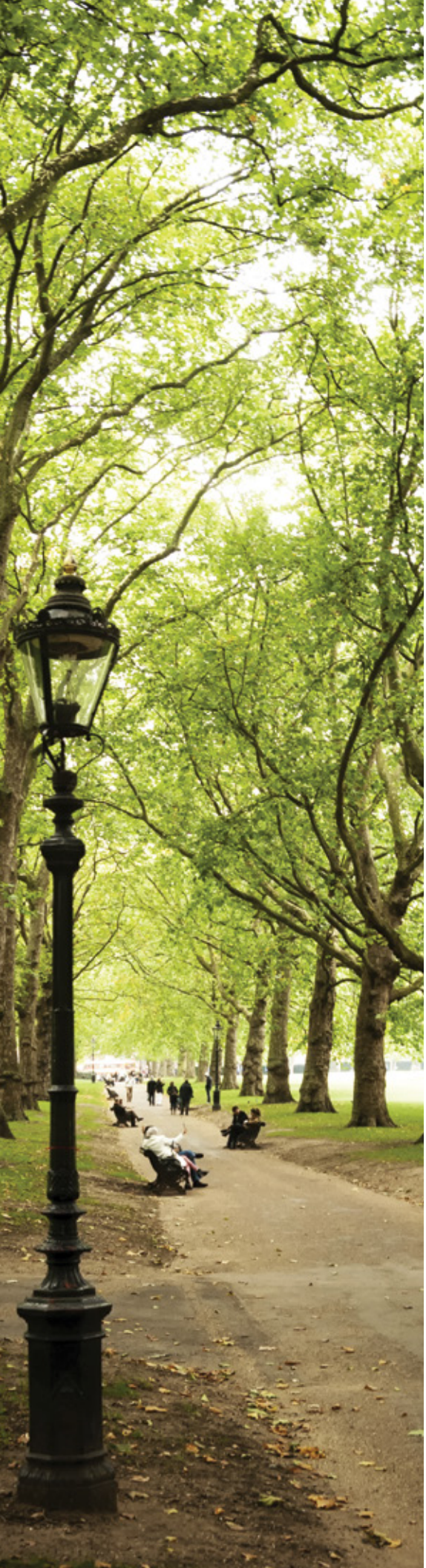
Safe Routes to Parks:

Improving Access to Parks through Walkability

NRPA
National Recreation and Park Association

SAFE ROUTES TO PARKS



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INTRODUCTION

Public parks provide highly valued benefits in America's local communities. Some of these benefits include but are not limited to economic viability, environmental conservation and improved health outcomes. Adults living within a half mile of a park visit parks and exercise more often, but according to the 2014 State Indicator Report on Physical Activity, less than 38 percent of the U.S. population lives within a half mile of a park. More safe and convenient places are needed for Americans to be physically active in their communities.[1] People who are unable to walk to parks are deprived of the opportunity to engage in two instances of physical activity — walking to the park site and participating in activities at the site.[2] Given evidence that access to parks increases one's level of physical activity, parks are an important destination that should be easily accessible to all citizens. Consequently, the key to ensuring accessibility to parks is through creating safe routes to parks within communities. When citizens have the resources to safely walk to parks, every trip taken by foot is an opportunity to engage in physical activity. Nevertheless, there are several physical and social barriers that make walking to parks undesirable, such as proximity to parks, lack of infrastructure, crime and traffic safety concerns.[3] These barriers are a result of engineering, zoning, land use and design trends that have existed in the United States for the past 50 years. Breaking down these barriers requires a shift in the transportation system paradigm from mobility to accessibility.[3]

Given the high prevalence of obesity and chronic diseases in the United States, parks have proven to be affordable locations for physical activity because they are located in most communities around the nation. Empirical evidence demonstrates that people who reside in communities with safe, active transit to parks are more likely to be physically active than their counterparts. Although these findings are encouraging, we are faced with a challenge that needs further attention - that is, most neighborhoods are not appropriately connected to parks via pedestrian paths. This presents difficulty for people to easily access parks without motorized transportation. People are more likely to walk to parks if their communities are better connected to parks by active transit routes.

