



**APPENDIX A** 

### "CURRENT STATE" RESEARCH FINDINGS REPORT









## LAND ACKNOWLEDGEMENT

We acknowledge that the sport fields and other facilities we discuss in this project are built on the unceded territories and homelands of the xwmə0kwəy'əm (Musqueam), Skwkwú7mesh (Squamish), and səlilwətał (Tsleil-Waututh) Nations. We thank them for continuing to care for these lands and waters since time immemorial. The Park Board recognizes its own legacy of colonialism, including the forced removal of Indigenous peoples from their lands to create parks and athletic facilities. This work aims to contribute to athletic facilities that better reflect and support local First Nations cultures and provide more equitable opportunities for Indigenous athletes and field users.

"Current State" Research Findings Report

Young boy throwing a baseball

# EXECUTIVE SUMMARY



# KEY FINDINGS AND CONSIDERATIONS

The following table summarizes the key findings and considerations for the Sport Field Strategy presented in this report.

Key	/ Finding	Impact of Strategy	
1	<b>There are field type inconsistencies.</b> Vancouver's current system for how fields are classified and defined is inconsistent. Fields within each class are not always similar in terms of dimensions, amenity types, and functions.	The strategy presents an opportunity to create clear definitions and a refreshed classification system. The refreshed classification system can be used to guide ongoing operations and capital planning, including field enhancement projects and new site development. Additionally, opportunities also exist to better align the inventory with the most appropriate uses.	
2	The distribution of sport fields varies. Generally, the provision of sport fields is higher per 1,000 residents in areas of lower density. As such, service provision by population is lower in downtown Vancouver and core areas surrounding downtown than in other parts of the city.	Recognizing the unique land supply context of Vancouver, the strategy will need to determine if it is realistic to undertake initiatives aimed at balancing sport field geographic distribution. Different classes and types of sport fields have different catchments. The strategy will need to consider the spectrum of uses as it pertains to field infrastructure needs (e.g. spontaneous to performance sport use).	

Key	y Finding	Impact of Strategy
3	A limited number of sports fields are accessible directly from rapid transit. Most sport fields are in close proximity of active and public transportation routes, however only a small proportion have direct access via rapid transit.	Proximity and access via public and active transportation modes may be a decision- making consideration when determining future projects.
4	There is high demand for spontaneous and casual play opportunities. Available trends data further reflects (and supports the local engagement findings) that there are increasing demands for space for spontaneous/ unstructured sport field activities and that residents seek these opportunities close to home.	The strategy will need to provide guidance on how to ensure sufficient sport field supply exists for casual use and how to balance these needs with those from organized user groups and special events use.
5	<b>Cost structures vary for the different</b> <b>types and classes of fields.</b> Significant variations exist in the cost structures between the different classes of fields. Some field classes/types recover all or most of their associated operational costs through user fees, while others only recover a very small portion through user fees.	While not a driver of sport field provision, cost will need to be a consideration for both the operational and future project recommendations identified in the strategy. The strategy may present an opportunity to create better alignment between rates and fees and operational costs.

Key	y Finding	Impact of Strategy
6	<b>Synthetic turf fields are highly used.</b> There is a high level of user demand for synthetic turf fields, especially during fall, winter and spring months (rainy seasons).	If bookings reflect actual field use, it is reasonable to state that the synthetic turf inventory has capacity challenges during some peak months and times. Additional tactics are needed to further explore the actual utilization of fields (including spontaneous use). The strategy will provide recommendations on the future provision of synthetic turf, considering both the findings contained in this report and the literature review and research published in the Environmental and Human Health Report.
7	<b>Field bookings are concentrated</b> <b>on a small number of fields.</b> Within the current Class A and B inventory, a relatively small number of fields accommodate the majority of booked time. Overall analysis of booking data and growth projections suggest there is enough overall volume of field space to accommodate future growth, however the inventory (typologies of fields, amenities, etc.) may require enhancements and adjustements to ensure fields are well suited to meet user needs.	The strategy will include a reclassification of the sport field inventory to ensure that greater consistency within each field class, and that clear levels and types of uses are identified for each type of field. The strategy will also provide guidance on allocations (permitting) that help ensure the right users are aligned with the right fields.
8	Vancouver sport field user fees are consistent with comparators. Rates and fees are generally consistent with those charged by other regional providers of sport fields	Maintaining consistency in rates and fees with regional comparators may be beneficial in helping to manage service level expectations. The strategy will provide guidance on how future rates and fees can be set to clearly consider equity, access and financial realities.

Key	y Finding	Impact of Strategy
9	The sport field inventory is adapted for a variety of uses. The sport field inventory appears to be fairly adaptable. A sizeable proportion of the inventory is sized and suitable for emerging and growing sports.	The strategy can provide guidance on how to evolve and adjust the inventory (physical space, configuration, and allocations) for emerging uses. It can also outline how best to classify and organize the inventory in light of emerging uses and needs.
10	<b>Synthetic turf fields provide more</b> <b>play time.</b> Synthetic turf fields provide significantly more capacity than natural fields. Their lifespan can be extended through proper maintenance and rehabilitation.	Given Vancouver's unique context, it will be important to make the most effective use of available land resources. Future synthetic turf provision will need to consider a multitude of factors, including equity of access, human health and environmental considerations, year-round sport demand, event hosting opportunities, sport suitability, and costs (e.g., the lifecycle of synthetic turf surfaces, and proper maintenance).
11	Natural turf field conditions are generally good across the inventory with opportunities to improve support amenities. The field condition assessments indicate that most field surfaces are in good condition, however there is a need to replace aging infrastructure such as backstops, washrooms/changerooms and other support spaces. The public and user group engagement generally supports the assessment findings.	The strategy will recommend field upgrades and standards that will support future re- investment. The new classification system will provide a basis to plan future projects and will establish new maintenance service levels for safety.

# TABLE OF CONTENTS

1.	INTRODUCTION AND CONTEXT	1
	PURPOSE OF THIS DOCUMENT	2
	PROJECT OVERVIEW & PREVIOUS PLANNING	3
	COMMUNITY PARTNERS	7
	FIELD MANAGEMENT	11
2.	INVENTORY AND SERVICE LEVEL ANALYSIS	19
	INTRODUCTION TO THE SPORT FIELD INVENTORY	20
	HISTORICAL CONTEXT OF SPORT FIELDS IN VANCOUVER	21
	SPORT FIELD INVENTORY CHARACTERISTICS	24
	SPATIAL ANALYSIS OF THE SPORT FIELD INVENTORY	29
	SPATIAL DISTRIBUTION BY FIELD TYPE	40
	DISTRIBUTION OF BALL DIAMONDS	59
	SPATIAL DISTRIBUTION OF SPORT FIELDS TO ACTIVE TRANSPORTATION ROUTES AND TRANSIT	64
	SPATIAL DISTRIBUTION OF SPORT FIELDS IN RELATION TO SCHOOLS	73
	SPATIAL DISTRIBUTION OF SPORT FIELDS BY SUITABLE ACTIVITIES	78
	CURRENT AND FUTURE SPORT FIELD PROJECTS	84
	SPATIAL OVERVIEW OF THE MAINTENANCE SYSTEM	86

# TABLE OF CONTENTS

3.	3. SERVICE DELIVERY REVIEW		
	ANALYSIS OF SPORT FIELDS BOOKINGS DATA	91	
	RECTANGULAR FIELDS	94	
	BALL DIAMONDS	132	
	ONGOING INVESTMENT TO OPERATE SPORT FIELDS	148	
	THE FINANCIAL IMPACTS OF PROVIDING DIFFERENT SPORT FIELD TYPES	153	
	ONGOING IMPROVEMENTS TO RENOVATE & IMPROVE SPORT FIELDS	154	
4.	SPORT FIELD CONDITION ASSESSMENT SUMMARY	156	
	METHODOLOGY	157	
	KEY FINDINGS	159	
5.	BENCHMARKING	164	
	SERVICE LEVEL BENCHMARKING	165	
	RATES AND FEES BENCHMARKING	168	

# TABLE OF CONTENTS

6. TRENDS AND LEADING PRACTICES	172
THE IMPORTANCE OF REVIEWING TRENDS AND LEADING PRACTICES	173
FIELD SPORT PARTICIPATION	174
SOCIAL, PHYSICAL AND MENTAL HEALTH	187
SERVICE DELIVERY	191
ALLOCATION AND PERMITTING	199
INFRASTRUCTURE	205
APPENDICES	211
APPENDIX A: SPORT FIELD DIMENSION STANDARDS	212
APPENDIX B: NEIGHBOURHOOD FIELD MAPS	216
REFERENCES	239

# 1. INTRODUCTION AND CONTEXT



- Purpose of this document.
- Project overview & previous planning.
- Community partner overview.
- Field operation staff roles.

Two players running to a soccer ball

# PURPOSE OF THIS DOCUMENT

Research, engagement, and analysis are critical for understanding Vancouver's sport field system, developing the strategy, and exploring key topics that should influence future decision-making. The research, engagement and analysis undertaken to inform the strategy is being compiled into three background documents-this "Current State" Research Findings Report is one of those three documents.

This report document consolidates findings from background research and analysis regarding the current sport field landscape in the city. In other words, the information contained in this report reflects the current state of the sport field system and helps identify potential strengths, gaps, and opportunities for enhancement. These insights, along with the data reflected in the other project background documents ("What We Heard" Reports and Environmental and Human Health Considerations Report) provide the basis of information from which the strategy will be developed.



#### **"CURRENT STATE" RESEARCH FINDINGS REPORT CONTENT OVERVIEW**

# PROJECT OVERVIEW & PREVIOUS PLANNING

The Vancouver Board of Parks and Recreation (Park Board) is developing a Sport Field Strategy to guide how it manages and invests in sport fields in the city. More specifically, the strategy will:

- Undertake comprehensive community and stakeholder engagement to better understand city-wide sport field needs, trends and perspectives.
- Review the condition and performance of existing sport fields.
- Identify optimum city-wide service levels, anticipate future needs and explore and recommend innovative directions.
- Propose priorities and phasing for replacing and renewing existing sport field facilities and identify new facility needs.
- Assess surfacing options for sports fields, including environmental and human health impacts.
- Assist with the development of a field use allocation policy.

The strategy document will be used by Park Board staff and Commissioners to inform future decision-making and resource allocation. Additionally, the strategy presents the opportunity to build upon the direction provided by VanPlay; the Park Board's overarching strategic planning document.



# SPORT FIELD (AND RELATED) 2040 ASSET TARGETS IDENTIFIED IN VANPLAY

VanPlay identifies a number of high-level recommendations and asset targets for the Park Board's spaces, facilities and amenity types. The targets take a city-wide perspective and look broadly across different amenities and facilities to catalyze further detailed studies such as the Sport Field Strategy, which then further refine the targets and provide more detailed and focused strategic direction. Specific targets were determined through consideration of trends, benchmarking against other cities, population projections, and service needs identified by the community, partners, and staff.

	Asset Targets	Asset Needs	Service Needs
Ball Diamonds	<ul> <li>Improve overall quality of existing ball diamonds to achieve 70-80% of ball diamonds in good condition.</li> <li>Increase the available hours of play by +25%.</li> <li>Provide more detailed and focused strategic direction.</li> </ul>	<ul> <li>Further analysis is required to determine demand, latent demand, caliber, suitability for types of play, competition level, distribution, condition, maintenance, and the ratio of softball pitches to regulation-sized diamonds required to inform future asset needs as part of the Sport Field Strategy.</li> <li>Collect additional data on the quality and playability of all diamonds in the city, including the turf fields.</li> <li>Partner with the Vancouver School Board to improve access to school fields.</li> <li>Match the sizes and designs of existing fields to the demand and accommodate multifunctional fields where possible during renewals.</li> </ul>	<ul> <li>Continue to work with the Vancouver Field Sports Federation and user groups to determine needs.</li> <li>Review allocation of ball diamonds within the overall field allocation policy.</li> <li>Define "good condition," in collaboration with user groups and recreation and operations staff to support meeting the 2040 asset target with a service focus.</li> </ul>

	Asset Targets	Asset Needs	Service Needs
Field Sports	<ul> <li>Increase the available hours of play by 25%.</li> <li>Increase the number of Grade A or higher, turf fields by 15%.</li> </ul>	<ul> <li>Undertake a comprehensive review of all fields to determine condition and category (as defined by playability and hosting ability) and to engage the public in considering asset targets, sustainability goals, and recommendations around synthetic turf playing fields (Field Sports Strategy).</li> <li>Continue to work with the Vancouver Field Sports Federation and user groups to determine needs, improve equitable access, and improve efficient use of field space.</li> <li>Known priorities of the Vancouver Field Sports Federation include:         <ul> <li>Two new co-located synthetic turf fields for field hockey use; and</li> <li>Fields to accommodate additional football and rugby.</li> <li>Consider conversion of existing all weather gravel fields to turf or synthetic turf. Those with existing lights should be prioritized and considered for synthetic turf to maximize playable hours.</li> <li>Continue to seek opportunities to create sport hubs of two or more co-located fields.</li> <li>Continue to partner with the Vancouver School Board to</li> </ul> </li> </ul>	<ul> <li>Create a Field Allocation Policy to facilitate equitable access to fields and support sport development.</li> </ul>

### OTHER RELEVANT PLANNING DOCUMENTS

Listed below are additional planning and policy documents reviewed by the project team. These documents include those that provide guidance on the provision of sport, recreation and active living opportunities, infrastructure commonly co-located with sport fields, issues of equity and inclusion, and other pertinent subject matter with potential relevance to the sport field system in Vancouver.

- Fieldhouse Strategy (Documents in Progress)
- Vancouver Community Centre Strategy (2022)
- Park Board Washroom Strategy (2020)
- Vancouver Washroom Strategy (2020)
- Vancouver Track and Field Strategy (2019)
- Rain City Strategy (2019)
- People, Parks, and Dogs: A strategy for sharing Vancouver's parks (2017)
- Park Board 11 Reconciliation Strategies (2016)
- Vancouver Sport for Life: Vancouver Sport Strategy (2008)
- Two-Spirit, Trans, and Gender Diverse: No Limits to Recreation (2STGD)-Park Board commitments and policy statements
- Neighbourhood and community land use planning



# COMMUNITY PARTNERS

The Park Board has a number of key partners in planning and delivering sport fields:

### VANCOUVER FIELD SPORTS FEDERATION (VFSF)

VFSF is a unique federation of sports groups who use field facilities in Vancouver-formed in the 1980s to help improve field conditions through the sharing of information and coordination of efforts. VFSF's volunteers represent over 40,000 adults and youth who play field sports in the city.

#### VFSF OBJECTIVES:

- A. To support and encourage organized amateur field sports in Vancouver;
- B. To improve the quantity and quality of field sports facilities in Vancouver, including maintaining & improving existing facilities and developing additional facilities;
- C. To advise the Park Board through formal & informal recommendations based on the needs of the member sports;

- D. To assist the Park Board with the planning for development & maintenance of playing fields and facilities, and with policies & procedures for allocation and ongoing usage; and
- E. To assist member sports, where possible, in procuring playing fields and facilities.

Two representatives from each major outdoor sport are elected annually to share ideas and concerns about outdoor fields. VFSF members generally meet quarterly with a variety of Park Board staff in attendance. VFSF acts as a liaison with the Park Board for field development, usage policies, and ongoing maintenance. Members currently contribute over \$1.5M annually to the Park Board in user fees, and some contribute additional funds for field maintenance and for capital projects. The VFSF submits valuable information to the Park Board for informing the four year capital planning process. The VFSF's main role is to advise and advocate on behalf of all outdoor sport field users.

### VANCOUVER SCHOOL BOARD (VSB)

The VSB and the Park Board are the major providers of outdoor sport fields in Vancouver, and have an established working relationship regarding field provision and maintenance.

The VSB currently has 143 rectangular fields in its inventory: four synthetic turf, 73 natural turf, and 66 all weather (gravel). This count includes fields that the VSB leases from the Park Board, so some fields appear in both Park Board and VSB inventories. The VSB does not currently have a formal count of its ball diamonds.

Currently, 49 Vancouver Park Board parks and their sport facilities are in close proximity to schools (including VSB schools as well as Conseil Scolaire Francophone and private schools), which use them extensively for school activities. Based off historical practices, schools generally have use of shared fields from 8 am until 4:30 or 5 pm on school days. The majority of side-by-side parks and schools do not currently have formal joint use agreements in place.

VSB and the Park Board are partners on three synthetic turf fields, with a fourth in progress, some of which are fully on VSB land, and some of which are on land shared by the school and park boards. The Park Board maintains these synthetic turf fields, with maintenance or capital expense contributions from the VSB as articulated in joint operating agreements. A recently completed memorandum of understanding will inform updates to these agreements.



#### VANCOUVER PARK BOARD AND VANCOUVER SCHOOL BOARD PLAYING FIELD RENEWAL PLAN

The 2002 Vancouver Park Board and Vancouver School Board Playing Field Renewal Plan is the most recent system-wide review. The VSB, Park Board, and VFSF contributed to this report, which assesses the state of Vancouver's sport fields at that time and outlines a strategy to address maintenance and supply concerns. According to the report, both quality and quantity of playfields were insufficient. Factors contributing to this include:

- An ongoing shortfall in maintenance budgets;
- Aging inventory in need of a funded renewal plan;
- Inefficiencies due to separate Park Board and VSB booking systems;
- Increasing population; and
- Increasing sports participation in several areas (emerging sports, women and girls, and youth from Vancouver's Downtown Eastside (DTES)).

#### VANCOUVER PARK BOARD AND VANCOUVER SCHOOL BOARD PLAYING FIELD RENEWAL PLAN

The report identifies opportunities for the Park Board and VSB to address these shortcomings and optimize service delivery. Suggestions fall into five categories, and include:

- Increasing capacity: allocating fields more effectively, installing lights, and installing additional synthetic turf fields;
- **Sustaining capacity:** improving maintenance levels and maintaining a field renewal schedule;
- **Financing:** collaborating with each other and VFSF to pursue funding and establishing a fee structure that reflects the true cost to maintain fields;
- **Harmonization:** coordinating maintenance practices, synchronizing classification and fees, and working toward joint booking and monitoring systems; and
- Evaluation: evaluating supply and demand every three years.

Since 2002 the Park Board in partnership with Vancouver School Board has moved forward with a number of the recommendations including developing new and renewing synthetic turf fields at Vancouver Technical Secondary School, Eric Hamber High School, Point Grey High School and Kitsilano Secondary School which has increased capacity throughout the system. These upgrades have also included lighting which increases capacity at these school sites by making more bookable hours available for sport field user groups and permit holders.

# FIELD MANAGEMENT

The Park Board and City staff from various departments have a role in the management of sport fields. The management of sport fields includes planning, development and the ongoing operations and maintenance of sport fields. The Park Board's Planning and Development Division is responsible for the planning and design of sport fields and outdoor sport infrastructure and amenities, while other Park Board and City department staff have a more direct role in the ongoing operations and maintenance of sport fields. The following tables provide a high-level overview of the roles and responsibilities of the departments that contribute to the ongoing operations and maintenance of sport fields.

#### PARK BOARD DEPARTMENT ROLES IN SPORT FIELD MANAGEMENT

Park Board Department	Division/Service Area	Role
Recreation Services	Outdoor Sport Facilities (OSF)	The OSF office performs many functions with regards to sport field management. Its primary role is to schedule, permit and administer all outdoor sport facilities. To be effective in this role staff engage with hundreds of organized and casual sport organizations and individuals year-round in order to understand their sport needs, trends and concerns. On behalf of the sport users and the public, the OSF coordinates the resolution of issues around field and amenity conditions interacting with Parks Operations staff, with Park Board shops and with Real Estate and Facilities Management (REFM) shops in the process.

Park Board Department	Division/Service Area	Role
Park Services	Parks/ VanDusen & Golf Operations	Park Operations' primary role is addressing safety and playability concerns through inspecting fields and correcting issues (i.e. levelling, filling holes, clearing debris, reseeding or sodding). They deliver high quality fields following a soil fertility program and cultural maintenance practices (i.e. aeration, dethatching, liming, fertilizing, top dressing, over seeding, and soil testing); additional maintenance practices are required for some field types, such as ball diamonds. Park Operations works with supporting departments on pest management, repairs to structures, repairs to irrigation and drainage, and graffiti removal. They provide monthly sport field condition updates and closures to OSF to help in relocating user groups. They also work with user groups by providing materials such as turf mix soil or rock dust for group use.
Park Services	Park Experience	Staff that work in the Park Experience service area are responsible for maintaining the cleanliness of washrooms and fieldhouses, ensuring that facilities are open and available for public use through (Building Service Workers), educating the public on park regulations, bylaw enforcement and working with police, fire and rescue services, etc., on issues found in the park (Park Rangers), among other responsibilities such as special event support services.

Park Board Department	Division/Service Area	Role
Building Structures and Maintenance	Trade Shops	<ul> <li>There are four trade shops that are involved in sport field maintenance:</li> <li>1. Asphalt and Drainage Shop This shop is responsible for field drainage work, asphalt aprons, and pathways around backstops, fieldhouses and washrooms.</li> </ul>
		<ol> <li>Construction Shop</li> <li>This trade shop is responsible for concrete work such as pads for bleachers and dugouts.</li> </ol>
		<ol> <li>Structures and Fabrication Shop This trade shop is responsible for soccer net standards, post-ins-post outs, and backstops.</li> </ol>
		<ol> <li>Coatings and Graphic Shop This trade shop creates field signage and works to remove graffiti.</li> </ol>

#### CITY OF VANCOUVER DEPARTMENT ROLES IN SPORT FIELD MANAGEMENT

City of Vancouver Department	Role
Real Estate, Environment and Facilities Management (REFM)	<ul> <li>There are two trade shops within REFM that perform work for sport fields.</li> <li>1. Electrical Shop <ul> <li>This trade shop performs field lighting standards services</li> <li>(electrical to the pole only, no work on the actual pole or lights), electrical for other support structures like fieldhouses and scoreboards.</li> </ul> </li> <li>2. Carpentry Shop <ul> <li>This trade shop provides lock and key services, bleacher</li> </ul> </li> </ul>
	boards and any machined wood products.
Plumbing	This City department provides non-irrigation related work such as maintenance and repairs to drinking fountains and washrooms.
Animal Services	This City department provides off-leash dog enforcement on sport fields.
Sanitation	This City department provides trash and recycling receptacle emptying (daily to weekly depending on the specific park/ facility and level of use)

Park Services and the Outdoor Sport Facilities office (OSF) work closely together to ensure that bookable fields are maintained to Park Board standards and safe for users. The following organizational charts outline the roles of staff members in sport field operations and permitting. These departments coordinate with other relevant Park Board and City services outlined in the tables provided above. **The organization of the Park Services Department changed in 2023. As most of this report addresses the state of sport fields prior to 2023, the former organizational chart is provided along with the new organizational chart to illustrate how the department was structured to provide services related to sport fields and how that has changed.** 







#### PARK OPERATIONS ORGANIZATIONAL CHART



#### PARK OPERATIONS ORGANIZATIONAL CHART (2023)\*

\*Highlighting 2023 organizational changes to operations and maintenance of sport fields.

ALST

-

Catcher catching a baseball

# 2. INVENTORY AND SERVICE LEVEL ANALYSIS

#### INCLUDED IN THIS SECTION:

- Historical context of sport fields in Vancouver.
- Current sport field management systems.
- Inventory characteristics.
- Spatial analysis of sport field inventory.

View of a soccer game from behind the net

# INTRODUCTION TO THE SPORT FIELD INVENTORY

An inventory and analysis of the Park Board's sport field system was conducted to determine the current supply and condition of rectangular sport fields, ball diamonds, and associated amenities within the parks. Spatial analysis of sport fields using Geographic Information Systems (GIS) data and site assessments were used to help identify gaps and underserved communities. This account will help to understand the mix of fields in the inventory and potential areas of optimization through upgrades and renewals to maintenance and improvements.



# HISTORICAL CONTEXT OF SPORT FIELDS IN VANCOUVER

The Park Board developed the first athletic facilities at Brockton Point in the late 19th century. This marked the beginning of the Park Board's shift from an early focus on informal leisure toward active recreation. This trend continued into the 20th century, and many of Vancouver's natural turf fields were likely installed in the following decades through to midcentury as the city grew. Many gravel fields (all weather fields) were developed in tandem with Vancouver School Board (VSB) sites beginning in the mid-century, as an affordable and low maintenance alternative to natural turf fields for yearround use. Synthetic turf fields were installed beginning in the 1980s, with the most recent addition in 2016.

Site selection decisions for new sport fields have been made by taking into account playing capacity, existing field condition, anticipated level of use, geotechnical conditions, availability of washrooms and parking, proximity to transit, proximity of houses regarding light pollution, proximity to natural habitat areas, ownership of site, and size of site, in addition to equitable distribution and service provision. In recent years, sport field types and sizes have also been based off physical park constraints, user group demand and engagement with the community.

### **OVERLAPPING FIELDS**

To accommodate as many field users as possible throughout the year within finite park space, the Park Board overlaps rectangular fields with ball diamond outfields in some locations. Access is coordinated by the Outdoor Sport Facilities office (OSF) to align with yearround sport seasons and to avoid sport user group conflicts.

