REPORT
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WOMEN’S PARTICIPATION IN BUSINESS INCUBATORS AND ACCELERATORS

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Women’s Participation in Business Incubators and Accelerators

Prepared for:

The National Women’s Business Council (NWBC)

Submitted by:

WASHINGTON | CORE

4340 East-West Highway Suite 1110
Bethesda, Maryland 20814
DUNS: 963530753

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The statements, findings, conclusions, and recommendations found in this study are those of the authors and do not necessarily reflect the views of the National Women’s Business Council, the United States Small Business Administration, or the United States Government.
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<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>I/A</td>
<td>Incubator/Accelerator</td>
</tr>
<tr>
<td>ICIC</td>
<td>Initiative for a Competitive Inner City</td>
</tr>
<tr>
<td>IP</td>
<td>Intellectual property</td>
</tr>
<tr>
<td>MBDC</td>
<td>Minority Business Development Center</td>
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<tr>
<td>NWBC</td>
<td>National Women’s Business Council</td>
</tr>
<tr>
<td>SBA</td>
<td>U.S. Small Business Administration</td>
</tr>
<tr>
<td>SBIR</td>
<td>Small Business Innovative Research</td>
</tr>
<tr>
<td>SBO</td>
<td>Survey of Business Owners and Self-Employed Persons</td>
</tr>
<tr>
<td>SCORE</td>
<td>Service Corps of Retired Executives (former name)</td>
</tr>
<tr>
<td>STTR</td>
<td>Small Business Technology Transfer Research</td>
</tr>
<tr>
<td>STEM</td>
<td>Science, Technology, Engineering and Mathematics</td>
</tr>
<tr>
<td>WBC</td>
<td>Women’s Business Center</td>
</tr>
<tr>
<td>VC</td>
<td>Venture Capital</td>
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</tbody>
</table>
Executive Summary

Women entrepreneurs are a vital component to the U.S. economy, as they are responsible for the creation of both new businesses and jobs. However, despite the rapid increase in number of women-owned firms in recent years, women-owned businesses face significant barriers to growth, including limited access to capital and networks.¹

Business incubators and accelerators can play an important role in the entrepreneurial ecosystem by not only offering training and services, but also connecting women business owners to opportunities and resources that may help them overcome various challenges that limit business development and growth. Program offerings can include work space, mentoring, technical assistance, and networking with potential investors, customers, and suppliers. Some recent studies have found that entrepreneurs who participate in a top performing accelerator perform better than those that did not participate in an accelerator in areas such as raising capital, exiting by acquisition, and acquiring customers.²

The National Women’s Business Council (NWBC) commissioned research to strengthen stakeholder understanding of incubators and accelerators as they relate to women entrepreneurs and, ultimately, to facilitate successful participation of women entrepreneurs in these programs. This research includes a literature review, as well as a direct exploration of the experiences and perspectives of women entrepreneurs and incubator and accelerator managers through survey and interview analysis.

Notable findings from this study include:

- Women entrepreneur participants who joined an incubator or accelerator (I/A) invested more capital in their first year of business and are more likely than those who did not participate to receive investments from angel investors and venture capital.

- Women incubator and accelerator participants responded that networking is the most important consideration for joining an incubator or accelerator, followed by acquiring skills to manage and grow businesses, and attracting additional outside capital. Incubator and accelerator manager participants also reiterated the importance and value of strong formal networks.

- Women entrepreneurs who joined an incubator or accelerator participate in more networking activities than women entrepreneurs who do not join incubator and accelerators.

Key Recommendations:

- Outreach to potential incubator and accelerator applicants should take into account underrepresented segments of entrepreneurs, such as women. Additionally, the

process for screening applicants should be reviewed to address possible unconscious bias and include a diverse panel of judges.

- Incubator and accelerator programs should include women entrepreneurs, investors, and other members of the startup community to address the needs of women participating in the program and demonstrate an inclusive environment to potential women applicants.

- The U.S. Federal Government can also play a role in facilitating the successful participation of women entrepreneurs in incubators and accelerators by promoting collaboration among business support organizations, revising the criteria for women’s business ownership, and adding inclusiveness as criteria for federal grants.
1 Introduction

As the global and United States (U.S.) economies continue to emerge from the Great Recession that began in 2007, there is growing awareness of the importance and potential of women entrepreneurs to accelerate economic growth. Experts recognize that women-owned businesses contribute to innovation, employment, and wealth creation in countries across the globe.³ At the same time, business incubators and accelerators have become the focus of intense interest because of their potential to help entrepreneurs create sustainable and scalable businesses that could have a profound effect on the economy.

Incubators and accelerators are organizations that provide an array of targeted resources and services to accelerate the successful development of business startups, which are defined as organizations formed to search for repeatable and scalable business models.⁴ Incubators and accelerators often provide comparable services, but there are distinguishing characteristics.⁵ According to Susan Cohen, Assistant Professor of Management at the University of Richmond, and Yael Hochberg, Associate Professor of Entrepreneurship at Rice University, “Incubators provide management guidance, technical assistance, and consultation to young, growing companies. Incubators usually also give clients access to appropriate rental space and flexible leases, shared basic business equipment, technology support services, and assistance in obtaining the financing necessary for company growth.”⁶

By contrast, an accelerator is defined as “a fixed term, cohort-based program, including mentorship and educational components that culminates in a public pitch event or demo day.” Whereas incubators typically involve one-to-one relationships between a mentor and a client and last an average of 33 months, an accelerator is a short-term cohort-based program lasting an average of 3 months.⁷

Recent studies have found that a business’ participation in an accelerator may contribute to increased economic performance, including access to capital. A 2016 study of 15 accelerators around the world by the Global Accelerator Learning Initiative found that entrepreneurs who participate in an accelerator raised 8.6 times more capital in one year than those who did not.⁸ Additional research has found that participants in top performing accelerators outperformed comparable companies in terms of raising capital, exit by acquisition, and customer traction. However, these benefits are only seen among top performing accelerators rather than accelerators as a whole.⁹

Both for-profit and non-profit incubators and accelerators continue to proliferate across the U.S., including many run or supported by universities or local governments. At the federal level, former President Barack Obama supported the expansion of services that support the prevalence and success of high growth entrepreneurs in the U.S. through

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³ For an introduction to current research on the contributions and performance of women entrepreneurs, refer to “Growth-oriented Women Entrepreneurs and Their Businesses: A Global Research Perspective.”
⁶ Ibid.
Startup America, an interagency initiative announced in January 2011. That policy initiative has led to the expansion of the federal initiative to become the Startup America Partnership\(^\text{10}\) as a partnership between the Federal Government, Kauffman Foundation, and Case Foundation. The Partnership was supported by federal programs to support startups like the U.S. Small Business Administration’s (SBA) Growth Accelerator Fund and the expansion of U.S. Economic Development Administration grants supporting business incubators.\(^\text{11}\)

While incubators and accelerators are enhancing the prospects of startups across a variety of industries throughout the country, there is anecdotal evidence that the representation of women-led and women-owned businesses among the graduates of such programs has been low. In response to this challenge, many women-focused incubators and accelerators have been established specifically to serve this underrepresented segment of entrepreneurs.\(^\text{12}\) However, even as experts develop a better understanding of the effects and best practices of business incubators and accelerators, participation rates and the factors affecting women’s involvement and utilization of incubators and accelerators by women entrepreneurs remain poorly understood.\(^\text{13}\)

This study employs a multi-methodological approach to better understand the interactions between women entrepreneurs and business incubators and accelerators in the U.S. This includes a review of relevant existing quantitative and qualitative data sources, an analysis of an original NWBC survey of women entrepreneurs and incubator managers, and aggregated responses to in-depth interviews and discussions with subject matter experts and stakeholders. The study seeks to provide an overview of the current state of thinking on this issue while providing a platform for further research and discussion, along with actionable policy recommendations to empower women entrepreneurs and the nation’s economy.

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\(^\text{10}\) Startup America Partnership continued as an organization to support entrepreneurial ecosystems known as UP America in 2013 and subsequently merged with Techstars, a global network of accelerators and other startup support programs in 2015.

\(^\text{11}\) Although the EDA does not have a program created specifically for incubators and accelerators, it distributed over $28 million in 2014 to 18 incubator and accelerator projects in 11 states.


\(^\text{13}\) JPMorganChase, ICIC. “Creating Inclusive High-Tech Incubators and Accelerators.” May 2016.
2 Background

2.1 Defining and Understanding the Role of Business Incubators and Accelerators

Incubators and accelerators are organizations focused on encouraging the growth of sustainable, innovative businesses. While the concept of the business incubator dates back to 1959, the concept of the business accelerator is much newer, with the 2005 launch of Y Combinator.\textsuperscript{14} Significant overlap between the functions, practices, and services typical of incubators and accelerators makes consensus definitions of the two difficult to obtain.\textsuperscript{15}

Differentiating characteristics between the two types of organizations can be seen in their program structures. Incubators stay engaged with their client businesses for long periods of time averaging well over a year and employ rolling application policies to ensure the continuous utilization. Accelerators focus instead on short, intense, cohort-based programs, averaging only three months, and compressing a variety of information, resources, and opportunities into a focused program. Accelerators’ intense focus on producing results in a short period of time is also typically accompanied by narrow technological or industrial sector focuses.

Accelerators also place a strong emphasis on capital and/or acquiring equity in companies that participate in their programs; this practice is not as typical of incubators. Accelerators emphasize networking with potential investors and customers through activities such as a demo day to attract investment to facilitate access to capital and resources after the completion of the accelerator program.\textsuperscript{16} Incubators may provide networking activities as well, but these are not often as significant and explicit as part of the value proposition for companies as they are in accelerators.

For clarity, Table 1 summarizes the commonly observed characteristics of incubators and accelerators. It is important to keep in mind that these characteristics described below are not directly opposed to each other, which is part of what creates so much overlap and confusion between the two types of organizations.

\begin{footnotesize}
\textsuperscript{14} For the history of incubators, see NBIA, “The History of Business Incubation”; For the history of accelerators, see “Accelerating Startups: The Seed Accelerator Phenomenon” p.2
\textsuperscript{15} For literature reviews and discussions of this definitional issue, see Isabelle 2013, Atkins 2011, Hoffman and Radojevich-Kelley 2012, and Cohen and Hochberg 2014.
\textsuperscript{16} A demo day is an event in which a selected group of entrepreneurs pitch their companies to prospective investors.
\end{footnotesize}
Table 2: General Characteristics of Incubators and Accelerators

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Incubators</th>
<th>Accelerators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Startup Selection Process</strong></td>
<td>Competitive – based on available space and resources</td>
<td>Competitive – essential to business model</td>
</tr>
<tr>
<td><strong>Technology Focus</strong></td>
<td>Broad</td>
<td>Narrow</td>
</tr>
<tr>
<td><strong>Stage of Technology</strong></td>
<td>Seed and broad range of stages</td>
<td>Seed and pre-seed</td>
</tr>
<tr>
<td><strong>Cohort Structure</strong></td>
<td>No</td>
<td>Yes – essential to business model</td>
</tr>
<tr>
<td><strong>Program Duration</strong></td>
<td>More than 12 months; average of 33 months</td>
<td>Less than 12 months; average of 3 months</td>
</tr>
<tr>
<td><strong>Office / Lab / Flex Space &amp; Equipment</strong></td>
<td>Yes</td>
<td>Varies</td>
</tr>
<tr>
<td><strong>Mentoring</strong></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Technical Assistance</strong></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Post-Program Support</strong></td>
<td></td>
<td>Varies</td>
</tr>
<tr>
<td><strong>Seed Funding</strong></td>
<td>Varies – not typical</td>
<td>Yes – essential to business model</td>
</tr>
<tr>
<td><strong>Equity Stake</strong></td>
<td>No</td>
<td>Yes – essential to business model</td>
</tr>
<tr>
<td><strong>Intellectual Property (IP) Conditions</strong></td>
<td>Varies by organization’s IP policy</td>
<td>Varies by equity agreement</td>
</tr>
<tr>
<td><strong>Networking with Angel / VC &amp; Corporate Investors</strong></td>
<td>Varies according to staffing and resources</td>
<td>Yes – important to business model and value proposition</td>
</tr>
<tr>
<td><strong>Networking with Potential Customers &amp; Suppliers</strong></td>
<td>Varies(^{18})</td>
<td>Yes – important to business model and value proposition</td>
</tr>
<tr>
<td><strong>Demo Day</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>On-site Participation Required</strong></td>
<td></td>
<td>Varies</td>
</tr>
<tr>
<td><strong>Cohort &amp; Alumni Networking</strong></td>
<td>Varies</td>
<td>Yes</td>
</tr>
</tbody>
</table>


Although there are important nuances that distinguish incubators and accelerator programs, **given the significant overlap between the organizations’ mission and programming**, the current study, which incorporates both survey and interview results, does not differentiate between incubators and accelerators. Rather, these

\(^{17}\) Incubator and accelerator sponsors include local governments, universities, and corporations.

