Review of Business Owner Demographics in the North Central Region

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Summary

This report presents an analysis of the demographic profile of 1,287 small-business owners using data from the NCR-Stat: Small Business Survey (collected from December 2023 to March 2024), conducted in the 12 states of the North Central Region by the North Central Regional Center for Rural Development. The survey is representative at the regional level based on business owner demographics such as race, ethnicity, gender, location (rural/urban), and veteran status. In addition to information on the demographic variables, this report presents a broader range of business owner characteristics such as education levels, workforce participation, income earned from businesses, and marital status of respondents to illustrate the profile of the business owners surveyed. After the initial analysis of all variables, some cross-sectional analysis delves into distributions and tendencies across categories. For example, it was found that a higher proportion of women had bachelor's degrees than men. Overall, the findings of this report offer a comprehensive overview of the makeup of the sample of small business owners in the North Central Region surveyed.

Introduction

The motivation behind this report was twofold: to provide users of survey data with essential demographic information about survey respondents and to enhance subsequent research. By offering a clearer understanding of the survey population, this data enables researchers to conduct more informed and accurate analyses of later hypotheses. Additionally, the NCR-Stat: Small Business Survey[1] data can serve as a valuable resource for small businesses, policymakers, community leaders, and others, facilitating data-driven decision-making. The inclusion of demographic insights allows these users to identify trends and patterns more easily within the survey data.

Data & Methods

The survey was administered using a Qualtrics platform. Then, to analyze the demographic variables of the survey, the results were imported into both Stata and Microsoft Excel to generate statistical information and create figures. Computations, including tabulations and descriptive statistics, were completed to understand the composition of the dataset and its variables. Forced responses were applied, therefore options such as "not applicable" or "I refuse to answer" were included to provide respondents the option to not disclose certain information. Occasionally,

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[1] Wiatt, R. D.; Marshall, M. I.; Wilcox Jr, M. D.; Bednarikova, Z.; Adams, N.; Katare, B. (2024). NCR-Stat: Small Business Survey. Purdue University Research Repository. doi:10.4231/6VG5-5386.

these responses were omitted from the analysis of variables to provide a clearer picture of trends and results of the survey. To obtain survey responses that achieve representativeness at the regional level, specific categories had targeted quotas. These categories were location (rural versus urban), gender, race, ethnicity, and veteran status.

Results

Household Location:

The survey asked respondents to describe the location of their households and businesses, beginning by identifying the state in which they reside. The North Central Region comprises 12 states: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The number of survey responses per state ranged from 102-110 responses, providing data that drew almost equally from each state in the region, as intended (Figure 1).

Figure 1. Number of responses by state in the North Central Region. (*N*=1,287)
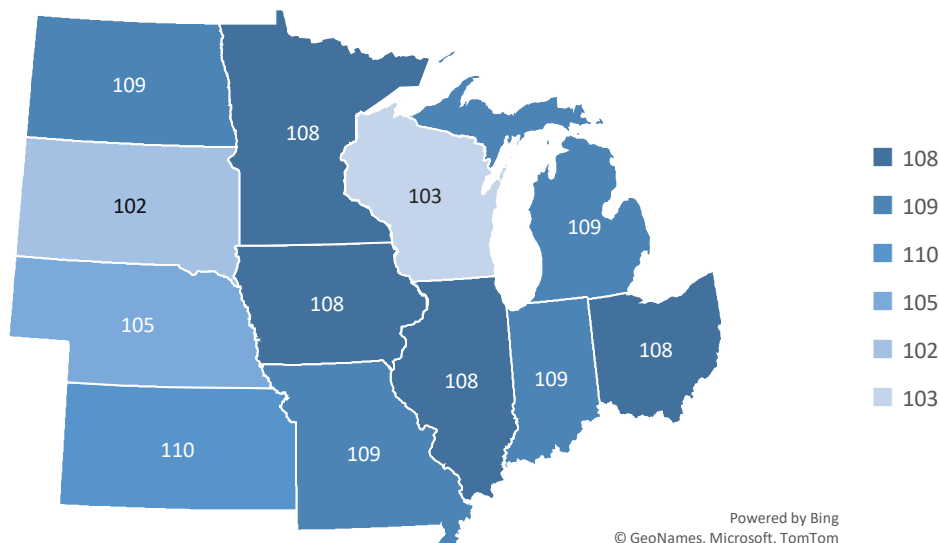
Source: NCR-Stat: Small Business Survey (Question SCR3)

Respondents provided information on the locations of their households and businesses. The location of small business owner households was determined in two ways: using population ranges and self-reported descriptions of their residential locations. Regarding objective specification, 331 (25.7%) respondents described their household location as an urban area of 100,000+ people, and 314 (24.4%) described their household location as a rural area or countryside (Figure 2). These are the two most common responses, while the least common, with 102 (7.9%) responses, was a town of less than 2,500.

