

Wellesley Playing Fields Lights Report

November 9th, 2019

Subcommittee Members



- Courtney Albin, Wellesley Public Schools
- Katie Griffith, NRC-Chair, PFTF
- Ellen Korpi, Department of Public Works
- Rob Lally, Neighbors
- **Jim Miller,** Co-Chair
- Jerry Nigro, PFTF
- Laurance Stuntz, Recreation, PFTF-Chair, Co-Chair
- Lisa Wesley, Wellesley Field Fund

Mission



- The Natural Resources Commission (NRC) asked the Playing Fields Task Force (PFTF) to investigate the possibility of adding additional and improving existing lighting equipment at playing fields in Town.
- The PFTF has placed a high priority on this initiative, given its ability to allow for greater active play for Town residents especially youth and strengthen our sense of community at evening games and events.
- The PFTF will issue a report to the NRC and any other relevant stakeholders, which will include an actionable recommendation for the Commission to consider.
- As such, the PFTF is appointing a Lights Subcommittee to act as fact-finders and investigators of potential paths forward. In regular consultation with the PFTF, the Subcommittee will draft a holistic report.

Questions To Be Answered



- **Scope**: On which playing fields do the benefits of installing new lights or improving existing lighting outweigh the costs?
- Type of Lights: What light fixtures would be recommended? How many and where?
- Improvement to the Fields: What ground-level improvements would be needed?
- **Abutter Concerns:** What are the abutters concerns? How can those concerns be mitigated?
- Financial Impacts and Fundraising: What are the costs? How would it be funded?
- Permits and Approvals: What permits and approvals would be needed?
- **Terms of Use:** What would the terms of use be? How would these terms be codified? How would they be enforced?

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Considerations



- Abutter concerns
- Environmental Impacts, including
 - Carbon emissions
 - Dark Sky Compliance, utilizing external expertise via consultant Bob Parks
 - Sound
- Intensity of use and maintenance of fields
- Traffic

Summary of Needs



Enormous Growth in Recreational Sports Teams

- 26% since 2014, 3,700% since 1969. In 2019 there are 253 fall teams and 270 spring teams
- Only includes public school and no-cut recreational town teams, not for-profit club teams

Unmet Need

- Many high school students stop playing after not making the highly competitive High School teams but express a desire to continue at a recreational level
- Based on number of teams, Wellesley is 8-12 fields short
- Because of this shortage, there are very few recreational / no-cut programs for high school aged kids offered for rectangular field sports in town

Significant Cost to Wellesley residents

- Wellesley youth programs spend more than \$150,000 per year renting field space
- Wellesley is one of very few towns in Massachusetts that cannot bring the community together outside on fields under lights for high school sports

Summary of Needs - Details



- 3,700% Growth in Number of Sports Teams: Since 1969, the number of soccer, football, field hockey, and lacrosse teams using rectangular playing fields in Wellesley has increased by 3,700%, from 14 teams in 1969 to 523 teams in 2019 (253 teams in the fall and 270 in the spring), without any increase in the total number of available playing fields.
- 26% Growth in Last Five Years: Since 2014, the number of teams has increased by 26% and all youth programs anticipate substantial future growth.

Summary of Needs (details continued)



Inclusive Wellesley Youth Sports Drive Field Demand

- Wellesley youth sports are no-cut recreational programs that provide equal access to both boys and girls regardless of their athletic ability.
- If a boy or girl in elementary or middle school wants to play a sport they are offered a place on a team without the fear of being cut.
- This has resulted in 5,009 children playing on various recreational youth soccer, field hockey, football, and lacrosse teams.
- This demand means that youth recreational teams have a hard time finding fields to practice.
- Inclusion is a core value of the town and is the primary driver of the growth of Wellesley youth sports and increased field demand.

Summary of Needs (details continued)



Need for Recreational Sports for WHS Students

- WHS sports teams are highly competitive and it is difficult to make the teams because there are only 411 roster spots on the eighteen WHS soccer, field hockey, football, and lacrosse teams.
- Hundreds of high school students who played sports in elementary and middle school no longer play recreational sports because that option is currently not available.
- The addition of lights at WHS Stadium could give high school students the opportunity to continue playing recreational sports past middle school.

Summary of Needs (details continued)



- Wellesley is 8-12 fields short of need indicated by our demand:
 - Wellesley has 15 rectangular fields and 253 teams in the fall and 12 fields and 270 teams in the spring.
 - The recommended number of fields to accommodate this many teams is 20-24.1
- Over \$150,000 Spent Renting Fields Each Year:
 - Wellesley's recreational, non-profit, no-cut youth sports teams spend more than \$150,000² per year to rent field space because there is not enough available space on town-owned fields.
- Community Building:
 - No lights at WHS Stadium limits the ability for community building nighttime events, impacts WHS's ability to host playoff games, and causes students to miss classes in certain instances.

• Traffic:

• Lack of lights at WHS Stadium leads to lots of cross-town traffic from the high school to Sprague, exacerbating post-school traffic issues.

