112) What race or ethnic background do you consider yourself?
  Hispanic
  White
  African-American
  Native American
  Asian American
  Don't know
  Other
  Refused

113) Finally, may I ask your age?

  —— ——

114) Observe and record gender.
  Male
  Female
  Uncertain

# APPENDIX B2

*Indiana Registered Boaters Survey on Boating in Indiana*

1

# Indiana Registered Boaters Participation in, Attitudes Toward, and Opinions on Boating in Indiana

**Please note:** This document is a survey outline rather than a full-fledged survey instrument. The survey instrument will be computer-coded, and although the questions are simply presented in a list here, the survey will automatically branch and skip certain questions in the full survey instrument. This outline is designed to present topics, content, and potential questions in a concise manner for your review.

## SURVEY OUTLINE

## INTRODUCTION

Hello, my name is _____, may I speak with _____?  I am calling on behalf of the Indiana Department of Natural Resources to gather some information about YOUR boating experiences in Indiana.  Our records indicate that you have a registered boat in the state of Indiana.  Is this correct, and would this be a good time to answer a few questions?  The survey takes about 8 – 10 minutes.

Continue only if they have a registered boat in Indiana.

## GENERAL BOATING PARTICIPATION

1)   During the last 12 months, did you operate any registered boat on any body of freshwater in Indiana?

   Yes
   No

2)   (If Q1 is No)  I am sorry, but right now we are only interviewing those individuals that operated a registered boat in the last 12 months in Indiana.  Thank you very much for your time and consideration.

   (If Q1 is Yes)  Which of the following types of boats do you have registered in Indiana? (Read list; Check all that apply)

   Motorboat (less than 16 feet)
   Motorboat (16-26 feet)
   Motorboat (26-40 feet)
   Motorboat (40-65 feet)
   Motorboat (greater than 65 feet)
   Sailboat (less than 16 feet)
   Sailboat (16-40 feet)
   Sailboat (greater than 40 feet)
   Flat-bottomed fishing boat
   Personal watercraft (Industry names include Jet ski, Wave Runner, Sea-Doo and/or Wet Bike)
   Canoe
   Kayak
   Rowboat with troller
   Pontoon boat
   Jon boat
   Powered catamaran
   Other

3) During your LAST BOATING TRIP in Indiana, what type of boat were you using?
(Read list; Check all that apply)
Motorboat (less than 16 feet)
Motorboat (16-26 feet)
Motorboat (26-40 feet)
Motorboat (40-65 feet)
Motorboat (greater than 65 feet)
Sailboat (less than 16 feet)
Sailboat (16-40 feet)
Sailboat (greater than 40 feet)
Flat-bottomed fishing boat
Personal watercraft (Industry names include Jet ski, Wave Runner, Sea-Doo and/or Wet Bike)
Canoe
Kayak
Rowboat with troller
Pontoon boat
Jon boat
Powered catamaran
Other

This survey deals with questions concerning your recreational boating experiences in the boat(s) you just mentioned. Please refer only to your experiences while boating IN Indiana. (If you registered more than one boat, please refer to the boat you use most often.)

4) Overall, are you satisfied or dissatisfied with your Indiana boating experiences in the past 12 months?
Very satisfied
Somewhat satisfied
Neither satisfied nor dissatisfied
Somewhat dissatisfied
Very dissatisfied

5) Overall, are you satisfied or dissatisfied with the Indiana DNR in managing Indiana's boating waters?
Very satisfied
Somewhat satisfied
Neither satisfied nor dissatisfied
Somewhat dissatisfied
Very dissatisfied

6) How many years, out of the past five years, did you go boating in Indiana?
   1 year
   2 years
   3 years
   4 years
   5 years

7) How many trips/outings total during the past 12 months did you take boating in Indiana? (Multiple outings in a single day count as one outing)
   _ _ _ (Range between 1 – 365)

8) How many days total during the past 12 months did you go boating in Indiana?
   _ _ _ (Range between 1 – 365)

9) How many hours do you usually spend on the water in a single day when you go boating?
   _ _ (Range between 1 – 24)

10) At what time of the day do you generally start your boating outing? (READ LIST)
   Morning
   Mid-day/noon
   Afternoon
   Evening

11) How long, in terms of hours, do you usually travel from your home to get to the location where you put in for a DAY trip of boating in Indiana?
   Don't take day boating trips
   Less than 1 hour
   1 – 2 hours
   2 – 3 hours
   3 – 4 hours
   4 – 5 hours
   6 – 7 hours
   Don't know

12) How long, in terms of hours, do you usually travel from your home to get to the location where you put in for an OVERNIGHT trip for the primary purpose of boating in Indiana?
   Don't take overnight boating trips
   Less than 1 hour
   1 – 2 hours
   2 – 3 hours
   3 – 4 hours
   4 – 5 hours
   6 – 7 hours
   Don't know

13) On which bodies of water did you boat in Indiana in the past 12 months?
   a. _____
   b. _____
   c. _____

14) You said your total number of boating trips was [Q7]. How many of those trips did you take to [Q13a]?

   __ __ __

15) How many of those trips did you take to [Q13b]?

   __ __ __

16) How many of those trips did you take to [Q13c]?

   __ __ __

17) What was the last body of water on which you boated in Indiana?

   _____

18) What are the reasons you do not go boating more often? (Open-ended; Check all that apply)
   Time: Work obligations
   Time: Family obligations
   Cost/Too expensive
   Do not own a boat/Depend on others that own boat to go
   Boat/Watercraft in need of repair
   Too far to get to water
   Don't know where to go
   Weather
   Other interests/hobbies
   Other

19) What is the typical number of persons who generally go boating with you during a single outing? (NOT INCLUDING YOURSELF; IF YOU GO ALONE SAY 0)

(If Q19 is 0, skip to Q21)

20) With whom do you usually go boating?  (Open-ended; Check all that apply)
  - Spouse
  - Children
  - Parents
  - Extended family
  - Friends
  - Co-workers
  - Other

21) During a typical boating trip, are there any other people that operate the boat you use? If yes: Who are they? (Open-ended; Check all that apply)
  - Spouse
  - Children
  - Parents
  - Extended family
  - Friends
  - Co-workers
  - Other

22) Over the past 12 months, would you say your boating activity in Indiana has increased, decreased, or remained about the same?
  - Increased
  - Decreased
  - Remained about the same
  - Don't know

23) What are the important reasons why you boat in Indiana?  (Open-ended, Check all that apply)
  - For relaxation
  - To be with friends and family
  - To be close to nature
  - To fish
  - To catch large fish
  - To go swimming
  - For the sport
  - To sightsee
  - As part of a vacation
  - It's a hobby
  - Entertain business associates
  - Other

