

Site Qualification Guide

SynSel

Cairo, IL



A letter from the CEO:

SynSel's mission is driven by socially responsible investing to produce Renewable Second-Generation Biofuels. We've assembled a leading team to bring this best-in-breed technology to market. Our goal is deploying our repeatable platform to 100 sites across the US and Canada in the next eight years.

Many rural communities are struggling from the closing of paper mills. Our Biorefineries complement existing forest-related industries within these communities by providing a profitable and eco-friendly outlet for waste wood. We use this wood to produce American-made, drop-in fuels. The production process is also good for the environment and provides a reduction in greenhouse gas emissions compared to fossil fuel-based equivalents.

Government incentives to create jobs and reduce carbon footprints are shepherding the petroleum industry to support America's burgeoning synthetic fuel sector. The SynSel fuel platform garners the highest priority and rewards from mandates designed to avoid the shortcomings of ethanol and biodiesel fuel.

Not only does your socially responsible and impact investor achieve an attractive return that is good for the environment, it also creates nearly 250 direct and indirect jobs at each site. The end result is resilient communities that can continue to succeed in forest-related industries. One SynSel Biorefinery at a time, we will do our part to increase national energy security, combat global warming, and increase resiliency in rural America. Are you ready to join the SynSel Synthetic Fuels Revolution?

Respectfully yours,



Tim Tawoda



Sustainable Forestry

Although renewable waste wood feedstock is readily available across the US, SynSel works with and supports organizations that use best practices in sustainable forestry. We promote Environmental Stewardship for landowners within our procurement zones.

SynSel's biomass will be procured in accordance of multiple third-party certification programs including:

- The Forest Stewardship Council
- The Sustainable Forestry Initiative (SFI)
- The Program for the Endorsement of Forest Certification (PEFC)
- The American Tree Farm System

We will continue to promote certifications across the supply chain with an emphasis on sustainable forestry – one SynSel Biorefinery at a time.

Enviro Industrial Parks

SynSel is throwing away the “Take, Make, Waste” model of production where waste is landfilled. Instead, we are further creating a Post-Carbon Economy that is designed to use the byproducts from the production of biofuel to provide material streams that are efficiently reused. The benefits of this approach are clear: less waste, improved environmental impact, and lower costs. We will also provide opportunities to further mitigate waste from the community.

The clustering of these manufacturing and service organizations near SynSel plants allows for the sharing of resources – infrastructure, inputs, and information – for better economic, environmental, and social performance.



Community Resiliency

Rural America needs help. Plant closures and job loss have stressed local communities. What remains is high unemployment, underutilized manufacturing zones, and excess wood feedstock.

The locations highlighted in this Site Qualification Guide are an ideal fit for a SynSel Biorefinery. These projects have the necessary support by local and state officials. There is a qualified and available workforce. Plus, there is an abundance of wood feedstock required for SynSel Plants to produce drop-in fuels.

One Biorefinery at a time, SynSel does its part to rebuild rural America and strengthen community resiliency.

Responsible Investing

Today's Socially Responsible Investor has a lot to consider when making investment decisions. What is the technology and its environmental impact? What's the source of feedstock? What's the carbon footprint of production and transportation? Where is the product produced and by whom? Not to mention, what is the return?

SynSel Biorefineries use a breakthrough catalytic process to produce drop-in fuels that reduces greenhouse gas emissions by over 65% compared to fossil fuel-based equivalents. Locally grown wood is used for the "Americanmade" fuel. The drop-in fuel price is market-driven, while wind and solar sell electricity back to the grid at a price set by the utility company.



