2019 JOINT ATHLETIC FACILITIES DEVELOPMENT PROGRAM UPDATE

A Program of Seattle Parks and Recreation and Seattle Public Schools
12/13/2019



Table of Contents

Executive Summary: 2019 JAFDP Update	Page
Purpose of the 2019 JAFDP Update	3
Background	3
Demographics	4
Facility/Field Usage	6
Sports Participation Trends	13
Athletic Facility/Field Development 2002-2018	16
Athletic Facility Design Considerations	17
Goals and Guiding Principles	19
Community Engagement	23
Conclusions	23
Recommendations	24
Appendix 1. 2002 JAFDP Project List Update	26

List of Tables

	Table	Page		
1	JAFDP Project List Summary	16		
2	Projects Underway, Funded and Planned	22		

List of Figures

Figure	Page
Seattle Population 2006-2017	4
Seattle Population Change by Age Group 2000-2016	5
Public-Private School Enrollment 2002-2017	5
Total Scheduled Hours 1992-2017	6
Scheduled Field Hours by Use 2006-2017	7
Total Scheduled Hours & Lighted Field Hours	7
Sports Less than 7,000 Scheduled Annual Hours	8
Sports Greater than 9,000 Scheduled Annual Hours	8
Sports Less than 8,000 Annual Scheduled Game Hours	9
Sports More than 20,000 Annual Scheduled Game Hours	9
Total Scheduled Fields & Locations 2002-2017	10
Field Surface Area by Owner 2002-2017	10
JAFDP Grass Athletic Fields	11
JAFDP Synthetic Athletic Fields	12
Team Sports Participation Age 6+ 2006-2016	13
Sports/Uses <1,000 Scheduled Annual Hours 2017	14
Sports/Uses <10,000 Scheduled Annual Hours 2017	14
Sports/Uses >10,000 Scheduled Annual Hours 2017	15
Number Public-Private High School Sports Teams 2016-2017	15
	Seattle Population 2006-2017 Seattle Population Change by Age Group 2000-2016 Public-Private School Enrollment 2002-2017 Total Scheduled Hours 1992-2017 Scheduled Field Hours by Use 2006-2017 Total Scheduled Hours & Lighted Field Hours Sports Less than 7,000 Scheduled Annual Hours Sports Greater than 9,000 Scheduled Annual Hours Sports Less than 8,000 Annual Scheduled Game Hours Sports More than 20,000 Annual Scheduled Game Hours Total Scheduled Fields & Locations 2002-2017 Field Surface Area by Owner 2002-2017 JAFDP Grass Athletic Fields JAFDP Synthetic Athletic Fields Team Sports Participation Age 6+ 2006-2016 Sports/Uses <1,000 Scheduled Annual Hours 2017 Sports/Uses >10,000 Scheduled Annual Hours 2017

Appendix1 2002 JAFDP Project List Update 26

Executive Summary: 2019 Joint Athletic Facility Development Program (JAFDP) Update

The Joint Athletic Facility Development Program Update identifies and prioritizes athletic facility improvements on Seattle Parks and Recreation (SPR) and Seattle Public Schools (SPS) properties. For decades SPR and SPS have been partners in providing athletic fields and facilities for youth and adults. As inactivity rates have increased in the United States among youth and adults it has become more important to provide facilities where people can play a range of sports or hold recreation events such as fun runs. Through the ongoing support of elected officials and Seattle residents, SPR and SPS have successfully improved the city's inventory of athletic fields over the past 21 years.

The focus in the past two decades has been on increasing field playing capacity by converting grass fields to synthetic field surfaces. From 2000 to 2017, SPR funding total \$51.4 million and SPS total \$85.5 million for a total of \$136.9 million for converted fields and new fields. Synthetic turf has a lifespan of approximately 10 years. In the period 2002-2018, SPR has replaced four synthetic turf fields at an estimated cost of \$4.6 million. SPS have replaced original synthetic field surfaces at 8 locations at an estimated cost of \$9.7 million. SPS also spent \$4.6 million on ballfield lighting. For the period 2019-2023, SPR plans to replace synthetic turf surfacing on 17 fields at an estimated cost of \$14.9 million.

Other field projects and related facilities have also been completed since the 2002 JAFDP. The 2002 JAFDP listed 60 projects (36 SPR, 23 SPS, 1 North Seattle College) based on funding and priorities to increase field capacity. As of 2018, 48 projects or 80% were under design/construction, partially or totally completed (32 SPR, 15 SPS, one joint project), leaving 12 projects not completed (3 SPR, 9 SPS, one joint 1 NSC). Projects that are under design or construction include: Bitter Lake Playfield (lights), Brighton Playfield, Soundview Playfield (synthetic turf and lights), Robert Eagle Staff Middle School (lights).

In 2018 and 2019, SPS completed seven field and lighting projects: Ballard High School (new lighting), Cleveland High School (new synthetic turf field, track, and lighting), Denny International Middle School and Chief Sealth High School (turf replacement and track resurfacing), Eckstein Middle School (turf replacement and track resurfacing), Garfield High School (turf replacement and track resurfacing), Robert Eagle Staff Middle School (new lighting), and Roosevelt High School (new lighting).

Prior to the development of the 2002 JAFDP, SPR completed a Ballfield Lighting Study in 2001. This provided an assessment of existing field lighting and made recommendations for improvements. Of the 25 projects/sites identified for lighting improvements in the lighting study 23 were completed. In addition, lighting was replaced/completed or is under design/construction at the following parks: Ballard, Bitter Lake, Cleveland, Genesee, Jefferson, and Magnuson.

The use of athletic facilities by SPR and SPS is governed by a Joint Use Agreement (JUA) which is renewed every five years. The current JUA covers a one-year period (2019-2020) and will need to be renewed in 2020.

A review of field permits issued by SPR over the period 2006 to 2017 shows that the hours of field use have steadily increased. In 2006, approximately 143,000 hours were scheduled, and in 2017 more than 171,600 hours were scheduled. The number of adult hours has remained relatively constant at approximately 24,200 hours per year. The amount of youth hours averaged 129,000 hours per year, more than five times the amount of adult use. The amount of lighted field hours has increased to 93,250 hours in 2017 from 13,440 in 2006. In 2006, this equaled 9.3 percent of total scheduled hours while in 2017 this equates to 54.3 percent of total scheduled hours, or an increase of seven-fold. Baseball and soccer are the

largest uses of fields, with each using more than 40,000 scheduled hours per year. Continuous growth has occurred in rugby, lacrosse, ultimate frisbee, and softball.

The 2019 JAFDP Update will be used by SPR and SPS in planning and prioritizing athletic field and facility improvements.

2019 Joint Athletic Facility Development Program (JAFDP) Update

Purpose

The 2019 Joint Athletic Facilities Development Program Update (JAFDP) incorporates demographics and trends in sports participation, documents scheduled field, lighting inventories and usage, goals and policies that guide athletic facilities' development, and provides a list of future potential athletic facilities projects. This Update will inform and provide guidance on priorities for future Seattle Parks and Recreation (SPR) and Seattle Public Schools (SPS) projects to improve and maintain athletic facilities, and to ensure equitable access throughout the city.

