ATTACHMENT 6 – FIELD USE DOCUMENTATION

MAXIMIZING THE DURABILITY OF ATHLETIC FIELDS

Maximizing the Durability of Athletic Fields

Durable athletic fields begin with sound construction and careful planning, and good management practices can increase a field's durability. The basic concepts presented here can help field managers extend the usability of athletic fields.

Field managers are asked to maintain premier turf surfaces knowing that the field will be overused and likely not make it through the playing season. Athletic fields are being used to host more and more events and tournaments. The addition of lights is a major reason for this situation. In some cases, new sports such as lacrosse are being added to fields already overburdened with soccer events. Football fields need to double as general purpose fields for special events. Of course, at some point, a field will begin showing signs of wear. And at some point, the field can fail.

Because field wear is influenced by so many variables, no definitive equation exists to predict when a field will begin showing signs of wear or when it will fail. Such a prediction would be invaluable to schools and municipalities as they face increased legal questions and liability issues regarding injuries associated with poorly designed or constructed facilities, and/or mismanaged facilities. Field managers struggle to accommodate all participating groups without damaging the fields. If fields are overused, then the likelihood of a player becoming injured due to poor field conditions increases. What is a field manager to do?

Ideally, adequate numbers of fields would be available so use could be properly distributed. It is best to have specific game and practice fields dedicated only to one sport to eliminate compound wear from two or more sports. Additionally, a sound turf maintenance program promotes turf growth and recovery. Unfortunately, budgets for field management are often the most limiting factor.

Good fields begin with a sound construction strategy, and careful planning is imperative for long-term success.

ENSURE ADEQUATE DRAINAGE

Several construction strategies can maximize field durability. At the top of the list is adequate drainage. Wet fields are more prone to damage than dry fields. Adequate drainage not only prevents rainouts; it can also prolong a field's life. Drainage can be achieved by using surface flow off fields that are crowned or by using subsurface drainage lines. Subsurface drainage depends on good water infiltration of the field. For this reason, a sand-based field will move the water from the field surface much more effectively than relying on surface flow alone. In addition, sand-based fields are less likely to compact. A compacted field generally has lower water infiltration rates, so the surface may remain wet for longer periods of time following a moderate rain.

SELECT A DURABLE TURFGRASS

Bermudagrass is the ideal turfgrass surface for most of North Carolina's athletic fields. The exception may be fields in the upper elevations in

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the western part of the state. In upper elevations, winterkill of bermudagrass may be a significant concern. Bermudagrasses released since 2000 have increased tolerance to cold temperatures and may offer these areas an opportunity to use bermudagrass.

Bermudagrass forms a tight, resilient playing surface with high wear tolerance and fast recuperative potential. These traits are most obvious in the summer and early fall when the bermudagrass is actively growing. If the turf goes dormant in late fall or winter, the aboveground tissue can be easily worn off during heavy play. Maintaining reasonable fertility practices during the fall can help the turf recover through the winter and spring. Overseeding fields with perennial ryegrass is one option that gives a green playing surface to dormant bermudagrass fields.

TRACK FIELD USE AND CONDITION

How much use can a field withstand? This question is best answered using on-site field-use data from previous years. Field data collection requires some careful documentation of games, practices, and other events. As the demands on fields increase, more managers are starting to track field use. Probably the easiest data to track is the number of hours the fields are in use during the year.

Before a field is ever used, planners, designers, and managers should understand its expected level of use and performance. These expectations should be realistic. Those involved in planning and maintaining a field should consider the maintenance budget, available equipment, and labor. It is often helpful to have one field labeled as a "championship" field and the other fields labeled as "practice" fields. This can help everyone involved define how each field can be managed via maintenance inputs and controlled scheduling to maximize its condition. Often the higher quality championship fields can be used as examples to encourage the construction of new fields that alleviate use or to increase maintenance budgets of existing fields.

Using data from a number of fields located in the Southeast and talking with turf managers and municipality supervisors, I have made a few general estimates relative to field use and condition (Table 1). These educated predictions are for grass fields (such as fields for football, soccer, or lacrosse) that are used nearly year-round. Baseball and softball should be evaluated differently because a large percentage of each game is played on a clay infield. The estimates assume the field is surfaced with a quality bermudagrass and begins the year with good coverage. The values relate to well-constructed fields that receive at least moderate maintenance and are used under reasonable conditions. The reality is that it takes only one extremely wet game to destroy a field. The values are based on all the events that occur on the field, including practices. Practices can also cause appreciable damage due to their repetitive activity in particular areas of a field, so practices must also be put into the equation.

The number of events a field can handle will ultimately depend upon field construction, weather conditions during the season (especially just before and during games), maintenance practices, recuperative periods, and the time of year.

RESTRICT FIELD USE IF NECESSARY

Obviously, the more traffic you put on the field, the faster the turf declines. Also, particular sports cause more severe field damage in localized areas. Football tends to cause extreme wear between the hash marks. Soccer wears the quickest in the middle of the field, in front of the goal mouths, along the sidelines (due to linesmen), and in the corner kick areas. Any repetitive action on the same area of the field accelerates wear. That is why practices and warm-up drills are often more damaging than games. But it is not just the athletes

Table 1. Expected Field Condition Based on Hours of Field Use per Year

Expected Field Condition	Field Use (Hours per Year)
Sustained good field conditions	200 hours or less
Good field conditions with some thinning of the turf and localized wear areas	400 to 600 hours
Fair field conditions; expect significant thinning and wear.	800 to 1,000 hours
Significant turf loss, field surface damage, increased potential for athlete injury	More than 1,000 hours

on the field who can cause wear problems. A marching band is extremely hard on a field because bands tend to march along the same lines all the time, both during a game and in practice. Cheerleaders and pep squads during games may also result in turf damage due to heavy use in a confined area.

Some reduction in traffic damage can be avoided by doing the following:

- Restrict use when soil is very wet.
- Restrict use when soil is very dry and turf is wilted.
- Always have coaches rotate heavy play areas during practices.
- Use portable goals when possible, and move them around the field.
- If possible, move a soccer field's sidelines during the year
- If a space is large enough to accommodate field rotation (see Figure 1), periodically rotate the entire field.
- On game fields, restrict the number of practices to a minimum.
- Have a reduced game schedule when grass is dormant.
- Have regularly scheduled rest times that are used to repair minor damages.
- Do not allow unofficial play.
- Use tarps (covers) on bench areas to reduce severe wear by coaches and team members,
- Use tarps (covers) on sideline areas used by the cheerleaders.

In most cases, field users will need to be informed of potential wear problems. Most users do not understand the damage that they can cause. Although it may be obvious to a field manager that a field is too wet for play, it is not obvious to most field users. Close fields when necessary. If the field manager is not allowed to close the field, the decision-makers should be made aware of the potential short and long-term damage that may result from field use given the situation. Unfortunately, some fields are scheduled the same as basketball courts or hard-surface tennis courts, without consideration of the turf surface's wearability. The field manager is in the best position to decide how much wear is too much.