SynSel Cairo

Site Specifications

Industrial Site Information

City Cairo, IL
County Alexander
Elevation 315 ft
Site Acreage 190
Zoning Classification Commercial

Transportation

Adjacent Roadway I-57, I-55, & I-24
Adjacent Roadway US Hwy 45
Nearest Airport Barkley Regional Airport, Paducah, KY
Distance 29 miles
Nearest International Airport St. Louis, MO
Distance 160 Miles
Nearest Deep-Water Port Confluence of Mississippi & Ohio Rivers
Distance Site located on Mississippi River
Nearest Railroad Canadian National Railway
Distance Junction of Rt 3 & Rt 51

Utilities

Natural Gas Company Cairo Public Utility
Electric Power Company Cairo Public Utility
Water Supplier Illinois American Water Distribution System
Sewer Supplier Available

Economy (County)

Current Unemployment 9.10%
Population estimates (2016) 2,359



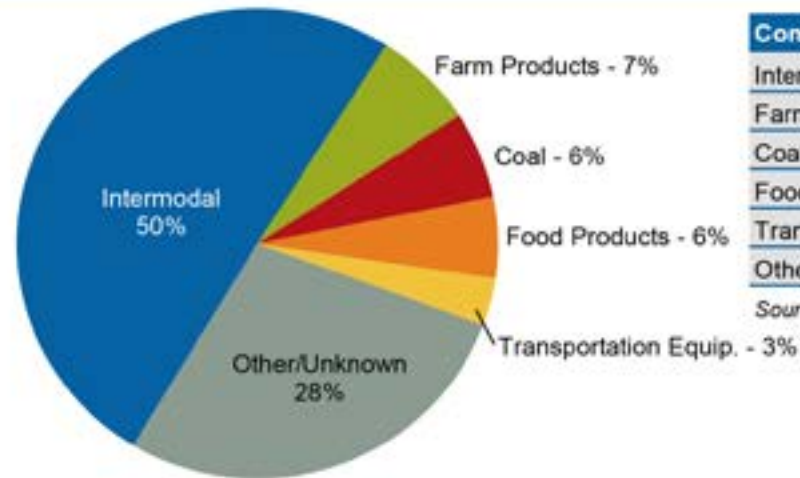
Rail Fast Facts

Operations	Number of freight railroads	46
	Freight railroad mileage	7,119
Employment and Earnings†	Number of freight rail employees	13,152
	Average wages & benefits per freight rail employee	\$110,250
Railroad Retirement	Number of railroad retirement beneficiaries	40,800
	Railroad retirement benefits paid	\$738 million
Fuel Efficiency	In 2015, America's railroads moved a ton of freight an average of 473 miles on one gallon of fuel. That's like going from Chicago to Omaha, NE. On average, railroads are four times more fuel efficient than trucks. Moving freight by rail instead of truck reduces greenhouse gas emissions by 75 percent.	
Cutting Highway Gridlock	One train can carry as much freight as several hundred trucks. It would have taken approximately 29.5 million additional trucks to handle the 531.5 million tons of freight that originated in, terminated in, or moved through Illinois by rail in 2014.	

† Employment data includes employees engaged in providing passenger service.

Rail Traffic Originated in 2015

Total Carloads: 4,935,567

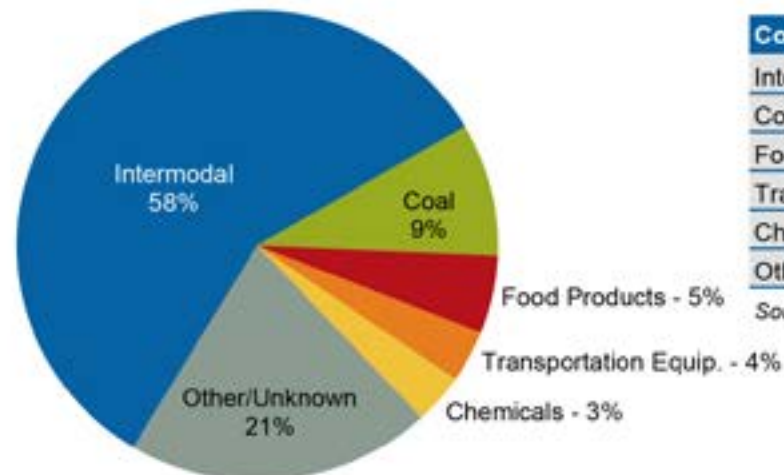


Commodity	Carloads	Percent
Intermodal	2,487,630	50%
Farm Products	335,828	7%
Coal	295,001	6%
Food Products	274,508	6%
Transportation Equip.	160,479	3%
Other/Unknown	1,382,121	28%

