

April 25, 2006

Subject: Incubator Feasibility Study

To Whom It May Concern:

The following feasibility study was conducted on behalf of the City of Wichita, Sedgwick County, Wichita Area Development, Wichita Downtown Development Corporation and Wichita Technology Corporation (collectively represented as Business Incubator Task Force) to examine the feasibility of a technology business incubator in Wichita. This initiative is in parallel with the Visioneering process that identified business incubation as a possible solution to assist entrepreneurs in the region.

The Business Incubator Task Force (BITF) engaged Greenwood Consulting Group, Inc., a consulting firm specializing in business incubation, to determine the feasibility of an incubator in Wichita. During the course of their examination, the consultants interviewed community leaders, entrepreneurs, government officials and service providers to determine the climate, need and support for incubation in Wichita.

The consultants concluded that Wichita currently lacks the environment and market demand for a technology business incubator focused on attracting new, value added jobs, but that a mixed-use business incubator might be feasible in the future. The consultants also outlined long-term action steps community leaders could take to grow the entrepreneurial environment that could build demand for an incubator.

The BITF is sharing this examination with the entire community to build awareness and support for the business needs of small enterprises in Wichita.

Regards,

Business Incubator Task Force

FINAL REPORT

FEASIBILITY STUDY FOR A TECHNOLOGY BUSINESS INCUBATOR IN THE WICHITA, KANSAS, AREA

March 15, 2006

Prepared for the

Business Incubator Task Force

Prepared by

Jim Greenwood, President
Greenwood Consulting Group, Inc.
1150 Junonia
Sanibel, Florida 33957
239-395-9446
g-jgreenwood@att.net
www.g-jgreenwood.com

Larry Icerman, President
Icerman & Associates
2999 Calle Cerrada
Santa Fe, New Mexico 87505
505-473-2102
licerman@aol.com

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EXECUTIVE SUMMARY

Greenwood Consulting Group, Inc. (GCGI) and its subcontractor, Icerman & Associates, have completed their analysis and conclude that a technology business incubator is only marginally feasible for the Wichita, Kansas, area at the present time. This conclusion has been reached after approximately 35 interviews, 15 incubator market survey responses, and data collected from published and electronic sources were used to assess the feasibility of a technology business incubator in the Wichita area based on six criteria in GCGI's Incubator Feasibility Model[®], which are market, champion, real estate, business assistance, development funding, and financial self-sufficiency or self-sustainability potential.

Evidence of a strong market is basically a requirement to conclude that a technology business incubator is feasible. Unfortunately, GCGI concludes that there is a very limited market for a technology business incubator in the Wichita area, based on the collection of primary and secondary information examined during this feasibility study. Only four of the incubator market survey respondents indicated a potential interest in locating their company in the proposed technology business incubator, while GCGI estimates that approximately 15 to 20 tenants would be required to achieve an acceptable occupancy level.

Traditional measures of technological entrepreneurship do not indicate that the Wichita area is a strong region of technology, R&D, or entrepreneurial activity, which diminishes considerably GCGI's enthusiasm for the market potential of a technology business incubator. For example, while the rate of patent issuance in Wichita is comparable with other metropolitan areas across the nation, this rate is far below that of well-known areas of technological entrepreneurship, such as Boston, Massachusetts, San Jose, California, and Austin, Texas. Similarly, although there are recent efforts to increase both the level of research support and entrepreneurship at Wichita State University (WSU), the technically focused research enterprise at WSU is very modest and certainly insufficient to create a constant stream of technology-based entrepreneurial endeavors that a technology business incubator could serve.

The *Clusters of Innovation Initiative*, performed by Professor Michael Porter of Harvard University for the Wichita area, also suggests a number of concerns related to the market of technology-based businesses for the proposed technology business incubator. However, all of these traditional measures are somewhat limiting and do not consider activity among microbusinesses, which are commonly a prime target of an incubator. Microbusiness data suggest there are over 1,100 very small businesses in the Wichita area that might be candidates for a technology business incubator. Nonetheless, when all market factors are considered, GCGI scores the Wichita area as a "2" on a scale of 0 to 5, where "0" indicates that the area does not meet the market criterion at all, while "5" indicates that the market criterion is met ideally. Therefore, the score of "2" suggests that the Wichita area is below average in satisfying the market criterion in the GCGI Incubator Feasibility Model[®].

Three possible candidates for a champion of the proposed technology business incubator were identified during the course of the feasibility study, including the Mid-America Manufacturing Technology Center (MAMTC), the Wichita Technology Corporation (WTC), and a new entity that would have representation from these organizations, the private sector, and others. Unfortunately, neither of the existing organizations on their own appears to be a suitable candidate to champion the development of the proposed technology business incubator given the current market conditions. The most viable alternative likely is to create a new non-profit entity, with participation by MAMTC, WTC, the City of Wichita, Sedgwick County, and others, to champion the development of the proposed technology business incubator. Once again, GCGI scores the Wichita area as a “2” on the scale of 0 to 5 for the champion criterion, which suggests the area is below average in terms of the availability of an solid champion.

There are many available sites that would be suitable to house the proposed Wichita technology business incubator, so GCGI believes the real estate needs can be met adequately. One unconfirmed claim is the existence of a considerable number of properties owned by city or county governments resulting from property tax foreclosures. There is not a strong consensus among the market survey respondents regarding the preferred location for the proposed technology business incubator; however, the preference appears to be for either the downtown area or in northeast Wichita. This lack of consensus is perhaps less important than in other communities because the commuting times in the greater Wichita area are very modest compared to many metropolitan areas. GCGI ranked Wichita as a “3” on the scale of 0 to 5 in terms of the real estate criterion in the Incubator Feasibility Model[®], indicating that we believe the community is somewhat above average in satisfying this criterion.

GCGI found several unmet needs for business assistance among survey respondents. Many survey respondents had not used existing sources of assistance in the Wichita area, which draws into question whether they would value a technology business incubator since a main feature of a business incubator is the availability of business assistance services for tenants. Survey respondents expressed some level of dissatisfaction with certain existing sources of business assistance, which depending on the reasons for this dissatisfaction may suggest an opportunity for the proposed technology business incubator to provide high-quality business assistance services. The survey respondents also indicated a number of specific areas of need, including access to investment capital, networking opportunities with other entrepreneurs and service providers, and shared services, such as a conference room and a receptionist. Unfortunately, there was little consensus about the desired and needed services among the four survey respondents interested in becoming tenants of the proposed technology business incubator, which could further diminish the ability to attract and add value to technology-based firms.

More than one-half of the survey respondents indicated they were unwilling to exchange equity in their firms in return for business assistance and other outside help. This attitude suggests that a technology business incubator in the Wichita area should not

acquire equity from tenants, unless investment capital is provided, to prevent the already marginal market from being further reduced dramatically. With all of these factors considered, GCGI scores the Wichita area as a “2” on the business assistance criterion on the scale of 0 to 5.

GCGI considered four financial scenarios for the proposed technology business incubator, all with a facility size of 30,000 square feet, which is approximately the size required to achieve financial viability and for obtaining the level of synergy and interaction desired in a business incubation program. None of these analyses corresponds to an actual building because GCGI was asked not to evaluate the suitability any specific buildings for housing the proposed technology business incubator during this feasibility study. Preliminary estimates for these scenarios indicate a development cost of between \$665,000 and \$3.9 million for the proposed technology business incubator, which covers acquisition, renovation or remodeling costs, and initial purchases of equipment and furnishings, as well as financial subsidies in the early years of operations.

The lower end of this range corresponds to a free or donated building in downtown Wichita requiring relatively minor renovation to serve the needs of a technology business incubator. The upper end of the development cost range represents the purchase of a modern building in northeast Wichita. Possible sources of funding to cover the development costs include local governments (e.g., the City of Wichita and Sedgwick County), local private contributions, and commercial loans. Assumed cash contributions by the City of Wichita range among the four scenarios from \$100,000 to \$1.8 million, while those from the Sedgwick County are assumed to be between \$550,000 and \$1.3 million. Sedgwick County contributions are assumed to be higher than those of the City of Wichita in some scenarios in which the City is assumed to be donating a building to house the technology business incubator. The largest source of federal government funding of business incubators, the Economic Development Administration (EDA) within the U.S. Department of Commerce, likely would not participate in the funding of the proposed technology business incubator in the Wichita area given the relatively high employment and per capita income levels in the area. GCGI scores the Wichita area at “3” on the development funding criterion, indicating that the area rates somewhat above average on this criterion.

Three of the four scenarios for the proposed technology business incubator have reasonable potential to break even and become financially self-sustainable. In all four scenarios, break even, that is the time required for annual revenues to first equal or exceed annual expenditures, is anticipated within three to five years after the technology business incubator begins operations, which is very reasonable. Anticipated accumulated operating deficits range from about \$43,000 to \$126,000 among the three scenarios that appear to be financially attractive. Occupancy levels needed for break even (i.e., ranging from 50% to 70%) are reasonable. The scenario in which a building in northeast Wichita must be purchased accrues an accumulated deficit of over \$260,000, requires five years to break even, and would generate a much lower annual operating surplus than the other three scenarios. Clearly, from a financial perspective,

this scenario is the least favorable. The most financially attractive alternative is a building donated by the City of Wichita in northeast Wichita to house the proposed technology business incubator, while the second best alternative is a City-donated building in downtown Wichita. GCGI scores Wichita as a “3” on the financial self-sufficiency or self-sustainability potential criterion, suggesting that the Wichita area is somewhat above average in terms of the prospects for financial self-sustainability of the proposed technology business incubator.

Using its Incubator Feasibility Model[®], GCGI rates the feasibility of the proposed Wichita technology business incubator at 50 points, with 100 being a perfect rating and 50 being that of an “average” incubator project (e.g., on an “academic” scale, this score is approximately a “C”). If the proposed technology business incubator is rated on short-versus long-term feasibility, then the ratings are 48 and 60, respectively. An ideal incubator project would have both short- and long-term ratings of 100, while an “average” incubator project would have both ratings equal to 50. In summary, GCGI concludes that the proposed technology business incubator has an overall rating of “average” in terms of feasibility.

Given that corrective action can be taken to address the identified shortcomings, especially with respect to the lack of a well-identified and attractive market, GCGI concludes that the proposed technology business incubator in the Wichita area is conditionally feasible. This conclusion means that the proposed technology business incubator may be feasible, but its feasibility is contingent on the City of Wichita, Sedgwick County, and others taking actions to overcome the challenges identified in this feasibility study.

Therefore, GCGI recommends that the following actions be taken to address these shortcomings:

1. Continue to seek possible tenants for the proposed technology business incubator through actions such as holding focus groups with bankers, business leaders, angel investors, representatives from the Small Business Development Center at Wichita State University, and others who might be able to identify emerging candidates for tenants.
2. Conduct one or more seminars on topics of interest to small, start-up, and/or home-based technology related businesses as a means to identify additional potential tenants and affiliates of the proposed technology business incubator. Disseminate an updated version of the technology incubator survey used in this feasibility study to attendees to determine their needs and interest levels.
3. Convene community leaders to discuss the option of expanding the market for the proposed technology business incubator. Two important market segments to consider including are: (i) lifestyle businesses and (ii) non-technology firms. GCGI emphasizes that the proposed Wichita business incubator could still have a focus on high-growth potential technology-based firms, but that this focus

should not be an exclusive one, or be maintained at the exclusion of other potential tenants and/or affiliates of what could be appropriately considered as a technology-oriented, mixed-use incubator.

4. Governmental, community, and business leaders should work together to determine which organization or organizations are best suited to champion the development of the proposed technology business incubator, including the articulation of an overall development strategy specifying roles and responsibilities.
5. Confirm, with the City of Wichita and Sedgwick County, that one or more suitable buildings exist that could be donated to house the proposed technology business incubator. The building needs to be approximately 25,000 to 30,000 square feet in size, suitable for class “B” office space, and preferably in downtown or northeast Wichita.
6. Confirm, again with the City of Wichita and Sedgwick County, and other local governments, a willingness to provide sufficient initial funding to the proposed technology business incubator to cover the costs of development and initial annual operating subsidies.

If significant improvements can be made, then the proposed technology business incubator may be able to proceed to the next stage of development, namely the preparation of an operating or business plan. If significant improvements cannot be made, then GCGI recommends that the proposed Wichita technology business incubator be put on hold indefinitely.

1.0 INCUBATOR FEASIBILITY MODEL

A criterion-based methodology is used by Greenwood Consulting Group, Inc. (GCGI) for assessing the feasibility of business incubators that incorporates a quantitative analysis and presentation. The GCGI Incubator Feasibility Model[®] begins with a set of criteria that, if satisfied, indicate that the feasibility of the proposed incubator is likely. The following criteria are used by GCGI in a feasibility analysis of an incubator:

- evidence of adequate market of potential tenants and/or affiliates;
- existence of a competent and willing champion;
- availability and suitability of real estate;
- existence of business assistance resources willing to help incubator tenants and/or affiliates, and evidence of unmet business assistance needs of local entrepreneurs;
- ability to raise sufficient funds and in-kind contributions to develop the incubator; and
- potential of the incubator to become financially self-sustaining or self-sufficient.

These criteria cover the most critical issues in determining feasibility, based on GCGI's experience over more than 20 years in developing and managing incubators. They also distinguish two related, but very different, financial issues (i.e., the ability to get a project constructed and started versus the ability to sustain its operations over time).

GCGI assigns each of the aforementioned criteria a weight on a scale of 0 and 5, with 0 being "irrelevant" and 5 being "mandatory." These weights are used on all GCGI incubator feasibility projects assessed under this methodology so that comparisons among projects are possible (e.g., an exception is the adjustment of the weights over time, as changes in the incubator industry or overall business environment occur).

GCGI offers two cautions regarding our feasibility analysis of an incubator. First, the purpose of the feasibility analysis is to determine if adequate opportunities exist to meet the six criteria but not to specify the exact location, content, market, and other variables of the incubator. These specifics are better left for the business plan, which should be prepared if the results of the feasibility study are sufficiently promising. Second, GCGI cautions that the incubator feasibility question can never be reduced to a single numeric rating above which feasibility is assured and below which no such incubator could ever succeed.

So what good is this quantitative model if this approach does not yield such a definitive answer? The following are advantages that are gained using the GCGI quantitative model versus a typical qualitative incubator assessment technique:

1. The quantitative model can show, at a glance, what the most important criteria are in determining an incubator's feasibility. That helps a community stay focused, as the project goes forward, on the more important aspects of the project.
2. The model can show, again at a glance, the strengths and weaknesses of a particular incubator project in terms of the six criteria. The weaknesses can

become areas where a community focuses resources to make changes that would raise its score (and in turn make their community more likely to have a successful incubator).

3. A quantitative analysis is less likely to be arbitrarily biased toward a feasibility or infeasibility conclusion, in comparison to the typical qualitative approach that usually points out strengths and weaknesses but never demonstrates how the analyst gets to the final conclusion regarding feasibility.
4. The model can be used to conduct sensitivity analyses (e.g., if a community rates poorly on the overall feasibility for an incubator, then the community can look at how much that rating might be raised if certain shortcomings are resolved).

If requested, additional information can be provided about the GCGI Incubator Feasibility Model[®].

2.0 Categories of Business Incubators

Small business incubators are often classified by the principal types of companies that are served (e.g., technology-based firms or any small or start-up product- or services-oriented firm) and by whether the incubator operates as a physical facility or merely provides services to clients without them being tenants (i.e., so-called virtual incubators or incubators without walls).

2.1 Technology Business Incubators

Small business incubators may exclusively serve technology-based companies and technically oriented entrepreneurs or may merely maintain a strong focus toward attracting technology-based companies and technically oriented entrepreneurs as tenants. In some instances, incubators will focus on companies within a single industry sector (e.g., biotechnology) or companies engaged in specific types of manufacturing (e.g., electronics). For the purposes of this feasibility study, a technology business incubator is an entity promoting the development of technology-based companies by providing access to financing, technical support, market research, management consulting, shared office equipment and services, networking with professional service providers, and flexible physical space. Furthermore, for most technology business incubators, there is a challenge to define the type of company or entrepreneurial venture that qualifies as a technology-based enterprise. In some instances, the definitions are quite strict and narrow; in others, much more encompassing. For the proposed Wichita technology business incubator, the definition of a qualifying company is an organization that pursues commercial application of science-based innovation; employs a high percentage of technicians, engineers, or scientists; or requires extensive research and development (R&D) to produce new products or services.

2.2 Mixed-Use Business Incubators

Mixed-use incubators generally solicit any small or start-up company that meets the established admission criteria, which are typically based on business promise. These

companies may be either product- or services-oriented. As such, a mixed-use incubator will typically have a broad mix of business types as tenants, from which the name originates. Mixed-use does not signify that all business types will be considered for inclusion as tenants or affiliates (e.g., retail businesses are often excluded from mixed-use incubators). Mixed-use incubators also may include areas of focus or emphasis. Relevant to this project, one scenario is to have a mixed-use incubator that has a focus, but not an exclusive one, on technical entrepreneurs and technology-based small businesses.

3.0 EVALUATION OF THE WICHITA TECHNOLOGY BUSINESS INCUBATOR RELATIVE TO THE SIX CRITERIA

3.1 Market Criterion

Evidence of a market for the proposed incubator is a critical, actually mandatory, component of the feasibility study. If there is not an adequate pool of entrepreneurs who might utilize the technology business incubator and its programs and services, satisfying the other five criteria does not really matter. GCGI collected both primary data on potential tenants by surveying entrepreneurs about their needs and interests, and secondary data about the market in the Wichita area.