\(^{18}\) The original SBA Office of Advocacy report stated “No” for this category, but it was changed to “Varies” to better represent the diversity of incubator organizations in operation.
two programs are treated as a common entity in presenting the study’s findings and policy recommendations for the federal government.

2.2 Major Trends Concerning Women Entrepreneurs and Their Businesses

This section summarizes the major trends regarding the development and performance of women-owned businesses. Although most of these trends have causes that are embedded within the wider society, business incubators and accelerators are in an ideal position to enhance or mitigate the effects of these trends, which could improve the overall business outcomes of women entrepreneurs.

2.2.1 Women-owned businesses are growing rapidly but are underrepresented as a share of the U.S. economy

Women-owned businesses are growing in number and are providing increasing employment opportunities. Based on data from the U.S. Census Bureau's Survey of Business Owners and Self-Employed Persons (SBO) between 2007 and 2012, the total number of women-owned businesses, both employer and non-employer firms combined, increased by 2,086,282 or 26.8 percent while men-owned business increased by 944,043 or 6.8 percent. More importantly, if only employer firms are considered, the rapid pace of growth is also significant. Between 2007 and 2012, women-owned employer firms increased by 125,994 or 13.9 percent, while men-owned employer firms only increased by 105,497 or 3.3 percent (Table 2).

Women-owned businesses have significantly contributed to the growth for the U.S. economy as the nation emerges from the recession. Women-owned businesses led in job creation during this time, adding nearly 911,493 jobs to the U.S. economy compared to 80,673 jobs by men-owned businesses as shown in Table 2 below.

| Table 3: Change in Major Indicators for Women-owned and Men-owned |
|------------------------|-------------------|-----------------|---------------|
| Indicator              | Ownership         | 2007            | 2012          | Difference    |
| Number of Employer Firms | Women-owned | 909,661          | 1,035,655      | +125,994     |
|                        | Equally-owned    | 1,050,232       | 764,977        | (-285,255)   |
|                        | Men-owned        | 3,230,075       | 3,335,572      | +105,497     |
| Number of Employees    | Women-owned      | 7,520,121       | 8,431,614      | +911,493     |
|                        | Equally-owned    | 8,054,996       | 6,494,837      | (-1,560,159) |
|                        | Men-owned        | 41,051,438      | 41,132,111     | +80,673      |
| Payroll ($1,000)       | Women-owned      | $214,673,400    | $263,720,252   | $49,046,852  |
|                        | Equally-owned    | $215,448,734    | $188,853,393   | $26,595,341  |
|                        | Men-owned        | $1,510,450,810  | $1,643,868,568 | $133,417,758 |

Sources: Analysis of the U.S. Census Bureau, Survey of Business Owners and Self-Employed Persons, 2007 and 2012

19 Non-employer firms are defined by the U.S. Census Bureau as a business that has no paid employees, has $1,000 or more in annual receipts and is subject to Federal income tax. An employer firm is a business that has one or more paid employees.
20 Per methodology published by the Census Bureau, “For the 2012 SBO, the use of administrative data for direct substitution may have affected the equally owned estimates.” In particular, the 2012 SBO reflects relatively fewer equally-owned firms than non-equally owned firms in comparison with 2007 estimates.
21 Comparability of the 2012 and 2007 SBO Data: Per methodology published by the Census Bureau, “For the 2012 SBO, the use of administrative data for direct substitution may have affected the equally owned estimates.” In particular, the 2012 SBO reflects relatively fewer equally-owned firms than non-equally owned firms in comparison with 2007 estimates. Further analysis is required to understand the extent to which this
While women-owned businesses are growing rapidly in numbers, they still lag behind men-owned businesses in terms of their relative share of economic activity in the U.S. According to the most recently available data from 2012, women-owned employer firms stood at 1,035,655 businesses employing 8.4 million people and generating close to $1.2 trillion in receipts. However, while women-owned firms account for 20.2% of all privately-held employer businesses classifiable by gender in the U.S., they only accounted for 10.9% of total employer firm receipts, 15.0% of total employment, and 12.6% of total payroll. \(^{22}\) In comparison, men owned firms account for 64.9% of all privately-held employer businesses classifiable by gender in the U.S. and account for 80.4% of total receipts, 73.4% of total employment, and 78.4% of total payroll.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Women-Owned</th>
<th>Equally Women/Men-Owned</th>
<th>Men-Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average sales, receipts, or value of shipments of firms with paid employees</td>
<td>$1,149,598</td>
<td>$1,255,724</td>
<td>$2,642,245</td>
</tr>
<tr>
<td>Average number of paid employees</td>
<td>8.1</td>
<td>8.5</td>
<td>12.3</td>
</tr>
<tr>
<td>Average payroll</td>
<td>$31,278</td>
<td>$29,077</td>
<td>$39,966</td>
</tr>
</tbody>
</table>

Source: Analysis of the U.S. Census Bureau, Survey of Business Owners and Self-Employed Persons, 2012

A variety of factors could contribute to the large difference in average performance between men- and women-owned businesses, such as the distribution of firms across different industries with varying profitability, but experts have also found that women face unique challenges as entrepreneurs that may be inhibiting their success.

2.2.2 Women business owners have more limited access to capital

Access to capital is often cited as the most persistent challenge facing women entrepreneurs today. Capital is the lifeblood that allows a new firm to operate, and insufficient capital can result in the anemic growth or even failure of a business. Analysis of the 2007 and 2012 SBO data shows that women-owned businesses are more likely to start with smaller amounts of capital than men-owned or equally-owned companies (Figure 1). Nearly 65% of women-owned firms start with less than $5,000, while about 45% of men-owned firms start with the same amount of capital. A 2014 study by Alicia Robb and Susan Coleman on women’s access to capital found that men launch their firms with an average of $135,000 in startup capital compared to $75,000 by women. Among the top ranked firms by employment and gender, men use six times the amount of financing as women, $1,279,873 raised by men and $211,064 by women.\(^{23}\)

\(^{22}\) This excludes publicly-owned businesses and other businesses for which ownership data is not available.

In addition to the overall amount of startup capital that women are able to utilize when founding new firms, certain types of capital are also difficult for women entrepreneurs to obtain. The 2014 study by Alicia Robb and Susan Coleman found that, women rely significantly more on owner and insider financing such as family and friends, and less on outsider financing than men. Owner and insider debt and equity represents 47.6% of all startup capital raised by women compared by 38.4% of the capital raised by men. Most remarkably, outsider equity, such as venture capital (VC) and angel investments, accounts for only 1.9% of startup capital raised by women but 17.7% of the capital raised by men. Similarly, financing by angel investors in women-owned businesses is also low. The percentage of women-owned businesses receiving capital from angel investors in 2015 was only 14.4% according to a study by Jeffrey Sohl, Director of the University of New Hampshire’s Center for Venture Research. The low rate of angel investments received by women-owned businesses could suggest that opportunities for women entrepreneurs to obtain the investments needed to grow their business are constrained.

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25 Data taken from the *Angel Market Analysis Reports* series published by the University of New Hampshire Center for Venture Research.
2.3 Analyzing Women Entrepreneurs in the Context of Business Incubators and Accelerators

2.3.1 The state of women’s participation in incubators and accelerators

As evidenced above, entrepreneurs often face a variety of structural barriers to reaching the resources and opportunities available in the market. Organizations such as incubators and accelerators are well-suited to help mitigate structural problems through the networking services, subject expertise, and access to capital they can provide.

While comprehensive statistics on the participation of women in incubators and accelerators are nonexistent, evidence of low participation rate of women entrepreneurs and women-owned businesses in most incubator and accelerator programs has raised concern among the entrepreneurial community. In response to this concern, many organizations have developed coordinated efforts to increase representation of women and other under-served groups in incubator and accelerator programs. For example, Google for Entrepreneurs, Google’s non-profit organization focused on encouraging entrepreneurship through the support of startup communities, announced a program called #40Forward in March 2014 designed to increase the representation of women in incubator and accelerator programs by 25% by giving $1 million to 40 organizations focused on enabling entrepreneurship around the world.

Beyond this, pioneering organizations like Springboard Enterprises, Astia, and Count Me In for Women’s Economic Independence have been working to ensure a more balanced system by supporting women-owned businesses for the past 15 years, and they have been joined in more recent years by a number of new women-focused incubators and accelerators, such as The Refinery in Westport, CT, Prosper Women Entrepreneurs Startup Accelerator in St. Louis, MO, WiSTEM in Chicago, IL, and the BIG Innovation Centre and the Women’s Entrepreneurship Initiative both in Atlanta, GA.

The outcomes achieved by women-focused incubators and accelerators demonstrate the benefits these startup assistance organizations can provide for women entrepreneurs and women-owned businesses, but the lessons for other incubator and accelerator programs remain poorly understood. The lack of comparative research on this topic means it is difficult to identify which specific business practices lead to higher participation rates and better outcomes for women as well as how those practices vary between women-focused and gender-neutral incubators and accelerators.

2.3.2 Challenges facing female entrepreneurs participating in incubators and accelerators

A 2016 study published by JPMorganChase and the Initiative for a Competitive Inner City (ICIC) conducted interviews with 51 managers of incubators and accelerators and 25 experts in entrepreneurship to identify practices for creating more inclusive incubators and accelerators in the high technology sector. The study offered a series of strategies that could be adopted by high tech incubators and accelerators to increase participation by women and minorities, including: expand recruitment networks through diverse leaders and partners; create diverse selection committees and adjust the selection process to remove biases against women and minority entrepreneurs; intentionally design

programs to better fit the needs of women and minority entrepreneurs; and create an inclusive culture.

Research calls for incubators and accelerators to review their own programs and consider how they can boost participation by underrepresented segments of entrepreneurs by creating more inclusive programs. Future investigations should build on previous research and could seek to shed light on how organizations can enhance opportunities for successful participation and graduation by women entrepreneurs by adopting gender-inclusive practices, such as those identified above.

2.4 Key Research Goals

A review of the quantitative statistics on women entrepreneurs and women-owned businesses shows that the participation of women as entrepreneurs and company leaders continues to lag men, and existing studies make the challenges facing women entrepreneurs when starting and operating businesses abundantly clear. On the other hand, there is fairly limited literature on incubators and accelerators that has considered the influence of gender on the interactions between incubators, accelerators, and women entrepreneurs.

This study has been designed to address some of the gaps in the existing literature and to build a basis for further research. This study identifies general characteristics of women entrepreneurs who have participated in incubator and accelerator programs, as well as the characteristics of the programs in which these women have participated. Beyond this, the study seeks to better understand why women entrepreneurs decide whether to join an incubator or accelerator and the practices that may contribute to successful participation by women participants.

27 Ibid.
3 Methodology

The study adopted a multi-methodological approach that employed a survey and telephone interviews. The methodology for each component are summarized below.

3.1 Survey Methodology

The NWBC conducted an original survey of women entrepreneurs, women incubator and accelerator graduates (I/A graduates), and incubator and accelerator managers (I/A Managers) in order to gain insights into the factors that affect women’s participating in incubator and accelerator programs.28 Survey questions were generated after conducting the literature review summarized in the previous chapter. The three surveys are available in Appendices 3 through 5 following this report.

