

Site Selection in the United States

Key Variables, Processes, and Technologies



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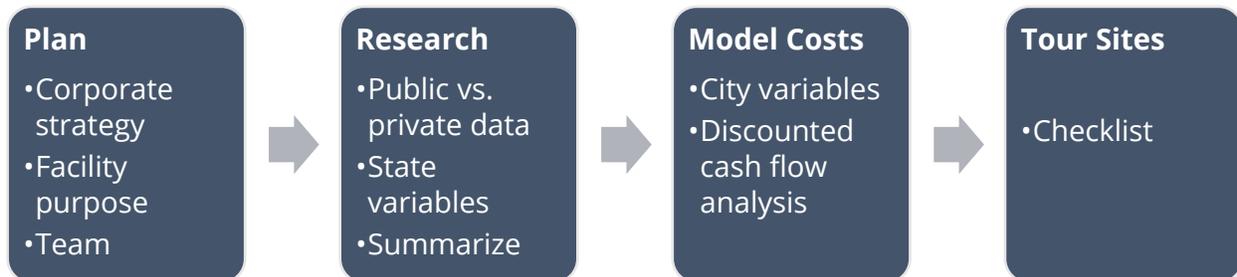
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SITE **SELECTOR**TM

Overview of Site Selection in the United States

Site selection is a process of identifying a state, region, and local community to locate a new corporate facility. When investing in the United States of America, private companies take responsibility for researching, analyzing, and selecting their locations. Different levels of government and economic development organizations may facilitate the corporate decision by providing the company with information, making available prepared sites, fast-tracking permits, and offering cost reductions such as economic development incentives.⁴⁷ The decision of where and when to locate resides with the company, its advisors, and executives.

Site Selection Process



Plan

The process begins with planning. When undertaking a new project, foreign investors should consider three items initially: corporate strategy, purpose of their facility, and advice from stakeholders.

Corporate Strategy

Companies invest in the United States for a variety of reasons.⁴⁸ The most common reason is accessing new markets and customers. In addition, because the shipping distances are shorter, companies find that their logistical costs are lower if they produce in the United States and ship to customers in the region, thus freeing working capital for other uses.

⁴⁷ The concept of economic development incentives are discussed in depth in [SelectUSA Investor Guide](#), Chapter 11: “Economic Development Incentives.” This chapter on site selection will incorporate incentives as part of a suggested cost model for evaluating potential locations.

⁴⁸ For a more thorough discussion of corporate strategy, please see [SelectUSA Investor Guide](#), Chapter 1: “Overall Investment Checklist.”

Others find that they can improve their intellectual property and enhance their products by hiring U.S. engineers.

Foreign investors typically open the following types of facilities. A sales office is usually opened to establish a customer base in the United States. A development and engineering office permits companies to tailor their products to the needs of the U.S. market. After securing sales contracts, foreign investors typically open a warehouse or distribution facility where they can inventory products manufactured in their home country. Because of the lead time associated with overseas production, investors need a place to hold their goods until required by the customer. Some companies choose to build manufacturing facilities in the United States as the U.S.-based production reduces lead time for delivering product to U.S. customers and frees up working capital otherwise tied up in inventory. To manage the various resources required to operate a manufacturing plant and serve their growing customer base, foreign investors establish a facility for their corporate staff where sales, engineering, finance, human relations, procurement, logistics, legal, and executive leadership can work together.

Facility Purpose

There are several general factors that affect selecting a state and local community. These factors include workforce, logistics, real estate, business and tax climate, and utilities.