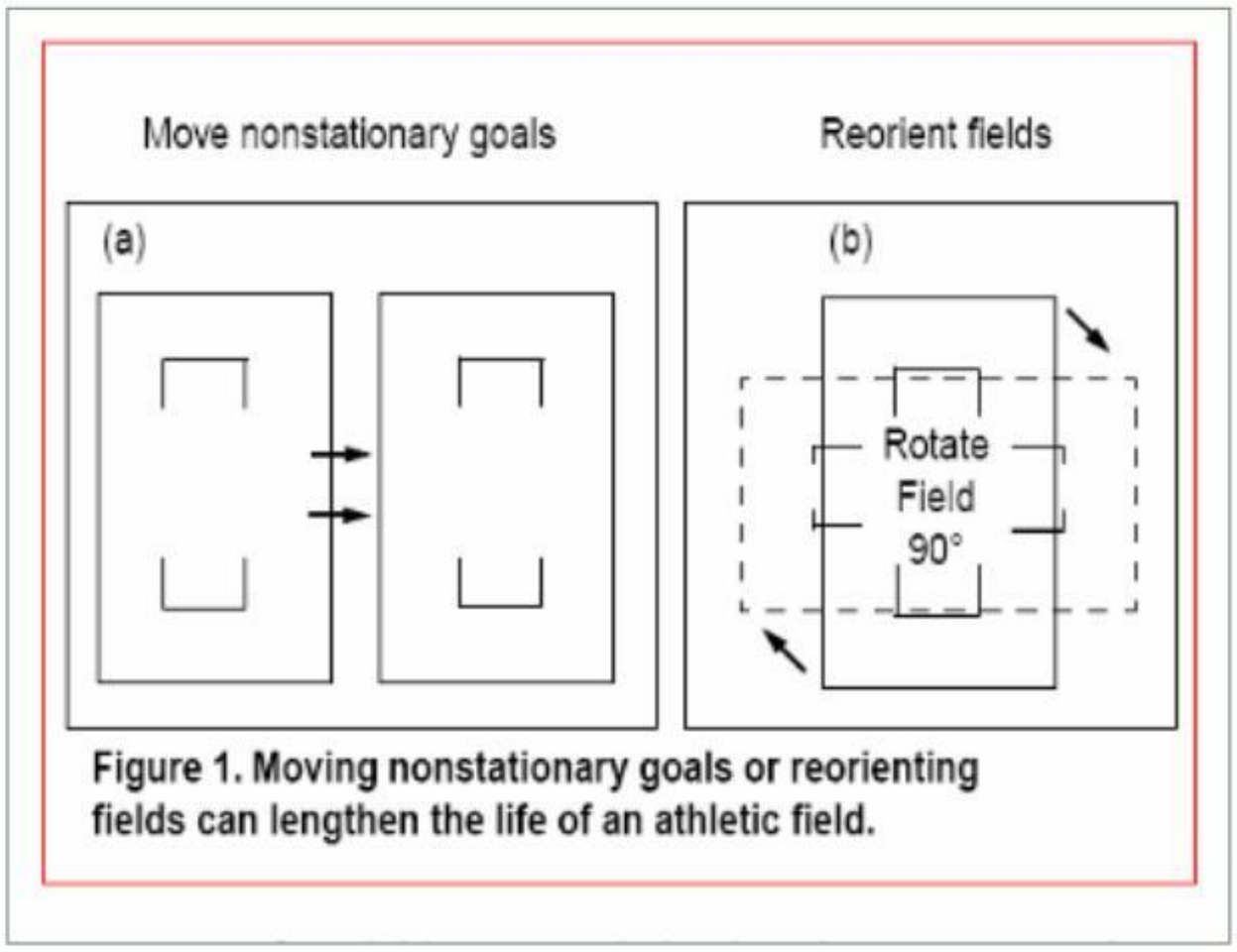

Figure 1. Moving nonstationary goals or reorienting fields can lengthen the life of an athletic field.

USE GOOD MANAGEMENT PRACTICES

Field managers can use a few practices that will maximize a field's ability to handle wear.

First, make every effort to begin the sporting season with 100 percent turf coverage. At the beginning of the year, schedule recuperative times during the season, realizing that non-overseeded bermudagrass fields will not recuperate very quickly in the late fall or winter months. Overseeding can be used to protect dormant bermudagrass if excessive wear is expected during the cooler months. But remember, the overseeding grass often can be a significant competitor with the bermudagrass in late spring to early summer when the bermudagrass is trying to grow. If premier conditions are needed during those months, then the overseed may need to be chemically removed to allow the bermudagrass to more easily re-establish.

Adjust maintenance practices to address the condition of the fields. Increase or decrease inputs (particularly irrigation and fertilization) as dictated by environmental conditions and the turf's growth.

Manage high wear areas differently than the rest of the field. This allows a manager to improve the entire field surface without dramatically increasing the budget. The most helpful practice along these lines is applying supplemental nitrogen fertilizer to the high wear areas to promote recuperation. The bermudagrass will respond to the added fertilization and promote more rapid growth, filling in divots and rip-outs quicker. The same can be done with aerification, soil amendments, and seeding. Think of a field as many parts, rather than just one field. The goal mouths of five fields in close proximity can be core cultivated in the same amount of time as one entire field. If the field routinely has localized standing water after a small shower, aerify those areas

and backfill with an appropriate coarser textured soil amendment (such as sand or calcined clay). Spread seed (if appropriate) in wear areas before games and practices.

Some management practices that can reduce field wear may be more controversial. Advocate that less aggressive cleat patterns be worn by athletes. Studies have shown that cleat design can dramatically influence turf damage. In one study, a trainer shoe produced 37 percent less turf damage than a standard soccer cleat. A 6-stud replacement cleat was 34 percent more damaging than the standard soccer cleat. The numbers are more relative than absolute, but they illustrate the impact on turf damage from something as simple as a shoe. Shoes with a greater number of smaller cleats will cause less wear and compaction damage (more cleats displace weight better) than more traditional cleat design. Of course there is a trade off—reduced traction by the user. The trainer shoe in the above-mentioned study required 47 percent less force to break traction than a standard soccer cleat. This difference may be unacceptable at certain levels of athletic competition.

To maximize field use and durability, there must be open communication among the field manager, the people responsible for scheduling the field, and the field users. Once excessive wear and field overuse results in hazardous and unsafe playing conditions, the field manager must request that the field be closed. Safety of the users is paramount. With good field design, construction, management, reasonable care and maintenance, and proper use, fields can continue to provide an acceptable playing surface.

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ATHLETIC FIELD SITE ASSESSMENTS

