

# F. Needs Assessment

## Community Needs

This chapter documents the needs that influence the types and number of parks, recreation facilities, and trails in the community. The needs assessment phase of the Recreation Master Plan documents the demand for services from current and future residents in association with the inventory of existing facilities (Chapter E) and highlights potential areas of shortfall or oversupply. This will in turn give direction to future master plan recommendations. Identifying levels of satisfaction, perceptions, use patterns, and priorities for recreational programs and facilities through contact with the user public was an important part of this process. Accurately assessing the needs of the community requires a diverse approach, using many different techniques to gather information. Collectively, the data from these various sources create a picture of what is needed and desired within Dedham, and can serve as the basis from which to develop a list of projects, priorities and actions. Each technique used in this process provides valuable information, but the data from any one technique should not be viewed in isolation and without comparing the needs to the Mission, Vision, Goals, and Objectives of the community.



## Needs Assessment

Chapter C includes population and growth projections and demographic characteristics in Dedham. This chapter and Chapter D (Programming) summarize a comparison of peer communities and national standards to determine the levels of service they provide for parkland, common recreation facilities, and recreation programming. The data set serves as a benchmark when determining the levels of service that are appropriate for Dedham.

Recreational preferences and the level of demand for additional park amenities and recreational opportunities are also addressed in this chapter. Pertinent information from national databases on recreation participation levels and data from the Massachusetts State Comprehensive Outdoor Recreation Plan 2012 were considered. Two public open houses were held to solicit input from the general public, and a community wide survey with questions related to the planning process and open space was made available to the public. Comments were also solicited from the public through a project website. Members from the local organizations, businesses, Dedham Schools, and town staff from various departments also participated in meetings to help provide insight to the issues and needs present in the community. Additionally, interviews were conducted with representatives of other public and nonprofit recreation providers in Dedham to assess any specific needs their organizations may have.

Residents of Dedham care greatly about their parks and open space. Public participation in the master plan process was excellent with just over 500 responses to the public survey. The public workshops were well attended with 60+ people attending the initial workshop and approximately 150 attendants at the second workshop, filling the Oakdale School Gymnasium where survey findings were presented. A summary of the survey findings can be found in the Town's updated Open Space and Recreation Plan.

Dedham residents largely participate in recreation activities in a manner similar to state-level and national trends. Residents of Dedham get most of their recreational activity through fitness sports (walking, biking, jogging, aerobics, etc.) National trends show us that while fitness sports and outdoor sports are popular amongst all age groups, individual and team sports are most popular for the Gen Z and Millennials population. The last Massachusetts Open Space and Recreation Survey found that, while participation in youth sports is high, there are exceptions for both baseball and softball which were mentioned less frequently in survey responses and have seen a decline at both the state and national level.

How residents of Dedham recreate and currently use their parks is an important piece of the needs analysis. Equally important is what Dedham sees as needs and/or demands for recreation opportunities in the future. Responses to the town wide survey were wide spread and included both active and passive forms of recreation. Respondents to the survey want more bike paths and walking and hiking trails in order to accommodate their largest form of recreation.

Based on public input, the Recreation Master Plan Steering Committee interpreted the wide spread needs and aspirations of the community and summarized the key findings into four major community impact or benefit areas: environment, social, economic, and cultural. Subsequently, this group asked the community whether they had heard their voices and understood their needs correctly through a second public workshop. The interpretation of community needs provided a foundation on which the Mission, Vision and Goals were established.



Key findings of community needs and aspirations are summarized as follows:

**Environmental:**

- There is an opportunity for DPR to take more of a role in the support of environmental stewardship and green practices.
- Residents use trails in parks and would like to have a connected system of trails, pathways and sidewalks throughout the Town and connecting open spaces.
- Residents want better management of natural resources and more environmental education on protection and restoration.
- Some residents would like to see more use of parks and open space for environmental education, programming and wildlife exploration opportunities.
- A large majority of residents would like to see better maintenance of existing park facilities, specifically athletic fields.

**Social:**

- The community expects DPR to help socially knit the community together and strengthen neighborhoods through communication and partnerships within the community.
- The community expects DPR to foster social equity and provide affordable and accessible programs and services in parks and facilities to serve all populations.
- The community needs adaptive and specialized programs and ADA accessible facilities for persons with disabilities.
- The community appreciates that safe parks can enhance public safety and build strong neighborhoods. Residents want their parks safe and clean.
- The community expects DPR to provide more programming for its adult and senior populations.
- The community expects DPR to provide more programming for its teen population.