- i) **Logistics:** includes accessibility to major customers, proximity to transportation infrastructure (such as water ports, railroads, and airports), and costs of inbound/outbound shipping. Generally, the further a facility is from the primary transportation node, the higher the freight costs.
- ii) **Workforce:** includes labor availability, skills, costs, and unionization.
- iii) **Real Estate:** includes availability of existing buildings, the time to obtain a certificate of occupancy, and the cost to construct improvements to an existing building or a new building on a greenfield site. Generally, the cost of construction varies widely across the United States.
- iv) **Business and Tax Climate:** includes operating restrictions, (such as COVID-19 Executive Orders), environmental regulations, tax rates, and permits required (conditions and processing time).
- v) **Utilities:** includes available capacity, the cost of adding capacity, generation and disposal sources, rates, and time to extend/tap.

The priority of these factors usually depends on the type of facility being planned. For example, the most important site selection factor for distribution facilities is logistics. In this case, the cost of in-bound and out-bound freight will typically be the single biggest driver of

competitiveness. For manufacturing, labor availability and cost are the major drivers in selecting a site. For office operations, as the average age of the U.S. workforce is rising and nearing retirement, access to a large pool of younger workers would be critical to business continuity.

Team of Key Stakeholders

The last step in the planning phase is to assemble a site search team. Failing to cover all of the disciplines and roles on a company's site selection team usually causes problems during the actual search, yielding inefficiencies as the search may have to begin afresh, or after the project is complete, leading to operational issues and cost overruns. If there are any gaps on the internal team, a company may consider filling the gap with an outside professional who is a subject matter expert in the particular field. As a best practice, the following disciplines should be included on a site search team.

The most critical corporate functions requiring full-time participation are:

- i) **Human Resources:** Given the importance of workforce to site searches, the human resources department is the most knowledgeable about types of labor, required skills, and number of associates required for a project.
- ii) **Real Estate:** The real estate team is usually tasked with aligning the physical footprint of the company to the business operations, analyzing the attributes of each site, and coordinating with brokers, engineers, and architects.
- iii) **Operations:** The operations colleagues, with experience from previous investment projects, are usually the most knowledgeable about timelines required to meet customer commitments, placement of equipment in a new facility, and labor required to efficiently operate such equipment. In addition, the operations team will operate the new facility after the site is selected.
- iv) **Supply Chain:** The supply chain colleagues analyze the suppliers, assess risks, and estimate costs to bring inbound materials and transportation charges for shipping finished products to customers.
- v) **Finance:** The finance team can help the team quantify the decision and measure its performance by modeling the upfront and operating costs, analyzing key site selection variables, and assessing risks.



To be successful, there are other functional areas that are required but not necessarily on a full-time basis:

- vi) **Communications:** In some states, incentives are awarded as an inducement to create jobs or commit investments to the location for a minimum period of time. These inducements are referred to in site selection as “but for” requirements (“but for” the incentive, the company would not commit to creating jobs or making the investment in the location). A company could violate a “but for” requirement by publicly announcing its intention to locate a project before entering into an incentives agreement with a state or community. Since the timing of any announcements about a project is critical to incentives, the site selection team must coordinate with the communications team about timing and content of any announcements about a project.
- vii) **Government Relations/Public Affairs:** Project success could also involve contacts with government agencies for tasks, such as expediting permits, as well as monitoring community support for a project.
- viii) **Legal:** The legal department is usually involved in several aspects of a project, including real estate contracts, permit applications and resulting conditions, incentive agreements, legal entity formation, and qualifications to do business in a new jurisdiction.
- ix) **Tax:** The tax team is the best-suited to evaluate tax climate and estimate the tax liability, including whether there are any planning strategies that could be affected by an incentive agreement, such as not being able to utilize non-refundable credits due to lack of a tax liability.

When working with such a large team, it is important to establish the goals and potential



benefits of such an investment project in order to ensure buy-in from company leadership and team members. Before recruiting colleagues to your site selection team, investors and/or their professional advisors should estimate a range of potential benefits. An investment such as this is a long-term project that will require many people to stay motivated over the course of months or years.