Location	PERMITTED FIELD TYPE	Irrigated	Lighted	Surface Material	Location Size (ACRES)	Available Athletic Field Area (ACRES)	Percentage of Lot available for Athletic Fields	Field Expansion Constraints
Angier School Playground	Little League Soccer Practice Area	NO	NO	NATURAL GRASS	**4.7**	**1.1**	**23%**	Bound by MBTA tracks, Angier School, and abutters. No room to expand without removal of other amenities.
Auburndale Playground "The Cove"	Skinned Baseball Softball Rectangular Field Practice Area	NO	NO	NATURAL GRASS	**36**	**2.8**	**8%**	Heavily wooded parcel. No room for additional fields w/o removing portions of existing forest. Topography is also a constraint
Braceland Playground	Baseball Field Soccer Field A (7v7) Soccer Field B (7v7)	NO	NO	NATURAL GRASS	**8.8**	**2.68**	**30%**	Terraced park. Masterplan eminent. Topography and other uses are a significant constraint. Riverfront Area.
Bowen/Thompsonville	Little League/Softball Little League/T-Ball Soccer Practice Area	YES	NO	NATURAL GRASS	**11.5**	**2.5**	**22%**	No room to expand field areas; high demand for ball fields in the Spring
Burr Park	Bigelow Track Soccer/Lacrosse Field Soft Ball Field	YES	NO	NATURAL GRASS	**5.1**	**1.86**	**36%**	Expansion challenging due to topography and existing amenities. Park has the only bankk of courts in this community
Burr School	Little League/Softball Soccer Ultimate Frisbee Area	NO	NO	NATURAL GRASS	**8.65**	**3.71**	**43%**	Capital project to expand usable grass field areas. Formerly capped landfill makes synthetic turf extremely challenging and involves a lengthy process. At an ellementary school with limited parking
Cabot Park	Skinned Baseball Little League Multi-Purpose (Baseball outfield Multi-Purpose (softball outfield) Skinned Softball Field	YES	NO	NATURAL GRASS	**11.57**	**4.64**	**40%**	Some potential for small rectangular field just south of the basketball courts. Irrigation and turf management required to expand small field here
New Cold Spring	Soft Ball Field Soccer/Lacrosse/Rugby Softball Outfield	YES	NO	NATURAL GRASS	**65**	**4.5**	**7%**	Potential for field redevelopment at Old Cold Spring. Irrigation install would be required. Parking, access and adjecency to dog park does not make this a good candidate. Heavily wooded. Cold Spring Brook
Old Cold Spring	50/70 Baseball	NO	NO	NATURAL GRASS				
Countryside School Playground	Little League Skinned Little League/Softball Soccer	NO	NO	NATURAL GRASS	**7.4**	**1.6**	**22%**	Site for school building redevelopment. Woods, wetlands, Southmeadow Brook
Davis Playground	Soft Ball Field	NO	NO	NATURAL GRASS	**1.6**	**0.55**	**34%**	Soft Ball Field in high demand. Land locked parcel without room for
Emerson Playground	Soft Ball Field Soccer	NO	NO	NATURAL GRASS	**2.6**	**1.2**	**46%**	No expansion feasible due to property boundaries and adjacencies
Forte Park	Lighted Skinned Softball Field Lighted Soccer/Lax/Frisbee	YES	YES	NATURAL GRASS	**6**	**2.1**	**35%**	No expansion feasible due to property boundaries and adjacencies; Great candidate for Synthetic Turf
Franklin School	Little League (away from School) Little League (near school) Soccer Practice Area	YES	NO	NATURAL GRASS	**5.5**	**1.41**	**26%**	No expansion feasible due to property boundaries and adjacencies
Albemarle Park	Little League Little League/Tball Roche Little League Cole Lighted Enclosed Softball Lighted Baseball Lighted 3A Softball F.A.Day Track Soccer Field B 7v7 Soccer Field E 7v7 Soccer Field A 9v9 Soccer Field B 7v7 Soccer/Lax Field C Soccer Field D (practice)	YES	NO NO NO YES NO YES NO	NATURAL GRASS	**16.9**	**10.32**	**61%**	Capital Project eminent. No room for expansion of grass field area due to property boundaries and adjacencies. Field expansion only possible through a lot of earthwork and clearing of Avery Woods. Synthetic turf to supplement lights for multipurpose field is the best approach. Riverfrotn Area. Field house and parking available. Sports and Recreation Complex with aquatic facility.
Horace Mann School	Little League Open Area (practice)	YES	NO	NATURAL GRASS	**2.9**	**1**	**34%**	Expansion not feasible. Ball field in high demand at this site.
Hyde Playground	Little League/Softball Soccer Practice Area	YES	NO	NATURAL GRASS	**1**	**0.45**	**45%**	Expansion not feasible due to property boundaries and adjacencies. Ball field in high demand.
Boyd Park	Little League (school side) Skinned Softball Multi-Purpose (soccer/lax/Flag)	NO	NO	NATURAL GRASS	**4.74**	**2.3**	**49%**	Expansion not feasible due to property boundaries and adjacencies. Softball in high demand. Opportunity to increase ractangular field space here.
Warren E Lincoln Playground	Baseball Field Soccer A (7v7) Soccer B (7v7)	YES	NO	NATURAL GRASS	**5.4**	**2.58**	**48%**	Expansion not feasible due to property boundaries and adjacencies. Rectangular fields are very well used.
Lower Falls	Little League/Softball Cornell) Little League/Softball (Pine Grove) Soccer A (9v9) Soccer B (9v9) Soccer C (7v7)	YES	NO	NATURAL GRASS	**8.52**	**3.4**	**40%**	Expansion not feasible due to property boundaries and adjacencies. All fields (rectangular and ball diamonds are well used.
Lyons Park	Lighted Little League Field	YES	YES	NATURAL GRASS				Little League field. No room for expansion due to adjacent wetlands, flooding and wooded areas.
Memorial Playground	Little league/Softball Soccer (9v9) Open Area	NO	NO	NATURAL GRASS	**2.93**	**1.22**	**42%**	Play expansion not feasible due to property boundaries and adjacencies. Only park in the area. Removal of any other amenities not feasible

