



Operational & Capital Budgeting for Clay Courts



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Operational & Capital Budgeting for Clay Courts

Introduction	3
Developing Operating & Capital Budgets for Your Clay Court Facility.....	3
Operating Budgets vs. Capital Budgets.....	3
Operational Budgeting	4
Daily Labor	4
Weekly Labor	4
Monthly Labor.....	5
Court Materials.....	6
Court Equipment	8
Water	10
Pulling the Operational Budgeting Numbers Together	11
Capital Budgeting	13
Laser-Tapered Resurfacing	13
Court Equipment	15
Court Accessories	17
Fencing	19
Lighting	21
Summary	22
Pulling the Operating & Capital Numbers Together for a Clay Court Facility	22



INTRODUCTION

Operational & Capital Budgeting for Clay Courts

Developing Operating & Capital Budgets for Your Clay Court Facility

Budgeting is a frequent topic of conversation with our clay court customers and prospects. We are often asked the following questions:

- How much does it cost to maintain a clay tennis court on an annual basis?
- How frequently will I need to resurface my court and how much will that cost?
- What other expenses do I need to consider?

10-S Tennis Supply and Fast-Dry Courts, Inc. have mined the 250+ years of collective experience in clay court construction and maintenance to bring you this informational guide. The entire 10-S Tennis Supply and Fast-Dry Courts, Inc. management and field operational teams have provided input into development of these free educational materials to provide you with the knowledge to make your tennis facility the best it can be!

We will provide you with relevant operating and capital budgeting guidelines for your clay tennis court facility, including labor, clay court materials, maintenance equipment and water usage.

We will cover the following topics:

- Operating vs. Capital Budgets
- Operating Budgeting – Labor
- Operating Budgeting – Court Materials
- Operating Budgeting – Court Equipment
- Operating Budgeting – Water
- Operating Budgeting – Pulling the Operating Numbers Together
- Capital Budgeting – Laser-Tapered Resurfacing
- Capital Budgeting – Court Equipment
- Operating & Capital Budgeting – Court Accessories
- Operating & Capital Budgeting – Fencing
- Operating & Capital Budgeting – Lighting
- Summary – Putting the Capital Numbers Together

Operating Budgets vs. Capital Budgets

The first distinction that we need to make is the difference between operating budgets and capital budgets. Operating budgets should include daily, weekly, monthly and annual court maintenance expenses like labor, material, equipment upkeep and water. Capital budgets should include court maintenance expenses that are only required every few years, like court equipment replacement and laser-tapered resurfacing. We will start by covering items that should be included in the operating budget for your clay court.

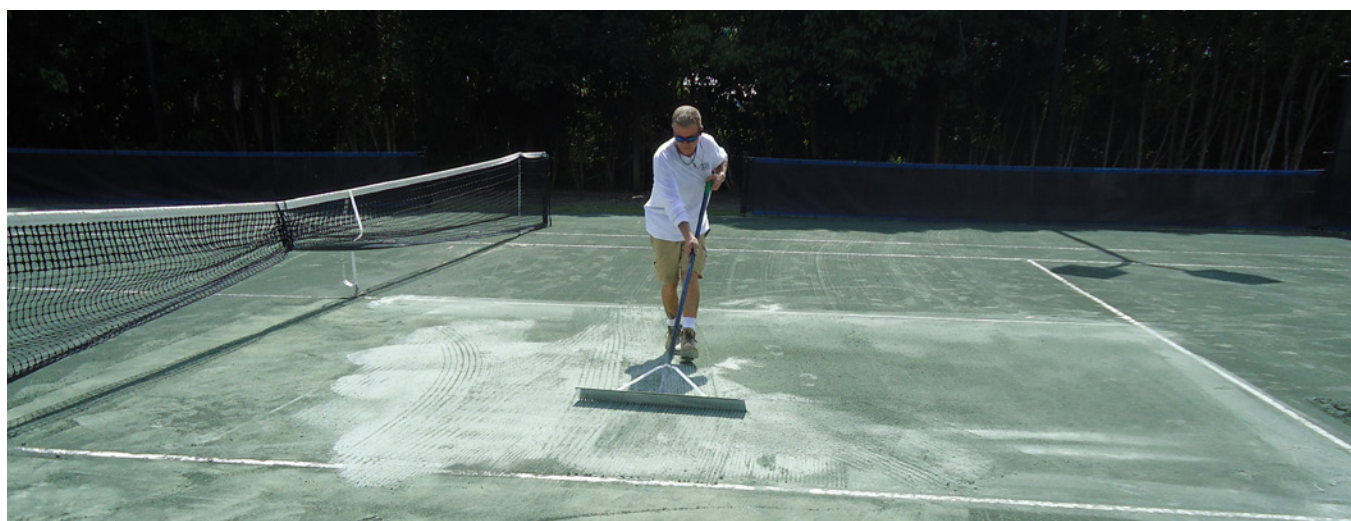
LABOR

Daily Labor

Your clay courts will typically need to be groomed 1-3 times per day – once at the end of the morning's play, once at the end of the afternoon's play and at the end of evening play. This pattern of maintenance prepares sprinkler irrigated courts for mid-day and overnight watering. However, the same routine is warranted for subsurface irrigated clay courts as regular grooming serves to agitate the court surface. The process of sweeping/grooming and lining should take +/- 15 minutes per court. You should therefore budget 15-45 minutes per day, per court, for daily grooming, depending on the frequency of play at your facility.

Weekly Labor

Your sprinkler irrigated clay court will need to be rolled somewhere between 1-3 times per week, depending on the preferences of your players and the amount of rain received. The amount of time required for rolling a single court will depend on the type of roller used, but 1 hour is a good benchmark. We suggest budgeting 2 hours per week, per court for rolling your sprinkler irrigated clay court. If you have a subsurface irrigated clay court, you will typically not be required to roll the court on a weekly basis as the continuous application of moisture serves to keep the court surface firm and compact. However, you may want to roll only the lines to keep them flush with the court surface.



