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# Women in the Workplace: Part 2

Utahns' Awareness, Understanding, and Attitudes

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January 22, 2025

WHITE PAPER | No. 12

**UTAH WOMEN &  
LEADERSHIP**  
Project



UtahStateUniversity

Jon M. Huntsman School of Business • Extension

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## Utahns' Awareness, Understanding, and Attitudes

Susan R. Madsen & Deborah Lin | January 22, 2025

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### Introduction

During the fall of 2023, Utah Women & Leadership Project (UWLP) researchers conducted a statewide study to establish a baseline for public perceptions related to the awareness, understanding, and attitudes about challenges that Utah women and girls face. In early 2024, we published 20 short research summaries<sup>1</sup> that shared the results of this comprehensive study. Then, in the fall of 2024, we administered this survey, with slight changes, around the state of Utah for the second time. This is the second of six white papers to share the results of the new data.

Overall, this comprehensive study was designed to support the efforts of A Bolder Way Forward (BWF), which is a statewide initiative focused on ensuring that more Utah girls, women, and their families thrive. Each area of focus (imagine the areas as spokes on a wheel) has bold goals with data-driven metrics to measure progress. This research focuses on collecting and analyzing data to help track this progress for those goals based on potential shifts in public awareness, understanding, and/or attitudes related to each spoke. The shifts are critical for Utahns to make progress in the topic areas.

The following lists the five overarching categories within BWF and the 18 spokes included in this research:

1. **Education:** Finance, Higher Education Attainment, and K–12 Initiatives
2. **Community Engagement:** Political Representation, Boards and Commissions, and Civic Engagement/Advocacy
3. **Safety and Security:** Child Sexual Abuse, Domestic Violence, Poverty and Homelessness, Sexual Assault, and Sexual Harassment and Gender-Based Discrimination
4. **Health and Wellbeing:** Health across the Lifespan, and Home and Family
5. **Workplace:** Childcare/Pre-K Programs, Entrepreneurship, Gender Pay Gap, Leadership Development, Organizational Strategies and Workplace Culture, STEM Fields, and Workforce Development

This report covers elements of four spokes in the Workplace category: Entrepreneurship, Workforce Development, STEM Fields, and Leadership Development. The results of the three other Workplace spokes (i.e., Organizational Strategies & Workplace Culture, Childcare/Pre-Kindergarten Programs, and Gender Pay Gap), in addition to one from the “Safety & Security” spoke (i.e., Sexual Harassment & Gender-Based Discrimination), are included in the first white paper in this 2025 series titled “Women in the Workplace: Part 1 – Utahns’ Awareness, Understanding, and Attitudes.” After highlighting foundational research methods for the study as a whole, this report shares the findings of these four areas of focus and includes both the applicable quantitative and qualitative results.

### Research Methods

The primary research questions for the full research study are as follows:

1. What are the levels of awareness, understanding, and concern related to issues and challenges that Utah women and girls face?

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<sup>1</sup> Madsen, S. R. (2024, January 17). *Background & methods: Research summary*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/research-summary-backgrounds-methods.pdf>. Research summaries for the 2023 study range from No. 9 to No. 28 on this webpage: <https://www.usu.edu/uwlp/research/research-summaries>.

2. What are the attitudes of Utahns around various topics that influence the experiences of women and girls in the state?
3. What are the differences among genders and other demographic variables related to attitudes, perceptions, and understandings of a variety of related topic areas?

An 82-item survey was created based on existing literature and survey instruments, guidance from experts, and the baseline data needed by BWF leaders in each of the 18 areas of focus. In addition, 13 demographic questions were included, along with one open-ended question inviting responses regarding any thoughts, insights, or ideas respondents may have related to the challenges that Utah women and girls face. Participants responded to each item using a 7-point Likert scale (1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=neither disagree nor agree, 5=somewhat agree, 6=agree, 7=strongly agree). The survey took approximately 10–20 minutes for participants to complete. Approval from Utah State University’s Institutional Review Board was secured before distribution.

Data were collected for this research study from October 1 to November 20, 2024, and all Utahns aged 18 or older were considered potential participants. The data were collected using two samples: first, we contracted with Qualtrics to distribute and collect data to ensure we had a *representative sample* of Utahns, which we knew may not have occurred with our convenience sample. Second, the online survey instrument was also administered to a *convenience sample* (non-probability) of Utah residents representing different settings, backgrounds, and situations. A call for participants was announced through the UWLP monthly newsletter, social media platforms, and website. In addition, UWLP staff, BWF leaders and coordinators, county coalition leaders and members, and advocates/volunteers around the state helped distribute it, as did nonprofit organizations, chambers of commerce, government agencies, municipalities and counties, women’s networks and associations, multicultural groups, businesses, universities, churches, and volunteers. In addition, targeted recruitment efforts were launched throughout the state to improve representation from individuals representing a broad range of demographics and geography; the survey was provided in both English and Spanish.

The representative sample was fully completed by 1,920 Utahns (see Appendix A for a demographic overview). The convenience sample had 2,801 respondents, but not all completed the entire instrument (see Appendix B for a demographic overview). As is common with a convenience sample, it is not fully representative of the state in several respects. For example, when compared to overall state demographics, this study under-sampled people of color, individuals with less formal education, and residents in lower income ranges. With the samples combined, 4,721 Utahns participated in the research study.

In terms of data analysis, the Statistical Package for the Social Sciences (SPSS) was utilized to run statistics. These statistical tests included descriptives, frequencies, one-way ANOVAs, T tests, bivariate correlations, crosstabs, and other tests as needed. A p-value helps determine the significance of a result in relation to the null hypothesis. In this research, as is typical, the p-value  $\leq 0.05$  was used to consider statistical significance. In the sections below, an asterisk (\*) was used for the demographic variables to identify those connections that reached this level of significance. It is important to note that this white paper reports statistical means (i.e., a single number that represents the center point or typical value of the dataset) and shifts through the years, which we report with standard deviations (SD). A SD is a measure of dispersement (i.e., how much the data is spread out around the mean or average) in statistics.<sup>2</sup> Smaller SD values indicate that the data points cluster closer to the statistical mean, which signifies that the values in the dataset are relatively consistent. On the other hand, higher values mean that the values spread out further from the mean.

The study findings in this white paper are described in the following four sections:

1. Entrepreneurship
2. Workforce Development
3. STEM Fields

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<sup>2</sup> Martínez-Mesa, J., González-Chica, D. A., Bastos, J. L., Bonamigo, R. R., & Duguia, R. P. (2014). Sample size: How many participants do I need in my research? *Epidemiology and Biostatistics Applied To Dermatology*, 89(4), 609–615. <https://doi.org/10.1590/abd1806-4841.20143705>

#### 4. Leadership Development

### Entrepreneurship

In the last decade, UWLP has produced three publications regarding women’s entrepreneurship. In 2020, the UWLP published a research and policy brief titled “The Status of Women and Entrepreneurship in Utah: A 2020 Update,”<sup>3</sup> which compared 2020 data to that of a study in 2016. In 2022, the UWLP partnered with the Women’s Business Center of Utah to conduct research on “Women-Owned Business in Utah: Status, Challenges, and Opportunities,”<sup>4</sup> and while Utah has seen substantial growth in women-owned businesses and ranks high among states in most respects, the state ranks poorly in others, including WalletHub’s entrepreneurship rate disparity between men and women, which is included as a metric in the “Best & Worst States for Women’s Equality.”<sup>5</sup> In this Entrepreneurship section, the results of its four survey items provide additional insights that identify changes that can improve women’s aspirations, experiences, and success in starting and growing businesses in Utah. There were 1,920 representative sample participants who responded to at least one of the four questions in this section, and 2,424 in the convenience sample, for a combined total of 4,344 participants.

#### 1. Start a Business

The first survey item was “*If I had the opportunity and resources, I would like to start a business.*” We ran frequency data separately for women and men because BWF is focused on changing perceptions of women, but the comparison with men is also helpful. The statistical mean was 5.06 (SD 1.72) for women respondents in the representative sample and 4.42 (SD 2.04) for participants in the convenience sample (see Table 1 for additional details). The particularly wide standard deviation for this item is understandable as the samples included people of all ages and situations, and many might not want to start a business. With that in mind, there is a strikingly high number of women who agreed they would be interested in starting businesses if they had the opportunity and resources. Table 2 reports men’s levels agreement with the item.

**Table 1. Start a Business – Women’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=5.06; SD=1.72</i>	<b>Convenience</b> <i>M=4.42; SD=2.04</i>	<b>Combined</b> <i>M=4.62; SD=1.97</i>
Strongly disagree	51 (5.0%)	240 (10.8%)	291 (9.0%)
Disagree	64 (6.3%)	323 (14.5%)	387 (12.0%)
Somewhat disagree	52 (5.1%)	154 (6.9%)	206 (6.4%)
Neither agree nor disagree	179 (17.7%)	367 (16.5%)	546 (16.9%)
Somewhat agree	168 (16.6%)	298 (13.4%)	466 (14.4%)
Agree	262 (25.8%)	365 (16.4%)	627 (19.4%)
Strongly agree	238 (23.5%)	474 (21.3%)	712 (22.0%)
<b>Total Participants</b>	<b>1014</b>	<b>2221</b>	<b>3235</b>

Overall, women’s levels of agreement regarding their desires to start businesses is slightly lower than men’s. With men in more traditional families being considered to be “breadwinners,” this is predictable. However, 55.8% of Utah women respondents also agreed at some level that they would want to start a business if they felt they had the opportunity and resources to do so.

<sup>3</sup> Townsend, A., Madsen, S. R., & Wallace, A. M. (2020, May 5). *The status of women and entrepreneurship in Utah: A 2020 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/briefs/22-status-of-women-and-entrepreneurship.pdf>

<sup>4</sup> Madsen, S. R., & Townsend, A. (2022, October 5). *Women-owned businesses in Utah: Status, challenges, and opportunities*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/wp/no-7.pdf>

<sup>5</sup> McCann, A. (2024, August 19). *Best & worst states for women’s equality*. WalletHub. <https://wallethub.com/edu/best-and-worst-states-for-women-equality/5835>

**Table 2. Start a Business – Men’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=4.97; SD=1.62</i>	<b>Convenience</b> <i>M=4.61; SD=1.92</i>	<b>Combined</b> <i>M=4.90; SD=1.69</i>
Strongly disagree	35 (3.9%)	15 (7.4%)	50 (4.5%)
Disagree	51 (5.7%)	23 (11.3%)	74 (6.7%)
Somewhat disagree	68 (7.6%)	18 (8.9%)	86 (7.8%)
Neither agree nor disagree	168 (18.8%)	39 (19.2%)	207 (18.8%)
Somewhat agree	175 (19.5%)	28 (13.8%)	203 (18.5%)
Agree	231 (25.8%)	35 (17.2%)	266 (24.2%)
Strongly agree	168 (18.8%)	45 (22.2%)	213 (19.4%)
<b>Total Participants</b>	<b>896</b>	<b>203</b>	<b>1099</b>

In the 2023 survey results,<sup>6</sup> the statistical mean for all study participants was 4.71 (SD 1.94) for the representative sample and 4.38 (SD 2.07) for the convenience sample, which is similar to the 2024 results. In the combined sampling, the agreement levels of women in 2023 were significantly lower—statistically—than those of men (4.37 and 4.86, resp.).

**Demographic Findings:** The brief statements below summarize findings for women respondents in the combined samples. The statistical means are based on a 7-point Likert scale (1=strongly disagree, 4=neither agree nor disagree, and 7=strongly agree. The “\*” refers to demographic variables that met the statistical significance p-value threshold of  $\leq 0.05$ .

**Age\*:** Women respondents who were 70 and older had the lowest agreement levels (3.18), followed by those in the 65–69 (3.85) and 60–64 (4.28) age ranges. The youngest study participants had the highest agreement: 18–24 (5.03), 25–29 (4.99), 30–34 (4.92), and 30–34 (4.92).

**Children\*:** Although there were no statistically significant differences between mothers and non-mothers on their agreement with this statement, there is slight evidence that mothers with more than three children had lower agreement levels.

**Counties/Regions\*:** Although there were no significant differences by counties in terms of women’s agreement with this statement, multi-county districts (MCDs)<sup>7</sup> documented significant differences among respondents; areas with the lowest agreement were in the Bear River MCD (4.24), while residents of the Mountainland MCD (4.92) and the Uintah Basin MCD (4.78) had the highest agreement.

**Education\*:** Interestingly, female respondents who had graduate degrees (4.20) were less likely to agree with this statement. Those who selected their highest educational attainment as some high school (5.13); some college, but degree not received or is in progress (5.06); and high school graduate or equivalent (4.98) were more likely to select a higher level of agreement with this statement.

**Employment\*:** Women who selected retired (3.54) as their employment status were significantly less likely to agree with the statement when compared to all others, and those who selected unemployed (looking for work) (5.48) had the highest agreement.

**Income\*:** Women with total household incomes before taxes that were less than \$75,000 were more likely to more strongly agree (from 4.71 and 5.06) than those with incomes over \$75,000 (from 4.38 to 4.64).

**Marital Status:** There were no statistically significant differences among marital status categories.

<sup>6</sup> Madsen, S. R. (2024, April 4). *Entrepreneurship: Research summary*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/entrepreneurship-research-summary.pdf>

<sup>7</sup> Multi-county districts (MCDs) include Bear River (Box Elder, Cache, and Rich counties), Central (Juab, Millard, Piute, Sanpete, Sevier, and Wayne counties), Mountainland (Summit, Utah, and Wasatch counties), Southeastern (Carbon, Emery, Grand, and San Juan counties) Southwestern (Beaver, Garfield, Iron, Kane, and Washington counties), Uintah Basin (Daggett, Duchesne, and Uintah counties), and Wasatch Front (Davis, Morgan, Salt Lake, Tooele, and Weber counties).

*Race/Ethnicity\**: White women had the lowest agreement (4.45), compared to all others. The respondents with the highest agreement selected Native Hawaiian and Other Pacific Islander (5.77) and American Indian or Alaska Native (5.45) as their race/ethnicity.

*Religion\**: The highest levels of agreement came from women who selected Islam (5.60), Catholic (5.18), Hinduism (5.00), Other/General Christian (4.93), and Judaism (4.91), with members of The Church of Jesus Christ of Latter-day Saints having the least agreement (4.37). Activity levels were ranked on a 5-point scale (1=lowest to 5=highest), and respondents who selected 3 as their religious activity level had the highest agreement (4.96), while those who selected 5=very active had the lowest (4.35).

*Residency\**: Women who had lived in Utah for 11–20 years (4.56) and more than 21 years (4.38) had the lowest agreement, while those who selected 2–5 years (5.08) and fewer than 2 years (4.98) had the highest.

## 2. Approval of Family & Friends

The second survey item in this section was “*If I started a business, my family and friends would approve/support of my decision.*” Again, we ran frequency data separately for women and men, because BWF is focused on changing perceptions of women, but the comparison with men is also helpful. Among women, the statistical mean was 5.52 (SD 1.39) for the representative sample and 5.88 (SD 1.24) for the convenience sample; the mean of the combined samples was 5.77 (see Table 3 for additional details). Overall, Utah women believe that their family and friends would approve and/or support their decision to start a business if they choose to do so. Table 4 presents men’s levels of agreement with this survey item.

**Table 3. Approval of Family & Friends – Women’s Agreement Levels**

Levels of Agreement	Representative <i>M</i> =5.52; <i>SD</i> =1.39	Convenience <i>M</i> =5.88; <i>SD</i> =1.24	Combined <i>M</i> =5.77; <i>SD</i> =1.30
Strongly disagree	15 (1.5%)	13 (0.6%)	28 (0.9%)
Disagree	26 (2.6%)	37 (1.7%)	63 (1.9%)
Somewhat disagree	34 (3.4%)	60 (2.7%)	94 (2.9%)
Neither agree nor disagree	152 (15.0%)	214 (9.6%)	366 (11.3%)
Somewhat agree	199 (19.6%)	281 (12.7%)	480 (14.8%)
Agree	291 (28.7%)	775 (34.9%)	1066 (33.0%)
Strongly agree	297 (29.3%)	840 (37.8%)	1137 (35.2%)
<b>Total Participants</b>	<b>1014</b>	<b>2220</b>	<b>3234</b>

**Table 4. Approval of Family & Friends – Men’s Agreement Levels**

Levels of Agreement	Representative <i>M</i> =4.97; <i>SD</i> =1.62	Convenience <i>M</i> =5.69; <i>SD</i> =1.24	Combined <i>M</i> =5.45; <i>SD</i> =1.32
Strongly disagree	12 (1.3%)	1 (0.5%)	13 (1.2%)
Disagree	24 (2.7%)	4 (2.0%)	28 (2.5%)
Somewhat disagree	28 (3.1%)	8 (3.9%)	36 (3.3%)
Neither agree nor disagree	143 (16.0%)	21 (10.3%)	164 (14.9%)
Somewhat agree	208 (23.2%)	29 (14.3%)	237 (21.6%)
Agree	286 (31.9%)	86 (42.4%)	372 (33.8%)
Strongly agree	195 (21.8%)	54 (26.6%)	249 (22.7%)
<b>Total Participants</b>	<b>896</b>	<b>203</b>	<b>1099</b>



We do find it interesting that women's agreement is higher than men's agreement on this item. According to our own research,<sup>8</sup> many Utah mothers do start businesses because they want flexibility and can work part time around the schedules of their children. Perhaps the uncertainty of starting a business feels more acceptable for women, particularly if they have a partner who can provide more of a stable income for their families. However, more research is needed to confirm this assumption and to tease out other nuances of women's entrepreneurship.

In the 2023 survey results, the statistical mean for all genders was 5.53 (SD 1.40) for the representative sample and 5.83 (SD 1.31) for the convenience sample, which is similar to the 2024 survey results. In the 2023 research, with both samples combined, only 6.1% disagreed, 12.0% neither agreed nor disagreed, and 81.9% agreed at some level. In addition, the agreement levels were similar in 2023 between women and men (5.74 and 5.67, resp.).

Demographic Findings: The following short statements share findings for the women's combined samples:

*Age\*:* Female respondents in the oldest two age range categories had the lowest agreement responses (5.27 and 5.55), with the highest agreement coming from respondents who selected the following age range categories: 50–54 (5.99), 60–64 (5.88), 25–29 (8.86), and 40–44 (5.84).

*Children:* There were no statistically significant differences between mothers and women who did not have children nor when comparing the results of mothers based on various numbers of children in a variety of age categories.

*Counties/Regions\*:* The highest statistical means came from women respondents in the following counties: Summit & Wasatch (6.04), Salt Lake (5.86), Iron (5.84), Davis (5.92), Cache (5.79), and Utah (5.96). This is followed by a grouping of eastern rural counties (5.71), Washington (5.71), Weber (5.65), a grouping of central rural counties (5.60), Box Elder (5.59), and, finally, the Tooele, Morgan, & Rich grouping (5.53). The only significant difference, however, was between the Tooele, Morgan, & Rich grouping and the Summit & Wasatch grouping.

*Education\*:* Women with less than a high school diploma were significantly less likely to agree with this statement than those in all other educational level categories.

*Employment\*:* Not surprisingly, women who were retired (5.36) and unemployed (looking for work) (5.56) were significantly less likely to agree with the statement than full-time homemakers (5.93) and full-time employees (5.86).

*Income\*:* Women who selected one of the two lowest household income ranges were significantly less likely (5.43 and 5.47, resp.) to agree with this statement when compared to those who selected one of the highest three household income categories (ranging from 5.83 to 6.02).

*Marital Status:* There were no statistically significant differences among the various marital status categories.

*Race/Ethnicity:* There were no statistically significant differences among race/ethnicity categories.

*Religion\*:* There were no significant differences among Utah women based on their selection of religious affiliation, but women on the opposite ends of the religious activity spectrum had the highest levels of agreement (5=very active, 5.86; 1=not at all, 5.72).