Background

SPR and SPS continue to coordinate on needs for athletic facilities and opportunities to develop new or improved facilities throughout the City. The two agencies work together on planning for projects such as field conversions, lighting, and new fields with funding from the City budget, Seattle Park District, and the SPS Building Excellence (BEX) and Buildings, Technology and Academics/Athletics (BTA) Levies.

The use of athletic facilities by SPR and SPS is governed by a Joint Use Agreement (JUA) which is typically renewed every five years. The School/Park Joint Use Agreement was renewed in 2016 for a three-year period and extended through 2020. Under the JUA each agency makes its buildings and grounds available for use by the other agency on a priority basis after the scheduling requirements for its own programs have been met. Each user will maintain its joint use spaces and equipment and will cooperate in expediting repair of damage. The current JUA covers the period 2019-2020. The goals of the JUA are:

- A. Effectively and efficiently manage use of District and Parks facilities and grounds for the benefit of Seattle's youth and residents;
- B. Encourage joint use of their respective facilities and grounds and give priority usage, after the owning agency's programming and/or on-going community obligations are met, to the requests submitted by the other agency;
- C. Provide facilities and grounds usable for District and Parks programs;
- D. Establish procedures to encourage cooperative working relationships between District and Parks personnel at all levels and to quickly resolve issues;
- E. Encourage joint and cooperative ventures, including facility maintenance and development;
- F. Equitably distribute the time and cost of the use of facilities and grounds; and
- G. Regularly report the outcomes of joint use to District and City personnel, elected officials and Seattle residents.

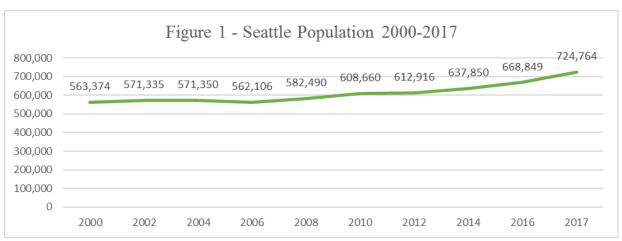
In addition to the SPR and SPS partnership, other athletic facility partnerships have been undertaken by SPR since 2002. One of the first partnerships dates to 1997 when the Interbay Soccer Stadium was renovated. This was a partnership between SPR and Seattle Pacific University resulting in a \$3.3 million project funded by private donations to the University. SPR also had an opportunity to reuse the turf from Husky Stadium. In 2013, a unique partnership was formed between the Seattle Preparatory School (a.k.a. Seattle Prep), the University of Washington, Ohno Construction Company, and SPR for converting the grass turf field at Montlake Playfield.

Demographics

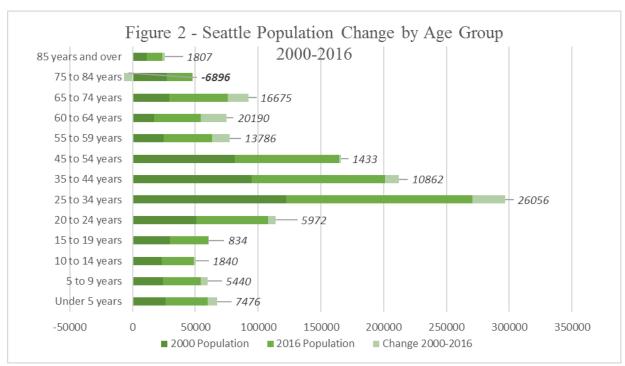
Since 2006, the city has experienced a period of significant growth. More people, and households with higher incomes are changing the composition of the city and its neighborhoods. Population projections show that the city and King County will continue to grow. In the recently completed comprehensive plan, Seattle 2035, it is projected that the city population will increase by 120,000 by 2035. This plan was completed in 2016 and by 2018 the population had grown by 50,000. Based on projections for King County, the city will likely become more diverse and most of this growth will come from new immigrants.

Figure 1 shows that between 2002 to 2017 the total population grew by 161,390 persons or 28.6 percent. In 2002 the total city population was 563,374, with 52,370 youth ages under 5 to 19 years old, comprising 9.3 percent of the population. In 2017, the total city population was 724,764 with 66,206 youth ages under 5 to 19 years old, comprising 9.1 percent of the population. While the city's population has grown significantly the percent of youth stayed static. The highest amount of growth by age group were: 25 to 34 years (26,000) followed by 60 to 64 years (20,200), and then 65 to 74 years (16,700). The population split between males and females was almost equal near 50 percent.

Figure 2 shows that age groups (0-24) younger than 25-34 are much smaller. In 2002, this group comprised 148,340 individuals with ages ranging from 10-19. As shown in statistics from The Outdoor Foundation, this age group also corresponds to the highest rate of youth sports participation. As the current younger groups age, the number of potential sports participants will be much less. In 2018, the 5 to 9 and 10 to 14 age groups comprise 55,160 individuals, an approximately 63 percent drop from the same age group in 2002.

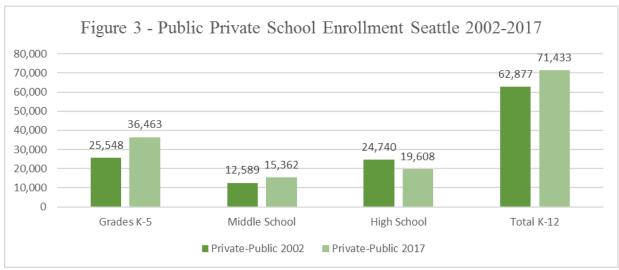


Sources: US Census, American Community Survey 2006-2016; Washington State Department of Financial Management 2017



Sources: US Census - American Community Survey 2006-2016, Seattle Parks and Recreation

SPR gathered enrollment data from the Washington State Office of the Superintendent of Public Instruction for the years 2002 and 2017. Figure 3 shows that total school enrollment has increased to 71,433 students for the 2016-17 school year, while in 2002 there were 62,877 students. This is an increase of 8,556 students or 13.6 percent over the time period. Looking at the data in Figure 3, it shows that high school enrollment has decreased, middle school enrollment has increased slightly, and K-5 enrollment has grown significantly.



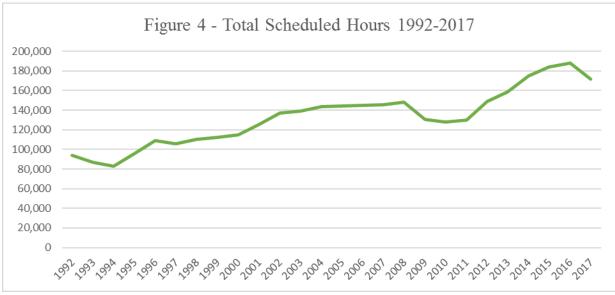
Source: Enrollment Reports 2001-02, 2016-17, Washington State Office of the Superintendent of Public Instruction

Facility/Field Usage

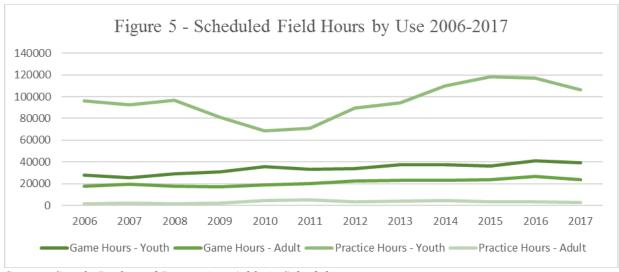
SPR reviewed field scheduling data from the early 2000s through 2017. Figure 4 illustrates how scheduled field use has steadily increased since the early 1990s. Figure 5 illustrates historical field use by youth and adults, and practice or game hours. As shown in the previous figure the total amount of hours has continuously increased, except for the period 2009 to 2011. This reflects the conversion and construction of several athletic fields in the SPR system. At this time, the cause is not known for a decrease in youth practice hours since 2016.

