APPENDIX C

CITY OF PALO ALTO OUTREACH QUESTIONNAIRE & RESPONSES

CITY OF PALO ALTO QUESTIONNAIRE TO FOCUS GROUPS

The session will be held via Zoom to ensure accessibility and to enable recording and transcription for inclusion in the study. If organizations/individuals are unable to attend the Zoom session or would prefer to provide written input. Written responses are due to sarah.robustelli@paloalto.gov by **July 17, 2025,** and are limited to one response per group/organization.

Standardized Questions for Turf Study Focus Groups

1. Introduction to Use and Experience

- Can you describe how you or your organization currently use athletic fields in Palo Alto, including El Camino Park if applicable? Please include, frequency, time of use, days used, and any unique uses (i.e. tournaments, special events, etc.)

2. Priorities and Values

- What are your top priorities or values when it comes to athletic field design and maintenance (for example, safety, environmental impact, playability, accessibility, cost, aesthetics)?

3. Environmental Considerations

- What environmental concerns or benefits do you associate with synthetic turf? With natural grass?
- Are there specific environmental impacts (for example, water use, heat, microplastics, biodiversity) that are particularly important to your group?

4. Operational and Maintenance Factors

- What has your experience with field conditions (for example, closures, wear and tear, drainage)? Please include feedback for both natural grass and synthetic turf fields.
- How important is year-round availability or durability of fields to your use?

5. Health and Safety Concerns

- Do you have concerns about injuries, heat, or other health impacts associated with either surface type?

6. Equity and Accessibility

- Are there barriers to access or use of athletic fields that your group experiences?
- How might field surface types impact equitable use by different user groups (age, income, ability, sport type)?

7. Financial Considerations

- What role should upfront costs versus long-term maintenance and replacement costs play in the City's decision-making?
- Would cost impact your organization’s ability to access or use these fields (for example, rental fees, frequency of use)?

8. El Camino Park as a Case Study

- Do you have any site-specific feedback about El Camino Park that should be considered in this study?
- Would you support using El Camino Park as a pilot location for field design improvements or new turf types? Why or why not?

9. Community Engagement and Decision-Making

- What would make you feel that your input is meaningfully considered in the City's decision-making process?

10. Open Feedback

- Is there anything else you would like to share that we have not asked about?

Castilleja School

Standardized Questons for Turf Study Focus Groups

The session will be held via Zoom to ensure accessibility and to enable recording and transcripƟon for inclusion in the study. If organizaƟons/individuals are unable to a send the Zoom session or would prefer to provide writen input. Writen responses are due to sarah.robustelli@paloalto.gov by **July 17, 2025,** and are limited to one response per group/organizaƟon. We appreciate your input!

1. IntroducƟon to Use and Experience

- Can you describe how you or your organizaƟon currently use athleƟc fields in Palo Alto, including El Camino Park if applicable? Please include, frequency, Ɵme of use, days used, and any unique uses (i.e. tournaments, special events, etc.)

Castilleja uses the fields seasonally, when there is availability we use El Camino twice a week (Tue/Thur) 3:30pm-5:30pm. We use it for Lacrosse and Soccer

2. PriориƟes and Values

- What are your top priориƟes or values when it comes to athleƟc field design and maintenance (for example, safety, environmental impact, playability, accessibility, cost, aestheƟcs)?

Playability and Accessability are the most important factors for us. The fields seem to be rented a lot and having them up and running year around is wildly important for us.

3. Environmental ConsideraƟons

- What environmental concerns or benefits do you associate with syntheƟc turf? With natural grass?

None

- Are there specific environmental impacts (for example, water use, heat, microplasƟcs, biodiversity) that are parƟcularly important to your group?

Water use is important; we want to limit excess water use as best as possible.

4. OperaƟonal and Maintenance Factors

- What has your experience with field condiϴons (for example, closures, wear and tear, drainage)? Please include feedback for both natural grass and syntheϴc turf fields.

Turf fields seem to be more available compared to grass, so they have less closures. Drainage has also never been a problem with the turf fields we have used where as grass needs time to heal after rain.

- How important is year-round availability or durability of fields to your use?

It is very important to us, we need to use the field a lot in the winter and with the rain having it available during that time is valuable.

5. Health and Safety Concerns

- Do you have concerns about injuries, heat, or other health impacts associated with either surface type?

Grass tneds to get “holes” in it palces where athletes can roll their ankeles and can be dangerous. Turf tends to be and remain stable consistenlty which allows our athletes to play in safe conditions.

6. Equity and Accessibility

- Are there barriers to access or use of athleϴc fields that your group experiences?

We are not priority uses and would love to use the fields more but thats it.

- How might field surface types, impact equitable use by different user groups (age, income, ability, sport type)?

I think if grass were put in and the field would need to rest we would not be able to use the field at all because other groups and that impacts our group and needs.

7. Financial ConsideraϴonsWhat role should upfront costs versus long-term maintenance and replacement costs play in the City's decision-making?

I think investing in a field that would be able to be used and require less maintenance would be best for the city, they could focus other things and potentially not need as much support compared to needing regular maintenance.

- Would cost impact your organizaϴon's ability to access or use these fields (for example, rental fees, frequency of use)?

No

8. El Camino Park as a Case Study

- Do you have any site-specific feedback about El Camino Park that should be considered in this study?

No

- Would you support using El Camino Park as a pilot locaϴon for field design improvements or new turf types? Why or why not?

Yes but it would depend on how long the field would be down for and at what time of year.

9. Community Engagement and Decision-Making

- What would make you feel that your input is meaningfully considered in the City's decision-making process?

Hearing about how decisions came about and knowing about the pros and cons were weighed.

10. Open Feedback

- Is there anything else you would like to share that we have not asked about?

Falinks Net

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1. IntroducΘon to Use and Experience

Can you describe how you or your organizaΘon currently use athleΘc fields in Palo Alto, including
El Camino Park if applicable? Please include, frequency, Θme of use, days used, and any unique
uses (i.e. tournaments, special events, etc.)
Weekly 1~3 times every week. Soccer practice and scrimmage.

2. PriοriΘes and Values

What are your top priοriΘes or values when it comes to athleΘc field design and maintenance
(for example, safety, environmental impact, playability, accessibility, cost, aestheΘcs)?

cost, playability, accessibility

3. Environmental ConsideraΘons

What environmental concerns or benefits do you associate with syntheΘc turf? With natural grass?
N/A
Are there specific environmental impacts (for example, water use, heat, microplasΘcs, biodiversity) that are parΘcularly important to your group?
N/A

4. OperaΘonal and Maintenance Factors

What has your experience with field condiΘons (for example, closures, wear and tear, drainage)?
cleaning.
Please include feedback for both natural grass and syntheΘc turf fields.
How important is year-round availability or durability of fields to your use?
very important

5. Health and Safety Concerns

Do you have concerns about injuries, heat, or other health impacts associated with either

surface type?
No

6. Equity and Accessibility

Are there barriers to access or use of athleΘc fields that your group experiences?
No
How might field surface types, impact equitable use by different user groups (age, income, ability, sport type)?
Turf is better as it is very even and ball moves fast and steady

7. Financial ConsideraΘons

What role should upfront costs versus long-term maintenance and replacement costs play in the
City's decision-making?
not sure.
Would cost impact your organizaΘon's ability to access or use these fields (for example, rental
fees, frequency of use)?
make it more affordable would be great.

8. El Camino Park as a Case Study

Do you have any site-specific feedback about El Camino Park that should be considered in this
study?
no
Would you support using El Camino Park as a pilot locaΘon for field design improvements or new
turf types? Why or why not?
don't have problem if it can move fast and less maintenance time.

9. Community Engagement and Decision-Making

What would make you feel that your input is meaningfully considered in the City's decision-
making process?
Really appreciate.

10. Open Feedback

Is there anything else you would like to share that we have not asked about?
NA

On Fri, Jul 18, 2025 at 1:51 PM Robustelli, Sarah <Sarah.Robustelli@paloalto.gov> wrote:

> Hi Zhi,

Are you able to supply these answer by end of day Sunday, July 20? We want to hear from you.

Thank you,

Sarah

SARAH ROBUSTELLI

Division Manager Open Space, Parks, and Golf

Community Services Department

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Please click here to provide feedback on our City's services

From: Zhiyong Zhang <zyzhang02@gmail.com>
Sent: Saturday, July 5, 2025 2:50 PM
To: Robustelli, Sarah <Sarah.Robustelli@paloalto.gov>
Cc: O'Kane, Kristen <Kristen.O'Kane@paloalto.gov>; Hartmann, Chase <Chase.Hartmann@paloalto.gov>
Subject: Re: Scheduling Turf Study Focus Group - User Groups of El Camino Park

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Sorry for the late reply. I can do 07/14 zoom session. I can fill in online as well. Let me know how I can help.

Thanks.