*Residency\*:* Women who had lived in Utah fewer than five years were significantly less likely (from 5.47 to 5.69) to have lower levels of agreement with this statement, compared with those who had lived in Utah longer (from 5.86 to 5.89).

### 3. Big Enough to Employ Others

The third survey item was “*If I started a business, it would grow to be big enough to employ others.*” The reason Utah ranks poorly on the related metric on the WalletHub “Best and Worst States for

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<sup>8</sup> Madsen, S. R., & Townsend, A. (2022, October 5). *Women-owned businesses in Utah: Status, challenges, and opportunities*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/wp/no-7.pdf>

Women’s Equality”<sup>9</sup> is that WalletHub includes only those businesses whose owners employ at least one other individual beside themselves.<sup>10</sup> Again, we ran frequency data separately for women and men because BWF is focused on changing perceptions of women, but the comparison with men is also valuable. For women, the statistical mean of the representative sample was 5.17 (SD 1.51), and it was 4.84 (SD 1.52) for the convenience sample (see Table 5 for additional details). Overall, Utah women at least somewhat agreed that if they started a business, it would grow enough that they could hire others to work with them. Table 6 includes men’s levels agreement with this survey item.

**Table 5. Big Enough to Employ Others – Women’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=5.17; SD=1.51</i>	<b>Convenience</b> <i>M=4.84; SD=1.52</i>	<b>Combined</b> <i>M=4.94; SD=1.52</i>
Strongly disagree	32 (3.2%)	54 (2.4%)	86 (2.7%)
Disagree	33 (3.3%)	125 (5.6%)	158 (4.9%)
Somewhat disagree	38 (3.7%)	133 (6.0%)	171 (5.3%)
Neither agree nor disagree	228 (22.5%)	714 (32.2%)	942 (29.2%)
Somewhat agree	199 (19.6%)	350 (15.8%)	549 (17.0%)
Agree	261 (25.7%)	476 (21.5%)	737 (22.8%)
Strongly agree	223 (22.0%)	365 (16.5%)	588 (18.2%)
<b>Total Participants</b>	<b>1014</b>	<b>2217</b>	<b>3231</b>

**Table 6. Big Enough to Employ Others – Men’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=5.23; SD=1.34</i>	<b>Convenience</b> <i>M=4.84; SD=1.45</i>	<b>Combined</b> <i>M=5.16; SD=1.37</i>
Strongly disagree	15 (1.7%)	4 (2.0%)	19 (1.7%)
Disagree	20 (2.2%)	11 (5.4%)	31 (2.8%)
Somewhat disagree	29 (3.2%)	14 (6.9%)	43 (3.9%)
Neither agree nor disagree	199 (22.2%)	54 (26.6%)	253 (23.0%)
Somewhat agree	220 (24.6%)	49 (24.1%)	269 (24.5%)
Agree	245 (27.3%)	43 (21.2%)	288 (26.2%)
Strongly agree	168 (18.8%)	28 (13.8%)	196 (17.8%)
<b>Total Participants</b>	<b>896</b>	<b>203</b>	<b>1099</b>

In the 2023 survey results, the statistical mean for all genders of study participants was 4.81 (SD 1.51) for the representative sample and 4.93 (SD 1.51) for the convenience sample. With the samples combined, women’s agreement levels were significantly lower than men’s (4.76 and 5.18, resp.). In the combined 2023 samples, 12.7% disagreed, 32.2% neither agreed nor disagreed, and 55.1% agreed, but only 18.4% did so strongly. The 2024 data show that women’s agreement has risen slightly in the past year, and men’s has remained the same.

**Demographic Findings:** The brief statements share findings for women respondents in the combined samples.

**Age\*:** Again, as with the first two survey items in this section, the oldest two age range categories for women (70 and older and 65–69) had the lowest agreement (4.36 and 4.71, resp.). Statistical significance came only from comparing the 70 and older category with most other categories. Interestingly, those who selected the 50–54 age range had the highest statistical mean (5.17).

**Children\*:** Mothers had significantly higher agreement levels than women who did not have children (5.00 and 4.79, resp.) although both hovered around the somewhat agree range.

<sup>9</sup> McCann, A. (2024, August 19). Best & worst states for women’s equality. *WalletHub*. <https://wallethub.com/edu/best-and-worst-states-for-women-equality/5835>

<sup>10</sup> Madsen, S. R., & Madsen, G. P. (2021, December 2). *Women’s equality in Utah: Why Utah is ranked as the worst state, and what can be done*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/wp/no-4.pdf>



*Counties/Regions\**: The highest statistical means came from women respondents from the following counties: Summit (5.55), Piute (5.55), Kane (5.53), Rich (5.50), and Sevier (5.47). There is a significant difference between these five counties and Emery County (4.00). For interest’s sake, the statistical means of other counties include Cache (4.63), Juab (4.64), Weber (4.66), Millard (4.75), Garfield (4.75), Carbon (4.76), Morgan (4.77), Davis (4.78), Dagget (4.86), Uintah (4.87), Tooele (4.87), Wayne (4.88), Washington (4.89), Box Elder (4.90), Salt Lake (4.90), Grand (4.90), Wasatch (4.93), San Juan (4.98), Sanpete (5.00), Iron (5.02), Beaver (5.05), Duchesne (5.13), and Utah (5.15).

*Education\**: Women respondents who held master’s (5.86) and bachelor’s degrees (4.87) were significantly less likely to agree with this statement, particularly compared to those with some high school (5.24) and some college, but degree not received or is in progress (5.10).

*Employment\**: Women who selected retired were the least likely to agree with this statement (4.51), compared to those who selected unemployed (looking for work) (5.17) and employed full time (5.07).

*Income\**: Women who selected they had a household income level of \$35,000–\$49,999 were the least likely to agree with the statement (4.77), followed closely by those who selected \$75,000–\$99,999 (4.81) and \$50,000–\$74,999 (4.83). Surprisingly, the two highest agreement categories included \$200,000 and above (5.22) and less than \$25,000 (5.01). There was not a linear correlation among household income ranges and agreement on this item.

*Marital Status*: There were no statistically significant differences among the various marital status categories.

*Race/Ethnicity\**: Women who selected White were the least likely to agree (4.84) with the statement, compared to Native Hawaiian and Other Pacific Islanders (5.92), American Indian or Alaska Native (5.57), Black or African American (5.45), Hispanic/Latino (5.32), and Asian women (5.24).

*Religion\**: The highest agreement levels of participants selected the following religious affiliations: Islam (6.30), Catholic (5.34), Hinduism (5.33), Other/General Christian (5.24), Judaism (5.22), and Spiritual but Not Religious (5.20). The lowest agreement came from women who selected Jehovah Witness (4.38) and Latter-day Saint (4.69).

*Residency\**: Although there was some statistical significance regarding the length of time an individual had lived in Utah, the findings do not represent a pattern. Those women who selected they had lived in Utah more than 21 years had the lowest agreement (4.80), while those who selected they had lived in Utah 2–5 years (5.28) had the highest.

#### 4. Accessing Resources & Support

The final survey item in this section was “*If I were to start a business, I would know how/where to access resources and support.*” Again, we ran frequency data separately for women and men because BWF is focused on changing perceptions of women, but the comparison with men provides perspective. The statistical mean was 4.67 (SD 1.65) for women respondents in the representative sample, 3.84 (SD 1.76) for the convenience sample, and 4.10 for the combined samples (see Table 7 for more details).

**Table 7. Accessing Resources & Support – Women’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative <i>M</i>=4.67; <i>SD</i>=1.65</b>	<b>Convenience <i>M</i>=3.84; <i>SD</i>=1.74</b>	<b>Combined <i>M</i>=4.10; <i>SD</i>=1.76</b>
Strongly disagree	50 (4.9%)	192 (8.7%)	242 (7.5%)
Disagree	82 (8.1%)	410 (18.5%)	492 (15.2%)
Somewhat disagree	87 (8.6%)	424 (19.1%)	511 (15.8%)
Neither agree nor disagree	209 (20.6%)	312 (14.1%)	521 (16.1%)
Somewhat agree	230 (22.7%)	434 (19.6%)	664 (20.6%)
Agree	213 (21.0%)	295 (13.3%)	508 (15.7%)
Strongly agree	143 (14.1%)	150 (6.8%)	293 (9.1%)
<b>Total Participants</b>	<b>1014</b>	<b>2217</b>	<b>3231</b>

Overall, Utah women most likely are not aware of the resources and support that are available to help them start businesses. It appears that 38.5% of respondents disagreed at some level with the statement, while 16.1% neither agreed nor disagreed. Another 20.6% selected somewhat agree, while only a quarter either agreed or strongly agreed. Hence, there is significant room for improvement in terms of increasing the awareness of the resources and support available for women to start and grow businesses in Utah. Interestingly, the statistical mean of the convenience sample was significantly lower than the statistical mean for the representative sample. The demographic findings below provide some initial ideas of why this could be the case. Table 8 also includes men’s agreement levels with this survey item.

**Table 8. Accessing Resources & Support – Men’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative <i>M=4.93; SD=1.50</i></b>	<b>Convenience <i>M=4.37; SD=1.76</i></b>	<b>Combined <i>M=4.83; SD=1.56</i></b>
Strongly disagree	26 (2.9%)	14 (6.9%)	40 (3.6%)
Disagree	46 (5.1%)	23 (11.3%)	69 (6.3%)
Somewhat disagree	75 (8.4%)	29 (14.3%)	104 (9.5%)
Neither agree nor disagree	152 (17.0%)	28 (13.8%)	180 (16.4%)
Somewhat agree	238 (26.6%)	51 (25.1%)	289 (26.3)
Agree	235 (26.2%)	33 (16.3%)	268 (24.4%)
Strongly agree	124 (13.8%)	25 (12.3%)	149 (13.6%)
<b>Total Participants</b>	<b>896</b>	<b>203</b>	<b>1099</b>

In the 2023 survey results, the statistical mean for all genders of participants was 4.00 (SD 1.78) for the representative sample and 3.99 (SD 1.81) for the convenience sample. In the 2023 combined samples, women’s agreement levels were significantly lower than men’s (3.85 and 4.43, resp.). In addition, at that time, 41.6% disagreed at some level, 14.7% neither agreed nor disagreed, 20.3% somewhat agreed, 14.3% agreed, and only 9.1% strongly agreed. As we outlined in the 2023 report, even though there are resources and support to help Utahns start businesses, many Utahns were either unsure or did not know where to find them. Comparison of 2023 data to the current data shows that both women’s and men’s agreement levels have risen slightly.

Demographic Findings: The brief statements below share findings for the combined samples of women participants.

*Age\*:* The lowest agreement levels came from those in the 25–29 age range group (3.87), followed closely by the 30–34, 18–24, 40–44, and 35–39 age ranges. Interestingly, the top two highest agreement ranges were from respondents who selected 60–64 and 65–59 (both at 4.52).

*Children:* There were no significant differences between mothers and women who had no children, and no significant differences when comparing mothers of different numbers and ages of children.

*Counties/Regions\*:* Women from the counties or county groupings with the lowest agreement levels included Cache (3.88), Salt Lake (3.91), Davis (3.91), and Box Elder (3.93). Those with the highest agreement included Summit & Wasatch (4.44), the Tooele, Morgan, & Rich grouping (4.42), and Iron (4.38). Despite the statistical differences, the statistical means hover around the neither agree nor disagree option.

*Education\*:* Women respondents with some high school (4.58), less than high school (4.55), and high school graduate (4.40) were more likely to agree with this statement than those who had associate degrees (3.96), bachelor’s degrees (4.02), and graduate degrees (4.03).

*Employment:* Although the analysis was not statistically significant, women who were full-time students (3.47), full-time homemakers (3.96), and part-time employees (4.03) had the lowest levels of agreement, while the unemployed (4.42) had the highest.

*Income:* Although the data are not statistically significant, women who had household incomes of \$25,000–\$34,999 (4.38) and less than \$25,000, (4.29) had the highest agreement; the lowest agreement came from women who had household income levels that were \$100,000–\$149,999 (3.97), \$75,000–\$99,000 (3.97), and \$50,000–\$74,999 (3.98).

*Marital Status*: There were no statistically significant differences when comparing the various marital status categories to the agreement levels.

*Race/Ethnicity\**: White women had significantly lower agreement (3.99) with this statement than those who identified as Black or African American (4.99) and American Indian or Alaska Native (4.77). Others included Hispanic/Latino (4.52), Native Hawaiian and Other Pacific Islander (4.35), and Asian (4.18).

*Religion\**: The highest levels of agreement came from women who selected Islam (5.10), Judaism (5.02), Catholic (4.80), and Other/General Christian (4.51) as their religious affiliation. The lowest agreement came from women who selected Agnostic (3.77), The Church of Jesus Christ of Latter-day Saint (3.86), and Atheist (3.88). In terms of religious activity level, women who selected 1=not at all (3.90) and 5=very active (4.17) had the least agreement, while those who selected 3 (on a 5-point religious activity scale) had the highest agreement (4.35).

*Residency\**: Women who had lived in Utah the longest (11–20 years=3.84; more than 21 years=3.92) were significantly less likely to agree with the statement, while those who had lived in Utah fewer than 2 years (4.61) selected higher agreement options on the survey.

## 5. Qualitative Findings

As mentioned, we offered one open-ended question inviting responses regarding any thoughts, insights, or ideas respondents may have related to the challenges that Utah women and girls face. Overall, 2,248 study participants provided qualitative responses to this prompt, with 25 mentioning something that fell within the “Entrepreneurship” category. Table 9 lists the extrapolated emergent themes, followed by several respondent quotations that provide representative observations regarding the themes. Note that some comments pertained to several categories, as individual statements were often related to a variety of themes and topics. Others simply identified the general category as an issue of concern but did not provide additional commentary. As such, themes do not total 100.0%.

**Table 9. Qualitative Themes – Entrepreneurship**

Theme Categories	#	%
A. General Concerns	10	40.0%
B. Barriers & Discrimination	7	28.0%
C. Lack of Support and Education	7	28.0%

A. *General Concerns*: Many comments (40.0%) did not directly reference access, barriers, or support, but they still highlighted challenges female entrepreneurs face:

“All the local companies in my field are male owned; I will be starting my own company. Sadly, it is not what I want be doing at this stage of my life; I should be saving for retirement, not starting over again.”

“Fewer women own businesses, and therefore something must be wrong with the system or the culture.”

“There is the mentality of ‘I can do / have it all,’ and it leaves women who work or start a business feeling burnt out as they continue to try to achieve impossible standards in all areas of life.”

“I have a side business. I wouldn’t start another one.”

B. *Barriers & Discrimination*: A frequently mentioned issue was related to cultural barriers and gender discrimination female entrepreneurs experienced (28.0%). For example,

“I own my own business and do paid labor for clients. It’s typically a male-dominated field, and I often receive comments from people that I shouldn’t charge as much and should offer my services for free. I do quality work and charge what my male counterparts would charge.”

“I run three businesses and two nonprofits, and yet, when I tried to get a loan from the bank to purchase property to expand a business, I just didn’t get any response despite having excellent credit and equity. I can only assume they were waiting for my husband to come in.”

“I have a PhD and am a CEO of my own mental health practice. I feel that most women CEOs in Utah are referred to as ‘mompreneurs,’ and not taken very seriously.”

“Being taken seriously as a woman business owner in the franchise world, which is dominated by males, is challenging and difficult, but I won’t give up.”

C. *Lack of Support and Education*: Another common concern (28.0%) was the lack of support and education/training for women looking to start their own business. Responses included

“I would not have been able to set up and operate my company successfully over the past 23 years if I did not have a college education at the bachelor's and master's level.”

“Initiatives that provide mentorship, capital access, and networking opportunities specifically for female entrepreneurs could help women succeed in business.”

“We want to start a business but don’t know how. I wish I had places to go to help me become a strong leader.

There were also several comments that mentioned the challenge of accessing capital to start and grow businesses. Women want to be treated like they are competent and be taken seriously when approaching individuals—mostly men—about funding. They also called for Utah to create, as one respondent stated, “a more inclusive entrepreneurial ecosystem.”

## Workforce Development

On December 6, 2023, the UWLP published a research snapshot titled “Labor Force Participation Among Utah Women: A 2023 Update”<sup>11</sup> that shared the latest available data on the topic. According to the most recent U.S. Census Bureau estimate, which was in 2021, women in Utah comprise 44.2% of the state workforce. Because of this, Utah must focus on identifying, creating, and clearing pathways for women into better jobs. Although data that measures progress has been difficult to obtain, four related survey items in this study provide additional insight that can improve workforce development opportunities for Utah women and girls. Although these items focus on Utahns’ understanding and perceptions, the findings may also guide far-reaching strategies for societal change. Other resources can be found on the Career Relaunch, Employment, and Women in Business sections of the UWLP Toolkits. In addition, readers can explore what leaders, advocates, and partners in the Workforce Development Spoke are doing to lead change in Utah in workforce development.

For each of the four survey statements, we compare results with identical items from the 2023 UWLP study.<sup>12</sup> For all four items, we ran frequency data separately for women and men because BWF is focused on changing perceptions of women, but the comparison with men is also helpful. Overall, 1,920 Utahns completed the representative sample; 2,428 individuals responded to at least one of four items in the convenience sample, for a combined total of 4,348 respondents.

### 1. Awareness and Access to Resources & Support

The first survey item in this section was “*I am aware of and know how to access resources and support to attain a quality job.*” The statistical mean was 5.07 (SD 1.41) for women respondents in the representative sample and 5.30 (SD 1.48) for women in the convenience sample (see Table 10 for additional details). Not surprisingly, female respondents in the convenience sample had slightly higher agreement that they were aware of and know how to access resources and support, but both samples hovered around or were slightly higher than somewhat agree. In the representative sample, 33.0% of women participants either disagreed with the statement or selected neither agree nor disagree. This

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<sup>11</sup> Blackburn, R. C., Townsend, A., & Madsen, S. R. (2023, December 6). *Labor force participation among Utah women: A 2023 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/snapshot/52.pdf>

<sup>12</sup> Madsen, S. R. (2024, March 5). *Workforce development: Research summary*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/workforce-development-research-summary.pdf>

means that a substantial number of women in Utah need help to understand how to access resources and support to ensure they can attain a quality job. Table 11 presents men’s levels agreement with this item.

**Table 10. Awareness and Access to Resources and Support – Women’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=5.07; SD=1.41</i>	<b>Convenience</b> <i>M=5.30; SD=1.48</i>	<b>Combined</b> <i>M=5.23; SD=1.46</i>
Strongly disagree	18 (1.8%)	42 (1.9%)	60 (1.9%)
Disagree	38 (3.7%)	88 (4.0%)	126 (3.9%)
Somewhat disagree	61 (6.0%)	166 (7.5%)	227 (7.0%)
Neither agree nor disagree	218 (21.5%)	256 (11.6%)	474 (14.7%)
Somewhat agree	234 (23.1%)	478 (21.6%)	712 (22.1%)
Agree	289 (28.5%)	680 (30.8%)	969 (30.1%)
Strongly agree	156 (15.4%)	499 (22.6%)	655 (20.3%)
<b>Total Participants</b>	<b>1014</b>	<b>2209</b>	<b>3223</b>

**Table 11. Awareness and Access to Resources and Support – Men’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=5.08; SD=1.30</i>	<b>Convenience</b> <i>M=5.46; SD=1.35</i>	<b>Combined</b> <i>M=5.15; SD=1.32</i>
Strongly disagree	7 (0.8%)	4 (2.0%)	11 (1.0%)
Disagree	28 (3.1%)	4 (2.0%)	32 (2.9%)
Somewhat disagree	59 (6.6%)	7 (3.4%)	66 (6.0%)
Neither agree nor disagree	191 (21.3%)	27 (13.3%)	218 (19.8%)
Somewhat agree	246 (27.5%)	44 (21.7%)	290 (26.4%)
Agree	241 (26.9%)	71 (35.0%)	312 (28.4%)
Strongly agree	124 (13.8%)	46 (22.7%)	170 (15.5%)
<b>Total Participants</b>	<b>896</b>	<b>203</b>	<b>1099</b>

In the 2023 survey results, the statistical mean in the representative sample was 4.73 (SD 1.59) and 5.33 (SD 1.48) for the convenience sample. In the representative sample, 44.0% of all participants disagreed at some level or neither agreed nor disagreed. For the 2024 results and in subsequent studies, we will focus on responses only from women.

