OSA Skateboard Infrastructure Strategy

Ottawa Skateboard Association

Author Notes

This is a working document developed by the Infrastructure Committee and the OSA team through direct face-to-face feedback with skateboarders, and input from stakeholders. We welcome feedback and suggestions. Please visit our website to access our contact form or send us an email at info@ottawaskateboard.ca.

Table of Contents

Executive Summary

The City of Ottawa ("the City") currently has 18 free outdoor skateboard parks that serve residents of Kanata, Stittsville, Gloucester, Centertown, Conroy, Goulbourn, Orleans, Barrhaven, and Nepean. These facilities vary in size and design, but the overwhelming majority of these parks are constructed using prefabricated, modular wood/metal ramps set on an asphalt pad. Only five of Ottawa's skateboard parks are purpose-built skateboard parks by professional designers and builders.

Over the past several years, the Ottawa Skateboard Association ("OSA") has been working with the skateboard community and the City to inform and guide the design of new skateboard parks. The OSA strongly believes the City would benefit greatly by switching from an ad-hoc design and consultation method to a long-term, professionally developed skateboard park strategy that accounts for community-level development, as well as introducing a city-wide implementation plan. With a relatively modest investment in planning and consultation compared to overall project costs, both the City and the end users will benefit from high-quality, well-utilized skateboard parks worthy of the Nation's Capital.

Unfortunately, users of Ottawa's skateboard parks remain dissatisfied with the parks' design and direction and feel their concerns are disregarded. To address this issue, the OSA suggests that the City of Ottawa involve relevant and experienced design professionals (landscape architects, planners, skateboarders, and community organizations) in developing a new Ottawa Skateboard Park Strategy, as directed within the City's 2021 Parks and Recreation Master Plan.[1] This strategy should prioritize users' needs and be based on the recommendations and research put forth by this document, along with input from direct users and community groups. The following recommendations are detailed in the following report:

- **Solicit and develop a professional planning strategy and use this document as an anchor**[2]
- **Perform a City-wide Gap Analysis**
- **Adopt robust site selection criteria, including thematic design considerations**
- **Modify public consultation methods**
- **Set aside funding for Life-Cycle considerations**
- **Partner with community organizations**

[1] For more information on the City of Ottawa's "Parks and Recreation Master plan", see (City of Ottawa, 2021).

[2] *Appendix A: Constructing Ottawa's Skateboard Park Network* provides detailed recommendations to guide the design of parks in the new strategy

- **Increase the diversity of design professionals**

Our team believes that this document provides the City with an outline of an approach for Ottawa to become a champion of skateboarding in Canada and develop a network of parks that benefits the National Capital Region.

Introduction

Who We Are

The Ottawa Skateboard Association ("OSA") is a volunteer-driven organization that aims to support and promote skateboarding across the National Capital Region. A group of private citizens, we have come together because of our shared love for skateboarding. We are one of several initiatives in the area, along with our sister organizations: *For Pivots Sake*, *Girls+ Skate 613* and *onesquarefoot,* which formed out of the exponential growth in popularity that skateboarding is enjoying from diverse and traditionally under-represented communities.

Our Goal

The goal of the OSA is to have Ottawa become a champion of skateboarding in Canada and develop a network of parks that benefit the National Capital Region. Although the City of Ottawa has taken many positive strides in recent years to build high-quality skateboard parks, the current Ottawa Skateboard Park Strategy[3] is outdated and lacks the depth and thoroughness seen in the strategies presented by other municipalities. Since 2005, several other Canadian cities have produced progressive, wide-ranging skateboard park strategies, including Vancouver,[4] Calgary,[5] and Toronto,[6] which provide excellent examples for Ottawa to follow in this regard.

Why Skateboarding?

Simply put, we love it, and a significant number of other people love it as well. Originating in Southern California in the mid-1950s, skateboarding remains popular today thanks to significant media coverage. The major motion picture *Dogtown and Z-boys* and the popular video game franchise *Tony Hawk's Pro Skater* spawned the most recent surge of interest in skateboarding in the early 2000s. Competition series like Street League Skateboarding, the X-Games, and the Vans Park Series draw international attention - Montreal hosted the Vans Park Series in a new purpose-built competition facility at the Olympic Grounds in July 2019. Most recently, skateboarding had its

---

[3] The City of Ottawa does not have one comprehensive document outlining its skatepark strategy. Rather, the City has a "Parks and Recreation Master plan" (City of Ottawa, 2021) that outlines plans for future development, as well as a "Recreation Facility Infrastructure Standards" document (City of Ottawa Recreation, Cultural and Facility Services, 2019) which discusses the design standards and specifications for the building of skateboard parks within the City.

[4] For more information on the Vancouver skateboard park strategy, see Vancouver Board of Parks and Recreation (2022)

[5] For more information on the Calgary skateboard park strategy, see van der Zalm and associates (2011)

