

# Inclusive Spaces at the University of Utah

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## Abstract

The goal of this research project is to identify inclusive spaces on the University of Utah campus, which are physical spaces designed to meet the diverse needs of those who use them. Inclusive spaces are important as they foster a sense of belonging and safety, and encourage diverse social interactions. A survey was distributed across the campus to faculty, staff, and students. In addition, targeted groups such as the Office of Equity, Diversity, and Inclusion, International Student and Scholar Services, ASUU, and the Center for Disability Services were included. This study aimed to identify how students perceive their surrounding environment based on their demographic information and to implement inclusive design principles to improve campus development. The study recommends creating two separate surveys, running the survey for longer and during warmer seasons, and better coordination among developing campus task forces and partners, particularly the Equity, Diversity, and Inclusion (EDI) division at the University of Utah. The study also highlights the need for incorporating inclusive design principles and processes outlined in the EDI Strategic Plan into a new campus master plan to ensure sustainable development and inclusive spaces. The findings suggest that there is a clear discrepancy in how students perceive their surrounding environment based on their demographic information. The results of this survey will be used to incorporate inclusive spaces into the university's mission, which aims to promote diversity, equity, and inclusion, establish a culture of belonging, and become a model campus for equity, diversity, and inclusive excellence.

## Introduction

The University of Utah's 2022 Fall semester welcomed its largest freshman class ever, totaling 5,520. It surpassed the first class with over 5,000 enrollments in Fall 2021 (5,361) (the University of Utah Enrollment Numbers Smash Previous Records - @theU, 2021). The record-breaking enrollment included 1,655 freshman students of color and 2,779 female-identifying freshman students. The overall student enrollment for 2022 totaled 34,734, with 26,355 undergraduates and 8,739 graduate students (U Enrollment: A Three-peat Victory for Students in Utah - @theU, 2022).

An inclusive space is defined as a physical or virtual environment that is designed to accommodate and welcome people of all backgrounds and abilities, fostering a sense of belonging, safety, and respect for diversity (Nalbant et al., 2021). The University of Utah's existing and future campus infrastructures, facilities, and services determine student, faculty, staff, and visitor access, participation, and inclusion across the campus.

According to a study by the American Planning Association, inclusive spaces are characterized by the following features:

- Accessible design that accommodates people with disabilities and ensures that all areas of the space are reachable and usable.
- Universal design that anticipates the needs of a diverse range of users and provides flexibility in design to accommodate different abilities, preferences, and needs.
- Cultural sensitivity that respects and reflects the diversity of the local community and avoids stereotyping or excluding particular groups.

- Social interaction that promotes positive social interactions and encourages people to interact and connect with one another.
- Safety and security that ensures that the space is safe and welcoming for all users, with appropriate lighting, signage, and security measures.
- Amenities and services that provide a range of services and amenities that meet the needs of all users, including restrooms, seating, water fountains, and other features. (Nalbant et al., 2021).

Urban design refers to the process of shaping the physical layout and organization of cities, towns, and other urban areas. In the context of inclusivity, urban design involves creating cities and neighborhoods that are accessible and welcoming to people of all backgrounds and abilities, regardless of their race, ethnicity, age, gender, sexuality, socioeconomic status, or physical and cognitive abilities (*MRSC - the Importance of Urban Design for Your Community*, n.d.).

Inclusivity in urban design requires a comprehensive approach that considers multiple factors, diversity, and accessibility when designing spaces. Inclusive design considers accommodation for all abilities, ages, races, cultures, sexes, and gender identities and promotes diverse design elements. Inclusive design concepts can be integrated into all aspects of urban design, including transportation, landscapes, and housing opportunities that cities offer (*A Playbook for the Planning + Design of Diverse, Equitable, and Inclusive Campus Environments*, 2022).

Community engagement is an important aspect of inclusive design. Involving people affected by the design ensures their needs are heard and represented during the design process. Inclusive urban design is vital on campus as it improves student and work life and promotes social interactions by creating welcoming and accessible spaces (*A Playbook for the Planning + Design of Diverse, Equitable, and Inclusive Campus Environments*, 2022).

Urban design is an ever-growing field uncovering the intentions behind how spaces are physically designed. Features such as lighting, seating, walkways, and buildings can be analyzed through urban design principles to examine non-physical features such as accessibility, aesthetics, and comfort.

The University of Utah includes many designed spaces that are geared towards the typical demographics of a college campus: walkable plazas, widely accessible pathways, a dense mix of land uses, etc. The campus environment is rapidly developing and must be planned with the intention to grow sustainably. Efforts including the University of Utah 2008 Campus Master Plan describes how development should continue in the future. The guiding principles of this plan include Compact Academic Campus, Transit Nodes, Enhanced Connections, and Student Engagement (Campus Master Plan, 2008, pp. 5-2). This is supported by a detailed analysis of the existing conditions of the campus with specific recommendations on how to achieve the intentions of these principles through continuing development phases. While the plan does include many positive features of urban design, it lacks a direct interpretation of elements that could factor into inclusivity. As equity and inclusion become a more prominent goal of the University of

Utah, it is evident that development and physical changes to campus spaces need to consider the influence it has on the user population.

## Equity, Diversity, and Inclusion

Equity, Diversity, and Inclusion (EDI) serves across the entire university system and leads this work for the University. Our department includes resource centers, offices, and associated student, faculty and staff affinity groups. EDI's mission is to serve as a catalyst for transformation towards diversity, equity and inclusion as an embodiment of the University's core values with the ultimate vision of establishing a culture of belonging throughout the University and to become a model campus for equity, diversity, and inclusive excellence (*One U thriving*, 2023).

The history of the University of Utah addressing EDI, began in 1983 when the first associate vice president to oversee diverse academic programs was established. Then, not until the Fall of 2019, One U Thriving platform was created and the first vice president for EDI was appointed, Mary Ann Villarreal. Additionally, a steering committee was formed comprising 4 teams. Those teams were:

- Anti-Racism Committee
- Universal Design & Access Committee
- Racist and Bias Incident Response Team
- Presidential Commission on the Status of Women

In 2022, the University of Utah's division for Equity, Diversity, and Inclusion released the 2021-2022 Annual Report. It reiterated the *Vision* and *Mission* statements. The *Vision*: Equity, diversity, and inclusion principles are the foundation of the University of Utah's values. The *Mission*: To serve as a catalyst and a national leader for equity-centered campus transformation by ensuring equity, diversity, and inclusion are a part of everyone's work and by living the practices that inspire all to contribute and thrive. Finally, the report outlined the foundation of the University of Utah's values (*The University of Utah Equity, Diversity, and Inclusion 2021-22 Annual Report*, 2023).

- *Equity*: Equity aims to identify and actively eliminate systemic barriers to access and opportunities that prevent the full participation of people, specifically those from historically marginalized groups in higher education. Equity ensures fair treatment, access, opportunity, and advancement for all students, faculty, trainees, and staff to develop to their full academic, social, and career potential (*The University of Utah Equity, Diversity, and Inclusion 2021-22 Annual Report*, 2023).
- *Diversity*: Diversity refers to the variety of personal experiences, ideologies, and worldviews that arise from the whole of who we are. These experiences are valued and include but are not limited to: race, ethnicity, gender and gender expression, age, religion, mental or neurological function, language, disability, sexuality, and socioeconomic status. It is this collective that makes us a stronger whole (*The University of Utah Equity, Diversity, and Inclusion 2021-22 Annual Report*, 2023).
- *Inclusion*: Inclusion is the act of creating a community where everyone is welcomed, respected, supported, and valued. Inclusion actively embraces differences and engages historically marginalized individuals so that diversity can thrive (*The University of Utah Equity, Diversity, and Inclusion 2021-22 Annual Report*, 2023).

The 2021-2022 annual report also detailed the “strategic objectives for EDI at the U.

