



RESEARCH, EDUCATION AND DEVELOPMENT
FOR HEALTH, RECREATION AND LAND AGENCIES

RESEARCH BRIEFS

Translating Research to Practice

GP RED
Research Brief

#13-A

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MEASURING PARKS, TRAILS, AND OTHER PUBLIC GREENSPACE AREAS – VOLUME I

Elements of Parks and Greenspace:
Using Component Based Methodology
to Audit Parks and Greenspace

#
Symbol
Name
AEE Rating

Basic Active Series

Active Component Series

Basic Passive Series

Interactive Series

Complex Series

Rare Unearths

1 Ot Open Turf											2 Pg Picnic Ground	
3 P Playground, Local	4 Pd Playground, Destination	5 Dp Dog Park						6 Cs Concession	7 Ar Amusement Ride	8 Es Event Space	9 SL Shelter, Large	10 Sm Shelter, Small
11 Mp Multi-Use Pad	12 Gc Game Court	13 Bp Basketball, Practice	14 B Basketball Court	15 V Volleyball Court	16 Wb Wallball Court	17 Sf Skate Feature	18 Sp Skate Park	19 Wd Water Access, Developed	20 Wg Water Access, General	21 Wo Water, Open	22 Wf Water Feature	
23 R Rectangular Field, Small	24 RI Rectangular Field, Large	25 Rm Rectangular Field, Multiple	26 Rc Rectangular Field, Complex	27 Dc Diamond Field, Complex	28 Bc Batting Cage	29 D Diamond Field	30 Dp Diamond Field, Practice	31 Cl Climbing, general	32 Cd Climbing, Designated	33 Ed Educational Experience	34 Na Natural Area	
35 As Aquatics, Spray Pad	36 Ap Aquatics, Lap Pool	37 Al Aquatics, Leisure Pool	38 At Aquatics, Therapy Pool	39 Ac Aquatics, Complex	40 Bc Bike Complex	41 B Bike Course	42 Ws Winter Sport	43 Tr Target Range	44 G Golf	45 Gp Golf, Practice	46 Gm Golf, Miniature	
47 Fc Fitness Course	48 Tk Track, Athletic	49 PB Pickleball Court	50 T Tennis Court	51 Tw Tennis, Practice Wall	52 Tc Tennis, Complex	53 Hc Horseshoes, Complex	54 Hs Horseshoe court	55 In Inline Hockey	56 Ih Ice Hockey	57 Gc Garden, Community	58 Gd Garden, Display	
59 L Loop Walk	60 Tr Trail, Multi-Use	61 Th Trailhead	62 Tp Trail, Primitive	63 Tw Trail, Water	64 Eq Equestrian Facility	65 Dg Disc Golf	66 Cm Camping, Defined	67 Cu Camping, Undefined	68 Pa Public Art	69 Pn Passive Node	70 Oc Other Components	

Catalytic Series (Modifiers)

71 Da Design & Ambience 3	72 Or Ornamental Plants 3	73 Sp Seasonal Plants 3	74 SL Security Lighting 3	75 Ds Dog Station 3	76 Bq BBQ Grills 3	77 Bp Bike Parking 3	78 Pt Picnic Tables 3
79 R Restrooms 3	80 Df Drinking Fountains 3	81 S Seating 3	82 Pk Parking 3	83 Pa Park Access 3	84 Ct Connection to Trails 3	85 Sh Shade 3	86 Om Other Modifiers 3

Park Quality Series

Park Amenity Series

This graphic is the author's whimsical depiction of the GRASP® Periodic Table of Park Elements

NOTE: This 3-volume Research Brief discusses the measurement and analysis of parks and other public greenspaces. This first volume discusses a number of variables that can be used to describe, measure, and analyze individual parks and greenspaces and compare them to one another Volume II describes how data on such variables can be used to evaluate the potential of a given park or greenspace to support public health goals. The final volume discusses ways in which the measures for individual parks can be combined to analyze a park system and measure its performance on a variety of indicators.

Each volume builds on the previous one, so it is suggested that the reader begin with this one and continue with the remaining two in sequence, but that is not completely necessary for each individual volume to be useful as an independent resource.

Introduction

The purpose of this report is to present a way of understanding parks by viewing them as a set of features that are combined and organized upon the land to address specific needs and issues. It discusses protocols by which the features that make up a park can be catalogued, assessed, and analyzed for the purposes of research and management.



Measuring Parks and Greenspace

Traditional Ways of Measuring Parks

Historically, the primary metrics associated with parks and greenspace were limited to objective measures of quantity – expressed in areal units such as acres or hectares – and proximity, expressed as the distance from a park to homes or other features and determined in a variety of ways. One of these is the straight-line distance from the center or perimeter of the park parcel to the origin/destination. Another is the distance along established travel-ways from a point such as a park entrance, perimeter boundary, or other feature to another point such as a home or business. Proximity is also sometimes measured by travel duration, such as a ten-minute walk. These measures are often combined with other data to create indices, such as the number of park acres per unit of population (for example: 10 acres of park land per 1000 people) or percentage of the population found within a ten-minute walk of a park.

