Montgomery County Parks

Engage Millennials in Parks

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PALS - Partnership for Action Learning in Sustainability
An initiative of the National Center for Smart Growth

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Project Focus

How do we
- get millennials to go to the park?
- increase use of park programs and facilities?
- increase awareness about parks?
- increase technological engagement in the parks?

Interview Focus

- Find out what attracts or prevents people from visiting/enjoying the parks?
- How do the users decide which parks they would like to visit?
- What park facilities or features do the users usually interact with?
- What is the awareness about parks and various park activities amongst people?
- What technology do people use in the parks?
Our Process

○ Background Research

○ Field Research
  ■ Field Interviews
  ■ Experience Models
  ■ Affinity Diagram

○ Wall walk

○ Ideation
  ■ Visioning
  ■ Plus and minus

○ Product Concepts
Background Research
Majority of Millennials value parks highly.
  - Value feelings of solitude.
  - Value being part of nature and ability to relax in nature
  - People under 50 years old, visit parks much more often.

Millenials have differing opinions on leisure time.
  - Some believe it is about tranquility
  - Some believe it is about excitement and new-ness

Girls are less likely to go to parks than boys.
  - Among kids, teenagers and youth, teenage girls visit parks the least.
  - Few girls were seen participating in sports or playing in pick-up games, like basketball.

Ease of walk to parks is important.
  - It is important that the park is close
  - It is important that walking there is safe

Going to parks as kids leads to going as adults.
Field Research

Findings and issues
Our Interviewees

**Participants**

- 4 men, 8 women
- 21 – 35 years of age
- Range of occupations and income levels: student, nanny, artist, Government agent, TA, unemployed, Pizza delivery
- Range of frequency and interest in parks

<table>
<thead>
<tr>
<th></th>
<th>Goes Frequently</th>
<th>Goes Infrequently</th>
<th>Doesn’t Go</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likes Parks</td>
<td>2 users</td>
<td>2 users</td>
<td>5 users</td>
</tr>
<tr>
<td>Doesn’t Like Parks</td>
<td>2 users</td>
<td>0 users</td>
<td>1 user</td>
</tr>
</tbody>
</table>
Big Picture

Internet

Park Users

Non Users

Parks

Can’t find all the information I need on parks easily

I want to be able to drink in the parks.

Need someone to provide information on plants and animals in the park

Cannot find the time from work and busy schedule to go to parks

I don’t think there are any park activities. I don’t know where I would find them.

Other things distract me and keep me from going to parks

I don’t feel safe in the parks.

Not aware of parks nearby

Prefer walking to parks but cannot always find parks that are 5-minutes away

Forms are long and hard to figure out.

I need ways to get my friends out to the park.

Traveling to parks far away becomes difficult when I don’t own a car

I would rather just stay at home.

Not aware of public transportation to parks

I don’t want to go to the parks unless someone invites me.

Difficult to find people to go to parks with

I want to go to the parks at night.

It’s uncomfortable to use the playground when kids and their parents are around

I don’t know what to do at the parks.

I don’t feel safe in the parks.

I want to go to the parks at night.

I don’t know what to do at the parks.

I don’t feel safe in the parks.

I don’t think there are any park activities. I don’t know where I would find them.

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I don’t want to go to the parks unless someone invites me.
Challenges and high-level findings

I mostly go with my friends
- Many park activities are just excuses for social gatherings.
- Most park goers go because someone else gets them to go.

Many users don’t know about the parks near them
- Those who don’t normally go to parks don’t know about them.
- Users want to get park info from other users not from websites.

I don’t want to do tech things in park
- Users are resilient to the idea of screens in the park.
- Users don’t usually bring anything other than their phone.

