## 135 "Inclusive Parks": A scoping review of accessibility standards for people with disabilities

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It is well recognized that access to green and blue spaces have physical, social, psychological and health benefits for people with and without disabilities (Gascon et al., 2017; Labbé et al., 2019; Markevych et al., 2017; Merrick et al., 2020; Rugel et al., 2019, Zhang et al, 2019.). However, many people with disabilities are still excluded from these spaces because of accessibility issues (Burns et al., 2009). The federal government has determined that accessibility for people with disabilities in Canada's world-renowned national parks should be addressed (Marcastel, 2019). Historically, standards have focused on promoting access for people with physical disabilities; however, existing accessibility standards are relatively dated and have had less emphasis on people who experience cognitive or sensory challenges (i.e., visual or auditory) (Parks Canada, 1994). For example, wayfinding is emerging as a critical topic for different disabilities to identify accessible routes for planning purposes and enable real-time navigation. Moreover, environmental features intended for one group (e.g., tactile sidewalk sections for people with vision problems) may make it challenging for people from another group (e.g., those who use mobility devices like wheelchairs) (Ormerod et al., 2015). It is thus important to avoid developing standards in a siloed manner (i.e., with only one disability group in mind).

This scoping review is part of the project Providing Accessible ReCreation Outdoors: Userdriven Research on Standards (PARCOURS) which overarching goal is to improve the Canadian accessibility standards for national parks funded by the Canadian Accessibility Standards Development Organization. The first phase of this project was to conduct a scoping review to compare and contrast existing international and national standards and novel research evidence to inform the development of revised standards. The question guiding the search for relevant studies was "What are the current accessibility standards in terms of outdoor spaces, including parks to allow people with disabilities to enjoy the natural environments in their community?"

The scoping review involved five steps: identifying the research question, identifying relevant standards and guidelines, choosing standards, charting the data, and reporting the results (Tricco et al., 2018). The scoping review was conducted between June 2020 and February 2021 using Google search and governmental or official park websites. The search terms included accessibility terms (e.g., access\* standard\*, disabilit\* policy, regulation\*, guidelines), parks and nature terms (e.g., parks, outdoors, natural, urban, trail\*, path\*, national) and mobility device and disability types (e.g., wheelchair\*, scooter\*, blind, partial sight, deaf, hard of hearing, cognitive, mental, developmental). The searched covered International (e.g. United States, World, WHO, Europe, France, Switzerland, United Kingdom, England, Australia, Spain) and Canadian national standards, including provincial guidelines. For feasibility purpose, we excluded the guidelines and standards from cities. The search was conducted both in English and French, and standards in Spanish were also included as those 3 languages are spoken by the research team. The data was extracted and charted based on the features listed on the Parks Canada website and bonified with the content of the other standards founded. This list of features included: Paths and trails (e.g. sidewalks, walkways, stairs, ramps, lighting, obstacles), parking and drop-off areas and transit areas, amenities (e.g. rest areas, visitor centers, outdoor shelters, point-of-sales, washrooms), Wayfinding and signage, Park Management (e.g. policies, practices, and communications) and Summer and Winter activities (e.g. access to activities, equipment, installations). This last step of the scoping review is currently ongoing.

The search resulted in 30 standards and guidelines: 14 Canadian and 16 International. The preliminary results of the data extraction highlighted that the features that were the most covered were the accessibility of websites, parking access, paths and trails requirements. In terms of amenities, most included documents recommendations for information centers and washrooms. Summer activities were also covered by most standards including picnic tables, beach access and camping sites requirement. The standards more rarely included requirements on signage and wayfinding, and when they did, they mostly covered detectable warning surfaces for people with visual limitations. Moreover, despite the fact that many of those standards were developed in countries with winter conditions, requirements for winter activities were included in only one standard. Moreover, the level of specificity of the requirements varied greatly between the standards and guidelines, which could impact their implementation. For instance, some standards included only general statements about the necessity of having accessible parking space, while other standards offered specific ratio of parking space/accessible space.

The next phases of the PARCOURS project will be audits of national parks in two Canadian provinces and walk-along interviews with people with disabilities in those parks. Our team will then compare data from these audits with the existing standards identified in the scoping reviews. This review process will determine how compliant these park sites are with existing standards. The team will also assess if the standards are missing features based on the lived-experiences of people with disabilities of the outdoors and nature. The overall goal will be then to make recommendations for new standards to the Canadian government. This project will contribute to reducing barriers for people with disabilities and creating communities that enable everyone to participate fully and enjoy the nature splendors that Canada as to offer.

## References

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