You will also need to complete a few other court maintenance tasks on a weekly basis. The first is to scrape up “dead” material around the net posts and perimeter of the court. The second is to scarify and agitate the areas of the court that do not get a lot of foot traffic and are missed by your daily grooming efforts, specifically the court edges, corners and net line. The third task is to ensure the low side of your court drains adequately. You may need to remove built up material near the brick line or outside the court. The fourth task you need to complete each week is an observation of your sprinkler system, including minor adjustments to the sprinkler heads to ensure adequate coverage. The fifth and final task that needs to be completed on a weekly basis is the addition of new clay tennis court material (Har-Tru or HydroBlend) to the areas that receive a lot of play – namely the service boxes and baselines. The combined time required for these activities is +/- 2 hours per week, per court.

Monthly Labor

New clay courts include 1” of compacted Har-Tru (sprinkler irrigated clay courts) or HydroBlend (subsurface irrigated clay courts) across the entire court surface. It is imperative that this 1” surface depth is maintained for your clay court to perform at a high



level. Sprinkler irrigated clay courts in Florida and the south-eastern United States will typically lose 2.4 - 4 tons of material (60–100, 80 lb. bags) each year to normal watering, rain, wind and play. Sprinkler irrigated clay courts in other areas of the country will typically lose 1-2 tons of material (25–50, 80 lb. bags). Subsurface irrigated clay courts experience half of this material loss. Therefore the primary activity that you will need to complete on a monthly basis is the application of new material over the entire court surface to replace this lost material. You may also need to complete this task after a period of heavy rain.

We suggest that most facilities add 2-8, 80 lb. bags to each court on a monthly basis. This task should take +/- 4 hours per court each month. It is important to note that some facilities rely on tennis court contractors to add the required annual total amount of material to maintain 1” of surface depth in one application at the start/end of the season rather than adding material on a regular basis over the course of the year. This is certainly acceptable. However, make sure you add this cost to your operating budget and not your capital budget, as this is an annual expense.

Sprinkler irrigated clay courts actually perform best when they receive regular intervals of rain. Extended periods of dry weather can make it difficult for sprinkler systems to adequately keep the clay court surface moist. This is why many tennis facilities apply calcium chloride or magnesium chloride to their courts during dry months. We suggest facilities add 2, 50 lb. bags to each court (one bag per side) once per month during the dry season. This task should take 1 hour per court and only be required 3-4 months out of the year. Calcium Chloride and Magnesium Chloride are also good solutions for tournament situations when you will have play all day long and not have time to take down the courts for mid-day watering.



COURT MATERIALS

The amount of clay that you will need to purchase will vary depending on the type of clay court you have (sprinkler irrigated vs. subsurface irrigated) and the location of the court (year round vs. seasonal play). Facilities with sprinkler irrigated clay courts located in the southeastern United States experience year round play and receive significant seasonal rain. These facilities should purchase 2.4 to 4 tons of material (60-100, 80 lb. bags) per court on an annual basis. Subsurface irrigated clay courts lose 50% less clay material to rain and play. Therefore subsurface irrigated clay court facilities in the southeastern U.S. should purchase 1.2 to 2 tons of material (30-50, 80 lb. bags) per court on an annual basis.



Facilities with sprinkler irrigated courts in other areas of the country that are only open seasonally or do not receive a lot of rain should purchase 1 to 2 tons of material (25-50, 80 lb. bags) per court on an annual basis. Facilities with subsurface irrigated courts that are only open seasonally or do not receive a lot of rain should purchase 0.5 to 1 ton of material (13-25, 80 lb. bags annually).

So...how much is that material going to cost you? Unfortunately, the cost of each 80 lb. bag of Har-Tru clay (required for sprinkler irrigated courts) or Hydroblend clay (required for subsurface irrigated courts) varies significantly by location. This is because Har-Tru/Hydroblend material is heavy and shipping costs encompass a large portion of the total cost of each bag. Har-Tru/Hydroblend material is mined, crushed, blended, bagged and packaged on pallets outside Charlottesville, Virginia. In general, the further away from Charlottesville your facility is located, the higher the freight cost and the more expensive your Har-Tru/Hydroblend will be. That is why it always makes sense to purchase as much Har-Tru/Hydroblend material as you can safely store in a dry area. You will reduce your cost per bag by spreading the freight cost out over a larger number of bags.



In addition to the freight cost, you will also need to consider the cost of unloading the truck when the material arrives at your facility. If you do not own or cannot borrow a forklift, you may need to rent one. Forklift rentals can cost anywhere from \$150 - \$500 per day.

Har-Tru is delivered via four primary delivery methods:

Flatbed Carrier

Customer is responsible for unloading from the side of the truck with their forklift (owned, rented or borrowed)

Less than Truckload (LTL) Carrier

Customer is responsible for unloading from the back of the truck with their forklift (owned, rented or borrowed)

Less than Truckload (LTL) Carrier with Lift Gate

Carrier will lower pallet of material to the ground via lift gate from the back of the truck to the ground and customer is responsible for moving the pallet of material to final location on site

Flatbed Carrier with Piggyback Forklift

Carrier will offload pallet from truck and place at your desired location on site with a forklift that is attached to the delivery truck – some local tennis court supply retailers and tennis court contractors provide this service

In order to give you a number to plug in for the cost of an 80 lb. bag of Har-Tru for your facility, we have created the attached chart based on the quantity of material purchased, the type of freight chosen and your distance from Charlottesville, VA. Please contact 10-S Tennis Supply for an accurate quote based on your location and preferred delivery method.

Cost Per Bag	250 Miles		500 Miles		750 Miles		1,000 Miles	
	Flatbed	LTL w/ Lift Gate	Flatbed	LTL w/ Lift Gate	Flatbed	LTL w/ Lift Gate	Flatbed	LTL w/ Lift Gate
	560 Bags	125 Bags	560 Bags	125 Bags	560 Bags	125 Bags	560 Bags	125 Bags
	\$9.24	\$12.49	\$9.49	\$12.84	\$10.43	\$14.87	\$11.12	\$14.97



Flatbed Carrier with Piggyback Forklift

COURT EQUIPMENT

The court equipment needed to maintain your clay court will depend on the type of court you have – sprinkler irrigated or subsurface irrigated.