24) In the past 12 months, do you think the quality of your boating experiences in Indiana has declined, remained about the same, improved, or do you not know?
  Declined
  Remained about the same
  Improved
  Don't know

## BOATING REGULATIONS

25) Are you satisfied or dissatisfied with the current boating regulations in Indiana?
  Very satisfied
  Somewhat satisfied
  Neither satisfied nor dissatisfied
  Somewhat dissatisfied
  Very dissatisfied
  Don't know

26) Do you agree or disagree that Indian's boating regulations are clear and easy to understand?
  Strongly agree
  Moderately agree
  Neither agree nor disagree
  Moderately disagree
  Strongly disagree
  Don't know

## BOAT REGISTRATION

27) Overall, would you describe the process of registering and renewing your watercraft in Indiana as excellent, good, fair, or poor?
  Excellent
  Good
  Fair
  Poor
  Don't know

28) What aspects, if any, of the watercraft registration process would you like to see improved? (Open-ended, Check all that apply)
  None-process is fine
  More convenient/more places to register
  Timeliness
  Customer Service
  Application form simplified
  Easier renewals
  Cost – too expensive
  Other
  Don't know

## SAFETY ISSUES

29) Overall, do you think that boating on Indiana's waters is safe or dangerous?
Very safe
Somewhat safe
Neither safe nor dangerous
Somewhat dangerous
Very dangerous
Don't know

30) What would you say is the main reason that people have boating accidents? (Open-ended, Check all that apply)
Going too fast/speeding
Reckless/careless operation
Alcohol
Drugs
Don't know the rules of the waterways
Fatigue
Distractions
Not familiar with boating equipment
Immature/operators too young
Overcrowding, not enough space in waterway
Didn't take a boater safety class
Other
Don't know

31) When you use your motorboat on an Indiana public waterway, how frequently do you observe other boaters operating their motorboats, EXCLUDING PERSONAL WATERCRAFT (industry names include Jet Ski, Wave Runner, Sea-Doo, and Wet Bike), in an unsafe manner? Do you observe unsafe behaviors always, sometimes, rarely, or never?
Always
Sometimes
Rarely
Never
Don't know

32) When you use your motorboat on an Indiana public waterway, how frequently do you observe other boaters operating a PERSONAL WATERCRAFT (industry names include Jet Ski, Wave Runner, Sea-Doo, and Wet Bike) in an unsafe manner?
Always
Sometimes
Rarely
Never
Don't know

33) Overall, as a boater, what types of safety issues concern you the most? (Open-ended, Check all that apply)
    Reckless/careless operators
    Alcohol
    Drug use
    Personal watercraft (jet skiers)
    Inadequate operator training
    Speed at which watercraft are operated
    Overcrowded waterways
    Lack of law enforcement
    Poor buoys/signs or makers
    Lack of public access
    Water quality
    Pollution
    Not taking a boater safety class
    Nothing
    Don't know
    Other

34) How would you rate the DNR's efforts to provide education and safety training to Indiana's boaters? Would you say the DNR does an excellent, good, fair, or poor job?
    Excellent
    Good
    Fair
    Poor
    Don't know

35) Have you taken a DNR-recognized boating safety class, that is, a class that was at least 8 hours and was provided by the Indiana DNR, U.S. Coast Guard Auxiliary, U.S. Power Squadron, a school, or a boating club in the past 12 months?
    Yes
    No
    Don't know

36) What is your main reason for NOT taking a recognized boating safety class? (Open-ended, Check all that apply)
    Did not know boating safety classes were available
    Did not know who to contact/ how to register
    Do not have time
    Do not need a boating safety class
    Am an experienced boater/ have been boating for many years
    Took a class, but not a DNR-recognized class
    Took a class, but more than 12 months ago
    Don't know
    Other

37) Currently in Indiana, persons 15 years old or older, who do not possess a valid drivers license are required to take a boating safety class to operate a motorboat. Would you support or oppose efforts to develop a mandatory statewide boater safety course that all motor boaters, other than personal watercraft operators, must take before operating a boat in Indiana?
>    Strongly support
>    Moderately support
>    Neither support nor oppose
>    Moderately oppose
>    Strongly oppose
>    Don't know

38) Would you support or oppose efforts to develop a mandatory statewide boater safety course that all personal watercraft operators must take before operating a personal watercraft in Indiana?
>    Strongly support
>    Moderately support
>    Neither support nor oppose
>    Moderately oppose
>    Strongly oppose
>    Don't know

39) Would you support or oppose a change in legislation that would require boat occupants aged 12 and younger to use a personal flotation device (PFD) at all times?
>    Strongly support
>    Moderately support
>    Neither support nor oppose
>    Moderately oppose
>    Strongly oppose
>    Don't know

40) And on a typical boating trip, would you say you and your passengers usually use a PFD: (Read list; Check all that apply)
>    At all times
>    Only when the boat is moving
>    Only for certain activities
>    Only when conditions are bad
>    Only for certain activities in bad conditions
>    Under other circumstances
>    Or do you and your passengers never wear a PFD?

41) In your opinion, what actions could the Indiana DNR take to make Indiana's public waters safer for all boaters? (Open-ended; Check all that apply)
     Nothing
     Provide VOLUNTARY boating safety courses
     Provide MANDATORY boating safety courses
     Maintain a more visible presence on Indiana's waterways
     Hire more law enforcement/conservation officers
     Increase fines for operating watercraft in an unsafe manner
     Increase fines for the violation of boating regulations
     Increase minimum age for operating a watercraft
     Increase checks for boating registrations
     Implement regulations to address specific issues
     Other
     Don't know

## DNR LAW ENFORCEMENT ISSUES

Now I would like to ask you a few questions about law enforcement issues related to boating in Indiana.

