



Access to Outdoor Recreation in Urban Wisconsin

In response to rural-to-urban population growth and expansion in counties bordering out-of-state metropolitan areas, Wisconsin needs to launch a new generation of urban parks and green spaces. One of America's Great Outdoors (AGO) goals, "Establish Great Urban Parks and Community Green Spaces," was developed out of the public's demand for outdoor recreation facilities and associated benefits—improved health, community ties, and economy—closer to their home, work, and school.

For urban parks planning insight, Chapter 4 considers various urban recreation barriers and solutions, and analyzes peer-to-peer statistics for 145 municipalities. As AGO encourages use of the Land and Water Conservation Fund to create and enhance urban parks and community green spaces (AGO Recommendation 6.1), Wisconsin can develop new parks in overlooked urban waters and former industrial sites to suit emerging urban recreation activities (AGO Action Items 6.3c and 6.3b). Satisfying Wisconsin's need to unify park systems, AGO will support local, state, and tribal governments and communities to connect federal parks to urban and neighborhood parks by building community paths and sidewalks (AGO Action Items 6.4b and 6.4a).



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Chapter 4: Access to Outdoor Recreation in Urban Wisconsin

Overview

Readily available outdoor recreation is an important part of a healthy community. Wisconsin city parks and trails, playgrounds, and urban green spaces contribute to quality of life and foster local public health and wellness. Previous research has catalogued the availability of outdoor recreation facilities and related amenities across the state (WDNR 2006; Marcouiller et al. 2009). Urban recreation themes developed for this SCORP can also be a useful guide to analyze the benefits and availability of urban parklands and greenway open spaces in Wisconsin. These themes also provide an important framework for future recommendations and should be taken into consideration when planning for urban-based recreation.



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THEME: *The Link between Urban Parks and Public Health*

The link between urban parks and public health is a critical issue across the state, but this connection is even more important to understand in urban areas of Wisconsin. Health agencies at every level of government acknowledge that local facilities in urban areas are important for public health. The World Health Organization (2007), the White House (2010), the Centers for Disease Control and Prevention (CDC) (2009), and the Wisconsin Department of Health Services (2010) each list increased or improved local recreational facilities as an important objective for increasing physical activity. While many organizations recommend increased availability of recreation facilities, research appears divided on a causal connection between the availability of outdoor recreation and improved public health. Cohen and his collaborators (Cohen et al. 2007) question the magnitude of the causal connection between park provision and public health, recognizing the complex nature of the topic. However, Barton (2009) argues that the urban environment “exacerbates or mitigates health and well-being outcomes.” These divergent results are understandable, as no physical environment can guarantee high levels of physical activity and public health. Urban recreation facilities may also contribute to public health in ways not measured in existing studies.

THEME: *Standardized Metrics for Quality, Distance, and Size of Recreation Areas*

In order to accurately assess the state of urban recreation facilities in Wisconsin, standard metrics for the quality and distribution of urban parklands and greenway open spaces will need to be developed. Currently, most local government plans use the guidelines and standards of the National Recreation and Park Association (Mertes 1996). This commonly-used set of standards may be helpful for evaluating recreation across urban areas.

Research has shown that other factors are also important to consider in evaluating recreation. The Marshfield Comprehensive Outdoor Recreation Plan (Schreiber Anderson 2009) notes that factors like regional and statewide plans, and public input should also be used to measure the success of urban parks and outdoor recreational facilities. Brown (2007) uses island biogeography theory to evaluate the value of parks based upon size. Kaczynski et al. (2008) found that the range of features offered was more important in determining how much physical activity took place in a facility than

size and distance of the facility from population centers. Cohen et al. (2010) concluded that both range of activities and facility size are important. Some studies also make note of the fact that the distance as the crow flies to a recreational facility may be different from the functional network distance, particularly in urban areas with large barriers like freeways. Equitable distribution of high quality outdoor recreational facilities is an important goal. With proper metrics to measure the availability of these facilities, we can better plan for recreation across the state.

THEME: *Classification of Facilities and Activities*

Just as standardized guidelines for urban recreational facilities will help guide future research and development, so too will a classification scheme for types of facilities and recreational activities. The National Parks and Recreation Association guidelines, used by many communities in their individual plans, include a hierarchy of park types with different features, roles, and catchment area sizes. Mini parks, neighborhood parks, community parks, and special use parks all have different functions within a community. However, many other types of facilities were singled out, including trails and greenways, water trails, zoos, etc. Additionally, Ribeiro and Barao (2006), among others, focuses on improving pedestrian and bicycle facilities as a way to improve public health outcomes via the built environment. Currently, there is no clear distinction between bicycle and pedestrian facilities that are considered recreational and those that provide transportation and access functions.

As new classification systems are developed, it will be important to incorporate new and emerging recreation activities. Numerous articles allude to new trends in parks. Rooftop gardens and repurposed brownfields are becoming prime locations for outdoor recreational space in cities. The American Society of Landscape Architects provides one example of a new park in Brooklyn's High Line trail, which was constructed on an abandoned elevated railroad bed. These recent trends of non-traditional facility locations and the rise in popularity of activities like adventure recreation may require innovative or more nuanced classification schemes.

