AGENDA

- MEETING THE NEEDS OF OUR YOUTH AND SCHOOL ATHLETIC PROGRAMS
- LIGHTING SYSTEMS
- DISCUSSION OF BUDGET, MAINTENANCE, FIELD FEES



FIELD + PARK IMPROVEMENT GOALS

- IMPROVE QUALITY AND QUANTITY OF USABLE MULTIUSE FIELD SPACE
 - INCREASE EVENING PLAY OPPORTUNITIES
 - REPLACE END-OF-LIFE SPORTS LIGHTING
 - IMPROVE QUALITY OF ATHLETIC FIELD SURFACES
 - INCREASE AVAILABLE REGULATION-SIZE ATHLETIC FIELDS ON PARK AND SCHOOL LANDS
- IMPROVE ACCESSIBILITY IN PARK AND FIELD AMENITIES
- ESTABLISH BETTER PARK CONSTRUCTION MANAGEMENT FOR IMPROVED OPERATION & MAINTENANCE POST-CONSTRUCTION
- INVEST EQUITABLY IN NEWTON'S ATHLETIC FIELDS + PARKS ACROSS THE CITY
- SMART AND SUSTAINABLE TECHNOLOGY FOR BETTER RESOURCE MANGEMENT
 - SMART IRRIGATION
 - SMART LIGHTING
 - SUSTAINABLE MATERIALS
 - CONSISTANT SITE AMENITY SPECS (BACK STOPS, NETTING INFIELDS, BENCHES ETC.)

PRIORITIZATION CRITERIA

- POTENTIAL FOR GREATEST <u>CITY-WIDE</u> BENEFIT
- PROJECT SEQUENCING: PRIORITIZE MEANS TO EXPAND PLAY POTENTIAL (NEW FIELDS, LIGHT PROJECTS)
- EXPANDING EVENING PLAY (LIGHT IMPROVEMENTS/ ADDITIONS)
- Use and Conditions Assessment Data
- Spatial Criteria for Regulation Multiuse Fields (reduce field overlap)
- INTEGRATED WITH OTHER PROJECTS IN A PARK AREA (E.G., PATH AT McGrath, GATH POOL PROJECT, FEE ANALYSIS AND INCREASE, STAKEHOLDER FUNDRAISERS ETC.)

IMPROVE QUALITY,
QUANTITY AND
MAINTENANCE OF
ATHLETIC FIELD FACILITIES

5. COMPLETE MUTI-YEAR CAPITAL IMPROVEMENT PROJECTS 1. INCREASE ONGOING INVESTMENT IN ATHLETIC FIELDS

4. FIELD REPLACEMENTS AND ENHANCEMENTS

2. EXPAND PROJECT MANAGEMENT TEAM

How will we accomplish our plan?