- Belonging: A person’s knowing their authentic self is affirmed and supported. Ensuring Belonging for All: We are boldly determined to create a campus where everyone knows their authentic self is affirmed and supported in order to thrive at the University of Utah and beyond. The cultural and resources centers were identified (*The University of Utah Equity, Diversity, and Inclusion 2021-22 Annual Report, 2023*):
  - American Indian Resource Center: The mission of the American Indian Resource Center (AIRC) at the University of Utah is to facilitate the social, academic, and cultural engagement of American Indian and Alaska Native students, staff, and faculty through cultural affirmation, academic and professional development, and postgraduation preparation for undergraduate students. Additionally, the AIRC serves all tribal nations as the cultural conduit to both tribal communities and the University of Utah by affirming tribal sovereignty and self-determination.
  - Black Cultural Center: Using a Pan-African lens, the Black Cultural Center (BBC) seeks to holistically enrich, support, and advocate for faculty, staff, trainees, interns, and students through Black-centered research, culturally affirming educational initiatives, and service.
  - Center for Equity and Student Belonging: The Center for Equity and Student Belonging (CESB) creates community and advocates for academic success and belonging for students across intersectional identities and experiences among our African, African American, Black, Native, Indigenous, American Indian, Asian, Asian American, Latinx, Chicanx, Pacific Islander, Multiracial, LGBTQ+, Neurodiverse, and Disabled students of color. CESB’s early belonging initiative serves as the first stop for belonging at the University of Utah, builds community, and sets up students for success after college.
  - Dream Center: The Dream Center works holistically with undocumented students and mixed-status families from college access to graduation. The Dream Center engages in specialized college outreach and access strategies; connects students to social engagement and academic development provides individualized campus navigation guidance, scholarship support for current and future undocumented students; works closely with future graduate for life after college, and promotes campus-wide advocacy and training for students, faculty, trainees, interns, staff, and administration; and increases community-wide awareness of policies affecting current and future undocumented students at the University of Utah.
  - LGBT Resource Center: The LGBT Resource Center empowers lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual/aromantic (LGBTQIA+) students to grow as leaders and learners by supporting students in navigating university systems, exploring their identities, finding community, and developing as leaders with a social justice lens.
  - Office for Inclusive Excellence: The mission of the Office for Inclusive Excellence (OIE) is to provide professional and organizational development for staff and faculty in ways that ensure the University of Utah’s commitment to equity, diversity, and inclusion is embedded throughout all aspects of the university and its operation.

- **Inclusive Climate:** An institutional culture that is equitable and inclusive of the diverse individuals represented throughout our community. **Fostering An Inclusive Campus Climate:** We hold ourselves accountable to cultivating a climate that is equitable and inclusive of the diverse bodies represented throughout our community by consistently assessing university policies, programs, and practices so that everyone can thrive.
  - **New Leadership Academy - Leadership Development:** Preparing the State of Utah to Lead with Equity - The New Leadership Academy (NLA) changes the expectations that surround leaders, leadership, and leadership development across higher education. Based on the understanding that the demographic, democratic, and discursive foundations on which higher education has been built are changing, NLA prepares the next generation of leaders with the specialized tools and knowledge, as well as the personal and professional courage, to be effective in changing and complex conditions.
  - **EDI Self-Study Guide & Toolkit:** Guided by the perspective that equity is an intentional and ongoing practice, the division for Equity, Diversity, and Inclusion has developed, in partnership with the Office of the Vice President for Research, an EDI self-study guide. The guide offers a framework and toolkit for examining and disrupting institutional inequities and assessing climate.
  - **Inclusive Style Guide:** University Marketing & Communications; Equity, Diversity, and Inclusion Marketing & Communications; and University of Utah Health Marketing & Communications collaborated with experts across the U to create an Inclusive Style Guide. In a year-long process that began with analyzing similar tools from journalist associations, national organizations, and other institutions of higher education, the Inclusive Style Guide aims to provide thoughtful, practical guidance when speaking to or about:
    - Gender
    - Immigration, international, refugee status
    - LGBTQIA+
    - People with disabilities
    - Race and ethnicity
    - Socioeconomics

Because language around many groups is changing rapidly and, in some cases, there lacks consensus within communities regarding what is the most respectful language to use, each section of the ever-evolving document includes an introduction that puts issues into a historical context, offers writing and interview guidelines, provides definitions of common terms, and offers myriad resources for those who wish to learn more from different perspectives.
  - **University of Utah Presidential Leadership Fellows Program:** A \$1.3 million grant from the Mellon Foundation will expand the very successful University of Utah Presidential Leadership Fellows pilot program to Salt Lake Community College, Utah State University, and Weber State University. The program aims to increase the number of academic leaders from the arts and humanities, specifically those historically excluded and underrepresented from the ranks of chairs, deans, and university presidents.
- **Engagement:** The community connections where trust is built and the structural effects of injustice are uprooted. **Amplifying Community Engagement:** We actively cultivate internal and external community connections where trust is built, the effects of injustice are uprooted, and

long-term and sustainable outcomes and relationships are developed. EDI Signature Events: The division for Equity, Diversity, and Inclusion engages the campus community in honoring members of underrepresented communities and hosting events that educate participants on varying aspects of experience and identity.

- Equity, Diversity, and Inclusion Strategy Council (EDISC): Launched in December 2021, the Equity, Diversity, and Inclusion Strategy Council is one of many firsts for the university and organizes a collective effort toward an equitable and inclusive campus. It is composed of a representative from each college, division, unit, and organization at the University of Utah, the council provides direction, support, and oversight of the work of the university to become more diverse, equitable, inclusive, and anti-racist through its policies, practices, and programs. The EDI Strategy Council centers and implements equity processes, practices, and behaviors with over three dozen member leaders who further engage and ignite participation in their units.
- Friday Forums on Racism in Higher Education: Launched in September 2020, Friday Forums is a regular conversation with national thought leaders that elevates the national conversation on equity, diversity, and inclusion; showcases models of disrupting complicit racism; and provides opportunities for participants to share ideas on actionable items toward a diverse, equitable, and inclusive campus.
- New Leadership Academy - Fellows Program & Learning Partners: A partnership between the University of Utah and the American Association of Hispanics in Higher Education (AAHHE), NLA Fellows was previously hosted by the National Forum on Higher Education for the Public Good at the University of Michigan. In 2021-22, the program successfully transitioned to the University of Utah, completed a curricular refresh and launched the first cohort of 35 Fellows from across the nation.
- Health Equity: Ensuring all patients from underserved backgrounds achieve equitable health outcomes to patients from those groups with the best health outcomes. Securing Health Equity: We courageously and creatively develop institutional policies, practices, and programs that eliminate health inequities and ensure all patients and clients achieve equitable health outcomes. Each of the health sciences schools/colleges (Medicine, Dentistry, Nursing, Pharmacy and Health), the Huntsman Cancer and Mental Health Institutes, and the Eccles Health Sciences Library, all play a role in the delivery of care, and therefore have a responsibility and a role in securing health equity.
  - Health Sciences LEAP: The University of Utah serves an increasingly diverse state and houses the only public medical school, dental school, and pharmacy school in the state, as well as a college of nursing and health. Like most states, Utah's diversity in the health professions lags behind the diversity of its general population. Health Sciences Learning, Engagement, Achievement, and Progress (HS LEAP) is a four-year pipeline program intended to increase racial and ethnic diversity in the health professions, specifically focused on (but not limited to) students from underrepresented communities (first generation or academically, socially, or economically disadvantaged) seeking careers in health or medicine.
  - Research and Scholarship: The University of Utah Health Equity, Diversity, and Inclusion (UHEDI) office is committed to advancing the science and practice of equity, diversity, and inclusion work in academia, healthcare delivery, and society. University of Utah Health scholars and thought leaders are shaping the dialogue in equity, diversity, and



inclusion and recommending actions that institutions and individuals can take to improve the practice of equity, diversity, and inclusion in their circles of concern and influence.

- MEDiversity Week: MEDiversity Week highlights the equity, diversity, and inclusion work within University of Utah Health, while addressing health care disparities and offering solutions for the training of our current and future providers. The week's events include presentations on the research and practice of U of U Health faculty to address access to care as well as workshops and discussions on how to advocate for equity and inclusion in our daily personal and professional lives.

## Methods

### *Participants*

This survey was distributed across the University of Utah campus to faculty, staff, and students. The research team distributed the survey to the Office of Equity, Diversity, and Inclusion (Both Main Campus and Health Science EDI), International Student and Scholar Services, Associated Students of the University of Utah (ASUU), and the Center for Disability Services. These on-campus groups were targeted to ensure minority groups were represented in the sample. In addition, researchers distributed the survey within their departments (e.g., Parks, Recreation, and Tourism and City and Metropolitan Planning Departments).

### *Data Collection*

Data were collected using Survey123, an ArcGIS mapping and questionnaire platform. This platform allowed the research team to not only gather quantitative data regarding inclusion but also gather GIS data to determine spatial patterns.

### *Data Analysis*

GIS data were analyzed using point density to display patterns of spatial distribution.