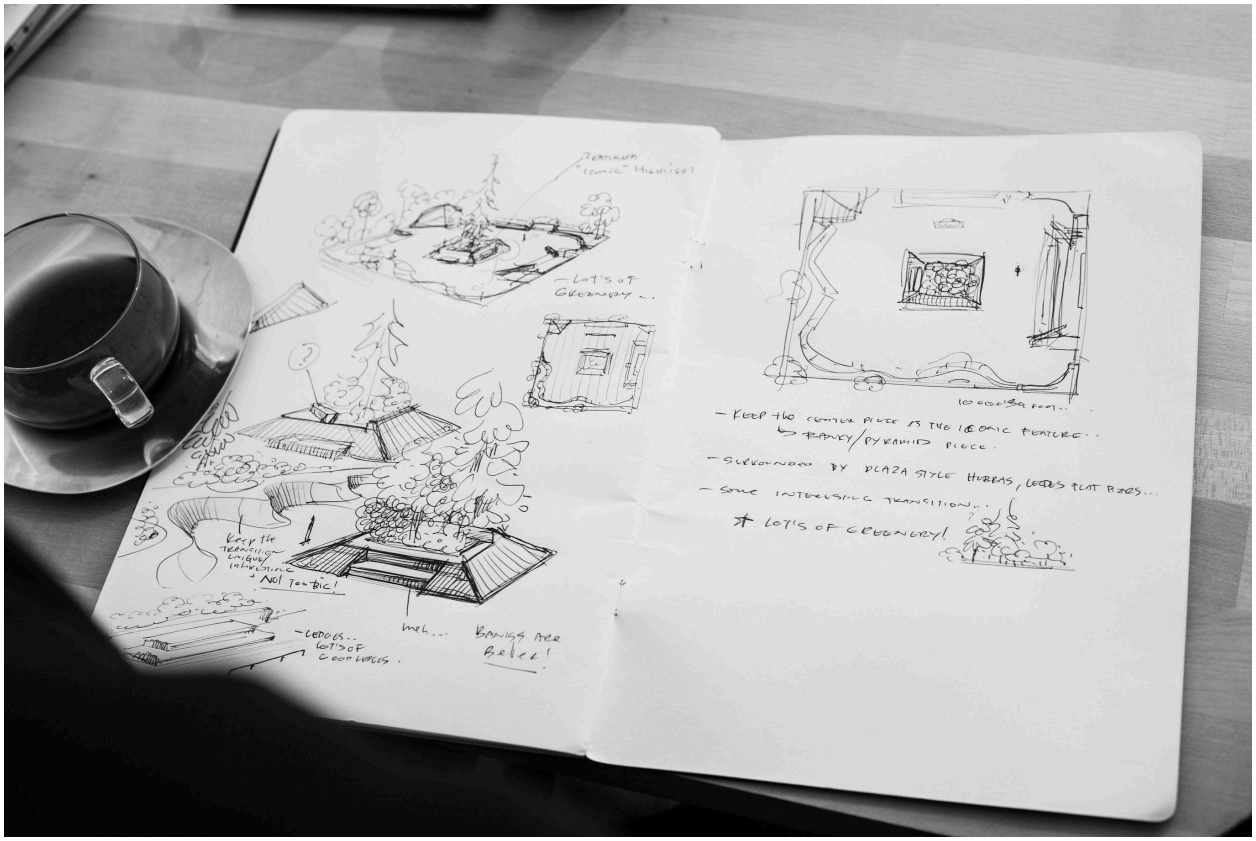
[6] For more information on the Toronto skateboard park strategy, see Toronto Parks, Forestry and Recreation (n.d.)

inaugural competition on the Olympic stage at the 2020 Tokyo Olympic Summer Games in 2021.

Aside from the economic engine behind the sport, skateboarding provides several significant physical and social benefits for participants. First and foremost, skateboarding is a physical activity which improves cardiovascular health (Furr et al., 2021; Men's Fitness Editors, 2018; Hetzler et al., 2011), strength (Cavazos, 2018; Men's Fitness Editors, 2018), and coordination/balance (Hunter, 2023; Kantha et al., 2023; Castillo-Daza, 2021). The physical activity-related benefits of skateboarding are incredibly relevant for Canadians, given that recent research completed by ParticipACTION cites that less than 1 in 3 children get the recommended amount of daily physical activity (ParticipACTION, 2022). As both a sport and an active mode of transportation, skateboarding is one easy way to promote healthy children and communities.

As an activity, skateboarding is uniquely accessible to participants in ways other popular Canadian sports are not. A brand-new, fully functioning skateboard and safety equipment from the local skateboard shop will cost approximately CAD 200. While this appears to be a high initial cost to the users, skateboards can last from several weeks to several years, depending on how heavily they are used and the care they are treated with. Additionally, It is not uncommon to have skateboarders use second-hand skateboards which have been handed down as other skateboarders replace or upgrade their equipment.[7] What is perhaps most beneficial to skateboarding's relative cost-effectiveness is how, unlike other sports, skateboarding does not require significant amounts of scheduled practice time or large sign-up fees that can be prohibitively expensive (in terms of time and money) for even middle-class families. As a result of the potentially long useful life of equipment, prevalence of second-hand hard goods, and lack of schedule and organizational fees, it is clear that skateboarding can provide youth and adults alike with a creative way to exercise, with relatively low financial barriers to entry.

[7] *For Pivots Sake*, a sister organization to the OSA that works to provide underprivileged youth in Ottawa with refurbished skateboard equipment and lessons on how to use it safely, relies heavily on second-hand hard goods from other skateboarders within the local community.



Skateboarding also provides a uniquely social activity for individuals of all ages. Although it is an individual activity where the participant constantly challenges themselves to overcome resistance from obstacles, the skateboard, and their body to perform tricks, it is often undertaken in a group setting, with other skateboarders undertaking the same or similar challenges. The individual struggle, learning, and growth that occurs alongside others fosters a sense of community and inclusion despite the individual nature of the activity; participants recognize and empathize with other skateboarders uniquely.

Background on Skateboard Park Design and Construction

Skateboard Park Overview

As the sport of skateboarding has grown and matured, so too has the design and construction of skateboard parks. In this regard, it may be helpful to think of skateboard parks like golf courses; while the layperson just sees a field with some trees and a hole, enthusiasts see tee boxes, fairways, and greens that combine to create a unique and engaging playing experience. The best examples (of skateboard parks and golf courses alike) utilize local resources to engage the community, drive tourism, and help develop local talent into world-class athletes.

However, with skateboard parks, as with golf courses, no “one size fits all” solution guarantees their success - each park is unique and must be designed to meet local considerations. For skateboarding, this means that community engagement - led by skateboard park design professionals and facilitators - during the design process is of utmost importance. Different considerations in this process include but are not limited to:

- Pre-design requirements;
- Site selection;
- Park size, shape, and orientation;
- Feature size, shape, and orientation;
- Construction phasing and materials.

While we mentioned that each skateboard park should form a unique response to local and community considerations, there are five main “types” of skateboard parks that can be used to classify the majority of skateboard parks found today.

Types of Skateboard Parks

There are five main types of skateboard parks that all provide space for different types of skateboarding. Much like different types of golf courses, which are generally classified by the style of play and amount of man-made intervention into the landscape (Isaacson, 2020), skateboard parks can be said to follow a similar classification.

D.I.Y.

“Do-It-Yourself” parks are generally the smallest and most unique skateboard park type. As the name suggests, these parks are built by and for the skateboarding community

without official oversight or approval. Harnessing the creative power of local skateboarders/builders and sometimes precarious building methods, D.I.Y. parks are often tactical interventions into the cityscape that utilize as much of the pre-existing urban environment as possible. Though there are many examples of D.I.Y. parks that have received retroactive approvals by different municipalities[8] (a practice we encourage), the ad-hoc nature of their management, safety and construction means this type of park is not well suited for planned development and will not be discussed further within this document.

