

Analyzing the Economic Impact of the

Women's Business Center Program

**A Research Study Prepared for the
National Women's Business Council
by Quality Research Associates
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T able of Contents

Executive Summary	1
Introduction.....	4
Research Questions	6
Results.....	7
Descriptives	7
Economic Activities and Outcomes.....	16
Economic Context	23
Impact by Location	24
Impact by Center Structure.....	26
Impact of Other Services	28
Impact by Population and Poverty	28
Success Factors.....	30
Discussion	36
Recommendations	39
Study Methodology	41
Bibliography	45
Quality Research Associates	45

T**able of Charts**

Chart 1: Total Number of Contacts 2001-2003.....	7
Chart 2: Average Number of Contacts 2001-2003.....	8
Chart 3: Total Number of Clients 2001-2003.....	8
Chart 4: Average Number of Clients 2001-2003	9
Chart 5: Race/Ethnicity of Clients 2001-2003.....	10
Chart 6: Race & Ethnicity Percentages.....	11
Chart 7: Other Types of Clients 2001-2003.....	13
Chart 8: SBA Clients 2001-2003.....	13
Chart 9: Female Ownership 2001-2003.....	14
Chart 10: Types of Businesses 2001-2003.....	15
Chart 11: Types of Businesses 2003 Percentages	15
Chart 12: Total Number of Clients Counseled 2001-2003.....	17
Chart 13: Average Number of Clients Counseled 2001-2003.....	17
Chart 14: Total Number of Clients Trained 2001-2003	17
Chart 15: Average Number of Clients Trained 2001-2003.....	17
Chart 16: Gross Receipts (Millions) 2001-2003.....	17
Chart 17: Average Gross Receipts (Millions) 2001-2003.....	18
Chart 18: Projected Total Gross Receipts (Millions) 2001-2003.....	18
Chart 19: Profits (Millions) 2001-2003.....	18
Chart 20: Average Profits 2001-2003	19
Chart 21: Projected Total Profits (Millions) 2001-2003	19
Chart 22: Losses (Millions) 2001-2003	19
Chart 23: Average Losses 2001-2003.....	20
Chart 24: Projected Total Losses (Millions) 2001-2003.....	20
Chart 25: New Jobs Created 2001-2003.....	20
Chart 26: Average Number of New Jobs Created 2001-2003	21
Chart 27: Projected Total New Jobs 2001-2003.....	21
Chart 28: Number of Start-Ups 2001-2003	22
Chart 29: Average Number of Start-Ups 2001-2003.....	22
Chart 30: Projected Number of Start-Ups 2001-2003.....	22
Chart 31: Geographic Location	24
Chart 32: 2001 Impacts by Location Clients	25
Chart 33: 2001 Impacts by Location Jobs Created	25
Chart 34: 2002 Impacts by Location Clients	25
Chart 35: 2003 Impacts by Location Counseled	25
Chart 36: Women's Business Center Types	26
Chart 37: Years in Operation.....	26
Chart 38: 2001 Impacts by WBC Type: Losses	27
Chart 39: 2002 Impacts by WBC Type: Profits	27
Chart 40: 2003 Impacts by WBC Type: Contacts.....	27
Chart 41: Other Resources: SBDC	28
Chart 42: Other Resources: PTAC	28

Table of Tables

Table 1: Growth in Minority Clients: 2001-2003	11
Table 2: Summary of Impacts 2001 and 2003.....	23
Table 3: Matching Groups Population & Poverty Rate	29
Table 4: Impact by Population and Poverty.....	30
Table 5: Centers Attaining Growth in 5 of 5 Outcomes.....	32
Table 6: Centers Attaining Growth in 4 of 5 Outcomes.....	33
Table 7: Centers Attaining Growth in 3 of 5 Outcomes.....	34
Table 8: Centers Attaining Growth in at least 1 Outcome	35

Executive Summary

In Spring 2004 Quality Research Associates (QRA) undertook an analysis of the economic impact of the Women's Business Center program (WBC). Using primarily the WBC data provided by the Office of Women's Business Ownership (OWBO) for 2001, 2002, and 2003, the analyses were largely based on *internal* and *external* factors. *Internal* factors included demographics and outcomes—number of businesses started, gross receipts, profits, losses, and new jobs created—geographic location and years a WBC has been in existence. *External* factors included business assistance alternatives, city/town size, race-ethnic composition, and poverty rate.

The WBC program has gained great momentum between 2001 and 2003 in terms of clients served, those counseled and trained, gross receipts, profits, the creation of new jobs and new firms started. This investigation uncovered phenomenal growth in both activities and impact. Contacts rose 61 percent and clients served almost doubled from 2001 to 2003. From these increasing numbers of nascent and existing entrepreneurs and small business owners, WBCs generated a total economic impact of nearly \$500 million in gross receipts with profits of \$51.4 million and losses of only \$11.8 million. WBCs also created 12,719 new jobs, and started 6,660 new firms.

The WBC program is having a significant economic impact - more than one-half of the Centers show growth in the number of clients served, gross receipts, profits generated, and new jobs created. Just slightly less than one-half of the Centers have shown growth in the number of new firms started. This growth occurs in Centers regardless of their geographic location and respective demographic characteristics. In fact, the 21 WBCs which displayed growth in all five measured outcomes ranged from Boston, Massachusetts to Pine Bluff, Arkansas; from Oakland, California to Grand Rapids, Michigan.

Economic impact growth is substantial. From 2001 to 2003, the **total number of clients served increased by 91 percent**. The economic impact indicators generated by these clients, however, resulted in increases from 376 percent to greater than 800 percent! The greatest increase was found in **total gross receipts, which increased by 824 percent**. **Profits increased by 490 percent; losses were less than two percent** of gross receipts; the number of **new jobs created increased by 481 percent**, and the number of **new firms increased by 376 percent**.

Metrics created from these activity and growth figures provide insight into what a Center must do in order to produce economic impact. For example, we found that:

- It takes **3.3 contacts to generate a client** who, in turn, will produce economic impact. While we do not know which contacts will turn into clients, the importance of continually and consistently providing information and materials to prospective clients is critical.
- For every 14 clients a WBC serves, 1 new job is created. Given the mix of clients that WBCs serve, multiple industries, and growth goals for individual owners, a 1:14 ratio is excellent.
- For every 25 clients served, 1 new firm is started. This metric essentially speaks to the large number of nascent entrepreneurs and the length of time it takes from idea to implementation. Also, the effect of clients who are already in business is unknown.

In addition to the high levels and growth of activities and economic impacts, the WBC program is reaching its targeted population. While one in five women business owners nationally is a woman of color (Center for Women's Business Research 2002 estimates), in 2003 WBCs had a client mix which was 46 percent women of color. And, 2003 is just one point in time. Over the three years, we found that more than two-thirds of

the WBCs have experienced growth in the numbers of minorities served. In fact, four in ten WBCs enjoyed an increase of 100 percent or greater in the number of non-White clients served from 2001 to 2003.

Factors that may influence the success of WBCs, such as location and the corresponding population size and poverty level; whether the Center operates as an autonomous organization (stand-alone) or is part of a larger structure (bundled); how long a Center has been operating; and whether business assistance services are provided by other organizations were investigated.

We discovered that urban locations have more clients, and non-urban locations create more jobs. At the same time, we found that the influence of population size and poverty level were relatively minor. We found that organizational structure and years in operation were highly correlated and Centers which have been around for more than five years are more likely to be bundled within a larger organization, such as a chamber of commerce, or economic or community development agency. Impact differences as a result of this structure included stand-alone centers had more training clients and bundled Centers had greater numbers of contacts, profits, and losses. We found that the availability of a Small Business Development Center (SBDC) in the same town or city did not impact WBC success. As such, it appears that the WBCs serve a need and population even in areas that have an SBDC.

The lack of significance for multiple service providers appears to show that there are plenty of clients and work to be done by all business assistance services. Clearly, here is no single best model for success. While there are differences in urban versus non-urban and in stand-alone versus bundled, we found success coming from a variety of models. Economic impact, economic growth, and Center activity growth is evident in WBCs operating in all settings. We found value in growing the number of clients as this growth from 2001 to 2003 predicted growth in new jobs and start-ups; however, numbers alone did not predict gross receipts or profits. As such, positive economic impact is generated through the efforts of each Center to concentrate on their local area, meet the needs of that specific target population, and assist in the

development of new and existing businesses. This is also a hallmark of program sophistication and integration – a WBC should reflect the individual uniqueness of its local area and the assets and needs therein.

Further analysis with more comprehensive data will allow a greater understanding of the factors which lead to success – for the individual starting or growing a business and for the WBCs who provide business assistance services. Future data should include specific programs or services used by various types of clients in order to map success pathways; more detail regarding existing business owners and their firms; job quality; motivational influences; investments into the business; technology; and social capital of the owner. These analyses, in turn, will lay a solid foundation upon which WBCs can provide the highest level of support to nascent and existing women entrepreneurs across the country regardless of geographic location, industry, race or ethnicity.

Introduction

In fall 2003, the National Women's Business Council (NWBC) awarded a research contract to Quality Research Associates (QRA) to conduct a national study of the economic impact of the Women's Business Center program. Comparing Women's Business Centers (WBCs) provides a foundation upon which to better understand the larger economic impact of WBCs on growth of firms, revenues, profits, and jobs as well as the characteristics of WBCs which determine higher degrees of success.

Understanding the economic impact of entrepreneurs and small business¹ has been a topic of interest for many years in business schools and economic departments as well as in sociology, psychology, and history departments. Since neoclassical economics does not have a

¹ The terms entrepreneur and small business are often used interchangeably. We follow the literature that proposes these are two separate types and should be differentiated whenever possible.

suitable place in which to insert the individual, many economists have chosen to place the study of entrepreneurship and small business outside their specific realm of quantification. Economists who have embraced entrepreneurship and/or small business have struggled to develop a model that utilizes appropriate measurement and formulae, especially in light of the regional variations that exist (Malizia and Feser, 1999). As such, scholars from other disciplines such as sociology, psychology, and history have taken the lead in providing both a greater understanding of the impact of entrepreneurship and small business on the larger economy and the motivation, characteristics, actions, and context of the entrepreneur.

Shapiro (1981, 1977) and others note the importance of providing capital, business services, and a physical infrastructure to enable firms to survive and grow. Measuring the impact of these elements, however, is often limited by the availability and timeliness of appropriate data. For example, the Economic Census is taken only every five years and usually is not available to researchers for one-two years following collection. Measuring business assistance programming focused on helping an entrepreneur, small business owner, nascent entrepreneur, or nascent small business owner start, grow, or operate a business profitably is especially limited (see James Chrisman's work on analyzing the impact of Small Business Development Centers).

Measuring economic outcomes for the WBC program is complicated in that individual Centers target specific populations for services; therefore, not all WBCs can be compared equally. Thus, factors relevant to each WBC have been adjusted to reflect this individuality. For example, comparing Centers located in urban areas to others similarly placed as opposed to comparing urban Centers to those located in rural communities. Taking into consideration these various limitations, QRA analyzed the economic impact of WBCs based on *internal* and *external* factors. *Internal* factors included client demographics, client outcomes – number of businesses started, gross receipts, profits, losses, and new jobs

created – WBC geographic location (urban, non-urban²) and years in existence. *External* factors considered included business assistance alternatives, such as the availability of a Small Business Development Center (SBDC) or Procurement Technical Assistance Center (PTAC), city/town population size, race-ethnic composition of population, and poverty rate of locale.

