



Homestead Park Ballfields

Section Six Appendices

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Summary of Costs

Facility Assessment Detailed Cost Estimate

August 16, 2012

COMMUNITY PARKS

Cedar Falls	\$3,859,173
Community Center Park	\$924,318
Homestead Park	\$2,497,044
Southern Community Park	\$237,261

NEIGHBORHOOD PARKS

Ephesus Park	\$912,882
Hargraves Community Center	\$410,445
Meadowmont Park	\$169,202
North Forest Hills Park	\$211,505
Pritchard Park	\$131,631
Umstead Park	\$691,014
Oakwood Park	\$284,796

MINI PARKS

Burlington Park	\$394,173
Westwood Park	\$114,199

CIVIC PARKS

Wallace Plaza	\$245,780
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Total Construction Budget with Contingency & GC **\$11,083,423***

*Summary cost for each of the parks has been rounded to the nearest thousand.

**Cedar Falls Park
Master Plan**

**Opinion of Probable Construction Cost
August 16, 2012**



Field #1 Multi Purpose	\$1,452,996
Field #2 Adult Baseball	\$140,963
Field #3 Youth Baseball	\$152,748
Field #4 Youth Baseball	\$173,513
Tennis Courts	\$555,051
Restroom Buildings	\$569,820
Park Structures	\$110,534
Parking Lot	\$551,779
Playground	\$77,247
Nature Trails	\$21,282
Park Amenities	\$53,240

Total Construction Budget with Contingency & GC **\$3,859,173**

Field #1 Multi Purpose Field

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	New Sports Lighting	ls	1	\$130,000.00	\$130,000.00
2	Install synthetic turf grass surface, (300'x350')	sf	105,000	\$8.00	\$840,000.00
3	Storm Water BMP	ls	1	\$45,000.00	\$45,000.00
4	Storm Drainage	ls	1	\$30,000.00	\$30,000.00
5	Remove 8' Ht, Extg Fence	lf	1,300	\$2.50	\$3,250.00
6	New fence, 8' ht poly coated	lf	1,300	\$28.00	\$36,400.00
7	New pedestrian gates, poly coated	ea	3	\$650.00	\$1,950.00
8	New service gates, poly coated	ea	1	\$1,200.00	\$1,200.00
9	New backstop, poly coated	ea	1	\$14,000.00	\$14,000.00
10	Remove bleacher pad	ea	1	\$1,800.00	\$1,800.00
11	New bleacher pad	ea	1	\$4,200.00	\$4,200.00
12	Remove walk	sy	380	\$3.00	\$1,140.00
13	New walk	sy	850	\$22.00	\$18,700.00
14	New access ramp	ls	1	\$8,500.00	\$8,500.00
15	Scoreboard	ls	1	\$7,500.00	\$7,500.00
16	Site Preparation, Grading, Erosion Control	ls	1	\$57,182.00	\$57,182.00
17	Project Contingency	ls	1	\$120,083.00	\$120,083.00
18	General Conditions, Bonds, Insurance	ls	1	\$132,091.00	\$132,091.00
				Field #1 Cost	\$1,452,996.00

Field #2 Adult Baseball

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove 8' ht, Extg Fence	lf	1,200	\$3.00	\$3,600.00
2	New fence, 8' ht poly coated	lf	1,200	\$28.00	\$33,600.00
3	New pedestrian gates, poly coated	ea	2	\$650.00	\$1,300.00
4	New service gates, poly coated	ea	1	\$1,200.00	\$1,200.00
5	New backstop, poly coated	ea	1	\$14,000.00	\$14,000.00
6	Remove bleacher pad	ea	1	\$1,800.00	\$1,800.00
7	New bleacher pad	ea	1	\$4,200.00	\$4,200.00
8	Remove walk	sy	450	\$3.00	\$1,350.00
9	New walk	sy	750	\$22.00	\$16,500.00
10	New access ramp	ls	1	\$8,500.00	\$8,500.00
11	Handrail	lf	80	\$55.00	\$4,400.00
12	Drainage Ditch, Permanent swale	lf	100	\$4.00	\$400.00
13	Storm Pipe, 15" RCP	lf	350	\$30.00	\$10,500.00
14	Storm Structure	ea	1	\$2,100.00	\$2,100.00
15	Scoreboard	ls	1	\$7,500.00	\$7,500.00
16	Site Preparation, Grading, Erosion Control	ls	1	\$5,548.00	\$5,548.00
17	Project Contingency	ls	1	\$11,650.00	\$11,650.00
18	General Conditions, Bonds, Insurance	ls	1	\$12,815.00	\$12,815.00
				Field #2 Cost	\$140,963.00

Field #3 Youth Baseball

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Install irrigation	ls	1	\$22,000.00	\$22,000.00
2	Remove 8' ht, Extg Fence	lf	800	\$2.50	\$2,000.00
3	New fence, 8' ht poly coated	lf	800	\$28.00	\$22,400.00
4	New pedestrian gates, poly coated	ea	2	\$650.00	\$1,300.00
5	New service gates, poly coated	ea	1	\$1,200.00	\$1,200.00
6	New backstop, poly coated	ea	1	\$14,000.00	\$14,000.00
7	Remove bleacher pad	ea	1	\$1,800.00	\$1,800.00
8	New bleacher pad	ea	1	\$4,200.00	\$4,200.00
9	Remove walk	sy	475	\$3.00	\$1,425.00
10	New walk	sy	675	\$22.00	\$14,850.00
11	Drainage Ditch, Permanent swale	lf	650	\$4.00	\$2,600.00
12	Storm Pipe, 15" RCP	lf	350	\$30.00	\$10,500.00
13	Storm Structure	ea	3	\$2,100.00	\$6,300.00
14	New access ramp	ls	1	\$8,500.00	\$8,500.00
15	Handrail	lf	130	\$55.00	\$7,150.00
16	Site Preparation, Grading, Erosion Control	ls	1	\$6,012.00	\$6,012.00
17	Project Contingency	ls	1	\$12,624.00	\$12,624.00
18	General Conditions, Bonds, Insurance	ls	1	\$13,887.00	\$13,887.00
				Field #3 Cost	\$152,748.00

Field #4 Youth Baseball

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Install irrigation	ls	1	\$22,000.00	\$22,000.00
2	Remove 8' Ht, Extg Fence	lf	800	\$2.50	\$2,000.00
3	New fence, 8' ht poly coated	lf	800	\$28.00	\$22,400.00
4	New pedestrian gates, poly coated	ea	2	\$650.00	\$1,300.00
5	New service gates, poly coated	ea	1	\$1,200.00	\$1,200.00
6	New backstop, poly coated	ea	1	\$14,000.00	\$14,000.00
7	Remove bleacher pad	ea	1	\$1,800.00	\$1,800.00
8	New bleacher pad	ea	1	\$4,200.00	\$4,200.00
9	Remove walk	sy	350	\$3.00	\$1,050.00
10	New walk	sy	550	\$22.00	\$12,100.00
11	Drainage Ditch, Permanent swale	lf	530	\$4.00	\$2,120.00
12	Storm Pipe, 15" RCP	lf	450	\$30.00	\$13,500.00
13	Storm Structure	ea	4	\$2,100.00	\$8,400.00
14	New access ramp	ls	1	\$8,500.00	\$8,500.00
15	Handrail	lf	400	\$55.00	\$22,000.00
16	Site Preparation, Grading, Erosion Control	ls	1	\$6,829.00	\$6,829.00
17	Project Contingency	ls	1	\$14,340.00	\$14,340.00
18	General Conditions, Bonds, Insurance	ls	1	\$15,774.00	\$15,774.00
				Field #4 Cost	\$173,513.00

Tennis Courts

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Drainage Ditch, permanent swale at perimeter of courts	lf	500	\$4.00	\$2,000.00
2	Storm Pipe, 15" culvert crossing at access trail	lf	25	\$22.00	\$550.00
3	New park bench w/ concrete pad	ea	2	\$800.00	\$1,600.00
4	Drinking fountain, accessible	ea	1	\$3,500.00	\$3,500.00
5	Minor sealing/patching of courts	ls	1	\$8,000.00	\$8,000.00
6	Remove fence, 12' ht	lf	1,100	\$2.50	\$2,750.00
7	New fence, 12' ht poly coated	lf	1,100	\$32.00	\$35,200.00
8	New pedestrian gates, poly coated	ea	2	\$650.00	\$1,300.00
9	Remove access walk	sy	555	\$3.00	\$1,665.00
10	New access walk	sy	555	\$22.00	\$12,210.00
11	Remove court pvmt	sy	4,800	\$3.00	\$14,400.00
12	Replace court pvmt	sy	4,800	\$22.00	\$105,600.00
13	Court surface, acrylic paint surfacing	ea	6	\$6,500.00	\$39,000.00
14	Court amenities	ea	6	\$650.00	\$3,900.00
15	Remove subgrade, 3' undercut	cy	4,800	\$12.00	\$57,600.00
16	Replace subgrade	cy	4,800	\$12.00	\$57,600.00
17	Replace court lighting	ls	1	\$90,000.00	\$90,000.00
18	Site Preparation, Grading, Erosion Control	ls	1	\$21,844.00	\$21,844.00
19	Project Contingency	ls	1	\$45,872.00	\$45,872.00
20	General Conditions, Bonds, Insurance	ls	1	\$50,460.00	\$50,460.00
				Tennis Courts Cost	\$555,051.00

Restroom Buildings

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	New Restroom/Concession Bldg (Tennis and Base Ball Facility)	ls	2	\$220,000.00	\$440,000.00
2	Remove Extg Restroom/Concession Bldg	ls	1	\$8,500.00	\$8,500.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$22,425.00	\$22,425.00
4	Project Contingency	ls	1	\$47,093.00	\$47,093.00
5	General Conditions, Bonds, Insurance	ls	1	\$51,802.00	\$51,802.00
				Park Buildings Cost	\$569,820.00

Park Structures

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Large Picnic Shelter (30'x65')	ls	1	\$65,000.00	\$65,000.00
2	Picnic Shelter (20'x20')	ls	1	\$22,000.00	\$22,000.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$4,350.00	\$4,350.00
4	Project Contingency	ls	1	\$9,135.00	\$9,135.00
5	General Conditions, Bonds, Insurance	ls	1	\$10,049.00	\$10,049.00
				Park Structures Cost	\$110,534.00

Parking Lot

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove pavement	sy	2,800	\$3.00	\$8,400.00
2	New pavement	sy	9,800	\$26.00	\$254,800.00
3	New curb and gutter	lf	3,400	\$18.00	\$61,200.00
4	New sidewalk, at parking lot	sy	2,100	\$35.00	\$73,500.00
5	Concrete wheel stops	ea	6	\$150.00	\$900.00
6	Driveway apron	ea	1	\$3,200.00	\$3,200.00
7	Parking Lot Lighting, by owner	ls	1	\$0.00	\$0.00
8	Pavement Striping-approximately 150 spc.	ls	1	\$3,500.00	\$3,500.00
9	Fine grade parking lot	sy	9,800	\$1.00	\$9,800.00
10	Storm Pipe, 15" RCP	ls	1	\$10,500.00	\$10,500.00
11	Storm Structure	ls	1	\$8,500.00	\$8,500.00
12	Site Preparation, Grading, Erosion Control	ls	1	\$21,715.00	\$21,715.00
13	Project Contingency	ls	1	\$45,602.00	\$45,602.00
14	General Conditions, Bonds, Insurance	ls	1	\$50,162.00	\$50,162.00
				Parking Lot Cost	\$551,779.00

Playground

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Playground border	lf	450	\$14.00	\$6,300.00
2	Replace playground surface w/ poured in place	sf	3,000	\$8.00	\$24,000.00
3	Playground access ramp	ea	1	\$750.00	\$750.00
4	Access to picnic tables	sy	750	\$35.00	\$26,250.00
5	Drinking fountain, accessible-high/low	ls	1	\$3,500.00	\$3,500.00
6	Site Preparation, Grading, Erosion Control	ls	1	\$3,040.00	\$3,040.00
7	Project Contingency	ls	1	\$6,384.00	\$6,384.00
8	General Conditions, Bonds, Insurance	ls	1	\$7,023.00	\$7,023.00
				Playground Cost	\$77,247.00

Nature Trails (1,000 LF of existing trail)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Drainage Ditch, Permanent swale	lf	1,000	\$4.00	\$4,000.00
2	Storm Pipe, 15" RCP	lf	95	\$30.00	\$2,850.00
3	Storm Structure	ls	3	\$2,100.00	\$6,300.00
4	Imported Trail Material	cy	300	\$12.00	\$3,600.00
5	Site Preparation, Grading, Erosion Control	ls	1	\$838.00	\$838.00
6	Project Contingency	ls	1	\$1,759.00	\$1,759.00
7	General Conditions, Bonds, Insurance	ls	1	\$1,935.00	\$1,935.00
				Nature Trails Cost	\$21,282.00

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Signage, Identification/Informational	ls	1	\$14,000.00	\$14,000.00
2	Site Furnishings, (12 Benches/6 Tables/8 Trash/2 Bike Rack)	ls	1	\$30,000.00	\$30,000.00
3	Project Contingency	ls	1	\$4,400.00	\$4,400.00
4	General Conditions, Bonds, Insurance	ls	1	\$4,840.00	\$4,840.00
				Park Amenities Cost	\$53,240.00

Community Center Park

Master Plan

Opinion of Probable Construction Cost

August 16, 2012

Playground and Picnic Area	\$28,968
Basketball Court	\$70,864
Gymnasium	\$30,250
Bocce Court	\$14,645
Access Walks	\$36,656
Splash Pad	\$616,193
Infrastructure	\$72,292
Park Amenities	\$54,450
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Total Construction Budget with Contingency & GC	\$924,318



Playground and Picnic Area

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Accessible route to park benches and picnic tables	sy	200	\$35.00	\$7,000.00
2	Picnic table pad	ea	6	\$550.00	\$3,300.00
3	Handrails	lf	100	\$55.00	\$5,500.00
4	Renovate lawn area around playground	ls	1	\$3,500.00	\$3,500.00
5	Drinking fountain, accessible-high/low	ls	1	\$3,500.00	\$3,500.00
6	Site Preparation, Grading, Erosion Control	ls	1	\$1,140.00	\$1,140.00
7	Project Contingency	ls	1	\$2,394.00	\$2,394.00
8	General Conditions, Bonds, Insurance	ls	1	\$2,634.00	\$2,634.00
Playground and Picnic Cost					\$28,968.00

Basketball Court

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Accessible route to basketball courts	sy	65	\$35.00	\$2,275.00
2	Replace basketball goals	ea	6	\$2,500.00	\$15,000.00
3	Re-surface court, acrylic paint surfacing	ls	1	\$6,500.00	\$6,500.00
4	Drinking fountain, accessible-high/low	ls	1	\$3,500.00	\$3,500.00
5	Renovate lawn area around courts	ls	1	\$3,500.00	\$3,500.00
6	Improve storm drainage around courts	ls	1	\$3,000.00	\$3,000.00
7	Picnic Shelter, (20'X20')	ls	1	\$22,000.00	\$22,000.00
8	Site Preparation, Grading, Erosion Control	ls	1	\$2,789.00	\$2,789.00
9	Project Contingency	ls	1	\$5,857.00	\$5,857.00
10	General Conditions, Bonds, Insurance	ls	1	\$6,443.00	\$6,443.00
Basketball Court Cost					\$70,864.00

Gymnasium Improvements

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Gymnasium sound baffles	ls	1	\$25,000.00	\$25,000.00
2	Project Contingency	ls	1	\$2,500.00	\$2,500.00
3	General Conditions, Bonds, Insurance	ls	1	\$2,750.00	\$2,750.00
Gymnasium Cost					\$30,250.00

Bocce Court

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Accessible route to bocce courts	sy	65	\$35.00	\$2,275.00
2	Accessible route to benches	sy	150	\$35.00	\$5,250.00
3	Renovate courts sub drainage	lf	200	\$20.00	\$4,000.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$577.00	\$577.00
5	Project Contingency	ls	1	\$1,211.00	\$1,211.00
6	General Conditions, Bonds, Insurance	ls	1	\$1,332.00	\$1,332.00
Bocce Court Cost					\$14,645.00

Access Walks

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Accessible route to park facilities	sy	550	\$35.00	\$19,250.00
2	Improve trail head	ls	2	\$2,800.00	\$5,600.00
3	Improve storm drainage	ls	1	\$4,000.00	\$4,000.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$1,443.00	\$1,443.00
5	Project Contingency	ls	1	\$3,030.00	\$3,030.00
6	General Conditions, Bonds, Insurance	ls	1	\$3,333.00	\$3,333.00
Access Walks Cost					\$36,656.00

Splash Pad

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Pool/Splash Pad	ls	1	\$400,000.00	\$400,000.00
2	Pool patio, Site Furnishings/Landscape/Public Art	ls	1	\$50,000.00	\$50,000.00
3	Pool patio, Shade Structure	ls	1	\$35,000.00	\$35,000.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$24,250.00	\$24,250.00
5	Project Contingency	ls	1	\$50,925.00	\$50,925.00
6	General Conditions, Bonds, Insurance	ls	1	\$56,018.00	\$56,018.00
Splash Pad Cost					\$616,193.00

Infrastructure

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Water supply to drinking fountain from on site source	lf	300	\$18.00	\$5,400.00
2	Drinking Fountain	ls	1	\$3,500.00	\$3,500.00
3	Safety lighting around building	ls	1	\$15,000.00	\$15,000.00
4	Expand existing parking lot, 35 spaces	ea	30	\$1,100.00	\$33,000.00
5	Site Preparation, Grading, Erosion Control	ls	1	\$2,845.00	\$2,845.00
6	Project Contingency	ls	1	\$5,975.00	\$5,975.00
7	General Conditions, Bonds, Insurance	ls	1	\$6,572.00	\$6,572.00
Infrastructure Cost					\$72,292.00

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Signage, Identification/Informational	ls	1	\$12,000.00	\$12,000.00
2	Site Furnishings, (14 Benches/10 Tables/6 Trash/3 Bike Rack)	ls	1	\$33,000.00	\$33,000.00
3	Project Contingency	ls	1	\$4,500.00	\$4,500.00
4	General Conditions, Bonds, Insurance	ls	1	\$4,950.00	\$4,950.00
Park Amenity Cost					\$54,450.00

Homestead Park

Master Plan

Opinion of Probable Construction Cost

August 16, 2012

Field #1 Adult Baseball	\$25,919
Field #2 Adult Baseball	\$24,776
Field #3 Soccer	\$988,195
Field #4 Soccer	\$983,528
Restroom/Picnic Shelter	\$10,419
Playground	\$60,617
Picnic Area	\$5,878
Basketball Court	\$14,612
Skate Park/Batting Cage	\$218,908
Greenway Trail	\$68,481
Dog Park	\$8,591
Park Amenities	\$87,120
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Total Construction Budget with Contingency & GC	\$2,497,044



Field #1 Adult Baseball (western)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Renovate extg bleacher w/ accessible seating and railings	ea	2	\$5,500.00	\$11,000.00
2	Drainage swale at western stair case	lf	200	\$4.50	\$900.00
3	Scoreboard	ls	1	\$8,500.00	\$8,500.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$1,020.00	\$1,020.00
5	Project Contingency	ls	1	\$2,142.00	\$2,142.00
6	General Conditions, Bonds, Insurance	ls	1	\$2,357.00	\$2,357.00
				Field #1 Cost	\$25,919.00

Field #2 Adult Baseball (eastern)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Renovate bleacher w/ accessible seating and railings	ea	2	\$5,500.00	\$11,000.00
2	Scoreboard	ls	1	\$8,500.00	\$8,500.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$975.00	\$975.00
4	Project Contingency	ls	1	\$2,048.00	\$2,048.00
5	General Conditions, Bonds, Insurance	ls	1	\$2,253.00	\$2,253.00
				Field #2 Cost	\$24,776.00

Field #3 Soccer (western)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Install synthetic turf grass surface	sf	82,000	\$8.00	\$656,000.00
2	Storm Water BMP	ls	1	\$35,000.00	\$35,000.00
3	Storm Drainage	ls	1	\$25,000.00	\$25,000.00
4	Remove fence, 8' ht	lf	1,200	\$3.00	\$3,600.00
5	New fence, poly coated	lf	1,200	\$28.00	\$33,600.00
6	New pedestrian gates, poly coated	ea	2	\$650.00	\$1,300.00
7	New service gates, poly coated	ea	1	\$1,200.00	\$1,200.00
8	Renovate bleacher w/ accessible seating and railings	ea	1	\$5,500.00	\$5,500.00
9	New team bench pad	sy	200	\$38.00	\$7,600.00
10	Remove access walk	sy	120	\$3.00	\$360.00
11	New access walk	sy	120	\$22.00	\$2,640.00
12	Improve drainage ditch	lf	1,500	\$4.00	\$6,000.00
13	Site Preparation, Grading, Erosion Control	ls	1	\$38,890.00	\$38,890.00
14	Project Contingency	ls	1	\$81,669.00	\$81,669.00
15	General Conditions, Bonds, Insurance	ls	1	\$89,836.00	\$89,836.00
				Field #3 Cost	\$988,195.00

Homestead Park
Town of Chapel Hill Parks and Recreation
Facility Assessment

August 16, 2012

Field #4 Soccer (eastern)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Install synthetic turf grass surface	sf	82,000	\$8.00	\$656,000.00
2	Storm Water BMP	ls	1	\$35,000.00	\$35,000.00
3	Storm Drainage	ls	1	\$25,000.00	\$25,000.00
4	Remove fence, 8' ht	lf	1,200	\$3.00	\$3,600.00
5	New fence, poly coated	lf	1,200	\$28.00	\$33,600.00
6	New pedestrian gates, poly coated	ea	2	\$650.00	\$1,300.00
7	New service gates, poly coated	ea	1	\$1,200.00	\$1,200.00
8	Renovate bleacher w/ accessible seating and railings	ea	1	\$5,500.00	\$5,500.00
9	New team bench pad	sy	200	\$38.00	\$7,600.00
10	Remove access walk	sy	85	\$3.00	\$255.00
11	New access walk	sy	85	\$22.00	\$1,870.00
12	Improve drainage ditch	lf	800	\$4.00	\$3,200.00
13	Site Preparation, Grading, Erosion Control	ls	1	\$38,707.00	\$38,707.00
14	Project Contingency	ls	1	\$81,284.00	\$81,284.00
15	General Conditions, Bonds, Insurance	ls	1	\$89,412.00	\$89,412.00
Field #4 Cost					\$983,528.00

Restroom/Picnic Shelter

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Replace drinking fountain with high/low fountain	ls	1	\$2,800.00	\$2,800.00
2	Extend building pad to roof line	sy	120	\$45.00	\$5,400.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$410.00	\$410.00
4	Project Contingency	ls	1	\$861.00	\$861.00
5	General Conditions, Bonds, Insurance	ls	1	\$948.00	\$948.00
Restroom/Picnic Building Cost					\$10,419.00

Playground

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove access walk	sy	100	\$3.00	\$300.00
2	New access walk	sy	250	\$38.00	\$9,500.00
3	Storm Pipe, 12" culvert crossing at access trail	lf	20	\$20.00	\$400.00
4	Improve drainage ditch	lf	250	\$4.00	\$1,000.00
5	Provide drainage ditch through Natural Area	lf	65	\$4.00	\$260.00
6	Accessible route to picnic tables	sy	75	\$38.00	\$2,850.00
7	Repair playground border	lf	900	\$14.00	\$12,600.00
8	Replace playground surface w/ poured in place	sf	2,600	\$8.00	\$20,800.00
9	Site Preparation, Grading, Erosion Control	ls	1	\$2,386.00	\$2,386.00
10	Project Contingency	ls	1	\$5,010.00	\$5,010.00
11	General Conditions, Bonds, Insurance	ls	1	\$5,511.00	\$5,511.00
Playground Cost					\$60,617.00

Picnic Area

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Accessible route to picnic tables	sy	85	\$35.00	\$2,975.00
2	Picnic table pad	ea	1	\$550.00	\$550.00
3	Replace stairs case (5 risers)	risers	5	\$220.00	\$1,100.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$232.00	\$232.00
5	Project Contingency	ls	1	\$486.00	\$486.00
6	General Conditions, Bonds, Insurance	ls	1	\$535.00	\$535.00
				Picnic Area Cost	\$5,878.00

Basketball Court

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Replace basketball goals	ea	2	\$2,500.00	\$5,000.00
2	Re-surface court, acrylic paint surfacing	ls	1	\$6,500.00	\$6,500.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$575.00	\$575.00
4	Project Contingency	ls	1	\$1,208.00	\$1,208.00
5	General Conditions, Bonds, Insurance	ls	1	\$1,329.00	\$1,329.00
				Basketball Cost	\$14,612.00

Skate Park/Batting Cage

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Replace drinking fountain with high/low fountain	ls	1	\$3,500.00	\$3,500.00
2	Concrete skate bowl	ls	1	\$150,000.00	\$150,000.00
3	Pitching machine improvements	ls	1	\$18,000.00	\$18,000.00
4	Replace Bike Rack	ea	1	\$800.00	\$800.00
5	Site Preparation, Grading, Erosion Control	ls	1	\$8,615.00	\$8,615.00
6	Project Contingency	ls	1	\$18,092.00	\$18,092.00
7	General Conditions, Bonds, Insurance	ls	1	\$19,901.00	\$19,901.00
				SkatePark/Batting Cage Cost	\$218,908.00

Greenway Trail (600 lf from baseball field north to property line)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Site Clearing	ac	1	\$7,500.00	\$7,500.00
2	Remove subgrade	cy	250	\$12.00	\$3,000.00
3	Replace subgrade	cy	250	\$12.00	\$3,000.00
4	Asphalt Trail, @ 8' wide	ton	95	\$125.00	\$11,875.00
5	Gravel Base	ton	250	\$23.00	\$5,750.00
6	Tensar Grid	sy	1,075	\$5.00	\$5,375.00
7	Drainage Ditch, Permanent swale	ls	600	\$4.00	\$2,400.00
8	Storm Pipe, 15" RCP	ls	1	\$8,500.00	\$8,500.00
9	Storm Structure	ls	1	\$6,500.00	\$6,500.00
10	Site Preparation, Grading, Erosion Control	ls	1	\$2,695.00	\$2,695.00
11	Project Contingency	ls	1	\$5,660.00	\$5,660.00
12	General Conditions, Bonds, Insurance	ls	1	\$6,226.00	\$6,226.00
				Greenway Trail Cost	\$68,481.00

Dog Park

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Water supply to drinking fountain from on site source	lf	200	\$18.00	\$3,600.00
2	Drinking Fountain	ls	1	\$3,500.00	\$3,500.00
3	Project Contingency	ls	1	\$710.00	\$710.00
4	General Conditions, Bonds, Insurance	ls	1	\$781.00	\$781.00
				Dog Park Cost	\$8,591.00

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Parking lot, traffic control devices	ls	1	\$16,000.00	\$16,000.00
2	Signage, Identification/Informational	ls	1	\$14,000.00	\$14,000.00
3	Site Furnishings, (16 Benches/10 Tables/12 Trash/4 Bike Rack)	ls	1	\$42,000.00	\$42,000.00
4	Project Contingency	ls	1	\$7,200.00	\$7,200.00
5	General Conditions, Bonds, Insurance	ls	1	\$7,920.00	\$7,920.00
				Park Amenity Cost	\$87,120.00

**Southern Community Park
Master Plan**

**Opinion of Probable Construction Cost
August 16, 2012**

December 15, 2134

Common Area, Turf Grass Improvements	\$121,194
Nature Trails	\$85,817
Dog Park	\$30,250
<hr/>	
Total Construction Budget with Contingency & GC	\$237,261



Common Area, Turf Grass Improvement

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Seeding, Common Bermuda	sf	355,500	\$0.06	\$21,330.00
2	Fertilize and straw	sf	355,500	\$0.02	\$7,110.00
3	Soil amendments, topsoil 1" depth	cy	1,098	\$25.00	\$27,450.00
4	Scarify and Grade	sy	39,500	\$1.00	\$39,500.00
5	Site Preparation, Grading, Erosion Control	ls	1	\$4,770.00	\$4,770.00
6	Project Contingency	ls	1	\$10,016.00	\$10,016.00
7	General Conditions, Bonds, Insurance	ls	1	\$11,018.00	\$11,018.00
				Turf Grass Cost	\$121,194.00