**Economic:**

- Residents value community wellness and physical activities to keep them healthy and active.
- The community expects DPR to invest in the younger generation to reap longer-term fiscal, social and health benefits.
- Taxpayers/voters expect DPR to be fiscally responsible.
- The community expects DPR to provide better and higher quality care of existing facilities.
- The community prefers free and self-directed opportunities in parks near their homes to keep them healthy.

**Cultural:**

- Parts of the community recognized that DPR can play a significant role in “place-making” and shaping a livable town through culture and heritage programs.
- The community appreciates special events and festivals like Dedham Day and the annual Flag Day Parade which make Dedham a fun and engaging place to live.

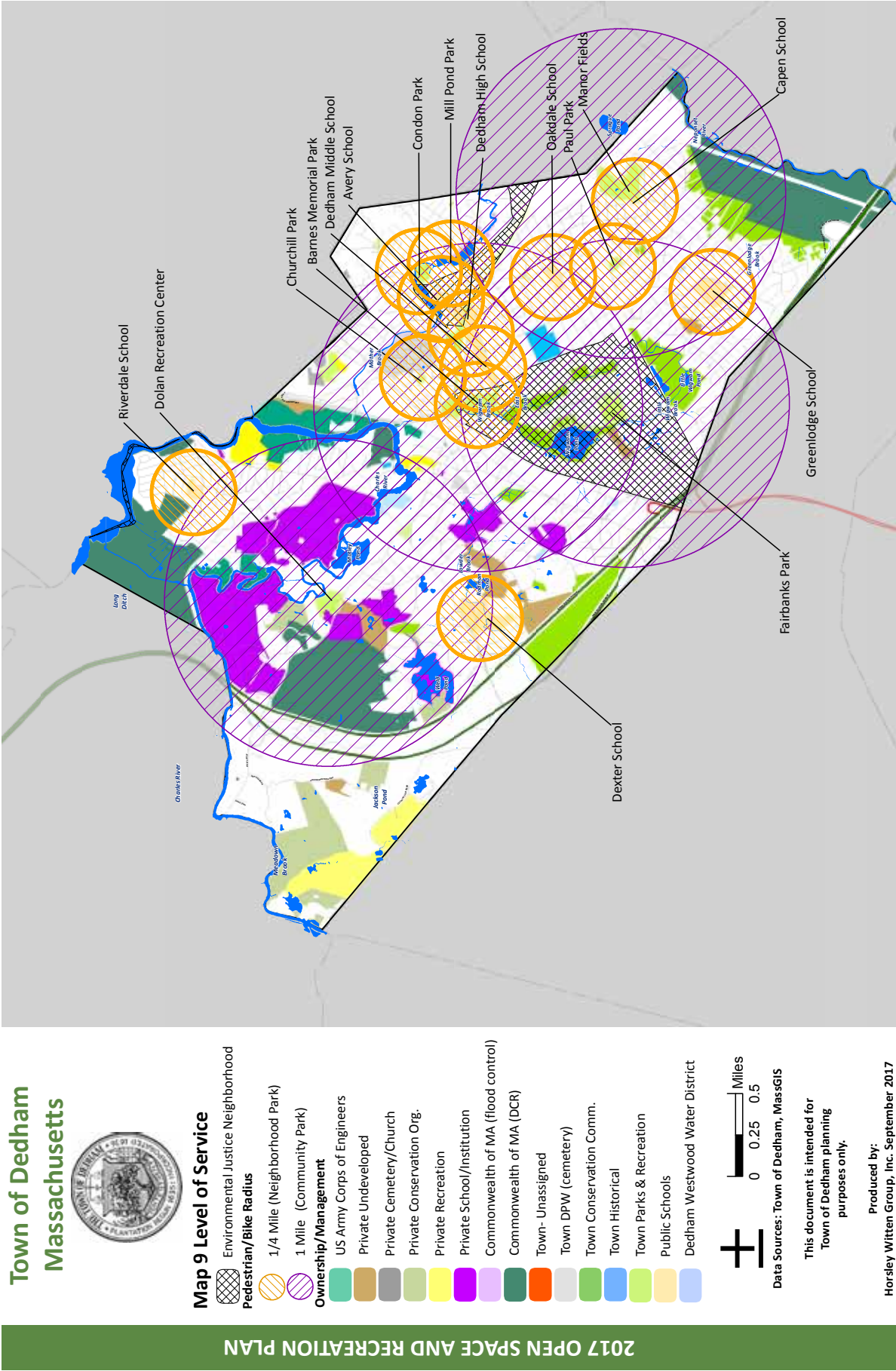
## Level of Service

Level-of-service (LOS) standards are measures of the minimum amount of a public facility which must be provided to meet a community's basic needs and expectations. LOS measures are typically expressed as ratios of facility capacity to the number of users. For example, a community may set a standard for how many park acres are needed per 1,000 population. Other examples of LOS representation include the median number of residents per facility or amenity, or the ratio of distance to a particular facility.