R esearch Questions

The overarching research questions considered in this study were:

1. What is the economic impact of Women's Business Center program on the growth of firms?
2. What factors account for success (as measured by economic outcome data)?
3. Is there a specific WBC model that predicts success?
4. What predicts positive economic outcomes?
5. How do client demographics affect outcomes?

Our analyses included investigating growth in impacts from 2001 to 2003 for WBCs in total as well as determining averages for activities and impacts. In addition, we looked at how individual WBCs compared to each other on both activities and impacts. We also specifically investigated possible relationships between the internal and external factors by Center and by appropriate groupings of Centers. Refer to the Methodology section specifically for additional information of the organization of the analysis.

² Non-urban includes rural and suburban as well as locations which include both suburban and rural classifications according to the Census Bureau.

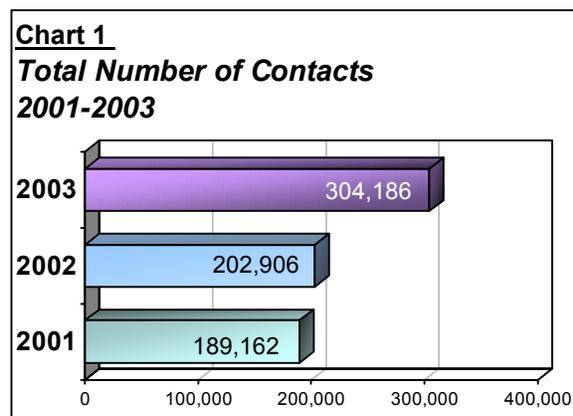
Results

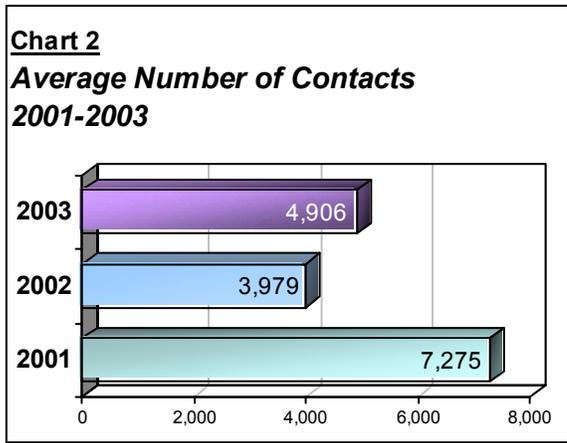
The results of our analyses of the economic impact of Women's Business Center program are organized as follows. First, we share descriptive information on the number and types of clients served by WBCs – for all Centers, averages for Centers, and projected totals based on mean imputation. Second, the activity and economic outcomes produced by WBCs are provided – for all Centers, averages, and projections. Third, we provide predictive results based upon economic context. And, fourth, we discuss WBCs which are extremely successful in terms of economic outcomes and the factors that contribute to that success. A discussion of our findings follows the Results section.

— Descriptives —

The WBC program is gaining momentum, with increases in contacts, clients, and specific types of clients served such as veterans, disabled, women eligible for TANF, and home-based businesses. Furthermore, the WBC program is successfully serving the specific populations they have chosen to serve – women of all races and ethnicities.

WBCs reported that they received **61 percent more contacts in 2003** than in 2001, jumping from 189,162 contacts to **304,186**.

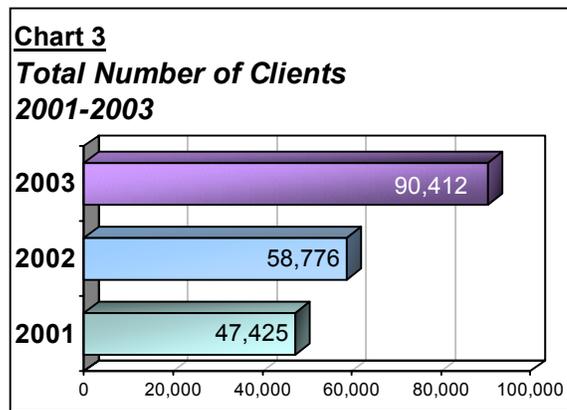




Using the total number of Centers which provided data (as opposed to the total number of WBCs)³, the **average Center had nearly 5,000 contacts in 2003**, almost 4,000 in 2002, and more than 7,000 in 2001. The decrease

between 2001 and 2003 is primarily due to the increased number of Centers reporting data (from 26 in 2001 to 62 in 2003).

Substituting the mean for missing data, the **potential total number of contacts in 2003 would have been 451,352** as opposed to the reported 304,186.

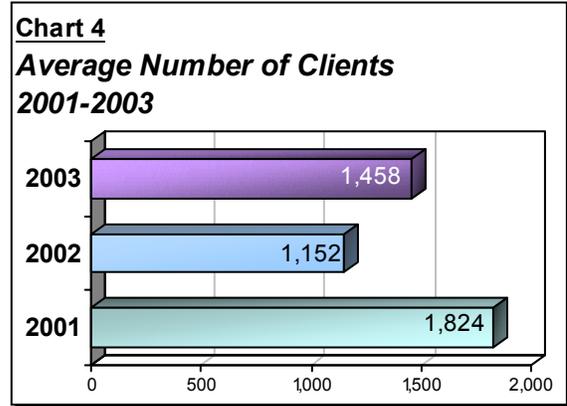


Even more important than contacts is the number of clients served. The **total number of clients almost doubled** in this same time frame (from 2001 to 2003) **from 47,425 to 90,412 – a 92 percent increase!**

³ In 2001, 26 centers provided data; in 2002, 51; and in 2003, 62. The number of WBCs varies because some are closed and new centers are opened over the years studied. Mean imputation is used only for missing data, not in instances where zeros were found.

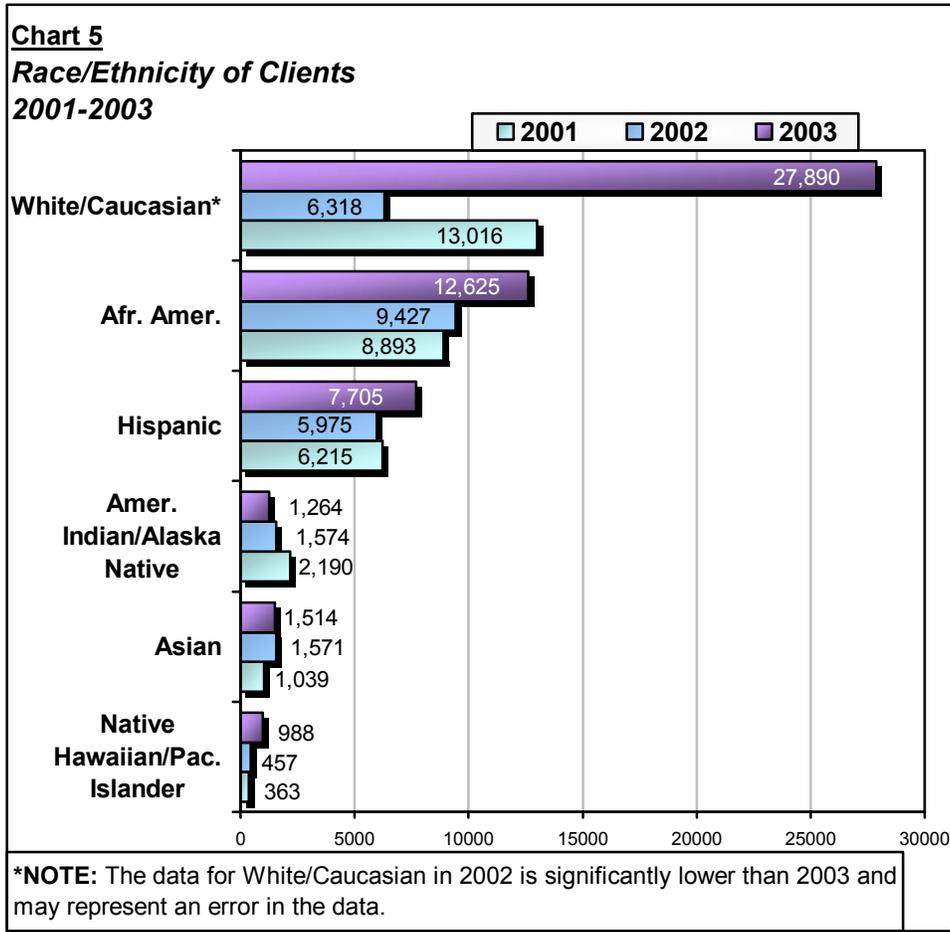
The **average number of clients per WBC was 1,458** in 2003.

Again, a projection based on mean imputation indicates that the **potential total number of clients in 2003 would have been 134,136** as opposed to the reported 90,412.



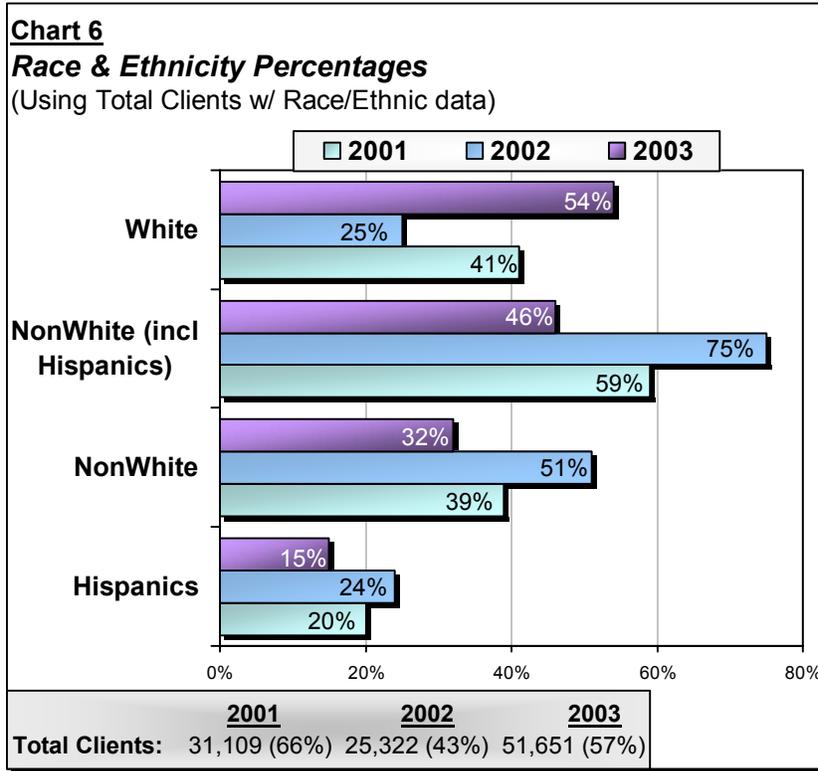
Race and ethnicity information reveal that the number of minority clients increased from 2001 to 2003. The first graph provides the numbers for race and ethnicity⁴ by year for all WBCs. The second graph illustrates the percentages of non-White and White clients by year. In this second graph, Hispanics are shown separately and as part of the non-White grouping for illustrative purposes.