42) How often have you seen the DNR's conservation officers patrolling and providing services while you were boating? Do you see conservation officers very often, somewhat often, rarely, or never?
     Very often
     Somewhat often
     Rarely
     Never
     Don't know

43) Do you agree or disagree that the Indiana DNR maintains a sufficient law enforcement presence on public waterways?
     Strongly agree
     Moderately agree
     Neither agree nor disagree
     Moderately disagree
     Strongly disagree
     Don't know

44) Within the past 12 months, have you had any personal contact with a DNR law enforcement/conservation officer while boating?
     Yes
     No (If No, skip to Q43)
     Don't know (If Don't know, skip to Q43)

45) What was the nature of this contact? (Open-ended; Check all that apply)
   You sought information about boating regulations
   You sought directions or navigational information
   You sought information on fishing
   You had a complaint about another boater (not personal watercraft)
   You had a complaint about a personal watercraft operator
   You were checked for proper safety equipment
   You were checked possession of fishing license
   You were cited/warned about reckless boat operation
   You were cited/warned about operating a boat too fast
   You were cited/warned about operating a boat under the influence of alcohol
   You were cited/warned about fishing violation
   Don't remember
   Other

46) Would you like to see more, the same amount, or less DNR conservation officers while boating in Indiana?
   Much more
   Somewhat more
   The same
   Somewhat less
   Much less
   Don't know

47) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort on checking for boat registrations?
   Much more effort
   Slightly more effort
   The same amount of effort
   Slightly less effort
   Much less effort
   Don't know

48) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort on checking for required safety equipment?
   Much more effort
   Slightly more effort
   The same amount of effort
   Slightly less effort
   Much less effort
   Don't know

49) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort on controlling boaters under the influence of alcohol or drugs?
 Much more effort
 Slightly more effort
 The same amount of effort
 Slightly less effort
 Much less effort
 Don't know

50) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort on controlling reckless operation?
 Much more effort
 Slightly more effort
 The same amount of effort
 Slightly less effort
 Much less effort
 Don't know

51) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort on investigating stolen watercraft?
 Much more effort
 Slightly more effort
 The same amount of effort
 Slightly less effort
 Much less effort
 Don't know

52) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort enforcing personal watercraft laws and regulations?
 Much more effort
 Slightly more effort
 The same amount of effort
 Slightly less effort
 Much less effort
 Don't know

## PROGRAM PRIORITIES

Next, I'm going to list several DNR programs that relate to boating and I would like to know if you think more, the same, or less time and effort should be devoted to each activity.

53) Do you think the DNR should spend more, the same, or less effort on boating safety education?
    Much more effort
    Slightly more effort
    The same amount of effort
    Slightly less effort
    Much less effort
    Don't know

54) Do you think the DNR should spend more, the same, or less effort on informing and educating boaters on issues other than boating safety education?
    Much more effort
    Slightly more effort
    The same amount of effort
    Slightly less effort
    Much less effort
    Don't know

55) Do you think the DNR should spend more, the same, or less effort on increasing boating access on lakes and reservoirs?
    Much more effort
    Slightly more effort
    The same amount of effort
    Slightly less effort
    Much less effort
    Don't know

56) Do you think the DNR should spend more, the same, or less effort on increasing boating access on rivers and streams?
    Much more effort
    Slightly more effort
    The same amount of effort
    Slightly less effort
    Much less effort
    Don't know

57) Do you think the DNR should spend more, the same, or less effort on building more boat ramps?
>   Much more effort
>   Slightly more effort
>   The same amount of effort
>   Slightly less effort
>   Much less effort
>   Don't know

58) Do you think the DNR should spend more, the same, or less effort on rebuilding and/or maintaining existing boat ramps?
>   Much more effort
>   Slightly more effort
>   The same amount of effort
>   Slightly less effort
>   Much less effort
>   Don't know

59) Are there any other areas that you would like to see the DNR spend more effort on as a program priority? (If nothing, leave blank)

> _____
> _____
> _____

## FACILITIES ISSUES

Now I would like to ask you a few questions related to the facilities the Indiana DNR provides for boating.

60) At the body of water you most often boat, are the boating facilities you use while boating, such as launch ramps, public or private facilities?
>   Public
>   Private
>   Don't know

61) Overall, would you rate the boater ACCESS FACILITIES at the area in Indiana where you boat most often as excellent, good, fair or poor?
>   Excellent
>   Good
>   Fair
>   Poor
>   Don't know
>   Not applicable

62) Would you rate the LAUNCH RAMPS at the area in Indiana where you boat most often as excellent, good, fair or poor or are there no launch ramps at all?
   Excellent
   Good
   Fair
   Poor
   Don't know
   Not applicable

63) How would you rate the PARKING at this area?
   Excellent
   Good
   Fair
   Poor
   Don't know
   Not applicable

64) How would you rate the RESTROOMS at this area?
   Excellent
   Good
   Fair
   Poor
   Don't know
   Not applicable

65) How would you rate the DOCKS at this area?
   Excellent
   Good
   Fair
   Poor
   Don't know
   Not applicable

66) How would you rate the ROADS to this area?
   Excellent
   Good
   Fair
   Poor
   Don't know
   Not applicable

67) How would you rate the SANITARY PUMP-OUTS at this area?
    Excellent
    Good
    Fair
    Poor
    Don't know
    Not applicable

68) How would you rate the FISH CLEANING STATIONS at this area?
    Excellent
    Good
    Fair
    Poor
    Don't know
    Not applicable

69) Are there any boater access facilities in this area that you would like to see improved? If yes, what aspects of the facilities need to be improved? (Open-ended; Check all that apply)
    None
    More free public access
    Launch ramps
    Restrooms
    Parking areas
    Mooring or docking facilities
    Fish cleaning stations
    Sanitary pump-outs
    Handicap accessible boating facilities
    Camping areas
    Picnic areas
    Swimming areas
    Lighting
    Roads to boating areas
    Other

70) Are there any boater access facilities in this area that you would like to see built?  If yes, what needs to be built? (Open-ended; Check all that apply)
    None
    More free public access
    Launch ramps
    Restrooms
    Parking areas
    Mooring or docking facilities
    Fish cleaning stations
    Sanitary pump-outs
    Handicap accessible boating facilities
    Camping areas
    Picnic areas
    Swimming areas
    Lighting
    Roads to boating areas
    Other

## KNOWLEDGE OF AND OPINIONS ABOUT THE INDIANA DEPARTMENT OF NATURAL RESOURCES

71) In Indiana, the DNR is the agency responsible for protecting, enhancing, and preserving the natural, cultural, and recreational resources in Indiana.  Before this survey, would you say you knew a great deal, a moderate amount, a little, or nothing about the activities of the Indiana DNR?
    Great deal
    Moderate amount
    A little
    Nothing
    Don't know

72) How would you rate the DNR's efforts to provide boating access opportunities?  Would you say they do an excellent, good, fair, or poor job?
    Excellent
    Good
    Fair
    Poor
    Don't know

73) In general, how would you rate the DNR's performance with incorporating boaters' wants and needs into the management of the state's recreational boating resources? Would you say they do an excellent, good, fair, or poor job?
> Excellent
> Good
> Fair
> Poor
> Don't know

## BOATING EXPENDITURES

Now I'd like to talk about your boating expenditures in Indiana. In general, there are three primary areas where you might spend money for a boating trip: in and around your place of residence, en route to the body of water, and at the body of water. For this survey, we will only focus on the money you spent AT THE BODY OF WATER. I'm going to read a few ways you may have spent money while boating, and I'd like you to tell me how much you spent in Indiana during YOUR LAST BOATING TRIP ONLY, AT [Q17].

