pinpoint when it will happen. The long-term trade forecast calls for import growth to average about 4.0% in the 2030s; 2.5% in 2040s-2050s; and 1.0% thereafter.

A few aggregate trade milestones (comprised of imports, exports, and empties) to note for Kansas City:

- 2 million TEU is expected by 2034;
- 3 million TEU reached in 2046; and
- 4 million TEU possibly handled by area intermodal rail ramps by 2067.

The complete trade forecast volumes are included in the Appendix III.

Figure 25 2022-2070 Forecast for Kansas City's Import Intermodal Containers



Source: KPMG and its sub-consultants; historical data from Datamyne

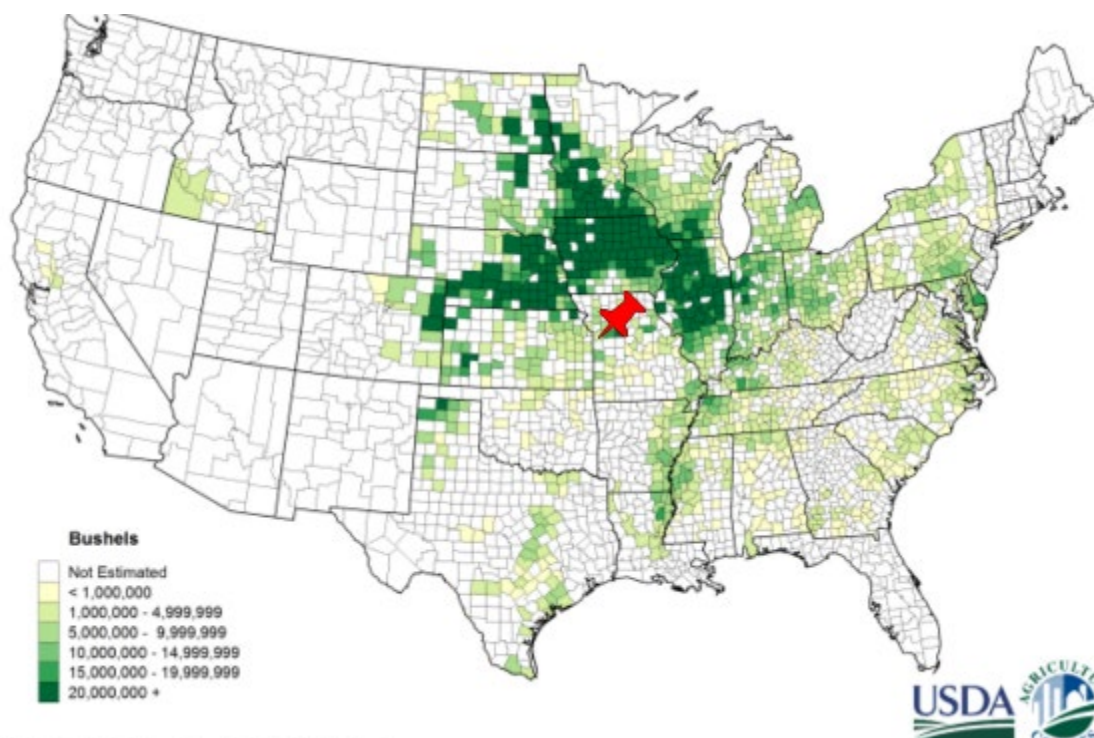
VII. Opportunities for Export Containerization of Agricultural Products

U.S. Census statistics show that American port exports of corn, soybeans, sorghum and DDGs topped 116 million metric tons in 2020, a robust 30% gain that totally erased the loss in 2019²⁶. A moderate increase of 3.6% in 2021 pushed exports above 120 million metric tons which surpasses the previous peak achieved in 2016. Early 2022 statistics (only through February) reveal volume dropping -17% led by major setbacks in soybeans (-25%) and corn (-12%). Significant changes are likely as the Ukrainian crisis was not yet a factor in global commodity trade volumes or prices.

In 2021, for these four key commodities, only 8% of outbound volume was shipped in containers which could present an opportunity for further containerization at Kansas City given the importance of these commodities in the export mix.

As an example, Kansas City's transport location is conducive for handling corn produced in western Iowa, eastern Nebraska, and northeastern Kansas. Corn could be transloaded into international containers and either railed or barged to coastal ports for export. Similar maps showing Kansas City's beneficial location near production of soybeans, sorghum and DDGs are included in Appendix IV.

Figure 26 Corn for Grain Production by County, 2019



Source: U.S. Department of Agriculture

There has been little shift in transport mode over the last ten years for the four commodities combined,

²⁶ <https://usatrade.census.gov/>, exports to Canada and Mexico are only includes ocean transportation

with container exports holding an 8% to 12% share. However, to reach new overseas markets, grain merchandisers and trade associations are increasing their marketing outreach emphasizing the use of containers. CHS Inc., a grain merchandiser, explained the value to its Asian importers of containers²⁷:

“CHS is a top container exporter and handler of sorghum. We are part of the entire supply chain from Kansas to China, which is appealing to buyers. Grain loaded via container better preserves crop identity during transit overseas. And containers can be easily transported inland by smaller vessels, rail, or trucks, reaching more customers and markets. Buyers are willing to pay a premium for identity-preserved grain and shipping flexibility. From Lincoln, Neb., we truck sorghum 200 miles to western Iowa, where it is loaded into containers and transported to Los Angeles by rail for export.” – **CHS, 2021**

The U.S. Soy Organization has identified similar containerization benefits for its products depending on the overseas buyer’s requirements.²⁸

For many countries, containers are preferred to bulk vessels. On a per metric ton basis, it is cheaper to ship a vessel of soybeans than an equivalent number of containers. If a country has a smaller animal population, the supply chain has an easier time handling a stream of 25 metric ton loads than a Panamax vessel shipping 60,000 metric tons or a fully loaded capesize vessel shipping 120,000 metric tons. By receiving containers versus bulk, the buyers can avoid infrastructure requirements that are necessary to unload, receive, and store the extra volume of soybeans. As the animal population increases, due to economies of scale cost savings, some container customers will shift shipments to bulk vessels. – **U.S. Soy Organization**

Nationally outbound cereals’ transport remains primarily a bulk business. DDG export in containers has advanced transport share from 41% to 46% since 2016. This share was marginally higher at 48% in 2020 prior to the container shipping delays. As an example, Vietnam is largest overseas market for containerized DDGs. In 2021, container transport accounted for 80% of outbound shipments compared to 92% in 2020. Container export tonnage dropped by 3%.

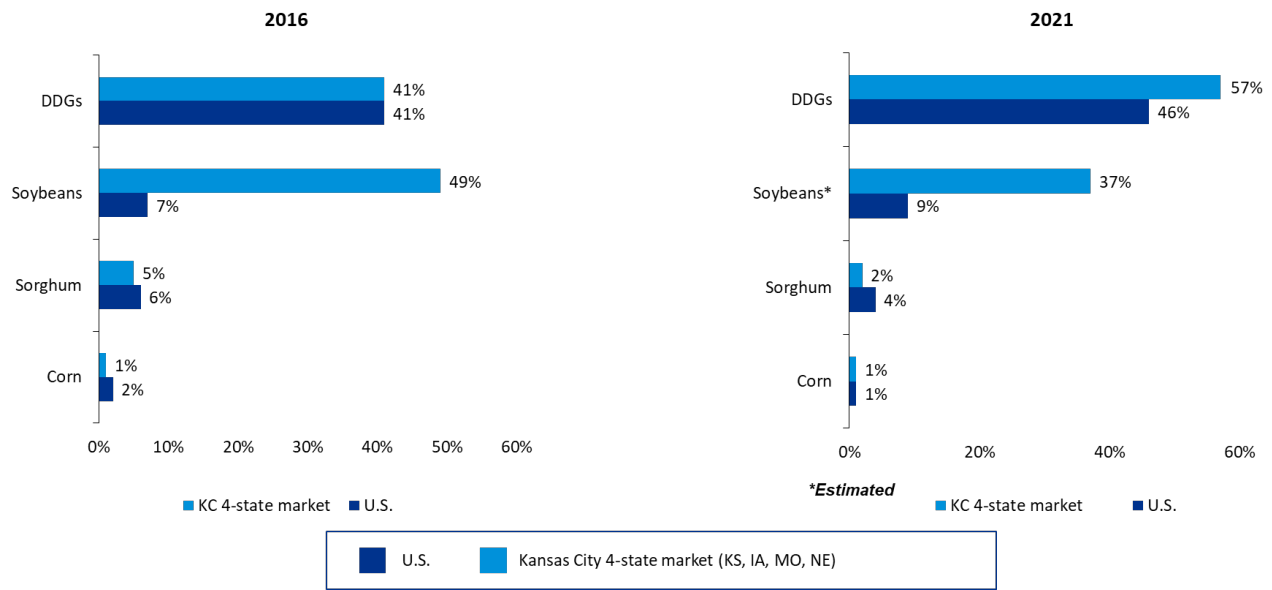
For the four-state market nearest to Kansas City (Kansas, Iowa, Missouri, Nebraska), containerization has gained transport share at a faster pace for soybeans and DDGs²⁹.