An important initial issue in assessing the market is estimating the number of companies that would need to be attracted as tenants of the incubator to ensure viability of the project. The National Business Incubation Association (NBIA) reports that the “average” tenant in a technology incubator occupies about 1,300 square feet.¹ Because GCGI believes that companies in the proposed technology business incubator would be smaller and younger than the national average, GCGI conservatively estimates the average tenant in the Wichita technology business incubator would occupy 900 square feet. Assuming that 75% of the gross physical space is available for lease (i.e., 25% is dedicated to common areas like conference rooms, restrooms, reception area, and hallways), the number of tenants that would be housed in a technology business incubator in Wichita at various occupancy levels and building sizes is shown in Table 1.

Table 1. Potential Number of Tenants Served at Various Occupancy Rates.

| Gross Incubator Area | Percentage of Leasable Space Occupied | | | | |
|-----------------------------|--|------------|------------|------------|------------|
| | 40% | 50% | 60% | 70% | 80% |
| 15,000 square feet | 5 | 6 | 8 | 9 | 10 |
| 20,000 square feet | 7 | 8 | 10 | 12 | 13 |
| 25,000 square feet | 8 | 10 | 13 | 15 | 17 |
| 30,000 square feet | 10 | 13 | 15 | 18 | 20 |

¹ 1998 *State of the Business Incubation Industry*, National Business Incubation Association, 1998. Data from the 2002 update to this publication could not be used because incubating tenants were not distinguished from other types of tenants.

The building sizes shown in Table 1 correspond to incubator sizes that might be viable. Relatively few tenants are needed to occupy significant fractions of a smaller building (e.g., only nine tenants are needed to achieve 70% occupancy in a 15,000-square-foot incubator). To achieve a similar occupancy in a larger, 25,000-square-foot facility, a total of 15 tenants is needed. If a more modest occupancy rate like 40% is assumed, consistent with the anticipation of lower occupancy of a new incubator when it first opens, somewhere between five and eight tenants are needed.

The NBIA reports that over one-half of the surveyed incubators have anchor tenants.² Defined as companies that occupy space in the incubator but are mature and therefore do not require typical incubator services, anchor tenants can be important contributors to incubators both for their financial contributions through rent and other payments and the mentoring and supplier relationship opportunities that they represent. While no specific candidates were identified, GCGI believes there are opportunities to include anchor tenants in a Wichita technology business incubator.³ Assuming that an average anchor tenant occupies 1,500 square feet of space, Table 2 shows the number anchor tenants that could be accommodated by the proposed technology business incubator. Depending on the amount of space dedicated to anchor tenants, Table 2 indicates that between three and five anchor tenants might be included in the Wichita technology business incubator. The space requirements for anchor tenants can vary tremendously (e.g., the space needs of candidates for this project appear to range from about 1,000 to 5,000 square feet). Therefore, the figures in Table 2 should only be considered as rough estimates.

Table 2. Number of Anchor Tenants Potentially Served in a Wichita Technology Business Incubator.

| Space Dedicated to Anchor Tenants | Number of Anchor Tenants, 100% Leasable Space |
|--|--|
| 5,000 square feet | 3 |
| 7,500 to 8,000 square feet | 5 |

By combining the data from Tables 1 and 2, estimates of the number of tenants for the Wichita technology business incubator can be made. For example, a 30,000-square-foot incubator that includes 5,000 square feet of anchor tenant space would require, at a 40% initial occupancy level, roughly eight incubating tenants and one anchor tenant, for a total of nine initial tenants.

3.1.1 Primary Market Analysis

GCGI surveyed local entrepreneurs to determine their level of interest in the proposed technology business incubator. A written survey form was developed and offered in both hard copy form and on GCGI's website. Efforts to disseminate the survey included

² 2002 *State of the Business Incubation Industry*, National Business Incubation Association, 2003.

³ For example, one respondent to the technology incubator survey is arguably an anchor tenant rather than an incubating tenant.

an electronic mailing to a limited list of technology-based companies in the region compiled by the Wichita Technology Corporation (WTC) and the Small Business Development Center (SBDC) at Wichita State University (WSU), requests of entrepreneurs to fill out and return the survey made by staff members of the sponsoring organizations of this study, encouragement by GCGI during personal interviews with entrepreneurs to respond to the survey, and follow-up telephone calls to the distribution list. In spite of these considerable efforts, only a total of 15 surveys were returned. This response level is only about 50% of that commonly obtained by GCGI in similar feasibility studies. Two possible reasons for this limited response are: (i) low level of interest in a technology business incubator in Wichita, or (ii) failure to achieve adequate dissemination of the survey to potential tenants of the proposed technology business incubator.

Unfortunately, this low response level makes drawing strong conclusions from the survey results problematic. The responses for the 15 replies are compiled in Appendix A. Some of the more informative results, in terms of the market for a technology business incubator, are:

- 33% of the respondents indicated that they thought Wichita has an average business climate for technology-based businesses, while 27% of the respondents rated the business climate as poor;
- most respondents felt the proposed Wichita technology business incubator should be limited to technology businesses, but seemed to be willing to include tenants who are in other industries (e.g., manufacturing) but want to better incorporate technology into their operations
- four (4) responses, or about 27% of the surveys received, indicated a willingness to consider becoming a tenant of a Wichita area technology business incubator;
- while expressing an interest, none of these potential tenants said they were willing to commit to space in the proposed technology business incubator within the next 12 months;
- 47% of the respondents indicated they would likely or might use the services offered by a technology business incubator;
- 80% of the respondents had never applied for a grant from the federal Small Business Innovation Research (SBIR) Program, Small Business Technology Transfer (STR) Program, or the Advanced Technology Program (ATP), while 53% would like to receive information about these programs;
- 20% of the respondents said they did not anticipate having a need for the technology business incubator;
- the most valued resources in the technology business incubator would be introductions to angel investors, networking opportunities, access to capital, opportunities to network with other entrepreneurs, shared services (e.g., a conference room or receptionist), and business assistance; and
- two locations were equally preferred by the respondents, namely, downtown or northeast Wichita, although "other" was the most frequent locational choice but with no two suggested locations being the same.

The relative levels of interest in the proposed technology business incubator are shown graphically in Figure 1. Forty-seven percent of the respondents indicated some level of interest in accessing services at the technology business incubator even though they were not interested in becoming tenants. This result suggests the opportunities for affiliates for the Wichita technology business incubator are reasonably good.⁴

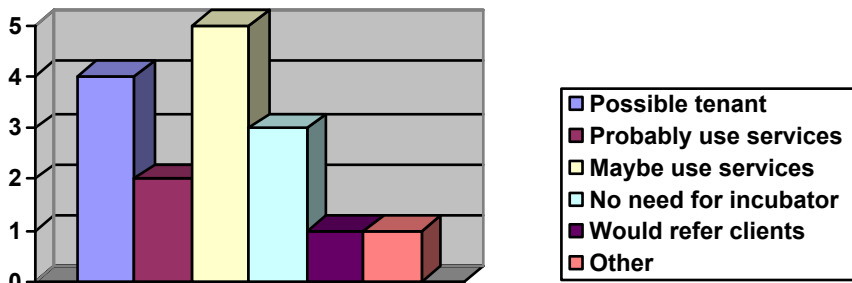


Figure 1. Wichita Technology Incubator Survey Responses

Appendix B includes a similar tally for the survey respondents, except that only those responses received from the four entrepreneurs interested in becoming a regular or anchor tenant of the technology business incubator are included. This sample size is extremely small so that making sound conclusions from these responses is difficult. Nonetheless, useful information relevant to the market for the Wichita technology business incubator extracted from this subset of surveys includes:

- 75% of the respondents felt that the proposed incubator for the Wichita area should only be focused on technology-based companies as tenants, thus suggesting that they would not be supportive of a mixed-use incubator with a technology-based business focus;
- the respondents indicated that the incubator should help entrepreneurs in many technology-related ventures, suggesting the incubator can cater to a broad cross section of companies and therefore broaden its market;
- only 50% of the respondents represented existing companies, suggesting both that the incubator will need to cater to existing as well as start-up technology businesses and that the survey probably did not reach prospective technical entrepreneurs as much as desired;
- 50% of the businesses represented by the respondents were software related companies;
- the resources of greatest interest to this subset of respondents were related to access to capital and opportunities for interacting with business mentors or coaches;
- these respondents are more likely to have interacted with university or government laboratories, with 50% of the potential tenants having such interactions versus only 33% of all survey respondents; and

⁴ An affiliate is defined as a firm that receives services and has access to resources at an incubator, but is not a tenant.

- there is stronger consensus about downtown Wichita being the preferred location, which is a positive outcome because location is a more important consideration for potential tenants than for respondents at large.

Location and business services preferences indicated in the technology incubator survey are discussed in more detail in Sections 3.3 and 3.4, respectively.

In conclusion, the considerable effort required to solicit the responses to the technology incubator interest survey identified only four companies that might become regular or anchor tenants of the Wichita technology business incubator. When considered in the context of the number of tenant and anchor companies needed to achieve various levels of occupancy of an incubator (see Tables 1 and 2), this level of response is not encouraging.

3.1.2 Secondary Market Data

As part of the analysis of the market for the Wichita technology business incubator, GCGI looked at a number of secondary market data sources to see if they are consistent with the conclusion that there is a modest market for a technology business incubator in the area. The most important results are as follows:

- In the decade 1988-1998, the creation of new business establishments in Wichita lagged the national average. Nationally, there were 70 new business establishments per 10,000 workers, whereas in Wichita there were only 44 new business establishments per 10,000 workers. This value translates to a growth rate in Wichita of about 1% per year, versus the national average of 1.44%.⁵ Wichita also routinely has less than its share of fast growth firms, as measured by the Inc. 500 list; only once in the 10-year period of 1991 to 2000 did Wichita have more than one such firm.⁶
- GCGI also reviewed data for the number of non-employer or microbusinesses in the Wichita Metropolitan Statistical Area (MSA). These entities are defined as businesses that have no employees, which commonly represents an individual entrepreneur and/or a part-time venture. Typically, these entities represent a good market for an incubator, given their small size and often early stage of development. Data for only the period of 1997 to 2003 were analyzed for these microbusinesses. As shown in Table 3 (page 8), there was nearly a 2.5% growth in the number of microbusinesses in the Wichita MSA during this six-year period, which is a growth rate of more than twice that of all employer establishments reported between 1988 and 1998. The microbusiness growth rate in the Wichita MSA is significantly higher than that of Kansas, but is considerably below the national average.

⁵ M.E. Porter, Clusters of Innovation Initiative, (Washington, DC: Council on Competitiveness, 2001), p. 47.

⁶ Ibid., p 46.

- The microbusiness data suggest that there is an opportunity for the proposed technology business incubator to serve very small businesses, of which there are a substantial number of microbusinesses in industry categories compatible with a technology focus. Two North American Industry Classification System (NAICS) categories are particularly relevant to the proposed technology business incubator, namely, Information and Professional/Scientific/Technical Services. In 2003, there were 296 and 3,666 microbusinesses in the Wichita MSA in the fields of Information and Professional/Scientific/Technical Services, respectively. The average revenues of these microbusinesses were \$25,118 and \$27,490, respectively, compared with an average of about \$39,400 among all microbusiness categories. This result suggests there may be an opportunity to help microbusinesses in these two NAICS categories grow). Of the microbusinesses in the category of Information, 95 were in the publishing field and 34 were engaged in the motion picture and sound production field. Therefore, the greater opportunities for the Wichita technology business incubator exist among the remaining 167 microbusinesses.⁷
- Among the microbusinesses in the Wichita MSA in the category of Professional/Scientific/Technical Services, the following subcategories are the most relevant to a technology business incubator:

| | <u>Number of Microbusinesses</u> |
|---|----------------------------------|
| Engineering services | 155 |
| Geophysical surveying and mapping services | 11 |
| Specialized design services | 197 |
| Computer systems design and related services | 355 |
| Management/scientific/technical consulting services | 529 |
| Scientific research and development services | 22 |
| Other | 1,128 |

The subcategories of engineering services, computer systems design and related services, and management/scientific/technical consulting services may represent particularly strong candidates for a technology business incubator.⁸

Table 3. Comparison of Microbusiness Data for the Wichita MSA, Kansas, and the United States.

| | Wichita MSA | Kansas | United States |
|--|------------------------|---------------|--------------------------|
| Number of microbusinesses (1997) | 29,169 | 154,619 | 15,439,609 |
| Number of microbusinesses (2003) | 33,435 | 168,895 | 18,649,114 |
| Microbusiness growth rate (1997-2003) | 14.6% | 9.2% | 20.8% |
| Microbusinesses per 1,000 population (2003) | 61.9 | 63.9 | 65.9 |
| Annual average microbusiness receipts (2003) | \$39,390 | \$38,243 | \$44,496 |
| Microbusinesses/all businesses | (est.) 70.2% | 69.3% | 72.0% |

⁷ Because of this limited number of firms, the Internal Revenue Service/Census Bureau do not report subtotals for other subcategories of the Information category of microbusinesses.

⁸ The category of Engineering Services, according to the *Clusters of Innovation Initiative*, was one of the 10 fastest growing industries in the Wichita area during the period 1988 to 1998, further suggesting that engineering services is a potential “growth industry” for the proposed technology business incubator.

3.1.3 Comparative Data for Technology-Based Business Markets

Several parameters associated with regions characterized by high-technology activity and entrepreneurship are compiled in Table 4 for the four Metropolitan Statistical Areas (MSAs) in Kansas. Overall, the Wichita MSA ranks fairly well. Only in the area of educational attainment does Wichita rank behind the other three MSAs.

Table 4. Parameters Associated with Regions Characterized by High-Technology Activity and Entrepreneurship for Selected Metropolitan Statistical Areas in Kansas.

| Metropolitan Statistical Area | Number of Issued Patents (1999) | Issued Patents per 10,000 Jobs (1999) | High-Technology Economy (% of Gross Metropolitan Product) | Educational Attainment (% of Adults with a Bachelor's Degree in 2000) |
|-------------------------------|---------------------------------|---------------------------------------|---|---|
| Kansas City | 277 | 2.74 | 6.9 | 28.5 |
| Lawrence | 26 | 4.86 | N/A | 42.7 |
| Topeka | 16 | 1.49 | N/A | 26.0 |
| Wichita | 102 | 3.35 | 28.6 | 24.7 |

The Wichita MSA was very close to the median value of patent rates for 318 MSAs nationwide (i.e., 3.38), while being well above the median value for patents issued (i.e., 54.5) in 1999. Although the Wichita MSA patent rate was essentially equal to the median value, the median is far below the rate for areas known for technology transfer and commercialization (e.g., the patent rates were 11.5, 54.5, and 23.5 for the Boston, Massachusetts, San Jose, California, and Austin, Texas, MSAs, respectively). The 2000 educational attainment level of the Wichita MSA was slightly higher than the median value of the 318 MSAs by 2.0 percentage points (i.e., 24.7% compared to 22.7%).

To the extent that patents issued and educational level are reasonable measures for high-technology activity and entrepreneurship, the Wichita MSA exhibits mixed results when compared with other areas in Kansas. As is well known in the technology community, the existence of patents is not a sufficient condition for the formation of technology-based businesses or even the successful commercialization of the underlying technology. A very high percentage of patents never result in successful products. Similarly, technology-based companies can be founded and grow successfully without the benefit of intellectual property protection. Being first to market with an innovative product can often be as important as any underlying patent protection.

Funding for R&D is commonly considered to be an indirect measure of the market for start-up, technology-based businesses. Relatively high funding levels for R&D are often associated with thriving entrepreneurial communities. One of the best-known examples in a relatively rural setting is probably the Research Triangle Park area in North Carolina. Table 5 (page 10) gives 1998 funding data for academic/nonprofit and Federal intramural R&D for the four MSAs in Kansas. There are very large disparities

among these MSAs. One of the MSAs (i.e., Topeka) received no funds for academic/nonprofit or federal intramural R&D according to data tabulated by the National Science Foundation. The Wichita MSA ranked above the median value (i.e., 4.2) for 318 MSAs nationwide in terms of Academic/Nonprofit R&D per 100,000 jobs in 1998, but well below that for the Lawrence MSA. For the job size class of less than 250,000 jobs, the Lawrence MSA ranked 10th nationwide.

Table 5. Funding for Academic, Nonprofit, and Federal Intramural R&D (1998) in Selected Metropolitan Statistical Areas in Kansas.

| Metropolitan Statistical Area | Academic/Nonprofit R&D (\$000s) | Academic/Nonprofit R&D per 100,000 Jobs (\$/Job) | Federal Intramural R&D (\$000s) | Federal Intramural R&D per 100,000 Jobs (\$/Job) |
|--------------------------------------|--|---|--|---|
| Kansas City | 24,760 | 2.5 | 4,800 | 0.5 |
| Lawrence | 117,115 | 225.8 | 1,100 | 2.1 |
| Topeka | 0 | 0 | 0 | 0 |
| Wichita | 15,607 | 5.1 | 200 | 0.1 |

As in the case of patents and educational attainment, the Wichita MSA has mixed results with respect to R&D funding. While Wichita State University (WSU) accounts largely for the Wichita MSA being above the median value in the nation for Academic/Nonprofit R&D per 100,000 jobs, the level of activity is not sufficient to reasonably expect WSU to be a continuous source of technology-based spin-off firms or technology-oriented entrepreneurs. Nonetheless, isolated instances of technology entrepreneurship can, and do, occur without the benefit of large-scale research programs or substantial research funding. For example, during the period of 1992 to 2000, WSU reported having four licensed technologies, with two new patents and one copyright being issued.⁹

3.1.4 Prospects for Anchor Tenants

As noted previously, an anchor tenant is a more mature business that does not need most of the business assistance and shared resources found in an incubator, but which can be very valuable to the incubator by providing a stable source of rental revenue and potentially participate in mentoring and/or supplier relationships with incubating tenants. The NBIA reported that over one-half of the incubators participating in their survey had one or more anchor tenants,¹⁰ so this concept is not unusual in the incubator industry. GCGI also has experience with anchor tenants that may be located in a separate facility from the rest of the incubator, which gives additional flexibility.