74) About how much money did you spend on lodging, travel, and food and drink, including gasoline for your vehicle, groceries and/or liquor, and money spent at eating and drinking establishments in Indiana during your most recent boating trip, AT THE BODY OF WATER?
> $ __ __ __

75) About how much money did you spend on boat expenditures, such as fuel for your boat and major and minor boating equipment, in Indiana during your most recent boating trip, AT THE BODY OF WATER?
> $ __ __ __

76) About how much money did you spend on access and rental fees, such as launch fees, boat rental, and rental equipment, in Indiana during your most recent boating trip, AT THE BODY OF WATER?
> $ __ __ __

## BOATING INFORMATION

77) Would you be interested in more information on boating in Indiana?
> Yes
> No (Skip to demographic questions)
> Don't know (Skip to demographic questions)

78) What types of information on boating would you be interested in receiving? We are not sending out information at this time; we are simply gauging interest. (Read list; Check all that apply)

> Nautical maps and charts
> Access information on boat ramp locations
> Fishing information
> Wildlife information
> Basic seamanship
> Boating safety courses
> Boating safety in general
> Boating rules and regulations
> Indiana DNR boating programs
> Any others

79) What would be the best ways to provide you with information on boating? (Open-ended; Check all that apply)

> I don't want any information
> Direct mail
> Internet/WWW
> Newspapers
> Magazines
> TV
> Radio
> Indiana DNR district offices
> Regulations handbook
> License agent/sporting goods store/marinas
> Law enforcement/conservation officers
> Other
> Don't know

## DEMOGRAPHICS

Finally, I would like to ask you some background questions to help us analyze the results.

80) How important is outdoor recreation to you personally? Would you say it is very important, somewhat important, or not at all important?

> Very important
> Somewhat important
> Not at all important
> Don't know

81) How important are boating and water-related activities to you personally? Would you say they are very important, somewhat important, or not at all important?
    Very important
    Somewhat important
    Not at all important
    Don't know

82) Do you consider your place of residence to be a large city, a suburban area, a small city/town, a rural area not on a farm/ranch, or a rural area on a farm/ranch?
    Large city or urban area
    Suburban area
    Small city or town
    Rural area not on a farm/ranch
    Rural area on a farm/ranch
    Refused

83) How long have you lived in Indiana?
    —— ——

84) Were you born in Indiana?
    Yes
    No

85) What is your county of residence?
    ——————

86) What is your marital status?
    Married
    Single
    Refused

87) What are the total number of children under age 18 living in your household?
    —— ——

88) Which of these categories best describes your profession? (Read list)
    Agriculture/farming
    Construction/development
    Clerical/Office
    Computer/Technical
    Finance/Insurance
    Health care
    Industry
    Teaching/education
    Transportation
    Retired
    Other

89) What is the highest grade level you have completed in school?
   Less than a high school degree
   High school diploma
   Some college/trade school
   College graduate
   Graduate school degree

90) Which of these categories best describes your total household income before taxes last year?
   Under $15,000
   $15,000 - $29,999
   $30,000 - $44,999
   $45,000 - $59,999
   $60,000 - $74,999
   $75,000 - $89,999
   $90,000 or over
   Don't know
   Refused

91) Are you of Hispanic or Latino ethnicity?
   Yes
   No
   Don't know
   Refused

92) What race or ethnic background do you consider yourself?
   Hispanic
   White
   African-American
   Native American
   Asian American
   Don't know
   Other
   Refused

93) Finally, may I ask your age?

   ___ ___

94) Observe and record gender.
   Male
   Female
   Uncertain

# APPENDIX C

## *2004 Trails Designate Survey – Survey America*

### What trail activities do you participate in the majority of the time?
(Multiple responses allowed)

Walking/running
In-line skating
Mountain bike riding
Off-road motorcycle riding
4-wheel drive off road vehicle driving

Hiking/backpacking
Cross country skiing
Canoeing/kayaking

Touring bicycling
Snowmobiling
Horseback riding
All-terrain vehicle riding
Other

### What are the primary reasons why you don't use recreational trails more often?
(Only asked of those who use trails once a week or less)
(Multiple responses allowed)

Not enough time
Too old
Trails need to be in better condition
Need stricter rules on who can use trails
Need better historical & environmental info
Need more facilities (restrooms, shelters)
Need more parking at trailheads
Need more professional guides available
Need better access for users with disability
Lack of safety on trails
I don't know where trails are located
Other

Trails too far away
Physically disabled

Poor health

### The following questions allowed responses of:

Not interested at all
Somewhat interested

Not very interested
Very interested

Neutral

### Please select your level of interest in participating in the following activity:

Day hike in the wilderness
Walk on a public trail in your city
Bicycling outside your city/town
Snowmobiling
Running or jogging
Off-road motorcycling
Off road 4-wheel drive riding

Overnight backpack hiking
Bicycling within your city/town
Horseback riding
Cross-country skiing
Canoeing
All-terrain vehicle riding
In-line skating

### The following questions allowed responses of:

Not important at all
Somewhat important

Not very important
Very important

Neutral

### How important/unimportant do you feel the following trail issues are?

Building more trails
Linking together existing trails
Designating roads as bike routes
Developing trails close to home
Publishing trail map guides
Designating a funding source

Building long distance trails
Paving trail with asphalt
Developing bike commuting trails
Developing trails for motorized use
Acquiring more land for trails
Improve trails for the disabled

# APPENDIX D

**APPENDIX D**

## 2004 Recreation Issues Survey – Ball State University

**We would like to ask you about the issues surrounding local provision of parks and recreation in your community. Thank you for your responses.**

1. Which of these do you have in your community?  Please check all that apply:
☐ Park and Recreation Department

☐ Park Board (or Park and Recreation Board)

2. Which of these best describes you, the respondent?  Please fill in one box:
☐ Employee of Municipal Park and Recreation Department
☐ Employee of Township Park and Recreation Department
☐ Employee of County Park and Recreation Department
☐ Member of Park Board
☐ Other (please describe):
_____