In Chapter E, as part of a review of the DPR's existing facilities, the recommendation was made to develop a park classification system within Dedham. That classification system allows DPR to assess the needs for particular facilities or amenities based on established measurements for each classification. The Table in Chapter E: (Parks and Recreation Land) summarizes proposed park classification systems. The following map shows the level of service as a ratio of distance for each of the classification types based on national standards for Towns of similar population. Deficiencies fall outside of the highlighted areas.

DPR manages portions of 22 parks including open spaces associated with schools and just over 188 acres of land. That is one park for every 1,147 residents and 7.45 acres for every 1,000 residents. Compared to national standards of one park for every 1,331 (Dedham performs better) residents and 9.6 acres for every 1,000 residents (Dedham performs worse). In addition to the land areas managed by DPR, there are a number of amenities and areas that provide unique experiences. In order to determine needs or deficiencies in park amenities, a diverse approach was used to collect both qualitative and quantitative data for comparison and evaluation. Table 10 summarizes national standards for median population per facility as part of annual survey conducted by National Parks and Recreation Association sent out to all participating communities.

**Map Level of Service, Park Classification System.**

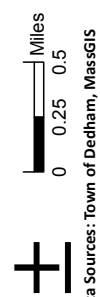


**Town of Dedham  
Massachusetts**



**Map 9 Level of Service**

- Environmental Justice Neighborhood
- Pedestrian/Bike Radius
- 1/4 Mile (Neighborhood Park)
- 1 Mile (Community Park)
- Ownership/Management**
- US Army Corps of Engineers
- Private Undeveloped
- Private Cemetery/Church
- Private Conservation Org.
- Private Recreation
- Private School/Institution
- Commonwealth of MA (flood control)
- Commonwealth of MA (DCR)
- Town- Unassigned
- Town DPW (cemetery)
- Town Conservation Comm.
- Town Historical
- Town Parks & Recreation
- Public Schools
- Dedham Westwood Water District



Data Sources: Town of Dedham, MassGIS

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**2017 OPEN SPACE AND RECREATION PLAN**

**Table 10. Nation Standards for Median Population per Facility**

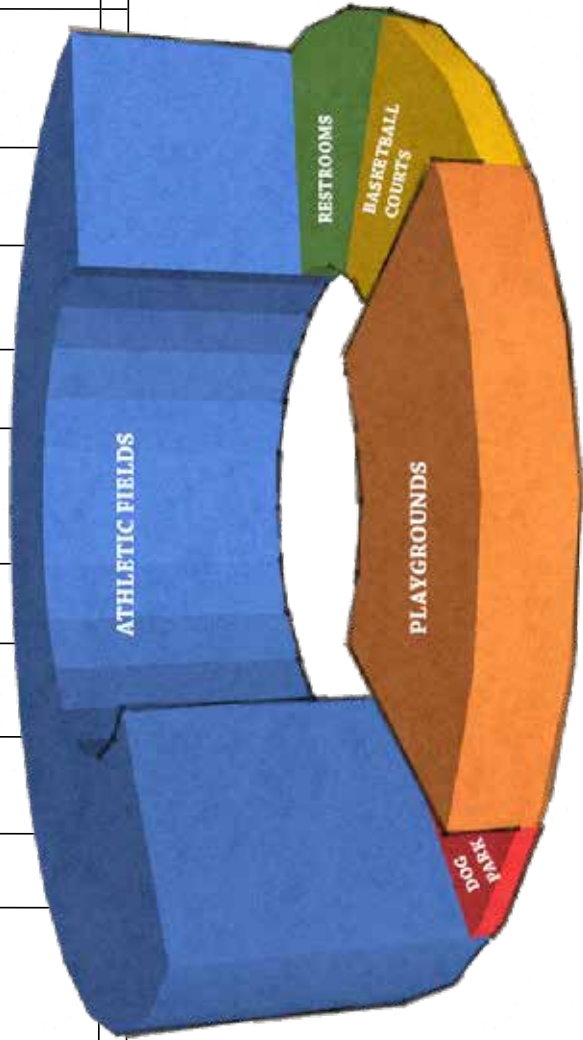
<b>Facility</b>	<b>% of Communities Offering</b>	<b>National Standard Median Population per Facility</b>	<b>Dedham Median Population Per Facility</b>
Diamond Field Softball/Youth baseball	68	6,453	1,401
Diamond Fields Adult Baseball	49	19,226	12,612
Playground	90	3,633	2,522
Basketball Court Outdoor	82	7,430	5,044
Tennis Court Outdoor	72	4,375	8,408
Multi-Use Field Rectangular Youth	45	6,199	5,044
Multi-use Field Rectangular Field Full Size	41	12,226	8,408
Multi-use Synthetic Turf Rectangular Full Size	11	34,242	12,612
Recreation Center	59	27,591	25,224
Gym	56	28,856	25,224
Swimming Pool Outdoor	53	33,128	25,224
Dog Park	52	42,500	25,224
Community Garden	45	31,000	25,224
Swimming Pool Indoor	8	47,800	25,224

