PROPOSAL COVER PAGE

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SUBMITTED TO: Iowa Legislative Council

APPLICANT: University of Northern Iowa
                            Cedar Falls, IA 50614-0135

PROJECT TITLE: Socioeconomic Impact of Gambling on
                            Iowans

**PROJECT DIRECTOR/
PRINCIPAL INVESTIGATOR:** Dr. Deepak Chhabra
                            Division of Health, Physical Education, and
                            Leisure Services

FUNDS REQUESTED: $ 87,037

PROJECT PERIOD: September 21, 2004 to July 1, 2005

AUTHORIZED SIGNATURE:

                            _____   _____
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Socioeconomic Impact of Gambling on Iowans

Introduction

In 2003, several counties in Iowa approved the referendum to permit excursion boat gambling. As a result, in June, 2004, the State Legislature approved the bill and several casino proposals are currently being considered. Under the 2004 Iowa Acts, House File 2302, section 61, the Iowa Legislative Council is now required to commission a study to assess the socioeconomic impact of gambling on Iowans.

Two studies on gambling were published during 2003 and early months of 2004. The first study was conducted by Cummings Associates. They analyzed the current markets for casino gaming in Iowa and compared them with other relevant markets in the United States. Furthermore, they developed projections for possible revenues that might be generated by the potential gaming facilities in Iowa. Cummings focused on the areas of unmet demand (areas currently interested in licenses) for casino gambling. The study indicated that Iowa has sufficient capacity to generate an additional $266 million of gaming revenue each year. Cummings used the gravity model and suggested that distance was a significant indicator of casino visitor spending while controlling for accessibility. The second study was conducted by the Iowa Association of Business and Industry (ABI). ABI aimed to expand on the work of Cummings and they made an attempt to identify market patterns of existing gaming facilities in Iowa using patron origination data. In doing so, they addressed the secondary economic impact issues of potential income, employment, vendor purchases, and tax receipts. ABI elicited patron data by zip codes from the Iowa casinos for mapping the actual trade area and tracking revenues from

out-of-state customers. Club player data from each casino provided information on casino visitor zip codes and the total amount lost or won at the casino. Based upon this data, the ABI study indicated that the major primary (average per capita winning is over $200) and secondary (average per capita winning between $50 and $200) trade areas are located within 50 miles radius of the casino location.

This study proposal aims to perform the services suggested by the Studies Committee to assist the decision makers in understanding the impacts of existing casinos. While using secondary data to obtain information on several services listed by the RFP, the researcher plans to collect primary data to determine the economic impact of casino visitors. ABI analyzed the economic impact of the casino expenditure sector. This proposal argues that several other sectors representing trip expenditures should be taken into consideration while calculating economic impacts. Eight expenditure sectors for visitor purchases have been analyzed by several studies (Roehl, 1996; Brock, Fussell and Corney, 1990). These are: gaming, food, entertainment, shopping, gasoline, recreation, events, and lodging. The proposed study aims to calculate the average expenditures incurred by casino visitors on sectors other than gaming. Further, this proposal argues that some casino expenditures of local residents are retained. Retained expenditures mean expenditures that would not have been spent elsewhere. These should be included in the economic impact study.

Furthermore, this study would use primary data to ascertain the impact of existing casinos on local resident quality of life and life style. The local resident perception of gaming and their gambling behavior in terms of frequency and losses would also be ascertained. Residents within 50 mile radius of the existing casino would be randomly interviewed over the telephone. Hundred surveys per casino trade area would be collected.

Objectives

In summary the proposed study aims to fulfill the following main objectives: 1) Economic impact of gambling at existing Iowa casinos on the local community; 2) Socioeconomic characteristics of gamblers; 3) Social impact of gambling on the local community; and 4) Impact of problem gambling.

Methodology

Study area

The proposed study aims to gather data from various communities of Iowa. Four types of study area would be used to define communities. Study Area I would refer to all the counties of Iowa. It would represent the entire community of Iowa. Study Area II would comprise of communities located within the 50 mile radius of the existing casinos. However, communities in the neighboring states would be excluded if located within the 50 mile radius. Study Area III would cover only the casino counties. Finally, Study Area IV would be ascertained for economic impact analyses through casino employee zip codes and might comprise of multiple counties.