Nature Trails (2,500 LF of existing trail)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Drainage Ditch, Permanent swale	lf	2,500	\$4.00	\$10,000.00
2	Storm Pipe, 15" RCP	lf	145	\$30.00	\$4,350.00
3	Storm Structure	ls	6	\$2,100.00	\$12,600.00
4	Imported Trail Material	cy	2,200	\$12.00	\$26,400.00
5	Site clearing	ac	1	\$7,500.00	\$9,000.00
6	Site Preparation, Grading, Erosion Control	ls	1	\$3,118.00	\$3,118.00
7	Materials for Special Projects	ls	1	\$2,000.00	\$2,000.00
8	Footbridges	ls	2	\$2,000.00	\$4,000.00
9	Project Contingency	ls	1	\$6,547.00	\$6,547.00
10	General Conditions, Bonds, Insurance	ls	1	\$7,802.00	\$7,802.00
				Nature Trail Cost	\$85,817.00

Dog Park

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Drainage Repairs	ls	1	\$25,000.00	\$25,000.00
2	Project Contingency	ls	1	\$2,500.00	\$2,500.00
3	General Conditions, Bonds, Insurance	ls	1	\$2,750.00	\$2,750.00
				Nature Trail Cost	\$30,250.00

Ephesus Park

Master Plan

Opinion of Probable Construction Cost

August 16, 2012

Restroom Building	\$279,510
Tennis Courts	\$453,506
Park Shelter	\$30,188
Access Walks	\$80,457
Baseball Field	\$40,181
Park Amenities	\$29,040
<hr/>	
Total Construction Budget with Contingency & GC	\$912,882



Restroom Building

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	New Restroom/Concession Bldg	ls	1	\$220,000.00	\$220,000.00
2	Site Preparation, Grading, Erosion Control	ls	1	\$11,000.00	\$11,000.00
3	Project Contingency	ls	1	\$23,100.00	\$23,100.00
4	General Conditions, Bonds, Insurance	ls	1	\$25,410.00	\$25,410.00
				Restroom Building Cost	\$279,510.00

Tennis Court

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove court pvmt	sy	4,800	\$3.00	\$14,400.00
2	Replace court pvmt	sy	4,800	\$22.00	\$105,600.00
3	Remove court subgrade	cy	4,800	\$12.00	\$57,600.00
4	Replace court subgrade	cy	4,800	\$12.00	\$57,600.00
5	Court surface, acrylic re-surfacing	ea	6	\$6,500.00	\$39,000.00
6	Court amenities	ea	6	\$650.00	\$3,900.00
7	Remove fence, 12' ht	lf	1,100	\$2.50	\$2,750.00
8	New fence, 12' ht poly coated	lf	1,100	\$32.00	\$35,200.00
9	New pedestrian gates, poly coated	ea	4	\$650.00	\$2,600.00
10	Bleacher w/ accessible seating and railings	ea	2	\$5,500.00	\$11,000.00
11	Improve Storm Drainage west of tennis courts	ls	1	\$8,500.00	\$8,500.00
12	Storm Structure	ea	3	\$2,200.00	\$6,600.00
13	Storm Pipe, 15" RCP	lf	350	\$22.00	\$7,700.00
14	Renovate lawn area west of tennis courts	ls	1	\$4,500.00	\$4,500.00
15	Site Preparation, Grading, Erosion Control	ls	1	\$17,848.00	\$17,848.00
16	Project Contingency	ls	1	\$37,480.00	\$37,480.00
17	General Conditions, Bonds, Insurance	ls	1	\$41,228.00	\$41,228.00
				Tennis Court Cost	\$453,506.00

Park Shelter

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Picnic Shelter (20'x20')	ls	1	\$22,000.00	\$22,000.00
2	Picnic table pad	ea	2	\$550.00	\$1,100.00
3	Replace stairs case (3 risers)	risers	3	\$220.00	\$660.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$1,188.00	\$1,188.00
5	Project Contingency	ls	1	\$2,495.00	\$2,495.00
6	General Conditions, Bonds, Insurance	ls	1	\$2,745.00	\$2,745.00
				Park ShelterCost	\$30,188.00

Access Walks

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Accessible route to park facilities	sy	525	\$35.00	\$18,375.00
2	Remove access walk	sy	250	\$9.00	\$2,250.00
3	Storm Drainage	ls	1	\$1,500.00	\$1,500.00
4	Remove concrete pipe/culvert	ls	1	\$2,200.00	\$2,200.00
5	Pedestrian bridge	lf	30	\$1,300.00	\$39,000.00
6	Site Preparation, Grading, Erosion Control	ls	1	\$3,167.00	\$3,167.00
7	Project Contingency	ls	1	\$6,650.00	\$6,650.00
8	General Conditions, Bonds, Insurance	ls	1	\$7,315.00	\$7,315.00
				Access Walks Cost	\$80,457.00

Baseball Field

Item	Item	Unit	Estimated	Unit	Sub-Total
1	Remove access walk	sy	625	\$9.00	\$5,625.00
2	Accessible route to baseball field	sy	625	\$24.00	\$15,000.00
3	Handrail	lf	200	\$55.00	\$11,000.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$1,582.00	\$1,582.00
5	Project Contingency	ls	1	\$3,321.00	\$3,321.00
6	General Conditions, Bonds, Insurance	ls	1	\$3,653.00	\$3,653.00
				Baseball Cost	\$40,181.00

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Signage, Identification/Informational	ls	1	\$6,000.00	\$6,000.00
2	Site Furnishings, (8 Benches/4 Tables/4 Trash/2 Bike Rack)	ls	1	\$18,000.00	\$18,000.00
4	Project Contingency	ls	1	\$2,400.00	\$2,400.00
5	General Conditions, Bonds, Insurance	ls	1	\$2,640.00	\$2,640.00
				Park Amenity Cost	\$29,040.00

Hargraves Park

Master Plan

Opinion of Probable Construction Cost

August 16, 2012

Youth Baseball Field	\$91,160
Gymnasium/Recreation Center Area	\$43,325
Parking Lot (Roberson St. Southern Lot)	\$109,798
Tennis Court	\$47,949
Basketball Court	\$11,435
Playground and Picnic Area	\$17,025
Swimming Pool	\$42,563
Park Amenities	\$47,190
<hr/>	
Total Construction Budget with Contingency & GC	\$410,445



Youth Baseball

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove fence, 8' ht	lf	1,100	\$2.50	\$2,750.00
2	New fence, poly coated	lf	1,100	\$28.00	\$30,800.00
3	New pedestrian gates, poly coated	ea	2	\$650.00	\$1,300.00
4	New service gates, poly coated	ea	1	\$1,200.00	\$1,200.00
5	New backstop, poly coated	ea	1	\$14,000.00	\$14,000.00
6	Accessible route around backstop	sy	220	\$35.00	\$7,700.00
7	Accessible route to gymnasium	sy	400	\$35.00	\$14,000.00
8	Site Preparation, Grading, Erosion Control	ls	1	\$3,588.00	\$3,588.00
9	Project Contingency	ls	1	\$7,534.00	\$7,534.00
10	General Conditions, Bonds, Insurance	ls	1	\$8,288.00	\$8,288.00
Youth Baseball Cost					\$91,160.00

Gymnasium/Recreation Center Area

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Improve storm drainage north of gymnasium	ls	1	\$5,500.00	\$5,500.00
2	Improve storm drainage south of recreation center	ls	1	\$2,500.00	\$2,500.00
3	Improve drain inlet grate west of pool house	ls	1	\$1,600.00	\$1,600.00
4	Improve accessible route east of gymnasium	ls	1	\$20,000.00	\$20,000.00
5	Renovate lawn area north and east of gymnasium	ls	1	\$4,500.00	\$4,500.00
6	Site Preparation, Grading, Erosion Control	ls	1	\$1,705.00	\$1,705.00
7	Project Contingency	ls	1	\$3,581.00	\$3,581.00
8	General Conditions, Bonds, Insurance	ls	1	\$3,939.00	\$3,939.00
Gymnasium/Recreation Building Cost					\$43,325.00

Parking Lot (Roberson St, southern lot)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Resurface existing asphalt parking lot	sy	2,800	\$22.00	\$61,600.00
2	Remove access walk	sy	30	\$9.00	\$270.00
3	Replace existing asphalt	sy	600	\$25.00	\$15,000.00
4	Accessible route to right of way	sy	30	\$35.00	\$1,050.00
5	Screening for trash collection area	ls	1	\$8,500.00	\$8,500.00
6	Site Preparation, Grading, Erosion Control	ls	1	\$4,321.00	\$4,321.00
7	Project Contingency	ls	1	\$9,075.00	\$9,075.00
8	General Conditions, Bonds, Insurance	ls	1	\$9,982.00	\$9,982.00
Parking Lot Cost					\$109,798.00

Tennis Court

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Resurface tennis court	ea	3	\$6,500.00	\$19,500.00
2	Replace tennis nets and post	ea	3	\$1,500.00	\$4,500.00
3	Repair pavement depressions and cracks	ls	1	\$6,500.00	\$6,500.00
4	Remove access walk	sy	85	\$9.00	\$765.00
5	Accessible route to tennis court	sy	85	\$35.00	\$2,975.00
6	Replace drinking fountain with high/low fountain	ls	1	\$3,500.00	\$3,500.00
7	Site Preparation, Grading, Erosion Control	ls	1	\$1,887.00	\$1,887.00
8	Project Contingency	ls	1	\$3,963.00	\$3,963.00
9	General Conditions, Bonds, Insurance	ls	1	\$4,359.00	\$4,359.00
Tennis Court Cost					\$47,949.00

Basketball Court

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Re-surface court, acrylic paint surfacing	ls	1	\$6,500.00	\$6,500.00
2	Minor patching/repair court surface	ls	1	\$2,500.00	\$2,500.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$450.00	\$450.00
4	Project Contingency	ls	1	\$945.00	\$945.00
5	General Conditions, Bonds, Insurance	ls	1	\$1,040.00	\$1,040.00
Basketball Cost					\$11,435.00

Playground and Picnic Area

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Renovate lawn area around playground and picnic area	ls	1	\$4,500.00	\$4,500.00
2	Extend building pad to roof line	sy	120	\$45.00	\$5,400.00
3	Accessible route to picnic tables	sy	100	\$35.00	\$3,500.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$670.00	\$670.00
5	Project Contingency	ls	1	\$1,407.00	\$1,407.00
6	General Conditions, Bonds, Insurance	ls	1	\$1,548.00	\$1,548.00
Playground Cost					\$17,025.00

Swimming Pool

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove Baby Pool	ls	1	\$8,500.00	\$8,500.00
2	Add Small Tot Splash Pad	ls	1	\$25,000.00	\$25,000.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$1,675.00	\$1,675.00
4	Project Contingency	ls	1	\$3,518.00	\$3,518.00
5	General Conditions, Bonds, Insurance	ls	1	\$3,870.00	\$3,870.00
Pool Cost					\$42,563.00

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Signage, Identification/Informational	ls	1	\$10,000.00	\$10,000.00
2	Site Furnishings, (12 Benches/8 Trash/6 Trash/3 Bike Rack)	ls	1	\$29,000.00	\$29,000.00
4	Project Contingency	ls	1	\$3,900.00	\$3,900.00
5	General Conditions, Bonds, Insurance	ls	1	\$4,290.00	\$4,290.00
Park Amenity Cost					\$47,190.00

Meadowmont Park

Master Plan

Opinion of Probable Construction Cost

August 16, 2012



Park Shelter and Picnic Area	\$103,201
Soccer Fields	\$2,541
Nature Trails	\$34,873
Park Amenities	\$28,587
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Total Construction Budget with Contingency & GC	\$169,202

Park Shelter and Picnic Area

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Access walk w/ connectivity to school facility	sy	400	\$22.00	\$8,800.00
2	Improve storm drainage around picnic shelter	ls	250	\$4.00	\$1,000.00
3	Restroom	ls	1	\$75,000.00	\$75,000.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$490.00	\$490.00
5	Project Contingency	ls	1	\$8,529.00	\$8,529.00
6	General Conditions, Bonds, Insurance	ls	1	\$9,382.00	\$9,382.00
				Picnic Shelter, Walks and Trail	\$103,201.00

Soccer Fields

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Team benches	ea	4	\$550.00	\$2,200.00
2	Site Preparation, Grading, Erosion Control	ls	1	\$110.00	\$110.00
3	Project Contingency	ls	1	\$231.00	\$231.00
				Soccer Cost	\$2,541.00

Nature Trails (600 LF of trail)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Drainage Ditch, Permanent swale	lf	600	\$4.00	\$2,400.00
2	Storm Pipe, 15" RCP	lf	50	\$30.00	\$1,500.00
3	Storm Structure	ls	1	\$2,100.00	\$2,100.00
4	Imported Trail Material	cy	200	\$12.00	\$2,400.00
5	Fishing Dock	ls	1	\$20,000.00	\$20,000.00
6	Site Preparation, Grading, Erosion Control	ls	1	\$420.00	\$420.00
7	Project Contingency	ls	1	\$2,882.00	\$2,882.00
8	General Conditions, Bonds, Insurance	ls	1	\$3,171.00	\$3,171.00
				Nature Trails Cost	\$34,873.00

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Signage, Identification/Informational	ls	1	\$5,500.00	\$5,500.00
2	Site Furnishings, (8 Benches/4 Tables/4 Trash/1 Bike Rack)	ls	1	\$17,000.00	\$17,000.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$1,125.00	\$1,125.00
4	Project Contingency	ls	1	\$2,363.00	\$2,363.00
5	General Conditions, Bonds, Insurance	ls	1	\$2,599.00	\$2,599.00
				Park Amenity Cost	\$28,587.00

North Forest Hills Park

Master Plan

Opinion of Probable Construction Cost

August 16, 2012

Restroom/Picnic Shelter	\$68,735
Basketball Court	\$11,563
Playground and Picnic Area	\$33,288
Access Walks and Trails	\$68,879
Park Amenities	\$29,040
<hr/>	
Total Construction Budget with Contingency & GC	\$211,505



Restroom/Picnic Shelter

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Replace drinking fountain with high/low fountain	ls	1	\$2,800.00	\$2,800.00
2	Renovate building for all seasons use	ls	1	\$45,000.00	\$45,000.00
3	Extend building pad to roof line	sy	120	\$45.00	\$5,400.00
4	Improve storm drainage around restroom building	lf	200	\$4.50	\$900.00
5	Site Preparation, Grading, Erosion Control	ls	1	\$2,705.00	\$2,705.00
6	Project Contingency	ls	1	\$5,681.00	\$5,681.00
7	General Conditions, Bonds, Insurance	ls	1	\$6,249.00	\$6,249.00
Park Building Cost					\$68,735.00

Basketball Court

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Improve storm drainage around basketball court	lf	400	\$4.00	\$1,600.00
2	Replace basketball goals	ea	2	\$2,500.00	\$5,000.00
3	Court Striping	ls	1	\$2,500.00	\$2,500.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$455.00	\$455.00
5	Project Contingency	ls	1	\$956.00	\$956.00
6	General Conditions, Bonds, Insurance	ls	1	\$1,052.00	\$1,052.00
Basketball Court Cost					\$11,563.00

Playground and Picnic Area

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Playground border	lf	650	\$14.00	\$9,100.00
2	Replace playground surface w/ poured in place	sf	1,800	\$8.00	\$14,400.00
3	Picnic table pad	ea	2	\$550.00	\$1,100.00
4	Improve storm drainage around playground	lf	400	\$4.00	\$1,600.00
5	Site Preparation, Grading, Erosion Control	ls	1	\$1,310.00	\$1,310.00
6	Project Contingency	ls	1	\$2,751.00	\$2,751.00
7	General Conditions, Bonds, Insurance	ls	1	\$3,027.00	\$3,027.00
Playground and Picnic Cost					\$33,288.00

Access Walks and Trails

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove access walk/trail	sy	925	\$2.50	\$2,313.00
2	Accessible route to park facilities	sy	900	\$24.00	\$21,600.00
3	Asphalt Trail, @ 10' wide	sy	750	\$24.00	\$18,000.00
4	Drainage Ditch, Permanent swale	ls	850	\$4.00	\$3,400.00
5	Remove subgrade	cy	225	\$12.00	\$2,700.00
6	Replace subgrade	cy	225	\$12.00	\$2,700.00
7	Storm Drainage	ls	1	\$3,500.00	\$3,500.00
8	Site Preparation, Grading, Erosion Control	ls	1	\$2,711.00	\$2,711.00
9	Project Contingency	ls	1	\$5,693.00	\$5,693.00
10	General Conditions, Bonds, Insurance	ls	1	\$6,262.00	\$6,262.00
Access Walks and Trails Cost					\$68,879.00

North Forest Hills Park
Town of Chapel Hill Parks and Recreation
Facility Assessment

August 16, 2012

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Signage, Identification/Informational	ls	1	\$6,000.00	\$6,000.00
2	Site Furnishings, (8 Benches/4 Tables/4 Trash/2 Bike Rack)	ls	1	\$18,000.00	\$18,000.00
3	Project Contingency	ls	1	\$2,400.00	\$2,400.00
4	General Conditions, Bonds, Insurance	ls	1	\$2,640.00	\$2,640.00
				Park Amenity Cost	\$29,040.00

**Pritchard Park
Master Plan**

**Opinion of Probable Construction Cost
August 16, 2012**



Playground and Picnic Area	\$52,981
Nature Trail	\$53,845
Park Amenities	\$24,805
<hr/>	
Total Construction Budget with Contingency & GC	\$131,631

Playground and Picnic Area

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	New playground, 2-5yrs old	ls	1	\$30,000.00	\$30,000.00
2	Accessible route to playgrounds	sy	150	\$38.00	\$5,700.00
3	Storm Grading and Drainage	ls	1	\$3,500.00	\$3,500.00
4	Storm Structure	ls	1	\$2,500.00	\$2,500.00
5	Site Preparation, Grading, Erosion Control	ls	1	\$2,085.00	\$2,085.00
6	Project Contingency	ls	1	\$4,379.00	\$4,379.00
7	General Conditions, Bonds, Insurance	ls	1	\$4,817.00	\$4,817.00
Playground and Picnic Cost					\$52,981.00

Nature Trails (1,000 LF of existing trail)

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Trail, Landscape/Public Art	ls	1	\$30,000.00	\$30,000.00
2	Trail Head	ls	1	\$2,500.00	\$2,500.00
3	Convert trail signs to Town standards	ls	1	\$12,000.00	\$12,000.00
4	Project Contingency	ls	1	\$4,450.00	\$4,450.00
5	General Conditions, Bonds, Insurance	ls	1	\$4,895.00	\$4,895.00
Nature Trails Cost					\$53,845.00

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Signage, Identification	ls	1	\$4,500.00	\$4,500.00
2	Site Furnishings, (10 Benches/3 Trash/3 Bike Rack)	ls	1	\$16,000.00	\$16,000.00
3	Project Contingency	ls	1	\$2,050.00	\$2,050.00
4	General Conditions, Bonds, Insurance	ls	1	\$2,255.00	\$2,255.00
Park Amenity Cost					\$24,805.00

Umstead Park

Master Plan

Opinion of Probable Construction Cost

August 16, 2012

Restroom/Picnic Shelter	\$10,419
Playground	\$182,636
Youth Baseball Field	\$4,162
Tennis Court	\$5,718
Access Walks	\$95,765
Basketball Court	\$19,694
Park Shelter	\$27,951
Pedestrian Bridges	\$301,109
Park Amenities	\$43,560
<hr/>	
Total Construction Budget with Contingency & GC	\$691,014



Restroom/Picnic Shelter

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Replace drinking fountain with high/low fountain	ls	1	\$2,800.00	\$2,800.00
2	Extend building pad to roof line	sy	120	\$45.00	\$5,400.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$410.00	\$410.00
4	Project Contingency	ls	1	\$861.00	\$861.00
5	General Conditions, Bonds, Insurance	ls	1	\$948.00	\$948.00
Restroom Building Cost					\$10,419.00

Playground

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove/re-install playground outside of floodplain	ls	1	\$100,000.00	\$100,000.00
2	Replace playground surface w/ poured in place	sf	3,500	\$8.00	\$28,000.00
3	Drinking fountain, accessible-high/low	ls	1	\$3,500.00	\$3,500.00
4	Accessible route to playground	sy	350	\$35.00	\$12,250.00
5	Site Preparation, Grading, Erosion Control	ls	1	\$7,188.00	\$7,188.00
6	Project Contingency	ls	1	\$15,094.00	\$15,094.00
7	General Conditions, Bonds, Insurance	ls	1	\$16,604.00	\$16,604.00
Playground Cost					\$182,636.00

Youth Baseball Field

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove outfield fence	lf	350	\$2.50	\$875.00
2	Remove backstop	ls	1	\$2,400.00	\$2,400.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$164.00	\$164.00
4	Project Contingency	ls	1	\$344.00	\$344.00
5	General Conditions, Bonds, Insurance	ls	1	\$379.00	\$379.00
Youth Baseball Cost					\$4,162.00

Tennis Court

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove tennis court	ls	1	\$2,200.00	\$2,200.00
2	Remove lighting	ls	1	\$1,200.00	\$1,200.00
3	Remove fencing	ls	1	\$1,100.00	\$1,100.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$225.00	\$225.00
5	Project Contingency	ls	1	\$473.00	\$473.00
6	General Conditions, Bonds, Insurance	ls	1	\$520.00	\$520.00
Tennis Court Cost					\$5,718.00

Umstead Park
Town of Chapel Hill Parks and Recreation
Umstead Park

August 16, 2012

Access Walks

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove access walk	sy	550	\$2.50	\$1,375.00
2	Accessible route to park facilities	sy	1,400	\$35.00	\$49,000.00
3	Storm Drainage	ls	1	\$25,000.00	\$25,000.00
4	Site Preparation, Grading, Erosion Control	ls	1	\$3,769.00	\$3,769.00
5	Project Contingency	ls	1	\$7,915.00	\$7,915.00
6	General Conditions, Bonds, Insurance	ls	1	\$8,706.00	\$8,706.00
				Access Walks and Trails Cost	\$95,765.00

Basketball Court

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Replace basketball goals	ea	2	\$2,500.00	\$5,000.00
2	Re-surface court, acrylic paint surfacing	ls	1	\$6,500.00	\$6,500.00
3	Minor patching/repair court surface	ls	1	\$2,500.00	\$2,500.00
4	Storm drainage around court	ls	1	\$1,500.00	\$1,500.00
5	Site Preparation, Grading, Erosion Control	ls	1	\$775.00	\$775.00
6	Project Contingency	ls	1	\$1,628.00	\$1,628.00
7	General Conditions, Bonds, Insurance	ls	1	\$1,791.00	\$1,791.00
				Basketball Cost	\$19,694.00

Park Shelter

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Replace picnic shelter, (20'x20')	ls	1	\$22,000.00	\$22,000.00
2	Site Preparation, Grading, Erosion Control	ls	1	\$1,100.00	\$1,100.00
3	Project Contingency	ls	1	\$2,310.00	\$2,310.00
4	General Conditions, Bonds, Insurance	ls	1	\$2,541.00	\$2,541.00
				Park Shelter Cost	\$27,951.00

Pedestrian Bridges

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove upstream pedestrian bridge at Bolin Creek	ls	1	\$6,000.00	\$6,000.00
2	Replace downstream pedestrian bridge at Bolin Creek	ls	165	\$1,400.00	\$231,000.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$11,850.00	\$11,850.00
4	Project Contingency	ls	1	\$24,885.00	\$24,885.00
5	General Conditions, Bonds, Insurance	ls	1	\$27,374.00	\$27,374.00
				Access Walks and Trails Cost	\$301,109.00

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Signage, Identification/Informational	ls	1	\$10,000.00	\$10,000.00
2	Site Furnishings, (10 Benches/8 Tables/6 Trash/2 Bike Rack)	ls	1	\$26,000.00	\$26,000.00
3	Project Contingency	ls	1	\$3,600.00	\$3,600.00
4	General Conditions, Bonds, Insurance	ls	1	\$3,960.00	\$3,960.00
				Park Amenity Cost	\$43,560.00

Oakwood Park

Master Plan

Opinion of Probable Construction Cost

August 16, 2012

Tennis Court	\$102,874
Access Walks	\$21,536
Restroom Building	\$107,993
Park Shelter	\$27,951
Park Amenities	\$24,442
<hr/>	
Total Construction Budget with Contingency & GC	\$284,796



Tennis Court

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Remove court pvmt	sy	800	\$3.00	\$2,400.00
2	Replace court pvmt	sy	800	\$22.00	\$17,600.00
3	Remove court subgrade	cy	400	\$12.00	\$4,800.00
4	Replace court subgrade	cy	400	\$12.00	\$4,800.00
5	Court Surface, acrylic re-surfacing	ea	1	\$6,500.00	\$6,500.00
6	Court amenities	ea	1	\$650.00	\$650.00
7	Remove fence, 12' ht	lf	360	\$2.50	\$900.00
8	New fence, 12' ht poly coated	lf	360	\$32.00	\$11,520.00
9	New pedestrian gates, poly coated	ea	2	\$650.00	\$1,300.00
10	Remove lighting	ls	1	\$3,500.00	\$3,500.00
11	Replace lighting	ls	1	\$20,000.00	\$20,000.00
12	Improve storm drainage around tennis courts	ls	1	\$3,500.00	\$3,500.00
13	Renovate lawn area around tennis courts	ls	1	\$3,500.00	\$3,500.00
14	Site Preparation, Grading, Erosion Control	ls	1	\$4,049.00	\$4,049.00
15	Project Contingency	ls	1	\$8,502.00	\$8,502.00
16	General Conditions, Bonds, Insurance	ls	1	\$9,353.00	\$9,353.00
Tennis Court Cost					\$102,874.00

Access Walks

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Accessible route to park facilities	sy	450	\$35.00	\$15,750.00
2	Storm Drainage	ls	1	\$1,200.00	\$1,200.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$848.00	\$848.00
4	Project Contingency	ls	1	\$1,780.00	\$1,780.00
5	General Conditions, Bonds, Insurance	ls	1	\$1,958.00	\$1,958.00
Access Walks					\$21,536.00

Restroom Building

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	New Restroom/Concession Bldg	ls	1	\$85,000.00	\$85,000.00
2	Site Preparation, Grading, Erosion Control	ls	1	\$4,250.00	\$4,250.00
3	Project Contingency	ls	1	\$8,925.00	\$8,925.00
4	General Conditions, Bonds, Insurance	ls	1	\$9,818.00	\$9,818.00
Restroom Building Cost					\$107,993.00

Park Shelter

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Picnic shelter, (20'x20')	ls	1	\$22,000.00	\$22,000.00
2	Site Preparation, Grading, Erosion Control	ls	1	\$1,100.00	\$1,100.00
3	Project Contingency	ls	1	\$2,310.00	\$2,310.00
4	General Conditions, Bonds, Insurance	ls	1	\$2,541.00	\$2,541.00
Park Shelter Cost					\$27,951.00

Oakwood Park
Town of Chapel Hill Parks and Recreation
Facility Assessment

August 16, 2012

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Additional tree planting/landscape	ls	1	\$4,200.00	\$4,200.00
2	Signage, Identification/Informational	ls	1	\$6,000.00	\$6,000.00
3	Site Furnishings, (4 Benches/2 Tables/2 Trash/2 Bike Rack)	ls	1	\$10,000.00	\$10,000.00
4	Project Contingency	ls	1	\$2,020.00	\$2,020.00
5	General Conditions, Bonds, Insurance	ls	1	\$2,222.00	\$2,222.00
				Park Amenity Cost	\$24,442.00

Burlington Park

Master Plan

Opinion of Probable Construction Cost

August 16, 2012

Parking Lot	\$99,577
Playground and Picnic Area	\$156,540
Access Walks	\$78,645
Park Shelter	\$27,951
Park Amenities	\$31,460
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Total Construction Budget with Contingency & GC	\$394,173