At a minimum, your sprinkler irrigated clay court facility should have the following items on hand:

- Drag Broom – Hand or Tow model
- Line Broom
- Line Scrub
- Lute/Scarifier
- Roller – Power or Tow model
- Spreader – Hand or Tow model

At a minimum, your subsurface irrigated clay court facility should have the following items on hand:

- Court Rake – Hand or Tow model (daily grooming)
- Drag Broom – Hand or Tow model (material application/distribution)
- Line Broom
- Line Scrub
- Lute/Scarifier
- Roller – Power or Tow model
- Spreader – Hand or Tow model

If you have 1 or 2 courts, you are probably going to be fine with using the manual “hand” model equipment. If you have more than 2 courts, you are going to be well served to have a golf cart or other maintenance vehicle (tractor) for completing court maintenance tasks. If you are going to utilize a court maintenance vehicle, you would need to have the “tow” models of the court equipment in order to hook them up to your maintenance vehicle.



AUSSIE CLEAN SWEEP



DRAG BRUSH



STEEL DRAG BROOM



COURT RAKE



GATOR RAKE (HYDRO)



10-S LINESMAN



PRO-LINE SCRUBBER



SCARIFIER LUTE



ROLLER

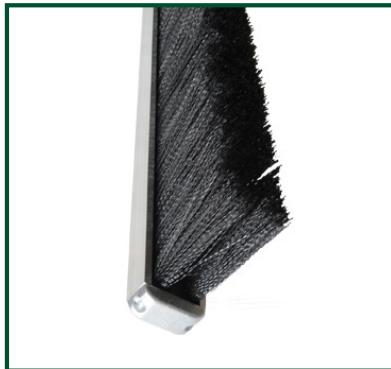


GANDY DROP SPREADER

The purchase of the court maintenance equipment outlined above should be considered a capital expense, as all items have useful lives > 1 year if they are stored properly. We will cover the useful lives of each item in our capital budgeting section. However, replacement parts for these products do need to be purchased on an annual basis and these expenses are therefore operational budget items.

We recommend the following replacement parts as annual purchases to maintain your court equipment:

- Drag Broom – bristles should be replaced on an annual basis
- Court Rake – tines should be replaced on an annual basis
- Line Broom – brush assembly should be replaced on an annual basis
- Line Scrub – head should be replaced on an annual basis
- Lute/Scarifier – blade should be replaced on an annual basis



DRAG BROOM REPLACEMENT BRISTLES



COURT RAKE REPLACEMENT TINES



LINE BROOM REPLACEMENT BRUSH



LINE SCRUB REPLACEMENT BRUSH



LUTE/SCARIFIER REPLACEMENT BLADE

WATER

Har-Tru clay tennis courts need water to perform effectively. In fact, water is the “glue” that holds a Har-Tru clay court together. Maintaining proper moisture levels within your clay court will keep the court firm, stable and prevent erosion of court material. Maintaining appropriate moisture levels also improves player traction and reduces bad bounces. Players certainly prefer the rich, dark aesthetic appearance of a recently watered court!

Sprinkler irrigated courts will require +/- 1,500 gallons of water per day to maintain adequate moisture levels. Subsurface irrigated clay courts will use half that amount or +/- 750 gallons of water per day. It is important to note that these averages will vary over the course of the year due to changing climatic conditions. Large, sprinkler irrigated clay court facilities can therefore use millions of gallons of water annually. The cost of this water varies significantly by location. Water rates are usually provided per 1,000 gallons. We have seen water rates that range from \$1.00 per 1,000 gallons to \$5.00 per 1,000 gallons or more, depending on the municipality. Please consult your most recent utility bill to find out the billing rate in your local area.

Many tennis facilities utilize water from wells, lakes, rivers and ponds and therefore do not directly pay for the water they use. If your facility is utilizing these water sources, it is important to be aware that the water needs to be as clean as possible. Nutrient rich water sources can cause algae and fungus growth on clay courts, making maintenance more difficult. However, whether you are paying for water or utilizing a free source, we strongly suggest you put your clay tennis courts on a separate water meter and track their water usage. Contract your facility's irrigation contractor for more information.



PULLING THE NUMBERS TOGETHER

We have discussed the costs associated with four major operational budgeting areas for your Har-Tru clay tennis courts – Labor, Materials, Equipment and Water. Here we pull the numbers together and create sample operating budgets for a single court, sprinkler irrigated clay court facility and a single court, subsurface irrigated clay court facility.

We will use the following assumptions for our sprinkler irrigated clay court budget:

Labor

Facility located in southeastern US with year-round play (50 weeks annually)
\$12.00/hour fully loaded labor rate (\$10.00/hour labor rate + 20% taxes/benefits)
1/2 hour (30 minutes) per day, per court for daily grooming (2 groomings at 15 minutes each)
4 hours (240 minutes) per week, per court for weekly maintenance activities
4 hours (240 minutes) per month, per court for monthly maintenance activities
Total of 8.5 hours per week, per court

Annual Labor Expense: \$5,100

Clay Court Material

Facility located in southeastern US, +/- 500 miles from Charlottesville, VA
LTL Freight Carrier with lift gate is used for delivery
\$12.85/per bag Har-Tru cost, including material, freight & tax
\$30.00/per bag Magnesium Chloride cost, including material, freight & tax
(63) 80 lb. bags of Har-Tru material per court, per year
(8) 50 lb. bags of Calcium chloride per court, per year

Annual Material Expense: \$1,050

Court Equipment

(2) 7' Drag Broom – Replacement Bristles
(1) 10-S Linesman – Replacement Brush Assembly
(1) Line Scrub – Replacement Head
(1) 30" Lute/Scarifier – Replacement Blade

Annual Court Equipment Expense: \$278

Water Usage

\$2.00/1,000 gallons
1,500 gallons per day, per court

Annual Water Expense: \$1,050

Total Annual Operating Budget: \$7,478

We will use the following assumptions for our subsurface irrigated clay court budget:

Labor

Facility located in southeastern US with year-round play (50 weeks annually)
\$12.00/hour fully loaded labor rate (\$10.00/hour labor rate + 20% taxes/benefits)
1/2 hour (30 minutes) per day, per court for daily grooming (2 groomings at 15 minutes each)
2 hours (120 minutes) per week, per court for weekly maintenance activities
2 hours (120 minutes) per month, per court for monthly maintenance activities
Total of 6.00 hours per week, per court