Data Collection

Historical data would be used to extract statistics from Study Area I (comprising of all counties) for comparison between casino and non-casino counties. Data would be collected for the most recent year. Time series analysis would be conducted for Study Area IV (casino counties) to identify trends and compare statistics between pre-casino and post-casino times. Data would be provided for the closest year available. Maps would be provided that would show

a trend chart with patterns in casino counties prior to gaming and post gaming. A telephone interview survey would be conducted of the Study Area II residents. A minimum of 100 residents (Study Area II) per casino would be interviewed to obtain information to monitor local perceptions of economic well-being, tourism crime, gambling behavior, quality of life and the effect of gaming on those perceptions. A total of sixteen hundred surveys would be obtained.

The data required for this study would be broadly divided into nine categories: statistics on family finances, family relations, and demographics; employment assessment; impact assessment of pathological gambling; impact assessment of gambling related crimes; casino impact on substitute sites; beneficiaries of gambling tax revenue; gaming visitor demographics; economic impact of gaming; and host community gambling habits and perceptions of the socio/economic/environmental impact of gambling. The following sections begin by discussing each of the above categories and the methods allocated for data collection:

A) <u>Family finances, family relations, family health and demographics</u>

These would comprise of information on average age of death, health problems (quantity and type), suicide rate, addictive disorder (drug, alcohol abuse, and mental illness), divorce rates, percentage of single families, per capital number of domestic abuses, percentage of credit counseling, percentage of home improvements, car purchases, or other large purchases, amount of personal debt, bankruptcies, homelessness, family demographics, average education level, school drop out rates and school attendance rates. The following sources would be used to collect data: Bureau of Economic Analysis, Bureau of Labor Statistics, U.S. Census Bureau, office of Social and Economic Trend Analysis, and Iowa Workforce Development. Per County figures would be provided for comparison. A total of two hundred individuals holding key positions in

Study Area III would be interviewed. It is assumed that these people, as a result of their work or position within the study area III, would be in a unique position to provide insights into the impact of casinos on the community.

Whenever possible, respondents who have resided in the community before the advent of casino gambling would be interviewed. Responses would be compared both within and between communities. The following core questions would be asked of the social service providers, law enforcement agencies, and economic development officers: Overall, have casinos had a positive or negative impact on the quality of life in your community? Has the impact of casinos been limited to the immediate vicinity or impacted the community as general? What specifically are some of the positive impacts you have observed? What are some of the negative impacts you have observed? What effect have casinos had on the volume of crime/types of crime? Are you in favor of casino in your community? Finally, are there any comments or observations you would like to make about the casinos?

B) Employment assessment

Information would be obtained on change in types of job opportunities, number of locally owned or family-owned businesses and their failure rates, average salary of residents, percentage of health insurance, pension benefits, job absenteeism of businesses, and type and number of jobs with pay and benefits. Comparisons would be made between Study Area III and non-casino comparable counties. The following sources would be used to collect data: Bureau of Economic Analysis, Bureau of Labor Statistics, U.S. Census Bureau, office of Social and Economic Trend Analysis, and Iowa Workforce Development. Per County figures would be provided for

comparison. Employment generated specifically by casino visitor expenditures is discussed in the economic impact section (H).

C) <u>Impact assessment of pathological gambling</u>

This would comprise of criminal impact of pathological gamblers and alcoholism in Study Area II. The sources for data collection would be the U.S. Census Data, law enforcement agencies, and treatment agencies. Treatment agencies would include Northwest Iowa Alcoholism & Drug Treatment Unit, Inc., Community and Family Resources, Allen Memorial Hospital, Substance Abuse Services Centers, Jackson Recovery Centers, Inc., 1-800-BETS FF Helpline, Central Iowa Gambling Treatment Program, Eastern Iowa Center for Problem Gambling, Family Service, Jennie Edmundson Hospital, Alcohol and Drug Dependency Services of Southeast Iowa, Inc.,

D) <u>Impact assessment of gaming related crimes</u>

These would consist of information on overall crime rate and type of crime, emergency calls (local versus visitors), illegal gambling in the community, percentage of people stealing from businesses, friends, and family, business related crimes including insurance, number of emergency related calls and their breakdown, and arrest rates. The data would be collected from Iowa Department of Public Safety, 911 Emergency call Center, and U.S. Census data. Law enforcement officers in Study Area II would be interviewed. Longitudinal comparisons would be made.

