

National Recreation  
and Park Association

# PRORAGIS Database Report: Counties



**N**RPA'S CUTTING-EDGE, online management tool PRORAGIS, is designed for public park and recreation agency decision makers to enable them to easily compare and evaluate their agency's performance and needs against that of other agencies. PRORAGIS, an acronym for Park and Recreation Operating Ratio and Geographic Information System, replaces the NRPA Standards that have guided land acquisition and development for the past 45 years. The data is much more accurate because users can compare standards with actual numbers for departments in their state or region rather than the more generic national average. PRORAGIS data provides assistance with the following park and recreation functions:

- Comparison survey of peers
- Master planning of parks
- Comprehensive jurisdiction planning
- Strategic planning
- Business and revenue-generation planning
- Marketing of facilities, programs, and tourist attractions
- Justification and defense of departmental budgets

The PRORAGIS database allows you to customize variables and pull differing data sets based on your specific parameters. In the future, we will conduct oversampling of PRORAGIS data to explore selected topics in greater detail. These topics may include program operating data, fees and charges, and salary studies. Currently, the profiles from jurisdictional types provide information that allows you to identify differences between each type.

The aggregate profiles show the similarities and differences between the jurisdiction types. As the number of profiles increase, it is likely that the overall character of the jurisdiction type will become more pronounced. The first jurisdiction type we reported on was the special park district, and this second report focuses on counties.. It is possible some PRORAGIS participants will find themselves in both the special park district and county categories.

Using PRORAGIS data, this report focuses on profiles submitted by 84 counties and demonstrates data sets based on square mileage, operating budgets, capital income, jurisdiction population, jurisdiction population growth, jurisdiction demographics such as age, ethnicity, household income, and much more. We are confident you will find this information interesting and helpful in your own planning.

## Background

In 1998, the National Association of County Park and Recreation Officials (NACPRO) Board of Directors was interested in learning how operations and capital activities of more than 3,000 counties nationwide compared to each other. Despite a concerted effort, NACPRO was unable to structure a data format that would allow for the collection of comparative data except in limited specific areas.

Some 13 years later, the National Recreation and Park Association (NRPA) created PRORAGIS. The PRORAGIS database launched in January 2011 and has now been operating for more than a year and a half. During this time, 84 counties have completed profiles that include information about departmental programming, finances, park lands, personnel, etc. From the current profiles, we are able to compile an

overview of county park and recreation systems across the country.

## The Distribution of Profiles

To date, U.S. park and recreation departments have submitted more than 300 complete PRORAGIS survey profiles. In addition, more than 500 others have completed four or more of the seven survey sections that make a complete profile. Although 84 total counties are included in the analysis, for some of the tables throughout this report, there are only 60 to 70 total respondents for individual questions. This occurs because some participating departments do not answer every question in the survey.

Presented in the following table is the distribution of county participants by state. States that are not listed currently have no complete county profiles. Insofar as possible, NRPA recommends that departments encourage others in their state to develop profiles, growing a larger pool of potential benchmark partners. While the relatively small number of profiles currently in the PRORAGIS database impacts aggregate information, having benchmark partners will allow participants to run side-by-side reports in order to make direct comparisons.

Completed County PRORAGIS Profiles			
GA	10	LA	2
FL	9	NV	2
NC	8	NJ	2
CA	7	TN	2
VA	5	DE	1
MD	4	IL	1
MN	4	NM	1
WA	4	NY	1
MI	3	OK	1
OH	3	PA	1
SC	3	TX	1
WI	3	UT	1
AZ	2	WY	1
CO	2		



## Your Jurisdiction

Regardless of how similar a department may seem for benchmarking or best practices studies, PRORAGIS users will want to ensure that the target jurisdiction is relevant as a match. Factors such as population density, age distribution, local finances, poverty levels, and population growth rates are indicators of a jurisdiction's suitability as a benchmarking candidate. In addition to medians and averages, a display of upper- and lower-quartiles provides insight as to how the data is distributed. For example, in the table below, operating budgets vary by 9,000% and population size varies by about 605%. On the other hand, population under age 18 only varies by 12%. The fact that the average may be larger than the median or even upper-quartile is indicative of high value outliers possibly distorting the results. Closer inspection of these numbers is warranted.