Research

Goal: Narrow to a few states

After planning, the next step is research. While identifying variables for their site search, the site selection team should also agree upon the data to define and measure those variables. There is little value in using variables that do not have readily available, or costly, data sets. Once a site search team decides on its key variables and data sets, the rest of research is essentially a process of elimination, using data to advance from a long list of considered locations to a shorter list with narrower criteria until the search team eventually agrees upon a state.

Data - Public versus Private

For data sets, there are two sources of information: public and private. Public data is generally collected, analyzed, and published by federal and state agencies, such as the [U.S. Census Bureau](#), the [Bureau of Labor Statistics](#) (BLS), and the [Energy Information Administration](#) (EIA). [SelectUSA Stats](#) and [Google Public Data Explorer](#) each compile and aggregate a variety of U.S. and international public data resources as well. The advantage of public sources is that the information is free. The drawback, however, is the latency of the data: some sources have lags of 24 to 48 months.

For private sources, data is available to purchase, but the databases are generally user-friendly, relatively current, and often comes with analysis and insights from the providers. There are several private data providers with information available at the state, county, and/or city level.

Narrowing the Search Area to a Few States

Selecting a group of eligible states to consider is a challenge in a country as vast and varied as the United States. An international company seeking to grow its revenue in the North America may want to start its analysis by identifying the locations of its potential customers. To identify customers, the U.S. Census Bureau maintains a database called the [Statistics of U.S. Businesses](#), which provides data by industry sector at the state and metropolitan statistical area (MSA) level. To estimate the size of a potential consumer base, the information is further categorized by number of establishments as well as payroll and employees per establishment.

In addition to customers, some companies may require a location that is close to their suppliers or critical infrastructure. For example, some companies require large amounts of natural gas or electricity. EIA provides publicly available [maps of electric transmission lines and natural gas pipelines](#) across the United States.

To continue narrowing the search to specific states, companies should focus on a few more general variables. These variables are best analyzed with independent rankings.

Business climate is a large umbrella that includes several sub-factors such as environmental permitting requirements, state liability system, and debt as a percentage of tax revenues. One of the most comprehensive and longest running resource for Business Climate is "[Rich State Poor State](#)," which is published by the American Legislative Council (ALEC). This resource publishes a score card for each state ranking their prior performance versus the other states and forecasting their future economic outlook.

Other factors may influence a location's business climate. For example, at the time of authorship, an area of concern is COVID-19 state level executive orders limiting economic activity. For current information on the COVID-19 restrictions in the United States, Kroll maintains a [global heat map](#) forecasting the impacts by country and by industry. As part of the heat map, there is a benchmark on the effectiveness of each state's COVID-19 orders.

Another important consideration in site selection is the tax structure for each state. It is important to analyze costs and burdens associated with corporate income, franchise, excise, sales/use, and property taxes. A comprehensive resource is the [Tax Foundation](#). Each year the Tax Foundation analyzes the tax structures in each of the 50 states and publishes a comprehensive explanation and ranking of each state's competitiveness. Another resource available for in-depth technical information on state and local taxes is the [Council on State Taxation](#).

After mapping the locations for its customers and suppliers and ranking the other indices, the search team will have a range of states to look for the rest of their data points and further refine the search to a county or city.



Modeling Costs: Refining the Search from States to Cities

Goal: Narrow the search to a local community

To select a specific location from a short list of options, a discounted cash flow analysis may be most helpful as a means of directly comparing potential communities in quantifiable terms based on the company's specific requirements.

Workforce

As discussed above, the most common variable across all types of operations is workforce. Using workforce to further refine the search has two benefits. First, with workforce data being available at the county and city level, it is one of the most efficient ways to narrow your search from states to a local community in each state. Second, finding enough workers with the right skills and the lowest cost is key to the success of many site searches.

To start the analysis, the site selection team should create a staffing plan focusing on at least three areas: worker availability, skill levels, and costs.