Source: AAR/Railinc

Rail Traffic Terminated in 2015

Total Carloads: 4,758,089



Commodity	Carloads	Percent
Intermodal	2,757,273	58%
Coal	433,777	9%
Food Products	254,955	5%
Transportation Equip.	170,770	4%
Chemicals	162,998	3%
Other/Unknown	978,316	21%

Source: AAR/Railinc

Class I Railroads	Miles Operated In Illinois in 2015
BNSF Railway Company	1,546
CSX Transportation	898
Canadian National	1,258
Kansas City Southern Railway Co.	199
Norfolk Southern Corp.	1,256
Canadian Pacific Railway	402
Union Pacific Railroad Co.	2,318
	7,877

Regional Railroads	Miles Operated In Illinois in 2015
Indiana Rail Road, The	34
Iowa Interstate Railroad, Ltd.	225
Wisconsin & Southern Railroad, LLC	85
	344

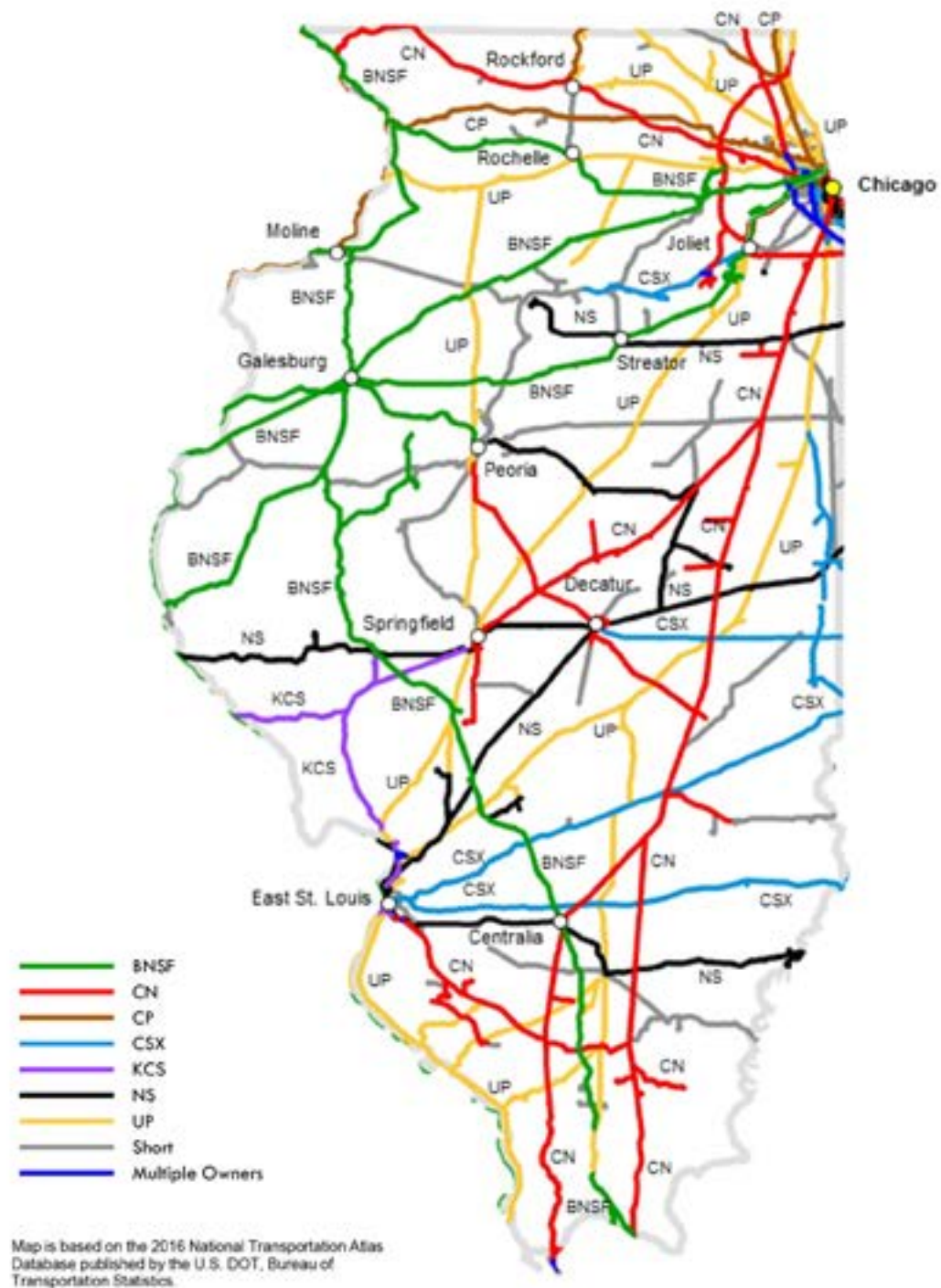
Local Railroads	Miles Operated In Illinois in 2015
Bloomer Line	45
Chicago, Ft. Wayne & Eastern Railroad	6
Chicago, SouthShore, & South Bend Railroa	6
Effingham Railroad Co.	5
Evansville Western Railway	27
Illinois & Midland Railroad, Inc.	169
Illinois Railway, LLC	113
Illinois Western Railroad Co.	3
Kankakee, Beaverville & Southern Railroad	77
Keokuk Junction Railway	145
Port Harbor Railroad, Inc	3
Toledo, Peoria & Western Railway Corp.	109
Vandalia Railroad	3
	711