3. Which level of government is the park department with which you are associated? (Check one)
☐ County                            ☐ Municipal (City or town)
☐ Township                          ☐ Other (please explain)
_____

4. What is the approximate size of the population served by the park department with which you work?

☐ 4,999 or less      ☐ 5,000-9,999      ☐ 10,000-49,999    ☐ 50,000-149,999

☐ 150,000 or more

5. Overall, what are the biggest issues your park department faces in planning for the future?
a._____
b._____
c._____

6. Are there any groups of people in your community that are a priority or main focus for the park and recreation department (e.g., age groups, persons with disabilities, socioeconomic groups, racial or ethnic groups, etc.)?

a._____
b._____
c._____

*Park Department Activities*

7. How does the park department promote its programs/services?  Check all that apply:

☐ Pamphlets or Flyers      ☐ Newspapers          ☐ Newsletter
☐ Direct Mail              ☐ Radio               ☐ Television
☐ Web Site                 ☐ Park and Recreation Logo
☐ Informational Signs or Displays
☐ None of the above        ☐ Other (please describe)

8. Does the park department coordinate with any of these local groups to provide recreation?

| | Yes, frequently | Occasionally | No, not at all |
|---|---|---|---|
| Local Schools | ☐ | ☐ | ☐ |
| Civic Organizations | ☐ | ☐ | ☐ |
| Volunteer Groups | ☐ | ☐ | ☐ |
| Clubs and Organizations, e.g., Little League | ☐ | ☐ | ☐ |
| Commercial Recreation Providers | ☐ | ☐ | ☐ |
| Private Industry | ☐ | ☐ | ☐ |
| Non-profit Recreation Providers, e.g., YMCA | ☐ | ☐ | ☐ |
| Conventions and Visitors Bureau | ☐ | ☐ | ☐ |
| Other Units of Government | ☐ | ☐ | ☐ |
| Neighborhood Associations | ☐ | ☐ | ☐ |
| Special Interest Groups | ☐ | ☐ | ☐ |
| Health Care Providers | ☐ | ☐ | ☐ |

9. In the next 5 years, does the park department expect to **add any new capital projects** from the following list to your park and recreation areas?  Please check all that apply:

| List A: Land Development | List B: Sports and Activities | List C: Buildings/Infrastructure |
|---|---|---|
| ☐ New land acquisition<br>☐ Single-use trail<br>☐ Multi-use trail<br>☐ Rails-to-trails project<br>☐ Nature/interpretive trail<br>☐ Water access, e.g. boat ramp<br>☐ Wetland or Pond<br>☐ Garden or Picnic area<br>☐ Drainage/irrigation/ flood control project | ☐ Basketball/volleyball court<br>☐ Baseball/softball diamond<br>☐ Soccer field/athletic field<br>☐ Tennis court<br>☐ Playground<br>☐ Skatepark<br>☐ Dog Park<br>☐ Archery or shooting range<br>☐ Community Center<br>☐ Senior Center | ☐ Parking lot<br>☐ Indoor recreational facility<br>☐ Lighting system<br>☐ Maintenance building<br>☐ Shelter house<br>☐ Administrative building<br>  ☐ Other buildings (e.g., restrooms, concession stand, nature center)<br>☐ Swimming Pool<br>☐ Aquatic Facility<br>☐ Campgrounds |

10. In the next 5 years, do you expect to **renovate/refurbish** any of the following? Please check all that apply:

| List A: Land Development | List B: Sports and Activities | List C: Buildings/Infrastructure |
|---|---|---|
| ☐ Single-use trail<br>☐ Multi-use trail<br>☐ Rails-to-trails project<br>☐ Nature/interpretive trail<br>☐ Water access, e.g. boat ramp<br>☐ Wetland or Pond<br>☐ Garden or Picnic area<br>☐ Drainage/irrigation/ flood control project | ☐ Basketball/volleyball court<br>☐ Baseball/softball diamond<br>☐ Soccer field/athletic field<br>☐ Tennis court<br>☐ Playground<br>☐ Skatepark<br>☐ Dog Park<br>☐ Archery or shooting range<br>☐ Community Center<br>☐ Senior Center | ☐ Parking lot<br>☐ Indoor recreational facility<br>☐ Lighting system<br>☐ Maintenance building<br>☐ Shelter house<br>☐ Administrative building<br>  ☐ Other buildings (e.g., restrooms, concession stand, nature center)<br>☐ Swimming Pool<br>☐ Aquatic Facility<br>☐ Campgrounds |

11. Please select the <u>top three</u> issues of importance to your park and recreation agency: Please rank 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>:

____ Staffing

____ Staff training and development

____ Competition from other recreation providers

____ Level of public participation

____ Land for recreation

____ Amount of facilities available

____ Perceived value of parks and recreation

____ Number of programs offered

____ Communication issues

____ ADA Compliance

____ Safety

12. Which projects/programs are the <u>first</u> to be eliminated when budget cuts are inevitable? (Please check <u>one</u>):

☐ Mow less grass           ☐ Hire fewer people/let people go

☐ Stop offering programs     ☐ Cut back on or cancel capital projects

☐ Maintain facilities less      ☐ Close recreational facilities

☐ Sell park properties        ☐ Other: _____

13. What alternative funding strategies is your park department pursuing for the future? (Check all that apply):

☐ Friends of parks group     ☐ Park foundation

☐ Donations               ☐ Fees

☐ Public-private partnerships  ☐ Grants

☐ Sponsorships            ☐ Taxes

☐ Fundraising             ☐ Other _____

14. What is the 2003 legally appropriated budget for your park and recreation department? _____

15. How many years have you worked in/with the parks and recreation profession?

_____

16. What is your gender:   ☐ Male    ☐ Female

17. What is your zip code? _____

18. Please respond to the following by circling the number that most applies to your park system:

| | Strongly Agree | Agree | Neither agree nor disagree | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| My park board members see outdoor recreation as essential to the economic health of my community. | 1 | 2 | 3 | 4 | 5 |
| Our town council members (or county commissioners) see outdoor recreation as essential to the economic health of my community. | 1 | 2 | 3 | 4 | 5 |
| Recreation is perceived as valuable to people in my community. | 1 | 2 | 3 | 4 | 5 |
| People in my community support spending for parks and recreation. | 1 | 2 | 3 | 4 | 5 |
| My park board members see outdoor recreation as contributing to the overall health of the citizens in this community. | 1 | 2 | 3 | 4 | 5 |
| Our town council members (or county commissioners) see outdoor recreation as contributing to the overall health of the citizens in this community. | 1 | 2 | 3 | 4 | 5 |
| Bringing facilities into ADA compliance is a concern for my agency. | 1 | 2 | 3 | 4 | 5 |
| My agency regularly markets/promotes facilities and programs to the community. | 1 | 2 | 3 | 4 | 5 |
| Coordinating volunteers for parks and recreation in our community is a challenge. | 1 | 2 | 3 | 4 | 5 |
| My park department does very well responding to the recreational needs of my community. | 1 | 2 | 3 | 4 | 5 |
| My park and recreation system helps to attract people into my community. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| Demand for outdoor recreation is growing faster than we can develop recreational opportunities. | 1 | 2 | 3 | 4 | 5 |
| My park and recreation system is helping to keep residents here. | 1 | 2 | 3 | 4 | 5 |
| The park systems throughout the state are helping to keep residents in Indiana. | 1 | 2 | 3 | 4 | 5 |