These types of measures were incorporated into guidelines and standards published by the National

Recreation and Park Association (NRPA) as early as 1906 (Buechner, 1971) and others throughout most of the 20th century. They can still be found embedded in local planning policies and land development regulations even though NRPA now discourages their use. Current philosophy in the parks and recreation profession has moved away from a standards-based approach to one tailored more specifically to each community's unique needs, based on the philosophy that all communities are not the same (Penbrooke, 2007).

Similarly, all parks are not the same. In addition to variations in size, parks differ in the types and quantities of natural and built features contained within them. Natural features might include vegetation; hills and other landforms; and streams or other water elements. Built features include all manner of man-made elements, from those intended to accommodate activities such as sports, games, and adventure to ones for passive activities such as picnicking and nature study. Structures such as restrooms, community centers, maintenance buildings, and many others are also found in parks. Other support features may include travel-ways such as roads and trails, parking lots, drinking fountains, and other comfort and convenience elements. The

specific features found within a particular park play a large role in distinguishing it from other parks, and these can be objectively measured in terms of type, size, quantity, and other metrics. Presence or absence of features, combined with a park's size, is a primary way parks have been distinguished from one another for decades. Based on these measures, parks have typically been grouped by type into Regional, Community, Neighborhood, Pocket, or other designations. Such designations are frequently used to define the intended purpose of a particular park and guide operation and maintenance.

Missing Measures

Less often found in traditional measures for parks are subjective characteristics such as the quality of the overall park and the individual features within it. Yet this may play a large role in distinguishing one park from another and an individual's choice of whether or not to use the park, and may affect the level of enjoyment it provides from a user's perspective. Awareness of this has triggered behavioral research targeted towards determining how qualitative aspects of a park affect its use and the benefits it provides (Hugheya et al., 2016).

Some qualitative aspects can be linked to objective measures, such as the amount of shade, vegetative cover, and the presence or absence and adequacy of convenience features such as restrooms, drinking water, and parking. The presence of incivilities such as trash and graffiti may also be used as measures of quality. Social and demographic data, for example, crime statistics, may also affect the perceived quality of a park. Other variables are harder to measure, such as scenic quality and the general sense of safety and well-being.

Clearly there are many different ways that parks can be measured and distinguished from one another. But why do we need to measure them in the first place?

Why Standardized Park Measurements are Needed

Lands designated as parks and greenspace, along with the natural and built features within them, are resources that are managed by agencies tasked with

making decisions about where to locate parks, what to place within them, how to arrange things within them, and how to operate and maintain them. A clear accounting of those resources is needed to do these things in a fair, equitable, effective, and efficient manner. This has traditionally included an assessment using the types of measures discussed earlier, such as size, location, and features to produce an inventory of assets owned or managed by an agency. Over time this has led to various policies, procedures, and practices to measure and assess parks. However, methods and protocols for measuring park environments have not been standardized across the industry. This makes it difficult for park agencies to compare themselves to other agencies or norms across multiple agencies. It also makes it difficult for researchers and policymakers to have a clear understanding of the overall footprint of parks across a region, state, or nation. Standardization would allow for better sharing of information within and between agencies and facilitate research to improve their performance.

How Park Measurements are Used

Data from park inventories are typically used to perform various analyses that help agencies manage their assets and resources. Analyzing the data can allow park managers to determine the status and condition of individual parks as well as entire park systems. Analysis can also be used to make predictions about the adequacy of existing parks to meet current and future needs. In the past few decades, park data has been used increasingly to conduct empirical research on how parks benefit people and the environment.

By definition, analysis involves the separation of something into its components. For example, a chemist might analyze a particular substance by determining what elements it contains. We can use that analogy to visualize an individual park as a set of elements that combine to make a unique compound generally known as a park, but with its own identifiable and measurable characteristics. To understand the individual elements that make up a particular park, an assessment of its elements can be compiled by auditing the park. An audit is an official examination of the quality or condition of something.

The resulting list of things at the park is referred to as an inventory of that park.

As mentioned earlier, it has been a long-standing practice to classify parks according to the types of features they contain. A park with a few basic features might be classified as a Neighborhood Park, while one with a variety of features for organized activities, such as sports leagues or special events, might be classified as a Community or Regional Park. However, these classifications are used inconsistently in the industry and may mean different things in different situations. Traditional classification schemes are often based on a park's physical size as well as its features, adding even more ambiguity. For example, a large site with a few simple features could be placed into one category based on its size and another based on its features. The features a park contains, along with how they are used and by whom, is a more accurate reflection of the park's actual function than its size. Thus, it is useful to look more closely at the component pieces within a park by using audit tools to conduct a detailed inventory.

Park Audits

Agencies need to know what capital resources they have in order to manage them properly. The current ways park agencies audit their capital assets range from compiling a simple list of properties they own or manage to a more elaborate classification of them according to their purpose (i.e., neighborhood or regional parks). Less commonly, this may extend to detailed audits of the features contained within them. Basic audits typically identify the presence or absence of features and include a simple count of them, such as the number of tennis courts, sports fields, etc. More elaborate inventories may include such details as the age, condition, or other attributes of features.