One of the respondents to the technology incubator interest survey may be more appropriately considered as an anchor tenant than a regular incubating tenant. In respect of confidentiality, no details related to the firm are discussed here.

⁹ Porter, p. 64.

¹⁰ *2002 State of the Business Incubation Industry*, National Business Incubation Association, 2003.

3.1.5 Lifestyle Companies as Target Incubator Tenants

Several times during the course of this feasibility study, GCGI was told that the proposed Wichita technology business incubator should not cater to so-called “lifestyle businesses.” Notwithstanding this perspective, GCGI suggests, for several reasons, that such businesses not be excluded from consideration as candidates for the proposed technology business incubator.

Clarifying what is meant by a lifestyle business is important. The term is credited to Dr. William Wenzel, Director Emeritus of the Center for Venture Research at the University of New Hampshire. A lifestyle business, according to Dr. Wenzel, is one “unlikely to generate economic returns robust enough to interest outside investors.”¹¹ Furthermore, according to Hendricks, Wenzel “recognizes lifestyle entrepreneurs as a specific breed of business owner who is neither a financially independent hobbyist nor wealth-seeking empire-builder.”

This definition is important in the context of assessing the potential market for a business incubator. The term “lifestyle business” is often used for a small sole proprietorship with few, if any, employees, which is not consistent with the term as defined by Dr Wenzel that does not restrict such businesses in terms of employment levels. Additionally, the term is sometimes used in reference to a firm that has no interest in or potential for growth. Again, this usage is not part of the definition per Dr. Wenzel. Simply put, a lifestyle business can be a small but growing firm, but is not growing at such a pace, or in a large enough market, to be attractive to venture or angel investors. Nonetheless, lifestyle businesses, according to this definition, can be important contributors to a community’s economy for a variety of reasons.

First, lifestyle businesses are reported to make up about 85 to 90% of all small businesses.¹² Therefore, if lifestyle businesses are excluded from an economic or community development initiative, the market for that initiative is reduced to only 10 to 15% of its potential size. This perspective may make the market for something like a business incubator so small that financial viability is infeasible.

¹¹ M. Hendricks, “Freedom, Not Money, Drives These Startups,” Startup Journal, The Wall Street Journal Center for Entrepreneurs, www.startupjournal.com, 2005.

¹² M. Hendricks, Not Just a Living: The Complete Guide to Creating a Business That Gives You a Life, Perseus Books, 2002. Hendricks cites three sources for this assertion:

(i) John Warrillow, a Toronto market researcher, says only 10% of small business owners are “Mountain Climbers” who are driven primarily by increased sales and achieving business success, while 60% are “Craftspeople” who are primarily motivated by desire to do particular work and do it well; the remaining 30% are “Freedom Fighters” whose primary motivation is independence.

(ii) 1999 Lou Harris Poll, “Why We Labor: American Dream Alive and Well,” indicates nine of ten people become entrepreneurs out of desire for independence.

(iii) Babson College Study in 2000 titled “Frontiers of Entrepreneurial Research” found that only 16% of survey respondents said making money was their primary reason for going into business.

Second, a lifestyle business is not necessarily one that shuns growth, either in terms of employment or gross revenue levels. For example, in a study of small business complexity, non-random samples of 97 growth-oriented and 159 lifestyle businesses were analyzed.¹³ Participants were asked to provide some basic information about their firms for the study. Average employment among the growth-oriented firms was about 67 persons, while there was an average of 87 employees in each of the lifestyle businesses. This same study reported that the average annual sales growth among the lifestyle businesses was 30%, while only about one-half of the rate of growth of the growth-oriented firms (59%), this growth rate still equates to a doubling of revenues in less than three years.

Third, to the extent that a community seeks to create a more entrepreneurial economy in which entrepreneurship is a common and accepted career path among its residents, lifestyle businesses can contribute. Children of self-employed parents are reported to be more likely to become entrepreneurs.¹⁴ Therefore, a nurturing and acceptance of even smaller lifestyle businesses in a community may encourage more entrepreneurs in the future.

3.1.6 Wichita State University as a Source of Technology Commercialization

The Carnegie Foundation for the Advancement of Teaching has provided a classification system for U.S. universities, known as the Carnegie Classification, since 1973.¹⁵ The classification system has undergone a number of revisions, principally in 1976, 1987, 1994, 2000, and 2005. In the 2000 Carnegie Classification, Wichita State University (WSU) was classified as a Doctoral/Research University-Intensive, which means a wide range of baccalaureate programs are offered and the institution is committed to graduate education through the doctorate. Institutions in this class award at least 10, but less than 50, doctoral degrees per year across at least three, but less than 15, disciplines, or at least 20 doctoral degrees per year overall.¹⁶ This classification is generally considered to be a second category behind Doctoral/Research University-Extensive, which for comparison includes both the University of Kansas and Kansas State University. A total of 172 institutions are classified as Doctoral/Research University-Extensive. Nearly all of the institutions with substantial technology commercialization activities fall into this classification. However, a majority of these institutions do not have a record of continuous technology commercialization success.

¹³ J.B. Arbaugh and S.M. Camp, "Sources of and Responses to Organizational Complexity: A Comparison of Growth-Oriented and Lifestyle Firms," *Frontiers of Entrepreneurial Research*, Babson College, 2000, www.babson.edu/entrep/fer/XXXIII/XXXIII/XXXIII.htm.

¹⁴ F. Delmar and J. Gunnarsson, "How Do Self-Employed Parents of Nascent Entrepreneurs Contribute?" *Frontiers of Entrepreneurship Research*, Babson College, 2000, www.babson.edu/entrep/fer/VI/VIA/VIA.htm.

¹⁵ Carnegie Foundation for the Advancement of Teaching, *The Carnegie Classification of Institutions of Higher Education*.

¹⁶ Carnegie Foundation for the Advancement of Teaching, *The Carnegie Classification of Institutions of Higher Education, 2000 Edition*. Electronic Data File, Fifth Revision, 2004.

In 2005, the single classification system was replaced by a set of multiple, parallel classifications. In the Graduate Instructional Program classification, WSU was classified as a doctoral, humanities and social sciences dominant institution. The classifications for the University of Kansas and Kansas State University are comprehensive doctoral (no medical/veterinary) and comprehensive doctoral with medical/veterinary, respectively.

As a further means of comparison, the *Clusters of Innovation Initiative* examined four communities in addition to the Wichita area, namely: the Atlanta/Columbus, Georgia, area; the Pittsburgh, Pennsylvania, area; the Raleigh/Durham/Chapel Hill, North Carolina, area; and the San Diego, California, area. Each of these four areas benefits from the presence of one or more major research universities with strong commitments to technology commercialization. Specifically, these four areas are home to the Georgia Institute of Technology, Carnegie Mellon University, North Carolina State University, Duke University, and the University of North Carolina, and the University of California, San Diego, respectively. The Carnegie Foundation classified all six of these institutions as Doctoral/Research University-Extensive in 2005.

Other indicators of institutions with extensive research activities leading to a strong technology commercialization potential include the level of total research and development (R&D) expenditures for science and engineering, the level of federal R&D expenditures for science and engineering, and the level of research library holdings. Five of the six institutions located in the other four areas investigated by the *Clusters of Innovation Initiative* ranked in the top 50 in federal R&D expenditures for science and engineering, while all six of these institutions ranked in the top 75 in total R&D expenditures in 2003. Five of the institutions rank among the top 115 institutions in research library holdings. Not surprising, given its Carnegie Classification, WSU does not rank in the top 70, top 100, or top 115 institutions, respectively, in these indicators.

On the other hand, WSU is an institution in transition with regard to research activities and technology commercialization potential. External awards for research, training, and service activities have increased by more than 200% during the period 1995 through 2005, reaching a total of about \$41 million, of which more than 20% was not associated with technical activities.

The external awards received by WSU are highly discipline concentrated. For example, in Fiscal Year 2005, the National Institute for Aviation Research (NIAR) accounted for nearly 58% of the total awards and more than 73% of the total awards for technical activities, totaling more than \$23 million. This success is largely the result of NIAR having developed very strong relationships with federal agencies, such as the Federal Aviation Administration, and large aerospace corporations worldwide. In contrast, the College of Engineering, excluding funds provided through NIAR, received only about \$2.5 million in R&D awards.

The level of funding received by NIAR in a concentrated high-technology discipline, such as aircraft technology, could be expected to regularly generate a small number of

new technology developments suitable for commercialization through new business formation. However, the actual work performed at NIAR tends to be dominated by hardware and systems testing rather than R&D. Furthermore, much of the testing work is performed for private aerospace corporations that hold the intellectual property associated with the hardware being tested. As such, NIAR is not really well positioned to contribute to the technology-based entrepreneurial economy in the Wichita area.¹⁷

Based on interviews with key WSU administrative personnel and faculty, no highly promising R&D areas from the perspective of technology commercialization potential were identified by GCGI. Notwithstanding this observation, a few occasional opportunities could arise, most likely from the College of Engineering, the Department of Biological Sciences, or the Department of Chemistry. However, any sustained flow of new business formations based on technical advances by faculty members and/or graduate students should not be expected.

An aggressive program for ferreting out technology commercialization opportunities from the limited research enterprise at WSU does not presently exist. No one at WSU has this activity as a major focus of his or her position. Successful technology commercialization programs are difficult to achieve and require a strong institutional commitment not currently present at WSU. Experience is just being gained by WSU in the intellectual property arena. Little internal expertise or experience exists. The extremely limited experience to date at WSU with technology-based entrepreneurship has been mixed at best, including some discouraging experience. Admittedly, WSU has not been positioned to respond well to external efforts to create an expanding technology-based entrepreneurial community in the Wichita area, such as the efforts championed by the WTC.

The College of Engineering historically has been focused much more on teaching than on research. Shifting toward an expanded focus on research is a time-consuming endeavor. While there is new interest in building more active research programs in targeted areas, such as advanced materials, including biomaterials and composite materials, computer networking, alternative sources of energy, and medical devices, to complement the concentration of research activities in aerospace technology, the competition for research funding in these areas is very high. Nonetheless, these areas do represent sound technology commercialization opportunities in the long term.

The national demographic trend of aging faculties is also prevalent at WSU. In 1995, about 29% of the WSU faculty members were 55 or older; in 2005, more than 41% were that old. In fact, nearly 10% of the WSU faculty is older than 65. In the immediate-term, this situation is inconsistent with building a more research-focused institution; however, in the longer term an opportunity is present to replace older faculty members with new faculty members who are much more focused on research activities and are more familiar and comfortable with the challenges of technology commercialization.

¹⁷ Porter, p. 16, agrees. When listing challenges facing the Wichita economy, Porter writes "NIAR requiring more funding, with a limited commercialization track record, not focusing on break-through technology, and conducting little technology transfer to aerospace entrepreneurs."

While the generation of technical advances suitable for commercialization at WSU appears to be quite limited in the near-term, the Center for Entrepreneurship, housed in the School of Business, has the potential to be a valuable resource, both internally at WSU as well as externally in fostering a more dynamic entrepreneurial community in the Wichita area. The Center appears to be well positioned to interact with key technically inclined WSU administrative staff, science and engineering faculty, and NIAR staff members to identify promising technologies, to encourage intellectual property disclosures, and to provide advice and counsel on potential technology commercialization endeavors. In the past, this role has apparently not been a priority function of the Center. Recent changes in the leadership at the Center offer an opportunity to explore new roles, provided that the necessary support were to be forthcoming from key WSU academic leaders.

3.1.7 Clusters of Innovation Initiative

From the onset of this feasibility study, GCGI was made aware of an analysis of the Wichita area economy prepared by Dr. Michael Porter of Harvard University. Known as the *Clusters of Innovation Initiative*, this project dealt extensively with the overall Wichita economy, past and present, and made observations and recommendations relevant to the future of the community. GCGI chose to conduct the market analysis portion of the feasibility study, without first reading the full *Clusters of Innovation Initiative* report. This approach was an intentional effort to not be biased in the conclusions that GCGI drew by Porter's analysis and conclusions.

An overall summary of the *Clusters of Innovation Initiative* report is not appropriate here, but there are several insights from that work that GCGI feels are relevant to the market analysis for the proposed technology business incubator in the Wichita area. A number of additional related observations and data are noted throughout this report.

- Porter's observations are consistent with GCGI's conclusions about the lack of innovation in the Wichita area. Porter notes that "low measures in patent registration, venture capital investments, number of initial public offerings (IPOs), number of fast growing firms, and establishment growth all signal weak innovative capacity."¹⁸ Later, he also says low innovative capacity is partially the result of weakness of research institutions, poor air service, a K-12 education system that is only fair, concerns about quality of life, and other variables. Porter sees the future of any community's economy dependent on its ability to innovate, and therefore seems quite concerned about the prevailing situation in the Wichita area: "These innovation measures raise concern about the [Wichita] region's future competitiveness."¹⁹
- Wichita has had a lower-than-average unemployment rate, and Porter reports some respondents to surveys and interviews conducted during the *Clusters of*

¹⁸ Porter, p. 40.

¹⁹ *Ibid.*, p. 44.

Innovation Initiative work indicate the lack of availability of a qualified workforce as a major issue. In GCGI's experience elsewhere, a low unemployment rate can be detrimental to the development of a successful incubator for two reasons. First, bountiful employment opportunities suggest some potential entrepreneurs will instead choose to continue to work for someone else rather than delve into the less certain environment of entrepreneurship. Secondly, community and business leaders, whose support is critical to the success of an incubator, may be unwilling to back a project that could be perceived as a potential competitor for the scarce workforce.

- Wichita has considerable “entrepreneurial pride,” but has failed to generate as many new business establishments over the 1988 to 1998 time frame as the nation as a whole. Porter explains the “pride” to be based on four factors: (i) many current Wichita residents work for companies that were the results of entrepreneurial efforts in past generations; (ii) Wichita’s rural and Midwestern roots support free will and entrepreneurship; (iii) Wichita’s past entrepreneurs are “profiled widely” in the community; and (iv) “Wichita has invested in programs and institutions...that teach, nurture and support the region’s innovators and promote entrepreneurship generally.”²⁰ Interesting, Porter reports that many of the persons interviewed during *Clusters of Innovation Initiative* work said the Wichita area was entrepreneurial, whereas GCGI asked this question during many of its interviews and had responses like “it thinks it is” or “no.” Some GCGI interviewees simply did not respond to the question; therefore, GCGI believes that Wichita leaders are recognizing that the past entrepreneurial successes of the community are not indicators of current or future potential.
- Local government has played a “supportive but conservative role” in economic and business development, according to Porter.²¹
- Porter writes “While entrepreneurialism is held in high regard in Wichita... business leaders do not exhibit highly supportive attitudes toward new entrepreneurs, nor do they demonstrate a strong proclivity to collaborate.”²² While GCGI did not see this level of negativity during this feasibility study, GCGI did perceive that entrepreneurship was not a high priority among many persons.
- Relative to the discussion contained in Section 3.1.6, Porter reports that all federal university R&D investment in the Wichita area has occurred at WSU, and the low level of this investment has resulted in the Wichita MSA receiving only 25% of the national average of R&D investment per worker.²³

²⁰ *Ibid.*, pp. 47-48.

²¹ *Ibid.*, p. 66.

²² *Ibid.*, p. 72.

²³ *Ibid.*, p. 63.

In conclusion, the *Clusters of Innovation Initiative* identifies a number of areas of concern related to the ability of the Wichita area to successfully undertake and support a technology business incubator. However, the *Clusters of Innovation Initiative* does suggest that the Wichita community be aggressive in building its future economy, using terms like “Take the Offensive” and “Pursue Bold Strategies.”²⁴ GCGI’s conclusion is that the *Clusters of Innovation Initiative* identifies many of the same shortcomings and problems that we saw in our analysis of the market for a technology business incubator, but GCGI also believes that aggressive measures could be taken to overcome these problems and build a strong regional economy in the future. Therefore, one perspective would be to conclude that, while there is a lack of evidence of an existing market for the proposed Wichita technology business incubator, perhaps this effort should be considered as part of a larger bold strategy for supporting entrepreneurs and innovators in the Wichita area.

