

eCPAT: Engaging youth in the development and testing of an app for park research and policy actions

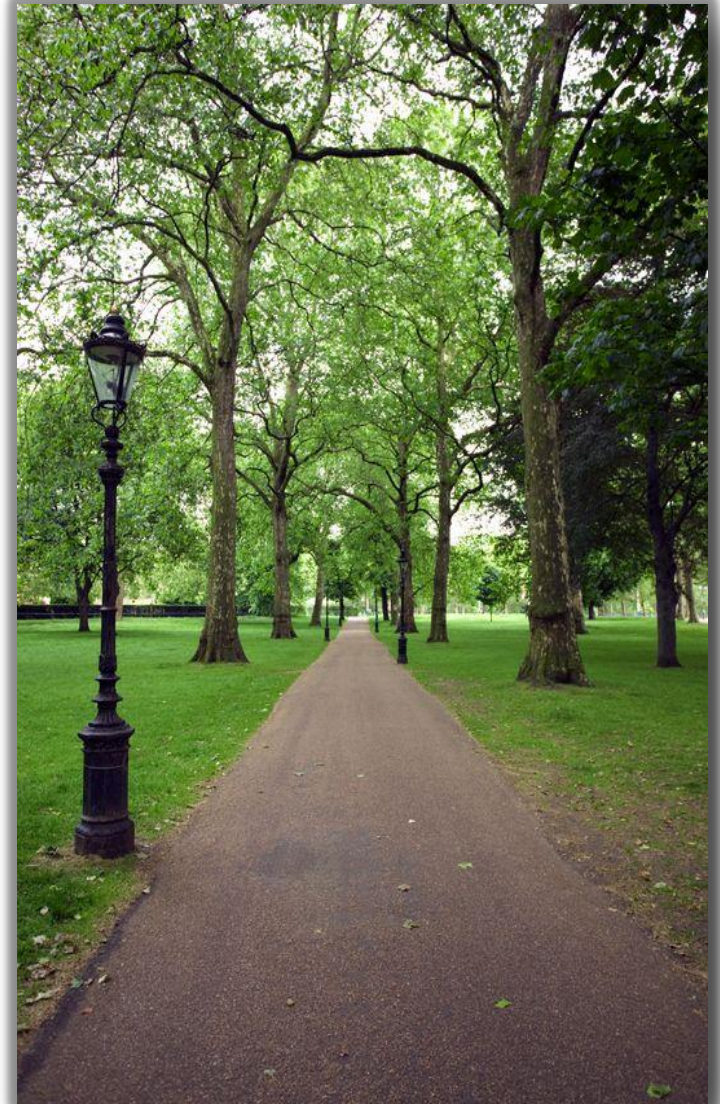


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Agenda for today...

- Introductions
- Parks and physical activity
- Development of the Community Park Audit Tool (CPAT)
- Youth advocacy and technology
- Development and beta testing of eCPAT
- Next Steps in eCPAT Project
- eCPAT demo and group activity
- Discussion and feedback



Some Broad-based Benefits of Parks

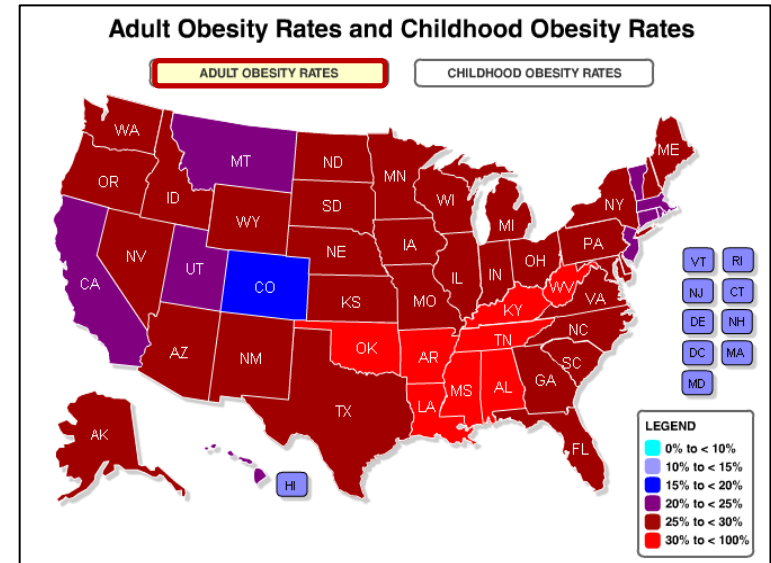
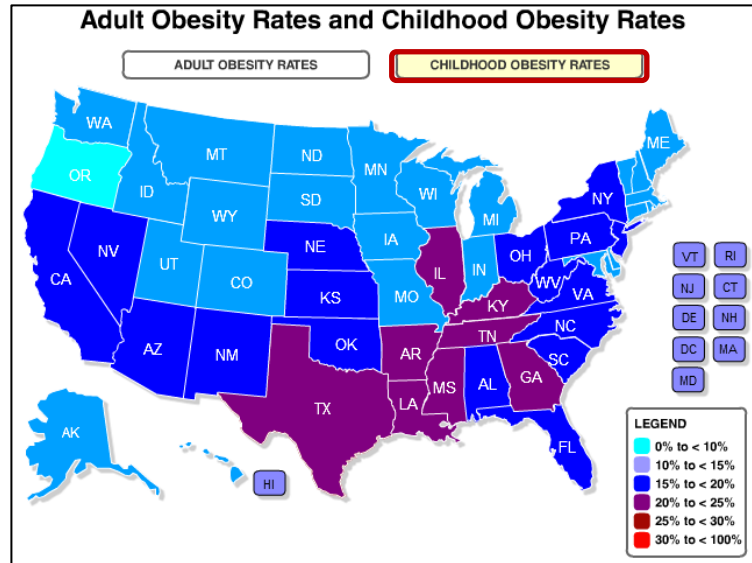
- Enhancing quality of life
- Attracting and retaining businesses
- Enhancing real estate values
- Protecting the environment
- Preventing youth crime/promoting youth development
- Facilitating community pride, connectedness, social capital
- Individual and community health – stress relief, spiritual restoration, reduced pollution, flood control, community connectedness, **physical activity**



Crompton, J.L. (2007). *Community benefits and repositioning: The keys to park and recreation's future viability*. Ashburn, VA: National Recreation and Park Association.

• **32%** youth (2-19) in US overweight or obese

• **63%** adults in US overweight or obese



- ❑ Health-related issues (mental & physical)
 - ❑ Staggering costs of medical care
 - ❑ Overweight children are more likely to be overweight or obese as adults
- (Ferraro et al., 2003; Freedman et al., 2001)



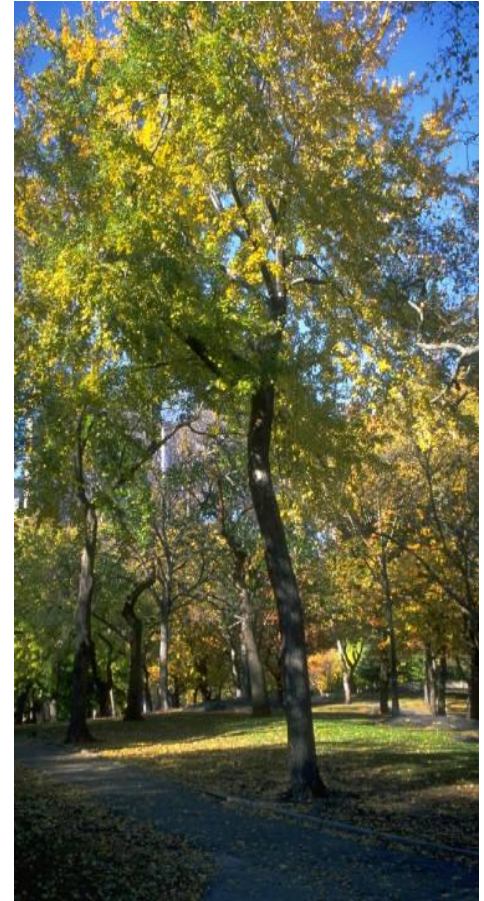
Parks as Important Community Physical Activity Resources

- Most local and state governments have some form of agency that oversees public open space
- Increasing interest among researchers and practitioners in the field(s) of leisure studies and recreation management in how parks contribute to community health
- Some have argued that much of the gains in physical activity are likely to occur in people's leisure time
- Parks provide important "behavior settings" in communities for both physical and social activity among residents across all demographics and abilities



Background: Parks and Physical Activity Research

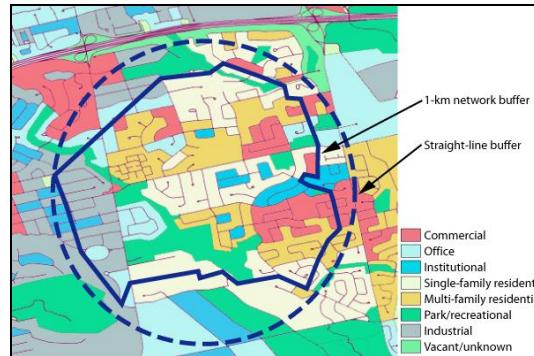
- **Living closer to park space** is associated with increased physical activity among adults & youth (e.g., Giles-Corti et al., 2005; Kaczynski & Henderson, 2007; Roemmich et al., 2006)
- **Park features & other characteristics** may be just as important as proximity in encouraging neighborhood & park-based physical activity (e.g., Cohen et al., 2006; Kaczynski et al., 2008; Timperio et al., 2008; Colabianchi et al., 2008)
 - Number & types of features (e.g., playgrounds, trails)
 - Quality of park and features (e.g., renovations)
 - Ease of accessing the park from surrounding neighborhood (e.g., street connectivity, traffic, crossings, public transportation)
- Park availability & park features and quality are generally **worse in low income and/or high-minority areas** (e.g., Crawford et al., 2008; Estabrooks et al., 2003; Moore et al., 2008)



