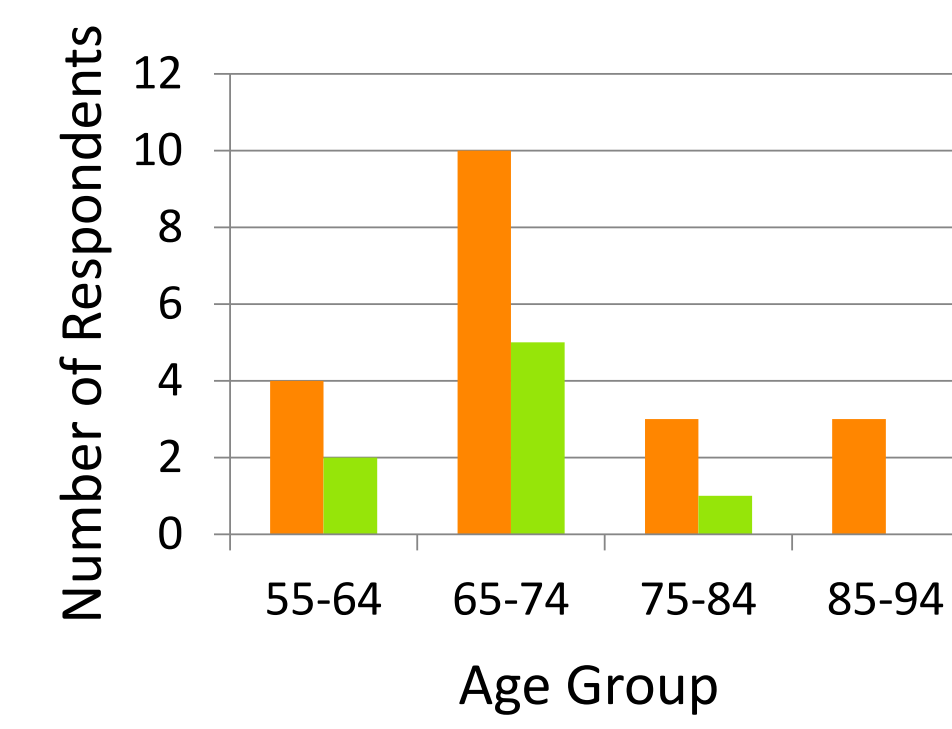


How to create Age-Friendly Communities through Setting New Parameters for Landscape Environmental Design