When evaluating a different jurisdiction for accurate benchmarking against your own, determine whether the two are similar in size, wealth of residents, or budgetary expenditures, among other factors. All of these can be important in assessing a suitable benchmarking partner.



Jurisdiction Data Category	Median	Average	Lower Quartile	Upper Quartile
Square mileage of jurisdiction area	604	1,359	405	1,208
Jurisdiction total operating budget	\$35,013,500	\$732,835,273	\$2,640,243	\$238,591,475
Jurisdiction capital budget	\$4,019,323	\$105,726,915	\$413,500	\$38,733,112
Jurisdiction per capita income	\$30,503	\$34,826	\$25,089	\$39,187
Jurisdiction median household income	\$52,390	\$57,524	\$44,802	\$60,826
Jurisdiction population	267,420	674,271	87,429	616,737
Percentage of jurisdiction population younger than 18 years of age	25%	25%	23%	27%
Percentage of jurisdiction population older than 65 years of age	12%	13%	10%	15%
Percentage of jurisdiction population below the poverty line	12%	12%	8%	16%
Jurisdiction population growth rate 2000-2010	12%	14%	6%	19%

## Other Jurisdiction Data Sets of Value

PRORAGIS has great value as a database designed for comparative analysis. There are a number of different data sets that may initially seem strange but are included because they enable users to judge what characteristics they are looking for in a benchmark partner or best-practices study. For example, the following table is intended to give a sense of the demographic characteristics of a potential benchmark county. PRORAGIS reporting allows users to view individual county responses in aggregate or in side-by-side columns. This table presents aggregate numbers. Note

that as an aggregate data set of counties, the numbers eventually begin to resemble the national percentage for each group. Some PRORAGIS users may wish to ensure that benchmark partners have a demographic distribution similar to their own jurisdiction.

Jurisdiction Ethnic Distribution	Median	Average	Lower Quartile	Upper Quartile
White/Caucasian	77%	72%	61%	86%
Black/African American	9%	13%	4%	20%
Hispanic or Latino (any race) or Spanish Origin	6%	12%	3%	15%
American Indian/Alaska Native	0%	1%	0%	1%
Asian	2%	4%	1%	4%

## Department Operations

Throughout the PRORAGIS profile are questions that reflect the level of resources a department has available and the types of activities for which they are responsible. In addition to questions on functions performed, such as maintenance of street trees or snowplowing, there are questions similar to the one in the following table that indicate the aggregate number of departments with access to Computerized Maintenance Management Systems (CMMS). CMMS is used to manage buildings, grounds, and equipment (vehicles, trailers, mowers, etc.), and to track maintenance costs, work schedules, asset and risk management, service levels, and maintenance activity travel routes. As is well-known, travel time is the number-one obstacle to productivity.

