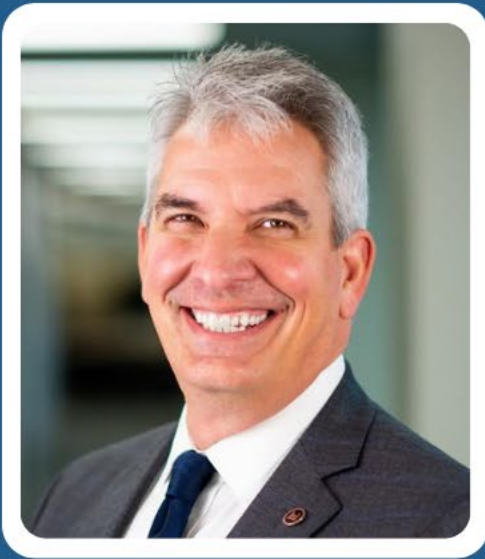


Rail-Served and Ready Sites



Moderated by: **Chase Eikenbary**, *Vice President of Project Management, Regional Growth Partnership*



Matthew Dietrich
Executive Director
Ohio Rail Development Commission



Matt Davis
Vice President, Real Estate
Regional Growth Partnership



Zachary Zaluski
Industrial Development Manager – Ohio
Norfolk Southern Corporation

*Regional Growth Partnership,
Ohio Rail Development
Commission , Norfolk Southern*
**Rail Served Sites &
Economic Development**



State of Ohio Rail Network



Rail Network Status

- Active
- Inactive
- Out of Service
- Railbanked
- Abandoned
- Unknown




Rail Modal Share,

by Commodity & Shipment Mileage to and from Ohio, 2022

Commodities	Rail Tons (000s)	Rail Modal Share					
		0 – 99 Miles	100 – 249 Miles	250 – 499 Miles	500 – 999 Miles	1,000 + Miles	All Shipment Mileages
Cereal grains	10,622	5%	9%	45%	98%	38%	21%
Natural gas and other petroleum products	9,674	3%	6%	4%	5%	31%	5%
Coal	9,363	0%	85%	32%	2%	24%	21%
Waste/scrap	8,836	2%	22%	24%	66%	46%	21%
Base metals	6,671	1%	3%	33%	32%	24%	16%
Other foodstuffs	3,911	1%	5%	9%	28%	34%	11%
Other ag prods.	3,572	0%	2%	4%	75%	12%	11%
Nonmetal min. prods.	3,519	0%	2%	9%	48%	20%	7%
Plastics/rubber	3,445	0%	7%	7%	15%	48%	17%
Nonmetallic minerals	3,341	0%	5%	14%	62%	43%	9%
Natural sands	3,022	3%	0%	74%	9%	86%	16%
Gravel	2,801	0%	23%	0%	73%	8%	3%
Other	16,541	1%	3%	4%	98%	38%	5%
Total	85,319	1%	7%	13%	23%	18%	9%