Zhi

> On Jul 2, 2025, at 10:09 AM, Robustelli, Sarah <Sarah.Robustelli@paloalto.gov> wrote:
>
> Hi El Camino Park Field Users,
>
> The City of Palo Alto is conducting a Turf Study, and Chase Hartmann identified your organization as an active user group at El Camino Park. As part of the study, staff will be holding three separate focus groups in July for the Playing Fields Ad Hoc Committee, user groups, and the Sierra Club.
>
> We are currently scheduling the user group session for the week of July 14 and would appreciate your participation. The session will be held via Zoom to ensure accessibility and to enable recording and transcription for inclusion in the study. The meeting will be approximately one hour.
>
> **Available Zoom Meeting Windows:**
>
> - July 14 – 9:00 am - 4:00 pm
> - July 17 – 9:00 am - 4:00 pm
> - July 18 – 9:00 am - 4:00 pm
> -
>
> Please reply with your availability during these times so we can coordinate accordingly.

If you are unable to attend the Zoom session, or would prefer to provide written input, we will be sending a set of standardized questions that are being used across all three focus groups. **Written responses are due by July 17** and should be limited to one response per group/organization.

We appreciate your time and input as we work to assess the future of athletic fields in Palo Alto.

Sarah

<Picture (Device Independent Bitmap) 1.jpg>

SARAH ROBUSTELLI

Division Manager Open Space, Parks, and Golf

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<Picture (Device Independent Bitmap) 7.jpg>

PRC Fields Ad Hoc

Both on this PRC Field Ad hoc for over 3 years

Anne Cribbs- PRC Commissioner. Board member of Rich May Memorial Field in East Palo Alto – leadership building the field and maintaining the field. It is a full sized all weather soccer and rugby field, with lights. All funds were raised privately, for community of East Palo Alto in honor of an East Palo Alto police officer, Rich May, killed in the line of duty in 2006. The Rich May Field opened in 2016, lights installed in 2018. There has been no need for field closures or repairs. We have no issues with heat or clumping issues. The field will be at the end of its life in 2027, confirmed by Colony Landscaping this year. Funds are being raised to replace the turf in 2027. I also was a youth soccer coach in Palo Alto years ago, and currently organize a senior adult soccer tournament, part of the Bay Area Senior Games since 2008, using Greer Park.

Jeff Greenfield – PRC Vice Chair, Member of the Playing Fields Ad Hoc, current soccer referee and referee coordinator; former soccer player, coach, team manager, adult league board member and past-president; involved with Palo Alto soccer playing fields since 1998.

Standardized Questions for Turf Study Focus Groups

1. Introduction to Use and Experience

- **Can you describe how you or your organization currently use athletic fields in Palo Alto, including El Camino Park if applicable? Please include, frequency, time of use, days used, and any unique uses (i.e. tournaments, special events, etc.)**

Anne – does not use El Camino. Does use Greer Park fields for Bay Area Senior Games Soccer tournament one weekend per year.

Jeff – Saturday, Sunday and weekday evenings as a soccer referee, 1-6 times per month.

PRC – Has a charter and role for the optimized utilization of resources and conveying community feedback and part of the Park and Recreation Master Plan – 2017 pp 86.

There is a study that will be referenced later. Here is “got space” Fields Advisory 2002..

2. Priorities and Values

- **What are your top priorities or values when it comes to athletic field design and maintenance (for example, safety, environmental impact, playability, accessibility, cost, aesthetics)?**

  Anne – Access for all (all ages), Safety, Availability, playability

Jeff – Many top priorities are essentially at an equivalent "top" level. This is includes Safety – always a top priority; Playability is the most visible aspect – it is what people see and experience on a daily basis; Accessibility / Availability. Environmental impact is an important consideration as well – balance competing priorities is the key challenge.

Cost is a factor, but should not be the driving priority. The compounding playing surface problems at EC Park and Mayfield – including compromised playability over the life of the fields and more frequent maintenance shutdowns than should have been necessary – have resulted in a strong negative impression for both the Palo Alto and neighboring communities. When these fields are revamped, the City has to get it "right". This includes both future plans for EC Park and the current synthetic turf replacement project at Mayfield.

This is important – the issues that we have having with them. We can't compromise on cost as this is passed on to stakeholders and field users.

Aesthetic issue that shouldn't need to be discussed – TPE clumping.

3. Environmental Considerations

- **What environmental concerns or benefits do you associate with synthetic turf? With natural grass?**
- **Are there specific environmental impacts (for example, water use, heat, microplastics, biodiversity) that are particularly important to your group?**

Synthetic turf concerns – use of potentially carcinogenic recycled rubber products was a health concern with early generation synthetic turf fields. Generally, this is not an issue today with newer generation synthetic field products, though of note, newer Stanford playing fields are using continuing rubber infill products. The benefits are the year-round playability during inclement weather / general resiliency and usability. Heat can be an issue and adding organic infill will be better. Microplastics are a legitimate environmental concern. Again, balancing competing priorities is the key challenge. The ultimate goal is finding synthetic field solutions that provide all-weather playability, but with mitigated environmental impacts.

Natural grass is a softer surface, and is particularly preferred by older age groups (it's easier on the joints 😊). Maintenance of natural turf fields is challenging and has been an issue for decades. Allowing grass field to rest is required. Fields studies state that there is synthetic fields offer 3.5 times more playing time than natural grass fields. Grass fields have significantly higher maintenance costs, even for marginal quality playing fields. Top quality natural grass fields (e.g. Stanford University and professional stadiums crews) require a level of financial investment that

is not realistic for municipalities, and the fields usage is significantly limited (this is all covered in the previous field study that Anne referenced). Grass fields are not without environment concerns, including water and fertilizer usage. Given the 3.5 usage ratio, if EC Park were converted to natural grass, 2.5 additional NEW playing fields would need to be added concern and the amount of land that would be needed to have enough access for the same number of fields.

Seniors complain soccer group– don't like to play on synthetic turf at Mayfield, Greer fields are uneven (natural grass) so they have complaints either way.

4. Operational and Maintenance Factors

- **What has your experience with field conditions (for example, closures, wear and tear, drainage)? Please include feedback for both natural grass and synthetic turf fields.**

  Synthetic Turf: currently issues with the TPE.

  For a new synthetic turf selection, recommend prioritizing design selection to include optimized "patching" of worn out turf areas.

  Lines on synthetic turf fields can be added by three different methods: manufacturing the turf with colored fibers, inlaying pre-colored turf strips, or using specialized paint. While the first option may be the most expensive, recent experience of inlaying pre-colored strips has resulted in the lines "ripping out". This creates an undesirable playing obstacle as well as a field hazard, until proper maintenance is done on the field. The field deterioration and problematic playing surface has lingered for many months (or years?), and the maintenance is added cost. Painted lines require periodic re-painting. Manufacturing the turf with colored fibers should be seriously considered.

  Grass – much more frequently, based on environmental considerations, extra care is provided. In the past, a partnership for maintenance PAASL paid for this (don't do this anymore as they only use the turf fields), for JLS fields example at a moderate level of funding 20 years ago. Irrigation is another issue, problems too much or not enough to maintenance. PSV Union FC has maintained grass fields at Jordan/Greene Middle School

  Mowing has been a concern previously too – either too short or not short enough.

- **How important is year-round availability or durability of fields to your use?**

The year round is critical and durability and should be optimized as much as possible.

Rich May Memorial Field in EPA.

5. Health and Safety Concerns

- **Do you have concerns about injuries, heat, or other health impacts associated with either surface type?**

We want to reduce the risk of injury. Sports are risky and they vary depending on the age and skill of the players, but the risks are there.

Turf fields have been TPE issues, and a lawsuit due to this. Limited the issue of the TPE transferring and taking it home from the current field worse at El Camino Park. More static at El Camino Park loss of fibers – this has been an issue for 5+ years. The work will be better.

Heating is a concern, but the organic infill will hopefully help with this.

Natural grass uneven playing surface continued issue for health and safety.

6. Equity and Accessibility

- **Are there barriers to access or use of athletic fields that your group experiences?**

  There is a barrier to access for the community based on demand for Tiers and Priority use and they are comfortable with that policy.

  Finances required to rent and pay for the use of the fields. Not a significant issue, they are far less expensive. Paly and Gunn and a lot more 2x or 3x.

  Pressure Point Weekday evenings – when day light saving is not active. Temp lights have assisted at Cubberley, but we see clubs having issues on a field to practice because space is limited.

  Spring/Fall – Peak Season youth soccer availability on turf and grass.

  Limitations on natural grass playing surfaces 3.5 times less and that would change the dynamic significantly if field conversions are changed.

  EPA has cost, availability concerns.

- **How might field surface types, impact equitable use by different user groups (age, income, ability, sport type)?**

7. Financial Considerations

- **What role should upfront costs versus long-term maintenance and replacement costs play in the City's decision-making?**

We have to get this right – fields that don't require extra maintenance, fields that are open, created with materials for our geography, fields that are designed with the best technology and material available.