Audits of individual parks can be used to compare them to a managing agency's standards and determine whether they are meeting their intended purpose. They can also be benchmarked against other parks in the system to assure equity across the system's service area. They may also be benchmarked against parks in other jurisdictions to measure performance. Recreation programmers can

Using GIS for Audits

Increasingly, agencies are using Geographic Information Systems (GIS) to manage their inventory data. GIS allows for the portrayal of tracts of land and their features on a digital map. At a minimum, parcels of land are shown as polygons on the map. Features within the parcels may be associated with the polygon in the GIS but not shown individually on the map, or they may be displayed on the map as points, lines or polygons. For example, playgrounds, fields, and courts might be shown as polygons with accurate geographic location, size and shape, or simply represented with points at their approximate center. The latter is common for features such as benches, tables, etc. whenever they are included in the inventory. Trails, walkways, and other linear features may be displayed by their centerlines, although their actual outlines and edges are sometimes shown instead. This information is typically derived from aerial photos, but it can also come from land surveys or legal descriptions. Geographic Positioning Systems (GPS) and mobile device technology is commonly used to collect a feature's location in the field.

Geospatial data from various sources can be combined and shared to compile a detailed model of the assets found within a given region, municipality, or some other defined boundary. This is often done at the county level if not at the municipal level. In Colorado, the City and County of Denver has compiled a GIS database that includes a full set of features within its parks and data on the condition, remaining life span, and projected replacement cost for each feature. Such detailed information is best compiled through direct observation in the field using some form of an audit tool. Audit tools can range from a simple paper map and checklist to sophisticated digital forms loaded onto hand-held tablets or other devices.

use audits when scheduling and managing organized activities and special events such as sports leagues and tournaments, as well as rentals of group picnic facilities or other event venues, and many other tasks. With the renewed emphasis on parks as a way to address public health needs, park audits have become an important research tool in examining the relationships between parks and health outcomes. Doctors can even use data from park audits to prescribe visits to specific parks as part of their patient services (Seltenrich, 2015).

Analysis of park audit data can be used to measure the adequacy of existing parks to meet current and future needs or predict the financial and staffing resources needed to manage parks in future years--at both the system level and for individual parks. By combining audits for all parks within a single system or region, the performance of the system can be measured across a specified area to look for gaps or inequities in service. This can be done for overall service or specific features such as sports fields, playgrounds, picnic facilities, and trails. It can also target a specific population, such as youth, seniors, or disadvantaged communities. For example, if a park agency is interested in upgrading all of its under-performing playgrounds, it can quickly identify these from the park audit data. A wide range of analyses are possible. These are described in the next volumes of this Research Brief.

Data from park audits can also be used to schedule and track routine maintenance, replacements, upgrades, and perform other operational or capital activities. Denver, Colorado and Raleigh, North Carolina are examples of places where this is happening.

Audits are also important to researchers who study relationships between parks and public health or other variables. Several audit tools have been developed specifically for use in such research. (Bedimo-Rung et al., 2006; Chona et al., 2007; Saelens et al., 2006; Kaczynski et al., 2012). While there is no single audit tool or protocol for greenspace that satisfies all needs, there is a need to collect, record, store, and manage data about parks in a manner that allows for it to be aggregated and used for multiple purposes. Doing so helps to justify the cost of acquiring data and maintaining it. For this reason, a park audit protocol

is presented here in support of the standardization of such data in the future.

The amount of time and money needed to prepare a park inventory varies widely. A cursory listing of sites and their features is possible with a relatively small investment, while highly detailed audits are more costly. To ensure effectiveness and efficiency, audits should match the agency's purposes, goals, and resources. Fortunately, audits can start out relatively simple and be expanded and refined as time and resources allow.

The Basic Units of Measurement for Park Audits

The process presented here for analyzing parks by looking at their component parts can be referred to as Component Based Methodology, or CBM. It was developed by a group of private consultants for proprietary use in managing parks and other public greenspace and trademarked under the name of **GRASP®**, which stands for **Geo-Referenced Amenity Standards Process**. Its development spans more than two decades, during which it has been used on well over a hundred planning studies and a number of research studies. While the GRASP® trademark is a proprietary name for the process that can only be used by permission of the trademark holders, the CBM process described here can be adapted and freely utilized by anyone who wishes to.



The creators of GRASP® spent years identifying, defining and refining a list of discrete elements that make up a park and testing it in the field on actual projects for park agencies across the USA. The current list is shown in Appendices A and B of this volume. The list is not intended to include every conceivable feature found in parks, but rather those elements that are normally combined to produce what is commonly referred to as a park. Like the elements found in chemistry, some park elements are abundant and occur frequently in the built environment, while others are rarely found. Also, like chemical elements, park elements have certain behaviors associated with them. Some serve to support or stimulate activities such as sports, games, or social interaction, while others serve



← Components

Components are elements of greenspace that support, encourage, or facilitate an activity or experience. The activity or experience can be active or passive, structured or unstructured, group or individual. The playground shown here is an example of a component.

Modifiers →

Modifiers are elements within greenspace that support, facilitate, or enhance the comfort and convenience of using greenspace components. This includes shade, restrooms, and pleasant surroundings.



Figure 1. Illustrative example of a component (playground) and modifiers (shade, seating, pleasant surroundings, etc.).

as catalysts that enhance other elements' effects. Examples of these include such things as shade, seating, drinking water, and other elements that enhance comfort and convenience for park users.