**Demographic Findings:** The brief statements below share findings for the combined samples of female respondents. As a reminder, the statistical means are based on a 7-point Likert scale (1=strongly disagree, 4=neither agree nor disagree, and 7= strongly agree). In addition, the “\*” refers to demographic variables that met the statistical significance p-value threshold of  $\leq 0.05$ .

**Age:** There were no statistically significant differences among age range categories and agreement levels.

**Children:** There were no statistically significant differences among mothers and women who had no children, as well as the numbers and ages of children for those who were mothers.

**Counties/Regions\*:** There were no statistically significant differences between counties or regions on level of agreement or disagreement with this item. However, there was a difference between respondents who lived in more urban areas of the state (5.26) versus those who lived in rural counties (5.11), with urban respondents having slightly higher agreement.

**Education\*:** Female respondents with graduate degrees (5.65) had significantly higher agreement with the statement, compared to those in any other educational attainment category: bachelor’s degree (5.17); associate degree (5.00); some college, but degree not received or is in progress (4.98); some high school (4.87); high school graduate or equivalent (4.77); and less than high school (4.65).

**Employment\*:** Not surprisingly, full-time (5.48) and part-time employees (5.00) had the strongest agreement, with the unemployed (looking for work) (4.61) and full-time homemakers (4.74) agreeing the least.

*Income\**: The higher the household income level, the stronger agreement with this item. The lowest agreement came from women who selected less than \$25,000 (4.68), \$25,000–\$34,999 (4.81), and \$34,000–\$49,000 (4.89), compared with those who selected the highest household income categories: \$200,000 and above, \$150,00–\$199,999, and \$100,000–\$149,000 (5.62, 5.53, and 5.39, resp.).

*Marital Status\**: Female respondents who selected divorced (4.95), living with partner/cohabiting (4.99), and widowed (5.07) had the lowest agreement levels, with married (5.35) and married but separated (5.08) having the highest agreement.

*Race/Ethnicity*: There were no statistically significant differences among race/ethnicity categories when comparing levels of agreement with this item.

*Religion\**: There were no statistically significant differences among religious affiliation categories when comparing levels of agreement or disagreement with this item. However, those with the highest religious activity levels agreed more firmly with this statement.

*Residency\**: Female respondents who had lived in Utah more than 21 years and 6–10 years (both with a mean of 5.31) had higher agreement than those who had lived in Utah fewer than 2 years (4.99).

## 2. Employability

The second survey item in this section was “*I believe that I am currently employable, or I can become employable within the next 12–24 months.*” The statistical mean was 5.29 (SD 1.54) for women respondents in the representative sample and 6.32 (SD 1.23) for the convenience sample (see Table 12 for additional details). There is a highly significant difference between the statistical means of the two samples (see Appendix A and B for the demographic details of the samples). In short, the convenience sample includes substantially more women who have higher educational attainment levels and higher household incomes, which most likely influences their perspectives.

**Table 12. Employability – Women’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M</i> =5.29; <i>SD</i> =1.54	<b>Convenience</b> <i>M</i> =6.32; <i>SD</i> =1.23	<b>Combined</b> <i>M</i> =6.00; <i>SD</i> =1.43
Strongly disagree	28 (2.8%)	32 (1.4%)	60 (1.9%)
Disagree	42 (4.1%)	36 (1.6%)	78 (2.4%)
Somewhat disagree	48 (4.7%)	36 (1.6%)	84 (2.6%)
Neither agree nor disagree	170 (16.8%)	103 (4.7%)	273 (8.5%)
Somewhat agree	182 (17.9%)	117 (5.3%)	299 (9.3%)
Agree	288 (28.4%)	450 (20.3%)	738 (22.9%)
Strongly agree	256 (25.2%)	1440 (65.0%)	1696 (52.5%)
<b>Total Participants</b>	<b>1014</b>	<b>2214</b>	<b>3228</b>

As aligned with the substantial research in this area, individuals with higher education attainment tend to have a higher likelihood of employability in both short- and long-term intervals. In fact, according to data from the U.S. Bureau of Labor Statistics,<sup>13</sup> higher levels of education lead to better job prospects and higher earnings. This report concludes that “educational attainment is a key factor in improving employability and earnings.” The Bureau’s 2024 update findings are similar.<sup>14</sup> Table 13 presents men’s levels of agreement with this item.

With the 2023 survey results that included both women and men, the statistical mean for this item in the representative sample was 5.39 (SD 1.84) and 6.54 (SD 0.9) for the convenience sample. There was a substantial difference between samples and much more variability from the mean with the second

<sup>13</sup> Vilorio, D. (2016, March). *Education matters*. U.S. Bureau of Labor Statistics. <https://www.bls.gov/careeroutlook/2016/data-on-display/education-matters.htm>

<sup>14</sup> U.S. Bureau of Labor Statistics. (2024). *Education pays: Earnings and unemployment rates by educational attainment, 2023*. <https://www.bls.gov/emp/chart-unemployment-earnings-education.htm>



sample. With the combined 2023 samples, 2,040 respondents (65.8%) selected strongly agree. Yet, we noted in 2023 that there were still thousands across the state who remained concerned. For the 2024 results and forward, we focus only on changes for women.

**Table 13. Employability – Men’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=5.20; SD=1.61</i>	<b>Convenience</b> <i>M=6.24; SD=1.33</i>	<b>Combined</b> <i>M=5.39; SD=1.61</i>
Strongly disagree	35 (3.9%)	4 (2.0%)	39 (3.5%)
Disagree	37 (4.1%)	2 (1.0%)	39 (3.5%)
Somewhat disagree	45 (5.0%)	7 (3.4%)	52 (4.7%)
Neither agree nor disagree	158 (17.6%)	9 (4.4%)	167 (15.2%)
Somewhat agree	160 (17.9%)	10 (4.9%)	170 (15.5%)
Agree	243 (27.1%)	45 (22.2%)	288 (26.2%)
Strongly agree	218 (24.3%)	126 (62.1%)	344 (31.3%)
<b>Total Participants</b>	<b>896</b>	<b>203</b>	<b>1099</b>

**Demographic Findings:** The brief statements below summarize the findings for the combined samples of female respondents.

*Age\**: Not surprisingly, women respondents who selected 70 and older (4.20), 65–69 (5.14), 55–59 (5.98), and 60–64 (6.03) were less likely to agree with the statement than those who selected 45–49 (6.36), 40–44 (6.26), 50–54 (6.25), 35–39 (6.20), 30–34 (6.20), 25–29 (6.13), and 18–24 (6.11).

*Children\**: Mothers (6.03) were more likely to agree with this statement than women who were not mothers (5.90). In addition, among all three children’s age range categories, women with five or six children were significantly less likely to agree with the statement than those with one or two children within the same category.

*Counties/Regions\**: Female respondents in the following counties were significantly more likely to agree with the statement: Cache (6.43), Davis (6.21), and Salt Lake (6.11). The counties or regions that were the least likely to agree included the Tooele, Morgan, & Rich grouping (5.39), the counties within the central rural region (5.61), Washington (5.80), and Summit & Wasatch (5.82).

*Education\**: Not surprisingly, based on the literature cited previously, women with graduate degrees (6.39) and bachelor’s degrees (6.14) had significantly higher agreement with this statement than those respondents who selected any other educational attainment category: associate degree (5.86); some college, but degree not received or is in progress (5.71); high school graduate or equivalent (5.15); some high school (5.09); and less than high school (4.50).

*Employment\**: Not surprisingly, full-time (6.47) and part-time employees (6.06) had the strongest agreement, while retired workers (4.43), full-time homemakers (5.43), and the unemployed (looking for work) (4.61) had significantly lower agreement. Yet, all were on the agree side of the scale.

*Income\**: The higher the household income level, the stronger the agreement with this survey item. The lowest agreement came from women who selected less than \$25,000 (5.04), \$25,000–\$34,999 (5.43), and \$35,000–\$49,999 (5.68), compared with those who selected the highest household income categories: \$200,000 and above, \$150,00–\$199,999, and \$100,000–\$149,000 (6.49, 6.33, and 6.20, resp.).

*Marital Status\**: Female respondents who selected widowed (5.12), married but separated (5.39), and divorced (5.59) had the lowest agreement levels, while the highest agreement came from those who selected married (6.15).

*Race/Ethnicity\**: The highest agreement came from women who selected Native Hawaiian and Other Pacific Islander (6.62), White (6.04), Asian (5.87), and Hispanic/Latino (5.87), compared to Black or African American (5.53) and American Indian or Alaska Native (5.57), who had the lowest agreement. All statistical means were still relatively high.

*Religion\**: Women who selected Latter-day Saint (6.26), Atheist (6.15), Agnostic (6.13), Islam (6.10), and Spiritual but Not Religious (6.09) had significantly higher agreement than those who selected

Jehovah Witness (5.00), Protestant (5.19), Judaism (5.56), Catholic (5.65), Other/General Christian (5.67), and Hinduism (5.73). Although there was not a linear relationship between selections within the religious activity scale and level of agreement, those who selected 5=very active had the highest statistical mean (6.07), followed by 4 (6.00); those who selected 3 (5.74) had the lowest agreement.

*Residency\**: Female respondents who had lived in Utah for 11 to 20 years (6.32) and more than 21 years (6.21) had significantly higher agreement than those who had lived in Utah fewer than 2 years (5.23) and 2 to 5 years (6.04).

### 3. Maintaining Successful Employment

The third survey item in this section was “*My current circumstances permit me to maintain successful employment over the next 5 years.*” The statistical mean was 4.86 (SD 1.74) for women respondents in the representative sample and 5.84 (SD 1.70) for women in the convenience sample (see Table 14 for additional details). There was a significant difference between the statistical means of the two samples (see Appendix A and B for the demographic details of each sample). As a reminder, the convenience sample includes substantially more women who have higher educational attainment levels and higher household incomes. Some striking results included the difference in the percentage of respondents who selected strongly agree with the statement, with 53.3% in the convenience sample doing so versus only 20.6% of women in the representative sample doing the same. There was a similar finding in men’s responses as well (see Table 15).

**Table 14. Maintaining Successful Employment – Women’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=4.86; SD=1.74</i>	<b>Convenience</b> <i>M=5.84; SD=1.70</i>	<b>Combined</b> <i>M=5.53; SD=1.78</i>
Strongly disagree	54 (5.3%)	88 (4.0%)	142 (4.4%)
Disagree	71 (7.0%)	102 (4.6%)	173 (5.4%)
Somewhat disagree	71 (7.0%)	81 (3.7%)	152 (4.7%)
Neither agree nor disagree	223 (22.0%)	145 (6.6%)	368 (11.4%)
Somewhat agree	154 (15.2%)	144 (6.5%)	298 (9.2%)
Agree	232 (22.9%)	473 (21.4%)	705 (21.9%)
Strongly agree	209 (20.6%)	1177 (53.3%)	1386 (43.0%)
<b>Total Participants</b>	<b>1014</b>	<b>2210</b>	<b>3224</b>

**Table 15. Maintaining Successful Employment – Men’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=4.84; SD=1.74</i>	<b>Convenience</b> <i>M=5.89; SD=1.66</i>	<b>Combined</b> <i>M=5.04; SD=1.77</i>
Strongly disagree	56 (6.3%)	9 (4.4%)	65 (5.9%)
Disagree	68 (7.6%)	4 (2.0%)	72 (6.6%)
Somewhat disagree	42 (4.7%)	10 (4.9%)	52 (4.7%)
Neither agree nor disagree	180 (20.1%)	15 (7.4%)	195 (17.7%)
Somewhat agree	153 (17.1%)	11 (5.4%)	164 (14.9%)
Agree	242 (27.0%)	44 (21.7%)	286 (26.0%)
Strongly agree	155 (17.3%)	110 (54.2%)	265 (24.1%)
<b>Total Participants</b>	<b>896</b>	<b>203</b>	<b>1099</b>

Overall, a quarter of the representative sample disagreed with the statement or selected neither agree nor disagree. Utah has a population of 3,454,230,<sup>15</sup> with approximately 50.7% men and 49.3% women. According to the World Population Review, there are 1,618,600 girls and women in Utah. Because those under 18 still make up roughly one-third of Utah’s population, we estimate there are 1,068,276 women 18 and older living here. If the findings of the representative sample are extrapolated to this

<sup>15</sup> World Population Review. (2024). *Utah population 2024*. <https://worldpopulationreview.com/states/utah>

projected population, it means that about 267,069 Utah women disagree or are unsure that their current circumstances permit them to maintain successful employment over the next five years.

With the 2023 survey results for this item that included both women and men, the statistical mean for the representative sample was 4.67 (SD 2.01) and 6.09 (SD 1.53) for the convenience sample. Nearly half (45.1%) of the 2023 representative sample participants either disagreed at some level or selected neither agree nor disagree. In 2024, 40.2% of all participants in the representative sample selected the same options, which represents a slight decrease. For the 2024 results and subsequent studies, we will focus on statistics for women.

Demographic Findings: The short statements below present findings for the combined samples of female respondents.

*Age\*:* Not surprisingly, women respondents who selected 70 and older (3.58) and 65–69 (4.69) were less likely to agree than those in all other age range categories. There was not a linear progression in terms of age categories and agreement, but women who had the strongest agreement were in the following age ranges: 45–49 (5.99), 50–54 (5.94), 40–44 (5.80), 35–39 (5.77), and 25–29 (5.67).

*Children:* There were no significant differences between parents and nonparents, and no differences among parents in terms of different numbers of children within each of the age range categories.

*Counties/Regions\*:* Female respondents in the following counties were significantly more likely to agree with the statement: Cache (5.89), Box Elder (5.79), Davis (5.72), Salt Lake (5.66), and the grouping of rural eastern counties (5.65). The least agreement was found in the central rural county grouping (5.06) and the Tooele, Morgan, & Rich grouping (5.13), both of which had significantly lower statistical means.

*Education\*:* Not surprisingly, women with graduate degrees (5.97), bachelor's degrees (5.71), and associate degrees (5.40) were significantly more likely to agree that their current circumstances permitted them to maintain successful employment over the next 5 years. Women who selected less than high school (4.35), high school graduate or equivalent (4.66), and some high school (4.69) had statistically less agreement with the statement.

*Employment\*:* Not surprisingly, women who selected retired (3.85) were less likely to agree with the statement than full-time (6.15) and part-time employees (5.48), followed by full-time students (5.30), unemployed (looking for work) (4.60), and full-time homemakers (4.43).

*Income\*:* The higher the household income level, the stronger the agreement with this survey item. The lowest agreement came from respondents who selected \$25,000–\$34,999 (4.57), less than \$25,000 (4.67), and \$35,000–\$49,999 (5.06), compared to those who selected the highest household income categories: \$200,000 and above, \$150,000–\$199,999, and \$100,000–\$149,000 (6.17, 6.10, and 5.80, resp.).

*Marital Status\*:* Female respondents who selected widowed (4.58), married but separated (4.94), and divorced (5.00) had the lowest agreement levels, while the highest agreement came from those who selected married (5.73).

*Race/Ethnicity\*:* The highest agreement came from women who selected Native Hawaiian and Other Pacific Islander (5.65), White (5.58), and Asian (5.49), compared to those who selected lower agreement options: American Indian or Alaska Native (5.26), Hispanic/Latino (5.28), and Black or African American (5.32). All statistical means were still on the somewhat agree to agree side of the scale.

*Religion\*:* Women who selected Latter-day Saint (5.79), Islam (5.70), Spiritual but Not Religious (5.63), Agnostic (5.60), and Atheist (5.59) had significantly higher agreement than those who selected Jehovah Witness (4.38) and Protestant (4.71). There was not a linear relationship along the 5-point activity level scale (1=not at all active and 5=very active) and level of agreement; those who selected 4 (5.64) and 5 (5.63) had the highest agreement, while women who selected 3 had the lowest agreement at 5.31.

*Residency\**: Female respondents who had lived in Utah more than 21 years (5.76) and 11–20 years (4.76) had higher agreement with the statement than those who had lived in Utah fewer than 2 years (4.78).

#### 4. Find Successful Employment

The final survey item in this section was “*I believe that in Utah I can find successful employment that works for me and my family.*” The statistical mean was 4.99 (SD 1.43) for women respondents in the representative sample and 5.46 (SD 1.57) for the convenience sample (see Table 16 for additional details). There was a significant difference between the statistical means of the two samples (see Appendix A and B for the demographic details). In short, the convenience sample included substantially more women who had higher educational attainment levels, which relates to confidence and opportunities for employment that can meet the needs of families. This item focused on Utah as a place where women can find successful employment. In the representative sample, 63.8% of women had some level of agreement that Utah is such a place, while 77.2% of women in the convenience sample had similar agreement levels. The statistical mean for the representative sample for men and women was identical. Table 17 includes men’s levels agreement with this item.

**Table 16. Find Successful Employment – Women’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative <i>M</i>=4.99; <i>SD</i>=1.43</b>	<b>Convenience <i>M</i>=5.46; <i>SD</i>=1.57</b>	<b>Combined <i>M</i>=5.31; <i>SD</i>=1.55</b>
Strongly disagree	26 (2.6%)	49 (2.2%)	75 (2.3%)
Disagree	42 (4.1%)	101 (4.6%)	143 (4.4%)
Somewhat disagree	48 (4.7%)	148 (6.7%)	196 (6.1%)
Neither agree nor disagree	251 (24.8%)	205 (9.3%)	456 (14.1%)
Somewhat agree	226 (22.3%)	412 (18.6%)	638 (19.8%)
Agree	279 (27.5%)	581 (26.2%)	860 (26.6%)
Strongly agree	142 (14.0%)	718 (32.4%)	860 (26.6%)
<b>Total Participants</b>	<b>1014</b>	<b>2214</b>	<b>3228</b>

**Table 17. Find Successful Employment – Men’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative <i>M</i>=4.99; <i>SD</i>=1.49</b>	<b>Convenience <i>M</i>=5.74; <i>SD</i>=1.54</b>	<b>Combined <i>M</i>=5.13; <i>SD</i>=1.53</b>
Strongly disagree	30 (3.3%)	5 (2.5%)	35 (3.2%)
Disagree	40 (4.5%)	5 (2.5%)	45 (4.1%)
Somewhat disagree	42 (4.7%)	15 (7.4%)	57 (5.2%)
Neither agree nor disagree	196 (21.9%)	11 (5.4%)	207 (18.9%)
Somewhat agree	211 (23.5%)	25 (12.4%)	236 (21.5%)
Agree	240 (26.8%)	57 (28.2%)	297 (27.0%)
Strongly agree	137 (15.3%)	84 (41.6%)	221 (20.1%)
<b>Total Participants</b>	<b>896</b>	<b>202</b>	<b>1098</b>

The 2023 survey results included responses from both women and men, and the statistical mean for the representative sample was 5.00 (SD 1.74), and for the convenience sample it was 5.75 (SD 1.41). For the representative sample, which is more generalizable to the Utah population, slightly more than one-third (35.8%) of the participants either disagreed or selected neither agree nor disagree, while 64.2% agreed. Please note that beginning with these 2024 results and in subsequent studies, the research will sample all Utahns but focus on results from women in the data reporting.

Demographic Findings: The short statements below summarize findings for the combined samples of female respondents.

*Age\**: Not surprisingly, women respondents who selected 70 and older (3.58) and 65–69 (4.69) were significantly less likely to agree with the statement than those who selected 45–49 (5.99), 50–54 (5.94), 40–44 (5.80), 35–39 (5.77), and 25–29 (5.67) years of age.

*Children*: There were no statistically significant differences between parents and nonparents in their agreement levels with this statement.

