A New Small City Business Incubator: A Business Community's Attitudes and Desired Services

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To revitalize the downtown area, city officials in Hagerstown, Maryland proposed a unique incubator model that would house new ventures and provide services to existing businesses. Research on small business incubators has addressed success factors, trends, and economic outcomes related to start up businesses. This paper advances that research by expanding the idea of incubators to be centers for developing new and existing businesses in the depressed downtown center. In a needs survey of existing businesses, city leaders determined that the most critical business services that the proposed incubator could offer to all businesses are networking, marketing assistance, and training.

EXECUTIVE SUMMARY

Revitalization of small downtown areas in the United States has been a long-standing issue. Suburban growth has stolen resources, businesses, and interest in the downtown as a shopping center and a social gathering place and left those areas vacant. A literature review reveals research about small town economic development issues, the role and types of incubators, success factors for incubators, trends for the future of incubators, and incubator outcome measurement methods. But, no research has addressed: 1) business community attitudes toward a newly planned incubator *before* its inception, 2) using incubators to revitalize specific geographic areas such as small downtowns and 3) the development of a cooperative incubator model that serves both existing and new businesses.

This study asked local businesses about attitudes toward the new incubator, desired services, types of business that would augment existing ones, and what types of businesses would be the best candidates for the new incubator, planned for late 2011/ early 2012.

Findings show differences by gender, years in business, and level of sales. Additional variables such as general demographics and financing and funding needs and methods are explored. Older business owners, in business longer, were less supportive and did not feel there was a need for a City small business incubator. Younger businesses with lower sales, more challenged in terms of financing the enterprise, were more likely to see the need for the incubator. There was interest in training programs, marketing assistance, and business concept development assistance. Women wanted new restaurants, office supplies establishments, and IT companies; men were interested adding physicians to the downtown area. Results of the study offer assistance in planning and implementation to the City of Hagerstown in providing services and seeking out strategic alliances and tenants that will most positively impact the downtown area.

INTRODUCTION

Revitalization of small downtown areas has long been an issue for business and government entities. Since the growth of suburbs starting in the 1950s, downtowns, particularly small downtowns, have gone into decline. This decline has been on a number of different levels: not only have businesses deserted the downtowns in significant numbers, but people no longer live in the downtown areas or gather there for social reasons. The greatest strength for small downtowns continues to be the government facilities and services located there.

A number of studies and programs have been directed towards re-energizing downtowns. The study presented here is a first step by a small city in Maryland to stimulate economic development in its downtown area by establishing an incubator to grow businesses for the area and to provide vital support services for existing downtown businesses. City officials hope that creating a synergy between the existing and newly created businesses, through the incubator infrastructure, will benefit the downtown economic climate. The National Business Incubator Association (NBIA) has identified seven incubators formed for the same or a similar purpose. The first step in this process was to survey existing businesses to determine what types of new businesses would most benefit the downtown area in general and their businesses specifically. This paper gives the results of that survey and discusses issues related to downtown and incubator development relevant to the topic.

LITERATURE REVIEW

Small Downtown Development Issues

The post WWII U.S. economy saw the movement of people out from the cities' downtown core for both working and living purposes. As the people moved out to the suburbs, so did the many businesses that served the daily needs of the population. As shopping malls proliferated, those who lived in the suburbs could shop right in their neighborhoods without having to go into the cities. Small downtowns responded to this event in a number of ways. In the early stages of outmigration downtowns attempted to lure shoppers back by improving automobile access and parking. When this strategy failed, downtowns attempted to emulate the suburbs by tearing down old buildings, constructing new, more modern buildings, and introducing indoor shopping malls. As downtowns continued to decline, many decided to emphasize what made them different and unique from suburban shopping areas – their ties to local history and culture and their blending of the old and new through architecture and living space. These efforts recognized several important trends that had developed in the late 20th and early 21st centuries: shopping fatigue many Americans felt based on the sameness of suburban shopping venues, nostalgia felt by many who missed an older, quieter time, and a desire to lead more environmentally friendly lives that allowed for walking and bicycling access to needed services (Filion 2004). But, even though the appeal of downtowns rebounded slightly beginning in the 1980s, the lack of shopping alternatives and the perceived crime issues tamped down any significant re-growth efforts especially for small cities

The Main Street Program was launched in 1977 to address the floundering of downtown areas. Based on a "strategy that would encourage economic development within the context of historic preservation (Lawhead,1995)," the program found that successful downtowns needed to build cooperation among interested parties, improve appearances, diversify the economic base and emphasize what was unique about the area.