E) <u>Casino impact on substitute sites</u>

Substitution refers to the question of whether spending on gambling activity has been diverted from non-casino businesses. Gambling can siphon-off money from other tourism related businesses and from other local enterprises. Study of casino impact on substitute sites would consist of assessing a pattern through visitation figures to the popular recreation sites in Study Area III (identified by the Conventions and Visitors Bureau). The managers of the recreation sites would be contacted to obtain information on the annual number of visitors over a period of ten years. Also, popular recreation locations in comparable non-casino counties and trends in their visitation figures would be studied.

F) <u>Beneficiaries of gambling tax revenue</u>

A list of the beneficiaries would be obtained through the Iowa Gaming Association and they would be intercepted through telephone to obtain a breakdown of the allocated revenue benefits. Non-profit agencies such as The United Way, Red Cross, Make-A-Wish, Fire and ambulance Department, would be contacted to receive a breakdown of revenue allocation funds. Schools and Day Care Centers that benefit from the tax revenues would also be contacted. The list would be obtained from the Iowa Gaming Association. Economic Impact of the total funds would be ascertained.

G) <u>Gaming visitor demographics</u>

These would consist of age, gender, annual household income, and place of residence of the visitors. Information on gaming visitors would be obtained from the existing casinos. Average spending on lodging, restaurants, shopping, and recreation would be obtained for Study

Area III from the Convention and Visitor Bureaus. Comparisons between the socioeconomic characteristics of casino and non-casino visitors would be made.

H) Economic impact of gaming

This section would include generalized information on the economy of casino and comparable casino counties and precision guided information on the impacts generated by casino visitor expenditures. In other words, the proposed study aims to provide a detailed comparison of retail sales data of non-casino businesses between casino and non-casino counties, infrastructure costs on Study Area III, commercial tax revenue comparison between Study Area III and comparable non-casino counties, and economic impact of casino visitors. General retails data would be collected for Study Area III and comparable non-casino counties. Analogies would be conducted between economically depressed communities and growing communities between Study Area III and comparable casino counties. Law enforcement agencies and department of transportation in Study Area III would be contacted to obtain information on additional costs that have resulted from the existing casino. Commercial tax revenue comparisons would be made between Study Area III and comparable non-casino counties.

The basic questions to address the economic impact of casino visitors would be: How much do tourists spend in the area? What portion of sales by local businesses is due to tourism? How much income does gaming generate for households and businesses in the area? How many jobs in the area does gaming support? How much tax revenue is generated from casino gaming? These questions would be answered by calculating direct (production changes associated with the immediate effects of changes in visitor gaming visitor expenditures), indirect (production changes resulting from various rounds of re-spending of the hotel industry's receipts in other

backward-linked industries), and induced impacts (changes in economic activity as a result from household spending of income earned directly or indirectly as a result of tourism spending) upon the host counties in terms of output (impact on Iowa businesses serving as vendors for casinos), value added (has four sub-components: employee compensation; proprietary income; other property type income and indirect business taxes), employment (jobs created to serve the casino industry), proprietary income (payments received by self-employed individuals as income), employee compensation (all income paid by employers including wage and salary payments and benefits), labor income (sum of employee compensation and proprietary income), and indirect business taxes (excise and sales taxes paid by individuals to businesses). Data on visitor expenditures would be collected from Study Area III and the economic impact would be ascertained on Study Area IV. Economic impacts of sole casinos would be compared with the economic impacts of the casino that includes other entertainment and hospitality related businesses.