Parking Lot

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	New pavement	sy	2,000	\$24.00	\$48,000.00
2	New curb and gutter	lf	320	\$16.00	\$5,120.00
3	New sidewalk, at parking lot	sy	265	\$35.00	\$9,275.00
4	Concrete wheel stops	ea	4	\$150.00	\$600.00
5	Driveway apron	ea	1	\$3,500.00	\$3,500.00
6	Parking Lot Lighting, by owner	ls	1	\$0.00	\$0.00
7	Pavement Striping-approximately 14 spc.	ls	1	\$1,800.00	\$1,800.00
8	Fine grade parking lot	sy	580	\$1.00	\$580.00
9	Storm Grading and Drainage	ls	1	\$5,000.00	\$5,000.00
10	Storm Pipe, 15" RCP	ls	1	\$2,000.00	\$2,000.00
11	Storm Structure	ls	1	\$2,500.00	\$2,500.00
12	Site Preparation, Grading, Erosion Control	ls	1	\$3,919.00	\$3,919.00
13	Project Contingency	ls	1	\$8,230.00	\$8,230.00
14	General Conditions, Bonds, Insurance	ls	1	\$9,053.00	\$9,053.00
				Parking Lot Cost	\$99,577.00

Playground and Picnic Area

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Playground border	lf	1500	\$14.00	\$21,000.00
2	Playground equipment	ls	1	\$40,000.00	\$40,000.00
3	Replace playground surface w/ poured in place	sf	2,100	\$8.00	\$16,800.00
4	Accessible route to playgrounds	sy	700	\$38.00	\$26,600.00
5	Drinking fountain, accessible-high/low	ls	1	\$3,500.00	\$3,500.00
6	Picnic table pad	ea	5	\$550.00	\$2,750.00
7	Split rail fence	lf	170	\$18.00	\$3,060.00
8	Storm Grading and Drainage	ls	1	\$5,000.00	\$5,000.00
9	Storm Pipe, 15" RCP	ls	1	\$2,000.00	\$2,000.00
10	Storm Structure	ls	1	\$2,500.00	\$2,500.00
11	Site Preparation, Grading, Erosion Control	ls	1	\$6,161.00	\$6,161.00
12	Project Contingency	ls	1	\$12,938.00	\$12,938.00
13	General Conditions, Bonds, Insurance	ls	1	\$14,231.00	\$14,231.00
				Playground and Picnic Cost	\$156,540.00

Access Walks

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Accessible route to park facilities	sy	500	\$35.00	\$17,500.00
2	Storm Drainage	ls	1	\$3,200.00	\$3,200.00
3	Remove concrete pipe/culvert	ls	1	\$2,200.00	\$2,200.00
4	Pedestrian bridge	lf	30	\$1,300.00	\$39,000.00
5	Site Preparation, Grading, Erosion Control	ls	1	\$3,095.00	\$3,095.00
6	Project Contingency	ls	1	\$6,500.00	\$6,500.00
7	General Conditions, Bonds, Insurance	ls	1	\$7,150.00	\$7,150.00
				Access Walks Cost	\$78,645.00

Burlington Park
Town of Chapel Hill Parks and Recreation
Facility Assessment

August 16, 2012

Park Shelter

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Picnic Shelter (20'x20')	ls	1	\$22,000.00	\$22,000.00
2	Site Preparation, Grading, Erosion Control	ls	1	\$1,100.00	\$1,100.00
3	Project Contingency	ls	1	\$2,310.00	\$2,310.00
4	General Conditions, Bonds, Insurance	ls	1	\$2,541.00	\$2,541.00
				Park ShelterCost	\$27,951.00

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Signage, Identification/Informational	ls	1	\$6,000.00	\$6,000.00
2	Site Furnishings, (8 Benches/4 Tables/6 Trash/2 Bike Rack)	ls	1	\$20,000.00	\$20,000.00
3	Project Contingency	ls	1	\$2,600.00	\$2,600.00
4	General Conditions, Bonds, Insurance	ls	1	\$2,860.00	\$2,860.00
				Park Amenities	\$31,460.00

Westwood Park

Master Plan

Opinion of Probable Construction Cost

August 16, 2012

Playground and Picnic Area	\$23,251
Park Shelter	\$27,951
Access Walks	\$18,329
Parking Lot	\$28,333
Park Amenities	\$16,335
<hr/>	
Total Construction Budget with Contingency & GC	\$114,199



Playground and Picnic Area

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Replace playground surface w/ poured in place	sf	1,800	\$8.00	\$14,400.00
2	Playground border	lf	200	\$14.00	\$2,800.00
3	Picnic table pad	ea	2	\$550.00	\$1,100.00
2	Site Preparation, Grading, Erosion Control	ls	1	\$915.00	\$915.00
3	Project Contingency	ls	1	\$1,922.00	\$1,922.00
4	General Conditions, Bonds, Insurance	ls	1	\$2,114.00	\$2,114.00
				Playground and Picnic Cost	\$23,251.00

Park Shelter

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Picnic shelter, (20'x20')	ls	1	\$22,000.00	\$22,000.00
2	Site Preparation, Grading, Erosion Control	ls	1	\$1,100.00	\$1,100.00
3	Project Contingency	ls	1	\$2,310.00	\$2,310.00
4	General Conditions, Bonds, Insurance	ls	1	\$2,541.00	\$2,541.00
				Park Shelter Cost	\$27,951.00

Access Walks

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Access ramp to park	ls	1	\$2,400.00	\$2,400.00
2	Accessible route to park facilities	sy	175	\$35.00	\$6,125.00
3	Replace stair case, (10 risers)	risers	10	\$220.00	\$2,200.00
4	Repair accessible route from Dogwood Drive	lf	125	\$20.00	\$2,500.00
5	Storm Drainage	ls	1	\$1,200.00	\$1,200.00
6	Site Preparation, Grading, Erosion Control	ls	1	\$722.00	\$722.00
7	Project Contingency	ls	1	\$1,515.00	\$1,515.00
8	General Conditions, Bonds, Insurance	ls	1	\$1,667.00	\$1,667.00
				Access Walks	\$18,329.00

Parking Lot

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Parking lot, 2 ADA spaces	ls	1	\$22,000.00	\$22,000.00
2	Wheelstops	ea	2	\$150.00	\$300.00
3	Site Preparation, Grading, Erosion Control	ls	1	\$1,115.00	\$1,115.00
4	Project Contingency	ls	1	\$2,342.00	\$2,342.00
5	General Conditions, Bonds, Insurance	ls	1	\$2,576.00	\$2,576.00
				Parking Lot Cost	\$28,333.00

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Signage, Identification/Informational	ls	1	\$3,500.00	\$3,500.00
2	Site Furnishings, (4 Benches/2 Tables/2 Trash/2 Bike Rack)	ls	1	\$10,000.00	\$10,000.00
3	Project Contingency	ls	1	\$1,350.00	\$1,350.00
4	General Conditions, Bonds, Insurance	ls	1	\$1,485.00	\$1,485.00
				Park Amenity Cost	\$16,335.00

Wallace Plaza

Master Plan

Opinion of Probable Construction Cost

August 16, 2012



Access Walks and Plaza	\$93,320
Park Amenities	\$152,460
<hr/>	
Total Construction Budget with Contingency & GC	\$245,780

Access Walks and Plaza

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Access walk w/ connectivity to service ally	ls	1	\$450.00	\$450.00
2	Repair broken lights	ls	1	\$2,500.00	\$2,500.00
3	Plaza, Shade Structure	ls	1	\$65,000.00	\$65,000.00
4	Flush storm drainage	ls	1	\$5,500.00	\$5,500.00
5	Site Preparation	ls	1	\$3,673.00	\$3,673.00
6	Project Contingency	ls	1	\$7,713.00	\$7,713.00
7	General Conditions, Bonds, Insurance	ls	1	\$8,484.00	\$8,484.00
				Access Walks and Trails Cost	\$93,320.00

Park Amenities

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Signage, Identification/Informational	ls	1	\$15,000.00	\$15,000.00
2	Plaza, Benches/Tables/Trash/Bike Rack	ls	1	\$30,000.00	\$30,000.00
3	Plaza, Landscape/Public Art	ls	1	\$75,000.00	\$75,000.00
4	Site Preparation	ls	1	\$6,000.00	\$6,000.00
5	Project Contingency	ls	1	\$12,600.00	\$12,600.00
6	General Conditions, Bonds, Insurance	ls	1	\$13,860.00	\$13,860.00
				Park Amenity Cost	\$152,460.00

DEMOGRAPHICS

3

The purpose of this section is to examine Chapel Hill's changing population and economy over time in order to establish trends. The variable rates of population growth and economic expansion are factors that profoundly influence everything else. Existing and projected demographic conditions provide a starting point for subsequent analysis.

In September 2003, the US Census Bureau issued an amended 2000 Census count for the Town. It revised the 2000 population from 48,715 to 46,019 and the total number of housing units from 18,976 to 17,393 in order to correct a counting error. Tables 3 and 4 of this section include Census data extrapolated from the higher original Census count and are indicated with an asterisk.

HIGHLIGHTS

- The Town's population is 57,233, according to the 2010 census.
- A commonly asked question is: "Does that Chapel Hill population count include UNC students?" The answer is, "Yes for students who live here". A UNC student living in a dormitory, or in an off-campus apartment in Chapel Hill counts as a Chapel Hill resident; a UNC student living in Chatham County does not.
- Of the Town's population, in 2009 approximately 13,000 students enrolled at UNC give their address as Chapel Hill. This represents about 46 percent of student enrollment.
- The land area within the Town's corporate limits totals approximately 20.9 square miles.
- Between 1990 and 2010 Chapel Hill's population has grown an average of 2.6% per year. Between 2000 and 2010 the population grew by 11,214. This is somewhat due to the annexation of urbanized areas. 42% of the Town's population growth between 2000 and 2009 was due to annexation.
- 4,005 certificates of occupancy were issued by the Town between 2000 and July 2010.
- Average household size in Chapel Hill according to the 2008 American Community Survey is 2.3 persons per household. Overall density in Chapel Hill is 4.2 persons per acre. By comparison, Carrboro's density is 4.9.
- According to the 2008 American Community Survey the age distribution in Chapel Hill is dominated by the 15-29 age group, accounting for nearly 45 percent of the Town's population. Also the Chapel Hill population is aging. From 1970 to 2008, the over-65 age group increased the largest percentage, from 4.4 percent to 9.5 percent, relative to all other age groups.
- The racial composition in Chapel Hill has changed since the 2000 census. Asian and Pacific Islanders surpassed Blacks as the second largest racial group (11.9%) after whites (72.8%). People of Hispanic origin comprise 6.4% and Blacks make up 9.7% of Chapel Hill's population. Countywide, the number of Asian and Pacific Islanders grew by 292 percent from 1990 to 2010, and per-

DEMOGRAPHICS

sons of Hispanic origin grew by 784 percent.

- The stability of the regional economy is apparent by looking at unemployment rates. The unemployment rates for Orange County and the Durham-Chapel Hill MSA were 6.6 percent and 7.9 percent, respectively, in December 2009. North Carolina and the United States had significantly higher 2009 unemployment rates at 10.6 percent and 9.3percent, respectively.
- The local economy is dominated by the University and UNC Hospitals. In 2009 the University employed 11,567 and UNC Hospitals employed 7,768.
- The UNC Main Campus is currently undergoing expansion. In 2001 the campus contained 13.7 million square feet of floor area. The University's Development Plan provides for an additional 7.7 million gross square feet by 2010. This equates to a 45% increase in occupied floor area. The anticipated increase in employee growth by 2010 is 3,884 employees (27%) and the anticipated increase in student growth over the same period is 3,633 (15%).
- In 2009 approximately 37% of UNC faculty and staff were Chapel Hill residents and approximately 62% were residents of the Durham, Chapel Hill, Carrboro area. Since 2000 UNC faculty and staff living in Durham has grown by more than 3%, while those living in Chapel Hill has decreased by 3.6%.
- In 2009 approximately 46% of UNC students gave Chapel Hill as their place of residence. This rises to almost 60% in the Durham, Chapel Hill, Carrboro area. Between 2002 and 2009 the number of students living in Chapel Hill declined by

19.7%, and those who listed 'other' as their address grew by more than 20%.

- The largest employment sector in Chapel Hill in 2008 was educational, health, and social services (45 percent). The next largest employment sector is arts, entertainment and food services (14 percent). Manufacturing accounts for 4 percent of total employment.
- Chapel Hill median family income is high compared to county, regional, state, and national incomes. In 2008 the median family income in Chapel Hill was 142 percent of US median income.
- The percentage of families living below the poverty line in Chapel Hill increased from 6.4 percent to 8.6 percent between 2000 and 2008.
- Chapel Hill's historical population growth has proceeded at a moderate pace except for a few high-growth periods. The most significant of these was the 1982-1984 when the housing stock increased by about 10 percent per year. Throughout the 90's however, annual population growth stayed below 2 percent.
- A characteristic that can be attributed to the presence of the university is the educational attainment of Orange County residents. According to the State Demographer, in 2009 29.5 percent of the County population had earned a graduate or professional degree, compared to the statewide 8.5 percent.

Table 1: Chapel Hill Population, Area and Density 1990-2010

Table 1: Chapel Hill Population, Area and Density			
Year	Estimated Population ²	Area (Sq. miles)	Density (people/acre)
1990	38,872	18.3	3.32
1991	39,765	18.3	3.40
1992	41,524	18.5	3.51
1993	42,918	18.5	3.62
1994	44,470	18.6	3.74
1995	43,549	19	3.58
1996	43,429	19	3.57
1997	43,977	19.9	3.45
1998	44,015	19.9	3.46
1999	44,343	19.9	3.48
2000	46,019	19.9	3.61
2001	48,902	21.1	3.62
2002	50,540	21.1	3.74
2003	51,485	21.1	3.81
2004	51,519	21.3	3.79
2005	52,397	21.3	3.85
2008	55,616	20.9	4.16
2009	56,778	20.9	4.24
2010	57,233	20.9	4.28
Annual Growth Rate 1990-2010	2.6%	NA	NA

Source: NC State Demographics. Chapel Hill Planning Dept., US Census 2010

Table 2: Densities of Selected Municipalities 2009

Municipality	Population	Area (Sq. miles)	Density (Persons/Acre)	Persons/ Household
Carrboro	19,891	6.3	4.9	2.2
Cary	147,270	54	4.3	2.7
Chapel Hill	56,778	20.9	4.2	2.3
Raleigh	384,116	142.4	4.2	2.3
Greensboro	268,917	127.8	3.3	2.3
Burlington	52,156	25.1	3.2	2.4
Durham	234,140	105.6	3.5	2.4
Wilmington	102,207	51.5	3.1	2.1
Asheville	79,973	45	2.8	2.1

Source: NC State Demographics

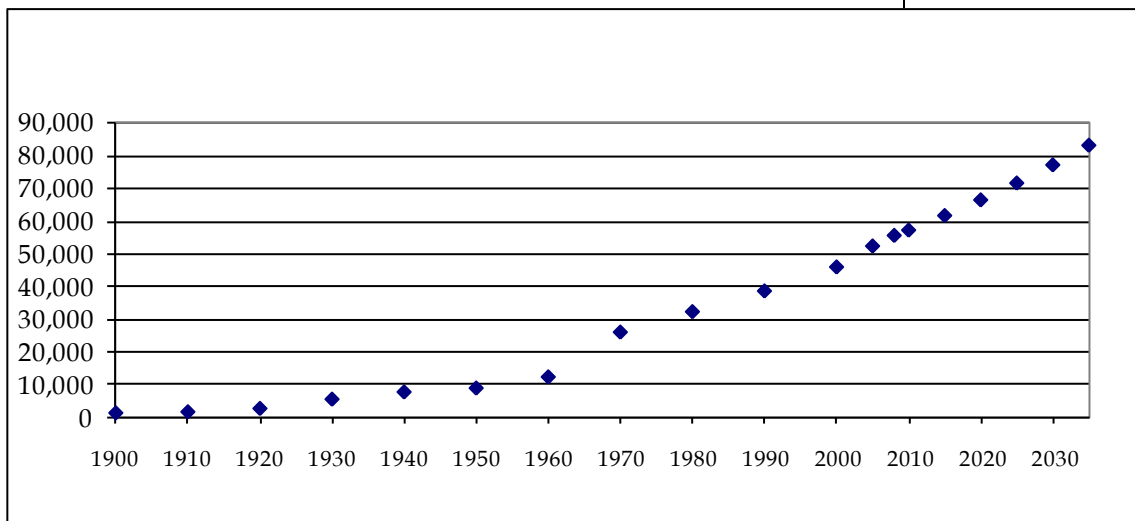
Table 3: Chapel Hill Historical and Projected Population 1900 - 2035

Year	Population	Growth	Annual Growth	Area (Sq. Miles)	Density (Persons/Acre)
1900	1,623	NA	NA	1.3	1.95
1910	1,951	328	2.0%	1.3	2.34
1920	2,972	1,021	5.2%	1.3	3.57
1930	5,796	2,824	9.5%	1.3	6.97
1940	7,995	2,199	3.8%	1.3	9.61
1950	9,177	1,182	1.5%	1.3	11.03
1960	12,573	3,396	3.7%	3.7	5.31
1970	26,199	13,626	10.8%	8.5	4.82
1980	32,421	6,222	2.4%	13.2	3.84
1990	38,719	6,298	1.9%	18.3	3.31
2000	46,019	7,300	1.9%	20.2	3.77
2005	52,397	6,378	2.8%	21.3	3.23
2008	55,616	3,219	2.0%	20.9	4.16
2010	57,233	1,617	1.5%	20.9	4.20
2015	61,656	4,423	1.5%	NA	NA
2020	66,421	4,765	1.5%	NA	NA
2025	71,555	5,133	1.5%	NA	NA
2030	77,085	5,530	1.5%	NA	NA
2035	83,042	5,957	1.5%	NA	NA

Projected ↓

Source: US Census Bureau, NC Office of State Planning
 Estimates in 1970 and later combine Town and UNC population.
 * Projected populations, source: 2035 Long Range Transportation Plan

Figure 1: Chapel Hill Historical and Projected Population 1900-2035



Source: US Census Bureau, NC Office of State Planning

**Table 4: Chapel Hill Projected Population.
2035 Long Range Transportation Strategy and Program**

POPULATION			
2005	2015	2025	2035
58,205	63,446	67,356	69,137
HOUSEHOLDS			
2005	2015	2025	2035
26,160	26,940	29,312	30,266
HOUSING UNITS			
2005	2015	2025	2035
23,000	26,293	34,124	35,558
EMPLOYMENT			
2005	2015	2025	2035
37,831	54,925	71,264	75,174

Source: Chapel Hill Planning Department for use in the Durham-Chapel Hill-Carrboro (DCHC) 2035 Long Range Transportation Plan for the DCHC Urban Area.

Table 5: Chapel Hill Age Distribution 1970-2008

Age Group	1970		1980		1990		2000		2008	
	Estimate	Per-cent	Estimate	Per-cent	Estimate	Per-cent	Estimate	Per-cent	Estimate	Per-cent
0-4	1,645	6.4%	1,086	3.3%	1,598	4.1%	1,754	3.60%	2,364	4.3%
5-9	1,564	6.1%	1,321	4.1%	1,578	4.1%	2,067	4.20%	2,144	3.9%
10-14	1,377	5.4%	1,541	4.8%	1,403	3.6%	2,236	4.60%	2,694	4.9%
15-19	4,423	17.3%	6,060	18.7%	5,747	14.8%	7,876	16.20%	8,246	15.0%
20-24	7,123	27.9%	8,513	26.3%	9,160	23.7%	11,469	23.50%	12,644	23.0%
25-29	2,483	9.7%	3,469	10.7%	4,152	10.7%	4,099	8.40%	4,123	7.5%
30-34	1,366	5.4%	2,169	6.7%	2,587	6.7%	2,835	5.80%	3,573	6.5%
35-39	992	3.9%	1,614	5.0%	2,351	6.1%	2,448	5.00%	2,474	4.5%
40-44	871	3.4%	1,102	3.4%	2,129	5.5%	2,544	5.20%	3,188	5.8%
45-49	862	3.4%	970	3.0%	1,624	4.2%	2,623	5.40%	2,639	4.8%
50-54	668	2.6%	869	2.7%	1,129	2.9%	2,179	4.50%	2,694	4.9%
55-59	541	2.1%	869	2.7%	1,022	2.6%	1,570	3.20%	2,474	4.5%
60-64	482	1.9%	755	2.3%	909	2.3%	1,094	2.30%	1,979	3.6%
>65	1,131	4.4%	2,083	6.4%	3,330	8.6%	3,921	8.00%	5,222	9.5%
Total	25,528	100%	32,421	100%	38,719	100%	48,715	100%	54,972	100%
Median Age	23	N/A	22.9	N/A	25.3	N/A	24	N/A	25.8	N/A

Source: US Census Bureau

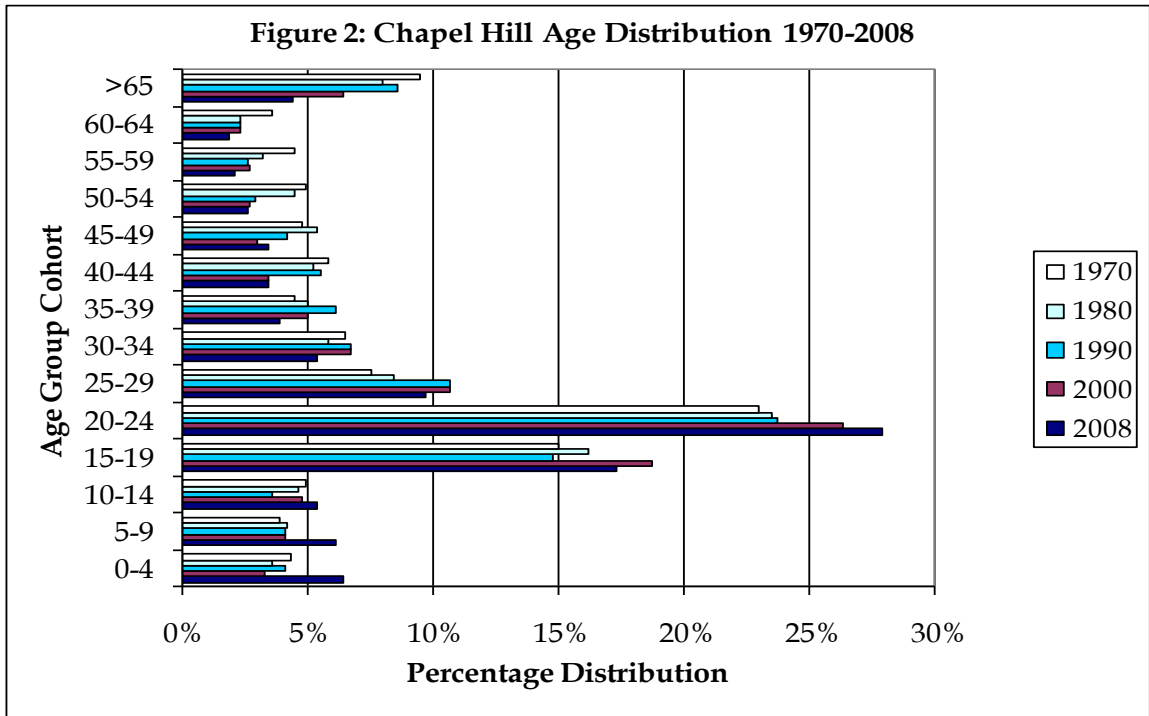


Table 6: Chapel Hill Population Composition by Race & Origin 1980-2010

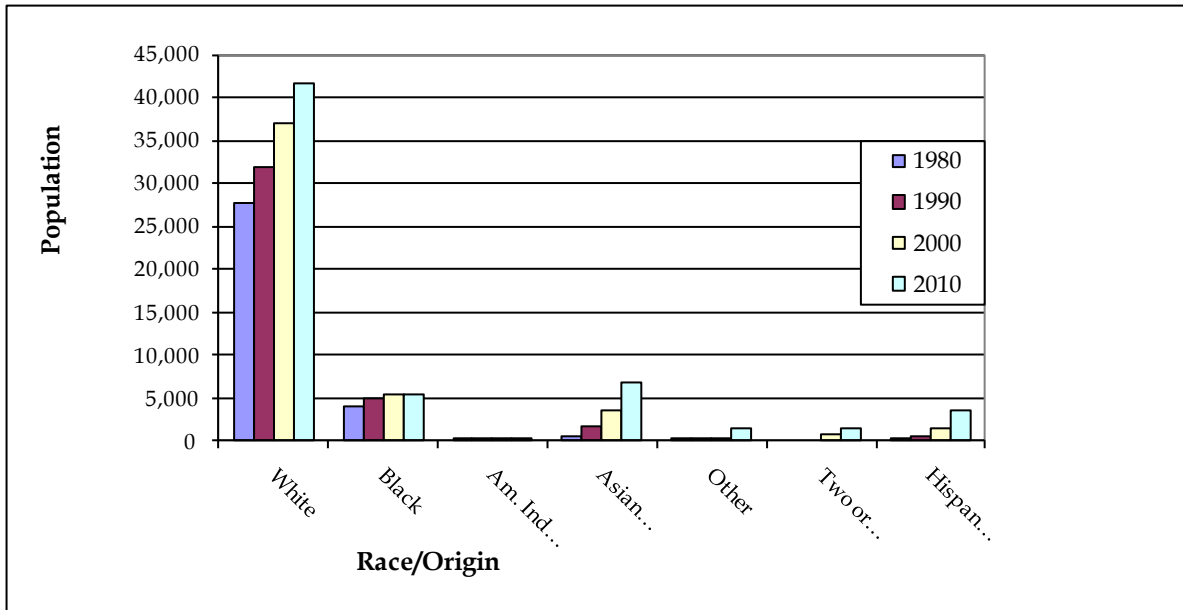
Race or Origin	1980	% 1980	1990	% 1990	2000	%: 2000	2010	%: 2010
White	27,690	85.4%	31,875	82.3%	37,073	76.1%	41,641	72.8%
Black	3,947	12.2%	4,853	12.5%	5,517	11.3%	5,530	9.7%
Am. Indian, Eskimo, or Aleut	77	0.2%	123	0.3%	181	0.4%	176	0.3%
Asian and Pacific Islander	531	1.6%	1,684	4.3%	3,508	7.2%	6,802	11.9%
Other	176	0.5%	184	0.5%	92	0.2%	1,536	2.7%
Two or More Races	-	-	-	-	780	3.20%	1,548	2.7%
Total	32,421	100.0%	38,719	100.0%	47,151	100.0%	57,233	100.0%
Hispanic Origin (any race)	330	1.0%	607	1.6%	1,564	3.2%	3,638	6.4%

Table 7: Orange County Population Composition by Race & Origin 1990-2010

Race/Oriin	1990	%:1990	2000	%:2000	2010	%:2010	% Change 1990 -2010
White	75,806	80.8%	92,272	79.4%	99,495	74.4%	31.2%
Black	14,900	15.9%	16,298	14.0%	15,928	11.9%	6.9%
Am. Indian, Eskimo or Aleut	404	0.4%	457	0.4%	570	0.4%	41.1%
Asian/Pacific Islander	2,311	2.5%	4,865	4.2%	9,064	6.8%	292.2%
Other	430	0.5%	2,312	2.0%	5,341	4.0%	1142.1%
Two or more races	-	-	2,023	1.7%	3,403	2.5%	N/A
Total	93,851	100.0%	116,204	100.0%	133,801	100.0%	42.6%
Hispanic Origin (any race)	1,246	1.3%	5,273	4.5%	11,017	8.2%	784.2%

Source: US Census Bureau, American Community Survey, NC State Demographer

Figure 3: Chapel Hill Population Composition by Race and Origin 1980-2010



Source: US Census Bureau, American Community Survey

Table 8: Orange County Gender Composition 2000 & 2009

	2000		2009	
	Orange Cnty.	North Carolina	Orange Cnty.	North Carolina
Males	47.4%	49.0%	47.4%	48.9%
Females	52.6%	51.0%	52.6%	51.1%
Under 20 years old	27.2%	19.5%	27.5%	27.3%
Over 64 years old	8.4%	12.0%	9.8%	12.4%

Source: US Census Bureau, American Community Survey, NC State Demographer

Table 9: Chapel Hill Gender Composition 1970-2008

Gender	1970	% Total	1980	% Total	1990	% Total	2000	% Total	2008	% Total
Female	12,078	46.1%	17,397	53.7%	21,024	54.3%	26,754	54.9%	29,405	53.5%
Male	14,121	53.9%	15,024	46.3%	17,695	45.7%	21,961	45.1%	25,567	46.5%
Total	26,199	100%	32,421	100%	38,719	100%	48,715	100%	54,972	100%