Street Plaza

“Street” skateboarding is widely regarded as the most popular style of skateboarding and is often practiced in public places such as urban plazas. In response to the popularity of street skateboarding, skateboard parks referred to as “Street Plazas” were developed to mimic the types of structures found in an urban environment. These features include ledges, stairs, and railings, all purpose-built for skateboarding but with the lowest requirement for manufactured intervention. Another defining feature of a

[8] Examples include Burnside Skatepark in Portland, Oregon (Portland Parks and Recreation, 2008), Leeside DIY Skatepark in Vancouver, British Columbia (City of Vancouver, 2024), and the Kenneli DIY skatepark in Finland (King, 2019), among others.

modern Street Plaza is the incorporation of structural and cosmetic enhancements such as different riding surfaces and green spaces.

Skate Dots / Skateable Art

Skate dots are single skateable features that can be integrated into existing park (non-skatepark) infrastructure. These single skateable features can also be integrated into components of public art and or other park elements.

Skateable Art refers to creative public art structures designed and built to be “skateboarding and multi-use friendly.” Most of these skateable art features have forms compelling to a broader public audience.

The skateboard community in Ottawa has expressed interest in developing small single skate spots and/or integrating multi-use public skateable art into existing or new park infrastructure, which would lead to a better network of skateboarding infrastructure across the city of Ottawa.

Transition/Bowl

“Transition” skateboarding describes a style of skateboarding that mimics the carving along waves performed by surfers and popularized on the schoolyard concrete banks and backyard swimming pools of California. Contemporary transition parks are purpose-built for skateboarding and are not necessarily replicas of an urban form. Transition parks require the most significant manufactured interventions as the bowls and ramps that make up this type of park are of considerable size and involve significant civil engineering. A transition skateboard park consists of primarily curved and inclined surfaces of varying height and angle, often going significant distances above and below grade.

Hybrid

“Hybrid” skateboard parks blend elements of “transition” and “street” style parks into a single facility. Hybrid parks have the potential to satisfy a larger segment of the skateboard community, though this benefit comes with some significant costs. “Transition” and “street” style skateboarding require significantly different spatial organization and trajectories, which, when combined into a Hybrid park, causes some of the most complex design challenges. This complexity also generally results in a larger overall park footprint and, therefore, significant site and financial considerations.

Ultimately, all skateboard parks can be classified into one of the five classifications described above. Most skateboarders will prefer one type of park or another based on the kind of obstacles they enjoy. When multiple types of parks are available, skateboarders will decide on which park to visit based on sometimes highly subjective and variable considerations such as the weather, ease of access/distance to the park, and where their friends may or may not be skateboarding. This multi-faceted decision criteria is why the OSA strongly recommends the City develop a Skateboard Park Strategy that considers its existing skateboard park infrastructure as a network that should be expanded in a planned and meaningful way.

Skateboard Park Design And Construction Methods

When determining a skateboard park's design and construction, there are two primary considerations to make:

1. **Is the park going to be pre-manufactured (modular) or site-specific (cast-in-place)?**

A wide variety of pre-manufactured skateboard park components are currently available in the marketplace. They include various configurations, materials, and aesthetic considerations aimed at attracting the attention of decision-makers who may have little or no experience with skateboarding and skateboard parks. While at face value, these products appear to provide a cost-effective solution, the reality is that these parks do not survive well in the harsh Canadian climate and quickly degrade to become expensive and undesirable at best and a risk to user health and safety at worst. Skateboard strategies from Portland,[9] Toronto,[10] Calgary,[11] and Nova Scotia[12] share these concerns and prefer site-specific, cast-in-place concrete construction.

Currently, the City of Ottawa has over a dozen pre-manufactured skateboard parks, forming the overwhelming majority of skateboard space in the region. **The OSA unequivocally recommends that the City of Ottawa immediately put a moratorium on purchasing additional pre-manufactured skateboard park equipment and that the current equipment stock be inspected and inventoried.** Special consideration should be given to the condition of each component so that dangerous obstacles are removed from use and replaced with refurbished stock. The remaining equipment could be consolidated and used in communities as temporary skateboard parks until the end of the equipment's life cycle.

2. **What materials should the skateboard park consist of?**

Skateboard parks can be built from many different materials, including wood, steel, concrete, asphalt, and unit masonry (pavers). It is also common to have mixed material parks, such as a combination of wood and steel or concrete and asphalt, though this practice is generally not recommended. Wood/steel ramps are not well suited to the Canadian climate except in an indoor facility where the ramps are sheltered and there is dedicated staff on hand for maintenance. Additionally, wood- or steel-fabricated ramps are often cited to be significantly more noise-generating than materials such as asphalt or concrete, creating additional considerations for skatepark development locations (Tony Hawk Foundation, 2024; Portland Parks and Recreation, 2008; Beck, n.d.).

Concrete/asphalt combination parks are problematic because the freeze/thaw cycle affects the materials differently. Asphalt degrades much more quickly than concrete and will require repair or replacement within as little as one year (Daskalov, 2015;

[9] For more information on the Portland skateboard park strategy, see Portland Parks and Recreation (2008).
[10] For more information on the Toronto skateboard park strategy, see Toronto Parks, Forestry and Recreation (n.d.)
[11] For more information on the Calgary skateboard park strategy, see van der Zalm and associates (2011)
[12] For more information on the Nova Scotia skateboard park strategy, see Moore (2006)

Michigan Concrete Association, n.d.). The only recommended combination material park is a concrete/unit masonry park because both are compatible building materials and handle freeze/thaw similarly.

The material shortcomings mentioned previously for combination parks also hold true for single material parks. Wood,, and asphalt are not well suited to the Canadian climate and using them for permanent public skateboard parks is not advisable. Other municipalities have noted that while these (often pre-manufactured) skateboard parks appear to have a lower upfront cost, over the equipment lifecycle, the costs become greater than those of a cast-in-place concrete skateboard park (Portland Parks and Recreation, 2008).