¹ The U.S. Soccer Federation recommends 20-24 fields to accommodate Wellesley's 253 teams in the fall and 270 teams in the spring.

²Based on a survey of Wellesley youth programs undertaking in the summer of 2019

Review of Existing Fields



At the start of the project, the Subcommittee did a comprehensive review of all the playing fields in Wellesley and reached the following preliminary conclusions:

- Shortage of rectangular fields: Soccer, football, field hockey, and lacrosse play on rectangular fields. Wellesley has an acute shortage of rectangular fields with only 15 fields available in the fall for 253 teams and 12 fields in the spring for 523 teams.
- Adding lights to grass fields does not significantly increase capacity: Grass fields are often closed due to rain and snow, particularly in the spring. Additionally, Wellesley grass fields are already stressed from overuse during daylight hours.
- Artificial turf can be used when wet and does not have the overuse concerns associated with grass: The Subcommittee focused its investigation on the merits of adding lights to the artificial turf fields at WHS Stadium and Sprague Field where usage can be maximized.

Review of Existing Fields: Sprague Turf Fields



In 2008, two artificial turf fields were installed at Sprague Fields.

Advantages of Adding Lights to Sprague

- Two turf fields that are highly sought after and are the backbone of youth sports
- Lighting both would add available playing time of 580 hours in the fall (123% increase) and 300 hours in the spring (40% increase).

Disadvantages of Adding Lights to Sprague

- No stadium or seating for fans and no public restroom facilities
- No Track
- Limited Parking, Traffic Flow Issues
- No existing electrical capacity or conduits, making a potential lights project more expensive

Review of Existing Fields: WHS Stadium Field



In 2016, Wellesley renovated its 1938 Stadium

- Advantages of Adding Lights to WHS Stadium
 - New artificial turf field (2016), state of the art track, stadium seating for 2,300
 - 318 parking spots available for spectators and participants at WHS
 - Location across the street from WHS allows students to safely walk to practices and games, reducing traffic across town to Sprague
 - Electrical capacity and conduits are already in place, making this the least expensive field to add lights
- · Disadvantages of Adding Lights to WHS Stadium

· Abutters' concerns about potential noise, traffic, light spillage and glare

Abutter Concerns



- The Subcommittee solicited the input of abutters to Hunnewell Fields and WHS Stadium, invited them to PFTF meetings, Light Subcommittee meetings, provided them working drafts of the Lights Reports, and have conducted three public meetings to hear their concerns.
- Abutters who are both for and against adding lights to WHS Stadium attended the public meetings.
- Concerns include:
 - Potential for Increased Noise
 - Potential for Increased Traffic
 - After Stadium lights, additional lights in the future at Hunnewell Fields Complex

Abutter Concerns: Noise



In order to mitigate the impact of noise from the WHS Stadium, the NRC and WHS Athletic Department, with support from the Playing Fields Task Force and Stadium user groups have the following procedures in place already:

- On May 10, 2018, NRC instituted a sound policy ¹ to govern the use of sound at WHS Stadium in response to the installation of a permanent sound system at the Stadium.
- The permanent sound system faces away from Smith Street and the speakers were designed and installed at an angulation that directs the sound to its intended audience in the Stadium and the sound is not allowed to exceed 85 decibels at the property line.
- The sound system policy has been in place since the start of the 2018-2019 school year. It is allowed to be used for games but not practices and is controlled and tightly monitored by WHS. WHS Athletics Department drives a golf cart around the property line of the Stadium during each event to measure the sound level at the property line.
- WHS Athletics ensures that the maximum volume does not exceed the agreed upon 85 decibels.
- WHS Athletics staff are on-site during Stadium events and can be appealed to in real time if the sound level is too high. Until the start of this Subcommittee's process, no complaints were lodged with staff or the NRC.
- Any sound system shall only be used from 9 am to 7 pm, unless by special permit from the NRC.

¹ WHS Stadium Track and Field Sound System Policy

Abutter Concerns: Noise (continued)



To date, abutter complaints about noise have been confined to the play-by-play at WHS Varsity Football Games, which are generally held on Saturday afternoons.

- During the 2018-19 school year, there were 102 sports competitions held at the WHS Stadium including youth and high school
- During the 2018-2019 school year, there were four regular season home football games and two post-season games, average duration 2 hours, 15 minutes.
- The installation of lights at WHS Stadium would not increase the number of WHS home football games.
- However, several abutters expressed concern about the increased potential for nightly evening noise, particularly through the use of the Stadium sound system, on weeknights, and after the bedtimes of small children.

| Team | Existing Use of Sound System | |
|------------------------------|-------------------------------|--|
| Boys Varsity Soccer Games | 30 minute warm-up music | |
| Girls Varsity Soccer Games | 30 minute warm-up music | |
| Varsity Football Games | Warm-up and game play-by-play | |
| Varsity Field Hockey Games | 30 minute warm-up music | |
| Boys Varsity Lacrosse Games | 30 minute warm-up music | |
| Girls Varsity Lacrosse Games | 30 minute warm-up music | |
| Track & Field | Race and Event Announcements | |
| Practices | None | |
| All Team Playoff Games | Announcements | |

Abutter Concerns: Noise (continued)



- Additional Recommendations to Mitigate Noise
 - NRC should establish and communicate to abutters a process for recording and submitting a complaint about possible violations of the Sound Policy.