Millennials want to be able to “Just Go” to the park on a whim
- 10 minute rule I don’t want to walk or drive more than 10 minutes
- I want to be able to fill my needs (bathroom, food, water) at the park.
<table>
<thead>
<tr>
<th>Kid at Heart</th>
<th>Self-care Enthusiast</th>
<th>The Preparer</th>
</tr>
</thead>
<tbody>
<tr>
<td>I loved playgrounds when I was a kid and it's better now as I make my own games and rules. I wish that I didn’t get judged for it though that wouldn’t stop me.</td>
<td>I just need to get away from screens sometimes to go somewhere natural and quiet. It helps me clear my head. I like that I can be around people but not obligated to talk.</td>
<td>I want to know all about the parks in my area before I go. If don't know then I’ll ask someone or look it up online. I also make sure I have everything I need for my trip.</td>
</tr>
</tbody>
</table>

**Give Me:**

- Adult Playgrounds
- Moving structures
- Challenges submitted by people in the park
- Adult/adjustable swing sets
- Specified quiet areas
- Comfortable places to sit

**Give Me:**

- Better way to learn about parks
- Locating bathrooms
- Bug deterrents
## Identity Elements 02

<table>
<thead>
<tr>
<th><strong>Sports Enthusiast</strong></th>
<th><strong>Hunter Gatherer</strong></th>
<th><strong>Social Hiker</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>I really just want the facilities and the abilities to practise my sport regardless of the weather. I take this seriously and I am willing to travel. I wish more people did it too.</td>
<td>I want to explore and look for things and conquer challenges. Hunting Pokemons gives me a rush. I just need to feel the thrill of discovery and excitement of the hunt.</td>
<td>I feel like it's nice to be outside with my friends. I like that we can go outside and get some exercise. It's a great way to get everyone together and it doesn't cost anything.</td>
</tr>
<tr>
<td><strong>Give Me:</strong></td>
<td><strong>Give Me:</strong></td>
<td><strong>Give Me:</strong></td>
</tr>
<tr>
<td>Well maintained sports equipment</td>
<td>Park scavenger hunts</td>
<td>Plan and contact friends for a hike</td>
</tr>
<tr>
<td>Clear rules of engagement and availability info for park equipment</td>
<td>AR games for hunting and tracking</td>
<td>Challenge trails</td>
</tr>
<tr>
<td></td>
<td>Hidden/secret areas and challenges to get there</td>
<td>Know the difficulty, length of trails</td>
</tr>
</tbody>
</table>
Identity Elements 03

### Public Space Enthusiast

I feel like having parks is really important for societies as a whole. I love the idea that they’re a place everyone can get access to.

**Give Me:**
- Accessible playground
- Free events in parks
- Ways to volunteer for parks

### Nature Lover

I want to learn more about the animals and the plants in the park. I want to get away from screens. I want to just hear and see nature.

**Give Me:**
- Information stations
- AR information
- Well maintained gardens
Park’s Physical Model
Physical Model Elements

- I spend a lot of time searching for information online
  - I Google images showing different activities in parks
  - I read online reviews by other park users
  - I want to know about the safety in parks

- I have to prepare for various activities at the park
  - I need to carry my bike till the park
  - I take my basketball and water bottle to the parks.
Physical Model Elements

- I want to eat food in the parks
  - I sit on the bench and sip tea in evenings
  - I prepare food at home to take it and eat in parks
  - I find pocket parks to have lunch
  - I get a cup coffee from the store when talking a walk especially in colder weather
Physical Model Elements

- I have no one to play with
  - It's difficult to find friends who play in nearby parks
  - I don't like to bring my equipment to the park.

- I want to be able to play on the playgrounds but they're just for kids.

- As an I want to be able to use swing sets and playgrounds
Physical Model Elements

- I want to water fountains that are easily visible or findable in the parks
- I need washrooms close by to parks for myself and my kids

- I want to know more about different plants of the parks. Don’t make me scan codes
- Finding new and cool things in park excite me
- I like to take pictures in the park 📸
Physical Model Elements

- I like to eat in parks, and some parks do not have picnic tables so I cannot go along with my friends.
- I would like to parks with access to coffee shops and small food places but also contain more quiet and secluded places.
- I like reading in parks under shade. I would like to see some free books available in parks.
- I want to capture pictures with friends in parks.
Overview of Findings

Understanding the challenges
How I grew up with Parks determines how I use them...