19. Do you have any other comments or feedback?

_____

_____


**Thank you for your time.**

**Please return to Amy Sheaffer, NREM Dept., WQ 114, Ball State University, Muncie, IN 47306.**

## APPENDIX E
# Trail Issues Survey



Dear Respondent,

The Department of Natural Resources' Division of Outdoor Recreation is conducting a Trails Issues Survey for inclusion in the 2005-2009 SCORP. Because of your involvement in planning trail management and/or administration, the study committee has selected you as a potential respondent. The results of this study will help determine the issues facing Indiana in terms of trail usage, service area demographics, specific trail attitudes, design/planning and development, legislative concerns, funding sources for development/maintenance, trail safety and communication.

Please take a few minutes to complete the survey and return it to the vendors name by date to be set by committee in the self-addressed stamped envelope. Some questions request more than one response, **but please only give one response if stated in the question**. Note the special instructions for question # 5 if a "Not Applicable" response is given. We also encourage everyone to give additional comments related to trail issues.

Thank you for your valuable input,

Trails Issues Study Committee

1. In what county/counties does your organization operate?
_____ or ☐ Statewide

2. What is the population of your service area?
☐ 4,999 or less ☐ 5,000 to 9,999 ☐ 10,000 to 49,999
☐ 50,000 to 149,000 ☐ 150,000 or more ☐ Not applicable

3. What best describes your organization?
☐ City ☐ County ☐ Township ☐ State ☐ Not-for-profit
☐ Federal ☐ Other_____

4. What approximate percentage (%) of your total annual operating budget is used for trails?
☐ 0 to 5 ☐ 6 to 10 ☐ 11 to 15 ☐ 16 to 20 ☐ 21 to 25
☐ 26 to 30 ☐ 31 to 35 ☐ 36 to 40 ☐ 41 to 45 ☐ 46 to 50
☐ Greater than 50 ☐ Not applicable

5. Please indicate how many miles are in your trail system? (excluding sidewalks)
_____ miles          ☐ Not applicable **(then please GO TO QUESTION #7)**

6. a. What is the type of use that your system provides? (Check all that apply)

☐ Motorcycling              ☐ Mountain biking          ☐ Hiking (natural surface)
☐ Cross-country skiing      ☐ Canoeing/kayaking        ☐ Off-road motorized (vehicle riding)
☐ Skating                   ☐ Horseback riding         ☐ Bicycling (paved hardened surface)
☐ Snowmobiling              ☐ Walking/running          ☐ Other_____

b. What is your perceived rate of trail use?     ☐ Low     ☐ Medium     ☐ High     ☐ Do not know

c. What is the estimated rate of use per month? (a numerical value) _____

7. Indicate the importance your organization places upon providing the following trail use opportunities: (Check all that apply)

| Type of trail operation | Will Not Consider | Not Important | Somewhat Important | Very Important | No Opinion |
|---|:---:|:---:|:---:|:---:|:---:|
| | | | Level of Importance | | |
| Cross-country skiing | ☐ | ☐ | ☐ | ☐ | ☐ |
| Bicycling (paved hardened surface) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Mountain biking | ☐ | ☐ | ☐ | ☐ | ☐ |
| Motorcycling | ☐ | ☐ | ☐ | ☐ | ☐ |
| Off-road motorized (vehicle riding) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Canoeing/kayaking | ☐ | ☐ | ☐ | ☐ | ☐ |
| Horseback riding | ☐ | ☐ | ☐ | ☐ | ☐ |
| Hiking | ☐ | ☐ | ☐ | ☐ | ☐ |
| Walking/running | ☐ | ☐ | ☐ | ☐ | ☐ |
| Skating | ☐ | ☐ | ☐ | ☐ | ☐ |
| Snowmobiling | ☐ | ☐ | ☐ | ☐ | ☐ |

8. What type of trail surface do you prefer to walk on?   (Check the SINGLE response that MOST applies)

☐ Native soil        ☐ Wood chips        ☐ Asphalt
☐ Sand               ☐ Crushed Stone     ☐ Concrete

| | Not Important | Somewhat Important | Very Important | Do Not Consider | Not Applicable |
|---|:---:|:---:|:---:|:---:|:---:|
| 9. What is your organization's view towards land acquisition for trail development? | ☐ | ☐ | ☐ | ☐ | ☐ |

| | Strongly Disagree | Disagree | No Opinion | Agree | Strongly Agree |
|---|:---:|:---:|:---:|:---:|:---:|
| 10. Do you believe that trails should be an important part of your community's infrastructure? | ☐ | ☐ | ☐ | ☐ | ☐ |

| | Strongly Disagree | Disagree | No Opinion | Agree | Strongly Agree |
|---|---|---|---|---|---|
| 11. Developing trails that serve high-density populations should be a higher priority than developing trails that serve less dense populations. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 12. Multi-use natural surface trail designs could include off-road motorized vehicle use. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 13. Roadway improvements that incorporate bicycle/pedestrian facilities (e.g., sidewalks, bike lanes, trails, etc.) are important for trail expansion and providing modes of alternative transportation. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 14. There is adequate information available describing how to determine optimal construction materials and essential trail features. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 15. Standardized signs and symbols should be used throughout the State to designate trail activities. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 16. Trail developments and renovations must comply with the latest ADA accessibility standards. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 17. Interpretive signage along trails is important. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 18. There should be State tax incentives to individual citizens and public utilities for their participation in land acquisition for trails. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 19. There should be State legislation that supports the acquisition of former railroad corridors for the development of trails. | ☐ | ☐ | ☐ | ☐ | ☐ |

20. Support for a trail project is often demonstrated by including the project in various local plans. Please indicate if any of the following planning documents include reference to your trail project(s):