Abutter Concern: Traffic

Concern: Some abutters are concerned about increased traffic associated with adding lights at WHS Stadium.

Wellesley's Police Department (WPD) supports lights at WHS Stadium and offers the following reasons that abutters concerns are misplaced:

- Night practices and games, other than varsity football games, should not impact traffic for most night uses around WHS and the Stadium.
- WHS has had night games in the past with portable lights and WPD successfully managed the traffic. If night varsity football games became a regular event, WPD's traffic plan will be in effect and even improved given the regularity of the event. Night games would also eliminate traffic issues associated with games on Saturday afternoons.
- WHS has 318 parking spaces adjacent to WHS Stadium.

Recommendation to Mitigate Traffic Concerns: Ensure that permits issued for usage of WHS Stadium be coordinated with WPD to ensure that a traffic plan is in place.

Letter from Wellesley Police Chief





TOWN OF WELLESLEY | POLICE DEPARTMENT

WELLESLEY, MA 02482 JACK PILECKI Telephone 781-235-1212 | Chief of Police

July 16, 2019

Wellesley Playing Fields Lights Subcommittee Wellesley Recreation Department, Warren Building 90 Washington Street Wellesley MA 02481

Dear Wellesley Playing Fields Lights Subcommittee.

I have been asked to assess the potential impact on traffic and parking if lights were installed at Wellesley High School Stadium ("WHS Stadium"). It is my understanding that if lights were installed at the WHS Stadium, sports teams would be able to practice and play games in the Stadium as late as 9:30 p.m.

Currently, parking around the Sprague School Fields is inadequate at best. Over the years the police department has received complaints from residents in the area about illegally parked vehicles and complaints concerning the amount of traffic. Moving games and some practices from the Sprague Fields to the Stadium would reduce these complaints and allow for ample parking in the WHS parking lot.

With the exception of WHS Varsity Football games, night practices and other games would not be expected to significantly impact traffic around the Stadium. Additionally, there is much more parking in the WHS parking lot and parking lots around WHS to accommodate vehicles.

We have had many night games in the Stadium in the past when portable lights were brought in. The police department implemented a traffic management plan for each game which proved successful. It involved hiring extra police officers at various traffic posts. If night WHS Varsity Football games become a regular event, I am confident our traffic plan will be effective and even improved given the regularity of the event.

-2-

In summary, I am supportive of lights being installed at the WHS Stadium. I am confident traffic and parking will be effectively managed in the area around the High School with the added benefit of less traffic and parking issues around the Sprague Fields.

Wellesley Police Department

Abutter Concerns: After Stadium lights, additional lights at Hunnewell Fields Complex in the future



Concern:

• Some abutters are concerned that the addition of lights at WHS Stadium will eventually leads to other lights being installed at the Hunnewell Fields Complex.

Comments relative to the Additional Lights Concern:

- This Subcommittee is not recommending adding lights to other parts of the Hunnewell Fields Complex.
- Any plan to add lights to other parts of the Hunnewell Fields Complex in the future would be subject to the approval of NRC.

Environmental Consideration: Light Spillage and Glare



Concerns:

- Abutters to the lights at Reidy, Hunnewell and the Tennis Courts have historically registered concern with the existing lights due to their spillage, glare, and impact on the night sky.
- Anecdotally we heard reports that the existing lights are sometimes on at times that the fields do not appear to be in use. The Recreation Department today works closely with user groups to ensure that lights are only turned on when practices or games are scheduled.

Recommendations to Mitigate Light Spillage and Glare:

- Replace the existing halogen lights with energy efficient, environmentally friendly LED lights. This would reduce light spillage and glare by 50% or more.
- Install new energy efficient, environmentally friendly LED lights at WHS Stadium that have virtually zero spillage and glare and can be certified as Dark Sky-compliant.
- Continue working with lighting consultant Bob Parks on the design of replacement and new lights to minimize spillage and glare.
- Implement procedures to minimize inadvertent lighting when the fields are not in use. New lights will have remote management capabilities to make this easier. NOTE: Existing lights already have remote management capabilities.