3.1.8 Market Analysis Summary

In summary, when considering measures often used for analyzing the level of technology in an MSA, Wichita does not rank very high. This information, along with other data collected during this feasibility study and GCGI’s own experience, suggest several conclusions:

- there is likely only a modest market for a technology business incubator in Wichita;
- the proposed Wichita technology business incubator would need to appeal to a broadly defined market of technology-based companies, including firms with modest utilization of technology (see, for example, Section 2.1);
- non-technology companies would likely need to be included in the proposed Wichita incubator (i.e., be a mixed-use incubator) to attract a sufficient number of tenants to meet even modest occupancy levels, thereby having the potential to become financially self-sufficient (see, for example, Section 2.2);
- one or more anchor tenants will probably need to be included to help ensure critical mass and financial viability for the technology business incubator (see Section 3.1.4); and
- the Wichita technology business incubator primarily would not be catering to an existing technology market, but will need to be part of a larger effort to attract existing firms and entrepreneurs from elsewhere (e.g., the presence of a technology business incubator can help in such an economic development effort by demonstrating visible support for technology firms in the area).²⁵

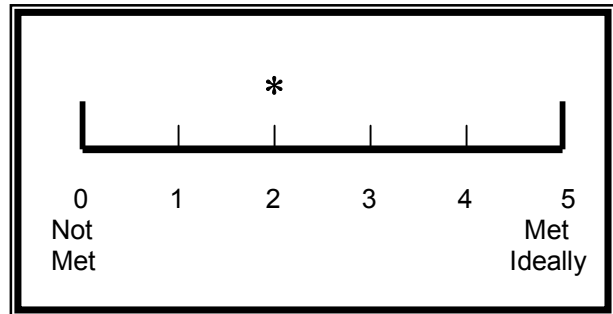
In conclusion, GCGI believes there is a rather limited market for a technology business incubator in the Wichita area, especially if the proposed incubator is to be focused

²⁴ *Ibid.*, pp. 122-123.

²⁵ Incubators have been shown elsewhere to successfully provide the initial location for an outside firm considering relocating or expanding to the community. In addition to providing temporary space and shared office services to reduce the overhead cost of that initial office, an incubator also can work with local economic developers to provide market data, financial incentives, and facility assistance to encourage the firm to establish a permanent presence in the community.

exclusively on housing technology-based companies. The primary survey data identified an insufficient number of potential regular tenants or anchor tenants to achieve reasonable initial occupancy levels. Also, the secondary data are not particularly positive in terms of the opportunities in the Wichita area for the formation of technology-based firms.

Finally, a key to the financial success of the proposed technology incubator could be enhanced with the presence of one or more anchor tenants. Only one candidate identified through the technology incubator interest survey disseminated in this feasibility study could possibly be a suitable anchor tenant. GCGI's primary concern regarding the question of the market for the technology business incubator is the relatively small number of surveys that could be collected during the feasibility study. Given the mixture of positive and negative indicators from the market analysis, GCGI has rated the Wichita technology business incubator as a "2" on its scale of 0 to 5 on the market criterion, thus rating the feasibility of the proposed Wichita technology business incubator solely from a market perspective as below average.



3.2 Champion Criterion

The champion criterion measures the availability of an organization or individual who is committed to seeing a proposed incubator through its development and early operational stages. The champion must have the ability and tenacity to see the project through difficult times, and also have the respect of the community and other entities involved in the project so that they will continue to follow the champion's lead.

In many communities in which GCGI has conducted incubator feasibility studies in the past, potential champions emerge from organizations, such as a Small Business Development Center, a local or regional chamber of commerce, an institution of higher education located in the community, and/or a nonprofit economic development organization. The Wichita area has existing organizations in each of these categories that could, in principle, fill the role of the champion for the proposed technology business incubator. However, the results of the interviews conducted by GCGI did not suggest that any of these organizations have the correct mix of skills and experience and/or have the inclination to serve in this capacity.

GCGI identified only three possible champions during the course of this feasibility study: the Mid-America Manufacturing Technology Center (MAMTC), the Wichita Technology Corporation (WTC), and a new entity.

The MAMTC serves as the Manufacturing Extension Program, as designated by the National Institute of Standards and Technology, for Kansas. The MAMTC provides basic business assistance for a number of inventors, innovators, and light manufacturers in the Wichita area. In addition to being a business advisor to small and start-up firms, MAMTC's other primary qualification to be the champion of the proposed Wichita technology business incubator is its enthusiasm for such an economic development initiative in the area. However, GCGI believes the focus of MAMTC is too narrow for the proposed technology business incubator, which would include more than manufacturing companies.

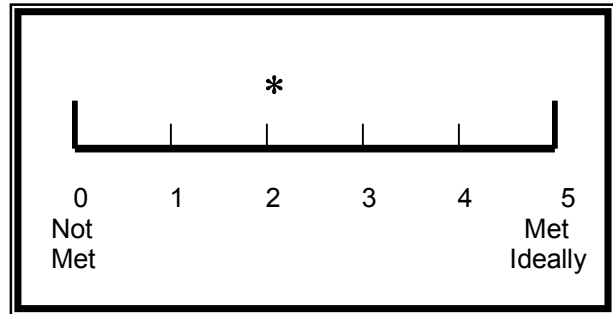
The WTC is a non-profit corporation created in 1994 as part of the statewide Kansas Technology Enterprise Corporation (KTEC) initiative to encourage technology-related business growth. The WTC currently provides both seed capital and business assistance to its clients, most of whom are technology-based firms. In addition to WTC's obvious qualifications to be the champion of the proposed technology business incubator in Wichita, based on its clientele and services, WTC has been mentioned as a possible champion as a way for local government to invest in WTC without making direct payments or subsidies.²⁶ GCGI questions whether WTC would be a suitable champion for the proposed technology business incubator, both because it currently works with a relatively narrow segment of the technical entrepreneurs and technology-based small business community in the Wichita area, does not enjoy universal support in the community, and it is doubtful that the proposed technology business incubator could generate significant operating surplus for WTC (see Section 3.6).

As always is the case, an alternative for a champion for the proposed Wichita technology business incubator is a new entity that would be formed specifically for the purpose of leading the project. While GCGI always seeks to find existing organizations to take on the championing role, there are times when no existing entity brings all of the desirable attributes to that role. A new entity would have the advantage of allowing representation in the technology business incubator's development and operations from a wide variety of existing organizations in the area. For example, WTC could be represented on the governing board of the new entity, as could the City of Wichita, Sedgwick County and possibly the counties of Butler, Harvey, and Sumner, entrepreneurs in the community, the Wichita Chamber of Commerce, the KTEC, and others. The disadvantages of forming a new entity include: (i) negative public perception that "yet another economic development group" is being formed and (ii) the diversion of resources away from incubator development and toward the organizational and legal tasks associated with forming a new entity. GCGI believes creation of a new entity is most appropriate in situations where no existing local entity has the desire, qualifications, support, and respect needed to serve effectively as a champion. This situation may very well be the case in Wichita.

The lack of strong potential champions for the proposed Wichita technology business incubator causes GCGI to rate the Wichita technology business incubator on the

²⁶ Although WTC does not, many of the other KTEC affiliated organizations in Kansas receive annual direct payments from their local and/or regional governments.

champion criterion as a “2” on the 0 to 5 scale. Nonetheless, the experience of WTC in the technology business and entrepreneurial community in Wichita could bring an important perspective to the establishment of a technology business incubator in the Wichita area. Similarly, the linkages that the Wichita State University (WSU) Center for Entrepreneurship has the potential to develop with the research activities at WSU, as well as the educational programs, should be a valuable resource to the proposed technology business incubator.



3.3 Real Estate Criterion

In the feasibility analysis conducted under the GCGI model, the real estate criterion addresses whether there appear to be many suitable sites for a proposed incubator, with possible sites ranging from existing buildings to raw or redevelopable land. In downtown Wichita, there reportedly are a large number of existing buildings that might be a suitable location for the technology business incubator. However, a thorough investigation of specific sites and buildings was beyond the scope of this study.

Implicit in this analysis is the determination of whether suitable sites are in general geographical areas favored by local entrepreneurs. Figure 2 summarizes the locational choices of the 15 respondents to the technology incubator interest survey, and the preferences of the four respondents who expressed a willingness to possibly become tenants. The latter group is the most relevant because of the level of commitment they are potentially willing to make to the proposed Wichita technology business incubator, but the former group is also important because they represent some of the companies that might utilize services of the proposed technology business incubator by becoming affiliates.

No location received the support of more than 33% of the survey respondents (see Figure 2a), although downtown Wichita and northeast Wichita clearly dominated the choices. Responses to the “other” category included a variety of options without clearly identifying a third favored location. There is greater consensus among potential tenants, with 50% favoring a downtown location (see Figure 2b). The results of the survey, along with the comments made during interviews conducted by GCGI during

Figure 2a. Locational Preferences All Respondents

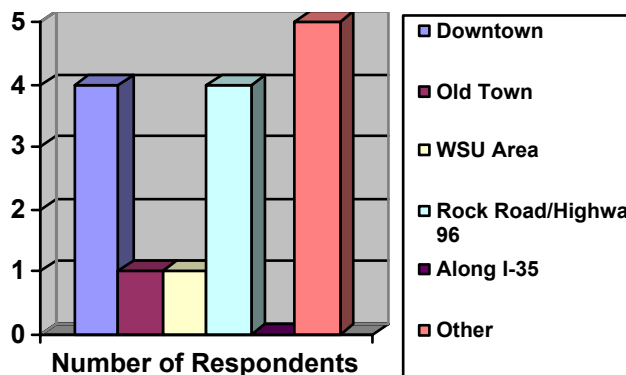
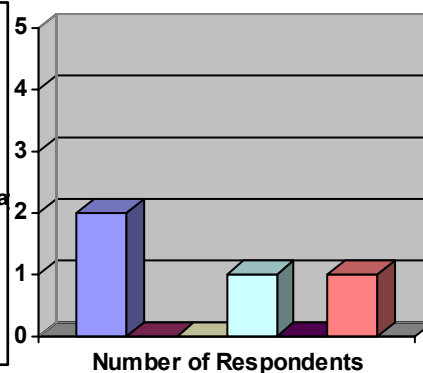


Figure 2b. Locational Preferences Potential Tenants



this feasibility study, suggest that the either downtown or northeast Wichita would be a reasonable and acceptable location for the proposed technology business incubator. Furthermore, several persons interviewed during this feasibility study indicated that getting from one area of Wichita to another is easy, therefore making the precise location not terribly important.

One variable that may play into the locational decision will be the availability of a suitable building under favorable circumstances. Some persons interviewed by GCGI suggested that the City of Wichita and/or Sedgwick County might have ownership of a variety of buildings, many in the general downtown area, presumably through property tax forfeitures. Individuals familiar with the Wichita downtown real estate market indicated that a suitable building likely could be found in the downtown area.

Overall, GCGI gives the Wichita technology business incubator a score of “3” on the scale of 0 to 5 on the real estate criterion. There appear to be a number of suitable potential locations in downtown Wichita, based on the availability of existing buildings. In addition, location does not appear to be as important in Wichita as in some communities because travel times from one part of the metropolitan area to another are quite modest.

3.4 Business Assistance Criterion

The fourth criterion of the GCGI Incubator Feasibility Model[©] addresses the need for business assistance by local entrepreneurs, and the willingness of existing sources of business assistance to work with an incubator in meeting those needs. Offering a comprehensive set of business assistance services that are highly sought by local technology entrepreneurs is critical to an incubator’s ability to contribute to the growth and success of those businesses.

The National Business Incubation Association (NBIA) indicates the breadth of services that are provided by technology incubators.²⁷ Table 6 (page 22) shows the services that are most commonly provided by the 95 technology incubators that participated in the NBIA survey. While some of the services are very specialized and most relevant to technology firms, others are common to most incubators and suggest that technology entrepreneurs value fundamentals like business basics, shared administrative and office services, and networking opportunities.

The survey of local technical entrepreneurs and technology-based small and start-up firms that was administered as part of this feasibility study provides valuable insights into the business assistance for small and start-up, technology-related businesses in the Wichita area. The areas of greatest business assistance need, and the resources of greatest value, that the Wichita technology business incubator could provide are taken from Questions 3 and 8 of the survey results, as shown in Appendices A and B. The

²⁷ 2002 *State of the Business Incubation Industry*, National Business Incubation Association, 2003.

needs indicated by the largest number of overall survey respondents, as well as those who are potential tenants of the proposed technology business incubator (See Appendix B, Question #7) are listed in Table 7 (page 23).

Table 6. Services Commonly Offered by Technology Incubators.

| Service | Percentage of Technology Incubators Offering |
|--|--|
| Help with business basics | 90 |
| Links to higher education resources | 88 |
| Links to venture and angel funds | 88 |
| Internet access | 87 |
| Networking activities | 86 |
| Links to strategic partners | 85 |
| Shared administrative and office services | 82 |
| General legal services | 62 |
| Marketing assistance | 79 |
| Commercializing technology | 78 |
| Help with accounting and financial management | 76 |
| Help accessing commercial loans | 75 |
| Help accessing specialized loan funds | 74 |
| Specialized equipment and facilities | 71 |
| Shadow boards and mentors | 71 |
| Intellectual property management | 70 |
| Management team identification | 69 |
| Help with presentation skills | 66 |
| Human resources and personnel development | 64 |
| Assistance with electronic commerce | 59 |
| Business management processes and customer assessment | 55 |
| International trade assistance | 55 |
| Help with regulatory compliance | 54 |
| Federal procurement assistance | 54 |
| Help with business etiquette | 54 |
| Comprehensive business training | 51 |
| Assistance with manufacturing practices, processes, and technology | 48 |
| Assistance with product design | 48 |
| Loaned executives | 44 |
| In-house investment funds | 42 |
| Economic literacy training | 21 |
| Child care services | 13 |

The predominate needs of all survey respondents and only those respondents interested in becoming tenants of the Wichita technology business incubator are in the areas of locating external investment capital and marketing. Additionally, one-third of the survey respondents desire assistance in intellectual property protection and product development. None of the respondents interested in becoming tenants of the technology business incubator expressed a need for either of these services. This situation may be attributable to these respondents having more mature technology-based products than the full set of respondents.

Table 7. Business Assistance Needs Expressed by Survey Respondents.

| Area of Need or Valued Resource | Percentage of All Respondents | Percentage of Potential Tenants |
|--|--------------------------------------|--|
| Marketing | 47 | 50 |
| Accounting | 13 | 0 |
| Legal issues | 27 | 0 |
| Taxes | 20 | 0 |
| Debt financing | 13 | 0 |
| Market analysis | 27 | 0 |
| Financial assistance | 13 | 0 |
| Business planning | 13 | 0 |
| Business registration | 13 | 0 |
| Securing outside capital | 53 | 50 |
| Personnel management | 7 | 0 |
| Intellectual property protection | 33 | 0 |
| Product development | 33 | 0 |
| Manufacturing process | 18 | 0 |
| Finding angel investors | 53 | 25 |
| Other | 0 | 0 |

Assistance in market analysis and legal issues were the next two most common business assistance needs identified by the survey respondents, with 27% of the respondents expressing these needs. In general, resources for market analysis, such as training, printed or online databases, and specialized consulting in an area like technology products and services, can be provided more effectively in the environment of a technology incubator than on a case-by-case basis by providers serving a broader constituency. Advice on legal issues is best provided by professional attorneys, although a technology business incubator should be able to recommend legal counselors who have provided high-quality advice to other tenants as well as negotiate favored rates for their tenants and clients with those attorneys.

One area of concern is the general lack of business assistance needs identified by the four survey respondents who are potential tenants of the proposed technology business incubator. The value of an incubator often lies in the provided services, yet these tenant candidates do not seem to feel the need for many services. This result further questions the market for a technology business incubator in the Wichita area. Not only is the market for a technology business incubator in the community small (see Section 3.1), but, if the survey respondents are an accurate representation, the market also does not value or seek the kind of business assistance typically provided in a business incubation setting. Put another way, those who may be good a tenant candidate may not see any value in being part of the proposed technology business incubator.

In summary, many of the business assistance needs and resources sought by local technology entrepreneurs and businesses are consistent with what most technology business incubators provide and are consistent with the strengths and capabilities of an incubator versus other business assistance vehicles. However, the potential tenants identified through the technology incubator interest survey do not appear to feel the

need for assistance in very many areas and, therefore, may not value the services available from the proposed technology business incubator.

3.4.1 Sources and Utilization of Business Assistance

According to the technology incubator interest survey disseminated as part of this feasibility study, a majority of technical entrepreneurs and small or start-up, technology-based businesses have not sought help from most of the available public or private sources of business assistance. Moreover, on average, the potential tenants of the proposed technology business incubator have made somewhat less use of the existing business resources than have the survey respondents as a whole. Table 8 (page 25) shows the number of total respondents and respondents who are potential tenants who have used various sources of business assistance.²⁸ For example, 47% of the overall survey respondents have consulted with the Small Business Development Center (SBDC) at Wichita State University, which is virtually identical to the percentage (i.e., 50%) of the potential tenants who have sought advice from the SBDC. Similar usage patterns are evident for many of the organizations in Table 8 that provide business assistance. Notable exceptions include WTC, the Wichita Chamber of Commerce, the South Central Kansas Economic Development District, attorneys, accountants, and management consultants.

According to the data in Table 8, local technology firms are somewhat more likely to use public or non-profit sources of assistance, like the SBDC, WTC, or the Wichita Chamber of Commerce, than a private, for-profit source like an attorney or accountant. For example, survey respondents using WTC reported 60 to 75% utilization rates for all respondents and potential tenants, respectively, versus only 47 to 75% for attorneys, 40 to 75% for accountants, and 47 to 50% for bankers.

GCGI draws several conclusions from the results of the utilization ratings of service providers found in the survey. First, potential tenants could be queried about their concerns with the current sources of business assistance to address whatever is causing the lower utilization rates of outside assistance providers. That result may possibly be explained by potential tenants feeling current sources are not appropriate for providing advice to technology firms. Second, the reason for somewhat lower utilization of private sources among survey respondents who are not potential tenants could be explored. If the cost of private sources is an issue, then the technology business incubator might consider negotiating reduced fees from private providers, and/or offering to subsidize a tenant's or affiliate's cost of using private service providers. If quality of the service is a concern, then the proposed technology business incubator could help local technical entrepreneurs by identifying and qualifying alternative sources of assistance.

