

EQUITY BASED PRIORITIZATION MODEL

# Ensuring Equitable Access to Milwaukee's Playfields



A department of MPS

## MILWAUKEE PUBLIC SCHOOLS EQUITY PROBLEM OF PRACTICE

Milwaukee Public Schools has neither consistently nor effectively engaged all of our students of color in an environment conducive to learning; thus, there are opportunity gaps that perpetuate low student achievement.

### MPS' WORK TO REDEFINE THE MPS EXPERIENCE



The MPS Strategic Plan includes eight strategic objectives. Objective #3, Redefine the MPS Experience, is guiding the work associated with the enhancement of recreation access and opportunities. For more information regarding the MPS Strategic Plan visit [mpsmke.com/8bigideas](https://mpsmke.com/8bigideas)

*Inherent in the concept of local public parks is the idea that all members of a community — regardless of age, race, ethnicity, gender, ability level, or socioeconomic status — have access to a safe place to gather, play, exercise, and enjoy being outdoors. Because inadequate access to parks contributes to inequitable health and economic development outcomes, a key tenet of promoting social equity must include expanding the distribution of and access to public parks and recreational spaces in underserved areas.*

– American Planning Association



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*Social equity is a critical responsibility borne by every public park and recreation agency and the professionals that operate them. It is a right, not just a privilege, for people nationwide to have safe healthful access to parks and recreation. – National Park and Recreation Association*

## MILWAUKEE, THE CITY OF THE LIGHTED SCHOOLHOUSE

The Milwaukee Public Schools Department of Recreation and Community Services was created in 1911 when the Wisconsin State Legislature granted authority to school boards to provide recreation programming community-wide and to establish funding streams to support such work. As such, the oversight of community recreation programming for the City of Milwaukee is managed by the school district and the Milwaukee Board of School Directors.

The Recreation Department's mission is to *enrich and strengthen the community by promoting healthy lifestyles, personal development, and fun through memorable recreational and educational experiences for people of all ages and abilities.*

Activities are offered year-round at more than 100 locations throughout the City of Milwaukee. Programming occurs in school facilities that serve as recreation centers, as well as recreation playfields which serve as neighborhood parks and offer amenities such as ballfields, playgrounds, basketball courts, tennis courts, fieldhouses, wading pools and open space.

As far back as 1926, the Milwaukee Board of School Directors and the Milwaukee Common Council have a history of cooperative policymaking regarding the financing, purchasing, construction, maintenance, and use of outdoor recreation facilities within the city. As is common in many urban areas, the ability to keep pace with deferred maintenance of public recreation spaces has been a challenge and thus both the City and MPS recognize the needs are no longer being adequately met.

## DEVELOPING A PLAYFIELD SYSTEM BASED ON EQUITY

The Milwaukee Public Schools (MPS) Department of Recreation and Community Services has a proud history of serving our entire community. Since the early 1900s, we've hosted countless activities at our large network of outdoor playfields. If you grew up in Milwaukee, you likely have fond memories of time spent at your local playfield: ice skating during the winter, playing softball in the warmer months, meeting your friends at the playground, or simply enjoying time outdoors.

Unfortunately, many of our 52 neighborhood playfields have fallen into disrepair and no longer meet the needs of their surrounding communities. Recognizing this problem, we created the Milwaukee Outdoor Recreation Facilities Master Plan, a ten-year roadmap for improvements to our outdoor recreation facilities. The Master Plan assessment provides a rating for each playfield and identifies more than \$25 million in improvements over the next decade.

MPS is committed to the fair and equitable allocation of district resources, support and opportunities. Our playfields, much like our school system, should be held to the same high standards regardless of location. In lieu of merely addressing improvements based on physical condition, we established a point-based system to ensure an equitable approach to the planned improvements. This methodology emphasizes racial and economic equity to determine which projects require immediate action.