Source: National Recreation and Parks Association

The tables show that DPR is generally meeting or exceeding its peers on a national scale when it comes to providing the most popular park amenities. Certain amenity areas such as picnic areas, restrooms and shelters were not included in the 2017 NPRA Agency Review, but these are areas in which DPR can improve. A large number of spaces and amenities are not accessible as defined by code, and while the spaces may be old enough to be grandfathered in, attempts should be made in the future to bring facilities up to code and reflect the mission of DPR. A full assessment of ADA components can be found in the appendix of the 2018 Open Space and Recreation Plan.

**Figure 24. Inventory of Uses and Opportunities at Each Facility**

	Churchill Park	Fairbanks Park	Condon Park	Dolan Center	Memorial Park	Gonzalez Field	Pool Field	Paul Park	Harnett Square	Former Landfill	Manor Park	Oakdale Square	The Triangle
Athletic Field Type	Softball	Youth base-ball/Softball	Youth base-ball/Softball	Softball	Baseball	Soccer	U-10 Soccer	Youth baseball/Softball		VACANT	VACANT		
# of Athletic Fields	1	3.5	1.5	1	3.5	1	1	1				13.5	
Athletic Field Overlay	0	Soccer	Soccer	0	Multi-use	0	0	0				0	
Basketball Court	1		0	0	0	0	0	1				2	
Picnic Area	0	0	0	0	0	0	0	0				0	
Restrooms	0	1	0	0	1	0	0	0				2	
Structures or Shelters	0	0	0	0	0	0	0	0				0	
Playground	1	0	1	0	1	0	0	1				4	
Trail System	None	None	None	Yes	None	None	None	None	None	None	None	None	None
Dog Park	None	None	None	1	None	None	None	None	None	None	None	None	None
Skate Park	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
*Note: Picnic Areas must be accessible as defined by ADA code													



Source: Traverse Landscape Architects, 2017

In the areas pertaining to athletic recreation spaces, the Town appears to largely out perform its peers, providing more public athletic recreation spaces than the national average with the exception of football and lacrosse, which do not have dedicated facilities. However, members of the Steering Committee and the public believed, based on its participation numbers and quality of its athletic spaces, that this comparison did not adequately reflect the community's needs.

The current trends in athletics were evaluated from a local, state, and national perspective to help better understand the need for additional athletic fields over the next 10+ years. Sources utilized as part of this analysis include: a questionnaire survey of the user groups; interactive workshops with representatives of the Town; participation statistics provided by the DPR; and participation statistics from the National Federation of High School Association (NFHS).

The evaluation from a national and state perspective provides a comprehensive understanding of the trends in athletics. Boys and girls lacrosse are the fastest growing sport from a national and state perspective among the sports that utilize the athletic fields included in the Recreation Master Plan.

The user groups that participated in the questionnaire included representatives in the following sports: Dedham Youth Baseball, Dedham Girls Softball, Dedham Pop Warner Football, Dedham Youth Lacrosse, Dedham Youth Soccer, Dedham Youth Hockey, Dedham High Athletics and Dedham Youth Basketball.

Through interaction with the user groups in workshops and the questionnaire process it was noted there is consistently an issue with scheduling of the athletic open spaces and each group would prefer the ability to manage the schedule of certain spaces. It was also noted that maintenance, quality and overuse are major issues amongst both user groups and the general public. Most user groups agreed that some of the need for additional space could be addressed by improving the existing fields to provide a better natural turf playing surface.

Further evaluation was done to assess the quality and make up as well as the hours that each facility was used. After evaluation facilities were assigned a weighted value based on make up. The make up of each facility was defined by a combination of drainage characteristics, irrigation and surface treatment. The table below defines the weighted values.