With this in mind, the CBM concept sorts the elements of parks into two categories: components (Appendix A), which serve as the basic building blocks of a park and are intended to produce a specific outcome or set of outcomes, and modifiers (Appendix B), which are catalysts that enhance these outcomes by encouraging people to visit more often, stay longer, and enjoy a more meaningful experience at a park (Figure 1).

Assaying Park Elements

Most park system audits include quantitative information about parks, especially the number of parks and the acreage associated with them. These basic measurements have been used to formulate policies related to the provision of parks and recreation service at various government levels. Quantitative numbers for the features within parks,

such as the number of fields, courts, etc. have also been commonly incorporated into park inventories. However, qualitative information on parks, such as how pleasant, safe, comfortable, and convenient they are and how functional or desirable their features are have not commonly been a part of the equation. While park quantity measures such as acres and number of parks have been clearly articulated, park quality has not been defined nor captured in general as a metric.

In part, this historic lack of detail in park inventories was due to limitations of the technology available to collect, store, and maintain large amounts of data. With the emergence of computers, and GIS in particular, these limitations have been overcome (see sidebar). Along with this has come the availability of more sophisticated audit tools, occurring largely due to the emergence of a flurry of research activity in recent decades to investigate the relationship between parks and public health. The impetus for this is a rising epidemic of obesity and other chronic diseases related to the modern built environment and associated sedentary lifestyles.

The GRASP®-IT Audit Tool

The GRASP®-IT audit tool is one of several such tools developed in recent years to conduct more sophisticated audits and thorough inventories of parks than the traditional standards approach required. It was initially developed as part of the GRASP® methodology for data-based planning and management of parks, but it has also been used in research related to behaviors, attitudes, and perceptions associated with parks, and by extension, outcomes such as public health, satisfaction, and physical activity. The GRASP®-IT audit tool identifies 75 discrete components and 15 modifiers that have been identified within parks over the course of visiting and measuring over 5,000 parks in more than 100 communities across 25 states. The components and modifiers are listed in Appendix A and are illustrated whimsically in the GRASP® Periodic Table of Park Elements shown on the cover of this document.

Assessing Components with the GRASP®-IT Audit Tool

The GRASP®-IT audit tool captures quantitative data on components, including the presence/absence and total number of each type of component found at a park. It also captures qualitative data, including an assessment of each component's functionality—defined as how well the component meets its intended purpose at its specific location (Figure 2.). For example, a small tot play area in good condition may be perfectly suited to its intended function in a pocket or neighborhood park, while the same feature by itself in a large, popular community park would be inadequate to serve the range of ages and numbers of children that use the park. Similarly, a large and complex play area at the community park would not serve its intended function adequately if it was in poor condition, obsolete, or unsafe.