The data do not represent a random, statistically significant, nationally representative sample of the entire population of women business owners. The survey is based on a sample of 755 responses from women entrepreneurs (non-I/A participants), 285 responses from women graduates of incubators and accelerators (women I/A graduates), and 121 responses from I/A managers.29 Respondents were separated into either the non-I/A participants or I/A graduate populations based on their response to survey questions. The survey’s findings are not intended to be extrapolated to the entire population. Throughout this report, all conclusions and statistics refer only to the data provided by survey and interview respondents.

3.2 Interview Methodology

30-to-60 minute telephone interviews were conducted with the following groups who were identified through a literature review and recruited independently from the survey:

- I/A program managers
- Entrepreneurs that are participating in or have graduated from I/A programs
- Organizations that support women’s entrepreneurship
- Experts with a background in women’s entrepreneurship

These interviews focused on identifying the factors, both structural and individual, that affect women’s participation in incubator and accelerator programs, and determining successful practices that I/A programs can undertake to better recruit and support women entrepreneurs. Individual interviews were tailored to the background of the interview subject and build upon key findings raised over the course of the interview.

Although these interviews offered coverage of broad categories of I/As, it should be noted that due to the number of interviews, distinct models of I/As were not covered. Therefore, perspectives presented in the interviews are limited in applicability and scope and should only be used to provide additional context from experts to complement the survey findings.

28 NWBC contracted with Washington CORE, LLC., a consulting and research firm based in Bethesda, MD, to work with the Council to design, implement, and analyze the survey.
29 The responses from I/A managers reflect the perspective of the individual who completed the survey, not their organization.
4 Key Findings

The following chapter presents findings from the study’s survey and interviews. Only findings that directly address the study’s investigation of women’s participation in I/As are included in the study. The chapter is organized into the following subsections:

- Characteristics of Entrepreneurs
- Mission of Incubators/Accelerators
- Access to Networking
- Access to Mentoring
- Access to Capital

The findings are organized by topic rather than methodology. Survey findings are presented with accompanying statistical data. Any interview findings are identified as such in text of relevant subsection.

4.1 Characteristics of Entrepreneurs

The survey found that women I/A graduates are more likely to hold higher degrees and hold degrees in the science, technology, engineering, or mathematics (STEM) field than women non-I/A participants. A comparison of the educational attainment of women entrepreneurs who participated in an I/A and those who did not find that women I/A graduates have earned higher degrees than women non-I/A participants. As seen in the figure below, 46% of women I/A graduates have attained a post-graduate degree compared to 31% of non-I/A graduates. Although the current results only hold true to those participants, for comparison, the figure also shows that 20% of women business owners hold higher than a bachelor’s degree according to the 2012 SBO.

Figure 2: Educational Attainment for WOBs

30 Sample size: Women Non-I/A participants: 755, Women I/A Graduates: 285
The survey also found that 50% of women I/A graduates have a degree in STEM, compared to 33% of non-I/A participants (Figure 4). It should be noted that the survey responses oversampled I/A programs involved in STEM. This is partly due to the high prevalence of STEM-focused I/A programs. Further, referrals of the survey by these programs to their graduates may have affected the findings regarding educational attainment and STEM education, resulting in inflated numbers for educational attainment and STEM degrees for survey participants. Interviewees note that there is strong presence of I/As within the high technology sector, because this sector attracts strong support from angel and venture capital investors.

**Figure 3: STEM Education Background for WOB Participants**

Women entrepreneurs who graduated from an I/A are also more likely to have relevant past experience in startups and executive positions than non-I/A participants. As seen in Figure 4, women I/A graduates are more likely to have experience working at a startup (49%) compared to non-I/A participants (32%). Although it is interesting to examine prior startup experience, as individuals conjecture that investors may prefer firms with said experience, existing research has not demonstrated a causal relationship between owner startup experience and firm survival.\(^{32}\)

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\(^{31}\) Sample size: Women Non-I/A participants: 755, Women I/A Graduates: 285

Additionally, Figure 5 demonstrates that women I/A graduates are more likely to have executive management team experience prior to their most recent business (59%) than non-I/A participants (46%).

In addition to differences between the entrepreneurs themselves, there are also notable characteristics about the size of the businesses owned by women I/A graduates. The businesses of women I/A graduates appear to be larger than women non-I/A participants. Women entrepreneurs who graduated from an I/A are more likely to employ more than two people, including the entrepreneur themselves (61%) than female non-I/A participants (45%). These findings indicate that the businesses owned by women

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33 Sample size: Women Non-I/A participants: 755, Women I/A Graduates: 285
34 Sample size: Women Non-I/A participants: 755, Women I/A Graduates: 285
I/A graduates are larger, at least in terms of the number of employees. According to the SBO, 10.5% of women-owned businesses would meet the definition of at least one employee, not including the owner. Therefore, it is important to note that when comparing these numbers to the SBO, both I/A graduates and non-I/A participants have higher levels of employment than the general population of women entrepreneurs.

4.2 Mission of Incubators/Accelerators

The survey found that many I/A managers consider gender-inclusive practices to be important whether or not the organization is a women-focused I/A.

Through distribution to I/A managers, the survey gathered information about their perspective on the goals of I/As and their importance, measured on a scale of 1 (lowest) to 5 (highest). The survey also sought information about whether the surveyed I/A had a specific preference for accepting applicants from a particular demographic category of entrepreneurs. The survey found that I/As that have a specific preference for women entrepreneurs also identify “encouraging minority entrepreneurs” to be very important (4 or 5 out of 5).

It is also notable, however, that 49% of I/A managers responded that while their I/A does not have a specific preference for women entrepreneurs, they do consider encouraging women entrepreneurs to be very important.

The survey also found that I/A managers who expressed a preference for supporting women entrepreneurs also showed a preference for supporting other categories of entrepreneurs as well. For example, 92% of I/A manager participants that had a preference for women entrepreneurs also ranked for minority entrepreneurs as “more important”. This suggests a relationship between a mission to support women entrepreneurs.

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36 Sample size: I/A Managers: 121
entrepreneurs and minority entrepreneurs. In particular, 86% of I/As that have a specific preference for Hispanic entrepreneurs consider encouraging women entrepreneurs to be “more important”. The table below shows the preference for different types of entrepreneurs according to whether the I/A also considers encouraging women entrepreneurs to be “more important”. The table shows that I/As that have a preference to accept applicants from specific segments of the population are also more likely to consider encouraging women entrepreneurs to be important to their mission.

Table 5: Preference for Types of Entrepreneurs and Mission to Encourage Women Entrepreneurs

<table>
<thead>
<tr>
<th>Preference for Types of Entrepreneurs</th>
<th>Mission to Encourage Women Entrepreneurs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less Important</td>
</tr>
<tr>
<td>Micro entrepreneurs</td>
<td>14%</td>
</tr>
<tr>
<td>College Students</td>
<td>33%</td>
</tr>
<tr>
<td>Low Income</td>
<td>14%</td>
</tr>
<tr>
<td>Women</td>
<td>13%</td>
</tr>
<tr>
<td>African American</td>
<td>16%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>8%</td>
</tr>
<tr>
<td>Social causes</td>
<td>17%</td>
</tr>
<tr>
<td>Native American</td>
<td>14%</td>
</tr>
<tr>
<td>Youth</td>
<td>0%</td>
</tr>
</tbody>
</table>

4.3 Access to Networking

The survey found that women I/A graduates participate in more networking activities than women non-I/A participants. The survey also found that access to networking opportunities is a prominent motivation for why women entrepreneurs joined an I/A.

The survey gathered information about women I/A graduates and non-I/A participants’ participation in any network, association, or other organizations. These activities are especially important in light of studies that found that participation in networking can have a beneficial impact on entrepreneurship, and that there are significant gender differences in the quality of the networks of men and women entrepreneurs. The survey found that women I/A graduates are significantly more likely to be members of a network, association or organization (96%) than non-I/A participants. What is also interesting though is that nearly 80% of non-I/A participants classified themselves as participating in a networking, association, or organization demonstrating that in general, the population surveyed has high levels of network participation. It is important to note though, that the survey does not provide additional findings on the quality of the network or the utility as it relates to business development and growth.

Interview subjects were asked to identify how I/As contribute to positive outcomes for participating entrepreneurs. **Networking emerged as the most commonly cited contribution of I/As.** The importance of networking was raised by interviews with both women-focused and gender neutral I/As managers as well as I/A graduates.

**Perspective on the value of networking**

Several experts, I/A graduates, and I/A program managers interviewed mentioned that networking is a significant challenge for women entrepreneurs, and saw it as one of the greatest opportunities for I/A programs to provide significant value to their participating entrepreneurs. I/A programs can provide entrepreneurs with access to closed or influential networks of relationships, which can in turn lead to relationships with people who can make a huge difference in a firm’s success.  

**Format of networking**

According to interviewees, there are significant benefits to both structured networking opportunities (structured meetings or conferences, roundtable series, guest speakers, group dinners) and unstructured opportunities (having opportunities to discuss with program leadership or other members of your cohort, opt-in social network programs for program cohorts and alumni, email lists). Several of the entrepreneurs interviewed emphasized that the unstructured networking opportunities were at least as valuable as the formal networking events.

I/A managers noted that, compared with male entrepreneurs, women entrepreneurs tend to lack a broad network of support from people with experience that they can draw upon, especially in the early stages of a company. In particular, one I/A manager noted that since many women founders, with whom she interacted, do not come from a technical background, they find it very useful to join networks that can help them to hire people who are experts in a particular field.

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38 Sample size: Women I/A graduates: 285
39 Interview participant
40 Interview participant
41 Interview participant
While there was general agreement across all categories of interviewees about the need for networking, one complaint raised by a few I/A graduate interviewees was that they found women-centric network programming to be less beneficial for most women entrepreneurs, since women face many of the same business requirements as men and seek access to a common pool of peers, mentors and investors to meet their needs. These individuals considered committing time to networking activities for women-only to be unnecessary and counter-productive.\footnote{Interview participant}

The value of networking was raised in most of the interviews, however the interviews revealed some differences in the purpose and format of networking at I/As for main street entrepreneurs and growth entrepreneurs. \textit{For the purpose of this study, main street entrepreneurs are defined as entrepreneurs that rely on traditional sources of financing. Growth entrepreneurs are entrepreneurs who seek angel investment and venture capital to finance rapid growth.}

Among main street entrepreneurs at I/A programs, informal networks are often strongly valued for the sense of community or camaraderie, as well as opportunities for collaboration or discussions with other co-located firms. For growth businesses, networking is crucial for building ties with potential mentors or funders.

\textbf{Peer networking among women entrepreneurs}

Managers from both general and women-focused I/A programs provided several recommendations in interviews about their own experiences in reaching out to women entrepreneurs. The most common advice from program managers was to encourage program alumni (especially women alumni) to recruit from their peers, and to build up relationships with women entrepreneurs and women’s entrepreneurship organizations in order to widen outreach to potential candidates. As one manager explained, “There is a domino effect in engaging with a lot of women, which leads to engaging with more women.”

In several cases, I/A program managers noted that long-running programs to encourage discussions on women’s entrepreneurship were originally started by entrepreneurs participating in their programs, and suggested that I/A programs should encourage a collaborative environment at their programs, where program participants and alumni can engage in creative and thoughtful discussions. Program managers suggested that helpful support for encouraging intra-program participation included team-building workshops, group meetings, and encouraging group breakfasts or dinners.

In general, managers and participants at women-focused I/A programs often cited the support network and sense of community as one of the most significant benefits from participating in a women-focused program.

\textbf{Use of networks beyond I/As}

Women I/A graduates are more likely to draw upon a more diverse network for acquiring personnel, expertise, and/or capital. Women I/A graduates are somewhat more likely to obtain support from family and friends and significantly more likely to obtain any form of assistance from alumni, business-related networks, organizations, or associations, local government, or the Federal Government. Both I/A graduates and non-I/A participants
obtained support from government, whether federal or local, infrequently, though I/A graduates were more likely to report receiving support than non-graduates.