Milwaukee is a city of neighborhoods, and our playfields have a profound and positive impact on residents' daily lives. We know that strong, vibrant playfields create healthier neighborhoods, stabilize housing by increasing property values, and narrow the achievement gap as young people are given equal opportunities to play and grow during their formative years.

Please take the time to familiarize yourself with our Equity Based Prioritization Model and our planned approach to ensuring access to high quality playfields for our entire community. We are routinely conducting community engagement sessions as we move this work forward and encourage you to get involved. Collectively, we will revitalize these important spaces in our community and ensure safe play for all!

Sincerely,



Lynn A. Greb  
Recreation Director



# METHODOLOGY

A rating system for the playfields was established using a set of criteria which included a combination of community and playfield characteristics. A total of 8 quantifiable criteria identified below resulted in the creation of an Equity Prioritization Index Value (EPIV) for each playfield. This approach is meant to quantifiably evaluate playfields and ensure investments are equitably targeted.

## EQUITY PRIORITIZATION INDEX VALUE

### NEIGHBORHOOD CHARACTERISTICS

- Income level
- Poverty rate
- Race
- Crime rate

### POPULATION CHARACTERISTICS

- Total population
- Population under the age of 18
- Adjacent parkland

### PLAYFIELD CONDITION CHARACTERISTICS

- Master Plan Condition Rating

## NEIGHBORHOOD CHARACTERISTICS

(Income, Poverty, Race and Crime)



The ability to access neighborhood public spaces has a profound impact on the poor, those with limited mobility and children. Easily accessed, nearby public spaces are very important for such vulnerable populations who may not have a personal vehicle, a situation made even more acute in neighborhoods with few public transportation options. Studies have also shown that youth in low-income neighborhoods rely more heavily on local public spaces and use them more frequently than those in more affluent areas.

An equitable provision of local parks is one way to lessen the disparity between wealthy and poor neighborhoods by enhancing neighborhood assets. Well-designed parks that are accessible, specific, authentic, adaptable and functional can provide social space and the yards and playgrounds children need to stimulate imaginative, creative play, while helping foster a more positive outlook on life.<sup>1</sup>

### INCOME, POVERTY, RACE

Communities of color and areas of poverty often experience a lack of public and private investment relative to other areas. According to a National Urban League report that analyzed data from 2015, the economic disparities between black and white Milwaukee residents is severe and has been for decades. The study reported that only 4.3 percent of whites were unemployed, compared to

17.3 percent of blacks. Even when African Americans find employment, they earn much less than white workers. Black Milwaukee residents have an average household income of \$25,600, compared to \$62,600 for their white counterparts.<sup>2</sup> According to the Milwaukee Journal Sentinel, the 2014 poverty rate among children 18 and under was 42.1%. The poverty rate among African-Americans in the city was 39.9%, among Hispanics it was 31.8% and among non-Hispanic whites it was 14.8%.

