I. Introduction

The purpose of this review is to provide a brief summary of issues surrounding the public provision of a business park in a community. The analysis will focus on the characteristics of successful business parks, a brief summary of firm location characteristics, and a discussion of the rationale for public provision (or partial provision) of a community business park. This review is not meant to answer the question as to whether a business park should be developed, but simply to raise the awareness of some of the issues.

II. Development of industrial park - A brief history.

The industrial park concept dates back to the turn of the century Chicago, where "planned industrial districts" were state of the art, (Peddle, 1993). These districts were privately developed and built around the railroad. Districts first emerged in Chicago and Kansas City. Government became as a player in the mid-forties, converting wartime facilities for industrial development. Industrial parks did not become a common part of economic development in the United States
until the mid-sixties, and after the conversion of transportation system to an automobile / truck transport orientation.

Present day manifestations of business parks include traditional forms but have expanded to include research parks and eco-industrial parks. Lugar and Goldstein, in an important book on industrial parks, Technology in the Garden, defines the research park as,

"entities that sell or lease spatially contiguous land and/or buildings to businesses.. whose principle activities are basic or applied research or the development of new products... It also excludes industrial parks, which manufacturing is the primary focus, and office pars, where administration or sales are the main focus."

Eco-industrial parks are an experimental notion developed by the Presidents Council for Sustainable Development, that tries to plan parks based upon a material balance approach, Friend (1995). The objective is to develop a closed production system where waste products of each firm are used by other firms in the park. The concept is still in its infancy and has many difficulties to overcome, CFE (1996).

Modern day business parks focus on building and enhancing what Venable (1990) calls park amenities as well as external attractions such as University links. Venable defines park amenities as ranging from well landscaped parks to collective conference centers, eating establishments, tenant guest accommodations, to child care facilities.

II. Firm reasons for locating in business parks, theory, evidence, incidence.

Location decisions by firms has been an extensively studied phenomenon and I will not summarize this body of literature, except some of the analysis that has direct relevance to business park development. For a complete summary see Shaffer (1989), Beckmann and Thisse (1986), and Stahl (1987). Traditional approaches to firm location decisions has been to focus on factors in the cost of doing business: Low wages, quality workers, proximity to necessary resources, available infrastructure, tax advantages, etc. The existence of those characteristics may be there inherently or as a result of agglomerations, or public policy. For example, firms may locate near Universities to take advantage of the quality labor force. The University creates a high quality labor force generates agglomeration economies that manufacturing firms can take
advantage of. The existence of a research University plays a major factor in the success of nonmetro research parks, (Lugar and Goldstein, 1994).

Another factor in the location decision are quality of life considerations. Recent work by several researchers indicate that quality of life is a major factor in a firms' location decision. A high quality of life gives firm managers a broader and personal reason for staying in a community and helps them retain high quality workers. One study on rural high technology manufacturing firms underscored the importance of quality of life, Barkley, et al (1990). Over 80 percent of the firms surveyed by Barkley, et al indicated the existence of amenities as a very important factor in their decision to locate or remain in a community, Figure 1. Amenities out ranked all other business related factors, Table 1.

**Figure 1.** Relative Importance of Community Characteristics.

![Graph showing relative importance of community characteristics](image)

Table 1. Ranking of Community Characteristics by Product and Ownership Type.

<table>
<thead>
<tr>
<th></th>
<th>All firms</th>
<th>Resource</th>
<th>Health</th>
<th>Electronics</th>
<th>Local</th>
<th>Nonlocal</th>
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<tr>
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<td>1.9</td>
<td>2.1</td>
<td>2.9</td>
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<td>2</td>
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<td>1.3</td>
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<td>1.7</td>
<td>2.3</td>
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<tr>
<td>Metro Areas</td>
<td>2.5</td>
<td>2.4</td>
<td>2.3</td>
<td>2.7</td>
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<td>3</td>
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<td>Interstate Highways</td>
<td>2.7</td>
<td>3</td>
<td>2.6</td>
<td>2.8</td>
<td>2.7</td>
<td>2.8</td>
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<tr>
<td>Skilled Labor</td>
<td>3.2</td>
<td>2.8</td>
<td>2.9</td>
<td>3.4</td>
<td>3.1</td>
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<td>Unskilled Labor</td>
<td>2.6</td>
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<td>2.5</td>
<td>2.8</td>
<td>2.1</td>
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<td>Services</td>
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<td>University Present</td>
<td>3</td>
<td>2.3</td>
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<tr>
<td>Commercial Sites</td>
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<td>2.9</td>
<td>3.4</td>
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<td>3.2</td>
<td>3.4</td>
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<tr>
<td>Amenities</td>
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<td>4.5</td>
<td>4.8</td>
<td>4.7</td>
<td>4.7</td>
<td>4.6</td>
</tr>
<tr>
<td>Telecom. &amp; Transp.</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3.9</td>
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III. Regional Economic role of Business Parks

The regional development role of business parks can be characterized in two similar types of regional development theories: A "growth pole" or an "entrepreneurial seedbed", Peddle (1993). As a growth pole it takes advantage external economies that exist in the region such as transportation, qualified labor pool, or technological spillovers. As the number of firms with similar needs increases, it facilitates the continued development of a qualified labor force, and other external spillovers.