In a survey of small U.S. city planners, Robertson (1999) found that implementation of the Main Street approach was thought to be the most successful strategy to revitalize downtown areas. This strategy was part of an overall "sense of place" approach to revitalization that grew out of an understanding that

downtowns could not be mini-suburbs and be successful – that they had to promote what made them unique and different from the suburbs to be able to survive. Interestingly, Robertson found that while promoting downtown housing, tourism, and entertainment activities were very popular among city planners, most found these strategies to be minimally successful in accomplishing revitalization objectives.

In a study to identify success factors of small downtowns, Filion et al. (2004) surveyed academic, business, and government leaders in the U.S. and Canada. The study found that stressing the "gathering place" history of pre WWII downtowns tended to work better than attempting to compete head to head with suburbs. Specific factors identified as benefiting downtowns included active, street-oriented retail shops; significant job presence; cultural activities; residential neighborhoods or space; historical significance; unique architecture; and events and activities that transcend the business day. Respondents stressed that an integrated and synergistic approach to downtown development was needed – that the scheduling of disparate and discrete activities was not as successful in linking people to downtown areas. Other identified success factors which many downtowns have no control over included: the presence of bodies of water, a state capitol, university, or strong historical appeal.

Incubators

The National Business Incubation Association (NBIA) defines business incubation as "a business support process that accelerates the successful development of start-up and fledgling companies by providing entrepreneurs with an array of targeted resources and services." There are about 1200 business incubators in the U.S. (Hatch, 2010) and about 7000 worldwide (NBIA, 2009). U.S. incubators are distributed unevenly across the country, with some states and counties having significantly more than other states and counties (Qian et al. 2010). Surprisingly, Qian et al. (2010) found that only about 15% of all counties (467/3000+) have even one incubator. Most incubators are located in metro areas (78%) while only 7% are outside core-based statistical areas (Qian et al. 2010).

Business incubators have evolved significantly since the first one was started in New York in 1959. These changes have affected what types of businesses are contained in incubators, what services are delivered, how the services are delivered, who supports the incubator management and infrastructure, and how incubators are organized.

Incubator Trends

Early business incubators involved the provision of physical space along with support services such as secretarial, reception, and business machinery. Later, mentoring, managerial advice, and networking became a significant part of the incubation model (Allen & Weinberg, 1988). Virtual incubators have sprung up that involve no space or operational support but rely solely on advice and materials delivered online. The University of Louisiana has developed a unique delivery mechanism with its incubator on wheels which visits rural areas and those parts of the state suffering from the aftereffects of Hurricane Katrina to deliver information and workshops to help local businesses thrive (D'Agostino 2009). Brooks (1986) identifies three major elements to an incubator: access to a managerial support network, operational support such as secretarial help, and university associations. Of these three, he argues that managerial support is the most important element to ensure success.

Early incubators generally served a variety of businesses and were referred to as multi or mixed-use incubators. While most incubators today are still mixed use (54% in 2009 according to NBIA figures), there has been a movement towards specialized single segment incubators that allow for more sharing of information and equipment that is specific to a particular industry. Many incubators have been specifically developed to meet the needs of startup technology companies and such facilities accounted for 39% of all incubators in 2009 (NBIA, 2009). Other specialized incubators include The Business Accelerator for Sustainable Entrepreneurship (BASE) at the University of North Carolina whose tenants represent socially conscious businesses (Field, 2009).