Memorial Spaulding School	Little League/Softball (upper) Little League (lower) Soccer practice area	NO	NO	NATURAL GRASS	**5.6**	**1.4**	**25%**	Paly expansion not feasible due to property boundaries and adjacencies. Expanded play could be done by installing irrigation and turf management.
Nahanton Park	Soccer Field Softball Field	YES	NO	NATURAL GRASS	**57**	**1.8**	**3%**	Play expansion not feasible due to property characteristics and adjacencies. Conservation Restriction on portions of the park. Park is
Newton Centre Playground	Baseball Field Little League Field Soccer Practice Area Open Area - the bowl	YES YES NO NO	NO	NATURAL GRASS	**17.8**	**4.5**	**25%**	Play expansion not feasible due to property characteristics and adjacencies. Hammond Brook and other amenities pose large constraints in field development here.
Newton Highlands Playground	Lighted Little League Field Soccer/Lacrosse/Football Multi-Purpose Open Area	YES	YES	NATURAL GRASS	**12.6**	**3.6**	**29%**	Recent capital project. Lighted fields; expansion not feasible due to property boundaries and adjacencies. MP field is narrow for best results of synthetic turf. Other areas need attention. Use on natural grass extensive and has created field closures. Use to be better distributed to other areas.
NNHS	Baseball Field Soft Ball Field Lowell Ave.Multi-Purpose Field Stadium Synthetic Turf Field Tiger Drive Multi-Purpose Field	YES NO YES		NATURAL GRASS NATURAL GRASS NATURAL GRASS SYNTHETIC NATURAL GRASS	**24**	**7.43**	**31%**	Expansion of grass field space not feasible. Expansion of turf field constraint by lack of regulation size grass area to convert.
NSHS	Baseball Field Field Hockey/Football Soft Ball Field JV/9th Soccer Brandeis Road Multi-Purpose Turf Field Lighted Stadium Multi-Purpose Turf Field	YES NO	NO YES	NATURAL GRASS NATURAL GRASS NATURAL GRASS NATURAL GRASS SYNTHETIC SYNTHETIC	**71.16**	**19.5**	**27%**	Expansion of grass field space not feasible with level of use. Play expansion through lighting existing synthetic turf fields will help with field permit management. Assessment of use impacts due to new lights forthcoming.
Brown-Oak Hill	Baseball Field Wheeler Road Softball/Little League Multi-Purpose A Multi-Purpose B Soccer 7v7 A1 Soccer 7v7 A2 Soccer 7v7 B1 Soccer 7v7 B2 Skinned Softball Field Wheeler Road K-Soccer fields (8 small)	YES	NO	NATURAL GRASS	**8**	**2.75**	**34%**	Expansion of grass field space not feasible with level of use, property boundaries and adjacencies. Capital project to improve quality of fields forthcoming.
Pellegrini Park	Lighted Softball Lighted Soccer/Lacrosse	NO	YES	NATURAL GRASS	**4.6**	**1.83**	**40%**	Paly expansion not feasible due to property boundaries and adjacencies. Expanded play could be done by installing irrigation and turf management. Expansion of play possible through better sports lighting.
Peirce School	Little League/Soft Ball Field Soccer (9v9) field	NO	NO	NATURAL GRASS	**4.87**	**1.24**	**25%**	Paly expansion not feasible due to property boundaries and adjacencies.
Richard McGrath Park @ Warren House	Soccer (7v7) A Soccer (7v7) C Multi-Purpose Field 1(Soccer/Lax) Multi-Purpose Field 2(Soccer/Lax) Softball Field (Myrtle) Softball Field (Comm Ave) Volleyball Area (Comm Ave) Volleyball Area (Myrtle)	YES	NO	NATURAL GRASS	**10.55**	**6.19**	**59%**	Capital Project eminent. No room for expansion due to property boundaries and adjacencies. Removal of ball diamonds inclrease rectangular field space.
Richardson Playground	Little League Grass Area outside LL Field	YES NO	NO	NATURAL GRASS	**2.98**	**2.19**	**73%**	No room for expansion due to property boundaries and adjacencies. Existing ball field very well used.
Stearns Playground	Little League/Soft Ball Field	NO	NO	NATURAL GRASS	**3.35**	**0.7**	**21%**	No room for expansion due to property boundaries and adjacencies. No real opportunities for rectangular field expansion.
Underwood School/ Farlow park	Little league Field	YES	NO	NATURAL GRASS	**3.76**	**0.56**	**15%**	No room for expansion due to property boundaries and adjacencies. No
Ward Park	Little League Field Skinned Softball Field Practice Soccer Area	NO	NO	NATURAL GRASS	**3.45**	**2.67**	**77%**	No room for expansion due to property boundaries and adjacencies. Opportunities to improve play surface to increase permit hours possible.
Weeks Park	Soccer Field C (7v7) Soccer Field J (7v7) Soccer Field A (9v9) Soccer Field B (9v9) Soccer Field F (9v9) Soccer Field E (9v9) Multi-Purpose Field K (soccer/Lacrosse) Multi-Purpose Field G (Soccer/Lacrosse) Little League/Softball	YES	NO	NATURAL GRASS	**15**	**7.21**	**48%**	No room for expansion due to property boundaries and adjacencies. Rectangular fields very well used. Pottential for underutilized ballfield removal.
Wellington Playground	Open Grassy Area			NATURAL GRASS	**1.9**	**0.44**	**23%**	No room for expansion due to property boundaries and adjacencies. Very small practice field, at best
West Newton Common	Baseball Field Multi-Purpose (soccer/frisbee)	NO	NO	NATURAL GRASS	**3.6**	**1.95**	**54%**	No room for expansion due to property boundaries and adjacencies. Good potential for irrigation installation to improve quality and permit
Williams School	Little League/Soft Ball Field	NO	NO	NATURAL GRASS	**3.09**	**0.71**	**23%**	Well installation attempted. Not enough GPM for irrigation. Espansion not feasible due to property boundaries

Zervas School	open field area	YES	NO	NATURAL GRASS	**6.5**	**0.35**	**5%**	No room for expansion due to property boundaries and adjacencies. Very small practice field, at best

NEWTON PARKS, RECREATION & CULTURE
FIELD SUBCOMMITEE MEETING
TIER TWO GRASS FIELD FEE PROPOSAL

NEWTON PARKS, RECREATION & CULTURE

FIELD SUBCOMMITTE MEETING

TIER TWO GRASS FIELD FEE PROPOSAL

NOVEMBER 10, 2021

CURRENT TIER STRUCTURE AND FEES

Tier	Groups	Turf	Grass	Lights
1	Newton Parks & Recreation, Newton Public Schools	$0	$0	$0
2	Newton-based Youth Sports Leagues – No charge except for Turf Fields. Light fees additional.	$50	$0	$50
3	Adult Groups and Youth Leagues with more than 65% residents, Newton Private Schools, Newton Charitable organizations, Newton Public School PTO's. Light fees additional.	$100	$30	$50
4	Newton Businesses, non-Newton schools, Adult Groups and Youth Leagues with less than 65% Newton Residents, Newton non-profits; Newton Charitable organizations. Light fees additional.	$150	$40	$50
5	Private for-profit Camps and Clinics not affiliated with Newton. One-time Events/Tournaments, or other organizations running a business regardless of number of Newton residents associated with the program. Light fees additional.	$150	$50	$50

New Tier 3, 4 & 5 Fees approved by PRC Commission 5/17/2021. In effect as of July 1, 2021

FEE BENCHMARKS TO OTHER COMMUNITIES

- A survey was done of 14 Communities to learn how each community handles their numerous requests for field use by residents and non-residents.
- All Communities appear to have some form of Tier System, similar to Newton.
- 9 of the 14 communities surveyed charge a per person participant fee for youth leagues; three communities charge youth leagues per hour; two or three communities charge a PPF for adult programs; several charge a PPF for non-resident youth and adult programs.
- Fees for grass field use range from $10/hour for a single use permit to as much as $40/hour. (fee reductions be given for groups who pay PPF)
- Fees for turf field use range from $30 to $150 per hour depending on Tier. (fee reductions may be given for groups who pay PPF)
- Communities appear to consistently charge higher fees to for-profit programs and non-resident programs.
- Survey information is attached as the appendix to this presentation (slides 15, 16 & 17).

Why Improve Athletic Fields?

Current facilities experience little to no rest time, are overused, and often under-maintained due to budgetary constraints and lack of staffing.

BEST PRACTICES

HOURS OF USE PER WEEK

- Professional Baseball/Football: 750 - 800 Per year (28 hours per week)
- Elite College Sports: 650 - 700 Per year (25 Hours Per week)
- Varsity Prep School and College Sports 550 - 600 Per year (21 Hours Per week)
- Varsity Sports 450 - 500 Per year (17 Hours Per week)
- Standard Varsity Sports/Municipal Sports 350 - 400 Per year (14 Hours Per Week)
- Low Maintenance/Municipal 250 - 300 Per year (10 Hours Per Week)

BUDGET

- **Professional Baseball/Football:** 20-30K+ per acre.
- Elite College Sports: 12-20K per acre
- Varsity Prep School and College Sports: 8-12K per acre
- High End Varsity Sports: 6-10K per acre
- Standard Varsity Sports/Municipal Sports: 5-8K per acre
- Low Maintenance/Municipal: 3-5k and under per acre

Figures based on materials and outsourced services only. Irrigation, mowing, lining, litter cleanup not included