Figure 2. Distribution of respondents by their household location. (N=1,287)
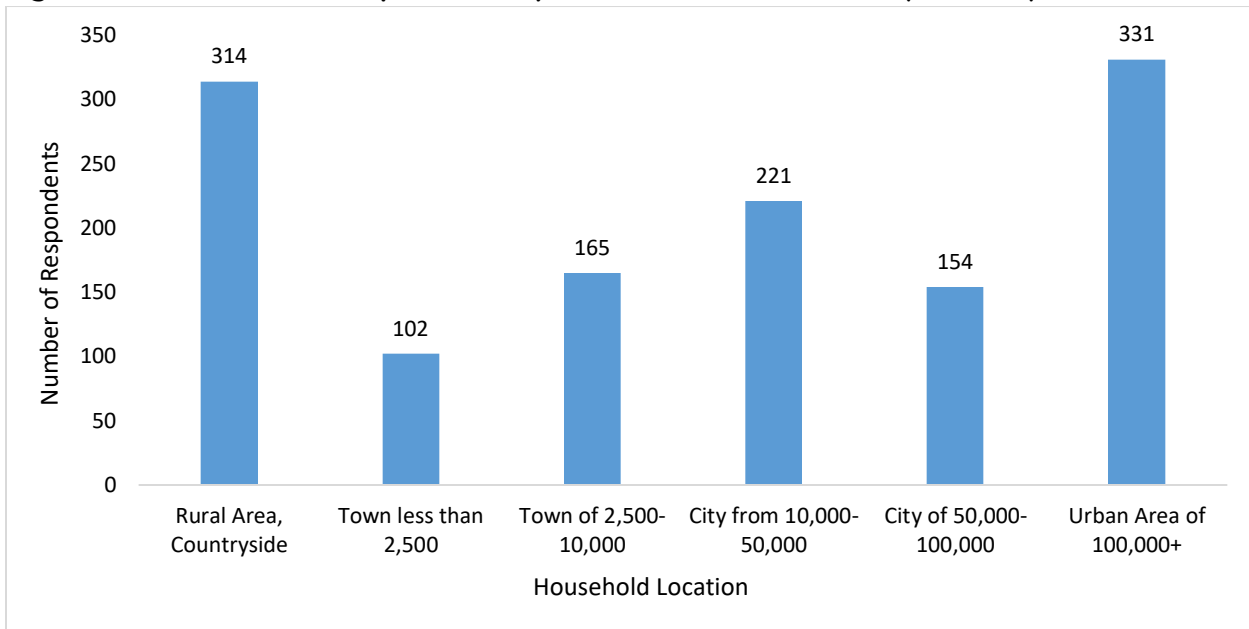
Source: NCR-Stat: Small Business Survey (Question SCR9)

When asked to self-describe residential location in terms of urban, suburban, or rural[2], a comparable number of respondents replied with each location. This category was predetermined to reflect a specific quota of responses per category.

Figure 3: Business owner perception of their household residential location. (*N*=1,287)
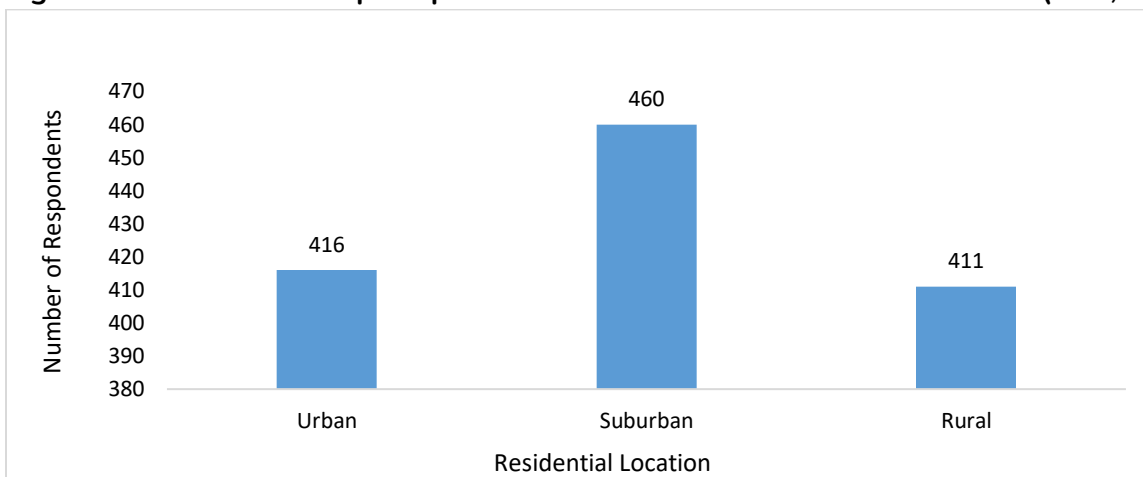
Source: NCR-Stat: Small Business Survey (Question SCR10)

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[2] The survey descriptions for urban, suburban, and rural residential locations are as follows. Urban: urbanized area- city or town, metropolitan area; suburban: outskirts of city or town, outlying area economically tied to an urban area, within commuting distance Rural: open and/or sparsely populated countryside, not within commuting distance to urban or suburban areas.

As designed, the three areas were represented by a similar number of responses, with urban as the largest percentage of the sample (*n*=460, 35.7%).

The greatest variability in rural, suburban, and urban residential locations appears in towns of 2,500-10,000 people and cities of population 10,000-50,0000, which is logical considering that towns of about this size may have great variability in population densities. As expected, very few urban dwellers (urban area of 100,000+) described their household location as a rural area or countryside and vice versa. This comparison may be useful to researchers wishing to choose a single definition for the household location of survey respondents. While both definitions seek to provide insights as to the rural or urban nature of respondents' location, the perception definition spans population sizes, especially in terms of suburban and urban.

Business Location:

The distribution of the locations in which respondents run a business is somewhat consistent with household residence (Table 1) with 492 respondents (38.3%) identifying their business location as urban, 431 respondents (33.6%) as suburban, and 361 (28.1%) as rural. Most business owners live in the same type of area as they work, including 91.1% of rural business owners, 78.9% of suburban, and 81.2% of urban. However, it is noteworthy that 17% of suburbanites located their business in a rural area, and 18.8% of urban dwellers located their business in non-urban areas.

Table 1: Combination of business location by household residential location. (*N*=1,284)

	Rural Business (*n*=361)	Suburban Business (*n*=431)	Urban Business (*n*=492)	Sample Size (*N*=1284)
Rural Residence	91.1%	6.7%	2.2%	415
Suburban Residence	17.0%	78.9%	4.1%	459
Urban Residence	8.8%	10.0%	81.2%	410

Source: NCR-Stat: Small Business Survey (Questions SCR10 and BIZ16)

Age:

The ages of small business owner respondents ranged from 18 to 99 years of age (Figure 5). The average survey respondent age was 48 years old; the standard deviation was 13, and the median age was 46. The largest proportion of respondents was aged between 40 and 50 years old (*n*=352, 27.6%). Very few respondents (*n*=8, 0.7%) were younger than 20 or older than 80.