### INVENTORY

Changes in historic inventory numbers are difficult to track with precision, due to inconsistencies in how fields and field sites have been documented and counted in various Park Board records. This underscores the need for the Sport Field Strategy work on developing a comprehensive inventory and classification system and an updatable database.

Soccer ball on field

### SPORT FIELD MANAGEMENT SYSTEMS

There are two ways that the Park Board identifies sport fields using specific characteristics related to their operational status and their booking ability:

#### **BOOKABLE MANAGEMENT SYSTEM**

This field categorization system is used by the Outdoor Sport Facilities (OSF) office and defines which sport fields are allocated for which types of play. The OSF issues seasonal and occasional permits, charging associated fees.

#### **OPERATIONAL MANAGEMENT SYSTEM**

The field categorization system used by the Park Operations team based on the field construction type and physical surface (i.e. sand based, natural turf, soil based natural turf etc.). This provides ease of management for operations and enables consistent maintenance regimes across field types.

The bookable management system is used in this document unless otherwise noted.



# SPORT FIELD INVENTORY CHARACTERISTICS

Sport fields are defined as open surface areas (natural turf, synthetic turf, or all weather) used for organized or spontaneous sport activities and play. In the context of this report, two types of sport fields are discussed: rectangular fields and ball diamonds. The Park Board overlaps rectangular fields with ball diamond outfields in some locations to optimize space.

#### **RECTANGULAR SPORT FIELD CHARACTERISTICS**

A rectangular sport field is a rectangular shaped open planar playing surface that is used for sports such as soccer, football, gaelic football, ultimate, cricket, lacrosse, field hockey and rugby. Standard dimensions required for each sport are dictated by the sport's governing body and specifics are provided in Appendix A of this report.
## CURRENT RECTANGULAR FIELD TURF TYPES

The table below describes the types of turf grades and the associated level of maintenance (where applicable). These turf types also distinguish how rectangular fields in Vancouver are booked.

Field Type	Attributes	Permitted For
Synthetic turf	Synthetic fibres that resemble grass.	Regulation games and practices.
Class A	Natural turf on sand or soil-based fields that are highly maintained.	Regulation games only.
Class B	Natural turf on soil-based fields with moderate levels of maintenance.	Practices and sports camps.
Class C (non-regulation)	Natural turf on soil-based fields with low levels of maintenance.	Non-regulation play.
All weather (gravel)	Gravel based fields (no grass) with low levels of maintenance.	Non-regulation play and practices.

## **BALL DIAMOND CHARACTERISTICS**

A ball diamond is a four cornered area of a field that is enclosed by three bases and a home plate. All ball diamonds should have a backstop. There are two types of diamonds discussed in this report: baseball and softball diamonds. Slow-pitch and softball are played on a softball diamond and baseball (hardball) is played on a baseball diamond. Dimensions of baseball and softball diamonds vary based on the age group targeted. Specific requirements are provided in Appendix A of this report. Ball diamond outfield turf is also maintained according to the turf types. Where there is an overlapping rectangular field using the diamond outfield, the turf is maintained to that specification. The Park Board does not currently permit ball diamonds based on the type of turf.

## CURRENT BALL DIAMOND COMPONENTS

The table below outlines the attributes associated with each type of ball. The main differences between the two diamond types are the size and the type of basepath (cut basepath or skinned infield bases) and the presence of a mound (baseball has one and softball does not). A skinned infield is the portion of the infield that contains clay, sand and silt around the bases and base paths.

Ball Diamond Type	Attributes	Permitted for
Baseball	Backstop, dugout, grass infield with basepath cut outs, bases pitchers' mound, outfield fence (optional).	Baseball, little league and t-ball.
Softball	Backstop, dugouts, fully skinned infield bases, outfield fence (optional), no mound.	Softball and slo-pitch.

## **OVERLAPPING FIELD CHARACTERISTICS**

Overlapping fields are areas within a park that have overlapping sports programming occupying the same area during the same season. While overlapping fields are found in other communities, the prevalence (quantity) that exists within Vancouver's inventory is higher than most, providing both advantages and operational challenges. The following table provides an overview of advantages and disadvantages of providing overlapping fields within the inventory.

Advantages and c	lisadvantages of overlapping fields
	<ul> <li>Maximizes use of available field space and capacity.</li> </ul>
Advantages	<ul> <li>Maximizes the flexibility of the park space as trends and activity needs change.</li> </ul>
	<ul> <li>Disperses wear and tear patterns of the play area.</li> </ul>
	• Allows different sport groups to use the same area of play.
Disadvantages	<ul> <li>Presents maintenance and seasonal transition challenges as different activities and equipment are required (e.g., change over between activities, lining for different sports, etc.).</li> </ul>
	<ul> <li>Can create difficulties accommodating different activities at the same time or season.</li> </ul>
	<ul> <li>Can present obstacles to amenity addition or enhancement as the field needs to serve multiple activities.</li> </ul>

There are 84 overlapping fields. Creating rectangular fields from ball diamond outfields has helped to increase the number of rectangular fields in the inventory and allows park spaces to suit more sport programming needs than ball diamonds alone. There are also fields that overlap over two rectangular fields.

The diagram below illustrates how ball diamond outfields can be used to create rectangular sport fields using Trafalgar Park as an example.

72 fields have been created using ball diamond outfields.



#### EXAMPLE DIAGRAM OF OVERLAPPING FIELDS AT TRAFALGAR PARK

The diagram to the right provides and example of how rectangular fields are created by overlapping two rectangular fields.

12 rectangular fields overlap with another rectangular field (some also overlap with a diamond outfield).

Permitting fields based on the season, reduces the user conflict and ensures that the field use is maximized. Of these fields, there are 14 fields bookable only in the spring/summer season and 60 fields bookable only in the fall/winter. There are 12 fields that overlap and are bookable in both seasons.

#### EXAMPLE DIAGRAM OF OVERLAPPING RECTANGULAR FIELDS



# SPATIAL ANALYSIS OF THE SPORT FIELD INVENTORY

The maps on the following pages reflect selected characteristics and attributes of the current sport field inventory managed by the Park Board using the bookable management system. This spatial analysis is intended to help better understand service levels, gaps and access/equity considerations.

## **OVERVIEW OF THE SPORT FIELD INVENTORY**

The following table and maps represent the total inventory and spatial distribution of sport fields (diamonds and rectangular fields) by neighbourhood provision, and in population growth areas and the VanPlay Equity Initiative Zones. A population density map is also included after to illustrate field provision per capita and impact of density on field provision per person.



## BOOKABLE SPORT FIELDS AND NEIGHBOURHOOD PROVISION

Neighbourhood	Population	Synthetic Turf	Class A	Class B	Class C		Baseball Diamond	Softball Diamond	Total	Neighbourhood Provision Per 1,000 Residents
Arbutus-Ridge	16,855	-	6	5	1	-	6	3	21	1.25
Downtown	72,946	2	-	-	1	-	-	-	3	0.04
Dunbar- Southlands	23,796	-	7	1	1	3	6	1	19	0.80
Fairview	36,548	-	-	1	1	-	-	-	2	0.05
Grandview- Woodland	30,321	-	-	5	1	-	-	2	8	0.26
Hastings- Sunrise	36,178	2	8	2	-	1	4	-	17	0.47
Kensington- Cedar Cottage	52,626	-	4	4	1	1	3	9	22	0.42
Kerrisdale	16,142	-	1	-	-	-	3	-	4	0.25
Killarney	31,382	-	3	1	1	1	4	2	12	0.38
Kitsilano	45,861	-	6	-	-	-	-	6	12	0.26
Marpole	27,834	-	4	2	-	1	4	1	12	0.43
Mount Pleasant	37,395	-	-	3	-	-	-	3	6	0.16
Oakridge	14,811	-	3	3	-	-	1	8	15	1.01
Renfrew- Collingwood	55,637	1	3	7	-	1	2	6	20	0.36
Riley Park	25,442	1	3	1	2	-	5	-	12	0.47
Shaughnessy	9,573	1	1	-	-	-	2	-	4	0.42
South Cambie	10,187	1	2	3	1	-	-	5	12	1.18
Stanley Park	-	-	3	1	-	-	-	1	5	-
Strathcona	15,294	2	1	3	-	1	-	3	10	0.65
Sunset	38,146	1	5	2	2	-	4	4	18	0.47
Victoria- Fraserview	31,700	-	3	5	-	-	5	8	21	0.66
West End	53,052	-	-	-	-	-	-	-	0	-
West Point Grey	14,505	1	4	-	1	1	4	1	12	0.83
Grand Total	696,231	12	67	49	13	10	53	63	267	0.38



#### **NEIGHBOURHOOD PROVISION OF SPORT FIELDS**

#### **POPULATION DENSITY AND SPORT FIELDS**



#### **KEY TAKEAWAYS:**

- Areas with lower population densities generally have a higher provision of sport fields per 1,000 residents.
- Arbutus Ridge, South Cambie, West Point Grey, and Oakridge neighbourhoods have the highest provision of sport fields per 1,000 residents.
- West End, Downtown and Fairview neighbourhoods have the lowest provision of sport fields per 1,000 residents.
- Sport field provision in East Vancouver (Strathcona, Grandview-Woodland and Hastings-Sunrise) varies from high to moderate provision per 1,000 residents.

Baseball player sliding to base

## **BOOKABLE SPORT FIELDS AND POPULATION GROWTH AREAS**

The population growth areas highlight current field provision with the City's 2041 population projections. The table and corresponding map show where sport fields (diamonds and rectangular fields) are located in those growth areas.

## DISTRIBUTION OF EXISTING SPORT FIELDS WITHIN THE POPULATION GROWTH AREAS (NON-GROWTH AREAS ARE OMITTED)

Neighbourhood	Sythetic Turf	Class A	Class B	Class C	All Weather	Baseball Diamond	Softball Diamond	Grand Total
Downtown	2	-	-	1	-	-	-	3
Fairview	-	-	1	1	-	-	-	2
Grandview-Woodland	-	-	5	1	-	-	2	8
Kensington-Cedar Cottage	-	-	1	-	-	-	-	1
Kitsilano	-	5	-	-	-	-	4	9
Marpole	-	4	2	-	1	4	1	12
Mount Pleasant	-	-	3	-	-	-	3	6
Oakridge	-	2	2	-	-	1	4	9
Renfrew-Collingwood	-	1	3	-	-	-	5	9
Riley Park	1	3	-	-	-	4	-	8
South Cambie	1	2	3	1	-	-	5	12
Strathcona	2	1	3	-	1	-	3	10
Grand Total	6	18	23	4	2	9	27	89

#### DISTRIBUTION OF SPORT FIELDS IN POPULATION GROWTH AREAS



#### **KEY TAKEAWAYS:**

- Marpole, South Cambie, and Strathcona have the most fields located within a population growth area.
- The West End and Killarney have population growth areas that do not have fields. However, there are plans for new sport fields within the Killarney growth area.
- Fairview and Downtown have the lowest provision of fields per 1,000 residents and are located completely within a population growth area.

## BOOKABLE SPORT FIELDS IN THE VANPLAY EQUITY INITIATIVE ZONES

As presented in VanPlay, Equity Initiative Zones (EIZ) identify areas of the city that may need resource investment and service delivery focus. This analysis was based on three core indicators: park access gaps, demand for low barrier recreation, and urban forest canopy gaps. The EIZ data set is updated periodically and is available on the City's **VanMap portal**.

## EXPLAINING THE EQUITY INITIATIVE ZONE ANALYSIS

The Equity Initiative Zone analysis uses centre points from which the zones/catchments can be analyzed using a 400 metre radius. The centre points reflected on the following map reflect all areas of the city that trigger two or more of the indicators (parks access gaps, low barrier recreation gaps and urban forest canopy gaps).

### DISTRIBUTION OF SPORT FIELDS IN VANPLAY EQUITY INITIATIVE ZONES



0 750 1,500 3,000 m



Note\* the EIZ data present in this figure was last updated as of September 2021

- Baseball Diamond
- Rectangular Field
- Overlapping Fields
- VanPlay Equity Initiative Zones
- 5-minute Walk from Equity Initiative Zone



## **KEY TAKEAWAYS:**

- There are not many fields within an Equity Initiative Zone (EIZ) (six fields). However 30% of all sport fields are within a five minute walk of an EIZ (82 fields).
- Kensington-Cedar Cottage and Renfrew Collingwood have two fields located within an EIZ. Grandview-Woodland and Mount Pleasant have one field located within an EIZ.

## SPATIAL DISTRIBUTION BY FIELD TYPE

The following maps and tables represent the inventory by field type and classification in each neighbourhood. For Class A and Class B fields, the season of use is also indicated in the tables as there are fields created from ball diamond outfields that are only used in specific seasons. **Appendix B contains maps of each neighbourhood with each field type clearly identified.** 

Lacrosse sticks in the air



SERVICE CATCHMENTS

When service catchments are used on the maps the following distances are assumed for travel times.

- 5 minute 400 m
- 10 minute 800 m
- 15 minute 1,200 m
- 20 minute 1,600 m

\*These are estimates and fluctuate based on the individual.

## **RECTANGULAR FIELD DISTRIBUTION**

The following table and map reflect an overview of the number of each rectangular field type within each neighbourhood.

## DISTRIBUTION OF RECTANGULAR SPORT FIELDS

Neighbourhood	Population	Synthetic Turf	Class A	Class B	Class C	All Weather	Grand Total	Neighbourhood Provision Per 1,000 Residents
Arbutus-Ridge	16,855	-	6	5	1	-	12	0.71
Downtown	72,946	2	-	-	1	-	3	0.04
Dunbar-Southlands	23,796	-	7	1	1	3	12	0.50
Fairview	36,548	-	-	1	1	-	2	0.05
Grandview-Woodland	30,321	-	-	5	1	-	6	0.20
Hastings-Sunrise	36,178	2	8	2	-	1	13	0.36
Kensington-Cedar Cottage	52,626	-	4	4	1	1	10	0.19
Kerrisdale	16,142	-	1	-	-	-	1	0.06
Killarney	31,382	-	3	1	1	1	6	0.19
Kitsilano	45,861	-	6	-	-	-	6	0.13
Marpole	27,834	-	4	2	-	1	7	0.25
Mount Pleasant	37,395	-	-	3	-	-	3	0.08
Oakridge	14,811	-	3	3	-	-	6	0.41
Renfrew-Collingwood	55,637	1	3	7	-	1	12	0.22
Riley Park	25,442	1	3	1	2	-	7	0.28
Shaughnessy	9,573	1	1	-	-	-	2	0.21
South Cambie	10,187	1	2	3	1	-	7	0.69
Stanley Park	-	-	3	1	-	-	4	-
Strathcona	15,294	2	1	3	-	1	7	0.46
Sunset	38,146	1	5	2	2	-	10	0.26
Victoria-Fraserview	31,700	-	3	5	-	-	8	0.25
West End	53,052	-	-	-	-	-	-	-
West Point Grey	14,505	1	4	-	1	1	7	0.48
Grand Total	696,231	12	67	49	13	10	151	0.21

#### DISTRIBUTION OF RECTANGULAR SPORT FIELDS



#### **KEY TAKEAWAYS**:

- There are approximately 0.21 rectangular sport fields per 1,000 residents in Vancouver (based on 2021 Statistics Canada Census data).
- Six neighbourhoods have 10 or more fields.
- Six neighbourhoods have five or fewer fields.
- Fairview, Grandview-Woodland, and Mount Pleasant do not have any synthetic turf of Class A fields (competitive fields).
- Arbutus-Ridge, South Cambie, and Dunbar-Southlands have the highest provision of rectangular fields per 1,000 residents.
- Downtown, Fairview, and Kerrisdale have the lowest provision of rectangular fields per 1,000 residents. The sport fields located in Stanley Park are not included in the provision of sport fields for the Downtown neighbourhood.

Soccer ball on an empty field

## SYNTHETIC TURF DISTRIBUTION

The following table and map reflect the distribution of synthetic turf fields and their associated amenities. Neighbourhoods not listed in the table do not have a synthetic turf field.

## DISTRIBUTION OF SYNTHETIC TURF FIELDS

Neighbourhood	Synthetic Turf	Fields with Lighting	Fields with Washrooms	Fields with Drinking Fountains	Fields with Fieldhouses and/or Storage	Fields with Spectator Seating
Downtown	2	2	2	2	-	-
Hastings-Sunrise	2	2	2	2	2	2
Renfrew-Collingwood	1	1	1	1	1	1
Riley Park	1	-	1	1	-	1
Shaughnessy	1	1	-	-	1	1
South Cambie	1	1	1	1	1	-
Strathcona	2	2	2	2	2	1
Sunset	1	1	1	1	1	1
West Point Grey	1	1	-	-	1	-
Grand Total	12	11	10	10	9	7

#### DISTRIBUTION OF SYNTHETIC TURF FIELDS





-----

Young soccer players practicing

#### **KEY TAKEAWAYS:**

- There are a total of 12 synthetic turf fields in Vancouver (nine neighbourhoods have one or more synthetic turf fields).
- 35% of residents live within a 20-minute walk of a synthetic turf.
- There are approximately 0.02 synthetic turf fields per 1,000 residents in Vancouver (based on 2021 Statistics Canada Census Data).
- Downtown, Hastings-Sunrise, and Strathcona each have two fields.
- Synthetic turf fields located in Downtown, Riley Park, South Cambie, and Strathcona are within population growth areas.
- Downtown synthetic turf fields serve an area with a very low (0.04) provision of rectangular fields per 1,000 residents.
- Shaughnessy and Renfrew-Collingwood serve an area with a low (0.21-0.22) provision of rectangular fields per 1,000 residents.
- Riley Park and Hastings-Sunrise synthetic turf fields serve and area with a moderate (0.28-0.36) provision of rectangular fields per 1,000 residents.
- Strathcona, West Point Grey, and South Cambie synthetic turf fields serve an area with a high (0.46-0.69) provision of rectangular fields per 1,000 residents.

## **GAME ONLY (CLASS A) FIELD DISTRIBUTION**

The following table and map reflect the distribution of Class A fields, their associated amenities and season of use. Neighbourhoods not listed in the table do not have a Class A field.

## DISTRIBUTION OF GAME ONLY (CLASS A) FIELDS

Neighbourhood	Total Class A Fields	Class A Fields Available in Spring/ Summer	Class A Fields Available in fall/ winter	Fields with Lighting	Fields with Washrooms	Fields with Drinking Fountains	Fields with Fieldhouse and/or Storage	Fields with Spectator Seating
Arbutus-Ridge	6	4	3	-	5	5	4	-
Dunbar-Southlands	7	4	7	2	7	5	1	-
Hastings-Sunrise	8	5	6	-	8	8	4	2
Kensington-Cedar Cottage	4	4	4	-	3	3	-	2
Kerrisdale	1	-	1	-	1	1	1	-
Killarney	3	2	3	1	-	2	-	1
Kitsilano	6	1	5	-	6	6	5	2
Marpole	4	3	4	-	3	3	-	-
Oakridge	3	-	3	-	1	2	-	-
Renfrew-Collingwood	3	1	3	-	2	3	-	1
Riley Park	3	1	2	-	3	3	-	3
Shaughnessy	1	1	1	-	-	-	-	-
South Cambie	2	1	2	-	1	1	-	2
Stanley Park	3	3	1	-	3	3	2	2
Strathcona	1	1	1	-	1	1	-	-
Sunset	5	2	5	1	5	5	3	1
Victoria-Fraserview	3	1	3	-	3	-	-	-
West End	-	-	-	-	-	-	-	-
West Point Grey	4	3	4	-	3	3	-	1
Grand Total	67	37	58	4	55	54	20	17

#### **DISTRIBUTION OF CLASS A FIELDS**



#### **KEY TAKEAWAYS:**

- Arbutus-Ridge, Dunbar Southlands, Hastings-Sunrise and Kitsilano have the most Class A fields in the city.
- Grandview-Woodland, Mount Pleasant, Fairview, Downton, and the West End do not have a Class A field.
- Six Class A fields are overlapping fields and 40 Class A fields are created from a ball diamond outfield.
- 56% of residents live within a 10-minute walk of a Class A field.
- Nine fields are not available in the fall/winter season.
- 31 fields are not available in the spring/summer season.
- In total, there is approximately 0.10 Class A fields per 1,000 residents in Vancouver (based on 2021 Statistics Canada Census data).



# PRACTICE/SPORTS CAMP (CLASS B) FIELD DISTRIBUTION

The following table and map reflect the distribution of Class B fields, their associated amenities and season of use. Neighbourhoods not listed in the table do not have a Class B field.

## DISTRIBUTION OF PRACTICE/SPORTS CAMP (CLASS B) FIELDS

Neighbourhood	Total Class B Fields	Class B Fields Available in Spring/ Summer	Class B Fields Available in fall/ winter	Fields with Lighting	Fields with Washrooms	Fields with Drinking Fountains	Fields with Fieldhouse and/or Storage	Fields with Spectator Seating
Arbutus-Ridge	5	2	4	-	5	5	-	-
Dunbar-Southlands	1	-	1	-	1	1	-	-
Fairview	1	1	1	-		1	-	-
Grandview-Woodland	5	3	5	-	3	3	-	2
Hastings-Sunrise	2	2	1	-	2	2	-	1
Kensington-Cedar Cottage	4	2	4	-	3	2	-	3
Killarney	1	1	1	-	-	1	-	-
Marpole	2	1	2	-	2	-	-	-
Mount Pleasant	3	2	3	1	3	3	-	1
Oakridge	3	-	3	-	1	2	-	-
Renfrew-Collingwood	7	3	7	2	4	5	-	1
Riley Park	1	-	1	1	1	1	-	-
South Cambie	3	1	2	1	3	3	-	1
Stanley Park	1	-	1	1	1	1	-	1
Strathcona	3	1	2	-	3	3	-	-
Sunset	2	2	2	-	1	2	-	-
Victoria-Fraserview	5	-	5	-	5	2	-	-
Grand Total	49	21	45	6	38	37	0	10

#### **DISTRIBUTION OF CLASS B FIELDS**



#### **KEY TAKEAWAYS:**

- Renfrew-Collingwood, Arbutus Ridge, Grandview-Woodland, and Victoria-Fraserview neighbourhoods have the most Class B fields.
- Downtown, Kerrisdale, Kitsilano, Shaughnessy, and West Point Grey neighbourhoods do not have a Class B field.
- Five Class B fields are overlapping fields and 32 Class B fields are created from a ball diamond outfield.
- 53% of residents live within a 10-minute walk of a Class B field.
- Four fields are not available in the fall/winter season.
- In total there are 0.08 Class B fields per 1,000 residents in Vancouver (based on 2021 Statistics Canada Census data).

Yellow soccer ball on a field

## NON-REGULATION (CLASS C) FIELD DISTRIBUTION

The following table and map reflect the distribution of Class C fields and their associated amenities. Neighbourhoods not listed in the table do not have a Class C field.

## DISTRIBUTION OF-NON-REGULATION (CLASS C) FIELDS

Neighbourhood	Total Class C Fields	Class C Fields Available in Spring/ Summer	Class C Fields Available in Fall Winter	Fields with Lighting	Fields with Washrooms	Fields with Drinking Fountains	Fields with Fieldhouse and/or Storage	Fields with Spectator Seating
Arbutus-Ridge	1	-	1	-	1	1	-	1
Downtown	1	1	1	-	1	1	-	1
Dunbar-Southlands	1	1	1	-	-	-	-	-
Fairview	1	1	1	-	1	-	1	1
Grandview-Woodland	1	1	1	-	-	-	-	-
Kensington-Cedar Cottage	1	1	1	-	1	1	-	1
Killarney	1	1	1	-	-	1	-	-
Riley Park	2	2	1	-	1	1	1	2
South Cambie	1	1	1	-	1	1	-	1
Sunset	2	2	2	-	1	1	-	-
West Point Grey	1	1	1	-	1	1	-	-
Grand Total	13	12	12	0	8	8	2	7

#### **DISTRIBUTION OF CLASS C FIELDS**



#### **KEY TAKEAWAYS:**

- 12 neighbourhoods do not have a Class C field.
- Class C fields are generally irregular shapes with little or no sport infrastructure present and provide good opportunities for spontaneous play.
- 29% of residents live within a 20-minute walk of a Class C field.
- In total there are 0.02 Class C fields per 1,000 residents in Vancouver (based on 2021 Statistics Canada Census Data).

## ALL WEATHER (GRAVEL) FIELD DISTRIBUTION

The following table and map reflect the distribution of all weather (gravel) fields and their associated amenities. Neighbourhoods not listed in the table do not have a all weather field.