The purpose of this report is to understand the obstacles limiting walkability to parks and identify the essential elements of a safe route to a park. Additionally, this report assesses the barriers to walkability, determines the key stakeholders responsible for creating safe routes to parks, identifies strategies on building awareness on the importance of walkability, and recognizes current initiatives on improving safe routes to parks.

METHODOLOGY

This report was developed using a two-part process. The initial step involved a thorough literature review on safe routes to parks. The literature review demonstrated that research on safe routes to parks does indeed have limitations. Although there exists significant empirical evidence on the health impacts of walking and on the relationship between physical activity, health benefits and access to parks, there is limited research conducted on how to specifically improve pedestrian routes to parks. This raises a question that calls for further research — how can communities improve walkability to parks?

Two focus groups were conducted to explore two overarching research questions aimed at identifying the key elements that constitute a safe route to a park and identifying community strategies used to create new and safer routes to parks. A diverse selection of professionals participated in the focus groups ranging from park executive directors, research and evaluation managers, landscape architects, community relations and outreach professionals, physical activity coordinators and strategic planning professionals.

OBSTACLES LIMITING WALKABILITY TO PARKS

Barriers limiting walkability to parks are dependent and unique to each specific community; however, distance and physical barriers are the most common obstacles in building safe routes to parks. Large roadways such as interstates and geographical barriers such as rivers are identified as major obstacles. In addition, multi-modal trails are also classified as barriers discouraging specific groups from walking to parks. For example, seniors may not be comfortable walking to a park on a trail with bicyclists. Specific barriers are outlined as follows:

Proximity to Parks

Long distances to parks are a deterrent of park use. Research demonstrates that people who have easy access to parks are 47 percent more likely to walk at the daily-recommended level than those who do not have easy access. Moreover, when the distance from a park doubles, the likelihood of park use decreases by almost 50 percent.[4] Consequently, inequity in park access is a big concern for park and recreation professionals. Although public parks are located in urban, suburban and rural communities across the United States, the distribution of these amenities is not uniform. Disparities in distribution and park access exist across communities that are specifically characterized by low-income and ethnic minority populations.[5,6] In cities that have more parks per population, distance to parks is still a barrier to park use. For example, the city of Los Angeles has more park acreage than any other city with 4 acres of parkland per 1,000 of the population; however, 75 percent of children do not live within a quarter mile of a park.[4] In Newark, New Jersey, fewer than 50 percent of children live within walking distance of a park or playground. Furthermore, while some people may reside in close proximity to parks, the location of the park entrance may not be easily accessible due to fencing and street patterns. As a result, residents still have to walk long distances to get to the park.[2]

Lack of Infrastructure

While long distances from parks is a clear barrier to walkability, lack of physical infrastructure is also a deterrent to park use.[3] Incomplete and disconnected streets present difficulties for pedestrians, thus making walking to parks an unattractive choice. Many neighborhoods either lack pedestrian crossings, pedestrian bridges, paved shoulders, pedestrian signals, medians, visible crosswalks, warning signals, signs, maps, landscape cues and in-pavement lighting.[8]

A 2012 national survey on pedestrian behavior revealed that 24 percent of injuries to pedestrians occurred as a result of uneven/cracked sidewalks. The survey highlights that poor quality infrastructure is the leading cause of pedestrian injury.[9] When roads have safe sidewalks, people are four times more likely to walk.[10] The absence of appropriate pedestrian infrastructure leads to the next barrier — traffic safety concerns.

