



Web Book of Regional Science

Regional Research Institute

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Community Preparedness for Site Development

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The Web Book of Regional Science

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Community Preparedness for Site Development

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INTRODUCTION

When most people think of economic development, they think of attracting an industry to their community. They think that somehow, a company chooses a community and finds a place to build an establishment. But 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 meeting the requirements of prospective businesses. The following story provides a useful illustration:

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 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 buy a pair of shoes. The sales clerk greets you kindly and offers assistance. You tell the clerk you're looking for a burgundy loafer with tassels, size 11, priced in the neighborhood 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 with 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: "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 out of the store.

The world is full of informed consumers. People know what they want before they 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 utility businesses are opening up to choices for the consumer. The change started with telephone providers and 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 understand the buyer's wants and desires.

This reality is of particular importance to an industrial or retail firm selecting a site. Firms complete a great deal of market analysis before searching for a suitable location. In addition, firms compile detailed information regarding the cost of product. They know whether electricity cost is more important than freight cost or labor price. Prepared with a list of "must haves" based on this information, the firm's site consultant or representative begins the quest for the firm's ideal location. You can be assured that, like the shopper looking for a pair of shoes, individuals seeking a site for their firms are 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 its 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 it selects or develops a particular site for promotion, the lower the likelihood becomes that local leaders will 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 run an ad 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 choose to locate on the site. More often, though, the community goes through years of frustration trying to build interest in the site. At more than one service organization meeting these same leaders must explain why no one is locating a business in the 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 that discourage any other firm from locating in the area.

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

This module's goal is to help communities prepare 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 instead to focus on the tremendous effort required to lead up to 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. Bessire (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 is a site?
2. Is there a need for site development?
3. Some of the trends and data affecting site development.
4. Business/Industrial parks and sites.
5. What are some goals and objectives of site development, especially from the business's perspective? What are the actual steps to site development, focusing on the steps leading up to the actual construction?

1 WHAT IS A SITE?

Most communities in the United States can claim to have sites available for business development. Under closer inspection, these sites are usually either undeveloped open spaces (often agricultural 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 currently (or were recently) utilized for agricultural purposes. Many do not have the infrastructure needed for business development. Infrastructure refers to physical improvements such as water, sewer, storm water, communication, and other utilities. These improvements are needed by most businesses, and they are usually among the criteria a potential business will consider in evaluating potential locations. Most sites will not be considered if they lack appropriate infrastructure (see *Greenfields* in Section 4).

Sites that have been previously used for industry or other activities are called brownfield sites. Most are in central city areas and are often surrounded by mixed land uses such as residential, commercial, or public (schools and hospitals, for example). Usually brownfield sites were occupied by industrial complexes. Since older industries used multistory facilities, these sites are often on small parcels of land. Modern factories are laid out horizontally (using one story) to facilitate assembly lines and flow of products. Older sites 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 such actions as bringing the structure up to current fire, building and disability codes as well as other standards). These factors add to the cost of using brownfield sites (see *Brownfields* in Section 4).

To minimize their costs and risks, businesses will usually locate on 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.

1.1 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 a business will consider locating there.

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 be in place by a site seeker. The community that is aware of and has already prepared to meet these requirements will place itself 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 the business's location conveniently. Businesses are, most often, looking for a site with 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, businesses will consider other crucial labor-force characteristics such as 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, backup systems. This is especially true for manufacturers, who may 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 their 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, they will want 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 not to 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. Gaining access to the site, especially by tractor-trailers in the case of manufacturing and large-scale retail, should not require going through residential 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 their land use to be acceptable.

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 should be noted, 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 I Environmental Assessment should be conducted by a qualified professional in order to identify any environmental conditions that warrant further study. This assessment 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. Floodplain maps must be obtained to ensure that the portion of the site that will be built upon is not on a floodplain.

A Phase I Archeological Survey may be undertaken to determine whether the site contains any areas or structures of historical or archeological 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 completed and reports made available to companies interested in the site. Identifying these site characteristics before making contact with a company will save time in the compliance process and avoid unanticipated delays and increased construction costs.

2 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 to be 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 and the residents' wishes, and that systematically develops feasible strategies. Site development can be a costly investment with no guarantees for a successful outcome. [Section 5](#) discusses a systematic planning program that communities can use for site development. Following these steps can save time, money and controversy for a community.