- **I grew up going to parks so it’s a habit**
  - My interest in outdoor play and games was developed at parks
  - I liked playground as a kid
  - I like this Park because it has a wide range of activities for people of all ages and I don't feel like I've outgrown it

- **I am bonded to “my” park**
  - I like a particular park because of nostalgia
  - I grew up with a specific type of park, doing specific activities in parks
  - I visit the park with my siblings or family to relive old memories

- **I learn about other parks by going to parks**
  - I don’t know about parks unless I go to them. There is a park 5 minutes but I only discovered it when I went there
  - When in parks, I find out activities at various parks
  - I find out about the parks while exploring the trails
I want to go more but other things distract me...

- **I don’t really feel relaxed until I am home**
  - I like the feeling of comfort when I know “I am home” at the end of the day

- **My work schedule makes it hard to go to parks**
  - I haven’t been to the park in a month because of my busy work schedule
  - I sometimes have to work on the weekends which prevents me from visiting parks

- **I prefer to socialize somewhere I can drink**
  - I am not comfortable drinking in parks as I am unaware of the park policy and feel it’s a hassle to get permission to drink
I research the parks I go to...

- **I search online mostly about specific issues regarding the parks.**
  - I google the parks I want to visit and check the images as well as street-level views to ensure they are good for biking and training.
  - I check if the bathrooms are available on the map and open before visiting a park.

- **I don’t usually go to the parks website for info.**
  - I usually just google parks.
  - I prefer getting my information from people who share my values and opinions about parks.

- **I search for activities I want to do in parks rather than the parks themselves.**
  - I like to go for hiking in parks and select them based on the variety of trails.
  - I only go to the parks for playing basketball and do not mind traveling far to a park that has good courts and playing equipment.

- **Which park I go to depends on who I’m going with and what I want to do.**
  - I prefer visiting Sligo Creek Park rather than the local park near my house, as I get to meet my friends there and spend time with them.
  - I usually go to the neighborhood parks with playgrounds with my kids.
Travelling to Parks should be easy...

- **Distance determines how and when I go to parks.**
  - I prefer driving to parks like Wheaton that are more than 2 miles away and take me more than 10 minutes to walk there.
  - I prefer walking to neighborhood parks if it takes me less than 10 minutes to get there.

- **I have trouble bringing my own stuff to the park.**
  - I occasionally bike to the park but find it a hassle to carry my bike all the way there.

- **I need a vehicle to get to the park.**
  - Not having my own car makes it difficult for me to visit the parks often.
  - If there were a shuttle to the park I would definitely go paddling.

- **I use apps to navigate to parks.**
  - I use Waze to find directions and travel to the park.
  - I use an app for the shuttle to the park and find it quite useful.
I want to be able to “Just Go” to the parks...

- I want to be able to have short bursts of outside.
  - I like to eat lunch at pocket parks near my workplace

- I like casual low effort park activities.
  - I did rock climbing and hiking only for a couple of years as I felt it was expensive and required a lot of planning.

- I don’t want to have to plan my park visits.
  - I like visiting local parks as I can go there spontaneously without any planning
  - I like parks that are closer to my neighborhood which makes it easy to go for a walk in the spur of the moment

- I go to the parks because I am bored and it’s easy.
  - I usually visit the local playgrounds whenever I’m bored
I want to see diverse people in parks.
○ I mostly find caucasians in the park even though there is a lot of diversity in my apartment complex
○ I feel uncomfortable when there’s nobody in the park that looks like me.

I want activity based park communities.
○ It would be nice to have Montgomery county parks encourage bike events and help build a bike community
○ I would visit local parks more if there were clubs that conducted cycling or skateboarding events

Events help me find my people in the park.
○ I like to attend events conducted by bike shops as I know I can find people who bike and train at the same level I want to

I like that parks are free and non-profit.
○ I’m willing to work and take responsibility for parks being free because I believe in community spaces.
I want to plan a social parks experience

- I use going to the park as an excuse to hang out with friends.
  - I usually go hiking as it gives me a chance to talk and catch up with friends while being in nature.
  - I prefer going to the park farther away than the one near my home as most of my friends live there and it gives me a chance to hang out with them.