⁴ In this chart we include the ethnic category, Hispanic, with race categories. While distinct and separate, race and ethnicity used to denote groups of people as in this instance merely are identifiers of minority status compared to majority (Whites) and can be used together.



According to the Center for Women's Business Research, making projections to 2002 using 1997 data from the U.S. Census Bureau, one in five women-owned businesses (19.6%) are owned by a woman of color. This information makes the fact that nearly 50 percent of WBC clients in 2003 were women of color even more impressive. The following graph shows that in 2001 more than one-half of WBCs clients were women of color (50 percent versus 41 percent); and, in 2003, **46 percent were minority clients compared to 54 percent majority clients**⁵.

⁵ This slight dip may reflect the race/ethnic composition of geographic locations of new centers opened in 2002 and 2003.



More than two-thirds (68 percent) of WBCs reported growth in number of minority (or non-White) clients from 2001 to 2003. In fact, 41 percent of WBCs reported at least a 100 percent increase in the number of minority clients from 2001 to 2003. The following table displays the Centers with growth in minority clients from 2001 to 2003 in rank order by number.

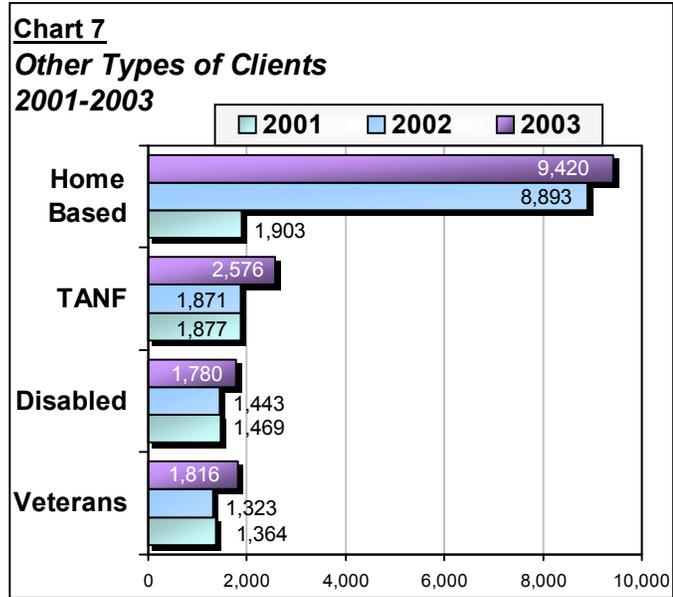
TABLE 1
Growth in Minority Clients: 2001-2003

WBC	Number	Percent
FORT WORTH, TX	1,248	1,328
HONOLULU, HI	615	647
OAKLAND, CA	533	208
ANN ARBOR, MI	511	140
CHICAGO, IL	468	194
PINE BLUFF, AR	461	378
MILWAUKEE, WI	429	64
PAGO PAGO	363	318
EL PASO, TX	348	544
COLORADO SPRINGS, CO	345	106
ALBUQUERQUE, NM	333	2,081
GREENVILLE, MS	325	417
DENVER, CO	307	21

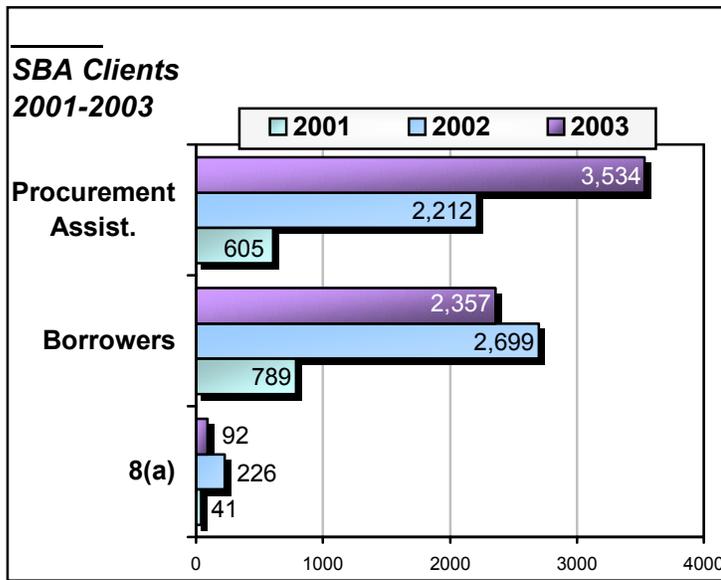
Economic Impact Analysis of Women's Business Center Program

WBC	Number	Percent
NEW ORLEANS, LA	279	100
BRONX, NY	256	800
BIRMINGHAM, AL	236	908
NORMAN, OK	213	520
PHOENIX, AZ	210	79
GRAND RAPIDS, MI	203	549
QUEENS, NY	156	380
SAN JUAN, PR	152	10
OKLAHOMA CITY, OK	146	973
BOSTON, MA	129	63
FAYETTEVILLE, NC	114	101
FORT WAYNE, IN	104	63
PENSACOLA, FL	100	73
ANCHORAGE, AK	99	113
DURHAM, NC	84	36
WORCESTER, MA	82	482
MADISON, WI	78	433
INDEPENDENCE, WI	76	238
BALTIMORE, MD	71	64
EDINBURG, TX	70	33
HELENA, MT	67	258
DETROIT, MI	60	15
FORT BRAGG, CA	56	117
EVERETT, WA	50	227
SAN FRANCISCO, CA	47	32
DURANT, OK	45	100
MEDFORD, OR	42	202
CHATTANOOGO, TN	40	800
UTICA, NY	34	425
WATHILL, NE	34	227
MOBILE, AL	33	150
FOSSTON, MN	29	223
ST. CROIX	29	26
BISMARCK, ND	27	71
PORTSMOUTH, NH	22	391
BOISE, ID	20	52
STAMFORD, CT	15	26
PROVIDENCE, RI	14	30
SIOUX FALLS, SD	7	350
LARAMIE, WY	7	41
WISCASSET, ME	6	17
PHILADELPHIA, PA	3	1
BROOKLYN, NY	2	1
SEATTLE, WA	1	1

Other types of descriptives which categorize clients reveal that WBCs have shown growth in the number of clients served who are Veterans, Disabled, and TANF eligible. Furthermore, there has been an amazing growth in the number of clients who have **home-based businesses from 2001 to 2003 – from 1,900 to over 9,000!**

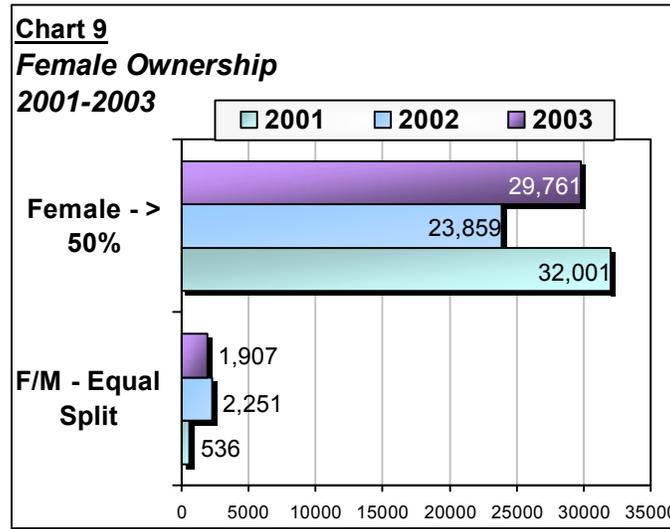


WBCs have more than **doubled the number of 8(a) clients**, and almost **tripled the number of SBA borrowers** from 2001 to 2003. In addition, the



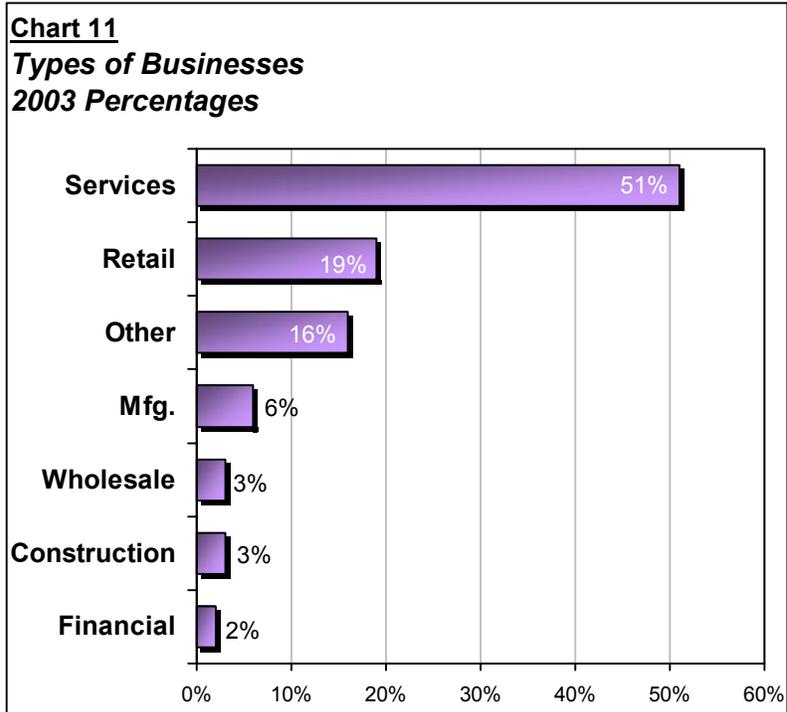
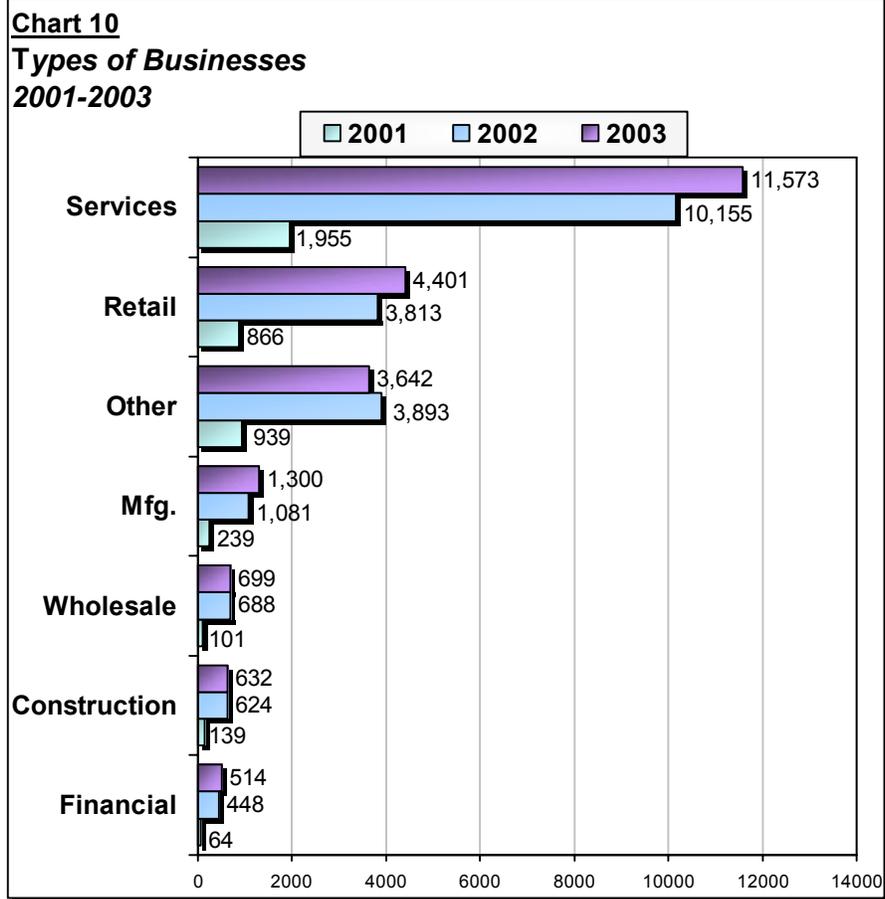
number of clients seeking **procurement assistance has jumped from 605 in 2001 to over 3,500 (484%) in 2003.**

The number of firms in which the woman owns greater than 50 percent of the business has remained about the same from 2001 to 2003, whereas the number of firms where there is an equal split between female and male owners has tripled – from 536 to 1,907.