Annual Labor Expense: \$3,600

Clay Court Material

Facility located in southeastern US, +/- 500 miles from Charlottesville, VA
LTL Freight Carrier with lift gate is used for delivery
\$12.85/per bag Hydroblend cost, including material, freight & tax
(30) 80 lb. bags of Har-Tru material per court, per year

Annual Material Expense: \$386

Court Equipment

(2) 7' Drag Broom – Replacement Bristles
(1) Court Rake – Replacement Tines
(1) 10-S Linesman – Replacement Brush Assembly
(1) Line Scrub – Replacement Head
(1) 30" Lute/Scarifier – Replacement Blade

Annual Court Equipment Expense: \$527

Water Usage

\$2.00/1,000 gallons
750 gallons per day, per court

Annual Water Expense: \$525

Total Annual Operating Budget: \$5,038

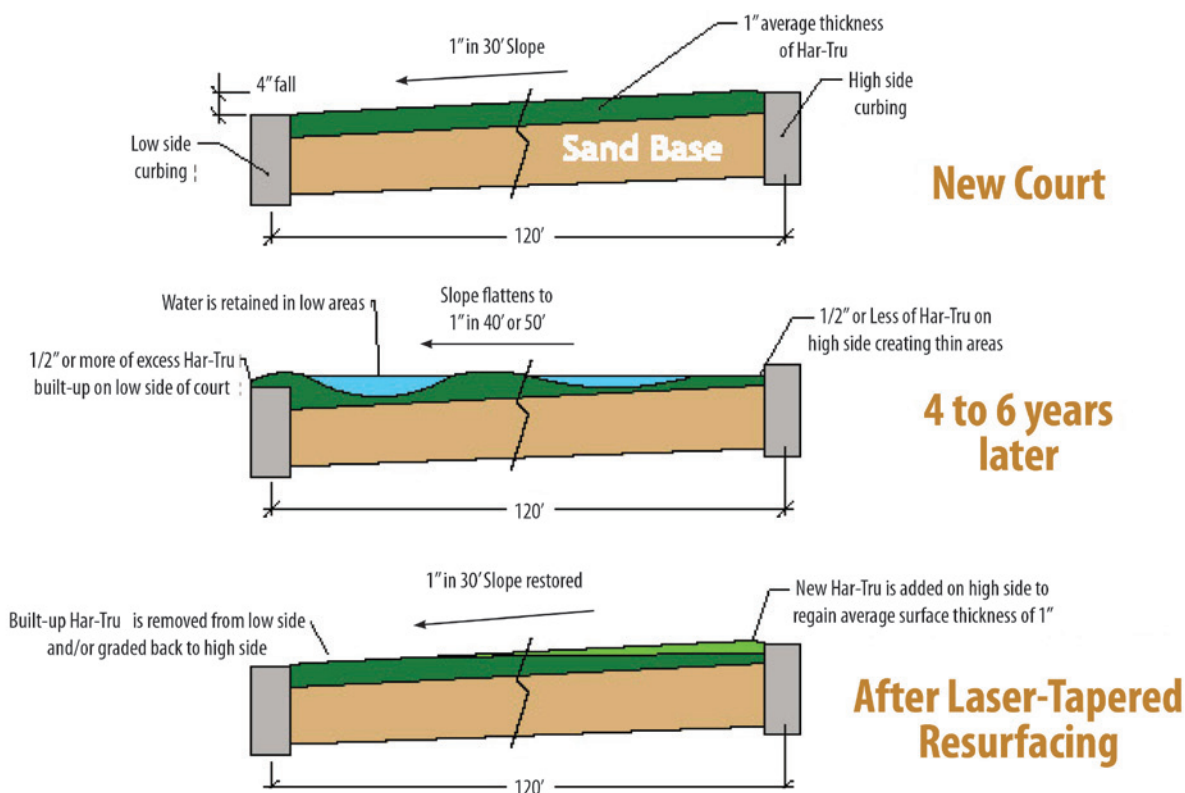
Please note that your facility could experience significantly lower annual costs, particularly if your labor, material and water rates are lower.

LASER-TAPERED COURT RESURFACING

Your clay tennis courts are undoubtedly a capital asset. Like all of your facility's capital assets, they will require periodic upgrades and enhancements to retain their value and continue to perform well. In this section of our educational guide, we will review the capital expenses you will need to anticipate for your Har-Tru clay tennis courts, including court resurfacing, court equipment, court accessories, fencing and lighting. This section will focus on laser-tapered resurfacing.

As discussed in our operating budgeting section, Har-Tru clay courts require 1" of surface material for optimum playability, court stability and moisture retention. For this reason, all new clay courts are built with +/- 40 tons (1,000, 80 lb. bags) of Har-Tru (for sprinkler irrigated courts) or Hydroblend (for subsurface irrigated courts) surfacing material. Each new Har-Tru court is also built with a 1" in 24' to 1" in 30' slope to ensure adequate rainwater drainage. This means that a new single court (60' W x 120' L) will slope 2" to 2 1/2" if it is sloped from side-to-side or 4" to 5" if it is sloped end-to-end.

Sprinkler irrigation, rain, wind and play all cause Har-Tru clay court material to regularly wash off the court and to migrate (or "shift") from the high side of the court to the low side of the court. Sprinkler irrigated Har-Tru courts in the southeastern US will lose 2.4 to 4 tons (60-100, 80 lb. bags) due to extensive rain and year round play. Subsurface irrigated courts will lose half this amount. Over time, your Har-Tru clay court will lose the ideal 1" surface depth, lose its 1" in 30' slope and begin to "flatten out". These changes will cause your clay court to retain less moisture, shift under rolling and play and drain poorly, resulting in less than optimum (possibly even dangerous) playing conditions. For these reasons, "Laser-Tapered" resurfacing is a recommended capital project that should take place every 4-6 years for your sprinkler irrigated clay court and every 7-10 years for your subsurface irrigated clay court.





LASER-TAPERING • TRACTOR & BOX BLADE



LASER-TAPERING • LASER

In a “laser-tapered” resurfacing, a professional tennis court contractor uses laser guided grading equipment to redistribute excess material that has migrated to the low end of the court over time and to add new material to the high end of the court. This process can restore the proper 1” in 30’ court slope and 1” surface depth of Har-Tru material.