**Above information provided by Tom Irwin Advisors for Newton Athletic Fields Foundation Forum 10/17/2021 **

GRASS FIELD

HOURS OF USE PER WEEK

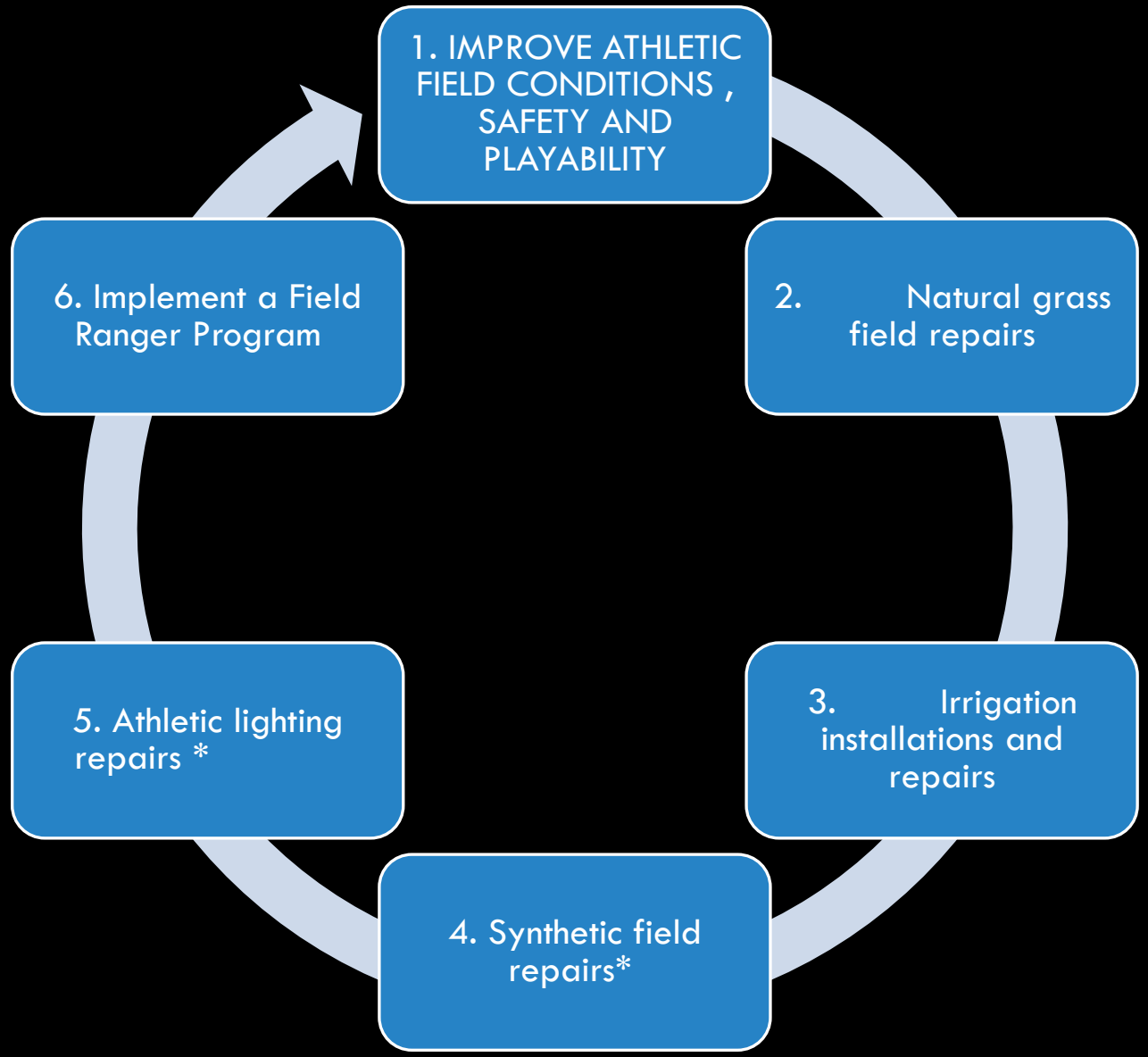
Sample of Newton Fields

April 1 – Nov. 27, 2021

FIELD	TOTAL HOURS April 1-November 27	AVERAGE WEEKLY HOURS (36 week)
Albemarle MP/Baseball**	915.5	25.4
Albemarle Roche/Field C**	876	24.3
Bowen Little league	802	22.3
Cabot Baseball	334.75	9.3
Cabot Little League	1,245	34.6
Cold Spring MP	712.5	19.5
Cold Spring SB	1,073	29.8
Forte MP/SB**	957	26.6
Franklin**	2852	79
Highlands MP	1,106.75	30.7
Highlands Little League	951	26.4
Oak Hill/Brown**	4,234/5	117.6
Weeks**	3,583.5	99.5
McGrath**	2,781.75	77.3
NNHS – Lowell Ave side**	2,179	60.3
Pellegrini MP	322.60	9
Pellegrini SB	386	10.7
NSHS – Grass fields**	2,054	57

** Multiple fields at site

WHAT WILL TIER TWO FEES BE USED FOR?



* Main funding for these repairs will come from light fees and synthetic turf fees

NEWTON PARKS, RECREATION & CULTURE
TIER TWO CRITERIA

1. League must be open to all Newton Youth.
2. A team does not constitute a League; Tier 2 is restricted to Leagues.
3. Youth Leagues are restricted to age 18 and below (or graduated the same year for summer leagues)
4. 100% resident participants (or enrolled in Newton PUBLIC or PRIVATE Schools). Roster verifications may be requested by PRC at any time.
5. Leagues with Travel Teams must play 50% or more of their games each season at “away” venues.
6. League must be Non-Profit.
7. League Board of Directors must be comprised of Newton Residents only, and must hold Quarterly Meetings, at a minimum.