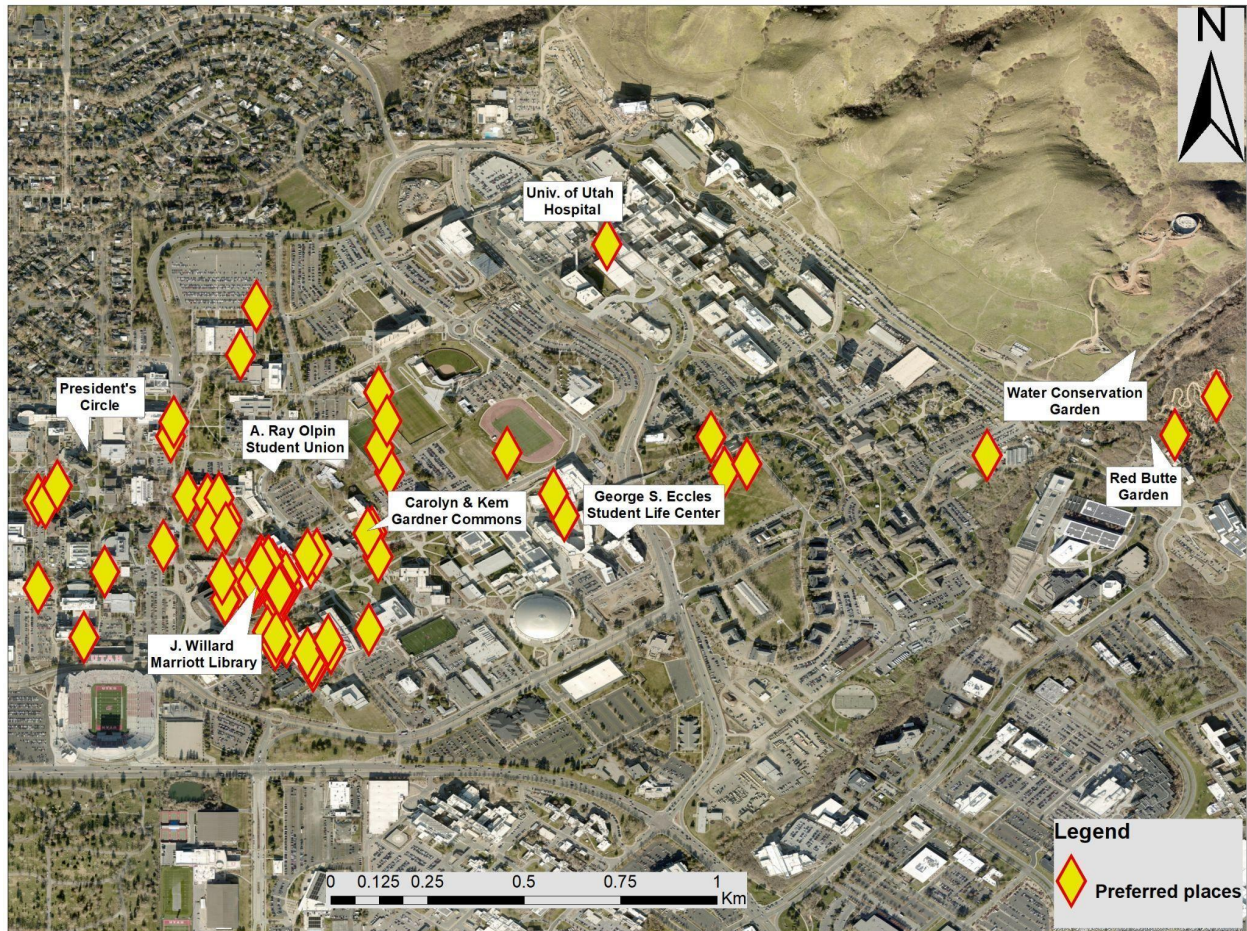
Measures of central tendency were employed to analyze survey data. For questions utilizing a Likert scale to determine on-campus spaces that participants preferred or avoided, means and percentages of the total were calculated. In addition, this set of questions was also analyzed by demographics including race, gender, sexual orientation, and student status.

## Results

### Spatial Analysis Results

In our survey, we asked people to indicate the places they like or prefer to spend time the most on campus. The results show that the areas in the southwestern part of campus are where people spend time the most (Figure 1). Specifically, the areas in front of the J. Willard Marriott Library, behind the A. Ray Olpin Student Union, and in front of the Carolyn and Kem Gardner Commons are where the respondents spend time the most on campus. More than 70% of the respondents specified these areas as where they

prefer to spend time the most on campus. Other notable areas that some of the respondents indicated that they spent time the most on campus were the President's Circle area, the Student Life Center area, and the Red Butte Garden.



**Figure 1:** Places people prefer to spend time the most on-campus

## Survey Results

The survey received 78 total responses. The following demographics represent the sample: 62.8% of respondents were White, 10.3% Black or African American, 9.0% Asian, 6.4% Other, 2.6% American Indian or Alaska Native, 2.6% marked multiple races, and 1.3%, Native Hawaiian or Pacific Islander. 11.7% of respondents were Hispanic/Latino. In addition, 67.9% of respondents identified as straight, 19.2% as bisexual/pansexual, 6.4% as gay/lesbian, 1.3% queer, and 2.6% marked more than one option. 55.7% identified as female, 35.4% as male, 5.1% as non-binary/third gender, and 1.3% marked more than one option.

## Preferred Spaces on Campus

Participants were asked to identify one location on campus where they like to go the most. With that place in mind, participants were asked to identify several factors that contributed to their preference for that place. For places that respondents preferred, they liked the sun exposure (93% total agree), felt physically comfortable (91% total agree), liked the natural features (89% total agree), believed the location was centrally located to their schedule (84% total agree), and felt safe and welcome (83% total agree). Table A.1 in Appendix A also details these results.

Some of these results differed significantly across race/ethnicity. Non-White respondents (i.e., respondents that indicated they were American Indian or Alaska Native, Asian, Black or African American, Hispanic/Latino, Native Hawaiian or Pacific Islander, and Other) did not feel as safe, included, or comfortable in the places they preferred on campus compared to White respondents. Only 13% of non-White respondents agreed they preferred places on campus because they felt included because of their racial/ethnic identity (vs. 74% total agree of White respondents), 25% felt included because of their sexual orientation (vs. 60% total agree of White respondents), and 13% felt included because of their cultural beliefs (vs. 48% total agree of White respondents). In addition, non-White respondents indicated they preferred certain locations on campus because it was located near the bus, Trax, or other transit (88% vs. 45% total agree of White respondents) and was accessible for wheelchairs and other ADA accommodations (63% vs 30% total agree of White respondents). These results are also displayed in Appendix A, Table A.2.

In terms of gender identity, non-binary respondents indicated that they preferred certain places on campus because there was a lot of lighting during all hours of the day (100% vs. 82% male, 68% female), they liked the natural features (100% vs. 86% male, 89% female), it was centrally located (100% vs. 76% male, 88% female), and liked the sun exposure (80% vs. 93% male, 95% female). 40% of non-binary respondents said they felt included in the space because of their sexual orientation (vs. 62% male, 64% female) and gender identity(40% vs. 62% male, 70% female). These results are also displayed in Appendix A Table A.3.

For respondents that identified as gay/lesbian and bisexual, pansexual, or other, they felt less comfortable on campus, even in places they preferred. 17% of gay/lesbian and 42% of bisexual, pansexual, or other respondents said they agreed they felt included on campus because of their sexual orientation in places on campus they preferred (vs. 70% of straight respondents agreed). In addition, respondents that identified as gay/lesbian and bisexual, pansexual, or other also felt less included because of their racial/ethnic identity, cultural beliefs, and gender identity. These results are demonstrated in Appendix A Table A.4.

## Avoided Spaces on Campus

However when asked why they avoid certain areas on campus, most respondents said they avoid that place because it was not centrally located (58% total disagree), felt physically comfortable (54% total disagree), there were enough places to sit (55% total disagree), and feel safe and welcome (46% total disagree). These responses indicate that the main factors respondents considered in terms of preferring or avoiding places on campus were if they are centrally located, could always find a place to sit, make the

individual feel physically comfortable, and feel safe and welcome. Detailed results across all respondents are also included in Appendix A Table A.5.

In terms of race/ethnicity, respondents that were non-White including American Indian or Alaska Native, Asian, Black or African American, Hispanic/Latino, Native Hawaiian or Pacific Islander, and Other indicated that they avoid certain places on campus because they do not feel physically comfortable (63% disagree total vs. 52% total disagree for White respondents), feel safe and welcome (63% total disagree vs. 40% total disagree for White respondents), there is not enough lighting (38% disagree total vs. 26% total disagree for White respondents), do not like the natural features (63% total disagree vs. 47% disagree for White respondents), and feel included in those places because of their sexual orientation (26% total disagree vs. 6% total disagree for White respondents). For each of these categories, White respondents did not feel as strongly. White respondents avoid certain places on campus mostly due to the location not being centrally located (49% total disagree vs. 26% total disagree for non-White respondents). These results are displayed in Appendix A Table A.6.

Disparities among gender identities were rather small, as indicated in Appendix B Figures B. 5, 6, and 7. However, the greatest disparity existed for non-binary/third gender respondents that indicated they avoided certain places on campus because they did not feel physically comfortable (60% total disagree vs. 52% males and 55% females total disagree) and safe and did not feel safe and welcome (60% total disagree vs. 44% males and 44% female total disagree), and did not feel included because of their gender identity (60% total disagree vs. 4% males, 10% disagree females total disagree). These results are displayed in Appendix A Table A.7.