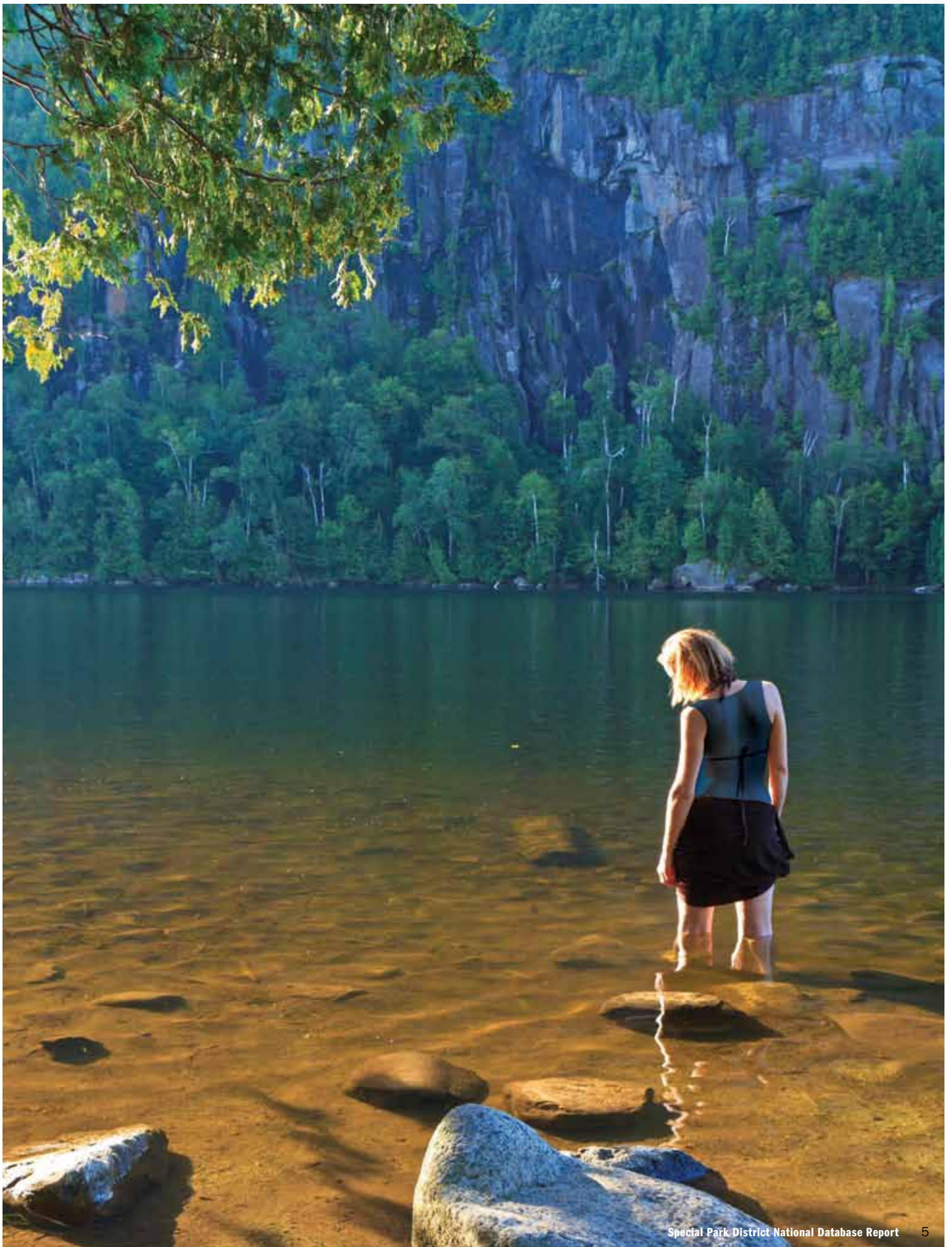
While the aggregate data can be perceived as being of nominal value, it does indeed have the ability to provide you with useful information. For example, if you are seeking to purchase CMMS from the myriad of possible systems, users have the ability to do a side-by-side search to determine which PRORAGIS participants currently have a system and solicit recommendations from them. From the data below, we can infer that there are currently more departments without CMMS than with it.

Does your department have a Computerized Maintenance Management System (CMMS)?	# of Responses	Percentage
Yes	21	30%
No	48	70%

## Possible Grant and Sponsorship Opportunities

In the PRORAGIS survey, there are a number of questions that relate to potential grants and sponsorships to which NRPA may have access. Since 2010, NRPA has distributed \$2.5 million to 40 park and recreation departments across the U.S. with a grant secured from the Walmart Foundation. The funds have been used to increase total number of meals served in summer feeding and before- and after-school programs. Additionally, communities have utilized the grant funding to expand infrastructure and staff resources supporting this programming. Being aware of these types of services may improve a department's likelihood of qualifying for similar grants. Funding is available to support the provision of healthy foods and activities that combat obesity and chronic health issues. NRPA can access such funds because they represent a national, grassroots membership.







