Allocating Sports Field Maintenance Costs

By Joe Ardolino

"If people didn't have to use athletic fields so often, we could keep them in the kind of shape they want."

"If teams canceled practices and games on rainy days, we could keep fields playable for days with good weather."

"If field users had to pay for the damage they cause, they couldn't afford to do what they do."

These and other "Yogi Berra-like" outcries are often uttered by those responsible for the care and maintenance of sports fields. Physical plant directors, turf managers and groundskeepers all wish the end users would take more responsibility in helping make fields better and safer.

Yet the reality is that sport turf exists for sports and the athletes who play them, and sports and sports-related activities receive high levels of wear and tear. With today's emphasis in sports of more participation for athletes of all ages and abilities, the demand for sports fields continues to boom. Those who schedule athletic activities probably have a better chance of booking an event in a gymnasium than on an athletic field.

Increased demand for field time is only one of the challenges facing today's sport turf manager. Real estate for expansion is often limited or extremely expensive, particularly in densely populated areas where demand is often the greatest, and new field construction can be costly. Operational staffs and budgets are being slashed. To believe that staff, budgets, and resources will increase with demand is unrealistic.

Many sports turf managers contend that this is "business as usual." Even during the boom of the 1980s, when new facilities were constructed and money was more readily available, the only significant growth affecting sports turf managers came in the use and wear of the fields.

So, after exhausting all ways and means of improving athletic fields, frustrated sports turf managers often turn to the end users. "Take more responsibility!" they plead.

It is true that field users could become responsible about the ways in which a field can be used, specific to activities, without doing unnecessary damage. Intelligent field use practices can and do make a difference. However, this alone won't significantly help sports turf managers maintain fields at optimum levels.

Establishing Responsibility

The major responsibility that most sports turf managers are trying to define is fiscal. What does it take, fiscally, to maintain a certain field for a certain use? Exactly how much financial support will it take from each field user to maintain and, when necessary, repair or establish safe, playable fields?

Asking users to take fiscal responsibility is not a new concept. Users of other kinds of athletic facilities pay user fees to help offset the capital debt on the facility or to defray maintenance costs. Users accept and pay these fees because they have been educated to understand the value of the facility. However, when sports turf managers ask users to pay "field user fees," users often resist.

Some organizations have instituted field user fees to offset cost or improve maintenance, and this trend is likely to continue. Athletic fields should be considered as important as other facilities. I advocate field use fees if they can be levied successfully to the extent that they make a positive impact on field conditions.

If a field use fee is to be levied, the sports turf manager must be able to show how the levies will be allocated among users and what the fees will accomplish. Taking the total cost of annual maintenance and presenting it to field users conveys the complete picture only in cases where the field is used for one sport. However, in most situations today, fields have multiple uses and multiple users.

We cannot arbitrarily decide the amount or types of fees users should pay. The fee structure must be developed methodically, logically and fairly. Use must be analyzed and an equitable share for all users must be established.

Without a logical means of use measurement, user fee programs will unlikely be implemented.

Field use measurement tools must measure:

- Who uses the field.
- Frequency of use.
- Length of use.
- Intensity level during that use.

Towson State University in Maryland developed just such a tool. Their utilization analysis tools identify, by user, the following for each field: the total number of days the field is used, the total number of field hours of usage, the level of intensity, and the repair "units."

The days and hours of usage were derived for each user's annual schedules. The level of intensity — high, medium and low — corresponded respectively to the numbers 3, 2 and 1. High indicates heavy usage with frequent and/or probable damage needing intensive repairs. Medium indicates moderate usage with an expected level of field repairs needed. Low indicates low levels of usage with little or no damage and minimal repairs needed. The number of hours multiplied by the intensity level determines Repair Units (RU) per field, per user. The variable not measured is inclement weather conditions. Low-intensity usage when a field is in poor condition because of weather can result in severe damage and the need for substantial repairs.

In an effort to formulate an equitable share of field maintenance responsibility among users, the following calculations can be used against statistical information and can help determine cost centers.

The Total Cost of Maintenance (TCM) divided by the Total Number of Repair Units (TNRU) of all users provides the Repair Unit Value (RUV). The Repair Unit Value (RUV) multiplied by the Users Repair Units (URU) will identify the cost per user.

This system of evaluation helps users see the impacts their activities have on field quality, and how those impacts fit into the total maintenance picture. Once presented with the facts, users are more likely to accept their fiscal responsibility.

Editor's note: Joe Ardolino was an assistant athletic director of Towson State University in Towson, MD, and a board member of the national Sports Turf Manager's Association. He gave an in-depth presentation on this topic at the STMA's Annual Conference and Exhibition, held November 6-9, 1993, at Camden Yards in Baltimore, MD.