The number of adult use hours both practice and game hours has remained constant between 2006 to 2017. The number of youth use hours has historically been higher than adult hours. However, the visible difference is the number of youth practice hours where it has averaged approximately 60 percent of the total hours, both adult and youth. Adult game hours have averaged approximately 14 percent of total youth hours.

The impact of field lighting, especially when coupled with field surface conversion to synthetic turf, has been significant. Figure 6 illustrates how the number of lighted field use hours has grown from 9.3 percent of total hours (13,444 hours) in 2006 to 54.3 percent (93,242 hours) in 2017. The number of hours in 2017 is almost seven times the number in 2006.



Source: Seattle Parks and Recreation, Athletic Scheduling



Source: Seattle Parks and Recreation, Athletic Scheduling

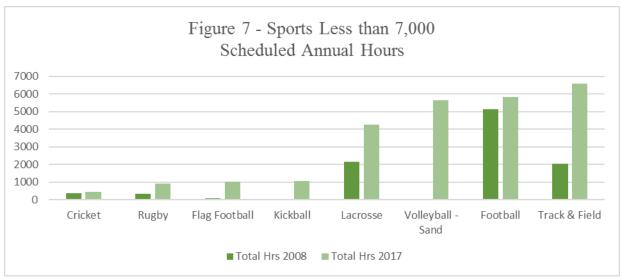


Source: Seattle Parks and Recreation, Athletic Scheduling

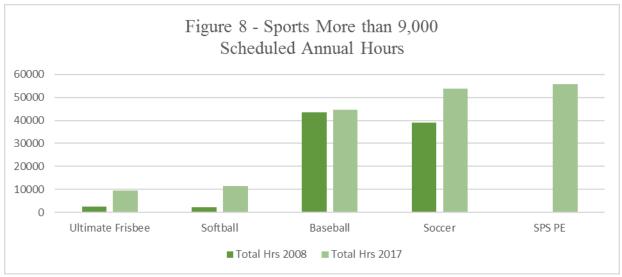
Figures 7 through 10 illustrate the number of scheduled hours played at times between the years 2008 to 2017. Thirteen sports are represented in the two figures, although in 2017, 42 sports/uses scheduled hours in/on an SPR facility (fields, pools, gymnasiums, tracks, outdoor running courses, etc.). Two sports consistently scheduled the largest number of hours, baseball and soccer. Baseball averaged about 40,000 hours, and soccer averaged about 50,000 hours. While baseball was somewhat static, soccer showed consistent growth until the mid-2010s. Ultimate Frisbee and softball each averaged close to 7000-8000 hours.

The next tier of sports scheduled generally less than 6000 hours during each year point. Track and field showed a very strong increase in 2017, but this may be more likely to better data entry on facility/field permits. Otherwise track and field consistently scheduled approximately 2000 hours. Football tracked in at the next highest scheduled user at approximately 5000 hours. Most football hours were booked by SPS high schools which used both SPR and SPS fields. A smaller number of hours was booked by a youth football league. Lacrosse was the next highest field user and showed consistent growth over the time

period. Two non-contact sports have increased their use of fields, flag football and kickball. Both only recently showed increases in the number of scheduled hours, likely solely due to bookings by the group Underdog Sports.

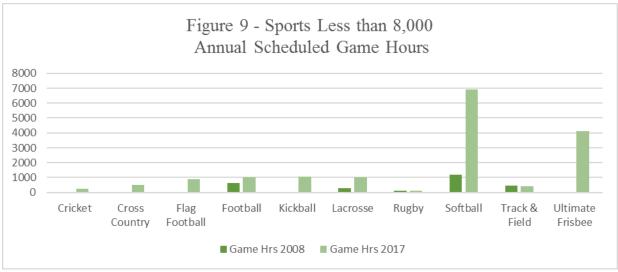


Source: Seattle Parks and Recreation, Athletic Scheduling

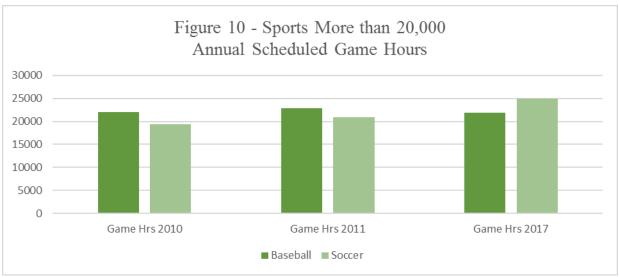


Source: Seattle Parks and Recreation, Athletic Scheduling

Figures 9 and 10, illustrate the amount of practice and game hours by specific sports. The goal with tracking this data is to see if there could be a ratio of practice to game hours by sport. Such a ratio could be useful for determining if practice hours could be reduced so that fields may be available and scheduled by other sports groups. Collection of this data in the future could be useful but would need to be consistently gathered and entered into databases.



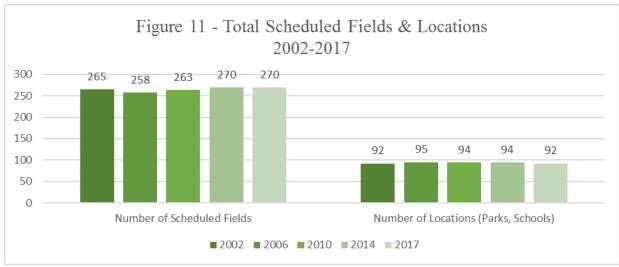
Source: Seattle Parks and Recreation, Athletic Scheduling



Source: Seattle Parks and Recreation, Athletic Scheduling

Figure 11 below shows that the number of scheduled fields and locations (parks and schools) has stayed relatively the same over the past 12 years. An inventory of all SPR and SPS fields discovered that while the number of fields stayed mostly the same, the number of scheduled fields changed at several locations. At approximately a dozen locations, fields were removed due to reductions in playable field surface area or totally removed for the expansion/construction of new facilities.

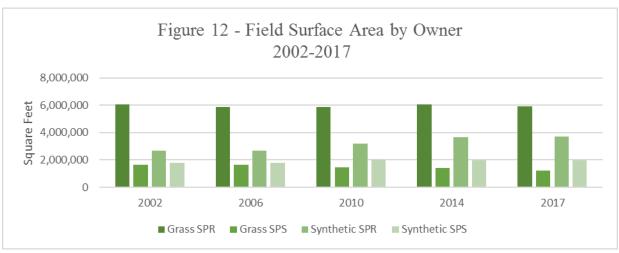
The total playable field surface increased 4.2 percent to 14,050,070 square feet between 2002 and 2017. The total amount of playable synthetic field surface increased 401 percent to 4,318,070 square feet during that same time period.



