



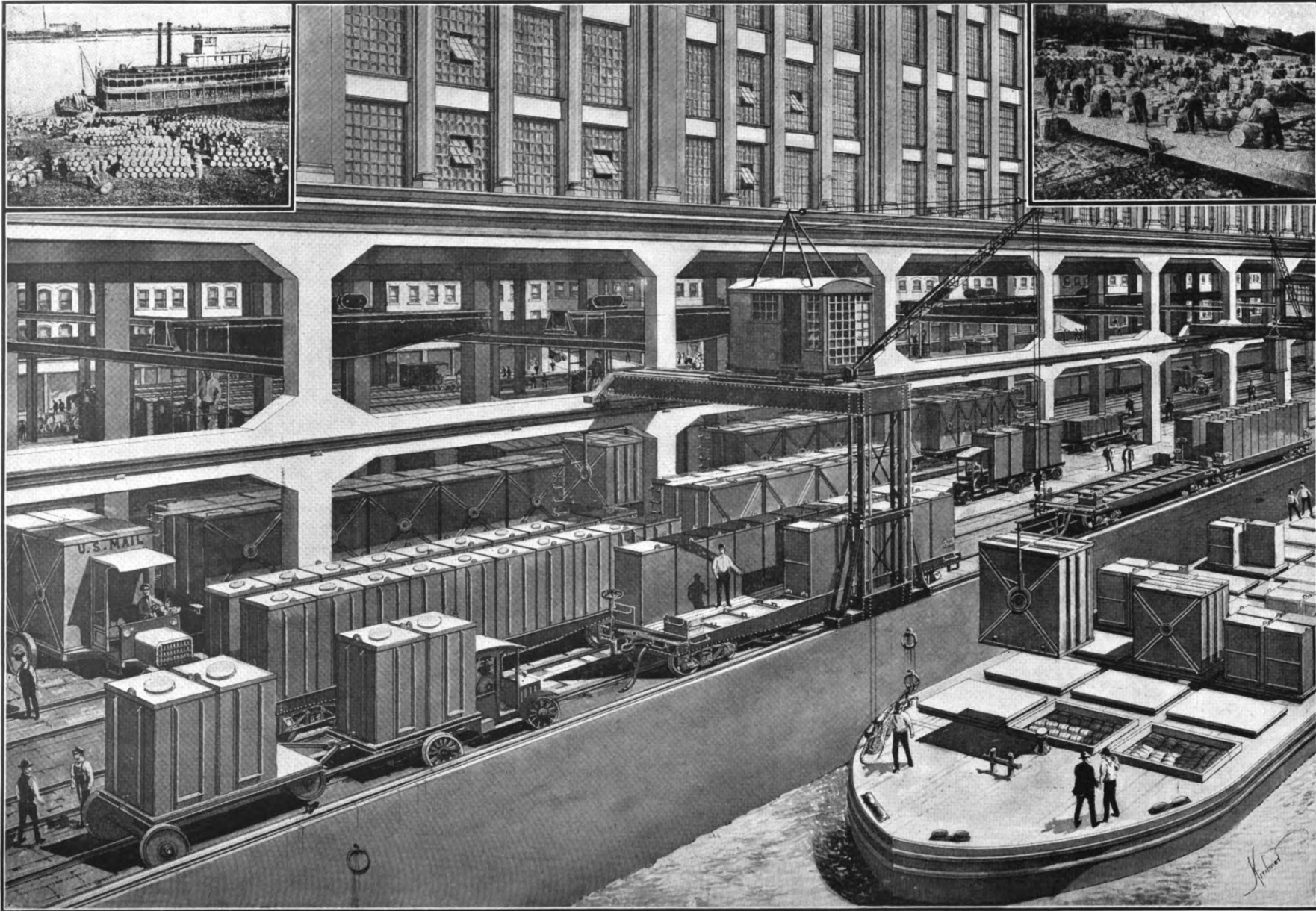
# Asset Utilization Potential of Building a Trucking & Rail Mega Intermodal Hub in the Saint Louis Region