It is important to realize that prospective businesses are searching for a profitable location, not just a profitable site. They consider factors other than the physical site. These include labor, education levels and proximity to suppliers/buyers. The community that best matches the business's criteria AND has a prepared site has a distinct advantage over other communities. As we stress throughout this module, the site-development process should be viewed as meeting the prospective business's needs 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. In the United States, many 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 inconsistent 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 1980s cited in Eisinger (1988, 179) notes that in the United States, 59 percent of the land in industrial parks does not have a tenant. Hence, communities should survey surrounding communities to determine the capacity level of each park, the size of the park, its location, and other pertinent factors. The community can then begin to determine if there is an overcapacity of industrial space. If there is an overcapacity, 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, there 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.

3 TRENDS AFFECTING SITE DEVELOPMENT

This section will cover some basic trends in the general economy, with discussion of some specific industries. Its 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 toward searching for existing functional buildings versus bare sites. A community could use this trend to upgrade an existing building, develop a spec (speculation) building, or choose to develop a site without an existing building.

The choice is the community's, but having the necessary data can help a community make an educated decision.

3.1 General Trends in the Economy

There is much talk about the United States 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-collar jobs. The effect of these trends varies from region to region throughout the world. The following table, from Atkinson and Court (1998), who work 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.

Issue	Old Economy	New Economy
<i>Economy-Wide Characteristics</i>		
Markets	Stable	Dynamic
Scope of competition	National	Global
Organizational form	Hierarchical, bureaucratic	Networked
<i>Industry</i>		
Organization of production	Mass production	Flexible production
Key drivers of economic growth	Capital/labor	Innovation/knowledge
Key technology driver	Mechanization	Digitization
Source of competitive advantage	Lowering cost through economies of scale	Innovation, quality, time-to-market, and cost
Importance of research/innovation	Low-moderate	High
Relations with other firms	Go it alone	Alliances and collaboration
<i>Workforce</i>		
Policy goal	Full employment	Higher real wages and incomes
Skills	Job-specific skills	Broad skills and cross-training
Requisite education	A skill or degree	Lifelong learning
Labor-management relations	Adversarial	Collaborative
Nature of employment	Stable	Marked by risk and opportunity
<i>Government</i>		
Business-government relations	Impose requirements	Encourage growth opportunities
Regulations	Command and control	Market tools, flexibility
Source: Atkinson and Court (1998, 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

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 decisions have tended to speed up. Site-location decisions are also made faster than they used to be. Businesses have shortened not only the search but also the project construction schedule. Communities that have no control over land and that 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 jobs, 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:

- more capital intensive
- less labor intensive
- less unionized
- less dependent upon locating near natural resources

Service-related jobs have increased in numbers during the last 20 years. While many of these jobs are referred to as “burger flipping” jobs, many are not. Some of these jobs are high tech, but many are simply knowledge intensive or nonmanufacturing jobs. Some communities take advantage of this increase 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).

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 people in the United States are questioning the need for using incentives, or at least questioning what their scope should be. Communities should think through their policy on incentives before offering them to industry, and they should 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 from 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 do current and future workers have? In one community in Ohio, the local vocational school (which primarily serves high-school students) opened its doors to provide welding instruction to a new area business at 11:00 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 continue 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. Readers are encouraged to collect information on their own and deduce their own trends.

3.2 What a Business/Industry Seeks in a Site

There are two primary challenges facing community decision-makers in site development. The first is for decision-makers to understand the criteria that site-seeking companies consider necessary for a site to be acceptable so decision-makers can address these needs when developing their site or park. The second is to be aware what motivates a company in its search for a new location so that the community can work with it 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 guaranteed to meet the needs of all industries. Each industry and each company will have certain priorities that cause one site to be more acceptable than another. For instance, warehousing and distribution companies 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 a community makes the determination that industry/business attraction is a strategy worth pursuing, and once it establishes goals regarding the types of companies that would benefit the community, it must clearly understand how to best develop a relationship with site-seeking companies. The role of a community and its economic development professional becomes, simply put, to reduce the risks encountered by a company when it decides to locate (or expand) in a given location. Companies are looking for 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 its shareholders or owners. It generally takes from 6 to 10 years for a company to begin to show a return on its investment (ROI) and begin to show a positive income stream. Even an already profitable company that expands operations reduces or eliminates its 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. Tax inducements and loans would help reduce the company's cost of operations.

Workforce Risk: A company must be assured that it will be able to access sufficient labor with the skills and qualities needed by its particular business. It also must be confident that it will be able to attract and retain technically skilled employees and management, positions that are often subject 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 local services and infrastructure when they locate or expand in a community. They will need to know not only 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 products 90 to 120 days after 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 its 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. Third, oftentimes a primary customer will dictate when it expects product delivery. The community can help the company meet this timetable by having a site that is ready for construction, with all environmental questions addressed and 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 information on how this impacts 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 move to Westchester County after all, taking 550 jobs to the suburbs. “It

was a financial decision,” the company spokesperson explained. “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).