Source: Seattle Parks and Recreation, 2019.

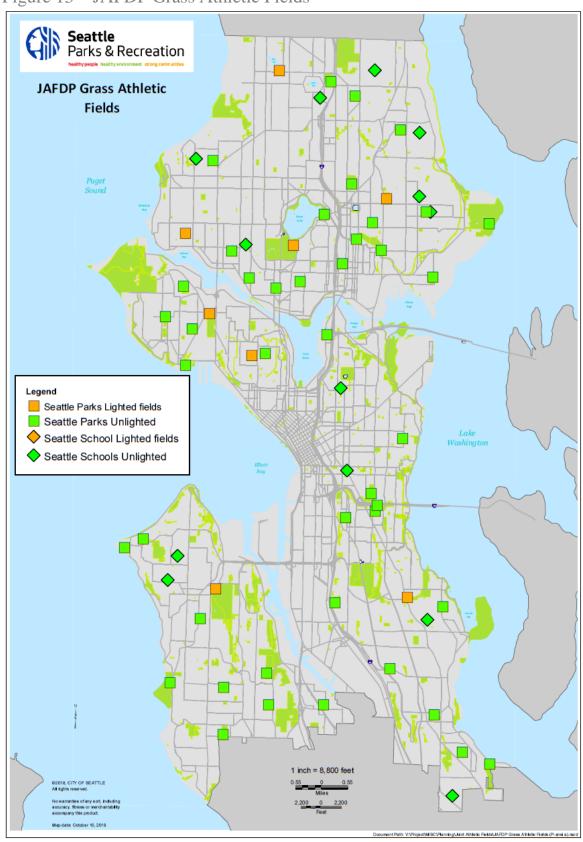
Figure 12 below shows the amount of field surfaces by type and by owner. For SPS, the amount of synthetic field area has increased by 9.5 percent while the amount grass field area has decreased by 26.7 percent. The total amount of field surface has declined by 7.8 percent to 3,164,100 SF, which comprises 24.7 percent of the total SPR-SPS field surface.

For SPR, the amount of synthetic field area has increased by 39.6 percent while the amount of grass field area has decreased by 2.4 percent. The total amount of field surface has increased by 10.4 percent to 9,620,400 SF, which comprises 75.2 percent of the total SPR-SPS field surface. Figures 13 and 14 show the relative locations of grass and synthetic turf fields, by owner, throughout the city.



Source: Seattle Parks and Recreation, 2019.

Figure 13 – JAFDP Grass Athletic Fields



Seattle Parks & Recreation **JAFDP Synthetic Athletic Fields** Legend Seattle Parks Lighted fields Seattle Parks Unlighted Seattle School Lighted fields Seattle Schools Unlighted

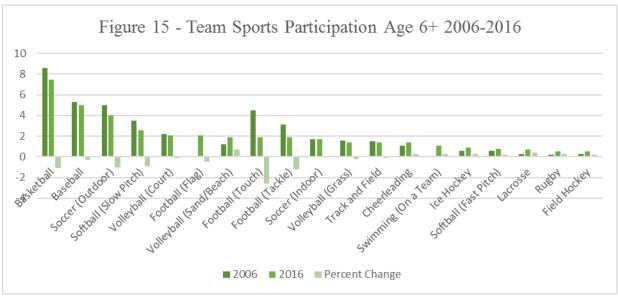
Figure 14 – JAFDP Synthetic Athletic Fields

Sports Participation Trends

The 2019 JAFDP Update includes a review of trends in sports participation both nationally and local, and scheduled field usage. New issues and considerations are seen in several areas including types of sports and demand for year-round play due to club sports, trends in scheduling patterns, and trends in facility demand. The following section seeks to capture these trends and how they may indicate proposed improvements to the athletic facility system.

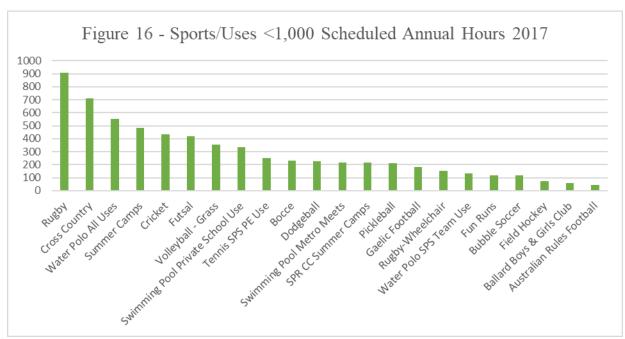
Participation statistics from sports and recreation advocacy organizations indicate that several sports are declining both for adults and youth. Figure 15 compares team sports participation rates play by ages six and above. Of 17 sports listed, four sports showed declines of greater than one percent. Tackle football showed the greatest decline at more than two percent. The report, State of Play 2017, tracked core participation of youth ages 6 through 12. Figure 16 shows that baseball, basketball, flag football, lacrosse, and soccer all showed declines. Baseball, basketball and lacrosse all showed declines of greater than three percent.

Relative to sports which use outdoor athletic facilities the following sports Figure 15 shows increases slight increases in participation for field hockey, rugby, softball and volleyball. Sports that show decreases include football (touch, flag, tackle), softball and soccer.

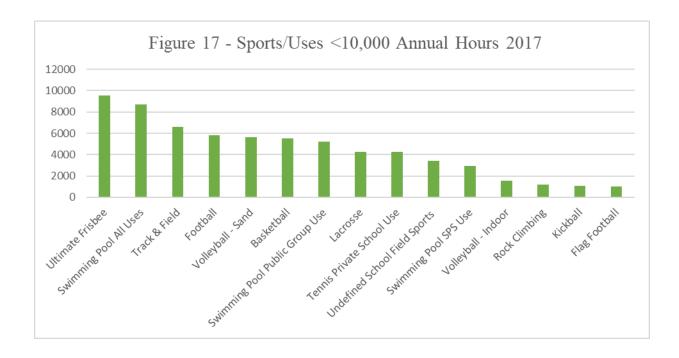


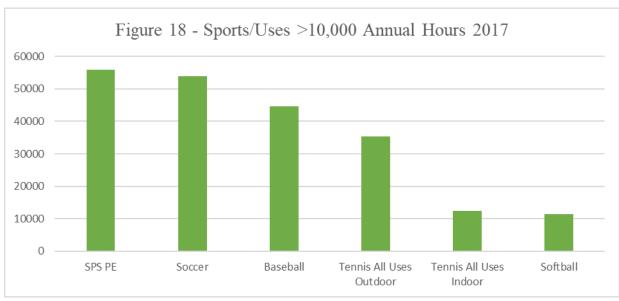
Sources: Outdoor Recreation Participation Report, The Outdoor Foundation 2009-2017; Seattle Parks and Recreation

Figures 16 through 18 show scheduled facility data for 2017 which identified 46 sports and/or uses were permitted at SPR facilities. The annual number of hours ranged from less than 50 to more than 50,000. The top sports/uses with more than 10,000 annual hours were SPS PE field use, soccer, tennis, baseball and softball (slow and fast pitch). Ultimate frisbee was close to this group with more than 9,000 hours. The sports with annual use between 2,000 to greater than 6,000 hours included undefined SPS field sports, private school tennis, lacrosse, basketball, sand volleyball, football (tackle) and track & field.