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Photo: Daniel Rust



# Mississippi Valley Magazine, April 1919



# Definition

- **Intermodal Transportation**
  - Transportation of freight in an intermodal container, using multiple modes of transportation (rail, truck, ship/barge), without any handling of the freight itself when changing modes
    - Maximizes advantages and minimizes disadvantages of modal assets used





Motor carrier for  
drayage



Rail for  
line-haul

# Definitions

- **Intermodal Terminal**

- A railroad facility designed for the loading and unloading of containers and trailers to and from flatcars for movement on the railroad and subsequent movement on the street or highway

- **Intermodal Hub**

- Similar to an intermodal terminal but will allow *multiple railroad carriers* to run their tracks via separate lanes through a *common location* in order to capitalize on opportunities with various trucking carriers to transfer cargo across both short-haul and long-haul distances

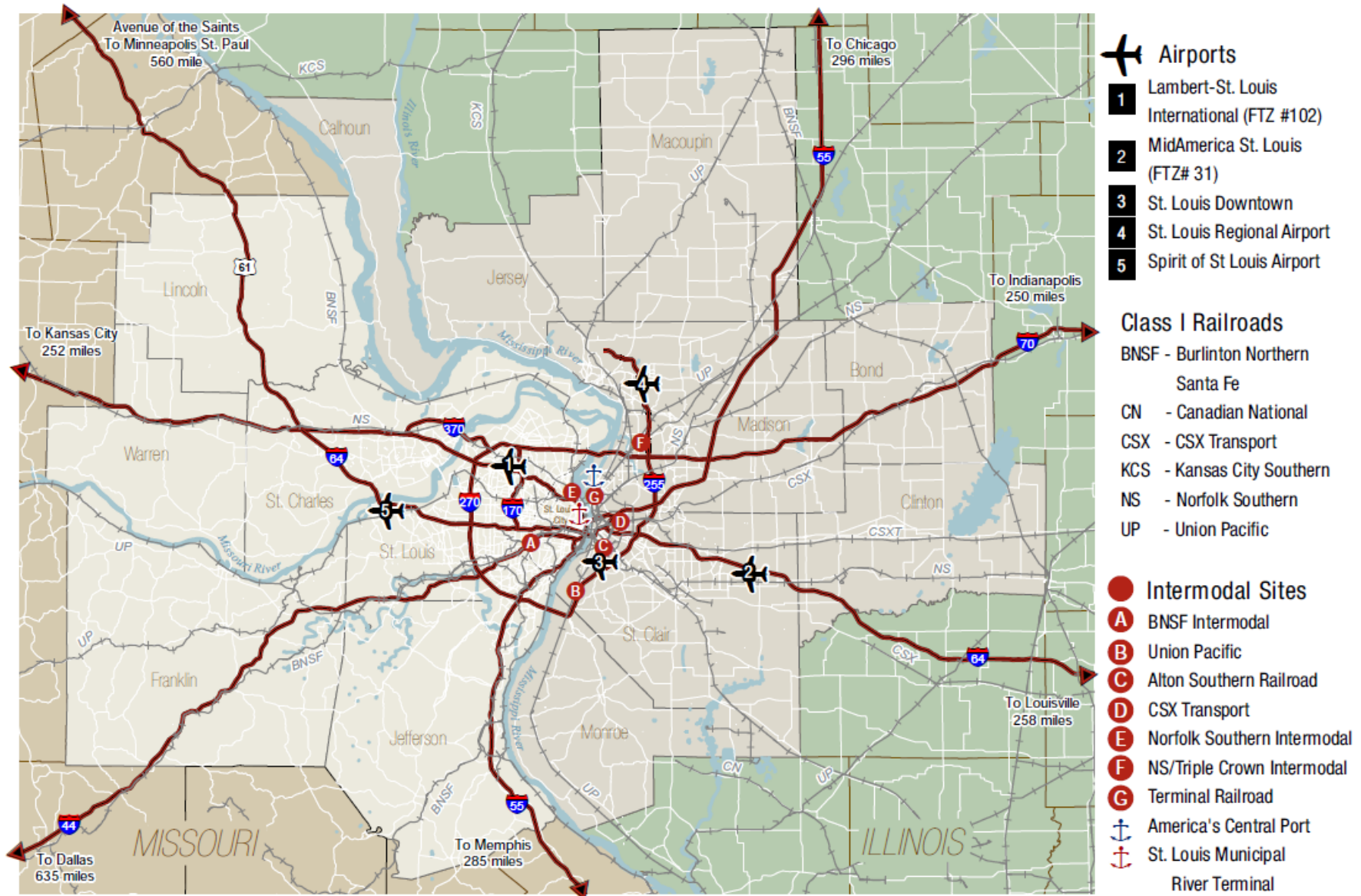
**Source:** Intermodal Association of North America. (2013). Intermodal Glossary.