PROPOSED TIER 2 PER PARTICIPANT FEES

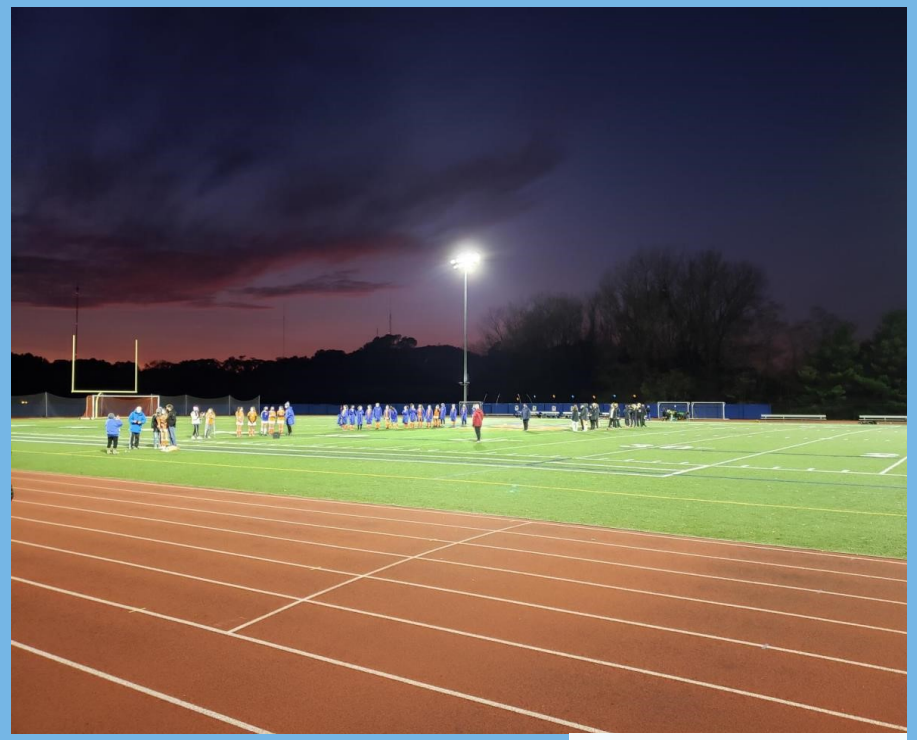
YOUTH LEAGUES PARTICIPANT NUMBERS

Newton Tier 2 Leagues	SUMMER 2020	FALL 2020	WINTER 2020	SPRING 2021**	TOTAL PARTICIPANTS	$10.00	$15.00	$20.00
Newton Youth Soccer	300	1,002	75	1076	2,453	$24,530.00	$36,795.00	$49,060.00
Newton Girls Soccer	228	989	100	1189	2,506	$25,060.00	$37,590.00	$50,120.00
BUDA Youth Frisbee*	22	91	0	118	231	$2,310.00	$3,465.00	$4,620.00
Newton Area Flag Football*	0	325	0	395	720	$7,200.00	$10,800.00	$14,400.00
Girls Lax Newton*(no 2020 or spring '21program)	0	0	0	0	0	$ -	$ -	$ -
Newton Boys Lacrosse(no 2020 program)	0	20	0	195	215	$2,150.00	$3,225.00	$4,300.00
Newton Girls Lacrosse (no 2020 program)	0	0	0	196	196	$1,960.00	$2,940.00	$3,920.00
Newton Girls Softball	78	193	0	215	486	$4,860.00	$7,290.00	$9,720.00
Newton Little League	113	225	0	325	663	$6,630.00	$9,945.00	$13,260.00
NLL Senior Division	0	80	0	78	158	$1,580.00	$2,370.00	$3,160.00
South East Little League	95	369	0	377	841	$8,410.00	$12,615.00	$16,820.00
Babe Ruth Baseball	82	0	0	90	172	$1,720.00	$2,580.00	$3,440.00
American Legion Juniors(no 2020 program)	0	0	0	18	18	$ 180.00	$ 270.00	$ 360.00
American Legion Seniors(no 2020or 2021 program)	0	0	0	0	0	$ -	$ -	$ -
Boston UVC Volleyball*	311	259	0	240	780	$7,800.00	$11,700.00	$15,600.00
Senior Youth Baseball (no 2020 spring program)	0	0	0	40	40	$400.00	$600.00	$800.00
Newton Mustangs (no 2020 program)	0	0	0	45	45	$ 450.00	$ 675.00	$ 900.00
TOTALS:	1229	3553	175	4597	9,554	$95,540.00	$129,900.00	$173,180.00

** based on registration #'s to date

ALTERNATE TIER 2 FEE PROPOSAL
BASED ON PERMITTED GRASS FIELD HOURS

Newton Tier 2 Leagues	SUMMER Hours 2020	FALL Hours2020 (9/1-11/30)	WINTER Hours 2020 (12/1/2--3/31/21)	SPRING Hours 2021 (4/1 - 6/20)	TOTAL PERMITTED HOURS	$2.00	$ 3.00	$ 4.00	$ 5.00	$6.00	$ 8.00	$10.00
Newton Youth/Newton Girls Soccer	186.5	10,730	123.5	4,217	15,257	$ 30,514.00	$ 45,771.00	$ 61,028.00	$ 76,285.00	$91,542.00	$ 122,056.00	$ 152,570.00
Boston Area Youth Volleyball*	38	308	0	113	459	$ 918.00	$ 1,377.00	$ 1,836.00	$ 2,295.00	$2,754.00	$ 3,672.00	$ 4,590.00
BUDA Youth Frisbee*	12	34	0	52	98	$ 196.00	$ 294.00	$ 392.00	$ 490.00	$588.00	$ 784.00	$ 980.00
Newton Area Flag Football*	72	46		88	206	$ 412.00	$ 618.00	$ 824.00	$ 1,030.00	$1,236.00	$ 1,648.00	$ 2,060.00
Girls Lax Newton*	78	56	0	0	134	$ 268.00	$ 402.00	$ 536.00	$ 670.00	$804.00	$ 1,072.00	$ 1,340.00
Newton Boys Lacrosse		24	2	529	555	$ 1,110.00	$ 1,665.00	$ 2,220.00	$ 2,775.00	$3,330.00	$ 4,440.00	$ 5,550.00
Newton Girls Lacrosse	0	0	0	126	126	$ 252.00	$ 378.00	$ 504.00	$ 630.00	$756.00	$ 1,008.00	$ 1,260.00
Newton Girls Softball	1396	916		3,732	6,044	$ 12,088.00	$ 18,132.00	$ 24,176.00	$ 30,220.00	$36,264.00	$ 48,352.00	$ 60,440.00
Newton Little League	1578	2,277		5,657	9,512	$ 19,024.00	$ 28,536.00	$ 38,048.00	$ 47,560.00	$57,072.00	$ 76,096.00	$ 95,120.00
NLL Senior Division		205		157	362	$ 723.00	$ 1,084.50	$ 1,446.00	$ 1,807.50	$2,169.00	$ 2,892.00	$ 3,615.00
South East Little League	1646	2,145		4,553	8,344	$ 16,688.00	$ 25,032.00	$ 33,376.00	$ 41,720.00	$50,064.00	$ 66,752.00	$ 83,440.00
Babe Ruth Baseball	727	13		42	782	$ 1,564.00	$ 2,346.00	$ 3,128.00	$ 3,910.00	$4,692.00	$ 6,256.00	$ 7,820.00
American Legion Juniors	0	0		4	9	$ 18.00	$ 27.00	$ 9.00	$ 45.00	$54.00	$ 72.00	$ 90.00
American Legion Seniors	0	0			0	$ -	$ -	$ -	$ -	$0.00	$ -	$ -
Newton Senior Youth Baseball	0	0	0	267	267	$ 534.00	$ 801.00	$ 1,068.00	$ 1,335.00	$1,602.00	$ 2,136.00	$ 2,670.00
Newton Mustangs Football	0	0	0	45	0	$ 90.00	$ 135.00	$ 180.00	$ 225.00	$270.00	$ 360.00	$ 450.00
TOTALS:	5,733.50	16,753.50	125.50	19,582.00	42,195	**$ 84,399.00**	**$ 126,598.50**	**$ 168,771.00**	**$ 210,997.50**	**$253,197.00**	**$ 337,596.00**	**$ 421,995.00**



Questions

Comments

Discussion

APPENDIX

CITY OF NEWTON ATHLETIC FIELDS MAINTENANCE BUDGET IMPROVEMENTS

Public Grounds Maintenance Budget					
Maint. Budget Expense Item	General Description	Fiscal Year 2021	Fiscal Year 2022	Budget Increase in Dollars	Budget Increase Percentage
Turf Mowing	Mowing Leaf removal Mulching Pruning	$ 575,000	$ 700,000	**$ 125,000**	**22%**
Turf Management	Aerification Fertilization Slice seeding Top dressing Integrated Pest Management (IPM)	$ 75,000	$ 250,000	**$ 175,000**	**233%**