**Figure 4: Distribution of age in groups of 10-year increments. (*N*=1,274)**
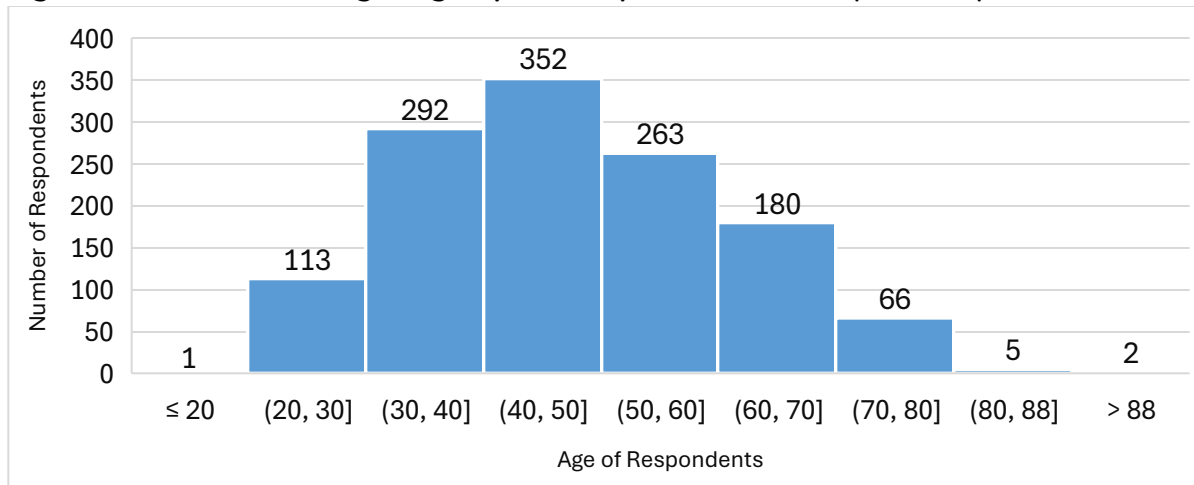
Source: NCR-Stat: Small Business Survey (Question OWN2)

Gender Identity:

Respondents were prompted to identify their gender with one of the following options: male, female, non-binary or non-conforming, transgender, or refusing to answer (Figure 6). The majority of respondents identified as male (748, 58.1%) or as female (529, 41.1%). Additionally, 7 (0.5%) respondents identified as non-binary or non-conforming and 3 (0.2%) as transgender. Although the average age of men and women were similar, 49 and 47 years old, respectively, the average age of nonbinary respondents was comparatively younger at 31 years old.

Figure 5: Gender identity of survey respondents. (*N*=1,287)
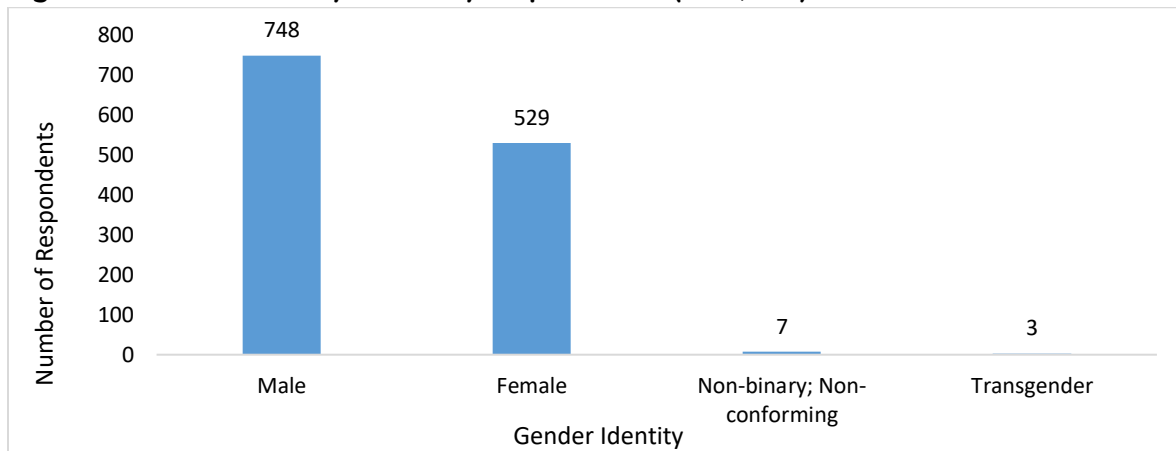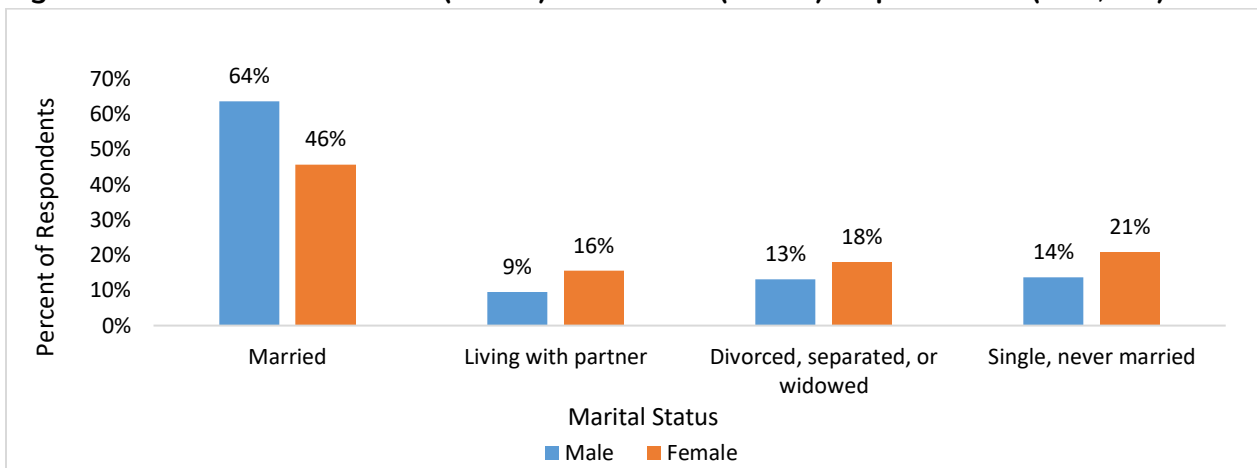