About 20% of North American business incubators are university-based (NBIA, 2006; Todorovic, 2008). Such incubators can be particularly helpful to high technology firms that benefit from the research

expertise of university personnel and the availability of specialized laboratories and equipment (O'Neal, 2005). In addition, the reputation and credibility of universities generally helps the image of new companies associated with such institutions (O'Neal, 2005). Growth companies coming out of university settings report productivity rates two-thirds higher than comparable companies, 21% higher annual revenues, 32% more recent bank loans, and 23% more capital investments (Coopers & Lybrand, 1995; O'Neal, 2005).

The general model for business incubators is a facility that is non-profit and supported, at least in part, by public funding. Government entities, economic development organizations and academic institutions accounted for 72% of the sponsorships of business incubators in 2009 (NBIA, 2009). Pure, for profit incubators accounted for only 4% of the incubator population (NBIA 2009). But that model is changing. More incubators are being set up today as for profit entities that require a stake in the participating businesses to deliver services. Some of these incubators will even provide funding for new businesses during the startup phase.

While most incubators are organized and run as single entities, regional incubator networks began appearing in the 1990s. Jackson & Rubens (2010) identify 25 such networks in the U.S., and indicate that positive reasons for this development include: economies of scale, more diverse network participants, expanded service areas and programs, and the sharing of opportunities and best practices.

Table 1 below summarizes the trends occurring in incubation development in the U.S. Some of these trends are slow to progress. For example, public sector incubators are still the overwhelming administrative model for incubators and most incubators are still stand alone entities, not tied in to any regional or state network.

EARLY INCUBATION MODELS	CURRENT MODELS
Focus on space and operational services	Managerial advice, mentoring and networking important components of model
Mixed use incubators predominate	Number of single segment incubators, particularly high tech incubators, increasing.
Government backing and support	More university involvement with incubators. More for profit incubators.
Single incubators	More regional and state networks of incubators

TABLE 1 TRENDS IN U.S. BUSINESS INCUBATION DEVELOPMENT (1959 → PRESENT)

Incubator Success Factors

Success factors for business incubators generally fall into the categories of operational support, managerial support, networking and relationship development, and entrepreneurial education and training programs. Smilor (1987) listed success factors as on site business expertise, access to financing, in-kind financial support, community support, entrepreneurial networks, education, effective selection process for tenants, ties to a university, and clear milestones, policies and procedures.

Peter, Rice and Sundarajan (2004) found that "customization of coaching programs and network formation helped (14 U.S. university) incubators gain competitive advantage and encouraged their survival," (Todorovic, 2008).

Allen and McCluskey (1990) used jobs created and tenants' graduation rates as measures of success for incubation programs. The authors determined that over 50% of the variation in these two categories

could be determined by the age of the facility and the number of tenants with older, larger facilities showing greater success rates.

O'Neal (2005) listed economic success factors as new jobs created and revenue generated but indicated that there may be non economic goals that are more important.

Access to networking capabilities is considered important to all startup companies (Aldrich, 1999; Granovetter 2000) but particularly to incubator companies (Hansen et al. 2000; Lee, Lee, & Pennings 2001). New technology companies seem to be particularly benefitted by human networking opportunities (Scillitoe & Chakrabarti 2005).

Incubator Outcome Measurements

Incubators provide benefits for all levels of participants: business clients, communities, and government support agencies.

In 2005, North American incubators supported more than 27,000 startup companies, resulting in fulltime employment for 100,000+ workers, annual revenues in excess of \$17 billion, and a return on investment of \$30 in local tax revenue for every \$1 of public investment (NBIA, 2006). The Economic Development Administration, U.S. Department of Commerce, reports that incubators provide up to 20 times the number of jobs that can be produced by community infrastructure projects. The EDA notes that a "strategic focus on innovation and entrepreneurship makes sense, in that investments in business incubators generate significantly greater impacts in the communities in which they are made than do other project types" (U.S. Department of Commerce 2008).

It appears more likely that businesses that participate in an incubator will succeed for the long haul. 87% of incubator graduates stay in business compared to 44% of those who do not come through an incubator (Hatch, 2010). Lewis (2003) reports that between 70-80% of technology incubator graduates in the U.S. are still operating three years later compared to less than a 50% national average over four years (Small Business Administration, O'Neal, 2005).