For respondents that identified as gay/lesbian and bisexual/pansexual, the top factors for places they avoided on campus where they did not feel physically comfortable (71% total disagree, 48% total disagree for straight), did not feel safe, and welcome (67% total disagree, vs. 37% total disagree for straight respondents), did not like the natural features (67% total disagree vs. 34% total disagree for straight respondents). A great disparity also existed in that 24% (total disagree) of gay/lesbian and bisexual/pansexual respondents said they did not feel included in the places they avoided on campus because of their sexual orientation (vs. 2% total disagree for straight respondents). These results are displayed in Appendix A Table A.8.

## Discussion

The data analysis provides insight into diversity, inclusion, and accessibility around campus spaces. The data requires further analysis to better understand inclusive campus spaces, specifically outdoor spaces, and determine the data's relevance to inclusive design.

Integrating inclusive design into campus outdoor spaces is vital to inclusivity on campus. Outdoor spaces represent the University's values of creating spaces for the campus users. This is reflected in core areas such as the Student Union and Marriott Plaza which are programmed with activities for the student population.

Below, the data is categorized by three essential elements of inclusive design: inclusion, accessibility, and diversity.

- Inclusion data relates to demography elements associated with feelings of exclusion.
- Accessibility data relates to places or locations that determine accessing places on campus.
- Diversity data relates to elements indicating the quality or quantity in or around spaces.

## Inclusion

Seventy-one percent (71%) of LGBTQ+ report **avoiding** places on campus because of physical discomfort, not feeling safe or welcomed (67%), and sexual identity (24%). Appendix A Table 8.

Sixty-three percent (63%) of nonwhite respondents **avoid** places due to physical discomfort (63%) and not feeling welcome (63%), and sexual identity (25%). Appendix A, Table 6.

Sixty percent (60%) of self-identifying nonbinary respondents report **avoiding** places because of gender identity: Appendix A, Table 7.

## Accessibility

Fifty-eight percent (58%) of respondents report the main reason for **avoiding** places is because they aren't centrally located. Appendix A Table 5.

Forty-nine percent (49%) of white respondents report **avoiding** spaces because they aren't centrally located. Appendix A, Table 6

Eighty-eight percent (88%) of nonwhite respondents **prefer** spaces near public transit access, and 63% state accessible wheelchairs and other ADA accommodations: Appendix A, Table 6, 2.

## Diversity

Integrating diverse elements, such as varying sun exposure throughout the day, light features, and seating options, offers a sense of welcoming and safety. The data below shows the need for campus to offer more diversity to meet the diverse needs and preferences of the people on campus.

Diversity in Inclusive Design includes:

Ninety-three percent (93%) of all respondents report **liking** the amount of sun exposure at campus spaces. Appendix A, Table 1

One hundred percent (100%) of non-binary respondents report **preferences** for spaces on campus due to the various lighting throughout the day. Appendix A, Table 3

Thirty-eight percent (38%) of nonwhite respondents **don't feel** certain campus spaces have enough lighting.

Eighty-nine percent (89%) of all respondents report **liking** the natural features around campus spaces. Appendix A, Table 1

One hundred percent (100%) of self-identifying non-binary respondents **prefer** campus spaces because of their natural features. Appendix A, Table 3

Opposed to sixty-seven percent (67%) of LGBTQ+ respondents report **disliking** the natural features of certain campus spaces. Appendix A, Table 8

Sixty-three percent of nonwhite respondents report **disliking** the natural features of certain campus spaces. Appendix A, Table 6

Fifty-five percent (55%) of all respondents report **not visiting** campus spaces because of the lack of seating. Appendix A Table 5.

## Recommendations

Outdoor spaces designed for inclusion are critical components of inclusive campuses nationwide. Outdoor spaces interconnect the campus, represent and reinforce campus values and environmental, economic, and social well-being, and contribute to learning, belonging, and comfort (*A Playbook for the Planning + Design of Diverse, Equitable, and Inclusive Campus Environments*, 2022). Outdoor spaces should be accessible, diverse, and inclusive.

**Table 1:** Recommendations and Considerations for inclusive outdoor design.

<b>Table 1.0</b> <a href="#">Inclusive Design Recommendations and Considerations</a>		
<b>Accessibility</b>	<b>Inclusive</b>	<b>Diversity</b>
Various Uses: Social, Study, Virtual Learning, Leisure  Accessible Electric Outlets, Wi-Fi  Close to Public Transit  Wayfinding:	Abilities: Visual, Auditory, Verbal, Physical  Variety of Tables and Chairs: accommodate various postures, abilities, cultures, body	Variety of spaces: large and small groups, areas to be alone,  Sustainable, durable, complementary landscape  Lighting

Parking Lots, Paths, and Entrances	Views, sunlight, shade, rain, snow, summer, and winter
------------------------------------	--

The best way to achieve inclusive spaces is through campus community engagement. Campus community engagement requires seeking and involving those using campus spaces and, more importantly, directly impacted by the designs. Campus engagement strategies should include the following:

- Targeted engagement on campus aims for sustainable inclusiveness and accessibility with a focus on diversity, including physical and learning abilities, age, sexual orientation and identity, race, ethnicity, and culture.
- Establish an Inclusive Advisory Panel composed of people representative of campus diversity. The panel will offer unique perspectives that guide inclusive design and contribute to a more sustainable, inclusive campus.
- Engagement should include opportunities to hear from everyone on campus regularly. The advisory panel is an excellent resource for determining effective strategies for campus-wide engagement, such as surveys.
- Incorporate Campus as a Living Lab in the Inclusive Design Process. Doing so contributes to the University of Utah's commitment to an inclusive campus. It also provides opportunities for more diversity and interdepartmental collaborations.

**Table 2:** Strategies for achieving inclusive outdoor design

Strategic Engagement	Strategies
Representative of campus diversity	Ongoing assessments and feedback
Disproportionately impacted by accessibility and inclusion	Surveys
Diverse physical and learning abilities, age, race, sexual orientation, identity, culture, religion	Advisory Panel
Students, Staff, Faculty	Campus As a Living Lab

## Conclusion

This study needs more time to achieve a more reliable response. We had many difficulties with the ArcGIS Pro Survey that we had not anticipated. Our questions should receive more review, but time constraints made this not possible for this study round. Additionally, our non-inclusive map markers did not work out. We are unsure why this happened and have yet to find a solution. A potential workaround could be to create two separate surveys where each only has one map question. The survey could have

also been running for longer and during a season when outdoor space usage is more common. These would likely lead to more accurate results as students are more likely to be actively experiencing the outdoor spaces during warmer times of the year.

Still, our results show a clear discrepancy as to how students perceive their surrounding environment based on their demographic information. This calls attention to the fact that students perceive areas differently based on how they identify demographically. Non-white students were more likely to rate locations worse across the board whereas white students were mainly focused on proximity. This could reveal that non-white students are more aware or concerned about their surroundings than non-minority which is a common feature of white privilege. In spaces designed and dominated by a white majority, they are less likely to notice objective flaws in the space as the presence of many similar-looking people can make it feel more welcoming.

Minority individuals may not feel as comfortable in these spaces, so they might seek out comforting design features such as seating, shade, programming, etc. Specifically addressing minority concerns about space has no negative impact on other users of the space; rather, it reveals disguised or hidden opportunities for improvement. Our inclusive design principles and strategies should be implemented according to a non-white experience to accommodate for the years of privilege and say given to white university officials and developers.

Our findings call for better coordination among developing campus task forces and partners. We seek more coordination with the Equity, Diversity, and Inclusion (EDI) division at the University of Utah, and would like their thoughts on our developed principles for inclusive design. The EDI needs to become a more integral part of comprehensive campus planning and development. Especially considering the negative impacts students mentioned from construction and other areas of growth on campus, EDI should be a part of the conversation and included in all development plans.

With the previous campus master plan enrolled in 2008 and development rapidly expanding the span of campus, there is also a need for a new master plan. Incorporating the Inclusive Design Principles and processes outlined in the EDI Strategic Plan must be a prioritized item in a future plan to ensure sustainable development on campus. Incorporating the ideals of inclusivity, diversity, and equity into master plans is becoming a more regular practice (described in numerous, recent city plans including the Denver Comprehensive Plan 2040), and the University of Utah's long-term sustainability goals would benefit largely from this adaptation. Precedent examples of implementation are a bit rare for universities, but the University of Kentucky Developed DEI Facilities and Spaces Plan by Sasaki is an excellent example of how to specifically apply inclusive ideas to designed spaces.

The U has made significant efforts to address E, D, and I through their Vision and Mission statements, the foundation of E, D, and I, and the "strategic objectives" (Belonging, Inclusive Climate, Engagement, and Health Equity), however, NONE of what they are working towards includes "Inclusive Spaces". In order for E, D, and I to achieve their goals, they must incorporate "Inclusive Spaces" into their presence on campus. E, D, and I must have places to accommodate: Universal Design, Accessible Design, Safety and Security, Cultural Sensitivity, and Social Interaction. Hopefully, our project will emphasize the importance of "Inclusive Spaces" on campus.