# Study Objective

- To assess the asset utilization potential of building a common trucking and rail intermodal hub in the Saint Louis region by looking at industry history, examining transportation policies and initiatives in the Saint Louis region, and evaluating the major stakeholders affected by intermodal initiatives

# St. Louis Metro Transportation Overview



- Airports**
- 1** Lambert-St. Louis International (FTZ #102)
- 2** MidAmerica St. Louis (FTZ# 31)
- 3** St. Louis Downtown
- 4** St. Louis Regional Airport
- 5** Spirit of St Louis Airport

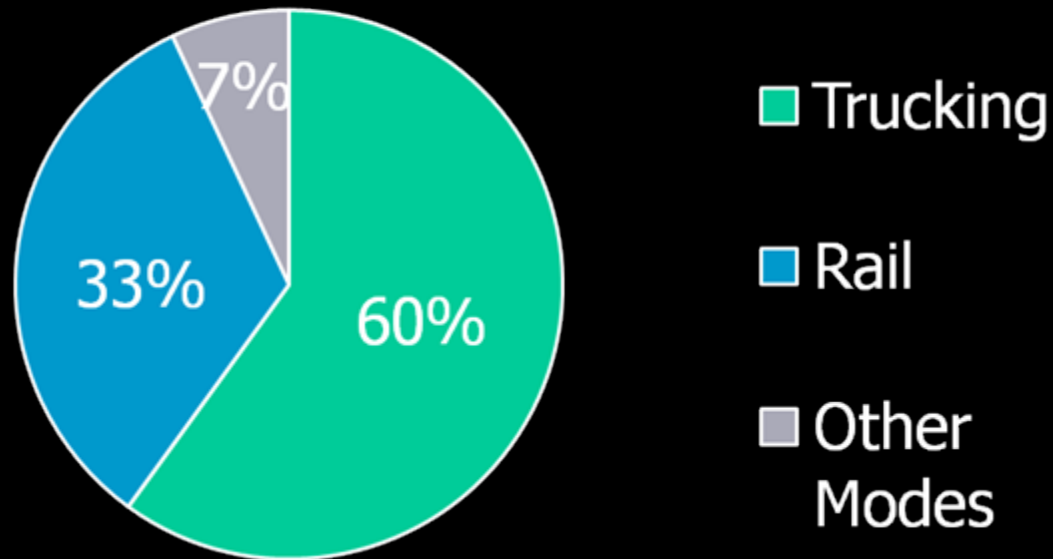
- Class I Railroads**
- BNSF - Burlington Northern Santa Fe
- CN - Canadian National
- CSX - CSX Transport
- KCS - Kansas City Southern
- NS - Norfolk Southern
- UP - Union Pacific