For communities that set up incubators to foster local economic development, results are positive. Studies show that 84% of those who participate in incubators tend to stay in the community once they graduate from the facility. (1997, 2006) Campbell (1989) found that 86% of firms stayed within the same city but generally moved to another neighborhood. It was particularly difficult for inner city incubators to keep their businesses in the area once they had graduated. But even though communities benefit from incubation centers, Qian et al. (2010) warn that "the effects of incubators on regional business development as a whole are probably negligible because most business incubators host fewer than 10 tenant firms and most counties have fewer than two incubators."

RESEARCH

A survey using Survey Monkey was sent to a list of 2200 downtown and local businesses in the city of Hagerstown, Maryland. The list was a compilation of Chamber of Commerce members and prospects, a small, in-house list, and the local SCORE chapter list of clients. The questions used were constructed based on feedback obtained in a focus group discussion with the downtown merchants to measure receptivity to the planned incubator. 77 usable responses for a response rate of 3.6% were obtained and analyzed using a chi-squared analysis in SPSS and Excel. The response rate falls within an acceptable, although low, range for surveys of this type (Fowler, 1998, 2002; Sue & Ritter, 2007). The survey was exploratory in nature and sought to determine the following:

- 1. Do local and downtown businesses support a City incubator?
- 2. What services do these businesses wish to see developed for businesses?
- 3. What types of new businesses would be the best prospects for incubator clients?
- 4. What types of new businesses would best augment the business outlook of existing business establishments?

FINDINGS

The City of Hagerstown and Washington County, Maryland sit right in the middle of Civil and Revolutionary war history sites, making them popular tourist attractions and deeply historic areas. Strategically located for commerce, Hagerstown was once called "Hub City," due to its centralized location in mid-Maryland and access to major routes east – west, and north – south. The county population is 147,430, of which 39,662 is within the city limits of Hagerstown. Washington County has experienced an 11.8% population growth over the past ten years, more than 2% greater than the State of Maryland.

Hagerstown, downtown, has been in significant decline for better part of twenty years after the demise of several large manufacturing companies. Since then, unemployment has soared to its current rate of 10%, considerably higher than Maryland's 7.4%. Community officials and leaders have made significant efforts to revitalize downtown businesses: incentive programs, new construction, arts district, downtown university center, and downtown parking garages. In 2006, the University System of Maryland (USM) renovated a large downtown building to house five state university programs. The USM at Hagerstown is expected to play a big role in revitalization of the area.

However, businesses continue to move out, complain about lack of services, customers, and attractive amenities. The downtown area is largely empty storefronts, a few restaurants – ready and waiting for new small businesses.

The 77 usable responses yielded a portrait of downtown and city businesses.

Table 2 presents the demographics of the study participants. The respondents were predominantly male (75.3%) and Caucasian (92%). Most had been operating their business for more than ten years (59%), were between 45-64 years of age (72.7%) and had sales of \$100,000 - \$500,000 (60.8%). The majority of respondents have been able to obtain adequate financing (71.2%) for their business, and 73.6% supported the development of a city incubator. Half of the respondents employed from none to four employees. 20% employed 5-15 and 29.3% employed more than sixteen. Overall, respondents were satisfied with the quality of the workforce available to them (49.4% vs. 26% with 18.5% remaining neutral. These demographics are similar to a recent study conducted in the State of Maryland that looked at variables about microenterprises (Mattare, Monahan, & Shah, 2009). A chi-squared analysis showed that women business owners experienced lower sales, $\chi^2(2, N = 73) = 5.32$, p = .07, and were more likely to express dissatisfaction with the quality of the workforce available to them, $\chi^2(1, N = 77) = 14.80$, p < .05, than male businesses owners.