Source: Seattle Parks and Recreation, Athletic Scheduling

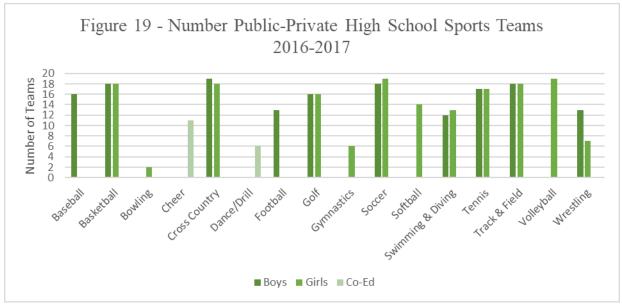




Source: Seattle Parks and Recreation, Athletic Scheduling

Twenty-two public and private schools sited within Seattle participate in the Washington Interscholastic Athletic Association (WIAA) Metro League. Fifteen high schools participate at the 3A level, four at the 1A level, and two at the 2B level. Of the participating schools, 11 are operated by SPS and 11 by private organizations.

High schools in the Metro League participate in 19 sports. Two unified sports are offered at five high schools for Special Olympics participants. All high schools do not participate in every sport. Figure 19 shows the number of teams fielded by high schools for individual sports. The top sports based on number teams are basketball, cross country, golf, soccer, track & field, and volleyball. The top boys only sports are baseball followed by football. For girls the sports are volleyball, softball and gymnastics.



Source: Washington Interscholastic Athletic Association, Seattle Parks and Recreation:

Athletic Facility/Field Development 2002-2018

The 2002 JAFDP listed 60 projects (36 SPR, 23 SPS, 1 North Seattle College) based on funding and priorities to increase field capacity. As of 2018, 48 projects or 80% were under design/construction, partially or totally completed (32 SPR, 15 SPS, one joint project), leaving 11 projects not completed (3 SPR, 9 SPS). Projects that are under design or construction include: Bitter Lake Playfield (lights), Brighton Playfield and Soundview Playfield (synthetic turf and lights), and Robert Eagle Staff Middle School (lights).

Table 1: 2002 JAFDP Projects List Status Summary

Project	Projects		Completed Projects		Uncompleted Projects	
	SPR	SPS	SPR	SPS	SPR	SPS
Fully or Partially Funded Field Improvement Projects	11	9	11	7	2	2
20 Projects						
(funding for these projects came from a variety of sources						
including grants, voter approved measures, major						
maintenance funds, and private donations).						
Other Field Improvement Initiatives		7	1	1	0	6
8 Projects						
Unfunded Projects that Increase Field System		7	13.5**	6.5**	3	1
Capacity						
23 Projects *						
Priority Projects to Enhance Quality of Play on		1	7	0	2	1
Seattle's Athletic Field and/or Reduce Impacts on						
Neighborhoods						
10 Projects						
Totals	36	23	32.5	15.5	3	9

Source: Seattle Parks and Recreation

Track improvements were proposed at 11 sites/locations and all projects were completed. Nine sites/locations include facilities for hammer throw, long jump, pole vault and shot put. (1 SPR, 8 SPS).

Field lighting was proposed for a total of 36 sites/locations (SPR 27, SPS 9). Of these sites/locations lighting projects are either underway or completed at 34 sites (SPR 26, SPS 8). In 2017, field lighting exists for 75 playable field surfaces (SPR 65, SPS 10).

^{*}Note: One field project was listed under North Seattle College (NSC). It is unknown if or what level of follow up was made as additional planning was not found.

^{**}Note: Cleveland PF has SPR and SPS shared ownership.

Athletic Facility Design Considerations

Field design considerations change over time. New regulations, climate change, unprecedented growth, emergent sports, an increase in select teams, new and improved athletic facilities materials, school bell times, racial equity, and costs are among the primary considerations for future field conversions and field maintenance. SPR is committed to responding to existing and emergent regulatory requirements.

Americans with Disability Act (2012)

In 2012, the Mayor implemented Executive Order #01-2012 which required all facilities that are owned, operated, managed or leased by the City of Seattle, must abide by the 2010 ADA Standards for Accessible Design.

Seattle Stormwater Code (2016)

In 2016, the Seattle Department of Construction & Inspections implemented a new stormwater code. Onsite stormwater management is required when a synthetic turf field is constructed a subsurface drainage system is installed.

Climate Change

In 2017, the Seattle Office of Sustainability and Environment, published the report, "Preparing for Climate Change". The report identified two items which would impact outdoor athletic facilities. First, was an increasing average annual temperature, with more frequent extreme heat days (days over 92°F). Synthetic turf fields get hotter than grass fields and there are indications of "heat islands" at fields with synthetic turf. Second, was potential for wetter winters and drier summers with more extreme heavy rainfall events that could affect all outdoor facilities throughout the year and could temporarily affect playability.

Race and Social Justice Initiative (2004)

The City of Seattle Race and Social Justice Initiative (RSJI) was initiated in 2004 to eliminate racial disparities and achieve equity within city employment and the provision of city services. SPR is also increasing access and opportunities for communities which have difficulty in participating in city programs and services due to race, income and other factors. For athletic facilities/fields this initiative informs where in the city facility/field improvements should be made, and how facilities/fields are scheduled to ensure equity.

Synthetic Turf Conversion and Replacement Costs & Timing

In 2019, synthetic turf conversions and new lighting can cost upwards of \$5 million, and replacement on a 10-year cycle can cost close to \$2 million, depending upon existing site conditions such as original field construction, stormwater and drainage, Americans with Disabilities Act access improvement, and other regulatory compliance needs. In construction contracts for turf replacement SPR requires environmentally sustainable disposal of the used turf.

Synthetic Turf Infill

The first synthetic fields included a fill layer composed of crumb rubber made from recycled car and truck tires. In 2016, Seattle Parks opened its first cork turf fill field at Bobby Morris Playfield, and is now moving away from crumb rubber to cork and other materials for future conversions and surfacing replacement projects. Depending on the type of infill materials, a shock-absorbing under pad may be required.

Field Surfaces & Overlapping Fields

A playfield consists of the dimensioned and striped field area, adjacent sidelines, end zones, and player areas (e.g. baseball dugouts). The playable field surface is solely the dimensioned and striped field area. For some fields, several dimensioned field areas could be overlaid. On a rectangular field this could include dimensioned striping for a soccer, football, rugby or lacrosse field. Diamond field outfields could overlay each other or an adjacent rectangular field. Several recent field redevelopment projects completely overlay rectangular and diamond fields. This means, for example, that a soccer and a softball game could not be played simultaneously. Allowing for maximum field playability will help increase field capacity.

Striping Synthetic Fields

Many of SPR's synthetic turf fields have multiple lines for different sports. The most field deterioration is at the seams of the different lines in the surfacing. In the future, we will consider minimizing the types of lines for long term durability and safety reasons.

SPS School Bell Times & Field Scheduling

School bell (start) times were revised in 2015 to allow students more time to sleep. A later start time affects the end of daytime and when SPS students could use athletic fields. The use of athletic fields is prescribed by the JUA and define the time of day, length of use per day.