²⁸ Because the technology incubator interest survey was disseminated largely to entrepreneurs or companies in the databases of the WTC and the SBDC, these data may not be representative of a broader sample and, consequently, the accuracy of the conclusions may be compromised.

Table 8. Sources of Business Assistance Used.

| Organization | Percentage of All Respondents | Percentage of Potential Tenants |
|---|--------------------------------------|--|
| Small Business Development Center (SBDC) | 47 | 50 |
| Wichita Technology Corporation (WTC) | 60 | 75 |
| Wichita Chamber of Commerce | 27 | 50 |
| Heartland Procurement Technical Assistance Center | 7 | 0 |
| Mid-America Manufacturing Technology Center | 7 | 0 |
| Service Corps of Retired Executives (SCORE) | 7 | 0 |
| South Central Kansas Economic Development District | 27 | 0 |
| Wichita Independent Business Association | 20 | 25 |
| Center for Entrepreneurship at Wichita State University | 27 | 25 |
| Attorneys | 47 | 75 |
| Accountants | 40 | 75 |
| Bankers | 47 | 50 |
| Angel Investors | 33 | 25 |
| Management Consultants | 13 | 25 |
| Other | 13 | 0 |

Third, based on the data of Table 8 and on the interviews with local technical entrepreneurs and small and start-up, technology-based businesses, GCGI concludes that there appear to be unmet business assistance needs among technology entrepreneurs and business owners in the Wichita area. This observation is consistent with part of the business assistance criterion in the GCGI Incubator Feasibility Model[®], that there exist unmet needs among the target market of businesses and entrepreneurs. However, there is some question as to why the existing sources of business assistance are not heavily used and how this practice impacts the value of the proposed technology business incubator, as well as the business assistance to be provided directly as well as the referrals to other external advisors made to tenants or affiliates.

3.4.2 Perceived Value of Business Assistance Received

Based on the interviews conducted during this feasibility study and the responses to the technology incubator interest survey, respondents are about as likely to judge assistance received from all types of business assistance providers as “not very helpful” as “very helpful.” This result is relatively consistent with GCGI’s experience in other communities and suggests that there should be opportunities for the proposed technology business incubator to provide high-quality services and/or introduce tenants or affiliates to high-quality service providers. In general, the proposed incubator could perform a service by: (i) determining the quality of various sources of assistance, (ii) encouraging tenants or affiliates to seek help from those sources of business assistance that have a history of providing sound advice, and (iii) providing assistance directly when alternative sources of affordable and competent assistance cannot be identified.

Figure 3 (page 26) shows the fraction of survey respondents who used one or more sources of business assistance and were satisfied with the advice received (i.e., indicated that the source was either “very helpful” or “helpful”). Among providers used

by three or more respondents, the blue bars represent all survey respondents, while the red bars correspond only to potential tenants. Only attorneys and the Wichita Independent Business Association received a 100% satisfaction rating from all respondents. Approximately 70% of all respondents were satisfied with the assistance received from the other two most commonly used business assistance providers, the SBDC and WTC. The business assistance provider receiving the lowest satisfaction ratings was the Wichita Chamber of Commerce.

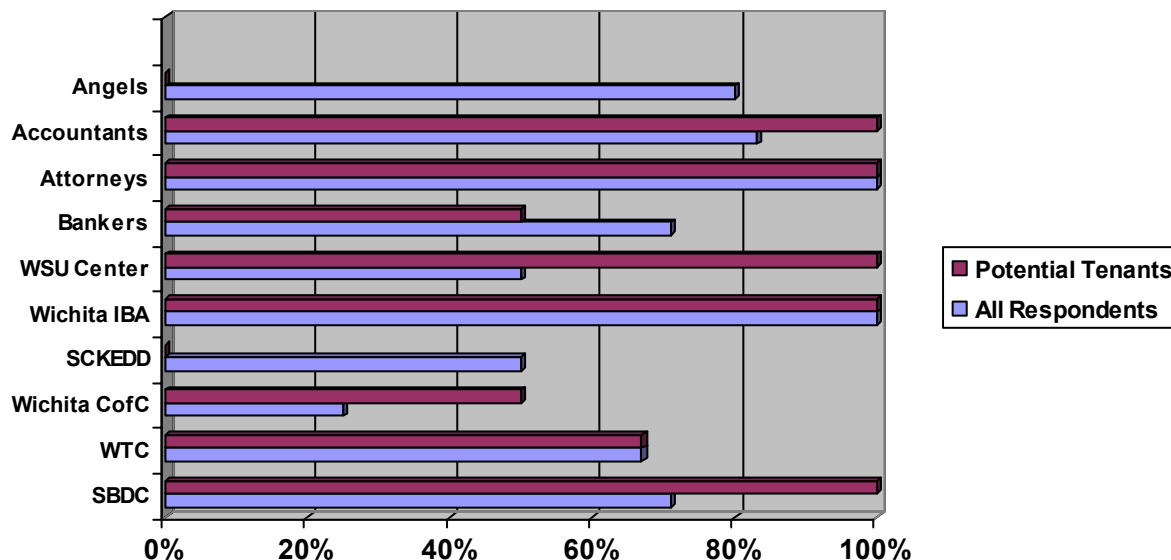


Figure 3. Satisfaction Ratings of Business Assistance Sources²⁹

GCGI found, among public and non-profit business service providers, that awareness of the technology business incubator concept was mixed, with some not being very familiar with the concept. However, once the concept was explained, the response of service providers regarding the proposed technology business incubator was varied. While there did not appear to be many service providers who viewed the services to be provided by the proposed technology business incubator as a competitor, there were some who questioned whether a technology business incubator was needed in the

²⁹ Angels refers to angel investors; WSU Center signifies the Center for Entrepreneurship; Wichita IBA refers to the Wichita Independent Business Association; SCKEDD denotes the South Central Kansas Economic Development District; Wichita C of C signifies the Wichita Area Chamber of Commerce. The number of responses, especially among potential tenants, is so small that any conclusions should be drawn with caution. Figure 3 does not show there were no users among potential tenants of some assistance sources (i.e., Heartland Procurement Technical Assistance Center, Mid-America Manufacturing Technology Center, Service Corps of Retired Executives, SCKEDD, and Other). This situation should be differentiated from instances in which some potential tenants used a source but no user was satisfied (e.g., Angels). In addition, Figure 3 does not distinguish “very helpful” from “helpful” response categories because of the small sample size.

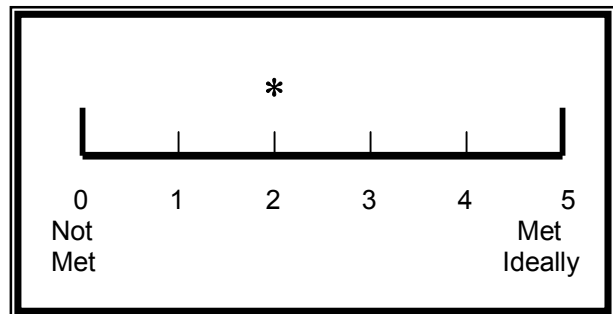
Wichita area. However, GCGI was given an opportunity to interview relatively few private, for-profit providers of business assistance during this feasibility study. Therefore, no definitive conclusion about their attitude toward the proposed technology business incubator in the Wichita area can be drawn.

GCGI's experience in other communities considering development of an incubator is that for-profit providers of business assistance are usually not in opposition to an incubator provided that they have been briefed about the intent of the effort and are assured that the incubator will refer its clients to private service providers as necessary and appropriate. This education and assurance effort should be undertaken concurrently with the development of a business plan for the proposed Wichita technology business incubator. This outreach effort is particularly important because these professionals are more likely to consider the proposed technology business incubator to be a competitor or a threat to their profession than public-sector business assistance providers.

3.4.3 Business Assistance Summary

As indicated in Table 7, acquiring investment capital is a particularly important area of interest to the local technology-based business community. GCGI believes a technology business incubator in the Wichita area could take a lead role, in collaboration with WTC, in helping technical entrepreneurs and technology-based businesses understand how best to make presentations to potential sources of investment capital. These same organizations could work together to introduce qualified entrepreneurs and businesses to investors who are known to have a particular interest in technology-based businesses.

Given the apparent level of the unmet business assistance needs that the proposed technology business incubator might satisfy, and the general level of support expressed by existing service providers, GCGI assigned a score of "2" on the scale of 0 to 5 for the business assistance criterion in the GCGI Incubator Feasibility Model[®].



3.5 Development Funding Criterion

The fifth criterion in the GCGI Incubator Feasibility Model[®] is development funding. This criterion asks whether the cost of establishing and, if necessary, initially subsidizing the operations of an incubator is reasonable, and whether that cost can be covered by sources that are, or likely to be, available to the project developers.

This analysis is based on the approximate cost to develop the proposed technology incubator in the Wichita area, under four different scenarios. These scenarios are consistent with the real estate options mentioned in Section 3.3, and also correspond to the operating financial projections presented in Section 3.6. In brief, these four scenarios are:

1. Renovate a building in good condition in downtown Wichita that is donated by the City of Wichita;
2. Renovate a building in poor condition in downtown Wichita that is donated by the City of Wichita;
3. Remodel a building in northeast Wichita that is donated by the City of Wichita; and
4. Remodel a building in northeast Wichita that is purchased from a private owner.

Scenarios #1 through #4 assume a building size of 30,000 square feet, with the space available to anchor tenant(s) ranging from 5,000 to 8,000 square feet. The size of the proposed technology business incubator is kept constant across these four scenarios so that the impact of variables other than physical size could be compared. A 30,000-square-foot facility also is a rule-of-thumb size in the incubator industry for a facility that has a strong chance of being financially viable.

As indicated in Table 9, the cost of developing the proposed technology business incubator under these various scenarios ranges widely from \$665,000 to about \$3.9 million. The first part of the development cost is for facility acquisition. Scenarios #1, #2, and #3 assume the City of Wichita donates a building so that there is no facility acquisition cost. For Scenarios #1 and #2, the assumed renovation costs are \$15 and \$45 per square foot, respectively, which reflect the different initial conditions of the donated buildings. The remodeling costs in Scenarios #3 and #4 are assumed to be

Table 9. Wichita Technology Business Incubator Development Cost Estimates.

| Cost Category | SCENARIO | | | |
|---------------------------|---|---|---|---|
| | #1 Renovate Donated Downtown Wichita Building in Good Condition | #2 Renovate Donated Downtown Wichita Building in Poor Condition | #3 Remodel Donated Building in Northeast Wichita | #4 Remodel Purchased Building in Northeast Wichita |
| FACILITY ACQUISITION | | | | |
| Purchase of Building | N/A | N/A | N/A | \$3,300,000 |
| Renovation | \$450,000 | \$1,350,000 | N/A | N/A |
| Remodel | N/A | N/A | \$600,000 | 300,000 |
| Equipment and Furnishings | 50,000 | 50,000 | 50,000 | 50,000 |
| Contingency (8%) | 40,000 | 112,000 | 52,000 | 28,000 |
| TOTAL FACILITY COST | \$540,000 | \$1,512,000 | \$702,000 | \$3,678,000 |
| Operating Subsidy | 125,000 | 130,000 | 50,000 | 250,000 |
| TOTAL DEVELOPMENT COST | \$665,000 | \$1,642,000 | \$752,000 | \$3,928,000 |

\$20 and \$10 per square foot, respectively. The remodeling costs assumed in these two scenarios are lower than the renovation costs assumed in Scenario #2 because buildings in northeast Wichita are generally newer, more likely to meet the American with Disabilities Act (ADA) requirements, and in better overall condition than those in downtown Wichita.

All four scenarios shown in Table 9 include an assumed cost of \$50,000 for equipment (including telecommunications) and basic furnishings. A contingency of 8% of renovation or remodeling costs and equipment and furnishings costs is assumed in all scenarios, which is consistent with GCGI’s assumptions in similar projects elsewhere involving renovation or remodeling of existing buildings. The final part of the development cost for the proposed Wichita technology business incubator, as shown in Table 9, is the amount of funding that needs to be available to cover operating subsidies. Ideally, only a relatively minor operating subsidy must be covered during the first few years of operations before the technology business incubator would achieve sufficient occupancy and stability so that revenues cover operating expenses. As will be seen in Section 3.6, this situation is true for three of the four scenarios. The level of operating subsidy required for each scenario is derived from the operating cash-flow analyses described in Section 3.6. The subsidy shown for Scenario #3, remodeling of a donated building in northeast Wichita, is substantially lower than the other three scenarios for two reasons. First, the assumption that the building is donated eliminates the cost of acquiring the basic facility when compared to Scenario #4. Secondly, rental rates are higher in the northeast Wichita commercial real estate market than in downtown Wichita, which allows this scenario to generate higher rental revenues and, therefore, require a lower operating subsidy when compared to Scenarios #1 and #2.

Table 10 shows potential funding sources to support the development of the proposed technology business incubator under each scenario. The Economic Development Administration (EDA), which is part of the U.S. Department of Commerce, is the largest

Table 10. Potential Technology Business Incubator Development Funding Sources.

| Source of Cash Funds | SCENARIO | | | |
|-------------------------------------|---|---|---|---|
| | #1 Renovate Donated Downtown Wichita Building in Good Condition | #2 Renovate Donated Downtown Wichita Building in Poor Condition | #3 Remodel Donated Building in Northeast Wichita | #4 Remodel Purchased Building in Northeast Wichita |
| Economic Development Administration | N/A | N/A | N/A | N/A |
| City of Wichita | \$100,000 | \$600,000 | N/A | \$1,800,000 |
| County governments | 550,000 | 1,000,000 | \$690,000 | 1,300,000 |
| Private donations | 20,000 | 40,000 | 65,000 | 65,000 |
| Commercial loans | 0 | 0 | 0 | 760,000 |
| Total | \$670,000 | \$1,640,000 | \$755,000 | \$3,925,000 |

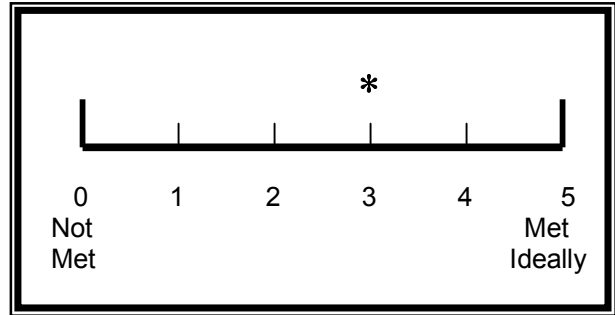
supporter, among federal agencies, of incubator projects. However, the economic conditions prevailing in Wichita are not likely to qualify for support from EDA because the focus of EDA is on depressed economic areas. Only if the developers of the proposed technology business incubator were able to successfully argue that the project would primarily benefit low to moderate income individuals would EDA become a more viable source. This claim is even harder to make given the intent to develop a technology business incubator in contrast to a mixed-use incubator, for example, which would more likely cater to a broader clientele.

The second and third sources shown in Table 10 are the City of Wichita and principally Sedgwick County, with possibly lesser support from Butler, Harvey, and Sumner counties. The in-kind funding by the City of Wichita is not shown in Table 10, but the amounts, which correspond to the assumed value of the donated buildings in Scenarios #1, #2, and #3 are \$540,000, \$300,000, and \$3,000,000, respectively. These local governments might be able to participate in the funding of the technology business incubator, using, in part, Community Development Block Grant (CDBG) funds, although again the low- to moderate-income population benefit may impact the ability to use CDBG funds. The amounts shown for the four scenarios are aggressive, and assume a high level of support for the proposed technology business incubator by local governments. During the course of this feasibility study, GCGI received different indications of the level of commitment that might be made to the proposed technology business incubator by Sedgwick County, which raises doubts about the county's willingness to participate financially, particularly at the levels shown in Table 10.

The fourth source of development funding shown in Table 10 is private donations. These funds may come in the form of cash, in-kind services, or donations of equipment and furnishings. The amounts shown are deemed to be reasonable assumptions for an expected level of community support for such a visible economic development project as the proposed technology business incubator. Higher amounts are assumed in Scenarios #2, #3, and #4 because of the greater need to close the gap between the development cost of the proposed technology business incubator and the funds assumed to be available from the other potential funding sources.

The final source of development funding shown in Table 10 is commercial loans. The dollar amount for this source is treated essentially as a "gap filler" between the development costs estimated in Table 9 and the total dollar value of the other potential funding sources listed in Table 10. The only assumed funding from commercial loans is shown in Scenario #4, which corresponds to a mortgage or promissory note to finance the purchase of the building from a private owner. GCGI believes the dollar amount shown for this source is reasonable for an overall development cost of this magnitude. The associated debt service is factored into the operational cash flows in Section 3.6 for Scenario #4. The loan amount shown might be made by a consortium of local lenders who therefore share the risk of making this sort of commercial loan to the organization developing the Wichita technology business incubator. However, GCGI does not know if one or more financial institution would consider participating in such a consortium or what the acceptable funding level might be.