Source: US Census Bureau, American Community Survey

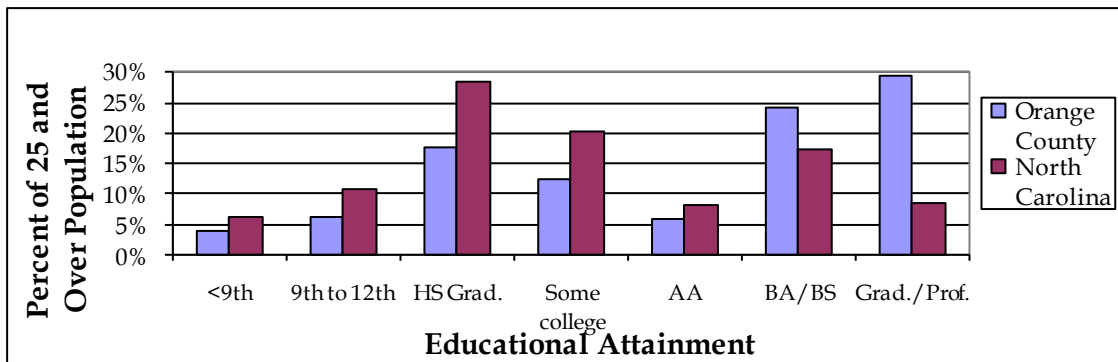
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Table 10: Educational Attainment - Orange County 2000-2009

Educational Attainment	2000	2000 % of total		2009	2009 % of total	
		Orange County	North Carolina		Orange County	North Carolina
		Less than 9th	3,070		4.4%	7.8%
9th to 12th, no diploma	5,545	8.0%	14.0%	4,515	6.3%	10.7%
High school graduate	11,031	15.9%	28.4%	12,757	17.8%	28.6%
Some college, no degree	10,298	14.8%	20.5%	8,815	12.3%	20.4%
Associate degree	3,787	5.4%	6.8%	4,300	6.0%	8.2%
Bachelor's degree	16,945	24.4%	15.3%	17,344	24.2%	17.3%
Graduate or professional degree	18,854	27.1%	7.2%	21,142	29.5%	8.5%

Source: U.S. Census Bureau, American Community Survey

Figure 4: Educational Attainment - Orange County 2009



Source: U.S. Census Bureau, American Community Survey

Table 11: Chapel Hill Family and Household Income 2000-2008

Income Range	2000			2008		
	Households	Families	Non-Family HH	Households	Families	Non-Family HH
< \$10,000	3,210	398	2,843	2,886	577	2,400
\$10,000-\$14,999	1,167	224	957	779	95	684
\$15,000-\$24,999	2,041	633	1,442	2,686	829	1,779
\$25,000-\$34,999	1,876	675	1,145	2,290	812	1,482
\$35,000-\$49,999	2,260	1,058	1,223	1,799	836	973
\$50,000-\$74,999	2,364	1,221	1,117	2,715	1,400	1,340
\$75,000-\$99,999	1,438	1,012	432	2,074	1,320	761
\$100,000-\$149,999	1,793	1,529	270	2,656	1,782	828
\$150,000-\$199,999	978	812	139	1,167	1,004	150
\$200,000 +	855	748	104	2,427	2,181	246
Total	17,982	8,310	9,672	21,479	10,836	10,643
Median Income	\$39,140	\$73,483	\$21,903	\$51,690	\$ 89,507	\$ 28,545

Source: US Census Bureau, American Community Survey

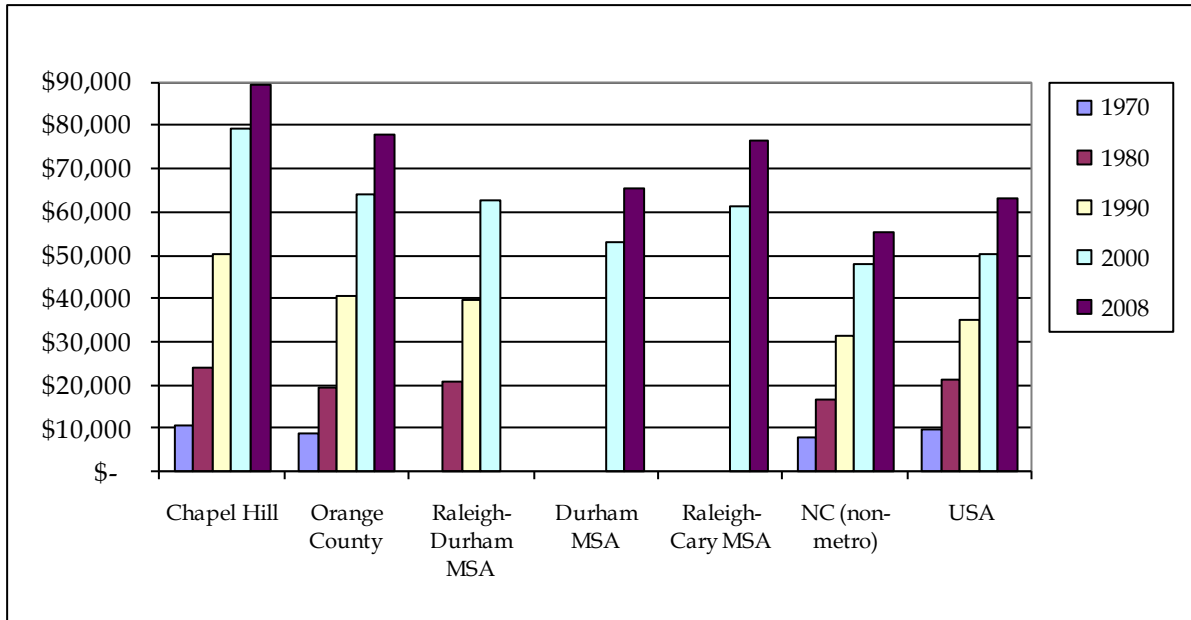
Table 12: Median Family Income, National, State and Local Level 1970-2008

Area	1970	% US Median Income	1980	% US Median Income	1990	% US Median Income	2000	% US Median Income	2008	% US Median Income
Chapel Hill	\$ 10,536	110%	\$ 24,007	114%	\$ 50,217	143%	\$ 79,393	158%	\$ 89,507	142%
Orange County	\$ 8,700	91%	\$ 19,305	92%	\$ 40,685	116%	\$ 64,323	128%	\$ 77,997	123%
Raleigh-Durham MSA	NA	NA	\$ 20,929	100%	\$ 39,723	113%	\$ 62,800	125%	-	-
Durham MSA ¹	NA	NA	NA	NA	NA	NA	\$ 53,184	106%	\$ 65,370	103%
Raleigh-Cary MSA ²	NA	NA	NA	NA	NA	NA	\$ 61,398	123%	\$ 76,424	121%
NC (non-metro)*	\$ 7,774	81%	\$ 16,792	80%	\$ 31,548	90%	\$ 48,000	96%	\$ 55,410	88%
USA	\$ 9,586	100%	\$ 21,023	100%	\$ 35,224	100%	\$ 50,200	100%	\$ 63,211	100%

Source: US Census Bureau, American Community Survey

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Figure 5: Median Family Income in Selected Areas 1970-2008



Source: US Census Bureau, American Community Survey

Table 13: Chapel Hill Families With Poverty Status 1980-2008

	1980	1990	2000	2008
Families with Poverty Status	7.6%	5.8%	6.4%	8.6%

Source: US Census Bureau

Table 14: Chapel Hill Vital Statistics 1970-2008

Year	Population	Live Births	Birth Rate (Births/1000)	Deaths	Death Rate (Deaths/1000)	Natural Increase
1970	26,199	413	15.8	90	3.4	323
1975	28,979	226	7.8	100	3.5	126
1980	32,421	261	8.1	148	4.6	113
1985	34,646	267	7.7	175	5.1	92
1990	38,872	361	9.3	204	5.2	157
2000	46,019	484	10.5	287	6.2	197
2003	51,485	543	10.5	241	4.7	302
2004	51,519	562	10.9	252	4.9	310
2005	52,397	608	11.6	282	5.4	326
2006*	53,416	547	10.2	270	5.1	277
2007*	54,904	637	11.6	308	5.6	329
2008*	55,616	598	10.8	283	5.1	315

Source: "Vital Statistics" NC State Health center for Health Statistics, <http://www.schs.state.nc.us/SCHS>
 Chapel Hill Planning Department. 1970, 1975, and 1980 migration figures do not include population increase due to annexation
 *Contacted statistician at NCSCHS for town data

Table 15: Regional Average Unemployment Rates 1975-2009

Year	Orange County	MSA	USA
1975	4.4%	5.3%	8.5%
1980	4.2%	4.6%	7.2%
1985	2.4%	3.0%	7.2%
1990	2.5%	2.8%	6.2%
1995	1.9%	2.6%	5.5%
1996	1.8%	2.3%	5.8%
1997	1.4%	1.9%	4.9%
1998	1.3%	1.7%	4.5%
1999	1.0%	1.5%	4.2%
2000	1.2%	1.7%	4.0%
2001	2.2%	3.3%	4.8%
2002	2.9%	4.8%	5.7%
2003	2.6%	3.9%	5.7%
2004	2.3%	3.3%	5.4%
2005	3.8%	4.3%	5.1%
2006	3.3%	3.9%	4.6%
2007	3.2%	3.9%	4.6%
2008	4.1%	4.8%	5.8%
2009	6.6%	7.9%	9.3%

Source: NC Employment Security Commission, US Bureau of Labor Statistics

Labor Market Division. YTD data through December

Table 16: Orange County Economic Rankings 2009

	Amount
Average Weekly Earnings (2009)	\$887
Per Capita Personal Income (2009)	\$32,650
Median Household Income (2009)	\$55,460
Taxable sales (Oct. 09)	\$ 74,287,000
Taxable sales (FY 09-10)	\$946,300,000

Source: N.C. Department of Commerce, Orange County Profile 2010

<http://cmedis.commerce.state.nc.us/countyprofiles/profile.cfm>

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Table 17: Orange County Employment and Wages by Sector (1st Quarter 2010)

	Orange County			North Carolina		
	Number Em- ployed	% Total	Average Weekly Wage	Number Employed	% Total	Average Weekly Wage
Total All Industries	59,538	100.0%	\$887	3,726,144	100.0%	\$791
Total Government	30,547	51.3%	\$819	696,176	18.7%	\$875
Total Private Industry	28,991	48.7%	\$680	3,029,967	81.3%	\$792
Agriculture Forestry Fishing & Hunting	134	0.2%	\$652	24,504	0.7%	\$546
Mining	29	0.0%	\$808	2,988	0.1%	\$741
Utilities	140	0.2%	\$1,236	13,459	0.4%	\$1,667
Construction	1,424	2.4%	\$719	172,044	4.6%	\$718
Manufacturing	1,101	1.8%	\$911	428,712	11.5%	\$985
Wholesale Trade	665	1.1%	\$1,094	162,628	4.4%	\$1,106
Retail Trade	5,918	9.9%	\$473	431,530	11.6%	\$453
Transportation and Warehousing	489	0.8%	\$847	120,604	3.2%	\$767
Information	714	1.2%	\$1,049	69,291	1.9%	\$1,269
Finance and Insurance	1,046	1.8%	\$1,600	147,470	4.0%	\$1,760
Real Estate and Rental and Leasing	677	1.1%	\$680	45,851	1.2%	\$681
Professional and Technical Services	2,568	4.3%	\$1,192	183,213	4.9%	\$1,168
Management of Companies and Enterprises	129	0.2%	\$1,414	72,185	1.9%	\$2,035
Administrative and Waste Services	1,159	1.9%	\$693	214,482	5.8%	\$550
Educational Services	827	1.4%	\$674	385,164	10.3%	\$734
Health Care and Social Assistance	4,714	7.9%	\$668	549,355	14.7%	\$741
Arts, Entertainment and Recreation	559	0.9%	\$331	51,523	1.4%	\$534
Accommodation and Food Services	5,155	8.7%	\$297	320,509	8.6%	\$266
Other Services Ex. Public Admin	1,704	2.9%	\$628	91,189	2.4%	\$498
Public Administration	2,581	4.3%	\$884	235,921	6.3%	\$789
Unclassified	70	0.1%	\$1,011	3,521	0.1%	\$1,040

Source: NC Department of Commerce
<http://eslmi23.esc.state.nc.us/ew/EWYear.asp?Report=1>

Table 18: Chapel Hill Employment by Sector 2008

Sector	Employed 2008	Percent
Agriculture	77	0.3%
Construction	582	2.2%
Manufacturing	1,172	4.4%
Wholesale Trade	165	0.6%
Retail Trade	2,205	8.2%
Trans/Warehouse/Utility		0.3%
Information	782	2.9%
Finance/Ins/Real Estate	1,192	4.4%
Prof/Man/Admin	3,215	11.9%
Educ/Health/Soc Service	12,096	44.9%
Arts/Enter/Food Services	3,770	14.0%
Other Services	1,103	4.1%
Public admin	501	1.9%
Total	26,942	100.0%

Source: U.S. Census

Table 19: Orange County's Major Employers By Size¹

Employer	Number of Employees
University of North Carolina	1000+
UNC Hospitals	1000+
Chapel Hill-Carrboro City Schools	1000+
Blue Cross/Blue Shield	1000+
Orange County Schools	1000+
Orange County Government	500-999
Town of Chapel Hill	500-999
Eurosport	500-999
Employers Resource	500-999
Harris Teeter, Inc.	500-999
A Southern Season	250-499
PHE, Inc.	250-499
Carol Woods Attn: Liz Shmitt	250-499
Food Lion LLC	250-499
Wal-Mart Associates Inc.	250-499
Wellspring Grocery	250-499

Source: Orange County Economic Development Commission, 2010

¹ Employers with 300 or more employees

² Source: Town of Chapel Hill and UNC, 2009

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Table 20: UNC Faculty and Staff by Place of Residence , 2009

Place of Residence (based on zip code)	Faculty/ Staff 2000	% in 2000	Faculty/ Staff 2005	% in 2005	% Differ- ence 2000- 05	Faculty/ Staff 2009	% in 2009	% Differ- ence 2000- 09
Apex (SE)	98	1.0%	165	1.5%	0.5%	195	1.6%	0.6%
Bahama (NE)	8	0.1%	8	0.1%	0.0%	11	0.1%	0.0%
Bear Creek (SW)	23	0.2%	25	0.2%	0.0%	26	0.2%	0.0%
Burlington (NW)	149	1.5%	174	1.6%	0.0%	213	1.7%	0.2%
Bynum (S)	19	0.2%	19	0.2%	0.0%	5	0.0%	-0.2%
Carrboro (W)	705	7.2%	801	7.3%	0.0%	907	7.4%	0.2%
Cary (SE)	120	1.2%	248	2.2%	1.0%	340	2.8%	1.6%
Cedar Grove (N)	17	0.2%	20	0.2%	0.0%	27	0.2%	0.0%
Chapel Hill	3,865	39.7%	4,303	39.0%	-0.8%	4,451	36.5%	-3.3%
Durham (NE)	1,447	14.9%	1,899	17.2%	2.3%	2,259	18.5%	3.6%
Efland (NW)	52	0.5%	73	0.7%	0.1%	87	0.7%	0.2%
Elon College (W)	10	0.1%	26	0.2%	0.1%	26	0.2%	0.1%
Fuquay-Varina (SE)	4	0.0%	13	0.1%	0.1%	22	0.2%	0.1%
Garner (SE)	12	0.1%	13	0.1%	0.0%	13	0.1%	0.0%
Graham (NW)	278	2.9%	348	3.2%	0.3%	424	3.5%	0.6%
Greensboro (NW)	42	0.4%	55	0.5%	0.1%	58	0.5%	0.0%
Haw River (NW)	36	0.4%	62	0.6%	0.2%	67	0.5%	0.2%
Hillsborough (N)	361	3.7%	432	3.9%	0.2%	445	3.6%	-0.1%
Holly Springs (SE)	-	-	-	-	-	19	0.2%	-
Hurdle Mills (N)	-	-	-	-	-	25	0.2%	-
Liberty(W)	12	0.1%	25	0.2%	0.1%	27	0.2%	0.1%
Mebane (NW)	182	1.9%	257	2.3%	0.5%	322	2.6%	0.8%
Moncure (S)	31	0.3%	33	0.3%	0.0%	28	0.2%	-0.1%
Morrisville (SE)	20	0.2%	75	0.7%	0.5%	79	0.6%	0.4%
Oxford (NE)	10	0.1%	13	0.1%	0.0%	12	0.1%	0.0%
Pittsboro (S)	478	4.9%	534	4.8%	-0.1%	569	4.7%	-0.3%
Raleigh (E)	243	2.5%	393	3.6%	1.1%	497	4.1%	1.6%
Rougemont (NE)	13	0.1%	28	0.3%	0.1%	24	0.2%	0.1%
Roxboro (N)	28	0.3%	38	0.3%	0.1%	37	0.3%	0.0%
Sanford (S)	62	0.6%	71	0.6%	0.0%	76	0.6%	0.0%
Saxapahaw (W)	10	0.1%	10	0.1%	0.0%	10	0.1%	0.0%
Siler City (SW)	67	0.7%	94	0.9%	0.2%	113	0.9%	0.2%
Snow Camp (W)	80	0.8%	103	0.9%	0.1%	115	0.9%	0.1%
Timberlake	-	-	-	-	-	28	0.2%	-
Wake Forest	-	-	-	-	-	34	0.3%	-
No Local Address On File	556	5.7%	27	0.2%	-5.5%	601	4.9%	-0.8%
Other	687	7.1%	651	5.9%	-1.2%	11	0.1%	-7.0%
Total	9,725	100%	11,036	100%	NA	12,203	100%	NA

Source: UNC Office of Institutional Research, and Registrar's Office

1. Includes academic and non-academic employees.

2. Travel direction from Chapel Hill

Table 21: UNC Students by Place of Residence , 2009

Place of Residence (Based on Zip Code)	Students 2002	% in 2002	Students 2005	% in 2005	% Differ- ence 2002- 2005	Students 2009	% in 2009	% Differ- ence 2002- 09
Chapel Hill	16,544	65.3%	15,294	56.1%	-9.2%	13,189	45.6%	-19.7%
Durham	1,936	7.6%	2,268	8.3%	0.7%	2,125	7.3%	-0.3%
Carrboro	2,587	10.2%	1,758	6.4%	-3.8%	1,693	5.9%	-4.4%
Raleigh (E)	746	2.9%	1,062	3.9%	0.9%	1,428	4.9%	2.0%
Cary (SE)	390	1.5%	452	1.7%	0.1%	660	2.3%	0.7%
Greensboro (NW)	187	0.7%	263	1.0%	0.2%	439	1.5%	0.8%
Morrisville (SE)	105	0.4%	157	0.6%	0.2%	137	0.5%	0.1%
Hillsborough (N)	141	0.6%	154	0.6%	0.0%	132	0.5%	-0.1%
Apex (SE)	128	0.5%	146	0.5%	0.0%	201	0.7%	0.2%
Pittsboro (S)	110	0.4%	112	0.4%	0.0%	112	0.4%	0.0%
Burlington (NW)	74	0.3%	73	0.3%	0.0%	119	0.4%	0.1%
Mebane (NW)	67	0.3%	67	0.2%	0.0%	84	0.3%	0.0%
Sanford (S)	59	0.2%	63	0.2%	0.0%	63	0.2%	0.0%
Graham (NW)	54	0.2%	62	0.2%	0.0%	50	0.2%	0.0%
Garner (SE)	25	0.1%	35	0.1%	0.0%	26	0.1%	0.0%
Siler City (SW)	14	0.1%	25	0.1%	0.0%	17	0.1%	0.0%
Efland (NW)	18	0.1%	23	0.1%	0.0%	11	0.0%	0.0%
Roxboro (N)	14	0.1%	16	0.1%	0.0%	22	0.1%	0.0%
Snow Camp (W)	13	0.1%	15	0.1%	0.0%	10	0.0%	0.0%
Oxford (NE)	14	0.1%	12	0.0%	0.0%	17	0.1%	0.0%
Rougemont (NE)	6	0.0%	11	0.0%	0.0%	7	0.0%	0.0%
Bahama (NE)	11	0.0%	8	0.0%	0.0%	9	0.0%	0.0%
Liberty(W)	5	0.0%	8	0.0%	0.0%	10	0.0%	0.0%
Cedar Grove (N)	10	0.0%	7	0.0%	0.0%	5	0.0%	0.0%
Haw River (NW)	9	0.0%	6	0.0%	0.0%	6	0.0%	0.0%
Bear Creek (SW)	3	0.0%	2	0.0%	0.0%	3	0.0%	0.0%
Moncure (S)	3	0.0%	2	0.0%	0.0%	2	0.0%	0.0%
Saxapahaw (W)	4	0.0%	2	0.0%	0.0%	12	0.0%	0.0%
Bynum (S)	2	0.0%	1	0.0%	0.0%	0	0.0%	0.0%
No Local Address On File	9	0.0%	13	0.0%	0.0%	4	0.0%	NA
Other	2,050	8.1%	5,159	18.9%	NA	8,323	28.8%	NA
Total	25,338	100.0%	27,276	100.0%	NA	28,916	100.0%	NA

Source: UNC Office of Institutional Research, and Registrar's Office

1. Includes all students with a Chapel Hill address (on-campus, off-campus, and outside Chapel Hill Town Limits).
2. Travel direction from Chapel Hill

Figure 6: UNC Employees and Students: Where They Live in 2009.
 Approximately 62% of UNC Employees and 59% of UNC students live in Durham, Chapel Hill and Carrboro.

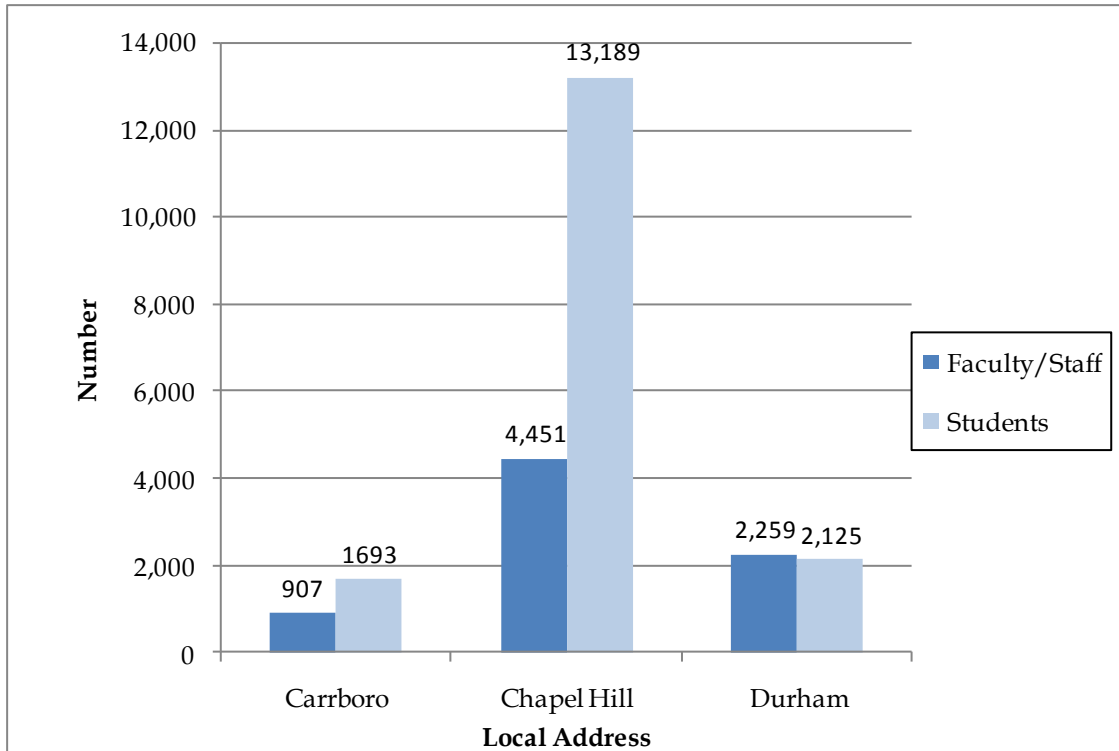


Figure 7: Locations outside of Durham, Chapel Hill and Carrboro with more than 50 UNC faculty/staff or students in 2009.

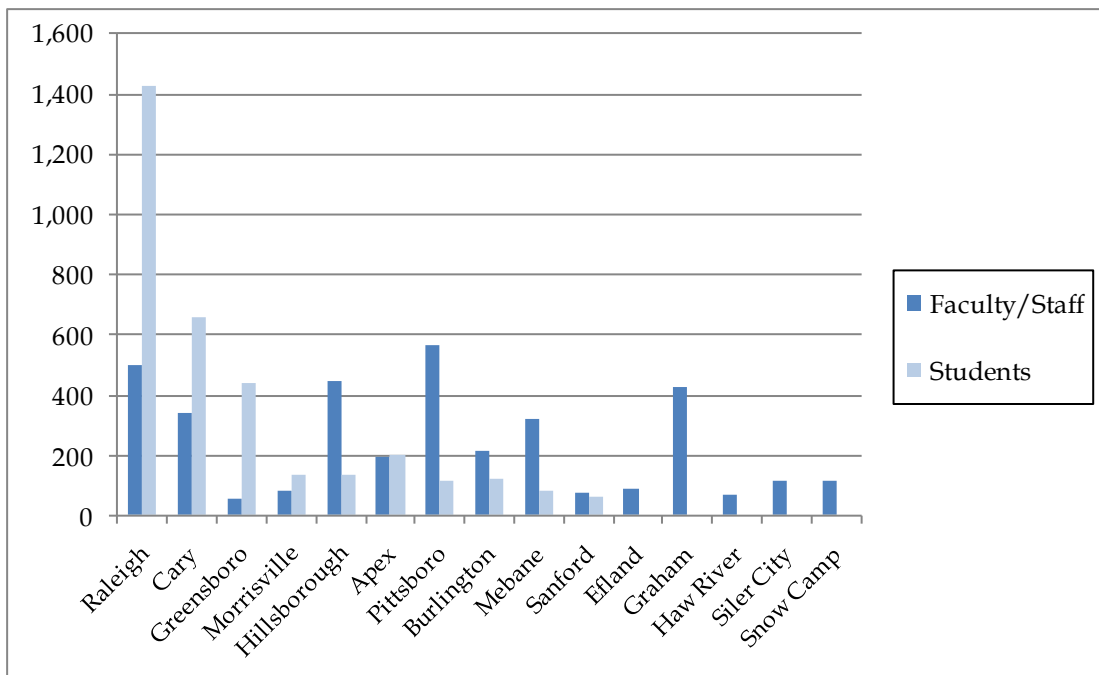


Table 22.1: UNC Population 1990-2009: Student Body, Employees, & Hospital Employees

Year	Students	UNC Staff ¹	UNC Hospital Staff ²
1990	23,852	8,289	4,203
1991	23,794	8,415	4,556
1992	23,944	8,728	4,660
1993	24,299	8,893	6,326
1994	24,463	9,065	6,227
1995	24,439	9,200	6,259
1996	24,141	9,445	4,914
1997	24,189	9,564	4,855
1998	24,238	9,619	5,082
1999	24,605	9,381	4,863
2000	24,872	10,086	5,189
2001	25,464	10,111	5,855
2002	26,028	10,115	5,473
2003	26,359	10,676	6,819
2004	26,878	10,935	6,853
2005	27,276	11,036	6,475
2006	27,538	10,371	7,054
2007	28,136	10,685	7,565
2008	28,567	11,145	7,467
2009	28,916	11,567	7,768
Avg. Annual Change 1990-2009	1.3%	2.2%	4.1%

Source: UNC Office of Institutional Research, UNC Hospital, and UNC Human Resources/Public Affairs

1. Includes full-time permanent staff (academic and non-academic)

2. Includes permanent and temporary, part-time and fulltime staff

Table 22.2: 2005-2010 Employment in Chapel Hill

Year	Employees
2005	36,719
2010	42,521

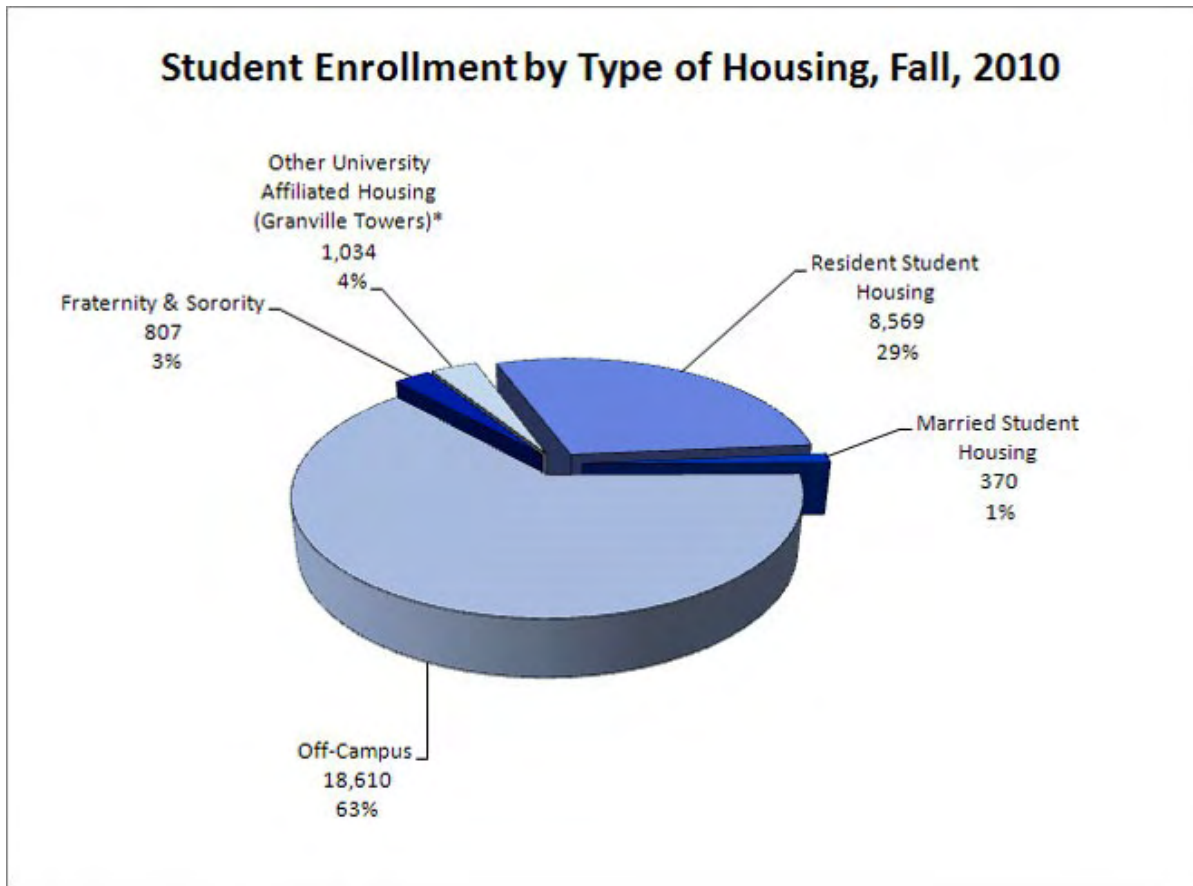
Source: Durham, Chapel Hill, Carrboro MPO geocoder.