Availability: To measure availability, a site selection team should consider several factors, such as:

- **Population:** absolute and forecasted statistics further categorized by age, race, sex, income, can be found via the [U.S. Census Bureau](#).
- **Employment:** the numbers of workers employed by industry and by occupation including absolute and trending rates can be found via the [Bureau of Labor Statistics](#) (BLS).
- **Unemployment:** information by state and region is also available via [BLS](#).
- **Location Quotient:** measuring the concentration of workers in a certain NAICS code as compared to the U.S. national average can be found via [BLS](#).
- **Commuting Patterns:** mapping where potential employees live and their expected travel time to/from the anticipated facility can be found via the [U.S. Census Bureau](#).

To quantify the “availability” of a workforce in a region, a site selection team should build a model that considers its current and future labor requirements. For such data points as retention rates and the number of students at each stage of their studies, the search team will need to request this information from the economic development organizations (EDOs) who represent the local communities as these data points are not publicly available. Below is a simple model.

Example Workforce Analysis of a Single Location

Workforce	Total / Percentage in Location A
Working-Age Population (Civilian Population 20 Years and Older)	310,860
Current Unemployment Rate	5%
Full Employment Rate	4%
<i>Population Available to Join Workforce</i>	3,109

Local University Students Graduating This Year	Undergraduate (Bachelor)	Graduate (Master or Ph.D.)	Total Graduating
Total Students	5,500	1,500	7,000
Undeclared	1,100	0	1,100
Science, Technology, Engineering, Mathematics (STEM) Fields	1,100	375	1,475
Arts & Science	1,925	563	2,488
Business & Finance	1,375	563	1,938
Of All Graduates in STEM, Arts & Science, or Business & Finance Programs			
Hypothetical Retention Rate of Local Universities	50%	75%	90%
<i>University Students Expected to Join Workforce</i>	2,950	4,425	5,310

Local Community College Students Graduating This Year	Associate Degree		
Total Students	2,500		
Technical	1,250		
Business & Finance	1,250		
Of All Graduates in Technical or Business & Finance Programs			
Hypothetical Retention Rate of Local Community Colleges	60%	80%	95%
<i>Community College Students Expected to Join Workforce</i>	1,500	2,000	2,375

Range of Estimates of Potential Available Workforce (Based on Possible Retention Rates)

Total Available Workforce for Project	Low Estimate	Middle Estimate	High Estimate
<i>Potential Workforce (Existing Available Workforce Plus Graduating University and Community College Students)</i>	7,559	9,534	10,794

Skills: While precise skill levels are difficult to determine without one-on-one interviews, there are a few data points that generally characterize the types of labor skills inherent in a community, including:

- Education attainment, segmented by high school, some college (which includes community colleges and other two-year institutions), bachelor and post-graduate degrees, can be found via the [U.S. Census Bureau](https://www.census.gov). In addition to education

attainment, the U.S. Census also reports on school financing from state and local governments.

- [Union membership](#) and participation by occupation, industry and state is available via BLS, as is information regarding [work stoppages](#).

Cost: Evaluating this factor is difficult given the latency of publicly available data. To develop a more accurate picture of the current and future labor costs, the site selection team should request the data from the EDOs or, if not available, from private sources.

- [Wages by occupation](#) are available by industry sector and at the state, county, and city level via BLS.
- BLS also provides [experimental data on labor productivity](#). Even though it is only available at the state level for a limited number of years, this data set includes granular details on labor productivity, number of employees, number of hours, output, real hourly labor compensation and costs, unit labor cost, and value of production.

Below is a simple model to compare labor costs in multiple local communities in a single state.