## DISTRIBUTION OF ALL WEATHER (GRAVEL) FIELDS

Neighbourhood	All Weather	All Weather Fields Available in Spring/ Summer	All Weather Fields Available in Fall Winter	Fields with Lighting	Fields with Washrooms	Fields with Drinking Fountains	Fields with Fieldhouse and/or Storage	Fields with Spectator Seating
Dunbar- Southlands	3	3	2	3	-	-	-	-
Hastings-Sunrise	1	1	1	1	1	1	-	-
Kensington- Cedar Cottage	1	-	1	1	1	1	-	-
Killarney	1	1	1	1	-	1	-	1
Marpole	1	1	1	1	1	-	-	-
Renfrew- Collingwood	1	1	1	1	1	1	-	1
Strathcona	1	1	1	1	1	1	-	-
West Point Grey	1	1	1	-	1	1	-	-
Grand Total	10	9	9	9	6	6	0	2



#### DISTRIBUTION OF ALL WEATHER (GRAVEL) FIELDS

#### "Current State" Research Findings Repor

#### **KEY TAKEAWAYS:**

- Eight neighbourhoods have an all weather (gravel) field.
- 37% of residents live within a 20-minute walk of an all weather (gravel) field.
- In total there are 0.01 all weather fields per 1,000 residents in Vancouver (based on 2021 Statistics Canada Census Data).

# DISTRIBUTION OF BALL DIAMONDS

The following tables and maps reflect the number of softball and baseball diamond within each neighbourhood. Neighbourhoods not listed do not have a softball or baseball diamond.

## **DISTRIBUTION OF BASEBALL DIAMONDS**

Neighbourhood	Baseball Diamonds	Diamonds with Lighting	Diamonds with Washrooms	Diamonds with Drinking Fountains	Diamonds with Fieldhouse and/or Storage	Diamonds with Spectator Seating	Diamonds with Outfields	Diamonds with Base Cutouts	Diamonds with Backstop
Arbutus-Ridge	6	-	6	6	4	5	2	5	4
Dunbar-Southlands	6	1	6	6	4	3	3	6	3
Hastings-Sunrise	4	-	4	4	3	3	1	4	3
Kensington-Cedar Cottage	3	-	3	3	3	-	3	3	1
Kerrisdale	3	-	3	3	3	2	1	3	1
Killarney	4	-	-	4	1	2	-	2	1
Marpole	4	-	4	-	1	2	1	3	3
Oakridge	1	-	-	1	-	-	-	1	1
Renfrew- Collingwood	2	-	2	-	1	2	2	2	2
Riley Park	5	-	5	5	3	5	3	5	4
Shaughnessy	2	-	-	-	-	2	-	2	1
Sunset	4	-	4	4	3	3	1	3	3
Victoria-Fraserview	5	-	5	4	4	4	2	5	2
West Point Grey	4	-	4	4	3	4	-	4	-
Grand Total	53	1	46	44	33	37	19	48	29

#### **DISTRIBUTION OF BASEBALL DIAMONDS**


## **DISTRIBUTION OF SOFTBALL DIAMONDS**

Neighbourhood	Softball Diamonds	Diamonds with Lighting	Diamonds with Washrooms	Diamonds with Drinking Fountains	Diamonds with Fieldhouse and/or Storage	Diamonds with Spectator Seating	Diamonds with Outfields	Diamonds with Base Cutouts	Diamonds with Backstop
Arbutus-Ridge	3	-	3	3	3	3	1	3	2
Dunbar-Southlands	1	1	1	1	1	1	-	1	1
Grandview- Woodland	2	-	1	1	1	-	-	2	-
Hastings-Sunrise	1	-	1	1	-	1	-	1	-
Kensington-Cedar Cottage	8	-	8	8	5	4	7	8	5
Killarney	2	-	-	-	-	2	-	2	2
Kitsilano	6	2	4	6	5	5	-	6	5
Marpole	1	-	-	-	-	-	-	1	-
Mount Pleasant	3	-	3	3	-	1	-	3	3
Oakridge	8	-	4	4	-	1	-	8	4
Renfrew- Collingwood	6	-	4	5	3	3	-	5	3
South Cambie	5	-	4	5	1	3	-	5	1
Stanley Park	1	1	1	1	1	-	-	1	-
Strathcona	3	-	3	3	3	2	-	3	1
Sunset	4	1	4	4	2	2	2	4	1
Victoria-Fraserview	8	-	8	-	-	5	-	8	7
West Point Grey	1	-	-	-	1	-	1	1	-
Grand Total	63	5	49	45	26	33	11	62	35

#### **DISTRIBUTION OF SOFTBALL DIAMONDS**



Softball player catching a ball

#### **KEY TAKEAWAYS:**

- Arbutus Ridges and Dunbar-Southlands neighbourhoods have the most baseball diamonds with six diamonds.
- Kensington-Cedar Cottage, and Victoria-Fraserview neighbourhoods have the most softball diamonds with eight diamonds.
- 35% of residents live within a 10-minute walk of a baseball diamond.
- 54% of residents live within a 10-minute walk of a softball diamond.
- Eight neighbourhoods do not have a baseball diamond.
- Five neighbourhoods do not have a softball diamond.
- Three neighbourhoods do not have a baseball diamond or a softball diamond (Downtown, Fairview, and West End).
- In total there are 0.09 baseball diamonds and softball diamonds per 1,000 residents in Vancouver (based on 2021 Statistics Canada Census Data).

## SPATIAL DISTRIBUTION OF SPORT FIELDS TO ACTIVE TRANSPORTATION ROUTES AND TRANSIT

The next four maps provide a spatial overview of the connectivity of sport fields in Vancouver. This includes areas within a five minute walk of a sport field and park, sport fields within a five minute walk of a bikeway, sport fields with a five minute walk of a bus stop and sport fields within a five and 10-minute walk of a rapid transit station.



## PARKS CONTAINING SPORT FIELDS

#### LEGEND

Study Area

Neighbourhood

Parks

- Trans-Canada Highway
- Baseball Diamond ٠
- Rectangular Field

Areas that have access to Parks with Fields:

- 5-minute Walk
- 10-minute Walk





The following fields are not located within a park: - Kerrisdale Elementary School - Queen Elizabeth Elementary School - Vancouver Technical School



## **RECTANGULAR SPORT FIELD PROXIMITY TO BIKE WAYS**



#### **BALL DIAMOND PROXIMITY TO BIKE WAYS**





### **RECTANGULAR SPORT FIELD PROXIMITY TO BUS STOPS**



#### **BALL DIAMOND PROXIMITY TO BUS STOPS**



#### **RECTANGULAR SPORT FIELD PROXIMITY TO RAPID TRANSIT STATIONS**





#### **BALL DIAMOND PROXIMITY TO RAPID TRANSIT STATIONS**

## KEY TAKEAWAYS:

- 53% of residents are within a five minute walk and 84% of residents are within a 10-minute of a park with a sport field.
- 97% of rectangular fields and ball diamonds are within a 5-minute walk of a bikeway, 100% are within a 10-minute walk.
- 77% of rectangular fields and 84% of ball diamonds are within 5-minute walk of a bus station. 100% of fields and diamonds are within a 10-minute walk.
- 2% of rectangular fields and 3% of ball diamonds are within a 5-minute walk of a rapid transit station. 16% of rectangular fields and sport fields are within a 10-minute walk.
- 9% of total parks area are sport fields.

Young girl kicking a soccer ball

## SPATIAL DISTRIBUTION OF SPORT FIELDS IN RELATION TO SCHOOLS

The table below and accompanying map indicate schools that are within a five-minute walk of a park with a sport field and whether there is a formalized shared use agreement between the Park Board and the school. There are two additional school field use agreements with that are not shown in this table and map. School District No 93 (Conseil scolaire francophone de la C.-B., or CSF) has an agreement for use of Oak Meadows Park, which is not shown because the agreement is with the school district rather than a particular school. The Park Board also has an agreement with Vancouver Technical Secondary ("Van Tech") which is omitted because the field is on school property, not within a park.

Park Name	VSB School Name	Agreement with Park Board (Year)	
Andy Livingston Park	Crosstown Elementary		
Beaconsfield Park	Lord Beaconsfield Elementary		
Bobolink Park	David Oppenheimer Elementary		
Bobolink Park	Sir James Douglas Elementary		
Camosun Park	Bayview Community Elementary		
Camosun Park	Queen Elizabeth Elementary		
Carnarvon Park	Carnarvon Community Elementary		
Chaldecott Park	Queen Elizabeth Annex		
Champlain Heights Park	Champlain Heights Annex	√ (1982)	
Charleson Park	False Creek Elementary		
Clinton Park	Chief Maquinna Elementary		
Connaught Park	Kitsilano Secondary		
David Lam Park	Elsie Roy Elementary		
Douglas Park	Edith Cavell Elementary		

## **VSB SCHOOLS BY PARK**

Park Name	VSB School Name	Agreement with Park Board (Year)
Earles Park	Sir Guy Carleton Community Elementary	
Gaston Park	Collingwood Neighbourhood School	
George Park	Pierre Elliott Trudeau Elementary	
Gordon Park	David Thompson Secondary	
Hasting Community Park	Dr A R Lord Elementary	
Hillcrest Park	General Wolfe Elementary	
Kensington Park	Tecumseh Annex	
Kerrisdale Park	Point Grey Secondary	√ (2008)
Kerrisdale Park	Quilchena Elementary	
Killarney Park	Dr George M Weir Elementary	
Kingcrest Park	Lord Selkirk Elementary	
MacLean Park	Lord Strathcona Community Elementary	
Malkin Park	Kerrisdale Elementary	
McSpadden Park	Queen Victoria Annex	
Memorial South Park	Sir Alexander Mackenzie Elementary	
Memorial South Park	Sir Wm Van Horne Elementary	
Memorial South Park	South Hill Education Centre	
Moberly Park	Walter Moberly Elementary	
Montgomery Park	Sir William Osler Elementary	
Nanaimo Park	Waverley Elementary	√ (1963)
Oak Meadows Park	Eric Hamber Secondary	√ (2002)
Oak Park	Sir Wilfrid Laurier Elementary	
Prince Edward Park	David Livingstone Elementary	
Prince Edward Park	Sir Charles Tupper Secondary	
Prince of Wales Park	Prince of Wales Secondary	
Renfrew Community Park	Nootka Community Elementary	
Riley Park	General Brock Elementary	
Robson Park	Florence Nightingale Elementary	
Sparwood Park	Champlain Heights Community Elementary	√ (1982)
Sunset Park	John Henderson Elementary	√ (2008)
Sunset Park	John Norquay Elementary	
Templeton Park	Templeton Secondary	
Tisdall Park	Dr Annie B Jamieson Elementary	
Trafalgar Park	Trafalgar Elementary	
West Point Grey Park	Queen Mary Elementary	√ (2008)

## **INDEPENDENT/OTHER SCHOOLS BY PARKS**

Park Name	Independent/Other School Name			
Connaught Park	Fraser Academy			
Connaught Park	St John's School			
Clark Park	St Joseph's			
Clark Park	Stratford Hall			
Earles Park	Vancouver Formosa Academy			
Shannon Park	Vancouver Hebrew Academy			
West Point Grey Park & Jericho Park	West Point Grey Academy			
Slocan Park	Westside Montessori Academy			



#### DISTRIBUTION OF SCHOOLS WITHIN A FIVE MINUTE WALK OF A SPORT FIELD

LEGEND	0	750 1,500	3,000	
Study Area		/30 1,300	mm	- N -
Neighbourhood				
Parks				
— Trans-Canada Highway				
Rectangular Field				

- Ball Diamond
- Public School with an Agreement
- Public School without an Agreement
- 1 Other School without an Agreement
- 5-minute Walk from a Rectangular Field or Diamond



Only schools within a 5 minute walk of a sport field are included on the map.

### **KEY TAKEAWAYS:**

Team Huddle

- 57 schools are within a five-minute walk of a sport field operated by the Park Board.
- Seven of the schools located within a five-minute walk have a formalized use agreement with the Park Board.
- The majority of shared use agreements that pertain to school use of city parks is between the Park Board and VSB schools. However the Conseil Scolaire Francophone (School District No. 93) and the Park Board have an agreement for use of Oak Meadows Park.
- Some of the agreements between the schools and the Park Board are from over 20 years ago, with the newest one being from 15 years ago (2008). These agreements are likely not up to date with the current park environment.

ancouver Sport Field Strateg

## SPATIAL DISTRIBUTION OF SPORT FIELDS BY SUITABLE ACTIVITIES

The table on the following page notes where sport fields meet the full-size regulation playing space requirements for specific activities. The activities that were chosen are a sampling of popular sport field activities in Vancouver and are not meant to direct or limit the types of activities that can be played on these fields. For more detailed information on field dimension requirements please refer to Appendix A and for detailed measurements of the current inventory refer to the Technical Appendix Document.

### **REGULATION FIELD SIZE DEFINITION**

Every rectangular field-based sport is overseen by a governing body responsible for establishing the official playing area dimensions for that sport. When a field adheres to the specified criteria for a sport's dimensions, it earns the designation of being 'regulation sized'.

# UNDERSIZED FIELD SIZE DEFINITION

An undersized field refers to any rectangular field that does not meet the required minimum dimensions for the specific sport being played.



Ultimate frisbee game

## SPORT FIELD DISTRIBUTION BY CURRENT FIELD DIMENSIONS SUITABILITY FOR ACTIVITIES

Neighbourhood	CFL	NFL	Ultimate Frisbee	Rugby	Cricket	Lacrosse	Soccer
Arbutus-Ridge	1	1	3	1	1	1	3
Downtown	-	2	2	-	-	2	2
Dunbar-Southlands	1	3	6	1	-	3	5
Fairview	-	-	1	-	-	-	-
Grandview-Woodland	-	-	-	-	-	-	-
Hastings-Sunrise	-	5	9	-	-	5	8
Kensington-Cedar Cottage	1	2	4	-	1	2	3
Kerrisdale	-	-	-	-	-	-	-
Killarney	2	2	4	2	1	2	3
Kitsilano	-	2	3	-	-	2	3
Marpole	-	3	3	-	-	3	3
Mount Pleasant	-	-	1	-	-	-	1
Oakridge	-	2	3	-	-	2	3
Renfrew-Collingwood	-	1	3	-	-	-	2
Riley Park	-	-	-	-	-	-	-
Shaughnessy	-	1	2	-	-	1	2
South Cambie	-	2	4	-	-	2	4
Stanley Park	-	-	2	-	-	-	1
Strathcona	-	-	3	-	-	-	3
Sunset	2	6	6	-	1	5	5
Victoria-Fraserview	1	2	2	1	-	1	1
West Point Grey	-	1	2	-	-	1	1
Grand Total	8	35	63	5	4	32	53

This table only indicates the number of fields suitably sized for an activity, it does not account for whether there is the appropriate equipment, infrastructure, or field markings on site. Field hockey is not listed in the table as the sport is not only limited by the field dimensions but by infrastructure requirements that are not portable and incompatible with others sport uses. The synthetic turf field at Eric Hamber School is the only field suitable for field hockey.

#### **KEY TAKEAWAYS:**

- 42% of all rectangular fields are suitable size for ultimate frisbee
- 35% of all rectangular fields are suitable size for soccer.
- 21% of fields are suitable size for field lacrosse.
- 5% of fields are suitable size for CFL football, while 23% are suitable size for NFL football.
- 3% of fields are suitable size for Cricket.
- 3% of rectangular fields are a suitable size for rugby.

Player holding two baseballs

## SPORT FIELD DISTRIBUTION BY TOURNAMENT HOSTING CAPACITY

The following table and map reflect the parks with sufficient sport fields to host a tournament within each neighbourhood. Tournament sites are defined as sites with three or more co-located fields of the same type or a synthetic turf field. The map illustrates a five-minute and 10-minute walk zone around each field location.

Neighbourhood	Park Name	# of Class A Fields	# of Baseball Diamond	# of Softball Diamonds	Synthetic Turf Fields
Arbutus-Ridge	Carnarvon	-	3	-	-
Downtown	Andy Livingstone Park	-	-	-	2
Dunbar-Southlands	Memorial West	-	3	-	-
Hastings-Sunrise	Adanac Park	3	-	-	-
Hastings-Sunrise	Empire Park	-	-	-	2
Kensington-Cedar Cottage	Kensington	-	3	-	-
Kensington-Cedar Cottage	John Hendry	-	-	5	-
Killarney	Kilarney	-	4	-	-
Kitsilano	Connaught	4	-	4	-
Marpole	Oak Park	-	3	-	-
Marpole	Winona	3	-	-	-
Oakridge	Montgomery	-	-	4	-
Renfrew - Collingwood	Vancouver Technical School	-	-	-	1
Riley Park	Hillcrest	3	4	-	1
Shaughnessy	Point Grey Secondary School	-	-	-	1
South Cambie	Douglas	-	-	4	-
South Cambie	Eric Hamber School	-	-	-	1
Strathcona	Strathcona	-	-	3	-
Strathcona	Trillium Park	-	-	-	2
Sunset	Memorial South	3	3	-	1
Victoria-Fraserview	Nanaimo	-	4	-	-
Victoria-Fraserview	Bobolink	3	-	4	-
Victoria-Fraserview	Gordon	-	-	4	-
West Point Grey	West Point Grey	-	3	-	1
Grand Total		19	30	28	12

### **DISTRIBUTION OF TOURNAMENT SITES**



## **KEY TAKEAWAYS:**

tebalance

- 22 parks have sport fields required to host a tournament.
- 12 parks have the capacity to host a soccer tournament.
- Eight parks have the capacity to host a baseball tournament.
- Six parks have the capacity to host a softball tournament.

Two players running to a soccer ball

## CURRENT AND FUTURE SPORT FIELD PROJECTS

The following table and map illustrate the location of future sport field projects that are not resulting from Strategy recommendations. The map indicates with different colour pins the type of project that will be occurring at that park space: projects approved by the 2022 board motion and previously approved sport field projects.



## SPATIAL DISTRIBUTION OF SPORT FIELD PROJECTS

LEGEND	0	750 1,500	3,000	
Study Area		750 1,500	m	- N -
Neighbourhood				
Parks				
— Trans-Canada Highway				

2022 Board Motion Projects

Previously Approved Sport Field Projects



## SPATIAL OVERVIEW OF THE MAINTENANCE SYSTEM

Up until 2023, there were five maintenance regions within Park Board Operation's system: Stanley Park, Downtown, West, North, and South. The table below identifies the number of sport fields within each maintenance region by field type. This table includes ball diamonds as classified by Park Operations. For more information about the Park Services department and the staff specific roles related to servicing sport fields, please review the table on page 11-14. As was noted on page 14, in 2023 the Park Services department was restructured. The Distribution of Sport Fields and Maintenance Regions Map on the following page reflects how sport field maintenance was divided spatially. Prior to 2023, there were two different managers, and five different superintendents that oversaw staff that performed sport field maintenance and upkeep tasks. Additionally, sport user groups assumed various field maintenance tasks such as field lining, raking ball diamonds, adding diamond infield's rock dust etc.

## **MAINTENANCE REGIONS PRIOR TO 2023**

Maintenance Region	Grade A	Grade B	Grade C	Gravel Field	Synthetic Turf	Total
Downtown	-	-	-	-	2	2
North	26	31	6	4	5	72
South	55	38	7	2	3	105
Stanley Park	3	-	2	-	-	5
West	54	19	3	4	3	83
Grand Total	138	88	18	10	13	267

In 2023 Park Services moved from five districts doing different maintenance practices to a centrally directed sport field maintenance plan. Staff from the five districts are still undertaking the work but it is now directed and monitored by a new position, the Sport Field Superintendent. This was done for consistency, safety, and playability across all districts. All districts are now on the same fertilizing and cultural practice program, same mowing height, and watering plan. In order to provide consistency across the city, Park Operations have purchased some new equipment (overseeders, topdresser, bunker rake, aerators) and are in the process of purchasing more.

Currently the same equipment is used to mow sport field turf and passive turf. Because of this the sport turf is cut too high, the passive turf is cut too low and weeds are transferred from the passive to the sport fields. In 2024 Park Operations plans on purchasing sport field specific mowers to provide proper playing conditions on the sport fields. The passive turf areas around the city can then be cut at a higher height leading to less weeds, better drought tolerance and cooler passive areas.

The Park Board Building Structures and Maintenance Department will continue to perform maintenance through their four trade shops as outlined on pages 12 and 13. Sport field user groups are approved and sanctioned by the Park Board to complete the tasks noted on the previous page.

### DISTRIBUTION OF SPORT FIELDS AND MAINTENANCE REGIONS (PRIOR TO 2023)



### **KEY TAKEAWAYS:**

- The West and South maintenance regions each had more Class A fields to maintain than the other regions combined.
- The South maintenance region maintained 39% of the total sport field inventory, the West maintenance region maintained 30% and the North maintenance region maintained 28%. The Downtown and Stanley Park maintenance regions maintained 3% of the inventory combined.
- The North maintenance region maintained the most Class B and synthetic turf fields.
- Sport field maintenance practices are now directed and monitored by a sport field superintendent.

Ultimate frisbee player jumping to catch

STAR PARTIES SUTTING

# 3. SERVICE DELIVERY REVIEW

## INCLUDED IN THIS SECTION:

- Analysis of sport field bookings.
- Review of the ongoing investment to operate sport fields.

Girls baseball team

## ANALYSIS OF SPORT FIELDS BOOKINGS DATA

The following section provides an overview of bookings data and attempts to determine how much unused capacity exists within the sport field inventory and identify other notable characteristics of how the inventory is currently provided. Booking data from 2017–2019 was used for the analysis in this report because they provide a sample of years prior to the global pandemic where sport participation was considered normal. An average of the data was used to calculate annual and seasonal booking totals. The data collected only reflects what was booked on the fields and not what the actual use is as spontaneous use and unsanctioned use is difficult to represent accurately.

Sport field capacity was calculated both seasonally and annually; this is important because of the way that the permit office responds to provincial sport seasons and allocates fields creatively to maximize space. Some fields are created from ball diamond outfields or are overlapping other fields. The seasons are grouped into two categories; spring/summer and fall/winter. The following types of analysis will be reviewed in this section:

- The overall booked time of each field type.
- The amount of time booked on specific days of the week for each field type.
- The amount of booked time during prime hours for each field type.
- The amount of time booked by different types of user groups (e.g., for-profit groups, not-for-profit groups, minor sport groups, special events, schools, etc.) for each field type.
- The amount of time booked for different activities (e.g., soccer, field hockey, rugby, etc.) for each field type.
- An analysis on the most booked Class A and B fields and an analysis on all Synthetic, Gravel and Class C fields.

The number of fields available during the fall/winter and spring/summer seasons are different because of how the permit office allocates field use for specific activities. Because some rectangular fields are created from ball diamond outfields, those fields are not available during the same season as the ball diamonds. There were a total of 67 Class A fields, 49 Class B fields, and 13 Class C fields in the bookable inventory in 2019. The table below outlines the assumptions that were made to calculate capacity of each sport field type for the spring/summer seasons and the fall/winter seasons based on the seasonal availability of those fields.

## BOOKABLE CAPACITY ASSUMPTIONS FOR EACH FIELD TYPE AND CLASSIFICATION

Spring and Summer Season Capacity Assumptions								
	Synthetic Turf	Game Only (Class A)	Practice/ Sports Camps (Class B)	Non- Regulation (Class C)	All Weather (Gravel)	Baseball Diamonds	Softball Diamonds	
# of Weeks	22	20	20	20	20	22	22	
Weekly Hours	65	14	12	12	58	65	65	
# of Fields Available	12	36	21	12	10	52	62	
Total Hours Available	17,160	10,080	5,040	2,880	11,600	74,360	88,660	

\*This inventory is different from the Inventory section as a new baseball diamond has been created since the 2019.

Fall and Winter Season Capacity Assumptions									
	Synthetic Turf	Game Only (Class A)	Practice/ Sports Camps (Class B)	Non- Regulation (Class C)	All Weather (Gravel)				
# of Weeks	30	25	25	25	25				
Weekly Hours	65	14	12	12	58				
# of Fields Available	12	58	45	12	10				
Total Hours Available	23,400	20,300	13,500	3,600	14,500				

## NATURAL TURF FIELD CAPACITY

The field capacity for natural grass turf is based on the recommended maximum use from a field maintenance perspective. The recommended maximum use attempts to average the wear and tear of several different types of activities to get a reasonable amount of use that would reduce negative impact on turf quality.

# SYNTHETIC, ALL WEATHER (GRAVEL) AND BALL DIAMOND CAPACITY

Synthetic turf, gravel, and ball diamond capacity assumptions are based on how many prime hours are available at each field type during the fall/winter and spring/summer seasons. For synthetic turf and ball diamonds prime hours are defined as 4-11 pm on weekdays and 8 am-11 pm on weekends. For gravel fields prime hours are defined as 4-10 pm on weekdays and 8 am-10 pm on weekends.

## RECTANGULAR FIELDS

As was illustrated in the sport field inventory, there are currently five field type classifications for rectangular fields: synthetic turf, game only (Class A), practice/sports camps (Class B), non-regulation (Class C) and all weather (gravel).

## **OVERVIEW OF TOTAL BOOKED HOURS**

The table below shows the average number of hours that were booked at each field type annually, how many fields are booked through the booking system and the total capacity of each field type based on the number of fields that are being booked. As reflected in the table, there is a significant difference between the booking levels for the different types of fields in the inventory.