Number of visitor days and their average daily expenditure would be estimated to calculate economic impacts. Detailed visitor expenditure data are important to quantify economic sector used for visitor purchases. Total number of visitors would be obtained from the Convention and Visitors Bureau (CVB) and the casinos. Tourism rates in Study Area III would be compared with comparable non-casino counties. Percentage visitors gambling would be calculated (local and non-local). Average spending on gaming, food, entertainment, shopping, gasoline, recreation, and lodging would be ascertained through casino data and the CVB data. Alternative to CVB data, area businesses (randomly selected) catering to tourists would be interviewed to calculate average visitor spending. Total spending per sector would be calculated of casino visitors. Local resident casino spending information would be obtained through the

social impact survey. Percentage of local residents who would not have gone to a substitute site is injecting dollars generated by the existing casino. These retained expenditures would be included in the impact.

IMPLAN would be used to assess the above mentioned economic impacts on Study Area IV. IMPLAN makes use of Input/Output (I/O) models. These models describe the flows of money within a region's economy. Flows are predicted by knowing what each industry must buy from every other industry to produce a dollar's worth of output. Using each industry's function, I-O models also determine the proportions of sales that go to wage and salary income, proprietor's income, and taxes. Thus, the models emphasize on economic interdependence and are readily available to calculate multipliers for delineations. Economic base model is a special case of an I/O. It consists of a grouping of export and local support industries in a two sector framework. The Minnesota IMPLAN group offers I-O tables for any county grouping or individual states.

I) <u>Local resident perceptions of the social impact</u>

This would consist of information on local gambling behavior and perceived social impact on the local residents. The data would be obtained through telephone interviews from Study Area II. A preliminary list of measurement items has been developed through a review of previous studies on tourism impacts and perceived quality of life (QOL). The pretest instrument was submitted for comments to Black Hawk County residents and academicians with expertise on social impacts.

A modified version of an eight latent construct scale discussed by Perdue, Kang, and Long (1999) is used. The constructs are: quality of life, community safety, community

involvement, social changes in the community, congestion/crowding changes in the community, job opportunity changes, desirability of Gaming, and personal benefits from gaming. A set of potential measurement items would be developed for each scale. The pretesting process will reduce the set of items using principal axis factor analysis, LISREL confirmatory factor analysis, construct validity assessment, and convergent validity. Factor analysis is a procedure that is used to determine the extent to which shared variance exists among a set of variables (Mertler and Vannatta, 2002). Most variable scales used would follow a typical format of "strongly disagree" to "strongly agree," except for the community change scale. Basic information about the residents would include: number of years of residence, age, annual household income, gender, number of people in the family, marital status, home ownership, education, and gambling behavior. The survey data would be tested for reliability by using the split-half method. Average value of the continuous variables on the first half of the sample would be compared with the measure on the remaining half to determine if the halves assess a single trait through correlation (Mitra and Lankford, 1999).

SPSS would be used to analyze the data. Frequencies would be calculated for categorical variables and univariate analyses would be used for continuous variables. Analysis of Variance tests would be conducted to test if differences in social impact perceptions exist among different income groups, marital status, education levels, and gender. Tukey tests would be conducted to identify significant differences. Bivariate regression tests would be conducted to determine the effect of age, family size, number of children in respondent's family, and age of the youngest child upon residents' perceptions of social impact. The draft of the survey questionnaire is as follows:

Social Impact of Gambling in Iowa

1) Perceived impact of gambling:

The following items are related to determine the impact of the existing casino. Please read each statement carefully and indicate your disagreement or agreement by marking the appropriate response category. Please check "not appropriate" if the statement does not apply to you.