Cost is the excluding factor in a unit concrete park since it is considerably more work to construct and install than cast-in-place concrete. Additionally, using Skate Lite or similar composite materials, particularly for ramps such as bowls or halfpipes, can be a viable option if designed with a steel frame or pressure-treated wood for durability. Such features should be implemented with community consultation and constructed by a

reputable designer to ensure longevity, functionality, and alignment with the needs of local skateboarders.

Ultimately, cast-in-place concrete is the hands-down best material for an outdoor, permanent skateboard park.Skate Lite or composite materials on steel or treated wood frames can offer durable solutions for ramps like bowls or halfpipes, especially when designed with community input and expert craftsmanship. It is a widely used construction material with a long and well-documented history of surviving the Canadian climate and a desirable material to skateboard on (Beck, n.d.; Tony Hawk Foundation, 2024). Numerous municipal skateboard strategies and other organizations have acknowledged the benefits of utilizing cast-in-place concrete for skateboard park development, and we at the OSA enthusiastically agree (Tony Hawk Foundation, 2024; van der Zalm and associates (2011); Portland Parks and Recreation, 2008; Beck, n.d.; Toronto Parks, Forestry and Recreation (n.d.).

Existing Skateboard Park Facilities in Ottawa

At the start of summer 2018, the OSA audited the 18 skateboard parks in the City of Ottawa, intending to create a comprehensive review of the current skateboard landscape within the City. The OSA selected a group of skateboarders and visited each park with an OSA member. At each facility, the OSA and community members would ride the park, take photos, use the amenities and have a group discussion at the end of each session. Topics of discussion included the design of the park, amenities, how the park fits into the network of parks in Ottawa, park location, and how users interacted with the surrounding facilities. Highlights from the report include:[13]

- Graffiti covers many skateboard facilities; the new Richcraft and Berrigan parks are already eyesores for many users.
- The three older, prefabricated concrete skateboard parks (Trillium Park Skateboard Park, Manotick and Blackburn Skateboard Park) would benefit from DIY user-led upgrades.[14]
- Besides garbage collection, OSA found that the City of Ottawa performs no significant ongoing maintenance at any of the 18 skateboard facilities.
- To the best of the OSA's knowledge, no funding exists for repairs or upgrades of any kind at skateboard parks.
- Many of the prefabricated skateboard parks present liability issues due to poor design and maintenance.
- Overall, user feedback reported that most parks perform poorly with respect to many of our formal evaluation criteria, especially in terms of design.
- Most skateboard parks in Ottawa have been built without direct skateboard community involvement.
- Users of these facilities continue to express preferences for concrete parks over prefabricated parks.
- Many users suggested a disappointment with the network of skateboard parks in Ottawa and generally did not enjoy or travel to any of the facilities because of poor design.

[13] For the complete audit report, see Cayer (2019).
[14] Community lead DIY would include a collaboration between the OSA and the City of Ottawa similar to the partnership with leeside DIY skateboard park and the City of Vancouver.

The Future of Skateboarding in Ottawa

According to the City of Ottawa's Draft Parks and Recreation Facilities Master Plan, eight new skateboard parks are currently planned for development between 2021 and 2031 (City of Ottawa, 2021, P. 41). This development plan provides the City with an extraordinary opportunity for positive impact within the skateboard community.

Looking to the future of skateboarding in Ottawa, the OSA would like to present the following actionable items as a starting point for a more effective and efficient use of the City's investment into skateboarding infrastructure. The development of a planning strategy may encompass all of the below recommendations. Further, this document's Appendix A highlights specific technical recommendations that the OSA *strongly* believes must accompany the planning strategy:

1. Solicit and develop a professional planning strategy that builds on the work done by the OSA

Following the example set by many other municipalities in Canada and across North America, the OSA recommends that the City of Ottawa engage relevant and experienced design professionals (architects, landscape architects, planners, skateboarders and community organizations) to produce a comprehensive planning strategy for all current and future skateboard parks. A user-led planning strategy would enable the City of Ottawa to identify stakeholders, identify and quantify existing assets, and provide a roadmap for future investments in skateboarding infrastructure that maximizes value for the City. When considering the cost of any new park or revitalization process, the relative cost of a professional planning document pales compared to any physical construction costs. The professional planning strategy must be developed with consultation with users and expert community groups.

The OSA has reviewed the recommendations from the draft parks and recreation facilities master plan and advises action on the following already committed recommendations by the City of Ottawa (that includes the development of a professional planning strategy):

a. Set a citywide target provision level of 1:50,000 residents.

b. Proceed with planning and developing six skateboard parks between 2021 and 2031 as planned, matching the six typologies outlined in Appendix A of this report.

c. Investigate the opportunity to redirect funds collected from the "2004 Facility Needs Study" for the development of indoor skate parks and work directly with community groups and skateboard users to develop, plan and implement a future indoor skate park.

d. Review the feasibility of adding lighting to existing and/or skate parks in appropriate locations with the OSA and community groups.

e. Update and replace the 2012 Interim Skateboard Park Strategy by leveraging the work in this report, including the development of one new skateboard park in the "Downtown Core" and one new skateboard park in the "Outer Urban" transect to improve provision levels; the City should also develop new skate spots as part of new park development and park redevelopment to provide more local opportunities to access basic, beginner-level skateboard park facilities. The OSA suggests that the City should assess the potential need and opportunity to develop additional regional and/or community skateboard parks in strategic locations and update the provision level target for skateboard parks as appropriate.

The City of Calgary provides the most comprehensive Canadian skateboard park strategy the OSA has come across. *Appendix A: Constructing Ottawa's Skateboard Park Network* provides our detailed recommendations to guide the new strategy based on the planning rationale of the City of Calgary's Skateboard Park Strategy, which has been in place for several years and has produced over a dozen well-designed, engaging, and attractive skateboard facilities since it was adopted.

2. Perform a city-wide gap analysis.

A critical element of any professional planning strategy and an essential document given the City's considerable investment in skateboard parks, the OSA recommends conducting a thorough gap analysis before developing new skateboard parks. The development of a comprehensive gap analysis is also listed in the City of Toronto's Skateboard Park Strategy (Toronto Parks, Forestry and Recreation, n.d., p.30). It aims to maximize municipal investment by identifying areas of need during the planning stage before (largely irreversible) construction begins. A gap analysis is invaluable to the City of Ottawa as the current piecemeal approach to skateboard park development wastes valuable time and energy as each project group operates in isolation. Excessive effort could be minimized, and skateboard park development could made more efficient with a City-wide gap analysis, in direct communication with skateholders.