Source: NCR-Stat: Small Business Survey (Question SCR5)

Additionally, the marital status of respondents was recorded (Figure 7). Among the 1,287 respondents, 56% (*n*=718) were married, 17% (*n*=215) were single and never married, 15% (*n*=197) were divorced, separated, or widowed, and 12% (*n*=157) lived with a partner. The

percentage of married male respondents was notably greater than female respondents, while the opposite trend was seen in single respondents. Regarding same-sex partners, 76 (5.9%) of small business owners reported being in same-sex marriages, with 5.2% (n=39) of married men and 7% (n=37) of married women having a spouse of the same gender as them. Furthermore, 33.0% (n=237) of married respondents report joint involvement with their spouse in the day-to-day management of the business. Of this group, 67.5% (n=160) were men and 32.5% (n=77) were women.

Figure 6. Marital status of male (n=476) and female (n=242) respondents[3]. (N=1,277)
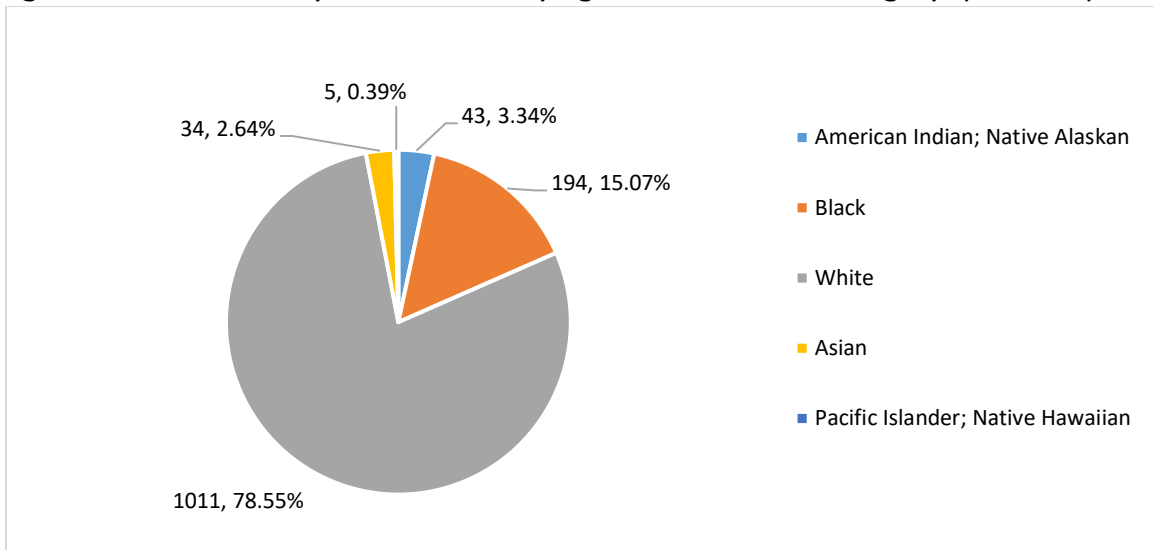

Source: NCR-Stat: Small Business Survey (Questions SCR4 and SCR5)

Race:

The race of the small business owner survey respondents was used during sampling to maintain representativeness. Respondents were asked to identify as one of the following races: American Indian or Alaska Native, Asian, Black or African American, White, or Native Hawaiian and other Pacific Islander. Consistent with intended quotas, 75% (n=1,011) of respondents identified as White, 14% (n=194) identified as Black or African American, followed by smaller percentages of respondents who identified with other races (Figure 8). The survey provided the opportunity to select two or more races in addition to a specific category or other with a textbox to provide a custom description of race. Fifty-three respondents (4.1%) selected two or more races, with 43.4% (n=23) of those also selecting White. Text responses highlight complex relationships between race and ethnicity, as some respondents self-reported their race as American or Hispanic, among other identities.

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[3] None of the seven total nonbinary respondents reported being in a marriage, though 3 reported living with a partner, 2 reported being divorced, separated, or widowed, and 2 reported being single and never married. Likewise, transgender respondents (n=3) reported either living with a partner or being divorced, separated, or widowed.

Figure 7: Percent of respondents identifying with each racial category. (*N*=1,287)

Source: NCR-Stat: Small Business Survey (Question SCR7)

Ethnicity:

Of 1,287 total respondents, 10.8% (*n*=139) identified as Hispanic when asked about their ethnicity, slightly lower than the 16% quota requested of Hispanic respondents. The majority of Hispanic respondents identified as White (59.8%, *n*=76), and 31.8% (*n*=41) identified as Black or African American (Table 2). The figure excludes categories with overlapping responses such as "other" and "two or more races".

Table 2. Ethnic makeup of survey respondents, by race. (*N*=1,287)

Race	Percent of Non-Hispanic Respondents (*N*=1,158)	Percent of Hispanic Respondents (*N*=129)
American Indian; Native Alaskan	3.3%	3.9%
Black; African American	13.2%	31.8%
White	80.7%	58.9%
Asian	2.5%	3.9%
Native Hawaiian; Pacific Islander	0.3%	1.6%
Percent of Total Sample	90.0%	10.0%

Source: NCR-Stat: Small Business Survey (Questions SCR6 and SCR7)

Education:

The Survey provides insights into educational differences among business owners. Respondents were provided eight options to describe their highest level of education. Eighty-four percent (*n*=1,087) attended some form of school after high school, and nearly 20% (*n*=257) obtained a graduate degree (Figure 9). Alternately, two respondents (0.02%) did not complete elementary school.