²⁷ <https://www.chsinc.com/about-chs/news/news/2021/03/09/containers-deliver-on-global-specialty-grain-demand>

²⁸ <https://ussoy.org/u-s-soybean-container-exports-increasing/>

²⁹ The 4-state export volume reported by U.S. Customs as being transported in containers does not specify the loading location. Grains produced in the region can be containerized locally or be trucked and railed in bulk to an ocean port for transloading into containers.

Figure 27 Increase in Containerization of Agricultural Products between 2016 and 2021



Source: U.S. Census data

As noted by the U.S. Soy Organization, a key to estimating the potential for further containerization is to evaluate exports from Kansas City’s four state agricultural market to identify countries where total annual shipment size is small to moderate, and containerized export share is low. To define this market potential by commodity, this analysis focused on annual tonnage per country less than or equal to 150,000 tons; and a current containerization rate no higher than 75%. Conversion to containers was set at 22 metric tons per 40-footer³⁰.

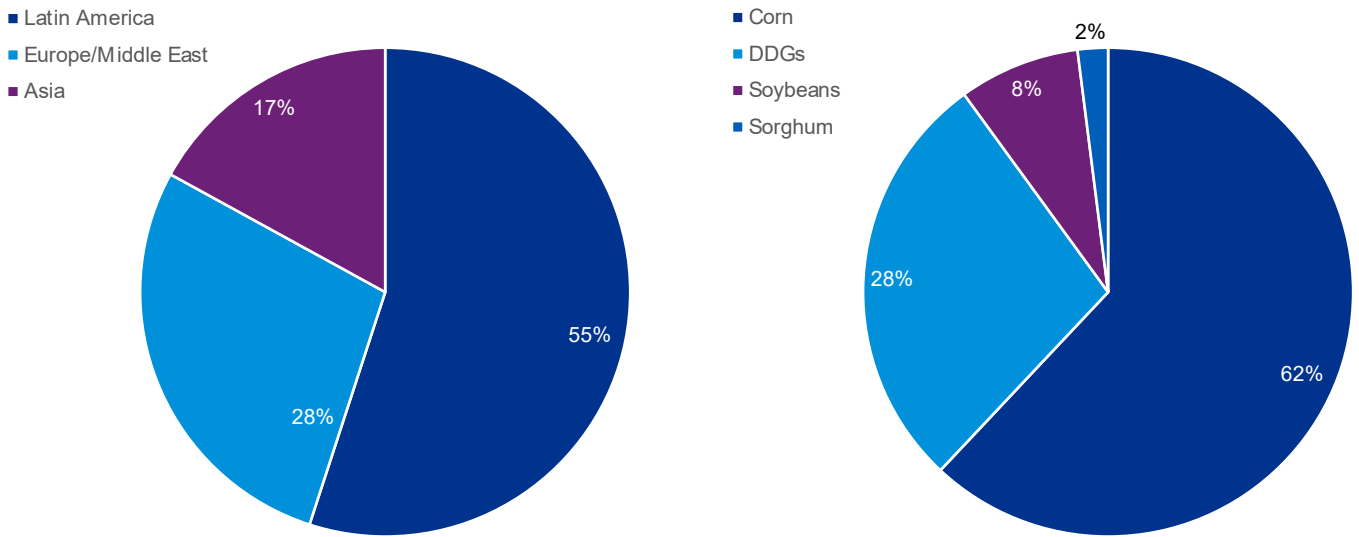
Please note that this container analysis is based on 2020 U.S. Census data. KPMG and its sub-consultants discern that the 2021 profile for container exports is likely skewed against containerization due to the transportation supply chain challenges experienced during the COVID-19 pandemic. As already noted, carriers opted to forego loaded container exports to return a higher-than-normal number of empty boxes overseas for faster reuse.

The 2020 calculation yields a potential, at full conversion, of nearly 50,000 40-footers annually. The volume for conversion of Chinese soybeans and sorghum and Japanese corn are shown in the tables because of their low container shares, however they are excluded from this 50,000-box count. The volume for these commodities appears sufficient to continue shipping by bulk vessel. If included as potential for transition to container shipments, the market possibilities increase to 120,000 40-footers. Both estimates are calculated at full conversion, which is not being implied in this research example as a matter of course.

Of the 50,000 containers, corn and DDGs offer the largest potential for containerization. Regarding global reach, Latin America (Caribbean, Central and South America) account for 55% of possible conversion. Interestingly, these southbound trades currently comprise only 9% of Kansas City’s container exports. Additional trade to Latin America might generate attention to COB transport via the Missouri/Mississippi River system to Gulf Coast ports.

³⁰ Datamyne data show that 90% of the 4 commodities researched were exported in 40-foot containers

Figure 28 Regional and Product Composition of Possible Added Container Exports from Bulk Conversion, 2020



Source: U.S. Census Bureau; KPMG and its sub-consultants

Figure 29 The 4-State Potential Container Export Volumes Converted from Bulk Shipment, 2020

Soybeans			
Country	2020 Total tons	% Containerized	Potential Conversion to 40-foot containers
Morocco	27,010	0%	1,228
Costa Rica	15,978	0%	726
Venezuela	5,206	0%	237
Japan	66,204	29%	2,124
China	585,458	41%	15,800
Total Potential, in containers			20,114
Without China			4,314

Sorghum			
Country	2020 Total tons	% Containerized	Potential Conversion to 40-foot containers
Japan	25,149	0%	1,141
China	886,998	2%	39,602
Total Potential, in containers			40,743
Without China			1,141

DDGs			
Country	2020 Total tons	% Containerized	Potential Conversion to 40-foot containers
Turkey	55,000	0%	2,500
Ireland	37,915	0%	1,723
Israel	26,654	0%	1,212
New Zealand	25,000	0%	1,136
Morocco	21,000	0%	955
Costa Rica	2,704	4%	119
Chile	77,076	4%	3,364
Japan	55,436	15%	2,136
Vietnam	77,132	71%	1,000
Total potential, in containers			14,145

Corn			
Country	2020 Total tons	% Containerized	Potential Conversion to 40-foot containers
Dominican Rep.	123,865	0%	5,630
Israel	123,849	0%	5,630
Jamaica	105,738	0%	4,806
Venezuela	68,539	0%	3,115
New Zealand	31,000	0%	1,409
Honduras	21,000	0%	955
Algeria	19,687	0%	895
St Vincent/Gren.	6,390	0%	290
Costa Rica	29,995	0%	1,363
Trinidad & Tob.	39,078	0%	1,772
Colombia	126,244	0%	5,721
Japan	353,485	1%	15,919
Total Potential, in containers			47,505
Without Japan			31,586

Source: U.S. Census Bureau; KPMG and its sub-consultants

A complete switch from bulk to container transport may not be likely for most trades excepting perhaps where volumes make containerization effective for a country's small-scale farmers. This conversion analysis and estimated container potential provides a simplified snapshot of market aspects only. Many factors influence the choice of transportation including pricing, aggregation and blending of multiple product sources before ocean shipment, equipment and storage availability, and the merchandisers' role, to name a few.

VIII. Market Findings and Opportunity for Missouri River Terminal

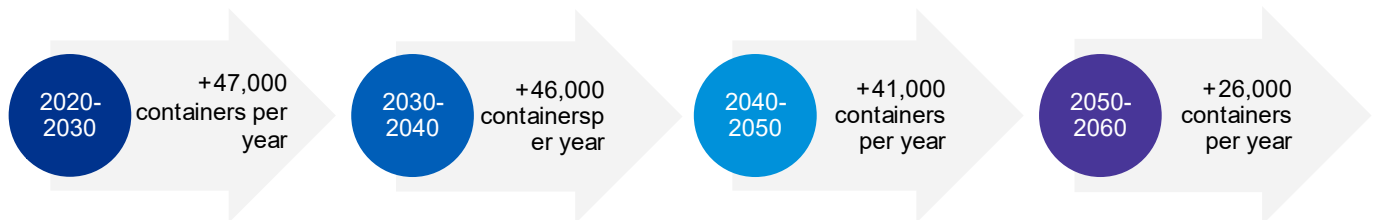
Kansas City is projected to continue as a preferred metropolitan area for container trade. A strong regional economy tops its list of attributes. Another feature is its mid-America location with five Class I intermodal railroads. The foundation for trade growth is solidly built on the region’s demographics fueling spending and commercial interests establishing an expanded base for merchandise distribution, warehousing, and related logistics.

This report and research did not address the current capacity and expansion required at the existing intermodal rail ramps to meet future import demand. MRT would be the 5th regional rail ramp, and operating at full planned buildout, would be within the same size profile as others. Therefore, MRT would have the design potential to handle 20% (one-fifth) of the region’s intermodal rail business.

One barometer to consider when evaluating a match of rail supply to demand is the container volume increase created on the margin each year. Normally rail terminals price their service and plan required equipment and facility space based on a container “lift” regardless of the container size (20s, 40s, or 53s), or its contents (loaded or empty). To reflect container lifts, the TEU trade forecast was converted to the number of container moves. For example, the 2021 volume of 1,050,000 TEU was equivalent to 600,000 container lifts.

The following chart shows the incremental container lifts that are forecast annually. The average yearly increase in container lifts for 2016-2021 was 30,000, including the market setback in 2019. A logical approach to determining future market share is to assume a 5th rail terminal participates in the market growth attracting some percentage of the new volume.

