Healthy Communities:

Mapping Recreational Resources
A Project Sponsored by:

- Adolescent Health Program
- Center for Local Public Health Services
- Information Technology Services: GIS Unit
- University of Missouri Extension Service
Overview of Today’s Training

- Welcome and Introductions
- Overview of Adolescent Health and how it is enhanced by the Healthy Communities: Mapping Recreation Sites Initiative
- Outline the basics of the Health Communities: Mapping Recreation Sites Initiative
- Review the collection forms, database, and GIS.
Overview of Today’s Training

- Field collection exercise on campus (collect data, enter data into database, and create maps)
- Presentation Tips
- Evaluating the Process
Welcome and Introductions
Adolescent Health
Mapping Recreational Resources: Overview
History of Community Mapping

Hull House Maps

Jane Addams

Leonard Covello
“Studies have shown that individuals of all ages will become more active where there are communities that offer new or improved places to be physically active.”
“Unfortunately, most individuals are unaware of available recreation resources.”
Youth will identify areas for physical activity in their community, and create a map to share with their peers.
Benefits of this project

- Educate youth on the benefits of physical activity

- Provide Youth with an opportunity to use technological tools like Geographic Information Systems (GIS) and Global Positioning Systems (GPS)

- Provide Youth with an opportunity to work closely with community leaders to promote or increase recreation opportunities
This project will:

• Educate the community on where to go for physical activity
• Identify areas lacking in recreational resources
• Provide a community map for youth to use
• Identify safety concerns
Possible results from project

- Present findings to community leaders
- Produce a map to distribute to peers
- Identify underutilized areas and explore reasons why
- Create a website of recreational options
- Create a plan to promote physical activity
- Add a survey of peers to find out where they go for recreation
- Expand project to include other community resources that promote wellness
Project Steps

- Setup project
- Collect Field Data
- Compile Data
- Create the map
- Analyze the findings
- Share Your Message
- Reflect
Setup Project

- Identify and analyze the issue
- Setting up the Project
- Review project materials
- Assign project roles and responsibilities
- Define your community area
Identify/Analyze Issue

Centers for Disease Control and Prevention (CDC) Overweight and Obesity  http://www.cdc.gov/nccdphp/dnpa/obesity/index.htm

CDC Health Youth  http://www.cdc.gov/HealthyYouth/index.htm

CDC Youth Risk Behavioral Surveillance System  
http://www.cdc.gov/HealthyYouth/yrbs/index.htm

Missouri Department of Health and Senior Services Health Missouri Initiative http://www.dhss.mo.gov/Obesity/
Identify/Analyze Issue

CDC BAM! Body and Mind  http://www.bam.gov/

CDC VERB  http://www.cdc.gov/youthcampaign/

National Institute of Diabetes and Digestive and Kidney Diseases
Take Charge of Your Health

The International Food Information Council Foundation  Kinetic
http://www.kidnetic.com/

FirstGov for Consumers  http://www.consumer.gov/health.htm
Project Steps

• Identify and analyze the issue
• Setting up the Project
• Review project materials
• Assign project roles and responsibilities
• Define your community area
Setting Up the Project

- Define the Audience
- Find Partners
- Explore Funding
Getting Started

- Identify and analyze the issue
- Setting up the Project
- Review project materials
- Assign project roles and responsibilities
- Define your community area
Getting Started

- Identify and analyze the issue
- Setting up the Project
- Review project materials
- Assign project roles and responsibilities
- Define your community area
Assigning Project Roles

**Team Leader:** Hands out materials, coordinates the project, and keeps the group on task

**GPS Reader:** Operates the GPS unit.

**Data Recorder:** Completes the data collection form and records locational information provided by the GPS Reader.
Assigning Project Roles

**Photographer:** Takes digital pictures of each location. Maintains a log of all photographs taken.

**Mapper:** Uses GIS software to conduct analysis and prepare maps of findings.

**Note Taker:** Takes notes about what happens during the activity. These notes will later be used for evaluation and creating presentations.
Assigning Project Roles

**Safety Person:** Monitors the activity to make sure that team members are following proper safety rules and regulations.