Users will find numerous questions in PRORAGIS geared toward supporting funding and partnership opportunities, such as the community gardens example below.

Does your department offer community gardens?	# of Responses	Percentage
Yes	22	34%
No	42	66%

### Determining Magnitude and Calculating Operating Ratios

Throughout PRORAGIS are questions that serve two functions. First, they have the ability to determine magnitude of variables as illustrated in the table below on program attendance. Similar to other data points, this data can be used in side-by-side analysis to determine suitable benchmark partners. As demonstrated in the table below, a large range of responses is evident from the huge distance between the median and average outputs. A user would generally want to be sure that a benchmark partner’s program attendance is of the same magnitude.

Programs Information	Median	Average	Lower Quartile	Upper Quartile
What is your total annual number of participants attending programs, classes and small events?	40,000	378,867	3,750	150,189

The second function of this data is to calculate various ratios. Potential ratios of value might include visitors per FTE, operating cost per visitor, revenue per visitor, etc. Ratios are used to “normalize” the data and make it possible to compare across departments of varying size. It is important to note that a majority of data outputs, such as total operating expenditures, do not have this normalizing quality. That is, a department with expenses equal to the national median may not compare to a county with a \$3,000,000 budget or a \$300,000 budget.

Department Data	Median	Average	Lower Quartile	Upper Quartile
What is your department’s total operating expenditures for your fiscal year?	\$2,661,186	\$16,905,755	\$1,089,536	\$20,465,201

### Financial and Budget Data

PRORAGIS gives users the opportunity to examine some data from a unique perspective. The following table shows a different way to analyze operating expenses. In the chart, capital expenditures represent products or services paid for from the operating fund rather than capital-funded projects. By studying the distribution of expenses for personnel, operations, and capital, users begin to have a sense of whether or not operations are balanced.

Although not illustrated in the following table, most departments that are focused on programming have a higher percentage of operating funds going toward personnel when compared to resource-based departments, as is the case with many counties. For example, if you look at a golf course operation, the personnel cost may typically be around 45%, the operating costs another 45%, and the capital at 10%.



Important to note is that if a department's data does not fall within the ranges outlined below, it does not imply that the department is doing anything incorrectly. However, it is definitely worth examining why the expenditures are organized in that distinct way.

What percent of your total operating expenditures are in the following categories?	Median	Average	Lower Quartile	Upper Quartile
a. Personnel services (expenditures for all salaries, wages, and benefits)	62.2%	59.1%	49.3%	68.9%
b. Operations (expenditures for all functions of the Department)	33.5%	34.6%	25.4%	41.2%
c. Capital (expenditures for capital equipment, capital projects, and debt services paid from the operating funds)	0.6%	4.6%	0.0%	4.8%
d. Other	0.0%	1.7%	0.0%	0.0%

## Trend Data

Some questions in the PRORAGIS survey focus on building trend data. For instance, while the table below gives information about capital fund budgets, it is also intended to serve as a baseline for future trend data. A trend pattern needs a minimum of three years of data to have validity.

Another element of trend data relates to what can be called “Big-Picture Credibility”. The second question in the table below addresses the total maintenance deficit for parks and recreation at the state and local levels. A study in Canada estimated the total maintenance deficit for parks and cultural facilities in Canada's municipalities to be \$40 billion. That would imply that in the U.S, there is a maintenance deficit in excess of \$300 billion. Only 24 counties responded to this particular question in PRORAGIS, and their reported deficit totaled \$438 million. If all 84 counties were averaging the \$18 million in maintenance deficit, the sample would account for almost \$1 billion in maintenance deficit. If that \$1.5 billion is accounted for by 0.5% of the estimated 12,000 publicly funded park and recreation departments in the U.S., the total maintenance deficit would approach \$300 billion.

Similarly, assume that the same 24 counties indicated that either new lands and facilities are needed or that existing structures have reached the point where they are no longer salvageable and must be replaced and that an average of over \$50 million in new capital funding is needed.