# Appendix A

## Preferred Places on Campus Tables

**Table A.1:** Responses for preferred places on campus across all responses.

<b>Survey items for preferred places on campus</b>	<b>Total Agree</b>	<b>Total Disagree</b>
This place is accessible for wheelchairs and other ADA accommodations.	28%	36%
I walk through this location often/this place is centrally located to my schedule.	84%	8%
I feel included in those places because of my cultural beliefs.	53%	4%
I feel included in those places because of my gender identity.	65%	3%
I feel safe and welcome in this place.	83%	1%
There is a lot of lighting in this location during all hours of the day.	75%	10%
I like the natural features (trees, water, rocks, etc.) of this space.	88%	5%
Located near the bus, Trax, or other transit.	56%	26%
I feel included in those places because of my racial/ethnic identity.	72%	3%
I feel included in those places because of my sexual orientation.	62%	3%
I can always find somewhere to sit at this location.	69%	19%
I like the sun exposure in this area.	93%	0%
I feel physically comfortable in this place.	91%	1%

**Table A.2:** Non-White and White responses for preferred places on campus.

<b>Survey items for preferred places on campus</b>	<b>Non-White Total Agree</b>	<b>White Total Agree</b>
This place is accessible for wheelchairs and other ADA accommodations.	63%	30%
I walk through this location often/this place is centrally located to my schedule.	75%	82%
I feel included in those places because of my cultural beliefs.	13%	48%
I feel included in those places because of my gender identity.	25%	65%
I feel safe and welcome in this place.	63%	82%
There is a lot of lighting in this location during all hours of the day.	75%	70%

I like the natural features (trees, water, rocks, etc.) of this space.	88%	86%
Located near the bus, Trax, or other transit.	88%	45%
I feel included in those places because of my racial/ethnic identity.	13%	74%
I feel included in those places because of my sexual orientation.	25%	60%
I can always find somewhere to sit at this location.	75%	64%
I like the sun exposure in this area.	88%	94%
I feel physically comfortable in this place.	71%	92%

**Table A.3:** Female, Male, and Non-binary responses for preferred places on campus.

Survey items for preferred places on campus	Female Total Agree	Male Total Agree	Non-Binary Total Agree
This place is accessible for wheelchairs and other ADA accommodations.	27%	31%	20%
I walk through this location often/this place is centrally located to my schedule.	88%	76%	100%
I feel included in those places because of my cultural beliefs.	52%	55%	40%
I feel included in those places because of my gender identity.	70%	62%	40%
I feel safe and welcome in this place.	82%	90%	60%
There is a lot of lighting in this location during all hours of the day.	68%	82%	100%
I like the natural features (trees, water, rocks, etc.) of this space.	89%	86%	100%
Located near the bus, Trax, or other transit.	63%	48%	40%
I feel included in those places because of my racial/ethnic identity.	75%	69%	60%
I feel included in those places because of my sexual orientation.	64%	62%	40%
I can always find somewhere to sit at this location.	70%	69%	60%
I like the sun exposure in this area.	95%	93%	80%
I feel physically comfortable in this place.	88%	96%	80%

**Table A.4:** Gay/lesbian, Bisexual/Pansexual/Other, and Straight responses for preferred places on campus.

Survey items for preferred places on campus	Gay/lesbian Total Agree	Bisexual/Pansexual/Other Total Agree	Straight Total Agree



		Disagree
This place is accessible for wheelchairs and other ADA accommodations.	29%	26%
I walk through this location often/this place is centrally located to my schedule.	24%	58%
I feel included in those places because of my cultural beliefs.	19%	10%
I feel included in those places because of my gender identity.	25%	11%
I feel safe and welcome in this place.	15%	45%
There is a lot of lighting in this location during all hours of the day.	26%	24%
I like the natural features (trees, water, rocks, etc.) of this space.	15%	44%
Located near the bus, Trax, or other transit.	44%	19%
I feel included in those places because of my racial/ethnic identity.	27%	7%
I feel included in those places because of my sexual orientation.	27%	8%
I can always find somewhere to sit at this location.	11%	55%
I like the sun exposure in this area.	23%	25%
I feel physically comfortable in this place.	10%	54%

**Table A.6:** Non-White and White responses for places avoided on campus.

<b>Survey items for places avoided on campus</b>	<b>Non-White Total Disagree</b>	<b>White Total Disagree</b>
This place is accessible for wheelchairs and other ADA accommodations.	25%	27%
I walk through this location often/this place is centrally located to my schedule.	25%	49%
I feel included in those places because of my cultural beliefs.	38%	7%
I feel included in those places because of my gender identity.	25%	11%
I feel physically comfortable in this place.	63%	52%
I feel safe and welcome in this place.	63%	40%
There is a lot of lighting in this location during all hours of the day.	38%	26%
I like the natural features (trees, water, rocks, etc.) of this space.	63%	47%
Located near the bus, Trax, or other transit.	13%	13%
I feel included in those places because of my racial/ethnic identity.	38%	2%
I feel included in those places because of my sexual orientation.	25%	7%

I can always find somewhere to sit at this location.	38%	56%
I like the sun exposure in this area.	25%	31%

**Table A.7:** Female, Male, and Non-binary responses for places avoided on campus.

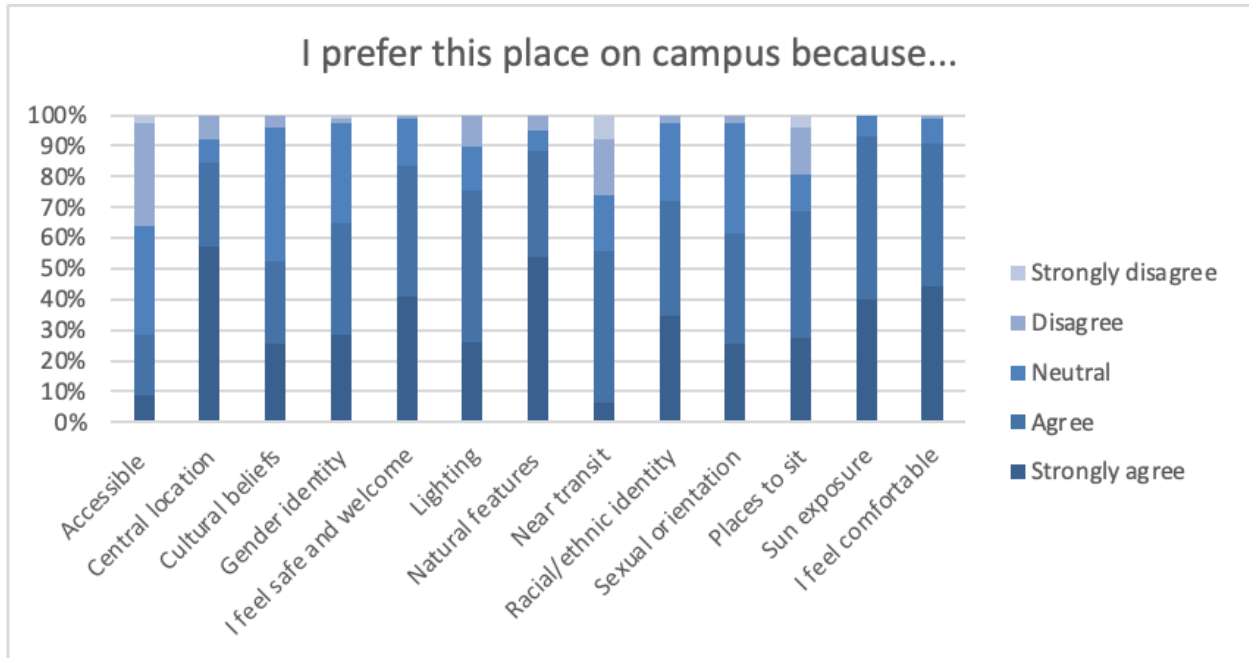
Survey items for places avoided on campus	Female Total Disagree	Male Total Disagree	Non-binary/ third gender, Other Total Disagree
This place is accessible for wheelchairs and other ADA accommodations.	25%	26%	40%
I walk through this location often/this place is centrally located to my schedule.	58%	59%	60%
I feel included in those places because of my cultural beliefs.	10%	8%	20%
I feel included in those places because of my gender identity.	10%	4%	60%
I feel physically comfortable in this place.	55%	52%	60%
I feel safe and welcome in this place.	44%	44%	60%
There is a lot of lighting in this location during all hours of the day.	27%	19%	20%
I like the natural features (trees, water, rocks, etc.) of this space.	40%	48%	60%
Located near the bus, Trax, or other transit.	17%	19%	40%
I feel included in those places because of my racial/ethnic identity.	2%	11%	20%
I feel included in those places because of my sexual orientation.	7%	4%	40%
I can always find somewhere to sit at this location.	56%	52%	60%
I like the sun exposure in this area.	27%	22%	20%