- I actively want to get more people to go to the parks.
  - I liked Pokemon go as I could get many of my friends, who were otherwise unwilling, to go to parks.
  - I would like to see more businesses organize events in parks.

- I find it hard to find people to go to parks with me.
  - It has become increasingly difficult to find time with friends to go to the parks due to our respective work schedules.

- I use social media to find people to go to parks with.
  - I use meetup to find people interested in basketball or other similar activities and get information on various events.
  - I would like to see the county website working in combination with meetup service to find new people that share similar interests in park activities.
I want adult play structures
○ I want adult or adjustable swing sets in the playground
○ I want to play on the play equipment but feel like I’m not allowed to when kids are around. It would be nice to have separate playgrounds for kids and adults

I like to create my own games with park equipment.
○ It’s more fun when I use the kids playing equipment in parks to create competitive and challenging games
○ Sometimes my sister and I sit on the rocking horses in the playground and pretend to be in a race to keep things fun and interesting

I like to find or hide things
○ I really like the secret scavenger hunt of statues in the park.
○ I like geocaching in parks because it is fun to hide things and find what other people have left behind

I like the feeling of hunting things
○ I went to the parks with more people because of Pokemon go as I really liked the idea of tracking and catching pokemons with friends
○ I really like the hunting and tracking feature in Pokemon go and was upset when they removed it

I create or play games in the park
I play mobile games in the park

- Geolocation mobile games drive me to parks.
  - Pokemon go made me stay in parks longer as there were so many pokemon and I roamed around to catch them all!
  - I played Pokemon go in parks because there were several pokestops and charging stations available

- I like that mobile games provide an excuse to go out with friends.
  - I liked Pokemon go not for the nostalgic value but because it allowed me to get many of my friends to parks and hang out with them
  - Pokemon go lets me have spontaneous outings with my friends in parks and I do not have to choose between going out and being social
I want to be immersed in park

- I go to parks to achieve a sense of tranquility.
  - I don’t want to be disturbed while in the park
  - Screens disrupt my immersion in parks

- Reading or listening to something is fine in the park.
  - I know people who like to read research papers in parks as they feel it helps them retain information better
  - I usually carry my headphones and use Spotify to listen to music while enjoying the nature in the parks

- I want to be able to sit in the shade.
  - I would like there to be more benches which are under trees for shade during the summer

- My phone is the only tech I really bring to the park.
  - I bring only my phone to the park so that I can talk to my family/friends while walking
I don’t want to have to leave parks for my basic needs

- **I want well maintained bathrooms that are open 24/7.**
  - I really like that Patapsco park has a lot of bathrooms closeby with things clearly labelled and maps everywhere
  - It is really annoying that I have to sometimes walk a lot or even leave the park to find bathrooms

- **I want food trucks, and access to nearby restaurants.**
  - I wish that the park had more “active events” like food truck festivals and live music events
  - My ideal park would be near restaurants and coffee shops but in a secluded region with a more natural aura

- **I want to be able to drink in the parks.**
  - I really enjoyed park picnics but they eventually died out as we weren’t allowed to get alcohol
  - I really enjoy the wine festivals in the parks and wish there were more such events
I want safety in the parks

- **I want kids in the park to be safe.**
  - I watch over my kids and help them use the play structures in the playground
  - I am worried about my kids safety whenever we go to the lake and wish there was a lifeguard around

- **I feel unsafe when it’s too dark.**
  - I am scared to walk in parks at night when some areas do not have enough light
  - I was particularly afraid to visit this lake while growing up as it was not connected to the sidewalk and was not well-lighted

- **Feeling safe in the park is a lot about the surrounding area.**
  - I feel safer walking in parks like Gaithersburg as it is more suburban than Silver Spring
  - I feel safe at this park as it is closer to my house

- **Well defined and followed rules make me feel safe.**
  - It’s important for me to know whether the park is well organized for biking as I am concerned about others safety on the trails
  - I am not comfortable drinking in parks as I am unaware of the park policy and feel it’s a hassle to get permission to drink
I go to the parks for intense physical activity

- I wish there were more challenging trails in the parks.
  - I like to visit big parks where there are usually a larger variety of challenging trails.
  - My favorite part of hiking the last time we went was a fallen tree over the river, as it made it more challenging and fun for us to walk across.