Overview of Total Booked Hours									
	Synthetic Turf	Game Only (Class A)	Practice/ Sports Camp (Class B)	Non- Regulation (Class C)	All Weather (Gravel)	Total			
Hours Booked	29,214	18,440	8,357	2,528	5,331	63,870			
# of Fields	12	67	49	13	10	151			
Available Hours	40,560	30,380	18,540	6,480	26,100	121,560			
Total % of Capacity Booked	72%	61%	45%	39%	20%	53%			

## TOTAL BOOKED HOURS BY SEASON

As fields are permitted using two seasons (spring/summer and fall/winter), the analysis below details the percentage of capacity booked for each season based on the fields that are available during that season.



The hours booked on Class A, B, and C fields includes hours booked on fields that are not intended to be booked during the spring/summer season. This includes permitting done to accommodate sports played into shoulder seasons and special events that are booked on the fields.

#### Vancouver Sport Field Strategy



#### FALL/WINTER BOOKED HOURS

The hours booked on Class A, B, and C fields includes hours booked on fields that are not intended to be booked during the fall/winter season. This includes permitting done to accommodate sports played into shoulder seasons and special events that are booked on the fields.
### **KEY TAKEAWAYS**:

- Synthetic, Class A, and gravel fields are booked more during the fall/winter season than the spring/summer season.
- Class B and C fields are booked more during the spring/ summer season than the fall/winter season.
- Why fields are booked to a higher percentage of their capacity in different seasons is impacted by a number of factors such as types of activities played in each season, weather, the school year, etc.

Football players tackling

Vancouver Sport Field Strategy

Philippine and an arrange

an an and a stand with the standard state

And Marine Courses and and the Marine States

# **BOOKED FIELD HOURS BY DAY OF THE WEEK**

The following graphics illustrate the average hours booked by day of the week for each season of play.

Only synthetic turf fields and all weather (gravel) fields can be evaluated based on their daily prime capacity. The daily capacity is the amount of prime hours available that day. If fields are booked over 100% of capacity that indicates that they are booked beyond prime (e.g., during school hours). As the all weather (gravel) fields are booked up to 6% of their capacity in spring/summer and 30% of their capacity in the fall/ winter, a comment on the hours booked of daily capacity is not provided in the call out on the following page.

Natural turf fields capacity is based on the recommended maximum use from a field maintenance perspective, therefore, it is not possible to provide an analysis of daily use of prime capacity. Class A turf fields are bookable for 14 hours a week, while Class B and C fields are bookable for 12 hours a week.

### SPRING/SUMMER HOURS BOOKED BY DAY OF THE WEEK



### FALL/WINTER HOURS BOOKED BY DAY OF THE WEEK



During the spring/summer season, Monday-Thursday, Synthetic Turf Fields are booked approx. 80-86% of their daily prime capacity.

During the fall/winter season, Monday-Thursday, Synthetic Turf fields are booked approximately 94-100%+ of their daily prime capacity.

### **KEY TAKEAWAYS:**

- In the fall/winter season, Saturdays have the most bookings per day on every field type except synthetic turf fields (Sunday was booked most often).
- In both fall/winter and spring/summer seasons demand for all field types is highest on weekends and lowest on Fridays.
- Synthetic turf fields are booked beyond their daily capacity Tuesday-Thursday in the fall/winter season. This indicates that during the evenings there is no additional capacity on those particular days.

Synthetic turf field in Vancouver

# PRIME HOURS BOOKINGS BY SEASON, HOURS & PERCENTAGES

Because natural turf field capacity is based on recommended maximum use from a field maintenance perspective, the maximum use for a field is much less than the hours that are deemed as prime hours.

Prime hours are from 4-11 pm on weekdays and 8 am-11 pm on weekends. On all weather fields prime hours end at 10 pm.

The table below shows the breakdown of hours booked during prime vs. non-prime by field type during the two booking seasons. This table is meant to illustrate when bookings occur the most often. It is not meant to show the percentage of hours booked of capacity as prime capacity does not apply to fields that use a capacity based on field maintenance (only 12 - 14 hours per week).

### SPRING/SUMMER SEASON BOOKINGS

	Prime Hours Booked	Non-Prime Hours Booked	Total Booked	% of Total Booked Time During Prime	% of Total Booked Time During Non-Prime
Synthetic Turf	9,531	1,783	11,315	84%	16%
Game Only (Class A)	6,413	1,576	7,989	80%	20%
Practice/Sports Camp (Class B)	3,507	725	4,232	83%	17%
Non-Regulation (Class C)	1,077	693	1,770	61%	39%
All Weather (Gravel)	356	329	686	52%	48%

### FALL/WINTER SEASON BOOKINGS

	Prime Hours Booked	Non-Prime Hours Booked	Total Booked	% of Total Booked Time During Prime	% of Total Booked Time During Non-Prime
Synthetic Turf	16,484	1,455	17,939	92%	8%
Game Only (Class A)	9,684	265	10,451	93%	7%
Practice/Sports Camp (Class B)	3,876	249	4,125	94%	6%
Non-Regulation (Class C)	634	125	758	84%	16%
All Weather (Gravel)	4,522	124	4,645	97%	3%

### **KEY TAKEAWAYS**:

- During the fall/winter season fields are booked more often during prime hours than the spring/summer season.
- 93% of all bookings during the fall/winter season take place during prime hours, while 80% of all bookings during the spring/summer occur during prime hours.

# **BOOKINGS BY ORGANIZATION TYPE**

The following pages contain charts that depict the percentage of booked time by organization type booking along with some key takeaways for each field type.

#### SYNTHETIC TURF FIELD BOOKINGS:

Most field bookings are for sport non-profit groups (78%), followed by sport for profit groups (18%), and school groups (3%) bookings.

### SYNTHETIC TURF FIELD BOOKINGS BY ORGANIZATION TYPE



### **CLASS A BOOKINGS BY ORGANIZATION TYPE**



### CLASS A FIELD BOOKINGS:

Most field bookings are for sport non-profit groups (81%), followed by sport for profit (10%) groups, and special events-profit (4%) bookings.

### CLASS B FIELD BOOKINGS:

Most field bookings are for sport non-profit groups (76%), followed by sport for profit bookings (11%), and community centre (4%) bookings.

### CLASS C FIELD BOOKINGS:

Most field bookings are for sport non-profit groups (43%), followed by community centre bookings (24%), and sport for profit groups (13%) bookings.

### **CLASS B BOOKINGS BY ORGANIZATION TYPE**



### **CLASS C BOOKINGS BY ORGANIZATION TYPE**



# ALL WEATHER FIELD BOOKINGS:

Most field bookings are for sport non-profit groups (82%), followed by filming (8%), and sport for profit (6%) bookings.

### ALL WEATHER FIELD BOOKINGS BY ORGANIZATION TYPE





Gravel field

# BOOKING BY ACTIVITY TYPE AND USER AGE CATEGORY

The following charts depict the percentage of booked time by activity and age category, along with some key takeaways for each field type.

### SYNTHETIC TURF FIELD BOOKINGS

- 59% of all bookings were for youth activities and 40% for adult activities.
- 74% of bookings on synthetic turf fields are for soccer, 11% for ultimate and 7% for field hockey.



### **ACTIVITIES BOOKED ON SYNTHETIC FIELDS**



### CLASS A FIELD BOOKINGS

- 50% of all bookings were for adult activities and 44% were for youth activities. 6% of bookings are for all ages activities.
- 46% of bookings on Class A fields are for soccer, 18% for ultimate and 12% for rugby.

### 

### **ACTIVITIES BOOKED ON CLASS A FIELDS**



### CLASS B FIELD BOOKINGS

- 60% of all bookings were for youth activities, 34% for adult activities, and 6% of activities are for all ages.
- 47% of bookings on Class B fields are for soccer, 11% for ultimate and 9% football.

### AGE CATEGORIES BOOKED ON CLASS B FIELDS 5% All Ages 35% Adult 60% Youth

### **ACTIVITIES BOOKED ON CLASS B FIELDS**



### CLASS C FIELD BOOKINGS

- 62% of all bookings were for youth activities, 23% for adult activities, and 15% of activities are for all ages.
- 39% of bookings on Class C fields are for soccer, 15% for mixed sports (e.g., school sport days, sport ball, etc.), and 10% for special events.

### 

### **ACTIVITIES BOOKED ON CLASS C FIELDS**



### ALL WEATHER FIELD BOOKINGS

- 83% of all bookings were for youth activities, 15% for adult activities, and 3% of activities are for all ages.
- 72% of bookings on gravel fields are for soccer, 10% of bookings are for unknown activities, and 8% of bookings are for rugby.

### AGE CATEGORIES BOOKED ON ALL WEATHER FIELDS



### **ACTIVITIES BOOKED ON ALL WEATHER FIELDS**



## OVERALL ASSESSMENT OF RECTANGULAR FIELD BOOKINGS

The table below categorizes bookings based on percentage of capacity booked ranges; over capacity, highly booked, moderately booked, low-moderately booked, and low bookings. Each rectangular field is assessed on the percentage of available booking capacity from 2017-2019. The total number of fields booked in each category is noted by field type.

Categories	Percentage Booked of Capacity	Number of Fields: Synthetic	Number of Fields: Class A	Number of Fields: Class B	Number of Fields: Class C	All Weather Fields
Over Capacity*	100% +	0	5	1	0	0
Highly Booked	75%-99%	6	8	3	1	0
Moderately Booked	50%-74%	6	13	5	2	0
Low-Moderately Booked	25%-49%	0	21	19	4	3
Low Bookings	0%-24%	0	20	21	6	7

\*Over capacity occurs when a field is booked beyond the field capacity, and thus will be depicted as beyond 100%

Categories	Percentage of Prime Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

On the following pages, each field classification type will feature a chart depicting the top 10 most booked fields of that type. Additionally, key findings are noted.

# LIT RECTANGULAR FIELDS

There are 30 lit rectangular fields, the Park Board uses Skylogix to control 12 of them via satellite and provides a key to user groups for 10 manually controlled lit fields. The other eight fields that have lighting are manually controlled by user groups or the Community Centre (Riley Park and Killarney Oval).

Most of the lighting equipment currently being used is dated and nearing end of life, requiring upgrades and replacements.

The number of fields by field type with lighting are as follows:

- 11 synthetic turf fields
- Four Class A fields
- Six Class B fields
- Nine all weather (gravel) fields

The dangers of under-lit facilities include injuries, participant safety, and liability.

Some challenges presented when user owned/controlled lighting is provided include:

- Natural turf facilities will be overused (used beyond permitted hours);
- Inequitable access to users that can't afford private lighting;
- Groups having a sense of ownership of the facility that also excludes others from accessing facilities;
- Providing access to electrical to user groups;
- Gas generators being used by user groups to power the lights;
- Noise from either generators or user groups staying beyond permitted time.

## SYNTHETIC TURF FIELDS

The following graphs reflect bookings of available capacity for the synthetic turf inventory. This analysis focused on prime hours as these times are key to facilitating access for most sport programming.

Categories	Percentage of Prime Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

### SYNTHETIC TURF FIELDS-PRIME TIME CAPACITY BOOKED (SPRING/SUMMER)





Categories	Percentage of Prime Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

### SYNTHETIC TURF FIELDS-PRIME TIME CAPACITY BOOKED (FALL/WINTER)





Categories	Percentage of Prime Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

### SYNTHETIC TURF FIELDS-OVERALL PRIME CAPACITY BOOKED (ALL SEASONS AGGREGATED)



#### **KEY TAKEAWAYS:**

- Synthetic turf fields are booked more often in the fall/winter than in the spring/summer.
- Hillcrest field's bookings drop by 20% in the fall/winter season compared to the spring/summer. It is the only field without lighting.
- Van Tech High School's synthetic turf bookings increase by 38% from spring/ summer to fall/winter.
- The majority of fields are moderately booked for spring/summer (nine of 12 fields).
- Half of the fields in fall/winter were highly booked and most of the other fields were moderately booked. Only one field was considered as having a low booking percentage (Hillcrest Synthetic) in the fall/winter. It is currently the only unlit synthetic turf field.
- Eric Hamber Field, is unique, has footwear restrictions and is used for field hockey almost exclusively.

Cricket player at bat

## CLASS A RECTANGULAR FIELDS

The most frequently booked Class A fields are depicted in the following graphs.

Categories	Percentage of Capacity Booked		
Over Capacity	100% +		
Highly Booked	75%-99%		
Moderately Booked	50%-74%		
Low-Moderately Booked	25%-49%		
Low Bookings	0%-24%		

### MOST BOOKED CLASS A FIELDS (SPRING/SUMMER)





Categories	Percentage of Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

### MOST BOOKED CLASS A FIELDS (FALL/WINTER)





Categories	Percentage of Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

# MOST BOOKED CLASS A FIELDS (ALL SEASONS AGGREGATED)



#### **KEY TAKEAWAYS**:

- A number of Class A fields are booked over capacity, especially in the spring and summer months.
- Demand for specific fields changes from season to season, however the overall quantity of Class A hours booked only varies slightly (3%) from season to season.
- Killarney Field Oval is booked more than double its capacity in the fall/winter.

Team huddle

# CLASS B RECTANGULAR FIELDS

The Top 10 most booked Class B fields for spring/summer and fall/ winter seasons are depicted in the following graphs.

Categories	Percentage of Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

#### MOST BOOKED CLASS B FIELDS (SPRING/SUMMER)





Categories	Percentage of Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

#### MOST BOOKED CLASS B FIELDS (FALL/WINTER)





Categories	Percentage of Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

### MOST BOOKED CLASS B FIELDS (ALL SEASONS AGGREGATED)



#### **KEY TAKEAWAYS:**

- Similar to the Class A bookings, a relatively small number of Class B fields accommodate a high concentration of bookings.
- Almost half (49%) of all Class B fields have low bookings.
- 35% of all bookings are considered as having moderate-low bookings.
- During the spring/summer months, Riley Field C is only booked 10% of the time while during the fall/winter months its booked significantly Over Capacity.
- Braemar Field C is the only Class B field with lighting controlled by the Park Board. It is booked more in the fall/ winter season.





# CLASS C RECTANGULAR FIELDS

The booking for Class C fields for spring/summer and fall/winter and the overall booked fields are depicted in the following graphs. As there are only 12 fields each field is shown in the graph for each season (the previous graphs for Class A and B fields only reflect the top booked fields). Although these spaces are booked by sport groups, they primarily serve basic skill development and spontaneous/ casual use purposes.

Categories	Percentage of Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

#### MOST BOOKED CLASS C FIELDS (SPRING/SUMMER)





Categories	Percentage of Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

### MOST BOOKED CLASS C FIELDS (FALL/WINTER)





Categories	Percentage of Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

# MOST BOOKED CLASS C FIELDS (ALL SEASONS AGGREGATED)



### **KEY TAKEAWAYS:**

- Class C fields are booked more often in the spring/summer months. For example, David Lam Field is booked 16% of its fall/winter season capacity, while in the spring/summer season it is booked over capacity (130%).
- Musqueam Field NW, George Field C, and the Melbourne Grass Area are booked the least often overall.
- There are no Class C fields with lighting.

Young player kicking a soccer ball

# ALL WEATHER (GRAVEL) FIELDS

As there are 10 all weather (gravel) fields, the following graphs depict the percentage booked of capacity for each field for each season. Prime hours were used to determine available capacity.

Categories	Percentage of Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

#### MOST BOOKED ALL WEATHER (GRAVEL) FIELDS (SPRING/SUMMER)





Categories	Percentage of Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

### MOST BOOKED ALL WEATHER FIELDS (FALL/WINTER)





Categories	Percentage of Capacity Booked	
Over Capacity	100% +	
Highly Booked	75%-99%	
Moderately Booked	50%-74%	
Low-Moderately Booked	25%-49%	
Low Bookings	0%-24%	

### MOST BOOKED ALL WEATHER FIELDS (ALL SEASONS AGGREGATED)



### **KEY TAKEAWAYS:**

- All weather (gravel) fields are booked more often in fall/winter than spring/ summer. Often all weather (gravel) fields are booked in addition to grass fields in anticipation of inclement weather.
- Clinton Field is the most booked all weather (gravel) field.
- Locarno Beach Field is the least booked all weather (gravel) field.
- Most all weather (gravel) fields have lighting.

Rugby players catching the ball

# BALL DIAMONDS

Ball diamonds are categorized as either baseball or softball in the booking data. Ball diamonds are permitted for softball and baseball during the spring/summer season, while during the fall/winter season select outfields are permitted as a rectangular field. Ball diamonds are not currently classified by condition or quality.

# **OVERVIEW OF TOTAL BOOKED HOURS**

The table below shows the average number of hours that were booked at baseball and softball diamonds annually, how many diamonds are booked through the booking system and the total percent of capacity booked of each diamond type. Capacity is based on prime hours available, and the hours used are the average annual hours that were booked during prime time.

TOTAL BOOKED HOURS	Baseball Diamonds	Softball Diamonds	Total
Total Hours Booked	26,662	20,942	47,604
Hours Booked During Prime	21,774	20,059	41,833
Booked Fields in the System	52	62	114
Total Available Capacity (Prime)	74,360	88,660	163,020
% of Total Capacity Booked	36%	24%	29%
% of Total Capacity Booked During Prime	29%	23%	26%

\*This table does not include hours booked at diamonds outside of the spring/summer season.
# BOOKED DIAMOND HOURS BY SPECIFIC DAY OF THE WEEK

The following graphic illustrates the average hours booked on each day of the week for spring/summer.







### BASEBALL DIAMOND HOURS BOOKED BY DAY OF THE WEEK



#### SOFTBALL DIAMOND HOURS BOOKED BY DAY OF THE WEEK





Monday-Friday baseball diamonds are booked to approx. 30-35% of their daily capacity.



Monday-Friday softball diamonds are booked to approx. 20-25% of their daily capacity.



Baseball diamonds are booked to approx. 40% of their daily capacity on the weekends.



Softball diamonds are booked to approximately 20-30% of their daily capacity on the weekends.

#### **KEY TAKEAWAYS**:

- Baseball diamonds are booked to a higher percentage of the daily capacity on the weekend compared to during the week. Softball diamonds are booked more hours on the weekend but only Saturday is booked to a higher percentage of the daily capacity compared to the other days of the week.
- Softball diamonds are booked most often on Sundays and baseball diamonds are booked most often on Saturdays.
- 50% of hours booked on baseball diamonds are booked on the weekend.
- 47% of hours booked on softball diamonds are booked on the weekend.

Baseball player at bat

## **BOOKINGS BY HOURS AND PERCENTAGES**

The table below shows the breakdown of the average hours booked annually at each diamond type during prime hours and non-prime hours.

### BOOKINGS

Ball Diamond	Prime Hours Booked	Non-Prime Booked	Total Booked During Prime		% of Total Booked During Non- Prime
Baseball Diamond	21,774	4,888	26,662	82%	18%
Softball Diamond	20,059	883	20,942	96%	4%
Total	41,833	5,771	47,604	88%	12%

### **KEY TAKEAWAYS:**

- The majority of hours booked at ball diamonds are booked during prime (88%).
- Baseball diamonds have more hours booked during non-prime hours than softball diamonds.

## **BOOKINGS BY ORGANIZATION TYPE**

The following graphs depict the percentage of booked time by organization type. Some key takeaways for each diamond type are present alongside the graphs.

### BASEBALL DIAMOND **BOOKINGS:**

- The majority of bookings are made by sport non-profit groups (89%) on baseball diamonds.
- Community centre bookings and special event bookings make up 4% of the total booked hours.

### SOFTBALL DIAMOND **BOOKINGS:**

- Softball diamonds were booked most often by sport non-profit groups (61%) followed by sport-profit groups (35%).
- Special event bookings made up 3% of total booked hours.



**BASEBALL DIAMOND BOOKINGS BY** 

#### SOFTBALL DIAMOND BOOKINGS BY **ORGANIZATION TYPE**



### BOOKINGS BY ACTIVITY TYPE AND USER AGE CATEGORY

The following graphs depict the percentage of booked time by activity and user age category, along with some key takeaways for each diamond type.

### BASEBALL DIAMONDS BOOKINGS

- Youth sport organizations booked baseball diamonds
  90% of the booked time. Adult and all ages activities made up
  10% of the booked time.
- Baseball is the most booked activity on baseball diamonds (92%), 4% of bookings were made for softball and 3% for events.

### AGE CATEGORIES BOOKED ON BASEBALL DIAMONDS 3% All Ages 7% Adult 90% Youth

#### ACTIVITIES BOOKED ON BASEBALL DIAMONDS



### SOFTBALL DIAMOND BOOKINGS

- In contrast to baseball diamonds, adult sport bookings make up the majority of softball diamond bookings (66%). Youth sport bookings make up 31% of all bookings, followed by 3% of booking made for all ages activities.
- Softball is the most booked activity on softball diamonds (87%), 9% of bookings were for baseball activities and 4% for events.

#### AGE CATEGORIES BOOKED ON SOFTBALL DIAMONDS



### **ACTIVITIES BOOKED ON SOFTBALL DIAMONDS**





### OVERALL ASSESSMENT OF BALL DIAMOND BOOKINGS

The table below categorizes bookings based on percentage of capacity booked ranges; over capacity, highly booked, moderately booked, low -moderately booked, and low bookings. Each ball diamond is assessed on the percentage of available booking capacity it booked from 2017–2019. For each diamond type the number of diamonds that meet the category's booked capacity targets is indicated.

Categories	Percentage Booked of Capacity	Baseball Diamonds	Softball Diamonds	Total Diamonds
Over Capacity*	100% +	0	0	0
Highly Booked	75%-99%	0	0	0
Moderately Booked	50%-74%	12	1	13
Low-Moderately Booked	25%-49%	26	23	49
Low Bookings	0%-24%	14	38	52

\*Over capacity occurs when a diamond is booked beyond the field capacity, and thus will be depicted as beyond 100%

Categories	Percentage of Capacity Booked
Over Capacity	100% +
Highly Booked	75%-99%
Moderately Booked	50%-74%
Low-Moderately Booked	25%-49%
Low Bookings	0%-24%

On the following pages, each diamond type includes a chart depicting the top 10 most booked diamonds of that type. Additionally, some key findings are noted.

### LIT BALL DIAMONDS:

There are four softball diamonds that are lit. All four softball diamonds are manually controlled by user groups. There is one baseball diamond with lights.

The Park Board controlled lit diamond is as follows:

• One baseball diamond (Balaclava Diamond SE)

Andy Livingston Diamond W has lights but they are no longer operated and the diamond has been removed from the inventory.

### BASEBALL DIAMONDS

The top 10 most booked baseball diamonds are depicted in the graph on the right.

Categories	Percentage of Capacity Booked
Over Capacity	100% +
Highly Booked	75%-99%
Moderately Booked	50%-74%
Low-Moderately Booked	25%-49%
Low Bookings	0%-24%

#### MOST BOOKED BASEBALL DIAMONDS



#### View of a baseball game

#### **KEY TAKEAWAYS:**

- The most booked baseball diamonds are Hillcrest Diamond SW (74% booked) and Hastings Diamond SE (72% booked).
- Most baseball diamond bookings (42%) are considered low-moderately booked.
- 31% of baseball diamonds are considered to have low bookings.

681 0

### SOFTBALL DIAMONDS

The top 10 most booked softball diamonds are depicted in the graph on the right.

Categories	Percentage of Capacity Booked
Over Capacity	100% +
Highly Booked	75%-99%
Moderately Booked	50%-74%
Low-Moderately Booked	25%-49%
Low Bookings	0%-24%

#### MOST BOOKED SOFTBALL DIAMONDS



#### **KEY TAKEAWAYS:**

- Nine out of 10 of the most booked softball diamonds are co-located with other fields or diamonds.
- 60% of softball diamonds are considered to have low bookings.
- Only three percent of softball diamonds are considered moderately booked diamonds.
- 29 diamonds have a shorter than regulation length outfield.
- 10 diamonds have overlapping outfields with other diamonds.

## OVERALL CAPACITY ANALYSIS SUMMARY

The analysis presented in this section indicates that there is enough total volume of sport field and ball diamond surfaces, however these surfaces may not be adequately aligned with the needs of user groups.

Using 2040 population projections for Vancouver (Metro Vancouver Regional Growth Strategy), the following table reflects how growth may translate to additional hours of demand for bookable sport field time and the net impact on the system. It is important to note that this analysis uses time currently booked across all field classes, but only reflects current unused capacity and the net impact for synthetic turf, Class A, and Class B fields as these fields are best suited for bookable uses. Adding Class C and Gravel fields would identify even more available unused field time and room for growth. The analysis is also based on the overall assumption that participation rates (demand for bookable field time) will increase in lockstep with population growth. Increases or decreases in participation rates will need to continue to be monitored on an ongoing basis.

# POTENTIAL IMPACTS OF GROWTH ON SPORT FIELDS

	Spring/Summer	Fall/Winter
Hours Currently Booked (All Field Classes)	25,992	37,918
Hours Currently Unused (Synthetic Turf, Class A and B only)	8,744	24,985
Additional Hours Required to Meet Growth Based on Growth Projections	5,198	7,584
Net Hours Remaining (Synthetic Turf, Class A and B only)	3,546	17,401

Acknowledging that not all sport fields in the inventory are optimally suited to accommodating bookable uses during all seasons of the year, further analysis was undertaken to identify scenarios in which a field time gaps (lack of supply) may exist in the future using the growth projections. As reflected in the table below, growth could result in a lack of field time if the following scenarios exist:

- If only between 50-60% of Synthetic Turf, Class A and Class B fields are suitable for bookable use during spring/summer seasons.
- If only 30 40% of Synthetic Turf, Class A and Class B fields are suitable for bookable use during.