Projected life cycle of the fields and budgeted accordingly. Factoring the time of year when the work is going to get done. The right season to do the work so to avoid additional delays.

- **Would cost impact your organization's ability to access or use these fields (for example, rental fees, frequency of use)?**

Not sure we can answer this question.

At a certain point yes, but this shouldn't be a primary consideration.

EPA (Rich May Field) - $50 an hour and that includes lights. RMF Board sets pricing so that underserved community has access and availability in their community.

8. El Camino Park as a Case Study

- **Do you have any site-specific feedback about El Camino Park that should be considered in this study?**

  See above – getting it right. 11-yard markers on both sides of the corners should be included in (optional soccer field marking). Crowd management – lining would be helpful for this site as well. Dashing of lines for the slide line area on the spectator side of the field. Most helpful at Mayfield could be helpful at El Camino Park.

  Warm up area and access is a challenge at El Camino as there are not many issues. The grass area to the north of the field is sometimes used for pre-game warm up, however not recommending going to synthetic.

- **Would you support using El Camino Park as a pilot location for field design improvements or new turf types? Why or why not?**

- See above – getting it right.
  The risk of getting it wrong is higher if we try new and cutting edge. More risks doing something new and the field is passed its lifecycle. Needs to be replaced ASAP. I can't imagine replacing it with synthetic, but we need reasonable quality field available and accessible for the hours that the field is currently in use for.
  Additional fields would need to be included for the loss of playtime and access.
  If we had a new plot of land and did a pilot project that would be ok but taking an existing field, it is not fair to the current community and user groups.

9. Community Engagement and Decision-Making

- **What would make you feel that your input is meaningfully considered in the City's decision-making process?**

  Is there an opt in email address – that would be good to include on the project page.

  Signage at the field for community engagement – for public input when the draft study is available. This time is challenging for feedback as many of the user groups are away during the summer.

10. Open Feedback

- **Is there anything else you would like to share that we have not asked about?**
- Synthetic Turf fields in PA are significantly narrow than top level playing fields in many neighboring communities (typically at community colleges). Length is generally ok, but wider fields are desirable.
- Partnering with PAUSD and is an unreliable variable. PAUSD has repeatedly made independent decisions resulting in the reduction of playing fields size – examples include: JLS added the solar panels, construction and Hoover School that impacts the playing fields.

- The attempt to work more closer with the PAUSD has not been successful and the desire for more cooperation to utilize field space is highlighted in the Parks Master Plan of 2017.

Palo Alto Adult Soccer League

1. Introduction to Use and Experience

Can you describe how you or your organization currently use athletic fields in Palo Alto, including El Camino Park if applicable? Please include, frequency, me of use, days used, and any unique uses (i.e. tournaments, special events, etc.)

Palo Alto Adult Soccer League ("PAASL") has been using ECP and Mayfield for as long as the facilities have been open. We play T/W/Th nights from 8:30 to 10 pm, and Sundays from 8 am to 2 pm. (While Mayfield is closed we are using Cubberley turf for Sunday games and using ECP on M and F from 7 pm to 10 pm, in addition to T/W/Th.)

2. Priori es and Values

What are your top priori es or values when it comes to athletic field design and maintenance (for example, safety, environmental impact, playability, accessibility, cost, aesthetic)?

Accessibility, playability and cost (in that order).

3. Environmental Considerations

What environmental concerns or benefits do you associate with synthetic turf? With natural grass? Are there specific environmental impacts (for example, water use, heat, microplastics, biodiversity) that are particularly important to your group?

Per the above, we value accessibility above all, which is why we use only turf fields (this way we don't have rainouts). We'd love to play on perfectly manicured grass fields, but the water cost, maintenance and being rained out some winter weeks would not be worth the trade for us.

Are there specific environmental impacts (for example, water use, heat, microplastics, biodiversity) that are particularly important to your group?

Heat is rarely an issue in this climate, but turf can get hot. See above for why we prefer turf.

4. Operational and Maintenance Factors

What has your experience with field conditions (for example, closures, wear and tear, drainage)? Please include feedback for both natural grass and synthetic turf fields. How important is year-round

availability or durability of fields to your use? 5. Health and Safety Concerns

See above. We prefer to avoid field closures above all else.

5. Health and Safety Concerns

Do you have concerns about injuries, heat, or other health impacts associated with either surface type?

When we have played on grass fields, the upkeep has been spotty, and there are numerous holes in PA's grass fields, which causes injury concerns. We don't typically have any injury concerns with turf, except for when the turf hasn't been kept up. Examples: 1) the bad "fill" at Mayfield which clumped on the bottoms of shoes when it was warm and made footing unstable; 2) there are depressions in Mayfield which can cause injury (which are assumedly being addressed in the current re-do of the fields).

6. Equity and Accessibility

Are there barriers to access or use of athletic fields that your group experiences?

Not usually, because we use the fields at the least desirable times of the week (late on weeknights and early Sundays)

How might field surface types, impact equitable use by different user groups (age, income, ability, sport type)?

Grass fields are not always usable during winter months, as noted we prioritize availability over everything else.

7. Financial Considerations

What role should upfront costs versus long-term maintenance and replacement costs play in the City's decision-making?

Long term maintenance and water use for grass fields should be of primary concern. There is not significant maintenance cost required for turf fields.

Would cost impact your organization's ability to access or use these fields (for example, rental fees, frequency of use)?

Probably not, unless fees were to go up significantly. We are an adult recreational league where players will make a cost/benefit decision on whether to play. I would note that our Women's league is much more focused on cost then the Men's leagues, so if cost were to increase it would probably impact the Women most.

8. El Camino Park as a Case Study

Do you have any site-specific feedback about El Camino Park that should be considered in this study?

Not really. It is nice to have 2 fields side by side like at Mayfield so that players have the option of playing in more than one game. But otherwise no.

Would you support using El Camino Park as a pilot location for field design improvements or new turf types? Why or why not?

I guess we'd rather not. It's a case of it not being broken from our perspective, so experimenting might make the field worse for use from our perspective.

9. Community Engagement and Decision-Making

What would make you feel that your input is meaningfully considered in the City's decision- making process?

If we don't just have a knee-jerk reaction to a few loud voices complaining about environmental impact. We think it's more important for all users to have access to fields since there is so much demand for them. And the water use and maintenance costs for grass fields, along with the threat of rainouts make the tradeoff not worth it.

10. Open Feedback

Is there anything else you would like to share that we have not asked about?

No.

Palo Alto Soccer Club Injury Report – Supplementary Info From Survey

The information below is purely based on reports made by players, coaches and families to the club from July 2024 - May/June 2025. I can break it down into more specifics but it's going to take a bit longer as I need to go back to the emails.

Injury Overview

- Total Cases Reported: 128
- By Field Type:

Grass Fields: 88 cases (69%)

Turf Fields: 40 cases (31%)

1. Introduction to Use and Experience

- Can you describe how you or your organization currently use athletic fields in Palo Alto, including El Camino Park if applicable? Please include, frequency, time of use, days used, and any unique uses (i.e. tournaments, special events, etc.)

PASC: 1977 currently 98 teams roster 12-20 kids, mainly a Palo Alto organizations, boys and girls 7-18, 600 in recreation programs 3-6, all adult league at Mayfield mainly

55% boys, 45% girls

Younger teams largest population(14 and younger)

PASC use PA soccer fields daily, year round for practices, games and tournaments.

4 tournaments – these all take place at El Camino in addition to Mayfield and Cubberley

Natural (14 and younger) and Synthetic Use (14 and older): Including JSL, Greer, Seale for younger aged

2. Priorities and Values

- What are your top priorities or values when it comes to athletic field design and maintenance (for example, safety, environmental impact, playability, accessibility, cost, aesthetics)?

Main concern is always: Player safety.

Low maintenance and environmental responsibility to bring players together in a community.

Grass field is challenging to maintain, almost impossible for the quality level. Weed, chemicals, December-March closures for Cubberley, holes, uneven, public park and access to all impossible to maintain high quality of natural grass.

Greer, JSL, Cubberley quality hard, and high water usage mentioned

Quality, durability, safety

3. Environmental Considerations

- What environmental concerns or benefits do you associate with synthetic turf? With natural grass?
- Are there specific environmental impacts (for example, water use, heat, microplastics, biodiversity) that are particularly important to your group?

PASC believes there is a need for both synthetic and grass fields. We leverage grass fields for younger players and teams not impacting the fields for heavy usage. This helps sustain biodiversity, air quality and stormwater management. We leverage synthetic fields (4 fields is not enough) for high traffic usage to not impact the biodiversity, air quality to foster continuous play for the rainy season.

Greer to synthetic turf one day.

Cubberley field has more temp usage due daylight and no lights on the field. Sunset during daylight savings sunset 7-8 pm unable to use, November-March lights are able to use that space with temp lighting

4. Operational and Maintenance Factors

- What has your experience with field conditions (for example, closures, wear and tear, drainage)? Please include feedback for both natural grass and synthetic turf fields.