Crime and Traffic Safety Concerns

Traffic safety is a major barrier to active transportation. Research demonstrates that negative traffic perceptions are associated with decreased walking because people purposefully avoid dangerous traffic areas. People are especially fearful of traffic volume and speed.[10] In 2012, 4,743 pedestrians were killed in crashes with motor vehicles.[11] These concerns are substantiated with evidence that there is a 45 percent probability a pedestrian will be killed if struck by a vehicle traveling at 35 mph. The probability of death is reduced to 5 percent if the vehicle is traveling at 20 mph.[3]

Crime is another factor that discourages people from walking to parks. The type of physical design in and around parks can either create a risk factor for crime or a protective factor for residents of a neighborhood. Problematic features of physical design around parks that influence crime include:[12]

- Narrow pedestrian paths located between dense planting;
- Dense shrubs that block the view of the park from adjacent houses;
- Secluded and unmonitored pedestrian routes that encourage misuse;
- Inadequate lighting on pedestrian routes;
- Signs of physical disorder such as graffiti and garbage; and
- Lack of formal surveillance of areas surrounding parks.

Partnership Building

While proximity to parks, lack of infrastructure, crime and traffic safety concerns are physical and social barriers limiting walkability to parks, a major challenge to overcome such barriers is to successfully work toward a unified goal through building partnerships with local government agencies, nonprofits and community organizations. Such challenges stem from the lack of understanding on issues related to walkability. It is important to approach partnerships as a process of creating a shared vision on walkability, building trust and communicating effectively.

One goal of building partnerships is to reduce the need for new resources. Therefore, potential partners should be prepared to share premises, equipment, staff and ideas to improve routes to parks.

ESSENTIAL ELEMENTS OF A SAFE ROUTE TO A PARK

There are five essential elements of an ideal safe route to a park; however; it is important to note that all the elements identified below are interrelated.

Comfort

The conditions of the sidewalks and aesthetics are key factors to take into account when building a safe route to a park. It is particularly important to make walking to parks inviting to residents by introducing tree-lined streets (particularly in warm weather states), creating a visually appealing and clean environment, ensuring low traffic and developing off-road trail access.

Convenience

Pedestrian routes to parks should be in close proximity to where residents live. The route to the park should be no longer than a half of a mile (within a 10-minute walk) from where people reside. To ensure that citizens are in close proximity to parks, appropriate site selection of new parks is an extremely important factor in the dialogue on building safe routes to parks because park siting policies heavily influence travel patterns to parks.

Safety

Physical separation boundaries are critical in establishing pedestrian safety. Separating pedestrian paths from roads with physical barriers is critical when building a safe route to a park so that pedestrians are not competing with automobiles. Introducing physical separation of sidewalks from curbs and parking areas reinforces a safer environment for pedestrians. Other essential safety elements required are well-maintained infrastructure, adequate lighting and winter maintenance (e.g., ice management and snow removal) for the northern tier states.

Perceived safety is also a major element of what makes a route to a park safe. Perceived safety is defined as the community's interpretation and assessment of whether routes to parks are safe and secure. It can be related to fear of accidents (safety-related risk perception) and/or fear of crime and violence (security-related risk perception). Although stakeholders may identify a route as safe, the community's perception of safety may differ; therefore, perceived safety is a determinant of whether residents will use routes to a park.

Access and Design

A safe route to a park must reflect various levels of mobility. Proper design benefits all users and allows all citizens to use safe routes to parks. All walkways at intersections must also be reviewed for ADA compliance. Important elements of access and design include effective wayfinding systems such as the use of landmarks, signage, distance to destination markers and interest points to assist in navigating the routes easily.

Ensuring multiple access points to parks is also important. While many homes may be in short linear distance to parks, pedestrian access to park entrances often results in longer walking distances due to the limited number of entrances due to fencing and other barriers. Consequently, it is essential to develop multiple access points around the park where possible.

The Park

A critical element to building a safe route to a park is the park itself. While all the above factors are indeed crucial to building a safe route to a park, the park itself must offer the amenities that the surrounding population will use. For example, if a local park does not offer programs for older adults in a community that has a significant older adult population, they will be less likely to use the park. Consequently, even if all the above elements were to exist in a community, residents are less likely to use safe routes if the park itself does not offer the amenities that the population desires.