### **POTENTIAL SPORT FIELD SUPPLY GAPS**

Scenario	Net Hours Remaining Spring/Summer	Net Hours Remaining Fall/ Winter
75% of the Synthetic Turf, Class A and Class B are functionally suited to accommodate future bookable demand.	1,360 hours available	11,155 hours available
50% of the Synthetic Turf, Class A and Class B are functionally suited to accommodate future bookable demand.	Gap of 826 hours	2,634 hours available
25% of the Synthetic Turf, Class A and Class B are functionally suited to accommodate future bookable demand.	Gap of 3,012 hours	Gap of 1,377 hours

Similar analysis was conducted for ball diamonds which reflects that an even greater volume of ball diamond supply exists to accommodate growth, while also recognizing that the ball diamond inventory may not be optimally aligned with the types of diamonds and amenities required by user groups.

## ONGOING INVESTMENT TO OPERATE SPORT FIELDS

Sports fields, like most types of publicly provided recreation amenities, require a subsidy to sustain ongoing operations. The following chart summarizes the average annual costs to provide the different types and classes of sport fields in Vancouver. As reflected in the chart, the net cost of providing sport fields in Vancouver is approximately \$1.66 million annually. Cost recovery varies significantly across the different field classes. Notably, Class A fields account for approximately half of the total expenditures and overall net cost (subsidy) to operate sport fields but make up only 28% of the rectangular field bookings and 44% of total number of fields in the system.

# Note: The analysis of expenses of revenues in the table below and in the graphics on pages 147-151 uses an average from 2017-2019 (rounded figures) as this 3-year period reflects normal operating years prior to pandemic disruptions from 2020-2022.

	Synthetic Turf	Natural Turf Class A	Natural Turf Class B	Natural Turf Class C	All Weather (Gravel)	Baseball Diamonds	Softball Diamonds	Total
Average Annual Revenues	\$870,000	\$120,000	\$40,000	\$130,000	\$20,000	\$60,000	\$150,000	\$1,390,000
Average Annual Expenditures	\$310,000	\$1,520,000	\$420,000	\$140,000	\$10,000	\$100,000	\$570,000	\$3,070,000
Average Annual Net Revenue	\$560,000	(\$1,400,000)	(\$380,000)	(\$10,000)	\$10,000	(\$40,000)	(\$420,000)	(\$1,680,000)
Average Annual Cost Recovery	280%	8%	10%	93%	200%	60%	26%	45%

Note: numbers shown in this chart are high-level estimates that were estimated based on the financial information available at time of publishing.

It is important to reiterate that the figures presented in the previous chart reflect high level, preliminary cost analysis. Conducting operational cost analysis of sports fields requires a number of assumptions to be used (Park Board operations staff undertake maintenance and upkeep on fields in conjunction with other co-located and nearby park space amenities). The cross-use nature of many sport field sites (mixed use between rectangular field sports and diamonds) adds a further complication to this analysis. The assumptions and calculations used to undertake this analysis are a best estimate of staff, equipment and other related costs dedicated to sport field maintenance and other operational functions.

Identified as follows are additional factors that should be considered when reviewing this initial cost analysis.

- The figures do not include utility costs (beginning in 2024 each department will be directly billed for their utility costs such as water and sewage). This is likely to impact future cost accounting for sport fields.
- The costs presented reflect current maintenance standards which may not be aligned with field maintenance recommended on a move forward basis (e.g., as per strategy recommendations).

### EXPENDITURE CONSIDERATIONS AND INSIGHTS

The adjacent graph further illustrates the difference in expenditures associated with the maintenance and overall provision of each field type.

General maintenance and upkeep represent approximately half of all sport field expenditures. Materials and equipment account for over one quarter (of expenditures).

# \$26,000 \$21,000 \$8,000 \$5,000 \$1,500

## ESTIMATED ANNUAL COST PER FIELD TYPE



Natural

All

Baseball

Softball

Natural

(rounded figures).

Synthetic Natural

#### SPORT FIELD EXPENDITURES BY TYPE/ OPERATIONAL FUNCTION



\*General maintenance and upkeep costs includes operations staff.

## REVENUE ANALYSIS

While sport user fees continue to represent the majority of sport field revenues (66%), revenues generated from special events and filming grew from 2017 to 2019 and represented approximately one third (34%) of all annual sport field revenues. Net revenues (revenues less expenditures) vary greatly across the different field classes.

#### AVERAGE ANNUAL REVENUE BY ACTIVITY TYPE



\*Based on 2017–2019 revenues and the bookable field sport field inventory counts as presented in Section 2.

#### AVERAGE ANNUAL NET REVENUE PER FIELD TYPE



(rounded figures).

## COST PER BOOKED HOUR

Another way to view the Park Board's ongoing operational investment in sport field infrastructure is to analyze the cost required per hour booked. As illustrated in the chart on the right of this page, synthetic turf and all weather (gravel) fields operate above a cost recovery positive position, while Class A and B fields have a more significant level of expenditure associated with their operations.

#### DEFINING COST RECOVERY

Cost recovery refers to the revenues required to offset expenditures. For example, if a field's annual expenditures are \$1,000 and \$800 is collected through user fees, cost recovery for that field would be 80%. It doesn't include construction or renewal costs.

#### ESTIMATED MAINTENANCE AND UPKEEP COST PER FIELD TYPE



\*Numbers shown in this chart are high-level estimates that were estimated based on the financial information available at time of publishing and the sport field inventory as presented in Section 2.

## THE FINANCIAL IMPACTS OF PROVIDING DIFFERENT SPORT FIELD TYPES

When looking at the financial investment required to provide sport fields, it is important to reiterate that different field types have variable capital cost, lifespan, level of durability, and ongoing maintenance program requirements. These different factors result in trade-offs that impact both long-term financial decisions (e.g., the optimal mix of fields within the sport field system) as well as ongoing operational costs. To further illustrate these variations, the following chart presents a summary comparison of a typical synthetic turf field to a typical natural surface field. As reflected in the chart, a synthetic turf field can accommodate significantly higher levels of use and operate at a revenue positive position. However, the shorter lifespan of synthetic turf also requires a more robust asset management and capital reserve plan to ensure adequate resources exist to renew the field every 10-12 years.

### SYNTHETIC TURF FIELD COMPARED TO A NATURAL SURFACE FIELD

(Typical	Class	A or	В	Field)
----------	-------	------	---	--------

Capital Cost (\$)	\$\$\$ - \$\$\$\$ 3 - 5 x the cost	
Lifespan (Year)*	€ 10 - 12 years (~1/3 the lifespan of a natural surface fi	-
Capacity for Utilization	Typically, at least 4 times the capacity with dependability during	ng rainy months
Ongoing Maintenance Care Required	Moderate ongoing field surface care, but requires a high staffing and amenity provision to support increased	er level of
Cost Recovery	\$ Î Can generate higher levels of net revenues compa to other types of field surfaces	red

\*Natural turf field lifespans are highly variable depending on the base material, site drainage conditions, as well as types and intensities of use. While the grass surface it self may last for numerous decades, the infrastructure that supports the surface (irrigation, drainage, base materials) often requires a major rebuild every 20 - 30 years.

## ONGOING IMPROVEMENTS TO RENOVATE & IMPROVE SPORT FIELDS

In order to address public safety concerns, playability issues, and to improve the quality and consistency of the network of sport fields across the city, the Park Board allocated capital funding to Park Operations in late 2022. The purpose of this funding was to complete small and medium scale field renovation and upgrade projects to address safety and playability concerns, as well as increase seasonal field grooming and cultural practices program (aerating, sanding, seeding, slicing etc) to steadily improve sport field quality and consistency.

The sport field funding is being applied in two ways:

### 1. WARM SEASON FIELD MAINTENANCE-APRIL TO SEPTEMBER

This maintenance work will double the current capacity to groom the over 125 city-wide ball diamonds. (Field grooming, dugout cleaning, dog hole filling, etc.). It will also increase cultural practice program to include all sport fields. Current service levels between fields are inconsistent and new capital funding will enable consistent, ongoing key services necessary for quality turf grass.

### 2. COOL SEASON FIELD MAINTENANCE-OCTOBER TO MARCH

Field Maintenance crews funded through this program will transition from the maintenance enhancements listed above to become a Field Upgrade crew in late fall through to March. They will focus on prioritized small and medium scale improvement projects with a focus on safety and playability. The purpose of the improvement projects is not to replace the list of projects developed as part of park renewals. It is meant to address very specific safety, playability, and quality issues. This work includes infield renovations and replacements, turf surface renovation or replacement, irrigation upgrades, drainage installation, soccer goal mouth renovation, field surface leveling and grading and other similar projects.

The goal of the Upgrade Team is to immediately improve city-wide playing conditions as well as address the public safety concerns our current fields present. The group is addressing the most concerning fields on a prioritized basis and beginning a year-round field enhancement program to improve field quality and consistency of the city-wide network.

# 4. SPORT FIELD CONDITION ASSESSMENT SUMMARY



# METHODOLOGY

Site assessments were conducted to determine the existing conditions of each sport field. Site assessments were completed in two parts-a desktop review of the GIS data provided by the Park Board and in-person site visits. The GIS data provided the basis for the inventory and was cross-checked with the latest available Google earth imagery to identify discrepancies between the data and aerial imagery. Discrepancies were noted to be investigated during site visits. From the desktop review, a matrix breaking down the various categories for evaluation was developed for population with site visit data. A kmz file listing all bookable fields was produced to help locate the sports fields and display the GIS record of turf maintenance. Because not all sport fields are listed with the bookable fields data, any rectangular field or ball diamond that could be identified from aerial photography or during field work was also evaluated.

The site visits and evaluation for standards of care was determined by a team of two inspectors. The site review team began the process by visiting nine parks together, establishing a baseline understanding for the expectations for each class of sports field and amenity condition. Rectangular fields and diamonds were scrutinized together, and further refinements to the categories and strategies for measuring and documenting the site were standardized. The site visits were conducted from November 2021 to January 2022.

Facilities such as washrooms, changerooms, drinking fountains, parking space, ease of access to the site and natural areas or open space were noted as present or absent within the park. Condition of these amenities was not assessed. Any field turf and fencing were evaluated on a scale of very good, good, moderate, and poor. At the time of the inventory assessment, cricket wickets were not present. Therefore, not assessed. Rugby and football uprights where assessed and results were recorded under "Goal Posts".

For all sites, turf and amenities were photographed and documented. Fields were walked from one end to the other and visually assessed for turf quality, planarity (flatness of the play surface), weed infestation, and conditions of goal area and posts if present. These qualities were scored on a scale of very good, good, moderate, and poor. For ball diamonds, the condition of the fences were scored on a scale of very good, good, moderate, and poor. Heights of backstops were estimated to the closest 0.50 meter. The length of backstops, wing walls, and distances from home plate, pitchers' mound (if present), to second base or to edge of the skinned in field was completed by walking in a straight line with a measuring wheel. Amenities such as dugouts, scoreboards, and score keepers' box were noted as present or absent and evaluated on a scale of very good to poor. The site assessment template and detailed findings can be found under separate cover in the **Technical Appendices Document.** 

A series of review meeting with the Park Board staff from both Recreation Services and Park Services, were held to review site assessment findings and provide comments. This included adding additional information where there were gaps in data or inconsistency.



# KEY FINDINGS

## **RECTANGULAR FIELDS**

The assessment covered various aspects of rectangular fields, including turf quality, planarity (play surface flatness), drainage, and, for grass fields, weed infestation. Due to the differential wear around goal areas in field sports, a separate evaluation of goal area turf was conducted in addition to the overall turf assessment. Each field was compared to others within the same classification. The majority of fields assessed during the site evaluation met the expectations of the turf grade listed from the GIS Data (Class A, B, or C). Class A sport fields were predominately "very good" or "good". Class B sport fields were generally evaluated as "good" or "moderate". Most Class C sport fields were "moderate".

Most Synthetic Turf fields demonstrated high scores in turf quality, ranging from "Very Good" to "Good", with a "Very Good" level of planarity with minimal undulation on the play surface, and exhibited "Very Good" drainage.

#### **TURF QUALITY**



In contrast, Grass Turf fields exhibited a broader range of conditions. Most of these fields were characterized by "Good" planarity, drainage, and minimal weed infestation. However, a few grass turf fields displayed "Moderate" to "Poor" conditions in terms of turf quality, planarity, and drainage.

The goal posts for rectangular fields were subject to visual assessment. Most of the existing goal posts were found to be in "Very Good" or "Good" condition. Nonetheless, a small number of goal posts received ratings of "Moderate" to "Poor".

There was little spectator seating for all rectangular fields and mechanical fences were mostly in disrepair or broken with the exception of synthetic turf fields.



## **BALL DIAMONDS**

The ball diamonds have a wide range of site conditions. There is no clear Park Board standard for ball diamond types or age groups. For both baseball and softball diamonds, there was great variance of diamond size, backstop height, and quality of dugouts. The presence of scorekeeper boxes, dugouts (and associated amenities such as gates and benches), bases, home plate and pitching rubber was variable. Some diamonds have an unmet need for additional storage of equipment and infield materials. Backstop heights ranged from 3-m-10-m high. Most were evaluated as "good" or "moderate", with under 10% as "poor".

Encroachment of surrounding tree branches over play fields was a common hazard. In many cases, ball diamonds shared the outfield with soccer fields. Some permanent soccer goal posts are in direct conflict with the diamond outfield.

#### **FENCE CONDITION**





Example of ball diamond and goal post conflict at Oak Park

## PARK AMENITIES

Sport field amenities include washrooms and fieldhouses (that include public washrooms and any combination of change rooms, concession, staff support space, programming, project and event space, and living space for park caretakers), field lights, user group storage, water/drinking fountains, sport furniture (player benches/ bleachers), and sport fitments (goals, bases, backstops, batting cages, scorer's boxes, etc.).

Generally, washroom buildings and water fountains were found at most parks. Few parks had change rooms and, field lighting. Fencing in most fields was damaged and built to various standards. Site inspectors observed people bouncing medicine balls off the backstop and kicking footballs at the backstop.

The photo on the right is an example of fence conditions and damage at Johnathan Rogers Park. In the foreground, a newer tee ball fence has the bottom of the backstop upturned. This is evaluated as moderate because it is still functional and easily repaired.



Example of fence conditions at Johnathan Rogers Park

### USER GROUP MAINTENANCE & INSTALLED ELEMENTS

Sport user groups have assumed various field maintenance tasks. Some tasks such as field lining, raking ball diamonds, and adding infield's rock dust are approved and sanctioned by the Park Board. The Park Board staff have attempted to stop unsanctioned activities such as mowing grass with ride on mowers, installation/ removal of fences, adding sod and modifying irrigation systems. User groups have also installed various field amenities without Park Board approval such as lights, score boards, concession stands and storage structures. Unauthorized user group improvements and maintenance activities expose the city, users and community members to increased risk and liability and additional costs to the Park Board to perform upkeep and additional maintenance. Without a better monitoring and consequence program these rogue user actions will continue.

Some of the limited maintenance tasks that are currently allowed by user groups including:

- Line fields (soccer, rugby, football, softball, baseball)
- Pre-use inspections (check for broken glass, needles, fill in dog holes, tripping hazards with PB supplied correct materials)
- Mow infield with non-ride on equipment
- Install outfield fences for baseball
- Maintain grass at outfield fence line if they choose to install an outfield fence
- Rake rock dust, and red shale areas

# 5. BENCHMARKING

mann

### INCLUDED IN THIS SECTION:

- Service level benchmarking.
- Rates and fees benchmarking.

Baseball player batting

# SERVICE LEVEL BENCHMARKING

Benchmarking is important as it allows for comparison between municipalities of similar sizes and characteristics. Benchmarking across service levels allows for comparison of sport field inventory across jurisdictions to see how the City of Vancouver stands in its current level of service provision, and where improvements can be made.

The charts on the following pages reflect a summary comparison of sport field supply in Vancouver to other selected jurisdictions in the region and across North America. It is important to note that benchmarking, while a valuable insight, needs to be taken in the proper context with the following research and analysis limitations recognized:

- Compiling the sport field inventory from the other jurisdictions is a desktop exercise that primarily utilizes websites, previous municipal planning documents and the consultant's file database from previous projects.
- Different jurisdictions classify their sport field inventory differently and some deliver sport field infrastructure through a variety of partnerships. This comparison considers sport fields

that are formally considered part of the municipal delivery system (e.g., in some municipalities school and post-secondary fields are part of the municipal inventory while in others they are not).

- Every jurisdiction is unique with respect to climate, municipal adjacencies (e.g., proximity to suburbs), density and activity trends. These factors all influence supply.
- Benchmarking does not speak to the quality, access (to transit and walking/ biking distance), or community demand.

The analysis in the following charts reflects a provision ratio (the number of residents per unit of each field type). Generally, within public sector recreation and sport, provision ratios increase as jurisdictions grow in size. It is difficult and unrealistic to expect that municipalities would develop infrastructure in lockstep with population growth. Vancouver provides a slightly lower level of provision per capita of sport field infrastructure when compared to the average of regional comparators and a higher level of service when compared to the other major urban centres (who have an average population higher than Vancouver).

# SERVICE LEVEL COMPARISON OF REGIONAL COMPARATORS

		Synthetic Turf		Natur	al Surface	Ball Diamonds	
Regional	Population		Provision		Provision		Provision
Comparators	Population	Supply	Per 1,000	Supply	Per 1,000	Supply	Per 1,000
			Residents		Residents		Residents
City of Surrey	518,467	15	0.029	68	0.13	94	0.18
City of Burnaby	249,125	9	0.036	44	0.18	60	0.24
City of Richmond	209,693	10	0.048	53	0.25	92	0.44
City of Abbotsford	153,524	6	0.039	32	0.21	34	0.22
City of Coquitlam	148,625	7	0.047	36	0.24	35	0.24
City of Kelowna	144,576	1	0.007	29	0.20	28	0.19
Township of Langley	137,399	7	0.051	61	0.44	75	0.55
City of Nanaimo	99,863	3	0.030	29	0.29	40	0.40
City of Chilliwack	93,203	3	0.032	20	0.21	36	0.39
City of Victoria	91,867	1	0.011	14	0.15	23	0.25
City of Port Coquitlam	61,498	2	0.033	16	0.26	23	0.37
Average	173,440	6	0.033	37	0.39	49	0.30
VANCOUVER PARK BOARD	662,248	12	0.018	129	0.19	114	0.19

### SERVICE LEVEL COMPARISON OF MAJOR URBAN CENTRE COMPARATORS

The supply of natural fields in Edmonton includes 36 premier fields, indicating that approximately 3% of the supply is considered premium.

The supply of natural fields in Calgary includes 31 premier fields, indicating that approximately 4% of the supply is considered premium.

		Synthetic Turf		Natural Surface		Ball Diamonds	
Municipality	Population	Supply	Provision Per 1,000	Supply	Provision Per 1,000	Supply	Provision Per 1,000
			Residents		Residents		Residents
Calgary	1,306,784	7	0.005	709	0.54	32	0.02
Ottawa	1,017,449	8	0.008	384	0.38	257	0.25
Edmonton	1,010,899	8	0.008	1,111	1.10	799	0.79
Mississauga	828,854	4	0.005	217	0.26	113	0.14
Seattle	724,305	17	0.023	59	0.08	110	0.15
Denver	705,576	12	0.017	160	0.23	81	O.11
Brampton	663,922	4	0.006	129	0.19	81	0.12
Portland	645,291	6	0.009	68	O.11	82	0.13
Hamilton	579,200	1	0.002	148	0.26	193	0.33
Surrey	518,467	15	0.029	68	0.13	94	0.18
Average	800,075	8	0.011	305	0.33	184	0.22
VANCOUVER PARK BOARD	662,248	12	0.018	129	0.19	127	0.19

# RATES AND FEES BENCHMARKING

Research was also undertaken in order to better understand how sport field rates and fees in Vancouver compare to other regional and North American jurisdictions. As noted with the service level benchmarking, it is important to recognize that jurisdictions have different approaches for classifying their inventory which impacts the rates and fees comparison (e.g., the definition of a premium natural grass field in one jurisdiction may differ from another). In general, rates and fees in Vancouver are similar to the regional comparators and less than the other major urban centre comparators.

### REGIONAL RATES AND FEES COMPARISON: RECTANGULAR FIELDS

Municipality	Synthetic Turf		Premium Natural Grass		Non-Premium Natural Grass	
	Youth	Adult	Youth	Adult	Youth	Adult
City of Surrey	\$22.26	\$39.10	\$0.00	\$11.75	\$7.22	\$25.79
City of Burnaby	\$54.73	\$77.31	\$0.00	\$15.51	\$0.00	\$11.46
City of Richmond	\$24.75	\$41.75	\$11.50	\$24.50	\$8.75	\$18.50
City of Abbotsford	\$20.00	\$35.50	\$3.68	\$7.50	\$3.35	\$6.95
City of Coquitlam	\$0.00	\$41.00	\$0.00	\$9.50	\$0.00	\$9.50
City of Kelowna	\$16.56	\$33.12	\$9.66	\$19.33	\$4.15	\$8.30
Township of Langley	\$72.86	\$115.24	\$5.12	\$12.85	\$5.12	\$12.85
City of Nanaimo	\$15.00	\$34.00	\$4.50	\$19.50	\$2.25	\$8.75
City of Chilliwack	\$14.68	\$29.33	\$7.43	\$14.65	\$2.65	\$4.95
City of Victoria	\$34.11	\$51.18	\$6.31	\$12.63	\$4.37	\$8.74
City of Port Coquitlam	\$23.50	\$47.00	\$7.50	\$15.00	\$3.70	\$7.35
Average	\$27.13	\$49.50	\$5.06	\$14.79	\$3.78	\$11.19
VANCOUVER (PARK BOARD)	\$28.25	\$55.15	\$2.18	\$16.95	\$2.18	\$11.87
### MAJOR URBAN CENTRES RATES AND FEES COMPARISON: RECTANGULAR FIELDS

Municipality	Synthetic Turf		Premium Natural Grass		Non-Premium Natural Grass	
	Youth	Adult	Youth	Adult	Youth	Adult
Calgary	\$119.95	\$152.20	\$42.32	\$85.08	\$2.50	\$22.54
Ottawa	\$105.95	\$167.65	\$19.00	\$61.40	\$16.40	\$46.43
Edmonton	\$23.95	\$105.00	\$22.95	\$46.00	\$0.00	\$6.00
Mississauga	\$65.63	\$199.36			\$6.16	\$10.35
Seattle	\$16.00	\$81.00	\$10.50	\$60.00	\$10.50	\$60.00
Denver	\$40.50	\$69.00	\$5.88	\$31.00	\$5.88	\$31.00
Brampton	\$65.17	\$95.49	\$10.92	\$30.96	\$8.71	\$30.96
Portland	\$73.75	\$94.13	\$17.75	\$44.50	\$12.25	\$30.00
Hamilton	\$67.81	\$135.61	\$23.83	\$45.28	\$17.50	\$31.45
Surrey	\$22.26	\$39.10	\$0.00	\$11.75	\$7.22	\$25.79
Average	\$60.10	\$113.85	\$17.02	\$46.22	\$8.71	\$29.45
VANCOUVER (PARK BOARD)	\$28.25	\$55.15	\$2.18	\$16.95	\$2.18	\$11.87

\*All figures are in Canadian dollars.

The dark squares indicate that the information was not available or not applicable (e.g., do not classify the same way, etc.)

## REGIONAL RATES AND FEES COMPARISON: BALL DIAMONDS

Municipality	Premium Ba	all Diamond	Non-Premium Ball Diamond		
Municipanty	Youth	Adult	Youth	Adult	
City of Surrey			\$7.22	\$25.79	
City of Burnaby	\$103.19	\$103.19	\$0.00	\$6.73	
City of Richmond	\$7.75	\$16.50	\$3.25	\$5.25	
City of Abbotsford			\$3.35	\$6.95	
City of Coquitlam			\$0.00	\$5.50	
City of Kelowna			\$4.15	\$8.30	
Township of Langley	\$137.86	\$137.86	\$4.30	\$7.59	
City of Nanaimo	\$15.00	\$34.00	\$2.25	\$8.75	
City of Chilliwack			\$2.65	\$4.95	
City of Victoria	\$57.87	\$63.49	\$4.37	\$8.74	
City of Port Coquitlam	\$8.55	\$17.15	\$3.70	\$7.35	
Average	\$55.04	\$62.03	\$3.20	\$8.72	
VANCOUVER (PARK BOARD)			\$2.18	\$11.87	

The dark squares indicate that the information was not available or not applicable (e.g., do not classify the same way, etc.)