Figure 8. Highest level of education completed by respondents. (*N*=1,283)
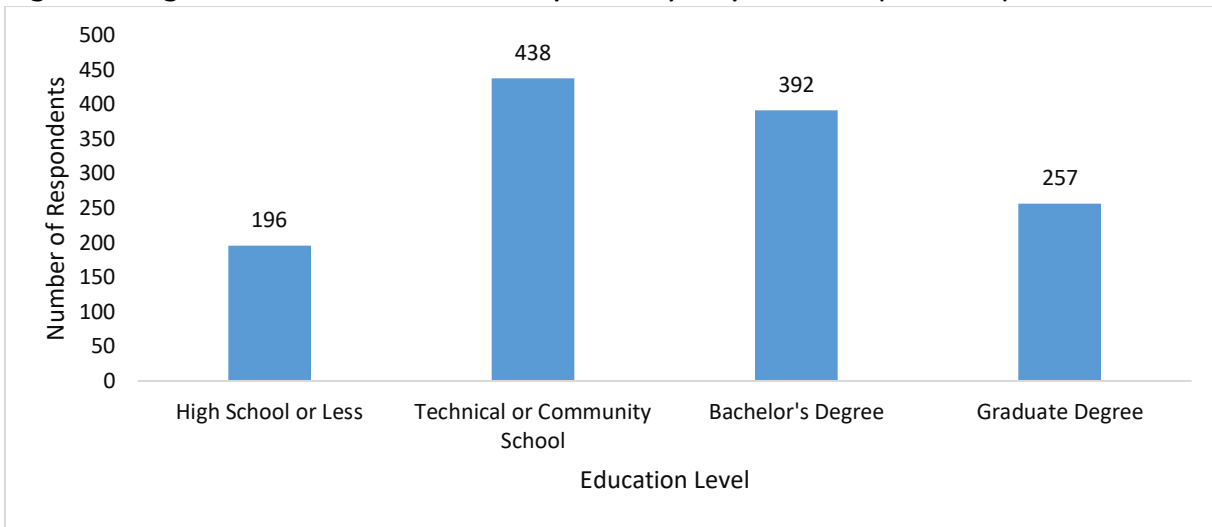
Source: NCR-Stat: Small Business Survey (Question OWN1)

Education attainment differs within categories such as race, ethnicity, and gender (Figures 10, 11, 12). For example, 44.1% (*n*=15) of the Asian respondents obtained a college degree, while 31.8% (*n*=322) of White and 20.8% (*n*=11) of respondents of two or more races completed the same level of education. This trend is also apparent in the response rates of those with graduate degrees: 35.5% (*n*=12) of Asian respondents completed graduate degrees, while respondents of no other race reported a rate of over 25% at this education level (Figure 10).

Figure 9. Proportion of Educational Attainment by Race of Survey Respondent for Three Largest Racial Groups. (*N*=1,283)
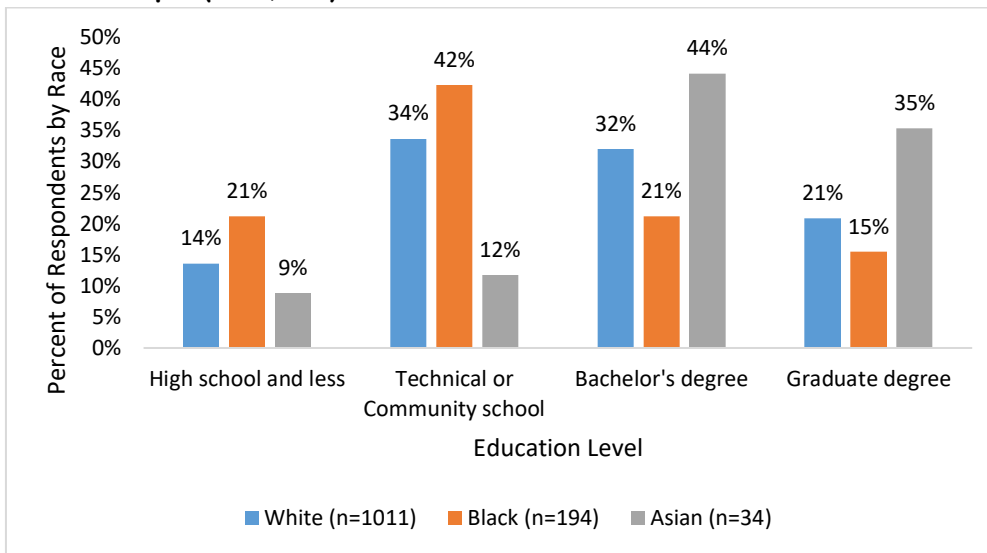
Source: NCR-Stat: Small Business Survey (OWN1, SCR7)

Differences in educational attainment were also observed by ethnic group. Although non-Hispanic respondents obtained college degrees at a greater rate than their Hispanic counterparts, Hispanic respondents had a higher rate of completion of high school (or a GED), some college or technical school, and graduate school (Figure 11).