Rail Infrastructure Needs

Vary Based on Needs of Shippers and Service

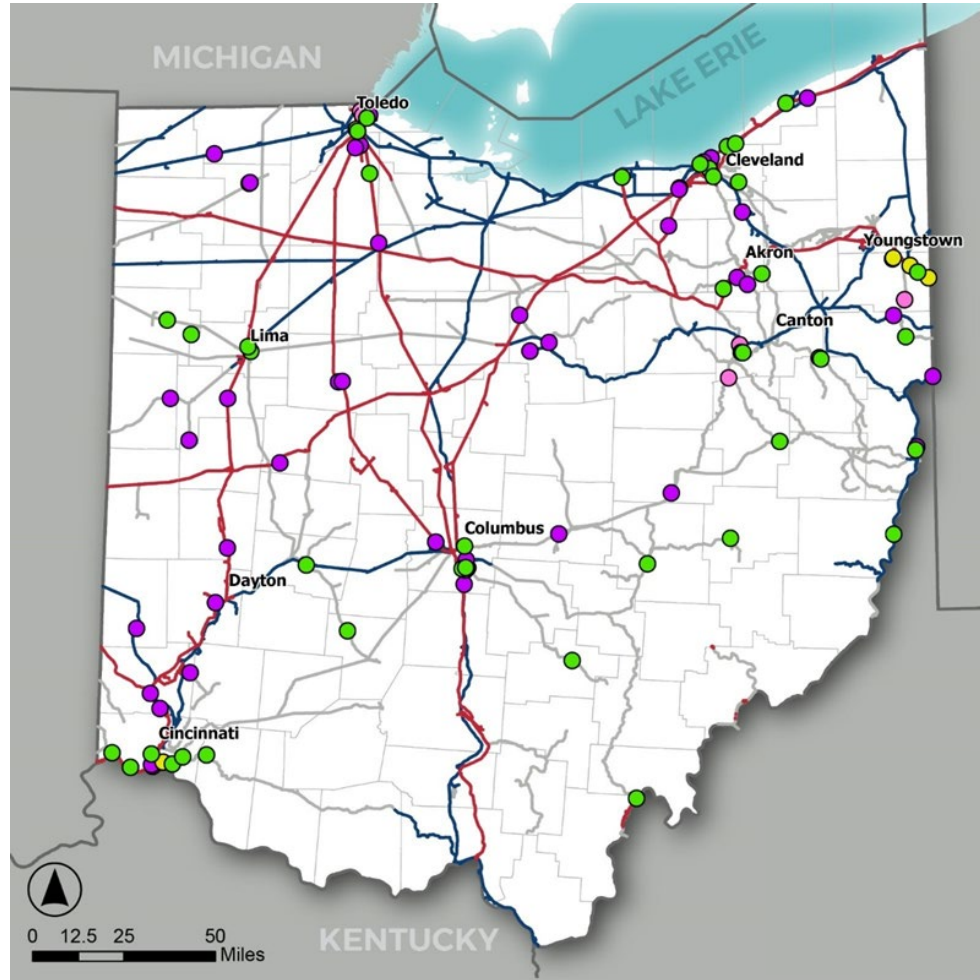
MANIFEST	UNIT TRAIN	INTERMODAL
		
<p>e.g. steel, manufacturing, building supply</p>	<p>e.g. coal, grain, crude oil, ethanol</p>	<p>e.g. retail, automotive</p>
Project Types that Address Priority Needs		
<ul style="list-style-type: none"> • Corridor preservation, small railroad improvements • Better mainline access, improvements to sidings and spurs • Additional transload facilities • Facilities that aggregate demand and share industrial access such as industrial parks • Yard improvements • Mainline capacity expansions 	<ul style="list-style-type: none"> • Unit train loading facilities • Competitive access at industrial sites or through short line railroads with access to multiple Class I railroads • Low density rail lines that can accommodate unit trains of 286,000-pound railcars • Mainline capacity expansions 	<ul style="list-style-type: none"> • Intermodal terminals, terminal capacity improvements • Clearance projects • Improved access to terminals • Mainline capacity expansions

Ohio Intermodal Facilities







#	<i>Terminal</i>
1	NW Ohio Intermodal Terminal
2	Collinwood
3	Buckeye Yard
4	Queensgate
5	Marysville
6	Rickenbacker
7	Maple Heights
8	Gest Street
9	Sharonville Intermodal Terminal
10	Toledo Airline Junction Intermodal Terminal
11	Central Ohio Intermodal Center




Ohio Transload Facilities



Facility Type

-  Team Track
-  Warehouse
-  Outdoor Transload / Warehouse
-  Outdoor Transload

Railroad Reporting Mark

-  CSXT
-  NS
-  Other

Norfolk Southern Corporation

Zach Zaluski, Industrial Development Manager

A Railroad's Perspective:

Rail Served Sites & Site Readiness



Norfolk Southern – Our Rail Network

Our rail network as a whole

Operating ~19,500 route miles across 22 states

Reaching more than 50% of the US population

Serving every major container port in the eastern US

Operating the most extensive intermodal network in the East



Norfolk Southern in Ohio

Deeper dive into our rail infrastructure in the Buckeye State

Operate ~1,905 route miles

Intermodal Terminals (6):