**Table 11. Recommended Use by Event and Intensity**

Field Construction Type	Recommended Primary Use	Recommended Number Weekly Events	Avg Hours of Use Weekly
Synthetic	Game	25	37.5
Engineered/Irrigated	Game	18	27
Engineered/non irrigated	Game/Practice	13	19.5
Non Engineered/Irrigated	Practice Low Level Games	12	18
Non Engineered/Non Irrigated	Practice Only	9	13.5

Source: Traverse Landscape Architects, 2017



**Table 12. Spring Season Capacity by Facility and User Group**

Spring Season April 1st-June 30th	Avery Practice Park	Chur-chill Park	Capen School	Capone Field (Fairbanks Park)	Collins Field (Fairbanks Park)	Condon Park	Sugrue Field (Dolan Center)	Davis Field (Memorial Park)	Frietas Field (Fairbanks Park)	Gonzalez Field	Green-lodge School	Heaphy Field	Lowen Field	Lower Memorial Park	Nagle Field (Fairbanks Park)	Oakdale School	Pool Field	Paul Park	Sullivan (Memorial Park)	Riverdale School
Field Use	Soccer	Softball/ Youth baseball	Softball/ Youth baseball/ U-10 overlay	Softball/ Youth baseball	Softball/ Little League	Multi-use	Softball/ Youth baseball	Baseball	Soccer	Soccer	Multi-use	Baseball	Softball/ Youth baseball	Football/ Soccer	Softball/ Little League	Multi-use	Soccer	Softball/ Little League	Softball/ Little League	Multi-use
Size	U-10	60'	60'	60	60	60	60	90	Full Size	Full Size	60	90	60	Full Size	60	60	Junior	60	60	60/Full Size
Recommendation			Full size multi-use													Remove				
Dedham Youth Soccer			210			288			406	336				210		42	336			322
Dedham Youth Baseball				574	378	168		378			252	728			378	210		378		210
Dedham Girls Softball	322						422						322						75	
Dedham Pop-war-ner																				
Dedham Youth Lacrosse																				
Dedham High School	82.5						105	174				133	105						90	
Hub Softball						96														
Ursuline			105							105										
Socca Sista									24											
Mens Soccer																				
Rental																			168	
Spring Season Length 14wk avg	14	404.5	315	574	378	552	527	552	406	465	252	861	427	210	378	252	336	378	333	532
Field Construction Type (1-5)	2	2	5	4	4	4	1	4	4	1	5	2	2	5	4	5	4	5	4	5
Capacity/wk	27	27	13.5	18	18	18	37.5	18	18	37.5	13.5	27	27	13.5	18	13.5	18	13.5	18	13.5
Avg HRs/wk	378	378	189	252	252	252	525	252	252	525	189	378	378	189	252	189	252	189	252	189
Capacity/season	378	378	189	252	252	252	525	252	252	525	189	378	378	189	252	189	252	189	252	189
Season Use	404.5	404.5	315	574	378	552	527	552	406	465	252	861	427	210	378	252	336	378	333	532

Source: Traverse Landscape Architects, 2017

Using the weighted values, a capacity of hours was determined for each field over the course of both the Spring and Fall seasons (Tables 12, 14, and 15). Use beyond the hours indicated per week or per season begins to degrade the playing surface excessively wearing out the vegetative cover and not allowing the field to recover properly.

Following the determination of a capacity for both spring and fall athletic seasons, demand was determined using a combination of the permit inventories provided by DPR and responses to the survey by each user group. Permitted hours and evaluations for each facility are shown in Figures 25-27.

**Table 13. Projected Need by Over-Demand vs. Capacity**

Spring	Total Hrs Over Capacity	New Engineered Irrigated Field x 14 wks	Fields Short (Demand)
Softball	630	378	1.67
Soccer	241	378	0.64
u-10	84	378	0.22
Football	0	378	1
Lacrosse	0	378	1
Baseball 90'	783	378	2.07
Baseball	1060.5	378	2.81

Source: Traverse Landscape Architects, 2017.

The demand versus capacity comparison portrays the amount that athletic fields in Dedham are over scheduled and overused compared to their capacity. A number of things can be done to help relieve capacity related issues. Improving grading, drainage, and natural turf surfaces for natural turf fields, are all recommendations to improve the quality and capacity of playing fields. However natural grass fields need to be rested, and allowed to recover, or degradation and failure of the surface will occur. DPR should develop a scheduling system with input from user groups that will allow for a more equitable reservation and division of athletic spaces. DPR should also revise its maintenance practices, limit hours of use to something closer to the facility's capacity and consider reorganization of spaces over time to alleviate capacity and align facilities with current trends and participation numbers.

Synthetic turf fields are another solution and an increasingly popular trend for athletic fields to address issues related to over-use, maintenance, and limited space. Synthetic turf generally has a lifecycle of 8-12 years with an unlimited amount of use. Sports lighting dramatically increases potential for use, extending playable hours past dark.