Measuring the Built Environment

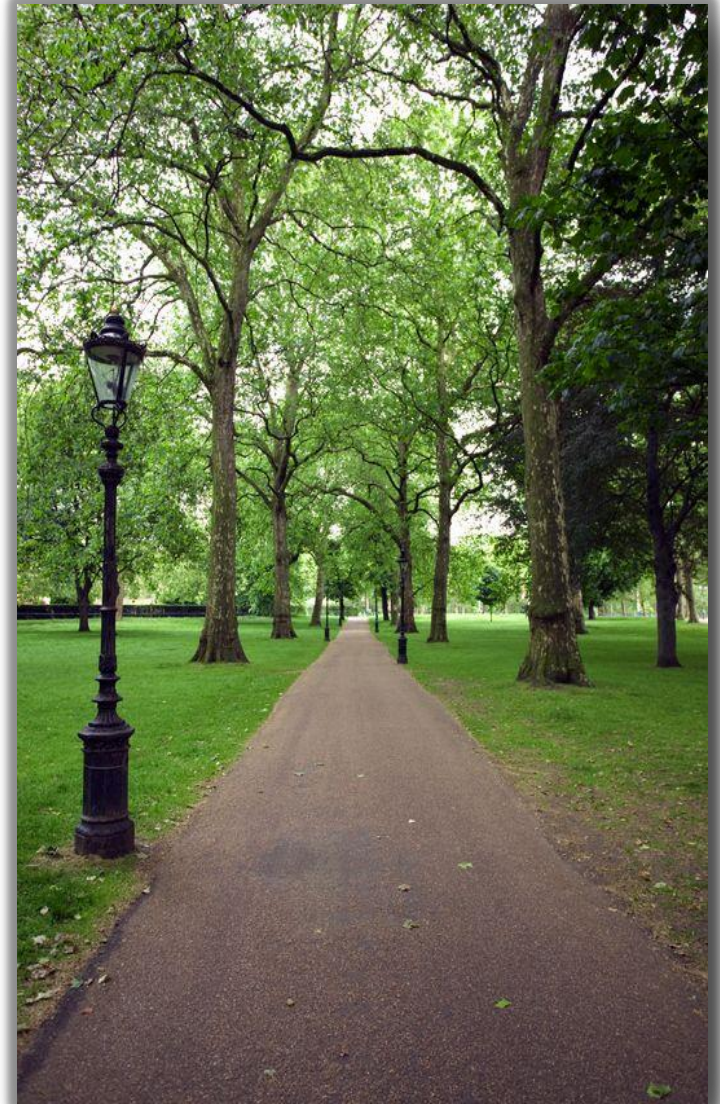
The primary methods used to measure characteristics of the built environment that may be related to physical activity include:

- Perceptions of residents
- Geographic databases
- **Direct observation (audits)**
 - More time-intensive
 - Best for capturing micro-scale features not included in geographic databases (e.g., specific features, quality ratings, etc.)
 - Useful for engaging residents in the research process
 - Can be tested for reliability



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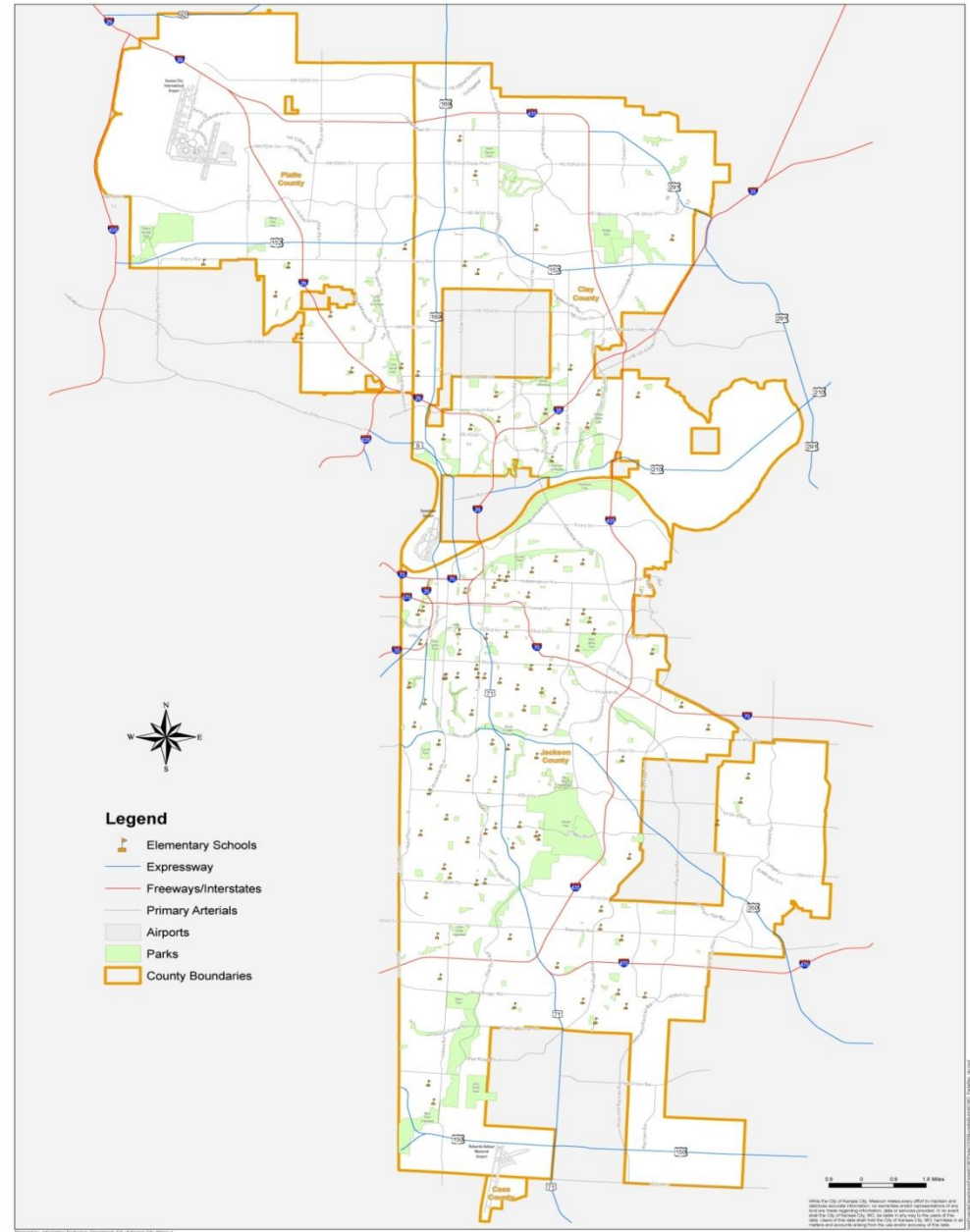
Community Park Audit Tool (CPAT) Project

Purpose: To develop a tool that will enable diverse stakeholders to quickly and reliably audit community parks for their potential to promote youth physical activity.



Study Setting

- Kansas City, Missouri
- 66 parks that represented a mix of quality and size and that emphasize features oriented towards youth physical activity



Project Participants

- In total, 34 unique community stakeholders participated in the three workshops representing diverse organizations from around the KC metro area:
 - Academia
 - Community Park Users and Non-Users
 - Municipal Legislators
 - Parks and Recreation Department
 - Parks and Recreation Board
 - Public Health
 - Other City Departments
 - Other Government Agencies
 - Private Sector Organizations
 - Youth Agencies
 - High School Students



Workshop 1 – Developing a Revised Park Audit Tool

- Pre-Workshop:
 - Review of domains/items within existing park and neighborhood audit tools
- Workshop 1 – Roundtable discussions with stakeholders
 - What is important to consider regarding an audit tool focusing on **park-based physical activity**?
 - What is important to consider regarding an audit tool focusing on **youth activities in parks**?
 - What is important to consider regarding a **user-friendly** audit tool?
 - Evaluation of **strengths and weaknesses of existing park tools**
- Post-Workshop:
 - Three key informant interviews with researchers familiar with parks and physical activity and/or the use of audit tools with community members

Data from all steps transcribed and analyzed by multiple coders



Community Park Audit Tool (CPAT)

- 6 pages with 4 sections:
 - Park Information
 - Access and Surrounding Neighborhood
 - Park Activity Areas
 - Park Quality and Safety
- Comprehensive (key areas covered) yet user-friendly (length, format, etc.)
 - Mostly yes/no responses, but also some items with three options, as well as checklists and spaces for comments
 - Concerned with presence/absence and 'useability' & 'condition' of most park elements
 - Average completion time = 15-30 min
 - Instructions contained within tool or items themselves
 - Guidebook available with additional details and definitions.



Community Park Audit Tool (CPAT) – pages 1 and 2

COMMUNITY PARK AUDIT TOOL

Instructions

Before you begin, review the brief training guide and audit tool and try to locate a map of the park. Then, go to the park and proceed with filling out this audit tool. The tool (6 pages) is divided into four sections that focus on different aspects of the park environment. Additional instructions are provided within each section.