3. Adopt robust site selection criteria.

As mentioned previously, and as championed by our partners *For Pivot Sake* and *Girls+ Skate 613*, skateboarders come from all walks of life and communities. Therefore, we believe that robust site selection criteria must consider social, economic, and cultural factors. Items such as the proximity to public transit, access to both public and private amenities, and the natural/built environment of the skateboard park and surrounding

area are just some additional considerations that the City should review when selecting a site.

4. Modify public consultation methods.

Again, given the diverse backgrounds of skateboarders, traditional consultation methods do not necessarily reach the community members who may be most interested in providing feedback. The OSA recommends that the City work with local stakeholders and businesses to increase community engagement for future skateboard park consultations. Utilizing groups like the OSA (and our sister organizations), skateboard shops, private skateboard facilities, and community associations would provide the City with a much larger pool of local constituents to gain more robust feedback on initiatives.

Additionally, the OSA strongly recommends designating a member of the City staff who would provide a consistent point of contact for the community across projects.

Finally, the OSA strongly recommends removing obstacle design from the public consultation process. Any reputable skateboard park build and design team is suited to present design options based on the thematic and typological needs of a future skateboard park site.

5. Set aside funding for life-cycle considerations.

Like any other building project, skateboard parks require routine maintenance to address deterioration caused by seasonal changes, use-based wear and tear, and graffiti or vandalism. Currently, there is no allocation of funds for the upkeep of skateboard parks, leading to some park users needing to perform (what should be considered routine) maintenance themselves to address unsafe conditions. The OSA recommends that the City establish a fund for routine maintenance of all existing skateboard parks and that every new skateboard park have a portion of its funding reserved for future maintenance.

Additionally, the OSA recommends that to reduce the amount and costs associated with use and maintenance, the City of Ottawa overturns the by-law that allows graffiti at all skateboard parks. Graffiti causes three distinct problems for park users:

1. Graffiti reduces the surface friction of concrete, creating a slip-and-fall hazard, especially when wet;
2. Graffiti disguises material wear and makes preventative maintenance challenging to perform; and

3. Graffiti (specifically the prevalence of “tagging”) is unsightly and leads to a lower sense of ownership for the users and an increase in litter, vandalism, and antisocial behaviour.

6. Partner with community organizations

Given the complex nature of skateboard park design and skateboarding programming, the OSA recommends that the City of Ottawa formalize a partnership between its planning departments and local community organizations, including the OSA. The community organizations in Ottawa have vast expertise in the subject matter and, as a result, can play critical roles in supporting the development of premier skateboard parks in the City of Ottawa.

In addition, through consultations with stakeholders, the OSA has identified opportunities for programming such as skateboard camps, lessons, and other skateboard programs as key areas for development. Partnering with local organizations would leverage their experience and support the development of strong, inclusive skateboard programs that would leverage the future network of skateboard parks. The city of Ottawa needs to formalize and support their relationship with skateboarders and the OSA.

7. Increase the diversity of design professionals

Diversity in the design of each skateboard park is crucial to a robust design network for these facilities. The relationship between skateboard space and the user is unique to skateboarding: it is imperative that each space be designed uniquely in relation to other skateboard parks within the network.

Traditional design approaches include an information meeting and design workshop that aims to inform citizens of the proposal and develop design ideas and priorities to be used by the consultant in the preparation of design concepts. A second workshop follows to present the design concepts and receive stakeholder feedback. Based on stakeholder feedback, a concept is chosen, revised and finalized.

Although the traditional design approach seems comprehensive, historically, facilities developed through this approach lack consistency in themes. A key theme reported within the OSA’s audit of Ottawa’s 18 existing skateboard parks was that skateboard parks in Ottawa have redundancy in style, obstacle choice and design (Cayer, 2019).

The OSA strongly recommends that the city consider diversifying the contractors building our future parks and considers the importance of developing each park thematically in the network of parks (see the “Theme” section in Appendix A for further

details and a suggested theme network). Further, in selecting park designers, the City of Ottawa needs only to consider professional skateboard design organizations that produce fully custom, poured-in-place concrete (or street-style materials such as granite). Prefabricated or pre-cast skateboard parks do not benefit the community and should not be developed moving forward.

Summary

By implementing the recommendations listed above, the OSA strongly believes the City of Ottawa will be in the best possible position to guide the development and implementation of future skateboard park projects that will greatly benefit the skateboard community. With a relatively modest investment in planning and consultation compared to overall project costs, the City and the end users will benefit from high-quality, well-utilized skateboard parks worthy of the nation's capital and recognized across Canada.

Appendix A: Constructing Ottawa's Skateboard Park Network

This appendix is an adaptation of the City of Calgary's "Skateboard Amenities Strategy" developed by van der Zalm and associates (2011) and modified by the OSA for use within the City of Ottawa.

What is a Skateboard Park Network?

The idea of a skateboard park "network" underpins much of the Ottawa skatepark strategy. Rather than looking at proposed skateboard park sites independently, the focus should be on how each new skateboard park fits into the overall network in the city. The primary goals of this skateboard park network include:

- Providing comprehensive **accessibility** to skateboard parks for all citizens of Ottawa;
- Creating a diverse and **inclusive** environment for patrons of all sports and skill levels;
- Providing skateboard park users with a substantial **variety** of features and unique skateboard park designs;
- Employment of skateboard park **themes** in order to cater to the diverse interests of skateboarders.
- Providing developers with a **diverse skateboard park typology**, including different skateboard park styles and size-based design recommendations to optimize skateboard park development's consultation and planning phases.

Each one of these goals are discussed in detail over the subsequent pages.