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree	Not Applicable
1. The prices of goods and services have increased because of the casino existence.	☐	☐	☐	☐	☐	☐
2. High spending visitors have negatively affected our way of living.	☐	☐	☐	☐	☐	☐
3. Our roads and other public facilities have been kept at a high standard because of casino existence	☐	☐	☐	☐	☐	☐
4. New and improved recreational facilities have been built because of the casino.	☐	☐	☐	☐	☐	☐
5. Casino has attracted more investment into my community.	☐	☐	☐	☐	☐	☐
6. The areas businesses have been negatively affected because of the casino	☐	☐	☐	☐	☐	☐
7. Improving public facilities for visitors use is a waste of taxpayer's money.	☐	☐	☐	☐	☐	☐
8. Casino has increased employment opportunities in my community.	☐	☐	☐	☐	☐	☐
9. The prices of real estates (e.g. house, land etc.) have increased.	☐	☐	☐	☐	☐	☐
10. Size of crowds has affected my enjoyment of activities in public areas	☐	☐	☐	☐	☐	☐
11. Casino existence has resulted in traffic congestion.	☐	☐	☐	☐	☐	☐
12. Number of driving hazards have increased.	☐	☐	☐	☐	☐	☐
13. Noise levels have increased.	☐	☐	☐	☐	☐	☐
14. Casino existence has led to more vandalism in my community.	☐	☐	☐	☐	☐	☐

The following items are related to determine the impact of the existing casino. Please read each statement carefully and indicate your disagreement or agreement by marking the appropriate response category. Please check "not appropriate" if the statement does not apply to you.

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree	Not Applicable
15. Casino gambling has increased crime.	☐	☐	☐	☐	☐	☐
16. The historic value of my community has been affected.	☐	☐	☐	☐	☐	☐
17. There have been more opportunities of cultural exchange between tourists and residents.	☐	☐	☐	☐	☐	☐
18. Casino has increased residents' pride.	☐	☐	☐	☐	☐	☐
19. Construction of facilities to support casino visitors has destroyed the natural environment.	☐	☐	☐	☐	☐	☐
20. Casino has increased employment opportunities in my community.	☐	☐	☐	☐	☐	☐
21. Quality of recreation opportunities for local residents have increased.						
22. There have been more opportunities to meet interesting people.						
23. I personally receive social benefits from gambling.	☐	☐	☐	☐	☐	☐
24. I personally receive economic benefits from gambling.	☐	☐	☐	☐	☐	☐

2) Attitude towards gambling:

The following items are related to determine your attitude and feelings towards casino and gambling. Please read each statement carefully and indicate your disagreement or agreement by marking the appropriate response category. Please check "not appropriate" if the statement does not apply to you.

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree	Not Applicable
1. I am morally against casino gambling.	☐	☐	☐	☐	☐	☐
2. I think casino gambling is associated with crime.	☐	☐	☐	☐	☐	☐
3. Casino gambling has contributed positively to my community.	☐	☐	☐	☐	☐	☐

The following items are related to determine your attitude and feelings towards casino and gambling. Please read each statement carefully and indicate your disagreement or agreement by marking the appropriate response category. Please check "not appropriate" if the statement does not apply to you.

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree	Not Applicable
4. Casino gambling is leisure.	☐	☐	☐	☐	☐	☐
5. Casino gambling is a vice.	☐	☐	☐	☐	☐	☐
6. I am satisfied with my community as a place to live.	☐	☐	☐	☐	☐	☐
7. I am glad we have a casino.	☐	☐	☐	☐	☐	☐
8. I feel safe here.	☐	☐	☐	☐	☐	☐
9. My family is safe here.						

3) Gambling related problems in your community:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Casino gambling have resulted in family quarrels	☐	☐	☐	☐	☐
2. Casino gambling have resulted in negative thoughts of life	☐	☐	☐	☐	☐
3. Loosing/quitting jobs is frequent because of casino gambling	☐	☐	☐	☐	☐
4. Local residents borrow money to gamble.	☐	☐	☐	☐	☐
5. Local residents engage in illegal activities because of casino gambling.	☐	☐	☐	☐	☐
6. Local residents have lost interest in their work because of casino gambling.	☐	☐	☐	☐	☐
7. Alcoholism has increased because of casino gambling.	☐	☐	☐	☐	☐
8. Casino gambling has resulted in prostitution.	☐	☐	☐	☐	☐
9. Casino gambling has increased divorce rates.	☐	☐	☐	☐	☐
10. Casino gambling has led to bankruptcies.	☐	☐	☐	☐	☐
11. Casino gambling has decreased attendance to other entertainment centers such as museums, cinema, and theater.	☐	☐	☐	☐	☐

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
12. There are no problems associated with casino gambling in my community.	☐	☐	☐	☐	☐

4) Do you gamble?   ☐ **Yes**   ☐ **No**
      If yes, how many times a year?