4 BUSINESS/INDUSTRIAL PARKS AND SITES

4.1 What are Industrial Parks and Sites?

Both business/industrial parks and sites 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”—it 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 it wants to be competitive in attracting business/industry to its sites.

Business/industrial parks and sites are tracts of land specifically set aside for the potential location of more than one business or manufacturing firm. Business and industrial 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 parks or sites 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 reach its economic development goals. Examples of potential community goals include:

- Creating more jobs and increasing local population
- Providing better jobs for people already in the community
- Replacing lost jobs
- Replacing lost sources of income
- Producing a greater variety of jobs and economic activity
- Building and diversifying the local economic base

Source: Industrial Parks: A Step by Step Guide (U.S. Department of Commerce 1989)

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 an 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, is known as a covenant. Covenants specify what a tenant can and cannot do in the park or on the site, including possibly the exclusion of certain types of businesses and not permitting certain types of structures to be constructed on the site. 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 they 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 have 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 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 whether the return on its investment is sufficient.

Both parks and sites can be privately or publicly owned or controlled. Collaborative agreements among private and public entities, in which 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 and 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. In the latter case, 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 business/industry 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 for businesses to look for communities having parks or sites with more stringent performance standards, which are the guidelines to which the residents of the site are expected to adhere. Higher standards help 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 service 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 parklike. 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 property's marketability. 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, as mentioned above, 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.

4.2 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 of 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. 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 sites are vacant and, other than necessary site preparation and grading, are ready for construction, reducing the time needed until the company can be in operation. Greenfield sites provide flexibility, allowing a business either to be the sole tenant should it 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
- The potential compromising of environmentally sensitive areas such as wetlands or floodplains

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 they are most often an urban phenomenon, 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 business/industry 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. 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 (cleanup), the remediation process to be followed, and the extent to which cleanup is required.

If the site and buildings are contaminated, nearby ground or surface water may be affected. An environmental assessment will need to be conducted to determine the required cleanup 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 development of the property becomes financially infeasible. The extent of the contamination and resulting expense of cleanup 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. In the United States, these programs 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, the property owner still must meet the requirements of the Federal EPA, and while the release of liability guarantees that the owner 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 brownfield site reuse. Some cities are testing pilot brownfield programs in which 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 taken place because inner city sites often do not offer adequate access to interstate highways for tractor-trailer 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.

4.3 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 back-office operations, corporate headquarters, and research and development facilities; industrial sites accommodate manufacturing and warehousing and distribution; and retail sites include outlet malls. Each of these end users has its own priorities and standards for site characteristics and amenities above the “must have” basics identified above.

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 are perceived as low pay, low skill, and not bringing much benefit into the community. The 1990s has witnessed a reevaluation of service-sector employment in the recognition that it includes such high-paying and growing business sectors as the medical and insurance fields, providing good jobs plus a countercyclical balance to manufacturing sector swings. Now many communities have based their economic development goals on 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, 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 structures, 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 whether 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 criteria such as community receptivity and incentives for economic development are also included in 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 a call center needs and the characteristics it desires. 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 that 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 are 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 sell a site.

Back offices are facilities that provide supportive services for a company's main administrative and management functions. They are usually 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. Citibank, for example, 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, and absence of state and corporate taxes, and it was located in the Pacific Time Zone. What finally paved the way for the Citibank development was legislation pushed by the governor of Nevada to change the usury rate. Citibank started with a 500-employee facility, and it grew to a 24-hour operation employing 1,900 people by 1997.

Very similar site and community requirements exist for back-office operations and call centers. Both call centers and back offices rely heavily on telephone and telecommunications networks in order to conduct business. Communities that 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 is reliable, and that there are sufficient back-up systems in place for the network to avoid 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 have available buildings that will meet those companies' needs.

Call-center and back-office attractions have been used by some rural areas 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 Virginia provides an example of such an area. There, the coal industry had provided high-paying jobs for generations of residents. But after the steady decline of the mines that began in the 1980s, 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 spur investment in a superior telecommunications infrastructure that rivals those 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 is the increasing mechanization of farm production, resulting in fewer jobs in agriculture. The second trend is the need for off-farm income opportunities so that farm families can 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 that employs over 4,000 Iowans in 30 offices 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 APAC's spoke operations are typically located in vacant downtown retail space where APAC's telecommunications needs can be met. The presense of spoke operations helps 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 a 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. Larger cities can benefit when relocations take place by making themselves aware of a company's reasons and criteria for relocation. The decision where to locate is one of the most strategic a company will make, impacting directly on its ability to be successful in the global marketplace. The most common reason given by companies for relocating 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 locations 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 provide a more strategic location for a company's operations as well as offering lower costs of doing business.

