

FACILITY STANDARDS

Overview

Local governments are tasked with providing a variety of recreation facilities sufficient in size and number to meet the recreation demands of their residents. Facilities should be evenly distributed within the city boundaries to provide convenient access to parks and open space. Public facilities should also contain the natural resources and amenities appropriate to accommodate all the various types of recreational activities participated in by its citizens and as resources will allow.



Art in the Park Event at Stephens Lake Park

Park planners have long questioned the utilization of blanket development standards as a tool to determine recreation facility needs. Mirroring this philosophy, facility standards provided by the National Recreation and Park Association (NRPA) have been discontinued for quite some time. At the time of discontinuation, NRPA advised communities to establish needs in a more flexible way based on their specific community demands compared to the existing level of services offered, taking into consideration the recreation services provided by non-municipal facilities for a specified area and travel distance. Non-municipal and quasi-public facilities play an important role in accommodating the recreation needs of a community, as long as planners take into consideration restrictions in hours of operation and membership requirements. Recreation standards should also take into consideration the cultural background, health assessment, age and socio-economic status of a community. For example, Columbia's higher than average rate of poverty¹, along with parallel rates to the nation's obesity epidemic, indicates a need for free or low-cost fitness facilities, such as parks and trails.

Whether or not a community is meeting the recreational demands of a community is most often determined via market research acquired from public input. With citizens continuing to take a more active role in deciding what types of outdoor recreation facilities are needed in their communities, public input seems to be the most sensible approach to determining needs and the one that the Columbia Parks and Recreation Department (CPRD) continues to follow. Public input is addressed in Chapter 6 and heavily weighted in the recommended facilities listed in Chapter 11 - Recommended Capital Improvements.

As in past plans, this chapter will only address comparisons of Columbia's outdoor facilities to the current Missouri Department of Natural Resources (DNR) standards for outdoor park facilities as stated in the *2008-2012 State Comprehensive Outdoor Recreation Plan (SCORP)*. This comparison is included because many state and federal agencies require it on grant applications, and City staff can use this comparison to identify possible deficiencies. The

¹ 2010 U.S. Census - Persons below poverty level: Columbia, MO - 22.9%; Missouri - 14%; National - 13.8%

Comparison to Standards Charts contain facilities within a reasonable service radius owned by schools, universities, non-municipal/quasi-public agencies, and those owned and/or operated by the City of Columbia (See Chapter 4 – Park and Facility Inventory for details). As outlined in the SCORP, state and federal owned lands and recreation facilities are not factored in the SCORP needs analysis.

Included in this chapter are:

- DNR’s updated “Outdoor Recreation Development Goals” (also referred to as “Missouri Standards”)
- Tables comparing Columbia’s facilities with DNR’s “Outdoor Recreation Development Goals” based on 2013’s estimated population and 2022’s estimated population
- Conclusions drawn from these comparisons, with Surplus/Deficit tables for 2002, 2013, and 2022

For a more accurate comparison to SCORP’s development goals, CPRD adjusted its trail classifications as per the following descriptions:

- **Exercise Trail:** This category continues to include neighborhood park trails that incorporate trailside outdoor fitness equipment.
- **Bicycle Trail:** This category now includes trails primarily used for destination bicycling and trails developed utilizing American Association of State Highway and Transportation Officials (AASHTO) Guide for Design of Bicycle Facilities. (Examples: MKT Trail, Bear Creek Trail, and Hinkson Creek Trail) Since SCORP does not include a “Mountain Bike Trail” category, Rhett’s Run Mountain Bike Trail is also included in this category. In the 2002 Master Plan, this category was utilized as a subheading to indicate only rough terrain mountain bike use.
- **Multi-Purpose Trail:** This category now includes hard surface trails designed to primarily accommodate multiple forms of recreation such as walking, jogging, bicycling, rollerblading, skateboarding and scooter use. (Examples: Cosmo Fitness Trail and Stephens Lake Trail) In the 2002 Facility Needs Update, this category was utilized as a subheading to indicate multi-surface trails used for walking, jogging or bicycling.
- **Nature Trail:** This category now includes dirt trails or mowed paths minimally maintained by CPRD. (Examples: dirt trails in Wilson Park and Grindstone Nature Area) In the 2002 Master Plan, this category was utilized as a subheading to indicate maintained soft surface (gravel or dirt) trails primarily used for walking or hiking.
- **Walking Trail:** This category now includes gravel trails primarily used for walking or wheelchair use. This category was not utilized by SCORP or CPRD in 2002 (SCORP at that time included both hiking and jogging trails in their development goals).