**Figure 8: Assistance by Business and Governmental Institutions for WOB Participants**

![Figure 8: Assistance by Business and Governmental Institutions for WOB Participants](image)

**Figure 9: Assistance by Family, Friends, or Educational Institution for WOB Participants**

![Figure 9: Assistance by Family, Friends, or Educational Institution for WOB Participants](image)

Figure 10 demonstrates that I/A graduates are more likely than non-I/A participants to utilize one of the following Federal programs – Small Business Development Center, Women’s Business Center (WBC), Minority Business Development Center (MBDC), Small Business Innovative Research/Small Business Technology Transfer Research (SBIR/STTR), or the Service Corps of Retired Executives (SCORE). Participating in these programs may help contribute substantially to the quality of one’s network. 66% of I/A graduates received

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43 Business-related refers to industry or professional networks, associations, or organizations. Other categories were not defined by the survey and reflect the respondent’s own understanding of whether the received assistance from a Federal or local government program.

44 Sample size: Women I/A graduates: 285
counseling, training, technical assistance and/or grant funding from one of these programs compared to only 38% of non-I/A participants.\textsuperscript{45}

\textbf{Figure 10: Received Assistance from SBDC, WBC, MBDC, SBIR/STTR, or SCORE for WOB Participants}\textsuperscript{46}

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{chart.png}
\end{figure}

4. Considerations for Joining an Incubator and Accelerator

The survey asked women I/A graduates to rank the importance of various considerations for joining an I/A on a scale of 1 to 5. The survey found that learning how to grow a business quickly, improving business management or administrative skills, and gaining experience other entrepreneurs all ranked as more important (4 or 5 out of 5) for women entrepreneur I/A graduates. It is notable that gaining experience from other entrepreneurs was identified as more important, by 90% of respondents, showing that peer networking was by far the most commonly cited consideration for joining an I/A.

These findings along with the previous measures of the entrepreneurs’ use of networking shows that female I/A graduates highly value networking and mentorship. Interviews revealed that networking and mentoring are significant contributions of I/As by helping entrepreneurs acquire the skills and resources they need to grow their business.

\textsuperscript{45} The survey questionnaire asked whether the respondent had received support for Women Business Development Center (WBDC), not Women Business Center.

\textsuperscript{46} Sample size: Women I/A graduates: 285
4.4 Access to Mentoring

The survey did not identify any conclusive differences between I/A graduates and non-participants with respect to mentoring. However, access to mentoring was frequently identified as an important benefit during interviews. As a result, this section is based entirely on views shared by interview subjects.

*Mentorship was the most widely-cited benefit of participation in I/A programs mentioned in interviews. Mentoring is vital from helping entrepreneurs to develop critical skills, build their networks, and communicate with investors.*

While mentoring is an essential service offered by I/As, the programs should exercise care with respect to the format and quality of their mentoring activities.

*Perspective on the value of mentoring*

Mentorship is seen as a valuable tool for entrepreneurs for several reasons: a mentor can provide advice based on experience in venture capital or as an entrepreneur, or alternatively by providing expertise in a particular area that the founder lacks (for example, an entrepreneur with a technology background might benefit from a sales/marketing expert’s views and experience). Mentors can also help entrepreneurs to build their networks, and to learn new skills, such as preparing for investor pitches.

*Format of mentoring*

Participants emphasized that mentoring can be provided through programs that vary in terms of their structure, duration and the depth of mentoring. Different forms of mentorship mentioned include:

- Informal mentoring by I/A program leadership (typically experienced entrepreneurs in their own right)

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47 Sample size: Women I/A graduates: 285
- Informal mentoring by more experienced entrepreneurs participating in the same program
- Regular office hours to meet with experienced leaders, visiting speakers, or local executives, offered either on an ad-hoc basis or as a long-term match between two people
- Alumni connection programs to match entrepreneurs participating in the program with past graduates
- “Mentor dating” programs where entrepreneurs have 8-10 half-hour meetings per day with mentors, to build networks as well as expose those entrepreneurs to a wide variety of views
- Venture capital pitch contests with feedback

**Quality of mentoring program**

A professor on entrepreneurship noted that the caliber of mentors at a program makes a significant difference in the program quality: ideally, the mentors should have some training on how to be a good mentor (such as through mentor training programs, available at schools like MIT or Babson College), as well as experience in venture capital or as an entrepreneur.\(^{48}\)

Several entrepreneurs interviewed for this study warned that entrepreneurs should be careful about relying too heavily on formal mentoring through, which the I/A may assign a mentor who may not be a good match for the entrepreneur. Some entrepreneurs recommended that I/As should prioritize networking so that entrepreneurs can find and build relationships with suitable mentors. As one entrepreneur explained, “I hear from other entrepreneurs that often their mentoring only confuses them because different mentors give opposite advice. Personally, I prefer to rely on organic relationships created with people I trust.”\(^{49}\)

**Mentoring for main street and growth businesses**

Among the interviewees from main street businesses contacted for this research, entrepreneurs emphasized the importance of mentoring from individuals who have experience within their industry. For example, one program manager at a restaurant incubator noted that she helped entrepreneurs to develop informal mentoring relationships with more experienced cohort members, since formal mentoring had been a challenge to set up in the past, due to the nature of the food industry and the headstrong personalities that are common in the industry.\(^{50}\)

With respect to growth businesses, mentoring plays a critical role in helping entrepreneurs prepare for investor pitches. It was also noted that women entrepreneurs should have access to mentoring prior to joining an I/A so that they can receive advice on how to successfully apply to a highly competitive, growth-oriented I/A. that will help them to apply to an I/A for growth-oriented businesses.\(^{51}\)

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\(^{48}\) Interview participant  
\(^{49}\) Interview participant  
\(^{50}\) Interview participant  
\(^{51}\) Interview participant
4.5 Access to Capital

One of the key challenges raised in interviews by I/A program managers, experts and entrepreneurs is access to capital for women entrepreneurs. Interviews revealed that helping women entrepreneurs to access capital is an essential service provided by I/As, although the type of financing and the assistance provided by the I/As varies, especially with respect to whether the I/A supports main street or growth businesses.

I/A programs can help entrepreneurs to overcome this challenge through introducing entrepreneurs to sources of funding, such as grant competitions, introductions to angel investors or VC networks, or assisting entrepreneurs with going through the necessary steps for bank or SBA loans.

Access to capital presents different challenges for growth businesses and main street businesses. I/A programs for main street businesses focus on providing access to more traditional lenders such as the SBA, banks, or non-profit organizations. In contrast, I/A program support for growth businesses is focused on raising venture capital.

The survey found that women I/A graduates were better capitalized and more likely to have received capital from an angel investor and/or venture capital firm than women non-I/A participants.

The survey found that women I/A graduates have raised more capital in their first year of business and are more likely to receive capital from an angel investor than non-I/A participants. This is especially beneficial considering gender differences in startup capital. As seen in Figure 1, the 2012 SBO found that 76% of women business owners raised less than $10,000 in startup capital compared to 61% of men business owners. It should be noted however, that the survey questions do not indicate whether the capital was raised due to participation in an I/A.

**Figure 12: Investment Capital Raised (More than $10,000 in First Year of Business)**
Prior studies have found significant gender differences in terms of the role of outsider equity investments within the startup capital raised by entrepreneurs. Research by Marin Economic Consulting found that among high growth potential firms, defined as growing to at least 5 employees between 2004 and 2011, women entrepreneurs raised an average of $8,868 compared to $56,037 raised by men.\(^{52}\)

These challenges were also revealed during interviews conducted for this study. Multiple individuals interviewed cited access to capital as the most significant barrier facing women entrepreneurs and noted a gender gap in raising capital. One expert in entrepreneurship noted, ”The overriding, number one challenge is access to capital... It’s an uphill battle for women.” This individual added, “Incubators and accelerators all look slightly different but, at the end of the day, their ultimate core value is to get entrepreneurs to the point where they are ready to raise capital.”

The survey did not reveal a causal relationship, but did find that I/A graduates are more likely than non-I/A participants to raise funding from angel investors and venture capital, as shown in the following figures. The survey found that 25.2% of I/A graduates received capital from angel investors compared to 4.7% of non-I/A participants. Similarly, 15% of I/A graduates received investment from venture capital compared to only 4% of non-I/A participants.

The survey found correlation between I/As that have a neutral preference for women entrepreneurs and those likely to have a close relationship with angel investors. 59% of I/As with a preference for women entrepreneurs describe themselves as possessing a close relationship with angel investors. This is lower than the 81% of I/As with a neutral preference for women entrepreneurs and have a close relationship with angel investors. One explanation for this finding, according to interview subjects is that I/As that do not have a preference for women entrepreneurs are more likely to target sectors that receive support from angel investors, such as the high-tech sector.

**Figure 13: Incubator/Accelerators with Close Relationship with Angel Investors**

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\(^{52}\) Robb, A., Coleman, S. “Access to Capital by High-Growth Women-Owned Businesses.” April 2014
Access to capital for main street and growth businesses

Generally, debt is a more common source of financing among main street businesses while investments from angel groups and venture capital become more prominent for growth businesses. Among main street-focused I/As, program managers focused on actions such as introducing entrepreneurs to bank managers and assisting entrepreneurs with going through the necessary steps for SBA loans. In addition, many women start service-based businesses, which typically struggle to raise capital compared to other sectors.

Growth businesses are often reliant on venture capital, which was singled out by interviewees as a significant barrier to success for women entrepreneurs, due to gender discrimination within the venture capital industry and cited a number of studies that have investigated this issue. As an important contributing factor, interviewees observed that women are greatly underrepresented as partners at venture capital firms, which could create a bias against backing women founders. One interviewee noted that bias against women founders can create problems for investors as well as entrepreneurs, because companies with a women founder are more likely to succeed than companies with an all-male team of founders.

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53 Interview participant
54 Interview participant
55 Interview participant
56 Interview participant
5. Policy Recommendations

The following recommendations the federal government are based on survey findings, interviews, and literature review. These sources focused on identifying the factors, both structural and individual, that affect women’s participation in incubator and accelerator programs, and determining key actions that the federal government can undertake to develop better policies to encourage women’s entrepreneurship.

Experts and I/A program managers suggested several ways that the government can broaden awareness of inclusive policies for I/As and encourage the adoption of best practices. Experts also noted areas in which the government could change its funding criteria for grants, loans, and hiring to better support women entrepreneurs and inclusive organizations.

**Recommendation 1: Create opportunities for collaboration between government organizations, entrepreneurs, and I/As**

Business support organizations are not collaborating with each other as well as they could and should, hindering them from developing a strong entrepreneurial ecosystem to support growing businesses. This problem is exacerbated by funding that is driven by demonstration of a business support organization’s independent efforts. Federal funding for these organizations should incent organizations to demonstrate a commitment to collaborative work and partnerships with other organizations as part of a mandate to developing their local economic communities.  

Additionally, the federal government can play a valuable role by supporting events and programs that bring together I/As and other entrepreneurship support organizations with universities, entrepreneurs, and corporations, in order to build connections between different organizations at a local level. Networking events could also provide entrepreneurs with greater awareness of the variety of options in I/A programs (such as the availability of industry-specific, region-specific, and demographic-specific programs, or the programs available that might best serve an entrepreneur at different points of scale (such as the different options available for main street firms, early stage growth businesses, and mature growth businesses).

**Recommendation 2: Promote inclusion as part of the evaluation criteria for grant funding**

The federal government should continue to promote inclusive practices as part of the evaluation criteria for grant funding for I/As. For example, a report by ICIC and JPMorgan notes that the EDA’s Office of Innovation and Entrepreneurship’s Regional Innovation Strategies (RIS) program supports multiple grant opportunities for I/As in order to spur innovation and promote inclusion. The Office’s evaluation criteria for grant funding includes both the strength of outreach plans to populations and communities that are underrepresented in innovation and entrepreneurship, including women and minorities, as well as metrics to measure the effectiveness of that research. Similarly, the SBA’s Growth

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[57] Interview participant
[58] Interview participant

Accelerator Fund Competition, which awards funds to accelerators, incubators, and co-working spaces, deliberately seeks out programs that are run by or support women and minority communities.  