Capital Budget	Median	Average	Lower Quartile	Upper Quartile	All Respondents
What is your department's total capital budget?	\$535,178	\$22,458,551	\$33,000	\$19,397,500	\$786,049,292
What is your department's amount of renovation need?	\$2,188,457	\$18,250,303	\$450,000	\$11,152,500	\$438,007,263
What is your department's amount of new capital need?	\$4,000,000	\$52,845,023	\$1,875,000	\$7,603,352	\$1,321,125,568



The following tables show aggregate data but also attest to the potential for side-by-side analysis. The counties represented below report a median of 37 full-time employees with wide variance, as evident by the polarized lower and upper quartiles.

PERSONNEL	Median	Average	Lower Quartile	Upper Quartile
How many full-time (full-benefit/year-round) positions are in your park and recreation department budget?	37	146	9	172
How many non-full-time employee positions are in your park and recreation department budget?	52	277	15	300
How many volunteers are in your park and recreation department?	900	2,761	269	2,000
Number of hours worked annually by volunteers	15,855	72,972	4,555	94,783
What was the total personnel expense for your park and recreation department for the year? (includes salaries and wages, bonuses, payroll taxes, employee benefits, retirement plan contributions, etc.)	\$1,648,469	\$9,166,148	\$653,677	\$11,853,411





The following two tables provide an overview of aggregate park lands and trails data for participating counties. There appears to be significant variation in park attendance and park acreage as reported.

Park Lands	Median	Average	Lower Quartile	Upper Quartile
Park attendance	800,000	2,206,255	55,000	2,842,000
Parks or sites maintained and/or managed by your department/agency responsibility				
Number of parks or sites	20	67	8	41
Total number of acres	2,628	11,164	769	9,097
Percent of your acreage developed	50%	49%	19%	75%
Percent of your acreage undeveloped	70%	63%	37%	90%

What is the total mileage of greenways and trails managed by your agency?	Median	Average	Lower Quartile	Upper Quartile
a. Multi-purpose, no equestrian	10.00	20.50	1.00	33.00
b. Multi-purpose, equestrian permitted	3.00	30.14	0.00	13.00
c. Hiking/walking only	4.00	10.90	0.00	9.60
d. Bicycling only	0.00	2.96	0.00	0.00
e. Equestrian only	0.00	2.39	0.00	0.00
f. Other, please describe:	0.00	6.42	0.00	0.00
Total	31.00	73.30	13.00	91.20

As previously mentioned, the development of operating ratios is of immense value because it allows departments to measure certain aspects of performance across departments that may be wholly different. Furthermore, each department can determine what level of service they wish to provide to their citizens. A median response for acreage of park land per 1,000 residents is 13.1 acres.

Miscellaneous benchmarking ratios	Median	Average	Lower Quartile	Upper Quartile
Operating expenditures per capita	\$16.76	\$29.69	\$8.23	\$45.32
Cost-recovery revenue	25.0%	31.7%	14.1%	50.0%
Acreage of park land per 1,000 population	13.1	15.8	6.3	18.5
Number of FTEs	82.0	276.3	16.0	253.0
Acres of park land maintained per FTE	46.6	114.3	17.1	93.3



## Miscellaneous Ratios

Whether seeking budget justification, best practices, or performance measures to monitor work progress, operating ratios provide the greatest value. While the operating ratios created in the PRORAGIS reports may not provide the detail required to manage a department, they do provide a framework for identifying ratios that will be the most helpful. For example, users can drill down into the cost-recovery revenue to see where most of their revenue is coming from or to determine if increasing the revenue winners is an option. One department reportedly increased its program revenues by \$1.2 million when they moved to an online automated registration system that cut program cancellations by 21% over one year. These ratios will inform park and recreation departments where they stand among peers.

## National Standards

The data in the following table, though sparse, provides departments with a sense of the population standards that actually exist for county facilities. The NRPA Standards, last published in 1995, were not viable for county operations, and in any case, there has not been a replacement for them to date. As more PRORAGIS profiles are completed, the table of jurisdiction population per facility type will become an increasingly credible guide for use in master planning and funding. For example, a department master planning for recreation centers can choose to build to the median, the average, or a logical point along the quartile line.