*Counties/Regions\**: Female respondents in the following counties were significantly more likely to agree with the statement: Cache (5.89), Box Elder (5.79), Davis (5.72), Salt Lake (5.66), the eastern county grouping (5.65), and Iron (5.62). The lowest statistical agreement levels came from the grouping with central rural counties (5.06) and the Tooele, Morgan, & Rich grouping (5.13). In addition, respondents in urban counties (5.59) were more likely to agree with this statement than those in rural Utah (5.28).

*Education\**: As with others in this section, women with graduate degrees (5.97) and bachelor’s degrees (5.71) had significantly higher agreement with this statement than respondents who selected any other educational attainment category: associate degree (5.40); some college, but degree not received or is in progress (5.09); some high school (4.69); high school graduate or equivalent (4.66); and less than high school (4.35). The statistical significance was strongest between graduate degree holders and those in all other education categories.

*Employment\**: Not surprisingly, full-time (6.15) and part-time employees (5.48) had the strongest agreement, with retired workers (3.85), full-time homemakers (4.43), and the unemployed (looking for work) (4.60) agreeing significantly less.

*Income\**: The higher the household income level, the stronger the agreement with this item. The lowest agreement aligned with female respondents who selected less than \$25,000 (4.67) and \$25,000–\$34,999 (4.57), compared with those who selected the highest household income categories: \$200,000 and above, \$150,00–\$199,999, and \$100,000–\$149,000 (6.17, 6.10, and 5.80, resp.). The others had statistical means that ranged from 5.06 to 5.36.

*Marital Status\**: Female respondents who selected widowed (4.58), married but separated (4.94), and divorced (5.00) had the lowest agreement levels, while the highest agreement came from those who selected married (6.00), living with partner/cohabitating (5.47), and single (5.43).

*Race/Ethnicity*: There were no significant differences among respondents who selected various race/ethnicity categories and their levels of agreement for this survey item.

*Religion\**: Women who selected Latter-day Saint (5.79), Islam (5.70), Spiritual but Not Religious (5.63), Agnostic (5.60), and Atheist (5.59) had significantly higher agreement than those who selected Jehovah Witness (4.38) and Protestant (4.71). Again, although there was not a linear relationship between selections within the religious activity scale and level of agreement, those who selected 4 on the 5-point activity scale (5.64) and 5 (5.63) had the highest statistical mean (6.07), with respondents who selected 3 (5.31) having the lowest agreement.

*Residency\**: Female respondents who had lived in Utah 11 to 20 years and more than 21 years (both at 5.75) had higher agreement with the statement than those who had lived in Utah fewer than 2 years (4.78).

## 5. Qualitative Findings

As mentioned, we offered one open-ended question inviting responses regarding any thoughts, insights, or ideas respondents may have related to the challenges that Utah women and girls face. Overall, 2,248 study participants provided qualitative responses to this prompt, with 115 mentioning something that fell within the “Workforce Development” category. Table 18 lists the extrapolated emergent theme categories, followed by several respondent quotations that provide representative observations regarding the themes. Note that some comments pertained to several categories, as individual statements often overlapped a variety of themes and topics. Others simply identified the general category as an issue of concern but did not provide additional commentary. As such, the themes do not total 100.0%.

**Table 18. Qualitative Themes – Workforce Development**

<b>Theme Categories</b>	<b>#</b>	<b>%</b>
A. General Comment or Importance	48	41.7%
B. Influence of Culture and Religion	27	23.5%
C. Options and Resources	24	20.9%
D. The Impact of Raising Children	19	16.5%

A. *General Comment or Importance*: The most frequent theme consisted of general statements about workforce development being a significant issue, particularly for women and girls. For example,

“Women who do not attain higher education or workforce experience are extremely vulnerable to potential domestic abuse, including financial abuse. Women deserve to grow up seeing themselves as potential contributors to all sectors of society, not just the home. Women are needed in every field of study and work.”

“Utah is still a man’s place. A woman has a hard time finding good jobs and (being) able to compete in the workforce.”

“I have two daughters. I want them to make enough money to be able to buy a home (and) have children, if they desire.”

B. *Influence of Culture and Religion*: The second most frequently mentioned issue was how the traditional roles emphasized by Utah’s conservative culture and religion affect women’s life choices. Examples included,

“Historically the LDS Church and its influence throughout the state of Utah has limited certain options for personal growth, leadership, and support for women who want a career outside of the home.”

“One challenge that women and girls face in the state of Utah is cultural norms which influence their vision for themselves and their early-life decisions. For example, one prevailing cultural norm among women is that they must choose between developing themselves as a whole person or having a family.”

“Girls in Utah are influenced to get married young and have children young, which can affect their education and career goals.”

C. *Options and Resources*: The importance of helping girls and women know about career options and resources was the next most frequently mentioned theme. Comments included

“Guidance in the schools (whether high school or college) is part of what’s missing that leads to women landing where they do career-wise. As an adult, I now see the many other career paths that I could have taken that would have played to my interests and strengths and would have paid better.”

“Women overall need more support on how to make resumes that will shine the light on all the work they do/have done. Often, we undersell ourselves or think we can’t change jobs because we feel we don’t have the right skills, but in fact we have the skills and then some.”

“The challenge that women and girls face is the need for more current training and development.”

“I would have found it valuable in high school to have had more exposure to real career path options.”

D. *The Impact of Raising Children*: The next most commonly mentioned theme was how staying home to raise children impacts women’s careers in the long term. For example,

“Women are [. . .] hugely underemployed, to allow them to take more flexible employment to care for children. The issue with underemployment is lack of opportunity, decent pay, advancement, skills training, and mentorship. Even when kids are older, they tend to under employ themselves still or face discrimination from lack of adequate work experience. This affects long-term financial health because they don’t have retirement [and] savings and are financially dependent on their partners.”

“I’ve also seen the traditional problem of women giving up a career to be a homemaker only to find themselves a single mother with no skills, education, or experience. This happened to me.”

“I have dreams I want to fulfill after making a career of raising my children. Had I known to go to school while they were little, and worked part-time during the marriage, I would have more experience and be more credible.”



The next most frequently mentioned topic underscored the importance of role models and mentors, including the need for formal mentorship programs designed to help girls and women develop professionally. Additional comments included the need for systems to help women return to work after taking a break to raise their children, the role of government in helping with workforce development, STEM as a valuable career path, and the lack of women represented in leadership.

## STEM Fields

Nationally, women make up approximately 27.0% of STEM (science, technology, engineering, and math) workers, compared to 21.0% in Utah. In 2019, the UWLP published a research and policy brief titled, “[Utah Women in STEM Education: A 2019 Update](#),”<sup>16</sup> which noted that the STEM gender gap begins well before people reach the labor force. In 2022, the UWLP published a research snapshot titled, “[Utah Women and STEM: A 2022 Update](#),”<sup>17</sup> which focused on interpreting employment data and exploring opportunities for the STEM gender gap. Data that measure progress are critical on many fronts, and the five related survey items provide insight that can improve STEM opportunities for Utah women and girls. Other resources can be found in the STEM section of the [UWLP Toolkits](#). In addition, readers can explore what leaders, advocates, and partners within the [STEM Fields Spoke](#) are doing to lead change in Utah.

The five related survey items provide additional insight that can guide changes to improve support for more Utah families. For each of these statements, we compare current data with the 2023 UWLP study<sup>18</sup> results that used three identical items. One of the survey items from last year was changed in this year’s survey, and one new item was added. For the representative sample, 1,920 participants took the survey, while 2,435 in the convenience sample participated, making for a combined total of 4,355 individuals.

### 1. Welcoming Fields

The first survey item in this section was “*STEM fields (science, technology, engineering, and math) are welcoming fields for women and girls in Utah.*” There was a statistically significant difference between the statistical means of the representative sample (5.06, SD 1.39) and the convenience sample (4.23, SD 1.63), and the mean of the combined samples was 4.59 (SD 1.58). The convenience sample, with significantly more respondents who had higher educational levels, had lower agreement. In the combined samples, 45.3% of respondents either disagreed or selected neither agree nor disagree (see Table 19 for more details). Only 11.7% of respondents strongly agreed, while many others selected either somewhat agree (22.6%) or agree (20.5%).

**Table 19. Welcoming Fields – Agreement Levels**

Levels of Agreement	Representative <i>M</i> =5.06; <i>SD</i> =1.39	Convenience <i>M</i> =4.23; <i>SD</i> =1.63	Combined <i>M</i> =4.59; <i>SD</i> =1.58
Strongly disagree	36 (1.9%)	113 (4.6%)	149 (3.4%)
Disagree	49 (2.6%)	298 (12.2%)	347 (8.0%)
Somewhat disagree	124 (6.5%)	449 (18.4%)	573 (13.2%)
Neither agree nor disagree	462 (24.1%)	438 (18.0%)	900 (20.7%)
Somewhat agree	435 (22.7%)	549 (22.5%)	984 (22.6%)
Agree	515 (26.8%)	377 (15.5%)	892 (20.5%)
Strongly agree	299 (15.6%)	211 (8.7%)	510 (11.7%)
<b>Total Participants</b>	<b>1920</b>	<b>2435</b>	<b>4355</b>

<sup>16</sup> Hanewicz, C., Thackeray, S., & Madsen, S. R. (2019, August 1). *Utah women in STEM education: A 2019 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/briefs/19-women-in-stem-2019.pdf>

<sup>17</sup> Winkel, R., & Madsen, S. R. (2022, June 2). *Utah women and STEM: A 2022 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/snapshot/39.pdf>

<sup>18</sup> Madsen, S. R. (2024, April 18). *STEM fields: Research summary*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/stem-fields-research-summary.pdf>

In the 2023 survey, a different statement was included: “Women can be successful in STEM jobs in Utah.” There was significantly more agreement with this statement than with the reworded statement in the 2024 survey. We believe this new question is more focused on what can be changed.

**Demographic Findings:** The brief statements below share findings for the combined samples. The statistical means are based on a 7-point Likert scale (1=strongly disagree, 4=neither agree nor disagree, and 7=strongly agree). The “\*” refers to demographic variables that met the statistical significance p-value threshold of  $\leq 0.05$ .

**Age\*:** Respondents who were in older age ranges had more agreement with the statement than younger study participants, but the relationship was not linear. The lowest agreement levels came from respondents in these age categories: 40–44 (4.38), 25–29 (4.44), 18–24 (4.48), and 45–49 (4.48). The highest agreement levels came from respondents who selected 70 and older (4.92), 65–69 (4.78), and 55–59 (4.70).

**Children:** There were no significant differences between parents and nonparents in their agreement levels with this statement.

**Counties/Regions\*:** Respondents who lived in the following counties/county groupings had the lowest agreement with the statement: Iron (4.29), Salt Lake (4.36), Cache (4.41), and Summit & Wasatch (4.44). The strongest agreement came from respondents in the Tooele, Morgan, & Rich grouping (5.14). All other counties or groups of counties had statistical means from 4.56 to 4.78. Among MCDs, Wasatch Front (4.48) had the lowest agreement levels, followed closely by Bear River (4.58), while the Mountainland MCD had the strongest agreement level at 4.74.

**Education\*:** There was statistical significance in this survey item, but only between respondents who selected less than high school (4.19) and graduate degree (4.32)—an interesting pairing—compared with those who selected associate degrees (4.92), some high school (4.92), and high school graduate or equivalent (4.84).

**Employment:** There were no statistically significant differences among employment categories in terms of agreement levels.

**Gender\*:** There was a significant difference between men (5.06) and women (4.45); non-binary participants had a statistical mean of 3.14. Men believe that STEM fields are more welcoming to women than women believe they are.

**Income\*:** As with education, there is statistical significance but not in a linear fashion. Respondents who reported \$200,000 and above had the lowest agreement levels at 4.32. Interestingly, the next-lowest agreement came from those who reported household incomes of less than \$25,000 (4.55), followed closely by respondents who had incomes in the \$150,000–\$199,999 (4.56) and \$100,000–\$149,999 (4.61) range. The strongest agreement came from individuals who selected the \$35,000–\$49,999 (4.75) and \$75,000–\$99,000 (4.73) income level categories.

**Marital Status:** There were no statistically significant differences among marital status categories and agreement with the statement.

**Race/Ethnicity\*:** Respondents who selected Native Hawaiian and Other Pacific Islander (4.31), White (4.51), and Hispanic/Latino (4.81) had the lowest agreement with the statement, while those who selected Black or African American (5.05) and Asian (4.98) had the highest agreement.

**Religion\*:** Those who leaned toward disagreeing with this statement selected the following religious affiliation categories: Agnostic (3.90), Atheist (4.00), Jehovah Witness (4.26), and Spiritual but Not Religious (4.32). Respondents who had more agreement with the statement included those who selected Islam (5.43) and Catholic (5.23). Affiliations in the middle of the mix included Protestant (4.92), Hinduism (4.86), Other/General Christians (4.78), and Latter-day Saint (4.59). There was a clear, significant pattern within religious activity levels, with respondents who selected 1=not at all (4.31) with the lowest agreement and 5=very active with the highest (4.88).

**Residency\*:** Respondents who had lived in Utah fewer than 2 years (4.96) had significantly higher agreement levels than those who selected 11–20 years (4.37) and more than 21 years (4.39).

## 2. Don't Need More Women

The second survey item was “*We don't need more women in STEM fields in Utah.*” There was a striking statistically significant difference between the means of the two samples, with the mean for the representative sample at 3.25 (SD 1.85) and the convenience sample at 1.69 (SD 1.18), with the combined samples at 2.37 (SD 1.70). In addition, the representative sample had a particularly wide standard deviation, which carried over into the combined samples. Further, 55.2% of respondents disagreed at some level or neither agreed nor disagreed in the representative sample, with only 23.1% selecting strongly agree. Compare that percentage to 96.8% of convenience sample respondents, who disagreed or neither agreed nor disagreed, with a striking 62.4% selecting strongly disagree. Also compare the finding that only 3.1% in the convenience sample agreed that “*We don't need more women in STEM fields in Utah,*” while nearly one-quarter of the representative sample agreed with the statement. See Table 20 for more details.

**Table 20. Don't Need More Women – Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative <i>M=3.25; SD=1.85</i></b>	<b>Convenience <i>M=1.69; SD=1.18</i></b>	<b>Combined <i>M=2.37; SD=1.70</i></b>
Strongly disagree	443 (23.1%)	1521 (62.4%)	1964 (45.1%)
Disagree	381 (19.8%)	550 (22.6%)	931 (21.4%)
Somewhat disagree	236 (12.3%)	135 (5.5%)	371 (8.5%)
Neither agree nor disagree	394 (20.5%)	154 (6.3%)	548 (12.6%)
Somewhat agree	158 (8.2%)	21 (0.9%)	179 (4.1%)
Agree	203 (10.6%)	23 (0.9%)	226 (5.2%)
Strongly agree	105 (5.5%)	32 (1.3%)	137 (3.1%)
<b>Total Participants</b>	<b>1920</b>	<b>2436</b>	<b>4356</b>

In the 2023 report, we stated that the statistical mean was 2.39 (SD 1.58) for the representative sample and 1.54 (SD 1.07) for the convenience sample. With both 2023 samples combined, 63.9% strongly disagreed, 20.0% disagreed, 4.5% somewhat disagreed, and 8.1% neither agreed nor disagreed (a total of 96.5%); only 3.5% agreed at any level. Comparing the 2023 results to the 2024 data, the change is somewhat troubling, primarily within the representative sample.

Demographic Findings: The following brief statements summarize the findings of the combined samples:

*Age\*:* Although all statistical means for various age ranges fell within the somewhat disagree to disagree space, the findings show that those in the older age range categories disagreed more strongly (2.11 to 2.21) with the statement, while those in the 18–34 age ranges disagreed less (2.53 to 2.75). This is a surprising finding.

*Children\*:* There was not a significant difference in agreement between parents and nonparents, but when comparing parents with the number of children in various age ranges, we found that those with more children in the 0–5 and 6–11 age ranges were more likely to disagree more strongly.

*Counties/Regions\*:* There were significant differences among counties or county groupings in terms of disagreement levels. The counties with respondents who disagreed most strongly included Cache (1.83), Davis (1.92), Salt Lake (1.92), and Weber (2.08). Those with the least disagreement resided in Utah County (2.83), the Tooele, Morgan, & Rich grouping (2.80), and the central rural county grouping (2.75).

*Education\*:* The more the education, the stronger the agreement—with respondents who have graduate degrees (1.83); bachelor's degrees (2.24); and some college, but degree not received or is in progress (2.54) having the strongest disagreement, and less than high school (3.69), some high school (3.44), high school graduate or equivalent (3.09), and associate degree (2.84) having statistically less disagreement.

*Employment:* There were no significant differences in levels of agreement and employment category.

*Income\**: Respondents with higher income levels had stronger disagreement, with \$200,000 and above (1.81) having significantly more disagreement than all others, and respondents reporting less than \$25,000 (2.93), \$25,000–\$34,999 (2.78), and \$35,000–\$49,999 (2.61) having the least disagreement.

*Marital Status*: There were no significant differences in levels of agreement and marital status category.

*Race/Ethnicity\**: Respondents who selected White (2.19) and Native Hawaiian and Other Pacific Islander (2.31) had significantly stronger disagreement with the statement than did those who selected Black or African American (3.44), American Indian or Alaska Native (3.20), and Asian (2.98).

*Religion\**: Respondents who selected Latter-day Saint (1.87) as their religious affiliation most strongly disagreed with the statement, followed by Agnostic (1.95), Atheist (2.07), and Spiritual but Not Religious (2.10). The ones with the least disagreement came from those who selected Islam (4.38), Judaism (3.50), Hinduism (3.38), and Catholic (3.35). There were no statistically significant differences between levels of agreement and religious activity levels.

*Residency\**: Residents who reported living in Utah for more than 21 years (1.81) and 11–20 years (2.13) had significantly more disagreement with the statement than those in all other categories, which had meanings ranging from 2.96 to 3.05.

### 3. Job Difficulty

The third survey item in this section was “*STEM jobs are more difficult than jobs in other industries in Utah.*” The statistical mean was 4.33 (SD 1.41) for the representative sample, 3.64 (SD 1.47) for the convenience sample, and 3.94 (SD 1.49) for the combined samples. These statistical means hovered around neutral. The most surprising finding from the analysis was that 40.1% of respondents in the representative sample and 40.6% in the convenience sample chose neither agree nor disagree. There may be a lack of awareness of STEM jobs within the public even among individuals who are more educated and have higher household incomes. Only 19.9% of respondents in the representative sample and 36.2% of the convenience sample disagreed at any level. See Table 21 for more details.

**Table 21. Job Difficulty – Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M</i> =4.33; <i>SD</i> =1.41	<b>Convenience</b> <i>M</i> =3.64; <i>SD</i> =1.47	<b>Combined</b> <i>M</i> =3.94; <i>SD</i> =1.49
Strong disagree	82 (4.3%)	244 (10.0%)	326 (7.5%)
Disagree	124 (6.5%)	385 (15.8%)	509 (11.7%)
Somewhat disagree	175 (9.1%)	253 (10.4%)	428 (9.8%)
Neither agree nor disagree	770 (40.1%)	987 (40.6%)	1757 (40.4%)
Somewhat agree	370 (19.3%)	301 (12.4%)	671 (15.4%)
Agree	268 (14.0%)	208 (8.6%)	476 (10.9%)
Strongly agree	131 (6.8%)	53 (2.2%)	184 (4.2%)
<b>Total Participants</b>	<b>1920</b>	<b>2431</b>	<b>4351</b>

In the 2023 survey, the statistical mean was 4.35 (SD 1.32) for the representative sample and 3.63 (SD 1.54) for the convenience sample; the statistical means were nearly the same as those in the 2024 study. With both 2023 samples combined, 72.9% disagreed at some level or selected neither agree nor disagree—compared to 69.4% in 2024—while 14.0% somewhat agreed, 9.2% agreed, and 4.0% strongly agreed. In the 2023 representative sample, 64.0% either disagreed at some level or neither agreed nor disagreed.

Demographic Findings: The brief statements below summarize findings for the combined samples. The “\*” refers to demographic variables that met the statistical significance p-value threshold of  $\leq 0.05$ .

