Community Preparedness for Site Development

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Foreword

When most people think of economic development, they think of attracting an industry to their community. Somehow, the company chooses their community and finds a place to build their establishment. Like most things in life, the site selection process is not that simple. A great amount of time must be spent in preparing for development and to meet the requirements of prospective businesses. The following story provides a useful comparison.

A Scenario

Imagine you’re going to the annual Founder’s Day dance. It’s the biggest event each year in the community. All the right people will be at the event, people who can affect your career, people who can help you get access to the prestigious organizations and businesses of the community. Of course you will want to make your very best impression. So you go shopping and buy a new suit and a tie and perhaps a new shirt. When you get home and try on these new items you discover your shoes aren’t what you had hoped. They really look dingy next to all this new stuff. So you head out to the local shoe store to pick up a pair of shoes. The sales clerk greets you kindly and offers their assistance. You tell them you’re looking for a burgundy loafer with tassels, size 11, in a price range of $105.00. The sales clerk returns with a pair of shoes, slips one on your foot and tells you how great it looks. The problem is it’s a size 10 1/2, brown in color and no tassels, but at least it is a loafer. “It’s the wrong size,” you say to the sales clerk. “We can fix that” is the reply, “we got a stretching machine in the back.” You offer a counter argument to the sales clerk by saying “but I asked for burgundy and this shoe is brown.” “No problem” the sales clerk replies, “we got burgundy dye.” “We’ll fix it up for you, and I just noticed these shoes are on sale for $80.00.” After that last remark you politely put your own shoe back on and walk right out of the store.

The world is now a place filled with informed consumers. People know what they want before they actually go out to make a purchase. It is now the role of the business establishment to have what the buyer wants. Gone are the days when people had little choice and had to buy what the retailer wanted to sell. Even the utility business is opening up to choices for the consumer. It started with telephone providers and now has spread to natural gas and electric providers. No one has to select a particular item anymore. Today if you wish to successfully market a product you need to first understand the buyers wants and desires.

This reality is of particular importance in the site selection process conducted by an industrial or retail firm. A great deal of market analysis is completed before a firm begins its
search for a suitable location. In addition firms also compile detailed information regarding the cost of product for their product. They know if electric cost is more important then freight cost or labor price. Prepared with this list of “must haves” the site consultant or firm representative begins their quest for the ideal location. Just like our shopper looking for a pair of shoes you can be assured the individual seeking a site for their firm is not about to change the selection criteria because they had a great dinner at your local restaurant. That is why developing a site is so competitive and requires a great deal of preparation by community leaders. It didn’t work for our shoe clerk to offer to dye the shoes the right color and it won’t work for a community when it offers to change the terrain of their local industrial site. Instead a community needs to spend time long before that first visit by a firm’s site selection team seeking answers to the details regarding the site the community wishes to promote. The more a community considers site selection criteria before they select or develop a particular site for promotion, the more likely local leaders will not need to explain why they spent so many public dollars on a site that is drawing no interest.

Unfortunately, there seems to be an urge among community leaders to find a piece of land in or near town, find a realtor to list the property, place a sign on the land proclaiming “Industrial Site” and finally run an add in a site promotion magazine announcing the availability of land for development. Maybe good fortune will smile on these leaders and a Fortune 500 firm will chose to locate on the site. More often though the community goes through years of frustration trying to get interest in the site. At more than one service organization meeting these same leaders must explain why no one is locating their business in our community. Finally the happy day arrives when in desperation the community finds a firm to locate on the site. Once again though misfortune follows these community leaders because the firm locating on the site produces waste products which discourage any other firm from locating in the area.

A happier story can be told by community leaders who took the time, energy and expended the funds necessary to prepare a piece of property as a site which meets the needs of future tenants.

Introduction

This module’s goal is to help communities develop sites for business development. We will focus primarily on industrial and wholesale commercial sites. Our goal is not to go through a step-by-step physical development process that focuses on how to physically construct an industrial site. A separate module provides some of this information. It is our intention to focus on the tremendous effort required to lead up to the physical site development, that is, the steps leading up to ground breaking. It is during this time period that many communities make expensive mistakes. Site development is an expensive and time-consuming endeavor. Proper planning is critical. Besserie (1981) provides a wonderful gem of wisdom, “Remember that in doing your planning, education is what you get from reading the small print and experience is what you get from not reading it.”

Our focus is from a community perspective. Specifically, we discuss:
1) What a site is
2) What are some of the trends and data affecting site development
3) Is there a need for site development
4) What are some goals and objectives of site development, especially from the business’ perspective
5) What are the actual steps to site development, focusing on the steps leading up to the actual construction

What is a site?

Most communities in the United States can claim to have available sites for business development. Under closer inspection, these sites are usually either undeveloped open spaces (often agriculture lands) at the edge of the community or former industrial lands within the community. Both of these share a common problem: Businesses cannot occupy them without substantial infrastructure improvements.

Sites that are undeveloped are often referred to as greenfield sites. They are open spaces that are often currently (or recently) utilized for agricultural purposes. Many do not have the infrastructure needed for business development. Infrastructure refers to physical improvements like water, sewer, storm-water, communication, and other utilities. These improvements are needed by most businesses, and are usually part of the criteria a potential business will consider in evaluating potential locations. Most sites will not be considered if they lack appropriate infrastructure.

Sites that have been previously used for industry or other activities are called brownfield sites. Most are located in central city areas and are often surrounded by mixed land uses like residential, commercial, or public (schools, hospitals, etc.). Usually brownfield sites were previously occupied by industrial complexes. Since older industries used multi-story facilities, these sites are often located on small parcels of land. Modern factories are laid out horizontally (using one story) to facilitate assembly lines and flow of products. Older sites also carry the risk of environmental contamination, especially since they were most likely operated during a period of less stringent environmental regulations. Environmental contamination can be costly to clean up. Finally, older sites may still contain the buildings or other structures from the previous land use. These will either need to be demolished or refurbished (this often includes bringing the structure up to current fire, building, disability codes, etc.). All of these factors add to the cost of using brownfield sites.

To minimize its costs and risks, businesses will usually locate in sites that require minimum investments in infrastructure and other improvements. This usually eliminates the unprepared sites. Hence, communities that want to have successful business sites must have developed a plan for creating a prepared site. Site development is utilized to create marketable, prepared business sites.

Requirements for a prepared site

It is important to realize that for a site to be effective, it must satisfy the needs of a particular business. The site is constructed to improve the quality of life of a community, but it still must be a viable site to attract business. As we stressed above, a site must be prepared with proper
amenities before business will consider locating there. Some of the “must haves” of site
development are discussed below.

Basic Site Requirements: “Must Haves”

Even given that business-specific needs do exist, certain basic site requirements must be
in place in order for a company to even begin to consider a specific site or park. Most often these
basics are assumed to already be in place by a site seeker. The community that is aware of and
has already prepared to meet these requirements will place themselves at the threshold of
competitive industry attraction. These threshold requirements include the following:

**Transportation and Accessibility:** Industry and business are looking for proximity and
availability of transportation networks for a variety of reasons including to carry product
to market, receive raw materials and inputs for production, transport employees to and
from work, and to allow customers to reach their location conveniently. Businesses are,
most often, looking for a site with an interstate highway access. The type of industry and
product produced may dictate additionally required modes of transportation. Heavy
industry and those transporting bulk products may seek locations with rail and water
access, because of its competitive cost, as well as highways. Call centers often choose
locations with public transportation to accommodate employees’ needs. Industries
producing smaller, higher value added products such as electronics may desire easy
access to air cargo services for transporting goods to markets. Corporate headquarters
seek to be close to passenger air carriers for ease of executive and management travel.

**Available Labor Force:** Although required skill levels and cost of labor may vary from
industry to industry, the vast majority of firms seek a location with an adequate labor
force from which to draw. The identification of the labor market area is most often
determined by commuting patterns. Commuting patterns are determined by the length of
time it takes an employee to get to work. An average of 30 minutes one way for
production workers, 20 minutes one way for clerical workers, and 43 minutes one way for
technical and professional workers is a normal standard. Manufacturers generally prefer
to see a job applicant to job ratio of 6 to 1 so that they have flexibility in the choice of
whom to hire. Another common concern will be whether or not the labor market wage
rates are at a level to enhance the industry’s competitive position in the world
marketplace (Mullis, 1998). In addition to wage rates and availability of labor are other
crucial labor force characteristics including productivity levels, existing industry turnover
rates and absenteeism, types and numbers of skilled workers in the area, management
recruitment and retention potential, work stoppage or labor strife history, and usage of
work team concepts among existing local employers.

**Utilities:** Adequate water, sewer, power and telecommunication services must be
available of the quantity and quality necessary to serve business and industry.
Characteristics of these systems that are important to potential employers are reliability,
excess capacity that will allow for growth, and the existence of redundant, back-up
systems. This is especially true for manufacturers, who may even make certain quality
demands of specific utilities above and beyond what would usually be available. For instance, computer chip producers require certain water quality standards in order to meet process requirements, and call center operations require state-of-the-art telecommunications networks in order to handle the volume of customer calls efficiently.

**Appropriate Land Use and Zoning:** Potential employers want to be assured that the site is zoned appropriately for the type of end use projected. For instance, industrial zoning for manufacturing and warehousing, commercial for office space, and retail for outlet malls. Proper zoning should already be in place, not promised to be enacted once the company commits to locate on the site. Many a project has been delayed due to the length of the normal zoning implementation process. And if citizen opposition to the zoning process ensues, the project can be delayed to the point where the industry or business decides to not go forward with the investment.

Employers also want to be assured that the surrounding area is compatible with their own planned land use. A manufacturing firm will not want to be surrounded by or even adjacent to residential property. Even access to the site, especially by tractor-trailers in the case of manufacturing and large-scale retail, should not take place through residential neighborhoods areas. It is important for employers to know when going into a community that their neighbors will not impact negatively on their business operations, and that the surrounding property owners will find them to be an acceptable land use.

**Ownership:** The lead economic development organization should have clear site control with a stated price per acre based on the fair market value of industrial, commercial or retail property in the area. This site control can be in the form of a legal option to purchase between the organization and the property owner, or as outright ownership by the organization. Specific conditions regarding the purchase, including who pays for closing costs, surveys and legal fees, and how crop loss will be covered.

**Topography and Soil Conditions:** Companies are looking for fairly level sites with good drainage to eliminate standing water. Some companies look for gently sloping sites for aesthetic purposes. Wetlands are generally to be avoided, although some business parks actually use wetlands and recreational amenities as selling points for the location if these items are designed as environmental assets to the site. The types of soils and load bearing capacity should be analyzed through soil boring. With manufacturing, the equipment used actually requires a greater load bearing capacity than the building itself. This information should be made available to companies looking at the site.

**Incentives:** Companies will want to know up front if incentives are available through the community, state, or both. In many circumstances a zone must be delineated and established by the local community in order to allow tax relief within certain geographic boundaries. Establishing these programs can take time, so they should be in place before a potential employer ever contacts the local community.
In general, incentives such as grants, loans and tax inducements will not make a bad location or site into a good one. Mullis (1998) tells his clients to let them do the analysis of the site first, and then plug in the inducements. In this way they have a clear picture of how competitive the site is on its own, and then inducements can be added to enhance the deal.

**Additional Studies:** A phase-one environmental assessment should be conducted by a qualified professional in order to identify any environmental conditions that warrant further study. This study will look at the historical and current usage of the site as well as other factors.

A wetland identification should also be conducted to avoid the violation of wetland standards. Flood plain maps must be obtained to insure that the portion of the site that will be built upon is not in the flood plain.

A phase one archeological survey may be undertaken to identify if the site contains any areas or structures of historical or archaeological significance. Identification of such assets may require further investigation. Some public funding sources may require the completion of an archeological survey.

These studies should be accomplished and reports made available to companies interested in the site. To identify these site characteristics prior to any contact by a company will save time in the compliance process and avoid unanticipated delays and increased construction costs.

**Is site development an appropriate economic development strategy?**

While this module focuses on site development, it is important to realize that not all communities will find site development as a feasible economic development strategy. The authors recommend that each community invest resources into developing some type of an economic development plan that considers the strengths and weaknesses of the community, the residents wishes, and systematically develops feasible strategies. Site development can be a costly investment with no guarantees for a successful outcome. Section Four discusses a systematic planning program that communities can use for site development. Following these steps can save time, money and controversy for the community.

It is important to realize that prospective businesses are searching for a profitable location, not just a profitable site. Other factors than just the physical site are considered. These include labor, education levels, proximity to suppliers/buyers, etc. The community that best matches the business’s criteria AND has a prepared site has a distinct comparative advantage over other communities. As we stress throughout this module, the site development process should be viewed as meeting a customer’s need (the prospective business) as well as the community’s needs.

