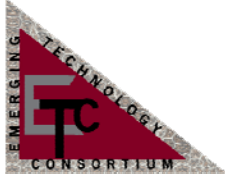




Technology Incubator Feasibility Study

**Presented by the Emerging Technology
Consortium and ANGLE Technology to the
Washington, DC Economic Partnership**

January 09



Innovation Empowers

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Mr. Steve Moore
President & CEO
Washington DC Economic Partnership
1495 F Street, NW
Washington, DC 20004

Dear Mr. Moore,

The Emerging Technology Consortium (ETC), and its subcontractor, Angle Technology Group are pleased to present to the Washington, DC Economic Partnership the Technology Incubator Study for the District of Columbia. Phase I of the report concludes that Washington DC has all the prerequisites to add technology based economic development to the District's economic plan. Phase II of the report provides a business implementation plan, with a proposed budget, to establish a technology incubator in the City. The report also provides the foundation for greater economic opportunities with technology based innovation as core of a new creative economy in the District.

The report is timely in light of the current economic crisis. The creation of businesses with high paying jobs will be essential to the country's overall economic recovery. The incoming administration has made stimulating metropolitan areas one of its key objectives of its urban policy. It proposed to provide \$200 million in planning and matching grants for regional business, government, and university leaders to collaborate on leveraging a region's existing assets to enhance long-term regional economic growth. The new administration also realizes that municipalities with comprehensive economic development plan can create "Promise Neighborhoods" where all communities can participate in the American dream. The ETC is in accordance with the approach of the new administration, believes that significant and coincident investments in math and science education (or STEM education), human capital and workforce development will yield a many-fold return particularly when aligned with the creation of businesses and encouragement of the entrepreneurial spirit. This is the essence of ETC's Technology Based Economic Development (TBED) 2.0 strategy.

The development innovative technology based economic development plan has the potential to make the District an integral component of the Metropolitan Washington Area and Regional economy. It also aligns the District with the incoming administration's vision for economic and urban revitalization.

We are pleased to present this report the Washington DC Economic Partnership and look forward to the next steps in developing a TBED 2.0 strategy for the District.

If you have any other questions, do not hesitate to contact me directly by phone at 202-347-5928 or via email at dhamlin@emergingtechconsortium.org.

Sincerely,

Darold Hamlin

President and Executive Director

EMERGING TECHNOLOGY CONSORTIUM

286 M STREET, SW - WASHINGTON, DC 20024



ANGLE Technology Group

January 30, 2009

Chad Womack, Ph.D.
Executive Vice President, Programs and Initiatives
Emerging Technology Consortium
286 M Street, S.W.
Washington, DC 20024

Dear Dr. Womack:

The ANGLE Technology team is pleased to submit to the Emerging Technology Consortium and the Washington, DC Economic Partnership this Final Report on the Feasibility Study for a Technology Incubator in Washington, DC.

We appreciate all the guidance you have provided to the ANGLE Team during the course of this study.

Sincerely,

Lisa S. Smith

*Principal
US Operations*

Acknowledgements

This Final Report on the Feasibility Study for a Technology Incubator in Washington, DC reflects the input from District of Columbia and local governments in the Greater Washington region, the private sector, non-profit and academic sectors, community representatives, and the study's paid consulting team, ANGLE Technology, beginning in the summer of 2008. The project was actively guided by the Emerging Technology Consortium and the Washington, DC Economic Partnership. The study was commissioned by Neil Albert, Deputy Mayor for Planning and Economic Development for the District of Columbia.

Special recognition and appreciation is extended to:

Emerging Technology Consortium

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Chad Womack, Ph.D., Executive Vice President, Programs and Initiatives

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1. Executive Summary

The Washington, DC Economic Partnership (WDCEP) worked with the Emerging Technology Consortium (ETC) to explore the possibilities of developing a technology incubator program or similar research and commercialization space in the District of Columbia, which could become a catalyst for the City's overall technology-based economic development strategy. WDCEP promotes business opportunities throughout the District of Columbia and contributes to business retention and attraction activities. The ETC promotes technology-based economic development activity in urban environments. The ANGLE Technology team was selected to conduct the Feasibility Study for a Technology Incubator in Washington, DC. This study has been funded by the Deputy Mayor for Economic Development in the District of Columbia.