TABLE 2DEMOGRAPHICS (N=77)

Gender	%	Sales	%
Female	24.7	0-100K	39.2
Male	75.3	100-1,000K	29.7
		> 1,000K	31.1
Ethnicity	%	Satisfied with Available Workforce	%
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Caucasian	92.0	Agree	49.4
Oriental	1.3	Disagree	26
	6.7	Neutral	18.5
African-American	0.7	Incultat	10.5

Number of Employees	%	Length of Time in Operation	%
0-4	50.1	0-3 years	21.8
5-15	20.0	4-10 yrs	19.2
16+	29.3	> 10 yrs	59.0
Age	%		
0-44	20.8		
45-65+	79.2	Obtain Adequate Financing?	%
		Yes	71.2
		No	28.8
Type of Business	%		
Professional (lawyer, etc.)	36.5	Support a City Small Business Incubator?	\$
Manufacturing	8.5	Yes	73.6
Distributor/Wholesaler	3.4	No	26.4
Retail	18.6		
Transportation (taxi, etc.)	1.7		
Finance/Insurance/Real Estate	13.6		
Other	39.0		

Respondents were asked what types of businesses would most positively impact their existing enterprises. Table 3 details the top three choices as: information technology firms, restaurants, and office supplies.

TABLE 3 TYPES OF BUSINESSES THAT WOULD POSITIVELY IMPACT YOURS (N=77)

Type of Business	Female %	Male %	Total %
CPA/Accountant	47.4	37.9	40.3
Attorney	36.8	32.8	33.8
Consulting Service	42.1	39.7	40.3
Physician	31.6	37.9	36.4
Restaurant	68.4	43.1	49.4
Coffee Shop	63.2	29.3	37.7
Crafts Store	42.1	25.9	29.9
Card Shop	36.8	19.0	23.4
Book Store	63.2	27.6	36.4
Office Supplies	68.4	36.2	44.2
Information Technology	68.4	56.9	59.7

*Note: Highest responses are in **boldface** type.

When looked at by gender, women were more interested in bringing in new restaurants than were men as well as office supply establishments and information technology enterprises. Men were more interested in having new physician offices added to the merchant mix.

Survey participants were asked for their evaluation of what types of businesses would be the most attractive candidates for tenancy in the City incubator. Table 4 indicates respondents were most interested in larger businesses as possible tenants in the incubator, particularly those that were complementary to their own. Women were far more interested in having larger businesses brought in as tenants than were men.

TABLE 4 TYPES OF BUSINESSES THAT ARE GOOD CANDIDATES FOR THE INCUBATOR (N=77)

Type of Business	Female %	Male %	Total %
Grocery Store	42.1	27.6	31.2
Card Shop	26.3	12.1	15.6
Book Store	36.8	24.1	27.3
Bakery	47.4	31.0	35.1
Crafts Store	26.3	19.0	20.8
Larger businesses complementary to existing local businesses	63.2	43.1	48.1

Area businesses expressed interest in potential services provided by the new incubator. Table 5 indicates that networking type activities were of great interest, followed by marketing plan assistance, then various types of training and workshops. In addition to wanting specific services provided to existing area businesses, participants also desired services that allowed them to develop more personal capacity. Below in Table 5, these services are ranked in order.

TABLE 5 RANKING OF DESIRED SERVICES FROM INCUBATOR (N=77)

Services	Female %	Male %	Total of N %
Networking	52.6	41.4	44.2
Marketing plan assistance	26.3	43.1	39.0
Social media marketing	42.1	25.9	29.9
Training/workshops	26.3	31.0	29.9
Counseling/consulting	42.1	24.1	28.6
Financial planning	15.8	32.8	28.6
Website development	21.1	29.3	27.3
Business plan development/evaluation	26.3	25.9	26.0
Peer network	31.6	24.1	26.0
Provide a place for meetings	31.6	22.4	24.7
Loan application assistance	10.5	27.6	23.4
Research services	15.8	25.9	23.4
Mentoring/apprenticeship	21.1	19.0	19.5
Accounting services	15.8	19.0	18.2
How to start a business	5.3	19.0	15.6

Table 6 breaks down a number of areas of personal development opportunities that participant wanted made available by the incubator.