In conclusion, Table 9 indicates that the total cost of developing the proposed technology incubator is between \$665,000 and about \$3.9 million depending on the specific scenario. Table 10 shows that there are potential and reasonable sources of development funds to cover the development costs in all four scenarios. However, these sources are not automatically available to the proposed technology business incubator, and there is significant risk in securing any one source of capital, much less the full capital investment required to fund any of the scenarios. Therefore, GCGI has assigned a score of “3” to the development funding criterion to reflect the risks associated with successfully securing the potential funding sources necessary to cover the development costs of the proposed technology business incubator.



3.6 Financial Self-Sustainability or Self-Sufficiency Potential Criterion

The financial self-sustainability or self-sufficiency potential criterion, like the development funding criterion, defines the financial viability of a proposed incubator.³⁰ But unlike the development-funding requirement, this criterion pertains to the ability of an incubator to become stable financially during its operations and to do so without needing a significant operating subsidy beyond the start-up phase.

Cash-flow forecasts have been prepared for the first five years of operations of the proposed Wichita technology business incubator to assess its ability to become financially self-sustainable (see Appendix C). Forecasts have been prepared for all four scenarios described in Section 3.5, as well as a minor variation of Scenario #2. All of the cash-flow forecasts for these scenarios and the variation share the following assumptions.

- The proposed technology business incubator will consist of a mix of primarily office space and a lesser amount of space that would be suitable for light manufacturing, assembly, or light laboratory space. The assumed mix is shown for each scenario.
- Rental rates will be at or slightly above market (i.e., \$14/square foot for class “B” office space, \$8.50/square foot for light assembly/manufacturing/laboratory space, and \$12/square foot for anchor tenant space for downtown Wichita; \$16/square foot for class “B” office space, \$8.50/square foot for light assembly/manufacturing/laboratory space, and \$14/square foot for anchor tenant

³⁰ In this Section 3.6, the term self-sustainability is used. Self-sustainability is a less onerous requirement than self-sufficiency. The latter term suggests that an incubator covers all of its operating costs through its revenues, while the former term indicates the incubator is able to cover all of its operating costs through revenues derived from operations as well as other “relatable” contracts and sources.

space in northeast Wichita). These rates are inclusive of utilities, maintenance fees, and common-area charges.

- Some revenues will be derived from entrepreneurs who are not tenants but who want to access resources at the technology business incubator that are referred to as “affiliates” and are charged a membership fee of \$65/month. A relatively conservative number of ten affiliates associated with the proposed technology business incubator is assumed, however, reflecting the apparent limited market in the Wichita area for these types of services.
- A full-time manager, compensated at an annual salary level of \$65,000, is assumed as part of the salary burden on the technology business incubator. In addition, a full-time clerical support person at a \$30,000 per year salary is assumed in all scenarios. A fringe benefit rate of 20% of salaries is also assumed.
- All other operational expenses are based on GCGI estimates.
- Property taxes are assumed to be waived or not applicable for all scenarios.
- The fraction of the technology business incubator facility that is leasable (i.e., is not devoted to common areas including a reception area, conference room, hallways, or restrooms) is assumed to be 75% for office space in downtown Wichita buildings and 80% in buildings located in northeast Wichita, 80% for manufacturing/assembly/laboratory space, and 100% for anchor tenant space. The difference in the percentage of office space being leasable as a function of location is related to the relative efficiency generally achievable in newer, single-story buildings compared to older buildings.
- The technology business incubator is assumed to lease up gradually, starting in all scenarios at only 40% occupancy in Year 1 and increasing to only 80% by Year 5. The starting and ultimate occupancy levels in these scenarios are lower than GCGI assumes in many incubator projects to reflect a conservative estimate of the market for the Wichita technology business incubator. In addition, an incubator focused exclusively on technology companies will typically experience a slower growth in occupancy levels than a mixed-use incubator catering to a broader segment of the small and start-up business market.

Table 11 (page 33) shows four key variables that summarize the financial viability of the Wichita technology business incubator under Scenarios #1 through #4. The first, “Accumulated Operating Deficit,” shows how much funding is required to cover the deficit that the Wichita technology business incubator would run under each scenario before breaking even (i.e., the time when annual operating revenues first equal or exceed annual operating expenses). As shown in Table 11, Scenario #4 is expected to accumulate the largest operating deficit, primarily due to the debt service paid on the assumed commercial loan of \$760,000 (see Table 10).

Table 11. Summary of Operational Cash-Flow Projections.

| Category | SCENARIO | | | |
|-------------------------------|---|---|---|---|
| | #1 Renovate Donated Downtown Wichita Building in Good Condition | #2 Renovate Donated Downtown Wichita Building in Poor Condition | #3 Remodel Donated Building in Northeast Wichita | #4 Remodel Purchased Building in Northeast Wichita |
| Accumulated Operating Deficit | \$126,003 | \$126,003 | \$42,559 | \$261,082 |
| Break-Even Year | Year 4 | Year 4 | Year 3 | Year 5 |
| Break-Even Occupancy | 60 % to 70% | 60% to 70% | 50% to 60% | 70% to 80% |
| Year 5 Operating Surplus | \$41,749 | \$41,749 | \$96,587 | \$20,809 |
| Cumulative Break-Even Year | > five years | > five years | Year 4 | > 10 years |

The second line in Table 11, “Break-Even Year,” indicates the number of years of operation after the start of the technology business incubator required before enough annual revenue is generated to first cover annual operating costs. Scenario #5, based on purchase of a building, requires the longest time period, although break even by Year 5 is commonly considered acceptable in the incubator industry. Scenario #3 requires only three years to break even, which is quite good in GCGI’s experience.

The third line in Table 11, “Break-Even Occupancy,” indicates what fraction of the Wichita technology business incubator building must be filled to achieve financial break even for each scenario. Scenarios #1, #2, and #3 have similar break-even occupancies, between approximately 55% and 65%. These values, again in GCGI’s experience, are very reasonable. In contrast, Scenario #4 requires about a 75% occupancy level to break even financially, which is not unreasonable but obviously will require greater success in securing tenants to occupy the leasable space in the proposed technology business incubator.

The fourth line in Table 11, “Year 5 Operating Surplus,” represents how much surplus cash the technology business incubator might be generating annually once operations have stabilized. All four scenarios in Table 11 show an ability to produce positive net revenues by the fifth year, ranging from about \$21,000 to more than \$96,000. Only Scenario #3 appears to have the potential to meet the objective of having the proposed technology business incubator generate operating revenue for the Wichita Technology Corporation (WTC), especially because WTC would likely have to share any net revenue produced by the technology business incubator with other entities involved in its operation.

The fifth line in Table 11, “Cumulative Break-Even Year,” indicates when the technology business incubator has reached a level of positive cumulative net revenues. This period is an important measure because all prior operating deficits have been more than offset by operating surpluses at this point. Only, Scenario #3 reaches positive cumulative net revenues within five years. Scenarios #1 and #2 would reach positive cumulative cash flow in about seven years, while Scenario #4 would require more than 10 years. Clearly,

if the proposed technology business incubator must purchase a facility, its financial viability is much more in doubt.

The impact of having to purchase a building from a private owner is illustrated in Figure 4. Only Scenarios #3 and #4 (i.e., a donated building in northeast Wichita and a purchased building in northeast Wichita) are shown to simplify the example. Figure 4 shows that purchasing a building increases the maximum accumulated operating deficit of the proposed technology business incubator by over 500% to approximately \$261,000, almost doubles the length of time to break-even from three years to five years, and increases the occupancy level required to achieve break-even from a modest 55% to about 75%. Purchase of the building also has a dramatic impact on the net revenues generated by the proposed technology business incubator in Year 5 of operations (i.e., the net revenues drop nearly 80% from about \$97,000 to just under \$21,000) and on the time required to obtain cumulative break even (i.e., the time required increases from four years to more than 10 years).

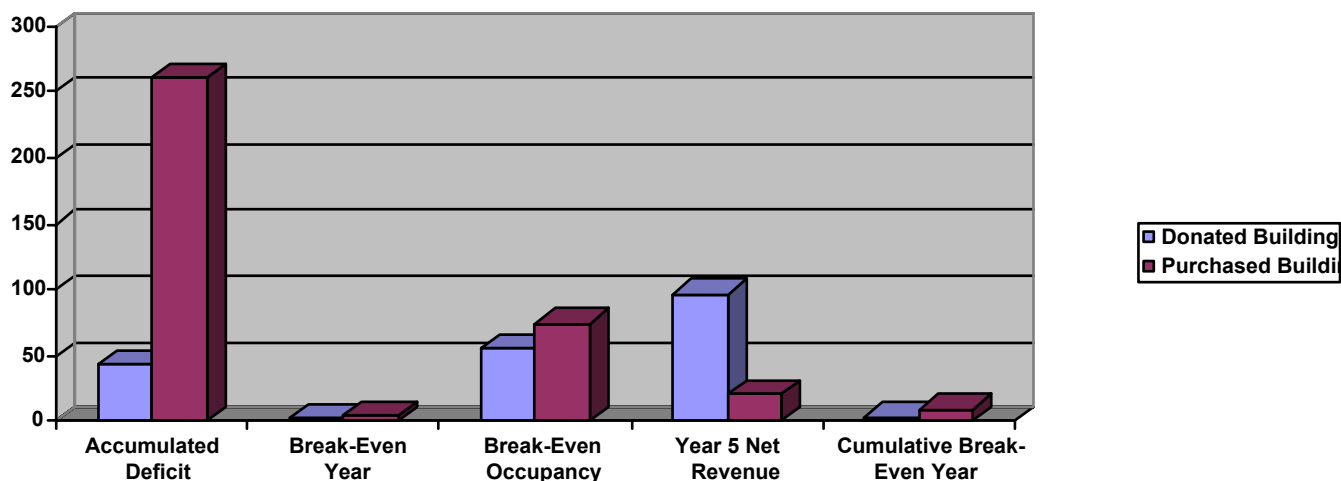


Figure 4. Impact of Building Purchase on Financial Viability.³¹

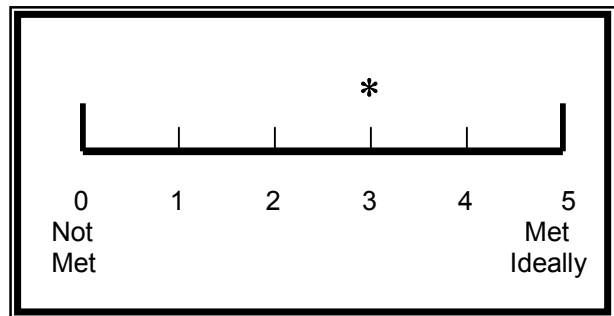
Based on the data presented in Table 11 and Figure 4, GCGI concludes that the preferred scenarios, solely from a financial self-sustainability perspective in decreasing order of preference, for the proposed technology business incubator are:

- remodel a building in northeast Wichita that is donated by the City of Wichita (Scenarios #3);
- renovate a building in downtown Wichita that is donated by the City of Wichita (Scenarios #1 and #2); and
- remodel a building in northeast Wichita that is purchased from a private owner (Scenario #4).

³¹ The Accumulated Deficit and Year 5 Net Revenue are given in thousands of dollars. The Break-Even Year and Cumulative Break-Even Year are given in numbers of years. The Break-Even Occupancy is given in percent.

The most financially attractive of these scenarios (i.e., a donated building in northeast Wichita) has modest operating deficits in the early years, can break even within the first three years of operation, can break even at reasonable occupancy levels of 50% to 60%, and can generate strong operating revenues in Years 4 and 5. The two scenarios involving the renovation of a donated building in downtown Wichita have equivalent operating numbers. However, these scenarios take about a year longer to reach operating revenue break even, have only about 40% of the Year 5 operating surplus, and require about a ten percentage point increase in occupancy levels to break even compared to Scenario #3, which assumes locating the technology business incubator in a donated building in northeast Wichita. Locating the technology business incubator in a purchased building in northeast Wichita is a poor alternative from a financial perspective when compared to any of the scenarios based on receipt of a donated building. The primary disadvantage of a purchased building is the requirement for a substantial commercial loan to be serviced by the operating revenues of the technology business incubator.

GCGI has selected a score of “3” in terms of the ability of the proposed Wichita technology business incubator to meet the financial self-sustainability potential criterion. GCGI is impressed with the relatively low anticipated operating deficits, quick break even, low break-even occupancy level, and reasonable Year 5 net revenues for all of the scenarios. However, achievement of financial self-sustainability is heavily dependent upon the City of Wichita actually being capable of donating a building to house the proposed technology business incubator. If such a donation is not practical, being able to develop a financially self-sustainable technology business incubator in the Wichita area is much less likely.



4.0 FEASIBILITY CONCLUSION

Section 3.0 included an extensive discussion of how GCGI evaluated the Wichita technology business incubator against the six criteria in the GCGI Incubator Feasibility Model[®]. Scores were assigned to the Wichita technology business incubator for each criterion. The other primary component of the GCGI quantitative assessment of a proposed incubator is the relative weighting of each of the six criteria in the GCGI Incubator Feasibility Model[®]. A different weight is assigned to each criterion to reflect its overall importance to the feasibility of an incubator project. Weights can range from 0, which means the criterion is irrelevant to the feasibility issue, to 5, which indicates that the criterion is mandatory to the feasibility of an incubator.

GCGI has established the following weights for the six criteria. These weights are used on all of its incubator feasibility projects, although they may change over time as conditions warrant.

| <u>Criterion</u> | <u>Weight</u> |
|---|---------------|
| Market | 5.0 |
| Champion | 5.0 |
| Real Estate | 3.0 |
| Business Assistance | 3.0 |
| Development Funding | 5.0 |
| Financial Self-Sustainability Potential | 4.0 |

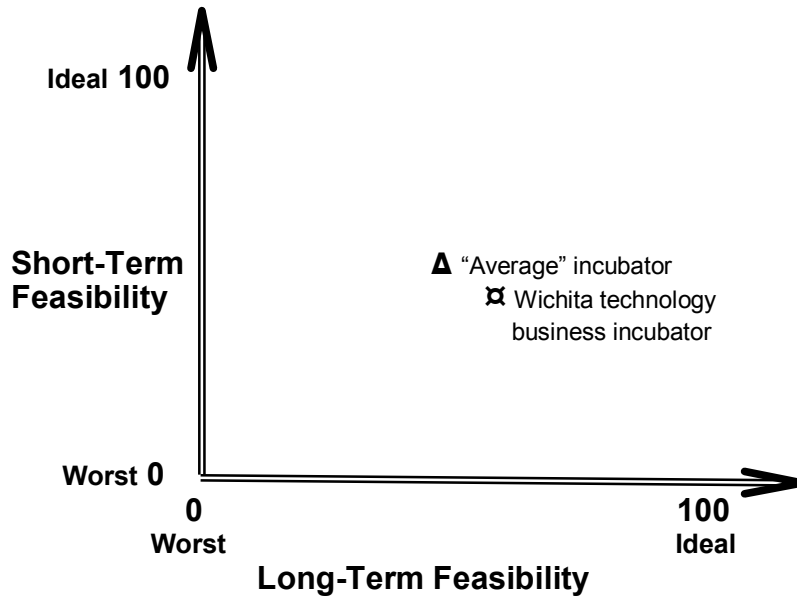
These weights reflect GCGI’s opinion that adequacy of the market, identification of a suitable champion, and availability of realistic funding opportunities for developing an incubator are the most critical elements in a feasibility determination. The real estate criterion has a lower weight because the dynamic nature of real estate markets suggests that a facility may become available at a later date even if it cannot be identified during the feasibility study. The lower weight for business assistance reflects GCGI’s experience that an incubator can survive and provide valuable services to its clients even if other business assistance providers in the area are not cooperative or of high quality, although the value of the incubator is clearly enhanced if they are. The last criterion, financial self-sustainability potential, is assigned a moderately high weight to indicate the importance of this aspect of an incubator, but also to acknowledge that too much importance should not be placed on preliminary financial projections made in advance of the project’s completion and operations. With weights for all of the criteria and scores assigned to each criterion, several quantitative assessments can be made.

First, a proposed incubator project can be assigned a single rating that is equal to the sum of the products of the respective weights and scores for each of the six criteria. Using this approach, and normalizing the result with 100 equaling an “ideal” rating, the proposed Wichita technology business incubator receives a rating of 50. An incubator project that scores “average” on the six criteria in the GCGI Incubator Feasibility Model[®] would have a score of 50; therefore, feasibility of the proposed Wichita technology business incubator is judged to be average.

A score of 50 does not correspond to an “academic scale” in which such a numeric score might correspond to a letter grade of a “D” or, perhaps, an “F.” Instead, because a numeric score of 50 is representative of an “average” incubator, a numeric score of 50 is roughly equivalent to a letter grade of “C.”

Second, a proposed incubator project can be assigned two ratings, reflecting both short- and long-term feasibility. The short-term feasibility is based on the first five criteria. The long-term feasibility is based on the sixth criterion. The products of weights and scores are summed and normalized to 100 as an “ideal” rating. In this analysis, the proposed Wichita technology business incubator receives short- and long-term feasibility ratings of 48 and 60, respectively. An incubator that rates as “average” in the GCGI Incubator Feasibility Model[®] would have both short- and long-term feasibility ratings of 50.

The short- and long-term feasibility of the proposed Wichita technology business incubator relative to the “average” incubator can be shown graphically as indicated below. While falling short of the ideal incubator, the proposed technology business incubator has a slightly below average short-term feasibility score and a somewhat above average long-term feasibility score.



Third, a proposed incubator project can be evaluated by computing the product of weights and scores for each criterion. These values indicate the more important areas of weakness that might be strengthened by the incubator developer and/or the champion. The six criteria, the weights, and the score assigned to each for the proposed Wichita technology business incubator are shown in Table 12.