Phase I of the Feasibility Study analyzed the market demand for an incubator and the potential economic impact it might produce. Phase II of the Feasibility Study developed a Business Plan for implementing the incubator initiative.

Phase I: Market Analysis is comprised of four elements:

- ◆ Estimated Market Demand
- ◆ Determination of the Incubator's Economic Development Purpose
- ◆ Determination of Community and Stakeholder Support
- ◆ Assessment of Market Feasibility

Existing business incubation programs in the Washington, DC area focus on several key business sectors/communities important to continued economic growth of the City, such as communications and social media, arts, nonprofits, and small minority business. The ANGLE Project Team has analyzed the critical mass of business and technology resources, as well as the competitive market demand for technology business incubation and new entrepreneurial initiatives in the District of Columbia. We find there is strong demand for the establishment of a business incubation program in Washington, DC with public and private sector support, which focuses on innovative, growth-oriented, early-stage technology businesses.

The establishment of a technology business incubator would meet the specific needs of one of the fastest growing sectors of the Washington, DC economy and help attract new residents to the City. The establishment of a technology business incubation program also would fill a gap in the spectrum of business support offerings in the City and complement the existing business development programs. Longer term, a technology incubation program could assist early-stage companies based on increasing levels of intellectual property generated by Washington's academic

institutions. Moreover, a technology business incubation program would be a value-add in the Greater Washington Market and offer programmatic and infrastructure resources to help drive regional innovation initiatives, such as the Chesapeake Crescent.

In addition, there is an opportunity for the District of Columbia to become “the heart” of technology business activity in Greater Washington by creating an environment for the development of innovative, growth-oriented companies. In a practical sense, the primary industry sector which would be most likely to benefit from a business incubation program is one of the City’s most dynamic, growth-oriented sectors: information technology (IT). The information technology sector broadly includes computer design and research, and IT services, as well as communications, Web 2.0 and social media companies. A secondary industry focus could be the professional and creative services sector, which includes advertising and marketing, environmental sciences, engineering.

Demand

Incubator initiatives can generally expect to source new knowledge-based companies and entrepreneurs from:

- ◆ Existing small companies and individual entrepreneurs
- ◆ Corporate sector
- ◆ Academic and government research establishments
- ◆ International/domestic inward investment

These four sources are all dynamic elements in the District of Columbia business environment.

Today there is an estimated 6,000 square feet of office space used by business incubation client companies in the City of Washington. By summer of 2009, that number could double, but it will not be enough to accommodate the space requirements of entrepreneurs and knowledge workers in the information technology and professional services employment sectors that are projected to add 3,000-4,000 jobs each year for the next five years, according to Greater Washington Initiative (GWI) data.

A technology incubator program in the District of Columbia could initially double and subsequently triple incubation space for technology companies to further diversify the industry base in the City. Based on demand, a two-phase incubator development program is envisioned: a 12,000 square foot incubator in Phase I, followed by an additional 12,000 square feet in a Phase II for a total of 24,000 in Phase II. The space could include offices, conference rooms, video conferencing and showroom/demonstration space. Direct economic benefits of a business incubation

program could be realized through an estimated 80 new, high wage jobs for technology company workers in Phase II and an estimated \$16 million in added economic activity in the City.