THEME: *Accommodating Various Demographic Groups*

Related to the above trends, literature repeatedly identifies the importance of catering to the needs of different demographic groups based on age, gender, race, and ethnicity. A number of studies have found that quiet areas and green or tree-lined areas used for walks and

social interaction were important for senior citizens. This may prove to be a particularly important goal in Wisconsin's smaller cities and villages, where senior citizens make up a higher proportion of the population. As Duzenli et al. (2010) point points out, the needs of adolescents are also markedly different from those of other age groups. This may be important, as children and young adults are often targets of public health policies and campaigns. Gobster (2002) highlights the need to be sensitive to racial and ethnic differences in the provision of recreational opportunities. The preferences of nearby groups should be considered in the design and maintenance of parks and other facilities. Keeping local demographic makeup and associated recreational use patterns in mind should help determine the type and nature of facilities that are provided in a given area.

THEME: *The Importance of Safety*

Safety was a noted consideration in a number of reviewed studies. The safety of a facility (and the ability to get to and from the facility safely) can play a critical role in determining the level of use for some outdoor recreational facilities. The Centers for Disease Control (CDC) and the White House's Let's Move! Initiative (2010) prioritizes the enhancement of public safety near parks and other places where citizens could be physically active. Peter Harnik's (2003) article also mentions safety as a key indicator for recreation facility success. Sugiama and Ward Thompson (2008) found that the safety of paths to and from facilities is important, particularly for children and the elderly. While metrics like size, distance, and quality of recreation facilities will always be important, safety should not be ignored in evaluating Wisconsin's urban parks and greenways.

THEME: *Aesthetic Appeal and Placement*

Two other factors that can help determine the success of parks and urban recreation facilities are a facility's aesthetic appeal and placement. Aesthetic appeal, as determined by design and level of maintenance, can either attract participants or turn away potential users. Thwaites et al. (2005) argue that parks should incorporate fundamental properties of order and integrate the locational, directional, and transitional spatial experience, which are present in the natural and cultural world and are associated with psychological benefits. Golicnik (2010) reviews Geographical Information System techniques that use annotation and visualization to reveal common patterned behavior that correlates to park layout and details, providing a technological advantage.

THEME: Financing Urban Parks and Greenways

The last theme, and an unavoidable issue when evaluating the provision of public facilities, is the issue of financing. While research recognizes the benefits of parks and supports an increase in community recreation facilities, the fact remains that financing these facilities in a sustainable and equitable way is not easy. Creative approaches like public-private partnerships are being employed in some places. The Great Communities Collaborative (2007) discusses a number of possible financing strategies, as well as the strengths and weaknesses of various approaches. Recommendations for improving Wisconsin's urban parks and greenways should be sensitive to the fiscal stress of local governmental units.

Urban Park and Trail Accessibility

Recreation that occurs close to home is an important aspect of outdoor recreation that directly affects residents of communities throughout the state. Questions like “to what extent are opportunities for outdoor recreation present where people live?” and “how accessible are these activities to local residents?” are important to understand the availability of local recreation in Wisconsin.

Currently, data on these questions is hard to come by. In evaluating access to outdoor recreation in a direct way, what matters most are parks, trails, and playgrounds in close proximity to where people live. At the most micro-scale, parks, playgrounds, and trails within walking distance of a Wisconsinite's front door provide direct access to outdoor recreation. Spatially explicit data on outdoor recreation, as well as an assessment of where this recreation exists relative to where people live is needed.

Walking is by far the most popular outdoor activity in Wisconsin. While much of recreational walking takes place on neighborhood sidewalks, the presence of parks and trails plays a significant role in activities like walking. Research has linked the presence of parks, trails, enjoyable scenery, and other people exercising to



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increased physical activity (Rosenberger et al. 2005; 2009). These are all environmental factors that are directly or indirectly provided by parks and trails.

The State of Wisconsin does not yet maintain a statewide comprehensive park spatial database. This said, finely grained data is available using the ESRI geographic information system.¹ To begin our assessment of local access to outdoor recreation, it is interesting to note that spatially, across Wisconsin, there are distinct differences in access to locally available parks, playgrounds, and trails. While many metrics could be developed, an interesting component to capture for urban park planning deals with walkability. For this, accessibility can be measured by the percentage of residents that live within walking distance of a public park (defined as a ½ mile for this assessment).

A network analysis was conducted to assess the pedestrian accessibility of Wisconsin's parks and trails. This network analysis considered where people live, where parks and trails were located, and how they were connected by public sidewalks. This led to a county-by-county estimation of how many residents lived within ½-mile walk of a park or trail, as shown in Figure 4-1 on the next page.

The results indicate that over 70% of Wisconsin residents do not live within a ½-mile walk of a public park or trail. The assessment also revealed wide variation of park walkability across the state. For example, more than 50% of all residents in Dane, Milwaukee, and Rock counties live within ½-mile of a park or trail. Meanwhile, in 31 other counties, less than 5% of residents have that level of pedestrian access.

When ranked at the county level, counties containing Wisconsin's largest urban areas (Milwaukee and Madison) rose to the top of this walkability metric.