The ICIC and JPMorganChase report further recommended that local governments could increase the impact of I/As on local communities by only funding organizations that are practicing inclusive policies towards women and minority populations, and by increasing awareness of I/As in their cities or states.

**Recommendation 3: Change federal certification rules to be more applicable to growth businesses**

Certification organizations require 51% ownership by women founders to qualify for certification as a women-owned business for government contracts. However, it has been argued that this is an unreasonable expectation for a high growth business, since normally a founder has 20% or less ownership. Therefore, an ownership of 10-17% would be far more in line with the reality for most women-led high growth businesses. Due to the 51% ownership requirement, many high growth women entrepreneurs are hampered by their inability to qualify for certification as a women-owned business in addition to the other challenges that they may face in raising capital. The federal government should consider ways to account for women-led businesses.

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59 Ibid
60 Ibid
61 Interview participant
## Appendix 1: Compilation of Statistical Data Sources

<table>
<thead>
<tr>
<th>Organization</th>
<th>Data Source</th>
<th>Use of Data in Report</th>
<th>URL</th>
</tr>
</thead>
</table>
Appendix 2: Survey Sample Size and Burden

The estimated survey burden and the sample size for each population of the survey is shown in the table below.

<table>
<thead>
<tr>
<th>Population</th>
<th>Survey Burden</th>
<th>Sample Target</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-I/A Participants</td>
<td>12</td>
<td>200</td>
<td>755</td>
</tr>
<tr>
<td>I/A Graduates</td>
<td>18</td>
<td>150</td>
<td>285</td>
</tr>
<tr>
<td>Incubator/Accelerator Managers</td>
<td>15</td>
<td>150</td>
<td>121</td>
</tr>
</tbody>
</table>

The survey was authorized by the OMB under the Paperwork Reduction Act in May 2015 through May 31, 2018 as OMB Control Number 3245-0386. The survey launched in June 2015 and concluded in May 2016.
Appendix 3: Survey for Non-I/A Participants

[Note] Text written within brackets, italicized, and on a gray background is intended as editorial text to describe interactive elements of the survey (i.e. value entry fields, pulldown menus, branching points, etc.) or placeholders to be replaced by the content described.

Section 1: Demographic Questions

1.1 How old are you currently?  
[ Numerical age ]

1.2 What is your ethnicity?
   1. Hispanic or Latino
   2. Not Hispanic or Latino

1.3 What is your race? (Please select one or more categories)
   1. American Indian or Alaska Native
   2. Asian
   3. Black or African American
   4. Native Hawaiian or Other Pacific Islander
   5. White
   6.

1.4 In what state do you currently reside?  
[ pulldown menu ]

1.5 What is your current marital status?
   1. Now married
   2. Cohabitating but not married
   3. Widowed
   4. Divorced
   5. Separated
   6. Never Married

1.6 Do you have dependent children?
   1. No
   2. Yes

Section 2: Entrepreneurial Experience

2.1 In what year did you start your company?  
[ year ]

2.2 Is your business still currently operating?
   1. No
   2. Yes
If 2.2 = "No"

2.3 Did that business employ more than two people (including yourself)?
   1. No
   2. Yes

2.4 Did you start your business along with a partner or co-owner?
   1. No
   2. Yes

If 2.4 = "No"

2.4A What was the ownership of your business?
   1. Women-owned (e.g. Women own 51 percent or more of the equity, interest, or stock of the business)
   2. Men-owned (e.g. Men own 51 percent or more of the equity, interest, or stock of the business)
   3. Equally men-/women-owned (Men own 50 percent and women own 50 percent of the equity, interest, or stock of the business)

2.4B How many people co-founded the business, yourself included?
   [number]

If 2.4 = "Yes"

2.4A What is the ownership of your business?
   1. Women-owned (e.g. Women own 51 percent or more of the equity, interest, or stock of the business)
   2. Men-owned (e.g. Men own 51 percent or more of the equity, interest, or stock of the business)
   3. Equally men-/women-owned (Men own 50 percent and women own 50 percent of the equity, interest, or stock of the business)

2.4B How many people co-founded the business, yourself included?
   [number]

2.5 What was the five digit zip code of the area where your last business was located?
   [zip code]

2.6 Was your business based out of your home?
   1. No
   2. Yes

2.7 Which of the following categories best describes the industry that your most recent business was a part of?
   1. Agriculture, Forestry, Fishing and Hunting
   2. Mining, Quarrying, and Oil and Gas Extraction
   3. Utilities
   4. Construction
   5. Manufacturing
   6. Wholesale Trade
   7. Retail Trade
   8. Transportation and Warehousing

If 2.2 = "Yes"

2.3 Does that business employ more than two people (including yourself)?
   1. No
   2. Yes

2.4 Did you start your business along with a partner or co-owner?
   1. No
   2. Yes

If 2.4 = "Yes"

2.4A What is the ownership of your business?
   1. Women-owned (e.g. Women own 51 percent or more of the equity, interest, or stock of the business)
   2. Men-owned (e.g. Men own 51 percent or more of the equity, interest, or stock of the business)
   3. Equally men-/women-owned (Men own 50 percent and women own 50 percent of the equity, interest, or stock of the business)

2.4B How many people co-founded the business, yourself included?
   [number]

2.5 What is the five digit zip code of the area where your business is located?
   [zip code]

2.6 Is your business based out of your home?
   1. No
   2. Yes

2.7 Which of the following categories best describes the industry that your current business is a part of?
   1. Agriculture, Forestry, Fishing and Hunting
   2. Mining, Quarrying, and Oil and Gas Extraction
   3. Utilities
   4. Construction
   5. Manufacturing
   6. Wholesale Trade
   7. Retail Trade
   8. Transportation and Warehousing
9. Information
10. Finance and Insurance
11. Real Estate and Rental Leasing
12. Professional, Scientific, and Technical Services
13. Management of Companies and Enterprises
14. Administrative and Support and Waste Management
15. Educational Services
16. Health Care and Social Assistance
17. Arts, Entertainment, and Recreation
18. Accommodation and Food Services
19. Other Services (except Public Administration)
20. Public Administration

2.7A [display definition of small business based on definition for industry selected in 1.7]
Based on the above definition, does your business qualify as a small business?
1. No
2. Yes

2.8 Have you ever received counseling, training, technical assistance and/or grant funding from any of the following programs or organizations? (Select one or more options from the following list.)
1. Small Business Development Center (SBDC)
2. Women’s Business Development Center (WBDC)
3. Minority Business Development Center (MBDC)
4. Small Business Innovative Research/Small Business Technology Transfer (SBIR/STTR)
5. Service Corps of Retired Executives (SCORE)

2.9 Have you ever participated in a program that could be described as a business incubator or business accelerator?
1. No
2. Yes

Section 3: Strategic Choice
For the next set of questions, choose the answer that best characterizes your level of concern about the following considerations.

3.1 To what extent were you concerned about how to balance your personal and professional lives.
Not concerned Slightly concerned Somewhat concerned Moderately concerned Strongly concerned

3.2 To what extent were you concerned about your knowledge of business
Not concerned Slightly concerned Somewhat concerned Moderately concerned Strongly concerned
operations and best practices.

3.3 To what extent were you concerned about incurring debt.  
Not concerned  Slightly concerned  Somewhat concerned  Moderately concerned  Strongly concerned

3.4 To what extent were you concerned about securing investment capital.  
Not concerned  Slightly concerned  Somewhat concerned  Moderately concerned  Strongly concerned

3.5 To what extent were you concerned about how to quickly grow or scale-up your firm in the future.  
Not concerned  Slightly concerned  Somewhat concerned  Moderately concerned  Strongly concerned

3.6 To what extent were you concerned about where to obtain business assistance in the local community.  
Not concerned  Slightly concerned  Somewhat concerned  Moderately concerned  Strongly concerned

For the next set of questions, how would you assess each factor as a motivation for starting your business?

3.7 The desire to build wealth.  
Not a motivation  Weak motivation  Moderate motivation  Strong motivation  Primary motivation

3.8 The wish to capitalize on a business idea you developed.  
Not a motivation  Weak motivation  Moderate motivation  Strong motivation  Primary motivation

3.9 The wish to capitalize on a patented invention.  
Not a motivation  Weak motivation  Moderate motivation  Strong motivation  Primary motivation

3.10 The appeal of a startup business culture.  
Not a motivation  Weak motivation  Moderate motivation  Strong motivation  Primary motivation

3.11 The long-standing desire to own your own company.  
Not a motivation  Weak motivation  Moderate motivation  Strong motivation  Primary motivation

3.12 Working for someone else did not appeal to you.  
Not a motivation  Weak motivation  Moderate motivation  Strong motivation  Primary motivation

For the next set of questions, choose the answer that best characterizes the importance of the following when starting your business.

3.13 Family as a source of capital and/or support.  
Unimportant  Little importance  Moderately important  Important  Very important

3.14 External advisors for support.  
Unimportant  Little importance  Moderately important  Important  Very important

3.15 Suitability/fit of the business incubator or accelerator programs to your business.  
Unimportant  Little importance  Moderately important  Important  Very important
3.16 Percentage of women-owned businesses in business incubator or accelerator programs.

3.17 Discrimination by male colleagues, competitors, and advisors.

Section 4: Human Capital

4.1 What is the highest degree or level of school you have completed?
   1. Some high school
   2. High school diploma or equivalent
   3. Some college
   4. Associate's degree (i.e. A.A. or A.S)
   5. Bachelor's degree (i.e. B.A. or B.S.)
   6. Master's degree (i.e. M.A., M.S., M.B.A., or M.Ed.)
   7. Professional degree (i.e. J.D., M.D., O.D., D.D.S., D.V.M., etc.)
   8. Doctorate degree (i.e. Ph.D. or Ed.D)

If 4.1 = 1, 2, 3, 4, or 5

   [skip]

If 4.1 = 6, 7, or 8

   4.1A Do you hold a Master's in Business Administration (MBA)?
      1. No
      2. Yes

If 4.1 = 1, 2, 3, or 4

   [skip]

If 4.1 = 5, 6, 7, or 8

   4.1B Do you hold a degree in a field related to science, technology, engineering, or mathematics (a.k.a. STEM)?
      1. No
      2. Yes

4.2 Have you ever filed for a patent for an invention you discovered?
   1. No
   2. Yes, but my patent application(s) were rejected.
   3. Yes, and at least one of my patent applications was either granted or is still pending.

4.3 Have you ever filed for a trademark you helped to create?
   1. No
   2. Yes, but my trademark application(s) were rejected.
   3. Yes, and at least one of my trademark applications was either granted or is still pending.