Lights Subcommittee Recommendations and Expected Benefits

Recommendations - Lights



- Replace existing halogen lights at Reidy Field, Hunnewell Multipurpose Field, and Tennis Courts with energy efficient, environmentally friendly LED lights.
- Install energy efficient, environmentally friendly LED lights at WHS Stadium.
- The groups using Reidy Field, Hunnewell Multipurpose Field, and WHS Stadium should pay the electrical costs of lighting the fields based on the time the fields are used by them.
- All playing fields lights should be placed on Wellesley Municipal Light Plant's 100% Renewable Energy Program, thereby eliminating the carbon emissions associated with lighting the playing fields.
- When the fields are used for practice or youth games, light level should be dimmed to a safe level for youth sports (generally to 30 ft candles) and the sound system should not be used

Recommendations - Usage



- Reserve lighted field capacity at WHS Stadium for use by WHS, WMS,
 Wellesley youth sports programs, and other Wellesley-based groups.
- The lights should only be used with permit from the PFTF, and should follow the pattern in the Hunnewell Complex with normal play ending by 9:30 pm.
- The NRC, working with PFTF, should develop procedures to minimize the time the lights are on without being used.
- The NRC should hold a hearing a year after the lights are installed to review usage and stakeholder (user groups and abutters) experience

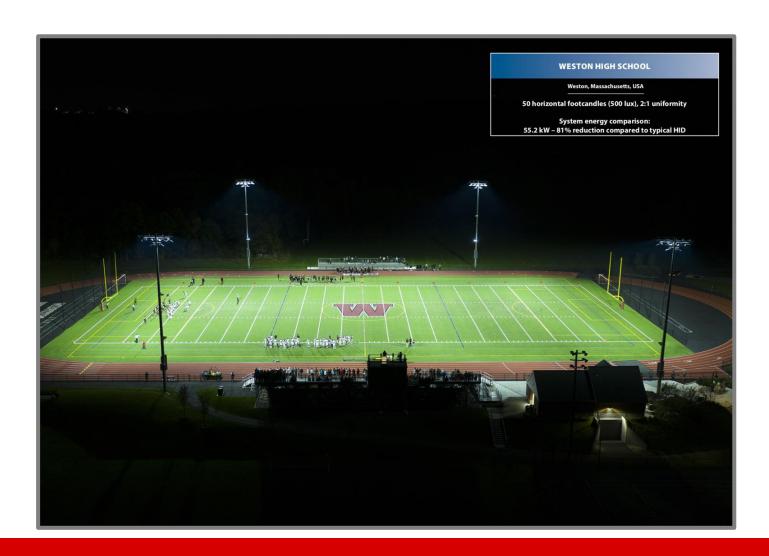
Recommendations - Scheduling



- Generally (subject to WHS Athletic Department scheduling constraints), two night games per high school varsity team, with the exception of football
- No more than 25 total WHS night games per year
- When the Stadium Lights are not used by the Athletic Department, they should be available for use by Wellesley youth sports and Wellesley-based groups through permits issued by the Playing Fields Task Force

Sample Installation – Weston HS





Sample WHS Stadium Use with Lights¹



| Team | Regular Season | Playoffs | Total Nights | Use of Sound System | 0/0 |
|----------------------------------|----------------|----------|--------------|-------------------------------|------|
| Girls Varsity Field Hockey Games | 1 | 1 | 2 | 30 minute warm-up music | 2% |
| Boys Varsity Football Games | 4 | 2 | 6 | Warm-up and game play-by-play | 6% |
| Boys Varsity Soccer Games | 1 | 1 | 2 | 30 minute warm-up music | 2% |
| Girls Varsity Soccer Games | 1 | 1 | 2 | 30 minute warm-up music | 2% |
| Boys Varsity Lacrosse Games | 1 | 1 | 2 | 30 minute warm-up music | 2% |
| Girls Varsity Lacrosse Games | 1 | 1 | 2 | 30 minute warm-up music | 2% |
| Practices/Youth | 65 | 20 | 85 | No sound system use | 84% |
| Total | 74 | 27 | 101 | | 100% |

¹ Based on WHS Athletic Department projections for the WHS Stadium schedule with lights. In November it is dark by 4 p.m. Soccer and field hockey games that start at 4 p.m. would played under the lights and are being counted as night games even though they would be finished before 6 p.m.

Expected Environmental Benefits



- Environmentally Friendly LED Lights: New LED lights can be Dark Sky Certified, dimmed, have reduced light spillage and glare, and can be controlled remotely from a smartphone, laptop or computer.
- 50-80% reduction in energy usage for existing lights: Replacing existing lights with energy efficient, environmentally friendly LED lights will reduce the amount of energy used to light the fields by 50%-80%.
- Net Zero Carbon Emissions: WMLP has a 100% Renewable Energy Program. Choosing this option would eliminate the carbon emissions associated with lighting Wellesley's playing fields in favor of 100% renewable energy. This would help Wellesley meet its goal of reducing town-wide greenhouse gas emissions 25% below 2007 levels by the year 2020 and serve as an example to Wellesley residents and businesses to join the 100% Renewable Energy Program.