¹ Park and trail data were taken from a nationwide park layer published by ESRI in 2003. This layer was assembled from National Park Service data, National Forest data, and Geographic Technology Dynamap/2000 v7.3. Dynamap/2000 is the source of local and county park data, which is the most important data to this assessment. This spatial data came from Tele Atlas North America/Geographic Data Technology database (TANA/GDT), which is sourced from federal agencies, state agencies, regional agencies, county agencies, as well as most cities and towns. Since further detail on TANA/GDT's relationships with Wisconsin agencies is not provided, the overall quality of the Wisconsin parks in this dataset is uncertain. Similar uncertainty exists with regard to the consistency of park inclusion across the state.

Figure 4-1: Percent of County Residents within a ½-Mile Walk of a Public Park

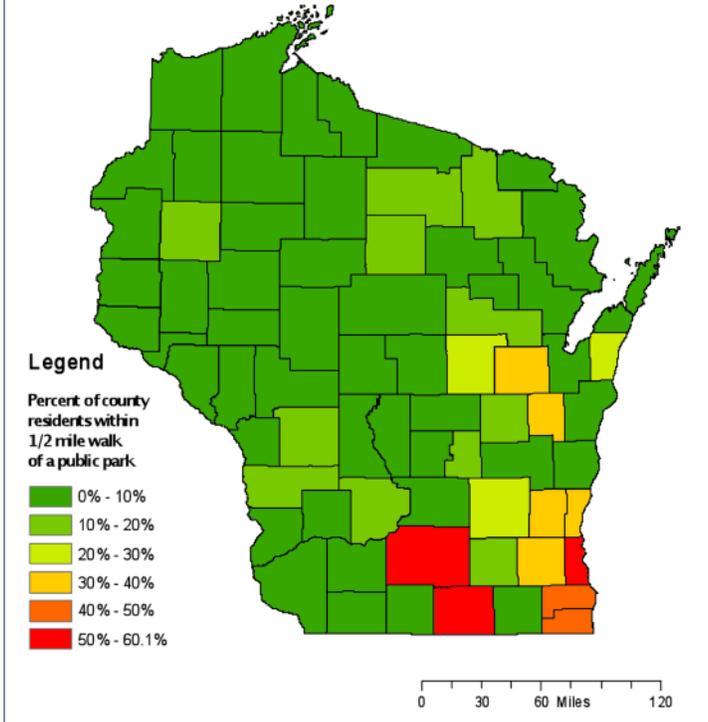


Table 4-1: Top Ten Counties for Pedestrian Park and Trail Access

County	2000 Population	Number of Residents Within 1/2-mile Walk of Park or Trail	Percent of Residents Within 1/2-mile Walk of Park or Trail
Dane	426,526	256,335	60.1%
Milwaukee	940,164	547,344	58.2%
Rock	152,307	80,931	53.1%
Kenosha	149,577	74,040	49.5%
Racine	188,831	87,094	46.1%
Outagamie	160,971	60,038	37.3%
Calumet	40,631	14,836	36.5%
Waukesha	360,767	129,999	36.0%
Ozaukee	82,317	29,355	35.7%
Washington	117,493	37,041	31.5%

However, it would be incorrect to consider park walkability as a proxy for urbanization. Using standard classification of degrees of urbanization by county (Beale codes), there are many “non-metro” counties that offer higher rates of park and trail access than “metro” counties. For example, 13 of Wisconsin’s metro counties (including Brown, La Crosse, Marathon, and Sheboygan) offer less than 10% access while 12 non-metro counties offer more than 10% access (including Dodge, Forest, Green Lake, and Waupaca).

The focus on urban parks and open spaces as a mechanism to improve local health and wellness outcomes is well-founded, but it has not been addressed in comprehensive planning processes. Recent data from the CDC point to the fact that Wisconsin is behind the national average in percentage of youth with parks or playgrounds, community centers, and sidewalks or walking paths available in their neighborhoods (USD-HHS 2011). Prioritizing the placement of outdoor recreation opportunities close to where Wisconsinites live will improve this issue of local access. In addition, it has been clearly shown that the type of park facility (e.g., presence of a trail) dictates the extent to which parks are used for physical activity. Access and proximity to public parks is important. As a first step toward this prioritization, we need to identify where the greatest potential for increased usage (and thus public health benefits) exists within the state.



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Defining Recreational Access in Urban Wisconsin

While walkability remains important, comparing recreational access at the municipality level requires a broader set of characteristics and a more finely grained geographic scale (unit of analysis) than the county level. To measure access to outdoor recreation in urban Wisconsin, municipalities across the state were compared to other Wisconsin municipalities of similar population. To make this assessment manageable, urban Wisconsin was defined in a three-step process.² First, counties were ranked by their level of urbanization based on census data prepared by the Wisconsin Department of Administration. Counties with more than 50% of their population living in an urban area were selected for inclusion. Using this method, 24 of Wisconsin’s 72 counties were identified as urban. Second, from these 24 counties, data was collected from all municipalities with populations greater than 1,000. This yielded 145 municipalities that serve as the basis of this assessment of urban parks and greenway open spaces. Finally, these 145 municipalities were split into four peer groups for comparative purposes. Characteristics of these peer groups are defined in Table 4-2. Municipalities under the cities of Milwaukee and Madison are not included in the peer groups as they have no peers within the state. Instead, Milwaukee and Madison were compared to other U.S. cities with similar populations and demographics. Madison was compared to Lincoln, NE; Durham, NC; Boise, ID; and Des Moines, IA. Milwaukee was compared to Nashville, TN; Louisville, KY; Columbus, OH; and Kansas City, MO.