Grass fields that are overused for sports causes major issues with maintenance and the limiting of chemicals causes the fields to be uneven, bald and overrun with weeds. This causes injuries to players and when it does rain the ground cannot absorb the water causing fields to close frequently. Field closers are very impactful to a soccer club as rescheduling games impact too many people as a lot of teams travel to Palo Alto for competitive matches.

Field Closures take place when there is a ¼ of rain (check policy) and rescheduling in an administrative nightmare for league, city staff, parent, no time to reschedule, etc.

Turf maintenance has not impacted PASC – upfront and little maintenance impacts after the install. Daily staff are already off the fields at 4pm.

Natural grass – see above.

- How important is year-round availability or durability of fields to your use?

Year-round availability is essential for all sport communities. Ours and other leagues use it year round.

- 5. Health and Safety Concerns

• Do you have concerns about injuries, heat, or other health impacts associated with either surface type?

Grass Fields: Uneven, and weedy grass fields have caused lots of ankle and leg injuries to players. They track their player injuries and roughly 90% are from grass.

Turf: Heat concerns for turf fields but we cancel practices and games when the heat hits 90 degrees to prevent player safety. Typically, not more than 5 times a year. Follow Guidelines by the US Soccer Federation that we follow.

Melting infill TPE there were complaints and injuries.

6. Equity and Accessibility

- • Are there barriers to access or use of athletic fields that your group experiences?

We work with the City of Palo Alto for permits for field usage per the city policy. Great relationship with Chase and Adam. Other non-PA tournaments that host in PA Fields can be a pain point. As a main user we care about the fields and care about their maintenance.

- • How might field surface types, impact equitable use by different user groups (age, income, ability, sport type)?

High level leagues must be synthetic fields or require a high level of maintenance. It is difficult to find space at synthetic fields for the 14 and younger groups.

7. Financial Considerations

- • What role should upfront costs versus long-term maintenance and replacement costs play in the City's decision-making?
- • Would cost impact your organization’s ability to access or use these fields (for example, rental fees, frequency of use)?

PASC pays the required fees to leverage grass and synthetic fields per the city’s policies. We pass these fees along to the user of the club.

Pre-covid assisted in funding, the Grass field for the summer being fenced at Cubberley. Have not reengaged in the conversation since. Can assist with funding if needed for maintenance costs.

8. El Camino Park as a Case Study

- • Do you have any site-specific feedback about El Camino Park that should be considered in this study?

We currently leverage El Camino turf fields without incidents or impact to the club.

Unhoused, drinking, dirty if this is still the case has been in the past.

Turf solved the problem for maintenance in their opinion.

Unpermitted users can easily access the fields and we are permitted and can be aggressive. Work with Police, ongoing issue and monitor the field usage. This is not the case at the grass fields (available online). Purchased the soccer goals (7,000) and need to locked up. Nets are replaced each season. Share on costs recommended for other users or for the city to take on the costs.

- Would you support using El Camino Park as a pilot location for field design improvements or new turf types? Why or why not?

As the industry is advancing on turf fields, if the city wants to convert the current field with a newer product, we support this initiative. Hybrid turf or advancements.

Not supportive going back to natural grass. This was how it was years ago, and it was not usability and would be extremely challenging.

More people moving into the city for housing we need to consider that there will be more usage how will we accommodate the increase need.

9. Community Engagement and Decision-Making

- What would make you feel that your input is meaningfully considered in the City's decision- making process?

PASC is the largest club using PA fields, as we server more than 2500 youth players. The open communications between the City of Palo Alto and PASC staff has been working well and we welcome the continued partnership to ensure the safety of PA youth soccer players.

10. Open Feedback

- Is there anything else you would like to share that we have not asked about?

Palo Alto Soccer Club Injury Report – Supplementary Info From Survey

The information below is purely based on reports made by players, coaches and families to the club from July 2024 - May/June 2025. I can break it down into more specifics but it's going to take a bit longer as I need to go back to the emails.

Injury Overview

- Total Cases Reported: 128
- By Field Type:

Grass Fields: 88 cases (69%)

Turf Fields: 40 cases (31%)

PSV Union Soccer Responses

Standardized Questions for Turf Study Focus Groups

The session will be held via Zoom to ensure accessibility and to enable recording and transcript on for

inclusion in the study. If organizations/individuals are unable to a end the Zoom session or would prefer

to provide written input. Written responses are due to sarah.robustelli@paloalto.gov by **July 17, 2025,**

and are limited to one response per group/organization. We appreciate your input!

1. Introduction on to Use and Experience

· Can you describe how you or your organization currently use athletic fields in Palo Alto, including

El Camino Park if applicable? Please include, frequency, me of use, days used, and any unique

uses (i.e. tournements, special events, etc.)

i have been renting city fields since 1990. we/i am arguably the individual who has used palo alto fields

the most out of any user group. i was the first individual and only soccer rep. to attend the city meetings when mayfield was being designed and approved in 2004 i believe. we
were the first users of el camino field. prior to the current turf fields. we even re-developed and made playable jordan/greene middle school

in 2025 we have used greene middle school every day with the exceptions of sundays. we do not use turf esp. from may through to october with the exception of a few weekend slots at mayfield and el camino.

2. Priori es and Values

· What are your top priori es or values when it comes to athletic field design and maintenance

(for example, safety, environmental impact, playability, accessibility, cost, aesthetics)? cost is not the most important.

3. Environmental Considerations

· What environmental concerns or benefits do you associate with synthetic turf? Withgrass?

we do not like to use turf. in fact we avoid it at when possible but we do use it on the weekends for games. while canceling practice is doable, cancelling games is an issue. so turf does and can help in this regard. its dangerous for players and coaches. there are more ACL and ankle injuries on turf. turf also gets too hot. we prefer grass. even bad grass. we even prefer dirt and concrete over using grass. user groups can fit in more games, more practices and more events using turf. if making money is the key for the city then use turf. less cancellations etc. there is an abundance of fields in palo alto. very few need turf on them. the best players in the world in the history of soccer mostly played on dirt, concrete and bad grass. they never played on turf. most fields in palo alto outside the 4 pm- 8 pm windows during mid week get very little usage.

· Are there specific environmental impacts (for example, water use, heat, microplasbiodiversity) that are par cularly important to your group?

natural

cs,

4. Operational and Maintenance Factors

· What has your experience with field condiPlease include feedback for both natural grass and syntheons (for example, closures, wear and c turf fields.

tear, drainage)? myself and my group spent years trying to fix greene/formerly jordan middle school. it was unplayabale. sprinklers and systems have been impacted by school facility rec-construction and construction. pipes were cut. coordinating construction with city maintenance has been an issue.

· How important is year-round availability or durability of fields to your use? we do need access to fields year round but our footprint is smaller. we prefer courts, concrete or rubberized courts to grass and turf. we are in discussion with partners and investors to construct facilities in the immediate area and will personally invest in these facilities. these will alleviate the need to use turf fields and grass and require less maintenance and space.

5. Health and Safety Concerns

· Do you have concerns about injuries, heat, or other health impacts associated with either

surface type?6. Equity and Accessibility heat is def. an issue. at 90- 100 degrees it can be 130F on the turf. far too hot for players and even spectators. also flying of drones, excessive number of dogs/dog owners abusing the offleash policy. hygiene- excessive amount of dog faeces. electric bikes being drive across and around the fields. if dog owners respected the city rules there would be next to no issues.

· Are there barriers to access or use of athle c fields that your group experiences? no

· How might field surface types, impact equitable use by different user groups (age, income,

ability, sport type)?

7. Financial Considera ons

· What role should upfront costs versus long-term maintenance and replacement costs play in the

City's decision-making? other surfaces and facilities which are more environmentally friendly, less costly to maintain and more beneficial to soccer player development and enjoyment

· Would cost impact your organization fees, frequency of use)?

on's ability to access or use these fields (for example, rental

8. El Camino Park as a Case Study

· Do you have any site-specific feedback about El Camino Park that should be considered in this

study? yes. quite a bit. it can be unsafe for children or coaches on certain occasions. we have had to call the police. there are no warm up areas. parking is a challenge.

· Would you support using El Camino Park as a pilot location turf types? Why or why not?

on for field design improvements or new unsure what is meant by this question.

9. Community Engagement and Decision-Making

· What would make you feel that your input is meaningfully considered in the City's decision-

making process? being able to attend an open meeting/forum. more press and media attention to the bigger problem..

10. Open Feedback

· Is there anything else you would like to share that we have not asked about? yes a considerable amount. but in short, we do not want or need more turf fields. players, coaches

and parents prefer grass. User groups prefer turf. turf is dangerous to player development and safety.

the solution to all the cities problems is for the private user groups to invest in a soccer specific venue and not put more demands on the cities fields. the building of soccer courts will solve all of the cities usage problems.