In 2003, nearly **three-quarters of the businesses were service or retail** (51 percent and 19 percent respectively). The distribution of clients' business types closely mirrors national data on women-owned businesses. The Center for Women's Business Research, using 1997 data from the U.S. Census Bureau to project to 2002, found that women-owned businesses clustered as follows – 53% Services, 16% Retail, 9% Finance/Insurance/Real Estate, 3% Construction, 3% Transportation/Communications /Public Utilities, 2% Wholesale, 2% Manufacturing, 2% Agriculture, and 12% Not Classified. Additionally, the Center for Women's Business Research found that the fastest growing non-traditional industry for women was construction (at 30% growth from 1997-2004). This movement and growth into the construction industry by women is also shown in the 354 percent increase of WBC construction business clients from 2001 to 2003.

The first graph depicts the types of businesses by year, and the second graph depicts the percent of businesses for 2003 by type.



— Economic Activities and Outcomes —

The economic impact of the WBC program is measured by the success of clients who start and grow businesses, generate sales receipts and profits, minimize losses, and create jobs. To get these impacts, the WBCs must provide relevant, timely, and targeted business assistance. We found that from 2001 to 2003, economic impacts and the activities leading to those impacts grew substantially in every category. In fact, we estimate that in 2003, WBCs generated nearly **\$407 million in gross receipts**, produced an average per Center of **\$420,607 in profits**, kept **losses at less than 2 percent**, created **6,493 new jobs**, and started **3,578 new businesses**.

The following information provides detail on the actual and estimated economic activities and outcomes for WBCs in 2001, 2002, and 2003. WBCs experienced healthy increases in the number of clients counseled and trained from 2001 to 2003 – in excess of a 75 percent increase for both types of activities. The **average number of clients counseled in 2003 per Center was 678** compared to the **average number of clients trained at 1,025**.

Using mean imputation and projecting for **2003, the potential total number of clients counseled would have been 62,376** as opposed to the reported 42,005; and, for **clients trained, the potential total number would have been 94,300** compared to the reported 63,524.

Chart 12
Total Number of Clients
Counseled 2001-2003

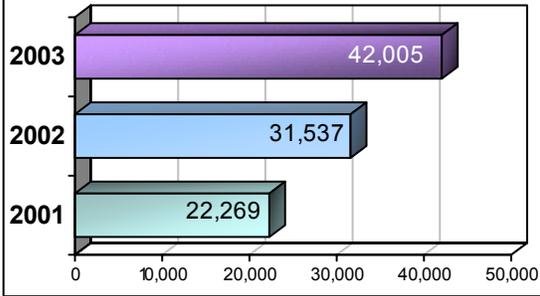


Chart 13
Average Number of Clients
Counseled 2001-2003

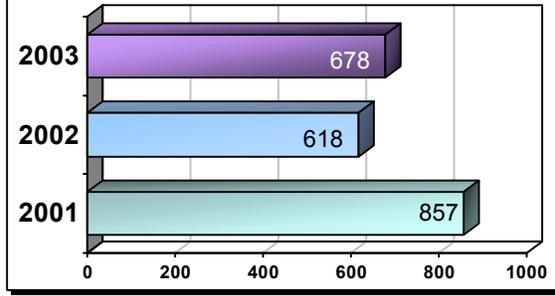


Chart 14
Total Number of Clients
Trained 2001-2003

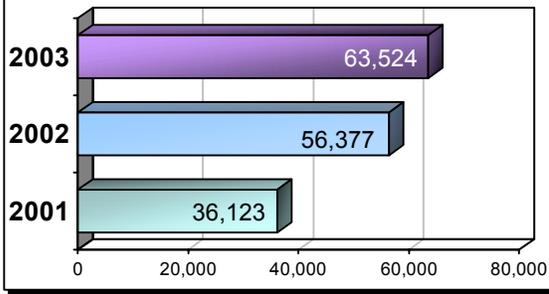
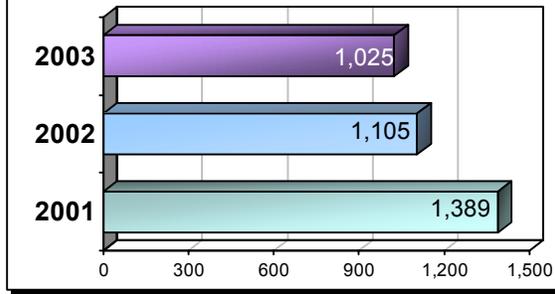
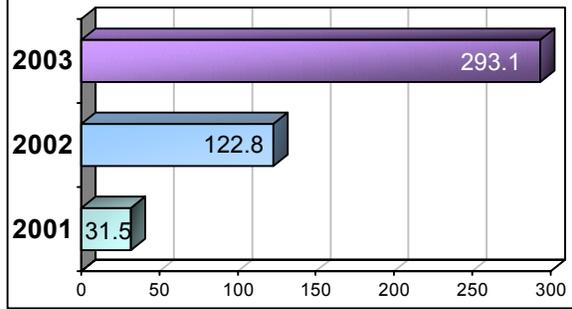


Chart 15
Average Number of Clients
Trained 2001-2003



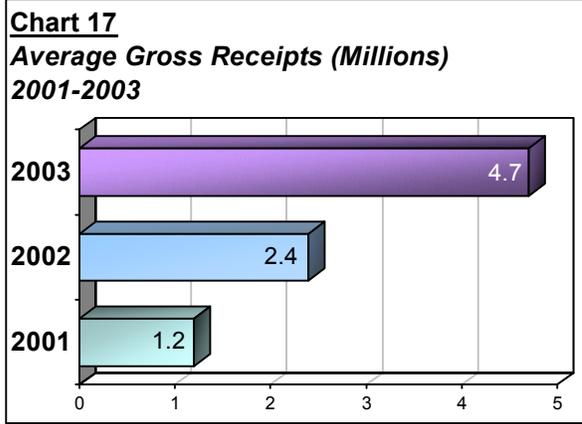
WBCs report total economic impact of \$293.1 million in gross receipts generated by their clients in 2003. This figure represents an increase in excess of 800 percent from 2001.

Chart 16
Gross Receipts (Millions)
2001-2003

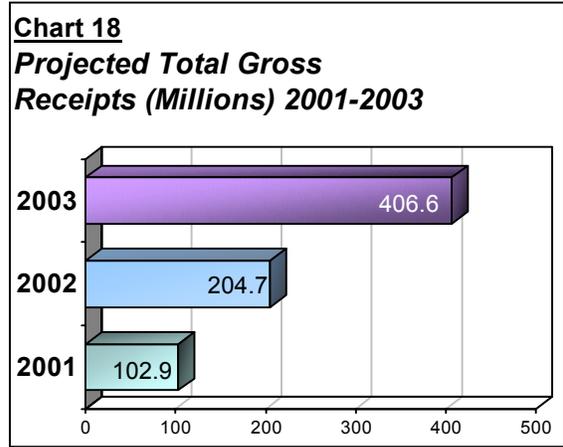


On average, a WBC produced **\$4.7 million in gross receipts** in 2003

compared to \$1.2 million in 2001.



Substituting means for missing data, we project the **total impact for all WBCs to be \$406.6 million in 2003.**



In addition to the amount of gross receipts skyrocketing from 2001 to 2003, the amount of **profits also skyrocketed from \$4.4 million to \$26 million** – a healthy 490 percent increase!

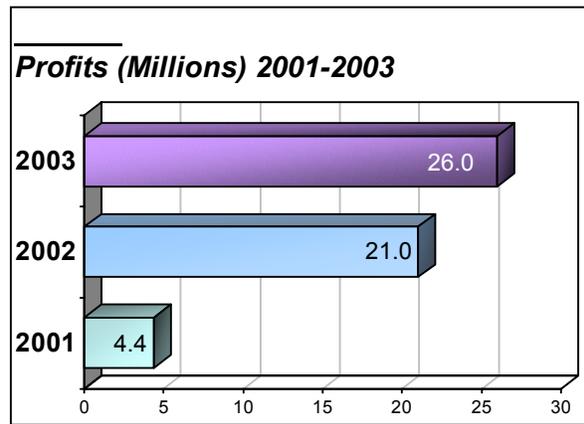
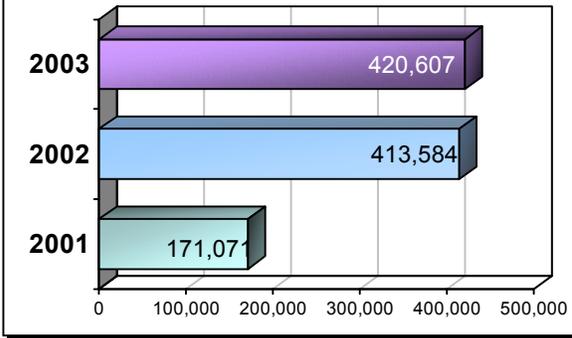


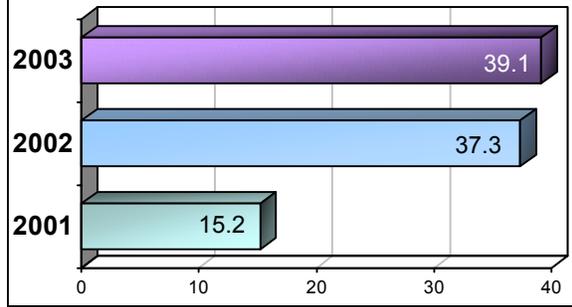
Chart 20
Average Profits 2001-2003



On average, each Center reported **\$420,607 in profits** in 2003 compared to \$171,071 in 2001.