Areas of Development	Female %	Male %	Total of N%
Develop Business Concept	21.1	22.4	22.1
Technical Skills	26.3	15.5	18.2
Knowledge of Market	57.9	51.7	53.2
Management Skills	31.6	12.1	16.9
Financial Management			
Skills	26.3	19.0	20.8
Work Well with Others	5.3	12.1	10.4
Communication Skills	15.8	8.6	10.4

TABLE 6 AREA OF CAPABILITY DEVELOPMENT (N=77)

Of these areas of development, opportunities to develop more knowledge of markets were of greatest interest, followed by opportunities to develop the business concept, then financial skills development. Although interest in development of management skills was not in the top three, women were much more interested in this than were men.

Finally, participants were asked if they felt there was a need for an incubator in the City. Chi-squared analyses revealed that newer business owners were more inclined to indicate there was a need while older business owners were less inclined, $\chi^2(2, N = 72) = 5.01$, p = .08. Also, businesses with lower sales felt there was a need, while those in the mid ranges felt there was no need, $\chi^2(2, N = 68) = 9.54$, p < .01.

CONCLUSION AND IMPLICATIONS

A small, economically challenged city, in the process of jump-starting its economy by fostering new businesses in a downtown City-run incubator, surveyed local merchants and downtown businesses to determine attitudes toward the creation of the incubator and training and support needs of the business community. Most important, the merchants were asked what types of businesses would best supplement their own, what types of businesses would be the best tenant candidates for the new incubator, and what services should be offered by the incubator for both new and existing businesses. This effort to include interested stakeholders in the decision process supports the Main Street approach to downtown revitalization which, among other strategies, emphasizes the need for strong cooperation among individuals and groups who have an interest in downtown development (Lawhead 1995).

The respondents desire to have the incubator fulfill their needs to increase market knowledge and enhance their ability to develop a business concept supports the trend toward more professional service needs in incubation environments (Allen and Weinberg 1988; Brooks 1986). The support services needed by the business community were virtually the same ones that have been found to be among the success factors for incubators; networking and training programs (Scillitoe and Chakrabarti, 2005Smilor, 1987).

So What

The City and the downtown business community is a system; interdependent and ideally possessing complementary attributes. A new dress shop needs some good restaurants to entice customers; a restaurant needs great shopping nearby. Now, with the data collected and analyzed from this study, the City has the opportunity to logically and carefully rebuild the City merchant system so that new, incubating businesses will be most likely to complement the existing ones and the existing ones will be likely to aid the launch of the new one.

The importance of conducting a survey such as the one discussed in this paper is that it provides an understanding of the needs and desires of the current local business community, especially one challenged by a regional downturn and poor economic conditions. It will help to ensure that a new incubator will provide the types of services that will have the most positive impact and the types of incubator tenants chosen will positively complement the local community. There is a fair amount of data available regarding incubator performance and the linkage to business success. It will be important to conduct longer range research to determine the types of actual incubator tenants chosen and their performance over time in relation to the City business community. In other words, understanding the impact of these new businesses nurtured in the City incubator on the whole community and vice versa is of great importance.

REFERENCES

Aldrich, H. (1999). Organizations Evolving. Thousand Oaks, CA: Sage Publications, Inc.

Allen, D. and McCluskey, R. (1990). "Structure, Policy, Services, and Performance in the Business Incubator Industry," Entrepreneurship Theory and Practice, Winter, pp. 61-77.

Allen, David N. and Mark L. Weinberg (1988). State Investment in Business Incubators." Public Administration Quarterly 12 (December 1988): 196-215.

Campbell, C. (1989). Change Agents in the New Economy: Business Incubators and Economic Development, Economic Development Review, Spring 1989, pp. 56-59.

Coopers and Lybrand LLP (1995). Growth Companies with University Ties Have Productivity Rates Almost Two-thirds Higher Than Peers, TrendSetter Barometer (January 26, 1995).

D'Agostino, C. (2009). The Business Incubator on Wheels, Economic Development Journal, Vol. 8, No. 4, pp. 25-30.

Field, A., Business Incubators Are Growing Up, Business Week, November 16, 2009.

