Accessible Exercise: Improving Parks and Recreation in the City of Pontiac

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Presenter

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Introduction

- Community-engaged public health research
- Encourage physical activity among the disabled
- Goal: Identify specific barriers to accessibility through visual and location-based evidence
Gathering Existing Data

(Michigan Department of Natural Resources, 2016)

(Oakland County, 2017)

(Reinvestment Fund, 2017)
Data: PolicyMap

- Provides demographics from 2010 U.S. Census
- Used heavily by Oakland County’s Economic Development & Community Affairs Department
- Filter through population data
Data: The Plan

- Prepare a composite map
- Select parks methodically
- Represent all seven council districts
Collecting Data, Part 1: Taking Inventory

Before visiting a park:
Record park information, including:

- Name
- Date
- Location
- Park Type

During a park visit:
Record presence of park facilities and accessibility features, including:

- Wheelchair transfer stations and access ramps
- Quality of ground surfaces
- Condition of park seating and entranceways
Collecting Data, Part 2: Waypoints and Pictures

During a park visit, several pictures were taken at each facility recorded on the inventory sheet.

Whenever a picture was taken, a waypoint was marked at the location.

After visiting a park, waypoints, tracks, and images were exported to a computer.
Collecting Data, Part 3: Organization

Google Earth Pro

- “Visualize, manipulate and export GIS data” (Google, 2017)
- Data cleaning

Why use a geographic information system (GIS)?

- Standard format
- Easy to share collected data
Results: Building the Map

Figure 1. A portion of the data as seen in Google My Maps. Data is organized by waypoint number.
Results: Park Facilities

Figure 2. A summary of facilities in the city parks surveyed.
Results: Accessibility

Figures 3 and 4. A summary of the accessibility of children’s play areas.
Figures 5 and 6. A summary of the accessibility of pathways and signage.
Results: Children’s Play Areas

Figures 7 and 8. Entrances to the Cherrylawn Park play area. [GPX: 003, 016]
Figures 9 and 10. Most play areas in the city rest on non-unitary surfaces, such as grass or wood chips. [GPX: 033, 059]
Results: Pathways

**Figure 11.** Pathways to park facilities have become unusable. [GPX: 088]
Figure 12. Accessing park facilities by wheelchair is not possible in many cases. These baseball stands, for example, are accessible only by stairs. [GPX: 114]
Figure 13. A great example of an accessible picnic table. Although it does not have wheelchair seating, the surface surrounding and leading to the table is clear, level, and unitary. [GPX: 077]
Figure 14. A lack of designated parking spaces and paved lots may prevent disabled individuals from reaching park facilities entirely. [GPX: 089]
Discussion: Findings

Children’s Play Areas
● Most effective potential improvement

Pathways and Facility Access
● Short-term: Repair or weed existing pathways
● Long-term: Connect unreachable facilities
Discussion: Findings (continued)

Parking

● Propose designated accessible parking spaces

Navigation

● Maintain navigational signage
Conclusion and Future Plans

**Barriers Identified**
- Many issues can be corrected without major efforts
- Some long-term solutions will require further investigation to determine cost and feasibility

**Using the Results**
- Updating the Parks and Recreation Master Plan
- Encouraging involvement of those with disabilities

**Improving the Project**
- Longer data collection window, additional researchers
- Potential replication
- Quality of existing data
Thank you!

Project Data and Complete Report
https://accessibleparksproject.org

Questions?
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City of Pontiac. (2014). City council.