4.4 Did you work in the same industry as your most recent business before deciding to start the business?
   1. No
   2. Yes
If 4.4 = “No” | If 4.4 = “Yes”
---|---

4.4A How many years did you work in that industry before starting your own company? (Please round down to the nearest year)
   1. 0 years
   2. 1 year
   3. 2 years
   4. 3 to 5 years
   5. 6 to 10 years
   6. 11 to 20 years
   7. More than 20 years

4.5 Before starting your most recent business, did you have prior experience working at a startup company?
   1. No
   2. Yes

4.6 Before starting your most recent business, did you have prior experience working as part of the executive management team of another company?
   1. No
   2. Yes

Section 5: Social Capital

5.1 How many national business networks, associations, or organizations do you belong to?
   1. 0
   2. 1
   3. 2
   4. 3
   5. 4 or more

5.2 How many non-national (i.e. local or regional) business networks, associations, or organizations do you belong to?
   1. 0
   2. 1
   3. 2
   4. 3
   5. 4 or more

5.3 How many non-business-related networks, associations, or organizations do you belong to?
   1. 0
   2. 1
   3. 2
   4. 3
   5. 4 or more

5.4 When starting your company, were any of the following groups instrumental to acquiring personnel, expertise, and/or capital? (Please select one or more answers from the list.)
1. Family
2. Friends
3. A college, university, or alumni association
4. A business-related network, association, or organization
5. The local government
6. The federal government
7. None of the above

5.5 Among the people you consider to be personal friends, how many male business owners do you know?
   1. 0
   2. 1
   3. 2
   4. 3
   5. 4 to 6
   6. 7 to 9
   7. 10 to 19
   8. 20 or more

5.6 Among the people you consider to be personal friends, how many women business owners do you know?
   1. 0
   2. 1
   3. 2
   4. 3
   5. 4 to 6
   6. 7 to 9
   7. 10 to 19
   8. 20 or more

Section 6: Financial Capital

6.1 How much capital was invested in your business in the first year? (Please round your answer to the nearest $1,000)
   $[number]000

6.2 Of the options in the following list, which forms of capital did your business use in its first year?
   1. Owner Equity (i.e. equity invested by the owner(s) of the firm)
   2. Insider Equity (i.e. equity invested by spouses or parents of the owner)
   3. External Equity (i.e. equity invested by venture capitalists, angel investors, other businesses, the government, or other individuals)
   4. Owner Debt (i.e. a loan made by the owner or the use of personal credit to finance business operations)
   5. Insider Debt (i.e. personal or business credit used for business operations provided by family or employees of the owner)
   6. External Debt (i.e. business credit cards, bank loans, government loans, and other business-related financial instruments)

6.3 How would you describe your personal credit score?
   1. Excellent
2. Very Good
3. Good
4. Fair
5. Poor

6.4 Have you ever applied for a bank loan either for or unrelated to your business?
1. No
2. Yes

<table>
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<th>If 6.4 = “Yes”</th>
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<tbody>
<tr>
<td>[skip]</td>
<td>6.4A Have you ever had an application for a bank loan be rejected?</td>
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<tr>
<td></td>
<td>1. No</td>
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<td></td>
<td>2. Yes</td>
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</tbody>
</table>

6.5 Have you ever received capital from an angel investor?
1. No
2. Yes

6.6 Have you ever received capital from a venture capital firm?
1. No
2. Yes
Appendix 4: Survey for Women Incubator/Accelerator Graduates

[Note] Text written within brackets, italicized, and on a gray background is intended as editorial text to describe interactive elements of the survey (i.e. value entry fields, pulldown menus, branching points, etc.) or placeholders to be replaced by the content described.

Section 1: Demographic Questions

1.1 How old are you currently?
   [Numerical age]

1.2 What is your ethnicity? (Please select one or more categories)
   3. Hispanic or Latino
   4. Not Hispanic or Latino

1.3 What is your race? (Please select one or more categories)
   7. American Indian or Alaska Native
   8. Asian
   9. Black or African American
   10. Native Hawaiian or Other Pacific Islander
   11. White

1.4 In what state do you currently reside?
   [Pulldown menu]

1.5 What is your current marital status?
   7. Now married
   8. Cohabitating but not married
   9. Widowed
   10. Divorced
   11. Separated
   12. Never Married

1.6 Do you have dependent children?
   3. No
   4. Yes

Section 2: Entrepreneurial Experience

2.1 In what year did you start your company?
   [Year]

2.2 Is your business still currently operating?
   3. No
   4. Yes

<p>| If 2.2 = “No” | If 2.2 = “Yes” |</p>
<table>
<thead>
<tr>
<th>2.3</th>
<th>Did that business employ more than two people (including yourself)?</th>
</tr>
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<tbody>
<tr>
<td>3.</td>
<td>No</td>
</tr>
<tr>
<td>4.</td>
<td>Yes</td>
</tr>
<tr>
<td>2.4</td>
<td>Did you start your business along with a partner or co-owner?</td>
</tr>
<tr>
<td>3.</td>
<td>No</td>
</tr>
<tr>
<td>4.</td>
<td>Yes</td>
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<th>If 2.4 = &quot;Yes&quot;</th>
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<tr>
<td>2.4A</td>
<td>What was the ownership of your business?</td>
</tr>
<tr>
<td>4.</td>
<td>Women-owned (e.g. Women own 51 percent or more of the equity, interest, or stock of the business)</td>
</tr>
<tr>
<td>5.</td>
<td>Men-owned (e.g. Men own 51 percent or more of the equity, interest, or stock of the business)</td>
</tr>
<tr>
<td>6.</td>
<td>Equally men-/women-owned (Men own 50 percent and women own 50 percent of the equity, interest, or stock of the business)</td>
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<tr>
<td>2.4B</td>
<td>How many people co-founded the business, yourself included?</td>
</tr>
<tr>
<td>[number]</td>
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<td>What is the ownership of your business?</td>
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<td>Women-owned (e.g. Women own 51 percent or more of the equity, interest, or stock of the business)</td>
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<td>5.</td>
<td>Men-owned (e.g. Men own 51 percent or more of the equity, interest, or stock of the business)</td>
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<td>6.</td>
<td>Equally men-/women-owned (Men own 50 percent and women own 50 percent of the equity, interest, or stock of the business)</td>
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<td>2.4B</td>
<td>How many people co-founded the business, yourself included?</td>
</tr>
<tr>
<td>[number]</td>
<td></td>
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</tbody>
</table>

| 2.5 | What was the five digit zip code of the area where your last business was located? |
|     | [zip code] |

| 2.6 | Was your business based out of your home? |
|     | 3. No |
|     | 4. Yes |

| 2.7 | Which of the following categories best describes the industry that your most recent business was a part of? |
|     | 21. Agriculture, Forestry, Fishing and Hunting |
|     | 22. Mining, Quarrying, and Oil and Gas Extraction |
|     | 23. Utilities |
|     | 24. Construction |
|     | 25. Manufacturing |
|     | 26. Wholesale Trade |
|     | 27. Retail Trade |
|     | 28. Transportation and Warehousing |
|     | 29. Information |
|     | 30. Finance and Insurance |
|     | 31. Real Estate and Rental Leasing |

| 2.7 | Which of the following categories best describes the industry that your current business is a part of? |
|     | 21. Agriculture, Forestry, Fishing and Hunting |
|     | 22. Mining, Quarrying, and Oil and Gas Extraction |
|     | 23. Utilities |
|     | 24. Construction |
|     | 25. Manufacturing |
|     | 26. Wholesale Trade |
|     | 27. Retail Trade |
|     | 28. Transportation and Warehousing |
|     | 29. Information |
|     | 30. Finance and Insurance |
|     | 31. Real Estate and Rental Leasing |
| 33. Management of Companies and Enterprises | 33. Management of Companies and Enterprises |
| 34. Administrative and Support and Waste Management | 34. Administrative and Support and Waste Management |
| 35. Educational Services | 35. Educational Services |
| 36. Health Care and Social Assistance | 36. Health Care and Social Assistance |
| 37. Arts, Entertainment, and Recreation | 37. Arts, Entertainment, and Recreation |
| 38. Accommodation and Food Services | 38. Accommodation and Food Services |
| 39. Other Services (except Public Administration) | 39. Other Services (except Public Administration) |
| 40. Public Administration | 40. Public Administration |

2.7A Based on definition for industry selected in 2.7, does your business qualify as a small business? 
1. No 
2. Yes

2.8 Have you ever received counseling, training, technical assistance and/or grant funding from any of the following programs or organizations? (Select one or more options from the following list.)
6. Small Business Development Center (SBDC) 
7. Women’s Business Development Center (WBDC) 
8. Minority Business Development Center (MBDC) 
9. Small Business Innovative Research/Small Business Technology Transfer (SBIR/STTR) 
10. Service Corps of Retired Executives (SCORE) 
11.

2.9 Have you ever participated in a program that could be described as a business incubator or business accelerator? 
1. No 
2. Yes

Section 3: Strategic Choice
For the next set of questions, choose the answer that best characterizes your level of concern about the following considerations.

3.1 To what extent were you concerned about how to balance your personal and professional lives. 
1. Not concerned 
2. Slightly concerned 
3. Somewhat concerned 
4. Moderately concerned 
5. Strongly concerned

3.2 To what extent were you concerned.
about your knowledge of business operations and best practices.

3.3 To what extent were you concerned about incurring debt.

3.4 To what extent were you concerned about securing investment capital.

3.5 To what extent were you concerned about how to quickly grow or scale-up your firm in the future.

3.6 To what extent were you concerned about where to obtain business assistance in the local community.

For the next set of questions, how would you assess each factor as a motivation for starting your business?

3.7 The desire to build wealth.

3.8 The wish to capitalize on a business idea you developed.

3.9 The wish to capitalize on a patented invention.

3.10 The appeal of a startup business culture.

3.11 The long-standing desire to own your own company.

3.12 Working for someone else did not appeal to you.

For the next set of questions, choose the answer that best characterizes the importance of the following when starting your business.

3.13 Family as a source of capital and/or support.
3.14 External advisors for support.

3.15 Suitability/fit of the business incubator or accelerator program to your business.

3.16 Percentage of women-owned businesses in business incubator or accelerator programs.

3.17 Discrimination by male colleagues, competitors, and advisors.

Section 4: Human Capital

4.1 What is the highest degree or level of school you have completed?

9. Some high school
10. High school diploma or equivalent
11. Some college
12. Associate's degree (i.e. A.A. or A.S)
13. Bachelor's degree (i.e. B.A. or B.S.)
14. Master's degree (i.e. M.A., M.S., M.B.A., or M.Ed.)
15. Professional degree (i.e. J.D., M.D., O.D., D.D.S., D.V.M., etc.)
16. Doctorate degree (i.e. Ph.D. or Ed.D)

If 4.1 = 1, 2, 3, 4, or 5

[skip]

If 4.1 = 6, 7, or 8

4.1A Do you hold a Master’s in Business Administration (MBA)?
3. No
4. Yes

If 4.1 = 1, 2, 3, or 4

[skip]

If 4.1 = 5, 6, 7, or 8

4.1B Do you hold a degree in a field related to science, technology, engineering, or mathematics (a.k.a. STEM)?
3. No
4. Yes

4.2 Have you ever filed for a patent for an invention you discovered?

4. No
5. Yes, but my patent application(s) were rejected.
6. Yes, and at least one of my patent applications was either granted or is still pending.
4.3 Have you ever filed for a trademark you helped to create?
   4. No
   5. Yes, but my trademark application(s) were rejected.
   6. Yes, and at least one of my trademark applications was either granted or is still pending.