**Figure 10. Educational Attainment by Ethnicity: Hispanic (*n*=139) or Non-Hispanic (*n*=1144). (*N*=1,283)**
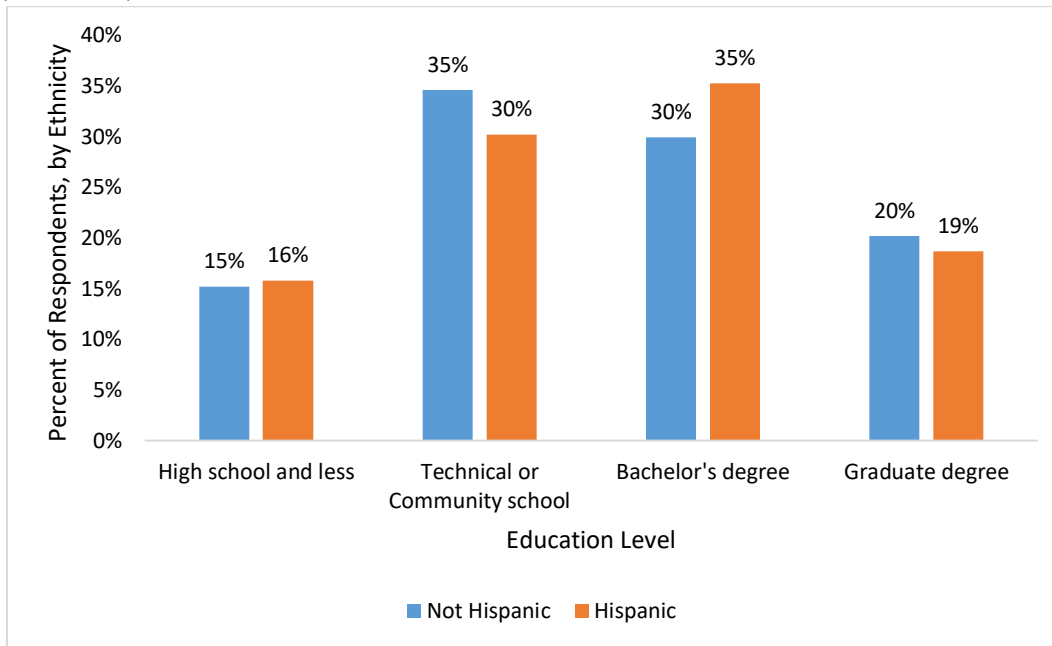
Source: NCR-Stat: Small Business Survey (Questions OWN1 and SCR6)

Educational differences were also observed between genders (Figure 12). Notably, all four respondents who identify as transgender obtained graduate degrees. Furthermore, three of seven (42.9%) non-binary respondents completed either college or a graduate degree. These results are difficult to interpret on a graph of education by gender due to the relatively small population of non-binary and transgender respondents. The most accurate method of representing differences between gender groups of different amounts is by percentage of each gender. Interestingly, a greater percentage of female respondents obtained a graduate degree than male respondents while the reverse trend was observed for those who obtained a bachelor's degree. Nationwide, 12% of women had earned an advanced degree in 2022 compared to 8% of men[4].

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[4] Hanson, Melanie, and Fact Checked. "Educational Attainment Statistics [2023]: Levels by Demographic." Education Data Initiative, 15 Oct. 2023, https://educationdata.org/education-attainment-statistics - :~:text=In 2022, 8%25 of men,compared to a bachelor's degree..

Figure 11. Educational Attainment by Gender: Male (*n*=745) or Female (*n*=528). (*N*=1,273)
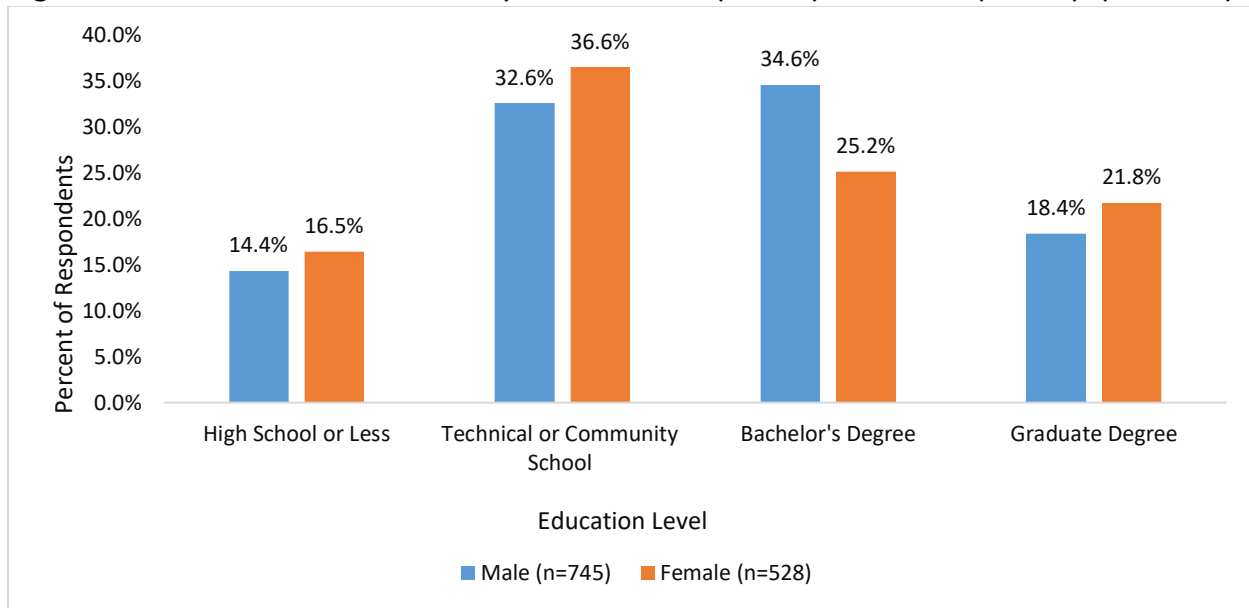
Income:

Small business owners were asked to report their 2022 salary/total payment received from [their] business based on provided income ranges (Figure 13). The most frequently reported range was $50,000-149,999, representing 23.7% (*n*=277). Few respondents reported an income of greater than $1,000,000 (*n*=14, 1.2%). It should be noted that 118 respondents (9.2%) refused to answer this question.