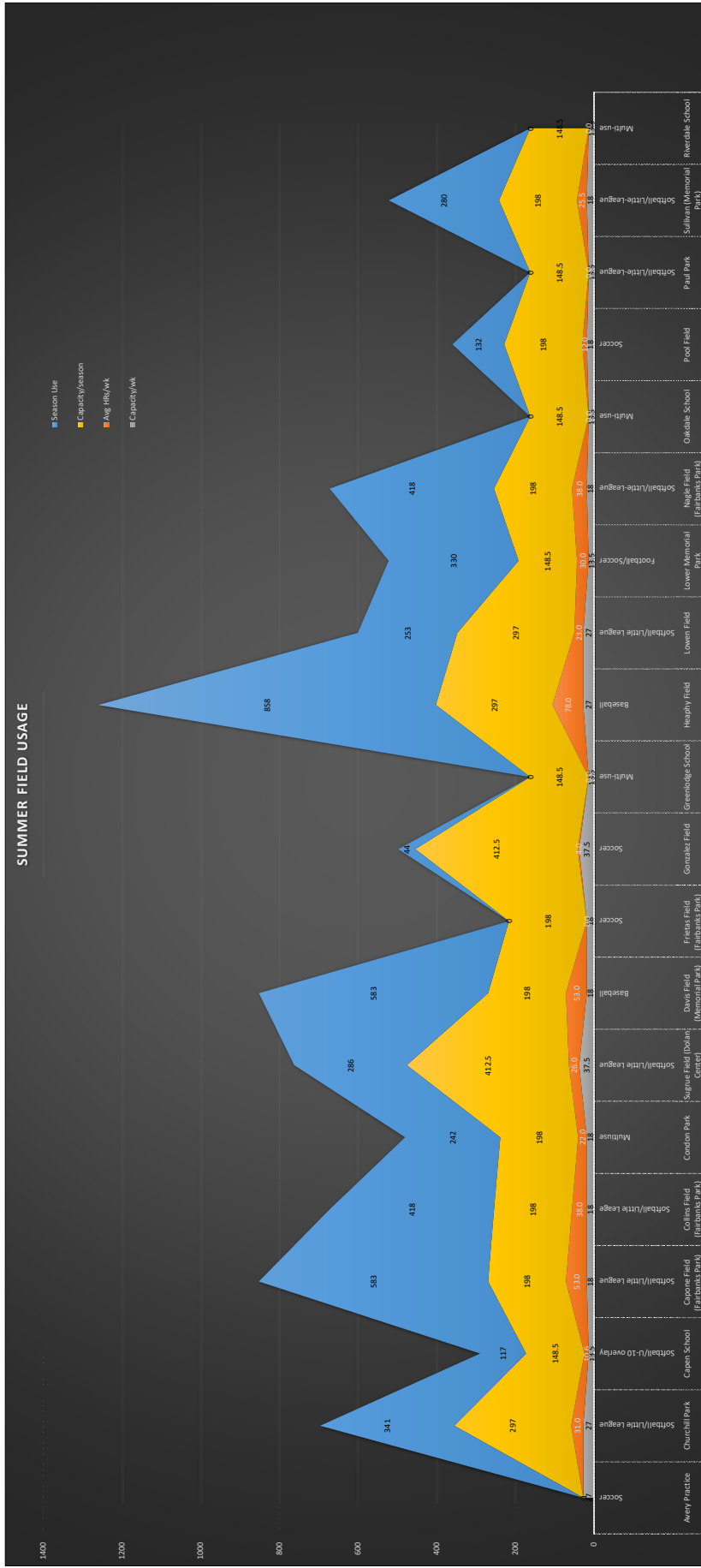
The graph for athletic field hours of use during the summer shows a dramatic difference in hours of use as compared to the spring. There is still a significant amount of over use on certain fields. However, based on user group interviews and survey information a portion of the hours of overuse is inflated based on the current permitting process. Baseball for example is reserving fields in blocks for use but may not be using all of those hours. The data also show that Dedham should be limiting hours per field and spreading out hours among facilities. None of the school youth baseball fields are being used during the summer yet the youth baseball fields at Fairbanks Park are dramatically overused and the baseball program is actually causing a significant amount of damage to fields that is unnecessary.

Fairbanks Park fields should be used for games only during summer, and practices for youth baseball should be spread among the remaining youth baseball fields. The Dolan Center synthetic turf field should support the most youth baseball/softball use of any single field in the system and it currently only supports half that of other youth baseball fields. This graph also brings into consideration the plan for Manor Park (as planned). While the Plan supports the plan for Manor Park and its amenities, improvements to Manor Park will not solve the dramatic over utilization of Heaphy and Davis fields.