Standardized Questions for Turf Study Focus Groups

The session will be held via Zoom to ensure accessibility and to enable recording and transcript on for inclusion in the study. If organizations/individuals are unable to a end the Zoom session or would prefer to provide written input. Written responses are due to sarah.robustelli@paloalto.gov by July 17, 2025, and are limited to one response per group/organization. We appreciate your input!

1. Introduction to Use and Experience

* Can you describe how you or your organization currently use athletic fields in Palo Alto, including El Camino Park if applicable? Please include, frequency, me of use, days used, and any unique uses (i.e. tournaments, special events, etc.)

While I can't name a Sierra Club Loma Prieta Chapter member in Palo Alto who plays league sports, there are several members with children or other relatives who play school and / or league sports in Palo Alto.

In addition to youth who complain about the heat of fields on hot days, and also about turf burn, parents and grandparents of young children say that plastic grass and synthetic rubber on playgrounds becomes too hot, and also that children don't know to stay off surfaces that are hot.

2. Priorities and Values

* What are your top priorities or values when it comes to athletic field design and maintenance (for example, safety, environmental impact, playability, accessibility, cost, aesthetics)?

In order, I'd say
1. Environmental impact (**see information about microplastics below**),
2. **PLAYERS' HEALTH (see public health risks below)** which includes "accessibility," as well as risk of injury, heat stress, or other risks caused by repeated exposure to microplastics (see below),
3. Cost (covered further down under "Financials")
4. P**layability (see below)**,
5. Aesthetics - though well taken care of real **grass looks awesome (see picture of McKegney Green below)**

Public Health Risks

Includes harms from either microplastics or their embedded chemicals, recovery from or treatment for the effects are less certain. John Hopkins Microplastics & Human Health, Harvard Medicine Microplastics & Human Health, Stanford Medicine Microplastics & Human Health, UN Microplastics & Environmental Justice, AAMC Microplastics & Human Health

Microplastics are distributed globally, so there is no getting away from them. We all have concerning amounts of microplastics in our bodies. PIRG Current Research on Microplastics in Humans

Environmental Risks

Microplastics, tiny particles resulting from plastic degradation or deliberately produced in sizes under 5mm, intensify multiple environmental crises. They contribute to biodiversity loss, ocean acidification, freshwater disruption, soil degradation, and altered atmospheric chemistry. This is a function of not only their fossil fuel origin but also their physical properties and of the complex mix of chemicals added to enhance product desirability. UN Fast Climate Change Facts, Geneva Plastics & Climate Change Page, CIEL Plastics in the Environment Page, UN Plastic Pollution Page, Guardian Plastic Pollution & Earth Systems Report, One Earth Journal Plastic Worsens. Climate Change, Geneva Chemicals in Plastic

Playability / Hours of Use What's Possible on a Sustainable Natural Grass Field
Below is quoted from a letter, from a parks superintendent in Arizona, which is hotter & drier than Palo Alto

On Fri, Jul 11, 2025 at 1:49 PM **Sean Carlin** <Sean.Carlin@gilbertaz.gov> **wrote**:
Being a Friday.....a quick reply but if you need more info send me a meeting invite for a discussion near the end of July.....right now we're swamped with park designs deadlines.

How many fields are part of the park?
4 now full size adult soccer/multi purpose. Going to 16 within 4 years park is in final design now.
What are they used for (what sport(s))? Flag football, soccer, a bit of lacrosse, and I'm not quite sure what else but there are probably a few other sports that simply rent the space to practice on the turf.
How old are the field(s)? 6 years old park first phase built 2019
What type of grass is used? Full bermuda.....can't quite remember the variety but will check. We're trying a few new types in new park construction to be a bit more wear and shade tolerant.
Was artificial turf ever a consideration - if yes, why are the field(s) grass? No. Too hot in Phoenix in our opinion on artificial turf during seasonal months of the year. Many high school football stadiums going artificial and some baseball, and Legacy Sports Complex in Mesa is all artificial.....mainly due to lack of water. My kid plays club baseball, I do not like the game on artificial turf, my opinion it slows the ball down greatly and changes the game and brings it in the infield. Grass is a better playing surface.

Do you track usage - how many hours and which sports per field?
Here's a bit of a rental screenshot.

Center Name	Facility / Equipment Type	Facility / Equipment / Instructor Name(Number)	Days Available	Hours Available	Days Reserved	Hours Reserved	Usage By Day	Usage By Hour	Total Attend
Desert Sky Park	Multi-Purpose Fields	Desert Sky Field 1 (DS Field 1)	366	5,856.00	343	2,458.92	93.72%	41.99%	3211
Desert Sky Park	Multi-Purpose Fields	Desert Sky Field 2 (DS Field 2)	366	5,856.00	330	2,411.25	90.16%	41.18%	1839
Desert Sky Park	Multi-Purpose Fields	Desert Sky Field 3 (DS Field 3)	366	5,856.00	307	2,116.50	83.88%	36.14%	1516
Desert Sky Park	Multi-Purpose Fields	Desert Sky Field 4 (DS Field 4)	366	5,856.00	312	2,172.00	85.25%	37.09%	1850
		Facility Type Sub-Total:	**1464**	**23,424.00**	**1292**	**9,158.67**	**88.25%**	**39.10%**	**8416**
		Center Sub-Total:	**1464**	**23,424.00**	**1292**	**9,158.67**	**88.25%**	**39.10%**	**8416**
		Grand Total:	**1464**	**23,424.00**	**1292**	**9,158.67**	**88.25%**	**39.10%**	**8416**

Do you track water usage? Are you using recycled or potable water? Reclaimed water use including a full pump system and lake in the park for the irrigation, and yes we track it. Landscaping entire park vegetation plus field watering. I get monthly reports and reclaimed use is quite high. Sand based fields drink and percolate water quickly.
Do you have tracking regarding maintenance: mowing, seeding, aerating, etc? Great question, we mow, aerate, fertilize, and occasionally are sprigging or resodding goal areas with more emphasis on repairing wear. Sand based fields with great drainage vs. being installed on native soil which is heavy clay content and does not drain well. Entire park was sodded when constructed.
Do you shut the field(s) at any point during the year - for what reasons and for how long? Yes.....sometimes up to 60 days hottest months of year during highest bermuda grass grow periods and least use due to climate. We do not overseed.
Are those using the field(s) happy? Our best park for large multiuse grass play in my opinion.

Sean Carlin
Parks Superintendent
Gilbert Parks and Recreation
sean.carlin@gilbertaz.gov
Work: (480) 503-6250
90 E. Civic Center Dr. Gilbert, AZ 85296
gilbertaz.gov

Picture of McKegney Green in Tiburon, CA - a sustainably managed real grass field

3. Environmental Considerations

* What environmental concerns or benefits do you associate with synthetic turf? With natural grass?

* Are there specific environmental impacts (for example, **water use**, **heat**, **microplastics, biodiversity**) that are particularly important to your group?

Water Use

There are drought tolerant grasses developed specifically for sports fields in the Western U.S. for example Bandera Bermudagrass

When the soil is properly tested & maintained, reclaimed water can be used. Sometimes minerals need to be added to the soil to counter salts or other minerals in reclaimed water.

Heat

Urban heat islands affect children, adults, birds, insects, etc. Besides being a public health concern heat is an environmental concern. (**See "Heat" elsewhere, for example for question #5 below.**)

Microplastics

Microplastics, tiny particles resulting from plastic degradation or deliberately produced in sizes under 5mm, intensify multiple environmental crises. They contribute to biodiversity loss, ocean acidification, freshwater disruption, soil degradation, and altered atmospheric

chemistry. This is a function of not only their fossil fuel origin but also their physical properties and of the complex mix of chemicals added to enhance product desirability. UN Fast Climate Change Facts, Geneva Plastics & Climate Change Page, CIEL Plastics in the Environment Page, UN Plastic Pollution Page, Guardian Plastic Pollution & Earth Systems Report, One Earth Journal Plastic Worsens. Climate Change, Geneva Chemicals in Plastic

Chemicals, Includes PFAS and other U.N. Chemicals of Concern

The U.N. Geneva Environment Network, Toxic Chemicals in Plastic
https://www.genevaenvironmentnetwork.org/resources/updates/plastics-and-health/#scroll-nav__5
"To date, it has been estimated that more than **16,000 chemicals** are used to make plastic, of which at least **4200 are chemicals of concern ...** A growing body of evidence points to the health risks posed are not only caused by plastic additives, as humans are also directly exposed to plastic materials in the form of microplastics and nano-plastics (Project TENDR, 2024). Exposure to plastics and chemicals can … act as endocrine-disrupting chemicals (EDCs), which are linked to infertility, obesity, diabetes, prostate or breast cancer, thyroid problems and increased risk of cardiovascular disease and stroke, among others. Other health conditions linked to additives include reproductive, growth, and cognitive impairment and neurodevelopment disorders. The technical report **Chemicals in Plastics** released by UNEP and the Basel, Rotterdam and Stockholm Conventions Secretariat in May 2023, highlights how women and children are particularly susceptible to these toxic chemicals."