Reduced Electrical Usage

- New LED lights are 50% to 80% more efficient than the existing lights at Hunnewell Multipurpose, Reidy Field, and the tennis courts.
- Because of this increased efficiency and the ability to dim the new lights for practice conditions, we expect that even with the addition of lights at the Stadium, the total electricity consumed will be less than is currently used.
- In order to ensure that there are no carbon emissions associated with lights, the Subcommittee recommends putting all Hunnewell Complex lights on the WMLP's 100% Renewable Energy Program

| Playing Field | Existing kW Light Load | Proposed LED kW Light Load ¹ | Percentage of Savings |
|---------------|---------------------------|--|-----------------------|
| Multipurpose | 64.00 | 12.60-31.51 | 51%-80% |
| Tennis Courts | 42.80 | 7.49-18.72 | 56%-83% |
| Reidy | 28.15 | 7.83-19.57 | 30%-72% |
| WHS Stadium | 0 | 23.34-58.36 | - |
| Total | 134.95 | 51.26-128.16 | 5%-62% |

¹The kW light load has a range rather than a static number because the proposed LED lights have dimming capabilities that enable lower levels of illumination for practices than during games.

Benefits of Increased Capacity in the Fall



In the Fall, lights at WHS Stadium would have the following benefits in terms of increased capacity:

- Net increase in available playing time of 290 hours.
- Increase in Monday-Friday after school playing time of 123%.
- In November, the increase in after school playing time jumps to 323%.
- Lights would enable WHS to host playoff games without student athletes missing classes because they have to leave school early to play games before it gets dark.

Benefits of Increased Capacity in the Spring



In the spring, lights at WHS Stadium would have the following benefits in terms of increased capacity:

- Net increase in playing time of **152 hours**.
- Increase in Monday-Friday after school playing time of 40%.
- Enable WHS lacrosse, softball, and baseball to hold their tryouts in WHS Stadium rather than at night in the WHS gym.
- Additional access to a turf field would reduce the need to cancel practices and reschedule games due to inclement weather. In the spring 2019, Wellesley youth soccer had to cancel and reschedule 131 games because of poor field conditions of grass fields due to inclement weather.

Community and Educational Benefits



- · Ability to hold night sporting events with easier attendance for families.
- Reduced impact on student athletes missing classes due to early dismissal for home playoff games.
- Improved traffic flow, particularly in the heavy post-school traffic period, with some games shifted from Sprague to WHS.
- Sporting Events at night can help build a sense of community and combat social isolation.
- Lights will create a safe place for residents to walk and run in the evening.

Benefits for WHS, WMS and Youth Sports



- WHS & WMS Sports Teams: Lights at WHS Stadium would create much needed field time for 24 WHS sports teams and six WMS sports to practice and host games in the Stadium: 8 soccer, 4 football, 5 field hockey, 6 lacrosse, and 7 track and field teams.
- Youth Sports Under the Lights: Lights at the Stadium could enable youth sports teams to potentially play under the lights, similar to how Little League Baseball and Softball teams play one game under the lights at Reidy Field and Hunnewell Multipurpose Field.

Approvals and Permitting



- NRC: The land is owned by the Natural Resources Commission, which will determine the path forward.
- **Electrical Permits:** Only permitting required would be electrical permits for the lights installation.

Funding

- In terms of replacing existing lights, we are exploring the possibility of applying for Green Communities Grant funding, plus private, town, and CPC.
- New LED lights at WHS Stadium would be funded through private donations by the Wellesley Field Fund.
- Operating costs for the lighted fields would be funded by field users.

Financial Analysis – Replacement Lights



Costs

• Estimated costs of new LED lights on existing poles at Reidy Field, Hunnewell Multipurpose, and Tennis Courts:

| • Reidy Field: | \$80,000-\$90,000 |
|----------------|-------------------|
|----------------|-------------------|

- Total: \$290,000-\$320,000
- Total costs, including labor: \$377,000-\$407,000

Funding

• Town, CPC, private, and possibly a Green Communities Grant

Financial Analysis – WHS Stadium Lights



Costs

• Estimated costs of new LED lights and poles: \$305,000-\$315,000

• Total costs, including labor: ~\$400,000

Installation Funding – to be privately raised

• Funds already raised by the Wellesley Field Fund: ~\$221,800

• Additional fundraising needs: ~\$180,000

Operating Costs

 Field usage fees to be designed to pay for the cost of operating lights, same model as for Reidy, Hunnewell, and the tennis courts.

Process Timeline



- Initial Charge from PFTF May 2019
- Initial Meeting with Stadium Abutters July 2019
- Draft Review at Playing Fields Task Force September 13, 2019
- Second Meeting with Stadium Abutters October 1, 2019 🛶
- PFTF Review and Discussion of Sound Policy October 11, 2019
- Third Meeting with Stadium Abutters October 21, 2019
- Lights Subcommittee Report Review October 25, 2019
- Next Steps
 - PFTF Report Review November 8, 2019
 - NRC Report Review and Public Meeting TBD



Background Details and Key Historical Findings (1969-2019)

Highest Participation and Winningest Sports Program in MA



• Wellesley's residents believe that youth sports play an important role in the life of the town and in the growth and development of our students.



• According to MIAA, Wellesley has had the highest participation of any sports program in Massachusetts five of the last six years.