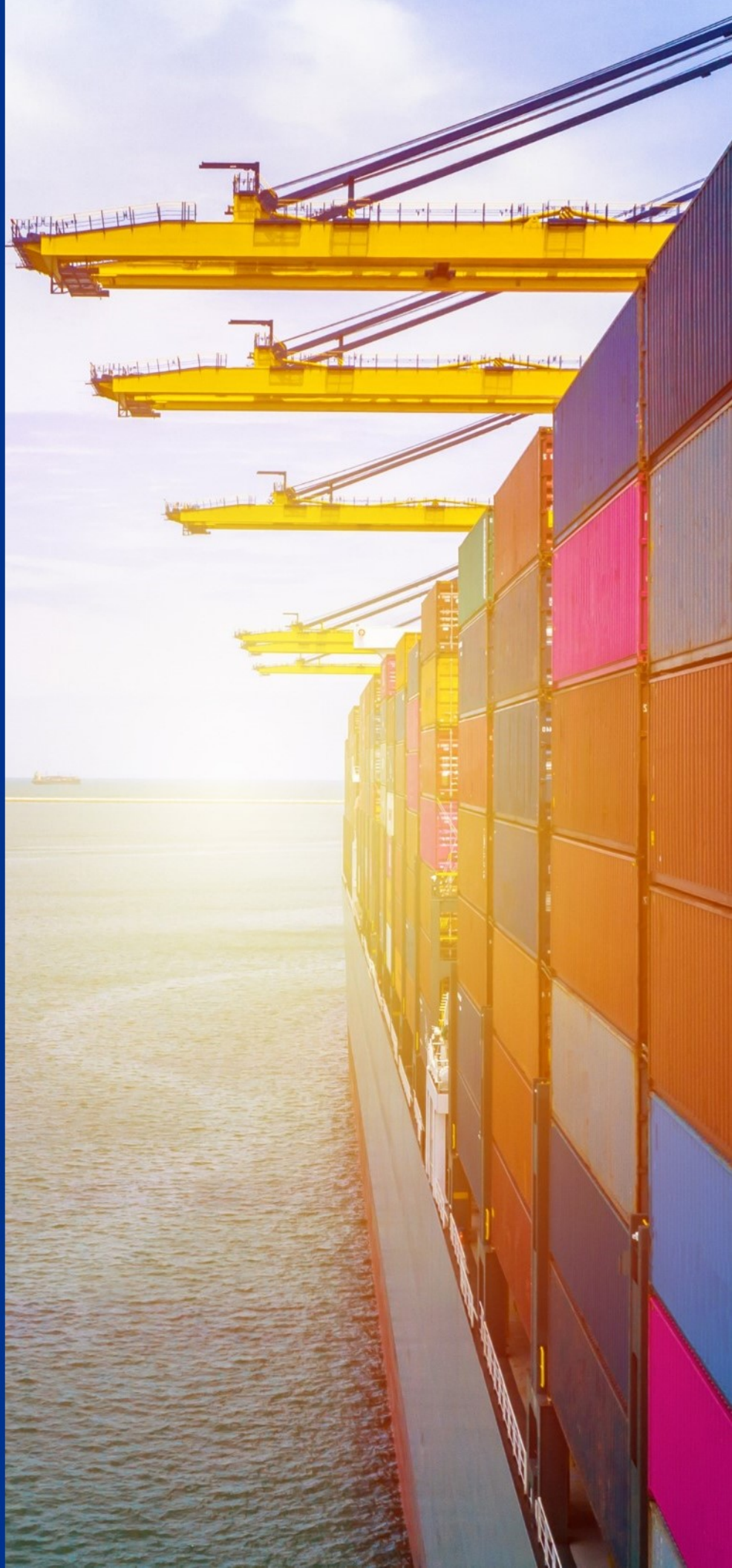
Figure 30 Forecast New Trade in Containers Lifts, Averaged by Decade



Source: KPMG and its sub-consultants; Datamyne historical statistics

To quantify a new terminal’s potential, it would be prudent to assume a gradual buildup to a 20% market share. Depending on the proposed start year, Figure 29 can be utilized as a gauge of future volume available to a new rail facility in the Kansas City MSA.

Appendices



Appendix I: References for Container-on-Barge Studies

1) Western Arkansas Intermodal Authority (WAIA) Intermodal Facility Concept Study Plan

Pickering Firm Inc., as presented to the WAIA Board in January 2022 (meeting packet)

[Western Arkansas Intermodal Authority | Western Arkansas Planning & Development District \(wapdd.org\)](http://wapdd.org)

From the introduction:

Pickering was tasked by Western Arkansas Intermodal Authority (WAIA) to prepare a Concept Plan Study Report addressing harbor development, upland development, and rail/highway access for the proposed development of the Western Arkansas Intermodal Facility. [on the Arkansas River]

2) Innovation: Global Trade and Inland Waterways A New Paradigm in International & Domestic Freight Movement

American Patriot Holdings, 2019

https://www.luc.edu/media/lucedu/quinlan-businesshub/sal_and_sandy_room1001.pdf

From the introduction: as presented by the authors at a Loyola University Chicago Business Leadership session

American Patriot Holdings will be presenting a new vertically integrated transportation alternative that will add value to the supply chain. The expansion of the Panama Canal opened the door to an all-water route into the Midwest. The widened canal can accommodate larger vessels, from 5,000 twenty foot equivalent units (TEU) to (18,000 TEU), whereas previously 60 percent of ocean going vessels could not fit through the canal. With the additional travel time to the Gulf Coast offset by congestion-related delays and longer dwell times at the West Coast ports, shippers now have a viable and efficient alternate route. That provides economies of scale which permits deeper market penetration into the United States from the Gulf Coast, eroding cost advantages previously associated with the East and West Coast.

Central Missouri Multimodal Port Feasibility Study

3) Cambridge Systematics, 2018

https://www.icchamber.org/clientuploads/Economic_Development/Port%20Authority/Central_Missouri_Multimodal_Port_Feasibility_Study.pdf

From the report introduction:

The Jefferson City Area Chamber of Commerce, Callaway County, and Cole County funded this study to assess the feasibility of a multimodal port facility in central Missouri. The port would potentially have one or more barge terminals on the Missouri River to help spur economic development in central Missouri region. The purpose of the current study is to assess potential market demand for a river port in the region.

4) Containerized Exports via the Inland Waterway System: An Opportunity for Agriculture?

Agribusiness Consulting (Informa), originally published in 2018 and updated in 2019

https://www.soytransportation.org/newsroom/ContainerizedShippingOnInlandWaterways_FullReport.pdf

From the report introduction:

This study produced for the Soy Transportation Coalition and the Illinois Soybean Association provides clarity on the potential for soybeans, soybean meal and other agricultural products to benefit from a new and innovative approach moving containers for the hauling of global trade via the nation's inland waterway system.

5) M-55 Illinois-Gulf Marine Highway Initiative

The RNO Group, 2013

<https://idot.illinois.gov/Assets/uploads/files/Transportation-System/Pamphlets-&-Brochures/Freight-Council/M-55%20Marine%20Highway%20Initiative%20Study%20-%20Final%20Report%202013.pdf>

From the report introduction:

The Heart of Illinois Regional Port District and Missouri Department of Transportation jointly sponsored the M-55 Marine Highway Corridor Initiative in order to develop marine intermodal transportation services on the United States' Mississippi and Illinois Rivers. As a part of that Initiative, a study was commissioned to identify regionally significant industries in the Peoria, Illinois area that would consider shifting their freight transportation providers from trucks to container or roll-on roll-off (Ro/Ro) marine vessels.

Appendix II: Colliers International Listing of Large Industrial Property Leases in the Kansas City MSA, 2018-2021

Figure 31 Kansas City Metro Industrial Space Leases, 2018-2021

(includes new, renewed & expanded leases of at least 200,000 ft.²)

Company	County	Square footage	Company	County	Square footage
Coleman Company	Johnson	1,100,000	Bayer/DHL	Johnson	300,000
Amazon	Wyandotte	1,080,000	Invenergy	Johnson	300,000
PepsiCo/Gatorade	Johnson	953,000	Harte Hanks	Wyandotte	298,000
Urban Outfitters	Wyandotte	880,000	Home Depot	Jackson	297,000
Hallmark Cards	Exec Park/NE	847,475	Kenco Logistics	Exec Park/NE	295,000
Chewy.com	Cass	796,000	Honeywell	Jackson	275,000
Hostess Brands	Johnson	765,000	Faurecia	Jackson	262,000
Pepsi	Jackson	584,820	Woodstream	St. Joseph, MO	256,000
BoxyCharm	Cass	575,000	Schlage Lock Company	Johnson	253,000
FedEx Ground	Exec Park/NE	548,560	XPO	Exec Park/NE	252,000
Pure Fishing	Platte	542,000	Winco Fireworks	Jackson	249,500
Bennett Packaging	Jackson	524,000	Murphy Logistics	Platte	249,465
Amazon	Exec Park/NE	517,000	Professional Packaging Syst.	Johnson	248,000
Ford Motors	Exec Park/NE	513,432	Vanguard Packaging	Exec Park/NE	248,000
Overstock.com	Wyandotte	513,000	doorLink Manufacturing	Platte	240,000
PAE	Johnson	507,000	ALPLA Group	Jackson	240,000
Ford Motors	Exec Park/NE	462,472	Scarborough Intl	Exec Park/NE	226,000
Matheson Companies	Johnson	460,000	Doorlink	Platte	220,000
American News Group	Johnson	455,000	PBI Gordon Corporation	Platte	211,588
Progress Rail	Cass	454,489	Metrie Industries Inc	Platte	211,000
Niagara Bottling	Jackson	425,000	Ply Gem	Exec Park/NE	207,000
URBN US Retail	Platte	400,828	XPO Logistics	Exec Park/NE	203,000
Hantover Inc	Exec Park/NE	391,900	Rogers Sporting Goods	Platte	202,800
Turn5, Inc.	Johnson	363,000	DHL	Platte	200,000
A1 Auto	Johnson	347,000			
Invenergy	Johnson	330,000			
ITRenew	Johnson	315,000			
Hanes	Johnson	311,000			
Adv. Logistics & Fulfillment	Exec Park/NE	310,000			
Ford	Exec Park/NE	303,000			
Lenexa Logistics	Johnson	303,000			