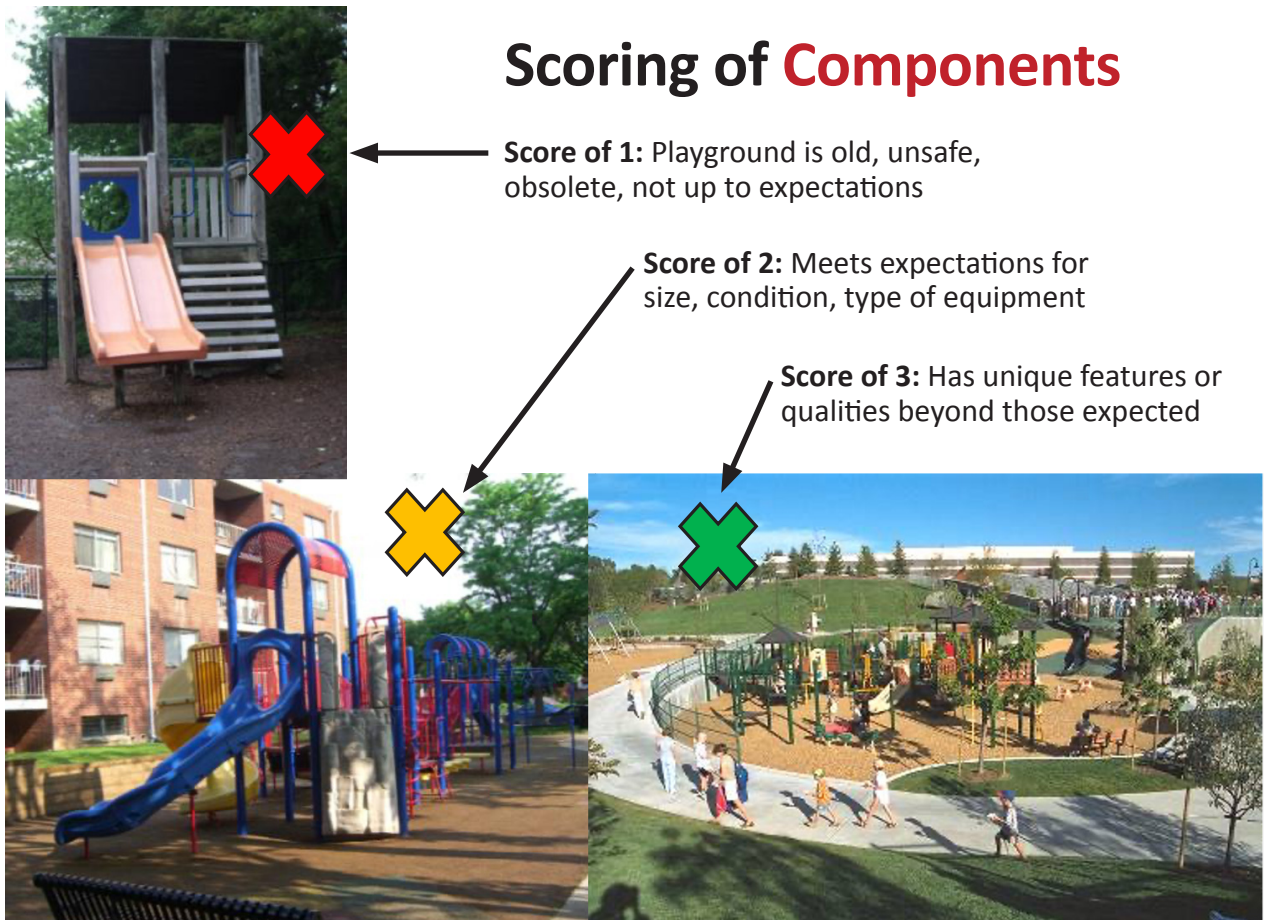


Figure 2. Example of functionality scores for playgrounds as a component.

Expectations play a role in the functionality assessment for park components and are set by community norms and other factors. Some communities might be happy to simply have a clean and safe playground with a variety of things to do, while other communities expect custom elements and the latest trends in its larger play spaces. Participants in pick-up soccer games have different expectations for what constitutes a functional soccer field than the participants in a major regional tournament. For this reason, it is important to consider who the intended user of a component might be when assessing its functionality.

Some components are evaluated at the site, parcel, or location level. This includes such things as public art and interpretive signage. Rather than evaluating each interpretive sign or piece of art at a single park, a component score is assigned based on how well the expectations for art or interpretive signs are met if those things are present.

There is necessarily a degree of subjectivity in evaluating the functionality of park components. While

this may seem to limit the validity of park audits, it is not an issue when proper procedures are followed. This includes having clear definitions and protocols, as well as using trained observers to conduct the audits. Norms for components within a given community can be established by reviewing a sample of parks and components before conducting the actual audit. Agency staff can identify examples of components across the range from poor to excellent to allow auditors to get a sense of what will be found across the entire park system. Community expectations can be revealed through focus groups, public workshops, and citizen surveys. In most agencies, staff will have a good sense of community expectations through their ongoing interactions with constituents.

Assessing Modifiers with the GRASP®-IT Audit Tool

While (except as noted above) each component within the park system is evaluated individually, modifiers are evaluated at the site or parcel level. For example, the modifier Shade is evaluated based on how well the presence of shade throughout



Figure 3. Modifier scores are assigned to 15 different features that may be present in a park. The scores can be combined into a single rating for the entire park, shown here as High, Medium, or Low.

the entire park aligns with the expectations of its intended users. As with components, the evaluation is made with local conditions in mind. For example, expectations for shade in a desert environment are different from those in a forested one. Modifiers for a single park are combined to produce an overall modifier score for the park (Figure 3.).

The Audit Dataset

The audit data from one or multiple parks can be compiled into a simple spreadsheet or a more sophisticated database for analytical use. Data hosted in GIS applications will typically be located in a shapefile or geodatabase from which it can be exported to produce reports and conduct analyses.

Before using them, agency staff or others familiar with the park system should review the completed audits to identify any obvious errors or inconsistencies. The assessments can be adjusted as needed to assure that the agency is satisfied that the audit is an accurate representation of current conditions.

Because conditions are constantly changing, especially across a large park system with lots of parks and features, it is important to track the date on which each item in the audit was assessed and recorded. The larger and more detailed the dataset is, the greater the likelihood that some items will be out of date or inaccurate. Despite efforts to maintain quality throughout the process, there will always be some degree of inaccuracy and unreliability in any tool or procedure used to collect data. This does not render the entire dataset useless.

Also because conditions change constantly, it is important to assign an as-of date on which the data is assumed to be the most current information available. This is especially important when conducting large inventories that can take time to complete and finalize. Plans, policies, and decisions based on the data should reference an as-of date for the simple reason that such actions take time to complete and by the time they are finalized something in the data may have changed. Acknowledging this up front will head off problems later. Otherwise, decisions made from the data will

come into question if someone finds that a particular item in the data has changed, even if that change has no impact on the decision.

Keeping audit data current can be challenging, especially in an extensive park system. Various methods for keeping audits updated can be established, but at a minimum this should be done as part of the agency's update cycle for its master plan, which may occur as frequently as every five years or as long as 10 or 20 years. Some agencies--such as Raleigh, North Carolina--are now adopting computerized asset management systems that tie work orders for maintenance or repairs to their database and allow for it to stay updated in real time.

Applying Park Data

The audit data for an individual park can be used to generate various measurements and indices for the park, which can then be compared against similar measurements for other parks in the same system, or other communities if they are using the same assessment methods. This is a primary justification for the standardization of measures and protocols for auditing parks.