- Intermodal Sites**
- A** BNSF Intermodal
- B** Union Pacific
- C** Alton Southern Railroad
- D** CSX Transport
- E** Norfolk Southern Intermodal
- F** NS/Triple Crown Intermodal
- G** Terminal Railroad
- America's Central Port
- St. Louis Municipal River Terminal

# Saint Louis—”Gateway to the West”

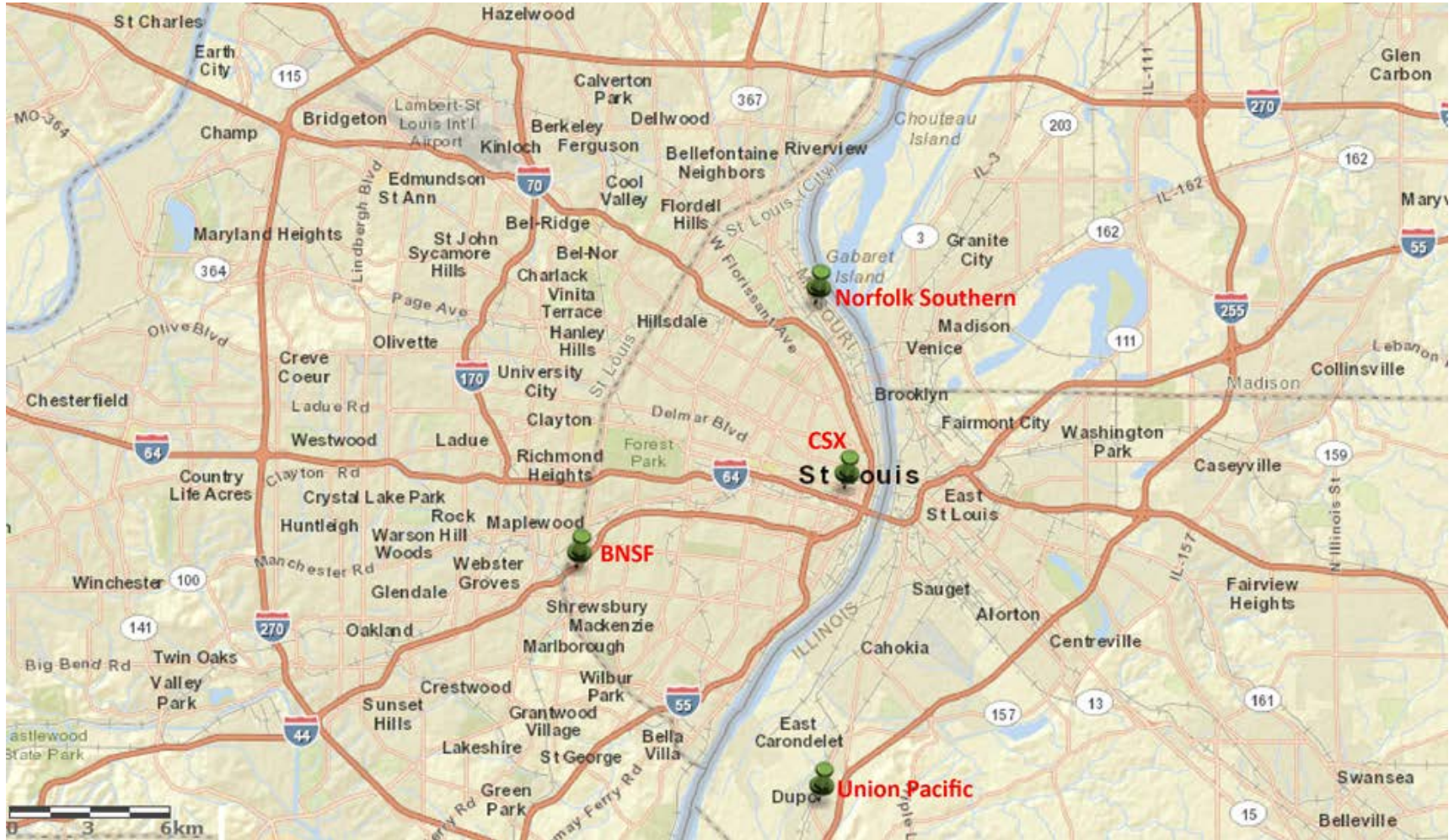
- More than one billion tons of cargo pass through St. Louis annually