Accessibility:

Every community in Ottawa should have easy access to a skateboard park. Skateboarding is a popular activity among youth, and studies have shown that closer proximity to recreational facilities/public parks can improve physical activity levels among youth (Kurka et al., 2015; Veugelers et al., 2009) and adults (Cutumisu & Spence, 2012; Cohen et al., 2007). Multiple systemic reviews of the literature concerning physical activity and built environments report that new and enhanced public transit infrastructure was associated with increased overall physical activity levels (Tcymbal et al., 2020; Kärmeniemi et al., 2018). A focus on accessibility in terms of additional skateboard park development and improved transportation infrastructure to new and existing skateboard parks will help ensure facility use. Building parks along pedestrian pathways or near public transit stops allows users without reliable access to private vehicles to enjoy Ottawa's skateboard park infrastructure, potentially leading to

additional usage, reduced barriers to entry for skateboarding (along with other extreme sports such as roller-blading/skating, scootering, and freestyle/motocross bicycling) and improved physical activity levels among Ottawa citizens (Centers for Disease Control and Prevention Division of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion, 2023; Canadian Public Health Association, 2021; Ontario Society of Physical Activity Promoters in Public Health, 2013; Canadian Partnership Against Cancer, n.d.).

Inclusivity:

All user groups, regardless of skill level or sport, should be able to enjoy Ottawa's skateboard park network. Additionally, skateboarders should have access to a facility that suits them regardless of their preferred skateboard park typology. Each network of skateboard parks should include obstacles for a broad base of skills and abilities, though the exact percentage of each park's obstacles should be weighed against the other parks in the network.

Variety:

Within the current skateboard park design and development process, there is insufficient consideration of what other obstacles, design themes, and skateboard parks are available in the region. This lack of consideration of existing facilities has historically resulted in duplication and redundancy in the designs of skateboard parks within the City. By adopting a networked approach, design, consultation, and review can be more direct and efficient than the current approach. In addition to obstacle and theme variety, the approach moving forward should emphasize diversity in contractors (skatepark build and design teams) for future skateboard park sites. Using different skateboard park build and design teams will add a layer to the diversity in skatepark design as each team will produce a unique take on each skatepark typology.

Diverse Park Typology:

When building high-quality skateboard parks that fit the design objectives of the three different styles of skateboarding (i.e., street, transition, and hybrid), it can be difficult to find a starting point. Planning often begins with community consultation, wherein community members are welcome to voice their opinions on what kind of park they would like constructed in their area. However, these discussions are often unfocused, as the starting point is generally a plot of land and a budget. The skateboard park network helps expedite this process by developing a skateboard park typology based on the size of the area that has been allotted for the skateboarding facility. This typology is somewhat prescriptive regarding park design but flexible with park style, as opting for a

street, transition, or hybrid style will depend on the neighbouring parks. The following subsections will describe the suggested types of skateboard parks that should be built based on the available space.

Integration of skateboarding into public design - less than 200m2

Incorporating skateboarding into the design of public spaces can enhance the urban environment and promote physical activity in the community. Skateboarding infrastructure can be integrated into existing public spaces such as plazas, parks, and even transportation hubs. Skateable features such as ledges, rails, and ramps can be added to these spaces to create an engaging and functional environment for skateboarders. When implemented properly, skateboarding infrastructure can also serve as a unique element of the public space, adding to the overall aesthetic and identity of the community. By recognizing the importance of skateboarding and including it in the design of public spaces, cities can create inclusive and dynamic environments that cater to diverse interests and activities.

Skateboard Spot - 200m2 to 600m2, Skateable Art or Skate Spots

Skateboard spots are small skateboard facilities integrated into residential parks or neighbourhoods. Although small in footprint, small areas such as these can be leveraged effectively by developing “Skateable Art.” A new but popular concept, skateable art facilities are being constructed in major cities across Europe and North America.[15] Skateable art is generally created in collaboration with a local artist with the goal of creating a sculpture that will be visually appealing in its environment and functional for skateboarders.

Neighbourhood Park - 600m2 to 1200m2, Street Plaza or Transition/Bowl

A “neighbourhood park” starts at roughly the size of a tennis court. These facilities generally cater to the neighbourhood's needs and leverage the additional space to offer features for a wider variety of skill levels and user groups. Within the Ottawa skateboard park network, these facilities will be selected as either Street Plaza or Transition skateboard parks. Focusing on a single skateboarding discipline will result in a facility with more features to suit the needs of all skill levels within that discipline, and selecting that discipline with the network in mind will ensure that users seeking a different style of skateboard park will not have to travel far to find it.

[15] For a detailed example of a skateable art installation, see Hoppes, (2017).

Municipal/Destination Park - 1200m2+, Hybrid Skateboard Park

A Municipal/Destination park is a facility designed to meet the needs of the entire city. Thanks to the large footprint, a hybrid design style that will provide features for users of all disciplines and skill levels can be employed. These parks are described as “Destination Parks” because they will drive tourism to the area and can accommodate major exhibitions and competitive events.

Skateboard Park Themes

To provide optimal skateboard amenities, a network of thematic skateparks should be explored. This network should ideally address a range of abilities, ages, and terrain types that reflect the diversity of user groups. In order to provide these amenities in a city-wide network, a variety of skatepark typologies is recommended.

By adopting different themes, each park will create more accessibility and, in turn, should facilitate a higher frequency of participation amongst youth, leading to more healthy youth and neighbourhoods.

Several distinct theme typologies can be considered within the city's park system. Leveraging existing stakeholder consultations, the OSA audit of infrastructure and web-scraping social media comments, the OSA recommends using the below theme typologies to guide the design of the future skateboard park amenities.

Street-Inspired Thematic Design Typologies

Street Spots: Integrating skateboarding into the planning and design of public spaces can offer a range of benefits for urban environments and the community at large. Street spots and other skateboarding infrastructure can be seamlessly integrated into existing public spaces, such as plazas, parks, and even transportation hubs, to promote physical activity and create a unique and engaging environment for skateboarders. With the addition of skateable features like ledges, rails, and ramps, these spaces can become functional and appealing, adding to the aesthetic and overall identity of the community. By recognizing the importance of skateboarding and incorporating it into the design of public spaces, cities can create inclusive and dynamic environments that cater to diverse interests and activities while also promoting physical health and well-being.