For example, data from the GRASP®-IT audit tool has been used for nearly two decades to generate performance scores for individual parks using a formula that combines the scores for the park's components with the modifier scores for the entire park. This is done using the functional score for each component as described in Figure 2 and applying modifier values (see Figure 3) for the entire park to arrive at a net value for each component. The net values for all components in the park are added together to arrive at a total score for the entire park. An example of this is illustrated in Figure 4.

By compiling the scores for multiple parks it is possible to compare any given park against all others for which data is available. These scores can also be used to evaluate equity and identify gaps in service between geographic areas served by different parks. This is covered in more detail in subsequent volumes of this series.

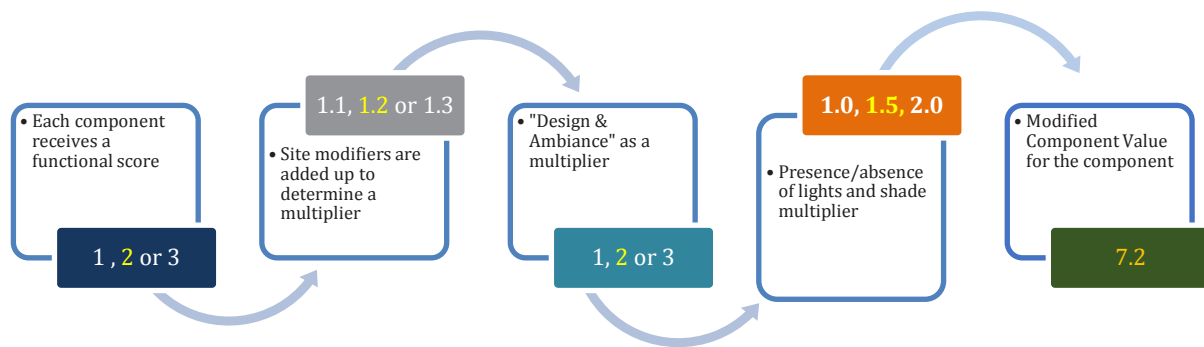


Figure 4. Sample process for determining a GRASP® value for a park component

The audit also provides an indication of the strengths and weaknesses of an individual park and can be used to develop a capital improvement plan for its future. The scores can be monitored over time, so repairs and replacements can be made within the park if scores drop due to aging, degradation, obsolescence, or other changes. Scores can also be projected for proposed additions or modifications to the park to evaluate the cost/benefits of various alternatives or proposals.

Conclusions

Parks can provide a wide range of benefits if properly managed. The lack of standardized ways to measure them has hindered the ability of park agencies and others to maximize the benefits that parks provide.

Parks are made up of different elements, and park audits can be used to understand and manage how these elements combine to create a unique whole in any given location. Across a larger area, the set of parks and other such spaces form a system that provides collective benefits to the people who live there. Audits allow for the elements that make up parks and the system they create to be identified, evaluated, and analyzed to set policies and make decisions. GIS and other technologies allow for audits to be as detailed and complex as needed to achieve desired outcomes. For the data from audits to be most effective, standardized protocols are needed, but are currently lacking in the industry. Component based methodology such as GRASP® offers a set of protocols that can be adopted or adapted to individual agencies' needs and the broader public.



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Appendix A: GRASP® Outdoor Components List

GRASP® Outdoor Component Type	Definition
Adventure Course	An area designated for activities such as ropes courses, zip-lines, challenge courses, etc. Type specified in comments
Amusement Ride	Carousel, train, go carts, bumper cars, or other ride upon features. Has an operator and controlled access.
Aquatics, Complex	A facility that has at least one pool and other aquatic features.
Aquatics, Lap Pool	A swimming pool designed for people to swimming laps primarily
Aquatics, Leisure Pool	A swimming pool intended for leisure water activities. May include zero depth entry, slides, and spray features.
Aquatics, Spray Pad	A water play feature without immersion intended for interaction with moving water.
Aquatics, Therapy Pool	A temperature controlled pool intended for rehabilitation and therapy.
Basketball Court	A dedicated full-sized outdoor court with two goals.
Basketball, Practice	A basketball goal for half-court play or practice. Includes goals in spaces associated with other uses.
Batting Cage	A stand-alone facility that has pitching machines and restricted entry.
Bike Complex	A facility that accommodates various bike skills activities with multiple features or skill areas.
Bike Course	A designated area for non-motorized bicycle use. Can be constructed of concrete, wood, or compacted earth. May include a pump track, velodrome, skills course, etc.
Camping, Defined	Defined campsites that may include a variety of facilities such as restrooms, picnic tables, water supply, etc. Quantity based on official agency count. For use only if quantity of sites is available otherwise use "Camping, Undefined".
Camping, Undefined	Allows for users to stay overnight in the outdoors in informal and/or undefined sites. Receives a quantity of one for each park or other location.
Climbing, Designated	A designated climbing feature or structure designed specifically for climbing activities. May include specific child play features.
Climbing, General	Indicates allowance for users to participate in a climbing activity. Receives a quantity of one for each park or other location.
Concessions	A facility used for the selling, rental, or other provision of goods and services to the public.
Diamond Field	Describes softball and baseball fields of all kinds suitable for organized diamond sport games. Not specific to size or age-appropriateness.
Diamond Field, Complex	Multiple ballfields at a single location suitable for tournaments.
Diamond Field, Practice	Describes any size of grassy area used for practice. Distinguished from ballfield in that it doesn't lend itself to organized diamond sport games and from open turf by the presence of a backstop.
Disc Golf	Describes a designated area that is used for disc golf. Quantities: 18 hole course = 1; 9 hole course = .5
Dog Park	An area designated specifically as an off-leash area for dogs and their guardians.
Educational Experience	Signs, structures, or features that provide an educational, cultural, or historic experience. Receives a quantity of one for each contiguous site. Distinguished from public art by presence of interpretive signs or other information.
Equestrian Facility	Area designated for equestrian use. Typically applied to facilities other than trails.
Event Space	A designated area or facility for an outdoor class, performance, or special event including amphitheater, band shell, stage, etc.
Fitness Area	One or more features intended for personal fitness activities. Fitness areas are typically ground in a single location. Receives a quantity of one the area.