Fall athletic field usage shows similar trends to the summer usage. While there is some need for rectangular sports fields to support usage by soccer, football and lacrosse, the biggest trend continues to show the over use of baseball fields. Hours can be spread among youth baseball facilities for baseball in the fall specifically where there are shorter days and shorter windows of usage without lighting. The amount of time spent in hours of use per participant in baseball far exceeds that of any other sport. This Recreation Master Plan does not support the addition of youth baseball fields to the Dedham parks system but rather encourages a permitting system that is both fair and supportive of baseball but limits use of facilities in order to preserve the facilities in the long term future. Steps taken by DPR to renovate Gonzalez Field and the continued support of Manor Park (as planned) will go a long way in the support of rectangular multi-use field space. Based on participation information collected in the Plan and future trends, Dedham should have enough multi-use field space to support its programming in the near future with the addition of Manor Park. Future planning of school yards and the former landfill should address the need for an additional full size baseball field to support usage trends.

**Figure 26. Summer Field Capacity vs. Use by Facility and User Type.**



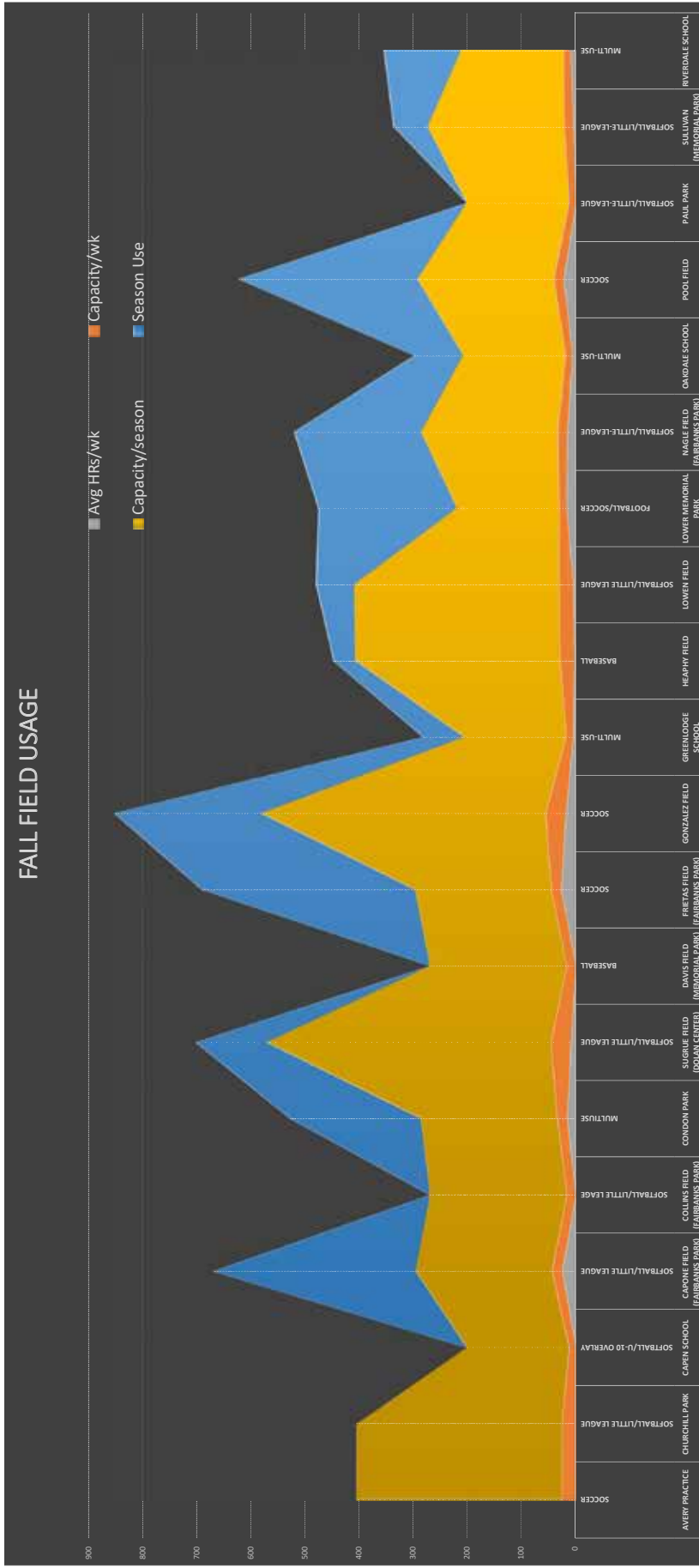
Source: Traverse Landscape Architects, 2017.