4.4 Did you work in the same industry as your most recent business before deciding to start the business?
   3. No
   4. Yes

<table>
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<tr>
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<tbody>
<tr>
<td></td>
<td>4.4A How many years did you work in that industry before starting your own company? (Please round down to the nearest year)</td>
</tr>
<tr>
<td></td>
<td>8. 0 years</td>
</tr>
<tr>
<td></td>
<td>9. 1 year</td>
</tr>
<tr>
<td></td>
<td>10. 2 years</td>
</tr>
<tr>
<td></td>
<td>11. 3 to 5 years</td>
</tr>
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<td></td>
<td>12. 6 to 10 years</td>
</tr>
<tr>
<td></td>
<td>13. 11 to 20 years</td>
</tr>
<tr>
<td></td>
<td>14. More than 20 years</td>
</tr>
</tbody>
</table>

4.5 Before starting your most recent business, did you have prior experience working at a startup company?
   3. No
   4. Yes

4.6 Before starting your most recent business, did you have prior experience working as part of the executive management team of another company?
   3. No
   4. Yes

Section 5: Social Capital

5.1 How many national business networks, associations, or organizations do you belong to?
   6. 0
   7. 1
   8. 2
   9. 3
   10. 4 or more

5.2 How many non-national (i.e. local or regional) business networks, associations, or organizations do you belong to?
   6. 0
   7. 1
   8. 2
   9. 3
   10. 4 or more
5.3 How many non-business-related networks, associations, or organizations do you belong to?
   6. 0
   7. 1
   8. 2
   9. 3
   10. 4 or more

5.4 When starting your company, were any of the following groups instrumental to acquiring personnel, expertise, and/or capital? (Please select one or more answers from the list.)
   8. Family
   9. Friends
   10. A college, university, or alumni association
   11. A business-related network, association, or organization
   12. The local government
   13. The federal government
   14. None of the above

5.5 Among the people you consider to be personal friends, how many male business owners do you know?
   9. 0
   10. 1
   11. 2
   12. 3
   13. 4 to 6
   14. 7 to 9
   15. 10 to 19
   16. 20 or more

5.6 Among the people you consider to be personal friends, how many women business owners do you know?
   9. 0
   10. 1
   11. 2
   12. 3
   13. 4 to 6
   14. 7 to 9
   15. 10 to 19
   16. 20 or more

Section 6: Financial Capital
6.1 How much capital was invested in your business in the first year? (Please round your answer to the nearest $1,000)
   $\text{[number]}$,000

6.2 Of the options in the following list, which forms of capital did your business use in its first year?
   7. Owner Equity (i.e. equity invested by the owner(s) of the firm)
   8. Insider Equity (i.e. equity invested by spouses or parents of the owner)
9. External Equity (i.e. equity invested by venture capitalists, angel investors, other businesses, the government, or other individuals)
10. Owner Debt (i.e. a loan made by the owner or the use of personal credit to finance business operations)
11. Insider Debt (i.e. personal or business credit used for business operations provided by family or employees of the owner)
12. External Debt (i.e. business credit cards, bank loans, government loans, and other business-related financial instruments)

6.3 How would you describe your personal credit score?
   6. Excellent
   7. Very Good
   8. Good
   9. Fair
   10. Poor

6.4 Have you ever applied for a bank loan either for or unrelated to your business?
   3. No
   4. Yes

<table>
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<tr>
<th>If 6.4 = “No”</th>
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<td>6.4A Have you ever had an application for a bank loan be rejected?</td>
</tr>
<tr>
<td></td>
<td>3. No</td>
</tr>
<tr>
<td></td>
<td>4. Yes</td>
</tr>
</tbody>
</table>

6.5 Have you ever received capital from an angel investor?
   3. No
   4. Yes

6.6 Have you ever received capital from a venture capital firm?
   3. No
   4. Yes

Section 7: Incubator and Accelerator Experience

For the next set of questions, choose the answer that best characterizes the importance of each consideration for your decision to apply to a business incubator or accelerator program.

7.1 Learn how to grow your company quickly.
   Unimportant Little Little importance importance Moderately Important Very important important

7.2 Protect and/or develop my intellectual property.
   Unimportant Little importance importance Moderately Important Very important
7.3 Attract and secure more outside capital investment.

<table>
<thead>
<tr>
<th>Unimportant</th>
<th>Little importance</th>
<th>Moderately important</th>
<th>Important</th>
<th>Very important</th>
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</table>

7.4 Improve your business management and/or administrative skills.

<table>
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<tr>
<th>Unimportant</th>
<th>Little importance</th>
<th>Moderately important</th>
<th>Important</th>
<th>Very important</th>
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</table>

7.5 Interact and gain experience from other entrepreneurs.

<table>
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<tr>
<th>Unimportant</th>
<th>Little importance</th>
<th>Moderately important</th>
<th>Important</th>
<th>Very important</th>
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</table>

7.6 Gain access to workspace or equipment.

<table>
<thead>
<tr>
<th>Unimportant</th>
<th>Little importance</th>
<th>Moderately important</th>
<th>Important</th>
<th>Very important</th>
</tr>
</thead>
</table>

7.7 Among the considerations you rated in the previous question, can you please pick the three you consider to be MOST important to your decision to apply to a business incubator or accelerator program. Please enter 1 next to one which was most important, 2 to one which was second most important and 3 to the one that was third most important.

- Learn how to grow your company quickly. [number 1–3]
- Protect and/or develop my intellectual property. [number 1–3]
- Attract and secure more outside capital investment. [number 1–3]
- Improve your business management and/or administrative skills. [number 1–3]
- Interact and gain experience from other entrepreneurs. [number 1–3]
- Gain access to workspace or equipment. [number 1–3]

7.8 Did the incubator or accelerator program you participated in have a specific focus on women entrepreneurs?

1. No
2. Yes

7.9 What was the name of the incubator or accelerator program you participated in?

[Text entry field]

7.10 How long was the duration of your program? (Please round your answer to the nearest week.)

[number] weeks

7.11 Which, if any, of the following business services did your incubator or accelerator program include? (Check all that apply.)
1. Business plan writing and business basics
2. Access to capital
3. Marketing assistance
4. Mentoring boards for clients with area business service providers
5. Ties to higher education institutions
6. Accounting and financial management services
7. Networking with other entrepreneurs, particularly other clients
8. Networking with the area business community
9. Assistance in developing presentation skills
10. Assistance in developing business etiquette
11. Legal assistance with intellectual property protection
12. Legal assistance with incorporation or other business structures
13. Legal assistance with import/export requirements
14. General legal services
15. Technology commercialization assistance
16. Access to specialized equipment and/or laboratories at reduced rates
17. Intellectual property management assistance

**7.12** In your best estimate, how many other companies participated with you in the program that you participated in?
   1. [number] companies
   2. I don’t know

**7.13** In your best estimate, of the other companies in the program that you participated in, how many had at least one woman owner or partner?
   1. [number] companies
   2. I don’t know

**7.14** Did the incubator or accelerator program you participated in acquire an equity stake in your company?
   1. No
   2. Yes

*For the next two questions, choose the answer that best characterizes your reaction to each statement.*

**7.15** The managers of my incubator or accelerator program were easy to communicate with.
   1. Strongly disagree
   2. Disagree
   3. Neither agree nor disagree
   4. Agree
   5. Strongly agree

**7.16** As a woman, I personally felt comfortable and accepted as part of my incubator or accelerator program.
   1. Strongly disagree
   2. Disagree
   3. Neither agree nor disagree
   4. Agree
   5. Strongly agree

**7.17** Do you continue to remain in contact with the organization that conducted your incubator or accelerator program?
   1. No
   2. Yes
7.18 Do you continue to remain in contact with any of the other participants in your incubator or accelerator program?
  1. No
  2. Yes

For the next set of questions, please rate the impact of participation in a business incubator or accelerator for each outcome on a scale of 1 to 5.

7.19 Greater confidence in dealing with business concerns.

7.20 Secure more investment capital.

7.21 Greater awareness of where to find solutions and support for business problems.

7.22 More connections to entrepreneurs like yourself.

7.23 More connections to investors and investment opportunities.

7.24 Is your company still in business?
  1. No
  2. Yes

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<th>If 7.24 = “Yes”</th>
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<tbody>
<tr>
<td>7.24A Approximately how many months after completing your program did your company dissolve?</td>
<td>[skip]</td>
</tr>
<tr>
<td>[number] months</td>
<td></td>
</tr>
</tbody>
</table>

7.25 Since participating in the incubator or accelerator program, has your company gained or lost employees?
  1. Gained employees
  2. Lost employees
  3. Stayed the same size

<table>
<thead>
<tr>
<th>If 7.25 = “Gained employees”</th>
<th>If 7.25 = “Lost employees”</th>
<th>If 7.25 = “Stayed the same size”</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.25A Approximately how many employees did your company gain since participating in the incubator or accelerator program?</td>
<td>7.25A Approximately how many employees did your company lose since participating in the incubator or accelerator program?</td>
<td>[skip]</td>
</tr>
<tr>
<td>[number] employees</td>
<td>[number] employees</td>
<td></td>
</tr>
</tbody>
</table>

7.26 Since participating in the incubator or accelerator program, has your company’s revenue increased or decreased?
1. Increased  
2. Decreased  
3. Stayed the same

<table>
<thead>
<tr>
<th>If 7.26 = “Increased”</th>
<th>If 7.26 = “Decreased”</th>
<th>If 7.27 = “Stayed the same”</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.26A Approximately how much has your company’s revenue grown by since participating in the incubator or accelerator program? <em>(Please round your answer to the nearest thousand.)</em> $[\text{number}],000</td>
<td>7.26A Approximately how much has your company’s revenue shrunk by since participating in the incubator or accelerator program? <em>(Please round your answer to the nearest thousand.)</em> $[\text{number}],000</td>
<td>[skip]</td>
</tr>
</tbody>
</table>

7.27 Has it been over 12 months since you graduated from your incubator or accelerator program?  
1. No  
2. Yes

<table>
<thead>
<tr>
<th>If 7.27 = “No”</th>
<th>If 7.27 = “Yes”</th>
</tr>
</thead>
</table>
| 7.27A In the first 12 months after graduating from your program, has your company gained or lost employees?  
1. Gained employees  
2. Lost employees  
3. Stayed the same size | [skip] |

<table>
<thead>
<tr>
<th>If 7.27A = “Gained employees”</th>
<th>If 7.27A = “Lost employees”</th>
<th>If 7.27A = “Stayed the same size”</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.27B Approximately how many employees did your company gain in the first 12 months since participating in the incubator or accelerator program? $[\text{number}]$ employees</td>
<td>7.27B Approximately how many employees did your company lose in the first 12 months since participating in the incubator or accelerator program? $[\text{number}]$ employees</td>
<td>[skip]</td>
</tr>
</tbody>
</table>

7.27C In the first 12 months after graduating from your program, did you hit all your employee growth targets?  
1. No  
2. Yes

7.27D In the first 12 months after graduating from your program, has your company’s revenue increased or decreased?  
1. Increased  
2. Decreased  
3. Stayed the same

<table>
<thead>
<tr>
<th>If 7.27D = “Increased”</th>
<th>If 7.27A = “Decreased”</th>
<th>If 7.27A = “Stayed the same”</th>
</tr>
</thead>
</table>
Approximately how much has your company’s revenue grown by in the first 12 months since participating in the incubator or accelerator program? (Please round your answer to the nearest thousand.)

$[\text{number}]\,000$

In the first 12 months after graduating from your program, did you achieve your revenue targets?
1. No
2. Yes
Appendix 5: Survey for Incubator/Accelerator Managers

[Note] Text written within brackets, italicized, and on a gray background is intended as editorial text to describe interactive elements of the survey (i.e. value entry fields, pull-down menus, branching points, etc.) or placeholders to be replaced by the content described.

Before you begin, be aware that several questions on this survey ask about “women-owned or women-led businesses”. Women-owned businesses are defined as businesses where women own 51% or more of the equity, interest, or stock of the business. Women-led businesses are defined as businesses where women make up at least 30% of the senior management positions such as President, Chair, CEO, CIO, COO, etc.