Incubator Economic Purpose

It is important to emphasize that business incubation is a process and that an incubator is much more than a multi-occupancy, managed work space. Incubators play an important role in their communities. A technology incubation initiative in Washington, DC would be a catalyst and a platform for:

- ◆ Providing a physical focus for entrepreneurship and technology company growth
- ◆ Creating a common culture and environment for technology entrepreneurship
- ◆ Facilitating inter company contact, networking and growth
- ◆ Enabling cost effective delivery of services/resources

In addition to these four roles, the incubation initiative in the District of Columbia should be structured from the outset to be the catalyst for referrals, marketing and the development of program resources for the two existing incubator programs in the City: Affinity Lab and the DC Minority Business Enterprise Center. The technology incubator also can be a platform for activities associated with technology based education and training activities for underserved communities in the City.

Community and Stakeholder Support

A small, but enthusiastic group of stakeholders was identified through the study interview program and an online survey of IT entrepreneurs. As the incubator program grows, becomes known and engages with stakeholders, this group will grow quickly.

Stakeholders noted that there would be challenges to establishing the incubator. Having political and financial support for the technology incubation initiative from the District government at the outset of the project will be critical. As the City does not yet have a comprehensive technology-based economic development strategy which would include this project, and this project would break some new ground, there was a concern that the launch of the incubator might become mired politically.

Some stakeholders also expressed concern about the challenge of identifying early-stage funding and locating appropriate, affordable incubation and graduation space for technology companies in a town known for the high-priced real estate occupied by law firms and other professional service firms. Partnerships with willing developers were suggested. The challenge of marketing to the initial incubator prospects also was highlighted.

Assessment of Market Feasibility

There is an opportunity now in the District of Columbia to establish a technology incubator initiative which will:

- ◆ build a stronger, more cohesive entrepreneurial environment for technology companies which links, leverages and further develops existing Washington, DC technology entrepreneurship activities which meet the needs of distinct client communities
- ◆ provide a platform for the development of specific new resources to advance technology development activity in the City, such as the creation of a \$1.5 million seed fund for DC-based companies and support for special entrepreneurship, science and technology education and workforce development activity for all communities in the City
- ◆ provide the platform for establishing a new, professionally managed technology incubator program specifically to drive the attraction, growth and development of growth-oriented technology companies representing Washington, DC's most dynamic industry sectors and most relevant university-developed intellectual property

The incubator program will increasingly be seen as the focal point, resource and catalyst for technology entrepreneurship in the District of Columbia.

Phase II of the Feasibility Study developed a Business Plan for implementing the incubator initiative.

Phase II: Business and Financial Plan is comprised of four elements:

- ◆ Site Assessment
- ◆ Business Plan
- ◆ Financials
- ◆ Future Development Options

Site Assessment

As noted in the Phase I report, it is recommended that the incubator be developed in phases and begin in leased commercial space, as discussions with the City government staff indicate that there is no city-owned space currently available which meets the location criteria. The real estate market in the City presents challenges for cost-effective incubator space.

Working with ETC and WDCEP stakeholders, the ANGLE Team reviewed more than 40 sites and further shortened the list of suitable properties as follows:

Near-Term – Phase I (not listed by preference)

- ◆ 1325 G Street NW
- ◆ 225 Virginia Avenue SE – City sublease
- ◆ 3400 International Drive, IntelSat
- ◆ 151 T Street, NE – Innovation Center at McKinley High School

Longer-Term – Phase II (not listed by preference)

- ◆ 641 S Street, NW, The Wonder Bread Building

Mission of the Incubator

The mission statement forms the basis of the business plan and quantifiable performance metrics. The following mission statement is proposed for the DC Technology Incubator:

To provide a common platform for growth-oriented DC technology entrepreneurs to access resources, mentorship, and capital to start and grow their ventures and to graduate from incubation space into commercial space in the District of Columbia.