Tips for Using the Community Park Audit Tool (CPAT)

- Drive, bike, or walk around the park to get a feel for the contents and characteristics of the park and surrounding neighborhood.
- The CPAT is organized such that questions on similar topics are grouped into logical sections and the four sections are arranged in the order that you might encounter them during your audit. However, you may need to switch between sections or pages as you complete the park audit. Therefore, it is important to review and be familiar with all of the tool sections and questions before you begin your audit.
- It is also important that you check back through the full document (6 pages) when you are finished to ensure you have completed all the sections and questions.
- Space is provided at the end of each section (and some individual questions) where you can take notes or record comments as you complete your audit. The margins or back of each page (if copied single-sided) can also be used to take notes, but please be sure that all relevant information is transferred to appropriate places on the tool and that all questions are fully answered using the format provided.
- If you see anything during your audit that requires immediate attention, contact the local parks department.

Section 1: Park Information

Park Name: _____ Observer Name or ID: _____

Park Address/Location: _____

Were you able to locate a map for this park? ☐ No ☐ Yes

Was the park easy to find onsite? ☐ No ☐ Somewhat ☐ Yes

Date (m/d/yr): ____ / ____ / ____

Approximate Temperature: ____ °F Weather: ☐ Clear ☐ Partly Cloudy ☐ Rain/Snow

Start Time: ____ am or pm (circle) End Time: ____ am or pm (circle) Length of visit: ____ min

Comments on Park Information:

Section 2: Access and Surrounding Neighborhood

This section asks about factors related to accessing the park and about features of the neighborhood surrounding the park. Several questions include follow-up responses if you answered yes. After completing all questions, provide any additional comments in the space at the end of the section. When thinking about the surrounding neighborhood, consider all areas that are visible from all sides of the park.

When rating the access and surrounding neighborhood, please use the following definition:

- Useable: everything necessary for use is present and nothing prevents use (e.g., sidewalks are passable)

1. Can the park be accessed for use? (e.g., not locked/fenced, available for activity, etc.) ☐ No ☐ Yes
2. Are there signs that state the following (could be same sign)? (check all that are present)
 - ☐ Park name ☐ Park hours ☐ Park contact information ☐ Park/facility rental information
 - ☐ Park rules ☐ Park map ☐ Rental equipment information ☐ Event/program information
3. How many points of entry does the park have? ☐ More than 5 (or park boundary is open) ☐ 2-5 ☐ Only 1
4. Is there a public transit stop within sight of the park? ☐ No ☐ Yes
5. What types of parking are available for the park? (check all that are present)
 - ☐ None ☐ Parking Lot ☐ On street parking ☐ Bike rack(s)
6. Are there sidewalks on any roads adjacent to the park? (could be on opposite side of road) ☐ No ☐ Yes

If yes ... Are they useable? ☐ All or most are useable ☐ About half ☐ None or few useable

Are there curb cuts and/or ramps on any sidewalks bordering or entering the park? ☐ No ☐ Yes
7. Is there an external trail or path connected to the park? ☐ No ☐ Yes

If yes ... Is it useable? ☐ No ☐ Yes
8. Are there marked bike lanes on any roads adjacent to the park? ☐ No ☐ Yes
9. Are there nearby traffic signals on any roads adjacent to the park? (e.g., crosswalk, stop light/sign) ☐ No ☐ Yes

If yes ... Are they on heavy traffic roads? ☐ No ☐ Yes ☐ There are not any heavy traffic roads
10. What are the main land use(s) around the park? (check all that apply)
 - ☐ Residential ☐ Commercial ☐ Institutional (e.g., school) ☐ Industrial (e.g., warehouse) ☐ Natural
11. Which of the following safety or appearance concerns are present in the neighborhood surrounding the park? (check all that are present in the surrounding neighborhood within sight on any side of the park)
 - ☐ Inadequate lighting (e.g., absent or poor lighting on surrounding neighborhood streets)
 - ☐ Graffiti (e.g., markings or paintings that reduce the visual quality of the area)
 - ☐ Vandalism (e.g., damaged signs, vehicles, etc.)
 - ☐ Excessive litter (e.g., noticeable amounts of trash, broken glass, etc.)
 - ☐ Heavy traffic (e.g., steady flow of vehicles)
 - ☐ Excessive noise (e.g., noticeable sounds that are unpleasant or annoying)
 - ☐ Vacant or unfavorable buildings (e.g., abandoned houses, liquor store)
 - ☐ Poorly maintained properties (e.g., overgrown grass, broken windows)
 - ☐ Lack of eyes on the street (e.g., absence of people, no houses or store fronts)
 - ☐ Evidence of threatening persons or behaviors (e.g., gangs, alcohol/drug use)
 - ☐ Other _____

Comments on Access or Surrounding Neighborhood Issues:

Community Park Audit Tool (CPAT) – pages 3 and 4

Section 3: Park Activity Areas

This section asks about the activity areas in the park. For each activity area type:

1. First, indicate the number (#) that are present in the park (if none, write "0").
2. Then, respond to several subsequent questions about up to three of those particular areas. If there are more than three areas for a specific activity area type, rate the first three you encounter during the audit. If there were no activity areas of that type present in the park, move on to the next type.
3. Finally, use the space provided to note any additional comments about each type of activity area.

When rating the activity areas, please use the following definitions:

- Useable: everything necessary for use is present (excluding portable equipment - rackets, balls, etc.) and nothing prevents use (e.g., are there nets up for tennis courts, goals for sport fields, are trails passable, etc.)
- Good condition: looks clean and maintained (e.g., minimal rust, graffiti, broken parts; even surface; etc.)

12. Activity Areas	# of Areas	Area 1	Area 2	Area 3
a. Playground (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Distinct areas for different age groups	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Colorful equipment (i.e., 3+ colors)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Shade cover for some (25%+) of the area	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Benches in/surrounding area	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Fence around area (i.e., 2+ sides)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Separation or distance from road	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
b. Sport Field (football/soccer) (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
c. Baseball Field (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
d. Swimming Pool (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
e. Splash Pad (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
f. Basketball Court (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
g. Tennis Court (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				

Activity Areas	# of Areas	Area 1	Area 2	Area 3
h. Volleyball Court (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
i. Trail (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Connected to activity areas	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Distance markers/sign	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Benches along trail	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
What is the trail surface? (check one)	<input type="checkbox"/> Paved	<input type="checkbox"/> Paved	<input type="checkbox"/> Paved	<input type="checkbox"/> Paved
	<input type="checkbox"/> Crushed stone	<input type="checkbox"/> Crushed stone	<input type="checkbox"/> Crushed stone	<input type="checkbox"/> Crushed stone
	<input type="checkbox"/> Dirt/mulch	<input type="checkbox"/> Dirt/mulch	<input type="checkbox"/> Dirt/mulch	<input type="checkbox"/> Dirt/mulch
Comments:				
j. Fitness Equipment/Stations (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
k. Skate Park (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
l. Off-Leash Dog Park (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
m. Open/Green Space (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
n. Lake (# : _____)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Is there a designated swimming area?	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
o. Other (fill in a type description for each)				
Useable	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Good condition	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Comments:				
Comments on Park Activity Areas:				

Community Park Audit Tool (CPAT) – pages 5 and 6

Section 4: Park Quality and Safety

This section asks about factors related to comfort and safety when using the park. Several questions include follow-up responses if you answered yes. After completing all questions, provide any additional comments in the space at the end.

When rating the quality and safety features of the park, please use the following definitions:

- **Useable:** everything necessary for use is present and nothing prevents use (e.g., can get into restrooms, drinking fountains work, etc.)
- **Good condition:** looks clean and maintained (e.g., minimal rust, graffiti, broken parts; etc.)

13. Are there a public restroom(s) or portable toilet(s) at the park? ☐ No ☐ Yes
 If yes ... Are the restroom(s) useable? ☐ All or most are useable ☐ About half ☐ None or few are useable
 Are they in good condition? ☐ All or most in good condition ☐ About half ☐ None or few in good condition
 Is there a family restroom? ☐ No ☐ Yes
 Is there a baby change station in any restroom? ☐ No ☐ Yes
14. Are there drinking fountain(s) at the park? ☐ No ☐ Yes
 If yes ... How many different fountains are there? (i.e., units, not spouts) _____
 Are the fountains useable? ☐ All or most are useable ☐ About half ☐ None or few are useable
 Are they in good condition? ☐ All or most in good condition ☐ About half ☐ None or few in good condition
 Are they near activity areas? ☐ All or most are near ☐ About half ☐ None or few are near
15. Are there bench(es) to sit on in the park? ☐ No ☐ Yes
 If yes ... Are the benches useable? ☐ All or most are useable ☐ About half ☐ None or few are useable
 Are they in good condition? ☐ All or most in good condition ☐ About half ☐ None or few in good condition
16. Are there picnic table(s) in the park? ☐ No ☐ Yes
 If yes ... Are the tables useable? ☐ All or most are useable ☐ About half ☐ None or few are useable
 Are they in good condition? ☐ All or most in good condition ☐ About half ☐ None or few in good condition
 Is there a picnic shelter in the park? ☐ No ☐ Yes
 Is there a grill or fire pit in the park? ☐ No ☐ Yes
17. Are there trash cans in the park? ☐ No ☐ Yes
 If yes ... Are they overflowing with trash? ☐ All or most overflowing ☐ About half ☐ None or few overflowing
 Are they near activity areas? ☐ All or most are near ☐ About half ☐ None or few are near
 Are recycling containers provided? ☐ No ☐ Yes
18. Is there food/vending machines available in the park? ☐ No ☐ Yes
19. If the sun was directly overhead, how much of the park would be shaded? ☐ <25% ☐ 25-75% ☐ >75%
20. Are there rules posted about animals in the park? (e.g., dogs must be leashed)? ☐ No ☐ Yes
21. Is there a place to get dog waste pick up bags in the park? ☐ No ☐ Yes
 If yes ... Are bags available? ☐ No ☐ Yes
22. Are there lights in the park? (not including neighborhood street lights) ☐ No ☐ Yes
 If yes ... How much of the park could be lit? ☐ <25% ☐ 25-75% ☐ >75%
 Are the activity areas lit? ☐ All or most are lit ☐ About half ☐ None or few are lit