### MAJOR URBAN CENTRES RATES AND FEES COMPARISON: BALL DIAMONDS

Municipality	Premium Ba	all Diamond	Non-Premium Ball Diamond		
Muncipanty	Youth	Adult	Youth	Adult	
Calgary	\$54.42	\$108.74	\$2.56	\$23.10	
Ottawa	\$72.07	\$158.41	\$17.38	\$52.78	
Edmonton	\$10.68	\$27.97	\$0.00	\$5.40	
Missasauga			\$6.16	\$10.35	
Seattle	\$68.88	\$68.88	\$10.50	\$60.00	
Denver	\$25.00	\$40.00	\$5.88	\$31.00	
Brampton	\$10.92	\$30.96	\$8.71	\$0.00	
Portland	\$19.50	\$47.75	\$8.00	\$21.25	
Hamilton	\$23.81	\$45.28	\$11.28	\$22.41	
Surrey			\$7.22	\$25.79	
Average	\$46.21	\$80.80	\$7.08	\$30.44	
VANCOUVER (PARK BOARD)			\$2.18	\$11.87	

\*All figures are in Canadian dollars.

The dark squares indicate that the information was not available or not applicable (e.g., do not classify the same way, etc.)

# 6. TRENDS AND LEADING PRACTICES

#### INCLUDED IN THIS SECTION:

- Field sport participation trends.
- Social, physical and mental health trends..
- Service delivery trends and best practices.
- Allocation and permitting best practices.
- Infrastructure trends.

Rugby players tackling

## THE IMPORTANCE OF REVIEWING TRENDS AND LEADING PRACTICES

Reviewing broader regional, provincial, national, and even international sector trends and leading practices can help identify emerging activity preferences that may impact sport field demand, and highlight innovative approaches to key service delivery topics. The trends and leading practices review also provides a unique overview of how both emerging and longstanding needs are being met through the provision of sport field infrastructure and management practices. The trends and leading practices highlighted in this section are intended to help supplement the local research and engagement and further frame the broader strategy around sport field needs, gaps and opportunities. It is important to also note that the Park Board and its sport field partners are aware of and, in many cases, working on an ongoing basis towards aligning with these identified trends and leading practices.



## FIELD SPORT PARTICIPATION

The chart on the following pages identifies and summarizes available data that reflects participation trends for several sport field activities. The COVID-19 pandemic has had significant impacts on many sports activities and the organizations that deliver them. Therefore, these trends generally reflect the situation prior to the pandemic and may need further analysis in the coming years once pandemic impacts on participation are better understood. Although some short-term trends have been identified, the long-term impacts of the pandemic are still relatively unknown. Trends information provided in this section is a compilation of data collected from a variety of sources including provincial and national sport organizations (e.g., viaSport), third-party research, and national statistics databases. Please refer to the references section at the end of this document for a complete list of references.

The diagram below is a field sport trend chart which shows sports listed in order of popularity. The following demand indicators are used throughout this section to represent the direction of demand of each sport studied based on trends and leading practices.