### CRIME

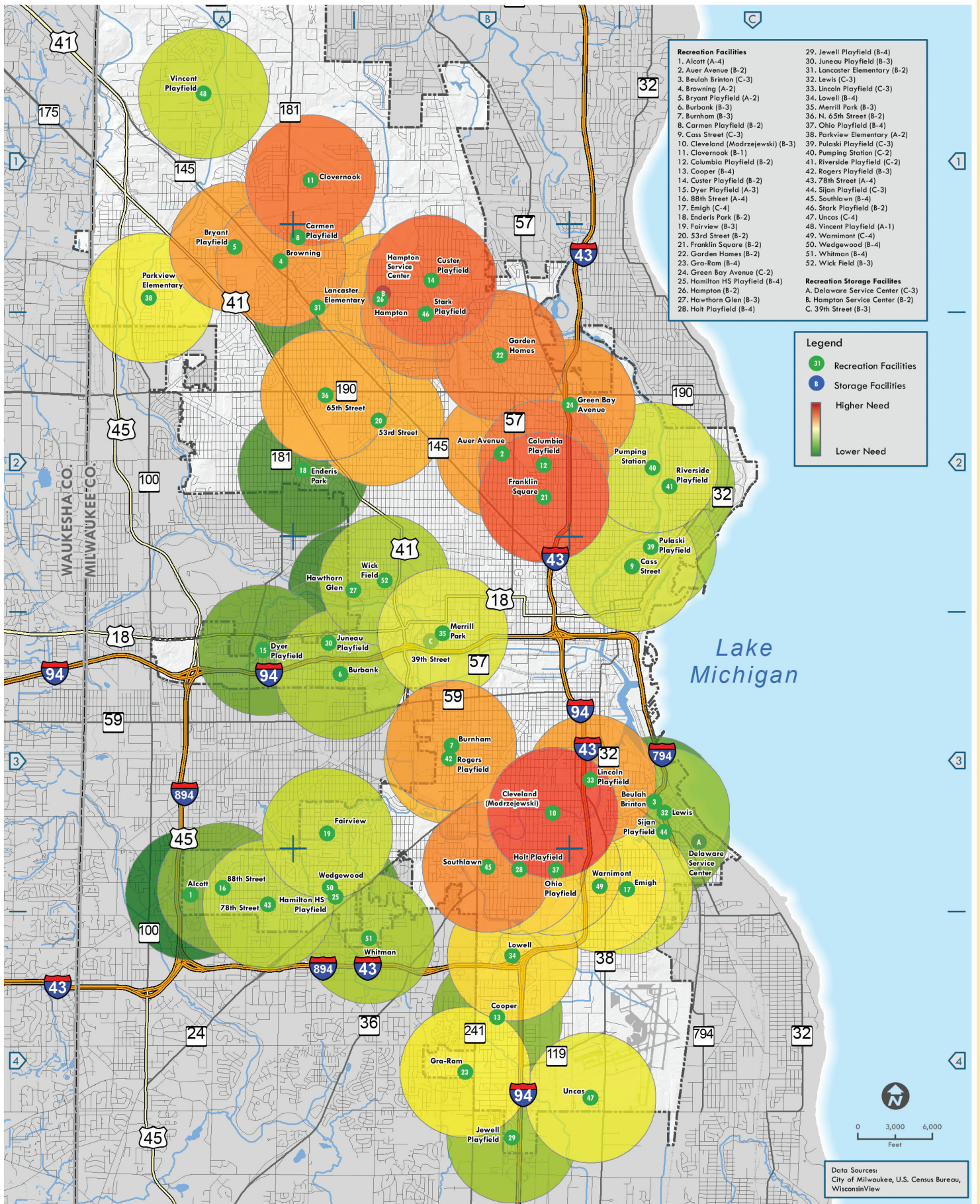
Well-designed and well-used parks and recreation areas are a great asset for local communities. But that asset can quickly become a liability when parks become unsafe and as a result, lose their value and benefit to the community. Keeping park and recreation facilities safe and in good condition is a key to community wellness and has a direct relationship to their usage rate. Research by The Citizens' Taskforce on the use and security of Central Park linked recreational programs with improved security by suggesting that an emphasis on expanded recreation initiatives will encourage greater use and ultimately create a safer park environment.<sup>3</sup> Park safety also has a strong relationship with park usage, as broken down and underused parks lose their value to the community if they are not, real or perceived, safe for potential park visitors.

<sup>1</sup>Adapted from professor Currie's 2017 article titled "A Design Framework for Small Parks in Ultra-Urban, Metropolitan, Suburban, and Small Town Settings," published in volume (22)1 of The Journal of Urban Design.

<sup>2</sup>Huffington Post, August 17, 2016

<sup>3</sup>Creating Safe Park Environments to Enhance Community Wellness

# PLAYFIELDS RANKED BY EQUITY PRIORITIZATION MILWAUKEE OUTDOOR RECREATION FACILITIES MASTER PLAN





## POPULATION CHARACTERISTICS

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### TOTAL POPULATION AND POPULATION UNDER THE AGE OF 18

Neighborhood playfields play a critical role as one of the fundamental building blocks that can enhance the quality of life for all Milwaukee residents. Neighborhoods with more people can mean many local park users and may also indicate fewer acres of open space for recreation or leisure, either public or private. High population density is likely correlated with high park use which can result in shorter asset lifespans than areas with lower population density. Higher density neighborhoods generally have the lowest amount of open space, either private or public. Parks in these areas are often the primary accessible options for open space for residents who live in apartments or have no private backyards. This means that local parks play an even more important role in providing access to nature, fresh air, and outdoor recreation.