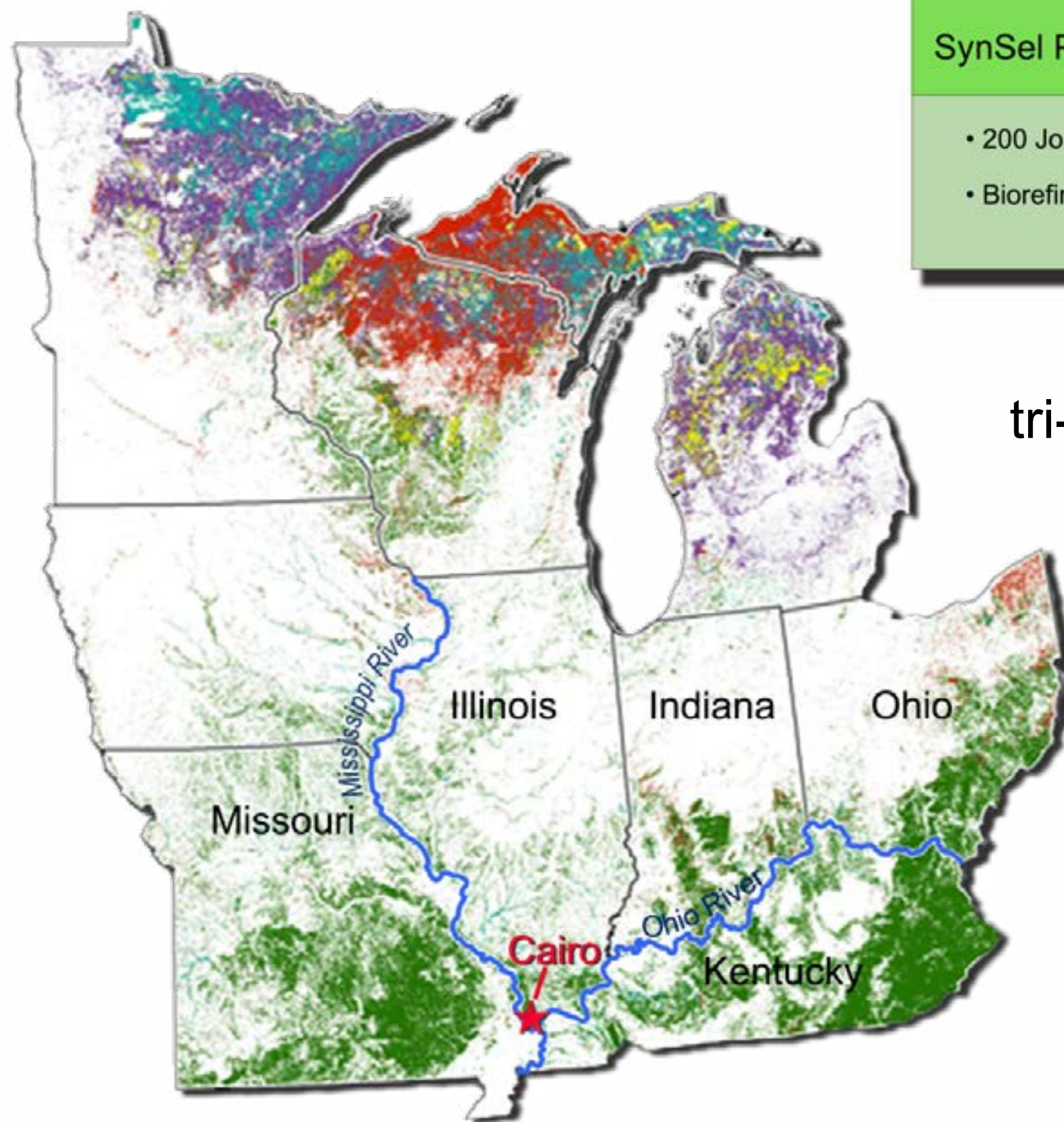
Illinois Totals	Number of Freight Railroads	Miles Operated Excluding Trackage Rights	Miles Operated Including Trackage Rights
Class I	7	5,813	7,877
Regional	3	284	344
Local	13	589	711
Switching & Terminal	23	433	437
Total	46	7,119	9,369