      Which casinos do you frequent?

5) How far do you travel to gamble?   **Miles (one way**)

6) What % of monthly income do you spend on Gambling?

7) a) If a casino was not available in your town, would you still drive to the next town to gamble?
      ☐ **Yes**   ☐ **No**

   b) If a casino was not available in your town, would you have participated in another form of entertainment such as theater, museum, recreation?
      ☐ **Yes**   ☐ **No**

8) Largest amount lost
    ☐ Several tens   ☐ Several hundreds
    ☐ Several thousand   ☐ Several ten thousand
    ☐ Several hundred thousand ☐ Several million
    ☐ All possessions

9) How do you propose the gambling tax revenue from your casino should be allocated?
    ☐ The needy   ☐ City's infrastructure
    ☐ Regional governments   ☐ The Youth
    ☐ Public schools Fire/Police protection   ☐ Other, Please specify

User Profile

10) What is your age?   _____ **years**

11) How many members are there in your family? _____

12) How many children do you have? _____

      a) What is the age of the youngest child in your house? _____ **years**

13) Marital status: ☐ Single ☐ Widowed ☐ Separated
  ☐ Divorced ☐ Married ☐ Live together

14) Annual Household Income
  ☐ Less than $ 50,000 ☐ Between $ 50,000 & $ 99,999
  ☐ Between $ 100,000 & $ 149,999 ☐ Between $150,000 & $ 199,999
  ☐ Above $ 200,000

15) What is your gender? ☐ Male ☐ Female

16) Which one of the following best describes your education? (Please check one):
  ☐ Grad School ☐ Secondary School
  ☐ High School Diploma ☐ Bachelor's degree
  ☐ Master's or doctorate degree

17) Please give your zip code:

18) Please give your ethnic origin:
  ☐ Caucasian ☐ African American
  ☐ Hispanic ☐ South Asian
  ☐ Other, Specify:

Unanticipated limitations

Unanticipated events and circumstances such as non-cooperation from the casinos might occur that would lead to estimations based upon previous comparable research findings. The actual methodology may be modified depending upon industry cooperation and such variations would be unavoidable. Alternative methodologies would be proposed when limitations occur. For example, if the Study Area III does not have an accurate account of visitor spending in its region, estimates would be made based upon similar studies conducted across the United States.

Budget

	$
Salaries & Wages	
A. Project Director: Dr. Deepak Chhabra	
1) Fall 2004, Extra Pay: 144/hrs * $34.50 hr.	4,968
Spring 2005, Release Time: $49,680 base / 2 semesters.*	
2) 50% effort (Release time would be paid to HPELS)	12,420
3) Summer 2005, $49,680 base * 2/9 mos. * 50% effort	5,520
B. Three students @ $11/hour for 500 hours	5,500
Two students (Department of Geography) @ $10/hour for 100	
C. hours	2,000
Fringe Benefits	
A. 30.3% of Project Director's salary.	6,941
B. 0% of student salary.	0
Travel reimbursements	2,500
Services - Ctr. for Social & Behavioral Research	
A. Survey costs: 21.16 cents/survey for 1900 surveys	
(includes reimbursement for two faculty members,	
5 p/s merit employees, 10 student employees and	
their fringe benefits)	40,204
Other Expenses (office equipment)	500
Total Direct Costs	81,053
Indirect Costs - 8% of Total Direct Costs	6,484
Total Budget $	87,037

Work Plan

October 1, 2004 - November 30, 2004: Data collection

December 1, 2004 – December 15, 2004: Data analysis

December 15, 2004 - January 14, 2005: Drafting the Report

January 15, 2005: Report draft complete

The Study Team

A) Division of Health, Physical Education, and Leisure Services (HPELS), College of Education, University of Northern Iowa: The personnel from HPELS would be Project Director Dr. Deepak Chhabra (see resume, Appendix A) and three students.