☐ Trail/greenway plan          ☐ Park and recreation master plan
☐ Transportation plan          ☐ Economic development plan
☐ Land use plan                ☐ Area comprehensive plan
☐ Historic/cultural plan       ☐ Other type of plan_____

21. When planning and designing trails, do you try to connect community destinations such as schools, recreation facilities, commercial districts, and cultural and historic sites? (Check the SINGLE response that MOST applies)
    - ☐ YES
    - ☐ NO time to plan and design trails for connecting community destinations
    - ☐ NO funding (includes hiring outside consultant) to plan and design trails for connecting community destinations
    - ☐ NO interest in the community to connect community destinations
    - ☐ NO, community destinations are too spread out to consider
    - ☐ Not applicable

22. Is your community included in a regional trails plan that includes connections to other communities? (Check the SINGLE response that MOST applies)
    - ☐ YES
    - ☐ NO regional plan for trails/trail networks
    - ☐ NO funds for a regional trail
    - ☐ NO interest in regional trails
    - ☐ Do Not Know
    - ☐ Not applicable

| | Strongly Disagree | Disagree | No Opinion | Agree | Strongly Agree |
|---|---|---|---|---|---|
| 23. There needs to be a coordinated effort between trail development and public transit services (e.g., buses and rail lines) to provide viable transportation alternatives. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24. Current funding for trail development in Indiana is adequate. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 25. Adjoining landowners and businesses must be involved in planning for trail development and management. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 26. There is a need for more research to identify common problems and possible solutions to trail development, planning, and maintenance. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 27. In terms of need for your service population, trail development is less important than other facility development. | ☐ | ☐ | ☐ | ☐ | ☐ |

28. During the design phase of your trails, what resources do you use to address user safety and crime prevention? (Check all that apply)
    - ☐ Public information/literature
    - ☐ Rely upon consultants
    - ☐ Emergency response personnel/safety experts
    - ☐ Community input
    - ☐ Not applicable
    - ☐ Other_____

29. Do you use the services of engineers, landscape architects, and/or urban/regional planners when you develop a trail system?

☐ YES (please specify how)
    ☐ In-house expertise on staff
    ☐ Contract service
    ☐ Other_____

☐ NO (please specify why not)
    ☐ No funds
    ☐ In future plans
    ☐ Not deemed necessary
    ☐ Other_____

☐ Not applicable

30. Does your organization use a specific set of guidelines for its **day-to-day** trail maintenance?

☐ YES
☐ NO
☐ In process of developing guidelines
☐ Not applicable

31. Do you have a **long term** plan for funding trail maintenance and management?

☐ YES
If YES, how long? _____years
How is it funded? _____
_____
_____

☐ NO
☐ Not applicable

32. Are health and wellness professionals (physicians, nurses, etc.) closely involved in the planning of your trails? (Check the SINGLE response that MOST applies)

☐ YES
☐ NO, health and wellness professionals in community are not interested
☐ NO time to involve them
☐ NO, had not previously considered
☐ NO, do not consider it necessary
☐ NO, do not know how to involve them
☐ Not applicable
☐ Other (specify)_____

33. Effective planning and management of trails requires demographic information (i.e., age, sex, ethnicity, marital status, etc.) about current and future trail users. If you collect this type of information, then what method(s) do you use? (Check all that apply)

☐ The most current U.S. census information
☐ Demographic information from current park and recreation master plan
☐ We collect our own demographic information
☐ Economic development information
☐ Area comprehensive information
☐ Land use information
☐ Other (specify)_____
☐ Do not use demographic information
☐ Not applicable

34. Do you use multilingual signage on your trails?

☐ YES
☐ In future plans
☐ Do not intend to install
☐ Not applicable

35. Do you publish trail maps including printable web based maps? (Check the SINGLE response that MOST applies)
    - ☐ YES
    - ☐ Not necessary due to small size of trail
    - ☐ No funds available
    - ☐ In future plans
    - ☐ Not applicable

36. Are you using Universal Trail Assessment Program (UTAP) to evaluate trail difficulty and accessibility? (Check the SINGLE response that MOST applies)
    - ☐ YES
    - ☐ No time to implement
    - ☐ Do not consider it necessary
    - ☐ No funds available
    - ☐ Not aware of UTAP assessment program
    - ☐ In future plans
    - ☐ Not applicable

37. Do you use volunteers for any of the following activities?   (Check all that apply)
    - ☐ Trail design
    - ☐ Trail construction projects
    - ☐ Trail maintenance
    - ☐ Trail safety and security
    - ☐ Do not use volunteers
    - ☐ Not applicable
    - ☐ Other (specify)_____

38. Do you install restrooms and water fountains as you develop trails?   (Check the SINGLE response that MOST applies)
    - ☐ YES
    - ☐ NO funds available to install
    - ☐ NO time available to maintain
    - ☐ NO funds available to maintain
    - ☐ NO, not necessary due to public restrooms/water fountains being available near by
    - ☐ NO, do not see need
    - ☐ Not applicable

39. What media do you use to promote your trail system?  (Check all that apply)
    - ☐ Website
    - ☐ Informational booklet/brochure
    - ☐ Radio/Television
    - ☐ Presentations at schools, Rotary, scouts, etc.
    - ☐ Special events (fairs, festivals, etc)
    - ☐ Newspaper/magazines
    - ☐ None
    - ☐ Not applicable
    - ☐ Other (specify)_____

40. Do you provide information on the benefits of trail use?  (Check all that apply)
    ☐ Do not provide trail benefit information
    ☐ Flyers/brochures/newsletters
    ☐ Website
    ☐ Presentations at schools, Rotary, scouts, etc.
    ☐ Newspapers/magazines/professional journals
    ☐ Other (specify) _____
    ☐ Not applicable

41. How do you promote responsible trail use and ethics?  (Check all that apply)
    ☐ Flyers /brochures/newsletters
    ☐ Website
    ☐ Presentations at schools, Rotary, scouts, etc.
    ☐ Newspapers/magazines/professional journals
    ☐ Trail maps
    ☐ Trail signage
    ☐ Other (specify) _____
    ☐ Do not provide trail use/ethics information
    ☐ Not applicable

42. Does your organization coordinate with other agencies and organizations for trail system
    development and management ?  (Check all that apply)
    ☐ State government          ☐ Non-government organizations
    ☐ City                      ☐ Other _____
    ☐ County                    ☐ NO, do not coordinate with other agencies
    ☐ Township                  ☐ Not applicable
    ☐ Federal government

43. Do you feel legislative action will assist in the further development of multi-use trail networks?
    ☐ Definitely will not help
    ☐ Probably will not help
    ☐ No opinion
    ☐ Probably will help
    ☐ Definitely will help

44. Does your community have ordinances and regulations that facilitate trail development?
    ☐ YES -  what type?  (Check all that apply)        ☐ NO
        ☐ Trail/park impact fees                        ☐ Not applicable
        ☐ Land use zoning
        ☐ Land development set asides (trails and parks)
        ☐ Other (specify)_____


Thank you for participating in the Department of Natural Resources,
Division of Outdoor Recreation's Trails Survey for the 2005-2009 Trails Plan.
We would like to have any additional comments you may have.
Please use the back of this survey for additional comments.