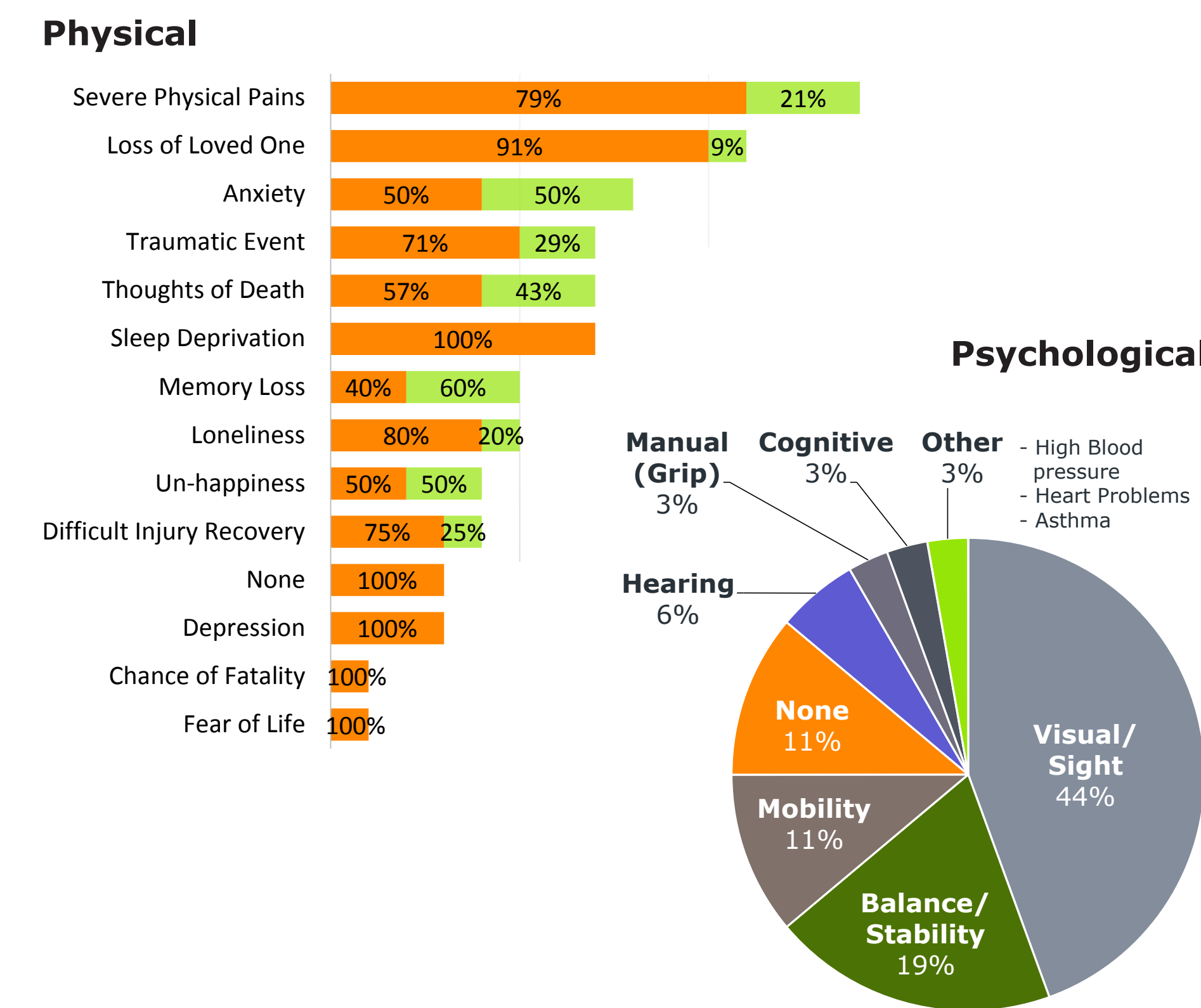


OVERVIEW

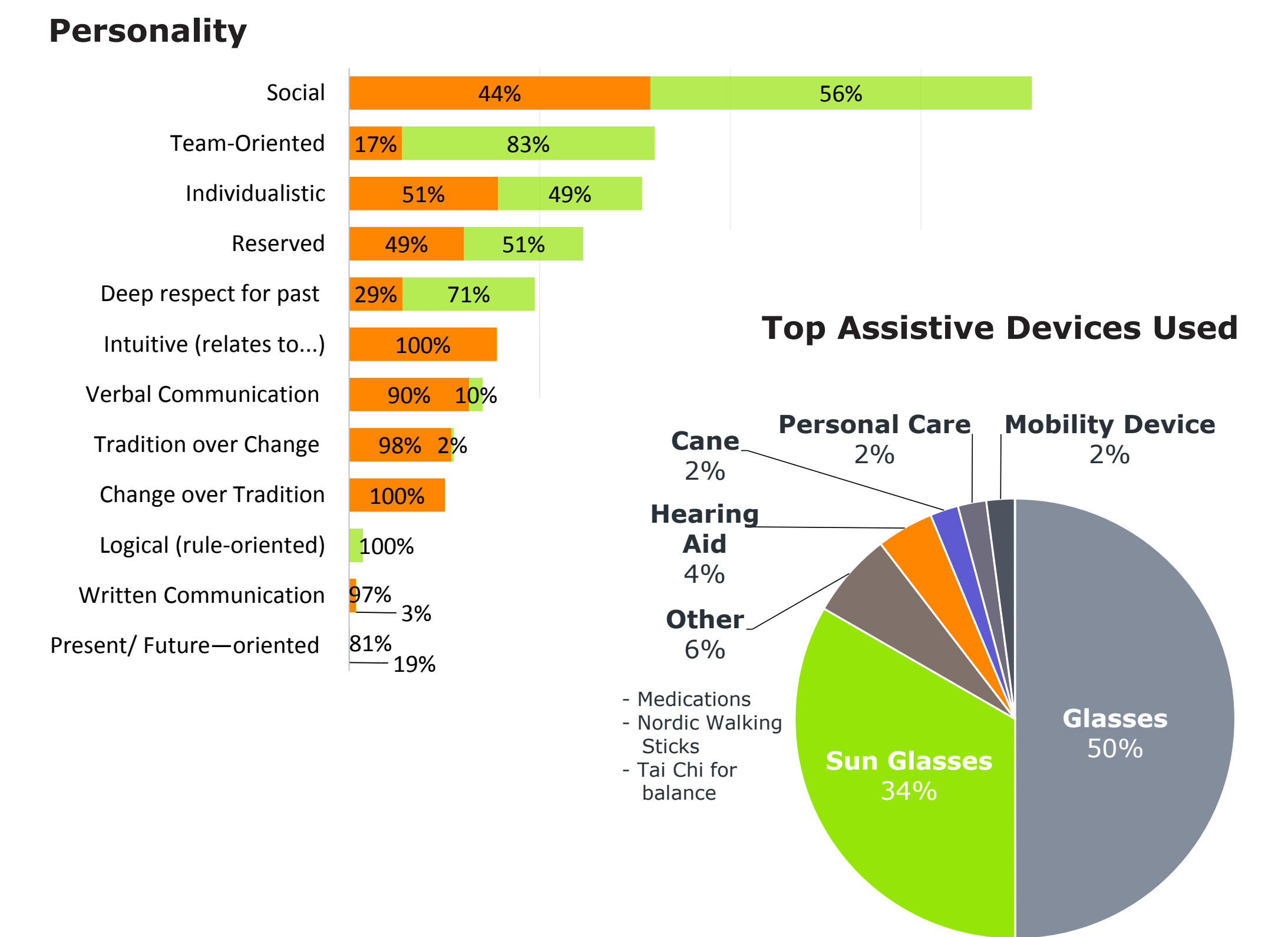
Abstract. Explore new methods of older adults' engagement within city planning and landscape design. A combination of theoretical and empirical research methods were used to bridge disciplinary practices and opinions. **Objective. 1.** Identify deficiencies and successes in the current practice of inclusive landscape architecture and design with a focus on the physical and psychological needs of the aging population within Canadian demographics. **2.** Explore the contributing catalysts of sustainability, environmental awareness and ecological efforts. **3.** Connect and redefine the investigated current concerns within the older adult demographics compared to industry research. **Methodology.** A comprehensive review of literature was investigated concerning aging characteristics and landscape development to provide base for the two types of empirical research applied. **Survey.** The end-user survey of 30 participants of ages 55+ was conducted to specify their present day physical and psychological requirements, concerns of comfort and accessibility levels, and their lifestyle needs or preferences for inclusive design. This reflects responses of current and future demands. **Interviews.** The interviews were conducted with professionals in several disciplines, such as: ecology, interior design, architecture, lifestyle-care consulting, aging organizational members, and care facility end-users to investigate successes and deficiencies within environmental sustainability, landscape practices, and aging. **NOTE:** Female results are represented in orange and male results are in green. Responses are ranked from greatest to least. Results were averaged to count for uneven gender participation. **Bibliography.** References available from presenter.