**Table 14. Summer Season Capacity by Facility and User Group.**

Summer Season June 1st-August 31st	Avery Practice	Churchill Park	Capen School	Capone Field (Fairbanks Park)	Collins Field (Fairbanks Park)	Condon Park	Sugrue Field (Dolan Center)	Davis Field (Memorial Park)	Frietas Field (Fairbanks Park)	Gonzalez Field	Greenlodge School	Heaphy Field	Lowen Field	Lower Memorial Park	Nagle Field (Fairbanks Park)	Oakdale School	Paul Park	Sullivan (Memorial Park)	Riverdale School	
Field Use	Soccer	Softball/ Youth baseball	Softball/ U-10 overlay	Softball/ Youth baseball	Softball/ Little League	Multiuse	Softball/ Youth baseball	Baseball	Soccer	Soccer	Multi-use	Baseball	Softball/ Youth baseball	Football/ Soccer	Softball/ Little League	Multi-use	Softball/ Little League	Softball/ Little League	Multi-use	
Size	U-10	60'	60'	60	60	60	60	90	Full Size	Full Size	60	90	60	Full Size	60	60	60	60	60/Full Size	
Recommendation			Full size multi-use																	
Dedham Youth Soccer																				
Dedham Youth Baseball				583	418			583				858			418					
Dedham Girls Softball		341				176	286						253							
Dedham Pop-warmer														330			132			
Dedham Youth Lacrosse																				
Dedham High School																				
Hub Softball						66												280		
Rental			117							44										
Spring Season Length 14wk avg	14	341	117	583	418	242	286	583	0	44	0	858	253	330	418	0	132	0	280	0
Field Construction Type (1-5)	2	2	5	4	4	4	1	4	4	1	5	2	2	5	4	5	4	5	4	5
Capacity/wk	27	27	13.5	18	18	18	37.5	18	18	37.5	13.5	27	27	13.5	18	13.5	13.5	18	13.5	13.5
Avg HRs/wk		24.4	8.4	41.6	29.9	17.3	20.4	41.6	0.0	3.1	0.0	61.3	18.1	23.6	29.9	0.0	9.4	0.0	20.0	0.0
Capacity/season	378	378	189	252	252	252	525	252	252	525	189	378	378	189	252	189	252	189	252	189
Season Use		341	117	583	418	242	286	583	0	44	0	858	253	330	418	0	132	0	280	0

Source: Traverse Landscape Architects, 2017

**Figure 27. Fall Field Capacity vs. Use by Facility and User Type.**



Source: Traverse Landscape Architects, 2017.

**Table 15. Fall Field Capacity vs. Use by Facility and User Type.**

Fall Season September 1st - November 15th	Avery Practice	Churchill Park	Capen School	Capone Field (Fair- banks Park)	Collins Field (Fair- banks Park)	Condon Park	Sugrue Field (Dolan Center)	Davis Field (Memori- al Park)	Frietas Field (Fair- banks Park)	Gonzalez Field	Green- lodge School	Heaphy Field	Lowen Field	Lower Memorial Park	Nagle Field (Fair- banks Park)	Oakdale School	Pool Field	Paul Park	Sullivan (Memori- al Park)	Riverdale School	
Field Use	Soccer	Softball/ Youth baseball	Soft- ball/U-10 overlay	Softball/ Youth baseball	Softball/ Little League	Multiuse	Softball/ Youth baseball	Baseball	Soccer	Soccer	Multi-use	Baseball	Softball/ Youth baseball	Football/ Soccer	Softball/ Lit-	Multi-use	Soccer	Softball/ Lit-	Softball/ Lit-	Multi-use	
Size	U-10	60'	60'	60	60	60	60	90	Full Size	Full Size	60	90	60	Full Size	60	60	Junior	60	60	60/Full Size	
Recommendation			Full size multit-use																		
Dedham Youth Soccer								217		132	75					90	119				75
Dedham Youth Baseball				372								40			234						
Dedham Girls Softball						90	130						70								
Dedham Pop-war- ner														75							
Dedham Youth Lacrosse																					
Dedham High School						150		175		90				180			210				67.5
Mens Soccer																					
Rental										48									63		
Spring Season Length 14wk avg	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Field Construction Type (1-5)	2	2	5	4	4	4	1	4	4	1	5	2	2	5	4	5	4	5	4	5	5
Capacity/wk	27	27	13.5	18	18	18	37.5	18	18	37.5	13.5	27	27	13.5	18	13.5	18	13.5	18	13.5	13.5
Avg HBs/wk		0.0	0.0	26.6	0.0	17.1	9.3	0.0	28.0	19.3	5.4	2.9	5.0	18.2	16.7	6.4	23.5	0.0	4.5	10.2	
Capacity/season	378	378	189	252	252	252	525	252	525	525	189	378	378	189	252	189	252	189	252	189	189
Season Use		0	0	372	0	240	130	0	392	270	75	40	70	255	234	90	329	0	63	142.5	

Source: Traverse Landscape Architects, 2017