A properly executed laser-tapered resurfacing project includes the following steps:

- Remove and dispose of existing line tapes
- Scrape “dead material” off the court
- Scarify and remove algae, fungus and hard pan
- Scarify excess Har-Tru material at low side of court, blend with new material and redistribute to high end of the court using laser-guided grading equipment
- Apply 5-30 tons of Har-Tru surfacing material and to restore 1” surface depth and 1” in 30’ slope using laser-guided grading equipment
- Water and roll court to initial firmness
- Install new line tapes

This brings us to an important question – how much do I need to budget for a laser-tapered resurfacing?

There are four primary variables that will determine the cost of a laser-tapered resurfacing:

- The amount of material required to bring the court back to a 1” overall surface depth (typically 10-20 tons)
- The cost of the Har-Tru material – which is driven by your facility’s distance from Charlottesville, VA where the material is manufactured
- The overall condition of the court – which drives the amount of prep work required
- The ease or difficulty of access to your courts – the more difficult, the more time and expense required

For the purposes of this exercise, we will assume the following:

- You have sprinkler-irrigated clay courts
- Your courts will need 10 tons of material to restore 1” surface thickness and 1” in 30’ slope
- Your facility is located 500 miles from Charlottesville
- Your courts are in average condition
- Access to your courts is simple

Given the above variables, you should expect to pay +/- \$5,600 per court for a laser-tapered resurfacing every 5 years.

ITEM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Laser-Tapered Resurfacing	\$ -	\$ -	\$ -	\$ -	\$5,600	\$ -	\$ -	\$ -	\$ -	\$5,600
Total Annual Capital Expense	\$ -	\$ -	\$ -	\$ -	\$5,600	\$ -	\$ -	\$ -	\$ -	\$5,600

If you have a subsurface irrigated clay court, you should only have to complete a laser-tapered resurfacing once every +/- 7-10 years.

ITEM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Laser-Tapered Resurfacing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$5,600	\$ -	\$ -	\$ -
Total Annual Capital Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$5,600	\$ -	\$ -	\$ -

COURT EQUIPMENT

We outlined the court equipment items that are required for maintaining your clay court earlier in this guide. However, we focused our discussion on the annual costs required to maintain these items in good working order. Here we are going to focus on the useful life and acquisition/replacement costs for these items.

We thought the best way to convey this information was in a chart/table format. We have organized the equipment into different required categories. We recommend that you have at least one item in each category. However, some facilities purchase and maintain multiple items in each category in order to have the right tool for each task. We have included the name of the item, the retail price of the item, the useful life and the annual cost.

PRODUCT CATEGORY	PRODUCT #	PRODUCT NAME	ACQUISITION COST	USEFUL LIFE	ANNUAL COST
Maintenance Vehicles	PM1002	ServAce Alloy (includes roller)	\$15,500	10	\$1,550
	PGC1000	Refurbished/Used Golf Cart	\$4,950	10	\$495
	JD1000	John Deere Tractor	\$1,999	5	\$400
Rollers	PL3022	5' CourtPac Pro	\$9,650	10	\$965
	PR1015	Brutus AR-1	\$8,145	10	\$815
	PL4022	5'Tow Roller	\$4,325	10	\$433
	PZ1000	10-S Surface Master - 4'Tow Roller	\$3,090	10	\$309
Daily Grooming Tools	SL9002	8' Aussie Clean Sweep	\$449	5	\$90
	SL2002	7' Drag Broom - Hand Model	\$195	3	\$65
	SL1002	7' Drag Broom - Tow Model	\$199	3	\$66
	SL3022	7' Drag Broom/Lute - Hand Model	\$255	3	\$85
	SL3012	7' Drag Broom/Lute - Tow Model	\$262	3	\$87
	VW2002	Classic Court Rake - Tow Model	\$585	5	\$117
	VG1000HY	Gator Rake - HydroCourt Model	\$980	5	\$196
Line Sweepers	WL2004	10-S Linesman	\$160	3	\$53
	WL3002	Line Scrub	\$67	3	\$22
Lute/Scarifier	VG3000	Gator Rake Lute	\$140	2	\$70
	VL1052	30" Lute/Scarifier	\$63	2	\$32
	VL1030	36" Lute/Scarifier	\$67	2	\$34
	VL1032	48" Lute/Scarifier	\$76	2	\$38
Spreaders	TL1000	Gator Spreader - Tow Model	\$1,995	5	\$399
	TG1022	42" Gandy Spreader - Tow Model	\$825	5	\$165
	TG2012	36" Gandy Spreader - Hand Model	\$529	5	\$106

For purposes of this capital budgeting exercise, we will assume that you spent \$10,428.00 on acquiring the following items when your courts were built:

- Refurbished golf cart
- 5' Tow Roller
- 7' Drag Broom – Tow Model
- Classic Court Rake – Tow Model
- 10-S Linesman
- Line Scrub
- 30" Lute/Scarifier
- 36" Gandy Spreader

There are two ways you could approach capital budgeting. The first would simply be to total up the annual costs of all items, divide by ten and budget that much for capital expenses each year. In our example, this would result in an annual capital budget for maintenance equipment of \$1,043 that could be used for whatever items needed to be replaced.



An alternate and more accurate capital budget plan would be to specifically identify each piece of equipment that you would like to replace each year over a ten year period, as follows:

ITEM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Refurbished Golf Cart	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$4,500
5' Tow Roller	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$4,325
7' Drag Broom - Tow Model	\$ -	\$ -	\$262	\$ -	\$ -	\$262	\$ -	\$ -	\$262	\$ -
Gator Rake - Tow Model	\$ -	\$ -	\$ -	\$ -	\$980	\$ -	\$ -	\$ -	\$ -	\$980
10-S Linesman	\$ -	\$ -	\$160	\$ -	\$ -	\$160	\$ -	\$ -	\$160	\$ -
Line Scrub	\$ -	\$ -	\$67	\$ -	\$ -	\$67	\$ -	\$ -	\$67	\$ -
30" Lute/Scarifier	\$ -	\$63	\$ -	\$63	\$ -	\$63	\$ -	\$63	\$ -	\$63
36" Gandy Spreader	\$ -	\$ -	\$ -	\$ -	\$529	\$ -	\$ -	\$ -	\$ -	\$529
Total Annual Capital Expense	\$ -	\$63	\$489	\$63	\$1,509	\$552	\$ -	\$63	\$489	\$10,397

Please keep in mind that the more clay tennis courts you are maintaining, the greater the number of each of these items you will need to have on hand and the greater your annual capital budget.