Minimalist/Low-Impact Street: Street skateboarding involves being creative when skating obstacles a skater typically finds on the street, such as park benches, ledges, banks, rails, handrails, staircases, etc. This style of park features low impact and smaller street-inspired obstacles. The benefit of this park style is that it will appeal to a wide variety of user groups, including those just starting. A distinct feature of a minimalist/low-impact street park is that the park should be relatively flat; complex landscaping is not required to build this style of park. Additionally, the design should avoid large handrails and stairs, avoid transition, and not include typical skateboard park obstacles such as hips and quarter pipes. If these items are to be included, they should be smaller and mimic street obstacles (for example, steeper or "tighter" transition as well as skateable art structures)

Realistic Street/Plaza: The realistic street/plaza style park should mimic real street spots and or plazas as close as possible: this would involve building obstacles such as park benches and ledges with street inspired materials (marble, granite). There should be no transition or typical skateboard park obstacles in the plaza. The inclusion of green space and non-skateboard park obstacles (e.g., flower gardens, trees, and public art) should be incorporated into the design and building of these facilities.[16]

Modern Street Park: The modern street park is a hybrid-style park with features from all skateboard park themes, focusing on street-style obstacles. The modern street park has elements that cater to intermediate to advanced skateboarders. These parks can help drive tourism to the area and will accommodate major exhibitions and competitive events such as Olympic qualifying events. Elements that can be found in the park

[16] The obstacles and design elements in Major's Hill Park or the Garden of the Provinces are examples of the design elements suggested for utilization within a plaza style skateboard park.

include medium and larger style handrails and hubbas, medium to larger sets of stairs, and more traditional skateboard park street obstacles.

Transition Inspired Thematic Design Typologies:

Do it Yourself (DIY): In recent years, amateur urban skateboard park DIY solutions have become an urban trend; these parks can be playful commentaries, critical interventions or functional improvements to cities that lack proper skateboard park facilities. DIY parks are built by skateboarders who often do not have extensive knowledge of park design or concrete work. Without long-term plans, most of these facilities are built ad-hoc over a long period, as the building was self-financed, and the work progressed only when communities had funds. These factors influenced the park style, which tends to be transition-oriented. Building large structures and deep transitions is cost and time-prohibitive; as a result, DIY parks tend to have smaller transitions, with a more complex variety of transition-inspired obstacles, use different materials for coping and have more diversity in the style and size of the radiuses.

Non-Traditional Transition Park: This style features low-impact, small- to medium-sized transition-inspired obstacles. The benefit of non-traditional transition parks is that they will appeal to various user groups, including those just starting. Due to the non-traditional style of these parks, the inclusion of green space and non-skateboard park obstacles (e.g., flower gardens, trees, public art) is encouraged. These parks contain mostly or all transition obstacles and integrate typical transition elements together to create a more constant flow for the rider or user. Similar to the DIY style of park, these parks have a more diverse set of transition radius sizes and employ different materials for coping.

Flow/Event Park: Flow/Event style skateboard parks will generally be larger than the other styles; some features included in these parks are vert walls, pools, bowls, spines and quarter pipes. This park style should generally be larger to accommodate a more intermediate or advanced skateboarder. These parks should also be able to accommodate larger-scale events. These flow/event parks should have more consistent sizing regarding radius design and less complex or experimental design elements.

References

Beck, A. (n.d.). *Skatepark Best Practices.* The Skatepark Project. https://www.google.com/url?q=https://skatepark.org/uploads/Skatepark-Best-Practices-2022-4.pdf&sa=D&source=docs&ust=1709394362269722&usg=AOvVaw3e2Fp44TN8WBgVP59SX-WS.

Canadian Partnership Against Cancer. (n.d.). *Active transportation policies in Canada.* Canadian Partnership Against Cancer Corporation. https://www.partnershipagainstcancer.ca/topics/physical-activity-policies/active-transportation/.

Canadian Public Health Association. (2021). *Public Transit Factsheet.* Canadian Public Health Association. https://www.cpha.ca/public-transit-factsheet.

Castillo-Daza, C. A., Peña-Ibagon, J. C., & Cheu, L. E. R. (2021). Stabilometric Characteristics of the Skateboarding Athlete from the Romberg Test. *Int. J. Hum. Mov. Sports Sci, 9,* 1284-1290. http://dx.doi.org/10.13189/saj.2021.090623.

Cavazos, M. (2018). *What Muscles Does Skateboarding Work?* SportsRec. https://www.sportsrec.com/7494909/what-muscles-does-skateboarding-work.

Cayer, A. (2019). *Evaluation of Ottawa Skateboard Parks.* Ottawa Skateboard Association. https://ottawaskateboard.ca/posts/audit-of-ottawa-skateboard-parks/.

Centers for Disease Control and Prevention Division of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion. (2023). *Priority Strategy: Increasing Physical Activity Through Community Design.* Centers for Disease Control and Prevention.

https://www.cdc.gov/physicalactivity/community-strategies/activity-friendly-routes-to-everyday-destinations.html.

Cohen, D. A., McKenzie, T. L., Sehgal, A., Williamson, S., Golinelli, D., & Lurie, N. (2007). Contribution of public parks to physical activity. *American journal of public health, 97*(3), 509-514. https://doi.org/10.2105/AJPH.2005.072447.

City of Ottawa. (2021). *Parks and Recreation Facilities Master Plan.* City of Ottawa. https://www.google.com/url?q=https://engage.ottawa.ca/17815/widgets/91381/documents/65461&sa=D&source=docs&ust=1709394362285787&usg=AOvVaw3VhvHw8l2SgpzJ9bTm1683.

City of Ottawa Recreation, Cultural and Facility Services. (2019). *City of Ottawa Recreation Facility Infrastructure Standards.* City of Ottawa. https://www.google.com/url?q=https://engage.ottawa.ca/9205/widgets/35897/documents/18068&sa=D&source=docs&ust=1709394362286404&usg=AOvVaw0omTSWVmlZJiVnBuYZGs0b.

City of Vancouver. (2024). *Leeside Tunnel skateboard park.* City of Vancouver. https://vancouver.ca/parks-recreation-culture/leeside-tunnel-skateboard-park.aspx.

Cutumisu, N., & Spence, J. C. (2012). Sport fields as potential catalysts for physical activity in the neighbourhood. *International Journal of Environmental Research and Public Health, 9*(1), 294-314. https://doi.org/10.3390%2Fijerph9010294.

Daskalov, T. (2015). Concrete Skateparks: Design and construction of a skateboarding recreational facility [Bachelor's Thesis, Häme University of Applied Sciences]. https://www.google.com/url?q=https://www.theseus.fi/bitstream/handle/10024/987

80/Teodor_Thesis_2015_final.pdf?sequence%3D1%26isAllowed%3Dy&sa=D&source=docs&ust=1709394362270515&usg=AOvVaw2yan4xaluz_k-GgP4ru9rQ.