23. Is the park monitored? (e.g., volunteer or paid staff, patrolled by police, cameras, etc.) ☐ Unsure ☐ Yes
24. Are there any emergency devices in the park? (e.g., phone, button, emergency directions) ☐ No ☐ Yes
25. Is there evidence of threatening behavior or persons in the park? (e.g., gangs, alcohol/drug use) ☐ No ☐ Yes
26. From the center of the park, how visible is the surrounding neighborhood? ☐ Fully ☐ Partially ☐ Not at all
27. Are there road(s) through the park? ☐ No ☐ Yes
 If yes ... Are there traffic control mechanisms on the roads within the park? (e.g., crosswalk, stop light or sign, brick road, speed bumps, roundabouts) ☐ No ☐ Yes
28. Are there any dangerous spots in the park? (e.g., abandoned building, pit/hole) ☐ No ☐ Yes
29. Which of the following park quality concerns are present in the park? *(check all that are present)*
☐ Graffiti (e.g., markings or paintings that reduce the visual quality of the area)
☐ Vandalism (e.g., damaged signs, buildings, equipment, etc.)
☐ Excessive litter (e.g., noticeable amounts of trash, broken glass, etc.)
☐ Excessive animal waste (e.g., noticeable amounts of dog waste)
☐ Excessive noise (e.g., noticeable sounds that are unpleasant or annoying)
☐ Poor maintenance (e.g., overgrown grass/weeds/bushes or lack of grass in green areas)
☐ Other _____
30. What aesthetic features are present in the park? *(check all that are present)*
☐ Evidence of landscaping (e.g., flower beds, pruned bushes)
☐ Artistic feature (e.g., statue, sculpture, gazebo, fountain)
☐ Historical or educational feature (e.g., monument, nature display, educational signs, etc.)
☐ Wooded area
☐ Trees throughout the park
☐ Water feature (e.g., lake, stream, pond)
☐ Meadow (e.g., natural, tall grassy area)
☐ Other _____

Comments on Park Quality and Safety Issues:

Before finishing, please ensure you have answered all questions in the tool.

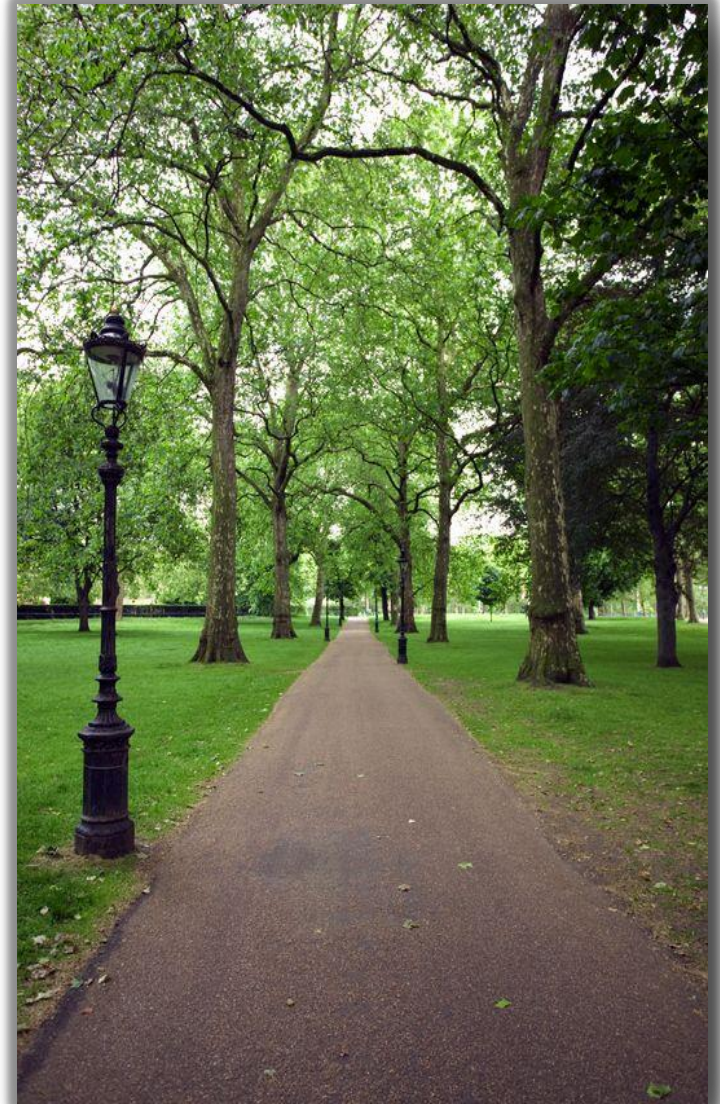
Audit Tool Field Testing

- 66 parks audited independently by 2 stakeholders each September-October 2010
- Parks audited represented a diverse mix of size, geography, neighborhood characteristics, and features and amenities
- Examined the inter-rater reliability of all of the questions within the CPAT
- For all variables except three, percent agreement was greater than 70% (considered good if 70% or better: Boarnet et al., 2006)
- Based on feedback from stakeholders, modifications were made to clarify questions within the tool and instructions within the guidebook



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Youth Empowerment/Advocacy for Healthy Community Design

- Creating healthy communities will require the interest and participation of multiple partners
- Youth voices can be powerful in influencing the priorities and decisions of policymakers
- Engaging youth in advocacy and community change efforts is critical
 - Positive youth development
 - Youth empowerment
 - Civic engagement
 - Future public leadership
- Youth advocacy for obesity prevention is the next wave of social change for health (Millstein & Sallis, 2011)



Youth Advocacy and Technology

- Technology provides a more interactive way for youth to engage in the process of community policy, systems, and environmental (PSE) change
- Findings from youth obesity advocacy efforts suggest that an electronic version of the CPAT could increase the appeal and use of this tool in data collection and community change activities
- Developing and testing the viability of technology-based methods for measuring physical activity environments among youth is an important step



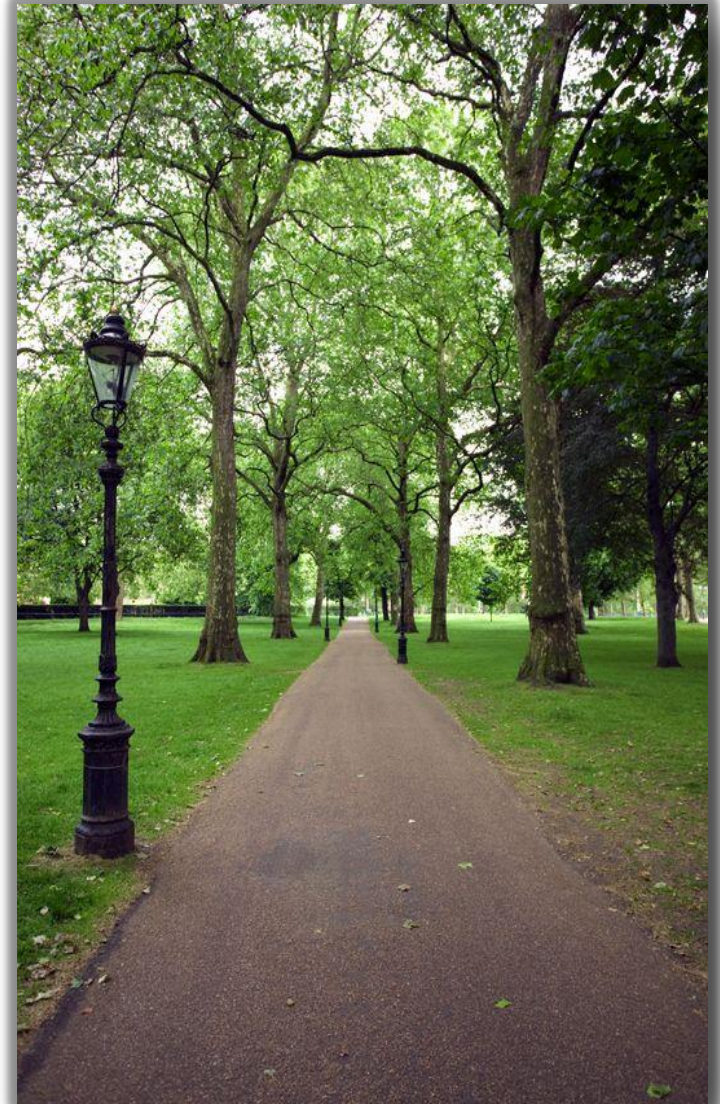
eCPAT Project: Objectives

- To develop an electronic version of the Community Park Audit Tool for use by youth and the general public on portable electronic devices.
- To examine the acceptability, feasibility, and efficacy (e.g., reliability, validity) of youth auditing parks using electronic vs. paper-and-pencil methods.



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Development and Testing of eCPAT: Project Stages



Review of literature on technology, youth, and health advocacy.



Key informant interviews with academic and community leaders familiar with youth engagement, developing electronic tools, etc.