**Table A.8:** Gay/lesbian, Bisexual/Pansexual/Other, and Straight responses for places avoided on campus.

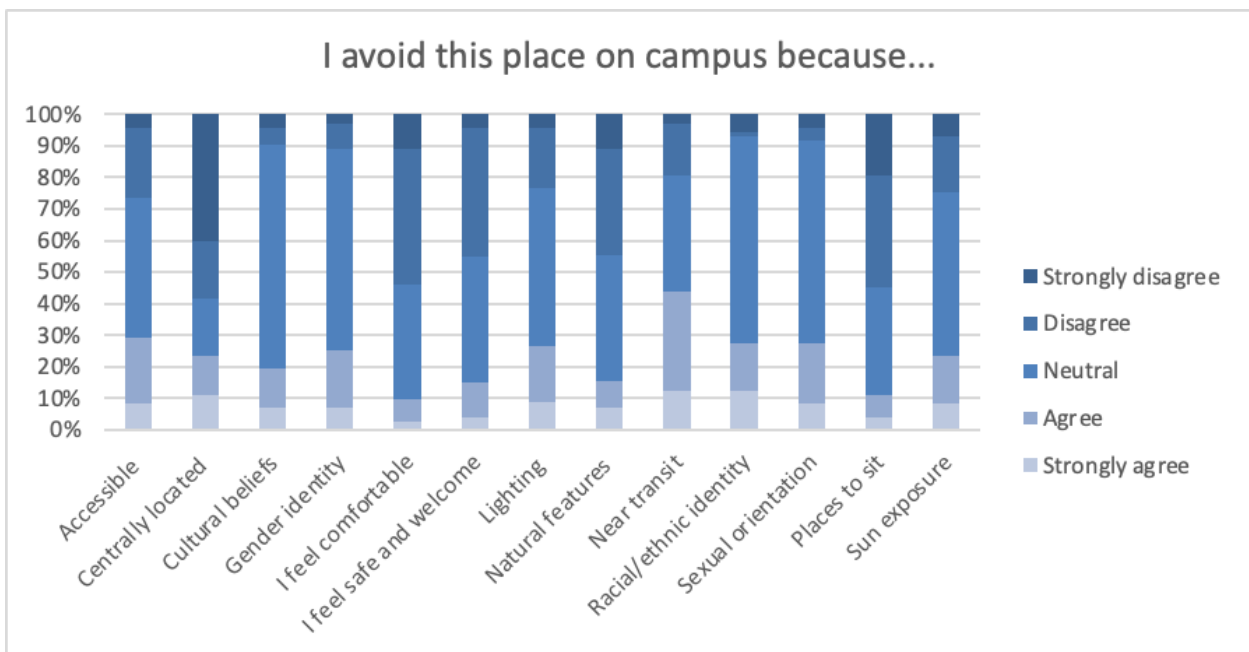
Survey items for places avoided on campus	Gay/lesbian Total Disagree	Bisexual/ Pansexual, Other Total Disagree	Straight Total Disagree
This place is accessible for wheelchairs and other ADA accommodations.	25%	44%	22%
I walk through this location often/this place is centrally located to my schedule.	50%	60%	61%
I feel included in those places because of my cultural beliefs.	50%	0%	8%



## Appendix B: Graphs

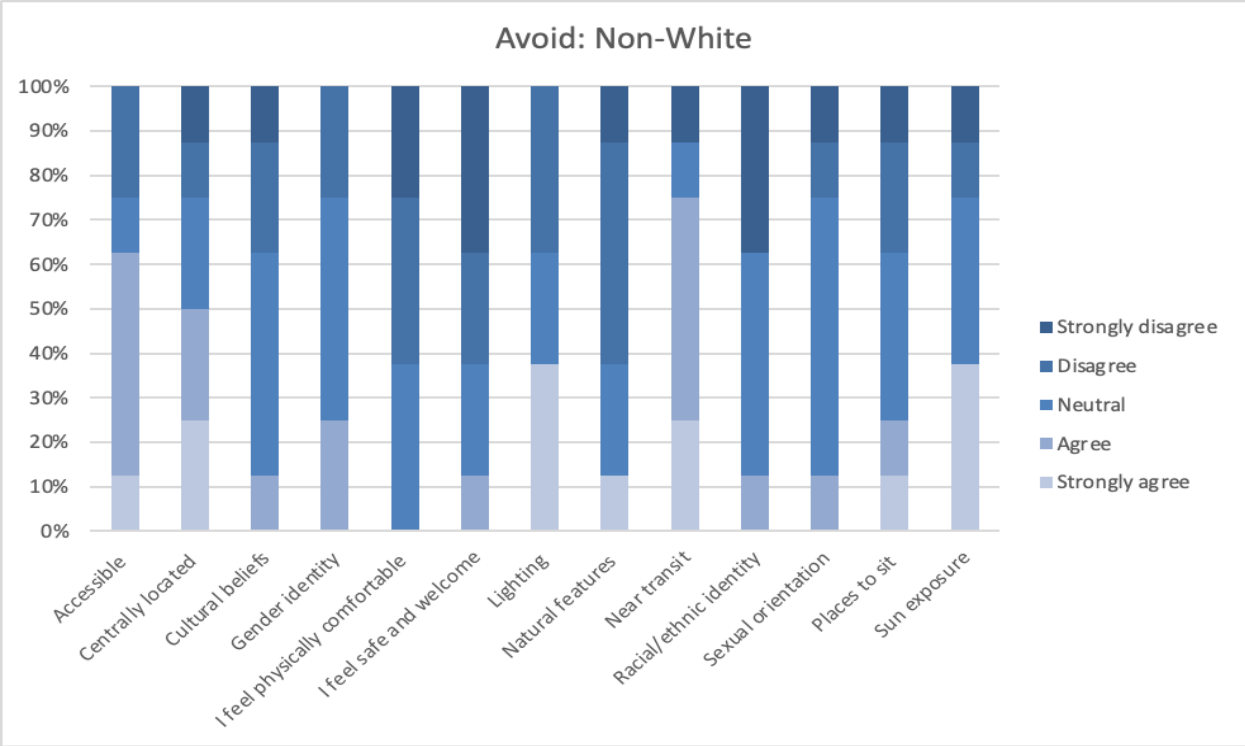


**Figure B.1:** Percentage of all respondents that strongly agree, agree, neutral, disagree, or strongly disagree they preferred certain places on campus because it has the following factors.



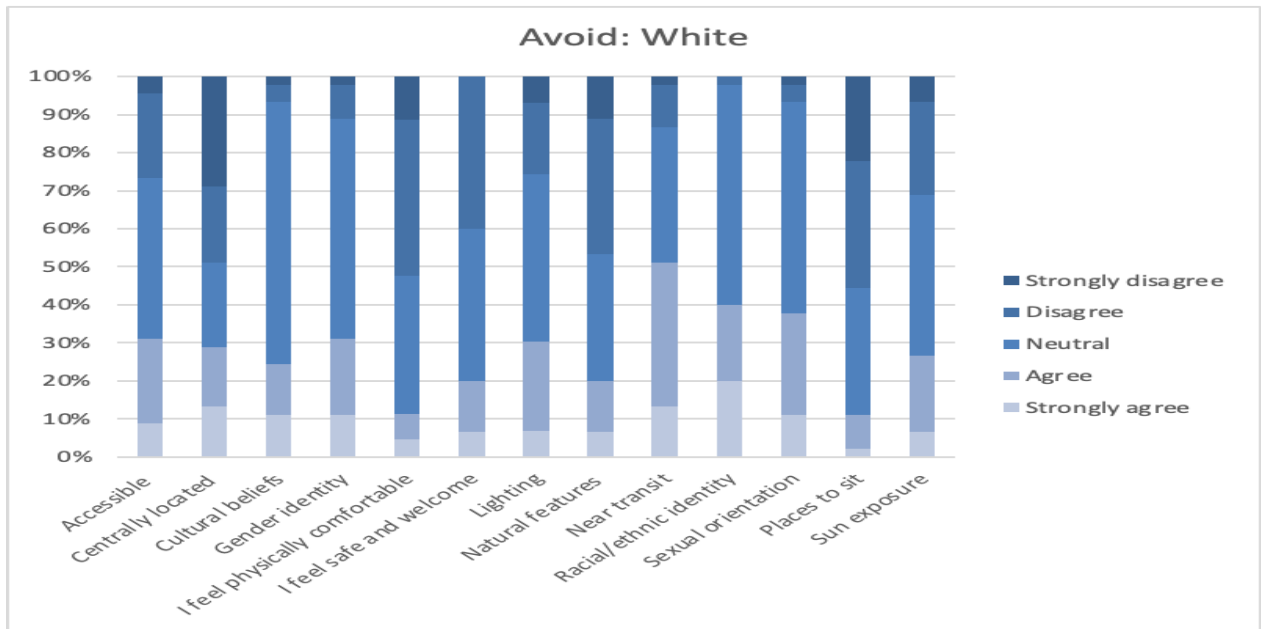
**Figure B.2:** Percentage of all respondents that strongly agree, agree, neutral, disagree, or strongly disagree they avoid certain places on campus because it has the following factors.