Table 22.3: 2010 UNC Student Enrollment by Type of Housing

	Male		Female		Total	
Resident Student Housing	3,525	12%	5,044	17%	8,569	29%
Married Student Housing	208	1%	162	1%	370	1%
Off-Campus	7,454	25%	11,156	38%	18,610	63%
Fraternity & Sorority	446	2%	361	1%	807	3%
Other University Affiliated Housing (Granville Towers)	450	2%	584	2%	1,034	4%
Total	12,083	41%	17,307	59%	29,390	100%

Source: NCHED A-2 (Student Housing Report), Fall 2010

Figure 8: 2010 UNC Student Enrollment by Type of Housing



Source: NCHED A-2 (Student Housing Report), Fall 2010

Table 23: UNC Main Campus Development Plan 2010

Facilities	Square Feet
Existing Campus Development, Gross	13,700,000
Proposed Development, Gross (45% Increase)	7,904,979
Existing Buildings Demolished, Gross	235,000
Net Increase, New Occupied Floor Area (37% increase)	3,900,000

Breakdown of Development Plan	
Classification	Square Feet
Academic	1,818,486
Cultural	140,629
Housing	923,163
Infrastructure	312,382
Office	460,200
Parking	1,950,700
Research	787,400
Student Life	339,699
UNC Health Care	961,350
UNC Athletics	210,970
Total	7,904,979

Source: UNC Development Plan, Traffic Impact Assessment January, 2010

Table 24: UNC Main Campus Development Plan Anticipated Employee Growth

	2000	2010	2000-2010
Number of Employees	14,303	18,187	3,884
Employees on Main Campus	13,016	16,550	3,534
Employees off Main Campus	1,287	1,637	350
Growth Rate			27%

Source: UNC Development Plan, Traffic Impact Assessment June 2006

Table 25: UNC Main Campus Development Plan Anticipated Student Growth

	2000	2010	2000-2010	Growth Rate
Number of Students	24,872	28,505	3,633	15%
Commuting Students	17,628	19,223	1,595	9%
Resident Students	7,244	9,282	2,038	28%

Source: UNC Development Plan, Traffic Impact Assessment June 2006

Verbatim Responses from Survey Comment Section

- Please keep at risk social services, e.g. men's homeless shelter away from parks and recreation facilities for public well-being and safety.
- My children always played in their own yard or in the school yard close by our home. Other than Little League Baseball, we never used city parks.
- They are wonderful
- Thanks for doing this survey!
- Excellent swimming pools. Lovely trails from Estes Street swimming pool
- For the amount of money generated by the high property taxes, I think the recreation and entertainment is outdated, limited, and in very poor condition.
- Would love to see an archery range; or a bridge where one can use a bow and arrows at downward targets. Of course supervised, unless a test was made to let a group of educated personnel use a range.
- It would be great if recreational areas were reachable on roads that had bike lanes. A dedicated paved greenway for biking from the Cedar Falls Park to downtown would be wonderful!
- Re - community center climbing Brelan does a wonderful job getting kids into climbing Rushdee is great!
- The main problem is that the Chapel Hill Bus Routes are not set up to provide easy and convenient access to the public parks, & this needs to be fixed. Example, a student at East Chapel Hill High has to take TWO buses--including one transfer--to get to recreational activities at the Community Center, as there is currently no bus route that goes straight down Weaver Dairy Road to Franklin Street & Community Center--obviously this "hassle factor" is an obstacle to wider use of the Community Center by teenagers & senior citizens; getting a bus ride from Weaver Dairy Road to art class at Lincoln Center is definitely NOT convenient either
- Very much enjoy the open space available.
- More activities (i.e. dance, tennis, gymnastics) for young children ages 3 - 7.
- Put a light or crosswalk @ MLK and Stateside (old) so we can get to Homestead Park safely.
- The parks are an important resource for our community. I don't use them much, but I support by keeping them attractive.
- I wish there were more trash cans and benches on Booker Creek Trail.
- More inclusion opportunities for individuals with DD. More "buddy programs" for individuals with DD like they have in Durham.
- Although I appreciate the good work the rec dept does in maintaining the greenways, I much prefer the excellent diversity of programs offered by the Carrboro rec dept. I have no interest in competitive sports, so the Chapel Hill rec dept has become almost irrelevant for me ever since the wonderful adult hiking and adventure trips were ended in 1996. I really miss those trips!
- We love the new swimming facility at Homestead Park. It would be great if the pool on Estes Dr could be renovated. During the winter monthes these are very popular.
- Love Homestead Pool.
- Too dangerous to ride bikes to any nearby park. Bike lanes are a joke.
- The restrooms at Forest Hills Park are nauseating.
- Why don't you learn from China? Build some primitive, simple, practical, and long-lasting exercise equipment for adults and seniors? It will improve quality of life and health too!
- The tennis courts at Cedar Falls Park are kept up very well. Also like the new trail markers.
- Outdoor concerts in park please! Not going downtown for concerts!
- frisbee golf course is great. Need more hours and ropes at climbing wall to reduce crowds
- What we do in our leisure time does not relate to C.H. parks and recreation in any way
- We are new to the area but look forward to using the parks and recreation facilities
- Yoga in the park is popular in Raleigh and other places. Would be nice here too!
- due to age of family members we don't often do recreation together. This makes your responses underestimate our usage of facilities indoor and out. I have no doubt that open spaces can help attract

groups which can increase crime esp. young jobless people. Organized activities give individuals a sense of self and purpose and reduce criminal activity

- I would like to have indoor facilities to walk during the summer months or cold weather
- keep it up
- The baseball fields are improving, but drainage is an issue. The athletic programs for kids need to be better managed.
- I enjoy the Booker Creek area. It has accessible walking area for my wheelchair. I go with a friend and it is most enjoyable.
- Please add some artificial turf and multi-use fields like the one proposed at Cedar Falls.
- It is extremely hard to enroll in swim classes. The signage at North Forest Hills Park is in very poor repair.
- Thank you for all you do. Being outdoors helps keep me sane.
- no
- I found it difficult to answer the questions because I don't know where all the parks are in Chapel Hill. Need more publicity
- copy the model of Boulder, Colorado. Create a newsletter for frequent trail users. Volunteer to help with upkeep
- usually find facilities are well maintained
- summer concerts should be in the parks like they were several years ago. They suck being on top of the parking deck
- mostly use Dry Creek Trail because the only "park" I can walk to or bike to and its pretty limited though nice for what it is. Not practical for small children or grandparents and we can't walk to Cedar Falls from Spring Creek
- Put backs on the benches! Make better playgrounds similar to Burlington's Beth Schmidt Park.
- Chapel Hill parks are beautiful and well maintained. A great addition to living here!
- Please give us more interesting parks and green spaces for our young children.
- We don't use parks, but used to with our children. Don't feel qualified to complete.
- I regret that I do not use the department's services enough to make my responses useful. I especially enjoy Bolin Creek Trail and North Hills Park!
- Have no information to share with you. I do not use the parks or trails but they are necessary for others.
- I would like information regarding what is available in Chapel Hill
- preserve green spaces as much as possible
- More land should be dedicated to greenways, parks and open space-too many trees are being cut down for developments of roads and utilities. We also need more bike paths and natural trails
- No put ??? not chemical(?) lawn - less water for the grass Thanks
- Thank You!
- Feel programs should cater to young people. Adults should be able to take care of their own needs.
- We used them a great deal when our children were young. The person answering the questions is now in a wheelchair.
- More greenways are needed in town, especially in North Chapel Hill.
- Most of the time I spend outdoors, I walk in my neighborhood or work in my yard. I am answering this survey to save you the expense of sending a third request!
- These resources are crucial to our physical and mental health.
- Paved paths accommodate bikes, wheelchairs etc. However, it is nice to have natural trails too. Don't pave everything. We pick up litter on much used paths. Be sure receptacles are available.
- Connect sidewalks so it's easier to walk, bike, and take a stroller throughout Chapel Hill.
- All of the above are good for people in the community. I rarely use them-
- Parking lot needs paving at the Weaver Dairy park badly
- Thanks for Polin Creek Trail and Little League Baseball
- Please fix the net on tennis court number 2 at Cedar Falls park. It would really help with the availability of courts on the weekend. Thanks!

- Love the facilities (parks) in Chapel Hill. After schools, this is the next most important thing in a community.
- There's a good variety of facilities in the area. More trails connecting neighbors would be great.
- In my opinion parks could be improved by restaurants (like they do in Europe) where people can socialize after exercising.
- There needs to be better monitoring of teenagers at community centers - I would go to these places more if I was not afraid of being harmed by the teenagers who hang-out there without adult supervision.
- n/a
- Please improve the tennis courts at Phillips and Cedar Falls. Thank you.
- Open spaces, parks, and greenways are an invaluable asset to any community.
- We support Chapel Hill parks, greenways and recreation facilities
- We love the parks in Chapel Hill! Well maintained and very beautiful. I have one complaint: Soccer players use the tennis courts sometimes...post signs saying they can't do that and make lighting more available for night time use.
- I am not very familiar with the parks etc, but I do value that we need such parks, greenways, and recreation facilities for a full life.
- All of these activities important to many esp those disadvantaged
- DO NOT pave the natural trails in Greenwood Forest/Battle Park - We need many more FREE basketball gyms - Need more public tennis courts
- We frequently use the dog park at Homestead Park. It would be nice if we could get the water turned on a little earlier, especially when we get have a warm spring. Also, it would be amazing to get a larger area fenced in! We sometimes go to Carrboro's Anderson Park just because the dog park is larger. Possibly plant some grass or something to keep the park from becoming a mud hole. But overall, thank you for providing great parks!!!
- Please enhance CH with parks, trails, and well-kept greenways. I wish I could enjoy them as I used to. CH is a great place to live.
- Thank you for all your work. We live in a nice place and often times don't hear Thank you. So, thank you for all that you do!
- scootering on paved trail 30 times and extremely interested
- I love the greenways and use them daily to bike commute to work.
- Need more swimming lessons open and better coach.
- Battle Park is the best. I love it. I would like to see more paved trails away from traffic similar to what you find in Boulder, CO.
- Played rugby 10 times and extremely interested. Thanks for supporting rugby fields.
- I know the parks and green areas are lovely and wish we had more time to use them, Maybe when we retire.
- Played table tennis 20 times. Extremely interested. Very user friendly.
- My wife and I got into a fight about whether the last section referred only to Parks and Rec Facilities.
- Cedar Fall, poor rating of parking lot.
- P & R has focused on public arts to the exclusion of other cultural attributes such as town and regional history. Please resurrect the Chapel Hill museum. Thank you.
- Thanks to all of you for what you do to make our town a great place to live and play.
- If our young grand children lived here we would make more use of the parks and recreation facilities.
- Survey, great idea. Expansion of green space is critically important.
- More paved bike trails connected. More bike lanes.
- Thank you
- Would be geat if more summer camp available for kids. Like the programs in Orange County P&R
- I have a 3/4 acre lot with lawn and veg garden ~ I don't need a park.
- Likes swinging and sliding at the local park. Still a little young for participation in athletic events.
- We need more greenways to reduce automobile traffic and increase safety for bicyclers and walkers.
- Good job, nice people, part of Chapel Hill's attraction.
- Thanks for all your work.

- We visit community center pools and play tennis in a park very frequent. We don't mind to pay user fee as long as it is reasonable. Tennis courts at Euphrates Elementary School needs improvement.
- Install webcams at the dog parks. Disabled people need more consideration at Homestead pool. No soap in the showers - disgusting. Too many lessons in program pools, makes it very hard, sometimes impossible for disabled and elderly people to do vital exercise and physical therapy. Raise price of annual pass, restore soap, cut back on scheduled and unscheduled lessons in the pool.
- I walk with a walker so don't go walking in the park.
- Parks and trails are great - need more.
- I avoid certain parks due to suspicious circumstances. Disheveled homelessness, long term squatters, unsanitary restrooms. Am currently seeking a safe place to long bike riding. Unsafe on roads despite the nice purple signs.
- My 6 year old was not able to use the 0-4 scale.
- Restrooms badly need cleaning and improvement.
- Went boating 5 times very interested. I lived in several areas of US including Chicago and Boston. Chapel Hill is a clear winner regarding parks and recreation facilities. Great job.
- Lots of parks, walking trails, rec facilities. This was highly on my list when considering moving to NC.
- We love the trails and bike paths.
- Enjoy walking trails and park spaces.
- Walking the Bolin Creek Trail is a wonderful way to relax.
- We live on the greenway on Elizabeth Street and love it. The pools are great too. Thanks
- I Love going to the park and jogging. I hope it doesn't go away.
- The parking lot at Cedar Falls Park has been in need of repair for years. It has huge potholes. It is a disgrace considering the amount of use it gets.
- Sorry I cannot help much. I don't know what is available. Are there maps for hiking trails?
- I think it is great to have parks and other facilities for those who can use them. At Carroll Woods where I live we have many concerts and other activities.
- I definitely enjoy Bolin Creek Greenway, but other trails should be more well marked such that they can be seen from the road.
- Excellent swimming pool Homestead aquatic facility CHP&R also very good Arobic-Aquatic excellent instructors. Sauna and hot tub will be good.
- I love the greenway connection MLK Blvd & Elizabeth St / Community Center ~ Great Job!
- We are very upset the park & rec board approved the IFC Shelter SUP next to Homestead Park. Having all at risk social issues are undone park provides no balance for our community.
- I find it difficult to keep up a consistent trail/path to run on without encountering construction, large dogs without leashes, or mountain bikes - please keep natural trails for people to enjoy! Carrboro (Bolin Creek) and Durham (Duke Forest) are good examples!
- With the sour economy parks and local facilities are even more important than before. Please expand!
- I very much enjoy the path between the community center and MLK. It is very well maintained.
- Homestead playground needs some help. Has gone downhill.
- Love the community center. Glad you built Homestead aquatics to ease the load. Thanks for your reduced rates.
- Daughter plays club soccer. Compared to other towns, Chapel Hill is lacking in soccer facilities. Many soccer fields we have are frequently closed when teams need to practice.
- Thank you. Chapel Hill parks and trails are excellent. We enjoy them almost every day.
- I do not use the facilities but I understand the need for them. However I am taxed out. Will have to move if taxes continue to rise.
- We could use more places to meet for pickup soccer.
- We cannot afford tax increases. Do not want increase in taxes!
- I notice that the playground at the community center is very heavily used; could be much larger.
- I like open spaces and greenways.
- We do not use the closest park due to its location close to the various drug and women's shelters.

- Using greenways is a problem because of the high number of dog owners who allow their dogs to run off leash. We miss the Chapel Hill museum.
- Although we have greatly enjoyed using the parks we now are physically able to do so. We especially enjoyed outdoor plays and concerts.
- Extend Bolin Creek Greenway. Build better bike pads for transportations purposes. I would love to bike along Estes Drive but to do so is to take your life in your hands.
- I love parks, etc. that are around Chapel Hill. I wish there were more softball fields and leagues in this area. I have to play Raleigh to find a good men's league.
- Fees, if any, need to be low to serve the public & paid for in taxes. Proud of our facilities esp. new one off Homestead.
- My kids would love to use more indoor basketball courts and nature trails.
- Chapel Hill P&R is a great resource for all citizens. Very important that it is well funded.
- The greenway currently being built connecting teh James Taylor Bridge & Arboretum is having a net negative effect ~ please be more ecofriendly (natural trails)!
- The intention is good but the questionnaire is far too complicated
- My property backs up to a greenway and although it has mostly been positive experience, there are negatives - noises (people) late at night when closed and occasional motor vehicles on it.
- It a blessing to have these available.
- Great to have so many natural areas. We walk our dog in Pritchard Park every day. Would love more off-road trails for biking.
- Love walking, running, biking trails.
- Interested in unpaved natural trails, not paved trails. Interested in preserving the quiet undisturbed natural areas, not in increasing fast traffic in these areas. Each has its place. There are plenty of places for sports activities and not enough secluded areas. I spend more time in state parks and in Durham and Raleigh than I do in Chapel Hill. That said, I love Battle Park and Bolin Creek area, just as they are. Please don't pave anything else.
- Extremely interested in kayaking.
- My primary exercise is running/walking. Chapel Hill's natural and paved trails in parks are inviting venues for this activity.
- Softball/baseball fields should be left unlocked so they can be played on.
- Need better trails. I live in Chapel Hill but run exclusively in Durham, Chatham, Wake, the American Tobacco Trail. Training for marathon.
- Age restricts activities
- Thanks for clean, great, free parks!
- I am sorry, just not an outdoorsy person. Perhaps not the best judge of our park/recreation areas.
- My family love the location, activities and maintenance of Chapel Hill Parks. It is a blessing for the community.
- grants/donations no renaming. Dog poop station/trash cans plus fine citizens who don't clean up. No smoking signs. signs should post fines and citizens can take picture of smoker to send in, which results in fine.
- Keep up the good work.
- More bike paths, more nature trails
- Grandchildren use playgrounds which are excellent. Thank you.
- I love parks.
- Enough Art already. More natural space for outdoor enjoyment. Better to buy space for a park of some kind where the movie theater used to be at Whole Foods.
- My husband uses Cedar Park for Tennis Courts and backboard and trails. Trails are not in good condition, they need repair. Greenways are wonderful, paved or unpaved.
- I am elderly, have physical limitation. I've used parks in other years with visiting grandchildren. They loved Umstead.
- It would be great to have more facilities to rent for events like kids parties.
- Need more/longer climbing wall hours.

- It would be nice to have open green/public space closer to downtown. Also all parks and community centers should be accessible by bus 6 days a week. Not all of us drive.
- The employees are not always very friendly. They also have too much of "this is the way we do it. IF you don't like it, too bad."
- Thank you for making Chapel Hill such a wonderful place to live.
- Apparently they do a great job but with growing pop. there could do more - especially for older people. I use the YMCA for most activities.
- Daily users of trails around public library. Hope these are maintained/preserved after library expenses.
- It would be nice to know what is available for recreation.
- It is the best.
- Looking forward to th completion of Weaver Dairy Road project so that we can bike safely.
- No instruction on how to use a sealing dot!. I've never heard of it and no clue how to seal the survey .. other than tape.
- I love the Community Park where you can stroll the paths and gardens and then stop to rest and watch the children play
- I would love to see the Bolin Creek Trail extended to connect with existing green space! (Umstead Park, etc)
- Chapel Hill could use more nature trails and undeveloped land to help residents get away from the city!
- Chapel Hill needs a public space or park downtown
- The parks in Chapel Hill, in particular those that are "under-developed" and offer dirt trails and large areas of unaltered woods and fields, are a highlight of this town and one that I HIGHLY value. Thank you for protecting and enhancing this precious resource!
- Have enjoyed them.
- Ideally, there would be a very large park with a more extensive trail system than say Battle Park. It would be much larger, with some open areas on the fringe for perhaps picnic areas/bathrooms, whatever. Several hundred acres with hiking/running trails.
- I do Jazzercise at Com, Center 4 times a week, and appreciate the use of the facility. Staff are very welcoming and helpful. A well attended and great class for all ages including senior citizens such as I. My thanks for allowing them use of the gym.
- As a bicyclist, I would urge CH to increase the number of greenways - and to connect them, so it is possible to take longer rides. At this point, we often take our bikes to Durham or Raleigh to ride on weekends.
- I love the parks! So well maintained and a great mixture of space. Running trails and dog parks especially good. More swing sets would be appreciated!
- i walk daily down franklin, boundary and around tenney circle and this substitutes for park, nature exposure.
- The bolin creek greenway is where my dogs and I get our daily energy - thank you - and I LOVE Homestead Aquatic Center
- Connect the paved greenways into a network
- no
- The dog park is great
- I walk my dogs every day, and I just wish the places where we walk them had owners and pets with better manners. My two have been attacked on Bolin Creek Greenway.
- Too hard to find a gym to play basketball and too many INDOOR pools. Need outdoor pools.
- keep up the good work!!!
- obvious public greenway/spaces are rare in Chapel Hill. Some exist, but you really have to know about them to find them. The 'sand' at the one public sand volleyball court at the community center is too rough to be comfortable to play on.
- More athletic fields needed. Love the climbing wall.
- Nope
- More bike paths, please. Better care for the Homestead Dog Park. It's always muddy and there is no longer fresh water available. There are broken chairs and deep holes.

- Tics and poison ivy are a major problem
- Please preserve more natural areas and trees! Homestead aquatic center is a nice facility.
- mostly we enjoy greenways/trails for exercise walking with and without our dog.







Chapel Hill Parks and Recreation Master Plan Public Comment Form










1. Which of the following Chapel Hill parks do you use the most often? (select top three)

		Response Percent	Response Count
Cedar Falls Park		21.3%	35
Southern Community Park		40.2%	66
Homestead Park		40.2%	66
Burlington Park		1.2%	2
Community Center Park		50.0%	82
Ephesus Park		5.5%	9
Jones Park		3.0%	5
Hargraves Park		9.1%	15
Meadowmont Park		9.8%	16
North Forest Hills Park		1.2%	2
Oakwood Park		6.7%	11
Pritchard Park		4.3%	7
Umstead Park		23.2%	38
Wallace Plaza		4.9%	8
Westwood Park		0.6%	1
I don't use Chapel Hill parks		5.5%	9
		answered question	164
		skipped question	3







2. For your top ranked park in Question 1, how often do you use the park?

		Response Percent	Response Count
Daily		6.2%	10
2-4 days per week		30.4%	49
Once per week		20.5%	33
1-2 times per month		18.0%	29
A few times per year		19.3%	31
Never		5.6%	9
answered question			161
skipped question			6






3. Which of the following Chapel Hill trails do you use the most often? (select top three)

		Response Percent	Response Count
Bolin Creek Greenway		77.0%	117
Lower Booker Creek Greenway		21.1%	32
Battle Branch Trail		40.1%	61
Dry Creek Trail		6.6%	10
Fan Branch Trail		11.2%	17
Tanyard Branch Trail		5.3%	8
I don't use Chapel Hill trails		11.8%	18
Other (please specify)			19
answered question			152
skipped question			15





4. For your top ranked trail in Question 3, how often do you use the trail?

		Response Percent	Response Count
Daily		7.9%	12
2-4 days per week		27.2%	41
Once per week		13.2%	20
1-2 times per month		21.2%	32
A few times per year		22.5%	34
Never		7.9%	12
answered question			151
skipped question			16









5. For your most recent trip to Chapel Hill parks or trails, how did you get there?

		Response Percent	Response Count
Personal automobile		53.6%	82
Bicycle		12.4%	19
Walking		32.0%	49
Public transportation		1.3%	2
Carpool		0.7%	1
Other (please specify)			7
answered question			153
skipped question			14







6. Would you use Chapel Hill parks and trails if you could more easily bike or walk to them?

		Response Percent	Response Count
Yes		61.8%	97
No		4.5%	7
I can already bike or walk to parks and trails		18.5%	29
This does not affect my use		15.3%	24
answered question			157
skipped question			10




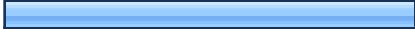














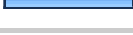
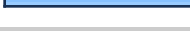
7. What are the most significant obstacles, if any, that prevent you from using Chapel Hill parks and trails? (select top three)

		Response Percent	Response Count
Lack of information about parks and trails		25.0%	33
Facilities in need of maintenance		15.9%	21
Lack of activities that suit my interest		10.6%	14
Travel time from my residence and/or place of business		18.9%	25
Lack of available transportation		4.5%	6
Personal safety concerns		14.4%	19
Accessibility concerns		4.5%	6
There are not obstacles that prevent me from using Chapel Hill parks and trails		46.2%	61
	Other (please specify)		40
answered question			132
skipped question			35

8. For the Chapel Hill parks and trails that you most often use, how would you rate the overall condition? (select one)

		Response Percent	Response Count
Need major renovations		5.9%	9
Need some improvement		18.4%	28
Average		15.8%	24
Above Average		39.5%	60
Excellent		19.1%	29
I don't know		1.3%	2
answered question			152
skipped question			15




9. What recreational or cultural facilities would you like to have more access to in Chapel Hill? (select top five)

		Response Percent	Response Count
Athletic fields		20.4%	31
Passive open space		34.2%	52
Paved greenways		43.4%	66
Natural surface hiking trails		61.8%	94
Community centers		9.9%	15
Gymnasiums		15.1%	23
Dog parks		15.8%	24
Off-road biking trails		28.3%	43
Tennis courts		15.8%	24
Basketball courts		9.2%	14
Outdoor theaters		19.1%	29
Aquatic facilities		19.7%	30
Environmental education center		17.1%	26
Arts facility		16.4%	25
Senior citizen center		2.6%	4
Skateboarding parks		5.3%	8
Picnic areas		18.4%	28
Disc golf courses		8.6%	13
Playgrounds		19.1%	29
Botanic gardens		27.6%	42
	Other (please specify)		28




skipped question

15




10. Do public parks and recreation areas enhance the economic health of Chapel Hill?

		Response Percent	Response Count
Yes		92.2%	142
No		1.9%	3
I don't know		5.8%	9
answered question			154
skipped question			13


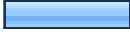



11. Do public parks and recreation areas enhance the physical and mental well-being of Chapel Hill residents?

		Response Percent	Response Count
Yes		97.4%	151
No		0.6%	1
I don't know		1.9%	3
answered question			155
skipped question			12

12. Do public parks and recreation facilities in Chapel Hill help reduce crime?

		Response Percent	Response Count
Yes		40.5%	62
No		6.5%	10
I don't know		52.9%	81
answered question			153
skipped question			14

13. How did you hear about this park planning project?

		Response Percent	Response Count
Newspaper ad		1.0%	1
Web blog/forum		18.6%	18
Public television/radio		0.0%	0
Word of mouth		36.1%	35
Town website		41.2%	40
Flyer		3.1%	3
Other (please specify)			61
answered question			97
skipped question			70

14. Do you have any comments you would like to share with the Parks and Recreation Department regarding your experiences using the Town of Chapel Hill parks, greenways, or recreation facilities?