Respondent Barriers

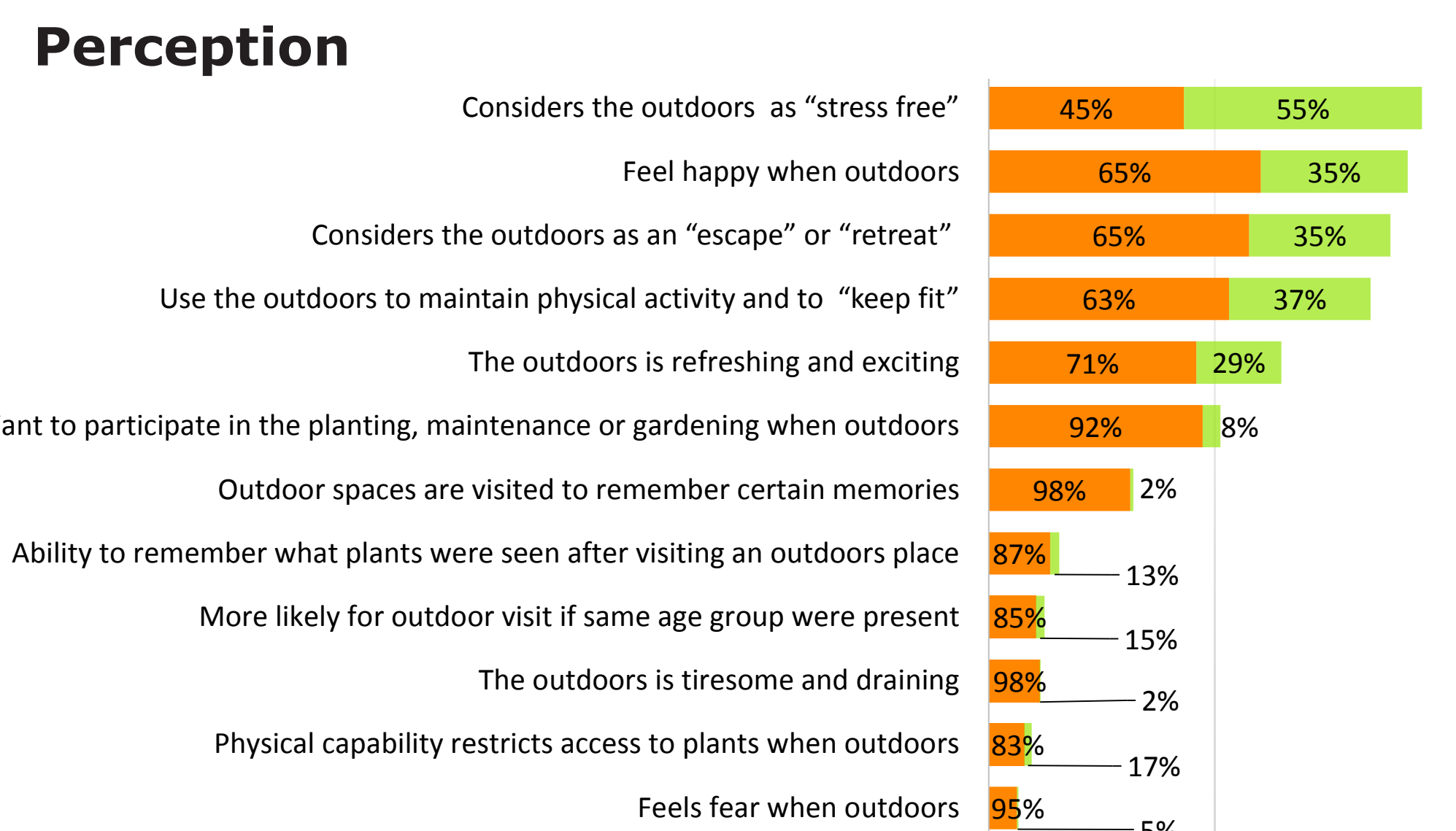


Characteristics of Respondents

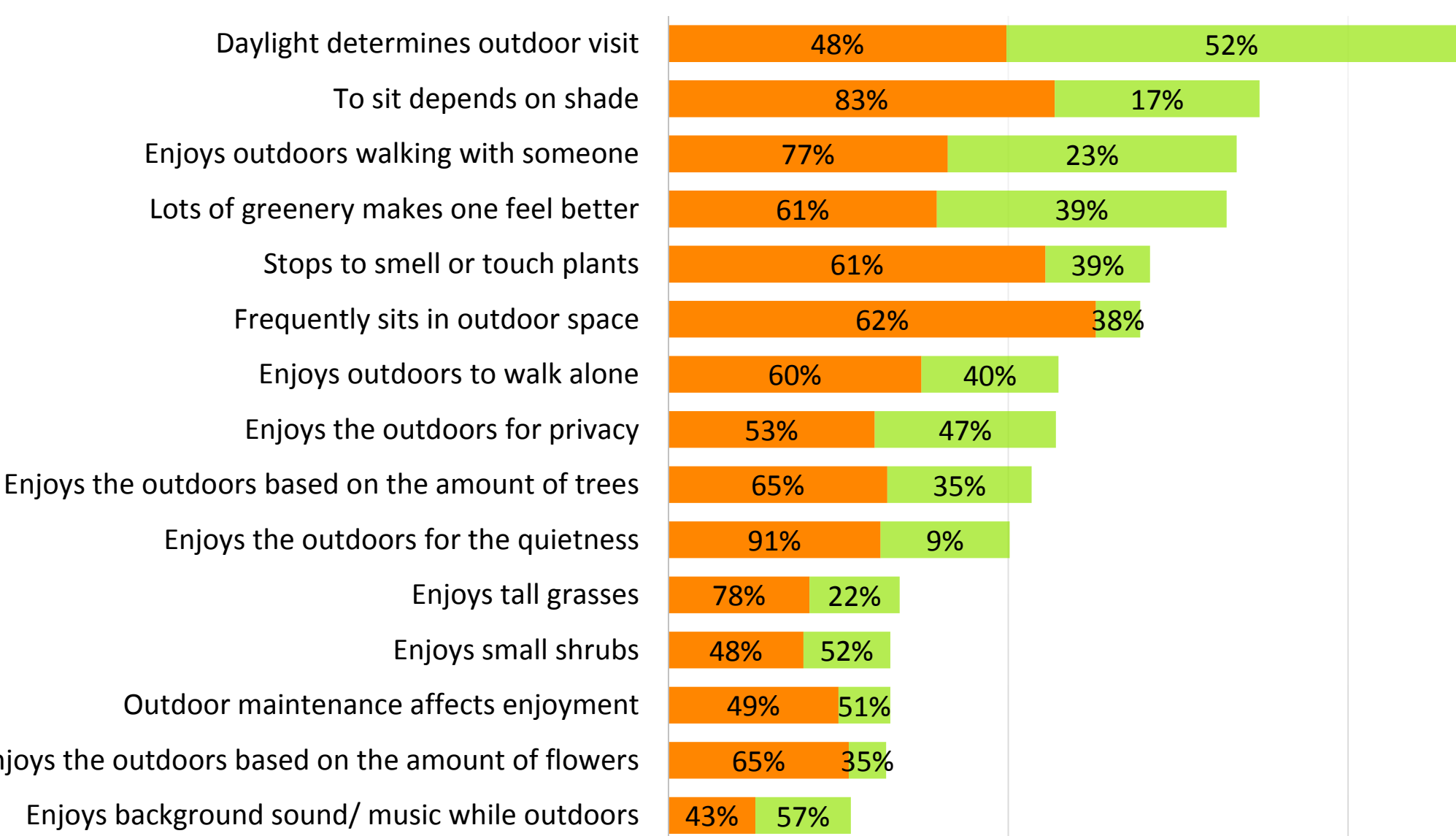