The 2010 census population of Columbia was 108,500. Based on the population increase from the 2000 census to the 2010 census, the *Fiscal Year 2013 City of Columbia Annual Budget* projects a 2.5 percent annual population increase for 2013. The following tables use this same 2.5 percent annual increase to estimate the city’s population in 2013 and 2022.

Note: At the time of publication, DNR planning staff indicated the 2013-2017 Missouri SCORP (awaiting approval by the National Park Service) will possibly no longer utilize development standards based on population. This change in development criteria will allow more credence to be given to local public input as well as new standards related to travel time and socio-economic community characteristics.

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Goals for Development Projects

Source: 2008 – 2012 *Statewide Comprehensive Outdoor Recreation Plan (SCORP)*;
Missouri Department of Natural Resources

Facility

Goals for Urban Areas

Ball diamond	1 diamond per 1,545 population
Basketball court	1 court per 4,410 population
Bicycle trail	1 mile per 2,624 population
Boat ramp*	1 ramp per 5 river miles in SMSA 1 ramp in 10 river miles in non-SMSA
Campsites	1 site per 3,400 population
Equestrian trail	1 mile per 4,854 population
Exercise trail	1 mile per 3,907 population
Football field/Soccer field	1 field per 3,274 population
Golf Course (9 or 18 holes)	1 course per 25,674 population
Handball/Racquetball court	1 court per 43,187 population
Horseshoe court	1 site per 2,810 population
Ice skating rink	1 rink per 108,838 population
Multi-purpose trail	1 mile per 4,220 population
Multi-use court	1 court per 6,073 population
Nature trail	1 mile per 4,814 population
Picnic shelter	1 shelter per 1,356 population
Picnic table	1 table per 128 population
Playfield	1 playfield per 7,886 population
Playground	1 playground per 1,379 population
Shuffleboard court	1 court per 4,251 population
Skateboard park	1 park per 34,435 population
Swimming pool	1 pool per 6,500 population
Tennis court	1 court per 2,333 population
Volleyball court	1 court per 4,659 population
Walking trail	1 mile per 4,446 population

SMSA = Standard Metropolitan Statistical Area

** Not applicable in Columbia, Missouri*

Examples of Columbia's Recreation Facilities



Basketball Court - Douglass Park

Did You Know?
Half of Missouri children in poor families are overweight or obese. These families are 30% less likely to have access to safe physical activity options and nutritious foods.



Soccer Field - Cosmo Park



Pool - Lake of the Woods



Multi-Use Trail - Stephens Lake Park



Golf Course - L. A. Nickell

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Comparison to Standards Chart - 2013