Economic development planning should include a wide consensus and involve all aspects of the community. Many communities engage in strategic planning or, in the U.S., use an Overall
Economic Development Program (OEDP – a planning process developed by the Economic Development Administration to help identify potential grant projects). Whatever planning process a community chooses, it should be thorough. By working through a planning process, a community may discover several possible economic development strategies. If site development is not one of these, the community may have saved time and grief by not pursuing a strategy that is not consistent with its needs, strengths and weaknesses. If site development is chosen as a strategy, the planning process should lead to more consensus for that decision.

A critical element of planning for any industrial site is determining the capacity levels and types of industrial parks in the community’s market area. There has been little research completed to determine the capacity level of all industrial sites. One estimate from the 1980’s sited in Eisinger (1988, p.179) notes that in the U.S., 59 percent of the land in industrial parks does not have a tenant. Hence, communities should survey surrounding communities to determine what the capacity level of each park is, the size of the park, its location, etc. The community can then begin to determine if there is an over-capacity of industrial space. If there is an over-capacity, the community should determine why. Are the parks/sites prepared sites with appropriate infrastructure? Are the sites accessible? How long have they been vacant? Just because there may be excess capacity in the sites does not mean that there is no need for more sites. For example, a community may find a nearby town with several small acreage lot sites, another town with several sites and no infrastructure serving the sites, and yet another nearby town with a park designed for research and white collar firms. Even if all of these locations have excess capacity, their still may be a need for prepared, large sites targeted for manufacturing industries. After obtaining answers to these questions, the community can then deduce the appropriateness of site development.

Area universities, Extension services, and consultants often have resources to aid in community planning. In addition, a community’s regional planning agency has probably done land use and comprehensive planning that indicates geographic areas of the community for industrial and other types of development.

Trends

This section will cover some basic trends in the general economy, with comments towards some specific industries. The purpose is to increase the awareness of readers and to lead them to investigate potential trends on their own. It is important to be aware of trends in the economy as a community considers site development. While the trends themselves should not dictate decisions, they should be considered in the decision making process. Awareness of current and potential future needs in a particular industry may influence some local economic development strategies. For example, one recent trend is a move by industries in searching for existing functional buildings versus bare sites. A community could use this trend to:
1) Upgrade an existing building;
2) Develop a spec (speculation) building; or
3) Chose to develop a site without an existing building.
The choice is the community’s, but having the necessary data can help to make an educated decision.
General trends in the economy

There is much talk about the U. S. and the world moving to an information economy, or a New Economy. These terms usually refer to a move away from industrial, blue-collar jobs to service and technology oriented white-color jobs. The effect of these trends varies from region to region throughout the world. The following table, from Atkinson and Court (1998), working on the Progressive Policy Institute’s Technology, Innovation, and New Economy Project, provides some generic trends affecting business in general today, especially in the developed world (this information is available at http://www.neweconomyindex.org/). Additional information may also be found in the module “The Geography of the New Economy.”

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<tr>
<th>Issue</th>
<th>Old Economy</th>
<th>New Economy</th>
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<td><strong>Economy-Wide Characteristics</strong></td>
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<td>Scope of Competition</td>
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<td>Organizational Form</td>
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<td>Key Drivers of Economic Growth</td>
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<td>Key Technology Driver</td>
<td>Mechanization</td>
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<td>Source of Competitive Advantage</td>
<td>Lowering Cost Through Economies of Scale</td>
<td>Innovation, Quality, Time-To-Market, and Cost</td>
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<td>Importance of Research/Innovation</td>
<td>Low-Moderate</td>
<td>High</td>
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<td>Relations With Other Firms</td>
<td>Go It Alone</td>
<td>Alliances and Collaboration</td>
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<td><strong>Workforce</strong></td>
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<td>Policy Goal</td>
<td>Full Employment</td>
<td>Higher Real Wages and Incomes</td>
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<td>Skills</td>
<td>Job-Specific Skills</td>
<td>Broad Skills and Cross-Training</td>
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<td>Requisite Education</td>
<td>A Skill or Degree</td>
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<tr>
<td>Labor-Management Relations</td>
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<td>Nature of Employment</td>
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<td><strong>Government</strong></td>
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<td>Business-Government Relations</td>
<td>Impose Requirements</td>
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<td>Regulations</td>
<td>Command and Control</td>
<td>Market Tools, Flexibility</td>
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Source: Atkinson & Court (1998, p.7)

These changes reflect some of the realities of business today. Synopses of some major trends are highlighted below.

Impact of technology
New and improved technologies help to restructure and reorganize the way businesses operate. Computers, faxes, and other information technologies have provided new alternatives for business. For example, telecommunications technologies (both wired and broadcast) have changed the rules of business location. Telemarketing centers can be located away from major metropolitan areas and high rent and labor costs. Likewise, computer automation changes the labor requirements. While technicians are needed to design and fix complex machinery, computer automation allows relatively unskilled workers to perform machining tasks that previously required skilled labor. Both of these trends help to make business less dependent on specific geographic locations. Technology also affects how communities position themselves to retain and attract businesses.

**Speed**

Much of life has seemed to speed up lately, and business practices are no exception. Product development schedules, delivery systems, and most decision making has tended to speed up. Site location decisions have also. Businesses have shortened not only the search, but also the project construction schedule. Communities that have no control over land and have not planned out the development of land will be at a distinct competitive disadvantage.

In addition, businesses will need the proper infrastructure to move products quickly and reliably.

**Changes in industry structure**

While many critics have moaned about the loss of manufacturing, a closer look reveals that while manufacturing employment is down, output of goods has increased. Manufacturing industries are doing more with less. Manufacturing is still an important target for industrial attraction, but it is important to realize that in general manufacturing has become:

1) more capital intensive
2) less labor intensive
3) less unionized
4) less dependent upon locating near natural resources

Service related jobs have increased in numbers during the last 20 years. While many of these are referred to as “burger flipping” jobs, many are not. Some are high tech, but many are simply knowledge intensive or non-manufacturing. Some communities take advantage of this by offering research parks, cooperate office parks, or lower paying service jobs like telemarketing.

**Environmental impacts**

Communities and businesses will likely face increased environmental regulation in the future, especially in the areas of output (i.e., emissions, solid waste, etc.)

**Inducements/incentives**
Most companies continue to ask for incentives. These may come in the forms of tax breaks, outright grants, deferred payments, training grants or assistance, or free land. Companies are interested in reducing both costs of a new facility and future operating costs. At the same time, many citizens in the United States are questioning the need (or at least the scope) of using incentives. Communities should think through their policy on incentives before offering them to industry, and develop a process to conduct a cost-benefit analysis (many communities utilize spreadsheet packages for this).

Role of government

Most of the world has moved closer to a market economy over the last several years. At the same time, most communities have entered into private-public partnerships in working with businesses. Government involvement is still needed for most projects, especially site development. Local government usually provides the necessary infrastructure, provides permits and can assist in securing permits and assistance form higher levels of government.

Labor

Different types of businesses require different types of labor. Communities need to consider labor types and availability as they plan their sites. Other workforce needs should also be considered. For example, what training needs to current and future workers need? In one community in Ohio, the local vocational school (which serves high school students as its primary audience) opened its doors to provide welding instruction to a new area business at 11:00pm each evening.

Trends in labor indicate that in the developed countries, there will be fewer opportunities for unskilled labor and more opportunities for workers with some skills. As routinized industries continues to move to less developed countries, communities may be able to utilize unskilled workers.

It is important to remember that not all jobs created in high technology fields require advanced degrees. Many can be performed by workers with some training (i.e. an associate, two-year degree in the United States or intense vocational training at the high school level) or even with no advanced training.

This is only a brief summary of some trends affecting site development at this time. Readers are encouraged to collect information on their own and deduce their own trends. Additional sources are provided in the resource section.

What a Business/Industry Seeks in a Site

There are two primary challenges facing community decision-makers in site development. The first is to understand the criteria that site seeking companies consider to be necessary in order for a site to be acceptable so that they can address these needs when developing their site or park. The second is to be aware what motivates a company in their search for a new location so that
they can work with them in partnership to achieve both company and community goals. This understanding is complicated by the certainty that there is no universal list of site requirements which is guaranteed to meet the needs of all industries. Each industry and each individual company will have certain priorities that cause one site to be more acceptable than another will. For instance, warehousing and distribution place a premium on close proximity to interstate highways while back office operations value state-of-the-art telecommunications networks. In the world of business site development, one size does not fit all.

**What Motivates a Site-Seeking Employer: Reduction of Risks**

Companies seeking new sites are most often motivated by the need to minimize costs of operation and/or the need to access adequate labor markets. Once making the determination that industry/business attraction is a strategy worth pursuing, and once establishing goals regarding the types of companies that would benefit their community, the community must clearly understand how to best develop a relationship with site seeking companies. The role of a community and their economic development professional becomes, simply put, to reduce the risks encountered by a company when they decide to locate (or expand) in a given location. Companies are looking for those communities that are willing to partner with them to reduce their risk of doing business. These risks can be organized into four areas: profit, workforce, infrastructure and timing:

**Profit risk**: the substantial capital investment in structures and equipment that will be made by a company when it locates or expands must reach a break even point and then begin to show a reasonable return within a certain period of time in order to justify the investment to the company’s financial institutions and their shareholders or owners. It generally takes from 6 to 10 years for a company to begin to show a return on their investment (ROI) and begin to show a positive income stream. Even an already profitable company who expands operations reduces or eliminates their existing profit until the investment is recouped. Anything a community can do to reduce the overall investment exposure of the company or reduce the cost of operations, especially in the first few years, will shorten the time to ROI, reducing the company’s profit risk. Some strategies might include offering incentives such as tax inducements tied to job creation or investments in real and personal property and low or no interest loans for capital investments, both of which would help to reduce the company’s cost of operations.

**Workforce Risk**: A company must be assured that they will be able to access sufficient labor with the skills and qualities needed by their particular business. They also must be confident that they will be able to attract and retain technically skilled employees and management, positions that are often subjected to a national or even international search. Communities can address these risks through long-term strategies of workforce preparation, skill development and lifelong learning opportunities through local educational institutions and schools, paying particular attention to the types of skills and competencies needed by the companies that they hope to attract or expand. Targeted programs, such as those designed to meet a particular company’s training needs, should
be available through local schools and colleges. Spousal employment opportunities and community quality of life will figure prominently in skilled and management employee attraction and retention so the community should be prepared to address these issues.

**Infrastructure Risk**: Companies are dependent upon the local services and infrastructure when they locate or expand in a community. They will not only need to know that the existing infrastructure is reliable and adequate to meet their projected needs in the present, but also that sufficient excess capacity exists for their future growth without causing stress on the community. Public services such as fire, police, and waste management must also be adequate and reliable. The community can reduce these risks by demonstrating that there is willingness to tax themselves to support needed infrastructure improvements, public services and public education. The willingness of telephone providers to continually reinvest in advanced technology is increasingly important to companies.

**Timing Risk**: Companies expect to be under roof and producing product within 90 to 120 days of commitment to locate. This fast time frame is important for a number of reasons: First, the cost of short term construction financing and other start-up costs are incurred without any counterbalancing income stream until the company is able to produce and sell their product or service, therefore it is important to be in production as quickly as possible; second, companies want to take advantage of market opportunities and timing as quickly as possible giving their competition as little time as possible to react; and third, oftentimes a primary customer will dictate when they expect product delivery. The community can help the company to meet this timetable by having a site that is ready for construction with all environmental questions addressed utilities in place (or planned and committed within the time frame needed by the company).

Verification of the importance of reducing risks and therefore costs of doing business and how this impacts on location decision-making is offered by a survey of company CEOs conducted in 1994 by the Bureau of Business Research at American International College in Springfield, Massachusetts. Survey results indicated clearly that the top factors influencing the location decisions of companies were related first and foremost to rational considerations of the relative cost of doing business in a particular community, and secondarily to more emotional considerations involving quality of life issues. Although quality of life, most often defined as quality local schools, attractive housing, and recreational/cultural amenities, is becoming of increasing importance to site seeking companies, the economic basics still prevail when the decision where to locate is made. According to this survey, of the 127 firms in 31 states who responded, the following were the top factors in order of importance for choosing a particular site and community:

- Availability and skill level of labor force
- Pro-business government
- Corporate income tax rates
Good roads and transportation

Real estate prices and property taxes

Educational system

Proximity to customers

Personal income tax

Colleges and universities

Proximity to suppliers

Healthy “downtown”

Proximity to competition

The survey included 24 different business categories, indicating that the consideration of basic costs in location decisions is important to a wide range of industries. A good illustration of the importance placed on financial considerations is offered through the story of MasterCard’s relocation in the mid-1990’s from New York City to nearby Westchester County. In 1993 MasterCard announced that it would relocate to a larger building to accommodate growth but stay in New York City after being offered a substantial financial package. One year later it announced that it would, after all, move to Westchester County, taking 550 jobs to the suburbs. The company spokesperson, Jana Weatherbee explained “It was a financial decision. We will save about $250 million in rents and other fees over the next 20 years by moving to the suburbs. It’s a buyer’s market for us in the suburbs.”(Business Facilities, September 1994.)