The last column, “Improvement Potential,” indicates how much the feasibility rating of the proposed business incubator could rise if it were possible to increase the score assigned on criteria with below average scores. If improvements could be made in each of these three criteria such that each had an increase in its score by one point, the overall normalized score for the Wichita technology business incubator would increase to 60, which is equal to a grade of “C+” or “B-.” The short-term feasibility normalized score would become 60, and the long-term feasibility score would stay at 60.

Table 12. Criteria Weights and Scores for the Wichita Technology Business Incubator.

| Feasibility Criterion | Weight | Wichita Score | Improvement Potential (before normalization) |
|---|--------|---------------|--|
| Market | 5.0 | 2 | 3 |
| Champion | 5.0 | 2 | 3 |
| Real Estate | 3.0 | 3 | 3 |
| Business Assistance | 3.0 | 2 | 3 |
| Development Funding | 5.0 | 3 | 3 |
| Financial Self-Sustainability Potential | 4.0 | 3 | 3 |

5.0 CONCLUSIONS AND RECOMMENDATIONS

GCGI concludes that the feasibility of a technology business incubator in the Wichita area, under reasonable assumptions and conditions, is doubtful. The most significant challenges facing the proposed technology business incubator are a questionable market, the lack of an existing suitable entity to serve as the champion, questions about local technical entrepreneurs and small or start-up, technology-based companies willingness to seek business assistance, and the necessity of acquiring significant financial contributions from local governments. Strengths of the proposed technology business incubator are relatively few, but include favorable financial scenarios that suggest the technology business incubator could break even and even generate modest annual net revenue levels over time under very reasonable conditions.

Of the six criteria, the market criterion is the one area that contributes the most to the proposed Wichita technology business incubator being judged as having only average feasibility. The exclusive focus on a technology business incubator, in contrast to considering a mixed-use incubator that would cater to a larger potential market, undoubtedly places an additional limitation on the market in the Wichita area consisting of only technical entrepreneurs and small and start-up technology-based businesses. Interestingly, a majority of the survey respondents preferred that the proposed incubator in the Wichita area only serve technology-based firms. This bias may, however, reflect the apparent dominance in the survey sample of technology-based companies. If tenants of the proposed technology business incubator were required to give up ownership equity in their businesses in exchange for access to physical space and services, this requirement would further diminish the already quite limited market in the Wichita area for a incubator serving only technology-based ventures.

The champion criterion is a second criterion that contributes to the proposed technology business incubator ranking as average feasibility. Only two entities showed any real interest in serving this function and neither represents an ideal situation. A new entity may solve the problem of identifying a suitable champion, but that approach could entail a significant period of time for the new entity to become organized and fully operational.

The third criterion contributing to the low feasibility score for the proposed technology business technology incubator is development funding. This criterion might receive a significantly higher score if the willingness of the City of Wichita, Sedgwick County, and potentially other local governments can be confirmed and quantified, and if the City's contribution can include the donation of a suitable building to house the proposed technology business incubator.

Given that corrective action can be taken to address shortcomings in all of these areas, GCGI concludes that a technology business incubator in the Wichita area is conditionally feasible. This conclusion means that the proposed technology business incubator may be feasible, but its feasibility is contingent upon the City of Wichita, Sedgwick County, and others taking actions to overcome the problem areas identified in this feasibility study.

Therefore, GCGI recommends that the following actions be taken to address these shortcomings.

1. Continue to seek possible tenants for the proposed technology business incubator through actions such as holding focus groups with bankers, business leaders, angel investors, SBDC representatives, and others who might be able to identify emerging candidates for tenants.
2. Conduct one or more seminars on topics of interest to small, start-up, and/or home-based technology related businesses as a means to identify additional potential tenants and affiliates of the proposed technology business incubator. Disseminate an updated version of the technology incubator survey used in this feasibility study to attendees to determine their needs and interest levels.
3. Convene community leaders to discuss the option of expanding the market for the proposed technology business incubator. Two important market segments to consider including are: (i) lifestyle businesses and (ii) non-technology firms. GCGI emphasizes that the proposed Wichita business incubator could still have a focus on high-growth potential technology-based firms, but that this focus should not be an exclusive one, or be maintained at the exclusion of other potential tenants and/or affiliates of what could be appropriately considered as a technology-oriented, mixed-use incubator.
4. Governmental, community, and business leaders should work together to determine which organization or organizations are best suited to champion the development of the proposed technology business incubator, including articulation of an overall development strategy specifying roles and responsibilities.
5. Confirm, with the City of Wichita and Sedgwick County, that one or more suitable buildings exist that could be donated to house the proposed technology business incubator. The building needs to be approximately 25,000 to 30,000 square feet in size, suitable for class "B" office space, and preferably in downtown or northeast Wichita.
6. Confirm, again with the City of Wichita and Sedgwick County, and other local governments, a willingness to provide sufficient initial funding to the proposed technology business incubator to cover the costs of development and initial annual operating subsidies.

If significant improvements can be made, then the proposed Wichita technology business incubator may be able to proceed to the next stage of development, namely the preparation of an operating or business plan. If significant improvements cannot be made, then GCGI recommends that the proposed Wichita technology business incubator be put on hold indefinitely.

APPENDIX A. BUSINESS INCUBATOR INTEREST SURVEY RESULTS

WICHITA TECHNOLOGY INCUBATOR QUESTIONNAIRE

A small business incubator is being considered for the Wichita area. An incubator is a program that helps small businesses (including start-ups and existing firms) be more successful. It often includes a building that houses 10 to 20 small and start-up businesses that share things like photocopiers, facsimile machines, and/or conference rooms. An incubator also gives small and start-up businesses easy access to business assistance through workshops and one-on-one advice and guidance. Sometimes that assistance is also available to companies that are not tenants of the incubator.

A technology-oriented incubator is being considered for the Wichita area. A technology-oriented incubator caters primarily to small and start-up companies that make significant use of technology in their products and services.

To help us decide if an incubator could help small and start-up firms in the Wichita area, please take a few moments to complete this survey. When you are finished, please return the survey to: Incubator Survey, Wichita Technology Corporation, 7829 E. Rockhill Road, #307, Wichita, KS 67206. You also can fax it to 866-810-6671, or e-mail it to g-jgreenwood@att.net. The survey also can be completed on line at www.g-jgreenwood.com/wichitaincubatorsurvey.htm.

Your response by October 15, 2005, would be greatly appreciated!

Name: _____ Company: _____

Address: _____ City/Zip: _____

E-mail Address: _____

1. Please mark all categories that describe your status:

- 2 Thinking of starting a technology-based company
- 9 Already have a technology-based company
- 3 Have or starting a manufacturing business in which I want to better incorporate technology into products or processes
- 3 Have or starting a service business in which I want to better incorporate technology into my services
- 0 Faculty member looking for opportunities for interaction with industry
- 2 Other (please specify) - may start non-technology business, marketing investment for re-start-up

2. If you have a company or are thinking of starting one, what is your primary SIC or NAICS Code (if you do not know, please briefly describe the industry you are in): 8711, aromatherapy, software publisher, computer/information technology/Internet, telecommunications software, machining and manufacturing, pharmaceuticals, web-based project management, computer peripherals, avionics, new energy services, wireless internet provider, virtual business assistance using technology

3. In what areas of business would you like more help (please mark all that apply)?

- | | | |
|--------------------------------|----------------------------|------------------------------------|
| 7 Marketing | 4 Market analysis | 1 Personnel management |
| 2 Accounting | 2 Financial analysis | 5 Intellectual property protection |
| 4 Legal issues | 2 Business planning | 5 Product development |
| 3 Taxes | 2 Business registration | 2 Manufacturing process |
| 2 Debt financing | 8 Securing outside capital | 8 Finding angel investors |
| 0 Other (please specify) _____ | | |

4. How would you rate the climate in the Wichita area for technology-based businesses?

- 1 Excellent 2 Very Good 5 Average 2 Fair 4 Poor

5. Do you believe that the Wichita Incubator should be focused only on technology-based businesses, or should it work with other types of small and start-up firms?

- 8 Technology-based firms only
- 5 Any type of business
- 1 Only the following types of businesses, in addition to technology-based firms:
 - 1 Manufacturing
 - 0 Business services
 - 0 Personal services
 - 0 Other (please specify): _____

6. Which of the following types of companies should the Wichita Incubator help, in terms of their connection to technology?

- 12 Companies with technology-based products and services
- 6 Companies with other types of products and services that want to better utilize technology
- 3 Minority-owned companies with technology-based products and services
- 4 Companies with products and services related to the aerospace industry
- 3 Companies with products and services related to the plastics industry
- 6 Companies in information technology
- 6 Companies that are helping other companies better utilize technology
- 4 Other (please specify): all start-ups should have equal opportunity, all, any

7. Please indicate your level of interest in the proposed Wichita Incubator, assuming it has a strong technology focus:

- 0 I would be willing to commit to space in the incubator in the next 12 months
- 4 I would consider becoming a tenant in the incubator
- 2 I would likely use services at the incubator
- 5 I might use services at the incubator
- 3 I do not anticipate using the incubator for my company
- 1 I would likely refer other companies to the incubator
- 1 Other (please specify): location would determine usage (prefer Rock Road area)

8. If you would anticipate using the space or services of the Wichita Incubator, please indicate the features that would be useful to your business:

- | | |
|---|------------------------------------|
| 3 Flexible leases | 3 Office space |
| 3 Laboratory space | 2 Manufacturing/assembly space |
| 5 Business assistance | 7 Access to capital |
| 4 Business mentor/coach | 8 Introductions to angel investors |
| 3 SBIR assistance | 4 High-speed data transmission |
| 1 Proximity to Wichita State University | 7 Networking opportunities |
| 6 Shared services (e.g., conference room, receptionist) | |
| 1 Other (please specify): flexible hours | |

9. If you anticipate using the space or services of the Wichita Incubator, which location would you find more convenient for your business?

- | | |
|--|-------------------------------|
| 4 Downtown Wichita | 1 Old Town |
| 1 Near Wichita State University | 4 Near Rock Road & Highway 96 |
| 0 Along the I-35 Corridor, between Douglas and 13 th Streets | |
| 5 Other (please specify): Sutton Place, do not need space, does not matter, low-cost location, west side | |

10. Would your company be willing to exchange some level of ownership (i.e., stock) for occupancy in and/or services provided by an incubator? 6 Yes 7 No

11. Have you ever attempted to acquire an investment in your company from business angels?

9 Yes 5 No

12. How would you rate the following providers of business assistance in the Wichita area?

| Provider or Organization | Very Helpful | Helpful | Not Very Helpful | Not Used |
|--|--------------|---------|------------------|----------|
| Small Business Development Center | 2 | 3 | 2 | 6 |
| Wichita Technology Corporation | 2 | 4 | 3 | 4 |
| Wichita Area Chamber of Commerce | 0 | 1 | 3 | 9 |
| Heartland Procurement Technical Assistance Center | 0 | 1 | 0 | 12 |
| Mid-America Manufacturing Technology Center | 0 | 1 | 0 | 12 |
| Service Corps of Retired Executives (SCORE) | 0 | 1 | 0 | 12 |
| South Central KS Econ Devel District (SCKEDD) | 2 | 0 | 2 | 9 |
| Wichita Independent Business Association | 1 | 2 | 0 | 10 |
| Center for Entrepreneurship (WSU) | 0 | 2 | 2 | 8 |
| Attorneys | 1 | 6 | 0 | 6 |
| Accountants | 1 | 4 | 1 | 7 |
| Bankers | 3 | 2 | 2 | 6 |
| Angel Investors | 1 | 3 | 1 | 9 |
| Management Consultants | 1 | 0 | 1 | 11 |
| Other (please specify): local business owner's network, family and relatives | 1 | 0 | 1 | 0 |

13. Have you ever applied for or received an award from the Federal Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR) Program, or Advanced Technology Program (ATP)? 1 Applied for, but not received 1 Received 12 Never have applied for

14. Would you like to receive information about upcoming training workshops pertaining to the SBIR or STTR programs? 8 Yes 6 No

15. If you have a company, have you had any interaction with universities or government laboratories (e.g., NASA Glenn Research Center, National Institute for Aviation Research) in an attempt to find technologies or to help your business with a technology-related issue? 5 Yes 9 No

If Yes, please indicate which universities and/or laboratories: University of Colorado, Sandia National Laboratories, Los Alamos National Laboratory, Lawrence Livermore National Laboratory, Tulane Medical School, University of Kansas Medical School, Wichita State University, U.S. Geological Survey, Arctic Laboratory

16. Do you know anyone who might be interested in the proposed Wichita Incubator who we should contact? Individuals or companies involved with technology are of particular interest. If so, please provide name, address, phone number/e-mail address, if possible: _____

17. Are there any other comments or suggestions that you would like to make to help us better understand your opinion on creating a business incubator in Wichita with a focus on technology-based businesses? Concerns about Wichita Technology Corporation leadership; do not think many will consider giving up equity; do not use KC incubator model - look at Maryland, Philadelphia, Boston, San Francisco Bay area; good idea but regionalize it; see letter attached to survey; many technology opportunities in Wichita but no grant money and no investment capital; it is hard to hire scientists or technology qualified people to come to Wichita - other places are so much more attractive for talented people

Thank you!

**APPENDIX B. BUSINESS INCUBATOR INTEREST SURVEY RESULTS
(POTENTIAL TENANTS AND ANCHOR TENANTS ONLY)**

WICHITA TECHNOLOGY INCUBATOR QUESTIONNAIRE

A small business incubator is being considered for the Wichita area. An incubator is a program that helps small businesses (including start-ups and existing firms) be more successful. It often includes a building that houses 10 to 20 small and start-up businesses that share things like photocopiers, facsimile machines, and/or conference rooms. An incubator also gives small and start-up businesses easy access to business assistance through workshops and one-on-one advice and guidance. Sometimes that assistance is also available to companies that are not tenants of the incubator.

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Your response by October 15, 2005, would be greatly appreciated!

Name: _____ Company: _____

Address: _____ City/Zip: _____

E-mail Address: _____

1. Please mark all categories that describe your status:

- 1 Thinking of starting a technology-based company
- 2 Already have a technology-based company
- 0 Have or starting a manufacturing business in which I want to better incorporate technology into products or processes
- 0 Have or starting a service business in which I want to better incorporate technology into my services
- 0 Faculty member looking for opportunities for interaction with industry
- 1 Other (please specify): marketing investment for re-start-up

2. If you have a company or are thinking of starting one, what is your primary SIC or NAICS Code (if you do not know, please briefly describe the industry you are in): software publisher, telecommunications software, virtual business assistance using technology

3. In what areas of business would you like more help (please mark all that apply)?

- | | | |
|--------------------------------|----------------------------|------------------------------------|
| 2 Marketing | 0 Market analysis | 0 Personnel management |
| 0 Accounting | 0 Financial analysis | 0 Intellectual property protection |
| 0 Legal issues | 0 Business planning | 0 Product development |
| 0 Taxes | 0 Business registration | 0 Manufacturing process |
| 0 Debt financing | 2 Securing outside capital | 1 Finding angel investors |
| 0 Other (please specify) _____ | | |

4. How would you rate the climate in the Wichita area for technology-based businesses?

- 0 Excellent 0 Very Good 1 Average 1 Fair 2 Poor

5. Do you believe that the Wichita Incubator should be focused only on technology-based businesses, or should it work with other types of small and start-up firms?

- 3 Technology-based firms only
- 1 Any type of business
- 0 Only the following types of businesses, in addition to technology-based firms:
 - 0 Manufacturing
 - 0 Business services
 - 0 Personal services
 - 0 Other (please specify): _____

6. Which of the following types of companies should the Wichita Incubator help, in terms of their connection to technology?

- 3 Companies with technology-based products and services
- 1 Companies with other types of products and services that want to better utilize technology
- 1 Minority-owned companies with technology-based products and services
- 0 Companies with products and services related to the aerospace industry
- 0 Companies with products and services related to the plastics industry
- 1 Companies in information technology
- 1 Companies that are helping other companies better utilize technology
- 1 Other (please specify): any

7. Please indicate your level of interest in the proposed Wichita Incubator, assuming it has a strong technology focus:

- 0 I would be willing to commit to space in the incubator in the next 12 months
- 4 I would consider becoming a tenant in the incubator
- 0 I would likely use services at the incubator
- 0 I might use services at the incubator
- 0 I do not anticipate using the incubator for my company
- 0 I would likely refer other companies to the incubator
- 0 Other (please specify): _____

8. If you would anticipate using the space or services of the Wichita Incubator, please indicate the features that would be useful to your business:

- | | |
|---|------------------------------------|
| 2 Flexible leases | 2 Office space |
| 2 Laboratory space | 1 Manufacturing/assembly space |
| 0 Business assistance | 2 Access to capital |
| 2 Business mentor/coach | 2 Introductions to angel investors |
| 0 SBIR assistance | 1 High-speed data transmission |
| 0 Proximity to Wichita State University | 1 Networking opportunities |
| 2 Shared services (e.g., conference room, receptionist) | |
| 0 Other (please specify): flexible hours | |

10. If you anticipate using the space or services of the Wichita Incubator, which location would you find more convenient for your business?

