# A Closer Look at Golf Maintenance Budgets

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A Closer Look at Golf Maintenance Budgets

The need to control golf maintenance expenses may finally get its due among golf club board members, managers and, by default, golf course superintendents. Let’s not begin cutting budgets before understanding an alternative budgeting process or the possible results.

The first thing needed to logically address golf course budgetary issues is a written standard of golf course maintenance. These standards must be concise at describing golf course conditions on a daily basis at each unique club.

The Standards

Standards are written guidelines for golf course maintenance minimums. These standards should be carefully drafted by the committee with major input from the golf course superintendent. The standards should include items such as follows:

<table>
<thead>
<tr>
<th>ANY TOWN GOLF CLUB</th>
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<tbody>
<tr>
<td>GOLF COURSE MAINTENANCE STANDARDS</td>
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<td>2009</td>
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Any Town Golf Club is characterized by an extremely high level of grooming and manicuring with an emphasis on creating professional caliber tournament conditions on a day to day basis. Any Town Golf Club’s standard of maintenance is very expensive and will be expected to be maintained on a daily basis throughout the season (April 1 – October 15)

The following are basic Golf Course Maintenance Standards. Your clubs standards should be very detailed leaving little to interpretation.

**Greens**

Overview: All greens are to be smooth, uniformly turfed, firm but not hard, well-defined and free of all major pest problems. Cups, poles and flags are to be uniform, clean and in excellent repair.

- Mowing frequency: Daily
- Mowing equipment: Walk Mowers (Type)
- Cutting height: 1/10 - 5/32 inch (weather dependent)
- Daily putting speed: 10.0 - 11.0 stempmeter
- Cups changed: Daily prior to play
- Ballmarks repaired: Daily
- Dew removal/whipping: After mowing
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Amenities:
- Tournament poles
- Zinc cups / No Liners
- Logo flags
  Replace flags & cups 5 times per year

**Tees, Collars & Approaches**

Overview: Tees smooth, completely turfed, level, firm but not hard, clean, properly directed, with amenities in good condition and repair, consistent and uniform. Markers rotated consistent with cup rotation system and aligned with the line of play.

Mowing frequency 4X/week
Mowing equipment Walk Mowers (Type)
Cutting height 1/4-3/8
Greens approach & collar cut 5X/week
Tee markers changed Daily
Divots repaired (par 3s) Daily
Divots repaired (par 4s/5s) Daily

Amenities:
- Ballwashers/trash containers - All Tees All holes
- Benches Every Hole
- Tee signage - purchased Every Hole
- Yardage monuments Every Hole
- Divot buckets on Par 3’s Every Hole
- Course restrooms - Service Frequency 7X/Week (am and pm)

**Fairways**

Overview: Smooth, uniform turf cover, stripe-mowed, clean, firm but not hard, well-defined and contoured to properly support the ball for play.

Mowing frequency 6X/week - 9 holes on Saturday 9 holes on Sunday
Mowing equipment 5-plex mowers (Type)
Cutting height 5/16-7/16
Divot repair Daily Landing Areas / 3X week all fairways
Yardage markings Sprinkler head marking to center of Green
## Roughs

Overview: Properly mowed and trimmed, clean and adequately uniform for play, distinct in height from fairway and intermediate rough.

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Mowing frequency</td>
<td>2-3X/week</td>
</tr>
<tr>
<td>Mowing equipment</td>
<td>Rotary (Type)</td>
</tr>
<tr>
<td>Cutting height (effective)</td>
<td>1.5 - 3.5</td>
</tr>
<tr>
<td>Intermediate rough cut</td>
<td>72 inch width / 2.0 inch height</td>
</tr>
<tr>
<td>Mowing - green/tee banks</td>
<td>3-4X/week</td>
</tr>
</tbody>
</table>

White O.B. stakes Yellow/red hazard stakes or marking maintained each day

## Bunkers

Overview: Clean, well-defined, weed-free, raked and edged, well-drained, uniform and consistent throughout each bunker and the golf course. Sand bunkers will maintain a minimum sand depth of four inches compacted. Bunker edges will be maintained with a greenside and direction of play lip of no greater than four inches and no less than two inches, lip edges in non-direction of play should be a close to flush as possible to maintain definition. Rakes placed outside the sand bunker and parallel to the line of play.