OPERATING & CAPITAL BUDGETING

There is certainly more to your tennis court facility than just the construction, care and maintenance of the court surface! Your courts also have a variety of court accessories that enhance the player experience – net posts, nets, windscreens, court benches, court organizers, score keepers, court numbers, etc. In this section we are going to focus on the useful life and replacement costs for these items.

Most court accessories do not need to be replaced on an annual basis. The only items that really fall into this category are center straps and windscreen ty-raps. We recommend that you replace your center straps on an annual basis and that you purchase +/- 100 windscreen ty-raps for each court at your facility. This results in an annual operating budget for court accessories of +/- \$100 annually per court.

Other court accessories do need to be replaced less frequently and therefore need to be included in your capital budget. We thought the best way to convey this information was in a chart/table format. We have organized the equipment into different required categories. We recommend that you have at least one item in each category. We have included the name of the item, the retail price of the item, the useful life and the annual cost.

PRODUCT CATEGORY	PRODUCT #	PRODUCT NAME	ACQUISITION COST	USEFUL LIFE	ANNUAL COST
Net Posts	DL1000	10-S External Wind Post - Aluminum	\$359	10	\$36
	DK2005	10-S External Wind Post - Steel	\$299	10	\$30
	DC2100	10-S Econo Post	\$219	10	\$22
Nets	AX1003	10-S Six Star II Tennis Net	\$199	5	\$40
	AL1024	10-S Tournament Double Net	\$169	5	\$34
	AL1014	10-S Tournament Net	\$149	3	\$50
	AL3004	10-S Standard Net	\$109	2	\$55
Windscreens	ET1009	9' Tuffy Windscreen (+/- 336 LF - 1 court)	\$2,067	5	\$413
	EL5033	9' 10-S Proscreen (+/- 336 LF - 1 court)	\$2,181	4	\$545
	EV1009	9' 10-S Standard VCP (+/- 336 LF - 1 court)	\$1,663	2	\$832
	ET1006	6' Tuffy Windscreen (+/- 336 LF - 1 court)	\$1,307	5	\$261
	EL5013	6' 10-S ProScreen (+/- 336 LF - 1 court)	\$1,327	4	\$332
	EV1006	6' 10-S Standard VCP (+/- 336 LF - 1 court)	\$1,042	2	\$521
Court Benches	MG4055	5' Malibu Bench	\$359	5	\$72
	MB2013	5' Courtside Deluxe Bench	\$225	5	\$45
	MB1013	5' Courtside Bench	\$185	5	\$37
Court Organizers	GX1003	Court Valet	\$129	3	\$43
	GC1003	10-S Court Caddy	\$44	2	\$22
Score Keepers	GH2000	LoveOne Scoreboard	\$139	5	\$28
	GH1003	ScorePost	\$75	3	\$25
	GC3005	ScoreKeeper	\$55	2	\$28
	GT1005	ScoreTube	\$34	2	\$17
	GF1005	Portable EZ Score	\$31	2	\$16
Court Numbers	ETB001	14" x 14" Windscreen Court #	\$25	5	\$5
	ET9001	10.5" x 10.5" Windscreen Court #	\$22	5	\$4
	GP3001	9" x 11" Black on White Aluminum Court #	\$17	3	\$6
	GS2001	8" x 10" White on Green PVC	\$13	3	\$4



For purposes of this capital budgeting exercise, we will assume that you would like to plan to replace the following court accessory items as they wear out:

- 10-S External Wind Post - Steel
- Six Star II Tennis Net
- 9' Tuffy Windscreen
- 5' Courtside Deluxe Bench
- 10-S Court Caddy
- LoveOne Scoreboard
- 10.5" x 10.5" Windscreen Court #s

There are two ways you could approach capital budgeting for these accessories. The first would simply be to total up the annual costs of all items, divide by 10 and budget that much for capital expenses each year. In our example, this would result in an annual capital budget for maintenance equipment of \$582 per court that could be used for whatever items needed to be replaced. An alternate and more accurate capital budget plan would be to specifically identify each accessory that you would like to replace over a ten year period, as follows:

ITEM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
10-S External Wind Post - Steel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$299
Six Star II Tennis Net	\$ -	\$ -	\$ -	\$ -	\$199	\$ -	\$ -	\$ -	\$ -	\$199
9' Tuffy Windscreen	\$ -	\$ -	\$ -	\$ -	\$2,067	\$ -	\$ -	\$ -	\$ -	\$2,067
5' Courtside Deluxe Bench	\$ -	\$ -	\$ -	\$ -	\$225	\$ -	\$ -	\$ -	\$ -	\$225
10-S Court Caddy	\$ -	\$44	\$ -	\$44	\$ -	\$44	\$ -	\$44	\$ -	\$44
LoveOne Scoreboard	\$ -	\$ -	\$ -	\$139	\$ -	\$ -	\$ -	\$139	\$ -	\$ -
10.5" x 10.5" Court Numbers	\$ -	\$ -	\$ -	\$ -	\$25	\$ -	\$ -	\$ -	\$ -	\$25
Total Annual Capital Expense	\$ -	\$44	\$ -	\$183	\$2,516	\$44	\$ -	\$183	\$ -	\$2,859

Please keep in mind that there are a variety of other court accessories that may fit your facility, including water coolers, umpire chairs, court divider netting, etc.

OPERATING & CAPITAL BUDGETING

Significant time and effort is made by each facility to ensure their court surface, court maintenance equipment and court accessories are maintained – and justifiably so. However, did you know that 20% to 25% of the cost of each tennis court is actually in the fencing? This fact is why it is important to consider and include fence upgrades, repairs and replacement in your facility's operating and capital budgeting process.