FY22 turf mowing budget increased by 22%. However, three grass contracts were rebid. They started July 1, 2021. Contractual grass contract prices increased by 17%. Two additional grass mowing contracts will start July 1, 2022, and more price increases are expected

COMMUNITY SURVEY

CITY/TOWN	Tier One	Tier Two	Tier Three	Tier Four	Tier Five
Brookline (minimum 2 hours)	no charge	$15 - $25/hour	$15 - $25/hour	$25 - $40/hour	$50/hour
TURF	no charge	$30 - $50/hour	$30 - $50/hour	$50 - $80/hour	$100/hour
LIGHTS					
Lexington	no charge	no charge w/$15 per person participant fee	$40/hour	$55/hour	$75/hour
TURF	no charge	$35/hour	$80/hour	$110/hour	$150/hour
LIGHTS	$35/hour	$35/hour	$35/hour	$35/hour	$35/hour
Westwood	no charge	$50/hour			
TURF	no charge	$150/hour			
LIGHTS	$70/hour WHS; $25/hour Morrison	$70/hour WHS; $25/hour Morrison			
Natick	no charge	$5/player/season	Natick Adult ORGS$125/team/ season	Natick residents$10/hour	$200/field/day
TURF	TBD	additional $5/player/season	TBD	TBD	$300/field/day
LIGHTS	TBD	TBD	TBD	TBD	TBD
Weston	no charge	no charge -$15/hour	$25/hour	$50/hour	$75/hour
TURF	n/a	n/a	n/a	n/a	n/a
LIGHTS	n/a	n/a	n/a	n/a	n/a
Waltham	No charge	No charge	$150/2hour block;$75 each added hour	$150/2hour block;$75 each added hour	$150/2hour block;$75 each added hour
Turf	No charge	No Charge	$150/2hour block;$75 each added hour	$150/2hour block;$75 each added hour	$150/2hour block;$75 each added hour
Lights	$75	$75	$75	$75	$75

COMMUNITY SURVEY

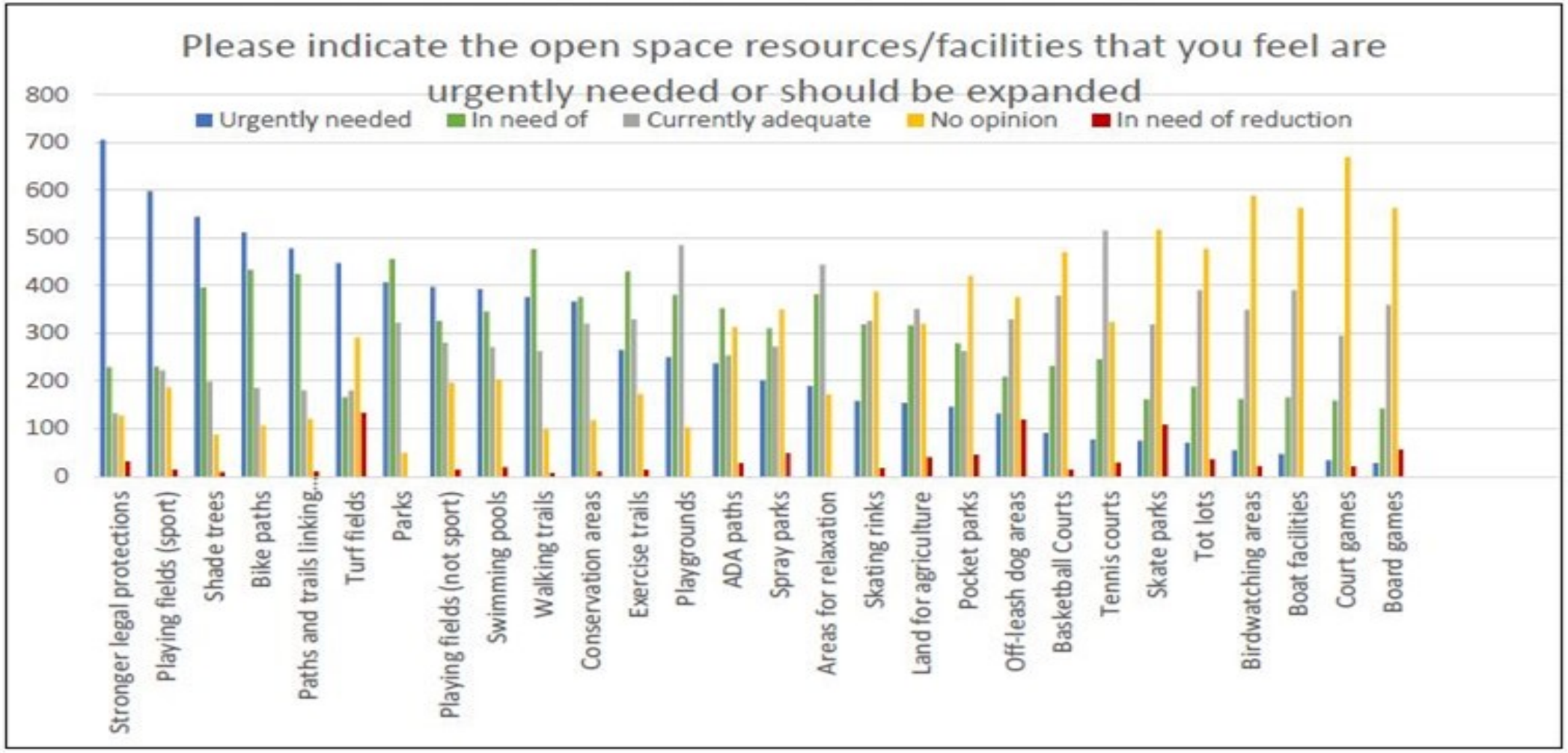
CITY/TOWN	Tier One	Tier Two	Tier Three	Tier Four	Tier Five
WELLESLEY (see attached)	1) Town-wide Special Events: No fee, 2) School Use: No fee, 3) School Coach(es) Clinics: $15 per participant, 1.5 hours minimum	League$30 per participant per season; Clinic $15/participant1.5 hours minimum	Multi-Purpose Field (at Hunnewell) for Adult Softball: $40 per participant per season ($25 to Recreation lighting account); Wellesley Resident – One-Time Use: $50 for a grass field, including the Multi-Purpose Field (at Hunnewell), but $75 if using lights (incremental $25 to Recreation lighting account); $75 for a turf field, 1.5 hours minimum	Non-Resident (Adults and Youth): Grass field and Sprague turf field: $150; High School turf field: $375 (fee is for field use only; utilization of scoreboard and sound system is not allowed),1.5 hours minimum	Non-Recreation Department Camps: $35 per participant on a grass field; $50 per participant on a turf field. 1.5 hours minimum
TURF			$75		
LIGHTS					
BURLINGTON	no charge	90% resident youth or adult $25/hour	60% residents youth or adult $35/hour	under60% resident youth or adult, but must have at least 20% residents on roster $50/hour	$50/hour plus usage fee of $500 per day - weekdays; $800/day weekends
TURF					
LIGHTS		going electrical rate	going electrical rate plus $15 admin fee	going electrical rate plus $15 admin fee	going electrical rate plus $50/admin fee
PLYMOUTH		Youth Leagues $5/pp per season	Adult Leagues $8/per adult	Resident single use $10/hour; NR single use $20/hour	
TURF					
LIGHTS		lights $15/hour	lights $15/hour	lights $15/hour	
NORWOOD		Youth group/league $20/pp oer season	Resident Single use $10/hour	Non resident single use $25/hour	Norwood camp $50/hour; non Norwood camp $75/hour
TURF					
LIGHTS					
SUDBURY (see attached)		ResidentYouth group: $40/pp per season; Non Resident Youth group $85/pp per season	Resident Adult group $45 pp per season; Resident grass field $70/hour	Non Resident Adult group $85 pp/per season	Camps/Clinics $50/person
TURF		$70/per hour resident	$70/hour	$110/per hour	
LIGHTS	seasonal: $35/hour One time; $75/hour				
LINCOLN	Lincoln Community Group non profit - $5/hour	Lincoln Community Group for profit - $20/hour	Non resident Community Group Non Profit - $45/hour	Non Resident Community group For Profit - $75/hour	
TURF					
LIGHTS					