Hand raking frequency will INCLUDE WEEKENDS AND HOLIDAYS

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<table>
<thead>
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<tbody>
<tr>
<td>Green bunkers</td>
<td>7X/week</td>
</tr>
<tr>
<td>Fairway bunkers</td>
<td>7X/week</td>
</tr>
</tbody>
</table>

Edging

<p>| | |</p>
<table>
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<tr>
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<tbody>
<tr>
<td>Mechanical (interval)</td>
<td>3 weeks</td>
</tr>
<tr>
<td>Hand heavy edge</td>
<td>6 weeks</td>
</tr>
</tbody>
</table>

## Cart Paths & Traffic Control

Overview: All paths clean, well defined, edged, smooth, in good repair, well-drained and properly located with adequate width and proper surface for use. Curbing should be used for traffic control wherever possible. Permanent traffic devices should be pre-approved and carried consistently throughout the property, keeping aesthetic value and safety in mind.

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<tbody>
<tr>
<td>Edging</td>
<td></td>
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<tr>
<td>All concrete paths (Interval)</td>
<td>1-2 weeks</td>
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<table>
<thead>
<tr>
<th>Sweeping/Blowing Paths</th>
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<tbody>
<tr>
<td>Green/Tee areas</td>
<td>Daily</td>
</tr>
<tr>
<td>All other</td>
<td>2-3X/week</td>
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</tbody>
</table>

Worn areas adjacent to path -where irrigated Not Acceptable
The above standards are just an overview of what to outline in your clubs’ golf course maintenance standards, clubs should refine standards to reflect the maintenance régime desired at their course.

**Cycle – Times**

Once a set of standards are created routine job tasks can be timed. We refer to the time it takes to perform these routine tasks as cycle-times.

<table>
<thead>
<tr>
<th>Labor Needed to Mow Greens</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
<th>Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-Workers Needed</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>36</td>
</tr>
<tr>
<td>Hours</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>108</td>
</tr>
<tr>
<td>Dollars Per Hour</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>Total Cost Per Day</td>
<td>$0.00</td>
<td>$180.00</td>
<td>$180.00</td>
<td>$180.00</td>
<td>$180.00</td>
<td>$180.00</td>
<td>$180.00</td>
<td>$1,080.00</td>
</tr>
</tbody>
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If the club establishes cycle-times for each routine labor requirement, a labor budget can be formulated on this basis.

Our experience has shown that 55 to 65 cents of every dollar of club income goes to cover the cost of a typical 18-hole club’s golf course maintenance effort\(^1\). While these percentages sound excessive let’s examine the importance of the golf course facility to the club; the majority of members (Over 70%) stated that the main reason for joining the club was “For the High Quality Golf Course”\(^2\):

- Country club courses are generally better maintained than public courses
- Play is usually faster, since the course is not clogged with beginners
- Since the monthly dues cover the cost of golf, it may be a good value for the person who plays golf often
- Golf outings and social functions may lead to job or business opportunities
- Families often enjoy the benefits of club memberships for health, well-being and to associate with like-minded people in their community

**The Zero – Based Budget**

The budget process starts with all line items being zero. Labor, based on predicted activities can constitute the beginning of the process. The standards and cycle-times should yield an hourly total for routine maintenance. Labor dollar amounts should be relatively simple to assign to job tasks; for instance, mowing greens would not require a high wage earner to accomplish, while applying fertilizers and chemicals to green surfaces will require a more experienced, higher wage earner.

Advantages of Goal Directed Budgeting:

1. Efficient allocation of resources, as it is based on needs and standards
2. Drives managers to find cost effective ways to improve standards and operations

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\(^1\) Country Club Stats, RubinBrown, LLP, 2007  
3. Detects inflated budgets
4. Useful for golf course maintenance operations where the output is difficult to recognize
5. Increases motivation by providing greater initiative and responsibility in decision-making
6. Increases communication and coordination within the club’s organization
7. Identifies and eliminates wasteful and obsolete operations
8. Identifies opportunities for outsourcing
9. Forces cost centers to identify their mission and their relationship to overall goals

Disadvantages of Goal Directed Budgeting:
1. Must define standards and decision units, which is time-consuming
2. Forced to justify every detail related to expenditures
3. Necessary to train managers. Goal Directed budgeting must be clearly understood by managers at various levels to be successfully implemented.
4. The volume of information may be so large that compressing the information down to a usable size might remove important details to middle and lower management
5. Honesty of the managers must be reliable and uniform - any manager that exaggerates input information skews the results

The wild card in any golf maintenance labor budget is weather and its related impact on dollars needed to provide standards that are acceptable to membership. During the golf season weather and is unique impact on golf course maintenance should be addressed to keep labor expenditures to a minimum. The superintendent must communicate with frequency and to the predetermined authority on additions to the allotted funds in each category of the maintenance budget. Hot humid weather can increase fungicide application rates and frequencies or drought can increase power and water use. The superintendent has the training and expertise to make these decisions, but must also be a good communicator when it comes to variances in budget forecasts.