- Cincinnati (2)
- Columbus (2)
- Cleveland (1)
- Toledo (1)

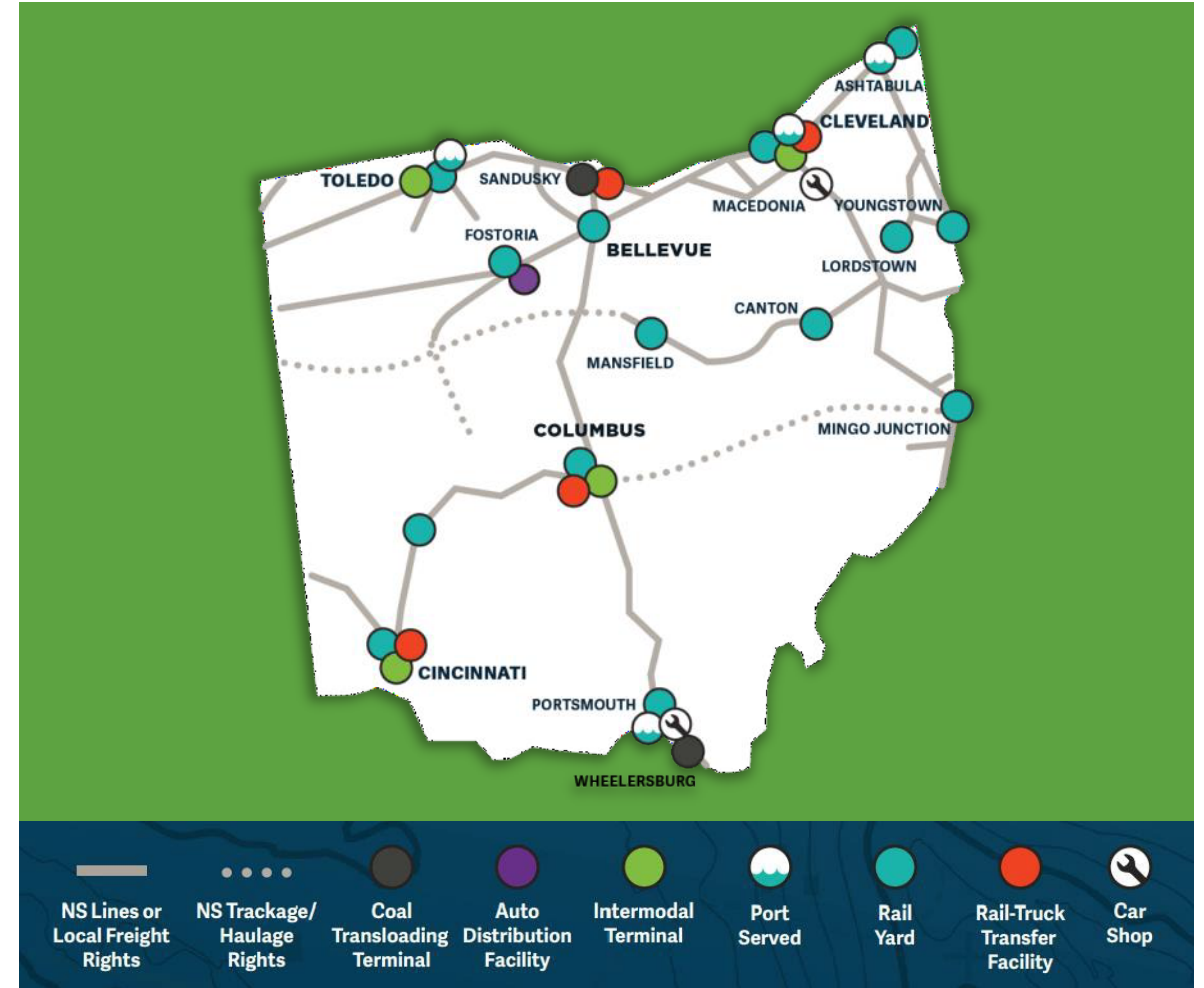
Ports:

- Wheelersburg
- Ashtabula
- Cleveland
- Toledo

Rail Yards:

- 14 Major Rail Yard to support our network.
- Bellevue, Ohio, Moorman Yard

Transload Network – Thoroughbred Bulk Transfers



The Benefits of Using Rail Freight

Delivering Transportation Optionality, Affordability, and Sustainability



~\$1.5 Billion

We have invested roughly \$1.5 Billion in our locomotives, freight cars, and tracks to serve our customers better.