HOW TO BEGIN ASSESSING BARRIERS TO WALKABILITY

There are three initial steps in which communities can begin assessing the barriers limiting walkability to parks:

1. Assessing Park Usage

The first step is to conduct a local needs assessment of the park to determine if it is meeting the needs of its community. Surveys and questionnaires are valuable tools to gather such information. Prior to implementing improvements on safe routes to parks, it is useful to know if residents are using the park, and if not, what the reasons behind that may be. If the park itself is not catering to the community's demographics it is intended to serve, it is unlikely that residents will use routes to the park.

2. Walkability Audits

The second step is to conduct walking audits. Walking audits are a simple and systematic way to assess a community's walkability to parks. Completing walking audits are beneficial for the following reasons:

- They assist in identifying routes that are functioning well and those that need improvement.
- They allow you to describe problem areas using photos, checklists, maps or reports.
- There is a record of the environmental condition you are auditing, and have you the ability to track changes over time.

Formal and Informal Routes

While conducting a community's walkability audit, it is crucial to determine if residents are using informal routes to access local parks. In many communities, youth are known for cutting through wooded areas and flowerbeds for easy access to parks. It is highly recommended that the community itself (adults and youth) is involved in identifying informal routes to understand why residents are opting to use these routes over formal routes.

3. Community Focus Groups and Public Participation

Since perceived safety is an important determinant on whether residents will use routes to parks, it becomes important to hold community focus groups to gather feedback from residents on what improvements are needed for them to feel safe walking to parks. Due to perceptions of crime, parents are fearful and reluctant to let their children walk alone to parks. As a result, implementing focus groups with parents to ask them what improvements would make them comfortable to allow their children to walk to parks is also beneficial.

WHO IS RESPONSIBLE FOR ADDRESSING WALKABILITY TO PARKS?

Building safe routes to parks is a shared responsibility of every agency responsible for public services and every segment of municipal services. Although there are certain agencies responsible for developing public infrastructure, partnerships with nonprofit and community organizations also play a vital role in building safe routes to parks. Potential partners include bike and pedestrian committees, citizen advocates, municipal planners, economic developers, municipal management, schools, recreation staff, health departments, advisory boards and law enforcement.

BUILDING AWARENESS AND COMMUNITY SUPPORT FOR SAFE ROUTES TO PARKS

Building awareness and community support for safe routes to parks can be initiated through several avenues. Information gathered from walking audits and use of local statistics on pedestrian and motor vehicle crashes should be distributed publicly. A community's walk scores can also be made public through social media and newsletters so that residents are able to discern the issues of walkability in their neighborhoods. Advocacy and neighborhood groups that have a working relationship with appropriate local agencies also play a large role in generating support for safe routes to parks by relaying the concerns and needs of the residents to the relevant agencies. Furthermore, the key to building awareness and establishing community support is to remain proactive in reiterating the benefits of walking and the value of parks as a way to counteract the negative perceptions.

CURRENT INITIATIVES TO IMPROVE SAFE ROUTES TO PARKS

Currently, there are two initiatives being implemented to improve safer routes to parks as described below:

1. Safe Park Zone Initiative

As discussed earlier, data illustrates that establishing and enforcing speed limits significantly reduces the probability of traffic fatalities. As a result, the Safe Park Zone initiative employs an integrated approach that promotes walking to parks by ensuring the safety of pedestrians through reducing speed limits and infrastructure improvement. [13]

What is a Safe Park Zone?