Table 4-2: Urban Peer Group Criteria

Peer Group	Population Threshold	Number of Municipalities
1	45,000 to 150,000	12
2	20,000 to 45,000	19
3	10,000 to 20,000	28
4	1,000 to 10,000	86
Total		145

Source: Department of Administration. There were 17 municipalities omitted from the peer group analysis due to missing data. Madison and Milwaukee were excluded as unique cases and were compared to similar-sized American cities as noted in the text.

² There are many alternative definitions of “urban Wisconsin” that could be used and would potentially generate slightly different results. Further, other counties in the state that were not used as a basis for this assessment likewise contain municipalities that would fit our urban peer group criteria. Simple application of results by peer-group to these missing municipalities would be a logical approach for local planning needs. Certainly, there is a need for further research in the area of access to urban outdoor recreation.

For all cities included in the four peer groups, data was collected on a variety of recreation supply components that focused on public parks (both number and acreage), public hiking and biking trails (length in miles), and non-school playgrounds. This data captured the relative presence of both activity-based outdoor recreation and open space (or greenspace). More detail on park and recreation facility information can be found in Appendix E.

For Madison and Milwaukee, data was collected on the availability of parks and recreation facilities across cities. In addition, fiscal data was collected on expenditures for outdoor recreation to assess relative investment levels in different communities. Specifically, data on each municipality’s 2008 parks and recreation budget allocation and total annual budget was collected.

Urban Peer Group Comparisons of Recreation Supply and Budgets

Using population thresholds defined in Table 4-2 as the criteria, Wisconsin cities and villages were divided into four peer groups with at least 10 municipalities in each group. This was done to compare like-sized units of government with similar recreation demand.

Five elements of recreational supply were selected from the 2005-2010 SCORP and compared across peer groups. The five outdoor recreation supply components included were (1) the number of non-school equipped playground facilities, (2) the number of parks, (3) park acres, (4) the length of bicycle trails, and (5) the length of hiking trails. All components were adjusted to a per capita basis. Many other components of urban outdoor recreation supply could be examined using this approach but remain beyond the scope of this assessment.

To allow for comparisons both within and among peer groups, recreation supply was indexed to reflect resident population. For each municipality (*r*), a measure that placed recreation supply on a per 1,000 residents basis (per 1000 capita) was first calculated, as shown below.

$$RS_r = \frac{rs_r}{Pop_r \times 1000}$$

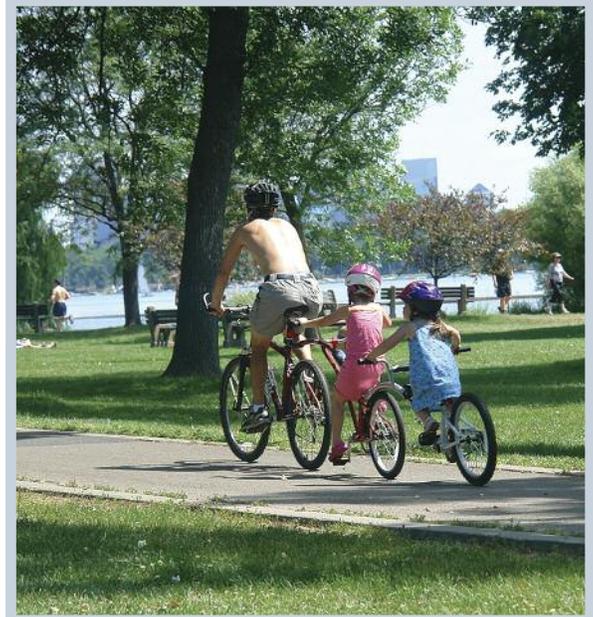
Here, *RS* is the per capita metric of recreation supply for each municipality (*r*), *rs_r* is the total amount of each supply component for each municipality, and *Pop_r* is the resident population of each municipality. When separated into peer groups, differences in mean values point to some interesting distinctions that speak to recreation access by the size of municipality. An indexed level of recreation supply that can be used to assess the distribution of recreation supply is fully outlined in Appendix E.

To allow for comparisons both within and among peer groups, a recreation supply index was developed that took into account population and maximum value within each peer group. This straightforward index simply reflects the per capita level of recreation supply divided by the maximum value for all four peer groups. The per capita recreation supply metric was then used to find an indexed recreation supply as shown in the equation below.

$$\text{Indexed Recreation Supply} = \left(\frac{RS_i}{\text{Max}RS_{145 \text{ municipalities}}} \right) \times 10$$

The indexed recreation supply reflects a range of variability on a linear scale from 0–10. This index allows us to compare recreation supply both within each peer group and between all four peer groups. Results of this assessment allow us to consider priorities for future investments in urban outdoor recreation for communities across Wisconsin. Given their sizes, Madison and Milwaukee are compared to similar sized cities elsewhere in the United States.³

Results of this assessment have been summarized in Table 4-3 below. For a breakdown describing each peer group with respect to recreation type, see Appendix E.



Assessing recreation supply within peer groups allows us to consider priorities for future investments in urban outdoor recreation for communities across Wisconsin.