Switching & Terminal Railroads	Miles Operated In Illinois in 2015
A & R Terminal Railroad	6
Ag Valley Railroad	3
Belt Railway Company of Chicago	27
Burlington Junction Railway	9
Chessie Logistics	1
Chicago Port Railroad Co.	1
Chicago Rail Link	72
Chicago Terminal Railroad	4
Cicero Central Railroad	1
City of Rochelle Railroad	4
Crab Orchard & Egyptian Railway	14
Decatur Junction Railway Co.	30
Eastern Illinois Railroad Co.	57
Indiana Harbor Belt Railroad	34
Manufacturers Junction Railway	6
Peru Industrial Railroad, LLC	3
Pioneer Industrial Railway Co.	8
Riverport Railroad, LLC	72
Shawnee Terminal Railway Co.	3
South Chicago & Indiana Harbor Rwy	27
Tazewell & Peoria Railroad, Inc.	28
Terminal Railroad Assn. of St. Louis	25
Vermillion Valley Railroad Co.	2
	437

Class I Railroad: A railroad with 2015 operating revenues of at least \$457.9 million. **Regional Railroad:** A non-Class I line-haul railroad that has annual revenues of at least \$40 million, or that operates at least 350 miles of road and revenues of at least \$20 million. **Local Railroad:** A railroad which is neither a Class I nor a Regional Railroad, and which is engaged primarily in line-haul service. **Switching & Terminal Railroad:** A non-Class I railroad engaged primarily in switching and/or terminal services for other railroads.

Freight Railroads in Illinois





SynSel Plant	Secondary	EIP	Total
<ul style="list-style-type: none"> • 200 Jobs • Biorefinery 	<ul style="list-style-type: none"> • 300 Jobs • Community 	<ul style="list-style-type: none"> • 350 Jobs • Biorefinery + Community 	<ul style="list-style-type: none"> • 850 Jobs • Biorefinery + Community

Quality jobs created by SynSel for the tri-states of Illinois, Missouri, and Kentucky.

The Cairo SynSel Biorefinery situated between the Mississippi and Ohio Rivers is supported by the Kentucky and Missouri wood baskets.



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