Important site/park criteria include access 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 attracting and retaining 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.

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 real-estate purchase costs and office-space rental costs fare better in the corporate relocation arena. Real-estate costs in the United States are generally a bargain compared with those of international cities.

Access to airports with excellent domestic and international connections is necessary to save time and cost to transport employees 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, law firms 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, day care, 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 is four times faster than analog modems), videoconferencing, and network integration are assumed.

High-Tech and Science Parks: High-tech and science parks are specialized parks that cater to businesses and enterprises involved in research and discovery. Many of these activities are traditionally centered near research universities and typically require large capital investments. Research parks are closely related to high-tech and science parks. According to Zimmerman (1995, 74):

Science parks ... 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-1900s. They have spread throughout the United States and the world, now numbering over 400 worldwide with some 150 in the United States (Giunta 1998, 5). Many of these parks have taken decades to fully develop.

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

Industrial Parks and Sites

In general, industrial sites and parks are those 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, 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-to-three hour truck haul from the main plant.

The type of industry and how it chooses to move its 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 transportation, and it is 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 that produce smaller, highly value-added products, will seek excellent highway access and proximity to airports for air cargo transport services.

Retail Sites

Many communities are interested in commercial sites. These can be sites for individual users, like mass merchandisers (i.e. Wal-Mart) 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. If communities have the right location and amenities, they should consider the potential benefit of commercial development.

5 DEVELOPMENT OF GOALS FOR PARKS/SITES

It is imperative for a community to develop clear goals and objectives for industry/business parks and sites before it begins planning and implementation. To fail to come to agreement on expectations and desired outcomes of its 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 park/site 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 to expand the number 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 reach its 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 the community is 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 it 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; it led "Between 1979 and 1985 [to] ... a shift from 12 to 25% nonresidential 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, 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 system.

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. The Village's strategic location on Interstate 71 halfway between, and an hours drive to, the major population centers of Columbus and Cincinnati set the stage. The community then enhanced the attraction 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, and supportive of travel and tourism efforts. There are as many different alternatives as there are communities and their goals.

It is important for each community to develop its own economic development strategies based on an honest analysis of its situation. If site development is deemed necessary, a community should begin the process of site development.

5.1 Developing a Site

The following process and criteria provide general guidelines to assist community officials and leaders in evaluating the ability of their communities 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 I 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.

5.2 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 its own but also operational demands unique to each category. For example, the location factors for a retail outlet center are different from those for an industrial manufacturing firm. An outlet center will seek sites near major population centers within a region to increase the number of 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, outlet retail centers will seek locations adjacent to interstate highways. Industrial firms are also interested in interstate highway use but do not need to be adjacent to the interstate. Usually they will be content within a ten-mile radius of the interstate. In addition, industrial firms do 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 that same rural community is able to compete for an outlet retail center, but it may be many years before a four-lane highway is constructed near the community and even more before it is near a major population center. By the time all that happens the owner of the development site will have lost interest and given up on the idea. It is not in the best interest of a community to try and re-create 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 its economic uniqueness a community needs to begin by getting to know itself. Individual members of a community assume they know the community, but their awareness is usually tempered by their daily experiences and the awareness of limited community data necessary related to 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. Each community has a great deal of current data and public opinion the community needs to acknowledge to begin the process of site development. Each community will also need to seek additional information through new inquiries such as surveys and focus-group sessions. The list contained in Exhibit B (see Other Sources at the end of this module) is suggested as a minimum database for assessing a community's economic personality.

The gathering, dissemination, review, and discussion of 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. A community may not like what the information says about our community, but neutral site-selection representatives will use this same information to determine the appropriateness of a community for their projects. 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 and finding access to information will be enhanced by including various partners in the review process.

Putting Together a Task Force: Who Should be Involved?

For many communities a quick and simple solution to determining who should be involved in assessing, planning and creating a development site is turning to the people who are going to cover the costs. Often communities retain a professional development organization to bring to community officials a plan for site development. When communities do this, community officials see their role as ensuring that 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. Sometimes, like our example indicates, individuals interested in creating a development site (Site Initiators) 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. Regardless of who the initiators are, a development strategy must involve the various organizations needed to make a long-term project successful because the community's decision will affect not only the community in general, but also each independent organization's 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 is not seeking a site within a community where it will only operate for a year or two. It is not unrealistic to imagine that firms locating on a 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 through engineering the site and developing a marketing strategy. Numerous other actors need to participate in each stage of the process on a short-term basis dependent upon their particular expertise. 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, making the final decisions necessary to move the project forward, and finally, physically completing 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 makeup of any community's task force will be unique. As a start, however, the following organizations should be represented:

- An elected official from the affected political jurisdictions where the proposed site will be located
- The local economic development office
- Representatives from area utility companies actively promoting sites
- The local engineer (may be county, municipality or contracted firm)
- Planning organizations with jurisdiction over the project
- Local business organization such as chamber of commerce
- Local employment agency (may be public or private)
- Representatives from affected neighborhood groups

There will also be 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, it will be involved for short periods in the process. A case in point may be a municipal water department that 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 is based on the belief 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. Including people and organizations at the beginning of the process will help them recognize more quickly that they are involved in the design of the project. This early recognition should lead to an easier acceptance of the process. A collaborative technique involves gathering information, listening for reactions, seeking alternatives and performing evaluations so the task force can 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, individual task-force members take these ideas to the organizations and groups they represent and other groups or individuals whose acceptance of the project is needed. Each task force member gathers reactions and 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 individuals 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. 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 the issue that going to so many individuals and groups throughout the development of a site will lengthen the time it takes to 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. A collaborative technique takes more time in the planning phase 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 whose approval is required for adoption of the plan. Take, for example, a development corporation that purchases a piece of land as an industrial site recognizing that there is the need to obtain a zoning change. This corporation has spoken with the local development and zoning offices, plus a few municipal council members, and it 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 that the community does not have enough excess water capacity to meet the project's 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 had included the water department and adjacent landowners in the planning phase of this project. Including all affected parties in the design of this site development from the beginning would have increased the potential for ownership of the project. Even if the development corporation solves the water issue, it still has lengthened the time required to reach the 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 instead of solution-focused.

Setting Goals and Objectives: The Task Force at Work

“What this community needs is more industry so people have money to spend with the downtown merchants,” says the owner of the local hardware store. “People are tired of driving to Center City to get new appliances,” says the town mayor. “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. “Someone needs to open a recreation center for the youth of this community.” “I agree,” says the Parent 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 be the scenario at a the first task-force meeting on site development.

Each of these people is 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 their 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 depend on the other. Where does a community begin, particularly a community with limited resources that cannot afford to place these resources in an unsuccessful project? Solving such dilemmas is the reason for gathering information about a community and establishing a representative task force and inclusionary planning process.

As the community works towards setting goals and objects it 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 community wants to make sure it 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 that 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 its 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 to 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. Communities may well need to make incremental changes that lead to long-range goals and objects. Increasing the potential for success of a site-development project, regardless of the type of 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: It must discuss and set goals. The words “goal” and “objective” get confusing because people usually use the two interchangeably. A goal is simply the end to which an effort is directed. In our example, a goal would be to provide jobs for high-school graduates. Another goal would be to increase property-tax revenues. A third goal may be to create jobs that provide full-time employment with health benefits.

Once a task force has all its goals established, it can set an objective. The objective is what it will do to achieve its goal(s). If it uses the three goals listed above, the task force may determine that an industrial park targeted toward warehousing operations is the objective.

Let’s continue this discussion by walking through the steps of the community feasibility assessment as outlined thus far. The process begins with a few individuals wanting to create some type of development site for economic enhancement of the community. These individuals establish a development task force. This task force begins 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 its present economic contribution to the area. Let us imagine a community with the following characteristics based on its economic personality profile:

- Seventy-five percent of high-school graduates do not go on to any post-secondary education
- 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 areas of expertise
- The area wage/benefit cost within the manufacturing sector is 90 percent of the state average
- The community is served by freight haulers, which are operating at 82 percent of capacity
- Housing cost in the community is 26 percent below the average statewide cost of a home
- The community has four-lane access within 10 miles of the national interstate system
- Both the water and wastewater systems can increase their daily operations by 42 percent
- 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
- 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:

- Provide employment opportunities for the graduates of plastic molding training

- Support the efforts of the local technical training institution by establishing working partnerships with area employers
- Provide property-tax relief to the retail and agricultural sectors
- Increase wage level within the community

Now the decision remains to set an objective using 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, 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 the decision makers' acceptance of the goals will be the long-term understanding of what the community is trying to accomplish by this industrial site project. This understanding will most likely mean a continued commitment by the community to the industrial site project, which will certainly impress firms that may want to locate on the site.

FEASIBILITY STUDY STEPS	
Action	Purpose
Initiators	Present opportunity
Create task force	Manage feasibility study process
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 whether there are potential sites available for development. In 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 that conflicts with other goals and objectives held by supporters might also lessen their commitment to the effort. For example, if a large tract of productive farmland 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 his or her support for maintaining the agricultural sector of the local economy and 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 the particular firm, it needs 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:

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?