Û	Activity participation is experiencing strong growth
	Activity participating is experiencing modest growth
$\Leftrightarrow$	Activity participation is stable
~ <del>~~</del> >	Activity participation is stagnant or declining
~~~~	More data is needed

#### DEMAND INDICATOR LEGEND

Field Sport Type	Demand Indicator	Supporting Research Insights		
		• Soccer is the largest participatory sport in Canada and is considered the fastest growing sport in the country.		
		<ul> <li>Soccer Canada membership in BC remained stable prior to the pandemic.</li> </ul>		
	Ŷ	<ul> <li>Soccer is one of the top team sports for New Canadian youth.</li> </ul>		
Soccer	U	<ul> <li>Soccer was the most popular community organization team sport for youth ages 10 to 12 in 2014.</li> </ul>		
		<ul> <li>Soccer has the highest reported membership of provincial field sport organizations in Vancouver.</li> </ul>		
		<ul> <li>Approximately 60% of participation in Vancouver is children aged six-17 years.</li> </ul>		
		• BC Rugby membership remained stable in the last few years leading up to the pandemic.		
0		<ul> <li>BC Rugby reported that school age membership grew in 2016 and continued the trend prior to the pandemic.</li> </ul>		
0	A⇒	<ul> <li>In 2019, BC School Sports introduced Rugby 7's as a demonstration sport.</li> </ul>		
Rugby		<ul> <li>BC Rugby's Vancouver membership has increased their percentage of female identifying players from 17% of their players in 2016 to 20% of their players in 2021.</li> </ul>		
		<ul> <li>Approximately two thirds of the provincial sport membership is made up of adults aged 18 or older.</li> </ul>		

Field Sport Type	Demand Indicator	Supporting Research Insights		
		• Field Hockey Canada estimates that 75% of athletes identified as female, while numbers provided by viaSport indicated a five-year average of 78% of athletes in Vancouver identify as female.		
		<ul> <li>Field Hockey Canada membership in BC had remained stable prior to the pandemic.</li> </ul>		
Field Hockey	$\Leftrightarrow$	• Field Hockey participation in Vancouver in the 2020-2021 season increased 26% from the 2019-2020 season.		
		<ul> <li>In Vancouver, children ages six to 12 were the largest player age group prior to the pandemic with 34% of the total membership. Adults 18+ (33%) and teens aged 13-17 (26%) were the next largest age groups.</li> </ul>		
		<ul> <li>According to Cricket Canada, there are approximately 130,000 players across Canada.</li> </ul>		
	0.0	<ul> <li>The British Columbian Mainland Cricket League was founded in 1917.</li> </ul>		
Cricket	2%	<ul> <li>Better data insights are needed to access cricket trends and growth considerations at a regional, provincial and national level.</li> </ul>		
		<ul> <li>As the new T20 genre grows in popularity, increased demand for cricket facilities is anticipated.</li> </ul>		

Field Sport Type	Demand Indicator	Supporting Research Insights		
		• Prior to the 2020 COVID-19 pandemic, membership in the BC Ultimate Society had increased by 7% from 2018 to 2019.		
		<ul> <li>Participation in Ultimate Frisbee in Vancouver has increased 31% since the beginning of the pandemic.</li> </ul>		
Ultimate	< <u>∽</u> >	<ul> <li>In B.C. the percentage of female identifying athletes has decreased over the last five years from 54% to 37% of participants.</li> </ul>		
Frisbee		<ul> <li>Most players in Vancouver that belong to the British Columbia Ultimate society are adults 18+. School aged participation has increased over the last five years and Ultimate is a recognized school sport.</li> </ul>		
		<ul> <li>Vancouver Ultimate League claims to be one of the largest independent ultimate leagues in the world.</li> </ul>		
		• The BC Provincial Football Association has indicated that there are 12 Minor Football Clubs in the Lower Mainland.		
(**)	0.0	<ul> <li>The percentage of athletes that identify as female in the BC Provincial Football Association in Vancouver increased.</li> </ul>		
Football	Football	• B.C. High School Football reported a 32% increase in players in Grades nine to 12 from 2019 to 2021.		
		<ul> <li>Professional leagues (NFL and CFL) have placed significant emphasis on developing flag football programs geared towards increasing participation in non-contact formats.</li> </ul>		

Field Sport Type	Demand Indicator	Supporting Research Insights		
		• Vancouver, BC Amateur Baseball membership in 2020-2021 is the highest it's been in the last five years.		
Baseball	$\overleftrightarrow$	• The percentage of female identifying athletes grew by approximately 2% from 2017 to 2021. In 2017–2018 that percentage peaked for the last five years while total participation was lower than the last five years.		
Baseban		<ul> <li>Prior to the pandemic participation was approximately 60% children aged six-12.</li> </ul>		
		<ul> <li>Softball BC estimates that approximately two-three percent of school aged children play softball.</li> </ul>		
		<ul> <li>Over the last five season an average of 73% of softball participants in Vancouver identify as female.</li> </ul>		
Softball		<ul> <li>The BC Amateur Softball Association reported its highest participation numbers in Vancouver since in 2017 in 2021. In both 2017 and 2021 the participation of adults aged 18-55 was over 40% of total participation, while in 2018, 2019, and 2020, participation of adults aged 18-55 was less than 30% of total participation in Vancouver.</li> </ul>		
		• An average of 60% of participation over the last five years in Vancouver was school aged.		

Field Sport Type	Demand Indicator	Supporting Research Insights	
		<ul> <li>Pacific Coast Field Lacrosse League reported that there was very little change in participation during the pandemic.</li> </ul>	
		<ul> <li>Vancouver Lacrosse plays in both Vancouver and Richmond.</li> </ul>	
Field Lacrosse	$\Leftrightarrow$	<ul> <li>The BC Lacrosse Association has reported that Vancouver participation averaged around 50% for school aged children for the last five years.</li> </ul>	
		<ul> <li>In Vancouver, the BC Lacrosse Association has reported a five-year average of 11% of participants that identify as female.</li> </ul>	

\*Note: Information is provided from viaSport unless otherwise noted and represents membership information provided from provincial sport organizations only and does not account for school sports or club leagues not affiliated with the provincial sport organizations. Additionally, it is important to recognize that sometimes reporting may not have been submitted by sport organizations and thus results in less accurate reporting.

### SMALL SIDED SPORTS

Small Sided Sports (SSS) are a growing trend within the Vancouver area, but also across the world. SSS refers to sports with adjusted formats that accommodate a reduced field of play. The rules are altered as the playing surface and number of players are reduced. Small sided sports are growing in popularity because more games can be played in a smaller space, the game play can be more intense as more control is needed and individuals may get more opportunities to interact in the play as less players are on the court/field at once.

Many children's and sports camps are incorporating small sided sports into their programming because it has been shown to help people learn fundamental skills quicker (Clemente, et al., 2021). Some elite players use small sided sports to mimic regulation sized game scenarios to further their skills but small sided sports leagues are also emerging. Small sided versions of soccer and basketball in particular are becoming more and more popular amongst both adults and youth.

### COVID-19 HAS CHANGED RECREATION AND LEISURE PURSUITS

COVID-19 has changed recreation participation and has highlighted the important role that parks, trails and recreation play in strengthening mental health. For instance, the Park People annual survey found that 94% of cities reported increased use of parks during COVID-19 while 66% of Canadians said they spent more time in parks compared to pre-pandemic. (Stark, Riddle, Garrett, & Longman, 2021). Post-pandemic, 82% of Canadians have reported an expected increase in their usage of parks. In addition to increasing volumes of use, the temporal patterns of recreation visitation have also shifted. Greater visitation is occurring during previously less busy times (e.g., mid-week, early morning, later evening). Increased visitation and new visitor patterns are expected to continue with the return of visitors from long-haul and international destinations. Overall increases in park use has an impact on sport field use as there is an increased desire for spontaneous use of sport fields are located within or next to park spaces.

### KNOWN IMPACTS OF COVID-19 ON SPORT ORGANIZATIONS

According to Canadian Tire Jumpstart Charities (2021) the following findings are some of the known impacts of COVID-19 on sport organizations:

- Three in 10 sport organizations were temporarily or permanently closed
- One third of sport organizations were close to bankruptcy
- 52% of sports organizations that did not close were worried about staying afloat after the COVID-19 pandemic
- Two thirds of parents of children aged four to 17 say that the COVID-19 pandemic has had a strong impact on their kids' participation in sports or recreational play. This sentiment is even stronger among those with kids four to 12.
- The impact could be on the types of activities that their child participates in, or the amount of activities that their child participates in. The study did not specify whether the impact meant an increase or decrease in participation.



### COVID ALERT: THE PANDEMIC IMPACT ON GIRLS IN SPORT REPORT

Canadian Women & Sport and E-Alliance (2021) published a report on the impact of COVID-19 on girls' participation in sport. The Pandemic Impact on Girls' in Sport report found that one in four girls were not committed to returning to sport post pandemic. This statistic is particularly troubling as the report cites research done previously that found that one in three girls drop out of sport by age 16 compared to only one in 10 boys. The report discussed the top five barriers to girls' participation in sport as:

- 1. Access to Facilities & Programs
- 2. Quality of Programs
- 3. Alternatives to Sport
- 4. Cost to Participation
- 5. Confidence

The Pandemic Impact on Girls' in Sport Report describes how each of these barriers has been exacerbated and provides actions to support girls return to sport for each of those identified barriers.

## **NEW CANADIANS AND SPORT**

Research has found that parks play a crucial role in supporting Canadian immigrants' health and well-being. This is because parks can promote social connections by encouraging socialization in non-work settings. Unfortunately, for new Canadians there are also common constraints that inhibit sport participation that include economic limitations (financial and time), socio-cultural barriers (language, communication, and race), and differences between sports in Canada compared to their native country. These constraints are important for municipalities to acknowledge so they can be addressed to better support Canadian immigrants (Gosai, Carmichael, Carea, & Rand, 2018).

The Sport for Life for All Newcomers to Canada (Gosai, Carmichael, Carea, & Rand, 2018) report outlines solutions, opportunities and promising practices for communities to address barriers for newcomers to Canada in sport and physical activity. Additionally, there are local initiatives in Vancouver that can help to address the barriers. The New Start 2016-2025, a settlement and integration strategy for immigrants and refugees in Vancouver (2016) learned that one of the top three areas of service needs for immigrants and refugees is health and well-being, with parks, gardens, and community/recreation centres valued



the most among civic facilities. The strategy outlines several goals for making Vancouver a healthy city for all. Relevant goals include "Active living and getting outside" and "Environment to thrive in", these goals aim to help remove barriers to participation in sport for newcomers. One example in Vancouver of a sport organization working with a non-profit organization is the partnership between the YMCA Newcomer Program and Vancouver Field Hawks field hockey. These two organizations bring immigrants and newcomers together for an evening every year to play field hockey and meet others (CBC News, 2019). This program aligns with the Sport for Life framework in that it aims to cultivate awareness of the opportunities that exist for sport and physical activity, and it aims to ensure that participants have a positive first experience with the sport.

Kabaddi is a sport that originated in South Asia and is gaining popularity in the Lower Mainland. There is a high school Kabaddi league in Surrey with teams from local high schools competing and pockets of kabaddi enthusiasts and user groups through the Lower Mainland. The sport is full contact and is played with four players on each side on a grass field (Lovegreen, 2017). In municipalities across Canada there is growing interest in developing dedicated fields and hub sites, however the sport can be played in a large open field. The new Ivor Dent Sports Park in south Edmonton is an example of a municipally supported site that includes dedicated kabaddi fields with a long-term plan to include other support amenities.



Photo Source: Surrey Now-Leader-Youth Kabaddi Word Cup 2019-courtesy of Neesh Communications

## **GAELIC FOOTBALL**

Gaelic football is an Irish field sport played with a round football that can be kicked, caught and hand passed. The goal of the game is to score points by putting the ball over the cross by foot or fist and under the cross bar and into the net by foot or hand/fist (Gaelic Athletic Association, n.d.). Ideally, the sport is played on a rectangular field, minimum 130 metres in length with a width of 80 metres (Central Council of the Gaelic Athletic Association, 2020).

The Vancouver Gaelic Athletic Association (Vancouver GAA) division is the newest division of the Gaelic Athletic Association within Canada. It has 9 affiliated clubs, 5 of which are specifically for Gaelic Football, while the others focus on Hurling and Camogie (other Gaelic Athletic Association games). The Vancouver Irish Sport and Social Club is Vancouver's longest running GAA, and was established in 1974 (ISSC Vancouver, n.d.).

## **EQUITY & INCLUSION**

There is an increasing cultural awareness as to the systemic nature of racism and the structural inequity that exists within society. In Canada, the work of the Truth and Reconciliation Commission was fundamental in highlighting and exposing historical and ongoing structural flaws within society that perpetuate racism and harm towards Indigenous populations. Global movements such as Black Lives Matter have resulted in a further level of awareness and discussion on issues of race, privilege, and inequity.

Like most other sectors, public sector entities that provide parks, recreation and culture services are in the midst of evaluating their own culpability in perpetuating historical inequities and generating solutions that can address these issues. Parks and recreation services are uniquely positioned to lead societal change by fostering inclusiveness and providing a platform to help blunt racism, prejudice, and inequities. Identified as follows are a handful of ongoing initiatives that are being undertaken by leading organizations in the recreation and sport sector.

- viaSport has identified inclusion as a key focus area and has developed a number of free or low-cost resources focused on fostering increased diversity and opportunity for women and girls, persons with disabilities, the 2SLGBTQ+ Community, marginalized youth, Indigenous people, individuals that are socio-economically disadvantaged, newcomers to Canada, individuals from rural/remote/isolated regions, and older adults (viaSport, n.d.).
- Sparc BC (The Social Planning and Research Council of B.C.) has published or co-developed a wealth of resources on inclusion and access. One of these documents. "Everybody's Welcome: A Social Inclusion Approach to Program Planning and Development for Recreation and Parks Services," was developed in conjunction with the British Columbia Recreation and Parks Association (BCRPA). It provided the sector with a formative resource that helped generate a greater understanding of what inclusion means and how to undertake actions that can foster it within public facilities and spaces (Sands, 2006).

- iSparc BC (Indigenous Sport, Physical Activity & Recreation Council) is aimed at creating elite athletes, healthy living for indigenous peoples, and provides grants to help do so. iSparc offers regionally specific plans focused on increasing youth participation and building leadership capacity in the areas of coaching and officiating. iSparc is the steward of the Aboriginal Sport, Recreation and Physical Activity Strategy and has begun to address TRC calls to actions 88 and 90 through funding, Indigenous games, team and skill development and education (ISPARC, n.d.).
- The Canadian Parks and Recreation Association (CPRA) "The Bench" website includes numerous resources on topics and issues related to equity, inclusion and accessibility. CPRA has also launched a grant program for Gender Equity in Recreational Sport among numerous other initiatives focused on levelling the playing field (TheBench, n.d.).

• The National Recreation and Parks Association (NRPA) in the United States has been a leader in fostering conversations on topics related to inclusion and inequality in parks and recreation. In 2018, NRPA published a Parks and Recreation Inclusion Report (2018) which outlined findings from a comprehensive review of inclusion practices across parks and recreation agencies (service providers) in the United States.

## SOCIAL, PHYSICAL AND MENTAL HEALTH

Sport and recreation have positive impacts on all aspects of health and well-being. The following trends relate to social, physical and mental health impacts of sport, recreation and leisure pursuits.

## PHYSICAL ACTIVITY AND HEALTH

The connection between the recreation and health sectors is clear and highly supported by data that reflects the linear relationship between activity and health outcomes. Regular physical activity is a well-known mitigation technique for preventing noncommunicable diseases such as heart disease, diabetes, and some types of cancer (World Health Organization, 2018). Additionally, a significant amount of the available research points to the importance and benefits of introducing physical activity at a young age. One study conducted by Sierra-Diaz, González-Víllora, Pastor-Vicedo, & López-Sánchez (2019) found that introducing physical activity and recreation early in life leads to better lifestyle habits and outcomes as individuals age. In Canada, the eight stage Long Term Development (LTD) model created by Sport for Life is based on research conducted by Canadian academics in collaboration with the sport and recreation

sector. The LTD model reflects the need to develop age-appropriate physical literacy skills at a young age that can (as demonstrated by research supported by the model) increase the probability of lifelong participation through the various stages of sport participation (Higgs, Balyi, Way, Cardinal, Norris, & Bluechardt, 2008).

The cost of inactivity to the Canadian health care system is well into the billions of dollars (Jansen, 2012) with available evidence noting particular concern about inactivity among children and youth cohorts (ParticipACTION Report Card on Physical Activity, 2022). Available research indicates that Canadians are aware of these issues and the critical role of public sector recreation services in fostering a physically, mentally, and socially strong society (Harper, 2009, as cited in A Framework for Recreation in Canada 2015: Pathways to Wellbeing).

## **MENTAL HEALTH IN SPORT**

While the physical health benefits of sports are well known, there is a growing recognition of the impacts of sport on mental health. Research has found that participation can have positive effects such as the ability to manage stress, reduce anxiety, improve mood, build mental awareness and foster the feeling of social connection (Biddle SJ, 2011). On the other hand, the competitive nature of sport can also negatively affect levels of stress, induce depression, anxiety, encourage over-exertion, and increase the prevalence of eating disorders (Dr Nick Peirce, 2018). It is therefore important for sport administrators and organizations to acknowledge and develop strategies to mitigate the potentially negative consequences of sport participation.

While there are many benefits of sport, it can be quite demanding for people, especially elite athletes and youth who may not have the coping skills to manage challenges. Many organizations in Vancouver, and across Canada have created mental health polices and guidelines to help people cope with the stresses that sport can bring to reap more of the benefits. These include counselling, buddy checkins, working with community organizations, communicating lessons learned from mental health professionals to members of the public, policies for coaches, and educational components.

## **SAFE SPORT & TRUE SPORT PRINCIPLES**

The Universal Code of Conduct to Prevent and Address Maltreatment in Sport (UCCMS) provides the foundation on which development of a coordinated implementation strategy to prevent and address maltreatment across all levels of the sport system (Canadian Centre for Ethics in Sport, n.d.).

"THE UCCMS DEFINES THE SEXUAL, PHYSICAL AND PSYCHOLOGICAL FORMS OF MALTREATMENT THAT ARE PROHIBITED IN SPORT AND OUTLINES APPROPRIATE SANCTIONS FOR INDIVIDUALS WHO VIOLATE THE UCCMS OR ENGAGE IN MALTREATMENT."

-The Canadian Centre for Ethics in Sport

In April 2022, the Government of Canada announced that the UCCMS must be adopted into the rules of all federally funded sport organizations (Canadian Centre for Ethics in Sport, n.d.). As the absence of maltreatment is not sufficient to create a positive, safe and inclusive environment, the seven True Sport Principles are designed to give people, communities and organizations the means to leverage the benefits of sport (True Sport, n.d.). True Sport is a series of programs and initiatives designed to give people, communities, and organizations the means by which to leverage the many benefits of sport from a platform of shared values and principles (True Sport, n.d.). The Guidelines for Communities action statements outline ways for communities to make a difference in the lives of all people by promoting good sport (True Sport, n.d.). The True Sport Principles:

- Go For It-Rise to the challengealways strive for excellence. Be persistent and discover how good you can be.
- 2. **Play Fair-**Understand, respect, and follow the rules. Play with integrity-competition is only meaningful when it is fair.
- 3. **Respect Others-**Show respect for everyone involved in creating your sporting experience, both on and off the field of play. Win with dignity and lose with grace.
- Keep It Fun-Find the joy in sport and share it with others. Remember what you love about sport and why you play.

- Stay Healthy-Always respect and care for your mind and body. Advocate for the health and safety of yourself and those around you.
- 6. **Include Everyone-**Recognize and celebrate strength in diversity. Invite and welcome others into sport.
- 7. **Give Back-**Say thanks and show gratitude. Encourage your sport group to make a difference in the community.



## SERVICE DELIVERY

There are many new trends enhancing the delivery of sports programming to the community including new frameworks for developing participants and their skills, coaching and volunteering needs, leveraging tourism, and governments using data driven decision-making.

# LONG TERM DEVELOPMENT IN SPORT AND PHYSICAL ACTIVITY

Sport for Life (S4L) is a nationally recognized non-profit organization aiming to create a future in which absolutely everyone has access to quality sport and physical literacy experiences. S4L recently updated their keystone resource guide, Long-Term Development In Sport and Physical Activity, (previously known as the Long Term Athlete Development guide), moving away from the use of the word "athlete" to be more inclusive of everyone across the spectrum of participation.

The Long-Term Development plan includes a physical activity framework, with a 7-stage process to improve physical literacy and provide multiple pathways for everyone to be participants. The first three stages are aimed at creating a sport for life foundation, enabling people to be physically literate thus improving their quality of life, but also set in motion a longer-term commitment to be physically active to be participants in sport and fitness for life. The next four stages are aimed at individuals who want to specialize in a sport or climb the ranks to become an elite athlete.



Long-Term Development in Sport and Physical Activity



The Plan enables a "system of alignment" of actions between governments, sport and physical activity organizations and coaches and leaders who work daily with athletes and participants. The implementation of this plan suggests that it is the responsibility of governments across Canada to create new policy in support of the Long-Term Development pathways and physical literacy.

# THE EVOLVING NATURE OF VOLUNTEERISM

Contrary to popular belief, overall volunteer participation rates are not rapidly declining-but the nature of volunteerism is changing. The "modern volunteer" is more selective of the organizations they commit their time to, desires clarity on roles and tenure/term for their involvement, and often prefers shorter duration commitments (e.g., event focused volunteerism) over ongoing and indefinite volunteer positions. Younger volunteers are also often motivated by the opportunity to gain new skills, make connections, and align themselves with organizations that are working to address key societal issues.

Even before the COVID-19 pandemic, changes in volunteerism were impacting the service delivery of public sector recreation, sport and culture facilities and programming. Volunteer fatigue has become an increasingly challenging issue for many organizations who have relied on volunteers to fulfill important roles, which has resulted in the need to pay individuals or alter program offerings. For example, prior to the pandemic the Alberta Soccer Association had created a Recruitment and Retention Plan for referees in order to address staffing shortfalls. More recently, a study conducted in the UK found that the COVID-19 pandemic has caused a shift in volunteer demographics where older generations are volunteering less, and younger people have been replacing them (Power & Nedvestskaya, 2022). This shift may be an early indication that the COVID-19 pandemic has further exacerbated the challenge to fulfill roles previously held by volunteers. Moving forward, volunteer demographics should be monitored to better understand the long-term impact of the COVID-19 pandemic on volunteerism as it remains to be known.

#### THE "PSYCHOLOGICAL CONTRACT" AND THE IMPACT ON RETAINING VOLUNTEER COACHES

A study conducted by Harman and Doherty (2017) explored the expectations and experiences of volunteer coaches and their respective organizations and found that:

- The "psychological contract" (in other words, unwritten expectations of what the volunteer coach and organization should realistically provide and commit to) guide the overall volunteer coaching experience and levels of satisfaction.
- Organizations can help retain coaches more effectively if they influence the "psychological contract" by providing clear information on expectations, available resources, and ensure ongoing dialogue.

## **PROFESSIONAL VS. VOLUNTEER COACHING**

Professional coaches are often brought into organizations to help with overall skill development, specialized development of skills for youth who are either older and/ or having a higher skill set in comparison. Professional coaches have previous coaching experience, licenses, specialty training, playing experience, and some even have degrees in sports coaching.

Having professional coaches may help with the overall draw to sports organizations, as they can advertise and increase the rationale for a family or individual to choose a particular organization over another. Professional coaches ensure a standard of skills in each player, helping youth in their development, further supporting their love of sport, and the increased confidence that comes with it. There is very limited data on professional vs volunteer coaches in Vancouver and the rest of Canada. In many cases, volunteer coaches are still required to attain micro-coaching credentials as many organizations have developed minimum qualifications for volunteer coaches.

However, many organizations tout the benefits of volunteer coaches, such as helping kids, creating a better community, being a positive role model, and providing personal fulfillment (Biquet, n.d.). It should be highlighted that many organizations would not be able to function if all coaches were paid professionals.



## LEVERAGING SPORT TOURISM

Both major and small-scale sport events can generate a variety of benefits for host communities when they are strategically leveraged. For instance, the 2010 Vancouver Olympic Games was leveraged to build critical sport infrastructure to increase the capacity for sport provision. Some of the legacy infrastructure has been used to host other events such as HSBC Canada Sevens. From an economic perspective, the value of sport tourism to British Columbia is estimated at approximately \$1.72 billion annually with an estimated annual visitor expenditure of \$1.10 billion in Vancouver alone (MacDonald, 2021).

Sport events, and the sport infrastructure built for an event, can also produce important social outcomes. For instance, after the Vancouver Olympics, an increase to physical activity was found at the regional level in areas directly surrounding the legacy infrastructure (Potwarka & Leatherdale, 2015). Research has also found that residents believe tourism, socio-cultural, psychological and environmental legacies were achieved (Karadakis & Kaplanidou, 2012), and that youth felt a greater sense of belonging and improved subjective wellbeing (Teare, Potwarka, Bakhsh, Barrick, & Kaczynski, 2021). These benefits point to the regional epicentre effect of sport events that can occur when an event is strategically leveraged.

#### ALIGNMENT WITH VANCOUVER SPORT FOR LIFE-VANCOUVER SPORT STRATEGY (VSS)(2008)

The VSS identified Recognition as a Premier Event Destination as one of its six strategic goals. The measurement of success behind this recommendation included:

- Develop and implement an Event Hosting Action Plan-City Council approved the Sport Hosting Vancouver Action Plan in 2015
- Resources and support to increase the capacity of sport organizations to host events.
- The development of specific targets including priority event to bid for and host going forward.

Event leveraging requires a strategic coordination of physical, human and knowledge resources to plan and achieve desired event outcomes. These include involving event organizers, local sport organizations, and non-sport organizations to help support initiatives, and that the physical resources are in built (or in development) to support any long-term growth. There are tighter social networks, pre-established relationships between stakeholders, and more flexibility in how the event is delivered (Taks, Chalip, & Green, 2015). Together, events themselves, leveraging initiatives, the capacity for sport within a community, the presence of local venues, and the brand of a particular geographical area can create a regional epicentre effect that produces a multitude of benefits for a host community (Potwarka & Wicker, 2020).

The displacement of community sport organizations during an event may be a cause for concern. To combat this for large-scale events, temporary facilities may be constructed to achieve event goals without displacing community sport organizations or building an oversupply of facilities (Davis, 2020). Another strategy is to involve the community sport organizations in the event itself as an event leveraging tactic. This can help connect the local community to the event, promote the sense of community and further develop knowledge and relationship capacity within the local sport system. Including community sport organizations should be a component of future event leveraging strategies.

In the future, hosting the 2026 World Cup of Soccer should present significant opportunities to create facility legacies, build relationships between community sport organizations and event organizers, and further Vancouver's position as a regional sport epicentre. On a more ongoing basis, ensuring that sufficient community facilities exist to host citywide, regional and provincial events and competitions can help continue to foster high levels of non-local spending and maintain Vancouver as a sport tourism destination.

## DATA DRIVEN DECISION MAKING

Parks and recreation departments are increasingly utilizing data to understand user behaviors, needs, preferences, and desires. According to an NRPA survey of parks and recreation professionals, more than 90% of respondents (in leadership roles) identified data collection and analysis as important or very important for activities such as master planning, capital investments, programming, and to support staff. However, the survey identified inconsistencies across the sector in how data is managed and collected. When asked about key data collection priorities and gaps, respondents identified facility usage data, program utilization data, demographic trends, crime data, and school enrolment as important data sources for decision-making.

Given the large volume of sport fields in a major urban centre, it is often challenging to accurately track actual utilization (vs what is "booked") and track spontaneous levels of use. Identifying creative solutions to these challenges can help ensure future investment and decision-making is better focused and directed at actual community need. Potential methods to better track field utilization include:

- Use of mobility data.
- Motion trackers (often called "trail counters").
- Putting in place a regular "spot check" protocol.
- Working with user groups to identify other solutions and opportunities to track actual utilization.

### VANPLAY ALIGNMENT

As part of the VanPlay Playbook Report implementation plan, the Groundwork chapter outlines the importance of evidence-based decisionmaking (G.2).

 G.2: Evidence-based decision-making should be supported by collecting and managing data and information.

The VanPlay Playbook Report also outlines the need to bolster understanding of recreation demand and capacity by mapping access, and identifying the function of those spaces and their proximity to residents (G.2.3)

Through this research report, the Park Board has attempted to confirm usage of permitted time on fields and diamonds. CARCH

#### CO-PARTICIPATION & SIMULTANEOUS "SIDELINE" PHYSICAL ACTIVITY

There have been several studies lately that look to identify program and facility design attributes within the community sport environments that facilitate or inhibit the well-being of parents via simultaneous participation. Research has shown that becoming a parent has been associated with decreased physical activity participation (Allender, Hutichinson, & Foster, 2008), and mothers more often, were less active than fathers (Rhodes & Bellows-Riecken, 2008).

The #MomsGotGame Campaign (2022) created by Canada's Sport Information Resource Centre (SIRC), supported by the Government of Canada, is a media campaign being piloted. This campaign aims to celebrate and support mothers of school-aged kids to play sport and be active. The campaign provides resources and support for mothers that want to participate in sport and physical activity but have limited access to organized sports, leagues and fitness facilities.

Co-participation programming and multi-use facilities or even facilities with additional sideline space aim to address the decrease in physical activity associated with becoming a parent.

Players running in a field

## ALLOCATION AND PERMITTING

## THE ALLOCATIONS AND PERMITTING CONTEXT

The majority of public sector providers of recreation and sport amenities have allocations approaches that stem from historical practices. Longstanding user groups that are "embedded" within the system typically received priority access to preferred times and spaces simply based on their tenure. While it is important to recognize the value that these groups have and continue to provide the community, many public sector providers are reimagining how they allocate their space. This shift in thinking is driven by a few key factors:

- A recognition that historical allocations practices perpetuate systemic inequity and sometimes favour privileged groups with resource capacity.
- Increased competition for available facility space-publicly funded providers of these spaces must determine which users of the space provide the highest level of public benefit.
- Diversifying activity preferences and the emergence of non-traditional sports and recreation activities.

### VANPLAY ALIGNMENT

The importance of providing equitable, low-barrier access to recreation facilities is embedded throughout VanPlay.

- Equity Bold Move: Identifies use of the Equity Initiative Zones to prioritize resources and service delivery, working inclusively to address inequities, and the need to identify and challenge colonial structures.
- Asset Needs Bold Move: Identifies as an action the need to expand access to recreation facilities to keep up with population growth and changing needs.

The VanPlay Playbook Report also specifically outlines as a short-term initiative the need to "support sport development and ensure fair and equitable use among field users" as part of a new Field Allocation Policy.

## SPORT FOR LIFE ALLOCATION PRACTICES

Sport for Life (S4L) has also developed a series of best practices and recommended principles for the allocation of facility time to user groups.

- Allocation practices are based on "standards of play" principles in terms of the time and space required by each group.
- Allocation policies are transparent and reviewed with the groups. Allocation is not done by tradition, but rather on actual requirements of all groups, including the needs of emerging sports.

- Seasonal allocation meetings are held with common users' groups to review their requests and try to achieve consensus on sharing available spaces and times.
- As seasons progress, groups are encouraged to be flexible in the reallocation of spaces with other groups when no longer needed, either temporarily or for longer periods.