- I use the parks to tire out my kids or dogs.
  - Whenever I’m babysitting, I take the kids to the playground as it provides good exercise and tires them out.

- I visit the parks for one specific type of training.
  - I spend about four hours to do endurance training on my bike and 1-2 Hrs to do mountain biking in the parks.
Bibliography


Wall Walk

Take a break!
Product Design
Overview of Product Concepts

**PARK MAP APP**
1. gives information;
2. improves safety;
3. shows you things to do;
4. has pocket mode for immersion.

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**PARK SHARE SYSTEM**
1. lets users just go to the parks;
2. provides equipment for all users;
3. lets users create their own park experience;
4. avoids extra preparation before going to parks.

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**PHYSICAL REDESIGN**
1. draws adults into the parks;
2. creates a time for adults to use the playground;
3. creates new selfie spots;
4. enables people to get food in parks.

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**PARK ARTS SYSTEM**
1. encourages artists;
2. makes creating and finding events easy.
Park Map App-- Overview

Provides an interactive map of the park

An easy way to find and get information on nearby parks

Allows users to rate and review the parks

Helps users to notify others in case of an emergency

Provides a pocket guide for the users while hiking
Updates
Alerts let you see when there’s something new in one of your favorite parks. Just tap to find out more.

Search
Search based on activities, proximity, or name.

Search
Parks are displayed based on their proximity and rating for the specific activity.
**Cool Stuff**
Showcases the hottest items and coolest things about the park as submitted and chosen by users.

**Voting**
Users decide what shows up first by upvoting or downvoting the stories.
Patapsco Park
Description about the park

Recent Activities / Events

- Eagles sighted here! It was really Cool and it.
- Beautiful lake for swimming!
- Party in the park this Friday at 9am.

Stats

Rank
#1

Download our Smart Park Map app
**Safety Concern**
Someone reported a safety concern here. Do you agree?

- YES
- NO

Do you agree with the suggested improvement?

- YES
- NO

You receive 5 points

**Animal Sighting**
What kind of animal?

- Ducks

Upload a Picture?

You receive 5 points

**Description of issue**
It's too dark here.

Suggest an improvement

- Lights

You receive 5 points
Drag & Drop icons on map to tag places

**SOS**
Creates a marker at your location that is displayed on all nearby maps. Also alerts park security.

---

**Edit Park**

<table>
<thead>
<tr>
<th>Camera</th>
<th>SOS</th>
<th>Challenges</th>
<th>Search</th>
<th>Pocket Mode</th>
</tr>
</thead>
</table>

**SOS**
Do you confirm there’s an emergency?

- YES
- NO

Your SOS has been sent. Would you like to describe the emergency?

Would you like to call 911?

- YES
- NO
The phone vibrates when walking in a distance of a tagged place.

Notification: Animal Spot
Here is an interesting animal spot.

Pocket Mode
Set at which proximity level you would like to receive notifications.
The phone vibrates when walking in a distance of a tagged place.

Notification: Take A Challenge?
Here is a walking challenge spot, 20 people have taken the challenge.

GO  SKIP
Makes creating and promoting events in parks easy.

Creates a reel of highlighted events for users

Allows users to become featured artists and promote their events in the parks
Park Share System - Overview

Provides an easy way to rent cool stuff to use in the park either through the mobile app or through Kiosks available at the park.
Park Share System -- Rental List

- ziplines
- metal detector
- croquet sets
- laser tag
- bikes
- basketballs
- telescopes
- zorbs
- literature
- binoculars
- tennis rackets
- umbrellas
Users swipe credit card and are informed they will be charged if stuff is not returned.

Green Labels display what is available.

Users can use kiosk to rent objects or find out info about the park.

Camera system in lockers checks to make sure items have been returned.

Expensive Items equipped with GPS tags which will scream and alert authorities if removed from the park.
Park Share System - - Kiosk System

Rental System Kiosk

Rent  Pick Up

Return

You can also use our app to do both reservation, rental and return.