Building a golf maintenance budget from zero takes into account individual line items such as fertilizers and chemicals. These commodities are needed to safeguard turf from disease, insect damage, weeds and to control growth and enhance playability (8% - 15% of total budget). The arsenal of chemicals available is better in terms of safety and function than in years past, but increases in price have steadily made an impact on cost of protection. An application program with specific dates, rates and cost per square foot can easily be forecasted with the use of modern spreadsheet programs. Basically, programs to spray herbicides, fungicides, fertilizers and other chemicals can be forecasted by most professional golf course superintendents. Pricing these products is generally preformed through competitive bidding. Be aware that generic turf chemicals have become a formidable product offering in recent years, only your superintendent will know which generic substitution will produce the results the club desires.

Equipment maintenance and repair are often large additional expenditures incurred in the golf maintenance budget (3% - 7%). An examination of repair records should take place to arrive at a decision whether to keep or retire equipment before the cost of operation exceeds the cost of repair or/or inconvenience due to chronic equipment failures resulting in poor conditions and not achieving standards of maintenance.

Drilling down into each line item is necessary to establish a Goal Directed budget.
Historical or Incremental Budgeting

Incremental budgeting uses a budget prepared during the previous period’s budget or actual performance as a base. Incremental amounts are added for the new budget period as desired. The allocation of resources is based upon allocations and increases of the previous period based on increased activity. This approach is not recommended as it fails to take into account changing economic or operational circumstances based on proven methodology. Moreover, it encourages “spending up to the budget” to ensure a reasonable allocation in the next budgetary period. It leads to a “spend it or lose it” mentality.

Advantages of incremental budgeting:
1. The budget is stable and change is gradual, usually based on a global percentage
2. Managers can operate their departments on a consistent basis
3. The system is simple and easy to understand
4. Conflicts are avoided when departments appear to be treated similarly
5. Co-ordination between budgets is easier to achieve
6. The impact of change can be seen quickly

Disadvantages of incremental budgeting:
1. Assumes activities and methods will continue in the same way
2. No incentive for developing new ideas
3. No incentive to reduce costs
4. Encourages spending up to the budget so that the budget is maintained over subsequent years
5. The budget will become out-of-date and no longer relate to standards or type of output desired
6. The priority for resources may have changed since the budgets were originally set
7. There may be budgetary slack built into the budget, which is never reviewed. Managers might have overestimated their requirements in the past in order to obtain a budget which is easier to work within, and which will allow them to achieve favorable results

Variable and Non-Variable Expenses

Many budgetary expenses are referred to as non-variable expenses. These expenses are considered mostly stable no matter how many rounds of golf are played. For instance, if a club has 10,000 rounds or 30,000 rounds, fungicide applications on greens will most likely remain the same. Conversely, the club that has 30,000 rounds is essential busy most of the day, labor hours to mow fairways can be expected to increase unless perhaps part-time labor is introduced later in the day, during a slow play period, to avoid overtime or increase cycle-time, running up the cost of labor to mow fairways. Variable and non-variable expenses should be considered when formulating budget forecasts. In the latter example, by using part-time and split shift labor we may be able to smooth variable expenses and create a more stable labor expense in relation to increase rounds. Our goal is to identify variable expenses and control escalation during increases in usage.
Comparison of Expenses

Across the country, many superintendents have had their budgets frozen or reduced, which is likely why some clubs look to compare course operations and budgets with hopes of increasing resources.

An interesting question to ask is – have golfers’ expectations and the related course maintenance to satisfy those expectations gotten out of hand (standards)? Is it time to scale back on items such as bunker maintenance (variable expenses) which is fast becoming equal to cost of greens maintenance? Is out-of-play maintenance critical to the overall golf experience? Is a vast array of annual flowers superior to perennial plantings? The key is to document and communicate changes needed to sustain a healthy bottom line during difficult economic times.