Business/Industrial Parks and Sites

Both business/industry sites and parks are a component of the same local economic development strategy, that is, the attraction of new business and industry into the community. Without these assets in a community’s economic development portfolio, success in luring new industry or business to an area is not likely. A community cannot “sell from an empty wagon”--they must have something of value to market to potential customers. The community must also be aware of what constitutes a marketable, readily developed site or park from the company’s perspective within the needed time frame and strive to provide this if they want to be competitive in attracting business/industry to their sites.

Both business/industrial parks and sites are tracts of land specifically set-aside for the potential location of more than one business or manufacturing firm. Industrial and business parks and sites provide an opportunity for a community to control and sell, on its own terms, a sizable tract of land to business and industry. They enable communities to prevent the use of
industrial land in ways that are in conflict or are inconsistent with local community values and goals. Parks and sites also provide the opportunity for planned development in an organized and sequential manner.

Some parks and sites are for general business and industry use, while others may be targeted to a certain type of activity. To be successful, targeted sites or parks must have certain attributes or amenities that are necessary or desirable for the specific type of business activity to be targeted.

Industry/business parks and sites should help a community to reach their economic development goals. Examples of potential community goals include:

Create more jobs and increase local population.

Provide better jobs for persons already in the community.

Replace lost jobs.

Replace lost sources of income.

Produce a greater variety of jobs and economic activity
Build and diversify the local economic base.

Source: Industrial Parks: A Step by Step Guide

Parks and sites should have, at a minimum, preliminary engineering plans for the location of utilities and infrastructure, a site plan showing the size and configuration of individual parcels within the property (which can be modified to suit individual company’s needs), preliminary environmental and historical assessments, and stated general conditions related to the sale or lease and use of the property. This last item, the statement of general conditions, are known as covenants. They specify what a tenant can and cannot do in the park or on the site, including possibly the exclusion of certain types of businesses, not permitting certain types of structures to be constructed on the site, etc. These covenants are attached to the deed and place legal restrictions on the property in perpetuity.

For communities without zoning, covenants can be used as an imperfect substitute, although it will not remove conflicts between the geographical park area and the surrounding area. For example, a park or site with covenants but no zoning and surrounded by residential homes may still have complaints from the surrounding residents. With no zoning, companies may be reluctant to locate in the park or on the site for fear of conflicts with residential neighbors over noise, dust or other perceived nuisances.

The primary difference between a park and a site is size. Parks are usually of greater acreage and can accommodate a number of businesses. Sites may be appropriate for only one user. A general rule of thumb of parks is that in order to be economically feasible a park should be at least 25 acres in size. The up-front costs of preliminary engineering and environmental assessments and, in some cases, the construction of utilities and other infrastructure are more justifiable if allocated over a larger site with a potential for a greater number of end users. A private or public developer of a park will want to carefully analyze the development within a cost-benefit framework to determine if the return on their investment is sufficient.

Both parks and sites can be privately or publicly owned or controlled. Collaborative agreements among private and public entities, where each takes the lead on a particular aspect of the development and marketing of the property, have become more commonplace over the past few decades. Some parks have ongoing management and developer involvement, while others are independent once all of the properties have been sold.

Parks or sites can include a wide range of amenities such as access to a park-owned rail spur, on-site employee training centers, nearby airports, or even recreational opportunities. Or, they may simply entail contiguous sites where companies locate and, although they are expected to follow whatever restrictions have been placed on occupants of the park or site, they are on their own once the property changes hands.

The type and extent of amenities are often determined by the kind of customer that is being recruited to the park or site. For instance, back office operations and call centers will
typically require an excellent telecommunications infrastructure while parks or sites devoted to heavy manufacturing may require access to a rail line. Parks or sites designed to attract corporate headquarters may include golf courses or health clubs, on-site services such as automatic teller machines and dry cleaner drops, and adjacent executive housing. In the intensely competitive world of industry/business attraction, amenities can serve to position the park or site to specific targets once basic needs for infrastructure, available labor resources, transportation networks and location have been met.

The current trend in site selection is that businesses are increasingly looking for communities having parks or sites with more stringent performance standards, which are the guidelines by which the residents of the site are expected to adhere. Higher standards help to protect an individual business’s financial investment in buildings and site improvements by requiring that their neighbors in a park or on a site meet and maintain the same expected standards.

Levels of performance standards can range from “none” to “advanced.” The final positioning of a park or site will still be determined by community goals, market determinations, and future trends for the area, and establishing standards will help to provide controls consistent with the anticipated quality of development. Communities in desirable locations and with parks or sites that are positioned to attract high tech or corporate tenants can use higher performance standards to attract those tenants that will provide substantial benefits to the community. These benefits include higher assessed property values, lower depreciation, and employers paying higher wage rates.

The following provides examples of levels of performance standards.

**No Performance Standards:** Heavy industrial and contractor uses with no covenants or standards. Such parks often lack paved roads or one or more basic utilities. Unscreened outdoor storage is allowed; no on-site landscaping or paving standards exist.

**Basic Performance Standards:** Park accepts heavy and medium industry. Roads are paved; basic utilities are available. Truck and rail access is provided. Most buildings are metal.

**Moderate Performance Standards:** Medium to light industry allowed, no heavy industry. Mixed-use park with setback requirements, buffers or limited landscaping requirements, and sign controls. Outdoor storage must be screened. Parking lots and driveways are paved. All parking is off-street and truck-loading space is provided. Rail may be available. Metal buildings are permitted but facades have architectural criteria. Permanent park entrance signs and ongoing management of the park are provided for.

**Advanced Performance Standards:** Strictest performance standards apply, with an emphasis on aesthetics. Zoning permits offices with light versions of manufacturing, warehousing, or distribution operations. Architectural standards are high. Landscaping is
required for the entire site and outdoor storage is not permitted. Utilities are underground and density is low; the grounds are park-like. Many newer parks are being developed as “business parks” rather than “industrial parks”. A “business” or “corporate” park designation generally implies an environment sometimes called a “corporate campus (Mooney, 1997)”.

One of the major issues with sites and parks, especially those in more sparsely populated rural areas where fully served vacant land is often not available, is the issue of how marketable the property really is. In other words, from the business/industry’s perspective, how acceptable and ready for development is a particular site? Sometimes a community in its desire to attract business or industry identifies a local property that is available for sale as an industrial site and begins to promote it to potential customers. In the intensely competitive arena of industry/business attraction, the mere existence of a piece of land does not gain a community entree into the game of locating new investment. The community must first be aware of what industry’s needs and motivators are. In general, manufacturers need to be in production within 90 to 120 days from the time that they commit to locate in a community. This is important for a number of reasons. It may be that the company’s major customer requires product shipment by a certain date. Also, the cost of interim financing during construction is typically more expensive than permanent financing, which begins once the project is completed. Finally, companies are financially stressed until they are finally in operation and cash flow becomes positive.

Greenfield and Brownfield Sites

Two additional terms used to identify general types of sites are useful to define. These two terms are “greenfields” and “brownfields.”

Greenfields

Greenfield sites are vacant, undeveloped tracts of land that are available for business or industrial use. They are referred to as “greenfields” because often their former usage (or in some cases current usage) is agricultural production. Greenfield sites are most often located in the urban fringe in the path of development or in rural areas where undeveloped land is more likely to be present.

Greenfield sites present a number of development advantages to locating business and industry provided they meet basic needs such as access to utilities and close proximity to adequate transportation resources. These advantages of greenfield sites are:

Since they have never been used for business, industry or uses other than agriculture, there is little danger of prior contamination leading to potential environmental problems and expensive cleanup costs, The site is vacant and other than necessary site preparation and grading, is ready for construction, reducing the time needed until the company can be in operation, and Greenfield sites provide flexibility, allowing an industry or business to be the sole tenant should they desire, or to share the site with other users.
The disadvantages of greenfield development include:

- The promotion of urban sprawl and “uncontrolled” land development,
- A possible lack of available infrastructure, requiring the raising of public funds to support site improvements and utility extensions, and
- The potential compromising of environmentally sensitive areas such as wetlands or flood plains.

Some site selection consultants have predicted that the development of advanced telecommunications networks in many rural or “exurb” areas may actually accelerate the use of greenfield sites because they enable business to be conducted even in relatively remote locations. Add to this the considerably lower cost of operations often found in rural communities, and greenfields can become an even more desirable place to do business from a company’s perspective.

**Brownfields**

The term “brownfields” was coined as an antonym for “greenfields.” Brownfield sites are “...unused, obsolete, and often abandoned industrial properties with known or suspected environmental contamination.” (Bielen, 1998) Many economic development professionals and environmentalists promote the development of brownfields as a logical, and environmentally/socially desirable alternative to greenfield development.

While most often an urban phenomena, brownfields can be found in small towns where perhaps a major local manufacturer shut down years earlier. They are not few and far between. William V. Trefethen, Director of Environmental Transaction Services for Coopers & Lybrand in Los Angeles, states that “it is estimated one in eight non-residential properties in the U.S. is contaminated.” (Business Facilities, June 1996).

There is an unmistakable logic to using brownfields for industry/business development. They help to counter urban sprawl by providing an alternative to development on the city and small town fringe, they promote development in areas already serviced by utilities and well-developed transportation networks, and they eliminate the need to raise additional tax revenues to provide infrastructure for unserviced greenfield sites. Since brownfields are oftentimes located in distressed inner cities or disadvantaged areas of small towns, they provide jobs for local residents and new capital investment in neighborhoods that have experienced physical deterioration over the years. Finally, brownfield development improves inner-city properties that are, at best vacant and dilapidated and, at worst environmentally at risk.

On the surface it would appear that brownfield site development provides the answer to a number of environmental, social, economic and land use concerns. However, a number of uncertainties in the development of previously used sites can render them risky and unpredictable. Included are questions concerning potential liability for contamination, costs of
remediation (clean up), the remediation process to be followed, and the extent to which clean up is required.

If the site and buildings are contaminated, nearby ground or surface water may be effected. An environmental assessment will need to be conducted to determine the required clean-up and related costs. Remediation can involve a variety of state and federal agencies, adding to the complexity of the development and uncertainty of the outcome. Sometimes the cost of remediation exceeds the value of the property and the development becomes financially infeasible. The extent of the contamination and resulting expense of clean up might not be known until the environmental assessment is completed. These assessments can be expensive and there is no guarantee that they will identify the full extent of the expense required.

Compounding the expense of brownfield development is the difficulty often encountered in obtaining financial assistance for site cleanup and development. According to Charles Bartsch, Senior Policy Analyst for Economic Development at the Northeast-Midwest Institute in Washington, D.C. “critical funding gaps are...the primary deterrent to site and facility re-use. The financing situation is especially gloomy for start-up firms or small companies.” (Business Facilities, June 1996). Since current law holds current and previous owners and even lending institutions liable for site contamination, banks are reluctant to become involved with brownfield sites and developers are unwilling to purchase them.

Public and governmental agency involvement is necessary to spur the development of brownfields. As of 1996 over two dozen states had set up voluntary cleanup programs. Fifteen of these were enacted in 1993 or later, so the effort of states to address brownfields is growing. The general characteristics of these programs in the United States are:

They are available for any contaminated sites except for landfills, Environmental Protection Agency (EPA) Superfund sites, and other properties subject to other corrective action under other Federal environmental programs. State oversight varies by type of site, private sector involvement, or level of required cleanup.

Cleanup standards vary according to intended use and are applied on a case-by-case basis. Assurances provided to property owners include a covenant not to sue, release of liability, certificates upon completion and commitment to no further action once the site complies.

Five states provide financial assistance in the form of grants or loans, two states provide tax credits, and two states target existing incentive programs to brownfields.