**Designer:** Determines the type of media used to create the final project. Creates layouts for handouts/brochures/maps and prepares presentation materials.

**Presenter:** Presents the findings to community leaders and the public.
Adult Coordinator’s Role

- Set Goals and Timeline for project
- Recognize the benefits of group work
- Guide youth in taking advantage of community resources
- Identify additional support youth will need to do the project
- Believe in youth
Getting Started

- Identify and analyze the issue
- Setting up the Project
- Review project materials
- Assign project roles and responsibilities
- Define your community area
Field Work

• Site Selection
• Preparation for Field Data Collection
• Field Visit
• Collecting Location Information
Site Selection

- Talking with peers, family members, teachers and church members
- Contact Local Parks and Recreation, YMCA, YWCA and Local Public Health Agencies
- Newspapers
- Yellow pages
- Chamber of Commerce, real estate association, and other community sponsored Web sites.
## Physical Activity Locations

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Site Name</th>
<th>Location</th>
<th>Collected</th>
<th>By</th>
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<td>1900 Blue Ridge</td>
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<td>C-2</td>
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<td>100 E Forest Ave</td>
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<td>C-7</td>
<td>Bear Creek Park</td>
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<td>C-15</td>
<td>Skatetown</td>
<td>1000 Mexico Gravel Rd</td>
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<td>C-16</td>
<td>American Legion Sports Park</td>
<td>602 S Legion Ln</td>
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<tr>
<td>C-17</td>
<td>Woodridge Park</td>
<td>3532 Berrywood Dr</td>
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Field Work

- Site Selection
- Preparation for Field Data Collection
- Field Visit
- Collecting Location Information
Field Teams

- Three to five participants best
- Need a mix of interest and skills
- Assigning study areas
- Assign specific tasks to team members
- Switch jobs so all get a feel for entire data collection process
Equipment

- Clipboard
- Pencil
- GPS unit
- Digital camera
- Extra paper for drawing sketches
- Physical Activity Asset Details form
- Photo Entry form
- Map of assigned area
Physical Activity Asset Details:

ID: ___________________________ Name: ___________________________ Open to Public?: ______
Address: _______________________ City: ___________________________
Zip Code: __________ Phone: __________ Fax: __________
Description: _______________________________________________________

GPS Location X: __________ Y: __________ Method: __________

Activities available at Site: (Check all that apply)

☐ Aerobics  ☐ Softball  ☐ Skateboarding
☐ Baseball  ☐ Frisbee Golf  ☐ Sledding
☐ Basketball  ☐ Golf  ☐ Soccer
☐ Biking  ☐ Gymnastics  ☐ Softball
☐ Bowling  ☐ Ice Skating  ☐ Swimming
☐ Climbing  ☐ Kickball  ☐ Tennis
☐ Dance  ☐ Martial Arts  ☐ Table Tennis
☐ Field Hockey  ☐ Playground  ☐ Trail
☐ Fishing  ☐ Rollerblading

Site activities are appropriate for which ages? (check all that apply)

☐ All Ages
☐ Children
☐ Adults
☐ Senior Citizens

Cost:
☐ Free
☐ Fee: $________

Location of Resources:

☐ Outdoor
☐ Indoor
☐ Both

Overall condition of resources:

☐ Poor
☐ Fair
☐ Good
☐ Excellent

Is the area lighted? ☐ Yes ☐ No

Hours of Operation: ________________________

Observed Hazards: ____________________________________________

Comments: ____________________________________________

☐ Entered into Database  Date __________ By __________________________
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</tbody>
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Activities available at Site: (Check all that apply)

- □ Aerobics
- □ Baseball
- □ Basketball
- □ Biking
- □ Bowling
- □ Climbing
- □ Dance
- □ Field Hockey
- □ Fishing
- □ Football
- □ Frisbee Golf
- □ Golf
- □ Gymnastics
- □ Ice Skating
- □ Kiteball
- □ Martial Arts
- □ Playground
- □ Rollaball
- □ Rollerblading
- □ Skateboarding
- □ Sledding
- □ Soccer
- □ Softball
- □ Swimming
- □ Surfing
- □ Table Tennis
- □ Tennis
- □ Trail
- □ Walking/Running
- □ Volleyball
- □ Weightlifting
- □ Winter Sports
- □ Other