B) Center for Social Behavioral Research, University of Northern Iowa: The team would consist of two investigating officers and five merit employees and ten students to conduct survey research. The investigating officers for Social Impact data collection would be Dr. Gene Lutz and Dr. Melvin Gonnerman. Gene M. Lutz, Ph.D., is Professor of Sociology and, since 1988, Director of the Center for Social and Behavioral Research (CSBR) and Professor of Sociology at the University of Northern Iowa. He has been the principal investigator for several studies in the field of public health funded by local, state and federal sources. This includes the Iowa Behavioral Risk Factor Surveillance System survey since 1995 (funded by the Iowa Department of Public Health and the Centers for Disease Control and Prevention) and numerous studies of substance abuse, tobacco and gambling addiction, and of health needs assessments, special population health risks, and health disparities. Melvin E. Gonnerman, Jr., Ph.D. is Assistant Professor of Psychology and Projects Coordinator at UNI-CSBR. He has had primary responsibility for data analysis for several externally funded projects in the fields of public health, environment and recreation, public perceptions and priorities for strategic planning activities, and various other areas. His personal research interest is in psychological measurement of self identity.

C) Department of Geography, University of Northern Iowa: Three students would be hired under the supervision of Dr. James Fryman, Associate Professor. These students would be required to transfer Excel data into maps.

References

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D) Dave Hanson

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References for Citations

Brock, F., Fussell, G., and Corney, W. (1990). How to Optimize Casino-Hotel Revenue. Journal of Business Forecasting, 9, 2, 2-5.

Giacopassi, D. (1998). Attitudes of Community Leaders in New Casino Jurisdictions Regarding Gambling's Effects on Crime and Quality of Life. National Institute of Justice, Office of Justice Programs, U.S. Department of Justice.

Mertler, C. & Vannatta, R. (2002). Advanced and Multivariate Statistical Methods. Pyrczak Publishing, Los Angeles, CA.

Mitra, A. & Lankford, S., 1999. Research Methods in Park, Recreation, and Leisure Services. Sagamore Publishing, Champaign, IL.

Perdue, L. Long, P., & Kang, Y. (1999). Boomtown Tourism and Resident Quality of Life: The Marketing of Gaming to Host Community Residents. Journal of Business Research, 44, 165-177.

Roehl, W. (1996). Competition, Casino Spending, and Use of Casino Amenities. Journal of Travel Research, 34, 3, 57-63.

Mitra, A. & Lankford, S., 1999. Research Methods in Park, Recreation, and Leisure Services. Sagamore Publishing, Champaign, IL.

Appendices

A) Resume of Project Director: Dr. Deepak Chhabra

B) Chhabra, D., Healy, R. and Sills, E. (2003). Staged Authenticity and Heritage Tourism. Annals of Tourism Research, 30 (3): 702-719.

C) Chhabra, D., Sills, E. and Cubbage, F. (2003). The Significance of Festivals to Rural Economies: Estimating the Economic Impacts of Scottish Highland Games in North Carolina. Journal of Travel Research, 41: 421-427.

D) Chhabra, D., Sills, E. and Rea, P. (2002). Tourist Expenditures at Heritage Festivals. Event Management, 7:221-230.

E) Chen, C., Chhabra, D. and Tatsugawa, K. (2004). Resident Perception of the Effect of Tourism: A Case Study of the Crystal Basin Recreation Area, California. E-Review of Tourism Research, 2(4).

F) Chhabra, D. (2004). Economic Impact of Nature Tourism: A Case Study of Napa County, CA. E-Review of Tourism Research, 2(3).

G) Chhabra, D., Fountain, B., Alsbury, A., Chen, C., Rossi, G., and Tatsugawa, K., (2004). Socioeconomic Study of the Upper American River Project. A Report prepared for Sacramento Municipal Utility District, Sacramento, CA.

H) 2002 Sacramento Visitor Survey, An Analysis and Report.

I) 2002 Lake Berryessa Visitor Survey, An Analysis and Report.