COMMUNITY SURVEY

CITY/TOWN	Tier One	Tier Two	Tier Three	Tier Four	Tier Five
NEEDHAM	Needham Non-Profit Youth organization § 100% "Needham residents"; Needham Public schools; Needham Park and Rec programs § Youth Legacy Organization § Game and Practice Schedules, only	Needham Non-Profit Adult organization § 100% "Needham residents" § Adult Legacy Organization § Game and Practice Schedules, only	Needham Non-Profit Adult organization ; 100% "Needham residents" (see definition) ;Adult Legacy Organization ;Game and Practice Schedules, only	Needham Non-Profit Youth or Adult organization;Less than 100% Needham residents; Regional Teams, based in Needham (Club, AAU)	Non Needham based Non profits; unlisted groups
	$15 per participant per season, of which $10 is deposited as Field Maintenance Fee and $5 is deposited as Field Administration Fee § $5 per participant per season, if proof of residency cannot be provided § Fees are not charged to Needham Public Schools	$45 per day per block of time of four hours or less; $90 for more than 4 hour block of time, deposited as Field Administration Fee § $10 per participant per season, deposited as Field Maintenance Fee § $5 per participant per season, if proof of residency cannot be provided	Clinics/Camps § This fee is not charged when event is approved special event only for members of a permitted organization during its regular season § $5 per participant per day § $5 per participant per clinic/camp, if proof of residency cannot be provided § The majority of the fee will be deposited into a Trust Fund for Capital Improvements to Athletic Fields and Facilities. A small portion may be deposited into the Field Maintenance Fund to assist with repairs after the event.	Special Events § The Park and Recreation Commission and/or Trustees of Memorial Park will determine the events that fall under this fee structure, based on type of organization requesting and type of use. § $500 per day on natural grass field or other facility, for event scheduled for four hours or more of actual use. § $1,000 per day on synthetic turf field, for event scheduled for four hours or more of actual use.	
Watertown	No charge	No charge	$30	$40	$50
Turf	No Charge	No Charge	$50 - $75	$70 - $110	$90 - $140
lights	No Charge	No Charge	$40 - $100	$50 - $100	$50 - $100

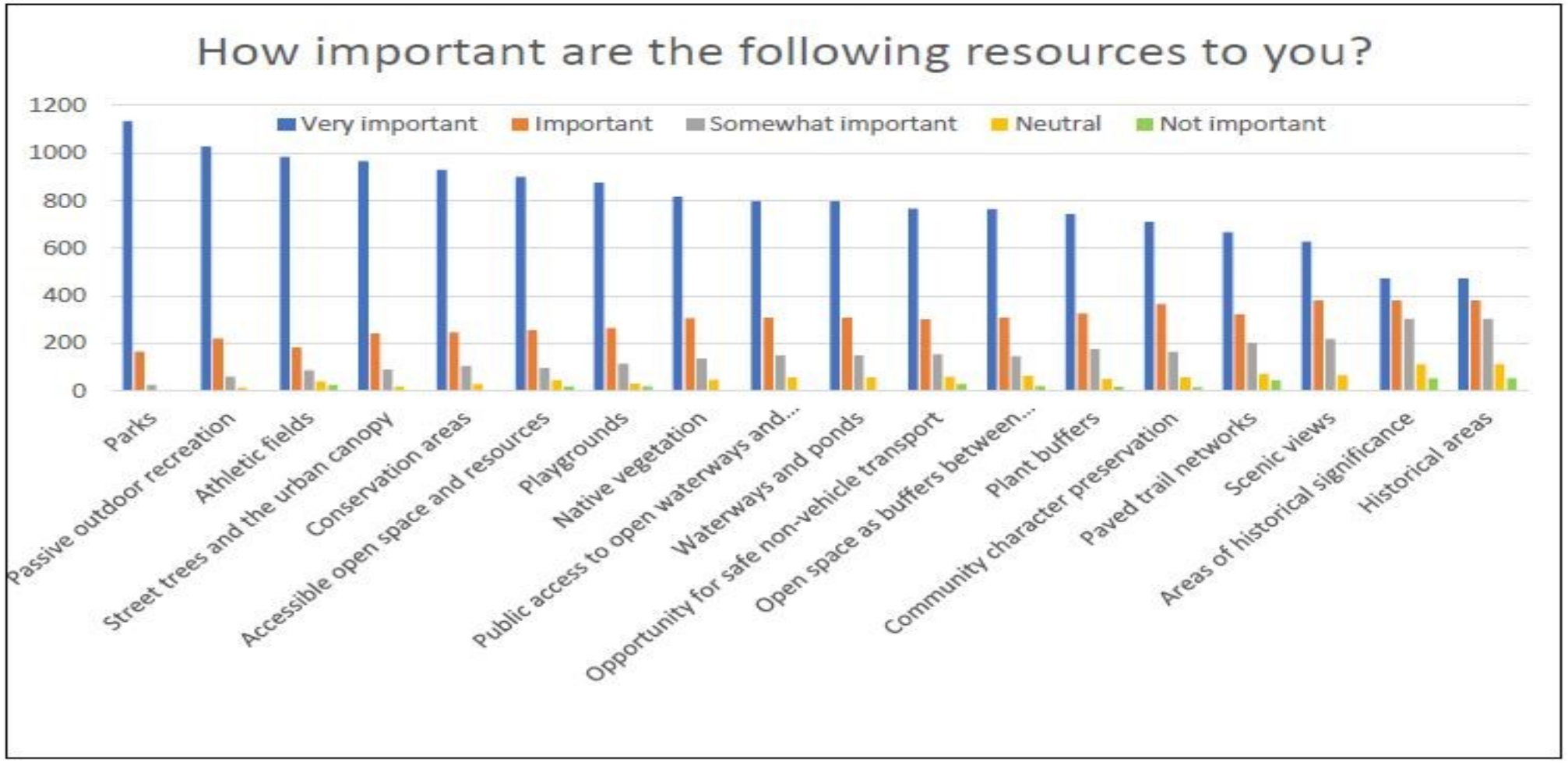
Community Survey (Open Space + Recreation Plan)

Figure 42. Community Survey: Open Space Resources in Greatest Demand



Community Survey (Open Space + Recreation Plan)

Figure 43. Community Survey: Open Space Resources in Greatest Demand



THANK YOU FOR YOUR CONTINUING SUPPORT OF OUR FIELDS!