Figure 12: Salary/total payment received from business in 2022. (*N*=1,169)
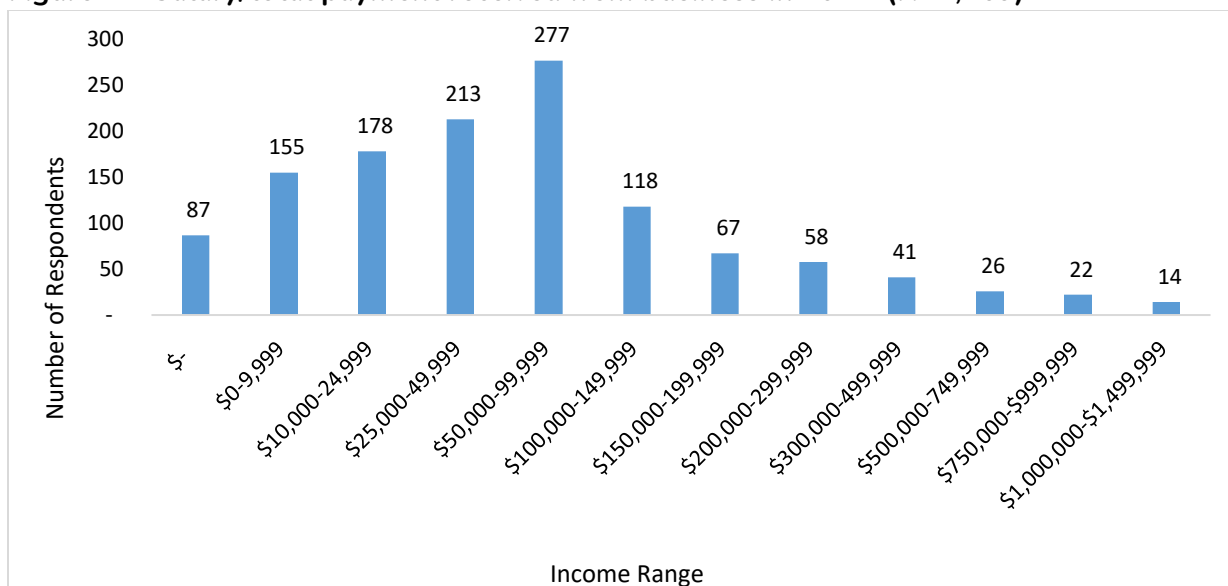
Employment Status:

Respondents were asked about their employment status and provided the opportunity to describe their time spent with their business versus outside employment. These response options were not mutually exclusive. Most respondents (n=871, 68.3%) reported being employed full-time in their business, 14.6% (n=186) are employed part-time in their business, and 9.2% (n=117) worked full-time outside of the business, and 5.1% (n=66) were not in the paid workforce (Figure 14). These categories are not mutually exclusive: 25 (1.9%) respondents reported full-time employment outside the business as well as part-time employment in the business and 16 (1.2%) reported working full-time both outside their business and in their business.

**Figure 13. Participation in the paid workforce. (N=1,287)**
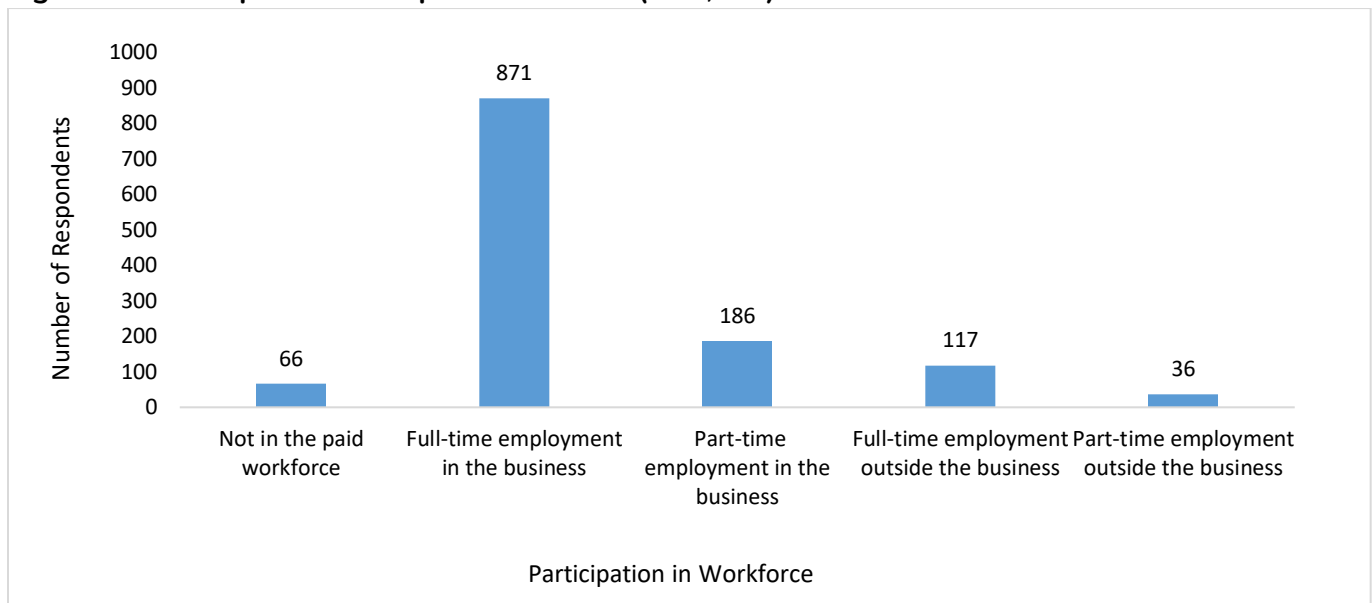
Source: NCR-Stat: Small Business Survey (OWN3)

Related to employment status, the time spent working in the business each week may be of interest to some researchers (Figure 15). Survey responses tended towards an average of 38 hours worked per week and a median time of 40 hours. The maximum time reported was 70 hours per week, of which 4.6% (n=59) reported working. The range with the greatest frequency of responses (n=313, 24.6%) was 30 to 40 hours worked. This is consistent with 2024 reports which describe the average work week for Americans as 34 hours per week[5]. Interestingly, respondents who reported full-time employment in their business reported an average of 45.6 work hours per week, which is higher than the total survey respondents' average time working.

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[5] "Average Weekly Hours of All Employees, Total Private." *FRED*, 4 Oct. 2024, fred.stlouisfed.org/series/AWHAETP.