*Age\**: Generally, respondents in the 50–70 and older age ranges (3.64 to 3.75) had slight disagreement with the statement, compared with those who were in the 18–34 age ranges (4.14 to 4.35).

*Children\**: There was not a statistically significant difference between the agreement levels of parents and nonparents, but among parents, those with fewer children in the 0–5 and 6–11 categories had stronger disagreement with the statement.

*Counties/Regions\**: The counties with respondents who had the lowest levels of agreement included Box Elder (3.58), Cache (3.74), Carbon (3.75), Salt Lake (3.77), Iron (3.77), Wasatch (3.78), Summit (3.78), Davis (3.81), Weber (3.81), and San Juan (3.83). The highest agreement came from residents of Millard (4.56), Duchesne (4.38), Piute (4.34), Tooele (4.28), Daggett (4.23), Sanpete (4.22), and Juab (4.21), all of which hovered around slightly above neither agree nor disagree. In terms of MCDs, Wasatch Front (3.81) and Bear River (3.81) were significantly different from Uintah Basin (4.17), Central (4.17), and Mountainland (4.14).

*Education\**: Respondents with graduate degrees had the lowest agreement (3.64), compared to those with associate degrees (4.16) and high school graduate or equivalent (4.10).

*Employment*: There were no statistically significant differences among reported levels of education and the respondents’ levels of agreement.

*Gender\**: Women’s agreement levels were significantly lower than men’s (3.80 and 4.36, resp.), and non-binary participants had a statistical mean between the two.

*Income\**: Respondents who selected \$200,000 and above as their household income category were significantly more likely to have lower levels of agreement (3.74), compared with those who selected \$35,000–\$49,999 (4.15) and less than \$25,000 (4.07).

*Marital Status*: There were no statistically significant differences among marital status categories and the respondents’ levels of agreement.

*Race/Ethnicity\**: Respondents who selected Native Hawaiian and Other Pacific Islander (3.72) and White (3.88) had significantly lower agreement levels than those who selected Asian (4.40) and Black or African American (4.28).

*Religion*: There were no statistical differences between levels of agreement and religious affiliations. There were also no significant differences among religious activity categories.

*Residency\**: Respondents who had lived in Utah for more than 21 years (3.71) and 11–20 years (3.92) were significantly less likely to agree with the statement than those who selected 2–5 years (4.32) and 6–10 years (4.26).

#### 4. Women Can Advance

The fourth survey item in this section was “*Women can successfully advance their careers in STEM industries in Utah.*” The statistical mean was 5.12 (SD 1.31) for the representative sample, 4.75 (SD 1.44) for the convenience sample, and 4.91 (SD 1.40) for the combined samples. Again, slightly more than 25.0% of Utahns in either sample selected neither agree nor disagree, which demonstrates a lack of knowledge about STEM fields more generally. More respondents did agree with the statement rather than disagree, with the convenience sample agreeing less. Each statistical mean, however, hovered around somewhat agree. See Table 22 for additional information.

**Table 22. Women Can Advance – Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M</i> =5.12; <i>SD</i> =1.31	<b>Convenience</b> <i>M</i> =4.75; <i>SD</i> =1.44	<b>Combined</b> <i>M</i> =4.91; <i>SD</i> =1.40
Strong disagree	23 (1.2%)	36 (1.5%)	59 (1.4%)
Disagree	44 (2.3%)	131 (5.4%)	175 (4.0%)
Somewhat disagree	91 (4.7%)	281 (11.6%)	372 (8.5%)
Neither agree nor disagree	484 (25.2%)	615 (25.3%)	1099 (25.3%)
Somewhat agree	474 (24.7%)	551 (22.7%)	1025 (23.6%)
Agree	496 (25.8%)	519 (21.3%)	1015 (23.3%)
Strongly agree	308 (16.0%)	298 (12.3%)	606 (13.9%)
<b>Total Participants</b>	<b>1920</b>	<b>2431</b>	<b>4351</b>

In the 2023 survey findings, the statistical mean was 5.36 (SD 1.33) for the representative sample and 5.18 (SD 1.41) for the convenience sample, which means there has been a slight decrease in agreement from last year's study. With both 2023 samples combined, 68.7% agreed at some level, 20.0% neither agreed nor disagreed, and 11.3% disagreed at some level. Last year most Utahns at least somewhat agreed that women can successfully advance their STEM careers in Utah, and the same is true for 2024.

Demographic Findings: The brief statements below share findings for the combined samples. As a reminder, the statistical means are based on a 7-point Likert scale (1=strongly disagree, 4=neither agree nor disagree; 7=strongly agree). The "\*" refers to demographic variables that met the statistical significance p-value threshold of  $\leq 0.05$ .

*Age:* There was no statistically significant difference among respondents in various age range categories.

*Children:* There were no significant differences between parents and nonparents in agreement level with this statement, nor were there differences among parents in terms of number of children in various age range categories.

*Counties/Regions:* There were no significant differences among agreement levels for this statement when comparing counties or regions—or even whether respondents lived in more rural or urban areas of the state.

*Education:* There were no statistically significant differences among agreement levels for this statement when comparing educational attainment categories.

*Employment\*:* Interestingly, full-time employees (4.99) had the highest agreement, while part-time employees (4.74), those who were unemployed (looking for work) (4.75), and full-time students (4.75) had the lowest agreement.

*Gender\*:* Women's agreement levels were significantly lower than men's (4.84 and 5.15, resp.), and non-binary participants had a statistical mean in the middle (4.86).

*Income:* There were no significant differences among agreement levels for this statement when comparing household income categories.

*Marital Status\*:* Respondents who selected widowed (4.72) and divorced (4.77) had significantly lower agreement with the statement than those who selected living with partner/cohabiting (4.98), single (4.94), and married (4.93).

*Race/Ethnicity\*:* Respondents who selected Native Hawaiian and Other Pacific Islander (4.86) and American Indian or Alaska Native (4.86) had significantly lower agreement levels with this statement than those who selected Black or African American (5.25).

*Religion\*:* There were no statistically significant differences of agreement levels among respondents' various religious affiliation categories. However, on the 5-point activity level scale (1=lowest, 5=highest), those who selected lower religious activity levels were more likely to agree less than respondents who selected higher activity levels.

*Residency\*:* Respondents who lived in Utah fewer than 2 years (5.03) had significantly stronger agreement than those who selected more than 21 years (4.85).

## 5. Trade Field Jobs

The final survey item in this section was "*Jobs in trade fields are good career choices for women to pursue,*" which was a new item added this year. The statistical mean was 5.29 (SD 1.28) for the representative sample, 5.71 (SD 1.12) for the convenience sample, and 5.53 (SD 1.23) for the combined samples. There was a significant difference between the statistical means of the two samples, with respondents in the convenience sample agreeing more strongly that jobs in trade fields are good career choices for women. In fact, 79.0% of respondents in the combined sample agreed at some level with the statement, while fewer (compared with other STEM fields survey items) neither agreed nor disagreed. See Table 23 for additional information.



**Table 23. Trade Field Jobs – Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=5.29; SD=1.28</i>	<b>Convenience</b> <i>M=5.71; SD=1.12</i>	<b>Combined</b> <i>M=5.53; SD=1.23</i>
Strong disagree	29 (1.5%)	9 (0.4%)	38 (0.9%)
Disagree	23 (1.2%)	22 (0.9%)	45 (1.0%)
Somewhat disagree	79 (4.1%)	47 (1.9%)	126 (2.9%)
Neither agree nor disagree	362 (18.9%)	346 (14.2%)	708 (16.3%)
Somewhat agree	499 (26.0%)	407 (16.7%)	906 (20.8%)
Agree	586 (30.5%)	931 (38.3%)	1517 (34.9%)
Strongly agree	342 (17.8%)	670 (27.5%)	1012 (23.3%)
<b>Total Participants</b>	<b>1920</b>	<b>2432</b>	<b>4352</b>

Demographic Findings: The brief statements below summarize findings for the combined samples of women participants.

*Age:* There were no statistically significant differences among age range categories and agreement levels.

*Children\*:* There was a significant difference between parents (5.58) and nonparents (5.42), but it is not large. Among parents themselves, those with fewer children in the 0–5 and 6–11 age ranges were more likely to agree more strongly with the statement.

*Counties/Regions\*:* Respondents who were residents of the following counties had the highest agreement: Salt Lake (5.66), Cache (5.64), Davis (5.62), Weber (5.60), and Iron (5.60). Interestingly, Box Elder County (5.16) stood alone among counties in reporting the lowest agreement.

*Education\*:* Respondents who selected less than high school (4.33) had significantly lower agreement than those who had graduate degrees (5.75); bachelor’s degrees (5.57); associate degrees (5.50); and some college, but degree not received or is in progress (5.47).

*Employment\*:* Respondents who were unemployed (looking for work) (5.15) and full-time students (5.33) had significantly lower agreement levels, compared to full-time employees (5.66). Part-time employees (5.47) were the next highest, but their numbers were not statistically different from the first two.

*Gender\*:* Women’s agreement levels were significantly higher than men’s (5.59 and 5.36, resp.), and non-binary respondents had the highest agreement (5.82).

*Income\*:* Respondents who had lower household incomes had lower agreement with this statement (e.g., \$25,000–\$34,999=5.18), while those who had higher income levels had stronger agreement (e.g., \$200,000 and above=5.72).

*Marital Status\*:* Respondents who selected divorced (5.34), widowed (5.37), single (5.43), and living with partner/cohabiting (5.44) had significantly lower agreement with the statement than those who selected other (5.73) and married (5.60).

*Race/Ethnicity\*:* Respondents who selected White (5.58), Native Hawaiian and Other Pacific Islander (5.53), and Asian (5.44) had significantly lower agreement with the statement than those who selected Hispanic/Latino (5.33) and Black or African American (5.37). Yet all were still between somewhat agree and a level of agreement.

*Religion:* There were no statistically significant differences among religious affiliation categories. In addition, no significant differences appeared regarding agreement levels and religious activity levels.

*Residency\*:* Respondents who lived in Utah fewer than 2 years (5.23) had significantly less agreement than those who had lived in Utah more than 21 years (5.68), 11–20 years (5.66), 6–10 years (5.58), and 2–5 years (5.54).

## 6. Qualitative Findings

As mentioned, we offered one open-ended question inviting responses regarding any thoughts, insights, or ideas respondents may have related to the challenges that Utah women and girls face. Overall, 2,248 study participants provided qualitative responses to this prompt, with 77 mentioning something that fell within the “STEM Fields” category. Table 24 lists the extrapolated theme categories, followed by several representative quotations that illuminate those themes. Note that some comments were included in several categories, as individual statements were often related to a variety of themes and topics. Others simply identified the general category as an issue of concern but did not provide additional commentary. As such, themes do not total 100.0%.

**Table 24. Qualitative Themes – STEM Fields**

Theme Categories	#	%
A. Bias & Other Challenges	45	58.4%
B. Barriers to Entry	33	42.9%
C. Recommendations for Change	22	28.5%

- A. *Bias & Other Challenges*: The most common theme respondents identified was the presence of bias and other challenges women experienced in STEM and Trade Fields as these tend to be “male-dominated” training programs and industries. More than half of all responses (58.4%) indicated this was a problem, and many included concerns over sexism, cultural bias, and gender-based expectations. For instance,

“My undergraduate degree is in a STEM field. Multiple professors treated me with disrespect when I went to them for help. I was dismissed or criticized. After graduating, I worked in a highly sexist office. I did not feel supported or encouraged to reach my potential. STEM is rough for women. Poor pay, treatment, and limited opportunities for growth and leadership.”

“STEM fields are not welcoming to women in Utah. My niece loves cars and wanted to go into mechanics. She attended a trade school where she was consistently belittled for being a girl and was told she knew less and had no idea what she was doing. And when she proved them wrong time and time again, they acted like it didn’t happen. She has persisted in her dream and graduated from the trade school but still gets a lot of pushback.”

“I work in a STEM field. In my company, 20 years ago, women only held administrative roles. This has changed over time, and we have made a concerted effort to recruit and promote women. This has been a change for the better of our company. At the same time, sexual bias is still present. With the gradual change in employee gender composition over time, I have also felt occasionally a general mistrust from women in our company towards men. It is a struggle for power that feels rooted in gender.”

“In manufacturing in particular, the old-timer mentality makes it hard to accept women in roles traditionally held by men. They think women are weak and not able to do certain tasks and such.”

- B. *Barriers to Entry*: The second most frequently mentioned issue was the prevalence of barriers to entering a career in STEM, which includes access to STEM education and opportunities for girls and women. More than 30 comments (42.9%) suggested that this is a main reason for female underrepresentation in STEM Fields, with many indicating that STEM jobs are not family friendly, which hinders opportunities for women who want to have both a career and family. Responses included

“As a woman working in a STEM field, my experience is that getting STEM training and education for women is one hurdle, and then finding good jobs and career growth in STEM is a bigger hurdle.”

“I think there is still an emphasis, among a large portion of the population, for girls and women to pursue careers/employment that will accommodate

“Women may face challenges in educational and career opportunities. This is particularly true of the state’s technology sector, where women are underrepresented in technical positions despite the large number of qualified female applicants. This may be related to gender bias and stereotyping, which can lead to difficulties for women in striking a balance between family and work.”

raising children. While this might be the best choice for some women, other women do not pursue careers in things like STEM, even though they would excel at it and enjoy it, because they are told that they need to stay home to raise children (or have a job that is flexible around caring for children). I think this hurts not only those individual women, but also their families, communities, and ultimately the entire state.”

“My wife chose to go back to school and then return to the workplace after being home with the kids for more than a decade. Her career is in a STEM field. Although she has mostly been welcomed into the field, most employers haven’t been well setup to support the needs of a mother with children.”

C. *Recommendations for Change:* Many respondents (28.5%) provided recommendations and ideas for how to decrease barriers and address the challenges faced by women in STEM. For example,

“Women and girls in Utah face several challenges, including disparities in educational and career opportunities, particularly in STEM fields. Fostering support networks and promoting policies that encourage equity can help address these challenges and empower women and girls in the state of Utah.”

“In terms of education, women and girls in Utah often experience societal expectations that influence their career paths, particularly when it comes to Science, Technology, Engineering, and Math (STEM) fields. Despite many opportunities, girls are still underrepresented in STEM, which can limit their future career prospects. Encouraging girls to pursue STEM from an early age, offering mentorship programs, and creating partnerships between schools and tech companies could help bridge this gap and provide girls with more diverse career options.”

“With the cost of higher education completely out of control, it’s hard for me to say that everyone should go to college these days. Young women out of high school or with associates degrees could be gainfully employed or even start their own businesses as plumbers, contractors, electricians, carpenters, or mechanics. We need all those things here, and we should encourage women to get into and be future leaders in those fields.”

Several comments (10.4%) from respondents expressed concerns about over-encouraging girls and women to explore STEM opportunities. Many indicated the need to let girls explore all areas they are interested in and to “normalize” STEM as a career option but that it is not better or more important than any others. One suggested that placing so much emphasis on STEM education for girls results in their passing up or ignoring other opportunities to enter jobs that pay less than STEM but are needed by society and may be of more interest to some women (such as educators, social workers, therapists, etc.). A few respondents stated that STEM education and programs should target both boys and girls equally, as bias towards educating more girls and hiring more women leads to extra pressure and higher expectations in these careers.

## Leadership Development

Although the UWLP has published a plethora of studies on the status of Utah women in leadership roles in a variety of sectors (i.e., state boards and commissions,<sup>19</sup> politics,<sup>20</sup> higher education,<sup>21</sup> public education,<sup>22</sup>

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<sup>19</sup> Madsen, S. R., Birchard, N., & Scheffler, B. (2023, October 5). *The status of women on Utah state boards & commissions: A 2023 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/briefs/53-status-of-women-on-utah-state-boards-commissions-2023.pdf>

<sup>20</sup> Townsend, A., & Madsen, S. R. (2023, February 16). *The status of women in Utah politics: A 2023 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/briefs/49-status-women-utah-politics-2023.pdf>

<sup>21</sup> Hauck, N. E., Hill, J. C., Townsend, A., & Madsen, S. R. (2021, April 21). *The status of women leaders in Utah higher education: A 2021 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/briefs/31-women-leaders-utah-higher-education-2021.pdf>

<sup>22</sup> Payne, H., Buesser, K., & Madsen, S. R. (2022, July 20). *The status of women leaders in Utah public education (K–12): A 2022 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/briefs/44-women-leaders-utah-public-education-k-12-2022.pdf>

state<sup>23</sup> and local government,<sup>24</sup> business,<sup>25</sup> and nonprofit organizations<sup>26</sup>), tracking specific leadership skills women develop as they acquire leadership roles has not yet been addressed. The two-fold goal is having more women serve in leadership roles and studying how leadership development can help people in all sectors identify and implement best practices. Fortunately, six items from this study provide additional insight that may be useful in determining ways to help more Utah girls and women combat barriers and strengthen leadership abilities. Extensive research has established that when women and men lead together in equal numbers, benefits spread to families, communities, businesses, and society.

There were 1,920 representative sample participants who responded to at least one of the questions in this section, and an additional 2,419 were in the convenience sample, for a combined total of 4,339 participants.

## 1. Aspirations

The first survey item in this section was “*I aspire to be a leader.*” We ran frequency data separately for women and men because BWF is focused on changing perceptions of women, but the comparison with men is also helpful. The statistical mean for women on this survey item was 5.05 (SD 1.61) for the representative sample, 5.76 (SD 1.37) for the convenience sample, and 5.54 (SD 1.49) for the combined samples (see Table 25 for additional details). Table 26 includes men’s levels agreement with this survey item. Notably, the men’s convenience sample (202 participants) is small compared to the number of men in the representative sample and of all women sample participants; therefore, consideration must be given to the combined statistical mean for men. It does appear that women’s aspiration for leadership is as strong as that of men, which most likely reflects a shift in recent years. Overall, 76.6% of women respondents agreed at some level that they aspire to be leaders, while 14.2% selected neither agree nor disagree, and only 9.2% disagreed.

**Table 25. Leadership Aspirations – Women’s Levels of Agreement**

Levels of Agreement	Representative <i>M</i> =5.05; <i>SD</i> =1.61	Convenience <i>M</i> =5.76; <i>SD</i> =1.37	Combined <i>M</i> =5.54; <i>SD</i> =1.49
Strong disagree	38 (3.7%)	22 (1.0%)	60 (1.9%)
Disagree	51 (5.0%)	60 (2.7%)	111 (3.4%)
Somewhat disagree	60 (5.9%)	65 (2.9%)	125 (3.9%)
Neither agree nor disagree	211 (20.8%)	249 (11.2%)	460 (14.2%)
Somewhat agree	176 (17.4%)	347 (15.7%)	523 (16.2%)
Agree	269 (26.5%)	613 (27.6%)	882 (27.3%)
Strongly agree	209 (20.6%)	861 (38.8%)	1070 (33.1%)
<b>Total Participants</b>	<b>1014</b>	<b>2217</b>	<b>3235</b>

In the 2023 survey results,<sup>27</sup> the statistical mean for all study participants was 4.78 (SD 1.75) for the representative sample and 5.86 (SD 1.40) for the convenience sample, with women’s agreement levels

<sup>23</sup> Townsend, A., & Madsen, S. R. (2024, June 4). *The status of women leaders in government – State of Utah: A 2024 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/briefs/57-women-leaders-government-utah-2024.pdf>

<sup>24</sup> Townsend, A., & Madsen, S. R. (2024, September 5). *The status of women leaders in government – Utah counties: A 2024 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/briefs/60-status-women-leaders-government-utah-counties-2024.pdf>

<sup>25</sup> Quayle, S., Madsen, S. R., & Blackburn, R. (2024, October 3). *The status of women leaders in Utah business: A 2024 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/briefs/61-status-women-leaders-utah-business-2024.pdf>

<sup>26</sup> Madsen, S. R., Hew-Len, A., & Thackeray, A. (2018, February 5). *The status of women leaders in Utah nonprofits: A 2018 update*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/briefs/16-status-of-women-leaders-in-utah-nonprofits-2018.pdf>

<sup>27</sup> Madsen, S. R. (2024, April 18). *Leadership development: Research summary*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/leadership-development-research-summary.pdf>

being significantly higher than men’s (5.57 and 5.18, resp.). The current results were similar to the 2023 findings.