Occupation	State A, County W	State A, County X	State A, County Y	State A, County Z
First Line Supervisors of Production and Operating Workers	\$26.88	\$28.20	\$27.92	\$26.93
Structural Metal Fabricators and Fitters	\$17.02	\$17.74	\$18.27	\$19.47
Computer Control Programmers and Operators	\$19.40	\$21.77	\$18.11	\$17.42
Machine Tool Cutting Setters, Operators, and Tenders, Metal and Plastic	\$14.49	\$16.48	\$15.81	\$15.64
Welding, Soldering, and Brazing Workers	\$17.03	\$17.45	\$17.64	\$19.33
Critical Occupations	\$19.50	\$21.68	\$22.92	\$20.29

Additional Factors Specific to the Investment Project

After analyzing the workforce in several communities in each state, a search team can begin the process of analyzing additional factors that are more specific to the project. To highlight a state’s strengths and challenges, a project team should prepare a cross-state cost model. Since many of the costs and the incentives occur annually over a period of years, the incentives and costs should be discounted to the present value.

To obtain estimates of equipping a facility, supply chain members should have this information. The supply chain colleagues, through their supplier network, should be able to determine the acquisition, shipping, and installation costs of machinery and equipment, furniture and fixtures, and computers. While the cost of the equipment may be the same for each location, shipping and installation costs will likely vary.

With respect to operating costs, analysis usually includes labor, utilities, logistics, and taxes. Labor costs are pulled from previous research using BLS Occupational Employment Surveys for states and metropolitan areas. In addition to wage rates, the human resources team analyze incidental costs associated with workforce. For unemployment insurance, tax colleagues can pull the rates and the salary thresholds from each state's UI Commission web page. The U.S. Department of Labor's website has a [convenient map](#) with a link to each state's unemployment insurance agency. For workers' compensation, [ALEC](#) or [Cerity](#) are examples of two resources with human resource data. The real estate colleagues can obtain a quote to relocate associates from national moving firms. For relocation costs, there are several online resources, such as the Relocation Center's [online estimation tool](#).

For utilities, the supply chain team should have information regarding the production requirements for water, sewer, electricity, and natural gas, if required. For electrical rates, EIA provides [rates by state and likely utility provider](#).

To estimate logistics costs, the project team should consider transportation of raw materials and finished goods, as relevant. For example, for a company that plans to utilize trucking services, several companies offer online quotes for truck loads and less than full truckloads on expedited and non-expedited basis, including [Freight Quote](#) and [Freight Center](#). For a more comprehensive decision model regarding transportation methods and costs, there are several online software tools available, such as [Llamasoft](#) and [AnyLogistix](#).

In addition, for international investors, the project team should consider travel time and associated costs for executives, suppliers, and customers traveling between international offices and the U.S. facilities. Cities containing larger hub airports with more international flights may have a higher cost of living, while those containing smaller regional airports with few or no international connections may have a lower overall cost of living. To better understand the size of U.S. airports and their international connections, the Federal Aviation Administration (FAA) maintains a [database](#) of the number of passengers per U.S. airport, and the Department of Transportation provides a [database of international routes](#) offered to or from U.S. airports.

When analyzing locations, the site selections team should consider state and local taxes. The model should consider corporate taxes, such as income, gross receipts and franchise taxes, sales and use taxes, and property taxes on building, land, machinery, and equipment. These taxes can vary considerably between jurisdictions. For example, in some

states, sales/use taxes are levied at both the state and local level. Moreover, some states offer tax exemptions for pollution control and industrial processing equipment.⁴⁹ Finally, with respect to property taxes, differences can be driven by multiplier tables, assessment ratios, and millage rates.

After reviewing each section of the cost model, the site selection team sums the total costs by year, discounts the cash flows, and ranks the locations. These rankings may change when the project team nets the value of incentives against the relevant costs.

Tour Sites

Goal: Select a preferred site.

With the cross-state cost model complete, a site selection team should be ready to visit local communities. Touring communities allows a search team to confirm the costs in its model, determine a community's interest in their project, and ascertain whether there is a good fit. In preparation for site tours, the search team should prepare a checklist so that it can methodically evaluate the characteristics of each community and site. For a list of items to consider for the checklist, the U.S. General Services Administration (GSA) provides an [exhaustive list](#) that it uses for its facilities. Companies can tailor this checklist for their own projects.