OUTDOOR FACILITIES/ACTIVITIES	MISSOURI STANDARDS						
	# OF UNITS PER POPULATION	RECOMMENDED # OF UNITS (BASED ON COLUMBIA'S *POPULATION)	CITY-OWNED OR CITY-MAINTAINED FACILITIES	CITY- OWNED FACILITIES: SURPLUS OR (DEFICIT) ACCORDING TO MO STANDARDS	NON-MUNICIPAL QUASI-PUBLIC FACILITIES	TOTAL FACILITIES: CITY + QUASI-PUBLIC	TOTAL FACILITIES: SURPLUS OR (DEFICIT) BASED ON MO STANDARDS
1 Football field	1 field per 3,274	36 fields	6	(30)	6 **school	12	(24) fields
2 Soccer field	1 field per 3,274	36 fields	18	(18)	1 university (lighted) 11 **school 5 non-municipal/quasi-public	35	(1) fields
3 Picnic shelter	1 shelter per 1,356	86 shelters	51	(35)	2 university	53	(33) shelters
4 Picnic table	1 table per 128	913 tables	443	(470)	17 university	460	(453) tables
5 Ball diamond	1 diamond per 1,545	76 diamonds	23	(53)	13 non-municipal/quasi-public 5 **school (2 lighted)	41	(35) diamonds
6 Tennis court	1 court per 2,333	50 courts	27	(23)	11 university (7 lighted) 16 **/**school (8 lighted) 9 non-municipal/quasi-public	63	13 courts
7 Handball/Racquetball court	1 court per 43,187	3 courts	0	(3)	4 university 2 non-municipal/quasi-public	6	3 courts
8 Playground	1 playground per 1,379	85 playgrounds	48	(37)	34 school 2 non-municipal/quasi-public 1 county	85	0 playgrounds
9 Swimming pool	1 pool per 6,500	18 pools	3	(15)	8 non-municipal/quasi-public 1 university	12	(6) pools
10 Ice rink	1 rink per 108,838	1 rink	0	(1)	0	0	(1) rink
11 Equestrian trail	1 mile per 4,854	24.1 miles	0	(24.07)	0	0	(24.07) miles
12 Walking trail	1 mile per 4,446	26.3 miles	13.84	(12.44)	0	13.84	(12.44) miles
13 Nature trail	1 mile per 4,814	24.3 miles	11.4	(12.87)	0	11.4	(12.87) miles
14 Exercise trail	1 mile per 3,907	29.9 miles	1.84	(28.07)	0	1.84	(28.07) miles
15 Bicycle trail	1 mile per 2,624	44.5 miles	22.52	(22.01)	3.63 university 4.2 county	30.35	(14.18) miles
16 Multi-Purpose trail	1 mile per 4,220	27.7 miles	1.85	(25.84)		1.85	(25.84) miles
17 Basketball court	1 court per 4,410	26 courts	22	(4)	0	22	(4) courts
18 Multi-use court	1 court per 6,073	19 courts	22	3	33 school 3 non-municipal/quasi-public	58	39 courts
19 Campsites	1 site per 3,400	34 sites	0	(34)	1 non-municipal/quasi-public	1	(33) sites
20 Shuffleboard court	1 court per 4,251	27 courts	1	(26)	0	1	(26) courts
21 Horseshoe court	1 site per 2,810	42 courts	16	(26)	1 university	17	(25) courts
22 Volleyball court	1 court per 4,659	25 courts	18	(7)	4 university 3 non-municipal/quasi-public	25	0 courts
23 Boat ramp	1 ramp per 5 river miles in SMSA N/A 1 ramp in 10 river miles in non-SMSA N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
24 Golf Course (9 or 18 holes)	1 course per 25,674	5 courses	2	(3)	1 university 6 non-municipal/quasi-public	9	4 courses
25 Skateboard park	1 park per 34,435	3 skate parks	1	(2)	0	1	(2) skate parks
26 Playfield	1 playfield per 7,886	15 playfields	18	3	31 school 9 university	58	43 playfields

* Based on an estimated 2013 population of: 116,843 (Source: FY 2013 City of Columbia Annual Budget)

**Includes Battle High School facilities - all facilities are currently under construction.

***Facilities that are school-owned, but maintained by the City are included in "City-Owned or City-Maintained Facilities" column.

Note: Calculations for items that cannot be counted by fractions are rounded up or down. SCORP standards do not include state and federal owned land and recreation facilities.