For some facilities, such as fitness centers, the population ratio is of limited value. A fitness facility, often located within a larger recreation center, usually has a minimum design size of 3,500 sq. ft. with maximum size dependent on the clientele base. Many fitness spaces are in excess of 10,000 sq. ft. to accommodate the mix of equipment desired for the fitness program.

Other standards are dependent on varying profiles from specific areas of the country. For example, indoor ice rinks may have a fairly consistent standard nationwide, but outdoor ice rink standards will only be of value when there are sufficient profiles from states in northern climates. For example, Eagan, Minnesota, a city of 80,000 in Dakota County, has two indoor ice sheets and 24 outdoor rinks. The old NRPA Standards indicated a need for 1 ice sheet per 50,000 residents.

## Conclusion

Go PRORAGIS! Utilize the multi-dimensional data PRORAGIS provides, free to NRPA members, to compare your agency in unprecedented ways and to provide county officials with the hard data necessary to justify your needs now and in the future.

Finally, after many years of research and development, the ability to obtain management, operating, and planning data is at hand! We anticipate that as departments increasingly understand the value of completing PRORAGIS profiles, the data for counties will become even more robust. Given the significant population base of counties, we believe data sets that demonstrate regional patterns will be very valuable.

Participating in PRORAGIS helps your department, helps your county, and helps NRPA be a better advocate for parks and recreation nationwide. Get started on completing your PRORAGIS profile today and start reaping the benefits of this cutting-edge database.



Jurisdiction population per facility	Median	Average	25% Quartiles	75% Quartile
Recreation/Community center	70,286	165,081	25,935	201,419
Fitness center	131,375	184,714	80,402	291,357
Playground	14,793	40,760	9,616	40,110
Tot lots	63,780	83,054	27,042	104,805
Tennis court (outdoor)	12,688	37,585	6,702	32,480
Basketball court (outdoor)	28,995	101,896	16,838	94,688
Swimming pool (outdoor)/Non-competition pools	209,503	273,647	160,099	323,444
Senior center	227,330	393,448	146,724	572,978
Ice skating rink (indoor)	257,414	478,473	158,333	807,904
Ice skating rink (outdoor)	535,153	476,718	315,077	667,577
Rectangular fields: Football	27,574	309,967	16,814	65,412
Rectangular fields: Soccer, lacrosse, field hockey (regulation size)	21,022	50,527	7,534	63,636
Rectangular fields: Soccer, lacrosse, field hockey (small-sided fields)	42,320	59,406	20,296	84,425
Diamond Fields: Baseball with 90-ft. base paths	52,376	123,857	23,604	152,010
Diamond Fields: Baseball with 50-65-ft. base paths and mound	16,387	29,864	6,242	42,664
Diamond Fields: Softball (youth)	19,206	71,760	7,461	58,507
Diamond Fields: Softball (adult)	35,227	114,667	13,026	71,394
Campsites	17,397	44,208	6,048	45,162
RV sites	8,640	180,005	3,808	19,628
Boat ramp(s)	158,333	448,389	104,237	410,122
Boat/canoe rentals	311,762	320,914	280,081	352,594
Slip rentals	4,798	24,203	3,301	35,403
Gym	92,831	365,892	17,782	337,181
Driving range	421,407	735,682	269,301	1,145,956
Dog park	262,671	332,800	117,181	403,161
Nature/interpretive center	311,132	468,566	188,338	440,108
Performing and/or visual arts/ community center	421,407	1,174,104	263,511	950,105
Community gardens	440,045	529,710	120,032	622,263

If you have questions, would like more information, or require support while completing a PRORAGIS profile, please contact:

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For additional help and insight, NRPA members may join the PRORAGIS Connect group ([www.nrpaconnect.org/PRORAGIS](http://www.nrpaconnect.org/PRORAGIS)) to interact directly with peers who are currently contributing to the database.





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