The Boston Globe

• Wellesley has won the Boston Globe Award for the highest winning percentage of any sports program in Massachusetts four of the last six years and came in second the other two years.

3,700% Growth in the Number of Teams



- In 1969, Wellesley had 14 youth and high school sports teams that played on rectangular playing fields (8 in the fall, 6 in the spring). The sports that play on rectangular fields are soccer, football, field hockey, and lacrosse.
- In 2019, Wellesley has 523 youth and high school sports teams that played on rectangular playing fields (253 in the fall, 270 in the spring).
- In the last five years, Wellesley has experienced a 26% increase in the number of teams that play on rectangular fields and the youth sports clubs anticipate similar growth for the foreseeable future.

No Growth in the Number of Rectangular Playing Fields



- In the last 50 years, Wellesley has not added any rectangular playing fields to accommodate the more than 3,700% growth in the number of sports teams that play on rectangular fields (soccer, football, field hockey, and lacrosse). In 1969, there were 15 rectangular fields available in the fall and 12 in spring, the exact same as there are today.
- The United States Soccer Federation, recommends between 20-24 fields to accommodate Wellesley's 253 teams in the fall and 270 in the spring.
- Wellesley is 8-12 fields short of what is recommended. A combination of artificial turf and lights would reduce the number of fields Wellesley needs to add in order to support its sports teams.

No New Rectangular Fields in Over 50 Years



- In the last 50 years, Wellesley has not added any rectangular playing fields to accommodate the more than 3,700% growth in the number of sports teams that play on rectangular fields (14 team in 1969, 523 team in 2019).
- In 1969, there were 15 rectangular fields available in the fall and 12 in spring, the exact same as there are today.
- The United States Soccer Federation, recommends between 20-24 fields to accommodate Wellesley's 253 teams in the fall and 270 in the spring.
- Wellesley is 8-12 fields short of what is recommended, not accounting for future growth.
- A combination of artificial turf and lights would reduce the number of fields Wellesley needs to add in order to support its sports teams.

| Field | Owner | Field Type | Surface | Lights | Availability |
|------------------------------|-------|--------------|---------|--------|---------------|
| WHS Stadium | NRC | Rectangular | Turf | No | Fall & Spring |
| Sprague Field 2 | SC | Rectangular | Turf | No | Fall & Spring |
| Sprague Field 3 | SC | Rectangular | Turf | No | Fall & Spring |
| Upham Lower Field | SC | Rectangular | Grass | No | Fall & Spring |
| Hunnewell Park Field (3) | NRC | Rectangular | Grass | No | Fall & Spring |
| Perrin Park | NRC | Rectangular | Grass | No | Fall & Spring |
| Hardy Field 2 | SC | Multipurpose | Grass | No | Fall & Spring |
| Schofield School Field | SC | Multipurpose | Grass | No | Fall & Spring |
| Sprague Field 1 | SC | Multipurpose | Grass | No | Fall & Spring |
| Sprague Field 4 | SC | Multipurpose | Grass | No | Fall & Spring |
| Hunnewell Park Fields (1) | NRC | Multipurpose | Grass | No | Fall & Spring |
| Hunnewell Park Fields (2) | NRC | Multipurpose | Grass | No | Fall & Spring |
| Kelly Field 1 (Bates School) | NRC | Multipurpose | Grass | No | Fall Only |
| Kelly Field 2 (Bates School) | NRC | Multipurpose | Grass | No | Fall Only |
| Hunnewell Multipurpose | NRC | Multipurpose | Grass | Yes | Fall Only |

50 Years of Growth of Youth Sports

Over the last 50 years, there have been four nationwide changes that have lead to dramatic increases in the level of participation in youth and high school sports in Wellesley and across the country:

- Increased Participation at Younger Ages and All Skill Levels: Starting in the late 1960s and continue to today, there has been a dramatic increase in the number of children playing youth sports, with the opportunity to participate available to all age and skill levels (K-12).
- **Title IX:** In 1972, Congress passed Title IX, a federal civil rights law that requires educational institutions that receive federal funding to provide equal opportunities to participate in sports, regardless of gender. Title IX has been a public policy triumph that has led to exponential growth in the number of girls participating in youth and high school sports.
- **Meteoric Growth of Soccer:** Soccer has led the way in terms of the growth of youth sports. In 1967 there were only 100,000 people playing soccer in the U.S. Today over 24.4 million Americans play soccer and approximately half of them are girls and women.
- Explosion in Popularity of Lacrosse: Lacrosse is the fastest growing sport in the U.S. and since its founding in 1993, Wellesley Youth Lacrosse has grown to almost 1,000 Wellesley youth playing in 2019.

1969: Birth of Wellesley Youth Soccer



- In the spring of 1969, Boston Area Youth Soccer (BAYS) was created for boys.
- That same year, Wellesley United Soccer Club (WUSC) was created and a single team of 9th grade boys joined the newly former BAYS league.
- The Wellesley boys faced Framingham in the BAYS Championships on a hot June day at Sprague Fields. The game was tied 0-0 at the end of regulation and went into quadruple overtime until Rick Copland scored the winning goal for Wellesley on a cross from David Himmelberger.
- Wellesley being crowned BAYS champions in the league's inaugural season was an auspicious start for a soccer program that has grown to be the largest and winningest program in Massachusetts.