Translated into a **projection for all Centers, profits would increase to over \$39 million.**

Chart 21
Projected Total Profits (Millions) 2001-2003



In 2003, **losses accounted for less than two percent of total gross receipts.**

Chart 22
Losses (Millions) 2001-2003

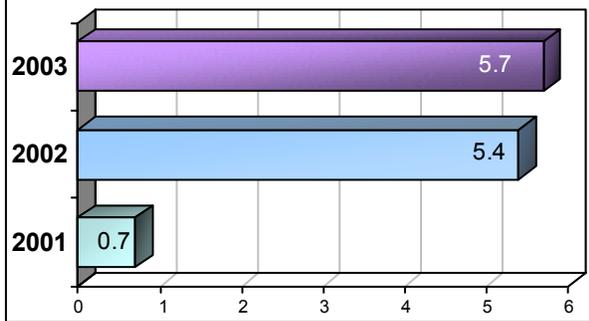
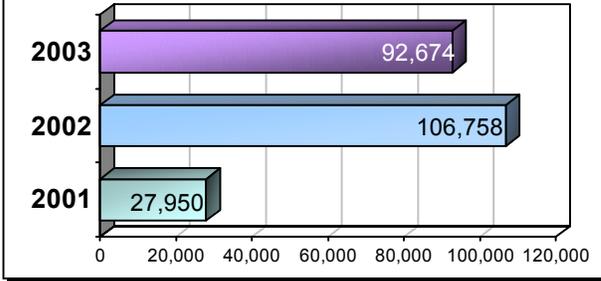


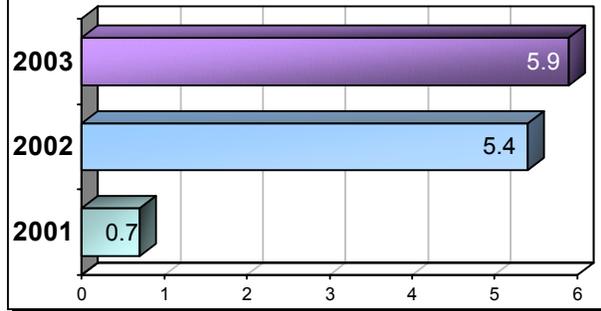
Chart 23
Average Losses
2001-2003



Again, for each WBC, the reported losses average less than \$100,000 in 2003.

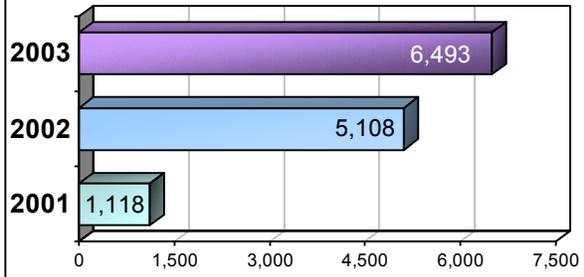
Using mean imputation, projected losses would have totaled about the same as reported data - \$5.9 million compared to \$5.7 million.

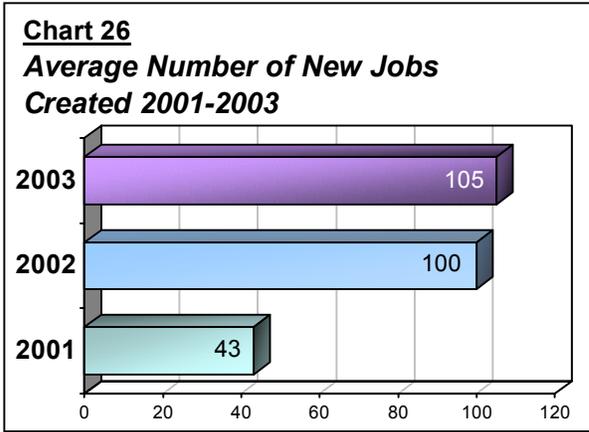
Chart 24
Projected Total Losses
(Millions) 2001-2003



WBC clients reported that they **created a total of 6,493 new jobs in 2003**, compared to 1,118 new jobs in 2001 – roughly a **500 percent increase!**

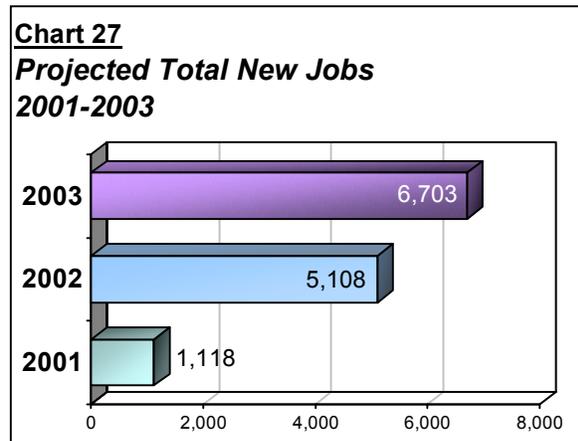
Chart 25
New Jobs Created
2001-2003



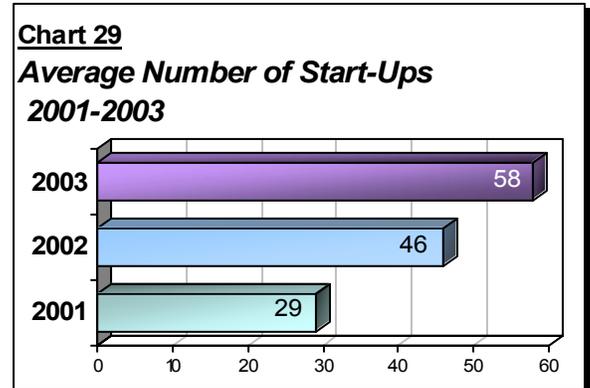
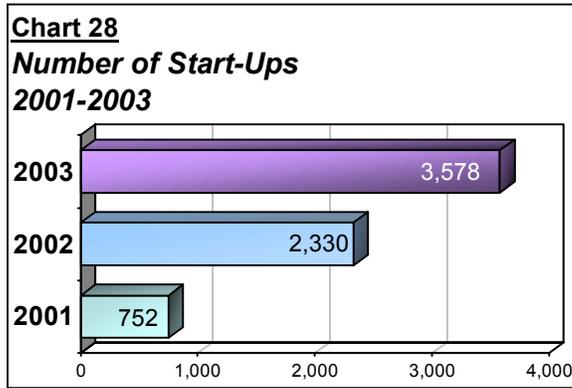


Again, looking at **Center averages**, the number of new jobs created was **105 in 2003**, compared to 43 in 2001.

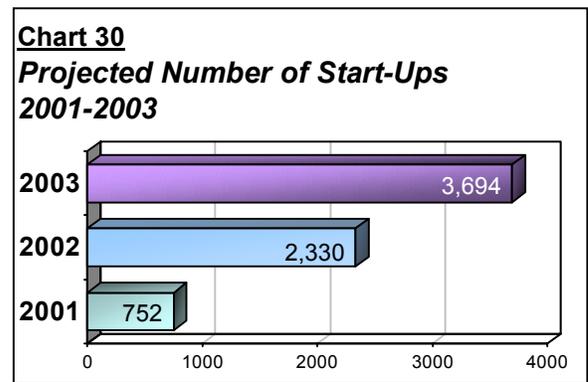
Using this mean number of new jobs created to replace missing data, we can project a **total of 6,703 new jobs created for 2003**.



And, last but certainly not least, are the number of start-ups. **In 2003, WBCs reported 3,578 start-up firms** for their clients. This is an **average of 58 per Center in 2003**, compared to 29 in 2001, representing a **376 percent increase**.



Once again taking advantage of mean imputation, we can project that the number of firms started in 2003 for WBC clients was slightly larger than reported with a total of 3,694 start-ups.



Given the great amount of data that has been discussed and displayed in this section, we prepared a summary table of the impacts from 2001 to 2003 using actual reported data to conclude this section of the Results chapter.

TABLE 2
Summary of Impacts 2001 and 2003

Impacts	2001	2003	Percent Change
Clients	47,425	90,412	91%
Gross Receipts	\$31.5 million	\$293.1 million	824%
Profits	\$4.4 million	\$26.0 million	490%
Losses	\$726,702	\$5.7 million	691%
New Jobs	1,118	6,493	481%
Start-ups	752	3,578	376%

— **Economic Context** —

In the previous section we discussed the activities and outcomes of the Centers. However, the Centers do not exist within a vacuum. They are situated within an economic context which influences the client base as well as the level of success the Centers may attain. In our analyses, we were particularly concerned with geographic location – primarily whether the Center was located in an urban or non-urban environment; organizational structures – are Centers configured as individual, autonomous organizations or integrated within larger organizations; how long Centers have been in operation; availability of other business assistance services – are Centers located where Small Business Development Centers (SBDCs) and Procurement Technical Assistance Centers (PTACs) are also operating; and, finally, the size of the population and level of poverty of Center locations.

In general, we found that the economic context is important in determining certain outcomes. However, not all of these environmental influences are as predictive as others, nor does a consistent trend emerge across factors. For example, we found that a large city location, regardless of poverty level, will yield higher numbers of clients and

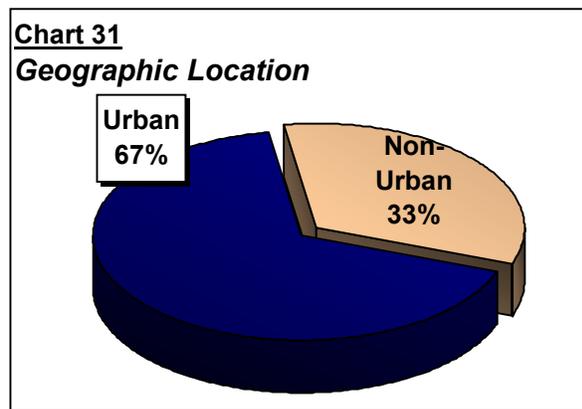
activities compared to small towns. This finding seems intuitive. On the other hand, however, we were unable to note any effect on outcomes based on whether other nationally-recognized business assistance services were offered within the same geographical space. The details of these analyses on the influence of economic context on activities and impacts follow.

Impact by Location

Approximately **two-thirds of the WBCs are located in urban environments** based on 2000 Census data.

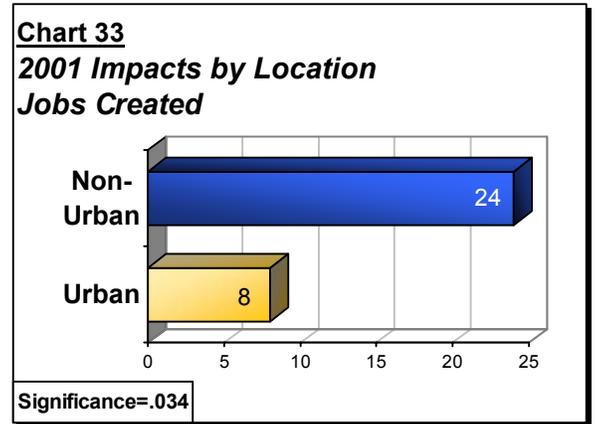
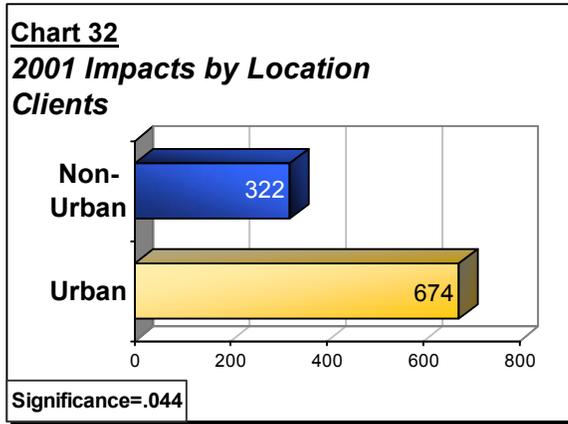
The other one-third are located in rural, suburban or micropolitan environments⁶ and are aggregated and represented as non-urban Centers⁷.