Table 4-3: Average Levels of Urban Recreation Supply by Peer Group

Recreation Type	Peer 1	Peer 2	Peer 3	Peer 4	Average of ALL Municipalities
Non-school equipped playground facilities [number] per 1000 people	0.31	0.50	0.69	1.12	0.89
Parks [number] per 1000 people	0.78	0.95	1.19	1.83	1.51
Parks [acres] per 1000 people	14.80	19.14	19.11	21.78	20.37
Trails – bicycle use [miles] per 1000 people	0.19	0.40	0.27	0.41	0.36
Trails – hiking use [miles] per 1000 people	0.12	0.40	0.33	0.69	0.54
Number of Municipalities by Peer Group	12	19	28	86	

Peer group comparisons on a per capita basis suggest important differences. This data shows the indices for non-school equipped playground facilities varied widely, with clear peer group differences. Data describing the number of parks within community boundaries also shows similar disparity between peer groups. In general, smaller communities (peer groups 3 and 4) tend to have a higher number of playground facilities and parks when compared to larger communities (peer groups 1 and 2). The total acreage of urban parks on a per capita basis also shows the same trend. While not as dramatic as the difference between peer groups in terms of playground facilities and parks, per capita data for

urban park acreage does suggest that smaller population centers have higher per capita park acreages. Meanwhile, the supply comparison of biking and hiking trail⁴ miles per 1000 people do not suggest significant differences between peer groups.

³ Once again, this approach has limitations, recognizing the simple fact that Madison and Milwaukee, being excluded from the peer assessment, remain outside of this prioritization assessment. That said, these two cities compare quite favorably to their national peers.

⁴ The study is inclusive of bicycle and hiking trails only; sidewalks and other walking trails are not included, but recommended as part of future tabulation.

Madison and Milwaukee Peer Group Comparisons

Because of their larger populations, the cities of Madison and Milwaukee could not be compared to other municipalities within Wisconsin. A case study approach was therefore used to evaluate park systems within these cities. Peer groups for each city were defined using U.S. cities that were similar to Madison and Milwaukee in population size and regional characteristics. Madison and Milwaukee were then compared to their peer cities using several different metrics.

This analysis had two components: a comparative analysis and a budget analysis. The comparative analysis focused on the basic features of a park system. The budget analysis compared per capita investment in park systems.

Cities selected as peers to Madison were Lincoln, NE; Durham, NC; Boise, ID; and Des Moines, IA. Madison's population at the time of this study was 235,626; the mean population for the peer group was 222,365. Madison's peer group was used as a benchmark for comparison to better understand how Madison performs in its provision of parks and recreation facilities and level of recreation investment.

Data was collected on the number and size of facilities per 1,000 residents for each city, and mean and median scores were calculated. Table 4-4 shows a summary of this data.



In a number of categories, Madison was found to be performing on par with or better than its peers. Madison is above average in number and size of all park types, number of arboretums, and number of golf courses. Madison is particularly strong in the number and size of small and medium sized parks. In fact, the size of Madison's mini and neighborhood parks make it an outlier

among its peer group.

Madison does fall below its peers in number of skate parks, miles of trails, number of pools, and acres of land conserved. The abundance of lakes and the city's reliance on private neighborhood clubs might explain why Madison has chosen to limit its investment in public pools. Madison's arboretum and conservancy areas may compensate for its lack of a nature center, as these facilities also provide residents with opportunities to learn about nature.

Madison also performed below its peers in number of conservancy areas. However, results for this metric varied widely among peer cities, making it difficult to speculate on Madison's performance. Because conservancy areas were also included in the calculation for total park areas, this also affects Madison's lower than average level of total park acres. A high amount of conservation land in Boise drives up the mean score of park areas and puts Madison below average for this measure as well.

Overall, Madison has a strong park system, but it could improve some of its recreation facilities to better compete with its peer cities. Adding a skate park, adding more pools, and expanding the miles of trails would offer Madison residents more options for outdoor recreation. The city should also consider constructing a nature center at its conservancy area to increase interest and awareness of the outdoors.

To conduct this same analysis for Milwaukee, a peer group was selected that included Louisville, KY; Nashville, TN; Kansas City, MO; and Columbus, OH. These cities were selected because of their similar populations, geographical location, and cultural makeup. With 605,013 inhabitants, Milwaukee is very close to the group's mean population of 605,724.



Like the Madison case study, data was collected on the number and size of facilities per 1,000 residents for each city, and mean and median scores were calculated. Milwaukee was then compared to its peer cities in these metrics. Summary statistics are assembled in Table 4-5.

Milwaukee's park system competed well against its peers, appearing in the top half of the peer group in all but three categories. Milwaukee excels in providing trail miles and golf courses to its residents—it has double the trail miles and number of golf courses of its closest peer. Data on the size of large regional parks in Milwaukee is lacking, but the city does have the highest number of these facilities in its peer group. Milwaukee residents therefore have better access to large parks even though these parks may be smaller than those of peer cities. Milwaukee lacks an adequate number of neighborhood parks, skate parks, and conservancy areas. While Milwaukee has the most mini parks per 1,000 residents, the size (acres) of these parks are well below the mean score.