Site activities are appropriate for which ages? (check all that apply)
- □ All Ages
- □ Children
- □ Adults
- □ Seniors/Citizens

Location of Resources:
- □ Outdoor
- □ Indoor
- □ Both

Overall condition of resources:
- □ Poor
- □ Fair
- □ Good
- □ Excellent

Cost:
- □ Free
- □ Fee: $________

Hours of Operation: ____________

Is the area lighted? □ Yes □ No

Observed Hazards:

Comments:

□ Entered into Database Date ____________ By __________________

GPS Location: X: _Y: _ Method

Name: McKee Street Park
Address: 1900 McKee St
City: ____________ Zip Code: ____________ Phone: ____________ For: ____________
## Photos

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</tbody>
</table>
Field Work

- Site Selection
- Preparation for Field Data Collection
- Field Visit
  - Data collection
  - Collecting Location Information
Physical Activity Asset Details:

ID: C-5  Name: McKee Street Park  Open to Public? Yes
Address: 1900 McKee St.  City: Columbia
Zip Code:  Phone:  Fax: 
Description: 4.5 acre - City of Columbia Park

GPS Location: X: 92.3691  Y: 38.9715  Method: GeoCode

Activities available at Site: (Check all that apply)

- □ Aerobics
- □ Baseball
- □ Basketball
- □ Biking
- □ Bowling
- □ Climbing
- □ Dance
- □ Field Hockey
- □ Fishing
- □ Football
- □ Frisbee Golf
- □ Golf
- □ Gymnastics
- □ Ice Skating
- □ Kickball
- □ Martial Arts
- □ Playset
- □ Rollerblading
- □ Skateboarding
- □ Sledding
- □ Soccer
- □ Softball
- □ Swimming
- □ Swings
- □ Table Tennis
- □ Tennis
- □ Trail
- □ Walking/Running
- □ Volleyball
- □ Weightlifting
- □ Winter Sports
- □ Other: open field

Site activities are appropriate for which ages?
(check all that apply)
- □ All Ages
- □ Children
- □ Adults
- □ Senior Citizens

Location of Resources:
- □ Outdoor
- □ Indoor
- □ Both

Cost:
- □ Free
- □ Fee: $________

Overall condition of resources:
- □ Poor
- □ Fair
- □ Good
- □ Excellent

Hours of Operation:
7 am - 11 pm

Is the area lighted?
□ Yes  □ No

Observed Hazards:
broken concrete on basketball court

Comments:
Trail is concrete ADA accessible.

Entered into Database: Date By: _____________________________
The most accurate way to find the physical location of your site is to use a GPS unit.
Collecting Location Information

Set the location format to Decimal Degrees!

XX.XXXXXX
Coordinate locations can be found by finding the site on aerial photography.

This method works well for larger areas, but it may be hard to locate smaller areas.
Site can be “geocoded” using US Postal information. This gives an approximate location based on the street ranges.

Geocoding does not work for Rural routes or Post office boxes.
Compiling the Data

- Enter the Information
- Map it
Compiling the Data

- Enter the Information
- Map it
Creating the Map

• Open the community_rec.mxd file in ArcView
• Add your Access table
• Display X,Y of Access table
• Modify/add layers as needed.
Creating the Map

- Map Format
- Map Layout
Map format

• How will you reach your peers?
  – Handout
  – Poster
  – Online map

• Use your resources
  – Partners may have access to plotters, printers, copiers
  – School may provide web space for map
Creating the Map

- Map Format
- Map Layout
Map Layout

- Map
- North arrow
- Scale bar
- Legend
- Date
- Title
- Your group's name and/or logo & contact information
- Information about the importance of physical activity.
Map Layout - optional

- A list of the sites on your map (with a short description for each)
- A paragraph or two about your group
- Information about how your group performed this project
- Photos or sketches
- Other....
Create a Layout

[Diagram showing a layout for creating a map with sections for title, legend, scale/north arrow, tips for physical activity, list of sites, about our group, and photo.]