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 floodplain? Is there some slope to allow for surface drainage of water? What is the soil makeup of the location? Are there sufficient soils to allow for compaction, or will the developer need to haul and replace topsoil?

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 needs because doing so allows for future expansions as well as creating a well-landscaped site.

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

Utilities: Are utilities such as water, wastewater, electricity and natural gas available 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?

Ownership: Who owns the location? Is the owner willing to sell, and if so can an option be obtained in order to set the price per acre? Is the price within a fair market value for the particular proposed usage? If the location is being used for agricultural purposes, who pays damages to crops?

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

These seven factors 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.

5.3 Site Engineering Study

By this point the development task force (working in concert with the community leaders and residents) has decided the appropriate type(s) of site for the community and narrowed the potential locations to a few attractive alternatives. The resources necessary to move the project ahead have 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 comes the time to expend some funds for consulting assistance. Engineering assistance is needed to determine the best site and to prepare information that a potential firm will need to decide the appropriateness of the site for its 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. These alternatives may not have been thought out by those who daily operate local facilities. For example, the local water department staff, while it may do 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 that do not have deficiencies that need to be 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-1980s, the site attracted the attention of 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 rectangular, with level topography of sizeable acreage. The community had not invested any funds in completing engineering studies but was 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 that had included its 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 narrowed down the options of sites that would fit the needs of the manufacturing firm. Unlike land used for growing crops, a manufacturer has heavy equipment that requires a solid foundation, such as clay. Though 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 a 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 being 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 as the other location, except that it was located out of the corporate limits. In addition, the soil borings revealed 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 in the first place by doing the technical work necessary to select the community's best location. A community's level of preparation will make a large statement about its 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 the selection of 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. Through the review of existing information, the consultant's regional expertise can be beneficial to the task force. Zoning regulations provide a case in point. 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 suggest 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.

Zoning: A quick review of zoning maps and regulations to make sure that the location is properly zoned for intended use. Consultants should also review adjacent property zoning classifications to identify any potential conflict with existing or future usage.

Road Considerations: The consultant should review access to major highways and secondary streets, internal and external circulation patterns, improvements needed to the road directly serving the site. The consultant should suggest appropriate entrance layout to the site (Waterhouse 1996, 114).

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 1996, 114).

Topography: A review of vegetation at the site should be included. Drainage patterns, storm water management, and soil-boring tests should be completed.

Environmental Issues: The site should be studied for wetland characteristics, hydrogeology reports, floodplain 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.

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, and electric and natural gas service. A review should be prepared including 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

The completion of the consultant review should provide information to help the development task force and community determine the best location or locations for meeting their objective of creating a development site. By completing the review, the development office will also have detailed reports and information that potential tenants of the site will need to make their location decisions. At this point of the site-development process the community should have invested financial resources only into the cost of consultant fees, engineering studies, and report creation. No investments should be made in actual improvements to the site until a market study is completed.

5.4 Marketing Approach

Congratulations to those of you who have gotten this far in the site-development process. Most communities leave the process long before they reach this point because they begin the process thinking all they need is a piece of land and a willing seller. 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 that the prospect is looking at them until the last instant. Such was the case in a community that located two major outlet centers a few years ago. Local leaders found out that 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 hadn't been for the marketing plan of the community, the project never would have gotten off the ground.

You may have thought marketing was about promotion. How can a community take credit for a marketing effort when it was the prospect that found it? Isn't marketing about finding prospects through advertising and direct contact? Could be, but those things take place at the end 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 pieces of this definition that can be applied to the practice of community economic development. The most important piece is “what people will fund.” This is the age of instant information packaged in all kinds of ways. Those seeking information will usually find more than they could have imagined when they began their search. This means that consumers are extremely aware of their needs. A retail business, an industrial firm or a commercial enterprise does not need a community telling it what it takes to succeed. What these enterprises need is a community that understands their needs and can do something to meet them.

This leads to the second piece of Blackwell’s definition: “change.” A community must be able to change its site to fit the needs of the firm. If a community wants to successfully fill a development site with a firm, it first must determine what the firm needs and how the site can be arranged to fit that need. So how 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 money on site improvements. The 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, begins 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 in which residents and leaders will support change to meet development goals. The final section of information gathered by the engineering study leads to the selection of a site that has the greatest potential to meet the desired prospect’s needs. Now the community needs to put all this information together and fine-tune its target market.