Table 4-4: **Madison Comparison Data (per 1,000 residents)**

Facilities		Madison	Lincoln	Durham	Boise	Des Moines	Mean	Median
Mini Park	number	0.581	0.119	0.081	0.084	0.126	0.198	0.119
	acres	1.184	0.072	0.166	0.047	0.316	0.357	0.166
Neighborhood Park	number	0.395	0.191	0.125	0.182	0.101	0.199	0.182
	acres	3.994	1.494	1.357	1.459	1.107	1.882	1.459
Community Park	number	0.093	0.068	0.054	0.044	0.035	0.059	0.054
	acres	2.988	3.881	1.729	0.858	3.326	2.556	2.98
Large/Regional Park	number	0.042	0.028	0.027	0.025	0.020	0.028	0.027
	acres	11.607	13.240	3.932	50.850	2.857	16.497	11.607
Total Park*	acres	26.814	30.168	7.699	102.516	8.447	35.129	26.81
	skatepark	0.000	0.008	0.004	0.015	0.005	0.006	0.005
	trails (miles)	0.110	0.509	0.087	0.281	0.202	0.238	0.202
	pools	0.004	0.036	0.022	0.030	0.025	0.023	0.025
	golf courses	0.017	0.020	0.000	0.005	0.015	0.011	0.015
	arboretum	0.004	0.000	0.000	0.000	0.000	0.001	0.000
	nature center	0.000	0.004	0.009	0.005	0.000	0.004	0.004
Conservancy Areas	number	0.089	0.008	0.009	0.005	0.005	0.023	0.008
	acres	7.041	11.481	0.515	49.302	0.841	13.836	7.041
Population		235,626	251,624	223,284	202,832	198,460	222,365.2	223,284

*includes acres of conservancy area lands in calculation

Table 4-5: **Milwaukee Comparison Data (per 1,000 residents)**

Facilities		Milwaukee	Nashville	Louisville	Columbus	Kansas City	Mean	Median
Mini Park	number	0.233	0.038	0.095	0.120	0.131	0.123	0.120
	acres	0.082	n/a	0.187	0.278	0.305	0.213	0.233
Neighborhood Park	number	0.084	0.059	0.042	0.091	0.195	0.094	0.084
	acres	1.161	n/a	0.535	0.948	2.220	1.216	1.054
Community Park	number	0.046	0.025	0.026	0.043	0.068	0.042	0.043
	acres	1.913	n/a	0.841	1.412	2.208	1.594	1.663
Large/Regional Park	number	0.063	0.035	0.042	0.026	0.060	0.045	0.042
	acres	13.522	n/a	20.258	10.878	16.497	15.289	15.009
Total Park*	acres	16.678	17.694	21.821	13.516	21.230	18.188	17.694
	skatepark	0.000	0.002	0.000	0.001	0.000	0.001	0.000
	trails (miles)	0.179	0.061	0.177	0.066	0.079	0.112	0.079
	pools	0.021	0.005	0.007	0.013	0.019	0.013	0.013
	golf courses	0.025	0.012	0.016	0.009	0.010	0.014	0.012
	arboretum	0.002	0.000	0.000	0.000	0.004	0.001	0.000
	nature center	0.002	0.007	0.002	0.000	0.002	0.002	0.002
Conservancy Areas	number	0.002	0.007	0.002	0.004	0.044	0.011	0.004
	acres	0.413	9.834	10.976	1.348	0.518	4.618	1.348
Population		605,013	605,473	566,503	769,332	482,299	605,724	605,013

*includes acres of conservancy area lands in calculation

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Chapter 4: Access to Outdoor Recreation in Urban Wisconsin

Budgetary Resources for Urban Parks and Recreation

In addition to measuring the supply of urban park facilities, this report also sought to understand the effort that each city puts into its park and recreation system. To make this comparison, data on financial support for park and recreation facilities was compiled and analyzed. For this metric, we divided each city's parks and recreation budget by its population and calculated mean and median scores for benchmarking. Results of this assessment for Madison and its peers are presented in Table 4-6.

Madison's per capita investment in parks and recreation is the median value, but it is roughly \$7 below the mean per capita spending of its peer group. Part of this difference is caused by Boise's high level of spending. Boise appears to be an outlier in this measure; at over \$106 per capita, Boise's value drives up the mean. Were Boise's value removed from the set, the mean would lower to roughly \$61. This puts Madison's spending efforts slightly higher than this smaller group's average. Either way, Madison remains in the middle of its peer group with respect to fiscal effort in parks and recreation.

Results for investment in the Milwaukee parks and recreation system relative to its peer group are presented in Table 4-7.

In its peer group, Milwaukee's per capita fiscal effort with respect to parks and recreation is second only to Kansas City's. Comparing these results to Table 4-6, we see that cities that spent less on parks and recreation also had lower recreation supply metrics. While Milwaukee spent only slightly more than its closest peers, it is interesting to note from Table 4-6 that lower expenditure cities did not perform better on most of the recreation supply metrics. It is also important to note that while Kansas City has a higher per capita investment, it also appears to be at the top of this peer group in most measures of recreation facility supply. Should Milwaukee decide to expand its park system services, a further examination of Kansas City's park system and financial support structure could provide valuable insight.