Section 1: Business Model

1.1 Would you classify your organization as an incubator or an accelerator?
   1. Incubator
   2. Accelerator
   3. Both an incubator and an accelerator
   4. Neither an incubator nor an accelerator

<table>
<thead>
<tr>
<th>If 1.1 = 1, 2, or 3</th>
<th>If 1.1 = 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>[skip]</td>
<td>1.1A</td>
</tr>
<tr>
<td></td>
<td>Please enter a very brief definition of your organization’s business model.</td>
</tr>
<tr>
<td></td>
<td>[text entry field]</td>
</tr>
</tbody>
</table>

1.2 Is your organization based on a not-for-profit model?
   5. No
   6. Yes

1.3 Is your organization sponsored by any state or local governments?
   1. No
   2. Yes

1.4 Is your organization sponsored by the federal government?
   1. No
   2. Yes

1.5 Is your organization sponsored by or associated with a university?
   1. No
   2. Yes

1.6 In what year did your organization begin operations?
   1. No
   2. Yes

1.7 What is the zip code of your organization’s headquarters or primary business location?
   [zip code]

1.8 Does your organization operate or conduct programming in multiple locations?
1. No
2. Yes

<table>
<thead>
<tr>
<th>If 1.8 = “No”</th>
<th>If 1.8 = “Yes”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.8A Please enter the zip code of all locations in the United States where your organization has operated or conducted programming in the past 12 months.</td>
</tr>
<tr>
<td></td>
<td>[zip code 1]</td>
</tr>
<tr>
<td></td>
<td>[zip code 2]</td>
</tr>
<tr>
<td></td>
<td>[etc.]</td>
</tr>
</tbody>
</table>

1.9 Which of the programs from the following list does your organization offer? (Please select all that apply.)
   1. A long-term residency program for startup businesses
   2. A short-term residency program for startup businesses
   3. A long-term non-residency program for startup businesses
   4. A short-term non-residency program for startup businesses
   5. Other

Repeat for each selection of options 1 through 4 in 1.9

<table>
<thead>
<tr>
<th>If 1.9A = “No”</th>
<th>If 1.9A = 2, 3, 4 or 5</th>
</tr>
</thead>
</table>
|                     | 1.9A Is there a fee required to participate in this program?
|                     | 1. No                  |
|                     | 2. Yes, and the fee is paid by the participants |
|                     | 3. Yes, and the fee is partially covered by the organization or its sponsors |
|                     | 4. Yes, and the fee is fully covered by the organization or its sponsors |
|                     | 5. Yes, but terms vary based on the company |
| [skip]               | 1.9B How much does it cost to participate in the program? $[number] |

1.9C Does your organization provide participants with any funding as part of this program?
   1. No
   2. Yes

<table>
<thead>
<tr>
<th>If 1.9C = “No”</th>
<th>If 1.9C = “Yes”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.9C Does your organization provide participants with any funding as part of this program?</td>
</tr>
<tr>
<td></td>
<td>1. No</td>
</tr>
<tr>
<td>[skip]</td>
<td>2. Yes</td>
</tr>
<tr>
<td></td>
<td>1.9D How much funding do you provide to participants? (If the amount varies by company please estimate the average amount.) $[number]</td>
</tr>
</tbody>
</table>

1.9E Does your organization provide working space for companies involved in this program?
   1. No
   2. Yes, at no cost
   3. Yes, with the cost included in the program fee
   4. Yes, for an additional cost
   5. Yes, but terms vary based on the company

<table>
<thead>
<tr>
<th>If 1.9E = “No”</th>
<th>If 1.9E = “Yes”</th>
</tr>
</thead>
<tbody>
<tr>
<td>[skip]</td>
<td>1.9F Is this working space considered a</td>
</tr>
<tr>
<td></td>
<td>1.9G How much do you charge for working space? $[number]</td>
</tr>
</tbody>
</table>

[skip]
1.9F Does your organization take an equity stake in firms that participate in this program?
1. No
2. Yes

1.9G What is the maximum duration for companies to participate in this program? *(Please estimate to the nearest whole week.)*
[number] weeks

1.9H What is the average duration of participation for companies in this program? *(Please estimate to the nearest whole week.)*
[number] weeks

1.9I Which, if any, of the following business services do you provide clients in this program? *(Check all that apply.)*
1. Business plan writing and business basics
2. Access to capital
3. Marketing assistance
4. Mentoring boards for clients with area business service providers
5. Ties to higher education institutions
6. Accounting and financial management services
7. Networking with other entrepreneurs, particularly other clients
8. Networking with the area business community
9. Assistance in developing presentation skills
10. Assistance in developing business etiquette
11. Legal assistance with intellectual property protection
12. Legal assistance with incorporation or other business structures
13. Legal assistance with import/export requirements
14. General legal services
15. Technology commercialization assistance
16. Access to specialized equipment and/or laboratories at reduced rates
17. Intellectual property management assistance

**If option 5 is selected as an answer for 1.9**

In the space provided, please briefly describe any other programs your organization offers.

[Text entry field]

### Section 2: Selection Criteria

2.1 Does your organization have a specific preference for startups in any of the following industrial sectors? *(Please select one or more answers.)*
1. No industry preferences
2. Agriculture, Forestry, Fishing and Hunting
3. Mining, Quarrying, and Oil and Gas Extraction
4. Utilities
5. Construction
6. Manufacturing
7. Wholesale Trade
8. Retail Trade
9. Transportation and Warehousing
10. Information
11. Finance and Insurance
12. Real Estate and Rental Leasing
13. Professional, Scientific, and Technical Services
14. Management of Companies and Enterprises
15. Administrative and Support and Waste Management
16. Educational Services
17. Health Care and Social Assistance
18. Arts, Entertainment, and Recreation
19. Accommodation and Food Services
20. Other Services (except Public Administration)
21. Public Administration
22. Other

2.2 Does your organization accept applications from startups outside of the industries you selected in Question 2.1?
   1. No
   2. Yes

2.3 Does your organization define itself as a technology-focused incubator?
   5. No
   6. Yes

2.4 Does your organization have specific preferences for any of the following special classes of entrepreneurs? (Please select one or more answers.)
   1. Micro-entrepreneurs
   2. College/university students
   3. Low Income
   4. Women
   5. African Americans
   6. Hispanics
   7. Social Entrepreneurs
   8. Native Americans
   9. Youth
   10. None of the above

2.5 Does your organization have a written policy regarding your selection criteria?
   1. No
   2. Yes

<table>
<thead>
<tr>
<th>If 2.5 = &quot;No&quot;</th>
<th>If 2.5 = &quot;Yes&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>[skip]</td>
<td>2.5A In the space provided, please copy and paste your selection criteria policy.</td>
</tr>
<tr>
<td></td>
<td>[text entry field]</td>
</tr>
</tbody>
</table>

For the next set of questions, rank the importance of each factor in selecting a company for your programs on a scale of 1 to 5, with 5 being most important.

2.6 The cultural fit of the company 1 2 3 4 5
applying.

2.7 The diversity of companies represented among our clients.  1  2  3  4  5

2.8 The potential for success of the company applying.  1  2  3  4  5

2.9 The intellectual property possessed by the company applying.  1  2  3  4  5

2.10 The potential for rapid growth for the company applying.  1  2  3  4  5

2.11 The amount of capital or investment interest already possessed by the company applying.  1  2  3  4  5

Section 3: Institutional Culture

3.1 Does your organization explicitly have a mission statement written out?
   1. No
   2. Yes

<table>
<thead>
<tr>
<th>If 3.1 = “No”</th>
<th>If 3.1 = “Yes”</th>
</tr>
</thead>
<tbody>
<tr>
<td>[skip]</td>
<td>3.1A In the space provided, please copy and paste your mission statement. [text entry field]</td>
</tr>
</tbody>
</table>

For the next set of questions, rank the importance of the following goal on a scale of 1 to 5, with 5 being most important

3.2 Fostering an entrepreneurial culture.  1  2  3  4  5

3.3 Creating jobs.  1  2  3  4  5

3.4 Building or accelerating the growth of a new business or industry.  1  2  3  4  5

3.5 Retaining and/or attracting firms to the region.  1  2  3  4  5

3.6 Diversifying the local or regional economy.  1  2  3  4  5

3.7 Commercializing new technologies.  1  2  3  4  5

3.8 Identifying spin on/spin off businesses.  1  2  3  4  5

3.9 Generating net income for the sponsor(s).  1  2  3  4  5

3.10 Encourage minority entrepreneurs.  1  2  3  4  5
3.11 Encourage women entrepreneurs. 1 2 3 4 5
3.12 Generating complementary benefits. 1 2 3 4 5
3.13 Revitalizing a distressed neighborhood. 1 2 3 4 5
3.14 Moving people from welfare to work. 1 2 3 4 5
3.15 Generating new manufacturing jobs. 1 2 3 4 5
3.16 Other goals not captured by the categories outlined above. 1 2 3 4 5
3.17 In the event a client is not meeting program goals or milestones, do you discuss the alternatives to incubation or acceleration programs?
   1. No
   2. Yes
3.18 Do you regularly evaluate your service providers?
   1. No
   2. Yes
3.19 Do you regularly evaluate the effectiveness of your programs?
   1. No
   2. Yes
3.20 Do you establish milestones for your clients and conduct follow-ups?
   1. No
   2. Yes
3.21 Does your organization have a written marketing plan?
   1. No
   2. Yes
3.22 How often do you review your organization's budget?
   1. Quarterly
   2. Monthly
   3. More frequently than monthly
   4. Irregularly or less frequently than monthly
3.23 Do you discuss exit and graduation strategies regularly with your clients?
   1. No
   2. Yes
3.24 To the best of your knowledge, how many people sit on your advisory board in total? [number] members
3.25 To the best of your knowledge, how many women sit on your advisory board? [number] members
3.26 Of the following categories, which are represented by members of your advisory board? *(Please select all that apply.)*

1. Experienced entrepreneur
2. Local economic development official
3. Finance community
4. Corporate executive
5. University official
6. Accountant
7. Business attorney
8. Chamber of Commerce
9. Incubator manager
10. Local government official
11. Marketing expert
12. Tech transfer specialist
13. Graduate firm
14. Real estate (manager/developer)
15. State economic development official
16. Patent attorney
17. State government official
18. Federal economic development official
19. None of the above

3.27 To the best of your knowledge, how many people are employed by your organization in total?

[number] people

3.28 To the best of your knowledge, how many women are employed by your organization?

[number] people

---

Section 4: Investors & Funding

4.1 How many sponsors does your organization have?

[number] sponsors

4.2 To the best of your knowledge, of your sponsor companies, how many of those companies are women-owned or women-led?

[number] sponsors

4.3 Does your organization have close relationships with specific angel investors?

1. No
2. Yes

<table>
<thead>
<tr>
<th>If 4.3 = “No”</th>
<th>If 4.3 = “Yes”</th>
</tr>
</thead>
<tbody>
<tr>
<td>[skip]</td>
<td>4.3A Of your angel investors, how many are women? [number] angel investors</td>
</tr>
</tbody>
</table>
4.4 Does your firm have an in-house venture fund?
   1. No
   2. Yes

4.5 Does your firm have a close relationship with any outside venture capital firms?
   1. No
   2. Yes

<table>
<thead>
<tr>
<th>If 4.5 = “No”</th>
<th>If 4.5 = “Yes”</th>
</tr>
</thead>
<tbody>
<tr>
<td>[skip]</td>
<td>4.5A How many venture capital firms do you work with regularly? [number] firms</td>
</tr>
<tr>
<td></td>
<td>4.5B To the best of your knowledge, of the outside venture capital firms you work with, how many have a woman as an owner or partner? [number] firms</td>
</tr>
</tbody>
</table>

Section 5: Performance Indicators

5.1 Does your organization maintain statistical data on the applications you receive?
   1. No
   2. Yes

<table>
<thead>
<tr>
<th>If 5.1 = “No”</th>
<th>If 5.1 = “Yes”</th>
</tr>
</thead>
<tbody>
<tr>
<td>[skip]</td>
<td>5.1A For how many years has your organization collected data on firms that have applied for one of your programs? [number] years</td>
</tr>
<tr>
<td></td>
<td>5.1B How many applications did you receive for your most recent program application cycle? [number] applications</td>
</tr>
<tr>
<td></td>
<td>5.1C How many applications from women-owned or women-led businesses did you receive for your most recent program application cycle? [number] applications</td>
</tr>
<tr>
<td></td>
<td>5.1D How many companies did you accept for your most recent program cycle? [number] companies</td>
</tr>
<tr>
<td></td>
<td>5.1E How many applications from women-owned or women-led businesses did you accept for your most recent program cycle? [number] companies</td>
</tr>
</tbody>
</table>

5.2 Does your organization collect data on firms that have completed one of your programs?
1. No
2. Yes

<table>
<thead>
<tr>
<th>If 5.2 = “No”</th>
<th>If 5.2 = “Yes”</th>
</tr>
</thead>
</table>
| [skip]        | If 5.2A For how many years has your organization collected data on firms that have completed one of your programs?  
[number] years |
|               | 5.2B For how many years after completion do you collect outcome data?  
[number] years |
|               | 5.2C For your most recent program cycle, how many companies completed the program?  
[number] companies |
|               | 5.2D For your most recent program cycle, how many women-owned or women-led companies completed the program?  
[number] companies |
|               | 5.2E How many companies have completed your program since you started offering your services?  
[number] companies |
|               | 5.2F How many women-owned or women-led companies have completed your program since you started offering your services?  
[number] companies |