The state of Ohio has a Voluntary Action Program that was operationalized in 1997. Under this program, a property owner who agrees to participate is released from liability from the Ohio EPA. However, they still must meet the requirements of the Federal EPA, and while the release of liability guarantees that they will not be sued in civil court, it does not prevent criminal action.
Ohio provides financial relief in the form of a 10-year abatement of increases in property taxes due to increased property values. Minnesota’s Contaminated Site Cleanup Fund gives grants for brownfield priority uses. Illinois offers a 25% corporate tax credit applied against site cleanup costs. Connecticut is establishing an insurance fund to aid with brownfield site reuse. Some cities are testing pilot brownfield programs where they take control of abandoned, tax delinquent properties and develop them for a predetermined purpose.

One interesting trend with brownfields is that they are often being transformed from their original manufacturing use to commercial, retail or even residential use. This has occurred because inner city sites oftentimes do not offer adequate access to interstate highways for tractor-trailers traffic, and because it may be necessary to assemble a number of contiguous sites to provide the size needed to accommodate a manufacturing facility.

In terms of brownfield site development, the future is optimistic. Increased government involvement in financing and relaxed regulatory requirements coupled with the growing willingness of developers to consider the potential value of these properties is leading toward their productive reuse.

Types of Parks and Sites

Business/industry parks and sites can be divided into three major categories: Commercial, industrial and retail. Commercial sites accommodate such uses as corporate headquarters, research and development facilities, and back office operations, industrial sites accommodate manufacturing and warehousing and distribution, and retail sites include outlet malls. Each of these end users has their own priorities and standards for site characteristics and amenities above the “must have” basics identified previously.

Commercial Parks and Sites

Since 1960 the number of American workers employed in the service sector has grown quickly, while the number of workers engaged in manufacturing has remained constant at about 20 million. A traditionally negative bias has existed toward service sector jobs, primarily because they were perceived of as low pay, low skill, and not bringing much benefit into the community. The 1990's has witnessed a reevaluation of service sector employment in recognition that it includes such high-paying and growing business sectors as the medical and insurance fields, providing good jobs plus a counter-cyclical balance to manufacturing sector swings. Now many communities have based their economic development goals around attracting these types of industries, and are developing sites and parks to meet the required criteria for these companies.

The following is a sampling of types of commercial ventures that have become especially sought after by communities over the past decade. Some of these represent opportunities that were unheard of even ten years ago, but due to changes and advances in the field of
telecommunications, customer service, and due to the push to cut costs and manage business in a “leaner and meaner” style, these advances have become a way of life for corporate offices.

Call Centers and Back Office Operations

The term “call center” is generic for “operations which use the telephone to support marketing, sales and service functions, from reservation or order taking to providing in-depth technical assistance (Tangeman, 1995, p. 27). Call centers have become a $650 billion industry in the United States, employing over 4 million workers to meet consumer’s demands for immediate information and product ordering resulting in over 60 million calls per day to toll free numbers (King, 1996). Call centers are becoming an ever-growing industry also in Europe, where the top markets are Ireland, Denmark, Belgium and Holland. Ireland and Holland, in particular, have actively positioned themselves to attract call centers by implementing changes in their tax structure, investing in technology, reducing tariffs, and promoting a young, qualified workforce adept at customer service. In Europe, Ireland is the country of choice, with many world class companies such as Gateway 2000, Dell Computers, Best Western International, and ITT Sheraton setting up operations for customer inquiries, technical support, product sales and order processing (Tangeman, 1995).

Companies wishing to establish call centers look for the same site requirements no matter if that site is in Europe or North America. They look for a region with an available labor pool with the needed demographics, low cost leaseable space, a reliable telecommunications network, and a favorable tax climate. Other criterion such as community receptivity and incentives for economic development are also included in the site evaluation. Areas with a likelihood of severe weather conditions are avoided because of the danger of communications disruption and employee absenteeism. These weather conditions affect not only the far northern climates, but also southern ones that are prone to freezing rain (freezing rain causes damage to suspended telecommunication lines and disrupts vital service).

Labor demographics weigh heavily in the decision making process because of the number of employees needed and the characteristics desired. Since call centers are usually large employers, operate twenty-four hours per day and experience high employee turnover rates due to the nature of the work, larger companies look for communities that have a sizable, transient labor force such as those found through universities, a large retirement community, unemployed homemakers, or the military. Smaller companies often look for more rural communities where the turnover rates and wage competition is low. Both large and small companies prefer locations with few or no other telemarketing operations so that there will not be upward pressure on wages and competition for available labor. Amenities designed to meet employees needs, such as secure parking lots, nearby restaurants, and public transportation will also help to sell a site.

Back offices are facilities which provide supportive services for a company’s main administrative and management functions, and are usually located in a more remote (and lower cost) location and connected to the corporate headquarters through a state-of-the-art telecommunications network. Back offices are used frequently by insurance and financial
services companies to support customer service and product promotion needs. One example is Citibank, which established a credit card back office in Las Vegas in 1993, beginning a boom in facilities of this type in that city. Las Vegas had the right mix of labor demographics, telecommunications infrastructure, affordable housing, absence of state and corporate taxes, and was located in the Pacific Time zone. What finally paved the way for the Citibank development was legislation pushed by the Governor of the state to change the usury rate. Citibank started with a 500-employee facility, which had grown to a 24-hour operation employing 1,900 people by 1997.

Very similar site and community requirements exist for back office operations as for call centers. Both call centers and back offices rely heavily on the telephone and telecommunications networks in order to conduct business. Communities who decide to target these operations in their attraction efforts must first be sure that they have the state-of-the-art network capable of meeting these company’s needs, including fiber optics, all digital switching, and system reliability and redundancy. The major concern for back offices and call centers is that the telecommunications network be reliable, and that there are sufficient back-up systems in place that if the network does experience problems there will be no disruption of service. Both call centers and back office operations are increasingly moving toward renting and modifying existing space as opposed to buying or constructing their facilities. Sites that seek to attract call centers and back offices need to be able to address this requirement, having available buildings that will meet those companies’ needs.

Call center and back office attractions have been used by some rural communities as a strategy to counteract the loss of manufacturing and natural resource-based jobs such as those in coal mining and agriculture. The Far Western tip of the state of Virginia provides such an example, where at one time the coal industry provided high paying jobs for generations of residents. With the steady decline of the mines beginning in the 1980's, economic development leaders began to turn to other strategies to improve the employment base. The Virginia Coalfield Economic Authority, encompassing seven counties in the region, helped to spur the investment in a superior telecommunications infrastructure that rivals that found in metropolitan areas. Combined with the pool of available labor and customized training programs, this region has been successful in attracting a number of teleservice firms.

The State of Iowa’s concerted efforts to attract call centers and back office operations is a direct result of two trends facing the state’s important agricultural industry. The first trend was the increasing mechanization of farm production, resulting in fewer jobs in agriculture. The second trend was the need for off-farm income opportunities so that farm families could survive economically. Iowa’s program has been a success; over 20,000 state residents have been employed in call center and back office operations since Iowa began its attraction efforts in 1990. Many of these employment opportunities involve part-time work, ideal for those farm families seeking supplemental income. One example is APAC, a large telemarketing company who employs over 4,000 Iowans in 30 offices located throughout the state. These offices provide services to clients in the insurance and package delivery industries and use a “hub and spokes” arrangement for statewide operations, characterized by central offices in sizeable cities, with
supportive satellite operations spoking out in smaller towns. This type of arrangement provides both direct and indirect benefits to the smaller towns. The direct benefit is in the form of new jobs. The indirect benefit occurs because these spoke operations are typically located in vacant downtown retail space where APAC’s telecommunications needs can be met, at the same time helping to revitalize the central building district in the towns in which they locate. Iowa is unique in that there are 150 independent telephone companies in the state. These companies typically reinvest their profits into advanced telecommunications technology. The combination of an solid educational system and an educated labor force, and state of the art telecommunications infrastructure has enabled Iowa to position itself to take advantage of the growth in these types of industries. Iowa was also proactive in establishing a tax structure attractive to the telecommunications industry. Data storage computers are not subject to sales, use or property taxes, intrastate telephone calls are not taxed, and revenues from customers outside of Iowa are not subject to the state’s corporate income tax (Bastian, 1997).

Corporate Headquarters

Few corporate relocations take place in any given year, but larger cities can benefit when they do by making themselves aware of the reasons and criteria for relocation. On the company’s part the decision of where to locate is one of the most strategic they will make, impacting directly on their ability to be successful in the global marketplace. The number one reason given by companies behind the decision to relocate their corporate offices, according to Gene DePrez, a partner with the site location firm, Fluor Daniel, is to establish a facility from which they can operate internationally. “Today, companies considering a move usually do so to establish a more global presence,” he says. “But in doing so they must think through the issue of identifying where those markets are that work for them.” Cities such as New York, Chicago, Atlanta, San Francisco, Washington D.C. and Los Angeles have traditionally been sought as corporate headquarters because they offer high visibility and global presence. But these favored cities no longer have a lock on corporate headquarters; companies are finding that advances in telecommunications provide the ability to conduct business just as effectively from “second tier” cities. The smaller cities may also provide a more a strategic location for a company’s operations as well as offering lower costs of doing business.

Important site/park criteria include; accessibility to a quality, talented workforce, proximity to airports offering excellent domestic and international connections, cost of doing business, operating environment, and quality of life. Many corporations today conduct an international search for top management and professional positions. In order to attract and retain this talent, quality of life issues such as affordable housing, excellent schools and access to higher education, cultural and recreational amenities and shopping all play an important part in making where the company locates a desirable place to live.

Real estate is generally a corporation’s second largest cost (after labor), according to Arthur J. Mirante II, president and CEO of Cushman & Wakefield, Inc. Cities with lower costs of real estate purchase and office space rental fare better in the corporate relocation arena. Real estate costs in the United States are generally a bargain compared to those of international cities.
Access to airports with excellent domestic and international connections is necessary to save employee travel time and cost from one company location or customer to another. Operating environment considerations include the receptivity of municipal and other local governmental entities, a pro-business attitude, access to ancillary services such as banking, legal and advertising, nearby research and development facilities (especially true for high-tech/biotech businesses) and, in the case of a corporate park, nearby or on-site amenities such as recreational centers and/or golf courses, daycare, ATMs, nearby executive housing and restaurants. Ease of access to the park for employees and advanced data and communications technologies including high speed data transmission systems such as ISDN (Integrated Services Digital Network which are four times faster than analog modems), videoconferencing, and network integration are assumed.

**Industrial Sites and Parks**

In general, industrial sites and parks are those that are targeted to meet the needs of manufacturers, ranging from basic to light industry or high tech, warehousing and distribution, and research and development. Beyond the “must haves” outlined in the Introduction to this module, the site requirements of manufacturers will vary according to such factors as type of product, production process, worker skills needed, product delivery methods, and location of major customers and suppliers.

**Warehousing and Distribution**

Companies seeking to locate their distribution facilities begin by identifying the region that makes the most sense in terms of where their customers and suppliers are located. Once a region has been identified, other site factors will come into play, in particular available labor, and tax structure favorable to shippers, and overall favorable business costs.

The importance of proximity to suppliers is particularly true for just-in-time manufacturing environments, where companies maintain minimal inventory and require suppliers to deliver frequently and quickly. In the auto industry when a manufacturer locates in a community, suppliers are not far behind. Witness the example of Honda Motor Company in Marysville, Ohio, with many suppliers locating on suitable sites in small towns within a two-three hour truck haul from the main plant.

The type of industry and how they choose to move their product determine the type of transportation network that a company will need. The relative cost and speed of delivery of the different alternatives will be weighed against delivery time needs and value of the product. The vast majority of manufacturers, no matter what they produce, will want access to the Interstate system for tractor-trailer hauling of products. Beyond that, manufacturers who use bulky raw materials, such as refractory producers who use bulk minerals, or those who use containerized shipping for eventual export, may require rail service on site. Barge transportation is the least expensive form of transport, and needed by some producers of bulky, low value products such as...
coal and ores. Companies producing time-sensitive products that need to reach the market quickly or who produce smaller, highly value-added products, will seek excellent highway access and proximity to airports for air cargo transport services.

**High-Tech and Science Parks**

High-tech and science parks are specialized parks that cater to businesses and enterprises that are involved in research and discovery. Closely related are research parks Many of these activities are traditionally centered around research universities and typically require large capital investments. According to Zimmerman (1995, p. 74):

Science parks are designed to solve that dilemma. They physically bring together research organizations and entrepreneurial companies. They provide rental laboratory space, overhead functions such as secretarial support and conference rooms, information access such as technical journals and an Internet domain, all in an attractive campus setting. Thus small companies can save money by sharing these R&D functions.

Research parks began in California in the mid-1900’s. They have spread throughout the United States and the world, now numbering over 400 worldwide with some 150 in the U. S (Giunta, 1998, p. 5). Many of these parks have developed slowly, taking decades to come fully develop.