Site Selection Technology

Advancements in technology in recent years have truly transformed corporate site selection. The rise of technology presents opportunities in the field of site selection from virtual site tours to online marketplaces to data analysis. As demonstrated in previous sections, a modern site search analyzes mountains of information on every county and major city in the United States.

Leveraging Digital Resources

Fortunately, today there is a database for almost every conceivable location factor in the United States. Whether researching taxes, regulations, workforce, or wages, there is a useful database a few clicks away. Many of these resources are government funded, free to the public, and often paired with Interactive search tools and maps that can make your search more productive.

⁴⁹ For a comprehensive discussion of state and local taxes, please see [SelectUSA Investor Guide](#), Chapter 4: Taxes.

Getting Started

The most common data resources used to begin a search often come from government agencies, such as BLS or the U.S. Department of Labor. Resources like the U.S. Census, state and local governmental data, and other free online resources can also be helpful.

As the search for suitable locations deepens, companies will likely require a variety of resources as they move through the process. It is important to note useful government resources employed when identifying potential geographic areas (such as at the state, regional, or metro area level) are rarely the same resources needed to conduct thorough site due diligence or to find available economic incentives.

Digital Challenges

Given the availability of so much data, it would appear that making an informed location decision would be easy; however, there are two practical problems most companies face. The first problem relates to how information is presented and stored during a search. Unfortunately, most resources present their data independently from any other location factor, thus creating a silo effect. The problem with having data organized in silos is that it becomes difficult, if not impossible to compare different locations on the same terms.

The second problem that is commonly encountered by companies with access to a seemingly endless amount of data is simply information overload. Many firms collect enormous amounts of data but then struggle to make sense of what all the data means. Depending on how unique the requirements for a given search are, a company could easily find itself needing to simultaneously evaluate dozens if not hundreds of sites across the country. In fact, it is not uncommon for a search to generate over 10 gigabytes of data that need to be analyzed.

One method that can be used to minimize the impact of information overload is to begin the search looking for communities that best match the needs of the company as opposed to considering specific sites in depth too early in the process. Only after narrowing the list of communities that meet the company's primary location decision drivers (such as labor availability, labor costs, or average wages) should the project team begin the evaluation of specific sites. Finally, preparing detailed pro forma financial models for each site will allow for accurate comparisons between sites.

Conclusion

With fifty states, five territories, a federal district, and hundreds of diverse metropolitan areas, selecting new locations in the United States is best approached as a data-driven process. Equally important steps include planning, researching, modeling, and touring. It is critical to begin the site selection process with a solid understanding of why the company is

investing in the United States. Then, selecting data points and reliable sources helps foreign investors identify a short list of states and communities to run cost models and quantify their decisions. Finally, armed with the data and cost comparisons, personally visiting each location permits the site selection team to assess whether a community will support the company and its employees for the long-term future. Communities in the United States have a long legacy of welcoming foreign direct investment with open arms. Dedicating time and resources to the site selection process will help a company identify the best U.S. location for its long-term success.

About Duff & Phelps and StageXchange

Duff & Phelps, LLC is a Kroll Business specializing in site selection and incentive advisory services. Our team of professionals has 100+ years of collective experience drawn from serving previously in the public sector, big four accounting firms, global law firms and in-house corporate suites. Having advised on more than 400 capital projects involving \$16 billion of investment, we teamed with StageXchange to create the first digital marketplace, [The SITE Selector™](#), where companies looking for new sites connect directly with 2,300+ communities across the United States. SITE Selector™ has a suite of tools to help companies identify, organize, and analyze thousands of pieces of data into a harmonized dashboard to facilitate decision making from an executive's desktop.

StageXchange is a private commercial real estate tech platform that leverages Artificial Intelligence and its own proprietary tools to streamline the due diligence process. Our custom Dashboards and integrated pro forma models make it easy to analyze hundreds of potential sites simultaneously.

Disclaimer

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