LANDSCAPE CORRELATION

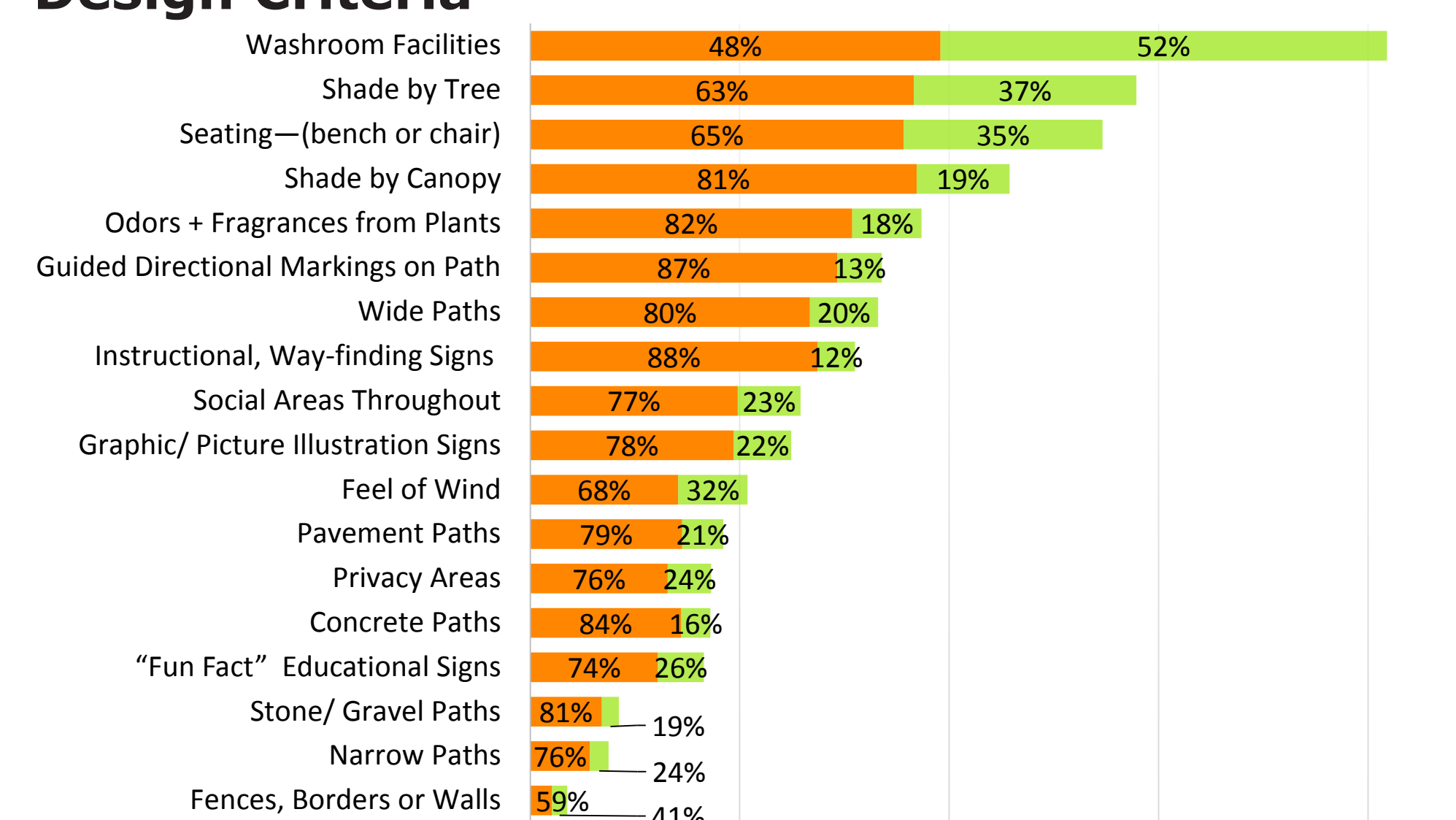
Participants rated the importance of the criteria listed below to evaluate the current needs