To determine whether or not geographic location is an important factor in outcomes, a series of statistical tests were conducted. In 2001, both number of clients and number of new jobs were statistically significant at the .05 level. As the following two graphs illustrate, an **urban location counseled or trained significantly more clients than did non-urban centers** (an average of 674 compared to an average of 322), while a **non-urban location produced more new jobs than did urban centers** (an average of 24 compared to an average of 8). The finding for significantly more new jobs in a non-urban environment is somewhat counter-intuitive. The data appear to reflect, however, two Centers with manufacturing start-ups in 2001 which may account for this finding.

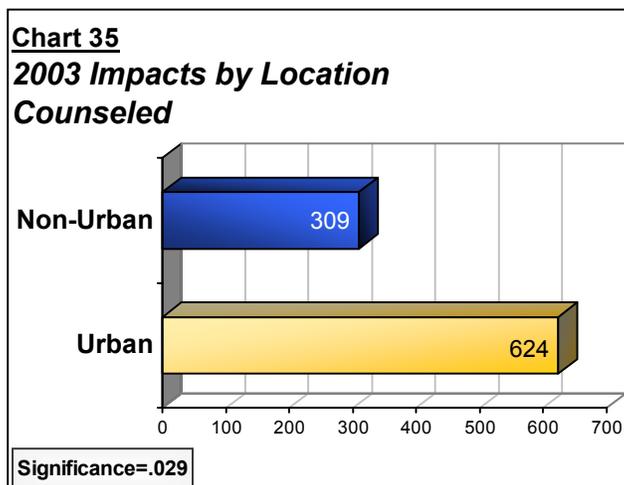
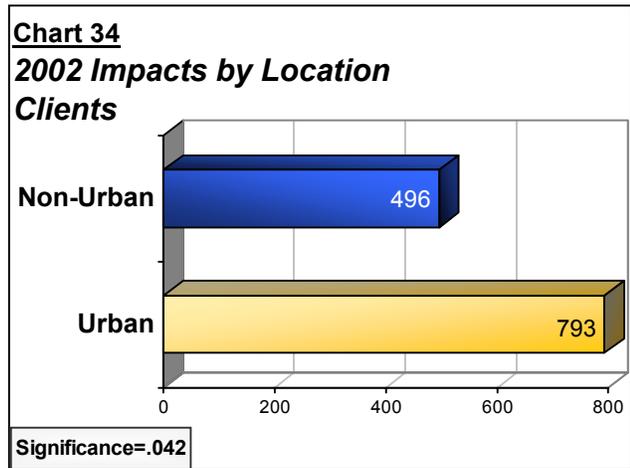


⁶ Most of the non-urban Centers are located in suburban or micropolitan areas.

⁷ This was necessary for statistical testing because the number of centers which fell into the various non-urban categories was too small.



In 2002, the number of clients was found to be statistically significant based on geographic location. The **average number of clients for an urban Center was 793 compared to an average of 496 for non-urban Centers.**

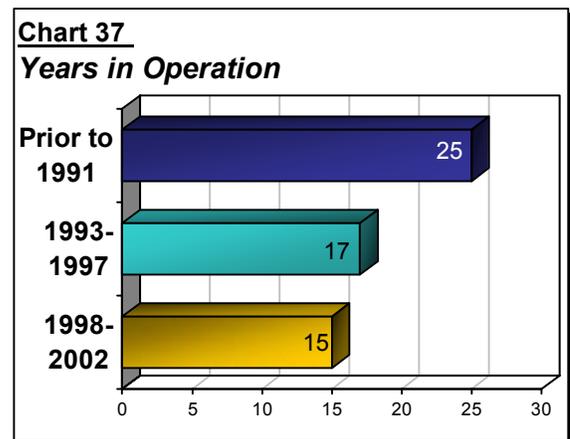
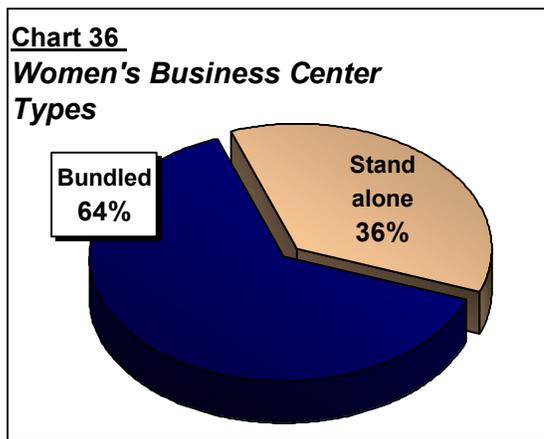


In 2003 the only outcome predicted by geographic location was number of counseling clients. **Urban Centers provided the greatest average number of counseling clients (624) compared to non-urban Centers (309).**

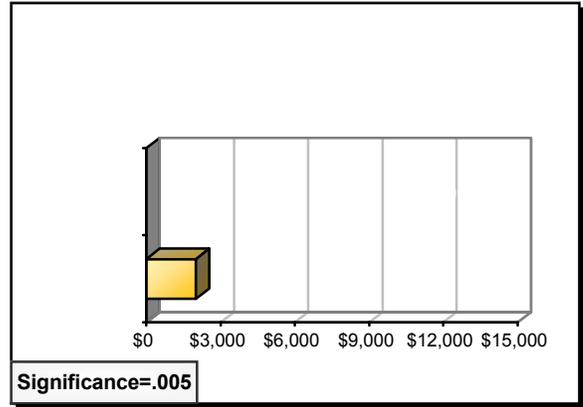
Impact by Center Structure

A search of web sites for each of the WBCs provided information to classify most Centers as to whether the Center was a stand-alone operation or bundled - worked within a larger structure, such as an economic or community development organization, chambers of commerce, etc. Additionally, we were able to determine the year the Center (or its host organization) began operations for approximately two-thirds of the WBCs.

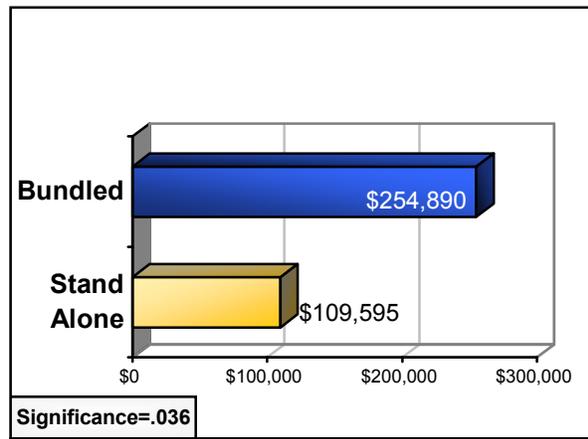
Roughly two-thirds of the Centers are housed or co-located (bundled) with other organizations. This finding, however, may be more an artifact of the SBA/OWBO funding guidelines than a specific strategy or purposeful choice. It should be noted here that **years in operation was highly correlated with structure type** – the older the Center, the more likely it was to be bundled within another structure.



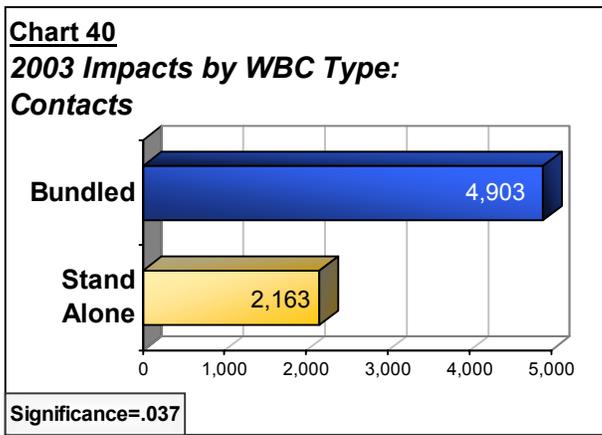
To determine whether or not the structure of a WBC is an important factor in outcomes, a series of statistical tests were conducted for stand-alone or bundled type. In 2001, **higher losses** (average \$13,900 versus \$2,000) were statistically significant for **bundled Centers**.



In 2002, however, **bundled Centers had far greater profits** (average \$254,890 versus \$109,595) reported.



And, in 2003, only the **number of contacts was significantly greater for bundled Centers** than stand-alone Centers (average 4,903 versus 2,163).

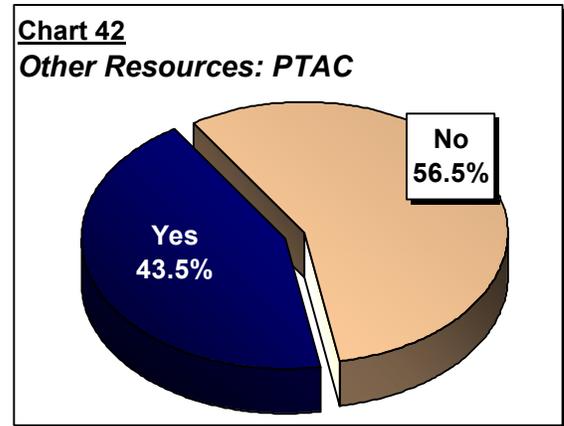
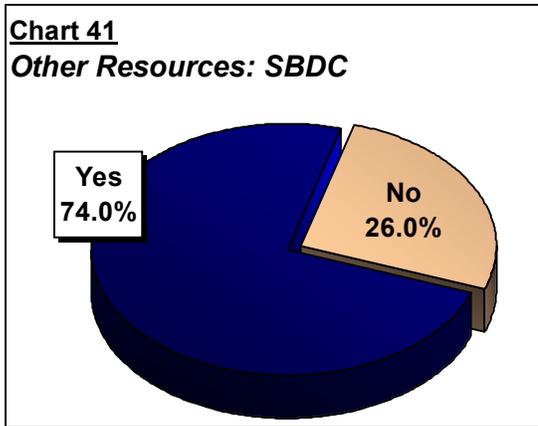


While the number of clients trained in stand-alone Centers versus bundled (average 785 versus 770) in 2003 was statistically significant, a difference of 15 per Center does not appear to be a substantive difference.

When we looked at years in operation and impacts, we found no statistically significant correlations. This may, however, be an artifact of the data since we were able to determine the year started for approximately two-thirds of the centers.

Impact by Other Services

We investigated whether or not the availability of other types of national business assistance services, such as SBDCs and PTACs within the same geographic space as a WBC impacted outcomes. We found that nearly **75 percent of WBCs are located in areas that also have an SBDC**, and **43 percent of WBCs also have a PTAC** located in their area. There were **no statistically significant differences in outcomes** based on whether or not a location had either an SBDC, PTAC or both. Thus, it appears that the WBCs are serving a need and a population that would not otherwise be served by an SBDC or PTAC.



Impact by Population and Poverty

The external factors that can influence a Center's success is more complex than just being in an urban or non-urban location, having other services available, or how the Center is structured. There are macro-level influences that set boundaries, often unseen, that can be powerful. We believe that population size and poverty level are two major factors to

consider. In other words, a WBC located in Brooklyn, New York (a large city with a high concentration of poverty) will face different obstacles and challenges than a WBC located in Taneytown, Maryland (a small town with a low poverty rate). These obstacles and challenges may, in turn, create barriers to success for women trying to start and grow businesses as well as for the WBCs attempting to assist in this economic growth.