Let’s continue the example we began in the *goals and objectives* portion of [section 5.2](#). In that section, the fictional community we were discussing targeted an industrial site because it had a high percentage of youth graduating into the workforce and a highly skilled plastics molding operator training program. Now let’s suppose that the community learns from the engineering study that the site lacks 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 a storage tank, investing in one would be a great 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. According to Blackwell’s marketing definition, the community would be demonstrating it is serious about changing to be what its customer needs.

Poor marketing in this example would be for this community to set restrictive covenants at its industrial site to attract high-tech industry, which needs a large supply of college graduates in the sciences. The survey of the community indicated that there were few college graduates in the community and few high-school graduates going on to secondary education. Someday those numbers may change, but a good marketing practice is to work toward such a change incrementally by attracting a plastic manufacturer that will raise the wage level of the community by employing recent technical-school graduates.

The first step, then, to a sound marketing approach is to 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 the development of a marketing approach, the community needs to recognize the reasons it is interested in its 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 of life to their 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. Our example community can make its job-creation statement specific by saying it wants jobs for technical-school graduates and support for the technical training institution. This would make 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 saying it wants to increase its tax base, this community could say it wants to provide tax relief for the retail and agricultural sectors of the local economy. By doing so, the community would show its commitment to a balanced, supportive community vitality. And instead of vaguely defining quality of life advancement, our example community could say it 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.

Now the community can begin the promotional portion of marketing. A final question the community must address is, "who is responsible for promoting this community?" If the community thinks that the answer is the chamber of commerce executive or the economic development office, it has only identified the tip of the iceberg. What is really needed is 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 after several years? Everyone knows that the development office is staffed by individuals paid to promote the virtues of the community. What the prospects want to learn is what other businesses and administrators of support programs have to say about the virtues and commitment level of the community.

Before we discuss the makeup of a team, we need to stress the importance of the lead person. The lead person is the contact for information about the community. Nearly all firms want to be confidential about their location process. A key element to building a marketing team is having one person to whom a company can present the technical information necessary for the contact to know during the initial stages of the site-selection process. The firms want someone who will respect confidentiality, even when talking to elected officials, and who can respond quickly to the firms' requests 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 represent the prospect as it tries to obtain the information and commitment needed to successfully operate locally. Simply put, the community's lead person is 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 in bringing the firm into the community. They will also be asked to facilitate 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 Expert: 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 Expert: 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 of future local employees. Included in this role may be questions regarding health services.

Engineering Expert: 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).

A development task force that has included the marketing team from the beginning of the feasibility study will have team members who understand the level of the community's commitment to development. Throughout the entire selection process firms will be evaluating the community's ability to foster a lasting partnership. 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. Firms may also want to visit some of the facilities where services are provided. The team needs to be in place as part of the community marketing effort, and the team should be involved 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. The group is made up of people who usually are not formal members of the team but are often the first contact the prospective firm has with the 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, for example, the water needs of existing firms are not being satisfied by the community, how can a new firm expect to be treated any differently?

The three big steps toward developing a marketing plan are:

- 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 begin what every organization assumes is the role of marketing: Promotion; in this case, of 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 making personal visits. All of these methods are appropriate, but they require a substantial promotional budget, and often a development staff. A more effective first step may be to foster relationships with organizations and individuals that promote development sites as a full-time business. Applying Blackwell's definition of marketing, we argue that the role of the local development effort is to help business location firms succeed in finding a site for their clients. Organizations involved in business location do not own sites but instead try to locate the ideal place for their clients. 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 in-state. These offices are competing with neighboring regions to attract firms to their geographical areas. A community that has a strong development effort can help a state or regional office meet its 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 contract with such consultants, who find a location for the business and then discontinue involvement in the site-selection process.

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

Rather than undertaking major promotional campaigns of their own, communities may want to partner in promotional efforts with the organizations listed above. Such partnerships may lead to major financial savings for the local development effort, and they may provide communities with resources that are 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 basis. These professionals obviously have the trust and confidence of decision-makers within the corporation they are providing services. Keeping these professionals apprised 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 prospect's needs will foster and encourage the continuation of strong partnerships for site marketing.

MARKETING REQUIRES	
Focus	Approach
Targeted market	1. Match community capacities 2. Address community deficiencies
Goal setting	Clearly articulated to residents
Leadership	Establishment of marketing team
Pro-business attitude	Care of existing businesses
Promotion	Building partnerships

5.5 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 that 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 efforts 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:

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. A theme throughout this section has been that communities should seek to develop partnerships that share the risk and reward. The owner of a site benefits by having someone who has developed a strong marketing approach representing the site.

Planning and Design Fees: The major costs 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, so they require funding at the time of performance.

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

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, 115) for funding the site development include:

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

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.

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.

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.