Preferences

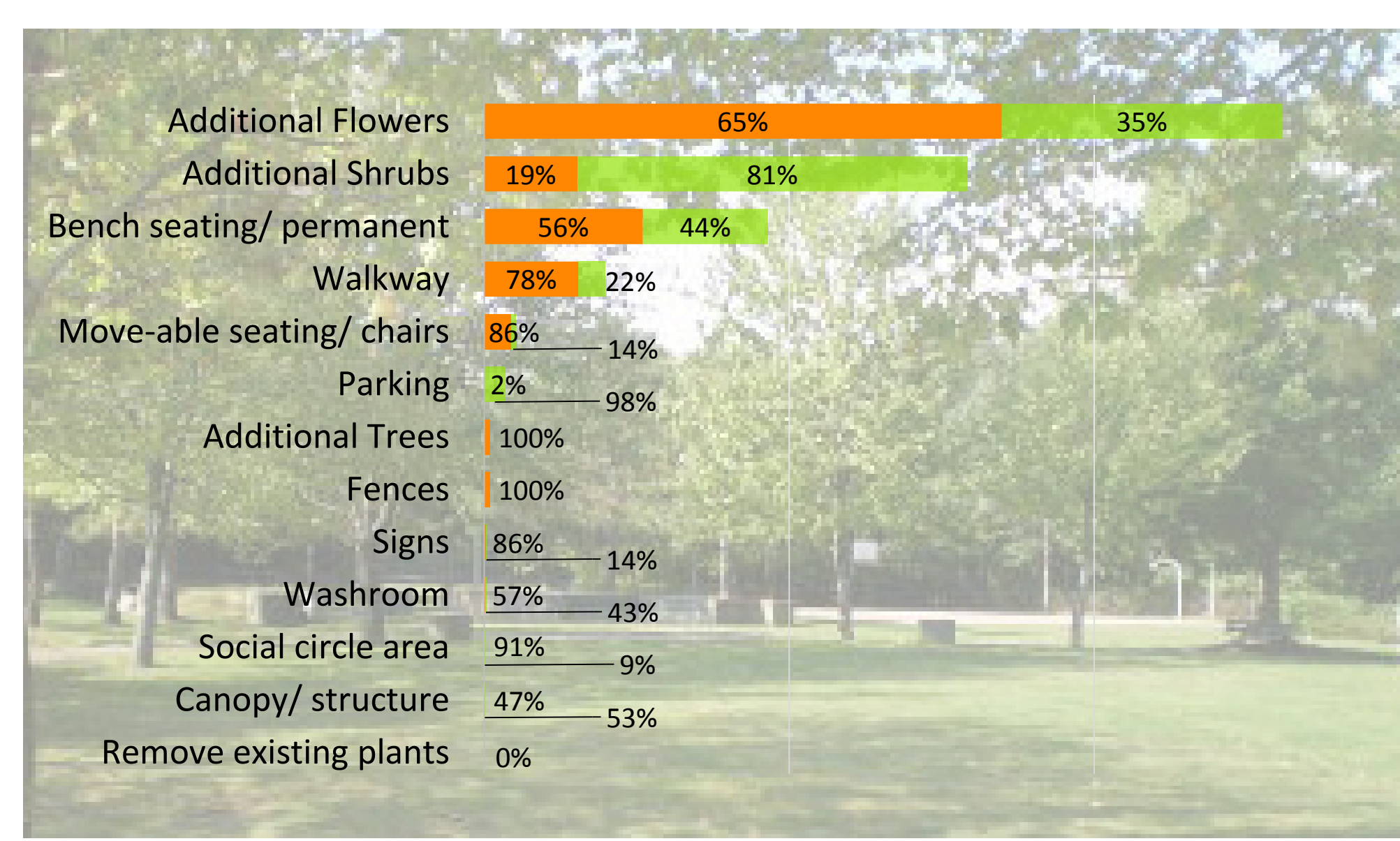