Cargo Traffic by Mode of Transportation  
in St. Louis





# Current Intermodal Terminals





# Major trucking and warehousing operations in Saint Louis City and County by ZIP Code





# Intermodal Hub Development Case Studies

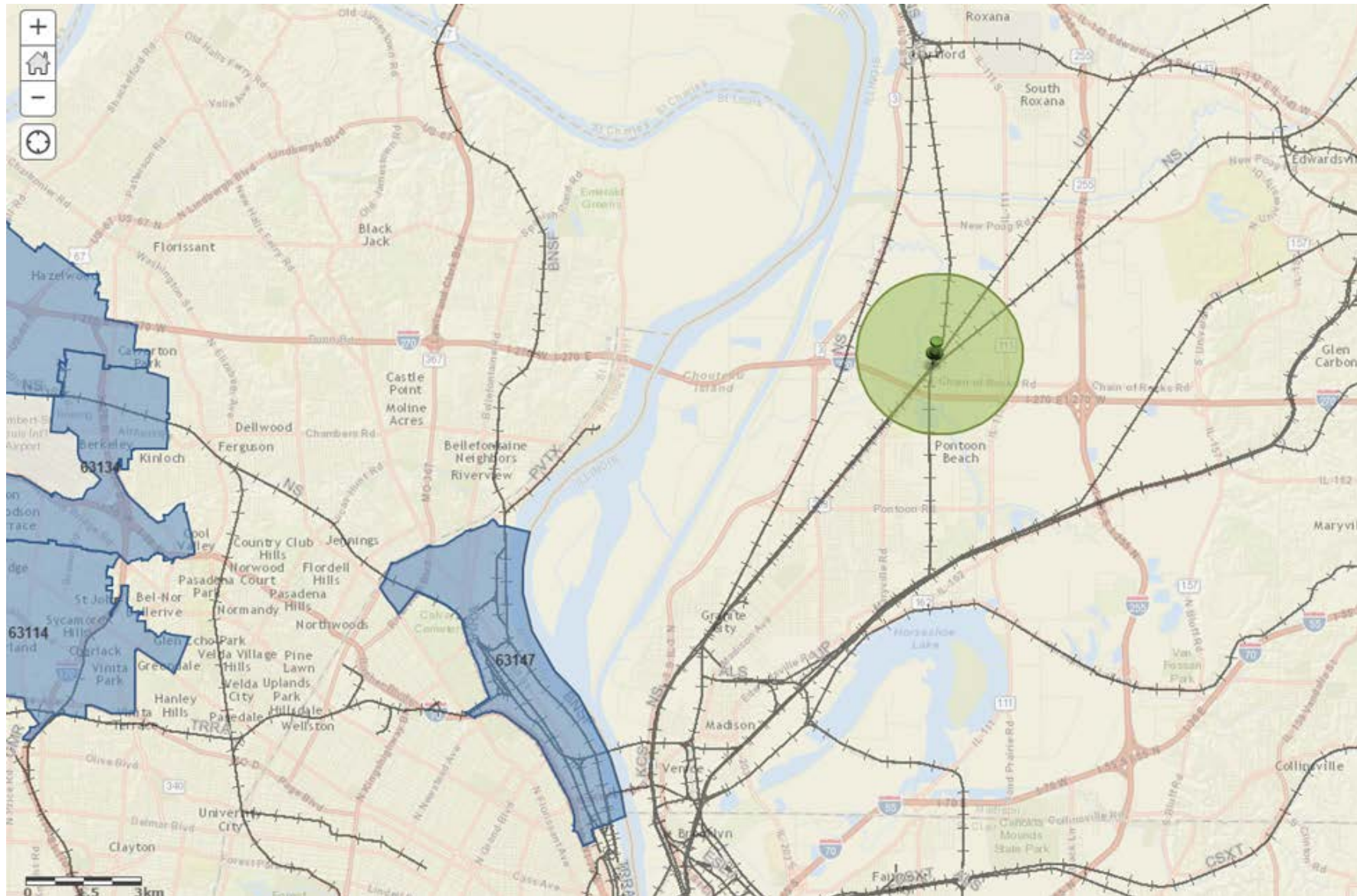
- **1. Kansas City SmartPort**
  - Pres. Chris J.F. Gutierrez
- **2. Ohio Rail Development Commission**
  - Exec. Dir. Matthew Dietrich
- **3. International Port of Memphis**
  - Exec. Dir. James R. Richardson
  