Source: www.colliers.com/en/research/kansas-city

Appendix III: Container Trade Forecast for Kansas City, 2022-2070

Figure 32 Kansas City Container Forecast

	Actual:							Estimate	Forecast										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Volume in thousand TEUs*:																			
Imports	386.9	391.7	429.1	483.0	469.5	500.5	525.0	548.1	594.1	633.1	672.9	713.9	754.8	794.4	833.2	872.7	913.1	952.3	
Export loads	190.2	222.5	235.1	248.9	252.4	237.9	189.3	<i>Total exports are forecast as a match back to imports</i>											
Export empties	196.7	169.2	193.9	234.1	217.0	262.6	335.7												
Total exports	386.9	391.7	429.1	483.0	469.5	500.5	525.0	548.1	594.1	633.1	672.9	713.9	754.8	794.4	833.2	872.7	913.1	952.3	
Total 2-way trade (000 TEU)	773.7	783.4	858.1	966.0	938.9	1,001.0	1,050.0	1,096.1	1,188.2	1,266.1	1,345.8	1,427.8	1,509.5	1,588.9	1,666.3	1,745.4	1,826.2	1,904.7	
% change		1.2%	9.5%	12.6%	-2.8%	6.6%	4.9%	4.4%	8.4%	6.6%	6.3%	6.1%	5.7%	5.3%	4.9%	4.7%	4.6%	4.3%	
Volume in thousand lifts**:																			
Total 2-way trade (000 lifts)	442	448	490	552	537	572	600	626	679	724	769	816	863	908	952	997	1,044	1,088	
% change		1.2%	9.5%	12.6%	-2.8%	6.6%	4.9%	4.4%	8.4%	6.6%	6.3%	6.1%	5.7%	5.3%	4.9%	4.7%	4.6%	4.3%	
Annual increase/decrease in lifts		5	43	62	(15)	35	28	26	53	45	46	47	47	45	44	45	46	45	
Cumulative increase in lifts from 2021							28	54	107	152	197	244	291	336	380	425	472	516	

* Conversion to TEUs for all container sizes

** each container counts as one lift regardless of box size

	Forecast																		
	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	
Volume in thousand TEUs*:																			
Imports	992.4	1,033.2	1,072.8	1,113.1	1,154.2	1,193.9	1,234.3	1,275.4	1,314.9	1,355.1	1,396.0	1,432.7	1,469.9	1,507.7	1,540.9	1,574.6	1,608.7	1,631.5	
Export loads	<i>Total exports are forecast as a match back to imports</i>																		
Export empties																			
Total exports	992.4	1,033.2	1,072.8	1,113.1	1,154.2	1,193.9	1,234.3	1,275.4	1,314.9	1,355.1	1,396.0	1,432.7	1,469.9	1,507.7	1,540.9	1,574.6	1,608.7	1,631.5	
Total 2-way trade (000 TEU)	1,984.7	2,066.4	2,145.6	2,226.2	2,308.4	2,387.7	2,468.5	2,550.7	2,629.8	2,710.2	2,791.9	2,865.3	2,939.8	3,015.4	3,081.8	3,149.2	3,217.4	3,263.1	
% change	4.2%	4.1%	3.8%	3.8%	3.7%	3.4%	3.4%	3.3%	3.1%	3.1%	3.0%	2.6%	2.6%	2.6%	2.2%	2.2%	2.2%	1.4%	
Volume in thousand lifts**:																			
Total 2-way trade (000 lifts)	1,134	1,181	1,226	1,272	1,319	1,364	1,411	1,458	1,503	1,549	1,595	1,637	1,680	1,723	1,761	1,800	1,839	1,865	
% change	4.2%	4.1%	3.8%	3.8%	3.7%	3.4%	3.4%	3.3%	3.1%	3.1%	3.0%	2.6%	2.6%	2.6%	2.2%	2.2%	2.2%	1.4%	
Annual increase/decrease in lifts	46	47	45	46	47	45	46	47	45	46	47	42	43	43	38	38	39	26	
Cumulative increase in lifts from 2021	562	609	654	700	747	792	839	886	931	977	1,023	1,065	1,108	1,151	1,189	1,228	1,267	1,293	

* Conversion to TEUs for all container sizes

** each container counts as one lift regardless of box size

Appendix IV: Selected Crop Production by County and DDG plants by location (2020)