Comments: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

# APPENDIX F

*Indiana regions and the counties within*

| Region | Counties within Region | Region | Counties within Region |
|--------|------------------------|--------|------------------------|
| 1A | Lake, LaPorte, Porter | 8 | Boone, Hamilton, Hancock Hendricks, Johnson, Marion, Morgan, Shelby |
| 1B | Jasper, Newton, Pulaski, Starke, White | 9 | Fayette, Rush, Union, Wayne |
| 2 | Elkhart, Kosciusko, Marshall, St. Joseph | 10 | Monroe, Owen |
| 3A | Huntington, LaGrange, Noble, Steuben, Whitley | 11 | Bartholomew, Brown, Decatur, Jackson |
| 3B | Adams, Allen, DeKalb, Wells | 12 | Dearborn, Franklin, Jefferson, Jennings, Ohio, Ripley, Switzerland |
| 4 | Benton, Carroll, Clinton, Fountain, Montgomery, Tippecanoe, Warren | 13A | Daviess, Greene, Knox, Lawrence, Martin |
| 5 | Cass, Fulton, Howard, Miami, Tipton, Wabash | 13B | Gibson, Posey, Vanderburgh, Warrick |
| 6 | Blackford, Delaware, Grant, Henry, Jay, Madison, Randolph | 14 | Clark, Floyd, Harrison, Scott, Washington |
| 7 | Clay, Parke, Putnam, Sullivan, Vermillion, Vigo | 15 | Crawford, Dubois, Orange, Perry, Pike, Spencer |

# APPENDIX G

## *Universal Design*

The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

The authors, a working group of architects, product designers, engineers and environmental design researchers, collaborated to establish the following Principles of Universal Design to guide a wide range of design disciplines including environments, products, and communications. These seven principles may be applied to evaluate existing designs, guide the design process and educate both designers and consumers about the characteristics of more usable products and environments.

The Principles of Universal Design are presented here, in the following format: name of the principle, intended to be a concise and easily remembered statement of the key concept embodied in the principle; definition of the principle, a brief description of the principle's primary directive for design; and guidelines, a list of the key elements that should be present in a design which adheres to the principle. (Note: all guidelines may not be relevant to all designs.)

### PRINCIPLE ONE: Equitable Use
The design is useful and marketable to people with diverse abilities.

Guidelines:
1a. Provide the same means of use for all users: identical whenever possible; equivalent when not.
1b. Avoid segregating or stigmatizing any users.
1c. Provisions for privacy, security, and safety should be equally available to all users.
1d. Make the design appealing to all users.

### PRINCIPLE TWO: Flexibility in Use
The design accommodates a wide range of individual preferences and abilities.

Guidelines:
2a. Provide choice in methods of use.
2b. Accommodate right- or left-handed access and use.
2c. Facilitate the user's accuracy and precision.
2d. Provide adaptability to the user's pace.

### PRINCIPLE THREE: Simple and Intuitive Use
Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Guidelines:
3a. Eliminate unnecessary complexity.
3b. Be consistent with user expectations and intuition.
3c. Accommodate a wide range of literacy and language skills.
3d. Arrange information consistent with its importance.
3e. Provide effective prompting and feedback during and after task completion.

### PRINCIPLE FOUR: Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Guidelines:
4a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
4b. Provide adequate contrast between essential information and its surroundings.
4c. Maximize "legibility" of essential information.
4d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
4e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

### PRINCIPLE FIVE: Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Guidelines:
5a. Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
5b. Provide warnings of hazards and errors.
5c. Provide fail safe features.
5d. Discourage unconscious action in tasks that require vigilance.

### PRINCIPLE SIX: Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

Guidelines:
6a. Allow user to maintain a neutral body position.
6b. Use reasonable operating forces.
6c. Minimize repetitive actions.
6d. Minimize sustained physical effort.

### PRINCIPLE SEVEN: Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Guidelines:
7a. Provide a clear line of sight to important elements for any seated or standing user.
7b. Make reach to all components comfortable for any seated or standing user.
7c. Accommodate variations in hand and grip size.
7d. Provide adequate space for the use of assistive devices or personal assistance.

Please note that the Principles of Universal Design address only universally usable design, while the practice of design involves more than consideration for usability. Designers must also incorporate other considerations such as economic, engineering, cultural, gender, and environmental concerns in their design processes. These

Principles offer designers guidance to better integrate features that meet the needs of as many users as possible.

"The Principles of Universal Design were conceived and developed by The Center for Universal Design at North Carolina State University. Use or application of the Principles in any form by an individual or organization is separate and distinct from the Principles and does not constitute or imply acceptance or endorsement by The Center for Universal Design of the use or application."

The Principles of Universal Design should be cited as follows: "The Center for Universal Design (1997). The Principles of Universal Design, Version 2.0. Raleigh, NC: North Carolina State University."

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# APPENDIX H

Acronyms used in the SCORP

ABA – The Architectural Barriers Act of 1968

ADA – The Americans with Disabilities Act of 1990

ADAAG – The Americans with Disabilities Act Accessibilities Guidelines

DOR - Division of Outdoor Recreation

EPA – United States Environmental Protection Agency

EWRA – Emergency Wetlands Resources Act of 1986

HWCI – Hoosier Wetland Conservation Initiative

IDNR - Indiana Department of Natural Resources

IWCP – Indiana Wetlands Conservation Plan

IWRP – Indiana Wetlands Reserve Program

LWCF – Land and Water Conservation Fund

NPS – National Park Service

NRCS – Natural Resources Conservation Service

NSRE – National Survey on Recreation and the Environment

NWPCP – National Wetlands Priority Conservation Plan

SCORP - Statewide Comprehensive Outdoor Recreation Plan

UD – Universal Design

UFAS – Uniform Federal Accessibility Standards (from ABA 1968)

USDA - United States Department of Agriculture

USFS – United States Forest Service

USFWS – United States Fish and Wildlife Service