Wellesley United Soccer Club BAYS Champions, Spring 1969



Title IX and the Growth of Soccer

- In 1972, Congress passed Title IX, and girls were finally given an equal opportunity to participate in sports. The year Title IX became law, there were only 400 girls playing high school soccer in the entire country and no girls in Wellesley played soccer.
- In 1974, BAYS and Wellesley began offering soccer to girls and over 230 Wellesley girls signed up to play in that first season.

 Wellesley High School Girls Soccer Team 1976
- Two years later, WHS began offering girls soccer.
- In 2019, over 24.4 million Americans play soccer and approximately half of them are girls and women.
- In Wellesley, thousands of kids of all ages play soccer and over half of them are girls (52% girls, 48% boys).
- Title IX worked brilliantly and resulted in increased participation in youth sports by BOTH girls and boys.

FRONT ROW. Mariano: White, Meg McCavler, Co-opeains Petry Ide, Jane Keele, Liss Anderson, Paula Klimane: BACK ROW: Coach Bersy Phillips, Linds Link, Ann Hadiey, Lee Cattanach, Alison Pruyne, Liss Berdan, Laure Grigg, Dorite Nicolo, Debbie Ponter, Lauren Griffiths.

50 Years of Growth of Soccer



- In 1969, Wellesley had a total of four soccer teams and soccer was for boys only:
 - A youth soccer team of 9th graders;
 - A Wellesley Junior High School Soccer Team (Middle School); and
 - WHS JV and Varsity Soccer Teams.
- During the 2018-2019 school year, Wellesley youth had:
 - 2,060 girls and boys playing on 221 teams in the fall, and
 - 1,829 girls and boys playing on 204 teams in the spring.
- The incredible growth of youth soccer is projected to continue for the fall and spring seasons, with additional demand during the winter months.
- In order to meet the demand for playing fields, Wellesley United Soccer Club pays \$100,000-\$140,000 each year to rent field time and is still not able to satisfy its needs.

Growth of Field Hockey

- Field Hockey has been offered as a fall sport to WHS girls for generations. In the fall of 2019, 95 girls played on two WMS and three WHS field hockey teams.
- Prior to 2014, the only fall sports available to girls in grades 1-4 was soccer. In contrast, Wellesley boys had the option to play soccer, flag football, football, and baseball.
- In the fall 2014, Wellesley Scoops Field Hockey Club ("Wellesley Scoops") was started to provide another team sport option to younger girls.
- Wellesley Scoops has quickly grown to 200 girls playing on 15 teams in the fall, and 100 girls playing on 9 teams in the spring and has the potential for future growth.
- Unfortunately, because of the shortage of playing fields, Wellesley Scoops has no field time in Wellesley and is required to rent fields from Wellesley College and Dana Hall for \$300 an hour to meet its needs.
- The growth of the Wellesley Scoops field hockey program has been limited due to lack of field time.
- The sport, which is ideally played on artificial turf, would benefit greatly from the Wellesley playing fields having a combination of artificial turf and lights and the additional field time that would create.

Growth of Football/Flag Football



- Wellesley High School Football dates back to the very founding of Wellesley in 1881. The Annual Thanksgiving Day football game between Wellesley and Needham began on 1882 and is the oldest public high school rivalry in the country.
- In the fall of 2019, 102 boys played on one WMS and three WHS football teams.
- In 2008, Wellesley Youth Football was founded.
- In 2018, 100 boys in grades 2-7 played on five Wellesley Youth Football teams.

• In addition to traditional football, over 200 kids in grades K-3 play flag football.

Growth of Lacrosse



- The Wellesley Youth Lacrosse Club was created in 1993.
- Lacrosse is the fastest growing sport in the United States and Wellesley. Wellesley Youth Lacrosse has grown 370% in the last 20 years from 10 teams in 2000 to 47 teams in 2019. Lacrosse is projected to continue to experience rapid growth in Wellesley and across the U.S.
- During the 2018-2019 school year, Wellesley Youth Lacrosse had:
 - 100 girls and boys playing on 4 teams in the fall, and
 - 935 girls and boys playing on 47 teams in the spring.
- In spring 2019, 59 girls and 53 boys played on three WHS lacrosse teams for each gender.
- In order to meet the demand for playing fields, Wellesley Youth Lacrosse pays approximately \$20,000 each year to rent fields at Wellesley College and Babson College and is still not able to satisfy its needs.