**Table 26. Leadership Aspirations – Men’s Levels of Agreement**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=5.08; SD=1.49</i>	<b>Convenience</b> <i>M=5.51; SD=1.30</i>	<b>Combined</b> <i>M=5.16; SD=1.47</i>
Strong disagree	17 (1.9%)	0 (0.0%)	17 (1.5%)
Disagree	43 (4.8%)	6 (3.0%)	49 (4.5%)
Somewhat disagree	60 (6.7%)	7 (3.5%)	67 (6.1%)
Neither agree nor disagree	184 (20.5%)	32 (15.8%)	216 (19.7%)
Somewhat agree	195 (21.8%)	45 (22.3%)	240 (21.9%)
Agree	223 (24.9%)	57 (28.2%)	280 (25.5%)
Strongly agree	174 (19.4%)	55 (27.2)	229 (20.9%)
<b>Total Participants</b>	<b>896</b>	<b>202</b>	<b>1098</b>

**Demographic Findings:** The brief statements below share findings for the combined samples. The statistical means are based on a 7-point Likert scale (1=strongly disagree, 4=neither agree nor disagree, and 7=strongly agree). The “\*” refers to demographic variables that met the statistical significance p-value threshold of  $\leq 0.05$ .

*Age\**: Not surprisingly, older women who participated in the study had less agreement with the statement, particularly those in the 70 and older (4.54) and 65–69 (4.91) categories. Respondents in the younger and middle-age categories had significantly stronger agreement: 45–49 (5.77), 18–24 (5.75), 50–54 (5.73), 25–29 (5.71), 35–39 (5.70), and 40–44 (5.70).

*Children\**: There was not a significant difference between parents and nonparents in agreement levels, but those who had more children in the 6–11 and 12–17 age ranges were more likely to agree with the statement.

*Counties/Regions\**: Women who lived in Utah (5.70), Weber (5.68), Salt Lake (5.64), Davis (5.57), Summit & Wasatch (5.57), and Cache (5.55) counties were significantly more likely to agree with that statement than those who resided in the grouping of central rural counties (5.15) and Washington County (5.22).

*Education\**: Women who had less than high school (4.75), high school graduate or equivalent (4.90), or some high school (5.07) were significantly more likely to have lower agreement with this statement than women with graduate (5.90) and bachelor’s degrees (5.61).

*Employment\**: Women who selected retired (4.70), other (4.76), and full-time homemaker (4.99) as their employment status were significantly less likely to agree with the statement when compared to full-time employees (5.84), full-time students (4.83), and part-time employees (5.42).

*Income\**: Women who selected they had the highest household income levels (5.63 to 6.01) had significantly higher agreement than those having the lowest incomes (4.93 to 5.20).

*Marital Status\**: Respondents who selected widowed (4.76) had significantly different agreement responses from those who selected married (5.64) and living with partner/cohabiting (5.60).

*Race/Ethnicity*: There were no statistically significant differences among the various race/ethnicity categories.

*Religion\**: There were no statistically significant differences when comparing the various religious affiliation categories. However, there was a significant difference in religious activity levels among respondents who selected 1=not at all (5.34) and the other categories. There was not a linear difference, though, with the religious activity variable and agreement with this statement.

*Residency\**: Although there was a significant difference among respondents in various categories, the relationship was not linear. For example, respondents with the highest agreement had lived in Utah 6–10 years (5.92), followed by those who had lived in Utah 2–5 years (5.78). Those who had lived in Utah fewer than 2 years (5.04) had significantly different responses (5.04) from all others.

## 2. Consideration

The second survey item in this section was “*Others consider me a leader.*” We ran frequency data separately for women and men because BWF is focused on changing perceptions of women, but the comparison with men is also helpful. The statistical mean for women on this item was 4.78 (SD 1.62) for the representative sample and 5.69 (SD 1.23) for the convenience sample (see Table 27 for additional details). Table 28 presents men’s levels agreement with this item. Although the statistical mean in the representative sample of women (4.78) is slightly lower than that of men (4.95), it is similar. In the convenience sample, both men and women had significantly higher agreement than men and women in the representative sample. Notably, the convenience sample had significantly more individuals who were highly educated; the link between education and leadership attributes has been a research subject for decades.<sup>28</sup>

**Table 27. Consideration– Women’s Levels of Agreement**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M</i> =4.78; <i>SD</i> =1.62	<b>Convenience</b> <i>M</i> =5.69; <i>SD</i> =1.23	<b>Combined</b> <i>M</i> =5.40; <i>SD</i> =1.43
Strong disagree	47 (4.6%)	6 (0.3%)	53 (1.6%)
Disagree	63 (6.2%)	47 (2.1%)	110 (3.4%)
Somewhat disagree	75 (7.4%)	59 (2.7%)	134 (4.1%)
Neither agree nor disagree	249 (24.6%)	252 (11.4%)	501 (15.5%)
Somewhat agree	178 (17.6%)	474 (21.4%)	652 (20.2%)
Agree	252 (24.9%)	706 (31.8%)	958 (29.6%)
Strongly agree	150 (14.8%)	676 (30.5%)	826 (25.5%)
<b>Total Participants</b>	<b>1014</b>	<b>2220</b>	<b>3234</b>

**Table 28. Consideration – Men’s Levels of Agreement**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M</i> =4.95; <i>SD</i> =1.44	<b>Convenience</b> <i>M</i> =5.64; <i>SD</i> =1.15	<b>Combined</b> <i>M</i> =5.07; <i>SD</i> =1.42
Strong disagree	20 (2.2%)	1 (0.5%)	21 (1.9%)
Disagree	38 (4.2%)	2 (1.0%)	40 (3.6%)
Somewhat disagree	66 (7.4%)	5 (2.5%)	71 (6.5%)
Neither agree nor disagree	202 (22.5%)	24 (11.8%)	226 (20.6%)
Somewhat agree	222 (24.8%)	47 (23.2%)	269 (24.5%)
Agree	217 (24.2%)	75 (36.9%)	292 (26.6%)
Strongly agree	131 (14.6%)	49 (24.1%)	180 (16.4%)
<b>Total Participants</b>	<b>896</b>	<b>203</b>	<b>1099</b>

In the 2023 survey results,<sup>29</sup> the statistical mean for all study participants was 4.64 (SD 1.62) for the representative sample and 5.73 (SD 1.28) for the convenience sample, with women’s agreement levels being significantly higher than men’s (5.42 and 5.19, resp.). Because the convenience sample in the 2024 study was so much larger for women than for men, the combined mean was significantly higher for women. Yet, overall, the current results were similar to the 2023 findings.

<sup>28</sup> Madsen, S. R., Hanewicz, C., & Thackeray, S. (2010, January 26). *The value of higher education for women in Utah*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/briefs/1-value-of-higher-education.pdf>; Madsen, S. R. (2007). *On becoming a woman leader: Learning from the experiences of university presidents*. Wiley; Janzen Le Ber, M., Devnew, L. E., Berghout Austin, A. M., Shapiro, M., & Donchai, B. (2024). Women’s leadership aspirations. In S. R. Madsen (Ed.), *Handbook of research on gender and leadership* (2nd ed., pp. 152–170). Elgar Edward Publishing.

<sup>29</sup> Madsen, S. R. (2024, April 18). *Leadership development: Research summary*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/leadership-development-research-summary.pdf>

**Demographic Findings:** The statements below share findings for the women’s combined samples. The statistical means are based on a 7-point Likert scale (1=strongly disagree, 4=neither agree nor disagree, and 7=strongly agree).

**Age:** There were no statistically significant differences among age range categories and agreement levels.

**Children\*:** There was a statistically significant difference in agreement between parents (5.51) and nonparents (5.15). In addition, parents with more children in the 6–11 and 12–17 age ranges tended to agree more strongly with this statement.

**Counties/Regions\*:** Women who lived in the following counties had the highest agreement levels: Salt Lake (5.57), Utah (5.40), Weber (5.49), Summit & Wasatch (5.46), Cache (5.45), and Davis (5.44). Respondents from the following counties had the weakest agreement: the central rural grouping (4.99), Box Elder (5.03), and the Tooele, Morgan, & Rich grouping (5.10).

**Education\*:** Women who selected some high school (4.33), less than high school (4.55), or high school graduate or equivalent (4.64) reported significantly less agreement with this statement than women with graduate degrees (5.92) and bachelor’s degrees (5.45).

**Employment\*:** Women who selected retired (4.86), full-time homemaker (4.91), and unemployed (looking for work) (4.99) as their employment status were significantly less likely to agree with the statement when compared to full-time employees (5.66), part-time employees (5.34), and full-time students (5.29).

**Income\*:** Women who selected they had the highest household income levels (with means between 5.52 to 6.10) had significantly higher agreement with the statement than those in the lowest household income categories: less than \$25,000 (4.67), \$25,000–\$34,999 (4.75), and \$35,000–\$49,999 (5.02). The higher the household income level, the stronger the agreement with this survey statement.

**Marital Status\*:** Respondents who selected widowed (4.86), single (5.18), and divorced (5.19) had significantly less agreement than those who selected married (5.54) and married but separated (5.42).

**Race/Ethnicity:** There were no statistically significant differences when comparing the various race/ethnicity categories to the respondents’ agreement levels.

**Religion\*:** There were no statistically significant differences among the various religious affiliation categories. However, there was a significant difference in activity levels between respondents who selected 1=not at all (5.14) and those who selected 5=very active (5.58).

**Residency\*:** Respondents who selected fewer than 2 years (4.76) were significantly less likely to agree than residents who selected 6–10 years (5.67), more than 21 years (5.59), 11–20 years (5.56), and 2–5 years (5.41).

### 3. Leadership Identity

The third survey item in this section was “*I see myself as a leader.*” This question replaced one in the 2023 survey. We ran frequency data separately for women and men because BWF is focused on changing perceptions of women, but the comparison with men is also helpful. The statistical mean for women on this survey item was 4.89 (SD 1.68) for the representative sample and 5.61 (SD 1.34) for the convenience sample (see Table 29 on the next page for additional details).

Table 30 reports men’s levels agreement with this survey item. Note that the men’s convenience sample was substantially smaller (203) than both the men’s representative sample (896) and all of the women’s samples (3,233), so consideration much be given to the combined statistical mean for men. The representative means for both women and men are nearly identical, while the convenience sample for women is significantly higher than for men (5.61 vs. 5.38, resp.). Women with higher education levels and household incomes are more likely to see themselves as leaders.

**Table 29. Leadership Identity– Women’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=4.89; SD=1.68</i>	<b>Convenience</b> <i>M=5.61; SD=1.34</i>	<b>Combined</b> <i>M=5.39; SD=1.49</i>
Strong disagree	50 (4.9%)	20 (0.9%)	70 (2.2%)
Disagree	63 (6.2%)	68 (3.1%)	131 (4.1%)
Somewhat disagree	82 (8.1%)	86 (3.9%)	168 (5.2%)
Neither agree nor disagree	177 (17.5%)	201 (9.1%)	378 (11.7%)
Somewhat agree	217 (21.4%)	477 (21.5%)	694 (21.5%)
Agree	234 (23.1)	714 (32.2%)	948 (29.3%)
Strongly agree	191 (18.8%)	653 (29.4%)	844 (26.1%)
<b>Total Participants</b>	<b>1014</b>	<b>2219</b>	<b>3233</b>

**Table 30. Leadership Identity – Men’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=4.99; SD=1.53</i>	<b>Convenience</b> <i>M=5.38; SD=1.30</i>	<b>Combined</b> <i>M=5.06; SD=1.50</i>
Strong disagree	28 (3.1%)	0 (0.0%)	28 (2.5%)
Disagree	49 (5.5%)	6 (3.0%)	55 (5.0%)
Somewhat disagree	53 (5.9%)	13 (6.4%)	66 (6.0%)
Neither agree nor disagree	178 (19.9%)	27 (13.3%)	205 (18.7%)
Somewhat agree	203 (22.7%)	52 (25.6%)	255 (23.2%)
Agree	240 (26.8%)	61 (30.0%)	301 (27.4%)
Strongly agree	145 (16.2%)	44 (21.7%)	189 (17.2%)
<b>Total Participants</b>	<b>896</b>	<b>203</b>	<b>1099</b>

**Demographic Findings:** These brief statements share findings for the women’s combined samples.

*Age\**: Not surprisingly, women 70 and older (4.72) had the lowest levels of agreement, and all statistical means ranged from 5.18 (25–29 and 65–69) to 5.66 (50–54) and 5.62 (45–49). There was not a linear relationship among age categories and levels of agreement.

*Children\**: There was a significant difference between parents (5.49) and nonparents (5.13) in terms of respondents’ agreement with the statement. Also, when comparing parents among themselves, the only significant difference was with parents who had children in the 12–17 age range; essentially, respondents who had greater numbers of teenage children were more likely to agree with the statement, compared to parents who had fewer children in this age range.

*Counties/Regions\**: Women who lived in Utah (5.53), Summit & Wasatch (5.51), Salt Lake (5.49), Weber (5.47), and Davis (5.45) counties were significantly more likely to agree with this statement than those who resided in the group of central rural counties (4.95), Box Elder County (5.03), and Iron County (5.06).

*Education\**: Women respondents who selected less than high school (4.60), high school graduate or equivalent (4.71), or some high school (4.80) were significantly more likely to have lower agreement with this statement than women with graduate (5.84) and bachelor’s degrees (5.43).

*Employment\**: Women who selected retired (4.80), full-time homemaker (4.96), and unemployed (looking for work) (4.97) as their employment status were significantly less likely to agree with the statement, compared to full-time employees (5.66), part-time employees (5.27), and full-time students (5.19).

*Income\**: Women who selected they had lower household income levels (less than \$25,000–\$34,999, 4.67) and \$25,000–\$34,999 (4.76) had significantly lower agreement than those in higher income levels. For example, respondents in the \$200,000 and above category had a statistical mean of 6.00, which was the highest. There was a linear path from lowest to highest income levels and weakest to strongest agreement with the statement.



*Marital Status\**: Respondents who selected widowed (4.93), single (5.16), and divorced (5.20) had significantly lower agreement levels than those who selected married (5.51) and married but separated (5.47).

*Race/Ethnicity*: There were no statistically significant differences when comparing the various race/ethnicity categories in the survey to the agreement levels of Utah women.

*Religion\**: There were no statistically significant differences in agreement among the various religious affiliation categories. However, there was a significant difference in activity levels on a 5-point scale (1=not at all and 5=very active) between respondents who selected 1 (5.12), with the lowest agreement, and the other categories. There was not a linear difference among women who selected various religious activity categories their levels of agreement.

*Residency\**: Respondents who lived in Utah fewer than 2 years (4.87) had significantly lower agreement levels with the statement than all other residency categories (ranged between 5.45 and 4.72).

#### 4. Development Opportunities

The third survey item in this section was “*There are opportunities and resources around me to help me develop leadership skills.*” We ran frequency data separately for women and men because BWF is focused on changing perceptions of women, but the comparison with men is also helpful. The statistical mean for women on this survey item was 5.09 (SD 1.38) for the representative sample and 5.30 (SD 1.42) for the convenience sample (see Table 31 for additional details). Table 32 reflects men’s levels of agreement with this survey item. Overall, in both samples, women slightly agree that there are opportunities and resources to help with leadership development. In the combined samples, 73.5% of respondents had some level of agreement, while 26.5% selected disagree or neither agree nor disagree. Respondents in the convenience sample had a high percentage of women who selected agree or strongly agree with this statement.

**Table 31. Development Opportunities – Women’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative <i>M</i>=5.09; <i>SD</i>=1.38</b>	<b>Convenience <i>M</i>=5.30; <i>SD</i>=1.44</b>	<b>Combined <i>M</i>=5.24; <i>SD</i>=1.42</b>
Strong disagree	20 (2.0%)	22 (1.0%)	42 (1.3%)
Disagree	30 (3.0%)	115 (5.2%)	145 (4.5%)
Somewhat disagree	55 (5.4%)	144 (6.5%)	199 (6.2%)
Neither agree nor disagree	217 (21.4%)	253 (11.4%)	470 (14.6%)
Somewhat agree	267 (26.3%)	499 (22.5%)	766 (23.7%)
Agree	261 (25.7%)	720 (32.5%)	981 (30.4%)
Strongly agree	164 (16.2%)	461 (20.8%)	625 (19.4%)
<b>Total Participants</b>	<b>1014</b>	<b>2214</b>	<b>3228</b>

**Table 32. Development Opportunities – Men’s Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative <i>M</i>=5.14; <i>SD</i>=1.26</b>	<b>Convenience <i>M</i>=5.56; <i>SD</i>=1.20</b>	<b>Combined <i>M</i>=5.21; <i>SD</i>=1.26</b>
Strong disagree	12 (1.3%)	1 (0.5%)	13 (1.2%)
Disagree	25 (2.8%)	5 (2.5%)	30 (2.7%)
Somewhat disagree	34 (3.8%)	6 (3.0%)	40 (3.6%)
Neither agree nor disagree	173 (19.3%)	22 (10.8%)	195 (17.7%)
Somewhat agree	283 (31.6%)	44 (21.7%)	327 (29.8%)
Agree	252 (28.1%)	84 (41.4%)	336 (30.6%)
Strongly agree	117 (13.1%)	41 (20.2%)	158 (14.4%)
<b>Total Participants</b>	<b>896</b>	<b>203</b>	<b>1099</b>

In the 2023 survey results,<sup>30</sup> the statistical mean for all study participants was 4.87 (SD 1.53) for the representative sample and 5.46 (SD 1.39) for the convenience sample, with women's and men's agreement levels being similar (5.29 and 5.33, resp.). In 2023, there was a significant difference between the two samples, with 58.9% agreeing at some level in the representative sample, compared to 86.8% in the convenience sample. In the representative sample, 38.9% selected either a level of disagreement or neither agree nor disagree, while in the convenience sample only 20.1% responded similarly. In the 2024 representative sample, fewer respondents (27.2% of men and 31.8% of women) disagreed or selected neither agree nor disagree.

**Demographic Findings:** The brief statements below share findings for the combined samples. As a reminder, the statistical means are based on a 7-point Likert scale (1=strongly disagree, 4=neither agree nor disagree; 7=strongly agree). The “\*” refers to demographic variables that met the statistical significance p-value threshold of  $\leq 0.05$ .

*Age:* There were no statistically significant differences among agreement levels and age range categories.

*Children:* There was not a significant statistical difference between parents and nonparents in agreement levels, nor was there when comparing the number of children a mother reported in the three age range categories.

*Counties/Regions\*:* Women who lived in the following counties had higher agreement levels: Summit & Wasatch (5.40), Cache (5.38), Utah (5.34), Davis (5.33), and the Tooele, Morgan, & Rich grouping (5.32). Respondents in the following counties had the lowest agreement: central rural county grouping (4.93), eastern rural county grouping (5.01), and Washington (5.09).

*Education\*:* Women who selected less than high school (4.50) or high school graduate or equivalent (4.91) were significantly more likely to have lower agreement with this statement than women with graduate degrees (5.53) and bachelor's degrees (5.18). Interestingly, in this analysis, respondents who selected some high school had stronger agreement (5.29) as well.

*Employment\*:* Women who selected full-time homemaker (4.85), unemployed (looking for work) (4.92), or retired (4.98) as their employment status were significantly less likely to agree with the statement, compared to full-time employees (5.42).

*Income\*:* Women who selected household income levels over \$100,000 (5.24 to 5.63) had significantly higher agreement than those who selected an income category less than \$75,000 (4.90 to 5.06).

*Marital Status\*:* Respondents who selected divorced (5.00), and widowed (5.02) had significantly different responses from those who selected married (5.31) and living with partner/cohabiting (5.22).