Filion, P.; Hoernig, H.; Bunting, T. and Sands, G. (2004). The Successful Few: Healthy Downtowns of Small Metropolitan Regions, Journal of the American Planning Association, Summer, Vol. 70, No. 3, pp. 328-343.

Fowler, F. J. (1998). Design and evaluation of survey questions. In L. Bickman & D. J. Rog (Eds.), *Handbook of applied social research methods*. Thousand Oaks, CA: SAGE Publications.

Fowler, F. J. (2002). Survey research methods (3rd ed.). Thousand Oaks, CA: SAGE Publications.

Granovetter, M. (2000). The Economic Sociology of Firms and Entrepreneurs. Ed. R. Swedbery: Entrepreneurship. Oxford, UK: Oxford University Press, pp. 244-276.

Hansen, Morten T., Henry W. Chesbrough, Nitin Nohria, and Donald N. Sull (2000). Networked Incubators: Hothouses of the New Economy, Harvard Business Review 78, No. 5 (September-October 2000): 74-83.

Hatch, L., Betting on Incubators to Create Jobs, Bloomburg Businessweek, August 16, 2010.

Jackson, G. and Rubens, A. (2010). Creating Economic Development Opportunities, Economic Development Journal, Vol. 9, No. 4, pp. 42-49.

Lawhead, Terry (1995). A Comprehensive Strategy for Rural Downtowns, Economic Development Review, 07423713, Spring, Vol. 13, Issue 1.

Lee, C., K. Lee and J.M. Pennings (2001). Internal Capabilities, External Networks, and Performance: A Study on Technology-based Ventures. Strategic Management Journal 22(6/7): 615-639.

Lewis, David (2003). Innovation, Incubation, and Place: An Evolutionary Theory on the Performance of Technology Business Incubators, Ph.D. Dissertation, Rutgers University.

Mattare, M., Monahan, M., & Shah, A. (2009). *A profile of micro-entrepreneurship in western Maryland: How demographic variables affect these nascent engines of opportunity.* Paper presented at the USASBE, Anaheim, CA.

National Business Incubation Association (2007). 2006 State of the Business Incubation Industry. Athens, Ohio.

National Business Incubation Association (2009). About Business Incubation. Athens, Ohio.

O'Neal, T. (2005). Evolving a Successful University-Based Incubator: Lessons Learned From the UCF Technology Incubator, Engineering Management Journal, Vol. 17, No. 3, pp. 11-25.

Peters, L., Rice, M. and Sundararajan, M. (2004). The Role of Incubators in the Entrepreneurial Process. Journal of Technology Transfer, 29(1): 83-91.

Qian, H.: Haynes, K. and Riggle, J. (2010). Incubation Push or Business Pull? Investigating the Geography of U.S. Business Incubators, Economic Development Quarterly, 25(1), pp. 79-90.

Robertson, Kent A. (1999). Can Small City Downtowns Remain Viable? A National Study of Development Issues and Strategies, Journal of the American Planning Association, 01944363, Summer, Vol. 65, Issue 3.

Scillitoe, J.L. and A.K. Chakrabarti (2005). The Sources of Social Capital Within Technology Incubators: The Roles of Historical Ties and Organizational Facilitation. International Journal of Learning and Intellectual Capital (2(4): 327-345.

Small Business Administration (2004). http://www.sba.gov/advo/stats/sbfaq.pdf

Smilor, Raymond W. (1987). Managing the Incubator System: Critical Success Factors to Accelerate New Company Development, IEEE Transactions on Engineering Management 34, No. 3 (August 1987): 146-155.

Sue, V. M., & Ritter, L. A. (2007). Conducting online surveys. Thousand Oaks, CA: SAGE.

Todorovic, Z. and Suntornpithug, N. (2008). The Multi-Dimensional Nature of University Incubators: Capability/Resource Emphasis Phases, Journal of Enterprising Culture, Vol. 16, No. 4, pp. 385-410.

U.S. Department of Commerce Economic Development Administration (2008). Construction Grants Program Impact Assessment Report.