As a seedbed it fosters the growth of entrepreneurs in the region. But as the population of entrepreneurs turns over with some going out of business (as is often the case), the business park houses new start-ups or migrants. Business parks are often located with business incubators, where firms that leave the incubator can easily move into another complex.
IV. Factors in a successful Business Parks

Factors that have been identified as contributing to a successful business park can be divided into two types: Locational, and Management. Locational advantages are characteristics external to the firm that attracts the firm to the area. Management characteristics are certain policies that have proven successful in attracting and keeping firms. Successful business parks require a mixture of both. Riesdorph (1991) identified four misconceptions about business parks:

< Automatically market the community
< Improve with Age
< Accommodate all prospective businesses
< Are the only solution for economic development.

The first, that a business park automatically markets the community is extremely important. If the business park investments take away from larger community investments in infrastructure, thereby lowering the attractiveness of the community, maintaining an entrepreneurial base will be difficult, Venable (1994). A Summary of locational and managerial characteristics by researchers are presented in Table 2.

V. Business Parks as a Rural Development Tool

Business / research parks can be viewed as a potentially good rural development tool, Riesdorph (1991), Goldstein and Lugar (1994). However, the tool is not without risks. Peddle (1993) cites evidence that 59 percent of industrial park space is vacant, nationally. Venable (1990) argued that the industrial park market was a tenant's market and more recent articles in Site Selection Magazine still characterize the market the same way. The business park does not market the community, the community has to market the business park. It means the management has to be aggressive in marketing the park. It also means that design and planning must provide the park with amenities that attract and retain firms. Finally, it also means that the quality of life in the community has to be sustained and developed so management has a broader community asset to market.
Table 2. Identified Characteristics of Successful Business Parks

**Managerial Characteristics:**

2. Park amenities, e.g:
   - Conference / meeting centers
   - Eating places
   - recreational facilities
   - day care
3. Good marketing plan

**Locational Characteristics:**

1. If it is a research park, then proximity to a research University. Goldstein and Lugar (1994).
2. A sufficient pool of entrepreneurs in existence or to be developed. Peddle (1993)
3. Well supported community infrastructure. Goldstein and Lugar (1994);

VI. Governments' Role in Business Parks

The above gives a brief summary of firms' location decisions and the role a business park can play in those decisions. It also provides an explanation for the role a business park plays in regional development. I also summarize important factors that make business parks successful. Government's role in business parks is not reported in the literature to the extent that other aspects of business park development have been, but nonetheless play a role. Most business parks are privately financed ventures. A recent survey reported in Site Selection Magazine reported 80 percent of business parks
as being privately owned. Fly-in parks (parks with their own air transportation facilities) are 70 percent government owned, (Venable, 1991). Even so a significant number of them are publicly owned. The extent of private ownership, however, may belie a larger level of government involvement because there is no knowing how many of the thes parks may have gotten subsidies and grants to develop the facilities. Furthermore, the reported results were on all business parks, and did not distinguish between office parks, mixed development parks, traditional industrial parks, and research parks. Research parks very often have as a stated goal to provide jobs for nearby research universities (Lugar and Goldstien, 1994), which would suggest government backing, if not government ownership.

Rationale for Government Involvement

Government intervention into markets occurs for two reasons: perceived market failures and barriers to entry, and society's redistribution of wealth objectives. Since the latter is clearly not an issue in business park development, the former is what concerns the policy objectives. Government's development or support of business parks can be considered a capital subsidy that helps newly established firms direct more of their assets into product development and market penetration, rather than being used for land acquisition and buildings. From a market failure perspective, for some reason private industry is not responding to a "pent-up" demand. Firms are willing to locate and build facilities at the going price, but are not able to.

Capital subsidies have been characterized in the literature as a "lubrication argument" or "catalytic argument", (Shaffer, 1989.) A "Lubrication argument" contends that to speed eventual free market adjustments by reducing historical and institutional barriers, by reducing risk to the entrepreneur, by compensating for the lack of agglomeration economies (transportation facilities, skilled labor pool, etc.), and by neutralizing resource misallocation caused by immobile labor, minimum wage, or other factors. The Catalytic argument contends that incentives stimulate the development of specific skills in the labor force or stimulate investment in critical businesses or services that are precursors to other development efforts.

What is implicit in both these arguments though is that a market failure exits. If so it may make sense for public intervention. If the reason for a lack of facilities is simply because the return
to developers does not justify an investment, the market is responding well, and public intervention will create market distortions rather than compensate for them. The local effects of such publicly created distortions could be an inflated land market that makes it difficult for non-park businesses and new residents to purchase land. It could also encourage these other firms that do not receive the subsidy to lobby harder for other subsidies or tax break for themselves. Another potential impact of public provision is a bidding war among the region's technology parks. This zero sum game can end up hurting all communities by reducing their taxable base all around (Harrison and Kantor, 1978).

Conclusion

Business parks can be viable community development alternative. Proximity to a research University, well planned park amenities, and sustained community and park amenities, all figure into the viability of an already over built market. The economics of using public funding to initiate a park are uncertain. While it may provide communities the tools to target the kind of firms they want, there are also potential negative effects.

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