*Race/Ethnicity:* There were no statistically significant differences among respondents in the various race/ethnicity categories.

*Religion\*:* There were no statistically significant differences when comparing the various religious affiliation categories and Utah women's levels of agreement. However, there was a significant difference between respondents who selected religious activity levels of 1=not at all (5.06) and 2 (5.09) and those who selected 5=very active (5.45) on the 5-point activity level scale.

*Residency\*:* Although there was a significant difference among respondents in various categories, the relationship was not linear. For example, residents with the highest agreement had lived in Utah 6–10 years (5.38), followed by those who had lived in Utah more than 21 years (5.30) and those who had lived in Utah 2–5 years (5.25). Those who had lived in Utah fewer than 2 years had significantly lower agreement levels (5.05).

## 5. Confronting Biases

Two additional questions focused on Utahn's perceptions of unconscious bias in the state. Since the research is clear that it is nearly impossible to create cultures of inclusion and belonging without

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<sup>30</sup> Madsen, S. R. (2024, April 18).

individuals and communities understanding their own conscious and unconscious biases,<sup>31</sup> it is important to understand what residents think about our culture of understanding biases.

The fifth survey item in the Leadership Development section was “*People in Utah are interested in understanding and confronting their biases.*” The statistical mean for this statement was 4.65 (SD 1.51) for the representative sample, 2.77 (SD 1.53) for the convenience sample, and 3.61 (SD 1.78) for the combined samples. Because there is such a striking difference between the statistical means of the two samples, we do not believe the combined samples data is particularly useful in understanding the data, though the divergence itself is notable. Clearly, the respondents in the convenience sample—which had more individuals who selected higher educational attainment and household incomes—think much differently regarding both their perspectives about Utahns and about bias more generally. The statistical differences appear at all agreement levels. Only 16.3% of respondents in the representative sample disagreed at any level, compared with 69.7% of those in the convenience sample; 30.6% of individuals in the representative sample were unsure (neither agree nor disagree), compared with only 14.0% in the convenience sample. Many people (53.1%) in the representative sample—and far fewer (16.4%) in the convenience sample—agreed at some level that people in Utah are interested in understanding and confronting their biases. See Table 33 for additional information.

**Table 33. Confronting Biases – Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative <i>M</i>=4.65; <i>SD</i>=1.51</b>	<b>Convenience <i>M</i>=2.77; <i>SD</i>=1.53</b>	<b>Combined <i>M</i>=3.61; <i>SD</i>=1.78</b>
Strong disagree	83 (4.3%)	613 (25.8%)	696 (16.2%)
Disagree	105 (5.5%)	580 (24.5%)	685 (16.0%)
Somewhat disagree	124 (6.5%)	460 (19.4%)	584 (13.6%)
Neither agree nor disagree	588 (30.6%)	331 (14.0%)	919 (21.4%)
Somewhat agree	423 (22.0%)	267 (11.3%)	690 (16.1%)
Agree	384 (20.0%)	97 (4.1%)	481 (11.2%)
Strongly agree	213 (11.1%)	24 (1.0%)	237 (5.5%)
<b>Total Participants</b>	<b>1920</b>	<b>2372</b>	<b>4292</b>

In the 2023 survey results,<sup>32</sup> the statistical mean for the full set of study participants was 3.93 (SD 1.66) for the representative sample and 2.86 (SD 1.58) for the convenience sample, with women’s disagreement levels significantly stronger than men’s (3.16 and 3.92, resp.). In 2023, this item was based on respondents’ views of Utahns more generally, and 80.4% of respondents in the representative sample either disagreed or selected neither agree nor disagree, while 64.9% in the convenience sample did the same. Overall, only 8.8% of Utahns in the 2023 sample agreed or strongly agreed with the statement. The percentage dramatically changed within one year.

**Demographic Findings:** Despite the significant statistical differences reflected in the representative and convenience samples, we have still provided brief statements that summarize the findings of the combined samples.

**Age:** There were no statistically significant differences among agreement levels for this statement when comparing age range categories.

**Children:** There was not a significant difference between parents and nonparents in agreement levels, nor was there a significant difference of agreement when comparing the number of children in the home in various age ranges.

<sup>31</sup> Ross, H. J. (2020). *Everyday bias: Identifying and navigating unconscious judgments in our daily lives* (updated edition). Rowman & Littlefield; Madsen, S. R. (2024, February 18). Opinion: Utah has slipped away from its founding principles of inclusion and respect. *The Salt Lake Tribune*.

<https://www.sltrib.com/opinion/commentary/2024/02/18/opinion-utah-has-slipped-away-its/>

<sup>32</sup> Madsen, S. R. (2024, April 18).

*Counties/Regions\**: Residents of the following counties had the strongest disagreement with this statement: Iron (2.97), Cache (3.09), Wasatch (3.10), and Salt Lake (3.19). Counties with respondents who agreed most strongly with the statement included Rich (5.10), Millard (4.50), Morgan (4.41), Beaver (4.30), Box Elder (4.27), Wayne (4.23), Daggett (4.23), and San Juan (4.22).

*Education\**: Respondents with graduate degrees (2.99) were more likely to select a stronger disagreement level than those who selected any of the other educational attainment categories: bachelor's degrees (3.49); some college, but degree not received or is in progress (3.89); associate degree (4.09); less than high school (4.21); high school graduate or equivalent (4.39); and some high school (4.53).

*Employment\**: Respondents who were part-time employees (3.27), full-time students (3.36), and full-time homemakers had the stronger disagreement, while those who selected unemployed (looking for work) (4.03) had the highest agreement, with retired (3.87) and full-time employees (3.58) in between.

*Gender\**: Women's agreement levels were significantly lower than men's (3.29 and 4.56, resp.), and non-binary participants had the strongest disagreement (2.82).

*Income\**: Respondents who had lower household incomes had lower disagreement with this statement (e.g., \$25,000–\$34,999=4.22; less than \$25,000=4.08), while those with higher income levels had stronger disagreement (e.g., \$200,000 and above=3.00; \$100,000–\$149,999=3.44, \$150,000–\$199,999=3.46).

*Marital Status*: There were no significant differences among agreement levels when comparing marital status categories.

*Race/Ethnicity\**: Respondents who selected White (3.43) and Native Hawaiian and Other Pacific Islander (3.66) were more likely to disagree with this statement than those who selected Black or African American (4.68), American Indian or Alaska Native (4.23), Asian (4.19), or Hispanic/Latino (4.02).

*Religion\**: Respondents who selected Agnostic (2.73), Atheist (2.84), Spiritual but Not Religious (3.08), and Latter-day Saint (3.36) were significantly more likely to disagree with this statement than were those who selected Islam (5.52), Catholic (4.53), Judaism (4.42), Hinduism (4.38), Jehovah Witness (4.37), Protestant (4.26), or Other/General Christian (4.23). In addition, on the 5-point activity level scale (1=not at all, and 5=very active), respondents who selected activity levels of 1 (3.30) and 2 (3.60) were significantly more likely to disagree than those who selected higher activity levels.

*Residency\**: Respondents who had lived in Utah more than 21 years (3.00) had the strongest disagreement with this statement. Residents of 11–20 years (3.17) also disagreed more strongly than those who selected fewer than 2 years (4.51), 2–5 years (3.98), and 6–10 years (3.87).

## 6. Bias Awareness

The second bias statement and the final survey item in this section was “*People in Utah are aware of their own biases.*” The statistical mean was 4.62 (SD 1.51) for the representative sample, 2.51 (SD 1.45) for the convenience sample, and 3.45 (SD 1.81) for the combined samples. Again, because there was such a striking significant difference between the statistical means of the two samples, we do not believe the combined samples data is useful in some respects; focusing on the results of the two samples separately may provide more insight. Clearly, participants in the convenience sample think differently about Utah's awareness of their own biases from respondents in the representative sample. Only 18.4% of respondents in the representative sample disagreed at any level, compared with 76.6% of respondents in the convenience sample—a striking difference. And 27.7% of individuals who participated in the representative sample were also unsure (neither agree nor disagree), compared with only 11.6% in the convenience sample. In addition, 53.9% in the representative sample—compared to only 11.8% of convenience sample respondents—agreed at any level that people in Utah are aware of their own biases. See Table 34 for additional information.

**Table 34. Bias Awareness – Agreement Levels**

<b>Levels of Agreement</b>	<b>Representative</b> <i>M=4.62; SD=1.51</i>	<b>Convenience</b> <i>M=2.51; SD=1.45</i>	<b>Combined</b> <i>M=3.45; SD=1.81</i>
Strong disagree	84 (4.4%)	725 (30.5%)	809 (18.8%)
Disagree	109 (5.7%)	655 (27.6%)	764 (17.8%)
Somewhat disagree	159 (8.3%)	440 (18.5%)	599 (13.9%)
Neither agree nor disagree	531 (27.7%)	275 (11.6%)	806 (18.8%)
Somewhat agree	454 (23.6%)	201 (8.5%)	655 (15.3%)
Agree	383 (19.9%)	53 (2.2%)	436 (10.2%)
Strongly agree	200 (10.4%)	26 (1.1%)	226 (5.3%)
<b>Total Participants</b>	<b>1920</b>	<b>2375</b>	<b>4295</b>

In the 2023 survey results,<sup>33</sup> the statistical mean for all study participants was 3.80 (SD 1.73) for the representative sample and 2.50 (SD 1.46) for the convenience sample, with women’s disagreement levels significantly stronger than men’s (2.84 and 3.63, resp.). In 2023, this survey item was based on respondent’s perceptions of Utah residents more generally, and 87.2% of respondents in the convenience sample either disagreed or selected neither agree nor disagree, while 66.8% in the representative sample did the same. Overall, only 6.8% of survey participants in the 2023 agreed that Utahns are aware of their own biases. As outlined above, it appears that things have changed in the past year.

Demographic Findings: Despite the significant difference between samples, we have still provided the following brief statements that outline the findings for all participants in the 2024 sample.

*Age:* There were no statistically significant differences among age range categories and agreement levels.

*Children:* There was not a significant difference between parents and nonparents in agreement levels, nor was there a significant difference when comparing the number of children in various age ranges and agreement levels.

*Counties/Regions\*:* Respondents who were residents of the following counties had the strongest disagreement with this statement: Cache (2.85), Wasatch (2.90), Davis (2.96), Iron (3.00), and Salt Lake (3.04). Those counties with respondents who agreed the most with the statement included Rich (5.00), Millard (4.69), Daggett (4.31), Beaver (4.24), San Juan (4.23), Morgan (4.20), Wayne (4.14), and Piute (4.00).

*Education\*:* Respondents with graduate degrees (2.73) were more likely to select a stronger disagreement level than those in all other educational attainment categories: bachelor’s degrees (3.30); some college, but degree not received or is in progress (3.72); associate degree (4.01); less than high school (4.38); high school graduate or equivalent (4.43); and some high school (4.68).

*Employment\*:* Respondents who were part-time employees (3.14), full-time students (3.15), and full-time employees (3.39) had a stronger disagreement than those who selected unemployed (looking for work) (4.05) and retired (3.78), a group that had weaker disagreement.

*Gender\*:* Women’s disagreement levels were significantly stronger than men’s (3.11 and 4.47, resp.), and non-binary respondents had the strongest disagreement (2.36).

*Income\*:* Respondents who had lower household incomes had less disagreement with this statement (e.g., \$25,000–\$34,999=4.23; less than \$25,000=4.06), while those with higher household income levels had stronger disagreement (e.g., \$200,000 and above=2.75, \$100,000–\$149,999=3.20, and \$150,000–\$199,999=3.28).

*Marital Status:* There were no significant differences among agreement levels for this statement when comparing marital status categories.

<sup>33</sup> Madsen, S. R. (2024, April 18).

*Race/Ethnicity\**: Respondents who selected Native Hawaiian and Other Pacific Islander (3.17) and White (3.22) were significantly more likely to disagree with this statement than those who selected Black or African American (4.88), American Indian or Alaska Native (4.25), Hispanic/Latino (4.04), or Asian (4.02).

*Religion\**: Respondents who selected Agnostic (2.63), Atheist (2.79), Spiritual but Not Religious (2.92), and Latter-day Saint (3.04) were significantly more likely to disagree with this statement than were those who selected Islam (5.26), Catholic (4.51), Hinduism (4.41), Other/General Christian (4.23), Jehovah Witness (4.21), Judaism (4.21), or Protestant (4.15). In addition, respondents who selected activity levels of 1=Not at all (3.25) and 2 (3.50) were significantly more likely to disagree than those who selected 4 (3.99) and 3 (3.92). Interestingly, those who selected 5=very active had a statistical mean in the middle (3.66).

*Residency\**: Respondents who lived in Utah more than 21 years (2.73) had the strongest disagreement with this statement, with 11–20 years (3.02) also disagreeing more strongly, compared to those who selected fewer than 2 years (4.46), 2–5 years (3.94), and 2–5 years (3.79).

## 7. Qualitative Findings

As mentioned, we offered one open-ended question inviting responses regarding any thoughts, insights, or ideas respondents may have related to the challenges that Utah women and girls face. Overall, 2,248 study participants provided qualitative responses to this prompt, with 174 mentioning something that fell within the “Leadership Development” category. Table 35 lists the extrapolated theme categories and is followed by several respondent quotations that articulate representative comments on the themes. Note that some comments pertained to several categories, as individual statements were often related to a variety of themes and topics. Others simply identified the general category as an issue of concern but did not provide additional commentary. As such, themes total more than 100.0%.

**Table 35. Qualitative Themes – Leadership Development**

Theme Categories	#	%
A. Impact of Religion and/or Culture	49	28.2%
B. General Support or Concern	39	22.4%
C. Barriers and Limits to Leadership	37	21.3%
D. Importance of Role Models and Mentors	36	20.7%
E. Lack of Female Leaders	35	20.1%

- A. *Impact of Religion and/or Culture*: The most frequent theme that surfaced among respondents (28.2%) was the perception that The Church of Jesus Christ of Latter-day Saints’ practices, or patriarchal, traditional culture limited leadership opportunities for women. Responses included

“I believe the challenges are primarily a result of the LDS Church’s historical and current influence within Utah culture. The roles of women within the Church, which permeate into the greater cultural norms and expectations of women in Utah, are merely reflected in the lower economic, educational, and leadership outcomes of women in the state. The lack of women in leadership roles, professionally and economically, is a contributing factor to underwhelming support for important social issues such as domestic violence, child abuse and neglect, food insecurity, and child poverty.”

“I think The Church of Jesus Christ of Latter-day Saints culture in Utah makes it harder for women to be leaders and harder for men to view them as someone with value outside of the home.”

“I feel like there is an ‘illusion of choice’ in Utah. Women feel they are valued in their communities (the LDS church) most when they take on roles as submissive wives and mothers. Because we are beings who need community, we want to secure our place in our communities by doing what the communities will value us most for.”

- B. *General Support or Concern*: A significant number of respondents voiced general support of women leaders, a need for increasing opportunities for women to lead, or benefits of representative

leadership. Of the 39 respondents (24.2%), many highlighted the importance of valuing gender equally in terms of leadership ability. For instance,

“I think people have a difficult time accepting that someone can be multiple things. A woman can be gentle and agreeable and still be a firm and confident leader.”

“Teach boys and girls from a young age that both can do wonderful things; it’s not a competition. If we show them that together more things are possible, things will get better in our communities.”

“Many women are using their voices and power to put men down like we once were; this is not acceptable. As a kid I was always under the impression that if women gained power, it was a threat to men. I am done playing small so men can feel big. And I have no interest in being big and making men feel small. I want us to stand side by side, hand in hand, as equals.”

C. *Barriers and Limits to Leadership*: Many respondents (21.3%) commented on existing barriers preventing women from rising in leadership roles. For example,

“There is a lack of leadership opportunities and upward mobility opportunities in Utah.”

“Sadly, I believe biases remain that girls and women are less able to achieve at the same level as men, which can lead to a withholding of encouragement, opportunity, and reward.”

“I hate to use this phrase, but it’s impossible for a woman to break into the ‘Good Ole Boys Club.’ How do you fight something that happens behind closed doors? Something that is just a feeling, or a look, or a ‘justified’ reason for why something was done?”

D. *Importance of Role Models and Mentors*: Highlighting the value of having allies and examples, 36 (20.7%) specifically noted the need for improvement. Some comments expressed how detrimental the lack of good role models can be. Comments included

“Strong women with choices and voices begin in childhood.”

“Women in leadership need to provide more outreach to other women!”

“Strong female mentors allowed me to see myself in a leadership position and strive to get there.”

“Where I work, I see women actively engage in behavior to cut down other women. These are women in leadership positions! Even one woman demonstrating this type of behavior in a leadership position does immense damage.”

E. *Lack of Female Leaders*: Further underscoring the need for role models, 35 respondents (20.1%) specifically cited the lack of female leaders as perpetuating the problem. Examples included,

“We need more women leaders in government and corporate hierarchy to address the problems that are unique to women and to advocate for equal opportunities for all. This should also include those of other races.”

“In many industries, women are still a minority in top leadership roles. This lack of representation leads to a lack of diverse perspectives and limits opportunities for women to have a voice in decision making.”

Additional comments explored a variety of ideas and concerns, including a cultural tendency to devalue the leadership and skills that women develop and strengthen as caregivers to children and as community volunteer workers. In comments focused on girls and young women, encouragement was a frequent theme, in conjunction with teaching self-confidence, self-advocacy, and positive self-talk. A handful of comments also highlighted the importance of demonstrating support for and thanking woman leaders. Comments regarding unconscious bias are published in our sixth white paper, which focuses on an analysis of the nearly 1,000 comments that addressed sexism and discrimination in Utah.

## Conclusion

This white paper highlights key findings related to data collected on four key areas (spokes) in the BWF initiative: Entrepreneurship, Workforce Development, STEM Fields, and Leadership Development. Respondents from across the state participated in this 2024 comprehensive study, which focused on understanding the perceptions and attitudes of Utahns on a variety of topics. Both quantitative and

qualitative findings were shared in this report. This is the second of six white papers that share the findings of the full study.

Instead of highlighting recommendations for changes in this conclusion, we have included Appendix C, which provides details of each of the four spoke areas of focus addressed in this report and includes the spoke's description, vision, goals, and thriving statement. The goals—linked to metrics that are updated each year—are our recommendations on what needs to be done to improve Utah in each area so that more women can thrive in their workplace settings.

Utah must do better to ensure everyone thrives. As Melinda Gates once stated, “If you want to lift up humanity, empower women. It is the most comprehensive, pervasive, high-leverage investment you can make in human beings.”<sup>34</sup> The vision of BWF is not to lift girls and women at the expense of boys and men—that is a fallacious scarcity mentality. Instead, we believe in the abundance mentality: there is enough for everyone through cooperation and collaboration. As Utah decision makers and residents join to find ways to strengthen the impact of girls and women more effectively, more Utah women and families will feel connected to our state's well-known mantra: “This Is the Place.” And, in fact, when more women can feel like “This is Her Place,” too, we will know Utah is finally becoming a place where women are truly valued.

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*Organization:* The Utah Women & Leadership Project (UWLP) is housed in the Jon M. Huntsman School of Business at Utah State University (USU) and works in partnership with USU Extension. UWLP's mission is to strengthen the impact of Utah girls and women. The UWLP serves Utah and its residents by, first, producing relevant, trustworthy, and applicable research; second, creating and gathering valuable resources; and third, convening trainings and events that inform, inspire, and ignite growth and change for all Utahns. The UWLP is also the backbone organization for A Bolder Way Forward ([www.abolderwayforward.org](http://www.abolderwayforward.org)).

*Acknowledgements:* A special thanks to Kolene Anderson and Brie Sparks for their qualitative data analysis for sections of this report. We also appreciate the editing expertise of Deb Thornton. Finally, we thank BWF leaders, members, advocates, and partners for distributing the survey throughout Utah to increase participation.

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<sup>34</sup> Gates, M. (2021). *The moment of lift: How empowering women changes the world*. Flatiron Books.