Utility Companies: Some utility companies will provide planning funds to communities developing sites within their service areas. Based on the size of the services provided to a firm locating on a site, utility companies may also finance improvements to the community's 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 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 ensure a smooth process. All efforts should be based on a comprehensive community plan for economic development.

Communities need to think in terms of what they offer to potential customers, businesses who would have a reason to locate in the community. What they offer will be dictated by an assessment of the community and the potential site(s). A good assessment 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.

EXHIBIT A

COMMUNITY DATA

The following information should be gathered for both local and regional profiles. Each profile should be constructed separate from the others so a comparison can be made between the two. This comparison is extremely important because each community is or has the potential to be a regional center for particular categories in the profiles. For example, a community may have 1000 residents with college degrees, but that community combined with neighboring communities may only have 3000 college graduates. 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? If the statewide average is 7%, the community may conclude that it has a more competitive labor market then the state as a whole.

ITEM	SOURCE
DEMOGRAPHICS:	
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
Temporary Labor Agency information	Chamber of commerce
Job-training programs	Educational institutions & state development offices
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, fiber 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

ITEM	SOURCE
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	Local schools
Condition of facilities for all types of schools listed above	Local school
BUSINESS BASE:	
Number of firms by economic sector	State employment office & local chamber of commerce
Names of firms, number of employees and product produced	Chamber & Local development office
Business starts and deaths	
Tax rate per economic sector	County, municipal, and state tax offices
Business trends, local	Chamber of commerce
List of available site in neighboring communities	Local development offices
LOCAL GOVERNMENT:	
Services provided including fire & police protection	Local government offices
Services provided per tax dollar, including breakdown of funding	Local government offices
by economic sector	
Type of local government	Local government offices
Zoning and growth patterns	Local government offices
Proposed and current capital improvements	Local government offices
HOUSING:	
Age of housing	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
Child-care 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 (including emergency services)	Chamber of commerce & hospitals
List of doctors, dentists, optometrists by specialty	Hospital administrators
Wellness programs serving community	Local doctors, health department
Presence of HMOs, PPOs	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

	% of Payroll	Annual Avg. Cost Per Employee
All industries	39.2	\$13,126
All manufacturing	38.8	\$14,317
All nonmanufacturing	39.4	\$12,761

Labor Relations History

In the last five years, unions won about 47% of all National Labor Relation Board elections in the United States

Labor Dependability

Monthly turnover rates of less than .5 % are excellent.

Monthly casual absenteeism rates of 2% 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

- Atkinson, R.D. & Court, R.H. 1998. *The New Economy Index: Understanding America's Economic Transformation*. Washington, D.C.: Progressive Policy Institute.
- Bessire, H. D. 1981. *A Handbook for the Eighties: Industrial Development*. El Paso, Texas: Hill Printing Company.
- Bastian, L.A. 1997. "Back Offices and Small Towns: Symbiosis at its Best." *Area Development* 32 (6), 28-44.
- Bielen, M. 1998. "Brownfields & Greenfields." *News Waves* 1 (Fall): 1-2.
- Eisinger, P.K. 1988. *The Rise of the Entrepreneurial State: State and Local Economic Development Policy in the United States*. Madison, Wisc.: The University of Wisconsin Press.
- Giunta, F. J. 1998. "Research Parks at Age 50." *Economic Development Commentary* 22 (3): 5-10.
- King, K.B. 1996. "Calling Overboard." *Plants, Sites & Parks* 23 (5): 147-155.
- Kotler, P., Haider, D.H., and Rein, I. 1993. *Marketing Places: Attracting Investment, Industry, and Tourism to Cities, States, and Nation*. New York: The Free Press.
- Mooney, J.M. 1997. Public and Private Partnerships. Paper presented at the Mid-American Economic Development Council Annual Conference, Wisconsin.
- Mullis, J.M. 1998. Community Marketing Plan – Its Development and Importance. Paper presented at the Ohio Economic Development Course, Columbus, Ohio.
- Tangeman, M. 1995. "European Telecom Choices: You Make the Call." *Expansion Management* 10 (1), 27-30.
- United States Department of Commerce. 1989. *Industrial Parks: A Step by Step Guide*.
- Waterhouse, M.D. 1996. "Principles of the Real Property Development Process." In *Practicing Economic Development* ed. R.L. Koepke, 113-116. Chicago: American Economic Development Council.
- "Urban Locations." 1994. *Business Facilities* 27 (9): 40-43.
- "The Workforce." 1996. *Business Facilities* 29 (11): 32.
- Zimmerman, G. 1995. "High Tech Campus for Business." *Expansion Management* 10 (6): 74.