Figure 33 Sorghum for Grain 2019 Production by County for Selected States

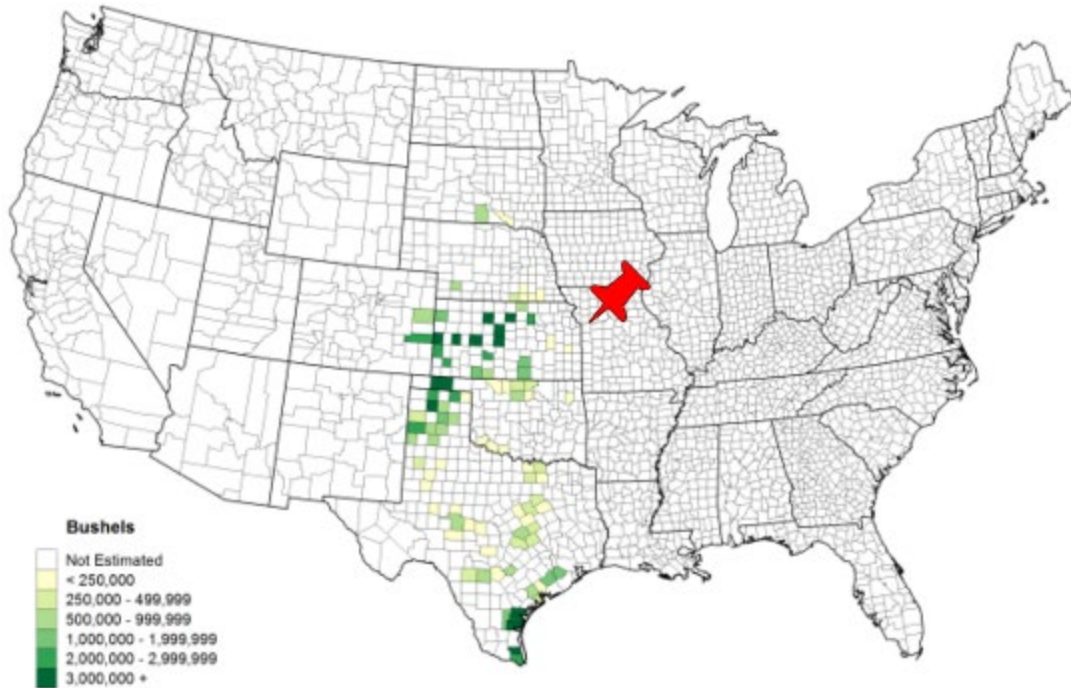
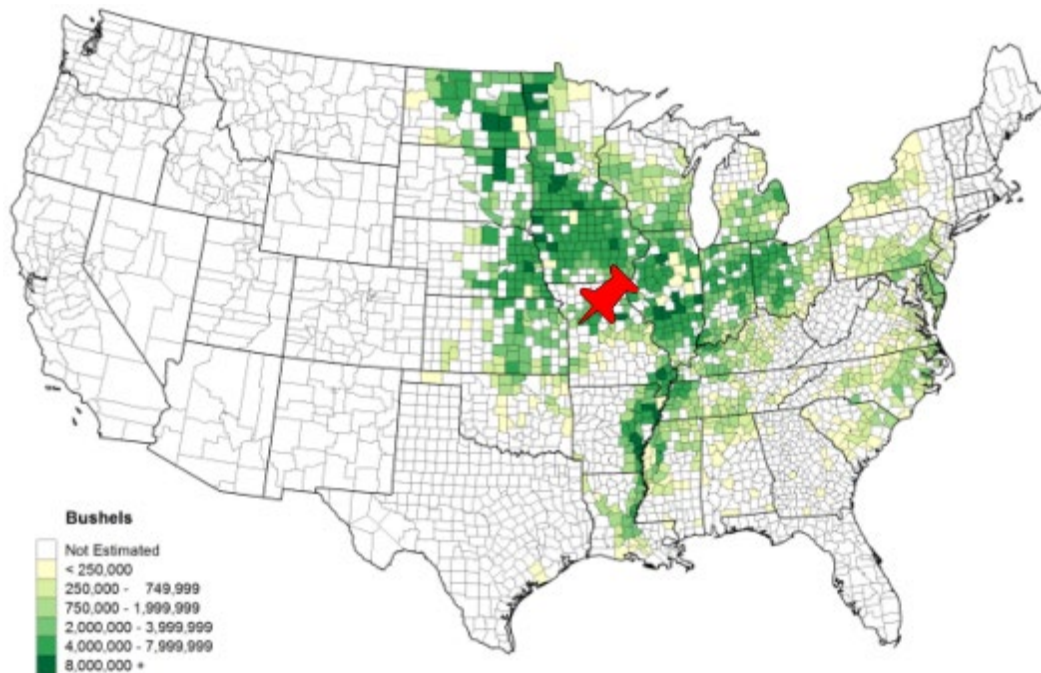
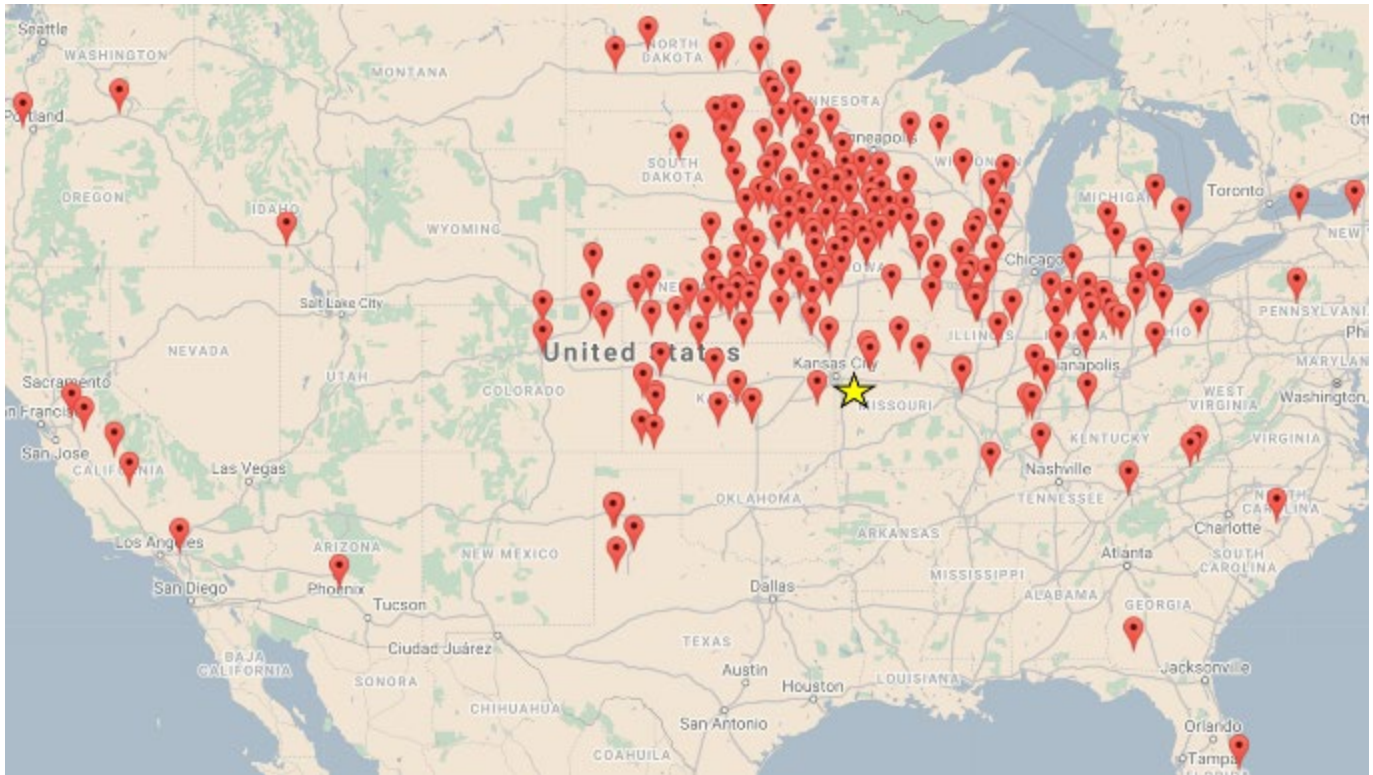


Figure 34 Soybeans 2019 Production by County for Selected States



Source (above images): USDA, U.S. Department of Agriculture, National Agricultural Statistics Service

Figure 35 Ethanol Plants with Capacity to Produce Distillers Dried Grains (DDG) as a Byproduct



Source: USDA

Appendix V: Leading Kansas City Importers, 2019

Figure 36 Top 100 Importers in Kansas City in 2019

Rank	Company	TEUs
1	SUNBEAM PRODUCTS INC	10,525
2	GRAINGER INTERNATIONAL	7,384
3	KUBOTA TRACTOR CORPORATION	6,218
4	SPECTRUM BRANDS INC	4,889
5	THE COLOMAN COMPANY INC	4,467
6	LEISURE TIME	3,909
7	BAYER CROP SCIENCE	2,650
8	SIEMENS GAMESA RENEWABLE ENERGY IN	2,194
9	VORNADO AIR LLC	1,907
10	HORIZON GLOBAL AMERICAS INC	1,845
11	LONGI SOLAR TECHNOLOGY US INC	1,721
12	PURE FISHING INC	1,601
13	OFM INC	1,562
14	IGNITE USA LLC	1,483
15	NILFISK ADVANCE INC	1,245
16	WOODSTREAM CORPORATION	1,242
17	J SONIC SERVICES INC	1,138
18	COLEMAN TILE LLC	1,092
19	ROQUETTE AMERICA INC	1,077
20	HALLMARK MARKETING COMPANY LLC	991
21	HUSQVARNA CONSTRUCTION PRODUCTS	970
22	SNORKEL INTERNATIONAL INC	942
23	ORSCHELN FARM AND HOME	914
24	FASTENAL CO	852
25	SILGAN DISPENSING SYSTEMS CORPORATI	847
26	CNH AMERICA LLC CO	806
27	SCHLAGE LOCK COMPANY	804
28	MID STATES DISTRIBUTING CO	790
29	DEMACO CORPORATION	746
30	WINCO FIREWORKS INC	722
31	EVERLAST SPORTS MANUFACTURING CORPORATION	706
32	GARMIN INTERNATIONAL INC	696
33	CATERPILLAR WORK TOOLS INC	693
34	EXCELLIGENCE LEARNING CORPORATION	648
35	LIFETIME PRODUCTS KANSAS CITY	624
36	MARSHALLTOWN COMPANY	610
37	NEBRASKA FURNITURE MART INC	576
38	CAMSO MANUFACTURING USA LTD	533
39	AMERICANA TIRE WHEEL	528
40	BEKAERT CORPORATION	520
41	ZOETIS GEOSPACE	515

Rank	Company	TEUs
42	HALDEX BRAKE PRODUCTS CORP	511
43	LELY NORTH AMERICA INC	503
44	COMPOSITE TECHNOLOGY INC	494
45	MCCORMICK INTERNATIONAL INC US	491
46	FUTURA LOGISTICS CORP	455
47	SOUTHERN CARLSON INC	449
48	GARDNER DENVER INC	445
49	WAGNER LOGISTICS	437
50	ALPHABRODER USA	437
51	JARDEN CONSUMER SOLUTIONS	429
52	EXIDE TECHNOLOGIES	421
53	PANASONIC AUTOMOTIVE SYSTEMS	411
54	SELECT BRANDS INC	409
55	HALE FIREWORKS	407
56	DANIELI CORPORATION	395
57	BOEING COMMERCIAL AIRPLANE GROUP	390
58	DAISY OUTDOOR PRODUCTS	390
59	WARRISON CORPORATION	384
60	ROYAL INGREDIENTS GROUP USA INC	383
61	CLORE AUTOMOTIVE DISTRIBUTION KC	380
62	LANSING TRADE GROUP LLC	380
63	CHANGXING INTERNATIONAL TRADE US C	370
64	FIREWORKS OVER AMERICA	370
65	STAMINA PRODUCTS INC	365
66	ARDENT MILLS	364
67	DON SMITH & ASSOCIATES INC	364
68	A & M PRODUCTS C O CLOROX	356
69	GUNZE PLASTICS & ENGINEERING CORPORATION OF AMERICA	348
70	EMPIRE CANDLE CO	329
71	BOEHRINGER INGELHEIM ANIMAL HEALTH	328
72	SOULE BLACK & WECHSLER INC	326
73	SPIRIT OF 76 LLC	310
74	K AND M TIRE	308
75	BRIDGEKEN INC	306
76	DELAVAL INTERNATIONAL AB SITE	304
77	WEG ELECTRIC CORPORATION WEC	304
78	REDNECK OUTDOOR PRODUCTS	291
79	W C BRADLEY ZEBCO HOLDING INC	289
80	LONG MOTOR CORPORATION	284
81	FOODCOM INTERNATIONAL	281
82	SCHUETZ CONTAINER SYSTEMS INC	280
83	GREAT PLAINS MANUFACTURING INCORPOR	276
84	FIOCCHI OF AMERICA INC	274
85	GHARDA CHEMICALS LIMITE	273
86	INNOVATIVE PROCUREMENT	271
87	1A AUTO INC	265