Mapping Recreational Resources: Analysis and Presentation
Analyze the Findings

- Identify Assets/Gaps
- Define Improvement Measures
Identify Assets/Gaps

- What are some positive resources you found?
- Where did you find gaps in availability of resources?
Analyze the Findings

- Identify Assets/Gaps
- Define Improvement Measures
Define Improvement Measures

BRAINSTORMING

From what you found in your project, how can physical activity be increased in your community?
Share Your Message

• Share your final map with your community
• Tell your local media sources about your project
• Have an event to highlight your project
• Give a presentation about your project
• Talk to other communities about starting their own project
Share Your Message

- Map Distribution
- Press Release
- Presentation
Share Your Message

- Map Distribution
- Press Release
- Presentation
News Release

For Immediate Release:

Date

Contact:
Name
Organization
Phone

Local Youth Use GIS Technology to Navigate Recreational Resources

(Names of group) Local youth are taking action to make their community healthier and safer by using sophisticated GIS and GPS technology. The youth will be working with local leaders on a project known as Healthy Communities: Mapping Recreational Resources, an activity using geospatial tools and data to identify community and environmental issues.

“This is a win-win opportunity for both our youth and community,” said (Name). “It allows our youth to have hands-on experience using powerful technology, builds relationships between youth and community leaders, increases leadership skills, and makes our community a healthier and safer place to live, work and play,” said (Name).

A planning meeting will be held (date, time and location) to discuss (agenda).

Mapping recreation resources serves many purposes that can help educate communities on where to go for physical activity and identify areas lacking recreational resources. Once the data is collected, community members will (include only those you plan to do in your community)

- Prepare findings to community leader
- Produce a map to distribute to peers
- Identify underutilized areas and explore reasons why
- Create a website of recreational options
- Create a plan to promote physical activity
- Add a survey of peers to find out where they go for recreation
- Expand project to include other community resources that promote wellness

“Making sure that our recreational outlets are safe and located in the most appropriate location for easy access will help members of the community be more physically active,” said (Name).

Regular physical activity improves strength and endurance, helps build healthy bones and muscles, helps control weight, reduces anxiety and stress, and increases self-esteem.

Healthy Communities: Mapping Recreational Resources includes many partnering organizations including (list local partners first including your local public health agency), Missouri Department of Health and Senior Services, Missouri 4-H, University Extension, MU Department of Geosciences and many others.

Youth and adults are welcome to participate. For more information contact (Name, phone, website, etc).

####
Share Your Message

- Map Distribution
- Press Release
- Presentation
Reflections
Reflections

• Have you learned anything new about your community?
• What did or did not work?
• What would you have done differently?
• What was the most difficult part of this project?
• What did you learn from this?
Reflections – Now What?

• Conduct surveys of your peers or other members of the community to determine the resources they use most. Find out which areas are not being utilized and why.
• Work with your local public health agency staff to develop a promotional plan to get youth more active.
• Create maps of safe walking routes to recreational resources.
Reflections – Now What?

• Collect detailed information of the sites you have collected. GPS the locations of the assets in each area.
• Create a website with the information you collected to educate your community about its recreational assets.
• Expand your project to include other youth resources, like libraries, movie theaters, community centers, etc.
• Add a nutrition element to your project by mapping the locations of healthy eating establishments, or hazards such as where junk food, liquor, or cigarettes are sold.
Celebrate!
Mapping Recreational Resources: Field Exercise
Mapping Recreational Resources: Field Exercise

• Partner up into teams of two or three

• Each team will conduct individual research on four recreation sites on campus.

• Teams will be divided into two groups. Each group will go to the sites to collect location and observational information.

• Teams will enter data and create maps

• Teams need to think about who their audience is and what they would like to do with the findings.
Mapping Recreational Resources: Questions?