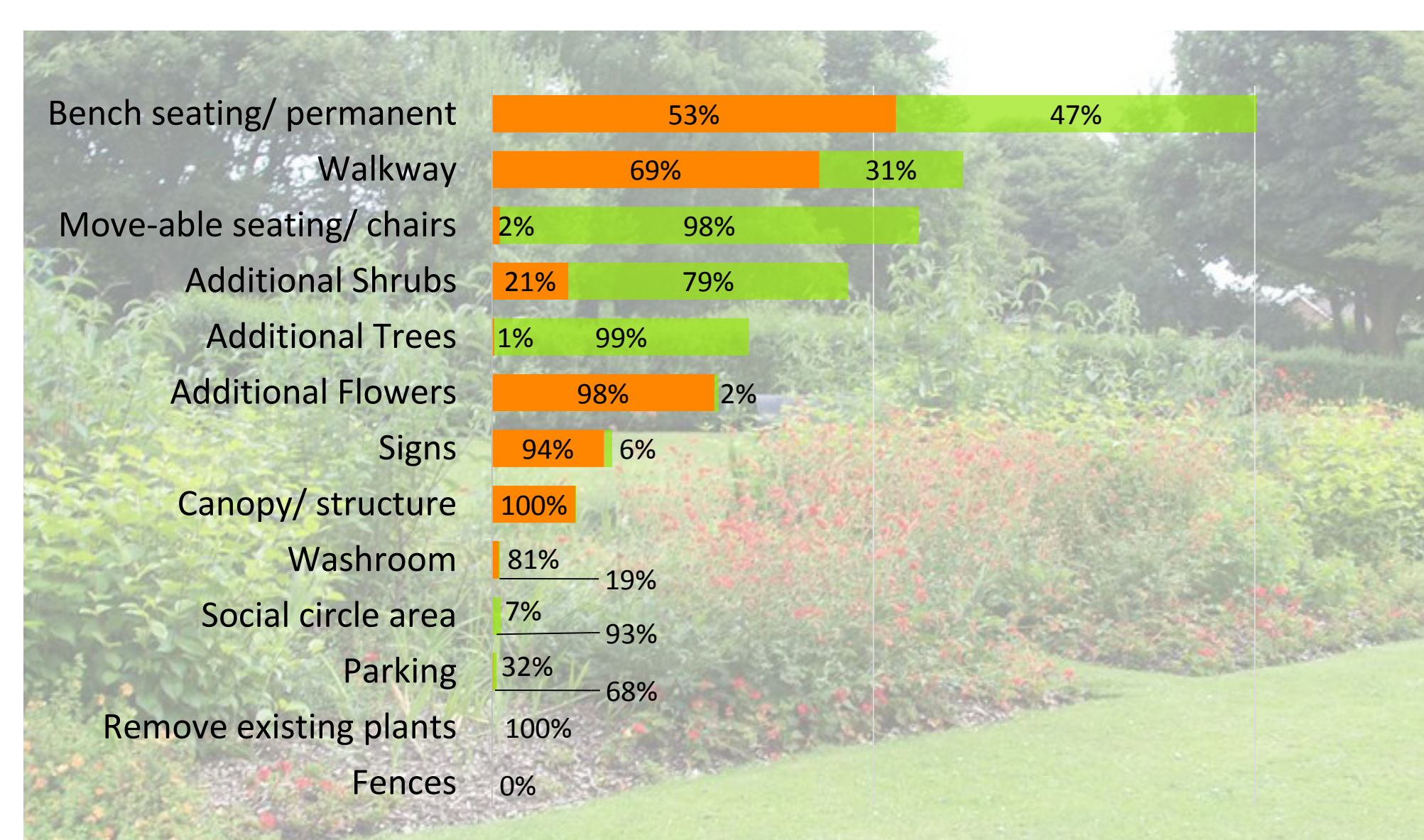
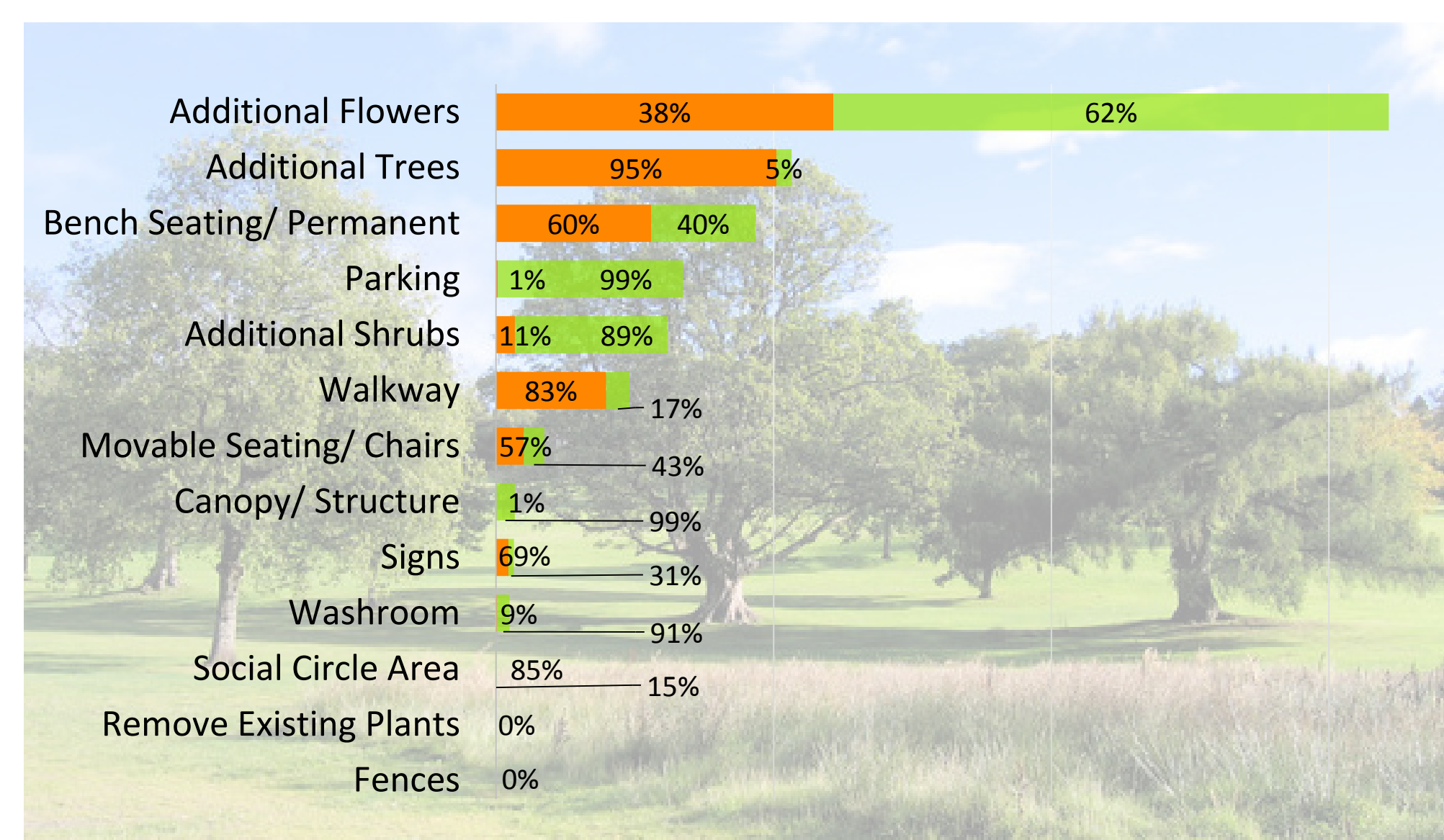