The useful life of a tennis court fence is usually 15-20 years. However, fence can start to show its age much earlier, sometime in as little as 10-15 years after construction. This is especially true if the facility is located in a coastal area and subject to continuous exposure to salt air. Annual operating expenses and budget for your fencing system should be minimal, consisting of the occasional replacement of low cost attachment hardware – tension bands, brace bands, top rail connectors, rail ends and fence ties. Fortunately, these are easy and inexpensive to replace - \$50 per court, per year should cover you. Aside from these items, there is not much to worry about on an annual basis.

The next area that you will see deterioration in is the fence fabric/mesh. As it ages, fence fabric/mesh tends to curl at the top and bottom of the fence. The final place you will see deterioration is in the fence framework itself – the vertical and horizontal poles. These can rust or bend, resulting in an unstable and dangerous situation. Storms of course can accelerate the process, particularly by bending the vertical and horizontal framework. This is why it is important to remove your windscreens before major wind events – tropical storms, hurricanes, etc. The paint and coatings on the framework also have a tendency to chip and deteriorate.

BEFORE



AFTER



There are two primary capital fence expenditures you should anticipate. If your fence framework is structurally sound and your primary issue is curling fence fabric/mesh, missing or broken hardware and chipped/peeling fence paint, than a fence rehabilitation project is in order.

The scope of work for this project includes the following:

- Removal and proper disposal of the old fence fabric/mesh and attachment hardware
- Prep and painting of the existing vertical and horizontal poles
- Installation of new fence fabric and hardware

In our opinion this fence rehab project, when combined/paired with installation of new windscreen, provides the biggest ROI from an aesthetic standpoint of any project you can complete for your tennis facility. This is especially true if your facility has old galvanized (i.e. silver) mesh and framework. You should plan to complete this project every 10-15 years. The total cost for this project is \$18-\$20 per linear foot, depending on your fence layout (\$6K-\$7K per court).

ITEM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Fabric Fence Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$6,000
Total Annual Capital Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$6,000

If your fence framework is not structurally sound, then you should consider a complete replacement of your fence.

The scope of work for this project includes the following:

- Removal and proper disposal of the old fence fabric/mesh, attachment hardware, vertical poles including concrete foundations, horizontal framework
- Installation of new vertical poles, including new concrete foundations
- Installation of horizontal poles/framework
- Installation of new fence fabric and attachment hardware

As you can imagine, this is a much more intensive and difficult project. In fact, it is actually much more difficult than installing a new fence on a new court, as the original framework has to be removed. The total cost for this project is \$40-\$45 per linear foot, depending on your fence layout (\$13K-\$16K per court).



OPERATING & CAPITAL BUDGETING

Tennis court lighting is an extremely valuable amenity for most facilities. Lighting provides the only opportunity for your working members or residents to play during the week, particularly during the late fall, winter and early spring months. Lighting extends the playability of your courts by 3-5 hours per day and expands court availability by 25%-50%. So, if your facility has lights, you need to budget in order to keep this valuable amenity in top condition.



Most tennis facilities utilize low profile, environmental lighting systems with metal halide fixtures. This type of lighting provides excellent visibility and minimal light spillage and pollution. In these systems the light fixtures are mounted 18' to 27' above the court surface with the lights aimed directly down onto the court. The components of an environmental lighting system include pole, mounting arm, fixture and wiring. Most lighting systems do not require annual operational maintenance or an associated budget. However, some items do need to be addressed every other year or less frequently and should be considered in your capital budgeting process.

Most light poles, mounting brackets and fixtures have a useful life of 15-25 years before they need to be replaced. The useful life depends on the construction materials used in the pole. Aluminum and galvanized steel poles last longer than standard steel poles. In general, by the time the poles naturally degrade, it makes sense to replace the entire lighting system. However, the paint on the poles and mounting arms will typically degrade and chip far before the structural integrity of the pole and foundation is compromised. You should plan to re-paint your light poles every 10 years. The cost for painting a single court with 8 poles, 8 mounting brackets and 8 fixtures is +/- \$2,800 or \$350/pole. This cost includes a lift rental, which is required to reach the higher areas of the pole. The cost per pole comes down substantially as the number of poles to be painted increases.

The individual components of the lighting fixture should also be maintained on a regular basis as a capital expense. Environmental lighting systems typically utilize metal halide bulbs. These bulbs provide natural white light but also degrade quickly with each on/off cycle. For this reason we recommend that the bulbs in your lighting system be replaced every two years in order for the fixture to perform at the specified uniformity, horizontal illumination and vertical illumination levels. The lens on each fixture should be cleaned and the ballast, fuses and fuse holders checked at the same time the bulb is replaced. The cost for replacing the bulbs on a single court with 8 poles, 8 mounting brackets and 8 fixtures is +/- \$925 or \$115/fixture.



ITEM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Bulb Replacement & Lens Cleaning	\$ -	\$925	\$ -	\$925	\$ -	\$925	\$ -	\$925	\$ -	\$925
Light Pole Painting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$2,800
Total Annual Capital Expense	\$ -	\$925	\$ -	\$925	\$ -	\$925	\$ -	\$925	\$ -	\$3,725

Pulling All the Numbers Together for Clay Court Facility

Well, we have covered a tremendous amount of ground in this educational guide! We have provided a comprehensive overview of the items you will need to consider to properly maintain your clay court on an annual and long-term basis. In this section we are going to tie everything together in one place so you have a complete understanding of all the costs you need to consider over the life of your court.

Example 1: Operating & Capital Budget for a Sprinkler Irrigated Clay Court with the Following Assumptions:

- Court is located in southeastern US with year-round play (50 weeks annually), +/- 500 miles from Charlottesville, VA
- \$12.00/hour fully loaded labor rate (\$10.00/hour labor rate + 20% taxes/benefits)
- \$12.85/per bag Har-Tru cost, including material, freight & tax
- \$30.00/per bag Magnesium Chloride cost, including material, freight & tax
- (63) 80 lb. bags of Har-Tru material per court, per year
- (8) 50 lb. bags of Calcium chloride per court, per year
- 1,500 gallons of water used per day, per court at a cost of \$2.00/1,000 gallons

ITEM	Operating Budget									
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Labor	\$5,100	\$5,100	\$5,100	\$5,100	\$5,100	\$5,100	\$5,100	\$5,100	\$5,100	\$5,100
Material	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050
Court Equipment Maintenance	\$278	\$278	\$278	\$278	\$278	\$278	\$278	\$278	\$278	\$278
Water	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050
Court Accessories	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100
Fence Repairs & Upkeep	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
Lighting Repairs & Upkeep	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Annual Operating Budget	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627