Development of eCPAT app for use on portable electronic devices (i.e., tablets, smartphones) using an Android platform.



Beta testing of eCPAT with 19 youth to examine the usability and functionality of the eCPAT app.

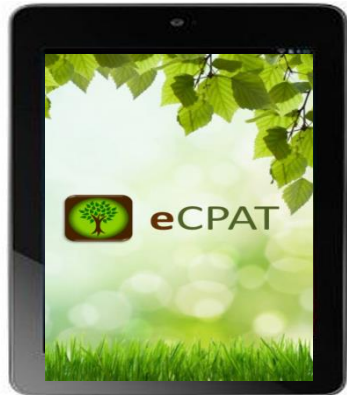


Reliability and validity testing with approximately 180 youth across Greenville County



Evaluation of youth experience through focus groups and brief surveys.

Development and Testing of eCPAT



Data collection on
Mobile Device + App



Server for data analysis

Functionality:

- Assess park access, activity areas, quality, and safety
- Enable capture of visual evidence (camera)
- Provide prompts and indicators on survey completion
- Provide prompts and helps to complete survey
- Provide data validation and completion logic
- Enable location services and wireless data transmission

Development and Testing of eCPAT

**eCPAT**
Community Park Audit Tool

Park Info

Access & Neighborhood

Activity Areas

Quality & Safety



Park Information

▶ Park Info

▶ Weather

Comments on Park Information






Park Info

Access & Neighborhood

Activity Areas

Quality & Safety



Public Restroom

Record whether there are one or more restrooms and/or public toilets in the park. For the remainder of question 13, both permanent restroom structures and portable toilets are referred to as restrooms and should be considered jointly.

- If one or more restrooms are present, consider them as a set and rate how many are useable (i.e., everything necessary for use is present and nothing prevents use). For example, if there were two restrooms in the park and one was useable, choose "about half".
- Also, if one or more restrooms are present, consider them as a set and rate how many are in good condition (i.e., looks clean and well-maintained). For example, if there were two restrooms in the park and one was in good condition, choose "about half".
- Also, note whether any of the restrooms have a family restroom (i.e., a restroom where a parent and child can comfortably and privately enter the restroom together).
- Finally, note whether any of the restrooms (i.e., male, female, or family) have a baby changing station.

Are there public res

☒ Yes

☐ No

Are the restroom(s)

☒ All or most are

☐ About half

☐ None or few are

Are they in good condition?


☒ All or most in good condition

Park Info

Access & Neighborhood

Activity Areas

Quality & Safety



Park Quality and Safety

▶ Instructions

▼ Restroom

Are there public restroom(s) or portable toilet(s) at the park?



☒ Yes

☐ No

Are the restroom(s) useable?

☒ All or most are useable

eCPAT Beta Testing – February 2014

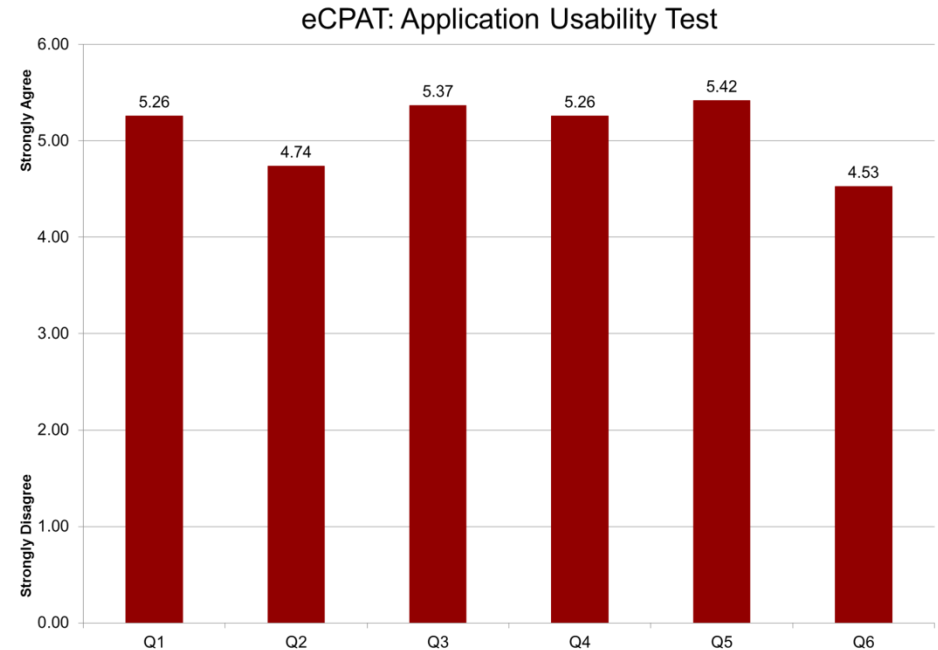
- Diverse group of youth ages 12-18 (n=19)
- Youth given project overview and brief training on CPAT/eCPAT
- Completed a park audit using both tools
- Conducted focus groups and a brief survey
- Assessed app usability (functionality, effectiveness), efficacy, and preferences



eCPAT Beta Testing Results

Youth felt that the eCPAT app was:

- Easy to use (M=3.95, SD=1.22)
- People would learn to use it very quickly (M=4.0, SD=0.75)
- Confident using the app (M=4.42, SD=0.77)
- App functions were well integrated (M=4.26, SD=0.87).



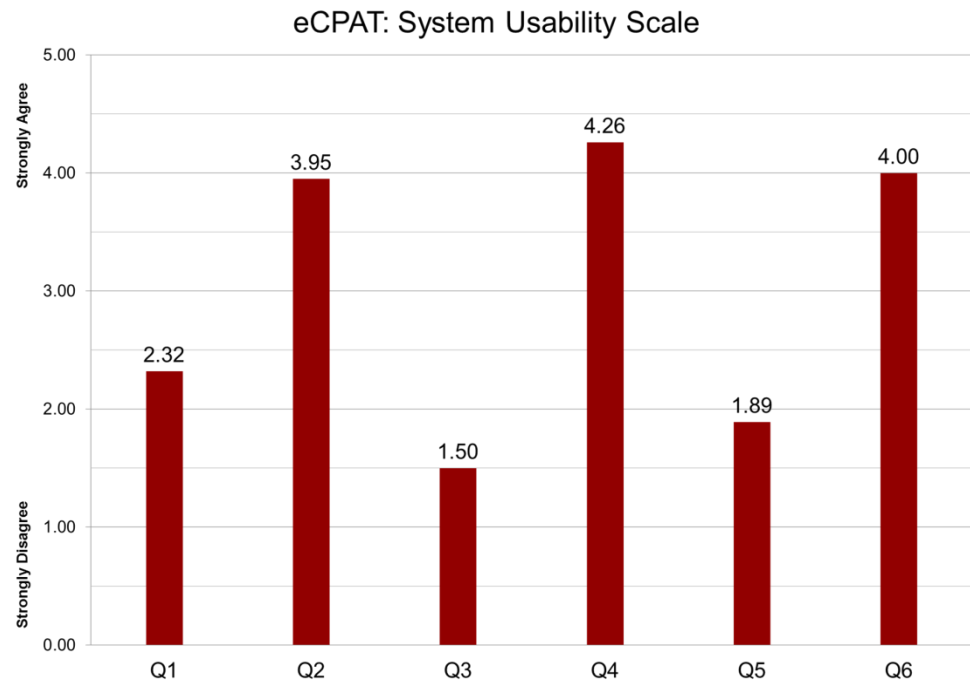
eCPAT Beta Testing Results

Youth strongly disagreed that the app was:

- Inconsistent (M=1.89, SD=1.20)
- Cumbersome (M=2.16, SD=0.83)
- That they would need technical support (M=1.50, SD=0.86)

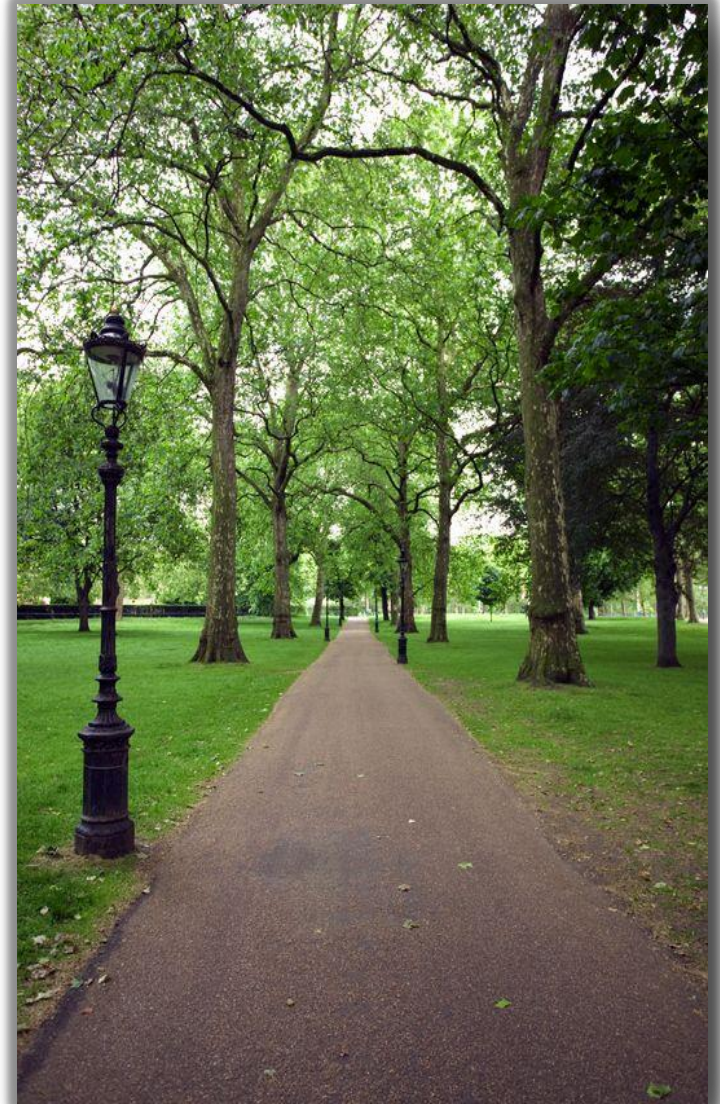
In comparison to the paper tool, youth felt the app was:

- Well organized (M=5.26, SD=0.99)
- Easier to use (M=4.84, SD=1.17)



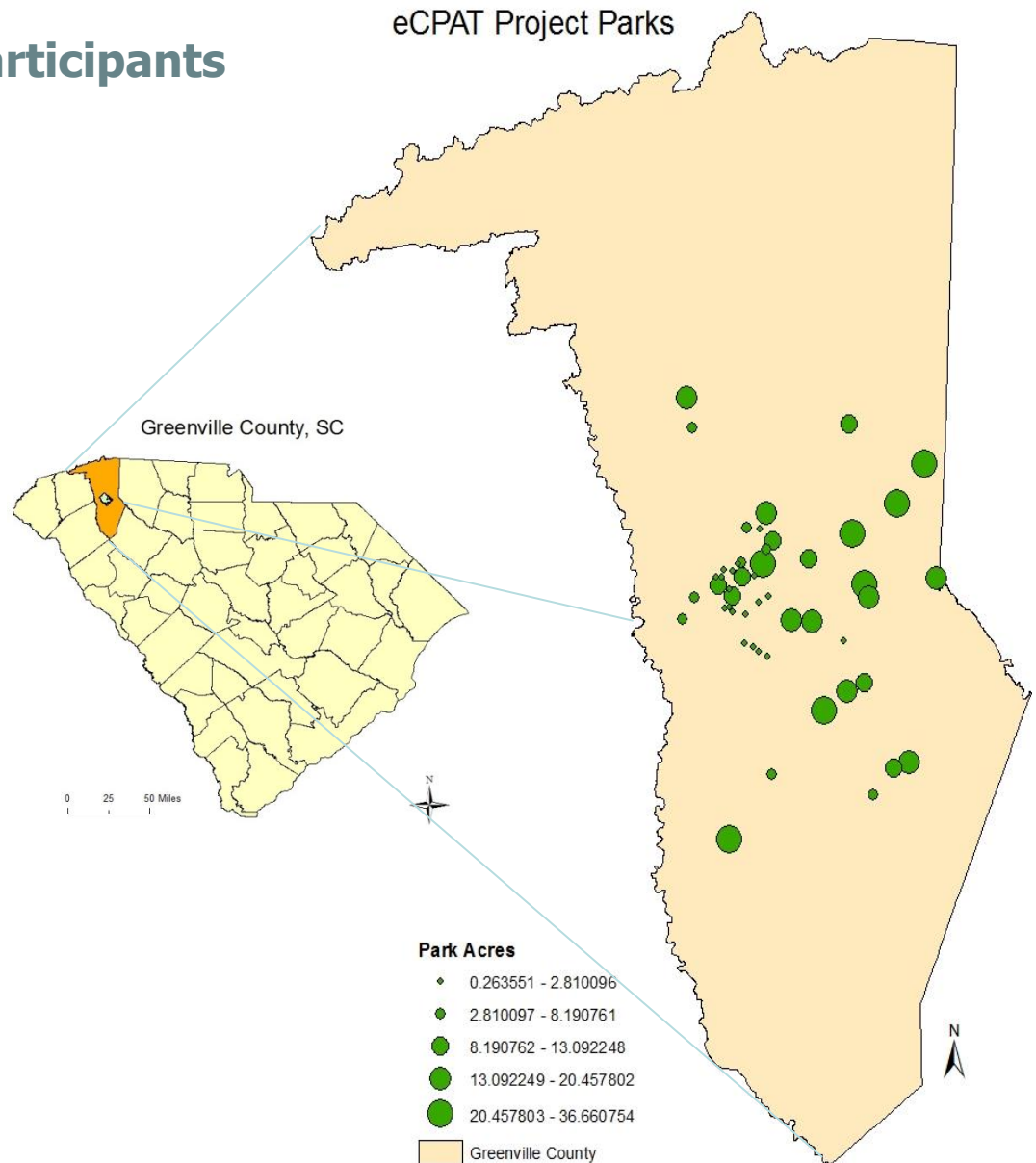
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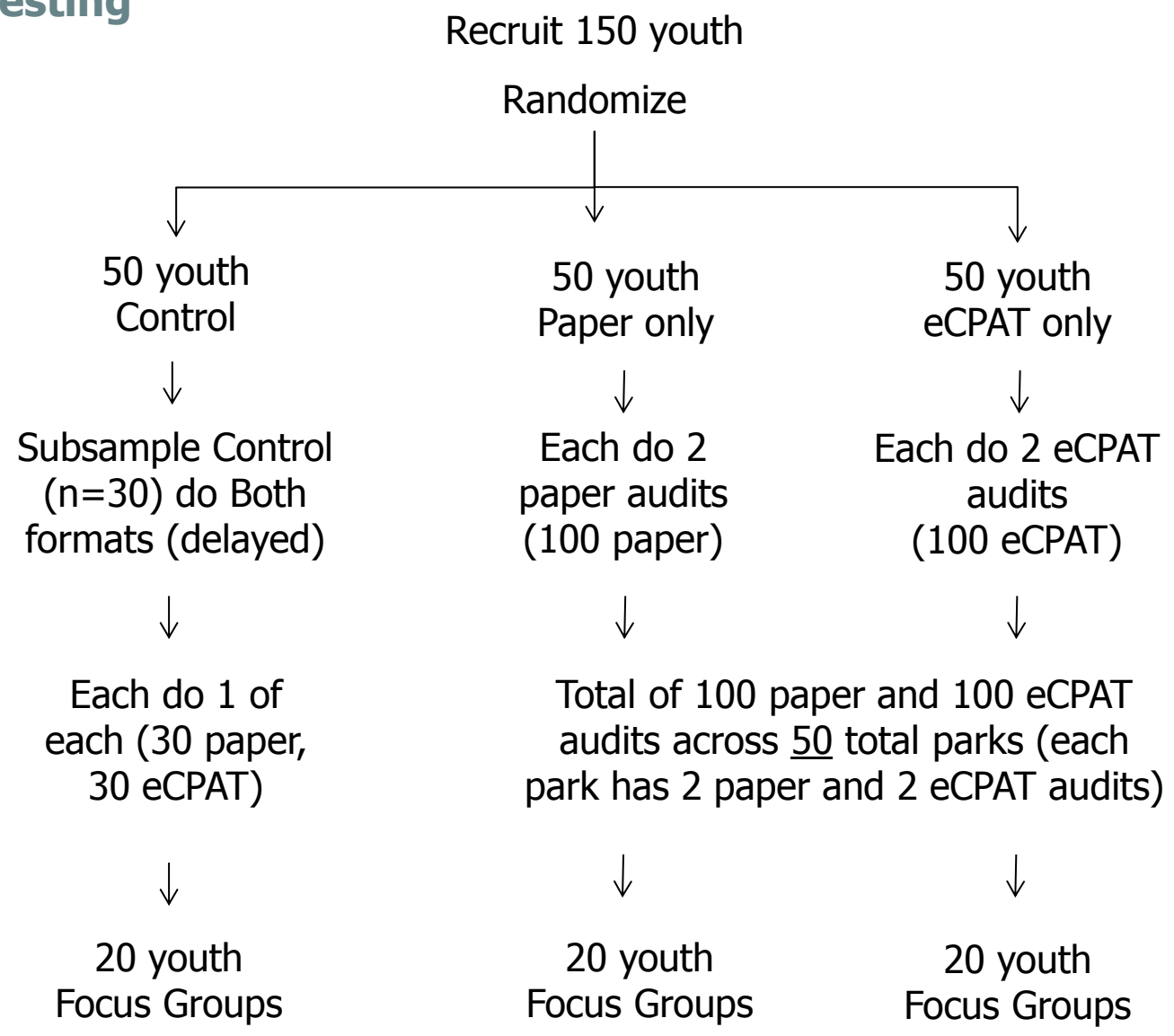


eCPAT: Study Setting and Participants

- 47 city and county parks in Greenville County, SC diverse in
 - Quality
 - Size
 - Features
 - Geographic Dispersion
- 124 youth ages 12-18 years from across Greenville County



eCPAT: Testing



eCPAT: Data Collection

Each youth asked to complete:

- Pre-project survey
- 2 park audits
- Post-project survey
- Subsample of youth asked to complete focus groups

Survey and discussion topics included:

- Park usage and activity
- Youth efficacy for PSE change
- Community/civic engagement
- Technology access and usage
- Audit tool usability and preference

Gold standard audit data collected by trained researchers



eCPAT: Analysis

Criterion Validity of eCPAT

- How does youth park audit compare with a Gold standard audit for the same park?

Reliability of eCPAT

- How does youth park audit compare with another youth audit in the same park?