Figure 14. Weekly hours worked by respondents for their own business, displayed in 10-hour increments. (*N*=1,273)
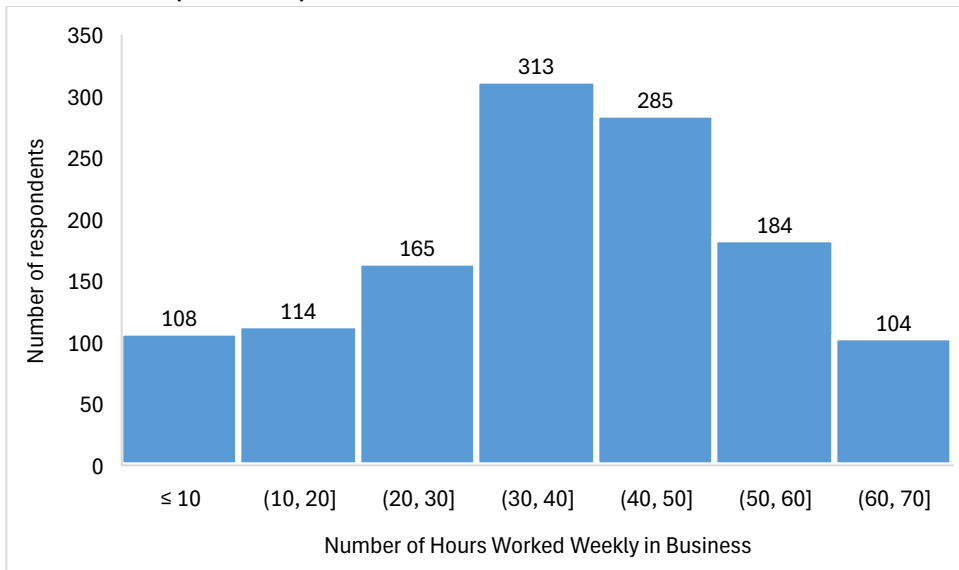
Source: NCR-Stat: Small Business Survey (OWN4)

Another important descriptor of small business owners is their veteran status. Veterans comprised 10.6% of the sample (*n*=137). Among veteran business owners in this report, the majority were men (*n*=120, 87.6%) and the average age of veteran business owners was 50 years old.

Figure 15. Gender of respondents who served in the U.S. Armed Forces. (*N*=137)
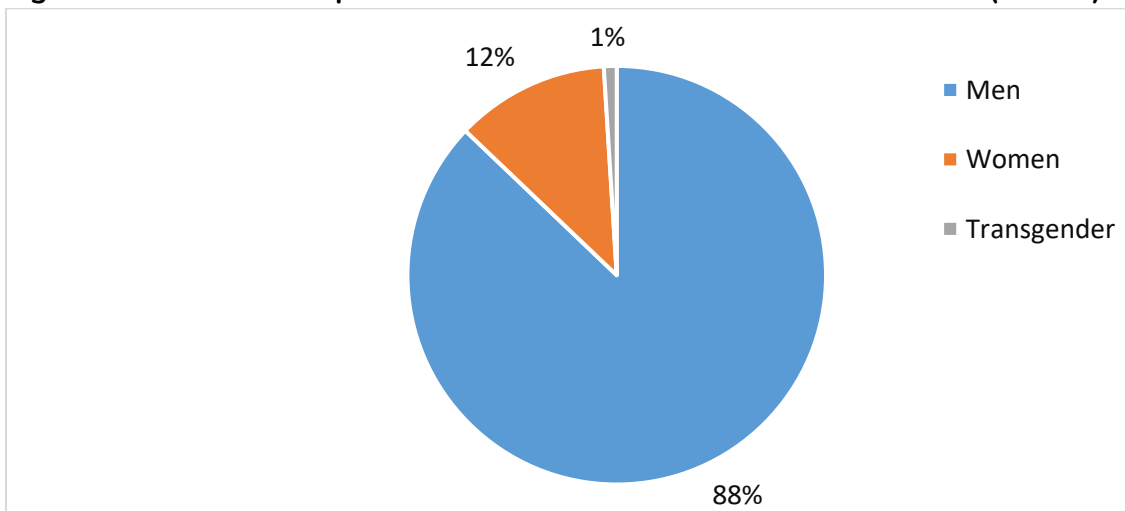
Source: NCR-Stat: Small Business Survey (SCR5, SCR8)

Conclusion

The analysis of the demographic profile of small business owners who participated in the NCR-Stat: Small Business Survey offers valuable insights into the composition and diversity of the population surveyed. The data reveals key information across various demographic categories: location, race, ethnicity, gender identity, education, and income. Several insights emerge from the demographic data. The age distribution of survey respondents shows a high concentration of respondents between the ages of 40 and 50, furthermore, 71.2% (n= 907) of the sample was between the ages of 30 and 60. The inclusivity of the survey was enhanced by allowing respondents to self-identify their race, ensuring that diverse backgrounds are accurately represented. Business location was inventoried, along with residential location, and it was found that the majority of business owners both reside and run a business in the same type of location. Next, education levels among small business owners are generally high, with a significant proportion holding at least a bachelor's degree. The inclusion of workforce participation and income data provides a further understanding of roles within businesses and highlights opportunities for studying financial success and small business viability. Furthermore, one's veteran status is an interesting characteristic to provide a more detailed look into the respondents of the Small Business Survey.

These insights provide a foundation for all those seeking to understand the demographic profile of North Central Region small business owners who participated in the 2023 NCR-Stat: Small Business Survey. Understanding the identities of survey respondents with these detailed findings enables future research in a multitude of directions. The survey data can be employed in programs, studies, and initiatives for small business, rural, and overall economic development. Understanding the demographic details of the report is essential so that further projects reflect the diverse identities of the business owners surveyed and that the survey is representative at the regional level. Furthermore, the described demographic results reflect the identities of the specific business owners surveyed, not the identities of all small business owners of the North Central region. Research derived from this data and report could benefit researchers, extension personnel, community leaders, and business owners to develop their programs in ways that support and promote small business development and advancement in the North Central Region.

Suggested citation

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FOR RURAL DEVELOPMENT
https://ncrcrd.org