Goals and Guiding Principles

Goal 1: Develop and Maintain Quality, Durable Facilities

Throughout the city, provide safe, fun, long-lasting and well-maintained athletic facilities that challenge athletic users and are maintained for durability over time and use.

Guiding Principle 1: Use long-term programmatic strategic plans to implement athletic facilities capital improvements city-wide. Consider the best use of limited funds to achieve maximum benefits with the intent of increasing capacity and quality of playing experience, while also anticipating the costs of ongoing maintenance and replacement (such as synthetic turf replacement and irrigation and drainage upgrades).

Guiding Principle 2: Design and redesign athletic facilities to provide quality playfields that improve playing experience in terms of field surface and player development, and to have a facility that can be maintained at a reasonable cost.

Guiding Principle 3: Consider regulatory code requirements and public safety design principles that address emergency action planning and Crime Prevention Through Environmental Design (CPTED) and incorporates these into the design of new or renovated athletic facilities.

Guiding Principle 4: Use SPR and SPS major maintenance plans (e.g. capital improvement plans, master plans, or maintenance plans) to promote proactive, preventative, and routine maintenance that prolongs the life of a facilities and maintains fields to the highest standards possible, within budget, including upgrading field lighting, drainage and irrigation as warranted.

Guiding Principle 5: Use ranking criteria to prioritize new projects and major maintenance projects, including equity as a criterion.

Goal 2: Increase Capacity of Athletic Facilities

Increase scheduling capacity by making changes and improvements to field surface and/or lighting where feasible and pursue opportunities for new facilities.

Guiding Principle 1: Focus efforts on extending field system capacity primarily through the improvements such as installation of synthetic turf and field lights on existing athletic fields rather than conversion of unprogrammed open space to athletic field use.

Guiding Principle 2: SPR and SPS should work together on parcel ownership issues and consider land swaps, as appropriate, to create opportunities for assembling land for new facilities.

Guiding Principle 3: Field scheduling practices should reflect the durability of the field surface. Natural turf should be given enough opportunity to recover from seasonal use. Recognizing that recovering fields will not be scheduled, efforts should be made to accommodate users on other fields in the SPR and SPS systems.

Guiding Principle 4: To serve multiple sports, seek to improve athletic field facilities to include both synthetic surfaces and field lighting systems by replacing or improving aging field lighting systems on existing synthetic field surfaces, and installing synthetic field surfaces on sites with existing field lighting, as appropriate to athletic field needs and neighboring conditions.

Goal 3: Be A Good Neighbor

Manage development and facility use as good neighbors by being sensitive to the needs of field users and concerns of neighbors.

Guiding Principle 1: Follow SPR and SPS public involvement processes while planning, developing or redeveloping athletic facilities. Involve interested stakeholders through community outreach efforts, including providing outreach materials in multiple translations as may be warranted, and invite comment on projects where the use of the field would increase as a result of the development proposal.

Guiding Principle 2: Minimize the potential negative impacts of field use on surrounding neighborhoods to the extent possible given site considerations and community resources; consider potential neighborhood impacts, such as parking, traffic, lighting, and noise, during the public involvement process and when planning facility use, and mitigate negative impacts to the extent possible.

Guiding Principle 3: Use adopted lighting design standards and/or field lighting guidelines to inform and guide both field lighting replacement and new field lighting installation proposals.

Guiding Principle 4: Consider location of field and proximity to residences. Seek to locate lighted fields where there is an ability to provide a buffer between the neighborhood and field, and/or where lighting impacts can be mitigated through available technology, such as LED lighting and fewer light standards.

Guiding Principle 5: Work with leagues and other organizations to communicate clear expectations to field users, coaches, and spectators on appropriate behavior and conduct when using facilities, in addition to providing any other specific regulations and facility-use requirements of SPR and SPS.

Goal 4: Equitable Access for All

Provide an equitable geographic distribution of athletic facilities throughout the city that can serve as places where people of diverse ages, abilities, race and interests can engage in a variety of sports.

Guiding Principle 1: Design, develop, and operate athletic facilities to assure reasonable accommodation in accordance with the Americans with Disabilities Act (ADA), for people of all abilities, ages and backgrounds.

Guiding Principle 2: Create an equitable field use system gives priority in development and use to youth sports, while also serving both youth and adult sports.

Guiding Principle 3: Seek opportunities to develop facilities or upgrade existing facilities to provide equitable access in areas of the city considered deficient pursuant to current adopted plans and analysis.

Guiding Principle 4: Use equity as a criterion for scheduling fields and continue to base athletic field scheduling on SPR's Use and Scheduling Policy and Procedures.

Guiding Principle 5: Recognize the field use demand for increased scheduled hours for youth from school and community athletic groups and seek to balance the distribution of heavily scheduled athletic fields across the city – such as lighted synthetic turf facilities – to meet the needs of underserved communities in the city.

Guiding Principle 6: Explore non-traditional methods to meet increased demand.

Goal 5: Respond to Trends and Demand

While monitoring trends and demand, manage facility development, redevelopment, and use to achieve a balance of opportunities for a full range of sports activities. Pursue common data points to help understand and to assess use and demand of joint-use athletic fields.

Guiding Principle 1: Use SPR and SPS data systems to collect and share common data points between partners, and share athletic facility use data for the purposes of increasing programming capacity and to anticipate demand for existing and emerging sports and seek to expand common data analysis systems.

Guiding Principle 2: Seek to accommodate growing and changing demands in existing and new or emerging sports to meet increasing demand and interest.

Guiding Principle 3: In responding to trends and demand, consider opportunities to develop multi-use sports facilities that can accommodate a range of sports and ensures equitable access.

Goal 6: Benefit from Contemporary Technology

Use and expand new and innovative technologies and data-informed practices to inform decision-making, to improve facilities and increase facility capacity, to monitor and assess trends, and to mitigate impacts on surrounding communities.

Guiding Principle 1: Identify innovative technologies that support athletic facility planning and operations and utilize these in pilot programs to assess the usefulness of the technologies to improve athletic facility program management and operations in meeting goals.

Guiding Principle 2: Use pilot sites to test new field surface, lighting, irrigation and drainage technology in developing and redeveloping athletic facilities and expand the use of new technologies based on the pilot projects and proven success in the Pacific Northwest climate. Analyze the test data, and share feedback with SPS and SPR.

Guiding Principle 3: Seek to use new field surface technology at selected fields throughout the city to meet needs and demands across the city, including increased capacity, improved durability, and enhanced safety.

Guiding Principle 4: Use SPR and SPS data systems to collect and share information between partners. Prior to collecting shared data, agree on: a) how athletic demand and use changes will be measured; b) what data is important to collect' and c) what format would be most useful.

Goal 7: Shared Use

Facilitate joint use and cooperation between SPR and SPS through the Joint Use Agreement, and with colleges, universities, private schools and other sports-oriented organizations to optimize capacity.

Guiding Principle 1: Continue partnership between SPR and SPS in looking at the entire system of athletic facilities and developing a strategic approach to developing joint use facilities.

Guiding Principle 2: Seek opportunities with public and private organizations, such as private schools, sports organizations, and colleges and universities, to increase facility capacity available to Seattle's youth and adults and to partner in financing. Use cooperative agreements to provide shared access to facilities and to supplement programing that will increase capacity and support community needs and interests.