Green House Gas

2019, Center for International Environmental Law, **Plastic & Climate: The Hidden Costs of a Plastic Planet**
https://www.ciel.org/project-update/plastic-climate-the-hidden-costs-of-a-plastic-planet/
"Nearly every piece of plastic begins as a fossil fuel, and greenhouse gases are emitted at each of each stage of the plastic lifecycle: 1) fossil fuel extraction and transport, 2) plastic refining and manufacture, 3) managing plastic waste, and 4) plastic's ongoing impact once it reaches our oceans, waterways, and landscape … Plastic that is unmanaged ends up in the environment, where it continues to have climate impacts as it degrades … Significantly, this research showed that plastic on the coastlines, riverbanks, and landscapes releases greenhouse gases at an even higher rate."

Biodiversity

Real grass fields can support community play, pets, bird droppings (good bacteria take care of droppings if people do not pick them up)

4. Operational and Maintenance Factors

* What has your experience with field conditions. (for example, closures, wear and tear, drainage)? Please include feedback for both natural grass and synthetic turf fields.

* How important is year-round availability or durability of fields to your use?

See the following documents, documenting comparisons between plastic turf and natural grass

Comparisons between plastic turf and natural grass

- Summary Ragel Ranch Sports Field, Notes on McKegney Green,

How to get many more cost-effective hours of play

1. In many localities there are unused open grass fields. If a portion of that acreage was converted to open, unfenced sustainable grass sports fields, many more hours of organized sports play would be possible at a reasonable cost.
2. **See letter from Arizona Parks Superintendent above** — They will be able to talk about their IMPRESSIVE hours of play on their natural grass fields

Taken from answer to question #1
"**Do you track usage - how many hours and which sports per field?**
Here's a bit of a rental screenshot.

Center Name	Facility / Equipment Type	Facility / Equipment / Instructor Name(Number)	Days Available	Hours Available	Days Reserved	Hours Reserved	Usage By Day	Usage By Hour	Total Attend
Desert Sky Park	Multi-Purpose Fields	Desert Sky Field 1 (DS Field 1)	366	5,856.00	343	2,458.92	93.72%	41.99%	3211
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		Grand Total:	**1464**	**23,424.00**	**1292**	**9,158.67**	**88.25%**	**39.10%**	**8416**

5. Health and Safety Concerns

* Do you have concerns about **injuries**, **heat**, or other **health impacts** associated with either surface type?

Heat and Health: An Immediate Concern

Plastic turf absorbs and retains heat to dangerous levels. Using a calibrated infrared thermometer, I've documented on-the-ground temperatures well over 150°F on sunny days in Santa Clara and San Jose.

Photo Documentation:

- 2025 Santa Clara & San Jose Heat Measurements

This extreme heat creates dangerous playing conditions. Across the country, graduations and games are being delayed or moved indoors due to plastic turf-related heat risks (Heat Wave Sends 9 to Hospital, Excessive Heat Moves Date/Time of Union High School's Graduation Ceremony).

Leading institutions like the **Icahn School of Medicine at Mount Sinai** have issued statements advising against plastic turf use due to the associated health risks, especially for

children:
Mount Sinai Position Statement

2024, The New Lede, As the World Heats Up So Does the Debate Around Artificial Turf
https://www.thenewlede.org/2024/08/as-the-world-heats-up-so-does-the-debate-around-artificial-turf/

Injury & High School Age Players
Note: This medical/science report is behind a paywall. However I paid the fee and will include a copy to accompany this document.

2021 July/August, **Current Orthopaedic Practice,** 32(4):p 355-360. University Hospitals in Cleveland, OH and from Case Western University.
I**njury incidence** is higher on artificial turf compared with natural grass in **high school athletes**: a retrospective cohort study.
https://journals.lww.com/c-orthopaedicpractice/abstract/2021/07000/injury_incidence_is_higher_on_artificial_turf.6.aspx
"**Conclusions: [High School] Athletes were 58% more likely to sustain an injury on artificial turf. Football, soccer, and rugby athletes were at a significantly greater injury risk on artificial turf.**"

Microplastics & Public Health Risks
Includes harms from either microplastics or their embedded chemicals, recovery from or treatment for the effects are less certain. John Hopkins Microplastics & Human Health, Harvard Medicine Microplastics & Human Health, Stanford Medicine Microplastics & Human Health, UN Microplastics & Environmental Justice, AAMC Microplastics & Human Health

Microplastics are distributed globally, so there is no getting away from them. We all have concerning amounts of microplastics in our bodies. PIRG Current Research on Microplastics in Humans

6. Equity and Accessibility

* Are there barriers to access or use of athletic fields that your group experiences?

* How might field surface types, impact equitable use by different user groups (age, income, ability, sport type)?

Equity and Public Health
Microplastics harm fauna, flora, and people. When discussing pubic health, this includes underserved populations with less robust or no healthcare since, when there is harm from either microplastics or their embedded chemicals, recovery from or treatment for the effects are less certain. UN Microplastics & Environmental Justice, AAMC Microplastics & Human Health

Children and Youth

Leading institutions like the **Icahn School of Medicine at Mount Sinai** have issued statements advising against artificial turf use due to the associated health risks, especially for children:

Mount Sinai Position Statement

"**Children are uniquely vulnerable to harmful exposures from artificial turf surfaces** because of their unique physiology and behaviors, rapidly developing organ systems, and immature detoxification mechanisms.[2] Children may be exposed to artificial turf chemicals through ingestion, inhalation, skin absorption, and open wounds or broken skin. Children and young athletes breathe faster than adults, putting them at greater risk for inhalation of chemicals that off-gas from turf fields. Small children put their hands and other objects in their mouths, increasing the risk of exposure via ingestion. In addition, youth have a higher surface area to body mass ratio, produce more body heat per unit mass, and sweat less than adults, all factors that increase susceptibility to heat injuries that have been observed on artificial turf fields. Vulnerability to turf chemicals persists through the teen years as the reproductive and nervous systems continue to develop beyond the first two decades of life. Lastly, children have more future years of life over which chronic diseases linked to the chemicals in turf develop …

Children are less able to regulate their body temperature than adults, making them particularly susceptible to conditions of extreme heat."

7. Financial Considerations

* What role should upfront costs versus long-term maintenance and replacement costs play in the City's decision-making?

* Would cost impact your organization's ability to access or use these fields (for example, rental fees, frequency of use)?

Cost

There are many kinds of natural grass fields — and also plastic turf fields — but generally speaking over a period of 12 or more years grass will be less expensive due to the fact that plastic turf must be replaced and that will cost $1million or more in today's dollars. For example, check the costs for natural grass fields at Ragel Ranch in Sonoma County, Summary Ragel Ranch Sports Field

Warranties for Artificial Turf
Various warranties, warranty examples and FAQs. **Below are screen captures. The original PDFs will accompany this document.**

https://sporturf.com/wp-content/uploads/2014/05/8-Year-Manufacturers-Limited-Warranty-with-Signatures-GrassTex.pdf
8 Year Warranty with an Exclusions that include

"I. Concentrated high wear areas identified as likely candidates for repair excluded from warranty provisions include, but not limited to, goal areas, penalty kicks, batters boxes, drill areas or any areas of concentrated use that could attribute to abnormal wear and tear.

The screenshot below comes from a TenCate Pivot 12 year warranty obtained from Tencate in January 2025. A 12-year warranty is the longest one. Most are for 8 years. (Original PDF will accompany this document.)

normal or expected wear and tear. Normal or expected wear and tear is not a manufacturing defect and is not covered by this warranty. In addition to the factors mentioned above, wear and tear depends on, without limitation, the construction of the synthetic turf (fiber face weight, stitch rate, fiber pile height and gauge) and the intensity of use of the synthetic turf); (n) if the Product is maintained and/or repaired at any time by anyone other than a service company authorized by TenCate and/or Purchaser's staff trained by TenCate; (o) if the Purchaser fails to clearly and legibly log all use, maintenance, repairs, and/or other upkeep performed on the field and fails to produce the log for inspection by TenCate upon request; (p) high wear areas such as batter's boxes, catcher's boxes, around bases, pitcher landing strips, or other high wear areas such as soccer goal areas and penalty kick locations are warranted for two years; and/or (p) fiber loss less than 50% of total field mass. Field use of any type prior to a signed certificate of completion will void the warranty. TenCate shall not be responsible for any warranty claim made by any person to third parties, including, without limitation, any warranty with respect to useful life. Furthermore, any warranty claim will not be approved unless payment in full has been made prior to the event triggering a warranty claim and Purchaser submitting a claim in writing within thirty (30) days of discovering the alleged defect to Warranty Department, TenCate, 1131 Broadway Street, Dayton, TN, 37321.

The screenshot below comes from an 8 year Field Turf warranty. (Original PDF will accompany this document.)