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Comparison to Standards Chart - 2022

		MISSOURI STANDARDS					
OUTDOOR FACILITIES/ACTIVITIES	# OF UNITS PER POPULATION	RECOMMENDED # OF UNITS (BASED ON COLUMBIA'S *POPULATION)	CITY-OWNED OR CITY-MAINTAINED FACILITIES	CITY- OWNED FACILITIES: SURPLUS OR (DEFICIT) ACCORDING TO MO STANDARDS	NON-MUNICIPAL QUASI-PUBLIC FACILITIES	TOTAL FACILITIES: CITY + QUASI-PUBLIC	TOTAL FACILITIES: SURPLUS OR (DEFICIT) BASED ON MO STANDARDS
1 Football field	1 field per 3,274	45 fields	6	(39)	6 **school	12	(33) fields
2 Soccer field	1 field per 3,274	45 fields	18	(27)	1 university (lighted) 11 **school 5 non-municipal/quasi-public	35	(10) fields
3 Picnic shelter	1 shelter per 1,356	108 shelters	51	(57)	2 university	53	(55) shelters
4 Picnic table	1 table per 128	1,140 tables	443	(697)	17 university	460	(680) tables
5 Ball diamond	1 diamond per 1,545	94 diamonds	23	(71)	13 non-municipal/quasi-public 5 **school (2 lighted)	41	(53) diamonds
6 Tennis court	1 court per 2,333	63 courts	27	(36)	11 university (7 lighted) 16 **/**school (8 lighted) 9 non-municipal/quasi-public	63	0 courts
7 Handball/Racquetball court	1 court per 43,187	3 courts	0	(3)	4 university 2 non-municipal/quasi-public	6	3 courts
8 Playground	1 playground per 1,379	106 playgrounds	48	(58)	34 school 2 non-municipal/quasi-public 1 county	85	(21) playgrounds
9 Swimming pool	1 pool per 6,500	22 pools	3	(19)	8 non-municipal/quasi-public 1 university	12	(10) pools
10 Ice rink	1 rink per 108,838	1 rink	0	(1)	0	0	(1) rink
11 Equestrian trail	1 mile per 4,854	30.1 miles	0	(30.06)	0	0	(30.06) miles
12 Walking trail	1 mile per 4,446	32.8 miles	13.84	(18.98)	0	13.84	(18.98) miles
13 Nature trail	1 mile per 4,814	30.3 miles	11.4	(18.91)	0	11.4	(18.91) miles
14 Exercise trail	1 mile per 3,907	37.3 miles	1.84	(35.51)	0	1.84	(35.51) miles
15 Bicycle trail	1 mile per 2,624	55.6 miles	22.52	(33.09)	3.63 university 4.2 county	30.35	(25.26) miles
16 Multi-Purpose trail	1 mile per 4,220	34.6 miles	1.85	(32.73)		1.85	(32.73) miles
17 Basketball court	1 court per 4,410	33 courts	22	(11)	0	22	(11) courts
18 Multi-use court	1 court per 6,073	24 courts	22	(2)	33 school 3 non-municipal/quasi-public	58	34 courts
19 Campsites	1 site per 3,400	43 sites	0	(43)	1 non-municipal/quasi-public	1	(42) sites
20 Shuffleboard court	1 court per 4,251	34 courts	1	(33)	0	1	(33) courts
21 Horseshoe court	1 site per 2,810	52 courts	16	(36)	1 university	17	(35) courts
22 Volleyball court	1 court per 4,659	31 courts	18	(13)	4 university 3 non-municipal/quasi-public	25	(6) courts
23 Boat ramp	1 ramp per 5 river miles in SMSA N/A 1 ramp in 10 river miles in non-SMSA N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
24 Golf Course (9 or 18 holes)	1 course per 25,674	6 courses	2	(4)	1 university 6 non-municipal/quasi-public	9	3 courses
25 Skateboard park	1 park per 34,435	4 skate parks	1	(3)	0	1	(3) skate parks
26 Playfield	1 playfield per 7,886	19 playfields	18	(1)	31 school 9 university	58	39 playfields

* Based on an estimated 2022 population of: 145,921 (Source: FY 2013 City of Columbia Annual Budget - 2013 estimated population with a 2.5% annual increase)

**Includes Battle High School facilities - all facilities are currently under construction.

***Facilities that are school-owned, but maintained by the City are included in "City-Owned or City-Maintained Facilities" column.