3. EXPAND EVENING PLAY

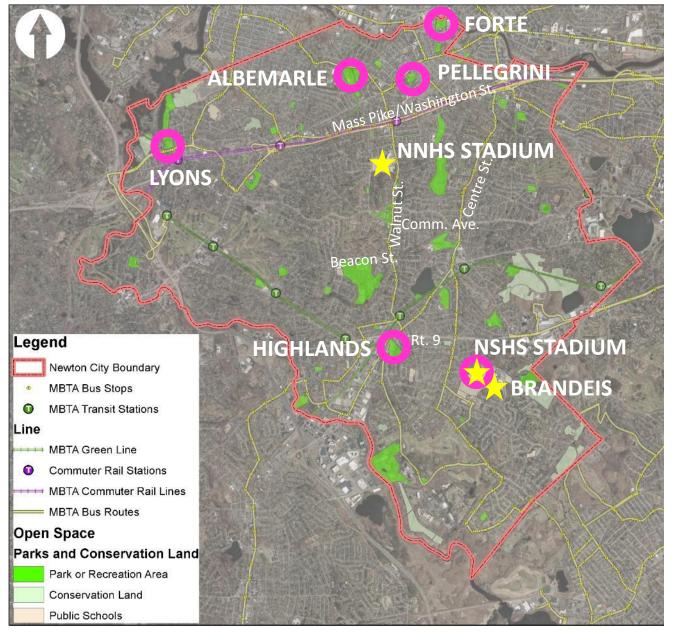
1. INCREASE ONGOING INVESTMENT

- DO MORE TURF MANAGEMENT WORK ON PREMIERE FIELDS
- INCREASE # OF SITES GETTING TURF TREATMENTS

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%			

2. EXPAND PROJECT MANAGEMENT TEAM

- CREATE A NEW DIVISION DEDICATED TO PARKS + OPEN SPACE PROJECTS
 - HIRED ADDITIONAL LANDSCAPE ARCHITECT
- INVOLVE IN-HOUSE MAINTENANCE AND TURF SPECIALIST IN PROJECT REVIEW PROCESS
- Increase Overall Staff Time Contribution to Provide Greater Project Management and Oversight
- HIRE DESIGN/ENGINEERING FIRM TO ASSIST WITH PROJECTS



3. EXPAND EVENING PLAY



- Albemarle Park
 - 4 lighted Fields
- Forte Park
 - 2 Lighted Fields
 - 1 Lighted Basketball Court
- Pellegrini Park
 - 2 Lighted Fields
- Lyons Park Field
 - 1 Lighted Field
- Newton Highlands Playground Fields
 - 2 Lighted Fields
- Newton South HS Stadium Track and Field
 - 1 Lighted Track + Field

TOTAL: 12 Fields

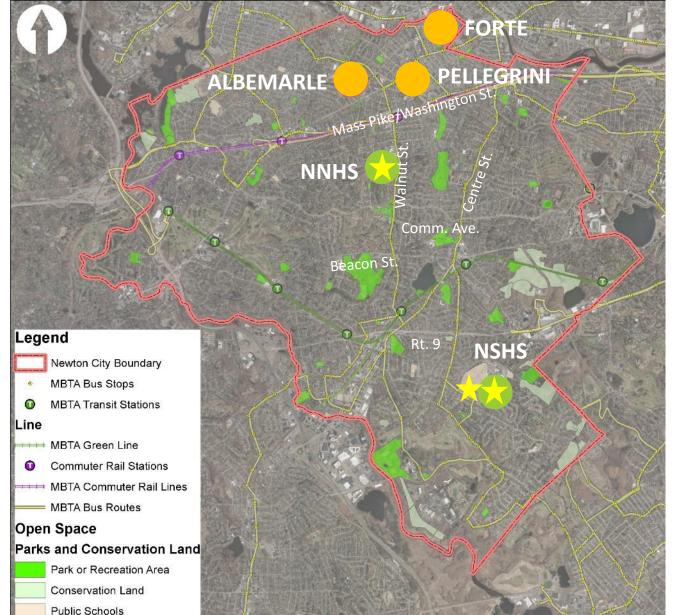
Existing Synthetic Turf Fields:



- Newton South HS Stadium Field
- Newton South HS Brandeis Rd Field
- Newton North HS Stadium Field

TOTAL: 3 Fields

Newton Parks Recreation and Culture Department





Existing Synthetic Turf Fields:

- Newton South HS Stadium Field
- Newton South HS Brandeis Rd Field
- Newton North HS Stadium Field

TOTAL: 3 Fields

Near-term Evening play expansion opportunities:

- Newton South HS Brandeis Rd Field
- Newton North HS Tiger Stadium Field

TOTAL: 2 Fields

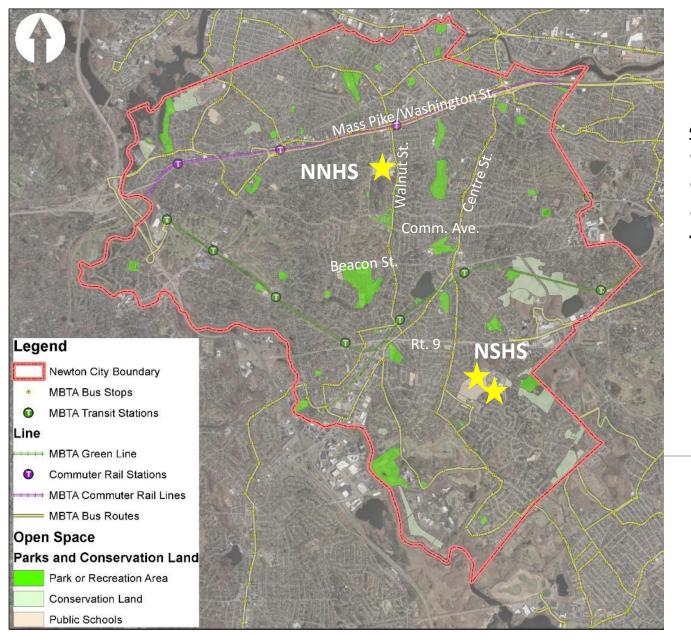
End-of Life Sports lighting replacements and availability increase:

- Albemarle Park
- Forte Park
- Pellegrini Park

TOTAL: 3 Parks, 7 fields

Newton Parks, Recreation and Culture Department

Athletic Fields Capital Improvement Plan





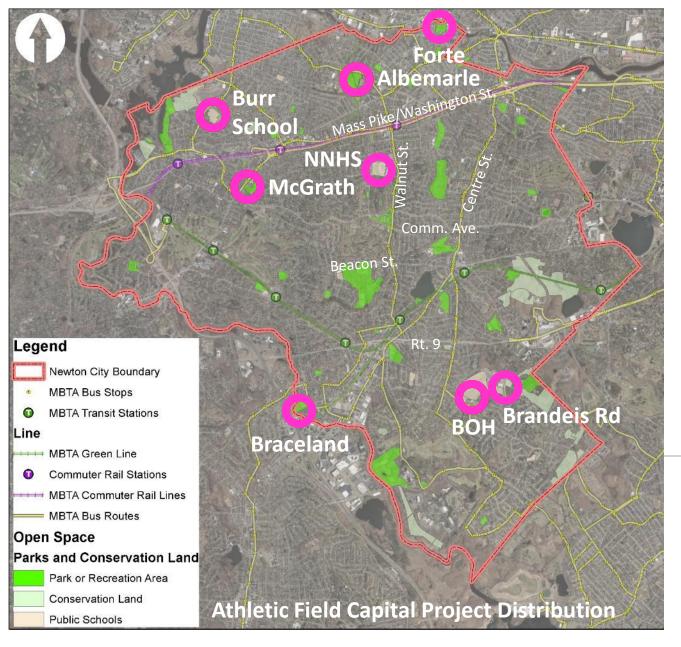
4. TURF REPLACEMENT

- Newton South HS Stadium Field
- Newton South HS Brandeis Rd Field
- Newton North HS Stadium Field

TOTAL: 3 Sites

Newton Parks, Recreation and Culture Department

Athletic Fields Capital Improvement Plan



5. MULTI-YEAR CAPITAL PROJECT DISTRIBUTION:

- ALBEMARLE PARK
- FORTE PARK
- Burr School
- Brown/Oak Hill Fields
- McGrath Park
- BOBBY BRACELAND
- Newton South Brandeis Rd. Field Lighting
- Newton North Tiger Stadium Lighting
- NSHS SYNTHETIC TURE REPLACEMENT
- NNHS SYNTHETIC TURF REPLACEMENT