Guiding Principle 3: Planning for improvements on SPS or SPR property will be managed by the field owner agency and will consider equity, the needs of the field owner agency, needs of all field users, and the community.

Guiding Principle 4: In planning upgrades and improvements to shared facilities, consider city-wide field scheduling needs when planning upgrades to existing fields

Guiding Principle 5: Consider opportunities to share management and maintenance of shared facilities.

Table 2: Projects Underway, Funded and Planned

PROJECTS U			
Site	Owner	Project	Primary Funding Source**
Ballard PG	SPR	Infield conversion to synthetic turf and lighting replacement	Funded- SPR REET
Brighton PF	SPR	Synthetic Turf conversion, lighting replacement	Funded – SPR Park District and REET
Soundview PF	SPR	Conversion to synthetic turf and new lighting	Funded – SPR Park District
Ballard HS	SPS	Synthetic turf replacement (2020)	Funded – BEX V
Jane Addams MS	SPS	Synthetic turf replacement and new field lighting (2020)	Funded – BTA IV and BEX V
Loyal Heights	SPR	Synthetic turf replacement	Funded – SPR Park District and REET
Madison MS	SPS	New synthetic turf field, track resurfacing and new field lighting (2020)	Funded – BEX V
Maple Wood PF	SPR	Athletic grass field renovation	Funded – SPR Park District
Nathan Hale HS	SPS	Synthetic turf replacement and track resurfacing (2020)	Funded – BTA IV
West Seattle HS	SPS	Synthetic turf conversion (2020)	Funded – BEX V
Whitman MS	SPS	New field lighting (2020)	Funded – BEX V
FUNDED PRO	JECTS*		
Site	Owner	Project	Primary Funding Source**
Lakeridge PF	SPS	Field drainage and irrigation renovation	Funded – SPR Park District
McGilvra Elementary	SPS	Synthetic turf replacement (2023)	Funded – BEX V
South Park CC PF	SPR	Conversion to synthetic turf and new lighting	Funded – SPR Partnership
Synthetic Turf Surfacing Replacements Program (existing fields)	SPR	Bobby Morris, Delridge PF, Garfield PF, Genesee #1, 2, Georgetown PF, Hiawatha PF, Interbay Stadium, Jefferson Park, Mickey Merriam Fields #6, #7, #8, #9 (Magnuson), Lower Woodland PF #1, 2, #7, Miller PF, Montlake PF, Queen Anne Bowl, Walt Hundley PF, Washington Park PF	Funded – SPR REET and Park District
W Queen Anne PF	SPR	Conversion to synthetic turf and lighting replacement	Partially funded-SPR REET and Park District
Judkins PF	SPR	Renovation of the grass field	Funded -SPR Parks and Recreation Fund

^{*}Assumes City Council appropriation and consistent funding levels for SPR projects

^{**}Note: Funding sources may change each annual budget cycle given need. Grants and donations can supplement city funds.

Table 2: Projects Underway, Funded and Planned, Continued

PLANNED PROJECTS*					
Site	Owner	Project	Primary Funding Source**		
Magnuson	SPR	Conversion to synthetic turf field and	Planned -SPR CIP		
Park #12		new lighting			
W Magnolia	SPR	Conversion to synthetic turf and	Planned – SPR CIP		
PF S		lighting replacement			
Grass Fields	SPR	Ongoing; sites TBD	Planned - SPR Parks and		
Renovation			Recreation Fund		
UNFUNDED I	POTENTI	AL FUTURE PROJECTS*			
Dahl PF	SPR	Replace lighting, possible synthetic	Unfunded, potential future		
		turf conversion	project		
Synthetic	SPR	Replace synthetic turf surfacing on new	Unfunded, potential future		
Turf		fields that come on-line: Brighton PF,	project		
Surfacing		Cleveland PF, Soundview PF, and TBD			
Replacements					
(new fields)					
West Seattle	SPR	Replace lighting, north grandstands	Unfunded, potential future		
Stadium			project		
TBD Sites	SPR and	Irrigation, drainage, and turf	Unfunded, potential future		
	SPS	conditioning (to be identified in SPR's	projects		
		grass field assessment 2019)			

^{*}Assumes City Council appropriation and consistent funding levels for SPR projects

Community Engagement

SPR and SPS staff worked with the Sports Advisory Council on the Update. They met four times in 2018, and once in 2019. A statistically valid community survey was undertaken in 2019, and there were questions on park usage for athletic fields and demand for sports fields and courts. Non-statistically valid surveys were available on social media and were conducted in up to seven languages at community meetings and events. These surveys had questions about values, use, and demand, as well. Finally, a community stakeholder meeting was held in fall, 2019 to review the data, the future projects list, and overall recommendations in the JAFDP Update.

Conclusions

The City is growing, and field permits, scheduled field use, and lighting use continue to increase. Overall demand is increasing as Seattle has had an unprecedented growth in population. The City is essentially built out, yet additional capacity is needed to accommodate the multiple sports and multiple user groups. Total scheduled hours have steadily increased, due in part to additional field lighting and a marked increase in youth field usage. There has been a jump in youth use of 17.2 percent since 2006. Seattle Public School enrollment also grew by 14% between 2001 and 2017.

As in 2002, SPR does not believe that it can or should meet the high level of demand. The 2019 JAFDP Update proposes field improvements that would reduce the gap between existing capacity and a reasonable accommodation of year-round and three-season field user demand. Improving field conditions on existing athletic facilities, including grass turf management and irrigation will help with the long-term availability and usability of them. The planned and potential future project lists should be viewed as an

^{**}Note: Funding sources may change each annual budget cycle given need. Grants and donations can supplement city funds.

illustration of the goal of reasonable accommodation, as there are many factors that could influence the City's ability to meet this goal, including better access to fields to achieve equitable access for people of color and other disadvantaged communities, growth of existing sports organizations, and accommodation of emerging sports. Maximizing the use of existing fields including the efficiency of multiple practices occurring on a field and other approaches will be explored. Additional field improvements will be considered, even if they are not currently listed in this Update.

Recommendations

- 1. Create a joint SPR-SPS technical group to identify best practices and "lessons" learned for athletic fields design, construction, and maintenance.
- 2. Reserve some hours at fields in low opportunity/underserved areas for unscheduled, drop-in play.
- 3. Use racial equity as one of the criteria for identifying future priority synthetic conversions or new fields and for programming decisions.
- 4. Complete the funded and partially funded synthetic field conversions and lighting projects in Table 2.
- 5. Complete planning for unfunded, future projects via partnerships in Table 2.
- 6. Consider renovating grass fields, including upgrading irrigation and drainage systems, and turf and infield conditioning improvements in Table 2.
- 7. Provide consistent funding for ongoing, preventative, and major maintenance to extend the life cycle of athletic facilities.
- 8. Seek partnerships, grants, and donations to help fund field improvements and long-term maintenance costs.
- 9. Institute more efficient scheduling methods and tools.
- 10. Develop consistent scheduled field use data collection and entry terms for ease of tracking and data analysis across SPS and SPR systems.
- 11. Periodically monitor and assess city population growth and field conditions, capacity, and demand, and develop plans to address the identified needs.

Sources

Aspen Institute. State of Play 2017, Trends and Developments, Project Play.