To investigate the plausibility of influence on outcomes and activities based on population and poverty, we categorized each Center according to size (small, medium, and large⁸) and poverty rate (less than 10 percent and 10 percent or greater). We then grouped the Centers into six homogenous groups as shown in the following table.

TABLE 3
Matching Groups
Population & Poverty Rate

Group 1	18.9%	Small community, low poverty rate
Group 2	25.6%	Small community, high poverty rate
Group 3	13.3%	Medium community, low poverty rate
Group 4	14.4%	Medium community, high poverty rate
Group 5	6.7%	Large community, low poverty rate
Group 6	21.1%	Large community, high poverty rate

Using analysis of variance (ANOVAs), we investigated which groups differed on each of the activities and outcomes for each year in the study. Quite surprisingly, we found statistically significant differences in only two measures – number of clients in total and number of counseling clients – in the three years. Poverty appears to be a secondary influence, while population size appears to be a predictor.

⁸ Small communities equal those with a population up to and including 123,976 people. Medium communities were between 123,977 and 478,434; and large communities were those with more than 478,435 people.

As the following table reveals, in 2001 small communities with poverty greater than ten percent had significantly fewer clients compared to large communities with a poverty rate of less than ten percent – a mean of 270 compared to a mean of 1,074 respectively. In 2002 and 2003, the number of counseling clients also differed between small and large communities, with smaller communities seeing fewer clients.

What is perhaps more intriguing is that we did not find more activities and impacts to be statistically significant based on population size and poverty level. This could be an artifact of the way in which we grouped the WBCs, the correlation of population size with urban location, or the factors themselves.

TABLE 4
Impact by Population & Poverty

Year/Impact	Population Size & Poverty Rate	Significance	Mean
2001 Clients	Small / high vs. Large / low	(.036)	270 1,074
2002 Counseled	Small / high vs. Large / low	(.004)	218 648
	Small / low vs. Large / high	(.029)	260 648
2003 Counseled	Small / high vs. Large / high	(.002)	247 1,003
	Small / low vs. Large / high	(.029)	333 1,003

— Success Factors —

Thus far we have discussed WBCs in the aggregate, looking at total and average activities and impacts, demographics, and other factors which may influence economic outcomes. What we have discovered is that there does not appear to be one model of success – for instance, urban

Centers counsel more clients, but non-urban Centers create more jobs. To this point, we have not ascertained which Centers are more successful in generating specific economic impacts. Therefore, to determine which WBCs were the most successful in terms of reaching outcomes over time, i.e., from 2001 to 2003, we utilized the five outcomes: clients, gross receipts, profits, new jobs, and start ups and viewed the WBCs at the individual-Center level. We employed mean imputation for missing data for the outcome variables. There are a total of 78 Centers which, from the database, appear to have been in operation in both 2001 and 2003.

Viewing the outcomes separately, from 2001 to 2003, there are:

- **63 WBCs which show growth in number of clients (81%)**
- **59 WBCs which show growth in profits (76%)**
- **55 WBCs which show growth in gross receipts (71%)**
- **54 WBCs which show growth in new jobs (69%)**
- **42 WBCs which show growth in start ups (54%)**

Combining outcomes, there are **21 WBCs which have growth in all five outcomes** from 2001 to 2003. In addition, there are a total of **38 Centers which have growth in at least four of the five outcomes**. The following four tables display the Center (alphabetically), the number of outcomes showing growth, and the applicable growth (difference between 2001 and 2003) numbers for each outcome.

TABLE 5
Centers Attaining Growth in 5 of 5 Outcomes

C	Increase from 2001 to 2003 in:					
	No. Growth Outcomes	Clients	Gross Receipts(\$)	Profits (\$)	New Jobs	Start-Ups
BALTIMORE, MD	5	3,210	1,908,990	693,696	192	26
BISMARCK, ND	5	416	3,516,705	249,536	161	8
BOSTON, MA	5	289	38,624,429	249,536	316	163
DURHAM, NC	5	681	3,516,705	249,536	62	32
EL PASO, TX	5	1,114	3,516,705	249,536	62	29
FAYETTEVILLE, NC	5	601	4,628,276	340,607	101	49
GRAND RAPIDS, MI	5	530	850,740	298,287	19	37
HELENA, MT	5	1,470	758,429	252,554	40	23
KANSAS CITY, MO	5	250	2,227,818	258,679	97	17
LARAMIE, WY	5	354	2,058,769	720,499	53	10
MANHATTAN, NY	5	229	2,268,499	249,536	136	151
MILWAUKEE, WI	5	913	9,508,429	1,028,929	331	13
OAKLAND, CA	5	812	848,244	942,986	10	17
PINE BLUFF, AR	5	493	1,069,088	111,133	82	5
COLORADO SPRINGS, CO	5	595	3,516,705	420,590	65	39
QUEENS, NY	5	1,026	3,516,705	249,536	62	29
SALT LAKE CITY, UT	5	395	3,516,705	230,703	75	29
SEATTLE, WA	5	1,206	32,612,013	1,242,802	99	22
ST. PAUL, MN	5	709	4,433,912	854,079	91	89
STAMFORD, CT	5	351	3,516,705	249,536	62	29
WORCESTER, MA	5	402	21,285,429	249,536	176	88

TABLE 6
Centers Attaining Growth in 4 of 5 Outcomes

Center	Increase from 2001 to 2003 in:					
	N O	C	Gross Receipts(\$)	Profits (\$)	New Jobs	Start- Ups
ALBUQUERQUE, NM	4	553	1,285,480	-12,592	5	6
ANN ARBOR, MI	4	941	39,988,429	3,549,929	-11	386
AUSTIN, TX	4	-1,131	3,516,705	249,536	62	29
BOISE, ID	4	294	5,062,500	622,500	-16	57
CHATTANOOGA, TN	4	512	3,516,705	249,536	587	-5
DENVER, CO	4	1,213	-619,791	87,349	689	308
FORT BRAGG, CA	4	279	-394,055	13,936	22	6
FORT WORTH, TX	4	3,022	1,087,479	-473,295	62	41
BRIDGEPORT, CT	4	11	-65,000	980,000	112	38
KILLEEN, TX	4	-585	3,516,705	249,536	62	29
LAS CRUCES, NM	4	-85	4,464,276	402,607	19	52
MADISON, WI	4	522	688,429	113,929	19	-10
NASHVILLE, TN	4	-466	20,341,000	714,994	463	160
PHILADELPHIA, PA	4	9	1,566,720	90,929	59	-82
PITTSBURGH, PA	4	-442	3,516,705	249,536	62	51
ST. LOUIS, MO	4	-43.5	529,005	295,084	18	14
WISCASSET, ME	4	95	3,593,350	117,583	96	-19

TABLE 7
Centers Attaining Growth in 3 of 5 Outcomes

Center	Increase from 2001 to 2003 in:					
	No. Growth Outcomes	Clients	Gross Receipts(\$)	Profits (\$)	New Jobs	Start-Ups
ANCHORAGE, AK	3	87	1,408,000	-74,371	33	-13
ATLANTA, GA	3	-294	2,259	120,154	41	-8
BIRMINGHAM, AL	3	1,589	-156,572	516,925	0	-3
CORALVILLE, IA	3	533	-242,890	54,375	17	-7
DURANT, OK	3	829	81,407	249,536	-9	-14
EDINBURG, TX	3	73	4,278,276	249,536	-78	-97
FOSSTON, MN	3	653	6,741,231	980,542	-25	-1
LONG BEACH, CA	3	-358	3,516,705	249,536	62	-11
MEDFORD, OR	3	271	339,295	-89,579	27	-6
MIDWAY, KY	3	-26	1,608,277	76,659	22	-4
NEW ORLEANS, LA	3	576	3,516,705	249,536	-8	-3
NORMAN, OK	3	650	1,386,381	249,536	-28	-22
OKLAHOMA CITY, OK	3	855	-1,021,571	-161,071	15	5
PENSACOLA, FL	3	487	3,516,705	249,536	-30	-19
PORTSMOUTH, NH	3	1,121	3,516,705	249,536	-33	-25
PROVIDENCE, RI	3	308	-491,971	-85,871	23	1
ROSWELL, NM	3	160	-276,075	23,122	21	-18
SAN FRANCISCO, CA	3	224	666,929	249,536	-25	-1
SAN JUAN, PR	3	655	-223,939	34,686	32	-13
ST. CROIX	3	-5,159	759,975	559,985	-41	2
UTICA, NY	3	850	-197,571	202,929	3	-6
WASHINGTON, DC	3	-311	3,516,705	249,536	62	-21

TABLE 8
Centers Attaining Growth in at least 1 Outcome

Cen	Incre					
	No. Out	Clients	G Receipts(\$)	Profits (\$)	Ne Jobs	Start-Ups
BROOKLYN, NY	2	-10	3,516,705	10,52,292	-17	-12
CHICAGO, IL	2	1,569	-1,571	-171,000	8	-16
DETROIT, MI	2	39	-933,023	-68,300	56	34
EVERETT, WA	2	3,809	-697,434	-168,071	-19	244
FORT WAYNE, IN	2	843	-798,276	-170,187	37	73
INDEPENDENCE, WI	2	879	12,664,721	-138,771	-7	-9
LENEXA, KS	2	-179	13,312,878	1,177,775	-21	-12
MOBILE, AL	2	1,472	9,929	-73,571	-12	-12
PAGO PAGO	2	1,764	-1,161,271	-169,382	11	-25
PHOENIX, AZ	2	972	-845,486	249,536	-35	-7
WATHILL, NE	2	793	-1,158,913	-148,422	-41	17
BRONX, NY	1	246	-163,471	-161,671	-38	-17
GREENVILLE, MS	1	898	-920,671	-122,471	-37	-23
HONOLULU, HI	1	1,108	-1,061,571	-76,071	-21	-1
SIOUX FALLS, SD	1	650	-1,076,576	-106,073	-31	-18
TANEYTOWN, MD	1	-762	-7,929,750	-399,663	-126	-37
TUCSON, AZ	1	-281	-978,571	249,536	-5	-3

To better understand the relationship between the number of clients and other impacts (gross receipts, profits, new jobs, start-ups), we used a general linear multivariate model wherein we asked whether or not from 2001 to 2003, growth in clients would predict growth in gross receipts, profits, new jobs, and start-ups. What we found is not intuitive - **growth in clients did not predict growth in gross receipts or profits.** What this may indicate, however, is that we do not have sufficient data over a sufficient length of time for this prediction equation.

At the same time, we found that growth in clients from 2001 to 2003 **does predict number of new jobs and number of new firms.** Thus, we have a finding that appears to highlight the relevance of growth in terms of more clients, and it may reflect the specific type of client served. In other words, the number of clients who are not in business who are being assisted as compared to those already in business when they become a client. When viewed from this perspective, the predictive capability of

growth in clients for number of new jobs and start-ups while not necessarily for gross receipts and profits is more understandable.