**Appendix A. Study Demographics – Representative Sample (N=1,920)**

<p><b>Gender</b>                  Man (46.7%)                  Woman (52.8%)                  Non-binary (0.5%)                  Prefer not to say (0.1%)</p> <p><b>Age</b>                  18–24 (5.6%)                  25–29 (9.5%)                  30–34 (14.2%)                  35–39 (9.4%)                  40–44 (8.6%)                  45–49 (7.5%)                  50–54 (7.0%)                  55–59 (9.9%)                  60–64 (7.4%)                  65–69 (8.6%)                  70 and older (12.3%)</p> <p><b>Education</b>                  Less than high school (1.6%)                  Some high school (3.7%)                  High school grad/eq. (26.7%)                  Some college (21.5%)                  Associate (12.0%)                  Bachelor’s (24.2%)                  Graduate (10.3%)</p> <p><b>Marital Status</b>                  Single (24.9%)                  Married (45.7%)                  Living with partner (8.6%)                  Married but separated (2.5%)                  Widowed (5.4%)                  Divorced (12.5%)                  Other (0.3%)</p> <p><b>Years in Utah</b>                  Fewer than 2 years (64.2%)                  2–5 years (8.8%)                  6–10 years (9.2%)                  11–20 years (6.4%)                  More than 21 years (11.4%)</p> <p><b>Employment Status</b>                  Employed full time (47.6%)                  Employed part time (10.8%)                  Full-time student (1.7%)                  Full-time homemaker (4.6%)                  Unemployed, looking (8.5%)                  Retired (22.9%)                  Other (3.8%)</p>	<p><b>Children</b>                  Yes (57.6%)                  No (42.4%)</p> <p><b>Children’s Ages</b>                  0–5 (0=74.4%, 1=16.3%, 2=5.8%, 3+=3.0%)                  6–11 (0=75.8%, 1=17.7%, 2=3.3%, 3+=1.6%)                  12–17 (0=77.4%, 1=15.0%, 2=4.6%, 3+=1.4%)</p> <p><b>Income</b>                  Less than \$25,000 (20.1%)                  \$25,000–\$34,999 (12.5%)                  \$35,000–\$49,999 (12.8%)                  \$50,000–\$74,999 (17.8%)                  \$75,000–\$99,999 (13.2%)                  \$100,000–\$149,999 (12.2%)                  \$150,000–\$199,999 (7.3%)                  \$200,000 and above (4.1%)</p> <p><b>Race/Ethnicity</b>                  American Indian or Alaska Native (4.8%)                  Asian (5.1%)                  Black or African American (11.9%)                  Hispanic/Latina (15.5%)                  Native Hawaiian and Other Pacific Islander (0.8%)                  White (60.9%)                  Other (0.8%)</p> <p><b>Religion</b>                  Agnostic (6.5%)                  Atheist (4.8%)                  Catholic (26.7%)                  Latter-day Saint (8.2%)                  Hinduism (1.6%)                  Islam (2.1%)                  Jehovah Witness (0.9%)                  Judaism (2.4%)                  Protestant (16.1%)                  Other/General Christian (17.3%)                  Spiritual/Not Religious (11.8%)                  Other (0.8%)</p>	<p><b>Religious Activity</b>                  1=Not at all (24.4%)                  2=A little (13.7%)                  3=Somewhat (22.2%)                  4=Active (19.0%)                  5=Very active (20.7%)</p> <p><b>County</b>                  Beaver (6.3%)                  Box Elder (1.1%)                  Cache (1.3%)                  Carbon (1.0%)                  Daggett (0.7%)                  Davis (3.6%)                  Duchesne (0.8%)                  Emery (0.6%)                  Garfield (1.8%)                  Grand (1.7%)                  Iron (0.9%)                  Juab (0.4%)                  Kane (1.2%)                  Millard (0.9%)                  Morgan (3.4%)                  Piute (0.5%)                  Rich (1.9%)                  Salt Lake (20.9%)                  San Juan (1.7%)                  Sanpete (0.6%)                  Sevier (1.1%)                  Summit (2.9%)                  Tooele (1.2%)                  Uintah (0.6%)                  Utah (25.8%)                  Wasatch (0.8%)                  Washington (9.2%)                  Wayne (2.9%)                  Weber (4.1%)</p> <p><b>Region</b>                  Bear River (4.3%)                  Central (6.5%)                  Mountainland (29.5%)                  Southeastern (5.0%)                  Southwestern (19.4%)                  Uintah Basin (2.0%)                  Wasatch Front (33.2%)</p>
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**Appendix B. Study Demographics – Convenience Sample (N=2,801)**

<p><b>Gender</b>                  Man (8.1%)                  Woman (91.2%)                  Non-binary (0.6%)                  Prefer not to say (0.1%)</p> <p><b>Age</b>                  18–24 (5.5%)                  25–29 (8.2%)                  30–34 (11.1%)                  35–39 (11.1%)                  40–44 (12.9%)                  45–49 (14.0%)                  50–54 (12.2%)                  55–59 (7.7%)                  60–64 (7.1%)                  65–69 (4.4%)                  70 and older (5.7%)</p> <p><b>Education</b>                  Less than high school (0.4%)                  Some high school (0.4%)                  High school grad/eq. (3.7%)                  Some college (11.6%)                  Associate (6.3%)                  Bachelor’s (35.3%)                  Graduate (42.2%)</p> <p><b>Marital Status</b>                  Single (13.6%)                  Married (71.4%)                  Living with partner (3.7%)                  Married but separated (1.4%)                  Widowed (2.3%)                  Divorced (7.5%)                  Other (0.3%)</p> <p><b>Years in Utah</b>                  Fewer than 2 years (1.6%)                  2–5 years (6.1%)                  6–10 years (7.4%)                  11–20 years (16.3%)                  More than 21 years (68.6%)</p> <p><b>Employment Status</b>                  Employed full time (65.5%)                  Employed part time (15.8%)                  Full-time student (2.2%)                  Full-time homemaker (5.7%)                  Unemployed, looking (1.9%)                  Retired (8.8%)                  Other (0.1%)</p>	<p><b>Children</b>                  Yes (57.6%)                  No (42.4%)</p> <p><b>Children’s Ages</b>                  0–5 (0=74.4%, 1=16.3%, 2=5.8%, 3+=3.0%)                  6–11 (0=75.8%, 1=17.7%, 2=3.3%, 3+=1.6%)                  12–17 (0=77.4%, 1=15.0%, 2=4.6%, 3+=1.4%)</p> <p><b>Income</b>                  Less than \$25,000 (3.9%)                  \$25,000–\$34,999 (2.5%)                  \$35,000–\$49,999 (5.3%)                  \$50,000–\$74,999 (10.6%)                  \$75,000–\$99,999 (14.4%)                  \$100,000–\$149,999 (24.3%)                  \$150,000–\$199,999 (16.9%)                  \$200,000 and above (22.1%)</p> <p><b>Race/Ethnicity</b>                  American Indian or Alaska Native (1.5%)                  Asian (2.1%)                  Black or African American (1.0%)                  Hispanic/Latina (4.6%)                  Native Hawaiian and Other Pacific Islander (0.8%)                  White (89.8%)                  Other (0.1%)</p> <p><b>Religion</b>                  Agnostic (12.5%)                  Atheist (7.3%)                  Catholic (3.5%)                  Hinduism (0.3%)                  Islam (0.0%)                  Jehovah Witness (0.1%)                  Judaism (1.3%)                  Latter-day Saint (50.2%)                  Protestant (2.9%)                  Other/General Christian (5.0%)                  Spiritual/Not Religious (16.9%)</p> <p><b>Religious Activity</b>                  1=Not at all (19.9%)                  2=A little (11.6%)                  3=Somewhat (12.0%)                  4=Active (14.8%)                  5=Very active (41.8%)</p>	<p><b>County</b>                  Beaver (0.5%)                  Box Elder (1.0%)                  Cache (6.2%)                  Carbon (1.6%)                  Daggett (0.0%)                  Davis (11.5%)                  Duchesne (0.3%)                  Emery (0.9%)                  Garfield (1.8%)                  Grand (1.1%)                  Iron (2.5%)                  Juab (0.4%)                  Kane (1.1%)                  Millard (0.4%)                  Morgan (0.2%)                  Piute (0.3%)                  Rich (0.2%)                  Salt Lake (31.8%)                  San Juan (1.4%)                  Sanpete (0.6%)                  Sevier (0.8%)                  Summit (1.7%)                  Tooele (1.5%)                  Uintah (0.9%)                  Utah (18.5%)                  Wasatch (1.1%)                  Washington (5.3%)                  Wayne (0.4%)                  Weber (6.1%)</p> <p><b>Region</b>                  Bear River (7.4%)                  Central (2.8%)                  Mountainland (21.2%)                  Southeastern (4.9%)                  Southwestern (11.1%)                  Uintah Basin (1.2%)                  Wasatch Front (50.8%)</p>
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## Appendix C. A Bolder Way Forward Spoke Details

### I. ENTREPRENEURSHIP

Although Utah ranks well in some elements of women’s entrepreneurship, it ranks low on other metrics and measures. However, there continue to be barriers for women starting businesses nationally, and there are obstructions that are unique to Utah women. The greatest barriers to women’s entrepreneurship are fair access to capital, access to mentors, access to affordable childcare, and lack of awareness of business training and resources. Even in the face of multiple hurdles, women are establishing businesses that not only generate revenue and employ other Utahns but also contribute to their quality of life and the prosperity of local and statewide economies. The Entrepreneurship Spoke seeks to eliminate barriers and support Utah women who desire to own and/or operate their own business.

**Vision:** Lead the nation with the highest concentration of women who own businesses with the most growth and longevity.

#### Goals:

1. Increase the number of Utah women-owned businesses from 109,554 in 2019 to 112,500 (2.7% growth) by 2026 and to 115,000 (5% growth) by 2030. This will include employer and non-employer businesses. [Metric Dashboard]
2. Increase the total annual revenue of Utah women-owned non-employer businesses by 3.8% growth by 2026 and 11% growth by 2030. [Metric Dashboard]
3. Increase the percentage of employer businesses of total women-owned businesses from 10.1% in 2019 to 12.6% (2.5% growth) in 2026 and to 16.1% (5% growth) in 2030. [Metric Dashboard]
4. Reduce Utah’s entrepreneurship-rate disparity between men and women. [Metric Dashboard]
  - a. Improve Utah’s entrepreneurship-rate disparity with an increase to 25% female entrepreneurs (of businesses with more than 1 employee) by 2030.
  - b. Move up in state rankings on WalletHub’s “Entrepreneurship-Rate Disparity” (for businesses with more than 1 employee).
5. Change Utahns’ agreement (understanding and perceptions) in the following areas: [Metric Dashboard]
  - a. If I had the opportunity and resources, I would like to start a business. [Increase women’s agreement by 10% by 2026 and 20% by 2030]
  - b. If I started a business, my family and friends would approve/support of my decision. [Increase women’s agreement by 5% by 2026 and 7% by 2030]
  - c. If I started a business, it would grow to be big enough to employ others. [Increase women’s agreement by 8% by 2026 and 16% by 2030]
  - d. If I were to start a business, I would know how/where to access resources and support. [Increase women’s agreement by 10% by 2026 and 20% by 2030]

**Thriving Statement:** Women and girls thrive when they aspire to own and operate businesses. Indicators of success include equitable access to capital, mentors, and business training and resources, all of which foster an environment in which they can achieve success.

## II. WORKFORCE DEVELOPMENT

The Workforce Development Spoke focuses on identifying, creating, and clearing pathways for women into better jobs. Utah women have traditionally experienced high levels of occupational segregation, with large percentages of the total female workforce in roles that offer low pay, little prestige, and minimal room for advancement. Many women also take career breaks and need support in entering the labor market as returning adults. The Workforce Development spoke will include educational providers, community organizations, employers, government entities, and individuals with lived experience dedicated to helping women prepare for the careers that are best for them, in a wide variety of industries and sectors. The goal is for more Utah women to be able to find sustainable and significant ways to provide financially for themselves and their families.

**Vision:** Increase the confidence and competence of all Utah women so they can find successful employment that works for themselves and their families.

### Goals:

1. Increase number and percentage of women in high-quality roles within high growth industries by 5% by 2026 and 10% by 2030. [Metric Dashboard]
2. Increase the number of companies offering formal return-to-work positions to 15% by 2026 and 30% by 2030. [Metric Forthcoming]
3. Increase the percentage of quality part-time job opportunities for women (i.e., jobs that offer some degree of flexibility; pathways to full-time work over the long term; and development of valuable, transferable skills). [Metric Forthcoming]
4. Increase the percentage of low-income single mothers, women who have experienced violence or trauma, women from underserved populations, etc., receiving restorative opportunities including participation in educational coaching that leads to securing a quality job. [Metric Dashboard]
5. Change Utahns' agreement (understanding and perceptions) in the following areas: [Metric Dashboard]
  - a. I am aware of and know how to access resources and support to attain a quality job. [Increase women's agreement by 10% by 2026 and 20% by 2030]
  - b. I believe that I am currently employable, or I can become employable within the next 12–24 months. [Increase women's agreement by 10% by 2026 and 20% by 2030]
  - c. My current circumstances permit me to maintain successful employment over the next 5 years. [Increase women's agreement by 10% by 2026 and 20% by 2030]
  - d. I believe that in Utah I can find successful employment that works for me and my family. [Increase women's agreement by 10% by 2026 and 20% by 2030]

**Thriving Statement:** Women thrive when they have the confidence and connections to find successful employment that works for them and their families.

### III. STEM FIELDS (Science, Technology, Engineering, and Mathematics)

Nationally and locally, fewer women obtain STEM-related college degrees and work in STEM-related occupations, and they leave STEM careers once employed at disproportionate rates compared to men. Because of this, the U.S. and Utah STEM workforce remains predominantly male. Significant disparities also exist for women within trade industries in Utah (such as manufacturing and construction). The STEM Fields Spoke focuses on strengthening the interest in and economic impact of women in science, technology, engineering, math, and trade industries by focusing on sustainable strategies, initiatives, and programs at every stage of the talent pipeline. The entities and individuals aligned with this spoke are interested in creating classrooms (K–12 to higher education) and workplace environments focused on inclusivity and high performance in these “nontraditional” fields.

**Vision:** Ensure that all Utah girls and women have a choice to pursue career opportunities and succeed in STEM or other nontraditional female fields.

#### Goals:

1. Increase the percentage of women earning STEM degrees and certificates in Utah by 5% in 2026 and 10% in 2030. [Metric Forthcoming]
2. Increase the percentage of women faculty in STEM programs at Utah public universities and technology colleges by 5% in 2026 and 10% in 2030. [Metric Forthcoming]
3. Increase the percentage of women in technology occupations by 5% in 2026 and 10% in 2030. [Metrics Forthcoming in 2025]
  - a. Increase the number of women taking entry-level Technology occupations by 5% in 2026 and 10% in 2030.
  - b. Increase the number of women being promoted in Technology occupations by 5% in 2026 and 10% in 2030.
  - c. Increase the number of women in management roles in Technology occupations by 5% in 2026 and 10% in 2030.
  - d. Increase the number of women in executive positions in Technology occupations or companies in the Technology industry by 5% in 2026 and 10% in 2030.
4. Increase the percentage of women in Science, Engineering, Technology, and Math occupations by 5% in 2026 and 10% in 2030.
5. Increase the percentage of women in the Trades by 5% in 2026 and 10% by 2030.
  - a. Increase the percentage of women earning Trade degrees and certificates in Utah by 5% in 2026 and 10% in 2030.
  - b. Increase the percentage of women in Trade occupations by 5% in 2026 and 10% in 2030.
6. Change Utahns’ agreement (understanding and perceptions) in the following areas: [Metric Dashboard]
  - a. Women can be successful in STEM (science, technology, engineering, and math) jobs in Utah. [Increase agreement by 5% by 2026 and 10% by 2030]
  - b. We do not need more women in STEM fields in Utah. [Decrease agreement by 10% by 2026 and 20% by 2030]
  - c. STEM jobs are not more difficult than jobs in other industries in Utah. [Increase women’s agreement by 10% by 2026 and 20% by 2030]
  - d. Women can successfully advance their careers in STEM industries in Utah. [Increase agreement by 10% by 2026 and 20% by 2030]

**Thriving Statement:** Women and girls thrive when they believe in their inherent ability, have the choice to pursue career opportunities in STEM or other nontraditional female fields, and can do so successfully.

#### IV. LEADERSHIP DEVELOPMENT

Developing leadership knowledge, skills, and abilities in girls and women across Utah is central to ensure that girls and women—and their families—thrive. Developing male allies is also critical to this spoke and the work of A Bolder Way Forward. Some of the initial elements of this spoke include helping more people understand what leadership means and how women lead in all kinds of ways, from their homes to their churches, communities, and workplaces. It will encompass efforts to help women and girls understand their gifts, talents, strengths, purpose, and calls. Important elements are strengthening a leadership identity, understanding our biases, and developing more traditional leadership skills and abilities. It will include development initiatives and opportunities, from supporting girls' camps to executive education, and increasing mentoring, sponsorship, and coaching skills, while gathering and sharing best practices for programming and metrics to increase effectiveness and collaboration across the state.

**Vision:** Significantly increase the number and percentage of women leaders in all settings in Utah. This includes creating opportunities for every Utah woman and girl to envision themselves as leaders, develop leadership skills, and lead in any setting they choose. It also includes increasing the number of male allies and individuals understanding and confronting their own biases.

#### Goals:

1. Increase the percentage of Utah women in leadership. [Metric Dashboard]
  - a. Increase women in executive positions by 4% in 2026 and by 11% in 2030.
  - b. Increase women in business leadership (e.g., CEO, board, president, top managers) by 20% by 2026 and by 60% by 2030.
  - c. Increase women in K–12 leadership, including district superintendents (to 25% by 2030), high school principals (to 50% by 2030), and high school assistant principals (to 50% by 2030).
  - d. Increase women in higher education leadership to 40% by 2026 and 50% by 2030.
  - e. Increase women in government leadership at the state and local levels to 40% by 2026 and 50% by 2030.
  - f. Increase women in elected office (in support of the Political & Civic Representation Spoke goals).
2. Maintain the percentage of women leaders in nonprofit settings, and some of the K–12, Higher Education, and County Government leadership categories. [Metric Dashboard]
3. Increase the percent of women in the higher income earning category (\$100,000+) (in support of the Gender Pay Gap Spoke Goal #2).
4. Increase the number of quality leadership development programs for girls and women by 10% by 2026 and by 25% by 2030. [Metric Forthcoming]
5. Increase the number of individuals who are completing quality leadership development programs by 20% by 2026 and by 50% by 2030. [Metric Forthcoming]
6. Increase the number of women program completers who are advancing in their careers so that (1) by 2026, 30% of participants have advanced in their careers within 2 years of completing the program, and (2) by 2030, 50% of the participants have advanced in their careers within 2 years of completing the program. [Metric Forthcoming]
7. Change Utahns' agreement (understanding and perceptions) in the following areas: [Metric Dashboard]
  - a. I aspire to be a leader. [Increase women's agreement by 10% by 2026 and 25% by 2030]
  - b. Others consider me a leader. [Increase women's agreement by 10% by 2026 and 25% by 2030]
  - c. It is important for me to pursue opportunities to develop leadership abilities. [Increase women's agreement by 10% by 2026 and 25% by 2030]
  - d. There are opportunities and resources around me to help me develop leadership skills. [Increase women's agreement by 10% by 2026 and 25% by 2030]

- e. People in Utah are interested in understanding and confronting their biases. [Increase agreement by 5% by 2026 and 15% by 2030]
  - f. People in Utah are aware of their own biases. [Increase agreement by 5% by 2026 and 15% by 2030]
8. Increase Utahns' agreement (understanding and perceptions) around elements of male allyship (in support of the Male Allyship Impact Team).

**Thriving Statement:** Women and girls thrive when they envision themselves as leaders, have access to leadership development opportunities, and lead in any setting they choose.