Rank	Company	TEUs
88	CHR OLESEN INC	265
89	ECCO DOMANI USA INC	252
90	MANNA PRO PRODUCTS LLC	252
91	JOHN DEERE	251
92	INFINITY HEADWEAR AND APPAREL	250
93	MGB INGREDIENTS WOODBINE	244
94	AGANDM ARCHITECTURAL GRANITE AND MA	242
95	ALTEC PRODUCTS INC	240
96	SPRINGS GLOBAL US INC	238
97	REYCO GRANNING LLC	236
98	CONCENTRIC INTERNATIONAL INC	234
99	GATES CORPORATION	234
100	KC STORE FIXTURES	232

Source: Datamyne

Appendix VI: Leading Kansas City Exporters, 2019

Figure 37 Top 100 Exporters in Kansas City in 2019

Rank	Company	TEUs
1	THE DELONG CO INC, WI	14,277
2	CONFIDENTIAL, WO	7,651
3	SCOULAR COMPANY, MN	5,123
4	SWIFT PORK COMPANY, CO	4,222
5	INTERNATIONAL, EX	3,278
6	NATIONAL BEEF PACKING CO LLC, MO	3,108
7	LTH LOGISTICS INC, CA	2,862
8	DG GLOBAL USA INC, KS	2,550
9	MAC CONTAINER LINE, CA	2,364
10	SEABOARD OVERSEAS GROUP, KS	2,143
11	JBS SWIFT COMPANY, CO	2,109
12	FORNAZOR INTERNATIONAL INC, NJ	1,568
13	LAFUER GROUP LTD, MO	1,440
14	INTERNATIONAL FEED COM, MN	1,380
15	NORTHPOINT FORWARDING LLC, MO	1,372
16	HILLS PET NUTRITION INC, KS	1,296
17	INTERNATIONAL LOGISTICS INC, NE	1,212
18	GAVILION INGREDIENTS LLC, NE	1,204
19	INTERGLOBO NORTH AMERICA INC, NJ	1,181
20	EXPEDITORS INTERNATIONAL OF WASHINGTON INC, MO	1,011
21	CARGILL INCORPORATED, MN	920
22	ALTER TRADING CORP, MO	913
23	KUEHNE & NAGEL INC, NJ	827
24	CH ROBINSON WORLDWIDE INC, MO	782
25	DAIRY FARMERS OF AMERICA INC, KS	762
26	POET NUTRITION LLC, SD	690
27	RICH INTERNATIONAL INC, NJ	651
28	MILLS BROS INTERNATIONAL INC, WA	648
29	DSV AIR & SEA INC DSV OCEAN, MO	643
30	DG GLOBAL INC, KS	600
31	NATUREWORKS LLC, MN	573
32	INTERRA FOOD MARKETING LLC, GA	569
33	SCHENKER INC, OH	568
34	DG GLOBAL INC USA, KS	562
35	CASTLE SHIPPING LINES, MN	521
36	DAIRY FARMERS OF AMERICA, MO	500
37	WM RECYCLE AMERICA, IL	484
38	MAC INDUSTRIES INC D B A MAC CONTA, CA	461
39	SHIPCO TRANSPORT INC EIN, NJ	447
40	STEAM LOGISTICS, TN	429
41	THE DAVID J JOSEPH COMPANY, OH	419

Rank	Company	TEUs
42	EXPEDITORS INTERNATIONAL OF WASHINGTON INC, NY	419
43	KUEHNE & NAGEL INC, MO	412
44	GLOBERUNNERS INC, MN	401
45	KUEHNE & NAGEL INC, MA	390
46	LANSING TRADE GROUP LLC, KS	378
47	ICL SPECIALTY PRODUCTS INC, MO	378
48	AMERICAN HONDA MOTOR CO INC, CA	378
49	MAC CONTAINER LINE, NJ	374
50	GAVILON LLC, NE	368
51	MAC CONTAINER LINE C O US, CA	365
52	RED RIVER COMMODITES INC, ND	355
53	INTERNATIONAL FREIGHT TRANSPORT INC, NJ	347
54	AMERICA METAL EXPORT INC, CA	329
55	POET NUTRITION INC, SD	326
56	TSC CONTAINER FREIGHT, IL	321
57	DUPONT SPECIALTY PRODUCTS USA LLC, DE	309
58	GFG INLAND ELEVATOR & GRAIN LLC, MO	308
59	DAIRY FARMERS OF AMERICA, KS	306
60	TSC CONTAINER FREIGHT CA, CA	298
61	CAROLINA OCEAN LINES INC, NC	284
62	UPS SUPPLY CHAIN SOLUTIONS, MO	282
63	MAC CONTAINER LINE, GA	280
64	COHERENT METAL INC, TX	275
65	SCHENKER INC, IL	270
66	US COMMODITIES LLC, MN	267
67	GLOBAL TRANSPORTATION SERVICES INC, TX	265
68	GLOBERUNNERS INC, CA	264
69	THE SCOLAR COMPANY, WO	262
70	CHS INC, MN	262
71	DSV OCEAN TRANSPORT, MO	259
72	SMITHFIELD FRESH MEATS CORP, VA	256
73	HARLEY DAVIDSON MOTOR COMPANY, WO	254
74	STRAIGHT FORWARDING INC, CA	251
75	VANGUARD, NJ	239
76	R V LOGISTICS INC O B FFC, CA	232
77	JORDAN TRADING INC, NY	224
78	PHILADELPHIA HIDE BROKERAGE, PA	222
79	VANGUARD LOGISTICS SERVICES, IL	210
80	WHEATON GRAIN INC, WI	210
81	NAVIGATION NETWORK, LA	207
82	ALLY GLOBAL LOGISTICS LLC, MA	194
83	SIMMONS PET FOOD, KS	184
84	SIGMA RECYCLING INC C O, GA	183
85	CH ROBINSON WORLDWIDE INC, GA	182
86	STONE ARCH COMMODITIES, MN	172
87	USA SHIPPING LLC, GA	171

Rank	Company	TEUs
88	JAS FORWARDING USA INC, TN	170
89	TRANSGLOBAL EXPRESS INC, IL	162
90	COFCO INTERNATIONAL GRAINS US LLC, IL	160
91	GEODIS WILSON USA INC, TX	159
92	SEALINK INTERNATIONAL INC, TX	155
93	CAROTRANS INTERNATIONAL INC, NJ	154
94	DSV AIR AND SEA INC, KY	154
95	ROSE CONTAINER INC, NY	152
96	INGREDION INC, IL	151
97	CEVA LOGISTICS USA INC, IL	150
98	TRADELANES INC, AL	146
99	PHISON INTERNATIONAL INC, IL	146
100	C & L GLOBAL INC, NE	146

Source: Datamyne

Note: This list does not reflect complete source document information due to US Customs data collection processes and aggregation of international companies. It is recommended that further information be obtained on key participants in the export supply chain through commodity associations such as the U.S. Grains Council and the National Cattlemen's Beef Association.

kpmg.com/socialmedia




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VERIFICATION

I, Jon Stephens, declare under penalty of perjury that I have read the foregoing Verified Statement, that I know the facts asserted therein, and that the same are true as stated. Further, I certify that I am qualified to and authorized to submit this Verified Statement.

Executed on September 7, 2022



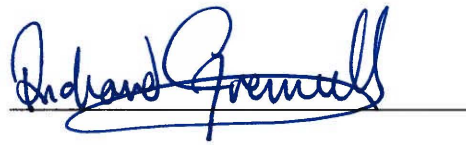
Jon Stephens

VERIFICATION

I, Richard Grenville, declare under penalty of perjury that I have read the foregoing Verified Statement, that I know the facts asserted therein, and that the same are true as stated.

Further, I certify that I am qualified to and authorized to submit this Verified Statement.

Executed on September 7, 2022



Richard Grenville

Exhibit C
Support Letters

EMANUEL CLEAVER, II

FINANCIAL SERVICES COMMITTEE

HOUSING, COMMUNITY DEVELOPMENT,
AND INSURANCE SUBCOMMITTEE
CHAIRMAN

INVESTOR PROTECTION,
ENTREPRENEURSHIP AND
CAPITAL MARKETS SUBCOMMITTEE



Congress of the United States
House of Representatives

FIFTH DISTRICT, MISSOURI

HOMELAND SECURITY COMMITTEE

SELECT COMMITTEE ON THE
MODERNIZATION OF CONGRESS

COMMISSION ON SECURITY
AND COOPERATION IN EUROPE
(HELSINKI COMMISSION)

[HTTPS://CLEAVER.HOUSE.GOV](https://cleaver.house.gov)

August 22, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings, Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406
Port Authority of Kansas City
Construction and Operation of a Line of Railroad, Jackson and Clay Counties, MO

Dear Ms. Brown:

I am writing in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board. Port KC is seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO, connecting the Missouri River to the interstate rail system in order to serve the Missouri River Terminal (MRT) project. The site is in Missouri's Fifth Congressional District which I proudly represent.