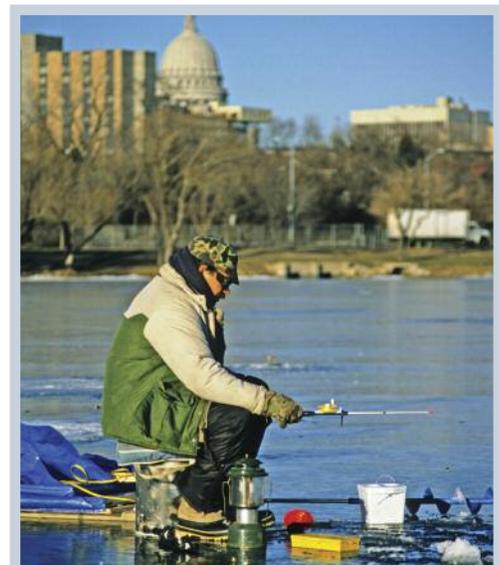
Analogous fiscal assessments for the municipalities listed in Appendix E (those located in the 24 urban counties of Wisconsin) were also done and suggest some interesting results. Analysis of municipal budgetary commitments to outdoor recreational facilities reveals that the mean community in our study group of 163 municipalities spent about \$1.2 million, or 6.8% of operating and capital expenditures, on parks and recreation in 2008. The median community spent about \$520,000 on parks, equating to a 6.2% share of total expenditures.

Table 4-6: **Madison Peer Group Budgetary Analysis Results per Capita**

City	Parks & Recreation Budget (2008 USD)	Population	Investment per Capita (2008 USD)
Madison, WI	\$14,806,922	235,626	\$62.84
Lincoln, NE	\$13,775,752	251,624	\$54.75
Durham, NC	\$10,300,000	223,284	\$46.13
Boise, ID	\$21,540,000	202,832	\$106.20
Des Moines, IA	\$15,798,586	198,460	\$79.61
Mean	\$15,244,252	222,365	\$69.90
Median	\$14,806,922	223,284	\$62.84

Table 4-7: **Milwaukee Peer Group Budgetary Analysis Results per Capita**

City	Parks & Recreation Budget (2008 USD)	Population	Investment per Capita (2008 USD)
Milwaukee	\$34,785,810	605,013	\$57.50
Nashville	\$30,600,800	605,473	\$50.54
Louisville	\$27,348,500	566,503	\$48.28
Columbus	\$35,674,624	769,332	\$46.37
Kansas City	\$53,961,614	482,299	\$111.88
Mean	\$36,474,270	605,724	\$62.91
Median	\$34,785,810	605,013	\$50.54



Madison remains in the middle of its peer group with respect to fiscal effort in parks and recreation.

In terms of peer group analysis, the percentage of operating and capital expenditure expended on parks and recreation are listed below in Table 4-8.

Table 4-8: **Urban Peer Group Summary for Percent of Operating and Capital Expenditures Spent on Parks and Recreation in 2008**

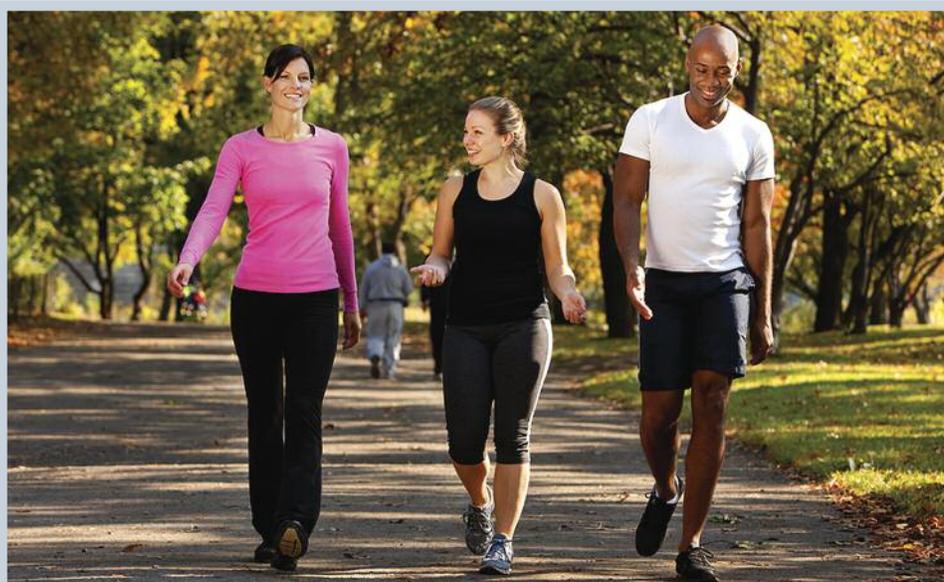
N = Number of Municipalities by Peer Group	Peer 1 (N=12)	Peer 2 (N=19)	Peer 3 (N=28)	Peer 4 (N=85)	Average Municipalities*
Operating and Capital Expenditure Spent on Parks and Recreation	5.58%	6.95%	8.51%	6.83%	7.06% (Peer Groups) 6.88% (ALL)

*Note: Only 144 out of 163 Wisconsin municipalities are categorized into peer groups; this is either due to missing data from some municipalities or unique cases like Madison and Milwaukee.