Newton Parks, Recreation and Culture Department

Athletic Fields Capital Improvement Plan

Lighting Systems

How Lights Can Help

- Most field needs are after school during spring and fall (peak sport seasons)
- School dismissal is later in the evening
- New park space is incredibly expensive (2-acre min. plus parking) and not available
- Maintenance: minor expense to operate vs. maintaining a field, environmental impacts are also minimal compared to turf management
- Lighting turf fields: can handle unlimited use, including during rain events. No reschedules/makeups.
- Lighting a field provides: **1,000+ additional hours** of playing time, ultimately it provides play opportunity that meets evening demand

Hours of added playing time each month (based sunset to 9:30pm)

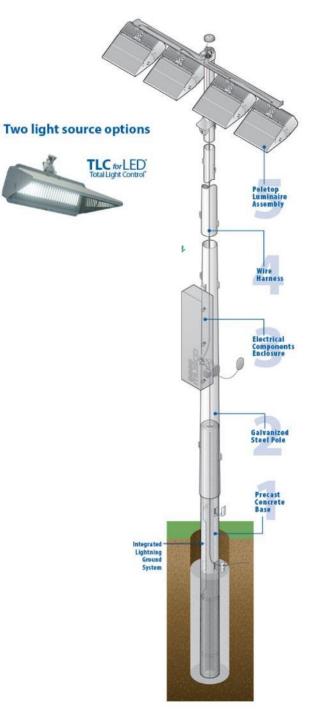
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
195h 30m	135h 30m	88h	61h 30m	46h 30m	34h	37h 30m	53h 30m	78h 30m	108h	149h 30m	163h 30m

IDENTIFYING THE RIGHT LIGHT SOLUTION

GOALS:

BEST LIGHT QUALITY WHILE MINIMIZING IMPACT TO ABUTTERS

- LIGHT QUALITY
 - UNIFORMITY, INTENSITY, LOW TO NO -SPILLAGE
- VARIABLES WE CONTROL
 - Pole Height
 - SHIELDING/DOWN CASTING
 - BULB CANDLEPOWER AND DIMMING
 - ABILITY TO MEET AND EXCEED THE CITY'S LIGHT SPILLAGE ORDINANCE











USED AT NNHS FIELDS WITH RECURRING ISSUES

NEED IS INCREASING AT NSHS

RENTAL COST

NOISE POLLUTION









EXHAUST POLLUTION

LIGHT POLLUTION

FOSSIL FUEL CONSUMPTION

SAFETY



Why are the High Schools Important in Meeting the City's Goals for Athletic Fields?

OF SPORTS HAS INCREASED OVER TIME (E.G., LACROSSE)

OF TEAMS: NSHS, NNHS HAVE MANY TEAMS I.E., VARSITY, JV, AND FRESH. SPORTS

NO STUDENT ATHLETE OFF-SITE TRAVEL FOR PRACTICES

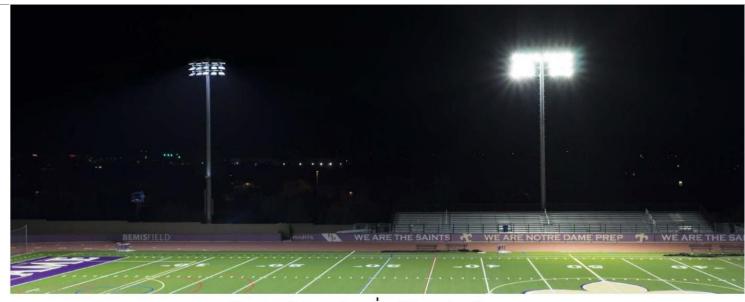
FIELDS ARE SYNTHETIC TURF, CAN HANDLE ADDITIONAL USE

ONSITE AMENITIES INCLUDE LOCKERS, REST ROOMS, SHOWER/CHANGING AREA

PARKING IS AVAILABLE

ATHLETIC TRAINER ONSITE AFTER SCHOOL

IDENTIFYING THE RIGHT LIGHT SOLUTION



Musco: what can be

What often is

TOTAL LIGHT CONTROL — TLC FOR LED™

OTHER LED MANUFACTURER

LIGHT LEVEL

75 horizontal footcandles (750 lux)

