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Mitigating Utility Costs and Risks in the Site Selection Process

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 By: [Amanda Taylor](#)

The site selection process is designed to uncover risks associated with the siting, construction and eventual operations of a facility. As site selectors, we are tasked with lifting every rock to uncover potential risks to both schedule (how long will it take to be operational) and cost (what is the capital outlay required to build and operate a facility). While there are a multitude of risks that can impact schedule and cost, the siting of a manufacturing project is particularly prone to risks associated with the availability, reliability and cost of utility services. Key steps to reducing risks are (1) identifying utility requirements of the new facility early in the siting process, (2) asking utility providers the right questions and (3) obtaining documented service commitments.

The primary utility needs of a manufacturing project include electricity, natural gas, water, wastewater and telecommunications. Electric requirements, such as a substantial electric load (10 megawatts or more) or a high degree of redundancy for dual service from two substations may limit suitable locations. The availability of municipal water and wastewater services can vary greatly across communities. High demand for water or wastewater (500,000 or more gallons per day) or the extension of infrastructure to a new greenfield site may not be financially feasible for a small municipality, presenting a locational risk that adequate service will not be available. Telecommunications and the proximity and connectivity to fiber backbones is a necessity as operations become more technologically connected.

Before engaging state and local economic developers to identify available sites, it is first imperative to have a good understanding of the utility capacity needs of the project. To determine service availability and to provide an estimated rate, the electric provider will want to know the planned operating schedule of the facility, the peak and average demand, daily usage needs, load and power factors and requested service voltage. Water providers will want to know daily demand and required pressures for fire protection, while wastewater treatment providers will want to understand the constituents of wastewater discharge as there may be limits to what the system can handle for certain discharge. Telecommunications carriers are characteristically secretive about the location of infrastructure so having specific needs identified upfront can help them to share necessary information.

To minimize schedule risks, it is important to ask utility providers the right questions early in the process. Information that must be identified in the site selection process includes:

- Identification of the location of the nearest infrastructure
- Capacity of the infrastructure and how much of that capacity is available to the project (both for the line at the property and the system serving the line)
- Availability of right-of-way to extend service or the process and time necessary to acquire the right-of-way
- Service reliability and documented history of outages or service blips
- The near- and long-term availability of adequate capacity factoring the needs of other existing users.

After a site has been qualified as meeting the utility requirements of the project, documentation of commitments by the appropriate parties should be secured assuring support, availability of service and cost and schedule to provide service. Any incentive commitments proposed to the project, such as infrastructure extensions at no cost or a reduced cost or an economic development incentive rate, should be documented in a letter or included in a development agreement.

Utility partners are eager to assist in the site selection process and are most helpful when there is ample information about the utility requirements of the project available early in the process. Being prepared with utility requirements, vetting the availability of service and obtaining documented commitments will best prepare a manufacturing project for a speedy and low-risk schedule to facility startup.

About the Author



Amanda Taylor
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