ITEM	Capital Budget									
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Laser-Tapered Resurfacing	\$ -	\$ -	\$ -	\$ -	\$5,600	\$ -	\$ -	\$ -	\$ -	\$5,600
Court Maintenance Equipment	\$ -	\$63	\$489	\$63	\$529	\$552	\$ -	\$63	\$489	\$9,417
Court Accessories	\$ -	\$44	\$ -	\$183	\$2,516	\$44	\$ -	\$183	\$ -	\$2,859
Fencing Refurbishment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$6,000
Lighting Refurbishment	\$ -	\$925	\$ -	\$925	\$ -	\$925	\$ -	\$925	\$ -	\$3,725
Total Annual Capital Budget	\$ -	\$1,032	\$489	\$1,171	\$8,645	\$1,521	\$ -	\$1,171	\$489	\$27,601

ITEM	Total Budget									
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Operating Budget	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627	\$7,627
Capital Budget	\$ -	\$1,032	\$489	\$1,171	\$8,645	\$1,521	\$ -	\$1,171	\$489	\$27,601
Total Annual Operating Budget	\$7,627	\$8,659	\$8,116	\$8,798	\$16,272	\$9,148	\$7,627	\$8,798	\$8,116	\$35,228

There are a couple of things to note when evaluating the Operating Budget numbers. The first is that your actual operating budget will vary depending on your facility's unique situation.

Your facility's costs could very well be significantly less than those shown here if:

- Your facility utilizes existing personnel (i.e. your tennis professionals or players) to complete some of the daily maintenance tasks
- Your facility has lower per bag Har-Tru or HydroBlend material costs as a result of having more courts and ordering more material (freight costs spread over more bags)
- Your facility has lower Har-Tru material costs as a result of being located closer to the manufacturing facility in Charlottesville, VA
- Your facility utilizes free lake, river or canal water for irrigation
- Your facility has a shorter playing season
- Your facility grooms the courts after play only once per day
- Your sprinkler-irrigated facility rolls your courts less frequently than 2-3 times per week

There are also a couple of things to note when evaluating the Capital Budgeting numbers. The example shows most of the major capital expenses hitting in year 10. The first thing is that you will eventually incur these costs – you will need to replace your golf cart/maintenance vehicle, you will need to laser-taper your courts, you will need to replace or refurbish your fencing and you will need to refurbish or replace your lighting. The question is timing. In all likelihood, these capital costs will not hit on the same year and that some items may not be required for 15-20 years rather than 10. The point is that we recommend that you consult with a professional tennis court contractor to determine the current status of your tennis court infrastructure and then make plans to complete this work when it is required.



Example 2: Operating & Capital Budget for a Subsurface Irrigated Clay Court with the Following Assumptions:

- Court is located in southeastern US with year-round play (50 weeks annually), +/- 500 miles from Charlottesville, VA
- \$12.00/hour fully loaded labor rate (\$10.00/hour labor rate + 20% taxes/benefits)
- \$12.85/per bag Hydroblend cost, including material, freight & tax
- (30) 80 lb. bags of Hydroblend material per court, per year
- 750 gallons of water used per day, per court at a cost of \$2.00/1,000 gallons

ITEM	Operating Budget									
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Labor	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600
Material	\$386	\$386	\$386	\$386	\$386	\$386	\$386	\$386	\$386	\$386
Court Equipment Maintenance	\$527	\$527	\$527	\$527	\$527	\$527	\$527	\$527	\$527	\$527
Water	\$525	\$525	\$525	\$525	\$525	\$525	\$525	\$525	\$525	\$525
Court Accessories	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100
Fence Repairs & Upkeep	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
Lighting Repairs & Upkeep	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Annual Operating Budget	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187

ITEM	Capital Budget									
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Laser-Tapered Resurfacing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$5,600	\$ -	\$ -	\$ -
Court Maintenance Equipment	\$ -	\$63	\$489	\$63	\$1,509	\$552	\$ -	\$63	\$489	\$10,397
Court Accessories	\$ -	\$44	\$ -	\$183	\$2,516	\$44	\$ -	\$183	\$ -	\$2,859
Fencing Refurbishment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$6,000
Lighting Refurbishment	\$ -	\$925	\$ -	\$925	\$ -	\$925	\$ -	\$925	\$ -	\$3,725
Total Annual Capital Budget	\$ -	\$1,032	\$489	\$1,171	\$4,025	\$1,521	\$5,600	\$1,171	\$489	\$22,981

ITEM	Total Budget									
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Operating Budget	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187	\$5,187
Capital Budget	\$ -	\$1,032	\$489	\$1,171	\$4,025	\$1,521	\$5,600	\$1,171	\$489	\$22,981
Total Annual Operating Budget	\$5,187	\$6,219	\$5,676	\$6,358	\$9,212	\$6,708	\$10,787	\$6,358	\$5,676	\$28,168



There are a couple of things to note when evaluating these Operating Budget numbers. The first is that your actual operating budget will vary depending on your facility's unique situation.

Your facility's costs could very well be significantly less than those shown here if:

- Your facility utilizes existing personnel (i.e. your tennis professionals or players) to complete some of the daily maintenance tasks
- Your facility has lower per bag Hydroblend material costs as a result of having more courts and ordering more material (freight costs spread over more bags)
- Your facility has lower Hydroblend material costs as a result of being located closer to Charlottesville, VA
- Your facility utilizes free lake, river or canal water for irrigation
- Your facility has a shorter playing season
- Your facility grooms the courts after play only once per day

There are also a couple of things to note when evaluating the Capital Budgeting numbers. The example shows most of the major capital expenses hitting in year 10. The first is that you will eventually incur these costs – you will need to replace your golf cart/maintenance vehicle, you will need to laser-taper your courts, you will need to replace or refurbish your fencing and you will need to refurbish or replace your lighting. The question is timing. In all likelihood they will not hit on the same year and they may not be required for 15-20 years. The point is that we recommend that you consult with a professional tennis court contractor to determine the current status of your tennis court infrastructure and then make plans to complete this work when it is required.