75 horizontal footcandles (750 lux)

ENERGY CONSUMPTION

103.5 kW

127 kW

LIGHT SPILLAGE LEVEL SUMMARY



WHAT TO KNOW:

- RED NUMBERS:
 - ZERO GRID COMPLETE

 DARKNESS

Newton Athletic Fields Foundation

PETITION:

Newton needs a multi-year athletic fields improvement program to:

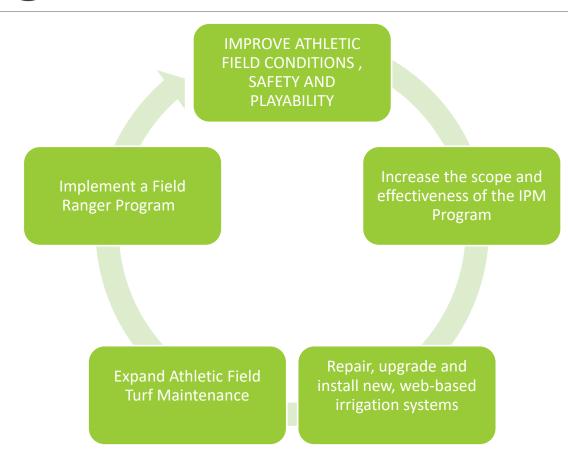
- ✓ Rehabilitate fields in disrepair
- ✓ Construct artificial turf fields
- ✓ Increase maintenance to support usage levels
- ✓ Configure and allocate fields based on demand (not history)
- ✓ Install additional field lighting

We seek a formal commitment from the Mayor's office, City Council and Parks, Recreation & Culture (PR&C) department to:

- ✓ Allocate capital and operating funds
- ✓ Commit to a multi-year plan (dates, deliverables, budget, resources)
- ✓ Charge market-rate rental fees and direct them to field maintenance
- ✓ Commit Community Preservation Act (CPA) funds annually
- ✓ Dedicate the required resources to both deliver improvements and maintain existing fields

Budget, Maintenance, Fees

Leveraging new funds



Revised 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	<mark>\$0</mark>	\$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 fess in effect as of July 1, 2021

Tier 2 Comps

- A survey was done of 14 nearby communities.
- 9 of the 14 communities surveyed charge a per participant fee for youth leagues; three communities charge youth leagues per hour.
- Lex, Brookline: \$15; Norwood: \$20; Wellesley: \$30; Sudbury: \$40

Proposed Tier 2 Per Participant Fees

YOUTH LEAGUES PARTICIPANT NUMBERS								
Newton Tier 2 Leagues	SUMMER 2020	FALL 2020	WINTER 2020*	SPRING 2021**	TOTAL PARTICIPANTS	<mark>\$10.00</mark>	\$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	<mark>\$1,960.00</mark>	\$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	<mark>\$7,800.00</mark>	\$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:	<mark>1229</mark>	<mark>3553</mark>	<mark>175</mark>	<mark>4597</mark>	9,554	\$95,540.00	\$129,900.00	\$173,180.00
			¥	** based on registration #'s to date				

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				
	Mowing				22%			
Turf Mowing	Leaf removal	\$ 575,000	\$ 700,000	\$ 125,000				
	Mulching	5 5/5,000	700,000	7 123,000				
	Pruning							
	Aerification							
Turf Management	Fertilization							
	Slice seeding	\$ 75,000	\$ 250,000	\$ 175,000	233%			
	Top dressing							
	Integrated Pest Management (IPM)							

Field Assessments

Maintenance Division Leadership

Superintendent Derek Mannion

Asst. Superintendent Rob McClary

- Ongoing field checks to review wear and tear
- Identify field areas needing additional turf work
- Reposition goals where/when possible to reduce excessive wear
- •Monitoring fields for standing water and saturation to make temporary closure decision
- Monitoring field booking activity and putting capacity limits in place