Note: Calculations for items that cannot be counted by fractions are rounded up or down. SCORP standards do not include state and federal owned land and recreation facilities.

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Conclusions Based on DNR Development Guidelines

The following conclusions are based solely on comparison of Columbia’s outdoor facilities with the “Goals for Development Projects” by the Missouri Department of Natural Resources. Deficiencies identified may be helpful for future grant applications.

Indicated deficiencies are based on the estimated population for 2013 and 2022. For comparison, the table below indicates if a need was also indicated in the *2002 Facility Needs Update*. Information for 2013 and 2022 is based on revised development goals from the *2008 – 2012 State Comprehensive Outdoor Recreation Plan (SCORP)*. Also note, as described in the Standards Overview, trail designations have been adjusted since the 2002 Facility Needs Update.

Facility	2002 Surplus or (Deficit/Projected Need)	2013 Surplus or (Deficit/Projected Need)	2022 Surplus or (Deficit/Projected Need)
Exercise trail	(9.93) miles	(28.07) miles	(35.51) miles
Bicycle trail	(31.86) miles	(14.18) miles	(25.26) miles
Multi-Purpose trail	(12.38) miles	(25.84) miles	(32.73) miles
Nature trail	(24.20) miles	(12.87) miles	(18.91) miles
Jogging/Walking trail	(44.15) miles	(12.44) miles	(18.98) miles
Hiking trail	(22.07) miles	NA	NA
Total Bike/Ped Trail Deficiency	(144) miles	(93) miles	(131) miles
Equestrian trail	(14) miles	(24) miles	(30) miles
Picnic table	(289) tables	(453) tables	(680) tables
Picnic shelter	(4) shelters	(33) shelters	(55) shelters
Ball diamond	(36) diamonds	(35) diamonds	(53) diamonds
Campsites	(294) sites	(33) sites	(42) sites
Horseshoe court	(39) courts	(25) courts	(35) courts
Football field	(14) fields	(24) fields	(33) fields
Shuffleboard court	(43) courts	(26) courts	(33) courts
Playground	(33) playgrounds	0 playgrounds	(21) playgrounds
Basketball court	NA	(4) courts	(11) courts
Swimming pool	(11,975) sq. ft.	(6) pools	(10) pools
Soccer field	21 fields*	(1) field	(10) fields
Volleyball court	(2) courts	0 courts	(6) courts
Skateboard park	NA	(2) skate parks	(3) skate parks
Tennis court	9 courts	13 courts	0 courts
Ice rink	(2) rinks	(1) rink	(1) rink
Handball/Racquetball court	2 courts	3 courts	3 courts
Golf Course (9 or 18 holes)	2 courses	4 courses	3 courses
Playfields	NA*	43 playfields	39 playfields
Multi-use court	30 courts	39 courts	34 courts

**Inventory noted for 2002 soccer fields included multi-purpose playfields with goal posts on site. The 2008-2012 SCORP includes separate categories for both soccer fields and playfields.*

Of special note, playground facility inventory grew significantly from the years 2002 to 2013. This increase is due to the development of 19 playgrounds at 16 city-owned parks, as well as an increase in 9 school facilities. The estimated 2.5 percent increase in population per year will again create a need for 22 more playgrounds by 2022.

Columbia Parks and Recreation will continue to collaborate with DNR and other government and non-municipal/quasi-public agencies to provide a well-balanced park system that meets local community needs. The information in this chapter should not be used as an all-inclusive list of recreational facility needs, but rather as one of many indicators. Recommendations based on all factors considered for capital improvement projects can be found in Chapter 11 - Recommended Capital Improvements.



Barberry Neighborhood Park
Development Scheduled 2015



Smith Community Park
Phase 1 Development Scheduled 2014



Gans Creek Recreation Area (Regional Park)
Phase 1 Development Scheduled 2013 - 2015