Safe Park Zones are streets adjacent to parks where a municipality monitors traffic by establishing slower speed limits and higher penalties for violation of traffic laws. Funds generated from penalties are invested in education and infrastructure improvements to the zone by the municipality and park district. Safe Park Zones encourage easier access to parks by promoting a safer environment and by introducing infrastructure that emphasizes the presence of pedestrians walking to the park.[12] Much like Safe School Zones, Safe Park Zones are streets around parks where the maximum traffic speed is 20 mph.[1] In 2006, Illinois was the first state to implement a Safe Park Zone Statute. By 2012, five of Illinois' municipalities had adopted the Safe Park Zone.[13]

How are Safe Park Zones Developed and Implemented?

Although there are standard guidelines to assist in the developing Safe Park Zones, each neighborhood will have a unique process to achieve the desired result due to variables in community and local government structure. The guidelines are as follows:

Process

The process begins by a municipality adopting an ordinance that defines Safe Park Zones on selected streets adjacent to parks.[3] Speed limits are set to 20 mph on these streets and signs are displayed warning drivers entering these zones. Fines are then set for traffic violations in these zones. Safe Park Zone penalties are issued in addition to other fines a driver would normally get for these violations. Revenue from penalties is then allocated to the park district for improving pedestrian infrastructure.[3]

Partnerships

This initiative involves close collaboration between various stakeholders including local police, park authorities, public works departments and elected officials. Since every community and every park is unique, it is necessary that all stakeholders work together to identify issues and strategize solutions.[13]

Planning

Safe Park Zones must include pedestrian safety infrastructure such as crosswalks and signs. All stakeholders must develop a clear plan focusing on improvements and maintenance for each zone. The plan should prioritize improvements in high-traffic areas.[3]

Enforcement

In order for the Safe Park Zones initiative to be successful, enforcement of the laws is the most effective way to address traffic safety and ensure drivers are obeying the law. Training law enforcement on Safe Park Zones and violation penalties is a crucial element to the success of this initiative.[3]

Allocation of Revenue

Revenues from Safe Park Zone penalties should be allocated to the local park district for improvement and maintenance in the zone. The process for transferring funds from local or county traffic court to park districts may vary in each community and relies heavily on a concrete relationship between all partners.[3]

2. Safe Routes to Play

The Safe Routes to Play initiative was developed in the early 2000s in Lebanon, New Hampshire. The concept involves strategy to connect neighborhoods to parks, playgrounds and open play spaces to encourage safe and easy active transportation options for children and adults.[14] Safe Routes to Play was adopted by Research, Education and Development for Health, Recreation and Land Agencies (GP RED) as a national initiative in 2010. The key principles that underlie this concept are that:[14]

- Children are also commuters;
- Child health and safety-oriented transportation planning is crucial; and
- Active access to community parks promotes physical activity en route to parks and within parks.

The Safe Routes to Play initiative involves children as participants in the process of identifying safe and unsafe areas in their community to travel independently using a mapping exercise known as uMAP.[15] Furthermore, Safe Routes to Play also uses PhotoVoice, a photography storytelling tool that allows youth to share their perceptions of community safety with policy makers.[15]

CONCLUSION

The literature review and focus group discussions reveal that safe routes to parks is a new and emerging concept to advance safe walking to and from parks to improve the well-being of all citizens and to foster the creation of livable communities. The data presented highlights some of the complexities involved in building safe routes to parks in America's local communities. Nevertheless, this report aims to initiate important conversations on how to approach the process of building safe routes to parks.

While there are urban planning principles that encourage walkable communities, the planning and implementation process can be complex due to policy, design and budgetary factors. An initial approach to improving walkability to parks is to understand the obstacles limiting walkability to parks in every community and identify essential elements required for a route to be classified as safe. Prior to implementing improvements to pedestrian routes, it is important for communities to assess walkability to their local parks and build community awareness by publicizing the barriers limiting access to parks in their neighborhoods.

In a time where our nation is faced with health, economic, social and environmental challenges, the dialogue around safe routes to parks requires further attention and exploration so that we can create neighborhoods that easily connect to parks because safe routes to parks is a vital component in creating a sustainable future.

ENDNOTES

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