There are few reliable methods to compare golf course maintenance budgets and it is essential to point out that the validity of such comparisons is dubious, at best. The difficulty associated with comparing course operations can be attributed to such items as:

- Managed sizes of turf on greens, tees and fairways
- The number of sand bunkers and bunker design
- Number of annual rounds of golf
- Water and soil quality and inputs needed to achieve desired standards

Comparisons may be useful in certain circumstances. The list below provides a few indicators that can potentially be used to compare and contrast courses:

- Maintenance cost per acre
- Maintenance costs per hole
- Labor hours per week
- Labor hours per hole
- Maintenance dollars per golf round
- Percentage of variable and non-variable expenses of budget or total golf-related income

In 2007 a major golf association studied the maintenance expenses of more than 66 private clubs in a major metropolitan area.\(^3\) Of the clubs surveyed in three distinct regions an 11% differential was observed in average maintenance budgets. Also in 2007 another set of country club statistics of major clubs in a Midwestern metropolitan area showed a variation in golf course maintenance costs of just over 12%\(^4\).

As we have continued to follow golf course maintenance expenses, the trends in maintenance costs have generally increased well in excess of the increases in the Consumer Price Index.

There will be further pressures on expenses due to volatility in oil prices. The increases in oil prices will not only increase what is normally only 3% - 5% of the typical budget, but will also increase the cost of most fertilizers and chemicals that are derived from petrochemicals and costs of delivery that will significantly impact budget line items.

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\(^3\) Cooperative Golf Club Survey, Metropolitan Golf Association Foundation, 2007
\(^4\) Country Club Stats, RubinBrown, LLP, 2007
Cost Control

Then there is the question of competition and the number of golf courses that have been added in the past decade. In the US, we have added over 20% to golf course capacity since 1988. While it is true that basic demographics relating to the aging of the “baby boom” generation will support some additional golf capacity, it will not absorb all the capacity that has been built. Reduction of pricing has left many private clubs opening their doors to the public or enlisting the likes of maintenance contractors to manage the golf course. These difficult management decisions are all part and parcel of the increases in operation expenses.

Over the years superintendents’ needs for larger budgets were necessary to keep pace with costs of maintaining status quo. What kind of help is the superintendent getting?

Let’s take for example a walking greens mower. A 22” mower in 1988 was $2,500.00 and is over $6,500.00 today. Inflation rate within the last 20 years is 82.44%\(^5\), which would put the adjusted cost of the $4,561.00 for the greens mower, 32.5% greater than the inflation rate. The machine will not produce a significant decrease in mowing height or quality. Clearly, today’s superintendent is not getting much help in lowering expenses from the equipment manufacturers.

What can a golf club’s Manager or Board of Directors do to control costs?

- Become more knowledgeable about basic maintenance practices
- Ask for alternatives, generally more than one method or piece of equipment is available for specific tasks
- Demand cycle-time information

The real point of this article is not to ridicule the golf course superintendent, but to call attention to the fact that the actual assembly of golf course maintenance budgets is being neglected. What can be done to correct the situation?

- Superintendents need to start asking some new questions – how can we become more efficient?
- Equipment manufacturers need to get focused on creating more cost-efficient and productive machinery
- Managers and Boards need to seek education on golf maintenance issues
- The USGA and GCSAA need to focus their efforts on providing increased education for General Managers and Boards
- Maintenance cycle-times and maintenance standards needs to become an operating “Best Management Practice”

Conclusion

Reinventing historic, incremental budgets must be accomplished if clubs are to stay competitive in the private golf market. Goal Directed budgeting places the output desired first through carefully drafted standards and researched cycle-times; the resources are only appropriated after standards are met. To place restraints on a managers and superintendents to reduce budget spending by an arbitrary percentage is unrealistic. With a Goal Directed budget, a decision can be made to curtail or eliminate a job task and the dollars saved can be immediately identified.

Unitized cost of production is easily identified through Goal Directed budgeting. Cost controls are simplified once the budget is formulated. Fixed and variable costs can be identified through upswings in usage and relating operational costs. The Goal Directed budget makes sense for a troubled economy when cost controls and even budget cuts are the order of the day. The process of Goal Directed budgeting helps to increase overall business acumen in managers and will help everyone understand the complexities on forecasting golf course operational expenses.

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Mike is head of McMahon Group’s Golf Division. He consults with private clubs on Turf Care Center Master Plans, Existing Conditions Reports, Golf Course Asset Reserve Studies, Golf Irrigation System Audits/Studies and Zero Based Budgeting.

Mike has 28 years of golf course construction and maintenance experience, serving 26 years as a Golf Course Superintendent. He also served as a General Manager at a private club in Illinois.

After graduating from Pennsylvania State University in 1978, he was President of the Illinois Turfgrass Foundation. He received the Distinguished Service Award in 1990. He is a class AA Life Member of the Golf Course Superintendents Association of America, a 21-year certified Golf Course Superintendent, and a Certified Golf Irrigation Auditor (CGIA) from the Irrigation Association.