Choose an available locker:

<table>
<thead>
<tr>
<th>Lockers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 1</td>
</tr>
<tr>
<td>B 1</td>
</tr>
<tr>
<td>C 1</td>
</tr>
<tr>
<td>D 1</td>
</tr>
</tbody>
</table>

Type in the return code, and the locker opens

Type in phone number, and send the code

Get a return code, and the locker opens
Park Share System -- App System

Rental System

- Sign Up
- Reserve
- Rent
- Return

Rental System/ Reserve

- One Click Reservation
- See History
  - Parks
  - Items
  - Time
  - Select

One-click reservation
Enable a fast reservation; choose one record as default reservation

Histories
Enable users to quickly select a previous rental other than which stored in one click reservation

Manually Choose a park, an item, and a time duration
Park Share System - - App System

Rental System/Sign Up

Account name:
Password:
Re-enter password:
Phone number:

Credit Card: +
Set my one-click reservation: +

Sign Up Now

Credit Card
Need credit card for sign up; Use it when doing rental and reservation

Personal Panel
personal information like credit card and phone number are stored here
You have successfully reserved item during with your credit card!

Here is the code for pick up! 5565 (already sent to your phone!)

Send to my friend
Read instructions ▼
Q&A ▼

Auto message
Ensure an easy pick-up

Send to friends
Ensure friend’s accessibility

Instructions
Security issue concerned; instructions are also sent to phone automatically

Recommendations
Attract potential users by making current users know more about rental items

Do you want to rent these items?
Physical Redesign

Playground equipment that lights up in the parks in the evening will create a cool buzz brand for the park and support activities in winter and evening when millennials want to go.

Playgrounds for all; swing sets that can be adjusted for height by adults and kids alike.

**Warmup Campfire**

Electric campfire to provide a cozy spots for millennials to sit down with friends.

Safety mechanism around the heated parts and automatic presence detection.
To create a social parks experience, selfie spots will photo booth style cameras will be placed.

Individuals and groups of people like clicking pictures in the park near trees and flowers.

Tables numbered and organized in the parks for food delivery from nearby restaurants.

List of restaurants and their phone numbers will be at the table for park users to order food.
Physical Redesign

Challenge trails hosted in various parks for people to do intense physical activity without preparation.

Competing with self, others and scoreboard to keep trying the challenges multiple times.

Relax rooms provide a open view of the park along with the comfort of a home.

Millennials can sit back, read, charge their phones, listen to music even at parks.
Social park experience for individuals and groups
- Food delivery tables, selfie spots and night lights around the park
- Allow artists to perform as well as display their art
- Electric fireplaces to combat the cold weather

Inclusive park play and amenities for all
- Adjustable swing sets and challenge trails for kids and adults
- Accessible bathroom facilities, rental lockers and equipments on demand

Challenge and fun activities as well as equipments available at the park
- Allow creation, submission and acceptance of challenge trails for users
- LCD screen showing the map and sighted events in the park.

Immersion in nature and creating eco-friendly awareness
- Relax shelters for a secluded and peaceful environment
- Trash can design to teach about biodegradable waste

Content driven parks app/website
- Park info including real time and upcoming events contributed by park users’ and staff
- Online rental service, upcoming events, event registration from artist and event/activities stats happening in the park.

Value proposition – many avenues to products
Next Steps

Scope the next phase based on the vision
  ▪ Identify which product concepts will be designed in detail

Define the details of the scoped design
  ▪ Storyboard to work out the details of the vision
  ▪ Create preliminary User Environment Design to structure the system
  ▪ Identify interaction design patterns for an initial user interface
  ▪ Create initial prototype in paper for customer testing

Validate concept, function and interaction design with paper prototype interviews with customers
  ▪ Iterate in 2-3 rounds of paper prototype testing
  ▪ Interpret user feedback from prototype interviews
  ▪ Make changes based on the interpretations

Create an online click-through prototype
  ▪ Test the interaction and visual design in online format
  ▪ Iterate the design with 2 rounds of users to ensure overall acceptance

Document the tested design for transition to development
Thank you!

Q&A