- User fees and subsidies need to reflect community taxpayer support, and the rationale should be shared with sport organizations.

## JURISDICTIONAL COMPARISON OF ALLOCATIONS AND PERMITTING APPROACHES

Jurisdictional caparisons help to determine how the city of Vancouver's approach to permitting and allocation compares with similar municipalities. Comparisons were made with Vaughan, St. Catherines, Abbotsford, Seatle and Denver because...

The City of Calgary's Sport Field Strategy (2016) included a significant focus on allocations and recommended use of Sport for Life in order to better align "the right groups, with the right fields, at the right times" and reduce field overbooking (p.9). The strategy also highlighted the need to have a single booking contact to maximize efficiency and customer service (the City's sport fields are provided by two separate departments).

Recent allocations policy and strategy development undertaken by Vaughan, St. Catherines and Abbotsford have similarly looked to ensure a focus on equity and transparency across the bookings and allocations process. While each of these three municipalities operate in a different community context (which is reflected in the documents they've developed), they all include:

- Allocations based on clear philosophical foundations (e.g., principles)
- An increased focus on equity and access while respecting the value of tenured user groups
- A clear and transparent process to adjudicate competing requests for space (with decisions made based on the activities that provide the greatest community benefit)
- A process for engaging with user groups on allocations



City of Calgary Sport Field Strategy



City of Vaughan Fair Play Facility Allocation Policy





It is important to note that not all public sector providers of sport fields are shifting away from or de-emphasizing historical tenure as a driver of sport field priority. The City of Seattle and City of Denver are examples of major American municipalities that indicate that existing user groups will receive priority access to fields they have previously permitted.



Banner Graphic for the City of St. Catherines Draft Recreation Facility Allocation Policy



City of Denver Field Court Permit Handbook (page 12)

"Current State" Research Findings Report

### THE CITY OF TORONTO'S "MAKING PERMITTING BETTER" REVIEW FINDINGS

The City of Toronto undertook a "Making Permitting Better" review of its permitting processes and procedures which included extensive community engagement with over 2,000 permit holders (2016).

Four key themes were identified during these consultations:

- Simplify the Process
- Deliver Consistent Information
- Offer More Online Capabilities
- Provide a Single Point of Contact

Football players celebrating

## CREATING INCREASED STRUCTURE AND RATIONALE IN SETTING USER FEES

Increasingly, many municipalities and other public sector providers of recreation services are looking to shift user fees to a more structured, rationalized approach based on aligning cost recovery (subsidy levels) with public benefits achieved. This type of model achieves two key outcomes:

- Creates direct alignment between the costs to deliver services and user fees (therefore helping to account for inflation and support more effective budgeting); and
- Puts in place a clear philosophical approach to setting user fees.

The graphic below reflects how the City of Abbotsford uses the benefits continuum and the subsequent table shows how the City of Courtney structures their fees based on that continuum.



The Benefits Continuum

City of Abbotsford Parks, Recreation and Culture Fees and Charges Bylaw Update (2021)

	Community Minor/Senior	Community Adult	Private	Commercial
Subsidy	75%	50%	25%	0%
Cost Recovery	25%	50%	75%	100% or cost recovery plus*

City of Courtney Recreation Fees and Charges Framework (2022)
## INFRASTRUCTURE

This section is intended to highlight trends in different types of space use from types of surfaces to different amenities associated with the use of sport fields.

## **MULTI-FIELD SITES**

While local neighbourhood and community provision of fields may be important to sustain, a continuing trend in the development of athletic fields is to develop these spaces together as multifield "hubs". This practice has a number of advantages which include operational efficiencies, increased tournament hosting capacity, and the ability to co-locate amenities (washrooms, change facilities, concessions, parks) that can be shared between users of multiple fields. When developing multi-field sites, a number of design factors are important to consider such as:

- Ensuring that fields are spaced and oriented in such a manner that activity conflicts are minimized is (e.g., baseballs/ softballs being hit into an adjacent rectangular field or seating area).
- Adequate parking for tournaments and high use/peak hours if public transit is not accessible.
- Ensuring, if possible, that the site is developed to accommodate future growth and/or repurposing if warranted.



## INTEGRATING INDOOR AND OUTDOOR RECREATION INFRASTRUCTURE

To maintain the capacity to play field sports through the winter months, some municipalities have built inflatable domes to cover outdoor fields. For example, Calgary has recently installed a dome over the Encana artificial turf field at Shouldice Athletic Park. These types of solutions will be important as the desire for indoor fields is increasing especially in wet and cold climates.



Shouldice Seasonal Dome

## **INCREASING DEMAND FOR SYNTHETIC TURF**

A significant trend impacting the provision of athletic fields is the growing user preference and demand for synthetic turf fields. Historically, this field type was often reserved for elite levels of sport with no or limited use by introductory and recreational levels of sport. However, in many urban centres a broader array of user groups are increasingly looking to access synthetic turf fields in order to expand their season of use, limit rain-outs and field condition related cancellations, and enhance overall participant experience. Advancements in synthetic turf technologies and reduced maintenance needs have also fuelled this trend. While in optimal circumstances many user groups may still have a preference for premium quality natural surfaces, advances in synthetic grass types of synthetic turf have narrowed the gap between how synthetic and natural surfaces feel to players. While increasing levels of demand for synthetic turf exist, the cost of providing synthetic turf surfaces remain significant and often results in user fees that are higher than many community user groups can afford. This dynamic has led to many communities initiating conversations on equity and accessibility as it relates to synthetic turf. For more information please review the Vancouver Sport Field Strategy's Environment and Human Health Report.

### COMMUNITY GREENSPACE AS A LOCATION FOR SPONTANEOUS RECREATION AND "PICK-UP" SPORTS

While structured sport programs and user groups are often the primary consideration when planning for future of athletic field spaces, the growing demand for passive or "spontaneous" recreation and leisure opportunities has forced many service providers to rethink the programming and design of sports fields. While designated athletic fields are attractive for spontaneous and "pick-up" activities, there are challenges to this. Users are often unaware if a field is booked by an organized user group. To ensure spontaneous opportunities exist for residents, many municipalities are actively encouraging the use of greenspace for casual and "pick-up" sports. In addition to supporting physical and social activity, encouraging these activities in public greenspaces (e.g., grass areas in parks that are not used as organized sports fields) can result in a number of broader benefits which include:

- Increased utilization of parks and open spaces.
- Reduction in deviant behaviour through increased resident value and regular use Vancouver Sport Field Strategy.
- Increased opportunities for multigenerational recreation, sport, and physical activity.

A number of municipalities have had success encouraging this practice in the following ways:

- Communicate and promote (through traditional and social media platforms) that parks and open spaces are available for "pick-up" sport.
- Install practice washroom facilities.
- Regular grass cutting and basic maintenance.
- Install signage in park spaces which promotes spontaneous recreational and spontaneous sport.

### INCREASING USER EXPECTATIONS AND THE DEMAND FOR CONVENIENT AMENITIES

In general, expectations for recreation and sport facilities continue to increase. Active participants and spectators alike have higher expectations for the experience provided at facilities that they use and/ or visit than in decades past. This trend is largely fueled by the significant investment made in recreation and sport infrastructure by municipalities of all sizes throughout Canada and beyond. Increasing the quality and provision of amenities has raised expectations across the board. Convenience and comfort amenities expected by many users at recreation facilities (including multi-sport field sites) now include WiFi, comfortable spectator seating areas, washroom facilities, change areas and child play areas. Investment in athletic field infrastructure in many municipalities has become driven by the demand for sites that can accommodate special events and tournaments.

## PROVIDING INFRASTRUCTURE FOR EMERGING SPORTS

Municipalities in Canada have traditionally provided rectangular athletic fields designed for soccer and football as well as ball diamonds designed for baseball and softball. Sport organizations such as ultimate frisbee and cricket are increasingly looking for dedicated field sites for their specific sports and as was mentioned earlier in the participation trends, small sided sports are becoming increasingly popular. Municipalities must be open to listening and responding to the needs of sports that residents bring forward and plan for scalability based on projected demand.



### MEETING SPORT FIELD NEEDS IN DENSIFIED URBAN SETTINGS

Vancouver has a challenging and unique land context with scarce supply, high land values, and continued densification. Available sport field sites in the city must additionally meet emerging demands for both spontaneous (casual) and structured (programmed). The concept of creating (or often retrofitting) spaces in urban environments into plaza or mini-pitch style sport fields is an emerging trend, especially in more densified areas. While these spaces can serve program based used, they are typically focused on meeting emerging needs for spontaneous "pick-up" games.

Another strategy to address the continued densification and scarcity of land is through the redevelopment of brownfields (contaminated sites) into sport facilities, parks and green space. Research has found that sport, recreation and cultural sites are the most popular option among residents for redeveloping brownfield sites (Martinat, et al., 2018). When possible, these spaces are best designed when they are large and multifunctional to promote social relations, entertainment and incorporate green space (Taraszkiewicz & Nyka, 2017). Although the redevelopment of brownfields can be costly, residents are often supportive as these spaces can transform the local community and have a positive impact on property values (Crompton & Nicholls, 2020). Examples in Canada include MLSE LaunchPad and the Toronto Pan Am Sports Centre which was built on a former garbage dump. Depending on the size of redevelopment, these sites can support both programmed and casual sport and recreation.



Mini-pitch soccer field located in San Francisco at The Crossing at East Cut

## CHANGE ROOM ADVANCEMENTS

There is growing movement towards increased gender neutral and universal changeroom and washrooms. This trend has been to promote equity, diversity, and inclusion for people of all genders. Newly constructed facilities are starting to incorporate more changing stalls, accessible stalls for all abilities, increased openness in shared spaces and changerooms so there is passive observation to ensure safety, and appropriate heights of doors and amenities to ensure no peeking and accessible reach (HCMA Architecture + Design, 2018).

In addition to enhanced design strategies, organizations are creating change room policies to protect youth. These include but are not limited to: restricting cell phone usage; implementing change maximums in presence of other genders; developing ratios for coaches in the same room as children; limiting parent access to change rooms unless needed; ensuring there are other change rooms for other genders; restricting male coaches in female changerooms to only pre-game discussions; and stricter hazing and bullying guidelines.

## WARM-UP SPACES

Many sport facilities currently do not have spaces to warm-up/practice prior to playing but are starting to incorporate spaces into their facilities or creating bookable spots for teams and others to warm-up before games. Warm-up spaces are especially important when a site is hoping to host a tournament and expects many teams or participants to be awaiting their time on the field (Maguire & Novak, 2012). Designated warm-up spaces can also help to mitigate user group conflicts, where possible indoor spaces may be appropriate as warm-up spaces for groups awaiting their turn on the field.

# APPENDICES

Cricket player batting

## APPENDIX A: SPORT FIELD DIMENSION STANDARDS

#### SPORT FIELD DIMENSION STANDARDS

SPORT	PLAYING FIELD AREA (NO SAFETY ZONE)	PLAY SUFACE AREA (INCL. SAFTEY ZONE)*	GOVERNING BODY
CRICKET (OVAL FIELD)	MIN. 118.86m x 128.00m (Men)	124.34m x 132.94m (MEN)	ICC
	WICKET TO WICKET 20.12m, WIDTH OF PITCH 3.05m		
FIELD HOCKEY	55.00m X 91.40m	61.00m X 101.40m	FIH WORLD CUP 22/23
FOOTBALL	65 YDS (59.436m) X 150 YDS (137.16m)	71.562 YDS (65.436m) X 160.932 YDS (147.156m)	CFL
FOOTBALL	53.33 YDS (48.768m) X 120 YDS (109.728m)	59.895 YDS (54.768m) X 130.936 YDS (119.728m)	NFL
GAELIC FOOTBALL	MAX 90m x 145m	95m x 145m	GAA
KABADDI	13m X 10m		World Kabaddi Federation
LACROSSE (UNIFIED)	60m X 110m	66m X 120m	FIL
LACROSSE (WOMEN'S FIELD LAYOUT)	60m X 110m	64m X 114m	BCLA
LACROSSE (MEN'S FIELD LAYOUT)	54.86m x 100.58m	60.34m X 106.06m	CBCLA

SPORT	PLAYING FIELD AREA (NO SAFETY ZONE)	PLAY SUFACE AREA (INCL. SAFTEY ZONE)*	GOVERNING BODY
RUGBY	MAX. 70m X 144m	80m X 154m	WORLD RUGBY 2022
SOCCER	64m X 100m	70m X 110m	FIFIA, BC SOCCER
ULTIMATE	37m X 100m	46.144m X 109.144m	USA ULTIMATE 22/23

\* Safety zones area areas around the field that are free from any ummovable objects that might present a risk to players (e.g., trees, posts, etc.).

#### **BALL DIAMOND DIMENSION STANDARDS**

SPORT	PLAYING FIELD AREA	GOVERNING BODY
SOFTBALL		
FEMALE-U9, U7	PITCH-30' (9.144m), BASES 45' (13.72m), FENCE C.F. MIN. 150' (45.72m) MAX. 210' (64.00m)	CANADA SOFTBALL
FEMALE-U11	PITCH-35' (10.67m), BASES 45' (13.72m), FENCE C.F. MIN. 150' (45.72m) MAX. 210' (64.00m)	CANADA SOFTBALL
FEMALE-U13	PITCH-38' (11.58m), BASES 55' (16.76m), FENCE C.F. MIN. 160' (48.77m) MAX. 210' (64.00m)	CANADA SOFTBALL
FEMALE-U15	PITCH-40' (12.19m), BASES 60' (18.288m), FENCE C.F. MIN. 170' (51.82m) MAX. 210' (64.00m)	CANADA SOFTBALL
FEMALE-U17 A & B	PITCH-43' (13.12m), BASES 60' (18.288m), FENCE C.F. MIN. 180' (54.86m) MAX. 210' (64.00m)	CANADA SOFTBALL
FEMALE-U17 C	PITCH-40' (12.19m), BASES 60' (18.288m), FENCE C.F. MIN. 180' (54.86m) MAX. 210' (64.00m)	CANADA SOFTBALL

SPORT	PLAYING FIELD AREA	GOVERNING BODY
FEMALE-U19 A & B	PITCH-43' (13.12m), BASES 60' (18.288m), FENCE C.F. MIN. 200' (60.96m) MAX. 210' (64.00m)	CANADA SOFTBALL
FEMALE-U20 C	PITCH-40' (12.19m), BASES 60' (18.288m), FENCE C.F. MIN. 200' (60.96m) MAX. 210' (64.00m)	CANADA SOFTBALL
FEMALE-A, B & C	PITCH-43' (13.12m), BASES 60' (18.288m), FENCE C.F. MIN. 220' (67.06m) MAX. 235' (71.63m)	CANADA SOFTBALL
FEMALE-D	PITCH-40' (12.19m), BASES 60' (18.288m), FENCE C.F. MIN. 200' (60.96) MAX. 210' (64.00m)	CANADA SOFTBALL
FEMALE- MASTERS	PITCH-43' (13.12m), BASES 60' (18.288m), FENCE C.F. MIN. 210' (64.00m) MAX. 225' (68.58m)	CANADA SOFTBALL
MEN-U9, U7	PITCH-30' (9.144m), BASES 45' (13.72m), FENCE C.F. MIN. 160' (48.77m) MAX. 225' (68.58m)	CANADA SOFTBALL
MEN-U11	PITCH-35' (10.67m), BASES 45' (13.72m), FENCE C.F. MIN. 160' (48.77m) MAX. 225' (68.58m)	CANADA SOFTBALL
MEN-U13	PITCH-38' (11.58m), BASES 55' (16.764m), FENCE C.F. MIN. 170' (51.82) MAX. 225' (68.58m)	CANADA SOFTBALL
MEN-U15	PITCH-42' (12.80m), BASES 60' (18.288m), FENCE C.F. MIN. 210' (64.00m) MAX. 250' (76.2m)	CANADA SOFTBALL
MALE- MASTERS, U23,U20,U17	PITCH-46' (14.02m), BASES 60' (18.288m), FENCE C.F. MIN. 225' (68.58m) MAX. 265' (80.77m)	CANADA SOFTBALL
SLOW PITCH		
(CO ED)	PITCH-50' (15.24m), BASES 65' (19.81m), FENCE C.F. MIN. 275' (83.82m) MAX. 325' (99.06m)	CANADA SOFTBALL

SPORT	PLAYING FIELD AREA	GOVERNING BODY
BASEBALL		
U19	PITCH - 60.5' (18.44m), BASES 90' (27.43m), FENCE C.F. MIN. 320' (64.00m) MAX. 400' (76.2m)	BASEBALL CANADA
U15	PITCH - 54' (16.45m), BASES 80' (24.38m), FENCE C.F. MIN. 280' (85.34m) MAX. 300' (91.44m)	BASEBALL CANADA
U13	PITCH - 48' (14.63m), BASES 70' (21.34m), FENCE C.F. MIN. 225' (68.58m) MAX. 260' (79.5m)	BASEBALL CANADA
U10 & U11	PITCH - 46' (14.02m), BASES 60' (18.288m), FOUL LINES. MIN. 180' (54.86m) MAX. 200' (60.96m)	BASEBALL CANADA
U9	PITCH - 46' (14.02m), BASES 60' (18.288m), FOUL LINES. MIN. 150' (45.72m) MAX. 200' (60.96m)	BASEBALL CANADA
U9	PITCH - 42' (12.80m), BASES 60' (18.288m), FOUL LINES. MIN. 150' (45.72m) MAX. 200' (60.96m)	BASEBALL CANADA
U7	PITCH - 36' (10.97m), BASES 50' (15.24m), FOUL LINES. MIN. 150' (45.72m) MAX. 200' (60.96m)	BASEBALL CANADA

SPORT	PLAYING FIELD AREA	GOVERNING BODY
TEE BALL (LEAGUE AGE 4-7)	PITCH - 46' (14.02m), BASES 50' (15.24m) OR 60' (18.29m), FENCE C.F. & FOUL LINES MIN. 200' (60.96m)	LITTLE LEAGUE BASEBALL**
MINOR LEAGUE (LEAGUE AGE 7-12)	PITCH - 46' (14.02m), BASES 60' (18.29m), FENCE C.F. & FOUL LINES MIN. 200' (60.96m)	LITTLE LEAGUE BASEBALL**
MAJOR DIVISION (LEAGUE AGE 9-12)	PITCH - 46' (14.02m), BASES 60' (18.29m), FENCE C.F. & FOUL LINES MIN. 200' (60.96m)	LITTLE LEAGUE BASEBALL**
INTERMEDIATE (50/70) (LEAGUE AGE 11-13)	PITCH - 50' (15.24m), BASES 70' (21.34m), FENCE C.F. & FOUL LINES MIN. 200' (60.96m)	LITTLE LEAGUE BASEBALL**
JUNIOR LEAGUE (LEAGUE AGE 12-14)	PITCH - 54' (16.46m) OR 60.5' (18.44m), BASES 90' (27.43m), FENCE C.F. & FOUL LINES MIN. 300' (91.44m)	LITTLE LEAGUE BASEBALL**
SENIOR LEAGUE (LEAGUE AGE 13-16)	PITCH - 60.5' (18.44m), BASES 90' (27.43m), FENCE C.F. & FOUL LINES MIN. 300' (91.44m)	LITTLE LEAGUE BASEBALL**

\*Includes the area outside of the play surface area that is there to allow for players to slow down

\*\*Note: Little League Baseball® age charts which count the birth year starting in September

## LITTLE LEAGUE STANDARDS:

**GOVERNANCE:** Trout Lake Little League, and the other 6 local Little Leagues based in Vancouver, are ultimately governed by the non-profit organization Little League Baseball, based in South Williamsport in the US. Little League Baseball has an international branch (including Little League Canada) and regional branches (including Little League B.C.), both of which Trout Lake LL fall under. These bodies may partner with Baseball B.C. and Baseball Canada for events and advocacy, but are not governed by them.

**DIMENSIONS:** Little League Baseball recommends a minimum outfield dimension of 200ft at all points. Baseball Canada recommends a minimum of 200ft along the right and left foul lines, and a minimum of 225 ft in centre field as per the chart above. **INTERMEDIATE:** Little League Baseball introduced a new division in 2010 called Intermediate (50/70), which uses a 50ft pitching distance and a 70ft base path, while keeping outfield dimensions the same. The division is for players age 11-13 looking for a transition between the shorter base/pitching distances of traditional Little League (46/60) and the longer base/pitching distances of Junior/ Senior Baseball (60'6/90). 13 year old players in Vancouver who have aged out of the Minor Division but are looking to continue playing ball are directed to South Vancouver Little League, which hosts an Intermediate league based at Memorial South Park.

AGE: Vancouver Little Leagues use the Little League age chart to determine what division participants should play in. "Baseball Age" is a child's age as of August 31 that year. As an example, the Major division at Trout Lake LL, is for ages 11-12. This means that for 2024, Baseball Age 12 was anyone born from Jan-Aug 2012 or from Sept-Dec 2011. This is a different system than Baseball Canada's age chart, which use January 1 for "Baseball Age".

## **APPENDIX B:** NEIGHBOURHOOD FIELD MAPS





#### DOWNTOWN

#### Legend

- A Class A Field
- B Class B Field
- C Class C Field
- Synthetic Turf Field

Juaine

- G All Weather Field
- **Baseball Diamond** O Softball Diamond D **Overlapping Fields** Equity Initiative Zones Population Growth Areas
- 3 Study Area Neighbourhoods of Focus Neighbourhood Parks and Open Space



#### **DUNBAR-SOUTHLANDS**

- A Class A Field
- B Class B Field
- C Class C Field
- Synthetic Turf Field
- G All Weather Field
- Baseball Diamond
   Softball Diamond
   Overlapping Fields
   Equity Initiative Zones
- Population Growth Areas
- Study Area
   Neighbourhoods of Focus
   Neighbourhood
   Parks and Open Space



#### FAIRVIEW

- A Class A Field
- B Class B Field
- Class C Field
- Synthetic Turf Field
- G All Weather Field
- Baseball Diamond
   Softball Diamond
   Overlapping Fields
   Equity Initiative Zones
   Population Growth Areas
- Study Area
   Neighbourhoods of Focus
   Neighbourhood
   Parks and Open Space



#### **GRANDVIEW-WOODLAND**

- A Class A Field
- B Class B Field
- Class C Field
- Synthetic Turf Field
- G All Weather Field
- Baseball Diamond
   Softball Diamond
   Overlapping Fields
   Equity Initiative Zones
   Population Growth Areas
- Study Area
   Neighbourhoods of Focus
   Neighbourhood
   Parks and Open Space



#### **HASTINGS-SUNRISE**



Equity Initiative Zones

Population Growth Areas

#### **KENSINGTON-CEDAR COTTAGE**

Parks and Open Space

Synthetic Turf Field

G All Weather Field



#### **KERRISDALE**

#### Legend

- A Class A Field
- B Class B Field
- Class C Field
- Synthetic Turf Field
- G All Weather Field

Baseball Diamond
 Softball Diamond
 Overlapping Fields
 Equity Initiative Zones
 Population Growth Areas

Study Area
 Neighbourhoods of Focus
 Neighbourhood
 Parks and Open Space



#### **KILLARNEY**

- A Class A Field
- B Class B Field
- C Class C Field
- Synthetic Turf Field
- G All Weather Field
- **Baseball Diamond** O Softball Diamond O **Overlapping Fields** Equity Initiative Zones Population Growth Areas
- 0 Study Area Neighbourhoods of Focus . 3 Neighbourhood Parks and Open Space

C



#### **KITSILANO**



MARPOLE

- A Class A Field
- B Class B Field
- Class C Field
- Synthetic Turf Field
- G All Weather Field
- Baseball Diamond
   Softball Diamond
   Overlapping Fields
   Equity Initiative Zones
   Population Growth Areas
- Study Area
  Neighbourhoods of Focus
  Neighbourhood
  Parks and Open Space



#### **MOUNT PLEASANT**



Population Growth Areas

#### OAKRIDGE

230

G All Weather Field



#### **RENFREW-COLLINGWOOD**

- B Class B Field
- Class C Field С
- Synthetic Turf Field Π
- All Weather Field G

Softball Diamond ര **Overlapping Fields** Equity Initiative Zones Population Growth Areas

Neighbourhoods of Focus Neighbourhood Parks and Open Space



#### **RILEY PARK**

- B Class B Field
- C Class C Field
- Synthetic Turf Field
- G All Weather Field
- Baseball Diamond
   Softball Diamond
   Overlapping Fields
   Equity Initiative Zones
   Population Growth Areas
- Study Area
   Neighbourhoods of Focus
   Neighbourhood
   Parks and Open Space



#### **SHAUGHNESSY**

- B Class B Field
- C Class C Field
- Synthetic Turf Field
- G All Weather Field

**Baseball Diamond** Softball Diamond D **Overlapping Fields** Equity Initiative Zones Population Growth Areas

Study Area Neighbourhoods of Focus . 3 Ĉ Neighbourhood Parks and Open Space



#### SOUTH CAMBIE

- A Class A Field
- B Class B Field
- Class C Field
- Synthetic Turf Field
- G All Weather Field
- Baseball Diamond
   Softball Diamond
   Overlapping Fields
   Equity Initiative Zones
   Population Growth Areas
- Study Area
   Neighbourhoods of Focus
   Neighbourhood
   Parks and Open Space



#### **STANLEY PARK**

#### Legend

- A Class A Field
- B Class B Field
- Class C Field
- Synthetic Turf Field
- G All Weather Field

Baseball Diamond
 Softball Diamond
 Overlapping Fields
 Equity Initiative Zones
 Population Growth Areas

Study Area
Neighbourhoods of Focus
Neighbourhood
Parks and Open Space

#### **STRATHCONA**



- C Class C Field
- Synthetic Turf Field
- G All Weather Field
- Baseball Diamond
   Softball Diamond
   Overlapping Fields
   Equity Initiative Zones
   Population Growth Areas
- Study Area
   Neighbourhoods of Focus
   Neighbourhood
   Parks and Open Space



**SUNSET** 

- B Class B Field
- C Class C Field
- Synthetic Turf Field G All Weather Field
- Softball Diamond D **Overlapping Fields** Equity Initiative Zones Population Growth Areas
- Neighbourhoods of Focus IJ 5 Neighbourhood Parks and Open Space



#### **VICTORIA-FRASERVIEW**

- A Class A Field
- B Class B Field
- Class C Field
- Synthetic Turf Field
- G All Weather Field
- Baseball Diamond
   Softball Diamond
   Overlapping Fields
   Equity Initiative Zones
   Population Growth Areas
- Study Area
   Neighbourhoods of Focus
   Neighbourhood
   Parks and Open Space



**WEST END** 

- A Class A Field
- B Class B Field
- Class C Field
- Synthetic Turf Field
- G All Weather Field
- Baseball Diamond
   Softball Diamond
   Overlapping Fields
   Equity Initiative Zones
   Population Growth Areas
- Study Area
   Neighbourhoods of Focus
   Neighbourhood
   Parks and Open Space



Population Growth Areas

#### WEST POINT GREY

G All Weather Field

## REFERENCES

Adri Stark, E. R. (2021). The Canadian City Parks Report: Centring Equity & Resilience. Park People.

- Alanna Harman, A. D. (2017). Psychological contract fulfillment for volunteer youth sport coaches. International Journal of Sport Management and Marketing, 17(1/2), 94-120.
- Allender, S., Hutichinson, L., & Foster, C. (2008). Life-change events and participation in. Health Promotion International, 23(2), 160-172. doi:https://doi.org/10.1093/heapro/dan012
- BC Rugby. (2020, May 21). BC Rugby Annual Report 2019-20. Retrieved from BC Rugby: https://bcrugby.com/wp-content/ uploads/2021/05/2019-20-BC-Rugby-Annual-Report.pdf
- BC School Sports. (2019, April 27). 2019 BCSS AGM Notices of Motion. Retrieved from https://www.bcschoolsports.ca/sites/default/files/files/news/pdf/2019%20AGM%20Results.pdf
- Biddle SJ, A. M. (2011). Physical activity and mental health in children and adolescents: a review of reviews. British Journal of Sports Medicine, 886-95.
- Biquet, M. (n.d.). Volunteering as a Coach is good. Doing harm to the coaching profession is bad. Retrieved from The Good Coach: https:// the-goodcoach.com/tgcblog/2020/1/17/volunteering-as-a-coach-is-good-doing-harm-to-the-coaching-profession-is-bad-by-mariabiquet
- British Columbia Mainland Cricket League: (n.d.). Retrieved from British Columbia Mainland Cricket League: https://www.bcmcl.ca/BCMCL/ viewClub.do?clubId=10126

Canada Soccer. (2020, August 7). About. Retrieved from Canada Soccer: https://canadasoccer.com/about-landing-page/

Canada Soccer. (2020, August 7). Abouy. Retrieved from Canada Soccer: https://canadasoccer.com/about-landing-page/

Canadian Centre for Ethics in Sport. (n.d.). Safe Sport . Retrieved from Canadian Centre for Ethics in Sport: https://cces.ca/safe-sport

Canadian Tire Jumpstart Charities. (2021). Jumpstart State of Sport Report.

Canadian Women & Sport. (2021). Canadian Women & Sport and E-Alliance, COVID Alert. Canadian Women & Sport and E-Alliance.

CBC News. (2019, June 25). Vancouver Hawks field hockey club welcomes refugees and immigrants for 125th anniversary | CBC News. CBC News. Vancouver, B.C., Canada. Retrieved from https://www.cbc.ca/news/canada/british-columbia/vancouver-hawks-field-hockey-club-welcomes-refugees-and-immigrants-for-125th-anniversary-1.5188988

City of Calgary. (2016). The City of Calgary Sport Field Strategy. City of Calgary. Retrieved from https://www.calgary.ca/content/dam/ www/csps/parks/documents/planning-and-operations/sportsfieldstrategy-oct2016.pdf

City of Toronto. (2016, July). Making Permitting Better. Retrieved from Toronto.ca: https://www.toronto.ca/services-payments/venues-facilities-bookings/booking-park-recreation-facilities/making-permitting-better/

City of Vancouver. (2016). new start 2016-2025, A Settlement and Integration Strategy for Vanouver .

- Clemente FM, R.-C. R. (2021). Effects of Small-Sided Game Interventions on the Technical Execution and Tactical Behaviors of Young and Youth Team Sports Players: A Systematic Review and Meta-Analysis. Front. Psychol., 07 May 2021. Retrieved from https://www.frontiersin.org/articles/10.3389/fpsyg.2021.667041/full
- Clemente, F., Ramirez-Campillo, R., Sarmento, H. P., Afonso, J., Silva, A., Rosemann, T., & Knechtle, B. (2021). Effects of Small-Sided Game Interventions on the Technical Execution and Tactical Behaviors of Young and Youth Team Sports Players: A Systematic Review and Meta-Analysis. Front. Psychol., 07 May 2021. Retrieved from https://www.frontiersin.org/articles/10.3389/fpsyg.2021.667041/full
- Colin Higgs, P. R. (2019). Long-Term Development In Sport and Phyiscal Activity 3/0. Sport for Life Society. Retrieved from https:// sportforlife.ca/wp-content/uploads/2019/06/Long-Term-Development-in-Sport-and-Physical-Activity-3.0.pdf
- Crompton, J. L., & Nicholls, S. (2020). Impact on property values of distance to parks and open spaces: An update of U.S. studies in the new millennium. Journal of Leisure Research, Volume 51.
- Davis, J. (2020). Avoiding white elephants? The planning and design of London's 2012 Olympic and Paralympic venues, 2002–2018. Planning Perspectives, 35:5, 827-848. doi:10.1080/02665433.2019.1633948
- Dr Nick Peirce, D. C. (2018, May). The Role of Physical Activity and Sport in Mental Health. Retrieved from Faculty of Sport and Exercise Medicine UK: https://www.fsem.ac.uk/position\_statement/the-role-of-physical-activity-and-sport-in-mental-health/
- Georgia Teare, L. R. (2021). Hosting the 2010 Vancouver Olympic Games and well-being among Canadian youth. European Sport Management Quarterly, 21:5, 636-657. doi: https://doi.org/10.1080/16184742.2021.1942124
- Gosai, K., Carmichael, J., Carea, A., & Rand, E. (2018). Sport for Life for All Newcomers to Canada, Creating Inclusion of Newcomers in Sport and Physical Activity. Sport for Life for Society. Retrieved from https://sportforlife.ca/wp-content/uploads/2018/01/Sport-for-Life-forall-Newcomers-to-Canada\_2018.pdf
- Gray, C. &.-P. (2014). Results from Canada's 2014 Report Card on Physical Activity for Children and Youth. Journal of Physical Activity and Health 11 (s1), S26-S32.
- Harman, A., & Doherty, A. (2017). Psychological contract fulfillment for volunteer youth sport coaches. International Journal of Sport Management and Marketing, 17(1/2), 94-120.
- HCMA Architecture +Design. (2018). Desiging for Inclusivity, Strategies for Universal Washrooms and Change Rooms in Community Recreation Facilities. HCMA Architecture + Design.

- Higgs, C., Way, R., Harber, V., Jurbala, P., & Balyi, I. (2019). Long-Term Development In Sport and Phyiscal Activity 3/0. Sport for Life Society. Retrieved from https://sportforlife.ca/wp-content/uploads/2019/06/Long-Term-Development-in-Sport-and-Physical-Activity-3.0.pdf
- ISPARC. (n.d.). About Us. Retrieved from ISPARC Indigenous Sport, Physical Activity & Recreation Council : https://isparc.ca/about-us/background/
- Kaplainidou, K. &. (2012). Legacy perceptions among host and non-host Olympic Games residents: A longitudinal Study of the 2010 Vancouver Olympic Games. European Sport Management Quarterly, Volume 12, 2012-Issu, 234-264. doi:A longitudinal study of the 2010 Vancouver Olympic Games. https://doi.org/10.1080/16184742.2012.680067
- Karadakis, K., & Kaplanidou, K. (2012). Legacy perceptions among host and non-host Olympic Games residents: A longitudinal Study of the 2010 Vancouver Olympic Games. European Sport Management Quarterly, Volume 12, 2012-Issu, 234-264. doi:https://doi.org/10.1080/16 184742.2012.680067
- Kashyap Gosai, J. C. (2018). Sport for Life for All Newcomers to Canada, Creating Inclusion of Newcomers in Sport and Physical Activity . Sport for Life for Society . Retrieved from https://sportforlife.ca/wp-content/uploads/2018/01/Sport-for-Life-for-all-Newcomers-to-Canada\_2018.pdf
- Leger, T. R. (2014). Youth and Performance-Enhancing Substances Survey.
- Lovegreen, T. (2017, June 7). CBC News. Retrieved from Surrey high school Kabaddi league brings generations together: https://www.cbc. ca/news/canada/british-columbia/kabaddi-surrey-high-school-brings-generations-1.4148940
- MacDonald, G. (2021, September 27). Value of Sport tourism in 2019 tops \$7 Billion. Retrieved from SIRC: https://sirc.ca/news/value-of-sport-tourism-in-2019-tops-7-billion/
- Maguire, P., & Novak, M. J. (2012, December 31). The Rise of the Multi-Purpose Field: All the Sports, All the Time. Retrieved from Sports Destination Management, Essential Planning & Location Strategies for Sport and Event Organizers: https://www.sportsdestinations.com/sports/sports-facilities/rise-multi-purpose-field-all-sports-all-time-5766
- Martinat, S., Navratil, J., Hollander, J. B., Trojan, J., Klapka , P., Klusacek, P., & Kalok, D. (2018). Re-reuse of regenerated brownfields: Lessons from an Eastern European post-industrial city. Journal of Cleaner Production, Volume 188, 536-545.
- Nation Recreation and Parks Association. (2018). Parks and Recreation Inclusion Report . Nation Recreation and Parks Association. Retrieved from https://www.nrpa.org/contentassets/e386270247644310b06960be9e9986a9/park-recreation-inclusion-report.pdf
- Nedvetskaya, P. G. (2022). An Empirical Exploration of Volunteer Management Theory and Practice: Considerations for Sport Events in a "Post-COVID-19" World. Frontiers in Sports and Active Living. Retrieved from https://www.frontiersin.org/articles/10.3389/ fspor.2022.689209/full
- Patrick Maguire, M. J. (2012, December 31). The Rise of the Multi-Purpose Field: All the Sports, All the Time. Retrieved from Sports Destination Management, Essential Planning & Location Strategies for Sport and Event Organizers: https://www.sportsdestinations.com/ sports/sports-facilities/rise-multi-purpose-field-all-sports-all-time-5766

- Potwarka , L. R., & Leatherdale. (2015). The Vancouver 2010 Olympics and leisure-time physical activity rates among youth in Canada: any evidence of a trickle-down effect? Leisure Studies, Volume 35, 2016, 241-257. doi:https://doi.org/10.1080/02614367.2015.1040826
- Potwarka, & Wicker. (2020). Conditions under which trickle-down effects occur: A realist synthesis approach. doi:https://doi.org/10.3390/ su13010069
- Power, G., & Nedvestskaya, O. (2022). An Empirical Exploration of Volunteer Management Theory and Practice: Considerations for Sport Events in a "Post-COVID-19" World. Frontiers in Sports and Active Living. Retrieved from https://www.frontiersin.org/articles/10.3389/ fspor.2022.689209/full
- Rhodes, R. E., & Bellows-Riecken, K. H. (2008). A birth of inactivity? A review of physical activity and parenthood. Preventative Medicine, Volume 46, Issue 2, 99-110.
- Sands, J. (2006). Everybody's Welcome, A Social Inclusion Approach to Program Planning and Development for Recreation and Parks Services. Vancouver: Social Planning and Research Council of BC and BC Recreation and Parks Association. Retrieved from https://www. sparc.bc.ca/wp-content/uploads/2020/11/booklet-everybodys-welcome.pdf

SIRC. (2022). The #MomsGotGame Campaign: What the Research Says About Mom's Participation in Physicla Activity and Sport. SIRC.

Solutions Research Group. (2017, November 1). Newcomers to Canada . Solutions Research Group Consultants Inc. Retrieved from Solutions Research Group Consultants Inc.: https://www.srgnet.com/2017/11/01/landmark-study-profiles-impact-of-newcomers-to-canada/

Stark, A., Riddle, E., Garrett, J. T., & Longman, N. (2021). The Canadian City Parks Report: Centring Equity & Resilience. Park People.

Taks, Chalip, & Green. (2015). Impacts and strategic outcomes from non-mega sport events for local communities. European Sport Management Quarterly, 15:1, 1-6. doi:10.1080/16184742.2014.995116

Taraszkiewicz , K., & Nyka, L. (2017). Role of Sports Facilities in the Process of Revitalization of Brownfields. IOP Conference Series: Materials Science and Engineering, Volume 245. doi:10.1088/1757-899X/245/4/042063

Teare, G., Potwarka, L. R., Bakhsh, J. T., Barrick, S. J., & Kaczynski, A. T. (2021). Hosting the 2010 Vancouver Olympic Games and well-being among Canadian youth. European Sport Management Quarterly, 21:5, 636-657. doi: https://doi.org/10.1080/16184742.2021.1942124

TheBench. (n.d.). Welcome to the Bench. Retrieved from The Bench: https://thebenchcpra.ca/index.html

TheBench. (n.d.). Welcome to the Bench. Retrieved from The Bench: https://thebenchcpra.ca/index.html

Tina Lovgreen. (2017, June 7). CBC News. Retrieved from Surrey high school Kabaddi league brings generations together: https://www.cbc. ca/news/canada/british-columbia/kabaddi-surrey-high-school-brings-generations-1.4148940

True Sport. (n.d.). True Sport Guidlines for Communities. Retrieved from True Sport: https://truesportpur.ca/true-sport-guidelinescommunities True Sport. (n.d.). True Sport Principles. Retrieved from True Sport: https://truesportpur.ca/true-sport-principles

viaSport. (n.d.). Inclusion. Retrieved from viasport.ca: https://www.viasport.ca/inclusion

- Sierra-Díaz, M. J., González-Víllora, S., Pastor-Vicedo, J. C., & López-Sánchez, G. F. (2019). Can We Motivate Students to Practice Physical Activities and Sports Through Models-Based Practice? A Systematic Review and Meta-Analysis of Psychosocial Factors Related to Physical Education. Frontiers in Psychology, 10. https://doi.org/10.3389/fpsyg.2019.02115
- Higgs, Balyi, Way, Cardinal, Norris, & Bluechardt. (2008). Developing Physical Literacy: A Guide for Parents of Children Ages 0 to 12. Retrieved from: https://sportforlife.ca/portfolio-view/developing-physical-literacy-a-guide-for-parents-of-children-ages-0-to-12/
- Janssen I. (2012). Health care costs of physical inactivity in Canadian adults. Applied Physiology, Nutrition, and Metabolism. Aug;37(4): 803-6. doi: 10.1139/h2012-061. Epub 2012 Jun 6. PMID: 22667697.
- World Health Organization (2018). Global action plan on physical activity 2018–2030: more active people for a healthier world. Geneva. Licence: CC BY-NC-SA 3.0 IGO.