Discussion

Our study reveals that the Women's Business Center program has grown dramatically in the three years under investigation (2001-2003). We find substantial growth in the numbers of individuals being served, and also in the types of clients, businesses, services sought, activities and economic impacts. The WBCs are located throughout the United States, in both urban and non-urban environments, operate as stand-alone organizations and are bundled with other agencies.

WBCs offer services to all races/ethnic groups, and the results of our study found that the Centers are indeed reaching their target market objective of serving women of color. As noted earlier, nationally women of color account for only one in five business owners, whereas WBC women of color clients are nearly one in two. **Women of color comprise almost one-half of the women served at the Centers** and this percentage have remained fairly constant. Furthermore, there is every indication that these numbers will increase with the substantial growth in non-White clients served at many of the WBCs. The largest non-White groups are **African-Americans and Latinas – both of which have experienced growth from 2001 to 2003**. In fact, 68 percent of the WBCs reported growth in the number of non-White clients and 41 percent of the Centers at least doubled the number of women of color served.

Most clients are women who have greater than 50 percent ownership in the firm; however, the number of firms with female/male equal split ownership is also on the rise. Nationally, women cluster into service and retail businesses, and these data are no different. Approximately one-half of the women have service businesses, while another one-fifth are in retail. In fact, the distribution of women in various types of industries aligns

closely with the national data. Again similar to what we know about national trends for women in business, we found **significant growth in clients starting or operating firms in manufacturing, wholesale, construction, and financial industries**. Women are starting more non-traditional businesses. There is every reason to believe that this trend will continue.

Clients are generated by touching many more women. In 2003, WBCs reported 304,186 contacts, and we project that the total **contacts for all Centers is actually around 451,352**. It takes approximately **3.3 contacts to generate a client** for the WBCs.

The growth in the number and types of clients is but one part of the story. The amount and growth of economic impact of firms started by these clients is the other. In 2003, WBC clients reported \$293.1 million in gross receipts and we **project that the actual impact is closer to \$407 million**. Another way of thinking about this is that **every WBC client generated \$3,432 in gross receipts impact in 2003**. And, WBC clients have profitable businesses - \$26 million in profits in 2003, and we **project that the total profits are probably closer to \$39 million**. **Losses were minimal**, representing less than two percent of gross receipts in 2003.

In 2003, **6,493 new jobs** were created which equals **a new job for every 14 clients**. Of course not all WBC clients are in business when they become clients. In 2003, WBC clients started **3,578 new businesses** which equal **a new firm for every 25 clients!**

Analyses undertaken to discover the factors that contribute to success reveal statistically significant differences between urban and non-urban locations. An urban location produces a greater number of clients, and a greater number of clients counseled. However, a non-urban location produces more new jobs – at least in 2001. We also discovered that Centers bundled with other organizations had statistically significant differences with regard to losses, profits, and number of contacts in 2001, 2002, and 2003 respectively, but that stand-alone WBCs had significantly

higher number of clients trained in 2003. This finding may reflect a greater reliance on training in the stand-alone Centers.

The availability of other nationally recognized business assistance services, specifically SBDCs and PTACs, did not show any statistically significant differences in economic impacts. This lack of significance indicates there is a need for multiple business assistance service providers within the same geographic locales.

To better understand the challenges of the economic context within which WBCs operate, the Centers were matched according to population size and poverty level. Statistically significant differences were found in number of clients and number counseled by small and large population groups with both low and high poverty levels. These differences, however, did not further our understanding of the possible influence more macro-level data may actually have on the success of WBCs and their clients. Different or more defined measures may be necessary to uncover influential factors from the economic environment.

Using the major outcomes – clients, gross receipts, profits, new jobs, and start-ups – we were able to determine which WBCs were successful in all five outcomes from 2001 to 2003. We revealed **21 WBCs which have growth in all five outcomes**, and an **additional 17 WBCs which have growth in four of the five** outcomes.

Perhaps most interesting about the WBCs which are most successful in reaching and growing their economic impact is the fact that **“A Single Model” does not emerge that fits all of these Centers**. They run the gamut – from Boston, Massachusetts to Pine Bluff, Arkansas. Some are urban, others are rural; some are stand-alone Centers, others are bundled; some have been in operation many years, others are relatively new organizations; some are on the Coast, others are in the middle of the country. Said another way, WBCs appear able to attain and sustain positive economic impact by focusing on the local area. We found value in growing the number of clients a WBC has in that growth in clients from 2001 to 2003 predicted growth in new jobs and in start-ups. On the

other hand, increasing sheer numbers of clients did not predict increasing gross receipts or profits. We are left to ponder the relationship between clients' stage of business, economic impact, and time – both representing the length of time clients have been in business as well as the number of years for which available data exist.

R **ecommendations**

— **Research Data** —

As with any research endeavor, more questions arise than answers provided, and this study is no exception. The limited descriptive data provided at the Center level does not allow further investigation into factors which may account for the success of one Center and not another. In addition, the large amount of missing data complicates the reliability of the projections, even though mean imputation is a conservative approach used to handle missing data. With these facts in mind, we recommend the following steps to improve future analysis of the economic impact of Women's Business Center program:

- Strongly encourage each WBC to provide all data requested.
- Determine if individual-level data are being captured at the WBC, and if so, extract it to be used at a national level, masking identifiers if necessary.
- ┘ Look at additional variables to better understand success. For example, what specific programs or services create a pathway that is successful for individual clients, and which pathways are most successful for WBCs?
- Additional data which would be important to capture include: categories of wages for jobs (quality of jobs), years in business, self-employed, number of employees, what propelled them into a WBC (motivation), what kinds of benefits does the business provide for the owner and employees, education attained, debt or equity investments,

use of technology in the firm, and social networks/social capital influences.

By providing better quality data and data from varying levels (Center, individual), future research will be able to discern the factors leading to success thereby improving the likelihood of success for all WBCs.

————— **Policy** —————

Specific policy recommendations include:

- Continue to educate policymakers and economic development professionals on the viability of entrepreneurship, in all its myriad forms, as an economic development strategy.
- Invest in programs which show results. This investment needs to include funding for ongoing operations as well as generating new programs and services. Centers which have been operating for a number of years have learned a great deal about their communities and what works. Their continuation should be ensured.
- Invest in research to create and/or implement appropriate evaluation tools. Assisting Center directors to track and monitor their activities and impacts in a coordinated and valid manner will ensure actionable knowledge at the Center level and nationally.
- Support the coordination of Federal agencies to provide a blended funding stream to WBCs. A coherent strategy for funding and providing other resources across all federal agencies would provide both flexibility and stability for business assistance services, resulting in even greater economic impact across the country.

S **Study Methodology**

— Analysis Plan —

In order to answer the research questions set forth for this study, we developed an analysis plan to guide our work. This plan included the following questions:

1. What are the total gross receipts for all centers for each year?
2. What are the total profits for all centers for each year?
3. What is the total number of start up for all centers for each year?
4. What is the total number of jobs created for all centers for each year?
5. How many clients were seen by all centers for each year?
6. How many contacts were made by all centers for each year?
7. How many clients were trained by all centers for each year?
8. How many clients were counseled by all centers for each year?
9. How many clients were served by all centers in each ethnic category for each year?
10. How many female owned businesses were served by all centers for each year?
11. How many clients were in each business category (construction, manufacturing, etc.) for all centers for each year?
12. What are the averages (gross receipts, profits, losses, new jobs, start-ups) for centers?
13. What are the averages (clients, contacts, counseled, trained, etc.) for centers?
14. Is there a relationship between how long a center has been in operation (regardless of SBA funding) and;
 - Number of clients
 - Number of contacts
 - Number of clients trained
 - Number of clients counseled
 - Gross Receipts
 - Profits
 - Losses

- Jobs Created
- Start Ups

15. Is there a relationship between center structure (bundled/stand-alone) and:

- Number of clients
- Number of contacts
- Number of clients trained
- Number of clients counseled
- Gross Receipts
- Profits
- Losses
- Jobs Created
- Start Ups

16. Is there a relationship between whether there are other resources (SBDC, PTAC) in the area and:

- Number of clients
- Number of contacts
- Number of clients trained
- Number of clients counseled
- Gross Receipts
- Profits
- Losses
- Jobs Created
- Start Ups

17. Is there a relationship between population and:

- Number of clients
- Number of contacts
- Number of clients trained
- Number of clients counseled
- Gross Receipts
- Profits
- Losses
- Jobs Created
- Start Ups

18. Is there a relationship between location type (urban, non-urban) and:

- Number of clients
- Number of contacts
- Number of clients trained
- Number of clients counseled

- Gross Receipts
- Profits
- Losses
- Jobs Created
- Start Ups

19. Is there a relationship between poverty level and:

- Number of clients
- Number of contacts
- Number of clients trained
- Number of clients counseled
- Gross Receipts
- Profits
- Losses
- Jobs Created
- Start Ups

20. Which centers are highly successful in terms of growth in gross receipts, profits, new jobs, and/or start-ups?

21. Which centers have shown growth in serving minorities (women of color) over the years?

Data for each WBC for the years 2001, 2002, and 2003 were provided by the Office of Women's Business Ownership (OWBO). The data are aggregated totals for each center and included the following variables:

<i>Total Clients</i>	<i>Business Type</i>
<i>Total Contacts</i>	<i>Online Business</i>
<i>Race</i>	<i>Total Clients Counseled</i>
<i>Ethnicity</i>	<i>Total Clients Trained</i>
<i>Gender (Ownership)</i>	<i>Gross Receipts</i>
<i>Veteran</i>	<i>Profits</i>
<i>Disability</i>	<i>Losses</i>
<i>SBA Clients</i>	<i>Jobs Created</i>
<i>Home Based Business</i>	<i>Start-ups Formed</i>
<i>TANF</i>	

In addition to these data, we searched each WBC web site for two factors: 1) the year operations began, regardless of first OWBO funding year; and 2) whether the center was a stand-alone entity or was bundled with other agencies, such as an Economic Development Council, Community Development Council, or Chamber of Commerce.

In order to understand the context within which each WBC functions, several other variables were collected from external sources. These include 1) the existence of an SBDC and/or PTAC office; 2) population numbers, race and ethnicity from the 2000 Census; 3) poverty level of the location; and, 4) official designation as metropolitan, rural, suburban, or micropolitan.

An Access Database was created to house all the data for each center. Appropriate WBC identifiers were attached to each center in order to match data from year to year. In a few instances where centers have satellite operations or offices, data were aggregated into the main center if necessary. There were a total of 92 WBCs in 2003. Data availability by year and by variable differed by Center. Therefore, in some analyses undertaken, we used mean imputation for activities and outcomes (training, counseling, gross receipts, profits, losses, new jobs, and start-ups). This conservative technique⁹ allows us to handle missing data while not dramatically over- or under-estimating effects.

⁹ While it is never desirable to have missing data, the reality of research is that missing data always exist and, as researchers, we must have viable techniques to account for these holes in our data which provide us with the most robust analysis. There are numerous ways in which to handle the types of missing data we incurred in this study. Some techniques are quite complex, e.g., using regression coefficients; while others are quite simple, e.g., SPSS has an automatic missing data technique. Mean imputation (or mean substitution) is one of the most conservative approaches. Given the wide range of outcome data for the centers, we believe that mean imputation is easily justified and does not over-estimate the impact.

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