Other Exclusions

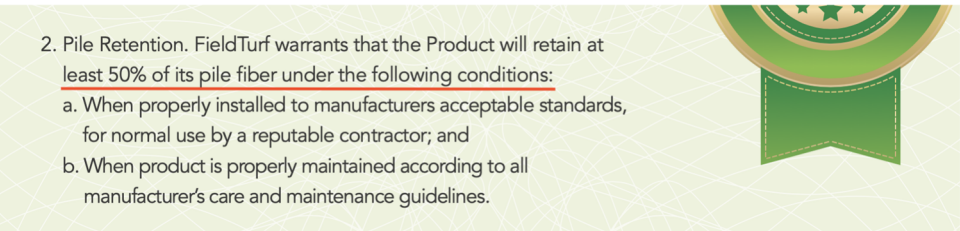
EXCEPT AS EXPRESSLY SET FORTH IN THE MANUFACTURER'S LIMITED WARRANTY ABOVE, FIELDTURF DISCLAIMS ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, IN FACT OR IN LAW, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

THIS WARRANTY SHALL BECOME NULL AND VOID IF THE PURCHASER FAILS TO MAINTAIN THE FIELD IN ACCORDANCE WITH THE FIELDTURF MAINTENANCE GUIDELINES AND SCHEDULE PROVIDED BY FIELDTURF THEREIN. ALL MAINTENANCE SHALL BE PERFORMED BY FIELDTURF-TRAINED AND/OR FIELDTURF-AUTHORIZED MAINTENANCE PERSONNEL ONLY.

Furthermore, this Manufacturer's Limited Warranty ***does not cover:***

1. Any damage resulting, directly or indirectly, from *force majeure*, accident, misuse, intentional and unintentional abuse, infill displacement, neglect; or from usage, unintentional or otherwise, that cannot reasonably be considered as normal play or ordinary use of the Product. For purposes of this Warranty, normal play and ordinary use shall mean usage up to 3,000 hours per year of regular play and utilization for the sporting activities provided herein; normal play and ordinary use also includes a reasonable number of users or participants, but does not include repetitive marching, repetitive training or high-intensity drills on the same part of the field, especially in the areas including, but not limited to, home plate, pitcher's mound, base areas, base paths, soccer penalty mark/spot areas, goal areas, sideline areas and lacrosse crease areas, all of which require frequent maintenance in accordance with FieldTurf Maintenance Guidelines and which may require regular replacement. This Warranty is expressly conditioned upon the Customer completing and submitting the FieldTurf Maintenance Log provided in FieldTurf's Maintenance Guidelines.
2. Damage resulting from failure to maintain the Product in accordance with FieldTurf's Maintenance Guidelines provided to the Purchaser. The Purchaser shall keep a log of all maintenance performed on the Product and supply FieldTurf with a copy upon request. Purchaser acknowledges that organic infill systems such as those in the *CoolPlay* product require specialized maintenance and care and given the nature of FieldTurf's *CoolPlay* product; this Warranty shall be conditioned upon the Purchaser carrying out regular *CoolPlay*-specific field maintenance as specified in FieldTurf's applicable maintenance manuals/guidelines

The screenshot below comes from an 8 year Field Turf warranty. (Original PDF will accompany this document.)



2. Pile Retention. FieldTurf warrants that the Product will retain at least 50% of its pile fiber under the following conditions:
   a. When properly installed to manufacturers acceptable standards, for normal use by a reputable contractor; and
   b. When product is properly maintained according to all manufacturer's care and maintenance guidelines.

The screenshot below comes from an 8 year Field Turf warranty. (Original PDF will accompany this document.)

Furthermore, this Manufacturer's Limited Warranty ***does not cover:***

1. Damage resulting from accident, *force majeure*, misuse, intentional and unintentional abuse, infill displacement, and neglect or from other than normal play and ordinary use of the Product. For purposes of this Warranty, normal play and ordinary use shall mean usage up to 3,000 hours per year of regular play and utilization for the sporting activities provided herein; normal play and ordinary use also includes a reasonable number of users or participants, but does not include repetitive marching, repetitive training or high-intensity drills on the same part of the field, especially in the areas of, but not limited to, home plate, pitcher's mound, base areas, base paths, soccer penalty mark/spot areas, goal areas, sideline areas and lacrosse crease areas, all of which require frequent maintenance in accordance with FieldTurf Maintenance Guidelines and may require regular replacement.

The screenshot below comes from an 8 year Field Turf warranty. (Original PDF will accompany this document.)

FieldTurf
A Tarkett Sports Company

Manufacturer's Limited Warranty

FieldTurf warrants that if **FieldTurf** FTRV-1F (Product) for multi-sport use synthetic turf proves to be defective in material or installation workmanship, UV degradation, resulting in premature wear, during normal and ordinary use of the Product for the sporting activities provided herein or for any other uses for which FieldTurf provides its written authorization, within eight (8) years from the date of completion of installation (as indicated in this Warranty), FieldTurf shall either repair or replace the affected area of the Product in accordance with the terms of this Warranty. FieldTurf's sole liability under this Warranty shall be limited to either repair or replacement of the affected area of the Product, at its sole discretion, and FieldTurf shall have no other obligations or liabilities with respect to defects of the Product. FieldTurf will, at FieldTurf's option, either repair or replace the affected area to the extent required to meet the Warranty period, but no cash refunds will be made. FieldTurf warrants that all materials installed meet or exceed the product specifications and further warrants that replacement material will be available through the Warranty period. FieldTurf will verify that their representative has inspected the installation and that the work conforms to FieldTurf's requirements and further warrants that the installation was done in accordance with both FieldTurf's recommendations and any written directives of FieldTurf''s representative. Warranty shall commence upon the date of completion indicated in this Warranty. The accompanying Warranty service will not come into effect unless and until FieldTurf's Certificate of Completion is sent for validation to the corporate office of FieldTurf indicated herein within thirty (30) days of the date of completion or Purchaser's first use, whichever occurs first. In all cases, the Warranty shall be deemed to commence upon the date of completion indicated in this Warranty. The acceptance form of the terms and conditions contained in FieldTurf's Maintenance Guidelines must also be provided to FieldTurf's corporate office within thirty (30) days of completion of installation. **FieldTurf** warrants that the G-max to maintain a value of below 135 at installation and no greater than 185 for the life of the warranty, as per ASTM 1936 and F-355 standards, providing that the customer has performed the regular maintenance as outlined in the maintenance guidelines. This Warranty is limited to the remedies of repair or replacement, which shall constitute the exclusive remedies available under this Warranty; all other remedies or recourse which might otherwise be available are hereby waived by the Purchaser. FieldTurf will have no other obligations or liability for damages arising out of or in connection with the use or performance of the Product, including, without limitation, damages for personal injury and/or economic losses. This Warranty shall not come into effect, and FieldTurf shall have no obligations under this Warranty, unless and until FieldTurf is paid in full for the Product to be warranted hereunder.

For the designated high-traffic areas (Home Plate, Pitcher's Mound, Base areas, Base Paths) and all synthetic turf installed anywhere on the infield, the above-noted warranty applies except that the applicable warranty period shall be limited to a two (2) year manufacturer's warranty.

Field Markings: Baseball, Softball

SAMPLE

Other Exclusions

8. El Camino Park as a Case Study

* Do you have any site-specific feedback about El Camino Park that should be considered in this study?

* Would you support using El Camino Park as a pilot location for field design improvements or new turf types? Why or why not?

We support using El Camino Park as a pilot location for field design improvements of natural grass types, such as Bermudagrass, Fescue, Rye, etc.

9. Community Engagement and Decision-Making

* What would make you feel that your input is meaningfully considered in the City's decision-making process?

10. Open Feedback

* Is there anything else you would like to share that we have not asked about?

Stanford Strikers FC Turf Study Feedback:

Hi Sarah,

Thanks for the opportunity to provide feedback. Below are responses to the questions posed.

Have a great weekend.

Bret

1. Use and Experience: Our youth soccer club, Stanford Strikers FC, has utilized Palo Alto fields (and fields from surrounding communities) on a year round basis for: team practices, competitive games, camps and tournaments. Most often we have used El Camino Park, Mayfield, Cubberley Turf and the grass fields at JLS, though we have participated in games and tournaments at all the soccer accessible fields in Palo Alto at one time or another.

2. Priorities and Values: Our top priorities of equal importance are safety and accessibility. Cost is also an important consideration in a community with a considerable percentage of families who have financial constraints. Environmental impact is an important consideration, but I believe environmental impacts can be mitigated significantly whether using grass or artificial turf with proper design and maintenance.

3. Environmental Concerns: All environmental impacts need to be considered, though player safety should be far and away the top priority. Artificial fields with proper infill and appropriate construction that significantly lessen heat and surface compaction are excellent for the sport of soccer. Their consistent surface allows for safe footing which is generally better than all but the best professional level grass fields.