Pre/post survey

- Did youth show increased levels of efficacy and engagement after completing park audits?



eCPAT

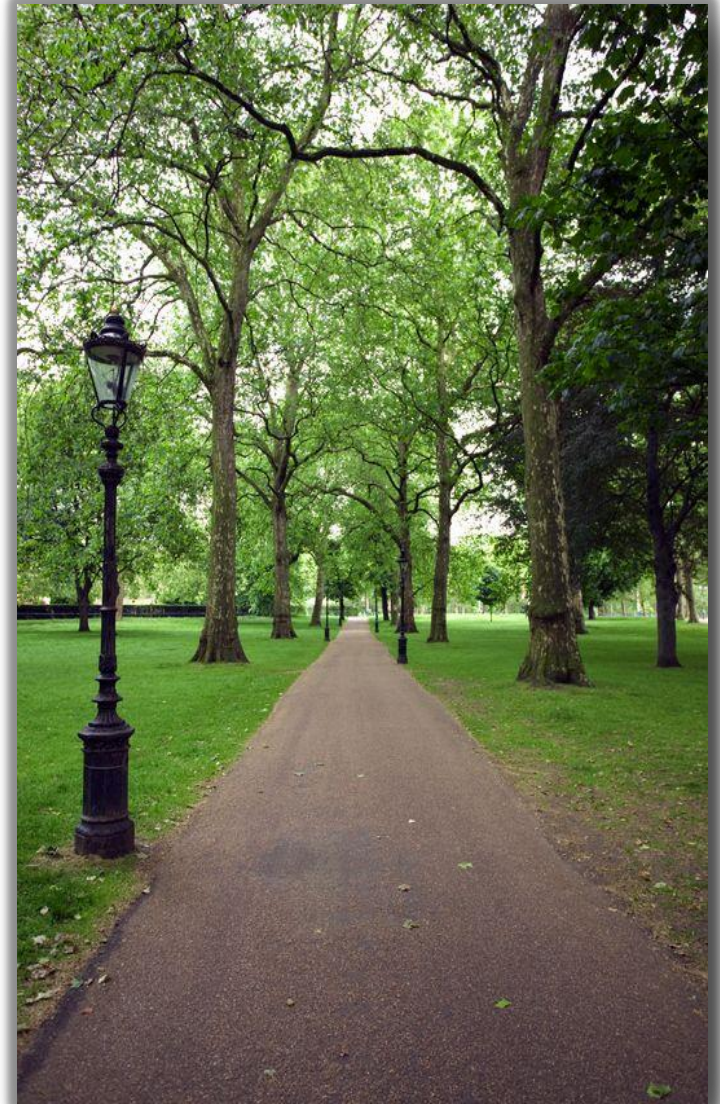
Summary

- Given the proliferation of smartphones and other electronic devices among both adolescents and adults, the eCPAT app also has potential to be distributed and used widely by the general public
- Future dissemination of this research will integrate the eCPAT as a critical component of the Healthy Young People Empowerment (HYPE) Project, a broader youth-led, community-based participatory research project to improve youth and community health



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eCPAT Demo



Group Activity: Practice Park Audit

- Divide into 5 groups
- 1 tablet per group
- Taking turns completing a practice park audit using the supplied pictures
- Make sure to fill out all answers (does not have to be accurate)



Group Activity: Practice Park Audit

Park Info

- Park Name: SCRPA demo
- Observer ID: your name

Weather

- Temp: 80
- Partly cloudy

Access

- Yes

Park Signs

- Check all that are present

Entry Points

- Only 1

Public Transit

- Yes



Group Activity: Practice Park Audit

Parking Type

- Parking Lot/Bike Rack

Sidewalks

- Yes
- All or most usable
- Curb cuts: yes

External Path

- No

Bike Routes

- Designated Lane

Traffic Signals

- Check all that are present



Group Activity: Practice Park Audit

Land Uses

- Residential
- Commercial
- Institutional
- Natural



Safety Concerns (neighborhood)

- Graffiti
- Excessive litter
- Vacant or unfavorable buildings
- Poorly maintained properties



Group Activity: Practice Park Audit

Playground (1)

- Usable: Yes
- Good Cond: Yes
- Distinct areas: No
- Colorful equipment: Yes
- Shade cover: No
- Benches: Yes
- Fence: No
- Separation: No



Playground (2)

- Usable: Yes
- Good Cond: No
- Distinct areas: Yes
- Colorful equipment: Yes
- Shade cover: Yes
- Benches: No
- Fence: Yes
- Separation: Yes



Group Activity: Practice Park Audit

Trail

- Usable: Yes
- Good Cond: Yes
- Connected: Yes
- Distance markers: No
- Benches: Yes
- Surface: Dirt/mulch



Other: Disc golf

- Usable: Yes
- Good Cond: Yes



Group Activity: Practice Park Audit

Restroom: Yes

- Usable: All
- Good Cond: All
- Family: No
- Baby change: No

Benches: Yes

- Usable: All
- Good Cond: All

Picnic Tables: Yes

- Shelter: Yes
- Grill: Yes

Trash: Yes

- Recycling: No

Food/Vending: Yes

- Fruit/Veg: No



Group Activity: Practice Park Audit

Shade: 25-75%

Animal Rules: Yes

- Bags: Yes
- Bags avail: Yes

Lights: No

Monitored: No

Emergency Device: Yes

Visible: Not at all

Roads: No

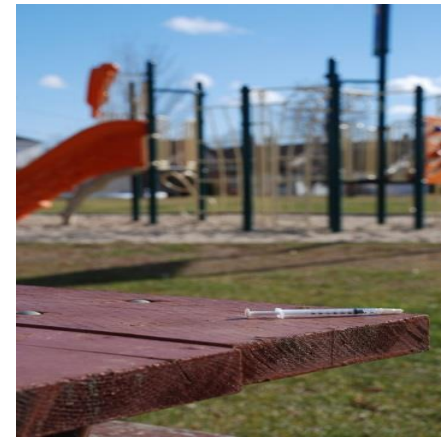


Group Activity: Practice Park Audit

Park Quality and Safety

Safety Concerns

- Graffiti
- Excessive litter
- Poor maintenance
- Evidence of threatening behavior

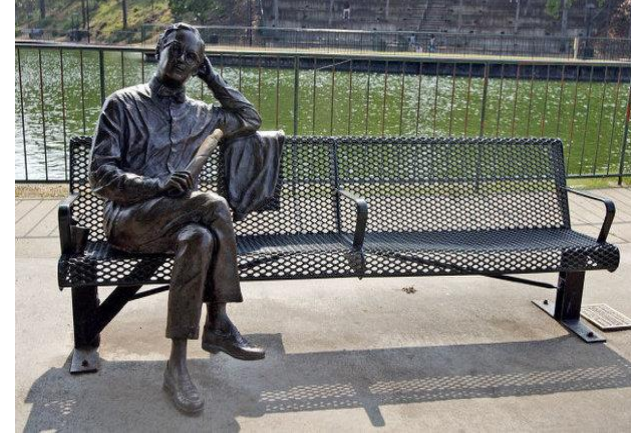


Group Activity: Practice Park Audit

Park Quality and Safety

Aesthetic Features

- Landscaping
- Artistic feature
- Wooded area
- Water feature



Discussion: Future Use of the eCPAT App

We would love your input on future use of the eCPAT App

For example, in small groups, please consider the following questions ...

- **What groups would the eCPAT be of use to in your community or beyond?**
- **How would/could the eCPAT be used with those groups to promote civic advocacy?**
- **How can we disseminate the eCPAT (locally or more broadly)?**



eCPAT in YOUR community

Contact us if you would like assistance getting started!

- Help get you going for advocacy and/or research in your community
- Provide onsite training and consultation



Acknowledgements

- The eCPAT app and training were developed by:

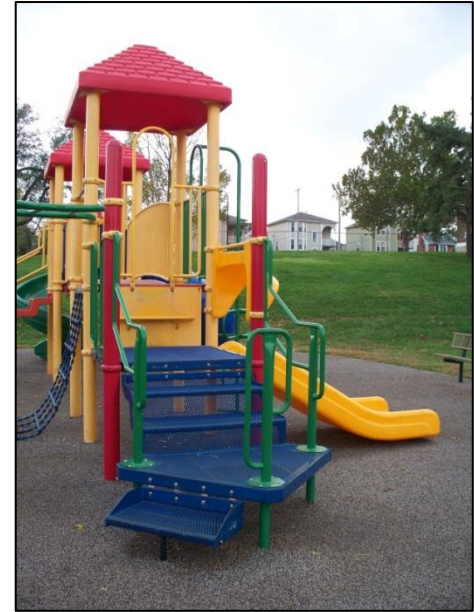
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- eCPAT development was funded by a South Carolina Clinical and Translational Research Institute grant and a University of South Carolina SPARC Fellowship
- For more information on this and other projects, please visit the Built Environment and Community Health (BEACH) Lab website:
<http://beachlab.sc.edu/>

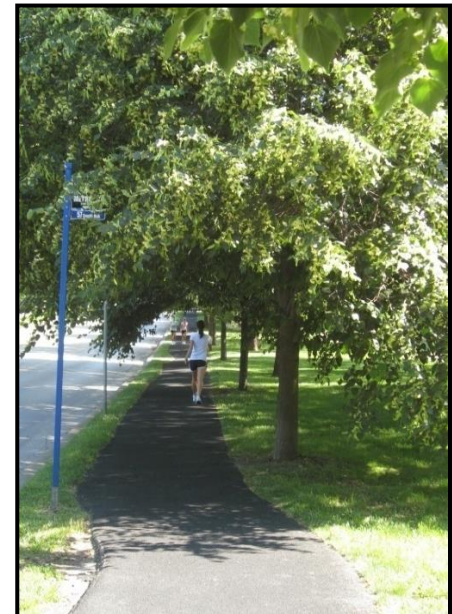
Top 10 Uses of CPAT

1. Use the CPAT as part of a master planning process to assess what facilities and amenities are available – and needed – in local parks and the surrounding neighborhood (e.g., playground, picnic shelter, lighting, sidewalk).
2. Create a website or other forum where residents can download the CPAT and upload their ratings or comments about neighborhood parks. You can also develop a searchable database that will help citizens choose community parks that meet their wants and needs (e.g., tennis court, restroom, shade).
3. Engage youth in conducting park audits as part of an extra-credit or youth organization project (e.g., 4H, Scouts) and have them share this information with the community and local policymakers.
4. Use CPAT audits to engage residents in a discussion of whether available park resources are appropriate for various groups in the neighborhood (e.g., different ages, cultures, abilities and disabilities, etc.).
5. Use data collected via the CPAT as the foundation for grant applications to organizations focused on issues such as youth, the environment, social justice, and health.