- ***For successful intermodal hub development***
  - *Railroads must be present at the table*
  - *Partnerships must be created between the public and private sectors*

# The Regional Freight District

- A new St. Louis region-wide freight development agency, under umbrella of Bi-State Development Agency
  - Authorized in fall of 2014
- Director hired in May 2015
  - To develop public-private partnerships
  - To create foundation for planning, marketing and advocacy of region as freight hub
- Likely entity to spearhead mega intermodal hub effort for St. Louis region

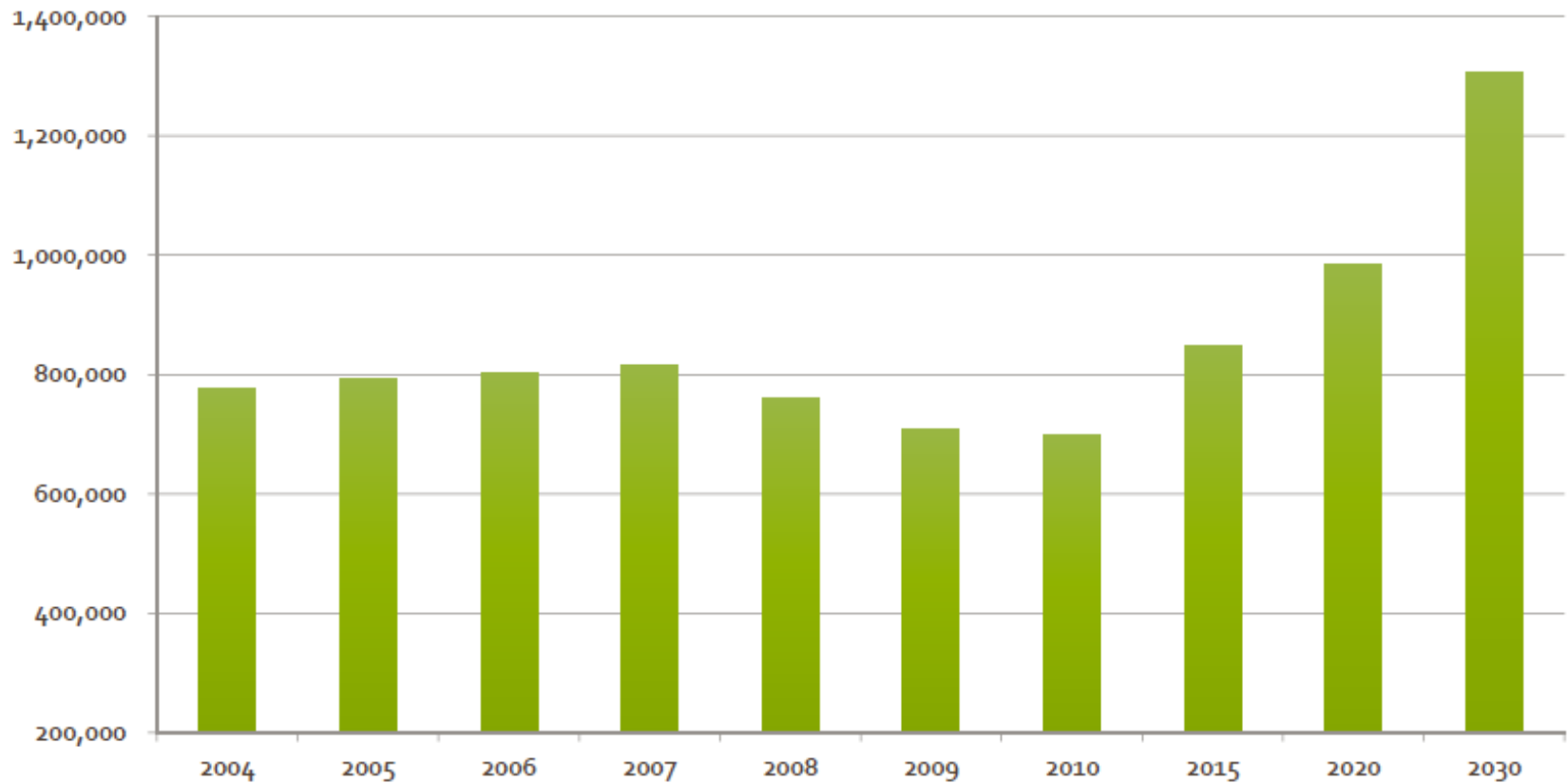


# Suggested Location for Intermodal Hub



# Projected Intermodal Growth for St. Louis Region

St. Louis Intermodal Unit Forecast (TEU) 2004-2030



Source: "St. Louis Gateway Regional Freight District" report dated 10 February 2015



# Rail Congestion in Chicago

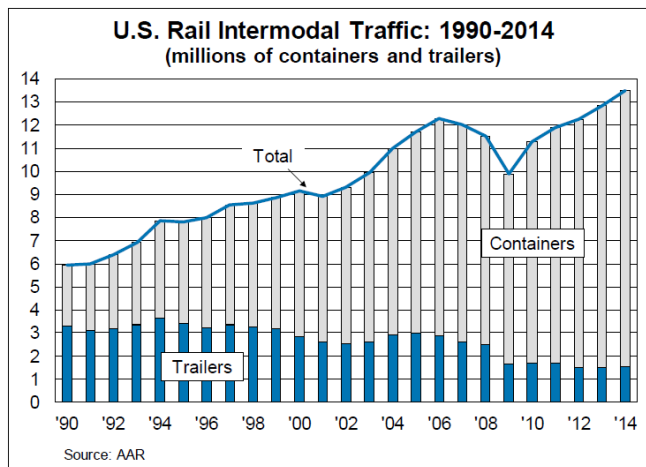
- 25% of all US rail traffic goes through Chicago—results in worst rail congestion in the nation
  - Average time for train to pass through Chicago is 33 hours
- Chicago Region Environmental and Transportation Efficiency Program (CREATE) = \$3.8 billion spent on 70 projects to alleviate rail congestion in the Chicago region
  - Still not enough to solve congestion problems
- Chicago's headache could be St. Louis' opportunity

# St. Louis as Possible Alternative to Chicago

Tonnage of Trailer-on-Flatcar and Container-on-Flatcar Rail Intermodal Moves: 2009



Transportation, Federal Railroad Administration, special tabulation, October 2011.





# Conclusions

- Intermodal hub development in the St. Louis region would likely reduce carbon emissions and create positive externalities
- Suggested location of intermodal hub for multiple rail services would increase the freight density of that location as well as increase demand for rail services in the region
- Over time, a mega intermodal hub used by multiple railroads has the potential to draw more industry and warehousing to the St. Louis area as a southern bypass to Chicago