Design Criteria



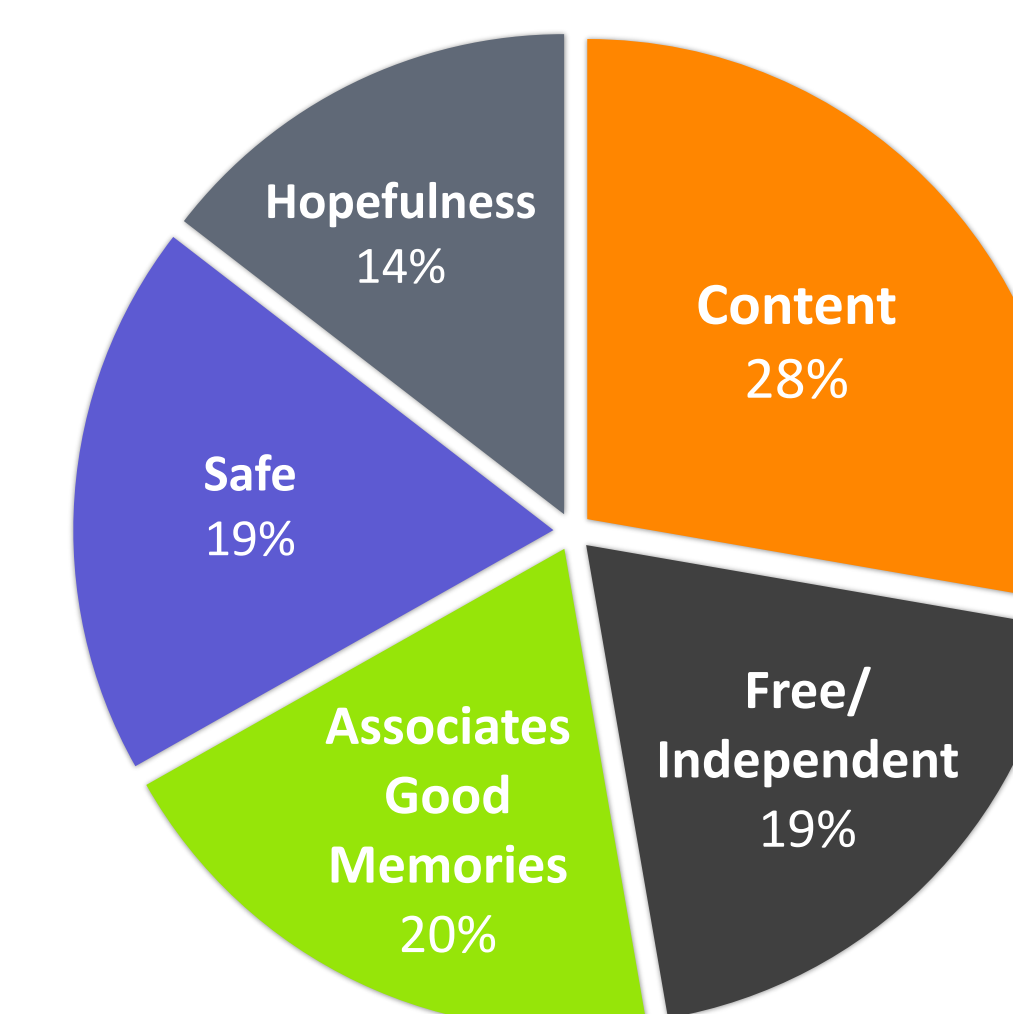
LANDSCAPE REFLECTIONS

Participants rated the important areas of improvement within the criteria listed below to the associated image.



Participants reflected on the images to the left to provide cognitive insight to how landscapes are observed by older adults. Adjectives were selected based on emotional and sensory characteristics that were associated with the image.

Top Cognitive Responses to Images



Only male participants made additional comments on each image and they **all** stated "no change" for improvement.

INTERVIEWS

The results of the interviews are as follows:

- There is a large gap in knowledge within the application and functionality of sustainable Landscape Design from a designer and ecological perspective
- Current Landscape Design does not meet the demands and desires of the present older adult demographic or administer appropriate strategies for future growth.
- Design should encourage independence and end-user choice while promoting safety.
- Sense of purpose and variety of options for differing abilities are critical.
- Inclusive Design principles within built landscapes are established as "very important" from all practices, which establishes the understanding for cross-disciplinary solutions
- Further empirical research of older adults is critical to build relevant adaptations within future city landscapes and age-friendly communities.

CONCLUSIONS

The analysis concluded that the aging population's requirements differentiate from the professional design solutions – particularly considering the psychological needs – within landscape design. Social scientists, researchers, and older adults are concerned about the disruption of cultural and psychological factors that connect people to locality, which reflects the ecological standpoint of "leave it the way it is."

Integral Psychological and Physical Needs

1. Universal and accessible landscapes promote active aging in regards to improvement, growth, and inclusivity for people of all abilities.
2. The cognitive response data to landscapes prove that they administer feelings of contentment and good memories. It installs independence and freedom, which provides dignity to people – an essential factor for healthy older adult living. Landscapes add a sense of security for individuals, gives hope, and acts as a positive retreat.
3. The aging population use the outdoor environment to obtain and maintain physical activity (fitness) and as a therapeutic atmosphere for stress-relief. Daylight is required, which determines their visit and social areas are critical requirements.
4. The promotion of ecological awareness and landscapes to remain in the original state support user and environmental sustainability.

Recommendations for Improvement

1. The most significant attributes to implement for outdoor landscapes are supportive spaces for the user. These are washroom facilities, walkways with proper circulation, wide path space, and designated areas for rest with bench seating. Wayfinding in signage and directional communication are critical to allow for user choices and confidence. Shade and parking are held important for improved experience.
2. Visual, aroma and tactile stimulation of additional flowers and shrubs supply the valuable sensory experience the aging population demand. The data of visual impairment and dependence of visual assistance supports this development.
3. Additional evidence-based design and quantitative research is vital to update standards and provide for accurate projected studies.