Research, high-tech, and science parks are obviously highly specialized sites that are not feasible in many communities. Each community will have to assess their attributes to determine if these types of sites would be an appropriate option for their community.

**Commercial sites**

Many communities are interested in commercial sites. These can be sites for individual users, like mass merchandisers (i.e. Walmart) or strips of several shops with one or more anchor tenant. Some rural communities with highway access and nearby population centers are prime locations for retail outlet centers. While this module primarily focuses on industrial type sites, if communities have the right location and amenities, they should also consider the potential benefit commercial development.

**Development of Goals for Sites/Parks**

It is imperative for a community to develop clear goals and objectives for industry/business parks and sites prior to their planning and implementation. To fail to come to agreement on expectations and desired outcomes of their investment is one of the most serious mistakes a community can make because it is likely to jeopardize the long-range success of the park or site venture.
As discussed before, parks and sites are frequently a cornerstone of a community’s economic development program, therefore the goals for site/park development and economic development are often one and the same. In general, these goals are to increase wealth in the community through the attraction of new employers and expansion of existing employers. Beyond these basics, each community brings its own particular desired future and existing capabilities and assets into play when determining parameters within which to accomplish their goals. A variety of different strategies can be used that will be consistent with the values, priorities, and goals of a given community.

Each type of business or industry cluster brings with it certain identifiable benefits and certain known requirements. Some industries will help a community to reach their goals while others, although perhaps “glitzy” or prestigious may not. A community should determine, up front, whether or not a business is compatible and how much they are willing to invest to design a site to attract certain kinds of businesses.

Some community’s goals may revolve around expanding and/or restructuring the local tax base, leading to a business attraction strategy. Such was the case in Fairfax County Virginia, where the community determined that they wanted to expand the local tax base, increase property values, and gradually shift the burden of taxes from residential to commercial and industrial properties. In 1979 the proportion of nonresidential tax base was 12%; the Fairfax County Economic Development Authority adopted the goal of increasing that proportion to 21% by 1985 through high tech business attraction and appropriate site development efforts. The program was highly successful: “Between 1979 and 1985 ...a shift from 12 to 25% non-residential tax base, a 10 percent reduction in the overall real estate tax rate, an expansion in public services, fiscal stability, and an AAA bond rating (Kotler, Haider, and Rein, 1993, p. 234).”

Other communities, perhaps those with high unemployment rates and low skilled workers, may adopt a strategy of developing sites suitable for manufacturers that they know to be labor intensive but not in need of a highly skilled workforce, such as food processing firms. The industry site requirements that the community would have to meet probably include large quantities of water for production, an available wage-competitive workforce, and access to the interstate highway network.

Still others may see benefit in offering sites that will attract outlet centers, with the goal of building a substantial sales tax revenue stream for their county and providing a substantial number of retail jobs. Such was the case in the small Ohio town of Jeffersonville, which attracted two major outlet malls within a year of each other. The Village’s strategic location on Interstate 71 halfway between, and an hours drive to, the major populations centers of Columbus and Cincinnati set the stage, which the community then enhanced by offering flat, large sites with all utilities and visibility from the highway.

Finally, some communities may seek a specific category of business to attract, such as those who are environmentally sensitive, high-tech, supportive of travel and tourism efforts. There are as many different alternatives as there are communities and their goals.
Once again, it is important for each individual community to develop their own economic development strategies based on an honest analysis of their situation. If site development is deemed as necessary, they should then begin to process of site development.

**Developing a Site**

The following process and criteria provides general guidelines to assist community officials and Leaders in evaluating the ability of their community to meet basic foundations required for the creation of an industrial site. This three-phase process begins with investing the time and energy of leaders and officials before expending financial resources necessary to complete the site development. Phase one requires the completion of a feasibility assessment. The second phase introduces consultants into the process through the completion of an engineering study. The final phase involves the development of a market strategy.

**Community Feasibility Assessment**

**Knowing the Community**

Previously we discussed the various types of sites that are available. Each type of site listed has not only physical requirements uniquely their own but also operational demands unique to each category. For example, the location factors for a retail outlet center are different than an industrial manufacturing firm. An outlet center will seek sites near major population centers within a region to increase the potential shoppers willing to travel to the center. To ease the travel for the desired shoppers and to increase visibility of the center for traffic passing by, the outlet retail center will seek locations adjacent to the interstate highways. Industrial firms, interested also in interstate highway use, do not however need to be adjacent to the interstate. Usually they will be content within a ten-mile radius of the interstate. In addition the industrial firm does not need to be near major population centers to attract customers. Their need is to be near the quality of life amenities demanded by the particular workforce necessary for the firm to produce a quality product. A rural community two hundred miles from a major population center with access only through winding narrow two lane roads would not compete very well for an outlet retail center. Of course, the day may come when this same rural community is able to compete for an outlet retail center, but it is going to be many years before the four lane highway is constructed and even more before the community fifty miles to the north is a major population center. By the time all that happens the owner of the development site will have surely lost interest and given up on the idea. It is not in the best interest of a community to try and recreate the economic personality of a neighboring community, no matter how economically secure that community may be. Instead, it is much wiser for a community to access its own economic uniqueness and to capitalize on the corresponding potential.

To discover their economic uniqueness a community needs to begin by getting to know itself. Each member of a community assumes they know the community, but their awareness is usually tempered only by their daily experiences and the awareness of limited community data.
necessary to sustain their particular activity. What is needed, however, is a composite picture, which can only be obtained through the involvement of numerous residents, agencies, businesses, organizations and political jurisdictions. Present within each community is a great deal of current data and public opinion necessary to begin the process of site development. Also, each community will need to seek additional information through new inquires such as surveys and focus group sessions. The list contained in Exhibit B is suggested as a minimum database for assessing the community’s economic personality.

The gathering, dissemination, review, and discussion around this information will help a community get to know itself and establish its unique economic personality. The difficult part is to accept what the information says. We may not like what the information says about our community, but the fact is neutral site selection representatives will use this same information to determine the appropriateness of our community for their project. If local leaders wish to increase the potential for successfully developing a site, they too must listen to the information gathered and create a site which meets the needs of the particular firm ideally suited to succeed within the community. Both the ability to understand the potential of the community, plus finding access to information will be enhanced by including various partners in the review process.

Who should be involved?

For many communities a quick and simple solution to who should be involved in assessing, planning and creating a development site is the persons who are going to cover the costs. Often a professional development organization is retained to bring to the community officials a plan for site development. In this instance community officials see their role as assuring the plan meets the various requirements of site development created by the community. These same officials have shifted the burden of financial risk away from the residents of the community to a knowledgeable professional organization. This is indeed a reasonable method to use for site development, but it may be premature at this stage of the process. These individuals who are interested in creating a development site are the Site Initiators. Sometimes, like our example, these individuals may be the same persons who are going to finance the effort. In other circumstances these individuals may be community leaders who feel there is a need for the creation of development sites. In either case a strategy which involves the various organizations needed to make a long term project successful must be provided an opportunity to participate in making a decision that will effect not only the community in general, but each independent organizations future. After all, what is being developed is a project that will be part of the community for decades. Surely the community is not seeking companies that will exist on the site for a few years and leave. Likewise a business firm is surely not seeking a site within a community where they will only operate for a year or two. It is not unrealistic to imagine firms locating on the site will operate there for fifty or more years. And even if there is turnover of firms on the site the location will continue to be part of the community’s personality long beyond any individual firm’s absence.

Therefore, a task force should be created to manage the process of completing the feasibility study, moving though engineering the site and finally developing a marketing strategy.
Numerous other actors need to participate within the effort on a short-term basis dependent upon their particular expertise at each stage of the process. The task force’s role is to manage the process by gathering information, bringing the information obtained to the organizations each member of the task force represents, communicating to the task force as a whole reactions obtained, make the final decisions necessary to move the project forward and finally physically complete site development.

Individual members of the task force should represent organizations whose acceptance of the site development effort is crucial to the successful operation of the site. Of course the particular make-up of any community’s task force will be unique. As a start however, the following organizations should be represented:

1. An elected official from the affected political jurisdictions where the proposed site will be located
2. The local economic development office
3. Representatives from area utility companies actively promoting sites
4. The local engineer (may be county, municipality or contracted firm)
5. Planning organizations with jurisdiction over the project
6. Local business organization such as Chamber of Commerce
7. Local employment agency (may be public or private)
8. Representative from effected neighborhood groups

There will also be numerous technical expertise required at various stages of the process. For example, while a particular utility organization that does not promote site development would not be a member of the task force they will be involved for short periods in the process. A case in point may be a municipal water department who will be needed to generate ideas and review decisions regarding water usage.

A helpful approach that the task force could employ to complete the feasibility study is to encourage a collaborative technique. Basically, a collaborative technique believes that the persons or organizations who have authority to make the final decision, are affected by the final decision or can block the implementation of a final decision should be included in the planning stage of a development project. By including people and organizations at the beginning of the process these persons will more quickly recognize that they are included in the design of the project. This early recognition should lead to an easier acceptance of the process. A collaborative technique gathers information, listens for reactions, seeks alternatives and performs evaluations to make a final decision.

Put into operation the collaborative technique requires the task force to check with appropriate individuals and organizations before moving forward. This plan and check for reactions method begins when the initial task force designs the process for developing an industrial site. After the task force discusses some ideas the individual task force members take these ideas to both the organization or group they represent plus any other appropriate group or individual whose acceptance of the project is needed. Reactions are gathered by each task force
member who then brings this information to the next gathering of the entire task force so the process designed can be adjusted to meet the requirements for participation and acceptance by key individual and groups. The task force may need to go out again and gather more reactions before finalizing the design process for the site project. Likewise the task force uses the same method when it works through the educational, analysis, idea generation, evaluation of ideas and decision-making phases of the site development project. The task force may also at times contact individuals and organizations for thoughts even before the task force designs a particular phase of the collaborative process. Of course, it is also appropriate to bring particular individuals into task force meetings to actively participate with task force members in the creation of each phase of the process.

Critics of a collaborative technique may raise an issue that going to so many individuals and groups throughout the development of a site will lengthen the time it takes to actually get to construction. Fortunately the opposite is true. The collaborative technique actually leads to earlier implementation of a project than linear planning processes. Linear planning processes focus on the solution to a problem rather than agreement on the problem itself. Using the linear process task forces move quickly through the planning phases of a project unlike a collaborative model, which takes more time to plan because of the inclusion of all appropriate people and groups. However, a collaborative technique makes up time because a demanding process is not needed to sell the ideas to those required for adoption of the plan. Take for example a development corporation who purchases a piece of land as an industrial site recognizing there is the need to obtain a zoning change. This corporation has even spoken with the local development and zoning offices, plus a few municipal council members and feels fairly secure that the change will be granted. But the zoning change process requires opportunity for neighboring property owners to react in a public hearing process to the zoning change. Since no one has bothered to discuss the project with these neighbors everyone is surprised when a few of these neighbors bitterly disagree with the need for the zoning change because they have discovered the community does not have enough excess water capacity to meet the projects needs. They may even disagree bitterly enough to take a decision made by the zoning board and council to a courtroom setting, thereby lengthening the adoption of this project. This difficulty could have been avoided if someone included the water department and adjacent landowners in the planning phase of this project. By including all affected parties in the design of this site development from the beginning the potential for ownership of the project would be increased. Even if the development corporation solves the water issue they still have lengthened the time required to reach implementation phase of this project. People must agree on the problem before they can agree on the solution. Collaborative techniques encourage such agreement because issues are problem focused verses solution focused.

Goals and Objectives

“What this community needs is more industry so people have money to spend with the downtown merchants,” says the owner of the local hardware. “People are tired of driving to Center City to get new appliances” says the town mayor. The mayor continues with “What we need is a shopping center so we can attract an appliance dealer.” “I am concerned by the youth of
this community,” adds a minister. She follows that comment with “Someone needs to open a recreation center for the youth of this community.” “I agree,” says the Patent Teacher Association (PTA) President, “and it wouldn’t hurt if we also had a theater that ran recent movies instead of those old ones we get in this town.” “My father and I have been in this community providing jobs for nearly forty years now and we need better freight centers for shipping our product if we are going to be able to continue to operate in this town” says a local industrialist. “My son and daughter grew up in this town but had to leave because there are not enough jobs for college educated youth; we need a commerce center so we can attract insurance and banking firms” volunteers a senior citizen. This may well be the scenario at the first task force meeting on site development.