4. Operational and Maintenance Factors: My experience with 30+ years of college (Stanford University, Creighton University, Berry College), high school (Sacred Heart Prep) and club has led me to the conclusion that artificial turf is by far the better option for year-round availability and durability.

5. Health and Safety Concerns: see #3 above

6. Equity and Accessibility: In Palo Alto and throughout the peninsula there is a severe lack of playing fields. Children and adults are forced to practice on over-crowded fields or later at night or not at all. The cost of the fields for the end users has increased dramatically over the years. Lighted artificial surface fields have been found to be the best solution for densely populated areas around the world.

7. Financial Considerations: The city, sports clubs and others should explore public-private partnerships to help with upfront costs to build and maintain high quality fields and other community assets. Rental fees should be minimized since that drives costs for the individual end users. Costs should not be a barrier to participation, especially for our children. The second biggest expense for our club (after coaching compensation) are field rentals. Last year our club paid over $300,000 in field rentals to the City of Palo Alto and other local cities.

8. El Camino Park - Case Study: There are many interesting projects, particularly involving hybrid natural and artificial turf solutions, that have been undertaken throughout the world. Since El Camino Park is one of only two lighted field locations in Palo Alto, a pilot program at one of the grass fields (for example one of the fields at JLS) or at a separate site would be preferred.

9. Community Engagement and Decision-Making: Thank you for this opportunity to provide feedback. I believe you've hit upon the major topics in this questionnaire. If I can be of any help, I'm glad to support your efforts. I have been involved in the artificial turf and grass installation and renovation projects at Stanford and Sacred Heart Schools. This is an important decision that has a big impact on our youth.

Responses from Tomahawks Lacrosse club

Colleen Niklaus

Tomahawks Lacrosse

BIll Glazier

Tomahawks Lacrosse

Standardized Questions for Turf Study Focus Groups

The session will be held via Zoom to ensure accessibility and to enable recording and transcription for inclusion in the study. If organizations/individuals are unable to attend the Zoom session or would prefer to provide written input. Written responses are due to sarah.robustelli@paloalto.gov by **July 17, 2025,** and are limited to one response per group/organization. We appreciate your input!

1. Introduction to Use and Experience

· Can you describe how you or your organization currently use athletic fields in Palo Alto, including El Camino Park if applicable? Please include, frequency, time of use, days used, and any unique uses (i.e. tournaments, special events, etc.)

We host lacrosse clinics, camps, games and team practices. During summer, we are on the fields from about 9am to 7pm. During spring, this is the major time of field use for the spring Northern California Rec Season. We need daily access to lined turf fields after school, and then access on weekends for games. In the Fall, we need weekend access, but because soccer claims priority, we get zero turf field access.

For Spring, we primarily end up using El Camino for practices and games. The El Camino field is properly lined for lacrosse. Mayfield is incorrectly lined, and the field sizes are not official for the sport of lacrosse for games.

When I first began running the lacrosse program here nearly 20 years ago, the City of Palo Alto allocated our Lacrosse Program NO fields at all. They said soccer was a Priority sport, and there were inadequate fields in our primary use period (Spring and Fall), and so we ended up having to rent school and other private fields (we lent the Gunn Sports Boosters money so they could build lights on the football field, and we were allowed to rent fields there at night and on weekends). I did succeed in getting lacrosse to have a spring priority eventually, after establishing high school programs at both Palo Alto High Schools and having them become the largest team sport in both schools. With the eventual addition of Mayfield and El Camino and Cubberley turf fields, we began (after 15 years of trying), to get reasonable spring turf allocation. Chase has done a great job to help us, and we appreciate his assistance, but it has taken a lot of effort and struggle to get where we are now.

Frankly, we still find ourselves constantly fighting to get adequate spring space (and we get zero Fall turf field allocations, even after 20 years). Summer is perfectly fine, we have zero issues with that. The problem is fundamentally that soccer abuses the process. It is a known fact that SIlicon Valley Soccer Association (aka Palo Alto Soccer Club) has kids from all over the Bay Area in its programs. I am sure they can provide you lists of kids from Palo Alto, but I can assure you that a very large (and growing) percentage of their kids do NOT come from this city.

If you convert Mayfield/El Camino/Cubberley back to grass, this will reduce overall field availability in our key Jan-March season by probably 50%, and this will mean that soccer will basically take 100% of the turf/grass fields, and we will go back to having no fields at all in this critical season. I am fully familiar with (in a normal precipitation year) how basically all grass fields are closed the majority of days in January through the end of February. We were not allowed to rent Fletcher this winter until the last week in February, and this was in a low rain year.

I remember well how awful the grass fields were at El Camino prior to the conversion to turf - basically useless until probably April every year, and in terrible shape year round. In general, basically all of the grass fields (Fletcher, Mitchell Park, Cubberley grass, and all elementary school fields) are UNSAFE to play or practice lacrosse. There is inadequate spectator or visitor protection with balls constantly whizzing around. A lacrosse ball is very hard and can travel 80+ mph, and can cause severe injury to a non-suspecting non-participant. For this reason, we can NOT play games for age groups older than U10 on current grass fields that are available.

2. Priorities and Values

· What are your top priorities or values when it comes to athletic field design and maintenance (for example, safety, environmental impact, playability, accessibility, cost, aesthetics)?

Safety - no bumps, rips, sink holes in the turf that may cause athletes to fall or injure themselves.

Lacrosse lines - for girls and boys lacrosse.

Reasonable cost.

Playability in all kinds of weather.

ANY kind of athletic field in Palo Alto will receive heavy use - and unfortunately that means grass fields will deteriorate quickly in any time of year. Add to that the winter rains, and you have a recipe for poor quality fields whose availability will markedly increase, especially in the winter/early spring season.

3. Environmental Considerations

· What environmental concerns or benefits do you associate with synthetic turf? With natural grass?

Grass takes too much water to maintain. Plus, the divots and inconsistency of the grass makes it unsafe sometimes.

Turf, if rubber, is concerning regarding cancer, etc.

· Are there specific environmental impacts (for example, water use, heat, microplastics, biodiversity) that are particularly important to your group?

We prefer turf for the playability and not having to water it. We prefer eco-friendly turf like coconut shells or cork instead of rubber.

4. Operational and Maintenance Factors

· What has your experience with field conditions (for example, closures, wear and tear, drainage)? Please include feedback for both natural grass and synthetic turf fields.

Fletcher/grass can get muddy in winter, and after it dries out it has holes which are very concerning for players' safety.

Mayfield has a horrible history of the rubber pellets melting together and sticking to players' cleats, causing uneven shoe soles which can lead to injury.

· How important is year-round availability or durability of fields to your use?

Extremely important. It's great to not have to worry about cancelling practice if wet/rainy. For Lacrosse in the winter/spring, given that Soccer takes priority over us, if field capacity goes down significantly, as it will with grass fields, we will likely receive no field allocations at all. Given that renting after school fields from Palo Alto School District is not possible during the school year (school policy that 100% preference goes to school teams except the 8PM-10PM time frame, which is unacceptable for our elementary and middle school kids), we would likely be forced to close our recreational programs, which serve 150-200 kids yearly. Kids would then need to travel to Los Gatos, Burlingame or Redwood City to play the sport. The Tomahawks program has been in existence for over 40 years.

5. Health and Safety Concerns

· Do you have concerns about injuries, heat, or other health impacts associated with either surface type?

Concerns regarding grass fields = inconsistent surface, which makes ankle sprains and serious knee injuries a major concern.

Mayfield has a horrible history of the rubber pellets melting together and sticking to players' cleats, causing uneven shoe soles which is also a major concern for player injury/safety.

6. Equity and Accessibility

· Are there barriers to access or use of athletic fields that your group experiences?

· How might field surface types, impact equitable use by different user groups (age, income, ability, sport type)?

Well, when a sport has 'Priority - that presently means that EVERY request they make takes precedence over other sports. Given soccer easily has 50% or more of its kids from other towns, why should that take precedence over the many Palo Alto kids who want to play lacrosse in the Fall, but for years have been told there are no fields available? Soccer clubs have gamed the system, and this is used to benefit a for profit youth club.

7. Financial Considerations

· What role should upfront costs versus long-term maintenance and replacement costs play in the City's decision-making?

· Would cost impact your organization's ability to access or use these fields (for example, rental fees, frequency of use)?

Not sure about upfront vs long-term costs, but we do appreciate the reasonable costs for field rentals.

8. El Camino Park as a Case Study

· Do you have any site-specific feedback about El Camino Park that should be considered in this study?

· Would you support using El Camino Park as a pilot location for field design improvements or new turf types? Why or why not?

If El Camino is turned into a grass field and basically closed during our high use rec season, we are in a world of hurt, and will have no fields to use. El Camino as it is right now is perfect for our needs.

9. Community Engagement and Decision-Making

· What would make you feel that your input is meaningfully considered in the City's decision-making process?

I appreciate this questionnaire and the invitation to join the Zoom calls and give input.

10. Open Feedback

· Is there anything else you would like to share that we have not asked about?