GRASP® Outdoor Component Type	Definition
Fitness Course	One or more features intended for personal fitness activities. Courses are typically along a path or trail and receive a quantity of one for the course.
Game Court	Outdoor court designed for a game other than tennis, basketball, volleyball, as distinguished from a multi-use pad including bocce, shuffleboard, lawn bowling, etc. Type specified in comments. Quantity counted per court.
Garden, Community	Describes any garden area that provides community members a place to have a personal vegetable or flower garden.
Garden, Display	Describes any garden area that is designed and maintained to provide a focal point or destination including a rose garden, fern garden, native plant garden, wildlife/habitat garden, arboretum, etc.
Golf	A course designed and intended for the sport of golf. Counted per 18 holes. Quantities: 18 hole course = 1; 9 hole course = .5
Golf, Miniature	A course designed and intended for use as a multi-hole golf putting game.
Golf, Practice	An area designated for golf practice or lessons including driving ranges and putting greens.
Historic Feature	A feature that is historic in nature but does not include interpretation or educational elements.
Horseshoe Complex	Several regulation horseshoe courts in single location suitable for tournaments.
Horseshoe Court	A designated area for the game of horseshoes including permanent pits of regulation length. Quantity counted per court.
Ice Hockey	Regulation outdoor rink built specifically for ice hockey games and practice. General ice skating included in "Winter Sport".
Inline Hockey	Regulation outdoor rink built specifically for in-line hockey games and practice.
Loop Walk	Opportunity to complete a circuit on foot or by non-motorized travel mode. Suitable for use as an exercise circuit or for leisure walking. Quantity of one for each park or other location unless more than one distinct circuit is present.
Multi-Use Pad	A paved area that is painted with games such as hopscotch, 4 square, tetherball, etc. Often found in school yards. As distinguished from "Games Court " which is typically single use.
Natural Area	Describes an area in a park that contains plants and landforms that are remnants of or replicate undisturbed native areas of the local ecology. Can include grasslands, woodlands and wetlands.
Open Turf	A grassy area that is not suitable for programmed field sports due to size, slope, location or physical obstructions. May be used for games of catch, tag, or other informal play and uses that require an open grassy area.
Other	Active or passive component that does not fall under any other component definition. Specified in comments.
Passive Node	A place that is designed to create a pause or special focus within a park and includes seating areas, plazas, overlooks, etc. Not intended for programming.
Pickleball Court	A designated court designed primarily for pickleball play.
Picnic Ground	A designated area with a grouping of picnic tables suitable for organized picnic activities. Individual picnic tables are accounted for as Comfort and Convenience modifiers.
Playground, Destination	Playground that attracts families from the entire community. Typically has restrooms and parking on-site. May include special features like a climbing wall, spray feature, or adventure play.
Playground, Local	Playground that is intended to serve the needs of the surrounding neighborhood. Includes developed playgrounds and designated nature play areas. Park generally does not have restrooms or on-site parking.
Public Art	Any art installation on public property. Receives a quantity of one for each contiguous site.
Rectangular Field, Complex	Several rectangular fields in single location suitable for tournament use.