Each of these people are probably correct about the community needs. An industrial park, a commerce center, retail center and the supporting entertainment activities of a recreation center and theater would enhance the comfort of living in this town. But where does a community start? Which of these activities comes first or do they all happen at the same time? Each goal seems to foster and also depend on the other. Where does a community begin, particularly a community whose resources are limited and cannot afford to place these resources in an unsuccessful project? Solving this dilemma was the reason for gathering information about the community and establishing a representative task force and inclusionary planning process.

As the community works towards setting goals and objects they must begin by analyzing the information gathered about the community and comparing this information to the requirements for each of the types of sites listed previously in this document. By matching the community’s economic personality to the type of site requirements listed, the question of where to begin will be resolved. The purpose of this activity is to make certain that the community can meet the minimum requirements of a particular type of business before embarking on costly site development investments. Very few communities in this world will be able to meet the needs of a particular type of site without further investment of valuable resources. It is most likely true that any community can establish an attractive industrial park. But will a community who must build a new water treatment plant, expand roads to interstate standards, add new educational programs in local schools, and provide millions in training incentives to a company ever recapture their investment? Or would this same community be better served by investing in the extension of a service road to a site attractive for retail development that can provide jobs for recent high school graduates and pay additional sales tax revenues to the county general fund? Then perhaps the county could dedicate those increased general fund dollars for improvements to the local water treatment plant and highway expansion. Both of these actions lead to future attractiveness of the community as an industrial site. What is being suggested here is that communities may well need to make incremental changes that lead to long range goals and objects. Even more powerful is the suggestion that increasing the potential for success of a development project, regardless of what type of site development, will lead to long range acceptance of development efforts because residents and leaders can see success coming from their efforts.
One final effort must be completed by the task force before setting the objective of which type of park to develop. Goals must be discussed and set. The words goal and objectives get really confusing since people usually use the two interchangeably. A goal is simply the end to which an effort is directed. Using our type of park dilemma as an example, a goal would be to provide jobs for high school graduates. Another example of a goal would be to increase property tax revenues. A third goal may be to create jobs, which provide full time employment with health benefits. Once we have all our goals established we could now set an objective. The objective is what we will do to achieve our goal(s). Continuing with our example based on our three goals, the task force determines that an industrial park targeted toward warehousing operations is the objective. Let’s continue this discussion by walking through the community feasibility assessment as outlined thus far.

The process began by a few individuals wanting to create some type of development site for economic enhancement of the community. These individuals begin the process by establishing a Development Task Force. This task force began the process of determining what type of site to develop by gathering information about the historic and existing community condition. Once compiled and distributed, this information is discussed to obtain an economic personality profile of the community and surrounding region. From the economic personality profile the community can understand it’s present economic contribution to the area. Let us imagine a community with the following characteristics based on its economic personality profile:

1. Seventy-five percent of high school graduates do not go on to any post-secondary education
2. The local secondary technical training institution has received national recognition for the quality of plastic molding machine operators it graduates. Eighty percent of these graduates leave the community to find employment within their area of expertise
3. The area wage/benefit cost within the manufacturing sector is 90 percent of the state average
4. The community is served by freight haulers, which are operating at 82 percent of capacity
5. Housing cost in the community are 26 percent below the average statewide cost of a home
6. The community has four-lane access within 10 miles of the national interstate transportation system
7. Both the water and wastewater systems can increase their daily operations by 42 percent
8. Electric service to the community has been interrupted in recent months but the electric provider is willing to upgrade the system by improving substations if a large user is contracted for services
9. The local property tax base is 15 percent manufacturing, 40 percent retail, 20 percent agricultural and 25 percent residential.

Based on this information a community, through the Development Task Force, sets the following GOALS:

1. Provide employment opportunities for the graduates of the plastic molding training
2. Support the efforts of the local technical training institution by establishing working partnerships with area employers
3. Provide property tax relief to the retail and agricultural sectors
4. Increase wage level within the community

Now the decision remains to set an objective between the various site development types: commercial, retail and industrial. Based on the goals established by the community, it makes sense to set the development of an industrial manufacturing site as the objective. Since the community has been involved throughout the entire process the acceptance of these goals and the objective necessary to reach the goals should be much easier to sell to the decision-makers of the community. A side benefit of this acceptance is the long-term understanding of what is trying to be accomplished by this industrial site project. This understanding will most likely mean a continued commitment by the community to assist in the industrial site project finding success, which will certainly impress firms who may want to locate on the site.

**FEASIBILITY STUDY STEPS**

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<tr>
<th>Initiators</th>
<th>Purpose</th>
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<td>Create Task Force</td>
<td>Manage Feasibility Study Process</td>
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| Discover Community Economic Personality | 1) Gather and Disseminate Data  
2) Analyze and Compare to Business Needs |
| Set Goals                   | Define Community Benefits of Project         |
| Set Objective               | Selection of particular site or park         |
| Site Availability           | Select appropriate sites for Engineering Study Phase |

**Site Availability**

A final step in the Community Feasibility Assessment Process is to determine if there are potential sites available for development. Referring to our example above, while everyone in the community may support the development of an industrial site, their commitment level may change if the site is placed in their neighborhood. Likewise the selection of a location which conflicts with other goals and objectives held by supporters might also change their commitment to the effort. For example, if a large tract of productive farm land is chosen, particularly if it destroys the pastoral beauty of the community, it may cause some individuals who support the project to be forced to choose between competing goals. In the case of using prime farmland for industrial usage the individual may be forced to choose between their support for maintaining the agricultural sector of the local economy versus their support for increased job opportunities for technical school graduates. Additionally, the industrial site may create additional off-farm jobs and allow some farm families to continue farming.

At this point the Development Task Force is not finalizing a particular location for a site. A lot more technical information must be gathered before a final location is determined. Instead the job of the task force is to narrow down the potential locations to the most realistic options.
Potential site locations will be nominated for a host of reasons. Maybe the mayor’s brother-in-law is having financial difficulty and needs to sell land. Perhaps a leader in the business community speculated on a piece of property thinking that someday an interstate highway was going to come past the location. Or maybe the organization that decades ago developed the last industrial site has a few acres remaining to sell.

Of course there will also be numerous folks who just know they can get 10 times the value of their property. What is a community to do with so many interested and influential sellers?

The answer lies in addressing the needs of the buyer, which is of course the firm that is ultimately going to locate on the chosen location. But since the community doesn’t know who the particular firm is they need instead to use some guidelines that have a high potential of matching those set by firms seeking a location. The following is a list of guidelines for location selection that a community may want to use to evaluate the potential of proposed locations.

1. Zoning. Is the proposed location properly zoned for its intended use? If not, what is the potential for re-zoning the property to fit the designated use? Even if the property is correctly zoned or could be, does the proposed use fit with the existing uses of neighboring property? For example, even if a location is zoned heavy industry is it appropriately zoned when all the surrounding parcels are used for retail purposes?

2. Topography and Soil Conditions. Does it appear that the future tenants will not need to do much excavation or site work to make the location suitable? Is the site in a flood plain? Is their some slope to allow for surface drainage of water? What is the soil make-up of the location? Are there sufficient soils to allow for compaction or will the developer need to haul and replace top soil?

3. Size and Shape: A rectangular site is preferred based on the particular use since this allows options for laying out building dimensions, parking lots and delivery methods. In addition, the trend has been toward larger firms purchasing larger acreage than the project currently needs because it allows for future expansions as well as creating a well-landscaped site.

4. Highway Access and Traffic Patterns: Is the location close to major transportation routes? Can the firm route their trucks away from residential usage thereby reducing noise levels for residents? Are there any difficult turns or points of traffic congestion that makes it difficult to operate tractor-trailers?

5. Utilities: Are utilities such as water, wastewater, electric and natural gas near or at the location? Are the mains serving this location adequate for providing service to the site? What is the per unit users’ cost if competing suppliers are within the community? How is storm drainage to be handled?
6. Ownership: Who owns the location now? Are they willing to sell and if so can an option be obtained in order to set the price per acre? If so, is the price within a fair market value for the particular proposed usage? If the location is currently used for agricultural purposes, who pays damage to crops?

7. Environmental Concerns: What was the previous use of the location? Was it used for a purpose which had the potential for environmental contamination (know as a brownfield)? If so this could lead to costly clean-up costs or even denial of financing by financial institutions. Is the location known as a historically significant site? Are there any visible signs of wet lands? Is the site in a floodplain?

The seven factors listed as reference for establishing location selection guidelines are very preliminary in nature. Each factor can be reviewed without the assistance of a consultant and will lessen the time spent by a consultant during the next phase of site selection. Remember the goal in the feasibility study is simply to determine which of the proposed locations have the greatest potential for future development and at what cost. To determine the final location the community will need to select a consultant to perform technical analysis appropriate to the particular site usage.

Site Engineering Study

By this point the Development Task Force (working in concert with the community leaders and residents) have decided the appropriate type(s) of site for the community and narrowed the potential locations to a few attractive alternatives. At this point the resources necessary to move the project ahead has been the time and effort of interested individuals, groups and community officials. Of course there also have been financial expenditures for materials, information distribution, travel, and meetings. Hopefully, most if not all of these costs have been covered by in-kind contributions from those organizations and political bodies involved in the effort. But now enters the need to expend some funds for consulting assistance. Engineering assistance is needed to both determine the best site and to prepare information potential firms will need to decide the appropriateness of the site for their project. Professional engineers bring the ability to view the project from an objective universal image. They should have experience working in other communities in the region and can help the local community understand the basic requirements regarding utility and layout issues to be competitive in the search for tenants. Consultants also bring the ability of a specialist to present alternatives that will meet the overall objectives of the project may not be present in those who daily operate local facilities. For example, the local water department staff, while doing a fine job caring for the efficient safety and delivery of services to the community, usually does not have the opportunity to gain detailed understanding of alternatives. Therefore, the contracting for the services of an engineering consultant will actually lead to the savings of cost for the project since there are few if any site development efforts which do not have deficiencies that need addressed. A community in southwest Ohio can serve as an example of this principle.
for years the community had promoted a site owned by a local land speculator. Finally, in the mid-eighties the site seemed very attractive to an industrial prospect. It was located on a national highway, close to utility lines and near the existing industrial park at the eastern edge of the town. In addition, it was a rectangular shaped, with level topography of sizeable acreage. At this point the community had not invested any funds in completing engineering studies, but where fortunate enough to have a manufacturing firm interested in locating in the community. Local officials were excited that after years of waiting they at last were working with an industrial firm which had included their community on the list of the final three communities. Before selecting the final location the firm wanted additional technical information, specifically soil test borings on all the final sites, to be delivered within ten days. The community found $3,500 and a soil sample company that could give a report within the allotted schedule. The results certainly narrowed down the option of which site would fit the needs of the manufacturing firm. Unlike land used for growing crops, a manufacturer has heavy equipment that requires a solid foundation like clay. While topsoil is great for increased harvests, it is something that needs to be removed to get to the clay base for a manufacturer. In addition water on the site is great for the root systems of crops but does not lead to a stable foundation for machinery. The results of the soil test borings found that the community’s site had an extremely high water table. So high that if those who farmed the land over the years had not invested in a tiling system, water would have been standing on the site. All the time and effort invested to promote this site for industrial use was wasted. To this date the location is still used for agricultural purposes. Luckily for this community there was an alternative location at the opposite end of town. This location had just been discovered and had the same characteristics of the other location, except it was located out of the corporate limits. In addition, the soil borings were great with no water and easy access to clay surfaces. Happily, the township and city joined together to make this alternative site work for the firm. Today the firm has made its third expansion and is one of the larger employers in the community. The point of this example is not to have an alternative site just in case your primary site doesn’t work. Instead, the idea is to be prepared by doing the technical work necessary to select the community’s best location. At the same time the community will make a large statement about their understanding of business (see marketing section of this document for further discussion regarding this point).

Contents of an Engineering Study

This phase of the process relates a particular location to its environmental and land use characteristics. The Development Task Force and community are trying to discover information that will lead to a selecting the best location from all the potential sites. Even though the community may know the answers to some of the items listed below, it is wise to have the consultant review the information. It is through the review of existing information that the consultant’s regional expertise can be beneficial to the task force. A case in point is zoning regulations. The community may already know the location of zoned light manufacturing. However, a consultant will review the standards of what the zoning classification means within that particular community. From this detailed review the consultant may offer some additional standards or the removal of some standards which could be more in keeping with regional standards.
The following is a list of items the community will want to consider including in an engineering study.

1. Zoning: A quick review of zoning maps and regulations to assure location is properly zoned for intended use. Plus consultant should review adjacent property zoning classifications to identify any potential conflict with existing or future usage.

2. Road Considerations: Consultant should review access to major highways and secondary streets; internal and external circulation patterns; improvements needed to the road directly serving the site; suggest appropriate entrance layout to the site (Waterhouse, 1996, p.14).