Port KC is revitalizing the former AK Steel facility to develop a multimodal freight center that is designed to expand the region's capacity for management of intermodal containers in the local area and regional freight market. MRT's connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project will provide valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Additionally, the project will activate a dormant property facing environmental challenges as well as provide an economic stimulus to the Blue River Valley Industrial Corridor.

Port KC's mission to grow the economy of Kansas City through transportation, logistics, and revitalization is one with a proven history of success. Therefore, I respectfully request the Board give every appropriate consideration to the Port KC Petition for Exemption.

Warmest regards,


Emanuel Cleaver, II
Member of Congress

PLEASE REPLY TO:

2335 RAYBURN HOB
WASHINGTON, DC 20515
(202) 225-4535 (PHONE)
(202) 225-4403 (FAX)

4001 DR MARTIN LUTHER KING JR BLVD, STE 210
KANSAS CITY, MO 64130
(816) 842-4545 (PHONE)
(816) 833-2991 (FAX)

411 WEST MAPLE AVENUE, SUITE F
INDEPENDENCE, MO 64050
(816) 833-4545 (PHONE)
(816) 833-2991 (FAX)

1923 MAIN STREET
HIGGINSVILLE, MO 64037
(660) 584-7373 (PHONE)
(660) 584-7227 (FAX)

SAM GRAVES
6TH DISTRICT, MISSOURI

1135 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-7041

Congress of the United States
House of Representatives
Washington, DC 20515-2506

11724 NW PLAZA CIRCLE, SUITE 900
KANSAS CITY, MO 64153
(816) 792-3976

411 JULES STREET, ROOM 111
ST. JOSEPH, MO 64501
(816) 749-0800

906 BROADWAY, P.O. BOX 364
HANNIBAL, MO 63401
(573) 221-3400

August 18th, 2022

Cynthia T. Brown, Chief-Section of Administration
Office of Proceedings
Surface Transportation Board.
395 E Street S.W.
Washington, D.C. 20024

Dear Chief Brown:

I am writing in support of the Port Authority of Kansas City, Missouri (Port KC) which is petitioning for an exemption from the Surface Transportation Board seeking to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO. The 2.8 miles of new rail construction will connect the Missouri River to the interstate Rail system and will support the Missouri River Terminal (MRT) project.

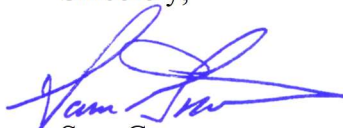
Port KC is revitalizing the Blue River Valley Industrial Corridor located in the heart of Kansas City. The development of the former AK Steel facility will expand multimodal freight and allow the expansion of the region's capacity, as well as a more efficient management of that freight. It will also provide an even more attractive option for shippers moving freight through Kansas City's rail network or via the Missouri River.

The MRT project and the proposed new rail line are of great benefit to the region. In addition to putting the area in a position to meet the coming freight needs, it will also spur redevelopment in a dormant property and economically blighted portion of Kansas City, MO. Which speaks nothing to the environmental clean-up and restoration that Port KC has already begun to undo ecological damages caused by the previous owners.

Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. I believe the Kansas City region and beyond will greatly benefit from Port KC's proposed line and the MRT project. I respectfully request that the Board approve the Port KC Petition for Exemption.

If you have any questions, please feel free to contact Matt Barry at my Kansas City District office at (816) 792.3976 or by e-mail at matthew.barry@mail.house.gov.

Sincerely,



Sam Graves
Member of Congress

CAPITOL OFFICE
STATE CAPITOL, ROOM 326
JEFFERSON CITY, MO 65101
TELEPHONE (573) 751-3678
DAVE.SCHATZ@SENATE.MO.GOV
WWW.SENATE.MO.GOV/SCHATZ



DISTRICT OFFICE
P.O. BOX 92
SULLIVAN, MO 63080
TELEPHONE (314) 807-9829

MISSOURI SENATE
JEFFERSON CITY

SENATOR DAVE SCHATZ
PRESIDENT PRO TEM
26TH DISTRICT

July 27, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406
Port Authority of Kansas City
-Construction and Operation of a Line of Railroad-
In Jackson and Clay Counties, MO

Dear Ms. Brown:

I am writing on behalf of Senator Dave Schatz in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the MRT project and the proposed line will activate a dormant property facing environmental challenges. Finally, re-development of the former AK Steel facility provides a

potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.

Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. We think that the Kansas City region will greatly benefit from Port KC's proposed line and the MRT project and respectfully request that the Board approve the Port KC Petition for Exemption.

Sincerely,

A handwritten signature in black ink, appearing to read "Dave Schatz". The signature is fluid and cursive, with the first name "Dave" being more prominent than the last name "Schatz".

Senator Dave Schatz

CITY OF FOUNTAINS
HEART OF THE NATION



KANSAS CITY
MISSOURI

City Manager's Office

29th Floor City Hall
414 East 12th Street
Kansas City, Missouri 64106-2768

(816) 513-6553
Fax (816) 513-1363

July 8, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406
Port Authority of Kansas City
Construction and Operation of a Line of Railroad
In Jackson and Clay Counties, MO

Dear Ms. Brown:

I am writing on behalf of City of Kansas City, Missouri in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the MRT project and the proposed line will activate a dormant property facing environmental challenges. Finally, re-development of the former AK Steel facility provides a potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.

Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. We think that the Kansas City region will greatly benefit from Port KC's proposed line and the MRT project and respectfully request that the Board approve the Port KC Petition for Exemption.

Sincerely,



Brian Platt
City Manager

CAPITOL OFFICE
STATE CAPITOL, ROOM 320
201 W. CAPITOL AVE.
JEFFERSON CITY, MO 65101
TELEPHONE (573) 751-3931
FAX (573) 751-4320
SENATE.MO.GOV/ROWDEN



COMMITTEES:
RULES, JOINT RULES, RESOLUTIONS AND
ETHICS - CHAIR
ADMINISTRATION, VICE - CHAIR
GUBERNATORIAL APPOINTMENTS, VICE - CHAIR
JOINT COMMITTEE ON EDUCATION

MISSOURI SENATE
JEFFERSON CITY

August 4, 2022

CALEB ROWDEN
MAJORITY FLOOR LEADER
DISTRICT 19

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406
Port Authority of Kansas City
Construction and Operation of a Line of Railroad-In Jackson and Clay Counties, MO

Dear Ms. Brown:

This is letter in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the MRT project and the proposed line will activate a dormant property facing environmental challenges. Finally, re-development of the former AK Steel facility provides a potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.

Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. We think that the Kansas City region will greatly benefit from Port KC's proposed line and the MRT project and respectfully request that the Board approve the Port KC Petition for Exemption.

Sincerely,

A handwritten signature in black ink, appearing to read "Caleb Rowden".

Caleb Rowden
Missouri State Senator District 19

CAPITOL OFFICE:
MISSOURI STATE SENATE
201 W. CAPITOL AVE., ROOM 419
JEFFERSON CITY, MO 65101
TELEPHONE (573) 751-1311



COMMITTEES:
GOVERNMENTAL ACCOUNTABILITY AND
FISCAL OVERSIGHT - CHAIR
APPROPRIATIONS - VICE CHAIR
LOCAL GOVERNMENT AND ELECTIONS - VICE CHAIR
ECONOMIC DEVELOPMENT
TRANSPORTATION, INFRASTRUCTURE
AND PUBLIC SAFETY

**SENATOR
LINCOLN P. HOUGH
DISTRICT 30**

August 3, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406
Port Authority of Kansas City
-Construction and Operation of a Line of Railroad-
In Jackson and Clay Counties, MO

Dear Ms. Brown:

I am writing in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the

Page 2
Ms. Brown
August 3, 2022

MRT project and the proposed line will activate a dormant property facing environmental challenges. Finally, re-development of the former AK Steel facility provides a potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.

Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. We think that the Kansas City region will greatly benefit from Port KC's proposed line and the MRT project and respectfully request that the Board approve the Port KC Petition for Exemption.

Sincerely,

A handwritten signature in black ink, appearing to read 'L. P. Hough', with a stylized flourish at the end.

Lincoln P. Hough
State Senator, 30th District



July 8, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406
Port Authority of Kansas City
-Construction and Operation of a Line of Railroad-
In Jackson and Clay Counties, MO

Dear Ms. Brown:

I am writing on behalf of the Economic Development Corporation of Kansas City, MO (EDCKC) in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the MRT project and the proposed line will activate a dormant property facing environmental challenges. Finally, re-development of the former AK Steel facility provides a potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.



Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. We think that the Kansas City region will greatly benefit from Port KC's proposed line and the MRT project. EDCKC would support the Board's approval the Port KC Petition for Exemption.

Sincerely,

Tracey Lewis
President & CEO
Economic Development Corporation of Kansas City, MO
300 Wyandotte, Suite 400
Kansas City, MO, 64105

600 Broadway, Suite 200
Kansas City, Missouri 64105-1659

816-474-4240
816-421-7758 FAX
marcinfo@marc.org
www.marc.org



August 11, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406: Port Authority of Kansas City Construction and Operation of a Line of Railroad In Jackson and Clay Counties, MO

Dear Ms. Brown:

I am writing on behalf of the Mid-America Regional Council (MARC) in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. MARC serves as the Council of Governments and Metropolitan Planning Organization for Greater Kansas City. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

Port KC's proposed line and the MRT project will benefit the region in multiple ways. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the MRT project and the proposed line will activate a dormant property facing environmental challenges. Finally, re-development of the former AK Steel facility provides a potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.

Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River. We believe that the Kansas City region will greatly benefit from Port KC's proposed line and the MRT project and respectfully request that the Board approve the Port KC Petition for Exemption.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Achelpohl", with a long horizontal flourish extending to the right.

Ron Achelpohl, PE
Director, Transportation & Environment

Copy: Richard Grenville, PortKC

Chair
Harold Johnson Jr.
Commissioner
Unified Government
of Wyandotte County/
Kansas City, Kansas

1st Vice Chair
Carson Ross
Mayor
Blue Springs,
Missouri

2nd Vice Chair
Janeé Hanzlick
Commissioner
Johnson County,
Kansas

Treasurer
Beto Lopez
Mayor Pro Tem
Lee's Summit,
Missouri

Secretary
Damien Boley
Mayor
Smithville,
Missouri

Executive Director
David A. Warm



American Patriot Container Transport LLC.

One Beach Club Drive TS-2 Miramar Beach Fl 32550

jgehegan@gmail.com
(732) 259-3563

August 10, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406
Port Authority of Kansas City
-Construction and Operation of a Line of Railroad-
In Jackson and Clay Counties, MO

Dear Ms. Brown:

I am writing on behalf of American Patriot Container Transport LLC. in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the MRT project and the proposed line will activate a dormant property facing environmental challenges. Finally, re-development of the former AK Steel facility provides a potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.

Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. We think that the Kansas City region will greatly benefit from Port KC's proposed line and the MRT project and respectfully request that the Board approve the Port KC Petition for Exemption.

Sincerely,

A handwritten signature in black ink that reads "Joe Gehegan Jr." The signature is written in a cursive, flowing style with a large initial "J".

Joe Gehegan Jr.
Executive Member



August 12, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406
Port Authority of Kansas City
-Construction and Operation of a Line of Railroad-
In Jackson and Clay Counties, MO

Dear Ms. Brown:

The Coalition to Protect the Missouri River (CPMR) is a diverse organization that represents those that live and work on and adjacent to the Missouri River. Our membership includes Missouri River ports, navigation interests, agriculture groups and more.

Today we are writing in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the MRT project and the proposed line will activate a dormant property facing

August 12, 2022

Page 2

environmental challenges. Finally, re-development of the former AK Steel facility provides a potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.

Part of CPMR's mission is to expand the primary purposes of the Missouri River which includes shipping and navigation. This project from Port KC aligns with that mission as it will grow the economy of Kansas City through transportation, logistics, and revitalization and support more product being moved on the entirety of the river. Port KC has a proven record of success in this area. We think that the Kansas City region will greatly benefit from Port KC's proposed line and the MRT project and respectfully request that the Board approve the Port KC Petition for Exemption.

Sincerely,

Shane Kinne

Shane Kinne
Executive Director
Coalition to Protect the Missouri River



July 27, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406
Port Authority of Kansas City
-Construction and Operation of a Line of Railroad-
In Jackson and Clay Counties, MO

Dear Ms. Brown:

I am writing on behalf of Custom Truck One Source in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the MRT project and the proposed line will activate a dormant property facing environmental challenges. Finally, re-development of the former AK Steel facility provides a potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.

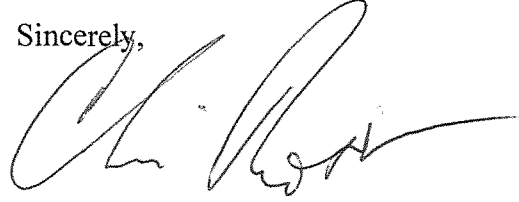
Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. We think

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July 27, 2022
Page 2

that the Kansas City region will greatly benefit from Port KC's proposed line and the MRT project and respectfully request that the Board approve the Port KC Petition for Exemption.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Ross", with a long horizontal flourish extending to the right.

Chris Ross
Operations Manager

August 15, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024



Re: STB Docket No. FD 36406
Port Authority of Kansas City
-Construction and Operation of a Line of Railroad-
In Jackson and Clay Counties, MO

Dear Ms. Brown:

On behalf of Inland Rivers, Ports & Terminals, I am writing in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the MRT project and the proposed line will activate a dormant property facing environmental challenges. Finally, re-development of the former AK Steel facility provides a potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.

Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. We think that the Kansas City region will greatly benefit from Port KC's proposed line and the MRT project and respectfully request that the Board approve the Port KC Petition for Exemption.

Sincerely,

Aimee Andres

Aimee Andres
Executive Director

Inland Rivers, Ports and Terminals, Inc.

4625 Lindell Boulevard, Suite 200 - #2179
St. Louis MO 63108

www.irpt.net



MISSOURI FARM BUREAU

P.O. Box 658, 701 South Country Club Drive, Jefferson City, MO 65102 / (573) 893-1400

August 12, 2022

Ms. Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

**RE: STB Docket No. FD 36406
Port Authority of Kansas City
-Construction and Operation of a Line of Railroad-
In Jackson and Clay Counties, MO**

Dear Ms. Brown:

I am writing on behalf of Missouri Farm Bureau in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, Missouri connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve its Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility located on the Missouri River to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. The MRT and the proposed line will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. For farmers and ranchers, this could mean greater access to inputs such as seed and fertilizer, and a greater opportunity to get our commodities to markets around the world utilizing our inland waterways.

Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. The Kansas City region will greatly benefit from Port KC's proposed line and the

MRT project, and we respectfully request that the Surface Transportation Board approve Port KC's Petition for Exemption.

Respectfully,

A handwritten signature in black ink that reads "Garrett Hawkins". The signature is written in a cursive style with a large, prominent initial 'G'.

Garrett Hawkins
President



August 9, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406
Port Authority of Kansas City
-Construction and Operation of a Line of Railroad-
In Jackson and Clay Counties, MO

Dear Ms. Brown:

I am writing on behalf of the Greater Kansas City Foreign-Trade Zone, Inc. (GKCFTZ). We are the non-profit licensing agent for designating Foreign Trade Zones authorized by the US Department of Commerce's Foreign-Trade Zones Board for the metro Kansas City, Kansas, metro Kansas City, Missouri, and outlying counties that make-up the service area of USCBP-Port of Entry 4501 in Kansas City Missouri.

GKCFTZ strongly supports the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the MRT project and

GREATER
KANSAS CITY
FOREIGN
TRADE ZONE, INC.

MAILING:
P.O. Box 3339
Kansas City, KS 66103

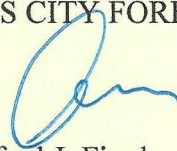
OFFICE:
One New Century
Parkway, Suite 110
New Century, KS 66031

(816) 474-2227
FAX: (816) 421-5500

the proposed line will activate a dormant property facing environmental challenges. Finally, re-development of the former AK Steel facility provides a potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.

Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. We think that the Kansas City region will greatly benefit from Port KC's proposed line and the MRT project and respectfully request that the Board approve the Port KC Petition for Exemption.

Sincerely,
GREATER KANSAS CITY FOREIGN TRADE ZONE, INC.

A handwritten signature in blue ink, appearing to read 'A. Figuly', is written over the company name.

Alfred J. Figuly
President, CEO



August 11, 2022

Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street SW
Washington, DC 20024

Re: STB Docket No. FD 36406
Port Authority of Kansas City
-Construction and Operation of a Line of Railroad-
In Jackson and Clay Counties, MO

Dear Ms. Brown:

I am writing on behalf of The Scarborough Group in support of the Petition for Exemption filed by the Port Authority of Kansas City (Port KC) with the Surface Transportation Board seeking authority to construct and operate approximately 2.8 miles of new railroad in Kansas City, MO connecting the Missouri River to the interstate rail system. Port KC's proposed line will serve the Missouri River Terminal (MRT) project.

Port KC is revitalizing the former AK Steel facility - located on the Missouri River within the Blue River Valley Industrial Corridor - to develop it as a multimodal freight center that will expand the region's capacity for efficient management of intermodal containers into and out of the local area and regional freight market. The proposed line is an integral part of Port KC's plan for the development of MRT.

MRT's location at the center of Kansas City and its connectivity to the Missouri River, the interstate rail network and the interstate highway system will provide an attractive option for shippers moving cargo through Kansas City's rail network or via the Missouri River.

Port KC's proposed line and the MRT project carry several benefits for the region. First, the MRT generally and the proposed line specifically will be valuable transportation facilities to aid the region in meeting the anticipated growth in freight movements through Kansas City. Second, the MRT project and the proposed line will activate a dormant property facing environmental challenges. Finally, re-development of the former AK Steel facility provides a potential economic stimulus to the Blue River Valley Industrial Corridor, an area that has suffered from disinvestment as industries, like AK Steel, have left the region.

Port KC's mission is to grow the economy of Kansas City through transportation, logistics, and revitalization. It has a proven record of success in meeting this mission. We think that the Kansas



SCARBROUGH

City region will greatly benefit from Port KC's proposed line and the MRT project and respectfully request that the Board approve the Port KC Petition for Exemption.

Sincerely,

Adam Hill
President & Chief Operating Officer