Top 10 Uses of CPAT

6. Incorporate park audits in parks, recreation, and tourism, public health, and urban planning classes as a teaching tool, as well as with middle/high school youth to educate them about the importance of healthy community design.
7. Use the CPAT to research whether parks and their attributes (e.g., features, quality) are equally distributed across cities and states and whether such patterns have implications for physical activity levels, obesity, depression, rates of chronic disease, and other health-related outcomes.
8. Engage local law enforcement and other organizations in discussions about how to increase real and perceived safety from crime and traffic in and around parks.
9. Use the CPAT data to showcase park attributes within the community as an economic development tool, making the case that your town is a great place to live and work with safe, attractive, and health-promoting parks.
10. Use CPAT findings as an evidence base for advocacy groups lobbying for better parks and outdoor recreation facilities to the city/county commission, parks and recreation board, urban planning board, or other decision-making body.



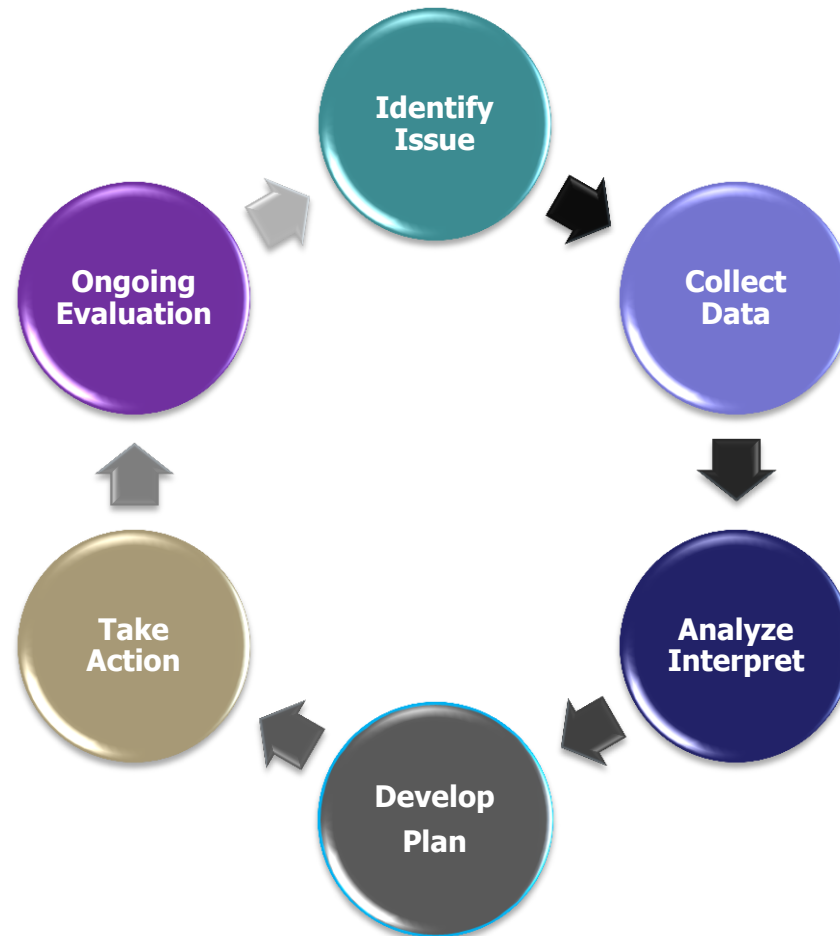
Participatory Action Research & Advocacy

- **Participatory Action Research (PAR)** - is “a methodology for an alternate system of knowledge production based on the people’s role in setting the agendas, participating in the data gathering and analysis, and controlling the use of the outcomes” (Reason 1994: 329).
- The accountability of participatory research is based on three components:
 1. Open participation in identification of issues, problems, and concerns by those involved or who would be affected by decisions
 2. Understandable knowledge to be used and developed through the interaction of researchers and the local group
 3. Stakeholders are *active researchers* rather than people made into passive objects of study.

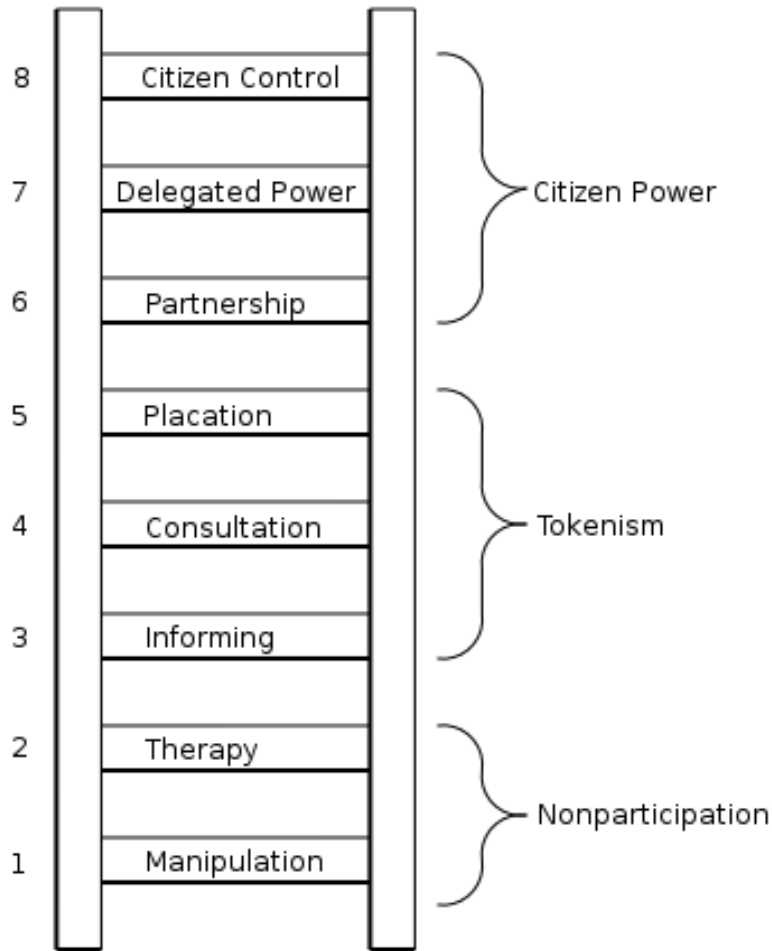
Kruger, Linda E. and Victoria E. Sturtevant. 2003. “Divergent paradigms for community inquiry: An argument for including participatory action research.” *Understanding Community-Forest Relations*. Kruger, Linda E., (ed). General Technical Report PNW-GTR-566, US Department of Agriculture Forest Service. Pacific Northwest Research Station, Portland, Oregon. February 2003.

Participatory Action Research & Advocacy

Participatory Action Research Model



Arnstein's Ladder of Citizen Participation



8. Full community participation in governing.
7. Dominant citizen authority over certain plans/programs.
6. Negotiation between citizens and powerholders for planning and decision-making responsibilities.
5. Few "hand-picked" worthy citizens on boards (easily out-voted if necessary).
4. Inviting citizen opinions (survey) for appearance of participation.
3. Typically a one-way flow of information (lack of participatory options).
2. Fake form of group participation where focus is on curing their "pathology".
1. Being placed on advisory committee by powerholder.

Participatory Action Research & Advocacy

- **Advocacy** - is a political process by an individual or a group which normally aims to influence public-policy and resource allocation decisions within political, economic, and social systems and institutions.

Lobbying Versus Advocacy: Legal Definitions. NP Action retrieved 09-19-11



Participatory Action Research & Advocacy

Steps to Using the CPAT to Increase Advocacy in your Community

- 1. Create Awareness:** Identify the issue(s) important to your community (e.g. # parks, park quality, facilities/amenities available, park accessibility, safety)
- 2. Partnership:** Organize a team of stakeholders and resource providers (e.g. parents, businesses, residents, local coalitions, non-for profits, schools, parks and recreation council, city/county officials, etc)
- 3. Assessment:** Have a variety of stakeholders audit parks and recreation area(s) using CPAT
- 4. Empowerment:** Develop a plan to address your issue
- 5. Advocacy:** Engagement of citizens to in goal attainment

Summary

- Parks are important resources for physical activity, but they differ dramatically with respect to their facilities, amenities, quality, and neighborhood context
- The eCPAT App provides diverse constituencies with a user-friendly yet content valid and reliable means of assessing the characteristics of local parks
- Such actions may lead to not only increased awareness of local resources, but also greater environmental justice, advocacy, and improved community health