3. Land Uses: Is the proposed use the best alternative for this location? What special features need to be addressed? How does the classification and intended use of this site affect future community development? How can natural features be optimized? If the site is to be used as a park layout intended for more than one user, then a plan should be developed and mapped for the site. (Waterhouse, p.14).

4. Topography: Included should be a review of vegetation at the site, drainage patterns, storm water management, and soil-boring tests should be completed.

5. Environmental Issues: The site should be studied for wetland characteristics, hydrogeology reports, flood plain review, any potential archeological significance, and finally potential contamination. The contamination review is usually accomplished by a Phase I Environmental Audit. This audit is primarily a review of historical use of the site and evaluates the existing condition of the site. If any evidence of potential contamination is discovered, a Phase II Audit is necessary.

6. Utilities: Utility standards are determined by the intended use of the site (industrial, retail or commercial), the size of the site, and the proximity to utility supplies. Information should be gathered for water, wastewater, electric and natural gas service. Included in a review should be the available capacity and size of the main, plus the rate for each service. If service must be upgraded a plan should be developed including cost of improvements and estimated time of construction. A review should also be included regarding the appropriate routing of each utility service.

The final report from the engineering consultant should include planning drawings and a supporting narrative describing the following.

The key features of the development

The transportation and utility network

Any appropriate subdivision of the site
A recommended phasing of needed improvements

Detailed copies of reports on items such as soil borings, environmental audit, archeological reviews, wetland review, etc.

The completion of the consultant review should now provide information to assist the Development Task Force and community to determine the best location or locations for meeting their objective of creating a development site. Also the development office will have detailed reports and information that potential tenants of the site will need to make their location decision. At this point of the site development process the community should have only invested financial resources into the cost of consultant fees, engineering studies, and report creation. Actual improvements to the site should not be invested in until a market study is completed.

Marketing Approach

Congratulations to those of you who have gotten this far in the site development process. Most folks have long left the process by now. They thought all they needed was a piece of land and a willing seller, because their community is like Lake Wobegon where all the women are strong, the men good looking and the children above average. If other communities drop out because of the required hard work, it can be fortunate for your community. Many a site location expert has indicated that economic development is all about communities removing themselves from the selection list. They say most communities don’t even know the prospect is looking at their community until the last instant. Such was the case in a community that located a major (actually two major) outlet centers a few years ago. Local leaders found out the community was being considered when the neighboring major city newspaper announced the project. It still took three years before the outlet centers were built. And if it wasn’t for the marketing plan of the community the project never would have gotten off the ground. What? Oh, you thought marketing was about promotion. How can you take credit for a marketing effort when the prospect found you? Isn’t marketing about finding prospects through advertising and direct contact? Could be, but if it is that is the last stage of the process.

Dr. Roger Blackwell, a marketing professor at The Ohio State University College of Business defines marketing as:

THE PROCESS BY WHICH AN ORGANIZATION CHANGES ITSELF TO BE WHAT PEOPLE WILL FUND

There are two key statements in this definition for the practice of community economic development. The most important statement is what people will fund. This is the age of not only information, but also instant information packaged in all kinds of ways. Those seeking information will usually find more than they could imagine when they began their search. This means the consumer is extremely aware of their needs. A retail business, an industrial firm or a
commercial enterprise does not need a community telling it about what it takes to succeed. What these enterprises need instead is a community who understands their needs and can do something about it. Which leads to the second statement contained in Blackwell’s definition. Change!!!! A community must be able to change to be what the prospect wants. No, not change the whole community, but change their site to fit the needs of the firm. So if a community wants to successfully fill a development site with a firm, they first must determine what the firm needs and how the site can be arranged to fit that need. So where does a community begin to understand a firm’s needs? By understanding the community itself.

The best time for a community to understand itself is before it spends dollars on site improvements. This entire site development process is intended to assist a community in understanding itself before it invests in site development or promotion. The community survey contained in the feasibility study combined with the inclusion of community participation began the process of understanding. From that effort the Development Task Force and community leaders should better understand their workforce, utility capacities, educational system, community infrastructure, governmental services and health system. The process of setting community goals to determine the appropriate type of site to develop will help a community identify areas where residents and leaders will support change to meet development goals. The final section of information gathered by the engineering study lead to selection of a site that has the greatest potential to meet the desired prospects needs. Now the community needs to put all this information together and fine-tune their target market.

Let’s continue our previous example used under the goals and objectives section of this document. As a refresher the community targeted an industrial site because it had a high percentage of youth graduating into the work force and a highly skilled plastics molding operator training program. Now let’s add to that the information the community learned under the engineering study about lacking up-ground water storage capacity to meet the fire suppression standards and water flow needs of the plastic industry. The first step the community needs to take to market itself is to plan how to correct the water storage problem. If the community can afford to do so, investing immediately in a water storage tank would be an even greater marketing method. This would send the message to developers and location consultants that this community is serious about serving the needs of the plastic industry. Based on Blackwell’s marketing definition the community just demonstrated it is serious about changing to be what its customer needed.

Poor marketing in this example would be for this community to set restrictive covenants at its industrial site to attract high tech industry which needed a large supply of college graduates in the sciences. The survey information in our example community indicated there were few college graduates in the community and few high school graduates going on to secondary education. Someday those numbers too may change in this community, but first a good marketing practice is to incrementally get there by attracting a plastic manufacturer who will raise the wage level of the community by employing recent technical school graduates.
The first step then to a sound marketing approach is match the capacities of the community to a particular suitable target market which places high value on these very capacities.

The next step is to begin to address the remaining capacity deficiencies to demonstrate willingness and ability to meet companies needs.

To continue moving through development of a marketing approach the community needs to recognize the reasons that they are interested in their targeted market. Many communities will say they want to create jobs for their residents, increase the tax base to continue quality education and public services and bring a higher quality life to it’s residents. If these are accurate statements about why a firm is wanted in a community, than any firm can meet these desires. These are very general goals present in every community. A community that can be more specific will demonstrate to a potential firm that local leadership understands the community and is willing to enter a partnership to enhance the community’s vitality. Returning to our example community’s goals, the job creation statement is changed to jobs for technical school graduates and support for the technical training institution. What a powerful statement to an industry that depends on technical training in an era when every school district is emphasizing preparing kids for college. Instead of increasing tax base this community wants to provide tax relief for the retail and agricultural sectors of the local economy. Again the community is showing its commitment to a balanced, supportive community vitality. And instead of vaguely defining quality of life advancement, our example community wants to improve the living wage scale for residents. A community with this depth of understanding of the importance of building lasting public/private partnerships is ready to present itself to prospects.

This is when communities begin the promotional portion of marketing. A final question the community must address is “who is responsible for promoting this community?” If the answer is the Chamber of Commerce Executive or the Economic Development Office the community only has identified the tip of the iceberg. What is really needed is the establishment of a marketing team. This group is lead by the individual or office assigned economic development responsibility within the community. However, prospects are trying to discover the community’s business personality and commitment to long term support of a pro-business attitude. Any community will jump to serve the needs of a new business, but will this same enthusiasm be there for support years from today. Everyone knows the development office is staffed by individuals paid to promote the virtues of the community. What the prospect wants to learn is what other businesses and administrators of support programs have to say about the virtues and commitment level of the community.

That is the reason to establish a marketing team. Before constructing that team we need to understand the importance of a lead person. The lead person is the contact person for information about the community. Nearly all firms want to be confidential about their location process. Having one person to present the technical information necessary doing the initial stages of the site selection process is a key element. The firm wants someone who will respect confidentiality, even from elected officials, and who can respond quickly to the firm’s request for
information. It helps if that individual can respond openly and honestly about the community. In reality the lead person no longer serves the community first once a prospect makes contact. Instead, the lead person’s responsibility is to now represent the prospect as the firm tries to obtain the information and commitment needed to successfully operate locally. Simply put the community’s lead person is now trying to meet the customer’s needs. At the appropriate time the community’s lead person will need the support of direct contact between the prospect and those organizations that provide services and information to the firm.

Key members of the marketing team are:

   Community Services representatives: These are the persons who deliver the utility services so valuable to a business. These individuals need to address technical questions about particular utility services important to the prospect.

   Building Standard representative: This individual needs to address the technical issue surrounding the obtaining of permits and the standards required to meet local and state building standards.

   Training and Educational Specialists: These individuals need to be prepared to answer questions regarding educational achievements, future educational programming and training incentives available to the firm.

   Labor Specialist: This individual will be asked questions about availability of labor, assistance in finding and screening qualified persons, and labor training programs.

   Elected Officials: These individuals will be necessary to demonstrate the interest within the community for bringing the firm into the community. They will also be asked to assure any necessary governmental action that will need to be initiated, such as local incentive programs. They may also be asked questions about the local tax structure.

   Financing Expertise: This position may require a person from the public sector to discuss any financing programs available to the firm. In addition, a private sector financial expert may be requested to give a summary of the local economy.

   Community Life Expertise: Every firm is concerned about the opportunities for social and cultural exchange for the families of employees moving into the area as well as the contentment of families from future local employees. Included in this role may be questions regarding health services.

   Engineering Expertise: The firm will have a number of questions about transportation networks, on and off site construction issues, drainage systems and other appropriate development standards. This may be the city/county engineer or a private engineer (for example, the engineer that completed the engineering study).
This team needs to be in place as part of the community marketing effort. Firms and their representatives need quick, accurate answers to their questions. In addition, they need assurance of commitment regarding all the information and promises the community has made through the lead marketing team person. They may want to visit some of the facilities where services are provided. Throughout the entire process the firm will be evaluating the community’s ability to foster a lasting partnership. Again, a Development Task Force that has included the marketing team from the beginning of the feasibility study will have team members who understand the commitment level of the community to support development. It also must be emphasized that the team is to be involved at the appropriate point when the prospective firm wants a direct meeting. It is the role of the team leader to determine when such contact is appropriate.

There is a final group involved in the marketing team. These people usually are not formal members of the marketing team mentioned above. However, they are often the first contact the prospective firm has with the marketing team. These people are the owners and managers of existing firms within the community. Be assured prospective firms will contact local businesses to assess the care officials give to lasting partnerships, the availability and productivity of the area workforce, the governmental support and quality of services and all the other factors related to a pro-business attitude. The importance of a sound retention and expansion program for existing firms is a necessary component of a sound marketing approach. If the water needs of existing firms are not being satisfied by the community, how can a new firm expect to be treated any differently?

To our previous two steps of developing a marketing plan we can now add.

- Have a specific understanding of goals the community expects from developing the site
- Build a marketing team that understands each member’s role
- Have an ongoing effort to satisfy the needs of existing firms

Promotion

At last the community is prepared to do what every organization assumes is the role of marketing. Now the community can promote the development site. Most communities will rush to place advertisements in development magazines and attend trade shows. A few communities may even try contacting firms directly by mailing materials or personal visits. All of these methods are appropriate but require a substantial promotional budget and often development staff. What well may be a more effective first step is to foster relationships with organizations and individuals that promote development sites as a full-time business. Referring to Blackwell’s definition of marketing the role of the local development effort is to help business location firms succeed in finding a site for their client. Those organizations involved in business location do not own sites but instead try to locate the ideal place for their client. These organizations are trying to build or maintain a reputation as providing quality locations. A community that can help these
organizations succeed has a strong promotional partner. Included in this list of potential promotional partners are:

State or Regional Development Departments: Many states or regions have development departments whose role is to provide potential sites to firms, primarily out of state but also instate. These offices are competing with neighboring regions to attract firms to their geographical area. A community that has a strong development effort can help a state or regional office meet their goals.

Utility Development Offices: Providers of natural gas and electricity want to attract or maintain firms in their service area so they can increase the demand for their product. Firms will contact these offices for assistance in locating potential sites.

Location Consultants: There are a number of individuals and firms that specialize in the entire location process for firms. Usually these individuals maintain a portfolio of clients who contact them for their expansion needs. Hiring these individuals saves people resources and provides expertise for the site seeking firm. Retail businesses often will contract with such consultants who find a location for the firm and then discontinues involvement in the site selection process.

Private Developers: Developers are organizations or individuals who provide not only site selection assistance to a firm, but who actually build facilities for the firm. Often these facilities are originally leased to the firm, which may be a capital investment savings for the firm.

Rather than undertake a major promotional campaign of their own communities may want to partner in promotional efforts with the organizations listed above. This could be a major financial savings to the local development effort, plus provide a resource that is extremely knowledgeable about contacting and being contacted by firms.