Places Avoided by Race/Ethnicity



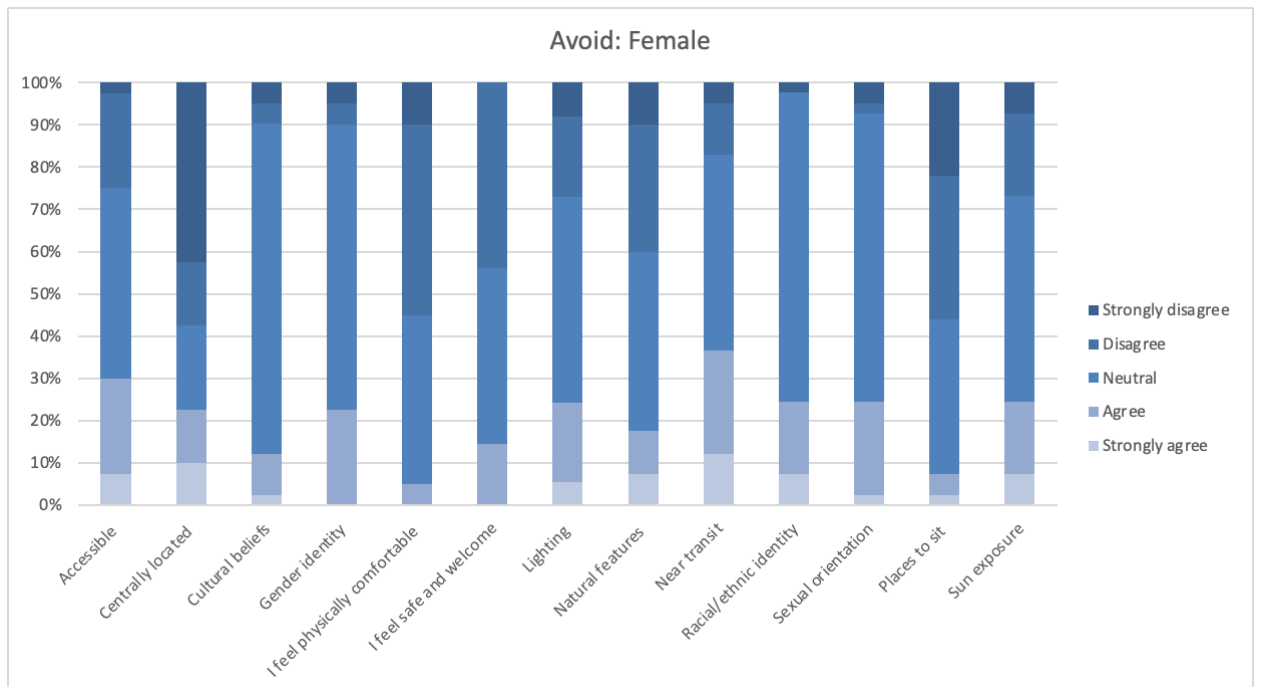
**Figure B.3:** Percentage of respondents that identified as non-white who avoid certain places on campus due to the following factors. \*Note: Statements listed were written as positive statements, therefore strongly disagree and disagree indicate that respondents avoid places due to that factor.



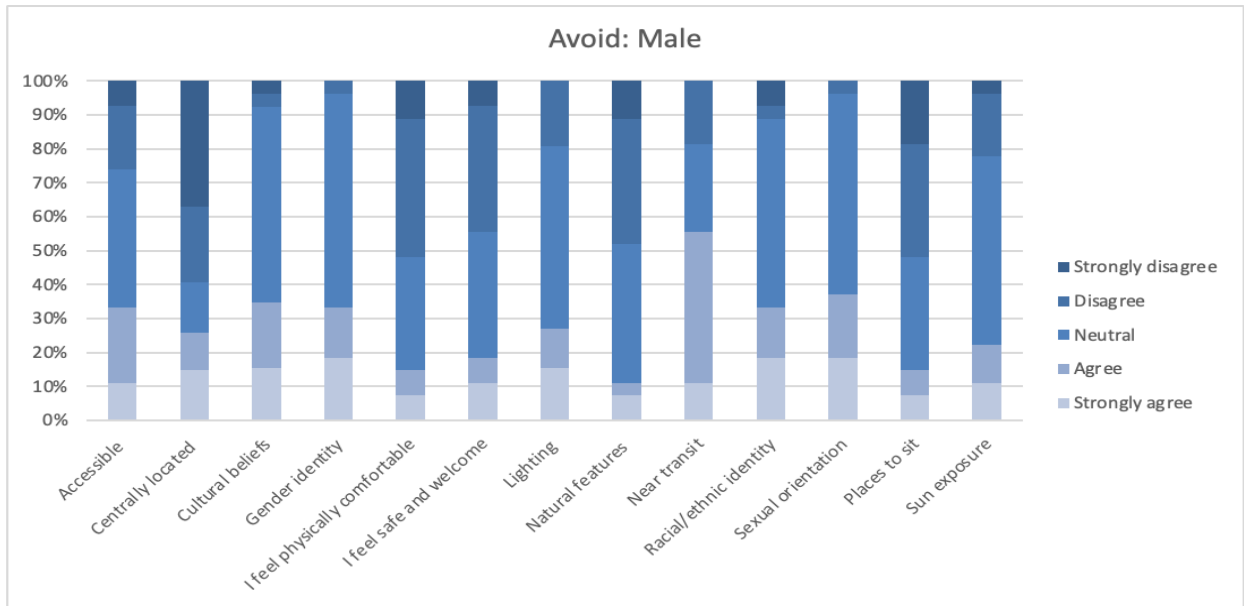


**Figure B.4:** Percentage of respondents that identified White who avoid certain places on campus due to the following factors. \*Note: Statements listed were written as positive statements, therefore strongly disagree and disagree indicate that respondents avoid places due to that factor.

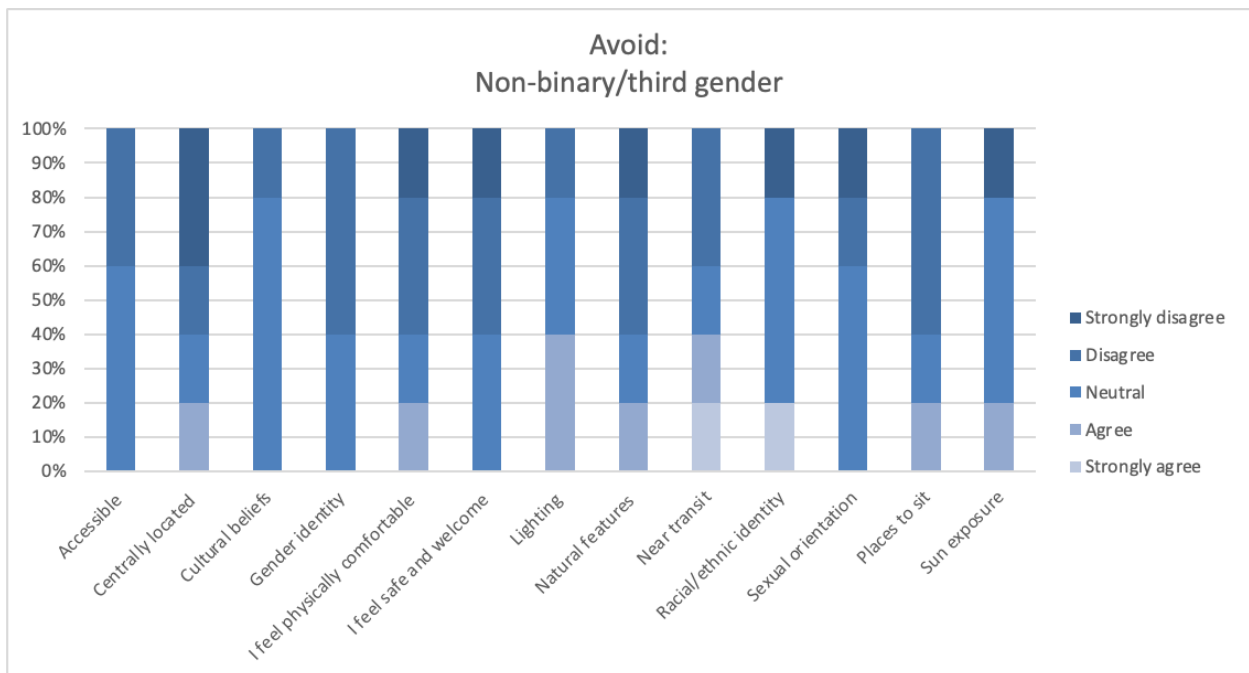
### Places Avoided by Gender Identity



**Figure B.5:** Percentage of respondents that identified as female who avoid certain places on campus due to the following factors. \*Note: Statements listed were written as positive statements, therefore strongly disagree and disagree indicate that respondents avoid places due to that factor.