Onho, Barbara. Old turf field recruited for park duty. Daily Journal of Commerce, August 29, 2013.

Outdoor Recreation Participation Report, The Outdoor Foundation 2009-2017.

Seattle, City of. 2014 Statement of Legislative Intent-Long Term Plan for Athletic Fields, Response to SLI 68-1-A-1. May 2, 2014

Seattle Office of Sustainability and Environment. Preparing for Climate Change, August 2017.

Silver, Jon. Seattle testing a new material for synthetic turf fields: cork. Daily Journal of Commerce, August 29, 2016.

US Department of Commerce, Census Bureau, American Community Survey 2006-2016.

Washington State Department of Financial Management 2017. Population Projections 2040.

Washington State Office of the Superintendent of Public Instruction. Enrollment Reports 2001-02, 2016

APPENDIX 1: 2002 JAFDP Project List Update

JAFDP Category Fully or Partial Funded Field Improvement Projects	Parks Ballfield and Lighting Projects Brighton Playfield	JAFDP Recommendation Conversion to synthetic for baseball, softball/little league, soccer/multi-use field sport field; replace existing lights;	2019 Status Construction 2017.
Fully or Partial Funded Field	Garfield High School	miscellaneous site furnishings Practice synthetic football/soccer/multi-	Field renovated with synthetic infield
Improvement Projects Fully or Partial Funded Field Improvement Projects	Georgetown Playfield	use sports, and field and track facility. Conversion to synthetic, replace existing lights; fencing, landscaping and site improvements, etc.	and track Completed
Fully or Partial Funded Field Improvement Projects	Genesee Playfield	Conversion of Field #1 sand surface to synthetic turf. (Lighting for Fields 1 & 2 and conversion of Field #2 to synthetic using King Co. and CRS funding.)	Completed
Fully or Partial Funded Field Improvement Projects	High Point	Replace existing field lights.	Completed
Fully or Partial Funded Field Improvement Projects	Judkins Park and Playfield	Lighting for the upper field, drainage, irrigation, turf renovation, youth soccer field, site paving, etc. Conversion to synthetic turf is a long-term goal.	Lighting was not installed. The grass turf renovation was completed.
Fully or Partial Funded Field Improvement Projects	Lower Woodland Park Field #1	Conversion to synthetic turf, drainage irrigation, ballfield amenities, and replace lighting.	Completed
Fully or Partial Funded Field Improvement Projects	Loyal Heights Playfield	Conversion to synthetic turf, field amenities, and replace lighting.	Completed
Fully or Partial Funded Field Improvement Projects	Meadowbrook Playfield	Grass turf renovation, backstops/wing fences, and fencing.	Completed
Fully or Partial Funded Field	Miller Playfield	Replace existing field lights.	Completed
Improvement Projects Fully or Partial Funded Field Improvement Projects	Sand Point/Magnuson Park	Add 11 new synthetic turf fields with lights and renovation of 4 existing natural grass fields.	Five synthetic fields added and three of them are lit. Four grass fields renovated.
Fully or Partial Funded Field Improvement Projects	West Seattle Stadium	Renovation of existing grandstands, restroom/concession facility, maintenance facility, new lighting, rubberized track, track and field	Track and other track and field amenities replaced in 2017 and additional work in 2019.
Unfunded Priority Projects that Increase Field System Capacity	Bitter Lake Playfield	amenities. Conversion to synthetic turf, replace lights, and other field and site	Lighting was replaced in 2018; the remaining work was not done.
Unfunded Priority Projects that Increase	Bobby Morris Playfield	improvements. Conversion to synthetic turf, replace	Completed
Field System Capacity Unfunded Priority Projects that Increase	Cleveland Playfield	lights. Conversion to synthetic, track facility	Completed in 2019. Lighting to be
Field System Capacity Unfunded Priority Projects that Increase Field System Capacity	Hiawatha Playfield	renovation, add lighting, fencing. Conversion to synthetic turf, replace field lights, and other site and field improvements.	completed in 2020. Completed in 2010.
Unfunded Priority Projects that Increase Field System Capacity	Interbay Playfield	Conversion to synthetic turf, lighting, backstops and site furnishings.	The lighting was replaced. The remainder has not been completed.
Unfunded Priority Projects that Increase Field System Capacity	Interbay Stadium	Conversion to synthetic turf.	Completed and the surfacing was replaced in 2015.
Unfunded Priority Projects that Increase Field System Capacity	Jefferson Park	Conversion of Jefferson Field to synthetic turf, add field lights and other site furnishings. Other field improvements in	Completed.
Unfunded Priority Projects that Increase	Maple Wood Playfield	the park may occur on the list. Conversion to synthetic turf, add lights, and other site and field improvements.	A project has been initiated for grass turf
Field System Capacity Unfunded Priority Projects that Increase Field System Capacity	Montlake Playfield	Moving field to the west and renovating irrigation, drainage, track improvements,	renovation but no lights due to size. Completed (Synthetic turf)
Unfunded Priority Projects that Increase Field System Capacity	Queen Anne Playfield	tennis court resurfacing. Conversion to synthetic turf, replace lights, and other field and site	Partially funded.
Unfunded Priority Projects that Increase Field System Capacity	Rainier Playfield	improvements. Conversion to synthetic turf, replace lights, and other field and site	Lights were completed, but the field conversion was not completed.
Unfunded Priority Projects that Increase Field System Capacity	Soundview Playfield	improvements. Conversion to synthetic turf, replace lights, and other field and site improvements.	In construction (2019).
Unfunded Priority Projects that Increase Field System Capacity	South Park Playfield	Conversion to synthetic turf, replace lights, and other field and site improvements.	Funded and in design (2019).

Unfunded Priority Projects that Increase Field System Capacity	West Magnolia Playfield-North	Drainage, irrigation repair, turf renovation, backstops, and goals.	Drainage and turf renovation are scheduled for 2020. The remaining work is unfunded.
Unfunded Priority Projects that Increase Field System Capacity	West Magnolia Playfield-South	Conversion to synthetic turf and replace lighting.	In the CIP, but unfunded.
Priority Projects to Enhance Quality	Ballard PF	Replace existing field lights and reconfigure MP field	Complete. Synthetic infield was installed, but field was not reconfigured.
Priority Projects to Enhance Quality	Dahl PF	Replace existing field lights	Not funded.
Priority Projects to Enhance Quality	Delridge PF	Replace existing field surface with synthetic and replace lights	Completed; two fields were developed out of one large field
Priority Projects to Enhance Quality	Garfield PF	Replace existing field lights	Completed
Priority Projects to Enhance Quality	Lower Woodland #2 and #7	Replace field surface with synthetic.	Completed
Priority Projects to Enhance Quality	Miller PF	Replace field surface with synthetic	Completed
Priority Projects to Enhance Quality	Queen Anne Bowl	Renovation of existing cinder track, ADA	Partially completed
Priority Projects to Enhance Quality	Riverview PF	access, and comfort station renovation North field improvements	Partially completed
Priority Projects to Enhance Quality	Thurgood Marshall	Turf Renovation, youth soccer, T-ball	Not funded.
Priority Projects to Enhance Quality	Washington Park PF	Replace field surface with synthetic and replace lights	Completed