Parks and their physical assets also provide opportunities for an active lifestyle for households

with children. Amenities for youth, such as play structures, athletic fields, and splashpads, can impact health outcomes such as childhood obesity and promote positive developmental aspects of play and socialization. The Milwaukee Public Schools Recreation Department strives to serve the youth of Milwaukee through both facilities and programming at local playfields to ensure children have quality recreation options nearby.

### ADDITIONAL PARKS WITHIN A MILE RADIUS OF THE PLAYFIELDS

Playfields with additional adjacent parks were ranked as having a lower need. Disparities in park distribution are particularly evident in areas with low income and racial/ethnic populations. Higher park acreage within a community is associated with increased participation in physical activity. Less park opportunities in populated area also increase the usage and pressure on the playfield facilities and can lead to accelerated deterioration in the facilities.

*With a population of almost 600,000, Milwaukee is a large city. But its neighborhoods render it both intelligible and approachable. While these neighborhoods come in many shapes, sizes, colors, and strengths, together they constitute the fundamental building blocks of the entire community*

*– John Gurda*



## PLAYFIELD CONDITION CHARACTERISTICS

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Each of the 52 playfields was evaluated based on the condition of its amenities. These included play equipment, sports courts, wading pools, ball fields, field houses, etc.

### **MASTER PLAN CONDITION RATING**

The condition of individual park amenities is a critical factor in determining whether capital funds should be allocated to make improvements to the location. Many of the MPS playfield facilities are at or past their life span. For example,

most building facilities over 50 years old have had no or few renovations since their construction. An estimated 56% of the facilities are more than 80 years old. These buildings are at the point or will soon be at the point in their life cycle where substantial improvements will be required to keep them operational. The age of these facilities also suggests that they are likely no longer being used for their intended purpose and that existing uses could benefit from building improvements.



# ANALYSIS

The following section discusses the data that was collected for the analysis, how it was normalized, and the calculations used to create an Equity Prioritization Index for each playfield.

## 1

### DATA COLLECTION – INPUTS

Below are the data sources and descriptions for each of the criteria used to create the Equity Prioritization Index Value for each playfield. A one-mile radius from the playfield address was used to calculate the values assigned to each criteria.

#### NEIGHBORHOOD CHARACTERISTICS

##### Income

Data Source: The estimated 2016 Median Household Income (this value was inversed meaning a lower income gave a higher value). Source: ESRI

##### Poverty

Data Source: The estimated percentage of households that were living in poverty in 2016. Source: ESRI

##### Minority Population

Data Source: The estimated percentage of the 2016 population that were not non-Hispanic white. Source: ESRI

##### Crime

Data Source: Total crimes reported in the identified area per 1,000 people using Wisconsin Incident Based Report (WIBR) Group A Offenses. Date range was 09/01/15 to 08/31/16. This was calculated for an area with a 0.5-mile radius of the playfield’s registered address. Data used is Milwaukee crimes. For areas that fall partially outside Milwaukee, the crime number is extrapolated by dividing the total crimes in the area by the percent of the area that falls within Milwaukee. Nearly all playfields had areas that fall mostly in Milwaukee. Source: City of Milwaukee, [http://itmdapps.milwaukee.gov/publicApplication\\_QD/queryDownload/login.faces](http://itmdapps.milwaukee.gov/publicApplication_QD/queryDownload/login.faces)

#### POPULATION CHARACTERISTICS

##### Total Population

Data Source: The estimated total population within a 1-mile radius of the playfield in 2016. Higher density neighborhoods received high point values. Source: ESRI