	Response Count
	99
answered question	99
skipped question	68

KEY LEADER INTERVIEWS

Interviews were conducted with town key leaders to gain a better understanding of their interests and perceptions of the parks and recreation department as well as current and future recreation facility development needs. Those interviewed included the mayor, town manager, assistant and deputy town managers, the economic development director, seven town council members, the assistant planning director, the town attorney, the chair of the park and recreation advisory board, the chair of the public arts advisory committee, the chief of police, the superintendent of schools, the director of the Orange County department on aging, the YMCA director, and one Orange County commissioner. The following are results of those interviews.

1. What do you like most about living in Chapel Hill?

- Cultural opportunities (2)
- Diversity (2)
- Mass transit (bus)
- UNC- provides opportunities not typically found in small town
- Urban growth boundary – will create a more urban town
- Curious/engaging people
- World class town (2)/university
- Absence of negative problems
- Beauty of town (4)
- Polite, genteel people
- Dynamic
- Small town with big town attitude (2)
- Green environment
- No billboards
- Schools
- Easy commuting
- Restaurants

2. What do you like least?

- Lack of recreational opportunities
- Community has potential to give/do more
- New versus old
- Lack of diversity/becoming more homogeneous (2)
- Civic process sometimes obsessive resulting in slow decision making (4)
- Lack of business community
- High taxes and cost of living (2)
- Limited resources for aged
- Elitist attitude of public
- Traffic between 5 – 6 PM
- Difficult access and parking downtown
- Greenway supporters dominate priorities
- Youth sports under-represented
- Limited job opportunities
- Limited access to cultural arts for those not associated with University

3. What role do local parks and recreation offerings play in the quality of life?

- As density of town increases, importance of park greenspaces increase
- As population ages, active life styles become more important
- Provides park and greenway system and important activities that give quality of life to community
- Protect open space
- Facilitates public participation in cultural arts for all citizens
- Offers quality programs at low cost, including scholarships, for those in need
- Responsive to public interests
- Contribute to healthy living through programs and facilities

4. What role should they be playing?

- Greater role in promoting healthy lifestyles
- Facilities need to be improved (2)
- Need greater diversity of programs (2)
- Should look for partners in the community (schools, UNC, County, YMCA) (3)
- Do more for seniors
- Improve town's appearance, community aesthetics
- Public areas should be maintained at level with University and private property owners
- Look beyond Chapel Hill for best practices across the nation.
- More programming, especially for low income citizens

5. What things are they doing right?

- Given current budget and facilities, they are doing a good job (6)
- Respond well to diversity of people
- Good at putting on special events
- Good staff/new director is good – honest, straight-forward with council
- People friendly – in touch with public interests
- Developing a park and recreation master plan
- Partnering with other town agencies, YMCA, Schools, etc.
- Seek out cost savings and efficiencies
- Youth programming
- Trails, aquatic center
- Major facilities such as Southern Community Park and aquatic center create sense of community

6. What things could they improve?

- Need more and better facilities (3)
- Improve registration process
- Need more activities for underserved youth
- Need to identify citizens that fall through recreation program cracks
- Need more activities for aged
- Council needs to invest in parks
- Need more arts programming and advancement of public art (2)
- Need studio/dance space
- Better maintenance of dog parks
- A better tennis complex
- Improved accessibility to facilities and parks

- More year round bathrooms in parks
- More festivals and special events, particularly in downtown
- Improve cemetery maintenance
- Better landscaping

7. In the next 10 years, Chapel Hill Recreation and Parks Department should:

- Add meeting room space at the aquatic center
- More greenspace (2)
- Make existing walks/trail accessible
- Need an amphitheatre
- Continue to add parks for growing population
- Look at underutilized land
- Meet the challenge of greater park needs in a community with little available land
- Integrate art into parks
- Build stronger partnerships with schools, UNC , County, and private sector
- Meeting needs of community in challenging economic times will require innovation (2)
- Adequately maintain existing facilities (2)
- Think regionally
- Need more meeting/programming space (2)
- Need more athletic fields/light fields (2)
- Add artificial turf to soccer fields to expand use, reduce maintenance
- Expand greenways, make connections, complete construction (2)
- Develop Chapel Hill into a “bike friendly” community
- Regional connections of greenways
- Improve entrances into Town
- Provide better office space for park and recreation staff

8. The Chapel Hill Recreation and Parks Department gets participants from Carrboro and other communities. What role should Chapel Hill play in providing services to those that do not reside in the community?

- Charge higher user fees for non-residents (6)
- Establish a reciprocal agreement with other agencies
- Need to work with County and neighboring communities. Currently the Department heads meet quarterly.
- Work with Chatham and Orange Counties, they have land
- Consolidate departments
- Top priority is quality programs that are well attended, regardless of residency

9. Should Chapel Hill/Carrboro Schools play a role in providing opportunities for park and recreation activities?

- Need to strengthen memorandum of understanding with schools
- Change in school superintendent may provide opportunities for change
- School system should be encouraged to do more. Town has made effort, but schools are reluctant.
- Co-locate parks and schools

10. What activities do you feel Chapel Hill Parks and Recreation should be focused on in the next 10 years?

Activity	Yes	No	Maybe
Outdoor Performances	9	2	
Indoor Performances	7	2	1
Watch Sports Events	3	4	1
Mountain Biking	7	2	
Cycling	10		
Playing at Playground	8		
Bird Watching	7		1
Sitting Quietly in Park	7		1
Roller Skating/Blading	2	1	
Summer Camp	9		2
Dance/Music Classes	4		
Looking at Gardens	1		1
Walking a Greenway	14		
Walking along a Trail	9		
A Walk in Natural Area	8		
Viewing Wildlife	7		
Climbing Wall	4		
Picnicking w/Family	7		1
Picnicking w/Groups	7		1
Photography	2	1	
Dog Park	6	1	1
Home/Garden Classes	4		
Other: Table tennis	1		
Other: Fencing	1		
Other: Badminton	1		

Activity	Yes	No	Maybe
Playing Volleyball	6	1	1
Playing Softball	6	1	1
Playing Basketball	8	1	1
Playing Golf	3	5	
Playing Soccer	7	1	1
Playing Frisbee	3		
Disc Golfing	2		
Playing Baseball	4		
Playing In-line Hockey	3	1	1
Play Bocce	4		3
Arts/Crafts Classes	5		
Swimming in a Pool	6	2	
Fishing	1		
Playing Tennis	7		
Jogging/Running	4		
Kite Flying			
Playing Football	4	1	1
Nature Study Classes	4		
Skateboarding	2	3	1
Fitness Classes	7		
Walking Pets	1		
Health Classes	2		
Other: Water Aerobics	1		
Other: Track	1		

11. Based on what you know or have heard, would you say there is a great need, some need, little need, or no need for additional public parks in Chapel Hill as the Town grows.

- Great need 3
- Some need 10
- Little need 1
- No need 2
- Don't know 1

12. The following statements concern the parks and recreation facilities in your area. After I read each statement, please tell me whether you strongly agree, agree, disagree or strongly disagree with the statement. How about...?

	STRONGLY AGREE		2.5	STRONGLY DISAGREE	
	1	2	3	4	
Additional public parks and recreation facilities would benefit my community.	11	5	1		
Public parks and recreation areas enhance the economic health of a community	16	2			
Public parks and recreation areas enhance the physical and mental well-being of the community	16	1			
Public parks and recreation activities in my community would help reduce crime	10	5	2		1

13. Have you used a public park, greenway or recreation area in Chapel Hill in the past year?

Yes – 12 No – 2 Could not recall - 5

14. How many times have you or someone in your household visited or used a public park, recreation area or trail in the past year?

Once	0
2-5 times	6
More than 5 times	10
Not at all	1
Don't Know	5

15. What public park, recreation area or trail did you visit most often?

Burlington Park	0	Bolin Creek Trail	8
Cedar Falls Park	3	Cedar Falls Trail	2
Community Center Park	2	Dry Creek Trail	0
Ephesus Park	1	Lower Booker Creek Trail	1
Hargraves Park	3	Pritchard Park Trail	1
Homestead Park	4	Tanyard Branch Trail	1
Meadowmont Park	1	Fan Branch Trail	1
North Forest Hills Park	0	Meadowmont Trail	0
Oakwood Park	0	Other: Carolina North	1
Southern Community Park	2	Other: Cemetery	1
Umstead Park	1	DK/Refused	0
Westwood Park	0		

16. What prevents you from using a public park, recreation area or trail?

Age	0	No desire	0
Crime/Safety	0	Transportation issues	0
Handicap – not accessible	1	Other	
Lack of time	7	• Better running surfaces	1
Not sure what is available	0	• No interest in offerings	1
No parks in my area	0		
Do not like parks in my area	0		
Lack of time	7		
Health reasons	0		
Money – can't afford	0		

17. What other types of recreational facilities would you like to see in Chapel Hill?

	YES	NO	DK/REF
Greenways – public walking or bicycle trails	19		
Open space – Undeveloped land for passive activities	9	1	2
Additional athletic fields	4		3
Water-based recreation	3	6	4
Community Recreation Centers	9	1	3
Arts Facilities	10	1	2
Gymnasiums	6	2	1

Additional comments:

- Pools – yes, ponds – no
- Connect greenways
- Soft surface trail for runners parallel to bike trails
- Do not pave trails - asphalt pollutes streams
- Use soil stabilizers on stone trails to improve ADA access
- Need community gathering point, preferably downtown plaza with power, water, etc., possibly with 140 West development (2)
- More active space downtown with child play area
- Downtown green space – possibly with University
- Gymnasiums – need one more gym, possibly with schools (2)
- Library
- Community Recreation Centers and Arts Facilities – possibly expand existing facilities
- Community Recreation Centers – neighborhood facilities are needed
- More bike amenities
- Farmers' Market as good as Carrboro's.
- As neighborhoods grow, add small dog parks and dog runs in smaller parks
- Do something positive with Chapel Hill museum
- Look for opportunities for excellence, such as the Cary Soccer Park complex
- Add more waste receptacles and recycling facilities in parks
- Move towards more energy efficiency such as the use of LED lights
- Golf course

- Develop regional facilities that help sell community
- Better tennis courts
- Develop soccer complex with artificial turf for local need and to attract tournaments and economic impact
- Parks and recreation needs a public relations campaign to change public image of the department

18. Based on either what you know or have heard, how would you rate the current condition of Chapel Hill parks and greenways?

Excellent	0
Above Average	2
Average	8
Need Minor Improvements	3
Need Major Renovations	2
Some are good/Some are Poor	2
Additional Comments:	
• Greenways are average	1
• Parks need minor improvements	1
• Small parks need improvements	1
• Large parks are excellent	1

19. Are there any other types of recreational facilities you would like to see provided by the Town?

- Greenways are interrelated to transportation; they need to be linked to sidewalks and transportation (2)
- Glen Paris – Partners for Parks
- Senior population is going to grow
- Have more parks and make parks better
- Restrooms are needed (year round) (2)
- Bleachers are needed in many parks
- Parking is needed in most parks
- Staffing patterns are important
- Important to say what it is...and what it is not
- Advisory Boards – what is role? Should have input.
- Lots of money spent on greenways
- More dog parks and dog runs
- A better tennis facility
- A soccer complex with artificial turf for local need and to attract tournaments
- A downtown green space with University as partner
- Golf course

Other Suggestions:

- Take a regional approach with Orange County in providing park and recreation services.
- Cooperate with schools in the design phase of new schools to include park lands and indoor facilities.
- Develop high quality facilities that will help sell community
- Partner with YMCA in the development of new facilities and programs
- New buildings should be “smart buildings” with energy efficient features
- Mark property boundaries of existing parks
- Can the landfill area be used as a future park?
- Chapel Hill needs a plan for public and cultural arts

Draft Plan Review
Comprehensive Parks Plan
Greenways Master Plan Update



Chapel Hill Parks and Recreation Department

June 12, 2012

Plan Purpose



Oakwood Park



Pritchard Park

- Provide a 10 year vision for the Parks and Recreation Department
- Review / assess existing parks and greenways
- Provide recommendations on operations, maintenance, and revenue generation
- Update 2006 Greenways Master Plan

2002 Parks and Recreation Plan



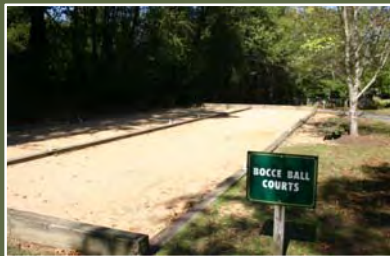
Southern Community Park



Homestead Aquatics Center

- Renovations to Existing Parks
- Build New Parks / Facilities
 - Homestead Aquatics Center
 - Southern Community Park (Phase 1)
 - Meadowmont Park
 - Improve existing neighborhood parks
 - Purchase property for two new neighborhood parks
 - Develop mini parks
 - Construct 6 – 7 miles of greenways
 - Acquire open space
- Expand Cooperative Efforts

Step One: Inventory/Assessment



Community Center Park



Umstead Park

- Facility assessment
- Review previous planning efforts
- Review available demographics
- Inventory publicly operated park and recreational facilities
- Inventory all school athletic facilities
- Inventory private recreation opportunities

State & County QuickFacts

Chapel Hill (town), North Carolina

People QuickFacts	Chapel Hill	North Carolina
Population, 2006 estimate	49,919	8,856,500
Population, percent change, April 1, 2000 to July 1, 2006	4.2%	10.1%
Population, 2000	48,715	8,049,313
Persons under 5 years old, percent, 2000	3.6%	6.7%
Persons under 18 years old, percent, 2000	15.1%	24.4%
Persons 65 years old and over, percent, 2000	8.0%	12.0%
Female persons, percent, 2000	54.9%	51.0%
White persons, percent, 2000 (a)	77.9%	72.1%
Black persons, percent, 2000 (a)	11.4%	21.6%
American Indian and Alaska Native persons, percent, 2000 (a)	0.4%	1.2%
Asian persons, percent, 2000 (a)	7.2%	1.4%
Native Hawaiian and Other Pacific Islander, percent, 2000 (a)	Z	Z
Persons reporting two or more races, percent, 2000	1.9%	1.3%
Persons of Hispanic or Latino origin, percent, 2000 (b)	3.2%	4.7%

Chapel Hill's Existing Parks



Park Types Mini Parks and Neighborhood Parks



Westwood Park



Ephesus Park



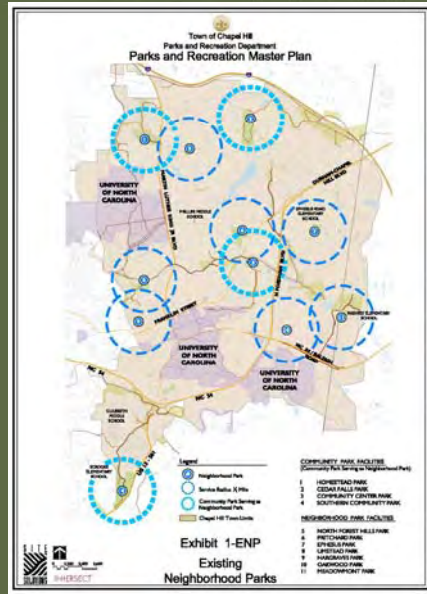
Burlington Park



Umstead Park

Park Types

Neighborhood Parks



Park Types

Community Parks



Homestead Park



Community Center Park

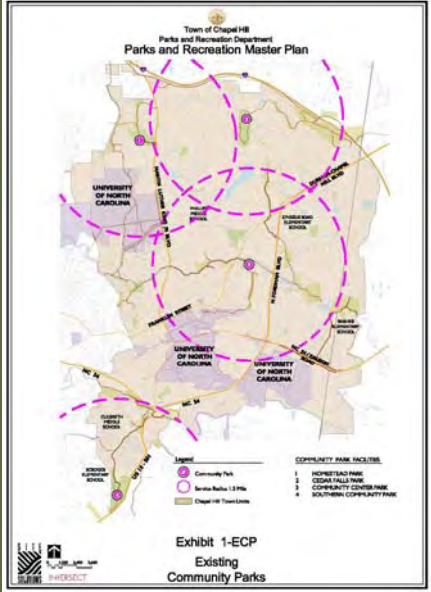


Southern Community Park



Cedar Falls Park

Park Types Community Parks



Park Types Special Use Facilities



James C. Wallace Plaza



Hargraves Community Center



Homestead Park



Homestead Aquatics Center

Park Types Greenways



Bolin Creek Trail



Lower Booker Creek Trail

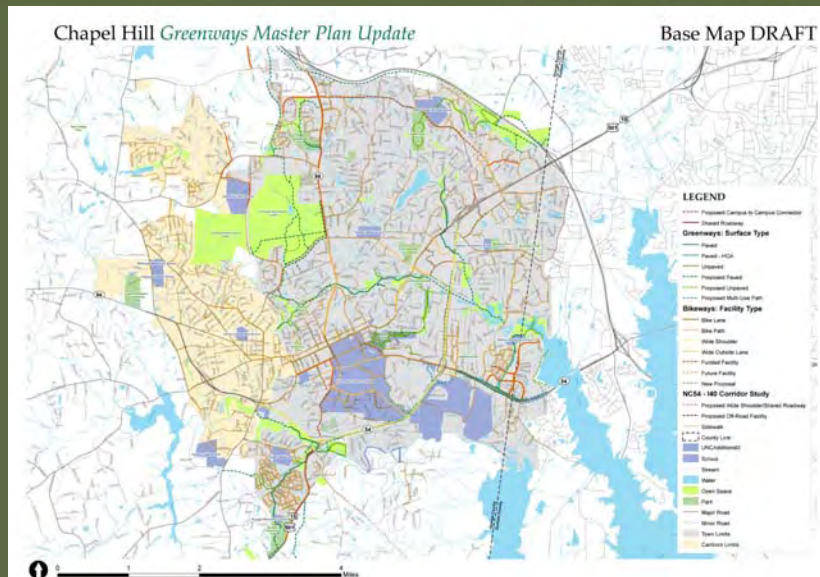


Battle Branch Greenway



Fan Branch Trail

Park Types Greenways



Step Two: Public Input



- Public Meetings
- Survey
- Interviews with Stakeholders
- Park Plan Website
- Social Networking
- Community Events



Step Two: Public Input



- Expand greenways, bikeways and pedestrian routes
- Create neighborhood parks
- Expand community arts/programming
- Partner with other agencies
- Enhance open space natural resources

Step Three: Analysis of Standards and Trends



Typical Mini Park 0.25 Acres



Typical Neighborhood Park 5-15 Acres



Typical School/Park ±50 Acres



Typical Community Park 25-30+ Acres



Typical District Park 200 Acres



Typical Regional Park + 1,000 Acres

Step Four: Standards for Parks by Type

Park Types	High Point	Rocky Mount	Greenville	Chapel Hill Master Plan 2002	Chapel Hill 2012 Proposed Standards
Mini Parks	<5 Acres/Park (.25 acres/1,000)	1-3 Acres/Park (.5 acres/1000)	1-4 Acres/Park (.25 acres/1,000)	.25 Acres/Park (.25 Acres/1,000)	1-4 Acres/Park (.1 Acres/1,000)
Neighborhood Parks	5-15 Acres/Park (2.5 Acres/1,000)	10-20 Acres/Park (2.5 acres/1000)	5-15 Acres/Park (1.5 acres/1,000)	5-15 Acres/Park (1-2 acres/1,000)	5-20 Acres/Park (2.5 Acres/1,000)
Community Parks	40-100 Acres/Park (2.5 Acres/1,000)	30-50 Acres/Park (3 acres/1000)	20-75 Acres/Park (3 Acres/1,000)	25-30+ Acres/Park (3 Acres/1,000)	20-50 Acres/Park (4 Acres/1,000)
District Parks			+200-400 Acres/Park (8 acres/1,000)	200 Acres/Park (10 Acres/1,000)	50-100 Acres/Park (2 Acres/1,000)
Regional Parks	100-400 Acres/Park (20 Acres/1,000)	100-250 Acres/Park (2.5 acres/1000)	+1,000 Acres/Park (10 Acres/1,000) *	+1,000 Acres/Park (10 Acres/1,000)	Over 100 Acres/Park (5 Acres/1,000)

Step Five: Park Needs Assessment

Park Types	2011 Existing Facilities	Chapel Hill Standards 2012	Current Demand 47,500	Current Need 47,500	2021 Demand 55,000	2021 Need 55,000
Mini Parks	2 Parks ± 4 acres	1-4 Acres/Park (.1 Acres/1,000)	3 Parks 4.75 Acres	Needs Met	3 Parks 5.5 Acres	Needs Met
Neighborhood Parks	7 Parks 100 Acres	5-20 Acres/Park (2.5 Acres/1,000)	± 10 Parks 118.75 Acres	3 Parks 20 Acres	11 Parks 137.5 Acres	4 Parks 39.5 Acres
Community Parks	4 Parks 194.7 Acres	20-50 Acres/Park (4 Acres/1,000)	±4 Parks 190 Acres	Needs Met	5 Parks 222 Acres	1 Park 27.3 Acres
District Parks	Town/County Partnership	50-100 Acres/Park (2.0 Acres/1,000)	1 Park 95 Acres	1 Park 95 Acres	1 Park 110 Acres	1 Park 110 Acres
Regional Parks	By State Parks	Over 100 Acres/Park (10 Acres/1,000)	1 Park 475 Acres	Needs Met By State Parks	1 Park 550 Acres	Needs Met By State Parks

Step Five: Park Needs Assessment



Regional Parks

- State Parks (Jordan Lake and William B. Umstead) meet needs for regional parks



District Parks/Sports Complexes

- Chapel Hill does not currently offer a district park
- Lack of available land in the town limits options for district park
- Orange County has land at Millhouse Road and Eubanks Road for a district park
- Explore options for joint development

Step Five: Park Needs Assessment



Community Parks

- Town has 4 community parks
 - Community Center Park is small for a community park and is over used
 - Cedar Falls Park needs renovation
- Consider expanding Ephesus Park to serve as community park

Step Five: Park Needs Assessment

Neighborhood Parks

- Town has 7 neighborhood parks
- Several areas of Town are not served by neighborhood parks
- 4 new neighborhood parks will be needed by 2020
- Improvements are needed at many of the Town's existing neighborhood parks

Mini Parks

- The Town currently has 2 mini parks
- Mini parks, because of their small size, provide limited recreation opportunities
- Mini parks should not be a priority for future park development

Step Four: Recreation Facility Standards

	NRPA Guidelines	State Standard	High Point	Rocky Mount	Greenville	Chapel Hill 2002	Chapel Hill 2012 Standards
Fields							
Adult Baseball	1/20,000	1/15,000	1/15,000	1/12,000	1/20,000	1/20,000	1/20,000
Youth Baseball	N/A	N/A	1/6,000	1/5,000	1/6,000	1/4,000	1/6,000
Softball	N/A	N/A	1/6,000	1/5,000	1/6,500	1/4,000	1/20,000
Football	1/5,000	1/5,000	1/20,000	1/20,000	1/20,000	1/3,000	1/30,000
Soccer	1/5,000	1/5,000	1/5,000	1/4,000	1/6,000	1/3,000	1/3,000
Courts							
Basketball	1/5,000	1/5,000	1/5,000	1/5,000	1/6,000	1/5,000	1/5,000
Tennis	1/2,000	1/2,000	1/2,000	1/2,000	1/2,500	1/2,000	1/2,000
Volleyball	1/5,000	1/5,000	1/10,000	1/5,000	1/10,000	1/5,000	1/15,000
Shuffleboard	1/2,000	N/A	1/10,000	1/5,000	1/10,000	1/5,000	1/15,000
Racquetball	1/10,000	N/A	N/A	N/A	1/10,000	1/10,000	N/A
Horseshoe	1/5,000	N/A	1/10,000	1/5,000	1/10,000	1/2,000	1/15,000
Outdoor Areas							
Picnic Shelter	1/2,000	N/A	1/3,000	1/3,000	1/3,000	1/2,500	1/2,500
Playground Activities*	N/A	1/1,000	1/2,000*	1/2,500	1/1,000	1/2,000	1/3,000
Trails							
Hiking/Fitness/Jogging	1/region	4 miles/1,000	4 miles/1,000	1 mile/5,000	25/1,000	3 miles/1,000	4 miles/1,000
Specialized							
Rec. Center w/Gym	1/25,000	N/A			1/17,000	1/25,000	1/15,000
Rec. Center w/out Gym	1/10,000	N/A			1/20,000	1/10,000	1/20,000
Outdoor Pool	1/20,000	1/20,000	1/30,000	1/20,000	1/30,000	1/10,000	1/20,000
Indoor Pool	1/50,000	N/A			1/75,000	1/50,000	1/25,000
Gymnasium	1/20,000	N/A				1/20,000	1/25,000
Golf Course	1/25,000	1/25,000	1/50,000	1/50,000	1/Community	1/25,000	1/50,000
Bicycling/Urban	1 mile/2,000	1 mile/1,000	1 mile/1,000	1 mile/1,000	1 mile/2,000	1 mile/2,000	1 mile/2,000
Amphitheatre	1/20,000	N/A			1/60,000	1/20,000	1/20,000
Auditoriums	1/20,000					1/20,000	1/20,000
Disc Golf	N/A	N/A			1/35,000		1/25,000
Skateboard Park	N/A	N/A			1/Community		1/50,000
Dog Park	N/A	N/A			1/30,000		1/12,000

Step Five: Facility Needs Assessment

	Chapel Hill 2002	Existing Facilities	2012 Proposed Standards	Current Demand (FY 2011)	Current Need (FY 2011)	2012 Projected Demand (FY 2011)	2012 Projected Need (FY 2011)
Fields							
Adult Baseball	1/20,000	2	1/20,000	2	-	2	-
Youth Baseball	1/4,000	4	1/6,000	8	4	2	5
Softball	1/4,000	2	1/20,000	2	-	2	-
Football	1/3,000	1	1/20,000	1	-	1	-
Soccer	1/3,000	8	1/3,000	16	8	16	10
Courts							
Basketball	1/5,000	8	1/5,000	10	2	11	3
Tennis	1/2,000	21	1/2,000	24	3	27	6
Volleyball	1/5,000	0	1/15,000	3	3	4	4
Shuffleboard	1/5,000	0	1/15,000	3	3	4	4
Racquetball	1/10,000	0	N/A	-	-	-	-
Horseshoe	1/2,000	0	1/15,000	3	3	4	4
Outdoor Areas							
Picnic Shelter	1/2,500	6	1/2,500	19	11	22	14
Playground Activities	1/2,000	10	1/3,000	16	6	18	8
Trails							
Hiking/Fitness/Jogging	3 miles/1,000	11.4	4 miles/1,000	19	7.6	22	10.6
Specialized							
Gymnasium	1/25,000	3	1/15,000	3	-	4	1
Rec. Center w/out Gym	1/10,000	1	1/20,000	2	1	3	2
Outdoor Pool	1/10,000	1	1/25,000	2	1	2	1
Indoor Pool	1/50,000	2	1/25,000	2	-	2	-
Golf Course	1/25,000	-	N/A	-	-	-	-
Bicycling/Urban	1 mile/2,000	1	1 mile/2,000	22 miles	-	-	-
Amphitheatre	1/20,000	1	1/20,000	2	1	2	1
Auditoriums	1/20,000	1	1/20,000	2	1	2	1
Disc Golf	1	1	1/25,000	2	1	2	1
Skateboard Park	1	1	1/50,000	1	-	1	-
Dog Park	2	2	1/10,000	3	1	4	2

Step Five: Facility Needs Assessment



Special Use Facilities

By 2021 the Town will need to construct the following special use facilities:

- Community Center with gymnasium
- Outdoor swimming pool
- Spray ground(s)
- Arts Center
- Parks and Recreation Administration Office