Vast Majority of Towns Wellesley Competes Against in Sports Have Stadium Lights



| Arlington High School | YES | Milton High School | YES |
|--|---------------|--|-----|
| Ashland High School | YES | Medfield High School | YES |
| Belmont High School | YES | Natick High School | YES |
| Braintree High School | YES | Needham High School | YES |
| Brookline High School | Football Only | Newton North High School | NO |
| Canton High School | YES | Newton South High School (Approved 2019) | YES |
| Cohasset High School | YES | Pembroke High School | YES |
| Concord-Carlisle High School | YES | Walpole High School | YES |
| Dover-Sherborn High School | YES | Wayland High School | YES |
| Framingham High School | YES | Wellesley High School | NO |
| Foxborough High School | YES | Westwood High School | YES |
| Lexington High School | YES | Weston High School | YES |
| Hingham High School | YES | Weymouth High School | YES |
| Lincoln-Sudbury High School | YES | Winchester High School | YES |

Playing Field Survey Results



A survey of WMS, WHS, and all the recreational youth sports organizations in Wellesley that play on rectangular fields (soccer, football, field hockey, and lacrosse) yielded the following results:

- Field time is an issue for 100% of teams.
- 99% of teams report a shortage of field time for practices and games.
- 100% of teams are interested in practicing and playing games on fields with lights.
- 94% of teams rent fields.
- If there was more field time, 94% of the sports would offer additional programs.

94% of teams rent fields

Annual costs of more than \$150,000



Question: Do you rent outside fields

- WMS & WHS Sports: No
- Wellesley United Soccer Club: Yes, WUSC leases two fields at Elm Bank in the fall and spring for \$40,000-\$80,000 depending on field conditions. WUSC rents space at Boston Sports Club and Longwood for \$60,000 and has a contract with Edge Sports Complex (900 Worcester Street) for \$350 an hour.
- Wellesley Youth Football: No
- Wellesley Scoops Field Hockey Club: Yes, field hockey does not get any field time in Wellesley and is required to rent fields from Wellesley College and Dana Hall for \$300 an hour to meet its needs.
- Wellesley Youth Lacrosse: Lacrosse spends approximately \$20,000 renting fields at Wellesley College and Babson College. Lacrosse also rents indoor space for winter training and early spring.

Reduced Field Rental Costs



- It will cost between \$8-\$20 an hour to light WHS Stadium vs. \$350 an hour to rent a lighted field.
- Installing lights at WHS Stadium would result in a net increase in playing field time of 442 hours a year (290 hours in the fall, 152 hours in the Spring).
- Moving practices from rented lit fields to the Stadium would save
 Wellesley youth sports programs significant money



Educational & Health Benefits

Reduction in Missed Classes



- Late in the season, particularly during playoffs, WHS student athletes are often required to be dismissed early from school in order to play games before it gets too dark.
- Adding lights will eliminate the need for these early dismissals and the lost teaching and learning associated with missing afternoon classes.

Fewer Cancellations / Shortened Games



- WHS sports teams routinely have to cancel games because of the poor condition of the grass fields after rain or snow and the need to preserve field integrity. Lights would expand capacity on the stadium turf field, reducing cancellations.
- In late October, JV field hockey games are only 20-35 minutes in length as it gets too dark to play. Lights would allow the games to last the full 60 minutes.

Sporting Events at Night Help Build Community and Combat Social Isolation



- Social isolation and loneliness are serious public health risks. This is particularly true for teenagers and the elderly.
- Sporting events at night at WHS Stadium would offer Wellesley residents of all ages the opportunity to engage with a wide circle of friends and acquaintances that can provide a sense of belonging and companionship.
- Students, their family members, and the broader community would all be welcome at night sporting events at WHS Stadium.



Why WHS Stadium?

WHS Stadium is at the hub of town life



- WHS Stadium was built in 1938 and has played an important role in the life of the town for generations
- Centrally located and largest gathering space in Wellesley
- Located across the street from WHS for easy access by students
- The only place large enough to hold the entire WHS student body
- Hosts WHS graduation, Wellesley Wonderful Weekend, St. John-St. Paul Annual Communal Mass, charity events, etc.

WHS Stadium is newly renovated

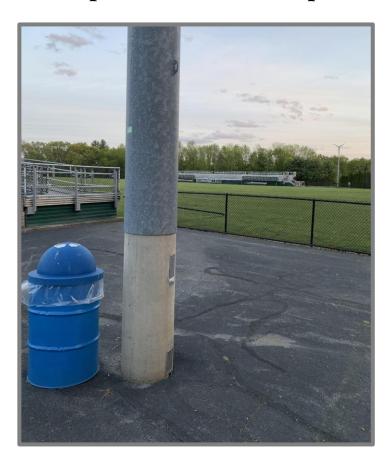


- New synthetic turf field and track (October 2016)
- Stadium seating capacity of 2,300 spectators
- 318 parking spaces (far more than any other field)
- Part of the Hunnewell Field Complex that already has lights at Reidy Field, Hunnewell Multipurpose Field, Tennis Courts, and Basketball Courts
- Electrical capacity and conduits are already in place, making this the least expensive field to add lights

Proposed Ground Level Improvements & Light Fixtures



Four poles, minimal footprint



LED Programmable Lights