Final potential sources for promoting a development site are local professionals, hospitals, and businesses. Attorneys and accountants often provide services to firms on a regional bases. These professionals obviously have the trust and confidence of decision-makers within the corporation they are providing services. Keeping these professionals appraised of the development effort could lead to a prospective inquiry. Also hospitals and doctors get involved in bringing new health care facilities and professionals to the community. Keeping these individuals aware of development efforts could also lead to opportunities. Finally, other business owners who are content with the community may also share information with suppliers and customers about development potential.

We can now add the final component to a marketing approach for site development:

Promotion of sites can best be accomplished in partnership with development professionals and through local businesses and professionals
Marketing is about serving the needs of the prospective firm by knowing community goals, establishing a volunteer support team and partnering with skilled promotional experts. Helping others reach their goals through community changes to address the prospects needs will foster and encourage the continuation of strong partnerships for site marketing.

**MARKETING REQUIRES**

<table>
<thead>
<tr>
<th>Focus</th>
<th>Approach</th>
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</thead>
<tbody>
<tr>
<td>Targeted Market</td>
<td>1) Match community capacities</td>
</tr>
<tr>
<td></td>
<td>2) Address community deficiencies</td>
</tr>
<tr>
<td>Goal Setting</td>
<td>Clearly Articulated to Residents</td>
</tr>
<tr>
<td>Leadership</td>
<td>Establishment of Marketing Team</td>
</tr>
<tr>
<td>Pro-Business Attitude</td>
<td>Care of Existing Businesses</td>
</tr>
<tr>
<td>Promotion</td>
<td>Building Partnerships</td>
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</tbody>
</table>

**Financing the site**

Things are rolling now. A site has been chosen, a marketing approach developed, and the community understands and supports the development effort. But how is the development of the site going to be paid for? While it would be wonderful if there was a magical source to step in and finance this risk, the fact is no such source exists. Actually a community should be thankful that this magical source does not exist. It is often said that a community’s ability to tax itself is a key factor in developing a healthy community. So it is good that most communities will need to become creative in their effort to finance site development. A few general suggestions follow.

**Costs**

The following is a list of cost categories a community will want to consider during the site development process:

1. Site acquisition: included in this category are actual purchase price, legal fees, appraisals, realtor fees, crop damage cost, survey fees and title insurance. Often the community can defer these costs by entering into a first refusal or option agreement with the current property owner. As has been a theme throughout the site development section of this document what is being encouraged is the development of a partnership which shares the risk and reward. The owner benefits because they have someone who has developed a strong marketing approach to represent their site.
2. Planning and design fees: The major cost under this heading are the consulting engineering fees. Also included however are the potential attorney fees and the engineering study testing fees. These costs are difficult to defer, thereby requiring funding at the time of performance.

3. Infrastructure Costs: Companies will usually assume on-site infrastructure costs, but public right of way costs are usually incurred by the appropriate political jurisdiction.

4. Financing Costs: Interest and service costs for funds borrowed make up the primary costs in this category.

Revenue Sources

Potential sources identified by Waterhouse (1996, p. 115) for funding the site development include:

1. Initial Land Sales: If the community can agree with the current property owner these revenues would go to the seller.

2. Loans: Local banks may be willing to provide loan funds, often at a reduced interest rate, for purchase of land and consultant fees if the collateral of the land is sufficient to cover the risk. If this method is used the interest and consultant fees should be included in the land selling price. Some state agencies will also provide low interest deferred loans to communities for site development.

3. Governmental capital investment: Local governments can use bond sales to finance the public portion of infrastructure improvements. Many political jurisdictions also have the ability to use tax increment financing (TIF) as a tool to recover infrastructure improvements. Basically, TIF projects allow governments to use future property tax revenues generated by the new firm to pay off bonds and bond costs committed to infrastructure development.

4. Grants: Federal and state programs may be a source for financing public infrastructure site development. Most programs require a matching contribution by the local community.

5. Utility Companies: Some utility companies will provide planning funds to communities developing sites within their service area. Based on the size of the services provided to the firm locating on the site, utility companies may also finance improvements to their infrastructure.

The challenge to a community in funding site development is to combine local contributions, with governmental grants and local tax structure commitment to finance
development costs. Creative communities can share the risk by and defer development costs by entering into partnerships.

**Conclusion**

Preparedness is the key to successful site development. Proper planning and involvement by the community and key stakeholders are needed to assure a smooth process. All efforts should be based on a comprehensive community plan for economic development.

Communities need to think both in terms of what they offer to potential customers, businesses who would have a reason to locate in the community. This will be dictated by an assessment of the community and the potential site(s). All of this requires a complete understanding of current trends and business needs.

The communities who prepare the most to meet business needs will be the most successful at site development.

**Other Resources**

To help strengthen this module, the authors would like to include some additional resources. Some useful websites are included below. The exhibits referenced in the text are also included, as are links to three related fact-sheets from Ohio State University Extension.

**Ohio State University Extension Factsheets**

OSU Extension offers several economic and community development factsheets (see [http://www.ag.ohio-state.edu/~ohioline/lines/comun.html](http://www.ag.ohio-state.edu/~ohioline/lines/comun.html) for a complete listing). Some relevant ones are listed below. While these are focused on Ohio, they contain information that can be used by most communities.

- Characteristics of an industrial site ([http://www.ag.ohio-state.edu/~ohioline/cd-fact/1525.html](http://www.ag.ohio-state.edu/~ohioline/cd-fact/1525.html))
- Developing rural industrial parks ([http://www.ag.ohio-state.edu/~ohioline/cd-fact/1526.html](http://www.ag.ohio-state.edu/~ohioline/cd-fact/1526.html))
- Shell building development ([http://www.ag.ohio-state.edu/~ohioline/cd-fact/1553.html](http://www.ag.ohio-state.edu/~ohioline/cd-fact/1553.html))

**General Economic Development**

National professional organization for economic development practitioners. Has several publications, etc.
Southern Economic Development Council (http://www.sedc.org/)
Regional economic development group that also offers publications.

National Business Incubation Association (http://www.nbia.org/)
Organization for business incubators

The Council for Urban Economic Development (http://www.cued.org/)
Another American organization for practitioners of economic development. This one focuses on urban areas

Center for Community Economic Development (http://www.cfed.org/)
Economic development policy group that focuses on asset building. Offers publications and services.

General Demographic/Economic Information

U.S. Statistical Abstracts (http://www.census.gov/statab/www/)
General statistical information

U.S. Census Bureau (http://www.census.gov/)
Good starting point to find any socio-demographic data in the United States.

EXHIBIT A
COMMUNITY DATA

The following information should be gathered for both a local and regional profile. Each profile should be constructed separate from the other so a comparison can be accomplished. This comparison is extremely important because each community is or has the potential to be a regional center for particular categories in the profile. For example, a community may have 1000 residents with a college degree but when combined with neighboring communities there may be 3000 college graduates within twenty miles. Where possible, statewide averages should be included to serve as a measurement reference. For example, a community’s unemployment rate may be 4%. But what does that number suggest about the community? When compared to a statewide average of 7% the community may conclude that it has a more competitive labor market then the state as a whole.

ITEM

DEMOGRAPHICS:

SOURCE
Population statistics including:

- Gender, minority population, age distribution, births, and population growth/decline (U.S. Census)
- Residents commuting patterns to place of work (U.S. Census)
- Death rates by cause of death (State Department of Health)

**LABOR FORCE:**

- Unemployment rates in both percentage and number of persons (State Employment Office)
- Employment rates in both percentage and number of persons (State Employment Office)
- Wage rates by economic sector (State Employment Office)
- Wage rates by job classification, both management & labor (State Employment Office & Local Survey)
- Number of workers by economic sector (State Employment Office)
- Persons seeking employment by skill (State & Private Employment Agencies)
- Organized labor affiliates, number of members, & recent work stoppages (Local Employers & National Labor Relations Board)

**INFRASTRUCTURE:**

- Water system excess capacity & rates (Local Provider)
- Wastewater system excess capacity & rates (Local Provider)
- Natural gas supply & rates (Local Provider)
Electric capacity and rates  
Local Provider

Telecommunication capacities & rates  
(digital switching, fibre optics & route diversity)  
Local Provider

Miles, capacity, rate restrictions & location of four lane highways  
Local & State Engineering Office

Miles, capacity, rate restrictions & location of two lane highways  
Local & State Engineering Office

Capacity, runway length, tie down space of local airport  
Local Engineering Office

Rail carrier, category of rail rating, number of switches per day  
Rail Provider

EDUCATION:

Number of students by grade  
Local School

Proficiency Testing Results  
Local School

Students to Teacher Ratios  
Local School

Per pupil expenditures  
Local School

Availability of sophisticated learning equipment  
Local School

Number of graduates entering workforce, college, military  
Local School

College Testing Scores  
Local School

Listing of any workforce preparedness programs  
Local School

Presence of Business/Education Committees  
Local School

List of Private & Parochial schools  
Chamber of Commerce

Colleges and University access & programs  
Chamber of Commerce
Vocational & Technical School Programs

Condition of facilities for all types of schools listed above

BUSINESS BASE:

Number of firms by economic sector

Name of firms, number of employees and product produced

Business starts and deaths

Tax rate per economic sector

Business trends, local

List of available site in neighboring communities

LOCAL GOVERNMENT:

Services provided including fire & police protection

Services provided per tax dollar, including breakdown of funding by economic sector

Type of local government

Zoning and growth patterns

Proposed and current capital improvements

HOUSING:

Age of housing

Local Schools

Local School

State Employment Office & Local Chamber of Commerce

Chamber & Local development office

County, municipal, and state tax offices

Chamber of Commerce

Local development offices

Local government offices

Local government offices

Local government offices

Local government offices

U.S. Census & Realtors, Regional Planning Commission
Types of housing (i.e. single family, multi-family)  
U.S. Census & Realtors,  
Regional Planning  
Commission  

Price & availability of housing  
Realtors  

Proposed new developments  
Local government building  
departments  

Type and number of building permits issued  
Local government building  
departments  

COMMUNITY SERVICES:  

Recreational facilities  
Local government offices  

Childcare Centers  
Chamber of Commerce  

Service Groups  
Chamber of Commerce  

Religious Institutions  
Ministerial Association  

Cultural Opportunities  
Chamber of Commerce  

Lodging facilities including price & occupancy rate  
Chamber of Commerce &  
Convention/Visitors bureau  

HEALTH:  

Names of Hospitals and available beds  
Chamber of Commerce &  
Hospitals  

(including emergency services)  

List of doctors, dentists, optometrist by specialty  
Hospital Administrators  

Wellness programs serving community  
Local doctors, Health  
Department  

Presence of HMO’s, PPO’s  
Local Doctors  

Exhibit B
Local Performance Indicators
From Mullis (1998)

The following indicators are used by J. Michael Mullis in evaluating communities for potential business locations. Mullis operates a site location firm, specializing in finding sites for businesses around the world.

**Labor Force Availability**

Job applicant to available job: Preferred ratio is 6:1

**Labor Market Area**

Based on commuting patterns, as follows:
- Production workforce: 30 minutes/day
- Clerical workforce: 20 minutes/day
- Professional/technical workforce: 43 minutes/day

**Benefits**

U.S. employer’s benefits costs

<table>
<thead>
<tr>
<th></th>
<th>% of Payroll</th>
<th>Annual Avg. Cost Per Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>All industries</td>
<td>39.2%</td>
<td>$13,126</td>
</tr>
<tr>
<td>All manufacturing</td>
<td>38.8</td>
<td>14,317</td>
</tr>
<tr>
<td>All non-manufacturing</td>
<td>39.4</td>
<td>12,761</td>
</tr>
</tbody>
</table>

**Labor Relations History**

In the last five years unions won about 47% of all National Labor Relation Board elections in the U.S.

**Labor Dependability**

Monthly turnover rates of less than .5 % are excellent

Monthly casual absenteeism rates of two percent or less are excellent

**Quality and Productivity Levels**

Production and/or service efficiencies at 100% levels are desirable
Transportation

Airports: minimum 5,000 feet runway to accommodate corporate jets
Global Positioning System (GPS) is desirable

Utilities

Gas: About 42% of the energy used by U.S. industry is supplied by natural gas

Water: Quality of water is important. The ideal pH is 7, preferred hardness is 75 – 100 ppm, iron content maximum of .3ppm, temperature 50 – 70 degrees F preferred

Telecommunications

Average expenditure for communications per employee is $2,200 – 3,500

Governmental Services

Police protection: 2 – 3.5 officers per 1,000 residents is standard

Fire protection: 1.64 personnel per 1,000 residents is standard

Health Care Considerations

Hospitals: 4 beds per 1,000 population

Average hospital stay is 7.6 days at a cost of over $3,800

Physicians: 5 per 1,000 residents is average

References