↓ 75%

Moving freight by rail instead of truck
Reduces greenhouse gas emissions by 75%
on average.

7X

Trains are up to seven times more fuel
efficient than other modes of freight
transportation.

Is this site a rail served site?

Early engagement will eliminate any questions pertaining to rail serviceability

Engage Early

Physical Site Characteristics

- Topography
- Wetlands
- Utilities
- Surrounding Roadway Infrastructure
- Rail Design Standards



Operational Considerations

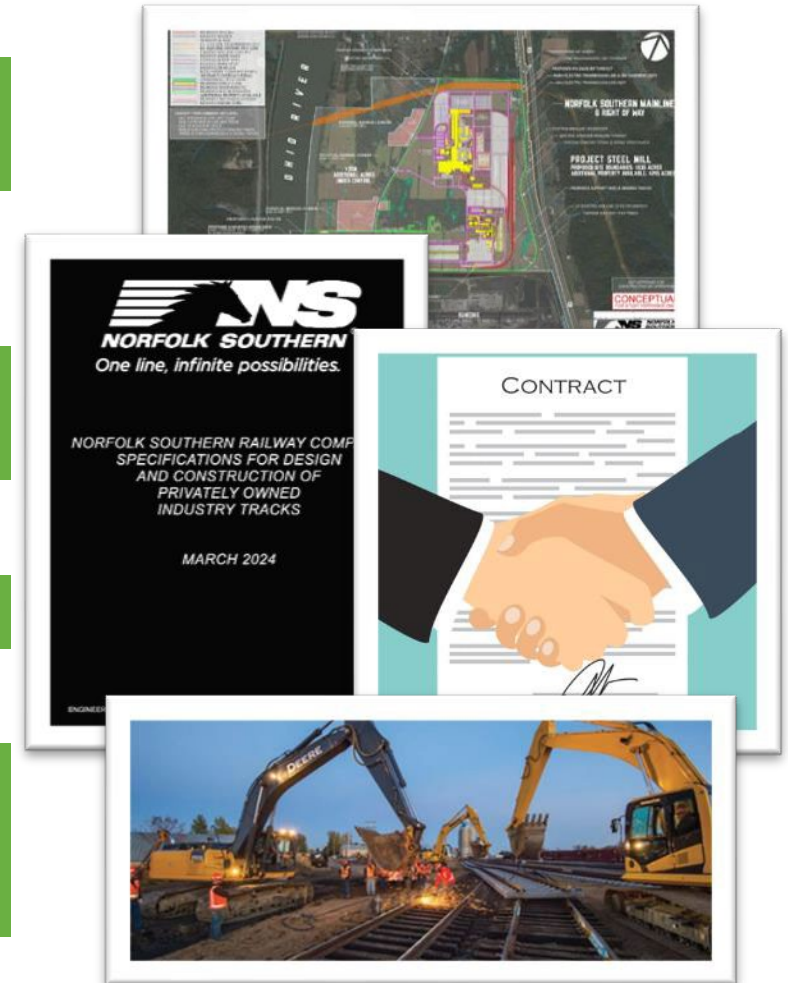
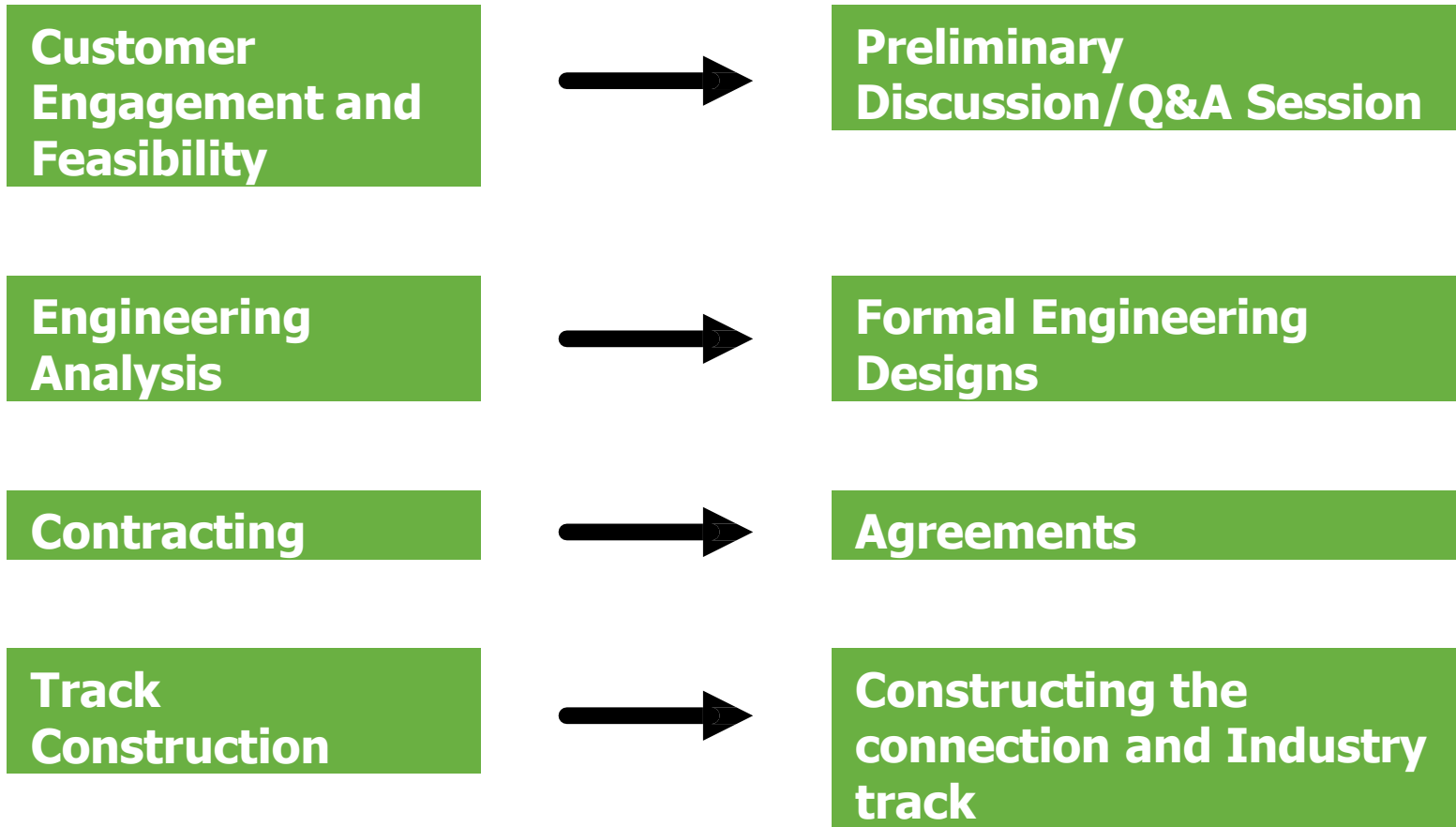
- Line Capacity/Volume
- Rail Infrastructure Requirements
- Railcar Weight/Size
- Switch Orientation

Plan for the Future

- Preserve for space for rail access

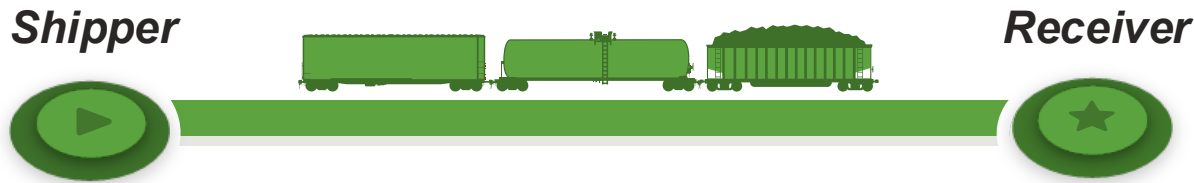
What's the process?