Furr, H. N., Nessler, J. A., & Newcomer, S. C. (2021). Characterization of heart rate responses, duration, and distances traveled in youth participating in recreational skateboarding at community skateparks. *The Journal of Strength & Conditioning Research, 35*(2), 542-548. https://journals.lww.com/nsca-jscr/fulltext/2021/02000/characterization_of_heart_rate_responses,.34.aspx.

Hetzler, R. K., Hunt, I., Stickley, C. D., & Kimura, I. F. (2011). Selected metabolic responses to skateboarding. *Research quarterly for exercise and sport, 82*(4), 788-793. https://doi.org/10.1080/02701367.2011.10599816.

Hobbes, N. (2017). *Art and Skateboarding Collide on Go Skate Day.* Red Bull. https://www.redbull.com/us-en/red-bull-skate-space-seattle-art.

Hunter, R. (2023). *11 Skateboarding Benefits You Maybe Didn't Know About.* Red Bull. https://www.redbull.com/ca-en/benefits-of-skateboarding.

Isaacson, D. (2020). *Here are the 6 different types of golf courses, explained.* GOLF. https://golf.com/travel/6-types-golf-courses-explained/.

Kantha, P., Hsu, W. L., Chen, P. J., Tsai, Y. C., & Lin, J. J. (2023). A novel balance training approach: Biomechanical study of virtual reality-based skateboarding. *Frontiers in bioengineering and biotechnology, 11,* 1136368. https://doi.org/10.3389/fbioe.2023.1136368.

Kärmeniemi, M., Lankila, T., Ikäheimo, T., Koivumaa-Honkanen, H., & Korpelainen, R. (2018). The built environment as a determinant of physical activity: a systematic review of longitudinal studies and natural experiments. *Annals of behavioral medicine, 52*(3), 239-251. https://doi.org/10.1093/abm/kax043.

King, A. (2019). *Upward slope: how skateboarding transformed the 'Manchester of Finland'.* The Guardian. https://www.theguardian.com/cities/2019/apr/16/upward-slope-how-skateboarding-transformed-the-manchester-of-finland-tampere.

Kurka, J. M., Adams, M. A., Todd, M., Colburn, T., Sallis, J. F., Cain, K. L., ... & Saelens, B. E. (2015). Patterns of neighborhood environment attributes in relation to children's physical activity. *Health & place, 34,* 164-170. https://doi.org/10.1016%2Fj.healthplace.2015.05.006.

Men's Fitness Editors. (2018). *Will Skateboarding Get You Fit?* Men's Journal. https://www.mensjournal.com/health-fitness/ask-mens-fitness-how-good-workout-skateboarding.

Michigan Concrete Association. (n.d.). *Concrete Vs. Asphalt: How Long Does Each Last.* Michigan Concrete Association. https://info.miconcrete.org/blog/concrete-vs-asphalt-how-long-each-lasts.

Moore, K. (2006). *Ramping Up! A Nova Scotia Skatepark Resource.* HeartWood Center for Community Youth Development. https://heartwood.ns.ca/wp-content/uploads/2013/07/sk8.pdf.

Ontario Society of Physical Activity Promoters in Public Health. (2013). *Key Messages and Policy Recommendations for Access to Recreation.* https://www.google.com/url?q=https://pub-brant.escribemeetings.com/filestream.ashx?DocumentId%3D29186&sa=D&source=docs&ust=1709394362277589&usg=AOvVaw3lupMVOArfwhhxItXncz0X.

ParticipACTION. (2022). *Lost & Found: Pandemic-related challenges and opportunities for physical activity. The 2022 ParticipACTION Report Card on Physical Activity for Children and Youth.* ParticipACTION. https://www.participaction.com/wp-content/uploads/2022/10/Report-Card-Key-Findings.pdf.

Portland Parks and Recreation. (2008). *Skatepark System Plan June 2008.* City of Portland. https://www.google.com/url?q=https://www.portland.gov/parks/documents/skatepark-system-plan-2008/download&sa=D&source=docs&ust=1709394362282162&usg=AOvVaw3xhU412Rr8NSEENyI9brXa.

Tony Hawk Foundation. (2024). *Skatepark Materials.* Tony Hawk Foundation. https://publicskateparkguide.org/get-started/c-community-outreach/channels-of-communication/.

Toronto Parks, Forestry and Recreation. (n.d.). *Skateboard Strategy.* City of Toronto. https://www.google.com/url?q=https://www.toronto.ca/wp-content/uploads/2017/10/992d-Skateboarding-Strategy.pdf&sa=D&source=docs&ust=1709394362288640&usg=AOvVaw3T6xNY4bUWpRH_ZVLdlMBc.

Tcymbal, A., Demetriou, Y., Kelso, A., Wolbring, L., Wunsch, K., Wäsche, H., ... & Reimers, A. K. (2020). Effects of the built environment on physical activity: a systematic review of longitudinal studies taking sex/gender into account. *Environmental health and preventive medicine, 25*(1), 1-25. https://doi.org/10.1186/s12199-020-00915-z.

Van der Zalm and associates. (2011). *The City Of Calgary Skateboarding Amenities Strategy 2011.* City of Calgary. https://www.google.com/url?q=https://www.calgary.ca/content/dam/www/csps/recreation/documents/skateparks/skateboard-strategy.pdf&sa=D&source=docs&ust=1709394362288059&usg=AOvVaw1VoZIzcZm2baFVxHfZb5hT.

Vancouver Board of Parks and Recreation. (2022). *Vancouver Skateboard Amenities Strategy June, 2022 (Proposed).* City of Vancouver. https://www.google.com/url?q=https://parkboardmeetings.vancouver.ca/2022/20220606/REPORT-SkateboardAmenitiesStrategy-CitySkate-20220606.pdf&sa=D&source=docs&ust=1709394362287137&usg=AOvVaw1Bbw5eCZ0AcoxtCLRCQWlH.

Veugelers, P., Sithole, F., Zhang, S., & Muhajarine, N. (2008). Neighborhood characteristics in relation to diet, physical activity and overweight of Canadian children. *International Journal of Pediatric Obesity, 3*(3), 152-159. https://doi.org/10.1080/17477160801970278.