Capital Improvement Plan - Renovation

CHAPEL HILL PARKS AND RECREATION CAPITAL IMPROVEMENT PLAN

Capital Improvement and Land Acquisition	10 Year Total	2012-2015	2016-2021
Existing Parks Renovation/Improvements			
Specific Renovations to Existing Parks			
Cedar Falls Park	\$3,859,000	\$3,859,000	
Community Center Park	\$965,000	\$965,000	
Homestead Park	\$2,497,000	\$2,497,000	
Southern Community Park	\$237,000	\$237,000	
Ephesus Park	\$913,000	\$913,000	
Hargraves Community Center	\$410,000	\$410,000	
Meadowmont Park	\$169,000	\$169,000	
North Forest Hills Park	\$212,000	\$212,000	
Pritchard Park	\$132,000	\$132,000	
Umstead Park	\$691,000	\$691,000	
Oakwood Park	\$285,000	\$285,000	
Burlington Park	\$394,000	\$394,000	
Westwood Park	\$114,000	\$114,000	
Wallace Plaza	\$246,000	\$246,000	
Planning & Design (10%)	\$1,112,000	\$1,112,000	
Renovation Total	\$12,236,000	\$12,236,000	\$0

Capital Improvement Plan – New

CHAPEL HILL PARKS AND RECREATION CAPITAL IMPROVEMENT PLAN			
Capital Improvement and Land Acquisition	10 Year Total	2012-2015	2016-2021
Land Acquisition			
N2 - North Central Neighborhood Park (5 acres at \$100,000)	\$500,000	\$500,000	
N3 - Central Park (5 acres at \$100,000)	\$500,000		\$500,000
N4 - Southwest Neighborhood Park (5 acres at \$100,000)	\$500,000		\$500,000
Community Park (20 acres at \$100,000)	\$2,000,000	\$2,000,000	
District Park / In partnership with Orange County	NA	NA	N/A
Greenways (50 acres @ 25,000 per acre)	\$1,250,000	\$750,000	\$500,000
Land Acquisition Total	\$4,750,000	\$3,250,000	\$1,500,000
Park Development			
Neighborhood Parks			
N1 - Northeast Neighborhood Park	\$500,000	\$500,000	
N2 - North Central Neighborhood Park	\$500,000	\$500,000	
N3 - Central Neighborhood Park	\$500,000		\$500,000
N4 - Southwest Neighborhood Park	\$500,000		\$500,000
Community Park	\$3,000,000	\$3,000,000	
District Park	\$5,000,000		\$5,000,000
Planning and Design (10%)	\$1,000,000	\$400,000	\$600,000
Park Development Total	\$11,000,000	\$4,400,000	\$6,600,000

Capital Improvement Plan – New

CHAPEL HILL PARKS AND RECREATION CAPITAL IMPROVEMENT PLAN			
Capital Improvement and Land Acquisition	10 Year Total	2012-2015	2016-2021
Special Use Facilities			
Community Center	\$2,000,000		\$2,000,000
Gymnasium	\$1,500,000		\$1,500,000
Swimming Pool	\$1,500,000		\$1,500,000
Parks and Recreation Administrative Office	\$2,000,000		\$2,000,000
Cultural Arts	\$3,000,000		\$3,000,000
10 Miles of Greenway Trail (\$1,000,000 per mile)	\$10,000,000	\$5,000,000	\$5,000,000
Planning & Design (10%)	\$2,000,000	\$500,000	\$1,500,000
Special Use Facilities Total	\$22,000,000	\$5,500,000	\$16,500,000
Capital Improvement Plan Summary			
Renovation Total	\$12,236,000	\$12,236,000	0
Land Acquisition Total	\$4,750,000	\$3,250,000	\$1,500,000
Park Development Total	\$11,000,000	\$4,400,000	\$6,600,000
Special Use Facilities Total	\$22,000,000	\$5,500,000	\$16,500,000
Total Capital Improvement Budget Cost	\$49,986,000	\$25,386,000	\$24,600,000

Operational Recommendations



Operational Recommendations

- Staff Needs
- Operational Cost
- User Fees
- Greener Operations
- Park Maintenance

Policy Recommendations



Policy Recommendations

- Strengthen joint use with schools
- Work with other recreation providers
 - Orange County
 - Carrboro
- Build relationships with the University and UNC Health Care



Greenway Master Plan Update

Submitted by Alta/Greenways

- Update recently annexed areas, new schools, land development, trail segments
- Comprehensive approach on maps
- Expansion of potential funding sources – local, state, federal, private
- Emphasize regional connections
- New long-term trail prioritization method



Trail Additions



Morgan Creek Trail



Comprehensive Approach



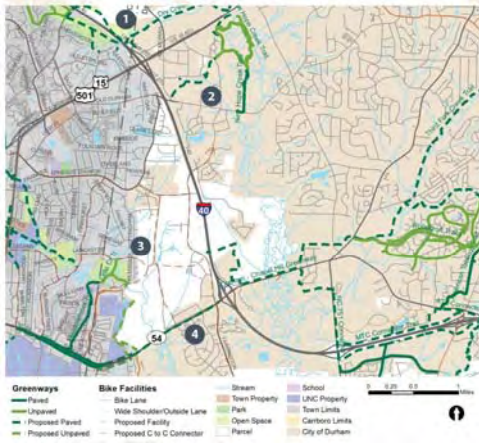
On-Road Connections

Bolin Creek Corridor



Regional Connections

Durham



Carrboro



Long-Term Prioritization

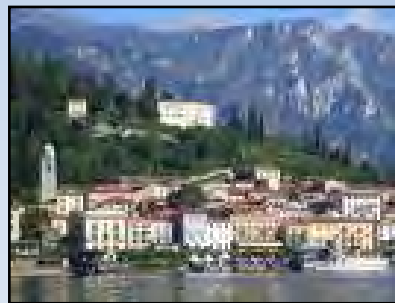
Prioritization | Chapel Hill Greenway Master Plan Update 2013

**TABLE 5.1:
PRIORITIZATION CRITERIA
FOR PLANNED TRAIL SEGMENTS**

Proposed Trail Segments	Connection to existing or funded trails & parks	Transportation Functionality	Residential Population Proximity	School Proximity	Connection to Low Income Areas/Low Car Ownership Rates	Facilitates Regional Connections
Bolin Creek						
Estes Drive Extension to Village Drive		X	X		X	X
Village Drive to Umstead Park	X	X	X		X	X
Umstead Park to MLK Jr. Blvd.	X	X	X		X	X
Community Center to Fordham Blvd.	X	X	X		X	X
Fordham Blvd. to Booker Creek			X		X	X
Booker Creek						
Weaver Dairy Rd. to Homestead Park	X	X	X			
Greene Tract to Upper Booker Creek Trail	X		X			
Fordham Blvd. to Little Creek	X	X	X		X	X
Little Creek						
Confluence to Pinchurst, Dr.		X	X			X
Pinchurst Dr. to Jurisdictional Limits	X		X	X		X
American Tobacco Trail Connection	X					X



2011 DirectionFinder® Community Survey FINAL Results



Prepared for
Town of Chapel Hill

February, 2012

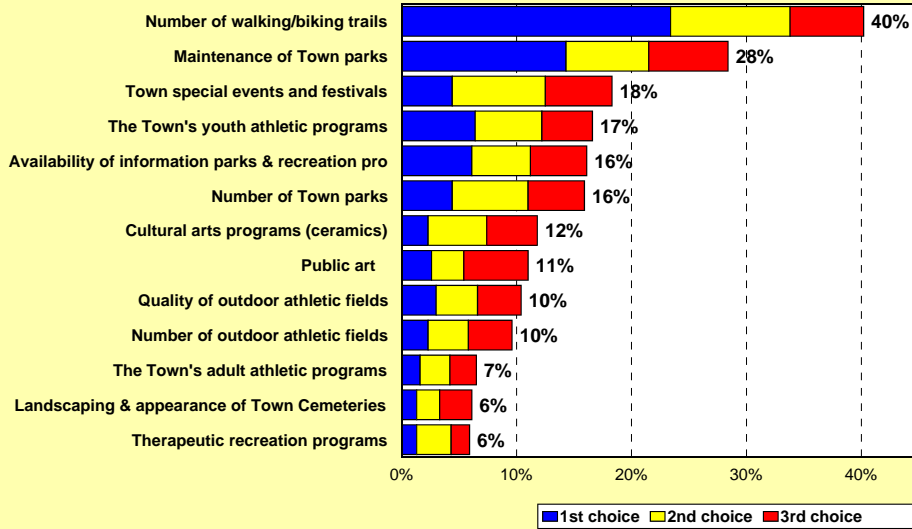
ETC Institute
725 West Frontier Circle
Olathe, Kansas
66061

THIS IS NOT THE COMPLETE DOCUMENT
SELECTED PAGES FOR REFERENCE ONLY

APPENDIX 3-A: 2011 COMMUNITY SURVEY

Q11. Parks and Recreation Services that Should Receive the Most Emphasis from the Town Over the Next Two Years

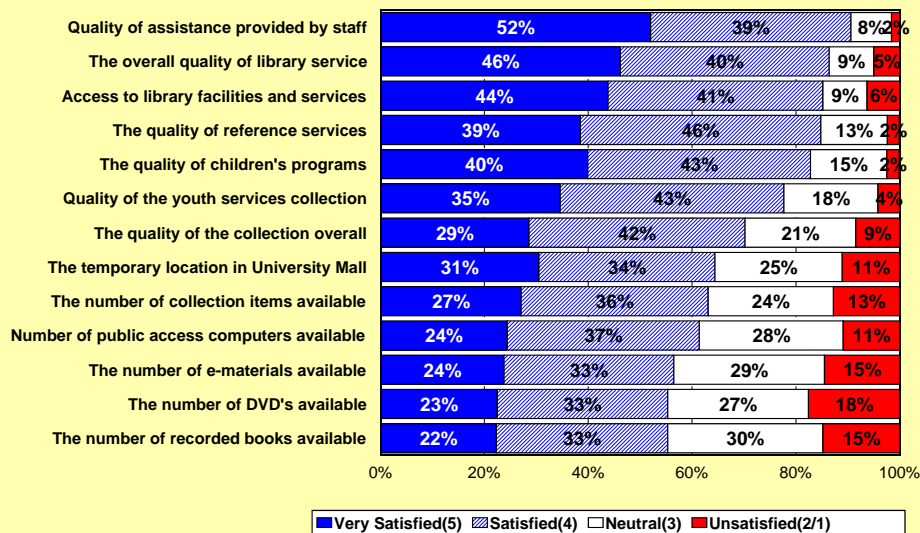
by percentage of respondents who selected the item as one of their top three choices



Source: ETC Institute DirectionFinder (2011 - Chapel Hill, NC)

Q12. Satisfaction with Library Services

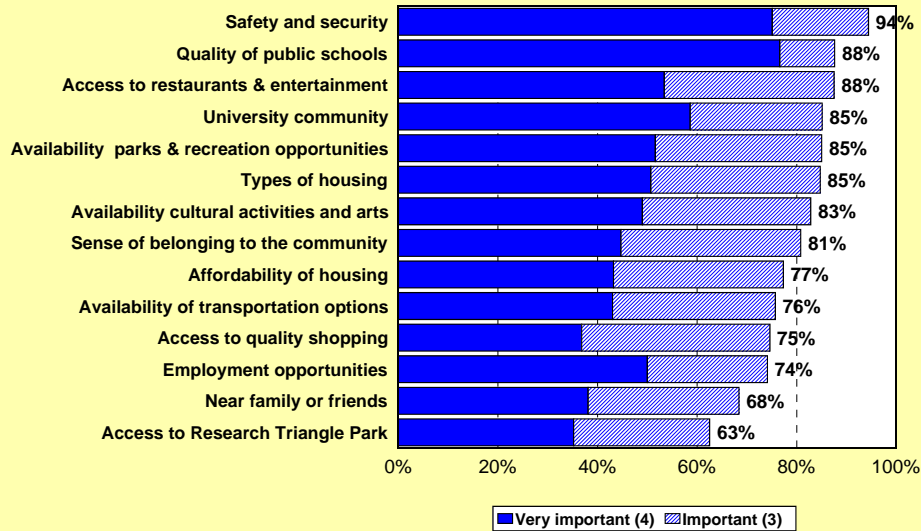
by percentage of respondents who rated the item as a 1 to 5 on a 5-point scale (excluding don't knows)



Source: ETC Institute DirectionFinder (2011 - Chapel Hill, NC)

Q18. Importance of Various Factors in your Decision to Live in Chapel Hill

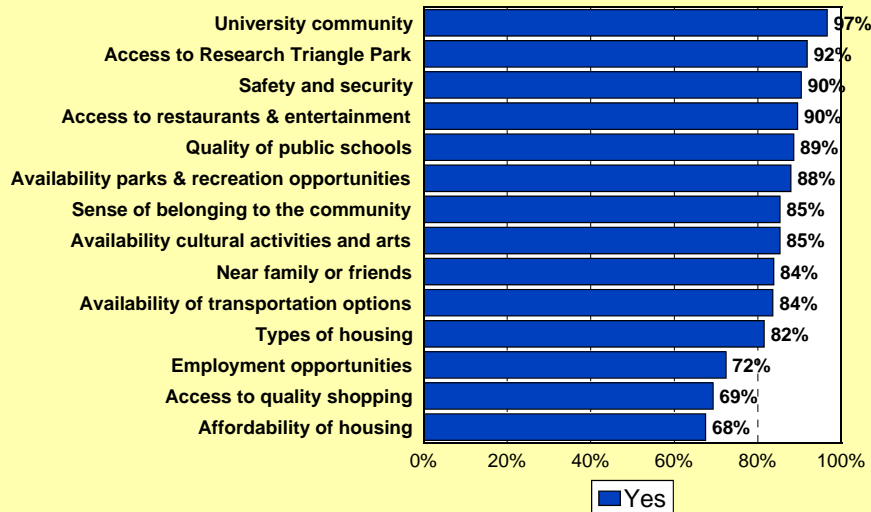
by percentage of respondents who rated the item as a 1 to 5 on a 5-point scale (excluding don't knows)



Source: ETC Institute DirectionFinder (2011 - Chapel Hill, NC)

Q18. Are your needs being met?

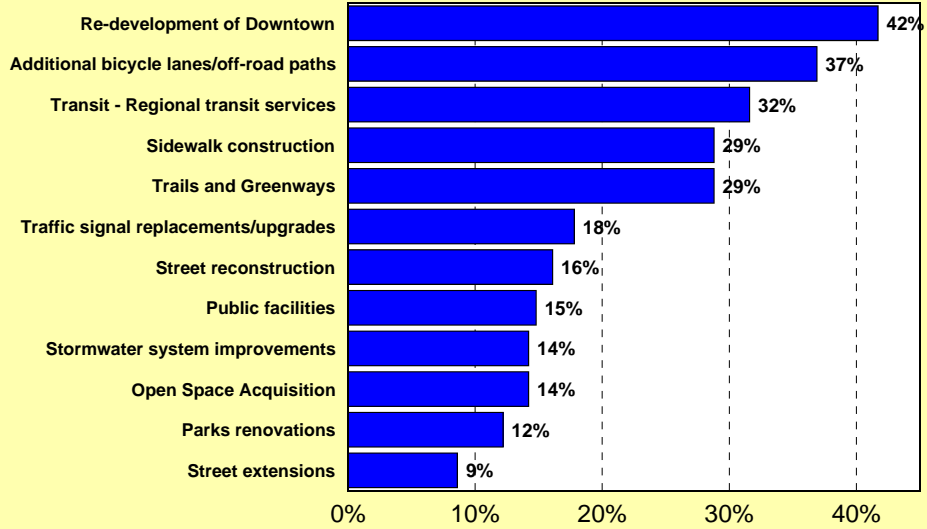
by percentage of respondents



Source: ETC Institute DirectionFinder (2011 - Chapel Hill, NC)

Q29. Capital Improvements that are Most Important to Residents

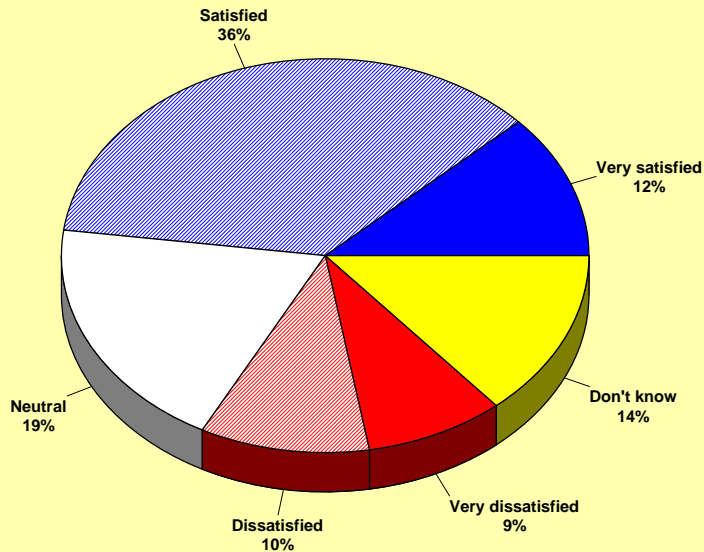
By number of respondents who selected the item as one of their top three choices



Source: ETC Institute DirectionFinder (2011 - Chapel Hill, NC)

Q30. What is your level of satisfaction with the value you receive for the portion of your property taxes that funds the Town's operating budget?

by percentage of respondents



Source: ETC Institute DirectionFinder (2011 - Chapel Hill, NC)

Importance-Satisfaction Rating

Town of Chapel Hill

PARKS and RECREATION

Category of Service	Most Important %	Most Important Rank	Satisfaction %	Satisfaction Rank	Importance-Satisfaction Rating	I-S Rating Rank
<i>High Priority (IS .10-.20)</i>						
Number of walking/biking trails	40%	1	65%	9	0.1400	1
<i>Medium Priority (IS <.10)</i>						
Town special events and festivals	18%	3	63%	11	0.0666	2
The Town's youth athletic programs	17%	4	70%	5	0.0510	3
Availability of information parks & recreation program	16%	5	69%	6	0.0496	4
Maintenance of Town parks	28%	2	84%	1	0.0448	5
Number of Town parks	16%	6	73%	2	0.0432	6
Cultural arts programs (ceramics)	12%	7	66%	8	0.0408	7
Public art	11%	8	65%	10	0.0385	8
Number of outdoor athletic fields	10%	10	66%	7	0.0340	9
Quality of outdoor athletic fields	10%	9	72%	4	0.0280	10
The Town's adult athletic programs	7%	11	60%	12	0.0280	11
Therapeutic recreation programs	6%	13	60%	13	0.0240	12
Landscaping & appearance of Town Cemeteries	6%	12	73%	3	0.0162	13

Note: The I-S Rating is calculated by multiplying the "Most Important" % by (1-'Satisfaction' %)

Most Important %:

The "Most Important" percentage represents the sum of the first, second, and third most important responses for each item. Respondents were asked to identify the items they thought should receive the most emphasis over the next two years.

Satisfaction %:

The "Satisfaction" percentage represents the sum of the ratings "4" and "5" excluding 'don't knows.' Respondents ranked their level of satisfaction with the each of the items on a scale of 1 to 5 with "5" being very satisfied and "1" being very dissatisfied.

2011 DirectionFinder by ETC Institute

National and State Studies on Outdoor Recreation Demand

President's Commission

The President's Commission Report indicated the following significant facts:

The top ten most popular outdoor recreation activities nationwide are:

Picnicking	Playing sports
Driving for pleasure	Fishing
Swimming	Attending sporting events
Sightseeing	Boating
Bicycling	Walking for pleasure

Activities rapidly growing in popularity are:

Canoeing	Sailing
Bicycling	Hiking/backpacking
Attending outdoor sports	Walking for pleasure
Camping, all types	Water skiing

The President's Commission report also noted that municipal agencies are providing 39% of the public recreation opportunities.

North Carolina Outdoor Recreation Survey

The North Carolina Outdoor Recreation Survey provided a list of the most popular outdoor recreation activities in the state. The most popular outdoor recreation activities in North Carolina are:

1. Walking for pleasure
2. Driving for pleasure
3. Viewing scenery
4. Beach activities
5. Visiting historical sites
6. Swimming
7. Visiting natural areas
8. Picnicking
9. Attending sporting events
10. Visiting zoos

National Sporting Goods Association Survey

The National Sporting Goods Association (NSGA) conducts an annual study of sports participation. The survey lists the following top activities per million participants. A participant is defined as someone seven years of age or older who participates in a sport more than once within a year for all sports except aerobic exercising, bicycle riding, exercise walking, exercising with equipment, running/jogging, step aerobics, weight lifting, and swimming. For these seven fitness sports, participation is defined as six times or more during the year. The following information reviews the findings for the past ten years.

Sport	2010	2008	2006	2004	2002	2000
Aerobic Exercising	38.5	36.2	na	29.5	29.0	26.7
Archery (target)	6.5	na	na	5.3	4.2	4.5
Backpack/Wilderness Camp	11.1	13.0	13.3	17.3	14.8	15.4
Baseball	12.5	15.2	14.6	15.9	15.6	15.6
Basketball	26.9	29.7	26.7	27.8	28.9	27.1
Bicycle Riding	39.8	44.7	35.6	40.3	39.7	43.1
Billiards/Pool	24.0	31.7	31.8	34.2	33.1	32.5
Boating, Motor/Power	20.0	27.8	29.3	22.8	26.6	24.2
Bowling	39	49.5	44.8	43.8	42.4	43.1
Camping (vacation/overnite)	44.7	49.4	48.6	55.3	55.4	49.9
Canoeing	na	10.3	7.1	7.5	7.6	6.2
Cheerleading	na	2.9	3.8	3.8	na	na
Exercise Walking	95.8	96.6	87.5	84.7	82.2	81.3
Exercising with Equipment	55.3	63.0	52.4	52.2	46.8	44.8
Fishing	33.8	42.2	40.6	41.2	44.2	47.2
Football (tackle)	9.3	10.5	10.1	8.2	7.8	8.0
Golf	21.9	25.6	24.4	24.5	27.1	26.4
Hiking	37.7	38.0	31.0	28.3	27.2	24.3
Hunting with Firearms	16.3	18.8	19.9	17.7	19.5	19.1
Hunting w/Bow & Arrow	5.5	6.2	5.9	5.8	4.6	4.7
In-line Roller Skating	7.5	9.3	10.5	11.7	18.8	21.8
Kayaking/Rafting	5.6	na	na	na	na	3.1
Mountain Biking (off road)	7.2	10.2	8.5	8.0	7.8	7.1
Paintball Games	6.1	6.7	8.0	9.4	6.9	5.3
Running/Jogging	35.5	35.9	28.8	24.7	24.7	22.8
Skateboarding	7.7	9.8	9.7	10.3	9.7	9.1
Skiing (alpine)	7.4	6.5	6.4	5.9	7.4	7.4
Skiing (cross country)	2.0	1.6	2.6	2.4	2.2	2.3
Snowboarding	6.1	5.9	5.2	6.6	5.6	4.3
Soccer	13.5	15.5	14.0	13.3	13.7	12.9
Softball	10.8	12.8	12.4	12.5	13.6	14.0
Swimming	51.9	63.5	56.5	53.4	53.1	58.8
Yoga	20.2	16.0	na	na	na	na
Target Shooting	19.8	20.3	19.1	19.2	18.9	16.9
Tennis	12.3	12.6	10.4	9.6	11.0	10.0
Volleyball	10.6	12.2	11.1	10.8	11.5	12.3
Water Skiing	5.2	5.6	6.3	4.7	6.9	5.9
Weight Lifting	31.5	37.5	32.9	26.2	25.1	22.8
Workout at Club	36.3	39.3	34.9	31.8	28.9	24.1

SOURCE: National Sporting Goods Association, Mt Prospect, IL 60056

Benchmarking Relative to Other North Carolina Communities

The Recreation Resources Service at North Carolina State University conducts an annual study of municipal and county spending on parks and recreation services throughout North Carolina. This study reviews both operational and capital spending of these municipal and county agencies. One hundred fifty one (151) agencies participated in the study.

The study breaks agencies into groups based on population, geography, and agency type (municipal vs. county). The Town of Chapel Hill was included in Category/Class B; agencies with populations between 50,000 and 99,999. With a current population of 56,778, Chapel Hill is in the lower quarter of its Class B category in size.

Operational Expenditures

Based on information provided for the 2008-2009 study, Chapel Hill's proposed operational and capital budget for this period was \$7,316,797, higher than most of those in the Class B category.

As noted below, the Town of Chapel Hill's operating and capital expenditures is comparable to municipal agencies throughout the state.

Class B Cities	
Mean Expenditures	\$7,293,048
Median Expenditures	\$6,250,773
Chapel Hill Expenditures	\$7,316,797

Agencies from throughout North Carolina with similar populations were chosen for a more detailed comparison. These included:

Agency	Population
Asheville	79,973
Burlington	52,156
Chapel Hill	56,778
Gastonia	75,280
Greenville	85,569
Rocky Mount	59,641
Wilson	51,264

A detailed breakout of this operational spending shows that Chapel Hill ranks relatively high among cities in North Carolina with similar populations.

Agency	Salaries	All Other Direct Spending	Construction	Land, Equipment, and Existing Structures	Total
Asheville	5,226,243	5,931,667	798,171	282,311	12,244,392
Burlington	3,502,554	2,030,766		341,563	5,874,883
Chapel Hill	2,649,382	2,270,130	2,303,889	93,396	7,316,797
Gastonia	2,483,777	992,677			3,476,454
Greenville	4,481,360	2,230,955	473,865		7,186,180
Rocky Mount	3,287,955	2,904,278	390,290	594,651	7,177,174
Wilson	2,088,079	2,657,706	2,959,365	521,090	8,226,240

Per Capita Expenditures by Individual Agency

A review of the per capita spending (including both operational and capital expenditures) for the same cities demonstrates that the Town of Chapel Hill ranks relatively high in overall per capita spending.

Agency	Operation Expenditures Per Capita	Capital Expenditures Per Capita	Total Per Capita
Asheville	153.03	139.52	13.51
Burlington	112.64	106.09	6.55
Chapel Hill	128.87	86.64	42.22
Gastonia	46.18	46.18	
Greenville	87.03	81.29	5.74
Rocky Mount	120.34	103.83	16.51
Wilson	160.47	92.58	67.89

Gold Medal Winners

Another way of benchmarking the City’s parks and recreation facilities/programs is to compare Chapel Hill with other outstanding communities from across the nation. The American Academy for Park and Recreation Administration (AARPA), in partnership with the National Recreation and Park Association (NRPA) presents National Gold Medal Awards to the nation’s outstanding park and recreation agencies for excellence in the field of recreation management. Gold Medal winners exhibit excellence in:

- Long range planning
- Fiscal resource management
- Citizen support systems
- Environmental stewardship
- Preservation
- Technological integration
- Program planning and assessment
- Professional development
- Agency recognition
- Services for special populations

With a current population of ±57,000, Chapel Hill is similar to cities in the Class III population category (50,001 to 100,000). This planning effort reviewed Gold Medal winners from the Class III category.

City of Waukesha Parks, Recreation and Forestry, Wisconsin

PARK MAINTENANCE

Summary

The level of maintenance practiced by the Department of Parks and Recreation might be described as average, or basically adequate. Some parks cannot be maintained at a high level due to their poor condition while others had better design and construction that makes quality maintenance easier to accomplish. The primary activity of the Division of Landscape Services and Park Maintenance is mowing. Other functions of the Division include the care of trees, shrubs and planting beds; athletic field maintenance; litter removal; playground inspections and maintenance; and the maintenance of greenways and trails. Other less traditional responsibilities include the maintenance of four cemeteries, five park-and-ride lots, 14 public housing areas, five fire stations, four town entrance signs, ten town office building areas and two boulevards.