GRASP® Outdoor Component Type	Definition
Rectangular Field, Large	A field large enough to host one adult rectangular field sport game such as soccer, football, lacrosse, rugby, and field hockey. Approximate field size is 180' x 300' (60 x 100 yards). Field may have goals and lining specific to a certain sport that may change with permitted use.
Rectangular Field, Multiple	A large open grassy area that can be arranged in any manner of configurations for any number of rectangular field sports. Sports may include, but are not limited to: soccer, football, lacrosse, rugby, and field hockey. Field may have goals and lining specific to a certain sport that may change with use.
Rectangular Field, Overlay	Describes a rectangle field that overlays a diamond. The two fields cannot be used simultaneously.
Rectangular Field, Small	Accommodates at least one youth field sport game but too small to for a regulation adult field sport. Sports may include, but are not limited to: soccer, football, lacrosse, rugby, and field hockey. Field may have goals and lining specific to a certain sport that may change with permitted use.
Shelter, Large	A shade shelter or pavilion large enough to accommodate a group picnic or other event for a minimum of 13 seated whether or not benches or picnic tables are provided.
Shelter, Small	A shade shelter, large enough to accommodate a family picnic or other event for approximately 4-12 persons with seating for a minimum of 4. Covered benches for seating up to 4 people included as a modifier in comfort and convenience scoring and should not be included here.
Skate Feature	A stand-alone feature primarily for wheel sports such as skateboarding, in-line skating, etc. May or may not allow free-style biking. Dedicated bike facilities are categorized as "Bike Course".
Skate Park	An area set aside primarily for wheel sports such as skateboarding, in-line skating, etc. Attracts users from the entire community. May or may not allow free-style biking. May be specific to one user group or allow for several user types. Can accommodate multiple users of varying abilities. Typically has a variety of concrete or modular features.
Target Range	A designated area for practice and/or competitive target activities. Type specified, such as archery or firearms, in comments.
Tennis Complex	Multiple regulation courts in a single location with amenities suitable for tournament use.
Tennis Court	One regulation court suitable for recreation and/or competitive play. Quick Start or other non-standard types specified in comments.
Tennis, Practice Wall	A wall intended for practicing tennis.
Track, Athletic	A multi-lane, regulation sized running track appropriate for track and field events.
Trail Access Point	A location that allows trail access but has limited other amenities more often association with a trailhead. See trailhead for more defined areas.
Trail, Multi-Use	A trail, paved or unpaved, that is separated from the road and provides recreational opportunities or connection to walkers, bikers, roller blades and equestrian users. Paths that make a circuit within a single site are "Loop Walks".
Trail, Primitive	An unpaved trail that provides recreational opportunities or connections to users. Minimal surface improvements that may or may not meet accessibility standards.
Trail, Water	A river, stream, canal or other waterway used as a trail for floating, paddling, or other watercraft.
Trailhead	A designated staging area at a trail access point. May include restrooms, an information kiosk, parking, drinking water, trash receptacles, seating, etc.
Volleyball Court	One full-sized court. May be hard or soft surface, including grass and sand. May have permanent or portable posts and nets.
Wall Ball Court	Walled courts associated with sports such as handball and racquetball. Type specified in comments.
Water Access, Developed	A developed water access point including docks, piers, kayak courses, boat ramps, fishing facilities, etc. Specified in comments including quantity.

GRASP® Outdoor Component Type	Definition
Water Access, General	The general ability to access the edge of open water. May include undeveloped shoreline. Typically receives quantity of one for each contiguous site.
Water Feature	A passive water-based amenity that provides a visual focal point. Includes fountains and waterfalls.
Water, Open	A body of water such as a pond, stream, river, wetland with open water, lake, or reservoir.
Winter Sport	An area designated for a winter sport or activity such as a downhill ski area, nordic ski area, sledding hill, toboggan run, recreational ice, etc. Type specified in comments.

Appendix B: GRASP® Modifiers

The following are comfort and convenience features that are referred to as modifiers. They are evaluated for the entire site, not as individual components.

BBQ Grills: Facilities for grilling that are adequate in number and appropriately located to address the anticipated need at this location.

Bike Parking: Secure facilities for parking bikes adequate in number and appropriately located within the park.

Connection to Trails: Presence of a direct or very near and clearly identifiable connection to a trail or greenway beyond the boundaries of the park. Walks and trails that are contained completely within the site are not considered a connection to trails, but rather a component of the park to be rated accordingly.

Design & Ambience: the overall “feel” and design of a park, including views into and out of the site. High scenic value, presence of special or unique features, high quality materials and/or design all can contribute to assessment of this variable. Can also be influenced by sense of safety and security of the site and its surrounding area.

Drinking Fountains: Availability of drinking water in safe, clean and convenient location(s), appropriately distributed throughout the park.

Dog Station: Bag dispensers and waste receptacles adequate in number and appropriately located within the park.

Ornamental Plants: Permanent plants that provide color and interest, such as flowering trees, specimen plants, hedges and shrub beds, etc.

Park Access: Access to the park from surrounding neighborhoods and streets is safe and convenient. If pedestrians have to cross a busy street to enter, that would lower the rating for this element.

Parking: Adequate parking is available to fit the needs of the park. This may be on the site, on adjacent streets, or on adjacent sites if the parking is convenient and usable.

Picnic Tables: Tables of good condition adequate in number and appropriately located within the park to serve the expected needs.

Restrooms: This item varies from place to place, based on local needs, norms, and expectations. Generally, it means that there is adequate availability of a clean, safe, and convenient place to take care of basic needs. This could be located in a typical on-site restroom building, or in an adjacent public building close by, or with the use of portables, depending on the situation.

Seasonal Planting: Annual and perennial plantings that provide changing seasonal interest and color are present in one or more key locations in the park – could be at the entrance, near gathering areas, or at various places throughout the park.

Seating: Places to sit that are adequate in number and appropriately located to provide a comfortable place to sit for the numbers and types of users expected.

Security Lighting: Lighting that is appropriate for the use and conditions of the park. This does not mean that all parts of the park should be lighted at night, but rather that any areas intended for nighttime use have appropriate lighting to make users feel safe and comfortable.

Shade: Natural or artificial shade areas, located so that park users can find protection from the sun as part of their normal use of the park.

Other: Special, unique, or other features that affect the comfort and convenience of the park for users that are not covered among the ones listed here.