The Technology Incubator Program

The DC Technology Incubator can support the launch and growth of carefully selected promising entrepreneurs and ventures, while also actively supporting the efforts of other District-based organizations with similar missions. Established as an independent government-funded not-for-profit organization, it can provide a range of valuable programs generally organized into two categories:

- 1) Entrepreneur and Venture Programs (including Services and Facilities)
- 2) Incubator and Network Programs (including operations support and promotion)

Focus Areas for the Technology Incubator

The primary focus of the DC Technology Incubator will be on technology entrepreneurs building high-growth ventures. The Incubator will make efforts to support women, minority, disabled, and veteran entrepreneurs via a number of mechanisms, including specialized programs, speakers and mentors, events, and staff recruitment.

The DC Technology Incubator should not initially focus on any specific industries or sectors, developing instead a strong general purpose infrastructure for entrepreneurial ventures with a wide spectrum of innovation-based, high growth business models (e.g., new products/services, new markets, new business processes). However, as

noted in the Phase I Market Analysis, the following industries will likely provide the bulk of the client base, which will be accommodated in a variety of different ways.

- ◆ Information & Communications Technology (Computer Hardware, GIS, GPS, Internet, IT Services, Mobile, Networking, Satellite, Security, Software, Telecommunications, Web 2.0)
- ◆ Entertainment & Media (Digital Media, Education, Film, Gaming, Music, Television)

Implementation Plan

For strategic reasons, a phased roll-out approach will be followed over five years to implement the incubator, beginning with an initial launch phase (Year 1-2) then growing through an expansion phase (Year 3-5). A core staff of two is recommended and detailed in the pro forma budgets, with additional staff support/functions detailed in the report narrative, but this support would need to be provided for through organizational sponsorship or in-kind support. As the incubation grows during Phase II, these two core staff members will be further leveraged over the entire program.

Organizational Structure

Operating as a stand-alone non-profit will improve the incubator's attractiveness to prospective sponsors, since many organizations will not fund an incubator they perceive as publicly supported or as a profit-making corporate entity. A stand-alone organization also, typically, has more maneuverability and flexibility when making financial and purchasing decisions. It is recommended that a non-profit corporation be created to operate the incubator. This non-profit organization could have a staff of two initially and be a program of the WDCEP, with an organizational relationship modeled on the Emerging Technology Centers (ETC)-Baltimore's relationship with the Baltimore Development Corporation (BDC).

Financial Plan and Pro Forma Budget

Based on the draft space configuration program developed during the Phase I portion of this study and the information gathered during the site selection analysis portion of the Phase II portion of this study, the ANGLE team developed a pro forma five-year operating budget for the proposed incubation facility. These budgets are based on a 12,000 square foot facility which doubles in size to 24,000 square feet as the project matures. The ANGLE team included data related to actual business incubation costs incurred by current incubator operations in Maryland as appropriate, given the anticipated operational model for the proposed incubator.

Income is drawn from office space rents; fee-based use of the assembly and digital showroom areas on a per diem basis; fee-based income for affiliate companies that seek to benefit from the programmatic resources available through the incubator as well as take advantage of conference space and other resources; an annual operating grant from the City; and sponsor-generated revenue.

Gross income in Year One is \$459,325 which grows to \$677,001 by year five. The aggregate gross income for the five year period is \$3,094,862.

Year One of the pro forma operating budget yields a loss of \$101,468. The overall Net Operating Income (NOI) during the five-year pro forma operating budget reflects a loss of \$24,336.

The total estimated Capital Furnishings Budget is \$84,464.

Summary

The District is operating in a potentially significant window of opportunity to energize its base of technology and entrepreneurial talent, expand that base and spur job growth. While there are a number of existing local and regional programs to support high-growth early-stage ventures in the District, the City's entrepreneur community still needs a "first-stop shop" platform to provide a focal point and to help integrate all of the various offerings.

The Emerging Technology Consortium (ETC), working with the Washington DC Economic Partnership (WDCEP) on a technology business incubation project, can help provide this missing piece of the ecosystem by launching the DC Technology Incubator with public and private sector support. Moreover, this new business incubation initiative can be the catalyst which leads to the development of a comprehensive technology-based economic development strategy for the District of Columbia.