- | | |
|---|-------------------------------|
| 2 Downtown Wichita | 0 Old Town |
| 0 Near Wichita State University | 1 Near Rock Road & Highway 96 |
| 0 Along the I-35 Corridor, between Douglas and 13 th Streets | |
| 1 Other (please specify): west side | |

10. Would your company be willing to exchange some level of ownership (i.e., stock) for occupancy in and/or services provided by an incubator? 1 Yes 3 No

11. Have you ever attempted to acquire an investment in your company from business angels?
3 Yes 1 No

12. How would you rate the following providers of business assistance in the Wichita area?

| Provider or Organization | Very Helpful | Helpful | Not Very Helpful | Not Used |
|---|--------------|---------|------------------|----------|
| Small Business Development Center | 0 | 2 | 0 | 2 |
| Wichita Technology Corporation | 1 | 1 | 1 | 1 |
| Wichita Area Chamber of Commerce | 0 | 1 | 1 | 2 |
| Heartland Procurement Technical Assistance Center | 0 | 0 | 0 | 4 |
| Mid-America Manufacturing Technology Center | 0 | 0 | 0 | 4 |
| Service Corps of Retired Executives (SCORE) | 0 | 0 | 0 | 4 |
| South Central KS Econ Devel District (SCKEDD) | 0 | 0 | 0 | 4 |
| Wichita Independent Business Association | 1 | 0 | 0 | 3 |
| Center for Entrepreneurship (WSU) | 0 | 1 | 0 | 3 |
| Attorneys | 0 | 3 | 0 | 1 |
| Accountants | 0 | 3 | 0 | 1 |
| Bankers | 1 | 0 | 1 | 2 |
| Angel Investors | 0 | 0 | 1 | 3 |
| Management Consultants | 0 | 0 | 1 | 3 |
| Other (please specify) _____ | 0 | 0 | 0 | 0 |

13. Have you ever applied for or received an award from the Federal Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR) Program, or Advanced Technology Program (ATP)? 1 Applied for, but not received 0 Received 3 Never have applied for

14. Would you like to receive information about upcoming training workshops pertaining to the SBIR or STTR programs? 1 Yes 3 No

15. If you have a company, have you had any interaction with universities or government laboratories (e.g., NASA Glenn Research Center, National Institute for Aviation Research) in an attempt to find technologies or to help your business with a technology-related issue? 2 Yes 2 No

If Yes, please indicate which universities and/or laboratories: University of Colorado, Sandia National Laboratories, U.S. Geological Survey, Arctic Research

16. Do you know anyone who might be interested in the proposed Wichita Incubator who we should contact? Individuals or companies involved with technology are of particular interest. If so, please provide name, address, phone number/e-mail address, if possible: _____

17. Are there any other comments or suggestions that you would like to make to help us better understand your opinion on creating a business incubator in Wichita with a focus on technology-based businesses? it is hard to hire scientists or technology qualified people to come to Wichita - other places are so much more attractive for talented people

Thank you!

APPENDIX C.
CASH-FLOW PROJECTIONS FOR THE FOUR SCENARIOS AND VARIATIONS THEREON

Scenario #1: 30,000 square feet, downtown Wichita, good condition, City donated

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Comments |
|-----------------------|-------------|-------------|--------------|-------------|-------------|-------------------------------------|
| Cash @ Start | \$ - | \$ (66,525) | \$ (109,217) | \$(126,003) | \$(114,685) | |
| Cash In | | | | | | |
| Rental: office | \$ 210,000 | \$ 218,400 | \$ 227,136 | \$ 236,221 | \$ 245,670 | 75% leasable @\$14/sf |
| Rental: manuf/lab | \$ 34,000 | 35,360 | 36,774 | 38,245 | 39,775 | 80% leasable@\$8.50/sf |
| Rental: anchor(s) | 60,000 | 62,400 | 64,896 | 67,492 | 70,192 | 100% leasable@\$12/sf |
| Services | 12,500 | 16,406 | 20,672 | 25,323 | 30,388 | \$1.25/sf occupied space,5% escal |
| Affiliates | 7,800 | 8,190 | 8,600 | 9,029 | 9,481 | \$65/mo, 5% escal, 10 affiliates |
| - vacancy factor | (146,400) | (126,880) | (105,564) | (82,340) | (57,089) | Equal % off/lab, but not anchors |
| - bad debt factor | (15,825) | (16,628) | (17,474) | (18,364) | (19,301) | 5% of rent & svcs |
| Net cash in | \$ 162,075 | \$ 197,248 | \$ 235,040 | \$ 275,607 | \$ 319,115 | |
| Cash Out | | | | | | |
| Salaries | \$ 114,000 | \$ 118,560 | \$ 123,302 | \$ 128,234 | \$ 133,364 | \$65k ft mgr, \$30k ft receipt +20% |
| Utilities | 36,000 | 37,500 | 39,000 | 40,500 | 42,000 | \$1/sf gross+\$.50/sf leased |
| Maint & repair | 45,000 | 47,700 | 50,562 | 53,596 | 56,811 | \$1.50/sf gross+6% infl |
| Debt service | n/a | n/a | n/a | n/a | n/a | 8% for 20 yrs |
| R/E taxes | \$ - | - | - | - | - | Seek city/county waiver |
| Supplies, phone | 3,600 | 3,780 | 3,969 | 4,167 | 4,376 | \$300/mo + 5% inflation |
| Insurance, misc | 30,000 | 32,400 | 34,992 | 37,791 | 40,815 | 8% inflation |
| Net cash out | \$ 228,600 | \$ 239,940 | \$ 251,825 | \$ 264,289 | \$ 277,366 | |
| Cash @ End | \$ (66,525) | \$(109,217) | \$ (126,003) | \$(114,685) | \$ (72,935) | |
| Change in Cash | \$ (66,525) | \$ (42,692) | \$ (16,786) | \$ 11,318 | \$ 41,749 | b/e looks possible @ ~65% occup |
| % incub occupied | 40% | 50% | 60% | 70% | 80% | |
| Rent escalation | | 4% | 4% | 4% | 4% | |

Scenario #2: 30,000 square feet, downtown Wichita, poor condition, City donated

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | |
|-----------------------|--------------------|--------------------|---------------------|--------------------|--------------------|------------------------------------|
| Cash @ Start | \$ - | \$ (66,525) | \$ (109,217) | \$(126,003) | \$(114,685) | |
| Cash In | | | | | | |
| Rental: office | \$ 210,000 | \$ 218,400 | \$ 227,136 | \$ 236,221 | \$ 245,670 | 75% leasable @\$14/sf |
| Rental: manuf/lab | \$ 34,000 | 35,360 | 36,774 | 38,245 | 39,775 | 80% leasable@\$8.50/sf |
| Rental: anchor(s) | 60,000 | 62,400 | 64,896 | 67,492 | 70,192 | 100% leasable@\$12/sf |
| Services | 12,500 | 16,406 | 20,672 | 25,323 | 30,388 | \$1.25/sf occupied space, 5% escal |
| Affiliates | 7,800 | 8,190 | 8,600 | 9,029 | 9,481 | \$65/mo, 5% escal, 10 affiliates |
| - vacancy factor | 146,400) | (126,880) | (105,564) | (82,340) | (57,089) | Equal % off/lab but not anchors |
| - bad debt factor | (15,825) | (16,628) | (17,474) | (18,364) | (19,301) | 5% of rent & svcs |
| Net cash in | \$ 162,075 | \$ 197,248 | \$ 235,040 | \$ 275,607 | \$ 319,115 | |
| Cash Out | | | | | | |
| Salaries | \$ 114,000 | \$ 118,560 | \$ 123,302 | \$ 128,234 | \$ 133,364 | \$65k FT mgr, \$30k FTrecept +20% |
| Utilities | 36,000 | 37,500 | 39,000 | 40,500 | 42,000 | \$1/sf gross+\$.50/sf leased |
| Maint & repair | 45,000 | 47,700 | 50,562 | 53,596 | 56,811 | \$1.50/sf gross+6% infl |
| Debt service | \$ - | \$ - | \$ - | \$ - | \$ - | 8% for 20 yrs |
| R/E taxes | \$ - | - | - | - | - | Seek city/county waiver |
| Supplies, phone | 3,600 | 3,780 | 3,969 | 4,167 | 4,376 | \$300/mo + 5% inflation |
| Insurance, misc | 30,000 | 32,400 | 34,992 | 37,791 | 40,815 | 8% inflation |
| Net cash out | \$ 228,600 | \$ 239,940 | \$ 251,825 | \$ 264,289 | \$ 277,366 | |
| Cash @ End | \$ (66,525) | \$(109,217) | \$ (126,003) | \$(114,685) | \$ (72,935) | |
| Change in Cash | \$ (66,525) | \$ (42,692) | \$ (16,786) | \$ 11,318 | \$ 41,749 | b/e looks possible @ ~65% occup |
| % incub occupied | 40% | 50% | 60% | 70% | 80% | |
| Rent escalation | | 4% | 4% | 4% | 4% | |

Scenario #2B: 30,000 square feet, downtown Wichita, poor condition, City donated, more modest City/County contributions

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | |
|-----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------------------------|
| Cash @ Start | \$ - | \$(166,233) | \$(308,633) | \$(425,127) | \$(513,517) | |
| Cash In | | | | | | |
| Rental: office | \$ 210,000 | \$ 218,400 | \$ 227,136 | \$ 236,221 | \$ 245,670 | 75% leasable @\$14/sf |
| Rental:manuf/lab | \$ 34,000 | 35,360 | 36,774 | 38,245 | 39,775 | 80% leasable@\$8.50/sf |
| Rental: anchor(s) | 60,000 | 62,400 | 64,896 | 67,492 | 70,192 | 100% leasable@\$12/sf |
| Services | 12,500 | 16,406 | 20,672 | 25,323 | 30,388 | \$1.25/sf occupied space,5% escal |
| Affiliates | 7,800 | 8,190 | 8,600 | 9,029 | 9,481 | \$65/mo, 5% escal, 10 affiliates |
| - vacancy factor | (146,400) | (126,880) | (105,564) | (82,340) | (57,089) | Equal % off/lab but not anchors |
| - bad debt factor | (15,825) | (16,628) | (17,474) | (18,364) | (19,301) | 5% of rent & svcs |
| Net cash in | \$ 162,075 | \$ 197,248 | \$ 235,040 | \$ 275,607 | \$ 319,115 | |
| Cash Out | | | | | | |
| Salaries | \$ 114,000 | \$ 118,560 | \$ 123,302 | \$ 128,234 | \$ 133,364 | \$65k FT mgr, \$30k FT receipt +20% |
| Utilities | 36,000 | 37,500 | 39,000 | 40,500 | 42,000 | \$1/sf gross+\$0.50/sf leased |
| Maint & repair | 45,000 | 47,700 | 50,562 | 53,596 | 56,811 | \$1.50/sf gross+6% infl |
| Debt service | \$ 99,708 | \$ 99,708 | \$ 99,708 | \$ 99,708 | \$ 99,708 | 8% for 20 yrs |
| R/E taxes | \$ - | - | - | - | - | Seek city/county waiver |
| Supplies, phone | 3,600 | 3,780 | 3,969 | 4,167 | 4,376 | \$300/mo + 5% inflation |
| Insurance, misc | 30,000 | 32,400 | 34,992 | 37,791 | 40,815 | 8% inflation |
| Net cash out | \$ 328,308 | \$ 339,648 | \$ 351,533 | \$ 363,997 | \$ 377,074 | |
| Cash @ End | \$(166,233) | \$(308,633) | \$(425,127) | \$(513,517) | \$(571,476) | |
| Change in Cash | \$(166,233) | \$(142,400) | \$(116,494) | \$ (88,390) | \$ (57,959) | b/e looks possible @ ~95% occup |
| % incub occupied | 40% | 50% | 60% | 70% | 80% | |
| Rent escalation | | 4% | 4% | 4% | 4% | |

Scenario #3: 30,000 square feet, northeast Wichita, City owned and donated

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | |
|-----------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------------------------|
| Cash @ Start | \$ - | \$ (35,925) | \$ (42,559) | \$ (17,442) | \$ 42,031 | |
| Cash In | | | | | | |
| Rental: office | \$ 256,000 | \$ 266,240 | \$ 276,890 | \$ 287,965 | \$ 299,484 | 80% leasable @\$16/sf |
| Rental: manuf/lab | \$ 34,000 | 35,360 | 36,774 | 38,245 | 39,775 | 80% leasable@\$8.50/sf |
| Rental: anchor(s) | 70,000 | 72,800 | 75,712 | 78,740 | 81,890 | 100% leasable@\$14/sf |
| Services | 12,500 | 16,406 | 20,672 | 25,323 | 30,388 | \$1.25/sf occupied space,5% escal |
| Affiliates | 7,800 | 8,190 | 8,600 | 9,029 | 9,481 | \$65/mo, 5% escal, 10 affiliates |
| - vacancy factor | (174,000) | (150,800) | 125,466 | (97,863) | (67,852) | Equal % off/lab but not anchors |
| - bad debt factor | (18,625) | (19,540) | (20,502) | (21,514) | (22,577) | 5% of rent & svcs |
| Net cash in | \$ 187,675 | \$ 228,656 | \$ 272,679 | \$ 319,927 | \$ 370,589 | |
| Cash Out | | | | | | |
| Salaries | \$ 114,000 | \$ 118,560 | \$ 123,302 | \$ 128,234 | \$ 133,364 | \$65k FT mgr, \$30k FT receipt +20% |
| Utilities | 28,500 | 30,000 | 31,500 | 33,000 | 34,500 | \$.75/sf gross+\$.50/sf leased |
| Maint & repair | 37,500 | 39,750 | 42,135 | 44,663 | 47,343 | \$1.50/sf gross+6% infl |
| Debt service | \$ - | \$ - | \$ - | \$ - | \$ - | 8% for 20 yrs |
| R/E taxes | \$ - | - | - | - | - | Seek city/county waiver |
| Supplies, phone | 3,600 | 3,780 | 3,969 | 4,167 | 4,376 | \$300/mo + 5% inflation |
| Insurance, misc | 40,000 | 43,200 | 46,656 | 50,388 | 54,420 | 8% inflation |
| Net cash out | \$ 223,600 | \$ 235,290 | \$ 247,562 | \$ 260,454 | \$ 274,002 | |
| Cash @ End | \$ (35,925) | \$ (42,559) | \$ (17,442) | \$ 42,031 | \$ 138,618 | |
| Change in Cash | \$ (35,925) | \$ (6,634) | \$ 25,117 | \$ 59,473 | \$ 96,587 | b/e looks possible @ ~55% occup |
| % incub occupied | 40% | 50% | 60% | 70% | 80% | |
| Rent escalation | | 4% | 4% | 4% | 4% | |

Scenario #4: 30,000 square feet, northeast Wichita, privately owned and purchased

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | |
|-----------------------|--------------|-------------|-------------|-------------|-------------|------------------------------------|
| Cash @ Start | \$ - | \$(111,703) | \$(194,115) | \$(244,777) | \$(261,082) | |
| Cash In | | | | | | |
| Rental: office | \$ 256,000 | \$ 266,240 | \$ 276,890 | \$ 287,965 | \$ 299,484 | 80% leasable @\$16/sf |
| Rental:manuf/lab | \$ 34,000 | 35,360 | 36,774 | 38,245 | 39,775 | 80% leasable@\$8.50/sf |
| Rental: anchor(s) | 70,000 | 72,800 | 75,712 | 78,740 | 81,890 | 100% leasable@\$14/sf |
| Services | 12,500 | 16,406 | 20,672 | 25,323 | 30,388 | \$1.25/sf occupied space,5% escal |
| Affiliates | 7,800 | 8,190 | 8,600 | 9,029 | 9,481 | \$65/mo, 5% escal, 10 affiliates |
| - vacancy factor | (174,000) | (150,800) | (125,466) | (97,863) | (67,852) | Equal % off/lab but not anchors |
| - bad debt factor | (18,625) | (19,540) | (20,502) | (21,514) | (22,577) | 5% of rent & svcs |
| Net cash in | \$ 187,675 | \$ 228,656 | \$ 272,679 | \$ 319,927 | \$ 370,589 | |
| Cash Out | | | | | | |
| Salaries | \$ 114,000 | \$ 118,560 | \$ 123,302 | \$ 128,234 | \$ 133,364 | \$65k FT mgr, \$30k FT recept +20% |
| Utilities | 28,500 | 30,000 | 31,500 | 33,000 | 34,500 | \$.75/sf gross+\$.50/sf leased |
| Maint & repair | 37,500 | 39,750 | 42,135 | 44,663 | 47,343 | \$1.50/sf gross+6% infl |
| Debt service | \$ 75,778 | \$ 75,778 | \$ 75,778 | \$ 75,778 | \$ 75,778 | 8% for 20 yrs |
| R/E taxes | \$ - | - | - | - | - | Seek city/county waiver |
| Supplies, phone | 3,600 | 3,780 | 3,969 | 4,167 | 4,376 | \$300/mo + 5% inflation |
| Insurance, misc | 40,000 | 43,200 | 46,656 | 50,388 | 54,420 | 8% inflation |
| Net cash out | \$ 299,378 | \$ 311,068 | \$ 323,341 | \$ 336,232 | \$ 349,780 | |
| Cash @ End | \$ (111,703) | \$(194,115) | \$(244,777) | \$(261,082) | \$(240,273) | |
| Change in Cash | \$ (111,703) | \$ (82,412) | \$ (50,661) | \$ (16,305) | \$ 20,809 | b/e looks possible @ ~75% occup |
| % incub occupied | 40% | 50% | 60% | 70% | 80% | |
| Rent escalation | | 4% | 4% | 4% | 4% | |