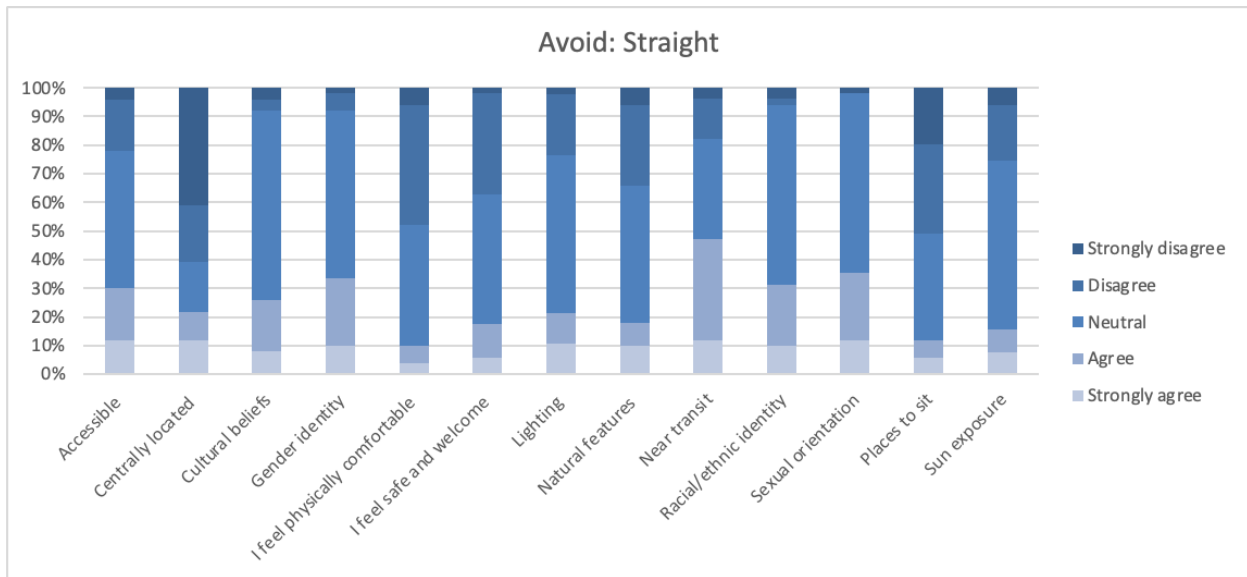


**Figure B.6:** Percentage of respondents that identified as male who avoid certain places on campus due to the following factors. \*Note: Statements listed were written as positive statements, therefore strongly disagree and disagree indicate that respondents avoid places due to that factor.

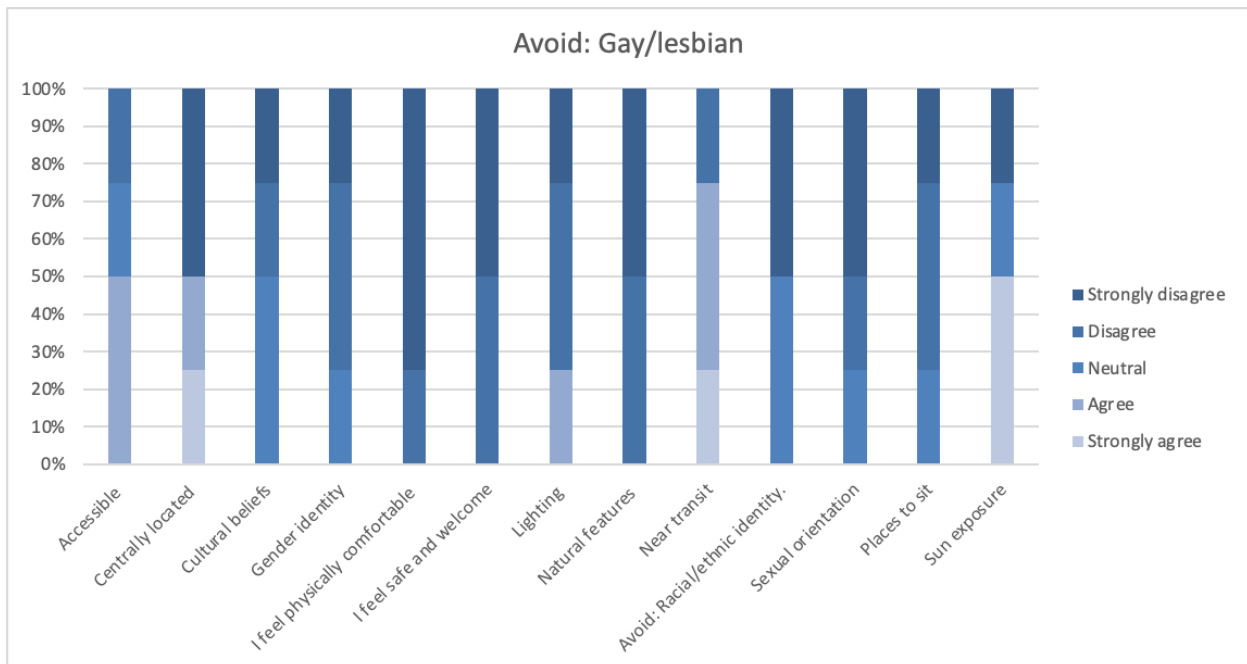


**Figure B.7:** Percentage of respondents that identified as non-binary/third gender and other gender identity who avoid certain places on campus due to the following factors. \*Note: Statements listed were written as positive statements, therefore strongly disagree and disagree indicate that respondents avoid places due to that factor.

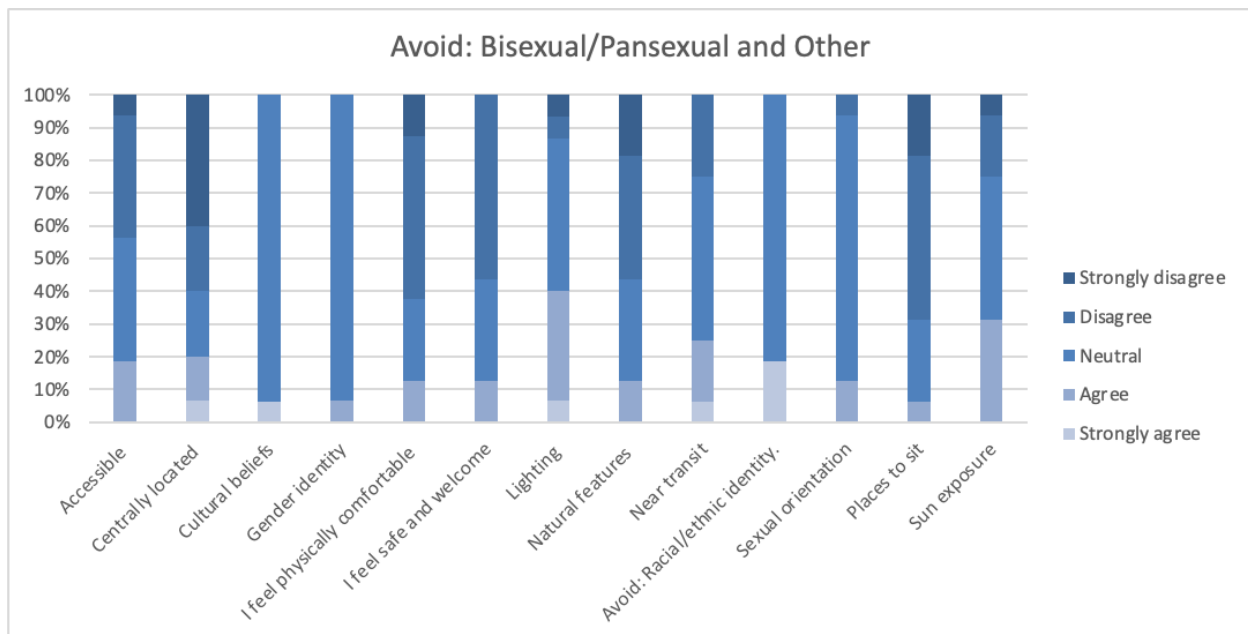
## Places Avoided by Sexual Orientation



**Figure B.8:** Percentage of respondents that identified as straight who avoid certain places on campus due to the following factors. \*Note: Statements listed were written as positive statements, therefore strongly disagree and disagree indicate that respondents avoid places due to that factor.



**Figure B.9:** Percentage of respondents that identified as gay/lesbian who avoid certain places on campus due to the following factors. \*Note: Statements listed were written as positive statements, therefore strongly disagree and disagree indicate that respondents avoid places due to that factor.



**Figure B.10:** Percentage of respondents that identified as bisexual/pansexual and others who avoid certain places on campus due to the following factors. \*Note: Statements listed were written as positive statements, therefore strongly disagree and disagree indicate that respondents avoid places due to that factor.

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