The process for businesses working with Norfolk Southern to locate on sites and ship via rail



Intermodal vs. Direct Rail *Vary Based on Needs of Shippers and Service*

INTERMODAL RAIL SERVICE



DIRECT RAIL SERVICE

NSites *Norfolk Southern's Site Portal/Database*

nsites.norfolksouthern.com

The screenshot displays the NSites web application interface. At the top left, the Norfolk Southern logo and 'NSites' branding are visible. The top right contains navigation links: 'OUR RAIL NETWORK', 'INDUSTRIAL & RAIL DEVELOPMENT', 'GURU HELP', and 'LOGIN'. Below the navigation is a search bar with '67 Industrial Sites' and a 'Search by keyword' field. A sidebar on the left lists several industrial sites with their addresses, locations, and acreage:

- 2001 COURTRIGHT ROAD**: Columbus, Franklin, OH. 230,000 SQFT. 51 ACRES. 1.7 MI. 6.0 MI.
- ALLIANCE COMMERCE PARK**: Alliance, Stark, OH. 106 ACRES. 19 MI. 64 MI.
- AVON INTERNATIONAL COMMERCE PARK**: Avon, Lorain, OH. 68 ACRES. 1.6 MI. 20 MI.
- BEDFORD - TINKERS CREEK COMMERC...**: Bedford, Cuyahoga, OH. 33 ACRES. 1.7 MI. 23 MI.
- BLUESTONE BUSINESS PARK**: (Address partially obscured)

The main map area shows a satellite view of Ohio with a network of red lines representing Norfolk Southern tracks. A legend in the top right corner identifies the track types: 'NS Owned/Freight Operating Rights' (solid red line) and 'NS Trackage/Haulage Rights' (dotted red line). The map also shows city names and various geographical features. A scale bar at the bottom left indicates 20 miles.

Regional Growth Partnership

Sites Programs & Initiatives

2024 SITE SEARCHES

88 Total Site Searches

45

ADVANCED MANUFACTURING



AEROSPACE & AVIATION

12

AUTOMOTIVE



LOGISTICS & DISTRIBUTION



FINANCIAL SERVICES



FOOD SCIENCES & AGRIBUSINESS



HEALTHCARE



INFORMATION SERVICES & SOFTWARE



MILITARY & FEDERAL

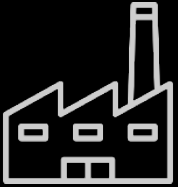


SHALE ENERGY & PETROCHEMICALS



OTHER

2024 REQUESTED PRODUCT TYPES



BUILDING

of Site Searches:

53 of the 2024 site searches requested that existing buildings be submitted for consideration. 19 were also open to sites.

Minimum SF Required:

The minimum building size required ranged from 5,000 sf to 1,000,000 sf, with the average being ~223,000 sf.

Other Requirements:

29 of the site searches specified ceiling heights of at least 25 feet in some portion of the building. 5 of the building searches required rail; 7 others preferred rail, but it was not a requirement.



LAND

of Site Searches:

35 of the 2024 site searches preferred a land site.