Based on numerous interviews with the Superintendent of Landscape Services and Park Maintenance, the review of proposed maintenance plan documents, the Department and Division organizational documents and inspections of every park in the Chapel Hill system, a number of options are suggested to improve the quality of maintenance at parks and other public areas:

1. Park Renovations – Renovating many existing parks will result in areas and facilities that are easier to maintain at a higher level.
2. Boulevards – Increasing the frequency of mowing, removing litter and edging curbs and planting beds will significantly improve the appearances of these important corridors. It is important to recognize that for many citizens that do not visit parks, the physical appearance of public areas, including boulevards, may be their only way to judge the performance of those responsible for their upkeep.
3. Maintenance Standards – Establishing a park classification system will identify those parks, areas within parks, and public landscaped areas that should receive a higher level of maintenance.
4. Athletic Fields – Establishing a formalized classification system for maintaining athletic fields would result in their increased use and improved appearance. As funds are available for the renovation of existing athletic fields, or the development of new ones, synthetic turf should be considered in that it allows for much greater use with much less maintenance than grass turf without compromising physical appearances.
5. Maintenance Management Plan – Parks and recreation leaders have developed a prototype plan for the management of maintenance functions at all parks and greenways. While that plan assumes improving the level of maintenance at all parks and greenways, and is dependent on increased funding, the process will be very valuable to the Department of Parks and Recreation in providing clear expectations and priorities, identifying personnel and equipment needs, and in measuring performance levels in the area of park and greenway maintenance.
6. Work Order System –The development of a formalized work order system should be considered to accurately determine maintenance standards, frequency of tasks, and the cost of maintaining all parks and other properties for which the Parks and Recreation Department is responsible. A work order system would also help in determining the life cycle of all physical assets in order to anticipate

capital improvement needs, staffing, and equipment necessary to meet the expectations of the community and Town leaders, particularly as new parks and recreation facilities are developed.

7. Contract Services - The Department may want to explore the possibility of contracting out specific services, however some park systems have found that contracting services ended up costing more than completing the same tasks at the same level with their own employees.
8. The Division should consider the purchase of a landscape tractor with appropriate attachments and at least one small dump truck. The tractor would enable the Division to be more efficient in completing many landscape projects that involve moving and spreading materials while the small dump truck would provide greater capacity and more options than using pick up trucks as currently used.
9. As part of the development of a park and recreation maintenance management plan, the Division should develop a Landscape and Park Maintenance Operations Manual with information to help orient new employees and to assure high quality services.

Note: The full report describing the current level of maintenance with recommendations for making improvements is located in the appendix of this document.

PARK MAINTENANCE

Overview of the Landscape Services and Park Maintenance Division

The vision for the Landscape Services and Park Maintenance Division of the Chapel Hill Parks and Recreation Department is that the town would be known as “A town within a park.” Certainly, the physical beauty of Chapel Hill with its rolling terrain, majestic trees and other vegetation, along with its winding streets, gives the town many of the basic elements of a park. The reality of accomplishing the vision of being a town with a park, however, also depends on the availability of park areas for public use and visual beauty, and the resources to develop and maintain those areas at a level expected by the citizens of Chapel Hill.

Responsibilities of the Landscape Services and Park Maintenance Division are varied and extensive. The Department has 937 acres of land to manage with 278 of those acres made up from 37 park areas and facilities. Of the 278 acres, 167 acres are dedicated to park areas with considerable maintenance requirements. Typical recreation areas and facilities within those parks include baseball and softball fields, soccer fields, playgrounds, turf areas, roads and parking areas, fencing and gates, dog parks, recycling centers, restrooms and landscaped areas.

The Parks and Recreation Department also has approximately 300 acres of wooded areas as its responsibility that includes nearly five miles of paved greenway trails and nearly six miles of natural surface trails.

In addition, the Division is responsible for maintaining five park-and-ride lots, four cemeteries, 14 public housing areas, five fire stations, four town entrance signs with landscaping, ten town office-building areas and two major boulevards (Martin Luther King and Fordham). Note: one section of the NC 54 boulevard near Meadowmont Village is currently mowed by contractual services with a commercial mowing business.

Other current responsibilities of the Landscape Services and Park Maintenance Division include landscape projects that include resodding areas, tree removal, assisting scout groups with various projects, and the renovation of the dog park at Southern Community Park. It also provides set-up personnel for multiple special events, snow removal of downtown facilities, and the clean up from various celebrations such as the annual Halloween event and NCAA basketball celebrations.

The Landscape Services and Park Maintenance Division has 32 full time staff and two weekend temporary staff. Of the full time staff, two have responsibilities for athletic fields while four are dedicated to maintaining and managing the town’s four cemeteries, including the cemetery administrator who also has payroll and accounting responsibilities. The division has two certified playground inspectors who also have responsibilities for public housing areas and the maintenance of natural surface trails. There is a three-member arborist crew, two responsible for mowing and trimming right-of-ways, and nine staff that make up two mowing crews. There are also two staff with responsibilities for downtown parks and public areas and two with responsibilities for litter removal from parks, restrooms, public housing and town facilities. One superintendent and three supervisors provide oversight to all of the above operations.

The park maintenance division has three vacant positions, two that are frozen and one that became vacant recently.

The park maintenance operation is centralized with all operations emanating from the Town's operation center as opposed to a decentralized system that would place personnel and equipment at various parks around the community. Given the limited Chapel Hill geographic area and the number of areas to be maintained, the centralized system appears to work well.

Landscape Services and Park Maintenance Resources

The Landscape Services and Park Maintenance Division works out of the town's new operations center, which is very adequate for current operations. The Division is part of the town fleet management program that provides replacement funds as vehicles become obsolete, however there is a need for small dump trucks and a landscape tractor at a minimum. While mowing takes up the majority of the Division's time and personnel, mower replacement is absorbed in the operations budget as opposed to a funded replacement program as with larger equipment. With recent budget reductions and the typical life span of a commercial mower, it is very likely that the Division will reach a point where it will be impossible to replace aging mowing equipment from its operating funds. It is surprising that the Division does not have a landscape tractor with typical attachments such as a front-end loader, scraper blades, etc. for minor landscape construction and maintenance projects.

Current Level of Maintenance

The current level of park maintenance varies from park to park, often due to the condition of the park in question. For example, Cedar Falls is a highly developed park with multiple facilities and high usage, but it has deteriorated over time to the point where a desired level of maintenance is not possible. At the same time, Southern Community Park is relatively new and better designed and constructed to better retain its original condition. In short, Southern Community Park reflects the physical image one would expect of the Town of Chapel Hill, whereas Cedar Falls and a number of other parks fall short. In some cases lower than expected maintenance is the result of poor original design and construction that created problems with erosion and turf management, while in other cases additional resources are likely needed to improve their function and appearance.

Greenways are maintained at a level one would expect. They are attractive, maintained regularly, and appear to receive high public use. The medians and shoulder areas for Martin Luther King, Jr. and Fordham Boulevards are maintained at a minimal level. Given their importance as part of the experience of travelling in and around Chapel Hill, they should be maintained at a higher level. Currently, greenways and boulevards are mowed on a two-week rotation. Increasing mowing to weekly would significantly improve the appearance of boulevards and greenways.

In assessing the level of maintenance of Chapel Hill parks, it is necessary to identify basic principles or guidelines for a quality park maintenance management system, and to determine to what extent the current maintenance system is in compliance. These

principles or guidelines are integral to the development of a park maintenance management system that develops standards of performance, identifies resources needed for the maintenance system, provides a schedule for routine, recurring maintenance activities, and provides cost estimates of major maintenance functions.

Park Maintenance Management System

As parks, recreation areas and other physical facilities are developed, it is important to have a maintenance management system with the goal of keeping those areas and facilities as attractive and appealing as possible. Simply stated, park and recreation maintenance is defined as "...keeping park and recreation areas and facilities in their original state or as near so as possible." (Warren, Rea and Payne, 2007)

A park and recreation maintenance management system should include routine, recurring work; repairs; and minor construction. To maximize its effectiveness the maintenance program should develop and follow basic principles or guidelines, such as:

1. Establish maintenance objectives and standards. Examples might include:
 - a. Areas and facilities should have a clean and orderly appearance at all times.
 - b. Areas and facilities that are aesthetically pleasing should be developed and maintained or identified and protected.
 - c. Areas and facilities should be maintained to create a safe and healthful environment.
 - d. Maintenance should promote good public relations by providing areas and facilities for positive recreation experiences.
2. Maintenance should be performed with economy of time, personnel, equipment, and materials.
3. Maintenance operations should be based on a sound written maintenance plan.
4. Scheduling maintenance work should be based on established policies and priorities.
5. Preventive maintenance should be emphasized.
6. The maintenance division should be well organized.
7. Adequate fiscal resources must be provided to support the maintenance program
8. Adequate personnel must be provided to accomplish the maintenance functions.
9. The maintenance program must be designed to protect the natural environment.
10. The maintenance unit must assume the responsibility for public and employee safety.
11. In the design and construction of park and recreation facilities, maintenance should be a primary consideration.
12. Maintenance employees have public relations responsibilities to the park and recreation department and to the community.

This section provides an assessment of the Division's activities related to each of the above maintenance principles.

I. Establish maintenance objectives and standards. The Division has informal standards for mowing, litter control and other routine tasks that appear to work under most circumstances. However, the Department should consider the development of formalized park maintenance standards that would specify quantitative and qualitative levels to which maintenance tasks should be accomplished. To do so, it is necessary to

identify key result areas that describe the physical condition of various areas and facilities when they are maintained at the desired level. The result is a classification system of parks and recreation areas as to their respective levels of maintenance. Most parks will actually include multiple classifications from one area to another with areas ranging from intensively maintained (Class A or B) to minimal maintenance (Class C or D). The following is offered as an example of park maintenance classification standards:

Park Classifications

Class A Parks – Park properties representing state of the art maintenance applied to a higher quality diverse landscape. Usually associated with high traffic areas such as public squares, government grounds or high visitation parks. Specific maintenance activities might include:

1. *Turf care* – Mowed at height and frequency according to species and grass variety. Common Bermuda grass mowed at $\frac{3}{4}$ to one inch two or three times weekly during the growing season. Mow cool season grasses at $2\frac{1}{2}$ to $3\frac{1}{2}$ inches often enough that no more than one-third of the grass height is cut. Aeration at least once per year. Reseeding or sodding as necessary. Test soil annually and apply fertilizer and lime as recommended. Irrigate per recommendations for turf variety. For detailed turf maintenance guidance, go to <http://turffiles.ncsu.edu>.
2. *Litter Control* – Minimum of once per day, seven days per week. High visitation may increase the frequency. Receptacles should be provided
3. *Pruning* – Frequency dictated by species and variety of trees and shrubs. Schedule during low demand periods or plant growing characteristics.
4. *Disease and Insect Control* – Focus on preventative, corrective, and integrated pest management as needed. For detailed information on organic turf management see: [http://www.turffiles.ncsu.edu/PDFFiles/004494/Organic Lawn Care A Guide to Lawn Maintenance and Pest Management for North Carolina.pdf](http://www.turffiles.ncsu.edu/PDFFiles/004494/Organic_Lawn_Care_A_Guide_to_Lawn_Maintenance_and_Pest_Management_for_North_Carolina.pdf).
5. *Lighting* – Damaged systems should be repaired as quickly as they are discovered. Bulb replacement should be done on the first working day following outage reporting.
6. *Surfaces* – Sweeping, cleaning and washing of surfaces as needed to avoid an accumulation of sand, dirt and leaves distracting from the looks or safety of the area. Repaint or restrain structures as needed. Graffiti should be washed off or corrected immediately.
7. *Repairs* – Repairs should be done immediately upon discovery pending availability of replacement parts and technicians, and when there would be no disruption to the public.
8. *Inspections* – Inspections of Class A areas should be done daily.
9. *Floral plantings* – Normally extensive floral plantings are part of the landscape design. Often multiple plantings with at least two blooming cycles per year. Maximum care of watering, fertilizing, disease control, disbudding and weeding is necessary. Weeding flowers and shrubs in done at least weekly. The desired standard is “weed free.”
10. *Rest rooms* – Service at least daily. High traffic areas may require multiple daily servicing.
11. *Special features* – Features such as playgrounds, fountains, drinking fountains, sculpture, speaker systems, flag poles, etc. should be inspected and maintained daily.

Class B Parks. Parks that have a high level of maintenance that are associated with well developed park areas with reasonably high visitation. Similar to Class A parks with these exceptions:

1. Turf care – Mow every five working days. Weed control as weeds become apparent. Adequate fertilizer to ensure turf (and other vegetation) is healthy and growing vigorously. Irrigation should be available.
2. Disease control – Practice disease control when disease or insects are causing plant damage or creating a bother to the public.
3. Surfaces – Clean, repair, repaint or replace when appearance has noticeably deteriorated.
4. Repairs – Complete when safety, function, or bad appearance is apparent.
5. Inspection – Daily when staff is scheduled.
6. Floral planting – some sort of floral plantings present. Care cycle once weekly. Water as needed. Fertilize and disease control to retain health and vigorous growth. Keep beds weed free.
7. Special features – Maintain special features for safety, function and high quality appearance.

Class C Parks. Parks requiring a moderate level of maintenance – associated with locations with moderate to low levels of development, moderate to low levels of visitation or where budget restrictions reduce intensity of maintenance. Similar to Class B parks with these exceptions:

1. Turf care – Mow once every 10 working days. Reseed or resodding only as major bare spots appear. Low level of fertilizer once per year. No irrigation other than portable systems during drought.
2. Litter control – Minimum service of two to three times per week. High use dictates higher levels during high use seasons.
3. Pruning – Once every two or three years to retain health and reasonable appearance.
4. Disease and insect control – Done only on epidemic or serious complaint basis.
5. Surfaces – Cleaned on complaint basis or as budget allows.
6. Repairs – Complete when safety or function is in question.
7. Floral plantings – Only perennials or flowering trees or shrubs.
8. Rest rooms – When present, service five days per week. Seldom more than once per day.
9. Special features – Minimum allowable maintenance for function and safety.

Class D Parks. Parks with minimal maintenance associated with a low level of development, low visitation, undeveloped areas or remote parks. Typical maintenance activities might include:

1. Turf care – High grasses may receive periodic mowing to aid public use or to reduce fire danger. Weed control limited to legal requirements for noxious weeds. No fertilizers or irrigation used.
2. Litter control – Once per week or less. Respond to complaints as needed.
3. Pruning – No regular trimming. Damage from weather may dictate actual work schedule.
4. Lighting – Replacement on complaint or employee discovery.
5. Surfaces – Only when safety or function is in question.
6. Inspections – Once per month.

7. Floral plantings – None. May have wildflowers, perennials flowering trees or shrubs.
8. Rest rooms – Usually not present. Where present, maintain five times per week.
9. Special features – Minimum maintenance to allow safe use.

Class E Parks. Parks that have minimum maintenance associated with low visitation natural areas or currently undeveloped. Similar to Class D parks with these exceptions:

1. Turf care – Not mowed. Weed control only to meet legal requirements.
2. Litter control – On demand or complaint basis.
3. Special features – Usually not present.

Athletic Fields - As parks can be classified by their respective level of development and maintenance, so should athletic fields. When used for competitive league play or hosting tournaments, athletic fields require considerable care and resources, whereas fields used for neighborhood pick up games require much less attention. A park system may have an athletic field classification system with multiple levels of maintenance similar to the levels of maintenance among parks of different classifications. Examples include:

Level I. League play and tournaments. These fields have a high visitation and should be maintained at the highest level of maintenance and used for tournaments and league play only.

Level II. These fields are used for league play and tournaments and have a moderate to high visitation and should be maintained at a high level of maintenance. Pick-up games are allowed when they don't interfere with scheduled games and maintenance.

Level III. These fields are used for league play and have moderate to high visitation. They should be maintained at a high level of maintenance. Pick-up games and other uses are allowed when they don't interfere with scheduled games or maintenance. (Warren, Rea and Payne, p.221)

Specific maintenance tasks can be developed for each level of athletic field similar to those developed for parks of various classifications noted above.

The above program for athletic field maintenance does not include fields where artificial turf may be installed.

Excellent resources to guide the maintenance of athletic fields in North Carolina include:

"Bermudagrass Athletic Field Maintenance Calendar," A.H. Bruneau. Published by North Carolina Cooperative Extension Service, Publication Number AG-429, June 2001. <http://www.turffiles.ncsu.edu/Athletic-Fields/Default.aspx#MC00024>.

"Tall Fescue Kentucky Bluegrass Athletic Field Calendar," A.H. Bruneau. Published by North Carolina Cooperative Extension Service, Publication Number AG-430, June 2001. <http://www.turffiles.ncsu.edu/Athletic-Fields/Default.aspx#MC000212>.

- II. Maintenance should be performed with economy of time, personnel, equipment, and materials. Maintenance employees participate frequently in training programs offered by equipment manufacturers and the NC Cooperative Extension Service to learn new skills and to maximize their efficiency while minimizing equipment down time or employee health or safety issues. However, because the Division's primary activity is mowing, and since new mowing equipment has to be purchased from supplies and materials funds, it is fair to say that equipment is often pushed to the limit, resulting in breakdowns that result in longer periods between mowings.
- III. Maintenance operations should be based on a sound written maintenance plan. The Department has developed a prototype maintenance management plan but it is based on optimal resource allocations as opposed to currently available resources. The proposed maintenance plan for each area to be maintained should include the following:
- An inventory of all park assets to be maintained.
 - Specific maintenance tasks for each park asset.
 - Frequency of maintenance tasks.
 - Personnel needs to complete each task.
 - Time estimate to complete each task.
 - Materials needed to complete each task.
 - Capital equipment needed to complete each task.

Maintenance plans can also provide solid cost estimates for each task as well as the total costs for maintaining each area by incorporating salary and benefit data as well as material costs.

- IV. Scheduling maintenance work should be based on established policies and priorities. The Division has a number of informal guidelines that are followed in scheduling maintenance work, including:
- Mowing is scheduled around heavy park usage and to have parks in optimal condition for weekends and holidays.
 - Arborists and other maintenance employees are proactive in checking for potentially dangerous conditions such as dead branches, worn surfaces and graffiti
 - Cemeteries are mowed weekly with special emphasis on having them mowed and trimmed for holidays when visitation is highest.
 - Playground inspectors begin their work no later than 6 AM so as not to conflict with early morning use.
 - The downtown maintenance crew begins their work at 4 AM to have all areas clean before the area is busy with students and workers.

V. Preventive maintenance should be emphasized.

By providing continuous attention and care to prevent damaging wear and costly repairs, the Division will get the optimum life from facilities and equipment. The most significant example of the Division's preventive maintenance program is with mowers and trucks that are maintained on a regular schedule as per manufacturers' recommendations to assure maximum performance and life span. Outdoor surfaces such as tennis courts are inspected regularly and resurfaced as funds permit. Building mechanical systems are maintained by the Building Services Division and are not the responsibility of the Landscape Services and Park Maintenance Division.

VI. The maintenance division should be well organized. The Division is organized as a centralized unit with all employees working out of the Town work center. With travel time to most park areas within 20 minutes of the work center, the existing centralized organizational structure is appropriate.

Within the past three years the following positive changes in the organization of maintenance activities were initiated:

- Mowing operations were reorganized into a North crew and a South crew with responsibilities assigned respectively as opposed to the previous system where they were organized by facility type
- Specialized maintenance crews were created for athletic fields and cemeteries.

With mowing being the most extensive activity of the Division, the above changes were positive steps in maximizing the use of personnel and equipment.

VII. Adequate fiscal resources must be provided to support the maintenance program. Fiscal resources enable the Division to maintain parks, greenways and boulevards at a Class C level as outlined earlier. Other than premier athletic fields, the majority of mowing is performed every two weeks as opposed to weekly, or even more frequently, as outlined in Class A or B parks. If the Department decides to elevate parks to a higher classification of maintenance, additional personnel, materials and equipment will be required.

VIII. Adequate personnel must be provided to accomplish the maintenance functions. Salary levels for maintenance personnel appear to be similar to those in other North Carolina communities, while benefits provided to full time employees appear to be exceptional. Housing prices and property taxes in Chapel Hill are considered high, making it necessary for many employees at all levels to live outside the Town. Interviews with the Superintendent of Landscape Services and Park Maintenance were never critical of the quality of maintenance personnel. As the Parks and Recreation Department moves forward in improving the level of maintenance in parks and other public areas, emphasis should be on continuing to employ quality personnel, providing a good orientation program to educate each individual on the importance of her or his job and the mission and goals of the Department. The Division should emphasize initial and in-service training so each employee can adequately perform the job for which she or he was hired, and good communication should be emphasized between upper administrative levels and all maintenance personnel to keep administrators informed of maintenance issues and challenges, while providing maintenance personnel with information related to the Department and Town that might be of value in their interactions with the public encountered while performing their work duties or when asked by residents while off duty.

IX. The maintenance program must be designed to protect the natural environment. The Parks and Recreation Department follows a number of maintenance guidelines to minimize any negative environmental impact. Examples include:

- Emphasis on the use of native trees and shrubs to minimize maintenance, the need for water or fertilizer, and frequent pruning.

- Martin Luther King Boulevard mowing is coordinated with Public Works street sweeping to pick up grass clippings and other debris so as not to clog storm water drains and streams.
- Litter pick up is a daily function in parks and greenways, which helps to avoid debris blowing into streams and into other difficult to reach areas.
- The Department emphasizes the purchase and upkeep of motorized equipment to minimize air pollution.
- The Department emphasizes the purchase of motorized equipment that meets or exceeds EPA standards.

IX. The maintenance unit must assume the responsibility for public and employee safety. The Parks and Recreation Department is proactive in helping to assure both public and employee safety through a number of activities including:

- Employees participate in regularly offered safety training programs on such topics as the proper use of safety equipment and vehicle safety.
- Arborists and other maintenance personnel routinely inspect for dead trees or limbs that could be potential dangers to the public or to employees. The removal of dead or damaged trees and limbs is a high priority.
- Policies require employees to abide by manufacturer recommendations for safety gear such as safety glasses, hard hats, gloves, safety vests, and other standard personal protective equipment.

X. In the design and construction of park and recreation facilities, maintenance should be a primary consideration. In recent years, maintenance personnel have had input into planning and development activities including the selection of building and construction materials, types of plants for landscaping, adequate mower access and maneuvering space, and other decisions that impact maintenance performance over time.

XI. Maintenance employees have public relations responsibilities to the park and recreation department and to the community. Supervisory personnel are informed of Department or Town events or activities that could lead to public inquiries. The importance of public service and public perception is emphasized repeatedly with maintenance personnel. Specific examples of points raised include safe driving and providing accurate assistance to the public in a polite manner. Employees wear standardized uniforms so they can be identified as employees of the park and recreation department. Also, as mentioned earlier, mowing, litter removal, and other maintenance functions are performed very early in the morning at selected parks and playgrounds to avoid any negative impact on public use.

Options for Higher Levels of Maintenance

Based on numerous interviews with the Superintendent of Landscape Services and Park Maintenance, personal inspections of all park areas and selected greenways, and the assessment of maintenance operations based on sound maintenance principles and guidelines, a number of recommendations can be made to improve the level of maintenance at Chapel Hill parks and greenways. Overall, the level of maintenance at Town parks and greenways can be described as “average”, but representative of the level of funding currently available. Whereas most progressive communities have

formalized classification systems for park maintenance, it is fair to say that very few parks or other properties under the care of the Parks and Recreation Department reach the A or B levels identified under the section of this report titled “Park Classifications.” If the goal is to have parks and recreation areas reflect the beauty normally associated with the Town of Chapel Hill, particularly given the relatively high cost of living in the community, it will be necessary to develop an aggressive maintenance management plan and to allocate resources accordingly. Specific options to improve the level of maintenance include the following:

1. Park Renovations – Renovating most existing parks will result in a much-needed fresh appearance and will provide an opportunity to create areas and facilities that are easier to maintain at a higher level over time.
2. Boulevards – Increasing the frequency of mowing, removing litter and edging curbs and planting beds will significantly improve the appearances of these important corridors. It is important to recognize that for many citizens that do not visit parks, the physical appearance of public areas, including boulevards, may be their only way to judge the performance of those responsible for their upkeep.
3. Maintenance Standards – Establishing a park classification system will identify those parks, areas within parks, and public landscaped areas that should receive a higher level of maintenance.
4. Athletic Fields – Establishing a formalized classification system for maintaining athletic fields would result in their increased use and improved appearance. As funds are available for the renovation of existing athletic fields, or the development of new ones, synthetic turf should be considered in that it allows for much greater use with much less maintenance than grass turf without compromising physical appearances.
5. Maintenance Management Plan – Parks and recreation leaders have developed a prototype plan for the management of maintenance functions at all parks and greenways. While that plan assumes improving the level of maintenance at all parks and greenways, and is dependent on increased funding, the process will be very valuable to the Department of Parks and Recreation in providing clear expectations and priorities, identifying personnel and equipment needs, and in measuring performance levels in the area of park and greenway maintenance.
6. Work Order System – The Landscape Services and Park Maintenance Division operates on daily and weekly task schedules as opposed to a systematic work order system. The development of a formalized work order system should be considered to accurately determine maintenance standards, frequency of tasks, and the cost of maintaining all parks and other properties for which the Parks and Recreation Department is responsible. A work order system would also help in determining the life cycle of all physical assets in order to anticipate capital improvement needs, staffing, and equipment necessary to meet the expectations of the community and Town leaders, particularly as new parks and recreation facilities are developed. As a first step, the Department could consider these changes:
 - Institute a work log system where each employee reports daily on specific work activities including time per activity, travel time, equipment and materials utilized. By adding salary and benefits costs for each employee, as well as equipment and materials costs, it would be possible to determine the cost of maintaining each location.
 - Develop a work order system for non-routine activities such as services provided for special events and festivals. Work order software is available for instituting such systems.

An example of a cost tracking system is provided at the end of this report.

7. Contract Services - In certain circumstances the Department may want to consider contracting out specific services such as mowing, edging, litter removal, playground safety and maintenance, etc.. While it is possible to lose some element of control with contract services, benefits can include cost savings in the form of avoiding expensive employee benefits and employee management challenges. This should receive careful consideration before making a decision for some park systems have found that contract services ended up costing more than completing the same tasks at the same level with their own employees.
8. The Division should consider the purchase of a landscape tractor with appropriate attachments and at least one small dump truck. The tractor would enable the Division to be more efficient in completing many landscape projects that involve moving and spreading materials while the small dump truck would be much provide greater capacity and more options than using pick up trucks as currently used.
9. As part of the development of a park and recreation maintenance management plan, the Division should develop a Landscape and Park Maintenance Operations Manual with information to help orient new employees and to assure high quality services. The content of such a manual could include documents such as:
 - Maintenance schedules for each area maintained.
 - Equipment maintenance schedules and procedures.
 - Safety considerations in the use of equipment and chemicals.
 - Scheduling maintenance activities so as not to interfere with park use, downtown activities, cemetery visitations, or special events.
 - Guidelines for maintenance employees regarding
 - Public and employee safety
 - Public contact protocol
 - Inspecting for problems beyond the normal responsibilities of the respective employee, such as the potential danger of a dead tree, graffiti, dumping in parks, stray animals, etc.

Cost implications for higher levels of maintenance

The recent trend in funding for landscape services and park maintenance has been to reduce funding through freezing positions as they become vacant. One would expect this action to have a negative impact on landscape and maintenance functions, however the Division does not currently have a cost tracking or work order system to identify precise costs for any of its landscape or maintenance functions. As a result, there are no base line data to know the impact of those cuts or to compare costs.

Based on site visits and numerous interviews with the Superintendent of the Landscape Services and Park Maintenance Division, it was not possible to determine if the unit is under performing. To determine true efficiencies would require a lengthy and costly study that is beyond the scope of this report. Instead, it is recommended that the Department and Town leadership determine if it is interested and willing to increase the maintenance level of specific parks and public areas, and to increase the staffing and equipment allocation respectively to determine if it is a worthwhile investment of resources. The Division Superintendent has developed "ideal" maintenance plans for

each park and greenway that could be a starting point. This should only be done if accurate records are maintained to cost-track all maintenance functions. Within one year it would be possible to determine if the added investment of resources results in an increased level of maintenance that is worth pursuing in other parks and public areas.

Three immediate recommendations are (1) for the Division to utilize a work order system for non-routine activities at the least, (2) for the Division Superintendent to explore commercially available software that can be utilized to develop maintenance cost tracking systems for all parks and public areas for which it is responsible, and (3) to seek out comparative data such as average cost data for activities such as mowing, mulching, litter removal, and other typical maintenance functions.

Only when the above activities and systems have been initiated will it be possible to gain a thorough understanding of the efficiency and effectiveness of the Landscape Services and Park Maintenance Division, and to improve the appearances and upkeep of parks and public areas.

References

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Park Maintenance Standards, Appendix 6, (December, 2006) Tampa Bay Engineering, Inc.

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Park Maintenance Plan, Kettering, Ohio (2006).