Focus Groups and Expert Observations

In 2010, a focus group and expert interviews were held to assess urban recreation barriers. From these interactions, the following themes emerged that highlight barriers, as well as opportunities for addressing these barriers. The primary barriers and opportunities are as follows:

- **Lack of real and perceived safety from crime and traffic.**
 - Create safe spaces by bringing traffic to the park and altering park design so there are no hidden places.
 - Bring foot traffic by offering programming and versatile spaces.
 - Install traffic-calming structures on area streets and crosswalks and reduce speed limits.
- **Lack of desired facilities and necessary amenities.**
 - Create versatile facilities like multipurpose fields and provide basic amenities including unlocked bathrooms and drinking fountains.
 - Rehabilitate or tear down blighted or unsafe infrastructure.
- **Lack of connectivity.**
 - Increase park connectivity with surrounding communities and other parks via greenways and bike paths.
- **Lack of programming.**
 - Create programming including walking clubs, which are very popular in urban areas, using neighborhood partnerships.



Walking clubs are popular in urban areas.

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Programming may also be developed through governmental partnerships and funding strategies. A good example of this type of partnership is the Center for Resilient Cities (CRC) in Milwaukee. The CRC has a development agreement with Milwaukee County that allows the CRC to oversee final park and recreation design. CRC holds all funds in escrow, and they are able to raise more funds than the city or county because they are a 501(c)(3), meaning that donations to the organization are tax-deductible, the organization is tax-exempt, and CRC projects are eligible for a wider range of grants. In discussions with the CRC, the organization noted that

people are often more comfortable donating to a non-profit than the City for specific projects because non-profits are seen as more transparent. The CRC is able to leverage its existing neighborhood connections to build community trust, respond to community desires, and help in the operation of park programming. The County provides money for capital expenditures (such as playground structures or berm removal), and the CRC helps fund the programmatic and operational aspects of a park. The CRC is a good example of how public-private partnership can work to overcome challenges in a difficult financial time.



Park programming tailored to meet the needs of local residents can increase park use and improve the image of a park system.



Summary and Policy Implications

This chapter has addressed the benefits and availability of recreation facilities in urban areas across the state. The following implementation strategies have been developed in response to the data presented in this chapter. These strategies may be adjusted to best meet the goals of individual park systems. The implementation strategies are as follows:

Small Parks, Connectivity, and Conservancy Land

Further park acquisition and development should be strategic and focus on physical unification of the park system. By developing trails and conservancy land corridors, park systems will be able to improve access and increase recreation offerings in underserved areas. Improved connectivity efforts can also be complimented with the strategic placement of mini-parks. Mini-parks (parks that are less than five acres in size) can meet some of the more common recreation demands in urban areas. These parks can also act as gateways to trails that connect users to larger community and regional parks. Connecting parks and improving access to a larger park system can help build a more integrated park system. Integrating green infrastructure into a park system is a perfect example of a co-benefit relationship that can improve connectivity and increase the sustainability of a city's infrastructure.

Increased connectivity also addresses safety concerns. Improved connectivity can provide designated routes and access points to limit users' exposure to high-volume traffic and congestion. Improved connectivity also has the potential to increase the number of park users at any given time. More people using park facilities means more eyes on the park—a safety measure similar to the eyes on the street concept. Efforts to improve connectivity should consider these possible safety benefits.

Programs, Specialized Facilities, and Versatile Facilities

Park programming tailored to meet the needs of local residents can increase park use and improve the image of a park system. It is also important to achieve a balance between providing specialized facilities and increasing park versatility. Increasing specialized facilities can meet the demands of niche recreation groups and help reach underserved populations with targeted recreation opportunities. Steps should be taken to evaluate demand and identify shortcomings for specialized facilities. Future projects should reflect these needs.

However, while specialized facilities are instrumental parts of park systems, individual parks should also strive to improve versatility by, for example, installing multipurpose fields instead of regulation soccer fields. Emerging recreation trends like bike polo and disc golf require small additions or alterations to typical park structures, which can also ideally be used for other recreation. Development should accommodate new recreation opportunities and integrate them into existing facilities whenever possible. The DNR standardizes recommendations for park and recreation designs in the interest of assisting park and recreation development agencies; more detail can be found in Appendix E.

Partnerships: Public-Public and Public-Private

Government agencies play a primary role in providing high quality, accessible outdoor recreation in urban areas. In order to provide the best recreation opportunities across multiple jurisdictions, agencies need to collaborate. Intergovernmental partnerships should focus on organizational structure and increasing administrative efficiencies. Efforts should focus on improving recreation connectivity and increasing park access. Potential areas for intergovernmental partnerships include but are not limited to school districts, water-utility departments, and metro area park systems.

Partnerships between government agencies and local organizations have the potential to vastly improve recreation offerings in urban areas. Public-private partnerships may focus on funding issues, programming elements, safety, and management strategies. In this kind of partnership, private partners often take on a level of ownership and responsibility that would traditionally be held by a public entity. This could include monitoring programs, park maintenance, fundraising, etc. Public-private partnerships may also bring in additional revenue sources through fundraising activities. Public-private partnership opportunities should be considered in order to improve park system offerings and increase park efficiency.

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The 2011–2016 Wisconsin Statewide Comprehensive Outdoor Recreation Plan

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