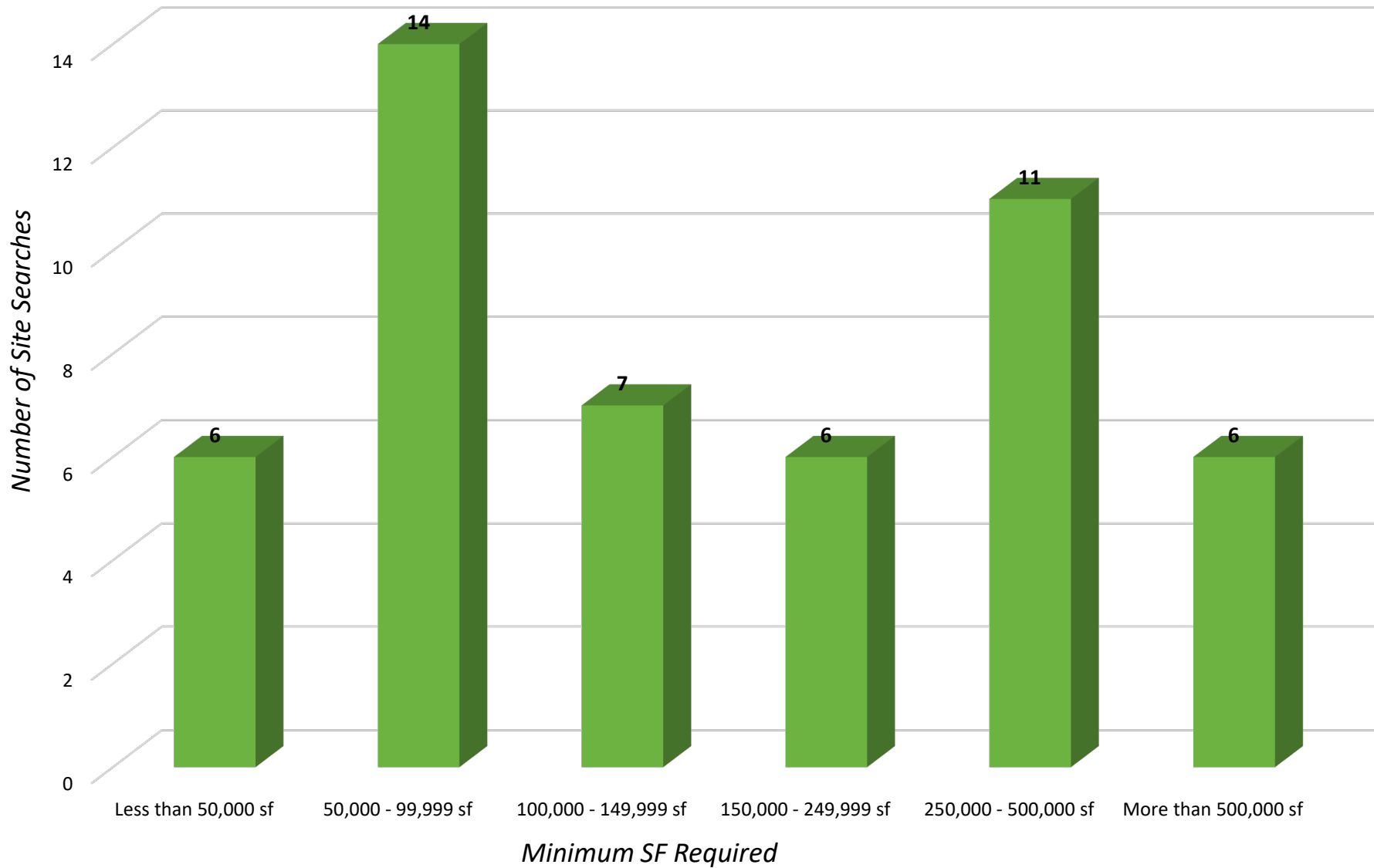
Minimum Acreage Required:

The minimum acreage required ranged from 2 acres to 650 acres, with the average being 101 acres.

Other Requirements:

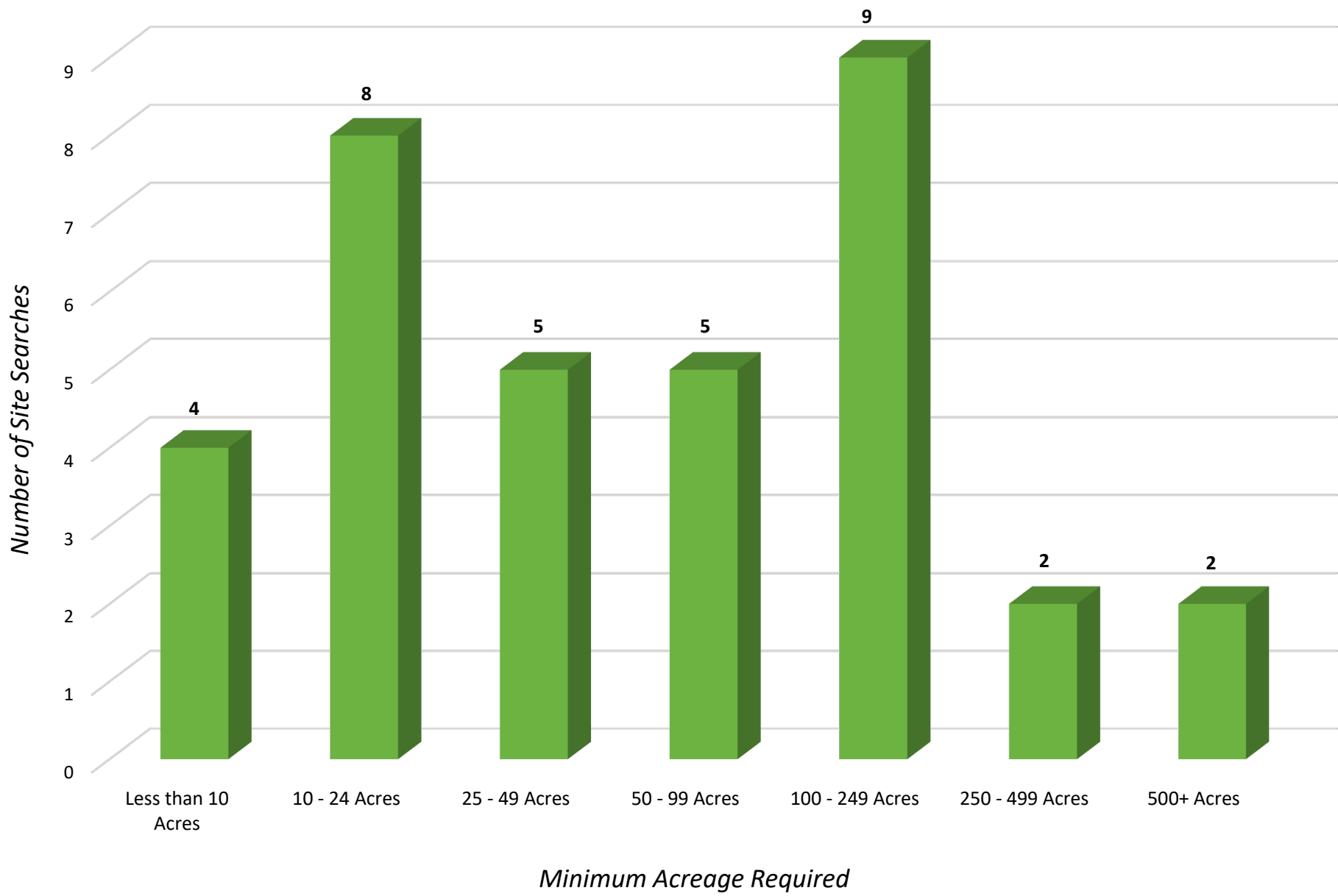
11 of the land searches required rail; 6 others preferred rail, but it was not a requirement.

2024 REQUIRED BUILDING SIZES



*3 Site Searches seeking existing building submissions did not specify a minimum sf required.

2024 REQUIRED LAND SIZES



2024 SITE SEARCH UTILITY REQUIREMENTS

ELECTRICITY

56 Site Searches provided a required electric capacity (MW).

Range: 0.325 MW to 500 MW

Average: 50.6 MW

Median: 13.5 MW

NATURAL GAS

Only 21 Site Searches provided a required natural gas capacity.

The least demanding capacity requested was 40 MCF/Month.

The most demanding capacity requested was 318 MCF/Hour.

WATER

39 Site Searches provided a required water capacity (GPD). Where specifically differentiated, the potable water capacity was used for data purposes.

Range: 1,000 GPD to 16,000,000 GPD

Average: ~1,045,000 GPD

Median: 100,000 GPD

WASTEWATER

34 Site Searches provided a required wastewater capacity (GPD). Where specifically differentiated, the domestic wastewater capacity was used for data purposes.

Range: 125 GPD to 15,000,000 GPD

Average: ~900,000 GPD

Median: 80,000 GPD



Thank You!
Questions?