##### Population under the age of 18

Data Source: The estimated population under the age of 18 within a 1-mile radius of the playfield in 2016. Neighborhoods with larger concentrations of youth received a high point value. Source: ESRI

##### Adjacent Park Land

Data Source: The number of parks within a 1-mile radius of the playfield address. These included parks from Milwaukee Public Schools Recreation or Milwaukee County Park System. Source: Milwaukee Public Schools Recreation and Milwaukee County, <http://county.milwaukee.gov/AbTheParkSystemmap10627.htm>

#### CONDITIONS CHARACTERISTICS

Data Source: Condition Rating from the 2014 Master Plan. Each playfield was evaluated based on the condition of its facilities. This included play equipment, sports courts, ballfields, wading pools, etc. Each amenity within every site was given a grade of 1 = poor, 2 = fair, 3 = good or 4 = excellent. The ratings were then averaged to create an average condition rating for each playfield.





## 2 NORMALIZATION OF DATA

Because each of the criteria used in this analysis are composed of different inputs, the data needed to be normalized. This step is very important when dealing with parameters of different units and scales. Therefore, all parameters should have the same scale for a fair comparison between them. Each characteristic was normalized to give a score with a minimum of 0 and maximum of 1.

Each value of the inputs was normalized with the following function:

$$\frac{x_i - \min(x)}{(\max(x) - \min(x))}$$

## 3 CALCULATION OF THE CHARACTERISTICS VALUES

The next step involved weighting the elements for each of the three characteristics. The normalized number for each element is multiplied by the weight and then added together to create a total Characteristic Value.

### Neighborhood Characteristics Weights

Income	0.20
Poverty	0.30
Minority Population	0.30
Crime	0.20

*Formula*

$$(\text{Income} \times .20) + (\text{Poverty} \times .30) + (\text{Crime} \times .20) + (\text{Minority} \times .30) = \text{Neighborhood Characteristics Value}$$

### Population Characteristics Weights

Total Population	0.30
Percent under 18	0.50
Adjacent Parks	0.20

*Formula*

$$(\text{Total Population} \times .30) + (\text{Percent under 18} \times .50) + (\text{Other Amenities} \times .20) = \text{Population Characteristics Value}$$

### Conditional Characteristics

Because there is only one element for conditional characteristic there is no need to weight the value.

Playfield Condition	1.0
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*Formula*

$$\text{Playfield Condition} = \text{Conditional Characteristics Value}$$



## 4

### CALCULATION OF THE CHARACTERISTICS VALUES

The final step in establishing the Equity Prioritization Index Value (EPIV) is to weight and combine the characteristic values. The three characteristics were multiplied by 10 and then multiplied by the following weights to create a value for each playfield:

Neighborhood Characteristics	0.25
Population Characteristics	0.25
Conditional Characteristics	0.50

#### *Formula*

$(\text{Neighborhood Characteristics} \times .25) + (\text{Population Characteristics} \times .25) + (\text{Conditional Characteristics} \times .50) = \text{Equity Prioritization Index Value}$

## 5

### RESULTS

Once the EPIV was calculated for each playfield, the locations were rank ordered according to their respective scores. Sites with a higher weighted prioritization score will be given priority consideration for playfield improvement work. Periodic review of this scoring and reaffirmation of project priorities will be important in the event neighborhood characteristics change over time.



## CONCLUSION

The Milwaukee Public Schools Department of Recreation and Community Services is committed to ensuring equitable access to recreation services for all Milwaukee residents. The creation of an Equity Prioritization Model provides the framework to guide investment in much needed recreation facility improvement projects and ensures a level playing field exists for all users.

*Special thanks to the following entities for their guidance in this work:*

- Minneapolis Park and Recreation Board who provided the model from which this work was launched, and the supporting documentation for the chosen criteria.
- Milwaukee Public Schools Office of Accountability and Efficiency for the data analysis and methodology development.



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